

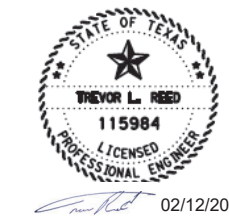
FHWA TEXAS DIVISION	FEDERAL-AID PROJECT NO.	SHEET NO.	
	F 2024(979)	1	
STATE	DISTRICT	COUNTY	
TEXAS	BMT	JEFFERSON	
CONTROL	SECTION	JOB	HIGHWAY NO.
0028	13	135	IH 10

EXISTING ADT (2021) = 104,036
 PROJECTED ADT (2041) = 145,650
 DESIGN CRITERIA: 4R
 DESIGN SPEED:

IH 10 MAINLANES	= 70 MPH
IH 10 FRONTAGE ROADS	= 45 MPH
IH 10 RAMPS	= 45 MPH
US 69 MAINLANES	= 60 MPH
US 69 FRONTAGE ROADS	= 45 MPH
US 69 RAMPS	= 45 MPH
DIRECT CONNECTORS	
(WB IH 10 TO NB US 69)	= 55 MPH
(SB US 69 TO EB IH 10)	= 45 MPH
TURNAROUNDS	= 15 MPH
CROSS STREETS	= 35 MPH
(LIBERTY AVE)	= 45 MPH

FUNCTIONAL CLASSIFICATION:

MAINLANES	
(IH 10)	- PRINCIPAL ARTERIAL (INTERSTATE)
(US 69)	- PRINCIPAL ARTERIAL (FREEWAY)
FRONTAGE ROADS	- MAJOR COLLECTOR
RAMPS	- MAJOR COLLECTOR
DIRECT CONNECTORS	- PRINCIPAL ARTERIAL (FREEWAY)
TURNAROUNDS	- MAJOR COLLECTOR
CROSS STREETS	- MINOR ARTERIAL
(CALDER AVE)	- PRINCIPAL ARTERIAL (OTHER)



VOLKERT
 F - 12679



DocuSigned by: TING: 2/28/2024
J. H. Lee
 50238C8D55F5470... DESIGN ENGINEER

DocuSigned by: TITTING: 2/28/2024
Lisa Collins
 5C6C707937C24CE... PORTATION PLANNING AND DEVELOPMENT

DocuSigned by: 2/28/2024
Marion N. Goff, P.E.
 578CD749506D4F0... EER

STATE OF TEXAS DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED STATE HIGHWAY IMPROVEMENT

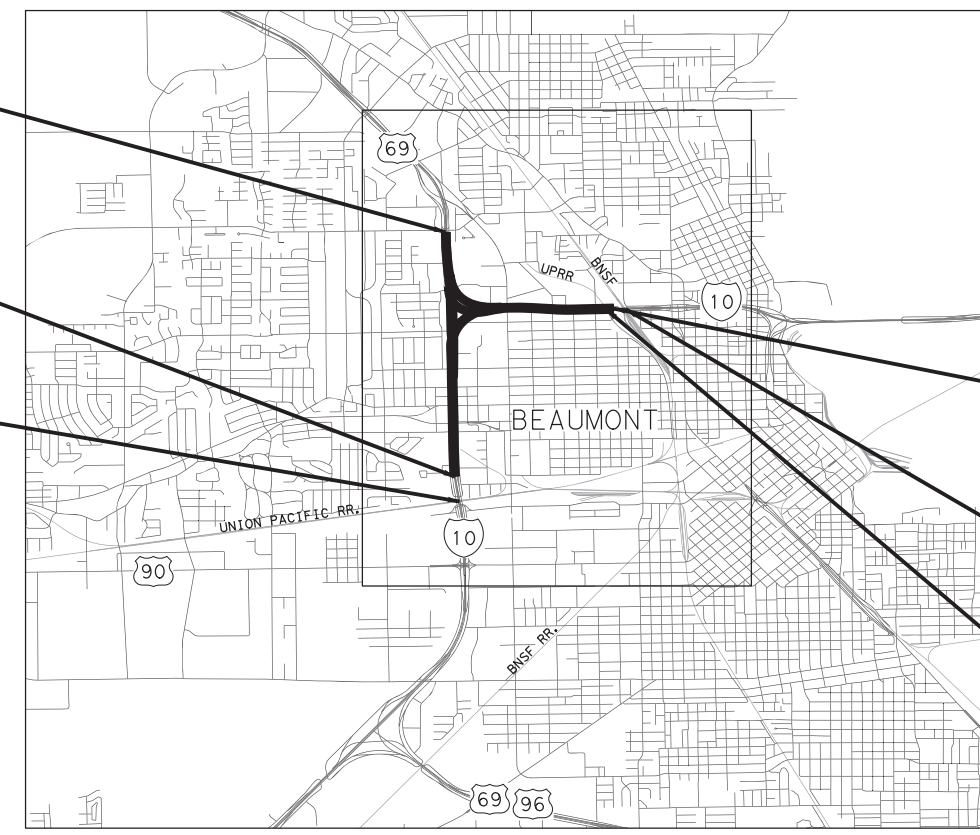
FEDERAL-AID PROJECT NO. **F 2024(979)**
 NET LENGTH OF PROJECT= 12967.68 FT. = 2.456 MI.

CSJ	ROADWAY LENGTH		BRIDGE LENGTH		TOTAL LENGTH	
	(FT)	(MI)	(FT)	(MI)	(FT)	(MI)
0028-13-135	4672.80	0.885	8294.88	1.571	12967.68	2.456

IH 10 JEFFERSON COUNTY CSJ 0028-13-135

FROM: HOLLYWOOD OVERPASS, EAST TO: 7TH STREET

FOR THE CONSTRUCTION OF WIDEN FREEWAY FROM 4 TO 6 MAIN LANES AND RECONSTRUCT INTERCHANGE



LOCATION MAP
 NOT TO SCALE
 EXCEPTIONS: NONE
 EQUATIONS: NONE
 RAILROAD CROSSINGS: UPRR ON IH 10 PAST HOLLYWOOD AVE.
 UPRR ON IH 10 PAST 7TH ST.
 BNSF ON IH 10 PAST 7TH ST.

END PROJECT
 BEGIN CSJ: 0028-13-135
 STA: 754+26.16 (NB US 69)
 STA: 650+41.36 (SB US 69)
 REF MRKR: 522+0.271

BEGIN PROJECT
 BEGIN CSJ: 0028-13-135
 STA: 296+87.89 (I-10)
 REF MRKR: 851+0.657

IH 10 WBFR - EXISTING UPRR CROSSING
 DOT NO. 762968H
 MILEPOST 280.63

IH 10 ML - EXISTING UPRR CROSSING
 DOT NO. 762716G
 MILEPOST 280.63

IH 10 ML - EXISTING UPRR CROSSING
 DOT NO. 446596Y
 MILEPOST 279.69

IH 10 EBFR - EXISTING UPRR CROSSING
 DOT NO. 762967B
 MILEPOST 280.63

END PROJECT
 END CSJ: 0028-13-135
 STA: 396+32.91 (I-10)
 REF MRKR: 854+0.080

IH 10 ML - EXISTING BNSF CROSSING
 DOT No. 023676X
 MILEPOST 1.93

IH 10 WBFR - EXISTING UPRR CROSSING
 DOT NO. 762590C
 MILEPOST 31.42

IH 10 ML - EXISTING UPRR CROSSING
 DOT NO. 762589H
 MILEPOST 31.40

IH 10 EBFR - EXISTING UPRR CROSSING
 DOT NO. 762588B
 MILEPOST 31.38

REQUIRED SIGNS SHALL BE IN ACCORDANCE WITH BC(1)-21 THRU BC(12)-21 AND THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

REGISTERED ACCESSIBILITY SPECIALIST (RAS) INSPECTION REQUIRED TLDR NO. TABS2023024497

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION, NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS PROJECT: REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS FHWA FORM 1273, OCTOBER 23, 2023.

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INDEX OF SHEETS

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VOLUME 4

FINAL PLANS

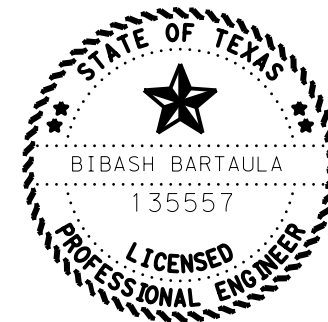
LETTING DATE: _____
 DATE CONTRACTOR BEGAN WORK: _____
 DATE WORK WAS COMPLETED & ACCEPTED: _____
 FINAL CONTRACT COST: \$ _____
 CONTRACTOR : _____

DATE: 28-MAR-2024 01:55
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\1 - General\1069_EASTEX_INDEX_OF_SHEETS_001.dgn

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THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN * HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

[Signature]

P. E.

03/27/2024
DATE

VOLKERT

F-12679



INDEX OF SHEETS

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DIST		COUNTY	SHEET NO.
BMT		JEFFERSON	2

DATE: 22-FEB-2024 19:41
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\1 - General\1069_EASTEX_INDEX_OF_SHEETS_002.dgn

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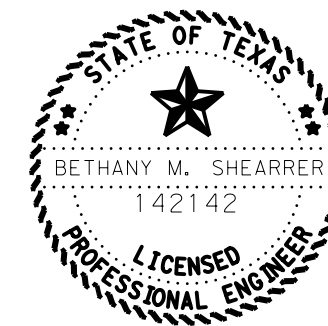
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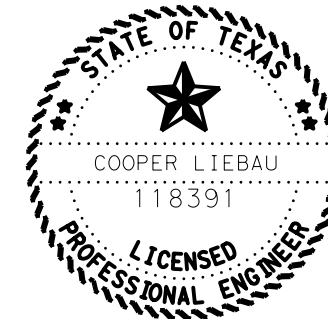
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1037	& PBGC
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1071 - 1072	& SETP-CD
1073	& SETP-PD

	BRIDGE DETAILS
1074 - 1189	BORING LOGS
	VOLUME 4
	IH10 MAINLANES OVER LAUREL AVE
1190 - 1192	BRIDGE LAYOUT IH 10 EBML LAUREL AVE
1193 - 1195	BRIDGE LAYOUT IH 10 WBML LAUREL AVE
1196 - 1201	CONSTRUCTION PHASING IH 10 MAINLANE OVER LAUREL AVE
1202 - 1203	TYPICAL SECTIONS IH 10 MAINLANE OVER LAUREL AVE
1204 - 1205	QYT & BEARING SEAT ELEV IH 10 ML OVER LAUREL AVE
1206 - 1207	FOUNDATION LAYOUT IH 10 EBML OVER LAUREL AVE
1208 - 1209	FOUNDATION LAYOUT IH 10 WBML OVER LAUREL AVE
1210	ABUTMENT 1 PHASE 1 STEP 3 IH 10 ML OVER LAUREL AVE
1211	ABUTMENT 1 PHASE 3 STEP 1 IH 10 ML OVER LAUREL AVE
1212	ABUTMENT 1 PHASE 4 STEP 2 IH 10 ML OVER LAUREL AVE
1213	ABUTMENT DETAILS IH 10 ML OVER LAUREL AVE
1214	BENTS 2 & 3 PHASE 1 STEP 3 IH 10 MAINLANE OVER LAUREL AVE
1215	BENT 4 PHASE 1 STEP 3 IH 10 MAINLANE OVER LAUREL AVE
1216	BENT 5 PHASE 1 STEP 3 IH 10 MAINLANE OVER LAUREL AVE



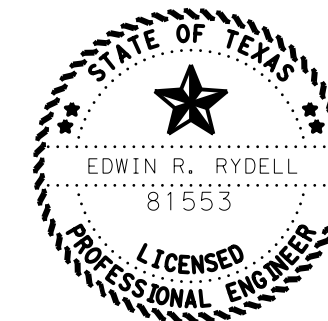
THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN # HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

Bethany M. Shearrer P. E. 02-22-2024
DATE



THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN # HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

Cooper Liebau P. E. 2/22/2024
DATE



THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN # HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

Edwin R. Rydell P. E. 2/22/2024
DATE

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0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	3	


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 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\1 - General\1069_EASTEX_INDEX OF SHEETS_003.dgn


SHEET NO.	DESCRIPTION
IH10 MAINLANES OVER LAUREL AVE (CONT.)	
1217	BENT 6 PHASE 1 STEP 3 IH 10 MAINLANE OVER LAUREL AVE
1218	BENT 7 & 8 PHASE 1 STEP 3 IH 10 MAINLANE OVER LAUREL AVE
1219	BENT 9 PHASE 1 STEP 3 IH 10 MAINLANE OVER LAUREL AVE
1220	BENTS 2-6, 9 PHASE 3 STEP 1 IH 10 MAINLANE OVER LAUREL AVE
1221	BENTS 7 & 8 PHASE 3 STEP 1 IH 10 MAINLANE OVER LAUREL AVE
1222	BENTS 2-6, 9 PHASE 4 STEP 2 IH 10 MAINLANE OVER LAUREL AVE
1223	BENTS 7 & 8 PHASE 4 STEP 2 IH 10 MAINLANE OVER LAUREL AVE
1224 - 1226	BENT DETAILS IH 10 MAINLANE OVER LAUREL AVE
1227 - 1233	BENTS 7 & 8 ARCH REINFORCING DETAILS IH 10 MAINLANE OVER LAUREL AVE
1234	FRAMING PLAN (SPANS 1-2) IH 10 EBML OVER LAUREL AVE
1235	FRAMING PLAN (SPANS 3-5) IH 10 EBML OVER LAUREL AVE
1236	FRAMING PLAN (SPANS 6-8) IH 10 EBML OVER LAUREL AVE
1237	BENT REPORTS IH 10 EBML OVER LAUREL AVE
1238	GIRDER REPORTS IH 10 EBML OVER LAUREL AVE
1239	FRAMING PLAN (SPANS 1-2) IH 10 WBML OVER LAUREL AVE
1240	FRAMING PLAN (SPANS 3-5) IH 10 WBML OVER LAUREL AVE
1241	FRAMING PLAN (SPANS 6-8) IH 10 WBML OVER LAUREL AVE
1242	BENT REPORTS IH 10 WBML OVER LAUREL AVE
1243	GIRDER REPORTS IH 10 WBML OVER LAUREL AVE
1244	250.00' PRESTR CONC GIRDER UNIT 1 IH 10 EBML OVER LAUREL AVE
1245	344.00' PRESTR CONC GIRDER UNIT 2 IH 10 EBML OVER LAUREL AVE
1246	338.00' PRESTR CONC GIRDER UNIT 3 IH 10 EBML OVER LAUREL AVE
1247	250.00' PRESTR CONC GIRDER UNIT 1 IH 10 WBML OVER LAUREL AVE
1248	344.00' PRESTR CONC GIRDER UNIT 2 IH 10 WBML OVER LAUREL AVE
1249	338.00' PRESTR CONC GIRDER UNIT 3 IH 10 WBML OVER LAUREL AVE
1250 - 1251	PRESTR CONC GIRDER UNIT DETAILS IH 10 EBML OVER LAUREL AVE
1252 - 1253	PRESTR CONC GIRDER UNIT DETAILS IH 10 WBML OVER LAUREL AVE
1254 - 1255	IGND
IH10 MAINLANES OVER CALDER AVE	
1256 - 1259	BRIDGE LAYOUT IH 10 EBML OVER CALDER AVE
1260 - 1263	BRIDGE LAYOUT IH 10 WBML OVER CALDER AVE
1264 - 1278	CONSTRUCTION PHASING IH 10 MAINLANE OVER CALDER AVE
1279 - 1280	TYPICAL SECTIONS IH 10 MAINLANE OVER CALDER AVE
1281 - 1282	ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS IH 10 MAINLANE OVER CALDER AVE
1283 - 1284	FOUNDATION LAYOUT IH 10 EBML OVER CALDER AVE
1285 - 1286	FOUNDATION LAYOUT IH 10 WBML OVER CALDER AVE
1287	BENTS 2-11 PHASE 1 STEP 3 IH 10 MAINLANE OVER CALDER AVE
1288	BENT 12 PHASE 1 STEP 3 IH 10 MAINLANE OVER CALDER AVE
1289	BENT 13 PHASE 1 STEP 3 IH 10 MAINLANE OVER CALDER AVE
1290	BENTS 2-13 PHASE 3 STEP 1 IH 10 MAINLANE OVER CALDER AVE
1291	BENTS 2 & 3 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1292	BENT 4 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1293	BENT 5 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1294	BENT 6 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1295	BENT 7 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1296	BENT 8 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1297	BENT 9 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1298	BENTS 10-13 PHASE 4 STEP 2 IH 10 MAINLANE OVER CALDER AVE
1299 - 1301	BENT DETAILS IH 10 MAINLANE OVER CALDER AVE
1302	FRAMING PLAN (SPANS 1-3) IH 10 EBML OVER CALDER AVE
1303	FRAMING PLAN (SPANS 4-6) IH 10 EBML OVER CALDER AVE
1304	FRAMING PLAN (SPANS 7-9) IH 10 EBML OVER CALDER AVE
1305	FRAMING PLAN (SPANS 10-12) IH 10 EBML OVER CALDER AVE
1306	FRAMING PLAN BENT REPORT IH 10 EBML OVER CALDER AVE
1307	FRAMING PLAN GIRDER REPORT IH 10 EBML OVER CALDER AVE
1308	FRAMING PLAN (SPANS 1-3) IH 10 WBML OVER CALDER AVE
1309	FRAMING PLAN (SPANS 4-6) IH 10 WBML OVER CALDER AVE
1310	FRAMING PLAN (SPANS 7-9) IH 10 WBML OVER CALDER AVE
1311	FRAMING PLAN (SPANS 10-12) IH 10 WBML OVER CALDER AVE
1312	FRAMING PLAN BENT REPORT IH 10 WBML OVER CALDER AVE
1313	FRAMING PLAN GIRDER REPORT IH 10 WBML OVER CALDER AVE
1314	336.00' PRESTR CONC GIRDER UNIT 1 IH 10 EBML OVER CALDER AVE
1315	345.00' PRESTR CONC GIRDER UNIT 2 IH 10 EBML OVER CALDER AVE
1316	363.00' PRESTR CONC GIRDER UNIT 3 IH 10 EBML OVER CALDER AVE
1317	369.00' PRESTR CONC GIRDER UNIT 4 IH 10 EBML OVER CALDER AVE
1318	336.00' PRESTR CONC GIRDER UNIT 1 IH 10 WBML OVER CALDER AVE
1319	345.00' PRESTR CONC GIRDER UNIT 2 IH 10 WBML OVER CALDER AVE
1320	363.00' PRESTR CONC GIRDER UNIT 3 IH 10 WBML OVER CALDER AVE
1321	369.00' PRESTR CONC GIRDER UNIT 4 IH 10 WBML OVER CALDER AVE
1322 - 1323	PRESTR CONC GIRDER UNIT DETAILS IH 10 EBML OVER CALDER AVE
1324 - 1325	PRESTR CONC GIRDER UNIT DETAILS IH 10 WBML OVER CALDER AVE
1326 - 1328	IGND
IH 10 EB MAINLANES AT US 69	
1329 - 1335	BRIDGE LAYOUT IH 10 EBML AT US 69
1336 - 1341	CONSTRUCTION PHASING IH 10 EB MAINLANE AT US 69
1342 - 1343	TYPICAL SECTION IH 10 EB MAINLANE AT US 69
1344 - 1345	QTY & BEARING SEAT ELEV IH 10 EB MAINLANE AT US 69
1346 - 1348	FOUNDATION LAYOUT IH 10 EB MAINLANE AT US 69
1349	ABUTMENT 21 IH 10 EB MAINLANE AT US 69
1350	ABUTMENT DETAILS IH 10 EB MAINLANE AT US 69
1351	BENT 2 IH 10 EB MAINLANE AT US 69
1352	BENT 3 IH 10 EB MAINLANE AT US 69
1353	BENT 4 IH 10 EB MAINLANE AT US 69

SHEET NO.	DESCRIPTION
IH 10 EB MAINLANES AT US 69 (CONT.)	
1354	BENT 5 IH 10 EB MAINLANE AT US 69
1355	BENT 6 IH 10 EB MAINLANE AT US 69
1356	BENT 7 IH 10 EB MAINLANE AT US 69
1357 - 1358	BENT 8 IH 10 EB MAINLANE AT US 69
1359 - 1360	BENT 9 IH 10 EB MAINLANE AT US 69
1361 - 1362	BENT 10 IH 10 EB MAINLANE AT US 69
1363	BENT 11 IH 10 EB MAINLANE AT US 69
1364	BENT 12 IH 10 EB MAINLANE AT US 69
1365	BENT 13 IH 10 EB MAINLANE AT US 69
1366	BENT 14 IH 10 EB MAINLANE AT US 69
1367	BENT 15 IH 10 EB MAINLANE AT US 69
1368 - 1369	BENT 16 IH 10 EB MAINLANE AT US 69
1370	BENT 17 IH 10 EB MAINLANE AT US 69
1371	BENT 18 IH 10 EB MAINLANE AT US 69
1372	BENT 19 IH 10 EB MAINLANE AT US 69
1373	BENT 20 IH 10 EB MAINLANE AT US 69
1374 - 1378A	BENT DETAILS IH 10 EB MAINLANE AT US 69
1379 - 1379A	BENT COLUMN DETAILS (MOD) IH 10 EB MAINLANE AT US 69
1380	FRAMING PLAN (SPANS 1-3) IH 10 EB MAINLANE AT US 69
1381	FRAMING PLAN (SPANS 4-6) IH 10 EB MAINLANE AT US 69
1382	FRAMING PLAN (SPANS 7-9) IH 10 EB MAINLANE AT US 69
1383	FRAMING PLAN (SPANS 10-11) IH 10 EB MAINLANE AT US 69
1384	FRAMING PLAN (SPANS 12-13) IH 10 EB MAINLANE AT US 69
1385	FRAMING PLAN (SPANS 14-16) IH 10 EB MAINLANE AT US 69
1386	FRAMING PLAN (SPANS 17-18) IH 10 EB MAINLANE AT US 69
1387	FRAMING PLAN (SPANS 19-20) IH 10 EB MAINLANE AT US 69
1388 - 1391	BENT AND GIRDER REPORT IH 10 EB MAINLANE AT US 69
1392	371.00' PRESTR CONC GIRDER UNIT 1 IH 10 EB MAINLANE AT US 69
1393	328.00' PRESTR CONC GIRDER UNIT 2 IH 10 EB MAINLANE AT US 69
1394	269.10' PRESTR CONC GIRDER UNIT 3 IH 10 EB MAINLANE AT US 69
1395	229.11' PRESTR CONC GIRDER UNIT 4 IH 10 EB MAINLANE AT US 69
1396	229.11' PRESTR CONC GIRDER UNIT 5 IH 10 EB MAINLANE AT US 69
1397	375.00' PRESTR CONC GIRDER UNIT 6 IH 10 EB MAINLANE AT US 69
1398	250.00' PRESTR CONC GIRDER UNIT 7 IH 10 EB MAINLANE AT US 69
1399	250.00' PRESTR CONC GIRDER UNIT 8 IH 10 EB MAINLANE AT US 69
1400 - 1404	PRESTR CONC GIRDER UNIT DETAILS IH 10 EB MAINLANE AT US 69
1405	GORE AREA ENDWALL DETAILS IH 10 EB MAINLANE AT US 69
1406	IGND
IH 10 WB MAINLANES AT US 69	
1407 - 1413	BRIDGE LAYOUT IH 10 WBML
1414 - 1421	CONSTRUCTION PHASING IH 10 WB MAINLANE AT US 69
1422 - 1423	TYPICAL SECTION IH 10 WB MAINLANE AT US 69
1424 - 1425	QTY & BEARING SEAT ELEV IH 10 WB MAINLANE AT US 69
1426 - 1428	FOUNDATION LAYOUT IH 10 WB MAINLANE AT US 69
1429	ABUTMENT 21 IH 10 WB MAINLANE AT US 69
1430	ABUTMENT DETAILS IH 10 WB MAINLANE AT US 69
1431	BENTS 2-3 IH 10 WB MAINLANE AT US 69
1432	BENT 4 IH 10 WB MAINLANE AT US 69
1433	BENT 5 IH 10 WB MAINLANE AT US 69
1434	BENT 6 IH 10 WB MAINLANE AT US 69
1435	BENT 7 IH 10 WB MAINLANE AT US 69
1436	BENT 8 IH 10 WB MAINLANE AT US 69
1437	BENT 9 IH 10 WB MAINLANE AT US 69
1438	BENT 10 IH 10 WB MAINLANE AT US 69
1439	BENT 11 IH 10 WB MAINLANE AT US 69
1440	BENT 12 IH 10 WB MAINLANE AT US 69
1441 - 1442	BENT 13 IH 10 WB MAINLANE AT US 69
1443 - 1444	BENT 14 IH 10 WB MAINLANE AT US 69
1445	BENT 15 IH 10 WB MAINLANE AT US 69
1446	BENT 16 IH 10 WB MAINLANE AT US 69
1447	BENT 17 IH 10 WB MAINLANE AT US 69
1448	BENTS 18-19 IH 10 WB MAINLANE AT US 69
1448A	BENT 20 IH 10 WB MAINLANE AT US 69
1449 - 1452B	BENT DETAILS IH 10 WB MAINLANE AT US 69
1453	BENT COLUMN DETAILS (MOD) IH 10 WB MAINLANE AT US 69
1454	FRAMING PLAN (SPANS 1-3) IH 10 WB MAINLANE AT US 69
1455	FRAMING PLAN (SPANS 4-6) IH 10 WB MAINLANE AT US 69
1456	FRAMING PLAN (SPANS 7-9) IH 10 WB MAINLANE AT US 69
1457	FRAMING PLAN (SPANS 10-11) IH 10 WB MAINLANE AT US 69
1458	FRAMING PLAN (SPANS 12-13) IH 10 WB MAINLANE AT US 69
1459	FRAMING PLAN (SPANS 14-16) IH 10 WB MAINLANE AT US 69
1460	FRAMING PLAN (SPANS 17-18) IH 10 WB MAINLANE AT US 69
1461	FRAMING PLAN (SPANS 19-20) IH 10 WB MAINLANE AT US 69
1462 - 1465	BENT AND GIRDER REPORT IH 10 WB MAINLANE AT US 69
1466	371.00' PRESTR CONC GIRDER UNIT 1 IH 10 WB MAINLANE AT US 69
1467	304.00' PRESTR CONC GIRDER UNIT 2 IH 10 WB MAINLANE AT US 69
1468	293.10' PRESTR CONC GIRDER UNIT 3 IH 10 WB MAINLANE AT US 69
1469	229.11' PRESTR CONC GIRDER UNIT 4 IH 10 WB MAINLANE AT US 69
1470	229.12' PRESTR CONC GIRDER UNIT 5 IH 10 WB MAINLANE AT US 69
1471	375.00' PRESTR CONC GIRDER UNIT 6 IH 10 WB MAINLANE AT US 69
1472	250.00' PRESTR CONC GIRDER UNIT 7 IH 10 WB MAINLANE AT US 69
1473	250.00' PRESTR CONC GIRDER UNIT 8 IH 10 WB MAINLANE AT US 69
1474 - 1478	PRESTR CONC GIRDER UNIT DETAILS IH 10 WBML AT US 69
1479	IGND

SHEET NO.	DESCRIPTION
IH 10 ML EB TO US 69 NB DC	
1480 - 1491	BRIDGE LAYOUT IH 10 EBML TO US 69 NB DC
1492 - 1495	CONSTRUCTION PHASING IH 10 EBML TO US 69 NB DC
1496 - 1497	TYPICAL SECTIONS IH 10 EBML TO US 69 NB DC
1498 - 1500	ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS IH 10 EBML TO US 69 NB DC
1501 - 1506	FOUNDATION LAYOUT IH 10 EBML TO US 69 NB DC
1507	ABUTMENT 33 IH 10 EBML TO US 69 NB DC
1508	ABUTMENT 33 DETAILS IH 10 EBML TO US 69 NB DC
1509	BENT 2 IH 10 EBML TO US 69 NB DC
1510	BENT 3 IH 10 EBML TO US 69 NB DC
1511	BENT 4 IH 10 EBML TO US 69 NB DC
1512	BENT 5&6 IH 10 EBML TO US 69 NB DC
1513	BENT 7 IH 10 EBML TO US 69 NB DC
1514	BENT 10 IH 10 EBML TO US 69 NB DC
1515	BENTS 11-13 IH 10 EBML TO US 69 NB DC
1516	BENTS 14-18, 23-24 IH 10 EBML TO US 69 NB DC
1517	BENT 19 IH 10 EBML TO US 69 NB DC
1518	BENT 20 IH 10 EBML TO US 69 NB DC
1519	BENT 21 IH 10 EBML TO US 69 NB DC
1520	BENT 22 IH 10 EBML TO US 69 NB DC
1521	BENT 25 IH 10 EBML TO US 69 NB DC
1522	BENT 26 IH 10 EBML TO US 69 NB DC
1523 - 1524	BENT 27 IH 10 EBML TO US 69 NB DC
1525 - 1526	BENT 28 IH 10 EBML TO US 69 NB DC
1527 - 1528	BENT 29 IH 10 EBML TO US 69 NB DC
1529 - 1530	BENT 30 IH 10 EBML TO US 69 NB DC
1531 - 1532	BENT 31 IH 10 EBML TO US 69 NB DC
1533 - 1534	BENT 32 IH 10 EBML TO US 69 NB DC
1535 - 1552	BENT DETAILS IH 10 EBML TO US 69 NB DC
1553	STRADDLE BENT COLUMN DETAILS IH 10 EBML TO US 69 NB DC
1554	FRAMING PLAN (SPANS 1-3) IH 10 EBML TO US 69 NB DC
1555	FRAMING PLAN (SPANS 4-6) IH 10 EBML TO US 69 NB DC
1556	FRAMING PLAN (SPANS 7-9) IH 10 EBML TO US 69 NB DC
1557	FRAMING PLAN (SPANS 10-12) IH 10 EBML TO US 69 NB DC
1558	FRAMING PLAN (SPANS 13-15) IH 10 EBML TO US 69 NB DC
1559	FRAMING PLAN (SPANS 16-18) IH 10 EBML TO US 69 NB DC
1560	FRAMING PLAN (SPANS 19-21) IH 10 EBML TO US 69 NB DC
1561	FRAMING PLAN (SPANS 22-24) IH 10 EBML TO US 69 NB DC
1562	FRAMING PLAN (SPANS 25-27) IH 10 EBML TO US 69 NB DC
1563	FRAMING PLAN (SPANS 28-29) IH 10 EBML TO US 69 NB DC
1564	FRAMING PLAN (SPANS 30-32) IH 10 EBML TO US 69 NB DC
1565	332.07' PRESTR CONC GIRDER UNIT (SPANS 1-3) IH 10 EBML TO US 69 NB DC
1566	332.02' PRESTR CONC GIRDER UNIT (SPANS 4-6) IH 10 EBML TO US 69 NB DC
1567 - 1568	534.17' CONTINUOUS PLATE GIRDER UNIT (SPANS 7-9) IH 10 EBML TO US 69 NB DC
1569	340.81' PRESTR CONC GIRDER UNIT (SPANS 10-12) IH 10 EBML TO US 69 NB DC
1570	331.50' PRESTR CONC GIRDER UNIT (SPANS 13-15) IH 10 EBML TO US 69 NB DC
1571	338.50' PRESTR CONC GIRDER UNIT (SPANS 16-18) IH 10 EBML TO US 69 NB DC
1572	389.00' PRESTR CONC GIRDER UNIT (SPANS 19-21) IH 10 EBML TO US 69 NB DC
1573	304.00' PRESTR CONC GIRDER UNIT (SPANS 22-24) IH 10 EBML TO US 69 NB DC
1574	354.00' PRESTR CONC GIRDER UNIT (SPANS 25-27) IH 10 EBML TO US 69 NB DC
1575	225.00' PRESTR CONC GIRDER UNIT (SPANS 28-29) IH 10 EBML TO US 69 NB DC
1576	375.00' PRESTR CONC GIRDER UNIT (SPANS 30-32) IH 10 EBML TO US 69 NB DC
1577 - 1581	PRESTR CONC GIRDER UNIT DETAILS IH 10 EBML TO US 69 NB DC
1582	GORE AREA ENDWALL DETAILS IH 10 EBML TO US 69 NB DC
1583	534.17' CONTINUOUS PLATE GIRDER UNIT DETAILS IH 10 EBML TO US 69 NB DC
1584	GIRDER ELEVATIONS SPAN 7 IH 10 EBML TO US 69 NB DC
1585	GIRDER ELEVATIONS SPAN 8 IH 10 EBML TO US 69 NB DC
1586	GIRDER ELEVATIONS SPAN 9 IH 10 EBML TO US 69 NB DC
1587	CROSS FRAME DETAILS IH 10 EBML TO US 69 NB DC
1588	BOLTED FIELD SPLICE DETAILS SPANS 7-9 IH 10 EBML TO US 69 NB DC
1589	MISCELLANEOUS STEEL DETAILS IH 10 EBML TO US 69 NB DC



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SHEET NO.	DESCRIPTION
1590	DEAD LOAD DEFLECTION AND CAMBER SPANS 7-9 IH 10 EBML TO US 69 NB DC
1591	STRUCTURAL STEEL GENERAL NOTES & CAMBER IH 10 EBML TO US 69 NB DC
1592	STRADDLE BENT SPLICE DETAILS IH 10 EBML TO US 69 NB DC
1593	STRADDLE BENT 8 CAP PLAN & ELEVATION IH 10 EBML TO US 69 NB DC
1594	STRADDLE BENT 9 CAP PLAN & ELEVATION IH 10 EBML TO US 69 NB DC
1595 - 1597	STRADDLE BENTS 8 & 9 CAP SECTIONS AND DETAILS IH 10 EBML TO US 69 NB DC
1598 - 1600	STEEL UNIT BEARINGS IH 10 EBML TO US 69 NB DC
1601	IGND
VOLUME 5	
US 69 SB TO IH 10 ML WB DC	
1602 - 1611	BRIDGE LAYOUT US 69 SB TO IH 10 ML WB DC
1612	CONSTRUCTION PHASING US 69 SB TO IH 10 ML WB DC
1613 - 1614	TYPICAL SECTION US 69 SB TO IH 10 ML WB DC
1615 - 1618	US 69 SB TO IH 10 ML WB DC ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS
1619 - 1623	FOUNDATION LAYOUT US 69 SB TO IH 10 ML WB DC
1624	ABUTMENT 30 US 69 SB TO IH 10 ML WB DC
1625	ABUTMENT DETAILS US 69 SB TO IH 10 ML WB DC
1626	BENT 2 US 69 SB TO IH 10 ML WB DC
1627	BENT 3 US 69 SB TO IH 10 ML WB DC
1628	BENT 4 US 69 SB TO IH 10 ML WB DC
1629	BENT 5 US 69 SB TO IH 10 ML WB DC
1630	BENT 6 US 69 SB TO IH 10 ML WB DC
1631	BENT 7 US 69 SB TO IH 10 ML WB DC
1632	BENT 8 US 69 SB TO IH 10 ML WB DC
1633	BENT 9 US 69 SB TO IH 10 ML WB DC
1634	BENT 10 US 69 SB TO IH 10 ML WB DC
1635	BENT 11, 21-24 US 69 SB TO IH 10 ML WB DC
1636	BENT 12 US 69 SB TO IH 10 ML WB DC
1637	BENT 13-17 & 20 US 69 SB TO IH 10 ML WB DC
1638	BENT 18 US 69 SB TO IH 10 ML WB DC
1639	BENT 19 US 69 SB TO IH 10 ML WB DC
1640	BENT 25 US 69 SB TO IH 10 ML WB DC
1641	BENT 26 US 69 SB TO IH 10 ML WB DC
1642	BENT 27 US 69 SB TO IH 10 ML WB DC
1643	BENT 28 US 69 SB TO IH 10 ML WB DC
1644	BENT 29 US 69 SB TO IH 10 ML WB DC
1645 - 1652	BENT DETAILS US 69 SB TO IH 10 ML WB DC
1653	BENT COLUMN DETAILS (MOD) US 69 SB TO IH 10 ML WB DC
1654	FRAMING PLAN (SPANS 1-3) US 69 SB TO IH 10 ML WB DC
1655	FRAMING PLAN (SPANS 4-6) US 69 SB TO IH 10 ML WB DC
1656	FRAMING PLAN (SPANS 7-9) US 69 SB TO IH 10 ML WB DC
1657	FRAMING PLAN (SPANS 10-12) US 69 SB TO IH 10 ML WB DC
1658	FRAMING PLAN (SPANS 13-15) US 69 SB TO IH 10 ML WB DC
1659	FRAMING PLAN (SPANS 16-18) US 69 SB TO IH 10 ML WB DC
1660	FRAMING PLAN (SPANS 19-21) US 69 SB TO IH 10 ML WB DC
1661	FRAMING PLAN (SPANS 22-24) US 69 SB TO IH 10 ML WB DC
1662	FRAMING PLAN (SPANS 25-27) US 69 SB TO IH 10 ML WB DC
1663	FRAMING PLAN (SPANS 28-29) US 69 SB TO IH 10 ML WB DC
1664	US 69 SB TO IH 10 ML WB DC 313.12' PRESTR CONC GIRDER UNIT 1 (SPANS 1-3)
1665	US 69 SB TO IH 10 ML WB DC 348.29' PRESTR CONC GIRDER UNIT 2 (SPANS 4-6)
1666	US 69 SB TO IH 10 ML WB DC 365.87' PRESTR CONC GIRDER UNIT 3 (SPANS 7-9)
1667	US 69 SB TO IH 10 ML WB DC 357.75' PRESTR CONC GIRDER UNITS 4 (SPANS 10-12)
1668	US 69 SB TO IH 10 ML WB DC 369.17' PRESTR CONC GIRDER UNITS 5 (SPANS 13-15)
1669	US 69 SB TO IH 10 ML WB DC 372.50' PRESTR CONC GIRDER UNIT 6 (SPANS 16-18)
1670	US 69 SB TO IH 10 ML WB DC 378.16' PRESTR CONC GIRDER UNIT 7 (SPANS 19-21)
1671	US 69 SB TO IH 10 ML WB DC 378.17' PRESTR CONC GIRDER UNIT 8 (SPANS 22-24)
1672	US 69 SB TO IH 10 ML WB DC 337.62' PRESTR CONC GIRDER UNIT 9 (SPANS 25-27)
1673	US 69 SB TO IH 10 ML WB DC 236.77' PRESTR CONC GIRDER UNIT 10 (SPANS 28-29)
1674 - 1676	US 69 SB TO IH 10 ML WB DC PRESTR CONC GIRDER UNIT DETAILS
1677	GORE AREA ENDWALL DETAILS US 69 SB TO IH 10 ML WB DC
1678 - 1679	IGND
US 69 SB TO IH 10 EB DC	
1680 - 1692	BRIDGE LAYOUT US 69 SB TO IH 10 EB DC
1693 - 1695	TYPICAL SECTIONS US 69 SB TO IH 10 EB DC
1696 - 1697	ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS US 69 SB TO IH 10 EB DC
1698 - 1701	FOUNDATION LAYOUT US 69 SB TO IH 10 EB DC
1702	BENT 2 US 69 SB TO IH 10 EB DC
1703	BENT 3 US 69 SB TO IH 10 EB DC
1704	BENT 4 US 69 SB TO IH 10 EB DC
1705	BENT 5 US 69 SB TO IH 10 EB DC
1706	BENT 6 US 69 SB TO IH 10 EB DC
1707	BENT 7 US 69 SB TO IH 10 EB DC
1708	BENT 8 US 69 SB TO IH 10 EB DC
1709	BENTS 9 & 10 US 69 SB TO IH 10 EB DC
1710	BENT 11 US 69 SB TO IH 10 EB DC
1711	BENT 12 US 69 SB TO IH 10 EB DC
1712	BENT 13 US 69 SB TO IH 10 EB DC
1713	BENT 14 US 69 SB TO IH 10 EB DC
1714	BENTS 15-18, 20-23 US 69 SB TO IH 10 EB DC
1715	BENT 19 US 69 SB TO IH 10 EB DC
1716	BENT 24 US 69 SB TO IH 10 EB DC
1717	BENT 25 US 69 SB TO IH 10 EB DC
1718	BENT 26 US 69 SB TO IH 10 EB DC
1719	BENT 27 US 69 SB TO IH 10 EB DC
1720	BENTS 2, 7, 15-18, 20-23 & 27 DETAILS US 69 SB TO IH 10 EB DC

SHEET NO.	DESCRIPTION
1721	US 69 SB TO IH 10 EB DC (CONT.)
1722	BENT 3 DETAILS US 69 SB TO IH 10 EB DC
1723	BENTS 4-6 DETAILS US 69 SB TO IH 10 EB DC
1724	BENT 8 DETAILS US 69 SB TO IH 10 EB DC
1725	BENT 11 DETAILS US 69 SB TO IH 10 EB DC
1726	BENTS 9 & 10 DETAILS US 69 SB TO IH 10 EB DC
1727	BENTS 12 & 13 DETAILS US 69 SB TO IH 10 EB DC
1728	BENT 14 DETAILS US 69 SB TO IH 10 EB DC
1729	BENT 19 DETAILS US 69 SB TO IH 10 EB DC
1730	BENT 25 DETAILS US 69 SB TO IH 10 EB DC
1731	BENT 24 & 26 DETAILS US 69 SB TO IH 10 EB DC
1732 - 1735	BENT DETAILS OSB LEDGE US 69 SB TO IH 10 EB DC
1736	BENT DETAILS US 69 SB TO IH 10 EB DC
1737	STRADDLE BENT COLUMN DETAILS US 69 SB TO IH 10 EB DC.
1738	FRAMING PLAN (SPANS 1-3) US 69 SB TO IH 10 EB DC
1739	FRAMING PLAN (SPANS 4-5) US 69 SB TO IH 10 EB DC
1740	FRAMING PLAN (SPANS 6-7) US 69 SB TO IH 10 EB DC
1741	FRAMING PLAN (SPANS 8) US 69 SB TO IH 10 EB DC
1742	FRAMING PLAN (SPANS 9) US 69 SB TO IH 10 EB DC
1743	FRAMING PLAN (SPANS 11-13) US 69 SB TO IH 10 EB DC
1744	FRAMING PLAN (SPANS 14-16) US 69 SB TO IH 10 EB DC
1745	FRAMING PLAN (SPANS 17-19) US 69 SB TO IH 10 EB DC
1746	FRAMING PLAN (SPANS 20-21) US 69 SB TO IH 10 EB DC
1747	FRAMING PLAN (SPANS 22-23) US 69 SB TO IH 10 EB DC
1748	FRAMING PLAN (SPANS 24-25) US 69 SB TO IH 10 EB DC
1749	FRAMING PLAN (SPANS 26-27) US 69 SB TO IH 10 EB DC
1750	355.05' PRESTR CONC GIRDER UNIT (SPANS 1-3) US 69 SB TO IH 10 EB DC
1751	200.67' PRESTR CONC GIRDER UNIT (SPANS 4-5) US 69 SB TO IH 10 EB DC
1752	205.00' PRESTR CONC GIRDER UNIT (SPANS 6-7) US 69 SB TO IH 10 EB DC
1753	792.00' CONTINUOUS PLATE GIRDER UNIT SPAN 8 US 69 SB TO IH 10 EB DC
1754	792.00' CONTINUOUS PLATE GIRDER UNIT SPAN 9 US 69 SB TO IH 10 EB DC
1755	792.00' CONTINUOUS PLATE GIRDER UNIT SPAN 10 US 69 SB TO IH 10 EB DC
1756	294.00' PRESTR CONC GIRDER UNIT (SPANS 11-13) US 69 SB TO IH 10 EB DC
1757	347.40' PRESTR CONC GIRDER UNIT (SPANS 14-16) US 69 SB TO IH 10 EB DC
1758	339.00' PRESTR CONC GIRDER UNIT (SPANS 17-19) US 69 SB TO IH 10 EB DC
1759	214.80' PRESTR CONC GIRDER UNIT (SPANS 20-21) US 69 SB TO IH 10 EB DC
1760	214.80' PRESTR CONC GIRDER UNIT (SPANS 22-23) US 69 SB TO IH 10 EB DC
1761	304.00' PRESTR CONC GIRDER UNIT (SPANS 24-25) US 69 SB TO IH 10 EB DC
1762	214.16' PRESTR CONC GIRDER UNIT (SPANS 26-27) US 69 SB TO IH 10 EB DC
1763 - 1766	PRESTR CONC GIRDER UNIT DETAILS US 69 SB TO IH 10 EB DC
1767	GORE AREA ENDWALL DETAILS US 69 SB TO IH 10 EB DC
1768	IGND
1769	STEEL UNIT TYPICAL SECTION US 69 SB TO IH 10 EB DC
1770	STEEL GIRDER ELEVATION SPAN 8
1771	STEEL GIRDER ELEVATION SPAN 9 US 69 SB TO IH 10 EB DC
1772	STEEL GIRDER ELEVATION SPAN 10 US 69 SB TO IH 10 EB DC
1773	BOLTED FIELD SPLICE DETAILS (SPANS 8-10) US 69 SB TO IH 10 EB DC
1774	MISCELLANEOUS STEEL DETAILS US 69 NB TO IH 10 EB DC
1775 - 1776	CROSS FRAME DETAILS US 69 SB TO IH 10 EB DC
1777	DEAD LOAD DEFLECTION AND CAMBER (SPANS 8-10) US 69 SB TO IH 10 EB DC
1778 - 1780	STEEL UNIT BEARINGS US 69 SB TO IH 10 EB DC
IH 10 WB TO US 69 NB DC	
1781 - 1787	BRIDGE LAYOUT IH 10 WB TO US 69 NB DC
1788	IH 10 WB TO US 69 NB DC TYPICAL SECTION
1789	IH 10 WB TO US 69 NB DC ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS
1790 - 1796	IH 10 WB TO US 69 NB DC FOUNDATION LAYOUT
1797	IH 10 WB TO US 69 NB DC BENT 1
1798	IH 10 WB TO US 69 NB DC BENT 2-4
1799	IH 10 WB TO US 69 NB DC BENT 5
1800	IH 10 WB TO US 69 NB DC BENT 6
1801	IH 10 WB TO US 69 NB DC BENT 7-15 & 17-20
1802	IH 10 WB TO US 69 NB DC BENT 16
1803	IH 10 WB TO US 69 NB DC BENT 21-22
1804	IH 10 WB TO US 69 NB DC BENT 2-4, 7-15 & 17-22 DETAILS
1805	IH 10 WB TO US 69 NB DC BENT 5 DETAILS
1806	IH 10 WB TO US 69 NB DC BENT 6 DETAILS
1807	IH 10 WB TO US 69 NB DC BENT 16 DETAILS
1808 - 1816	IH 10 WB TO US 69 NB DC GIRDER LAYOUT
1817 - 1825	IH 10 WB TO US 69 NB DC GIRDER UNIT
1826 - 1828	GIRDER UNIT DETAILS IH 10 WB TO US 69 NB DC
1829	IGND
IH10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP	
1830 - 1831	BRIDGE LAYOUT IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1832	ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1833	FOUNDATION LAYOUT IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1834	ABUTMENT 4 IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1835	ABUTMENT DETAILS IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1836	BENTS 1-3 IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1837	BENT DETAILS IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1838	FRAMING PLAN (SPANS 1-2) IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1839	FRAMING PLAN (SPANS 3-4) IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1840	226.00' PRESTR CONC GIRDER UNIT 1 IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1841	226.00' PRESTR CONC GIRDER UNIT 2 IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1842	PRESTRESSED CONCRETE GIRDER UNIT DETAILS IH 10 WB/US 69 NB DC TO IH 10 WB EXIT RAMP
1843	IGND



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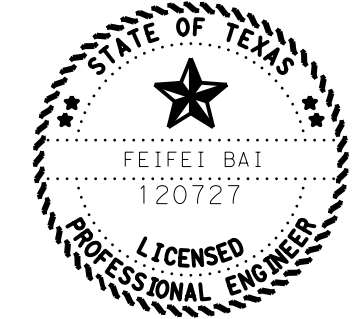
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SHEET NO.	DESCRIPTION	SHEET NO.	DESCRIPTION
1844 - 1847	BRIDGE LAYOUT IH 10 EBML OVERPASS AT 11TH ST	1955 - 1957	BRIDGE LAYOUT
1848 - 1852	BRIDGE LAYOUT IH 10 WBML OVERPASS AT 11TH ST	1958	TYPICAL SECTION US 69 SB ENT RAMP
1853 - 1862	CONSTRUCTION PHASING IH 10 ML OVERPASS AT 11TH STREET	1959	ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1863 - 1866	QTY & BEARING SEAT ELEV IH 10 ML OVERPASS AT 11TH STREET	1960 - 1962	FOUNDATION LAYOUT US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1867 - 1870	FOUNDATION LAYOUT IH 10 ML OVERPASS AT 11TH STREET	1963	ABUTMENT 8 US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1871	ABUTMENT 1 IH 10 EBML OVERPASS AT 11TH STREET	1964	ABUTMENT 8 DETAILS US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1872	ABUTMENT 13 IH 10 EBML OVERPASS AT 11TH STREET	1965	BENT 2 US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1873	ABUTMENT 1 IH 10 WBML OVERPASS AT 11TH STREET	1966	BENT 3-7 US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1874	ABUTMENT 13 IH 10 WBML OVERPASS AT 11TH STREET	1967	BENT 2 DETAILS US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1875	ABUTMENT DETAILS IH 10 ML OVERPASS AT 11TH STREET	1968	BENT 3-7 DETAILS US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1876	BENT 2-4 PHASE 3 STEP 1 IH 10 EBML OVERPASS AT 11TH STREET	1969 - 1971	GIRDER LAYOUT US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1877	BENT 5-7 PHASE 3 STEP 1 IH 10 EBML OVERPASS AT 11TH STREET	1972 - 1974	GIRDER UNIT US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1878	BENT 8 PHASE 3 STEP 1 IH 10 EBML OVERPASS AT 11TH STREET	1975	GIRDER UNIT DETAILS US 69 SB ENT RAMP OVER IH 10 WB EXIT RAMP
1879	BENT 9 PHASE 3 STEP 1 IH 10 EBML OVERPASS AT 11TH STREET	1976	IGND
1880	BENT 10-11 PHASE 3 STEP 1 IH 10 EBML OVERPASS AT 11TH STREET		
1881	BENT 12 PHASE 3 STEP 1 IH 10 EBML OVERPASS AT 11TH STREET		
1882	BENT 2-7 PHASE 2 STEP 2 IH 10 EBML OVERPASS AT 11TH STREET	1977	
1883	BENT 8 PHASE 2 STEP 1 & STEP 2 IH 10 EBML OVERPASS AT 11TH STREET	1978 - 1981	BRIDGE COMMON DETAILS
1884	BENT 9 PHASE 2 STEP 1 & STEP 2 IH 10 EBML OVERPASS AT 11TH STREET	1982	4'X4' COLUMN AESTHETIC DETAILS
1885	BENT 10 PHASE 2 STEP 1 & STEP 2 IH 10 EBML OVERPASS AT 11TH STREET	1983	4'X4' COLUMN AESTHETIC DETAILS IH10 ML OVER LAUREL AVE BENT 7 & 8
1886	BENT 11 PHASE 2 STEP 1 & STEP 2 IH 10 EBML OVERPASS AT 11TH STREET	1984	FLARED COLUMN AESTHETIC DETAILS
1887	BENT 12 PHASE 2 STEP 1 & STEP 2 IH 10 EBML OVERPASS AT 11TH STREET	1985	NON-FLARED COLUMN AESTHETIC DETAILS
1888	BENT 2-7 PHASE 2 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	1986 - 1988	COLUMN DETAILS TYPE A
1889	BENT 8-12 PHASE 2 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	1989	COLUMN DIMENSIONS TYPE C
1890	BENT 2 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	1990 - 1992	COLUMN DETAILS TYPE C
1891	BENT 3 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	1993	COLUMN DIMENSIONS TYPE D
1892	BENT 4 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	1994 - 1996	COLUMN DETAILS TYPE D
1893	BENT 5 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	1997	COLUMN DIMENSIONS TYPE E
1894	BENT 6 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	1998 - 1999	COLUMN DETAILS TYPE E
1895	BENT 7 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	2000	COLUMN DIMENSIONS TYPE F
1896	BENT 8-9 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	2001 - 2002	COLUMN DETAILS TYPE F
1897	BENT 10-11 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	2003	COLUMN DIMENSIONS TYPE G
1898	BENT 12 PHASE 4 STEP 1 IH 10 WBML OVERPASS AT 11TH STREET	2004 - 2005	COLUMN DETAILS TYPE G
1899 - 1902	BENT DETAILS IH 10 ML OVERPASS AT 11TH STREET	2006	COLUMN DIMENSIONS TYPE H
1903	FRAMING PLAN (SPAN 1-2) IH 10 EBML OVERPASS AT 11TH STREET	2007 - 2008	COLUMN DETAILS TYPE H
1904	FRAMING PLAN (SPAN 3-4) IH 10 EBML OVERPASS AT 11TH STREET	2009	COLUMN DIMENSIONS TYPE I
1905	FRAMING PLAN (SPAN 5-7) IH 10 EBML OVERPASS AT 11TH STREET	2010 - 2011	COLUMN DETAILS TYPE I
1906	FRAMING PLAN (SPAN 8-9) IH 10 EBML OVERPASS AT 11TH STREET	2012	COLUMN DIMENSIONS TYPE J
1907	FRAMING PLAN (SPAN 10-12) IH 10 EBML OVERPASS AT 11TH STREET	2013 - 2014	COLUMN DETAILS TYPE J
1908	FRAMING PLAN (SPAN 1-2) IH 10 WBML OVERPASS AT 11TH STREET	2015	COLUMN DIMENSIONS TYPE K
1909	FRAMING PLAN (SPAN 3-4) IH 10 WBML OVERPASS AT 11TH STREET	2016 - 2017	COLUMN DETAILS TYPE K
1910	FRAMING PLAN (SPAN 5-7) IH 10 WBML OVERPASS AT 11TH STREET	2018	COLUMN DIMENSIONS TYPE L
1911	FRAMING PLAN (SPAN 8-9) IH 10 WBML OVERPASS AT 11TH STREET	2019	COLUMN DETAILS TYPE L
1912	FRAMING PLAN (SPAN 10-12) IH 10 WBML OVERPASS AT 11TH STREET	2020	FOUNDATION DETAILS TYPE A1
1913 - 1916	BENT AND GIRDER REPORT IH 10 ML OVERPASS AT 11TH STREET	2021	FOUNDATION DETAILS TYPE A2
1917	221.75' PRESTRESSED CONCRETE GIRDER UNIT 1 IH 10 EBML OVERPASS AT 11TH STREET	2022	FOUNDATION DETAILS TYPE A3
1918	208.85' PRESTRESSED CONCRETE GIRDER UNIT UNIT 2 IH 10 EBML OVERPASS AT 11TH STREET	2023	FOUNDATION DETAILS TYPE A4
1919	354.00' EB PRESTRESSED CONCRETE GIRDER UNIT 3 IH 10 EBML OVERPASS AT 11TH STREET	2024	FOUNDATION DETAILS TYPE B
1920	226.00' PRESTRESSED CONCRETE GIRDER UNIT 4 IH 10 EBML OVERPASS AT 11TH STREET	2025	FOUNDATION DETAILS TYPE C1
1921	339.00' PRESTRESSED CONCRETE GIRDER UNIT 5 IH 10 EBML OVERPASS AT 11TH STREET	2026	FOUNDATION DETAILS TYPE C2
1922	221.75' PRESTRESSED CONCRETE GIRDER UNIT 1 IH 10 WBML OVERPASS AT 11TH STREET	2026A	FOUNDATION DETAILS TYPE C3
1923	208.85' PRESTRESSED CONCRETE GIRDER UNIT 2 IH 10 WBML OVERPASS AT 11TH STREET	2026B	FOUNDATION DETAILS TYPE C4
1924	354.00' PRESTRESSED CONCRETE GIRDER UNIT 3 IH 10 WBML OVERPASS AT 11TH STREET	2027 - 2028	FOUNDATION DETAILS TYPE C5
1925	226.00' PRESTRESSED CONCRETE GIRDER UNIT 4 IH 10 WBML OVERPASS AT 11TH STREET	2029 - 2030	FOUNDATION DETAILS TYPE C6
1926	339.00' PRESTRESSED CONCRETE GIRDER UNIT 5 IH 10 WBML OVERPASS AT 11TH STREET	2031 - 2032	FOUNDATION DETAILS TYPE D
1927 - 1932	GIRDER UNIT DETAILS IH 10 ML OVERPASS AT 11TH STREET	2033	FOUNDATION DETAILS TYPE E1
1933	EBML IGND	2034 - 2035	FOUNDATION DETAILS TYPE E2
1934	WBML IGND	2036 - 2037	FOUNDATION DETAILS TYPE F
		2038	FOUNDATION DETAILS TYPE G1
		2039	FOUNDATION DETAILS TYPE G2
		2040	FOUNDATION DETAILS TYPE H 60" SHAFT
1935	BRIDGE LAYOUT US 69 NB EXIT RAMP OVER US 69 NBFR	2041 - 2043	FOUNDATION DETAILS TYPE I 78" SHAFT
1936	ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS US 69 NB EXIT RAMP OVER US 69 NBFR		FOUNDATION DETAILS TYPE J 90" SHAFT
1937	FOUNDATION LAYOUT US 69 NB EXIT RAMP OVER US 69 NBFR		BRIDGE DRAINAGE DETAILS
1938	ABUTMENT 2 US 69 NB EXIT RAMP OVER US 69 NBFR		
1939	ABUTMENT DETAILS US 69 NB EXIT RAMP OVER US 69 NBFR	2044	BRIDGE STANDARDS
1940	FRAMING PLAN (SPAN 1) US 69 NB EXIT RAMP OVER US 69 NBFR	2045	@ BAS-C
1941	123.25' PRESTR CONC GIRDER UNIT (SPAN 1) US 69 NB EXIT RAMP OVER US 69 NBFR	2046 - 2048	@ BD-1 (MOD)
1942	PRESTR CONC GIRDER UNIT DETAILS US 69 NB EXIT RAMP OVER US 69 NBFR	2049 - 2050	@ BMCS
1943	IGND	2051	@ BRSM
		2052 - 2053	@ BS-EJCP
		2054	@ CRJ-ITB
1944	US 69 SB TO 7TH ST BRIDGE LAYOUT	2055 - 2056	@ CRR
1945	TYPICAL SECTION US 69 SB TO 7TH ST	2057	@ CSAB
1946	ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS US 69 SB TO 7TH ST	2058	@ FD (MOD)
1947	FOUNDATION LAYOUT US 69 SB TO 7TH ST	2059 - 2060	@ IGCS
1948	ABUTMENT 4 DETAIL US 69 SB TO 7TH ST	2061 - 2063	@ IGD
1949	BENT 2-3 US 69 SB TO 7TH ST	2064 - 2065	@ IGEB
1950	BENT 2-3 DETAILS US 69 SB TO 7TH ST	2066	@ IGMS (MOD)
1951	GIRDER LAYOUT US 69 SB TO 7TH ST	2067 - 2068	@ IGTS
1952	GIRDER UNIT US 69 SB TO 7TH ST	2069	@ MEBR (C)
1953	GIRDER UNIT DETAILS US 69 SB TO 7TH ST	2070 - 2071	@ MEBR (S)
1954	IGND	2072	@ PBC-RC
		2073 - 2076	@ PCP-FAB
		2077 - 2078	@ PCP
		2079	@ PMDF
			@ RW (SF)

SHEET NO.	DESCRIPTION
2080	@ SEJ-M
2081 - 2083	@ SGEB
2084 - 2086	@ SGMD
2087	@ SGMS (MOD)
2088	@ SSTS
2089 - 2090	@ SRR
2091 - 2092	@ SSTR
2093 - 2096	@ T80PP-RF
2097 - 2098	@ T80PP-TS
2099 - 2101	@ T80SS
2102 - 2103	@ T222
2104	@ TRF
2105 - 2106	@ TRF80
2107	SSTR TO T80SS RAILING TRANSITION

VOLUME 6	
ILLUMINATION	
2108 - 2138	ILLUMINATION PLAN
2139 - 2147	CIRCUIT DIAGRAM
2148 - 2149	UNDERPASS LAYOUT - LAUREL AVE
2150 - 2151	UNDERPASS LAYOUT - LIBERTY AVE
2152 - 2153	UNDERPASS LAYOUT - CALDER AVE
2154 - 2155	UNDERPASS LAYOUT - NORTH ST
2156 - 2157	UNDERPASS LAYOUT - HARRISON ST
2158	UNDERPASS LAYOUT - GLADYS AVE
2159 - 2160	UNDERPASS LAYOUT - 11TH ST
2161	OMITTED
2162 - 2168	UNDERPASS LAYOUT - DELAWARE ST



THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN @ HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

[Signature] P.E. 03-07-2024
DATE



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 Texas Department of Transportation

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DATE: 6-MAR-2024 20:43
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SHEET NO. DESCRIPTION

ILLUMINATION STANDARDS
 2169 - 2171 % RID(1)-20 THRU RID(3)-20
 2172 - 2175 % RIP(1)-19 THRU RIP(4)-19
 2176 - 2184 % HMD(1)-03 THRU HMD(9)-03
 2185 - 2186 % HMIP(1)-16 THRU HMIP(2)-16
 2187 - 2188 % HMIF(1)-98 THRU HMIF(2)-98

ITS

2189 ITS GENERAL NOTES
 2190 - 2205 ITS LAYOUT
 2206 - 2207 POLE DETAILS
 2208 COMMUNICATIONS BLOCK DIAGRAM
 2209 DEVICE LOCATIONS
 2210 DMS ELEVATIONS
 2211 ITS ELECTRICAL SERVICE CHART

ITS STANDARDS

2212 - 2214 % DMS (TM - 1) - 16 THRU DMS (TM - 3) - 16
 2215 % COSS-Z3 & Z3I-10
 2216 - 2217 % COSSD
 2218 % COSSF
 2219 % COSS-FD
 2220 % WV & IZ - 14
 2221 % ITS(1) - 15
 2222 % ITS(3) - 16
 2223 % ITS(4) - 15
 2224 % ITS(4A) - 15
 2225 - 2227 % ITS(5) - 15 THRU ITS(7) - 15
 2228 - 2229 % ITS(8)-15 THRU ITS(9)-15
 2230 - 2231 % ITS(10)-15 THRU ITS(11)-15
 2232 - 2233 % ITS(12)-15 THRU ITS(13)-15
 2234 - 2238 % ITS(14) - 15 THRU ITS(18) - 15
 2239 % ITS(19)-17
 2240 - 2246 % ITS(20)-15 THRU ITS(26)-15
 2247 - 2248 % ITS(27)-16 THRU ITS(28)-16
 2249 % ITS(29)-22
 2250 - 2256 % ITS(30)-16 THRU ITS(36)-16
 2257 % ITS(37)-22
 2258 % ITS(38)-17
 2259 % ITS(39)-16
 2260 % ITS(40)-17
 2261 - 2262 % ITS(42)-16 THRU ITS(43)-16
 2263 % RSE(1)-21
 2264 - 2265 % RSE(3)-21 THRU RSE(4)-21

SIGNALS

2266 - 2267 EXISTING TRAFFIC SIGNAL LAYOUT LAUREL AVE
 2268 - 2269 EXISTING TRAFFIC SIGNAL LAYOUT LIBERTY AVE
 2270 - 2271 EXISTING TRAFFIC SIGNAL LAYOUT CALDER AVE
 2272 - 2273 EXISTING TRAFFIC SIGNAL LAYOUT NORTH ST
 2274 - 2275 EXISTING TRAFFIC SIGNAL LAYOUT HARRISON AVE
 2276 EXISTING TRAFFIC SIGNAL LAYOUT GLADYS AVE
 2277 - 2278 EXISTING TRAFFIC SIGNAL LAYOUT ELEVENTH ST
 2279 - 2280 PROPOSED TRAFFIC SIGNAL LAYOUT LAUREL AVE
 2281 PROPOSED TRAFFIC SIGNAL DETAILS LAUREL AVE
 2282 - 2283 PROPOSED TRAFFIC SIGNAL LAYOUT LIBERTY AVE
 2284 PROPOSED TRAFFIC SIGNAL DETAILS LIBERTY AVE
 2285 - 2286 PROPOSED TRAFFIC SIGNAL LAYOUT CALDER AVE
 2287 PROPOSED TRAFFIC SIGNAL DETAILS CALDER AVE
 2288 - 2289 PROPOSED TRAFFIC SIGNAL LAYOUT NORTH ST
 2290 PROPOSED TRAFFIC SIGNAL DETAILS NORTH ST
 2291 - 2292 PROPOSED TRAFFIC SIGNAL LAYOUT HARRISON AVE
 2293 PROPOSED TRAFFIC SIGNAL DETAILS HARRISON AVE
 2294 PROPOSED TRAFFIC SIGNAL LAYOUT GLADYS AVE
 2295 PROPOSED TRAFFIC SIGNAL DETAILS GLADYS AVE
 2296 - 2297 PROPOSED TRAFFIC SIGNAL LAYOUT ELEVENTH ST
 2298 PROPOSED TRAFFIC SIGNAL DETAILS ELEVENTH ST

SIGNALS

2266 - 2267 EXISTING TRAFFIC SIGNAL LAYOUT LAUREL AVE
 2268 - 2269 EXISTING TRAFFIC SIGNAL LAYOUT LIBERTY AVE
 2270 - 2271 EXISTING TRAFFIC SIGNAL LAYOUT CALDER AVE
 2272 - 2273 EXISTING TRAFFIC SIGNAL LAYOUT NORTH ST
 2274 - 2275 EXISTING TRAFFIC SIGNAL LAYOUT HARRISON AVE
 2276 EXISTING TRAFFIC SIGNAL LAYOUT GLADYS AVE
 2277 - 2278 EXISTING TRAFFIC SIGNAL LAYOUT ELEVENTH ST
 2279 - 2280 PROPOSED TRAFFIC SIGNAL LAYOUT LAUREL AVE
 2281 PROPOSED TRAFFIC SIGNAL DETAILS LAUREL AVE
 2282 - 2283 PROPOSED TRAFFIC SIGNAL LAYOUT LIBERTY AVE
 2284 PROPOSED TRAFFIC SIGNAL DETAILS LIBERTY AVE
 2285 - 2286 PROPOSED TRAFFIC SIGNAL LAYOUT CALDER AVE
 2287 PROPOSED TRAFFIC SIGNAL DETAILS CALDER AVE
 2288 - 2289 PROPOSED TRAFFIC SIGNAL LAYOUT NORTH ST
 2290 PROPOSED TRAFFIC SIGNAL DETAILS NORTH ST
 2291 - 2292 PROPOSED TRAFFIC SIGNAL LAYOUT HARRISON AVE
 2293 PROPOSED TRAFFIC SIGNAL DETAILS HARRISON AVE
 2294 PROPOSED TRAFFIC SIGNAL LAYOUT GLADYS AVE

SHEET NO. DESCRIPTION

2295 PROPOSED TRAFFIC SIGNAL DETAILS GLADYS AVE
 2296 - 2297 PROPOSED TRAFFIC SIGNAL LAYOUT ELEVENTH ST
 2298 PROPOSED TRAFFIC SIGNAL DETAILS ELEVENTH ST

SIGNALS STANDARDS

2299 - 2310 + ED(1)-14 THRU ED(12)-14
 2311 - 2312 + SMA-100(1)-12 THRU SMA-100(2)-12
 2313 + MA-C-12
 2314 + MA-D-12
 2315 + TS-FD-12
 2316 - 2320 + LMA(1)-12 THRU LMA(5)-12
 2321 + TS-CF-21
 2322 + MA-DPD-20
 2323 + TS-BP-20
 2324 + LUM-A-12
 2325 + SNS-95

SIGNING & PAVEMENT MARKINGS

2326 - 2339 IH 10 PAVEMENT MARKING LAYOUT
 2340 - 2345 NBML US 69 PAVEMENT MARKING LAYOUT
 2346 - 2350 SBML US 69 PAVEMENT MARKING LAYOUT
 2351 - 2357 IH 10 WB/US 69 SB FR PAVEMENT MARKING LAYOUT
 2358 - 2365 IH 10 EB/US 69 NB FR PAVEMENT MARKING LAYOUT
 2366 - 2370 US 69 NB/IH 10 WB FR PAVEMENT MARKING LAYOUT
 2371 - 2376 IH 10 EASTBOUND FR PAVEMENT MARKING LAYOUT
 2377 - 2380 DCSBEASTX PAVEMENT MARKING LAYOUT
 2381 - 2383 DCWBNBEASTX PAVEMENT MARKING LAYOUT
 2384 11TH ST PAVEMENT MARKING LAYOUT
 2385 CALDER AVE PAVEMENT MARKING LAYOUT
 2386 GLADYS AVE PAVEMENT MARKING LAYOUT
 2387 LAUREL AVE PAVEMENT MARKING LAYOUT
 2388 - 2389 LIBERTY AVE PAVEMENT MARKING LAYOUT
 2390 NORTH ST PAVEMENT MARKING LAYOUT
 2391 HARRISON AVE PAVEMENT MARKING LAYOUT
 2392 RAMP RSBXBRENT PAVEMENT MARKING LAYOUT
 2393 - 2409 EXISTING SIGN LAYOUT
 2410 - 2420 IH 10 PROPOSED SIGN LAYOUT
 2421 - 2425 NBML US 69 PROPOSED SIGN LAYOUT
 2426 - 2432 SBML US 69 PROPOSED SIGN LAYOUT
 2433 - 2439 IH 10 WB/US 69 SB FR PROPOSED SIGN LAYOUT
 2440 - 2447 IH 10 EB/US 69 NB FR PROPOSED SIGN LAYOUT
 2448 - 2452 US 69 NB/IH 10 WB FR PROPOSED SIGN LAYOUT
 2453 - 2458 IH 10 EASTBOUND FR PROPOSED SIGN LAYOUT
 2459 - 2462 DCSBEASTX PROPOSED SIGN LAYOUT
 2463 - 2465 DCWBNBEASTX PROPOSED SIGN LAYOUT
 2466 - 2467 LIBERTY AVE PROPOSED SIGN LAYOUT
 2468 - 2474 CROSS STREETS PROPOSED SIGN LAYOUT
 2475 - 2496 LARGE SIGN ELEVATIONS
 2497 - 2505 LARGE SIGN DETAILS

SIGNING & PAVEMENT MARKINGS STANDARDS

2506 - 2508 ## PM(1)-22 THRU PM(3)-22
 2509 ## PM(4)-22A
 2510 ## PM(5)-22
 2511 ## CPM(1)-23
 2512 - 2517 ## FPM(1)-22 THRU FPM(6)-22
 2518 ## RS(1)-23
 2519 ## D&OM(1)-20 THRU D&OM(6)-20
 2520 ## D&OM(VIA)-20
 2521 ## TSR(1)-13 TO TSR(5)-13
 2522 ## SMD(GEN)-08
 2523 ## SMD(SLIP-1)-08 THRU SMD(SLIP-3)-08
 2524 ## SMD(BR-1)-14 THRU SMD(BR-3)-14
 2525 ## WV & IZ-14
 2526 - 2530 ## OSB-Z1
 2531 ## HOSB-Z1(1)-21
 2532 - 2534 ## HOSB-Z1L
 2535 ## OSBT(1)-21
 2536 ## OSBT
 2537 ## OSBC
 2538 ## OSBS-SC
 2539 ## OSB-FD
 2540 ## COSS-Z1-10
 2541 ## HCOSS-Z1-21
 2542 ## COSSD
 2543 ## COSSF-21
 2544 ## COSSF-21
 2545 ## COSS-FD

ENVIRONMENTAL DETAILS

2558 EPIC
 2559 - 2560 STORMWATER POLLUTION PREVENTION PLAN (SWP3)
 2561 - 2577 SW3P LAYOUT PHASE 1
 2578 - 2594 SW3P LAYOUT PHASE 2
 2595 - 2604 SW3P LAYOUT PHASE 3
 2605 - 2621 SW3P LAYOUT PHASE 4
 2622 INLET PROTECTION SILT FENCE

SHEET NO. DESCRIPTION

2623 ## EC(1)-16
 2624 ## EC(2)-16
 2625 ## EC(3)-16
 2626 - 2628 ## EC(9)-16

UTILITIES

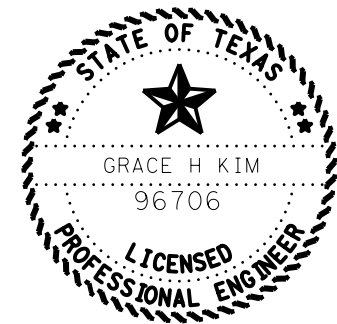
2629 OVERALL EXISTING UTILITY LAYOUT MAP
 2630 EXISTING UTILITY NOTES, LEGEND, AND CONTACT LIST
 2631 - 2652 EXISTING UTILITY LAYOUT
 2653 OVERALL PROPOSED UTILITY LAYOUT MAP
 2654 PROPOSED UTILITY NOTES, LEGEND, AND CONTACT LIST
 2655 - 2676 PROPOSED UTILITY LAYOUT

RAILROAD DETAILS

2677 - 2678 RAILROAD SCOPE OF WORK

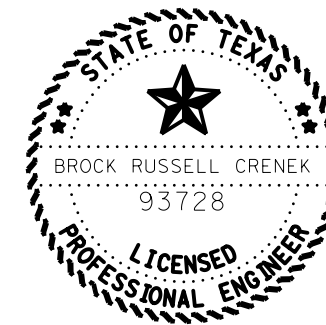
THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN ## HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

Cooper Liebau P.E. 2/23/2024
 DATE



THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN + HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

Grace H Kim P.E. 02/16/2024
 DATE



THE STANDARD SHEETS SPECIFICALLY IDENTIFIED ABOVE WITH AN % HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT

Brock Russell Crenek P.E. 02/23/2024
 DATE

VOLKERT
 F-12679

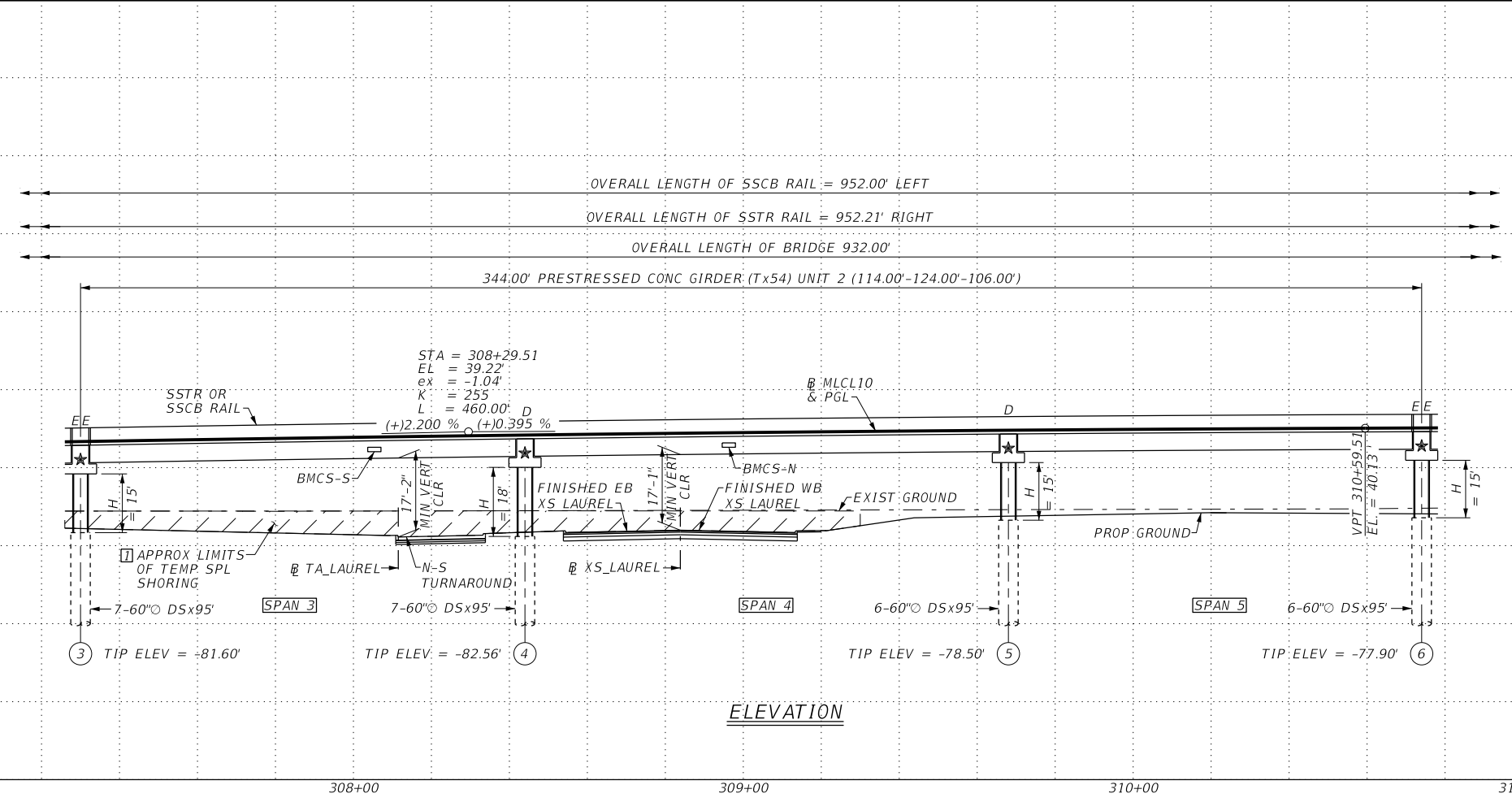
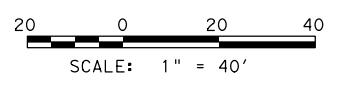
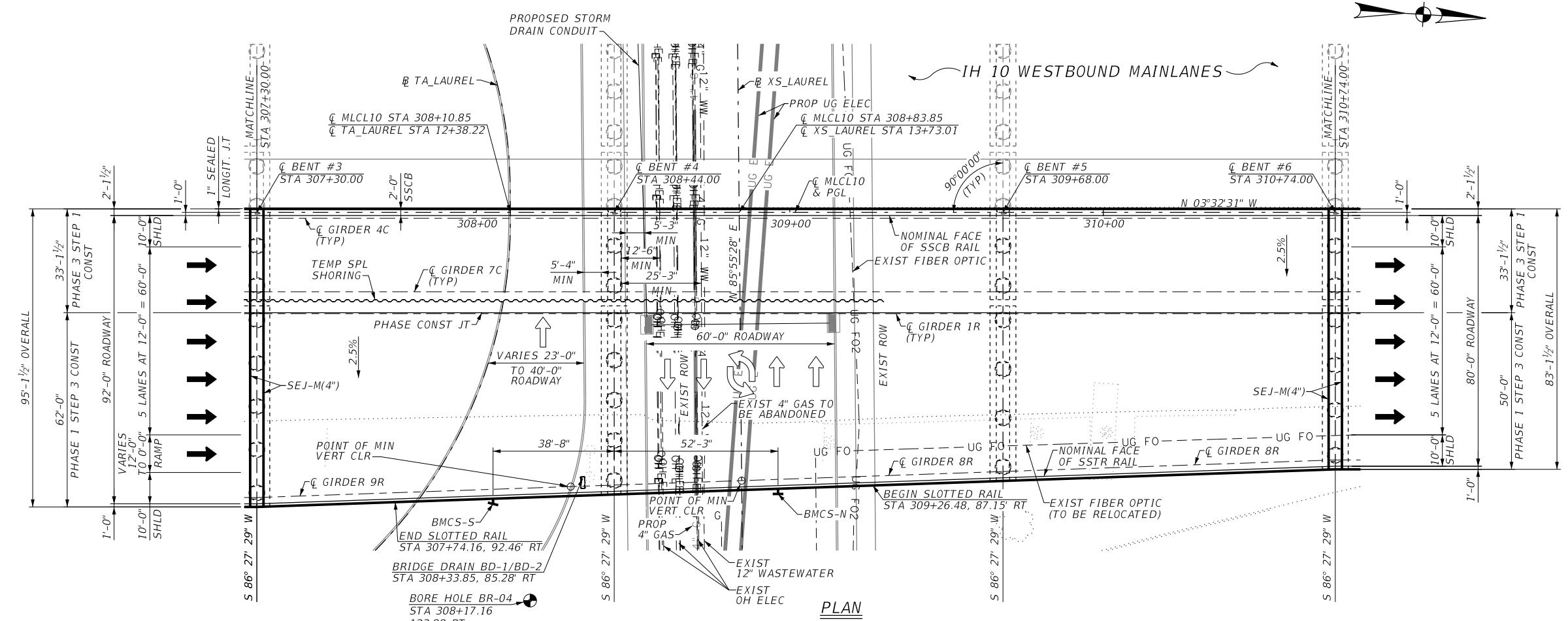


INDEX OF SHEETS

SHEET 6 OF 6			
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DIST		COUNTY	SHEET NO.
BMT		JEFFERSON	7

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NOTES:
 SEE SHEET 1 OF 3 FOR GENERAL NOTES.



Jeremy Vezina 2-20-2024

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.67

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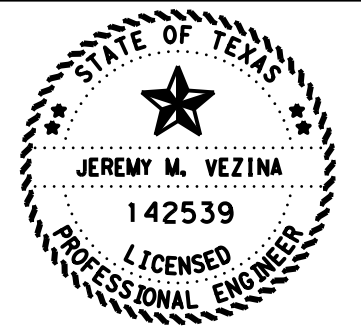
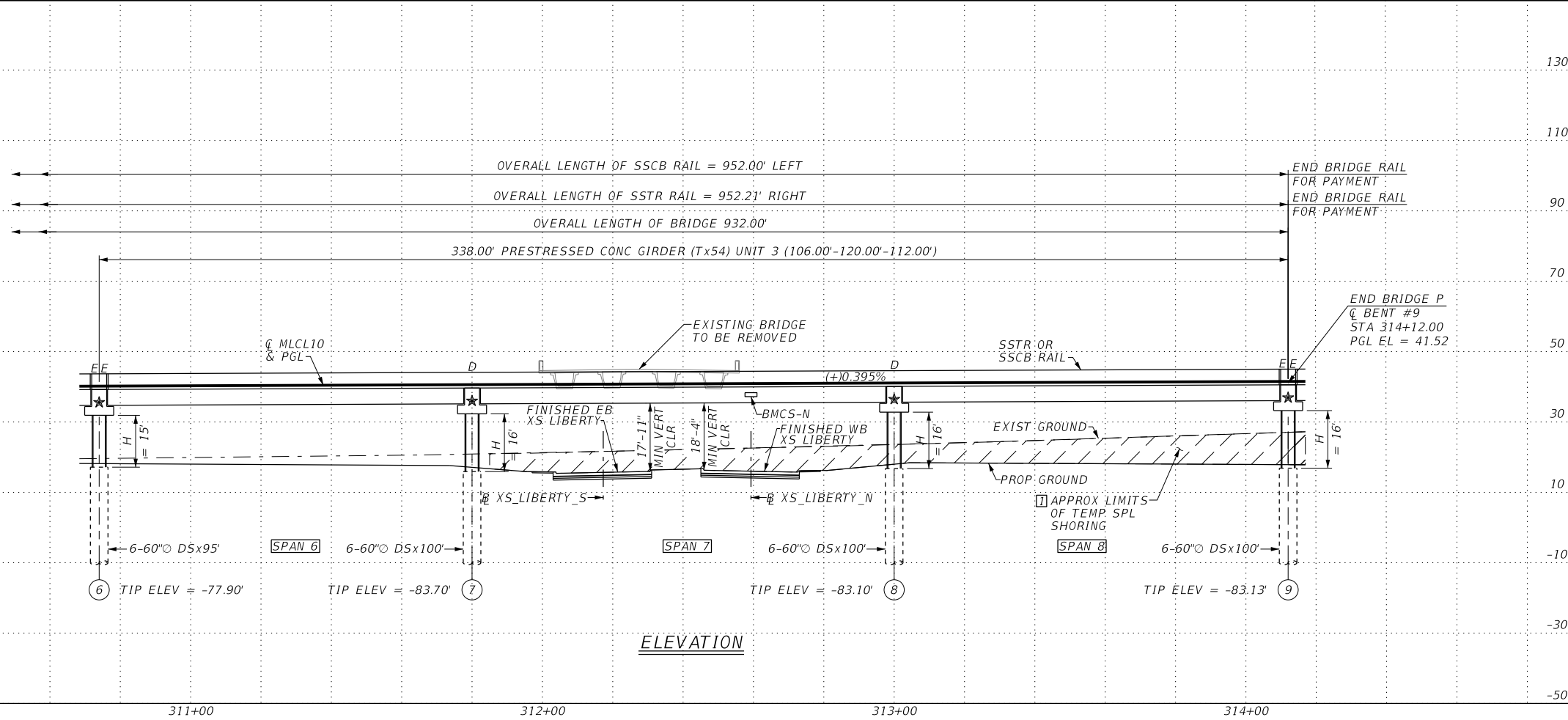
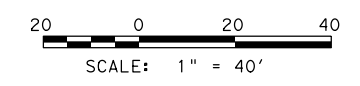
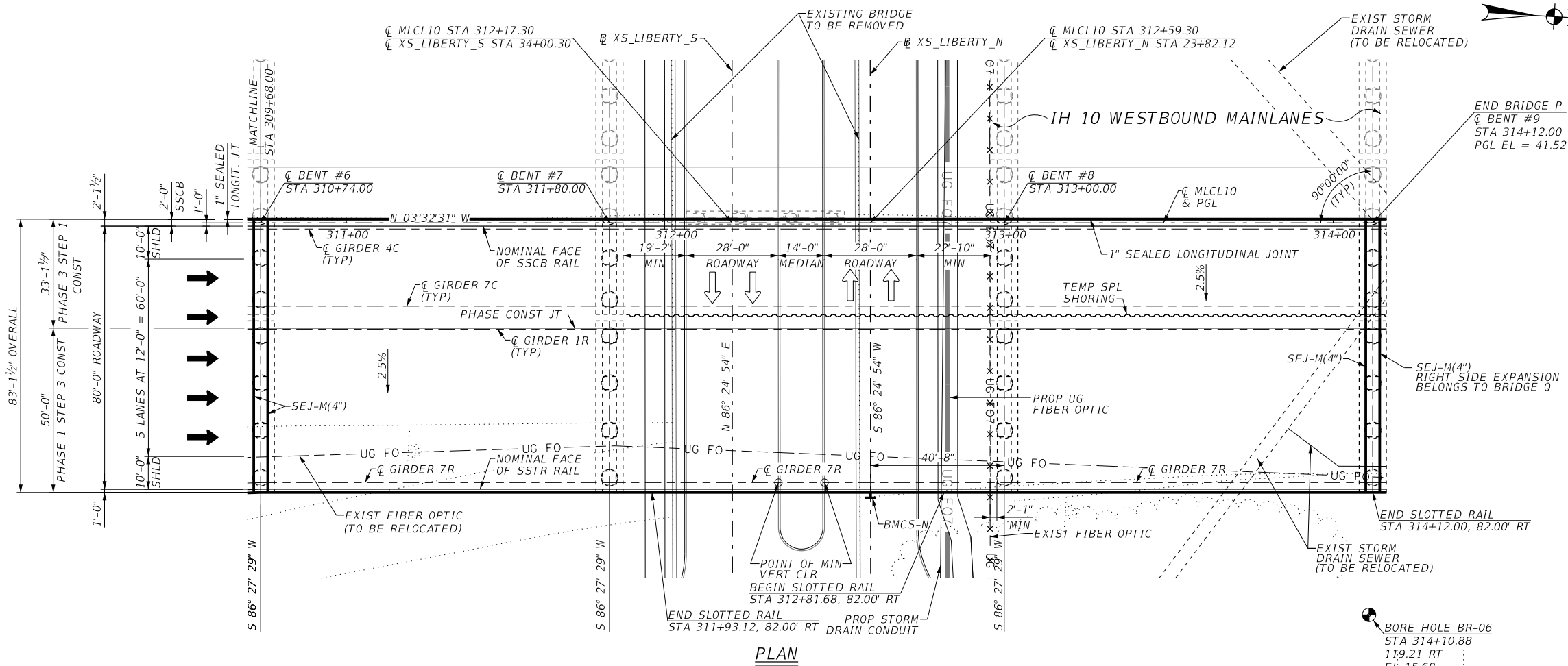
**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 EBLM OVER LAUREL AVE
 NBI: 20-124-0-0028-13-531
 BRIDGE P**

SHEET 2 OF 3

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NOTES:
 SEE SHEET 1 OF 3 FOR GENERAL NOTES.



Jeremy Vezina 2-20-2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.67



IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 EBML OVER LAUREL AVE
 NBI: 20-124-0-0028-13-531
 BRIDGE P

SHEET 3 OF 3

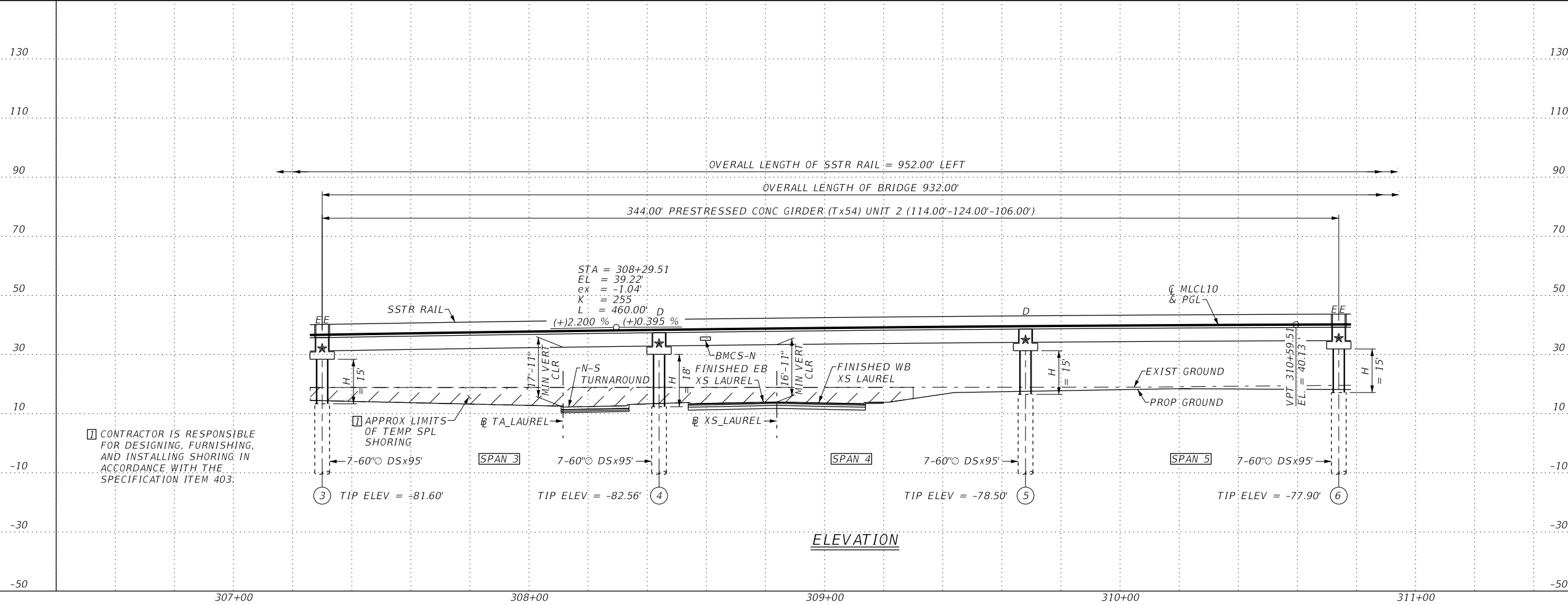
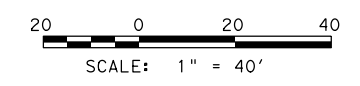
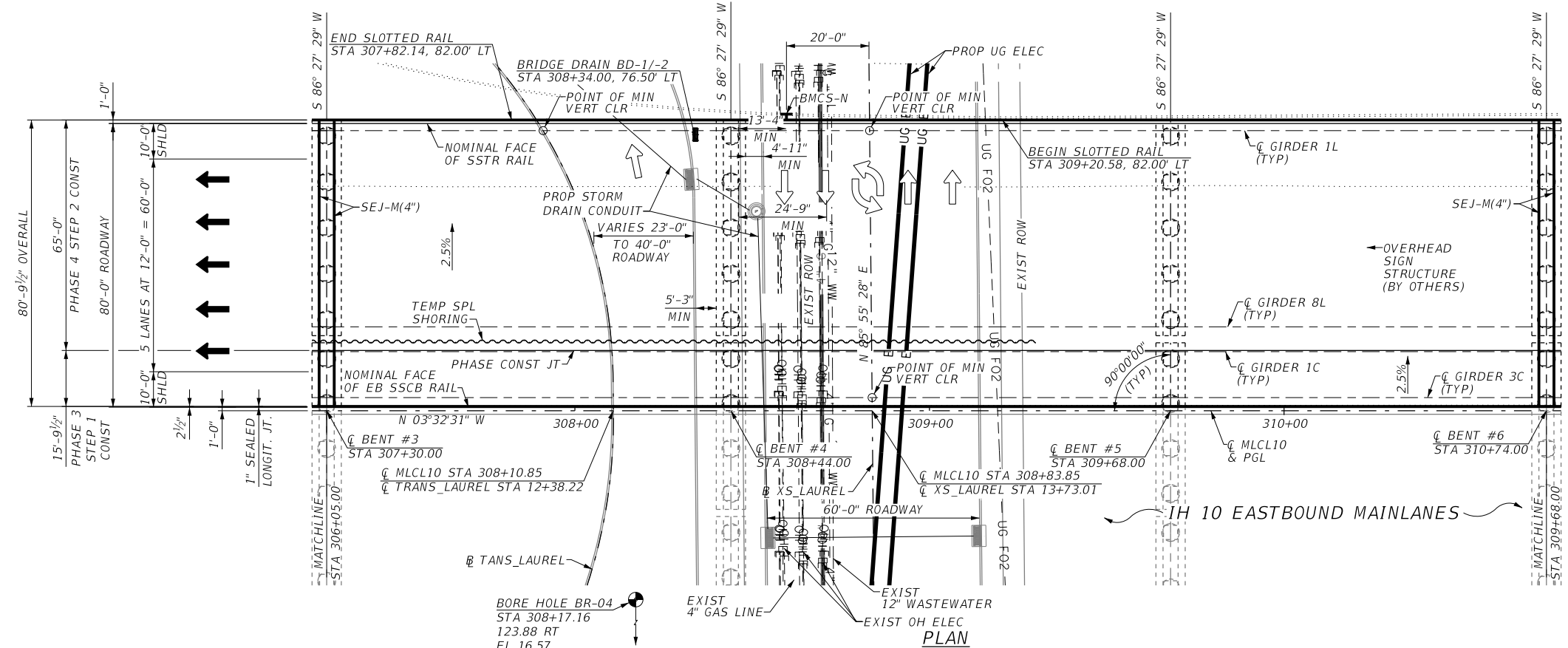
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DATE: 20-FEB-2024 13:17
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BORE HOLE BR-05
 STA 310+74.11
 121.22 LT
 EL 15.61



NOTES:
 SEE SHEET 1 OF 3 FOR GENERAL NOTES.



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HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.78

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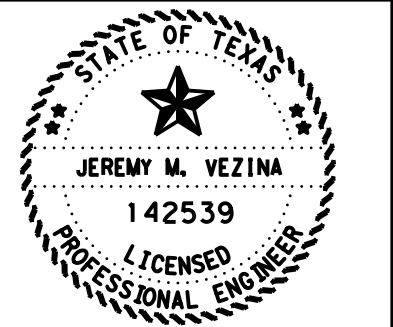
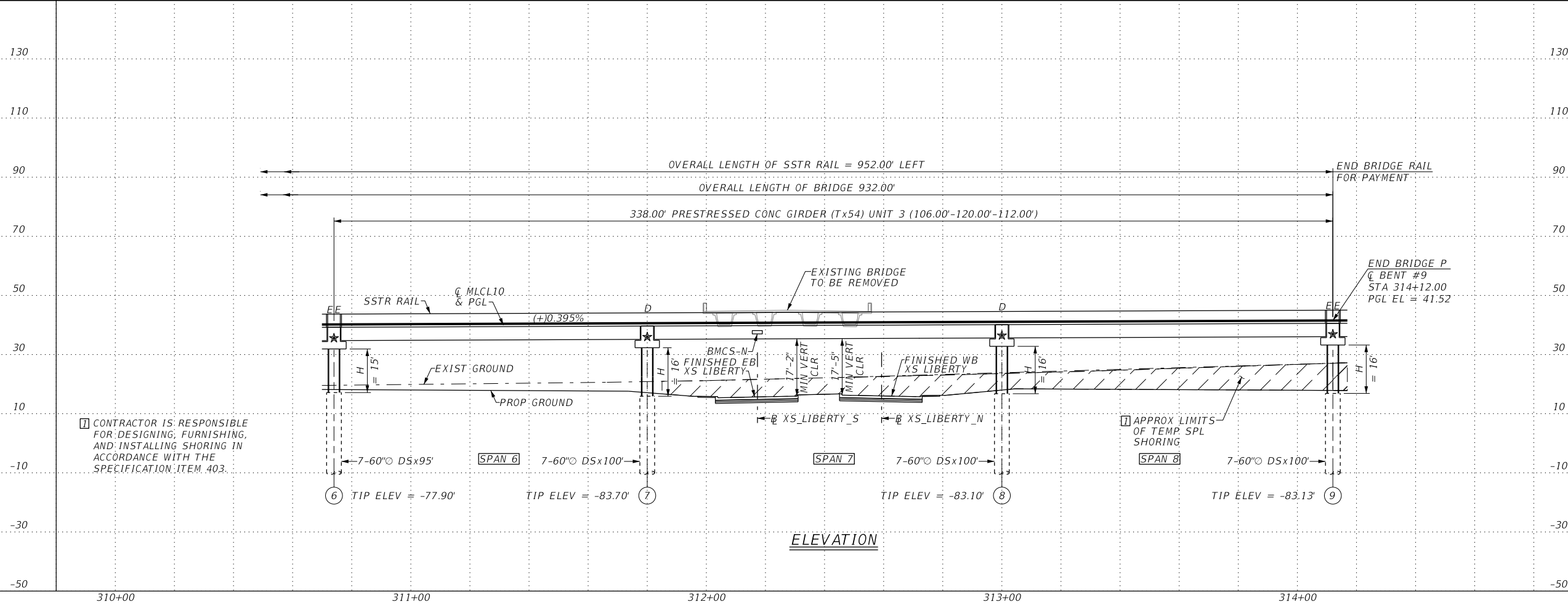
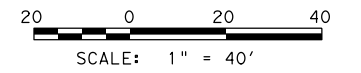
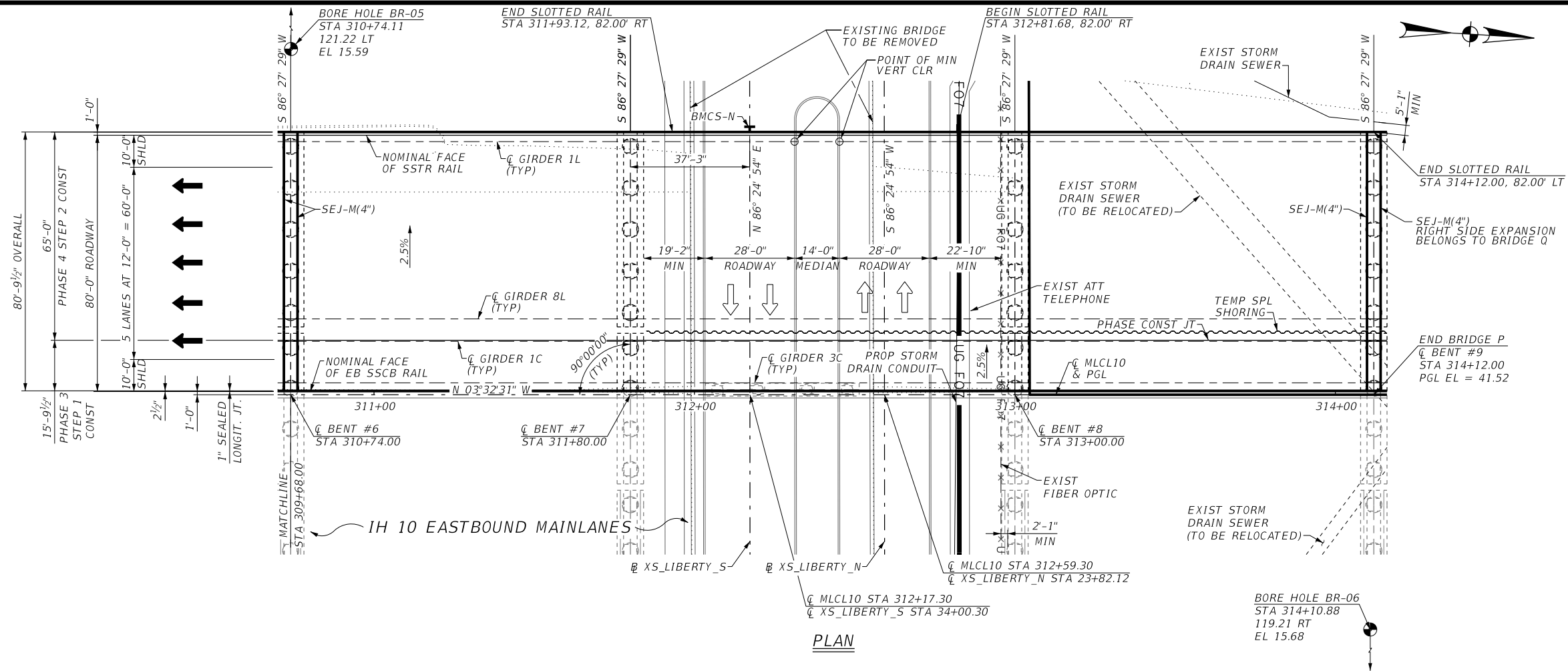
**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 WBML OVER LAUREL AVE
 NBI: 20-124-0-0028-13-532
 BRIDGE P**

SHEET 2 OF 3

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NOTES:
 SEE SHEET 1 OF 3 FOR GENERAL NOTES.



Jeremy Vezina 2-20-2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.78

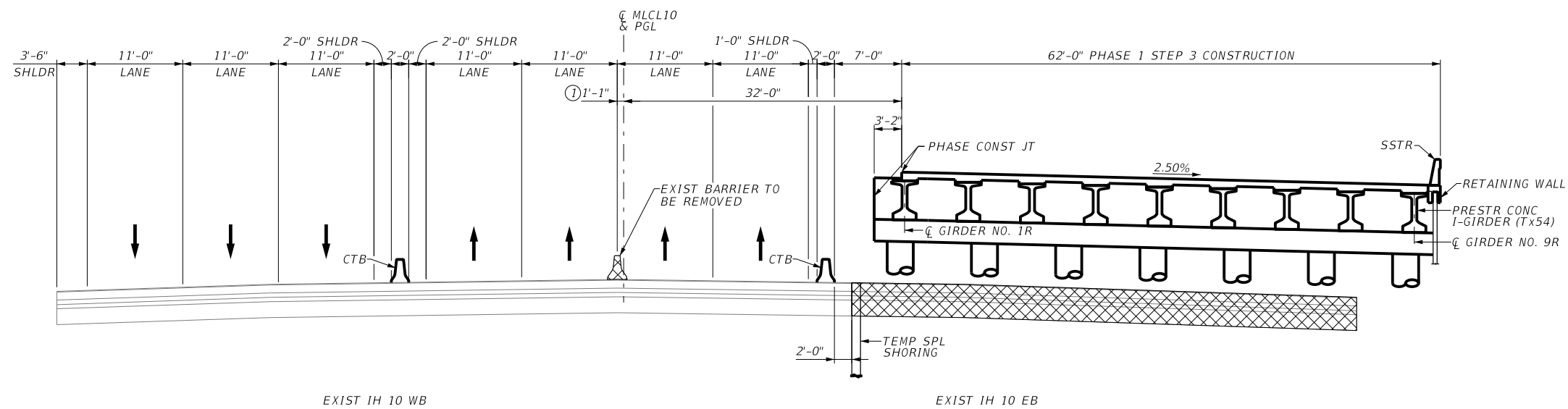


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 WBML OVER LAUREL AVE
 NBI: 20-124-0-0028-13-532
 BRIDGE P**

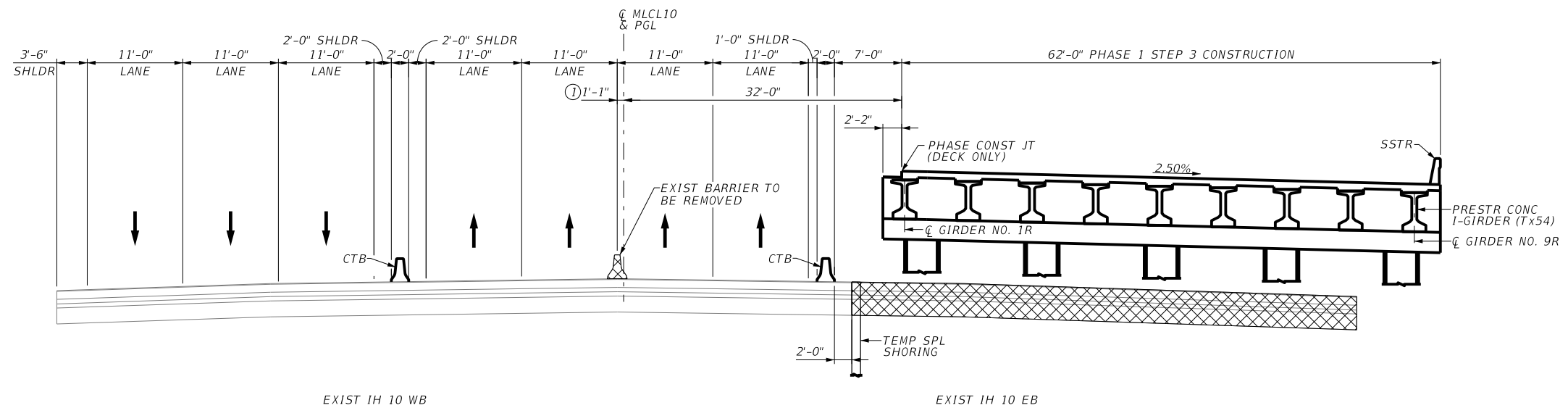
SHEET 3 OF 3

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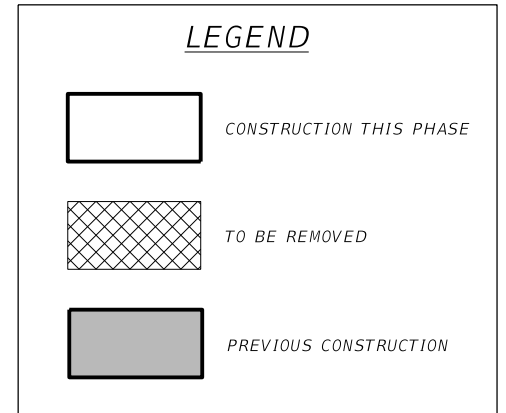
PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 1 AT ABUT 1)



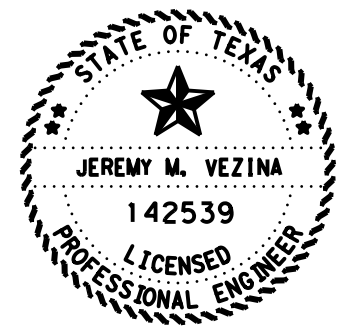
PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 1 TO SPAN 2)

NOTES:

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING BRIDGE DIMENSIONS AND ELEVATIONS PRIOR TO ANY FABRICATION AND CONSTRUCTION.
2. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
3. SEE TRAFFIC CONTROL PLAN SHEETS FOR ADDITIONAL STEPS, TEMPORARY SHOULDER WIDTHS, CTB RAIL LOCATIONS, LENGTHS & QUANTITIES WITHIN LIMITS OF ABUTMENT 1 TO BENT 9, AND INFORMATION NOT SHOWN HERE.



① CONTRACTOR SHALL FIELD VERIFY THE DIMENSION BETWEEN EXISTING AND PROPOSED PGL PRIOR TO CONSTRUCTION.



Jeremy Vezina 2-20-2024

HL93 LOADING



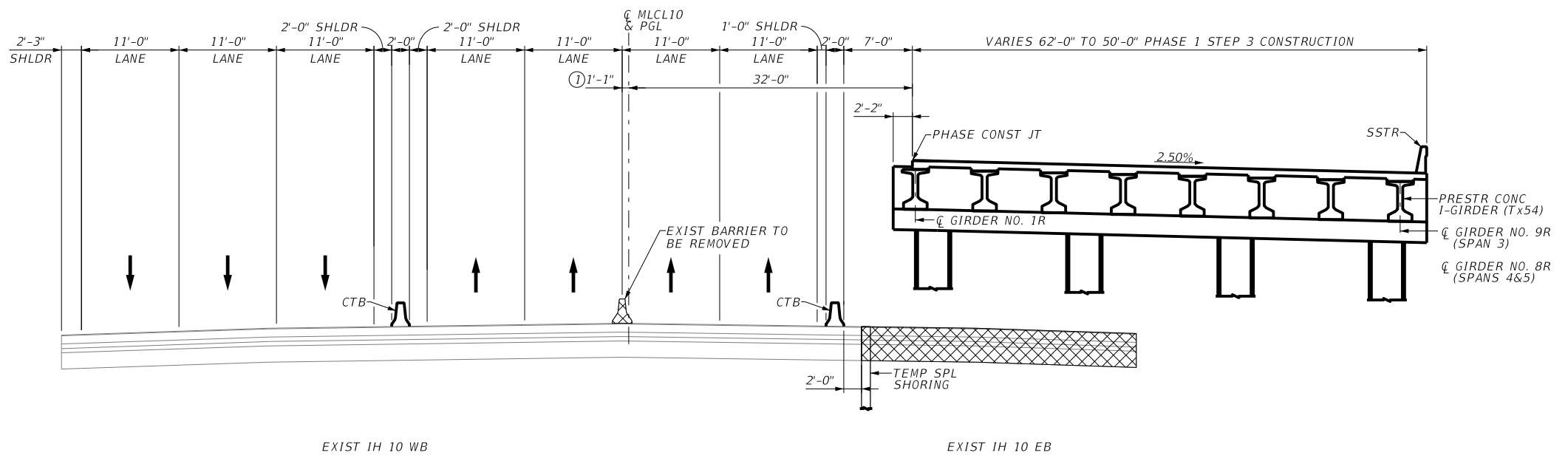
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 1 OF 6

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0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
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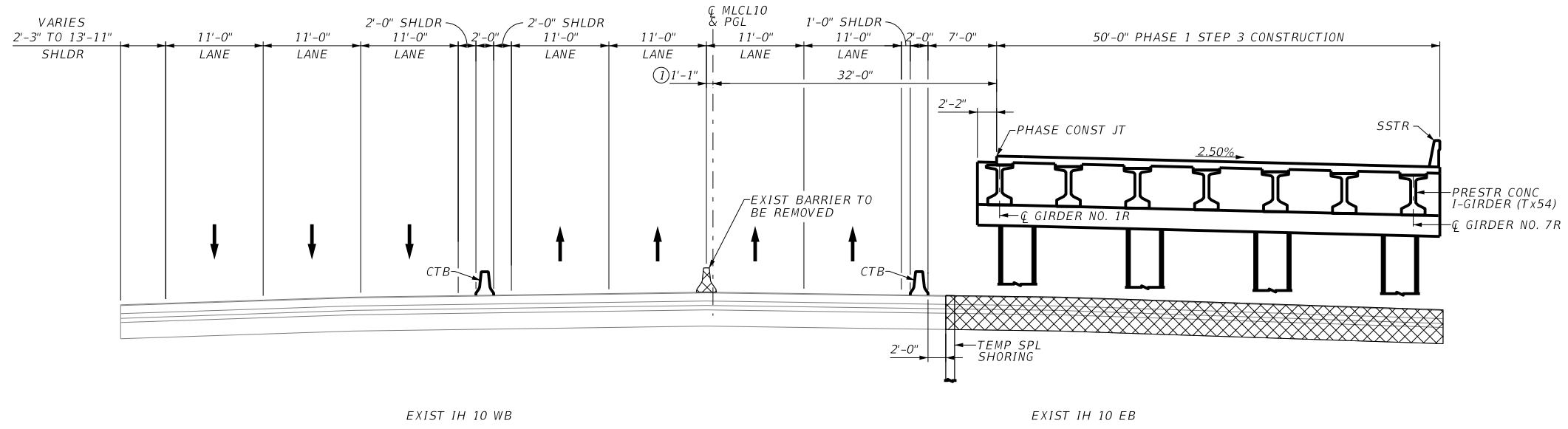
① CONTRACTOR SHALL FIELD VERIFY THE DIMENSION BETWEEN EXISTING AND PROPOSED PGL PRIOR TO CONSTRUCTION.



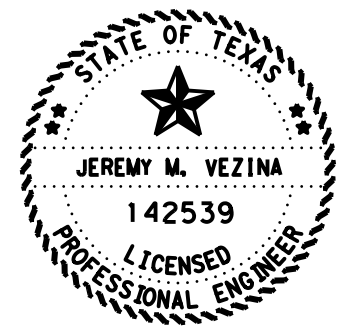
PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 4 & SPAN 5 SHOWN)
 (SPAN 3 SIMILIAR)

LEGEND

- CONSTRUCTION THIS PHASE
- TO BE REMOVED
- PREVIOUS CONSTRUCTION



PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 6 TO SPAN 8)



Jeremy Vezina 2-20-2024

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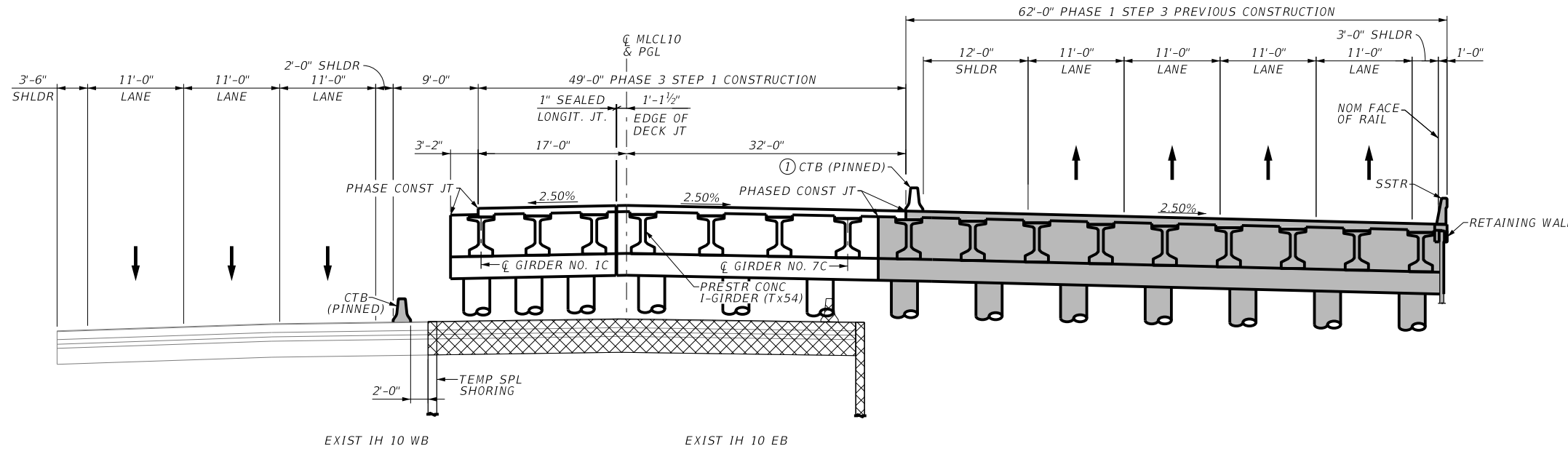
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 2 OF 6

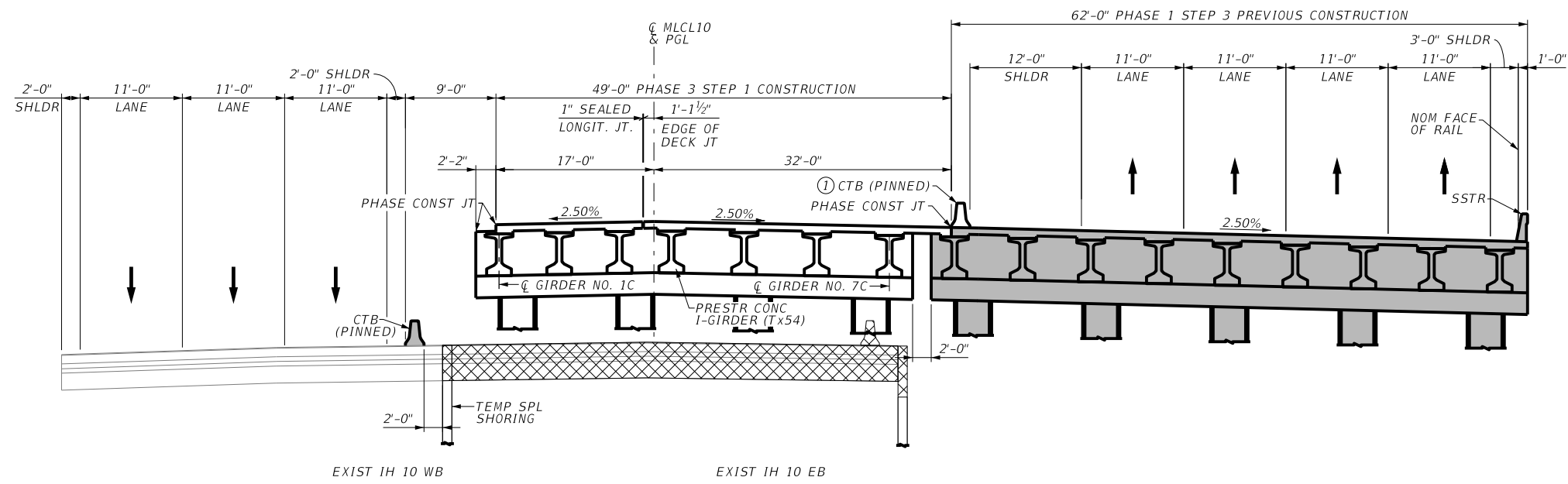
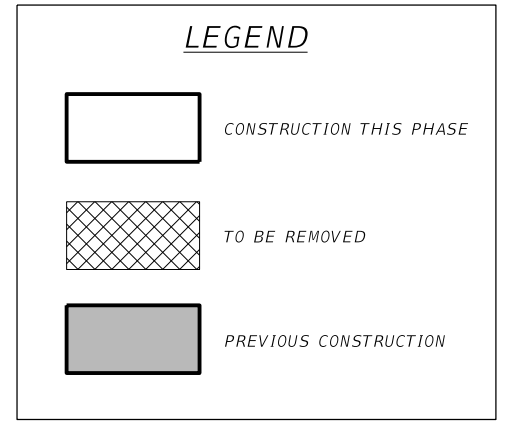
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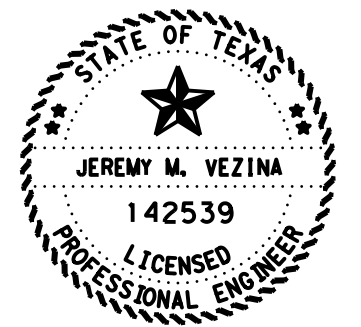
① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CTB.



PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 1 AT ABUT 1)



PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 1 TO SPAN 2)



Jeremy Veзина 2-20-2024

HL93 LOADING

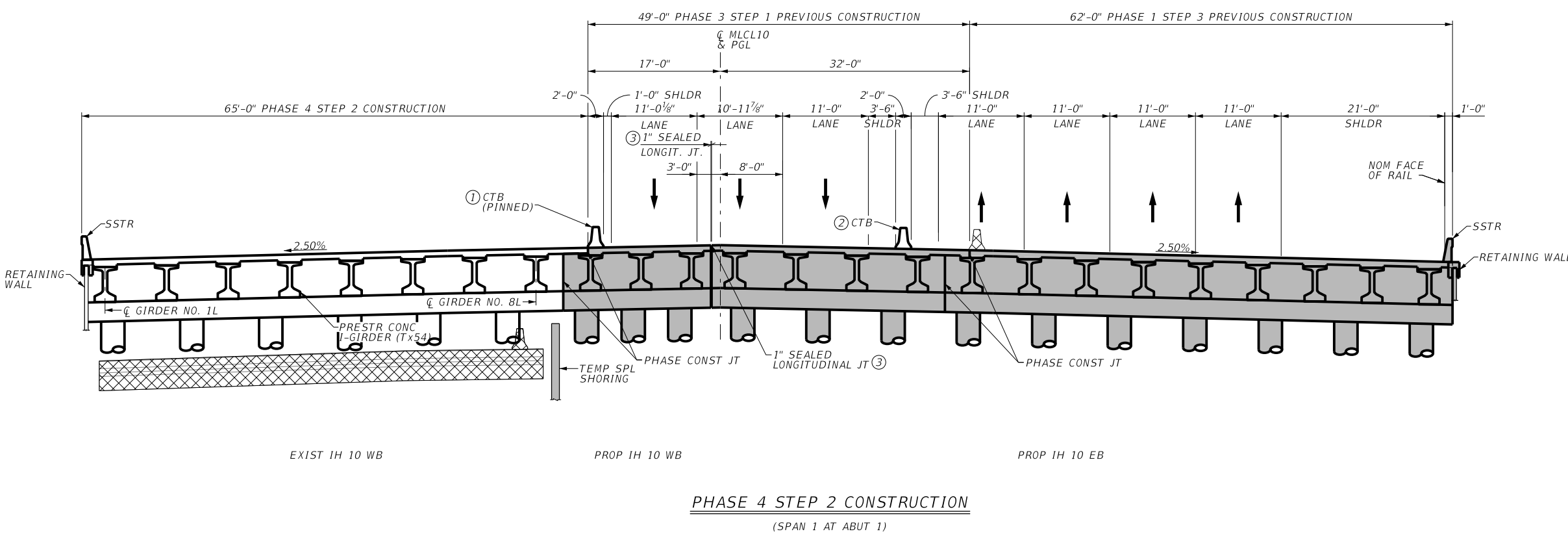
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**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 3 OF 6

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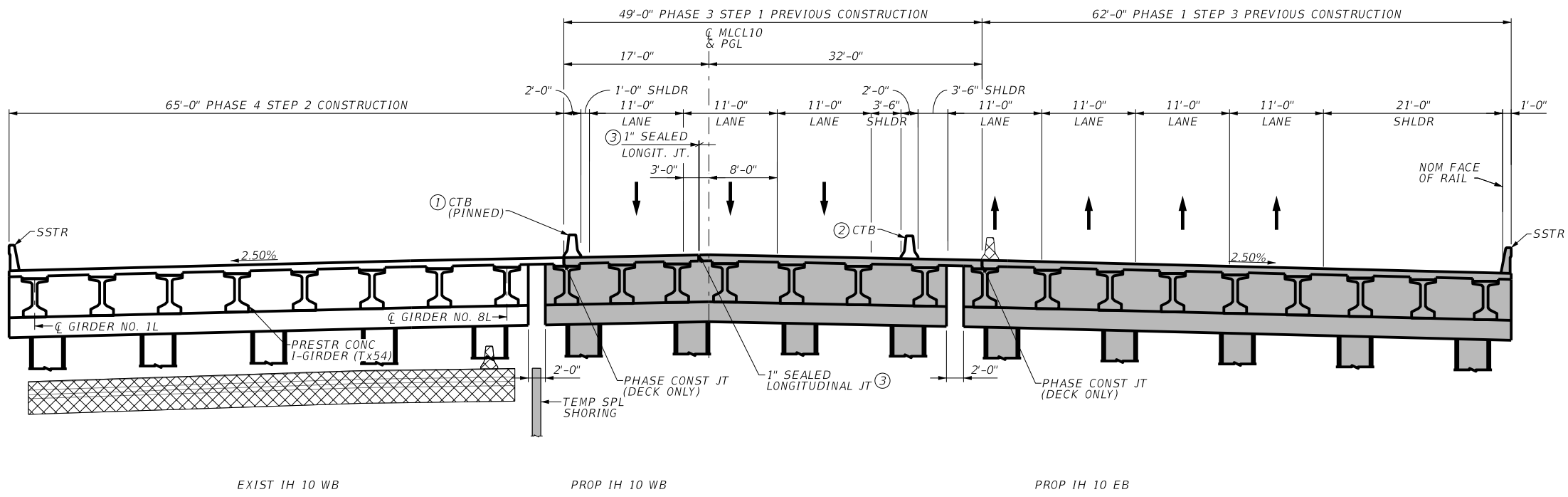


PHASE 4 STEP 2 CONSTRUCTION
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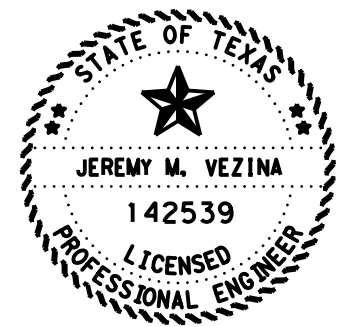
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CTB.
- ② TEMPORARY BARRIER SHALL BE MOVED FROM INITIAL POSITION SHOWN IN PHASE 1 STEP 3 DURING PHASE 4 STEP 2 CONSTRUCTION AND SHALL NOT BE PINNED TO NEW DECK LOCATION.
- ③ LONGITUDINAL JOINT SEALER SHOULD BE REPLACED UPON THE COMPLETION OF FINAL TRAFFIC CONFIGURATION. COST OF SEALER REPLACEMENT IS INCIDENTAL TO THE COST OF BRIDGE CONCRETE SLAB.

LEGEND

- CONSTRUCTION THIS PHASE
- TO BE REMOVED
- PREVIOUS CONSTRUCTION



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 1 TO SPAN 2)



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

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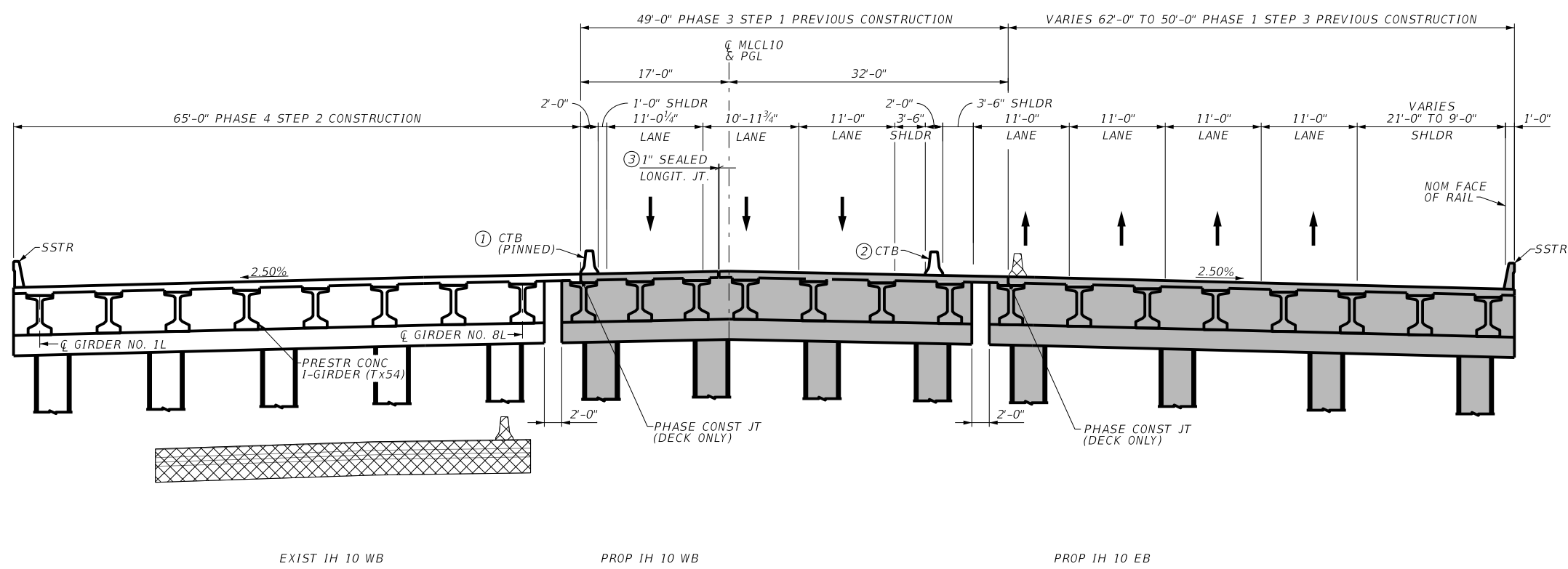
Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER LAUREL AVE**

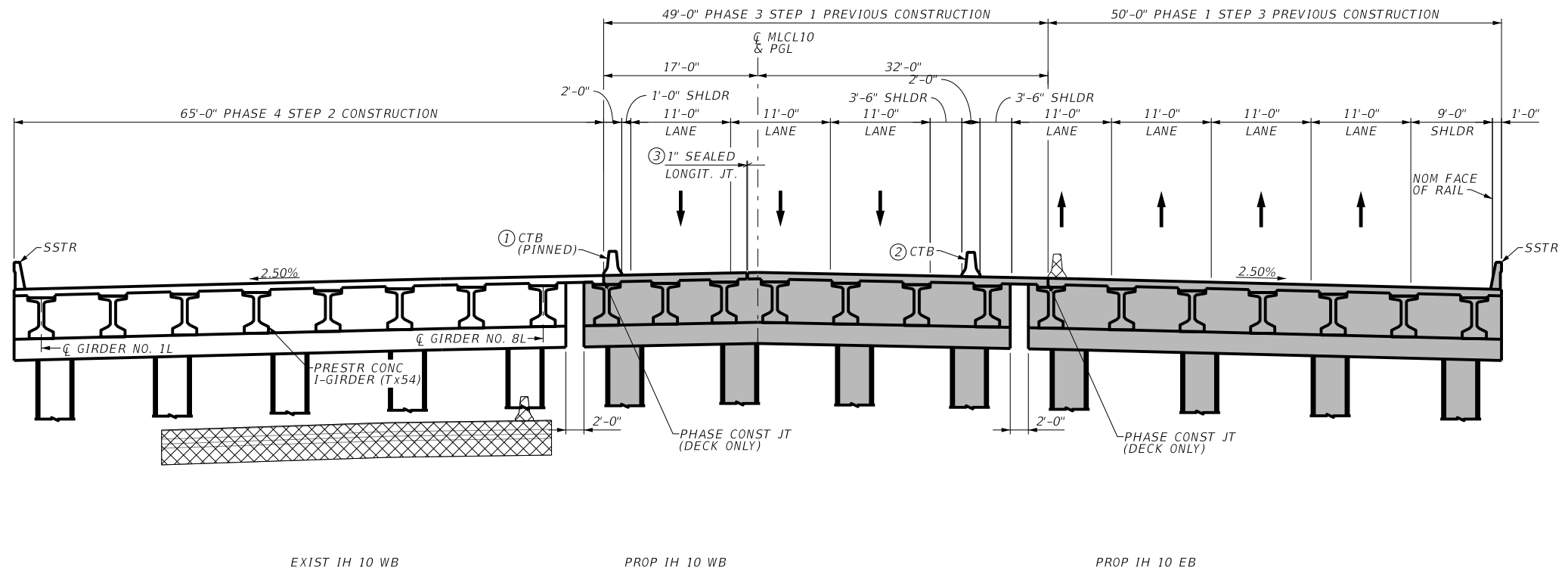
SHEET 5 OF 6

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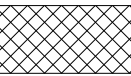

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 (SPAN 4 & SPAN 5 SHOWN)
 (SPAN 3 SIMILIAR)

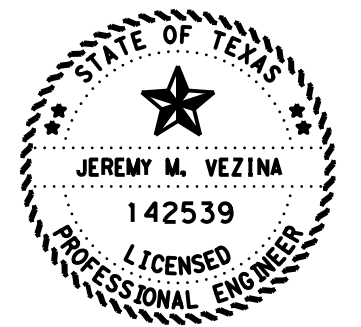


PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 6 TO SPAN 8)

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CTB.
- ② TEMPORARY BARRIER SHALL BE MOVED FROM INITIAL POSITION SHOWN IN PHASE 1 STEP 3 DURING PHASE 4 STEP 2 CONSTRUCTION AND SHALL NOT BE PINNED TO NEW DECK LOCATION.
- ③ LONGITUDINAL JOINT SEALER SHOULD BE REPLACED UPON THE COMPLETION OF FINAL TRAFFIC CONFIGURATION. COST OF SEALER REPLACEMENT IS INCIDENTAL TO THE COST OF BRIDGE CONCRETE SLAB.

LEGEND

-  CONSTRUCTION THIS PHASE
-  TO BE REMOVED
-  PREVIOUS CONSTRUCTION



Jeremy Vezina 2-20-2024

HL93 LOADING

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 F-12679

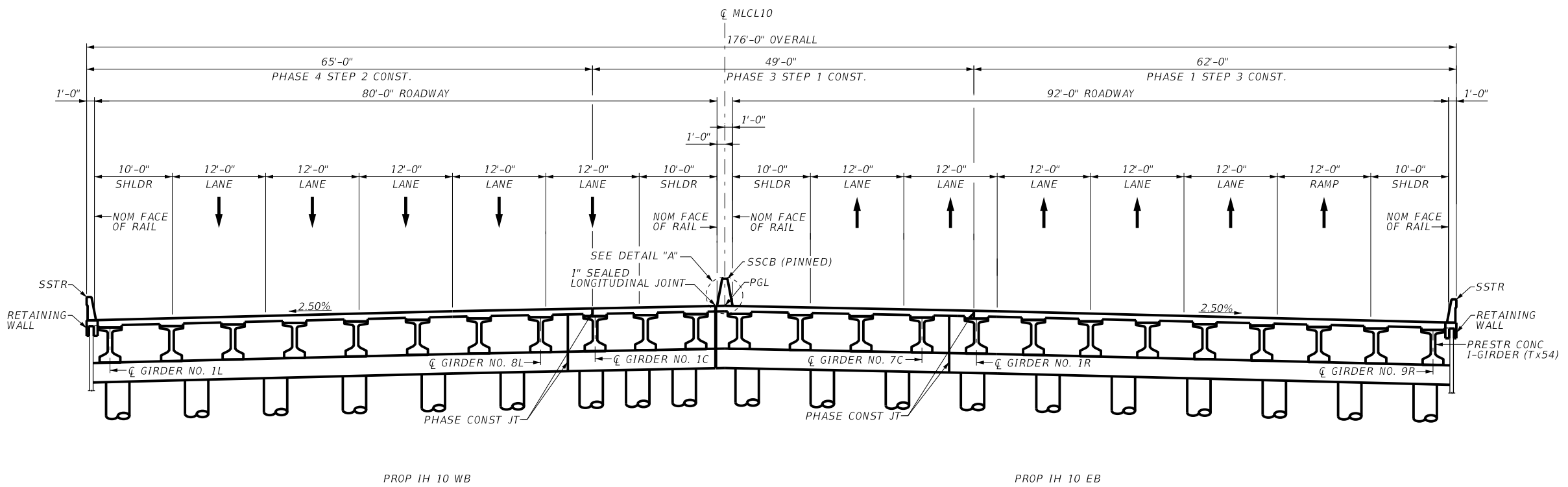
Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER LAUREL AVE**

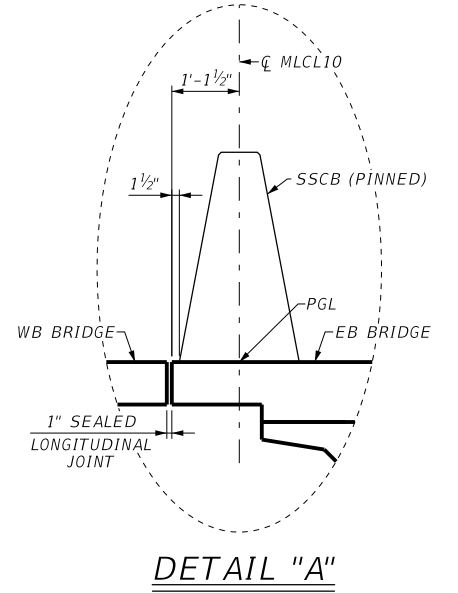
SHEET 6 OF 6

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	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
	BMT		JEFFERSON		1201		

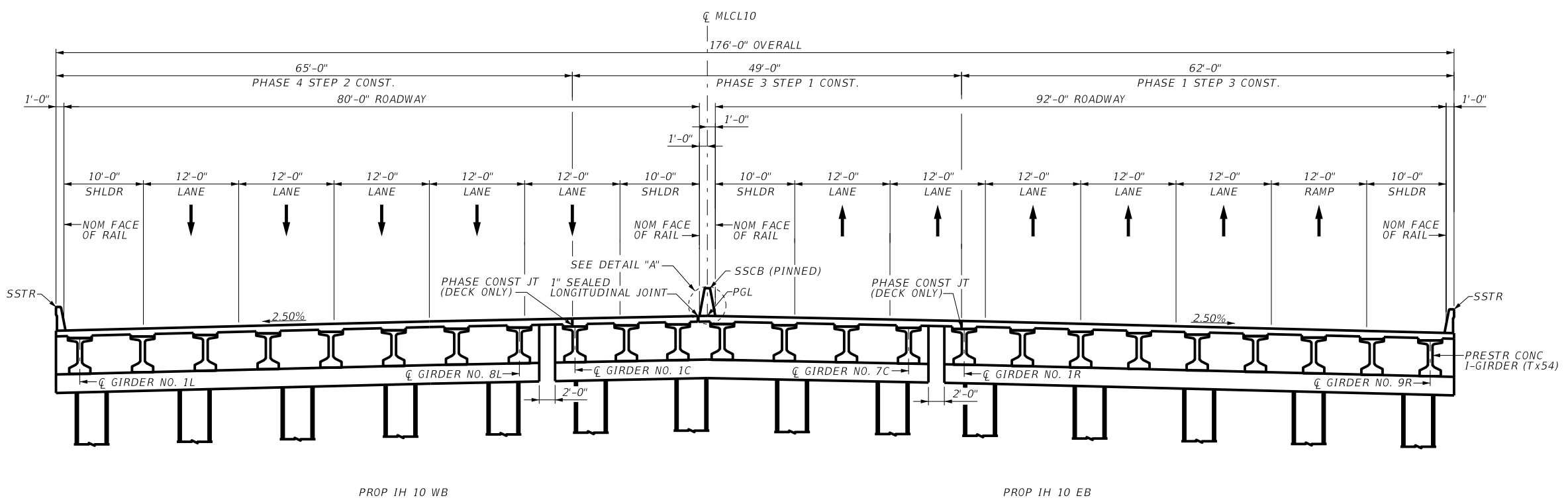
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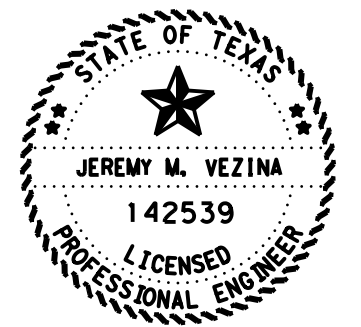
TYPICAL TRANSVERSE SECTION
 (SPAN 1 AT ABUT 1)



DETAIL "A"



TYPICAL TRANSVERSE SECTION
 (SPAN 1 TO SPAN 2)



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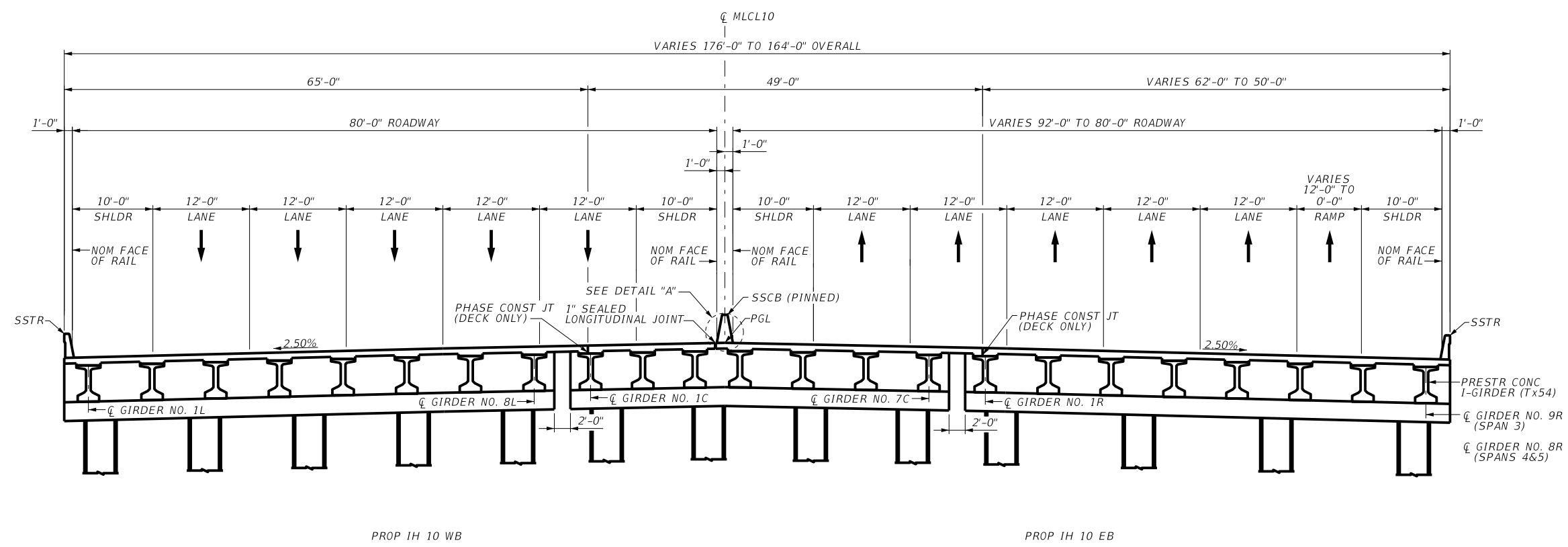


**IH 10 AT US 69
 TYPICAL SECTIONS
 IH 10 MAINLANE
 OVER LAUREL AVE**

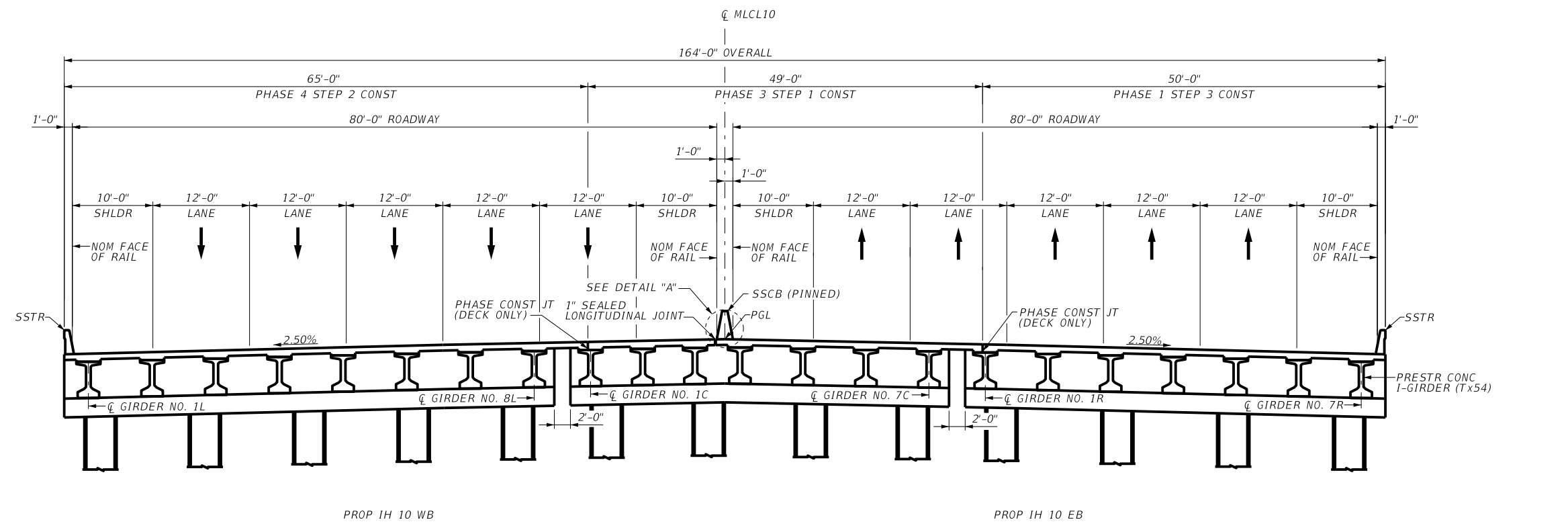
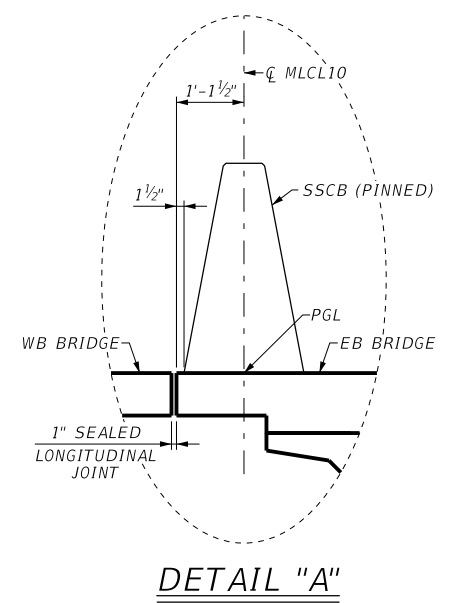
SHEET 1 OF 2

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CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1202	

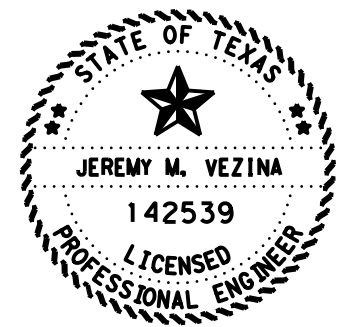
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TYPICAL TRANSVERSE SECTION
 (SPAN 3 TO SPAN 5)



TYPICAL TRANSVERSE SECTION
 (SPAN 6 TO SPAN 8)



Jeremy Veжина 2-20-2024

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**IH 10 AT US 69
 TYPICAL SECTIONS
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 2 OF 2

DW:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1203		

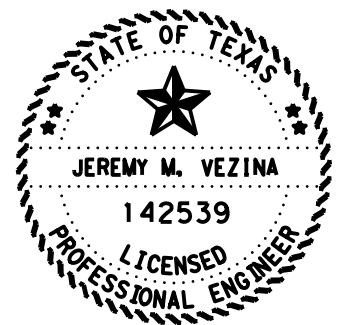
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SUMMARY OF BRIDGE QUANTITIES (PHASE 4 - STEP 2)															
ITEM	400	403	416		420			422	425	450		454	471	514	
DESCRIPTION CODE	6005	6001	6004	6008	6013	6029	6037	6001	6015	6039	6023	6054	6018	6007	6001
BRIDGE ELEMENT	CEM STABIL BKFL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	DRILL SHAFT (60 IN)	CL C CONC (ABUT)	CL C CONC (CAP)	CL C CONC (COLUMN)	REINF CONC SLAB	APPROACH SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (TY SSTR) (W/DRAIN SLOTS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	PERM CTB (SGL SLOPE) (TY 1) (42)
	CY	SF	LF	LF	CY	CY	CY	SF	CY	LF	LF	LF	LF	EA	LF
1-ABUTMENT (WBML)	129	-	360	-	30.8	-	-	-	61.0	-	-	-	-	-	-
8-INTERIOR BENTS (WBML)	-	-	-	3,800	-	745.6	491.9	-	-	-	-	-	-	-	-
1-250.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	-	-	-	16,250	-	1,941.42	-	250.0	130	-	-
1-344.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	-	-	-	22,360	-	2,638.16	138.4	205.6	130	1	-
1-338.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	-	-	-	21,970	-	2,590.02	88.6	249.4	130	-	-
TOTAL (WBML)	129	-	360	3,800	30.8	745.6	491.9	60,580	61.0	7,169.60	227.0	705.0	390	1	-
TOTAL	129	-	360	3,800	30.8	745.6	491.9	60,580	61.0	7,169.60	227.0	705.0	390	1	-

**BEARING SEAT ELEVATIONS
PHASE 4 STEP 2**

	GIRDER 1L	GIRDER 2L	GIRDER 3L	GIRDER 4L	GIRDER 5L	GIRDER 6L	GIRDER 7L	GIRDER 8L
ABUT 1 (FWD)	23.846	24.044	24.242	24.439	24.637	24.835	25.032	25.230
BENT 2 (BK)	26.506	26.703	26.901	27.098	27.296	27.494	27.691	27.889
BENT 2 (FWD)	26.725	26.923	27.121	27.318	27.516	27.713	27.911	28.109
BENT 3 (BK)	29.021	29.219	29.416	29.614	29.812	30.009	30.207	30.404
BENT 3 (FWD)	29.127	29.325	29.522	29.720	29.917	30.115	30.313	30.510
BENT 4 (BK)	30.705	30.902	31.100	31.298	31.495	31.693	31.890	32.088
BENT 4 (FWD)	30.783	30.980	31.178	31.375	31.573	31.771	31.968	32.166
BENT 5 (BK)	31.957	32.155	32.352	32.550	32.747	32.945	33.143	33.340
BENT 5 (FWD)	32.004	32.202	32.399	32.597	32.795	32.992	33.190	33.388
BENT 6 (BK)	32.551	32.749	32.947	33.144	33.342	33.540	33.737	33.935
BENT 6 (FWD)	32.932	33.130	33.328	33.525	33.723	33.921	34.118	34.316
BENT 7 (BK)	32.929	33.126	33.324	33.521	33.719	33.917	34.114	34.312
BENT 7 (FWD)	32.932	33.130	33.328	33.525	33.723	33.921	34.118	34.316
BENT 8 (BK)	33.382	33.579	33.777	33.975	34.172	34.370	34.567	34.765
BENT 8 (FWD)	33.406	33.604	33.802	33.999	34.197	34.395	34.592	34.790
① BENT 9 (BK)	33.824	34.022	34.219	34.417	34.615	34.812	35.010	35.207

① SEE IH 10 ML OVER CALDER AVE QUANTITY AND BEARING SEAT ELEVATIONS SHEET FOR BENT 9 (FWD) BEARING SEAT ELEVATIONS



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**IH 10 AT US 69
QTY & BEARING SEAT ELEV
IH 10 ML OVER LAUREL AVE
(PHASE 4 STEP 2)**

SHEET 2 OF 2

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1205		

DATE: 20-FEB-2024 13:15
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GENERAL NOTES:

DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

⊕ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.

UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.

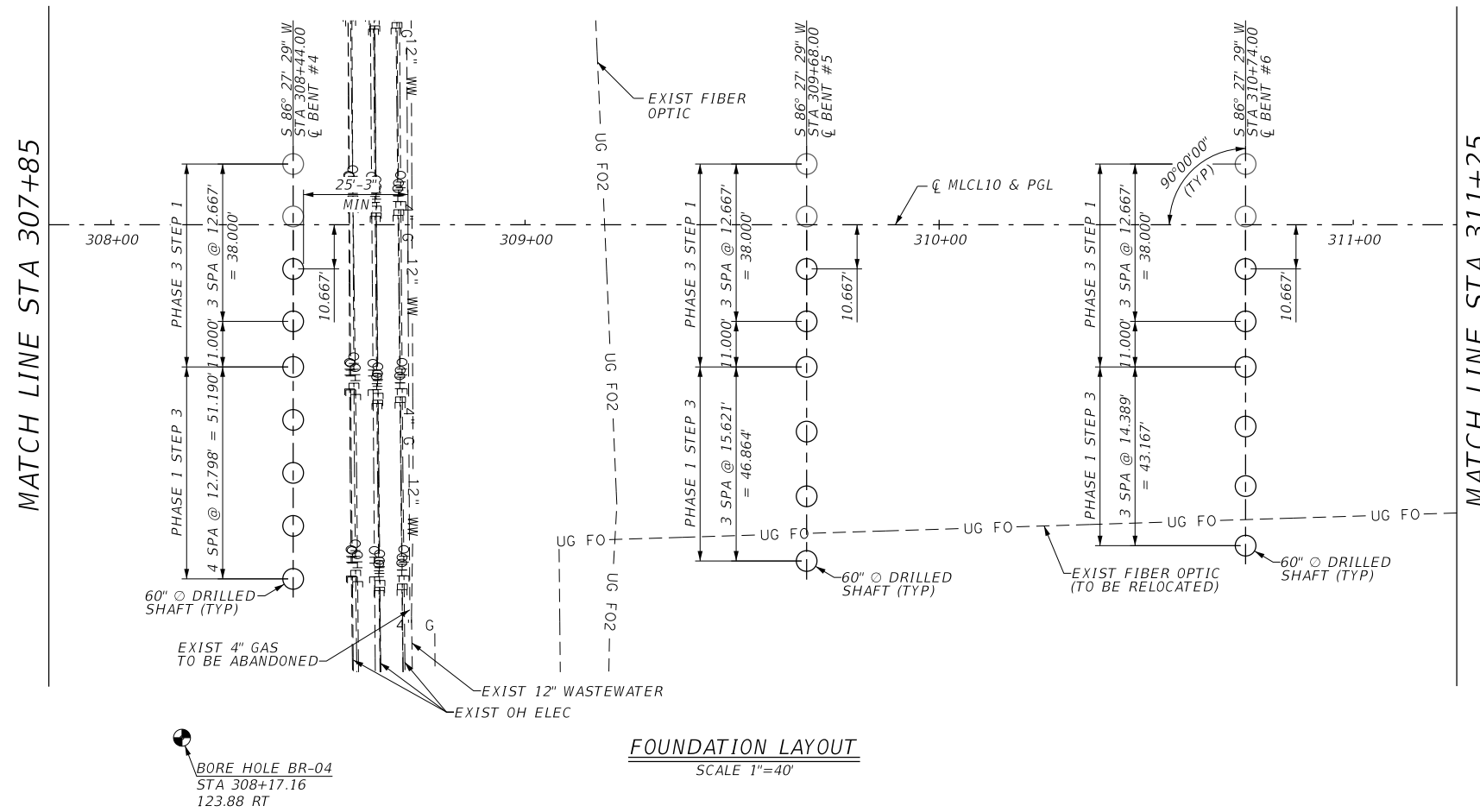
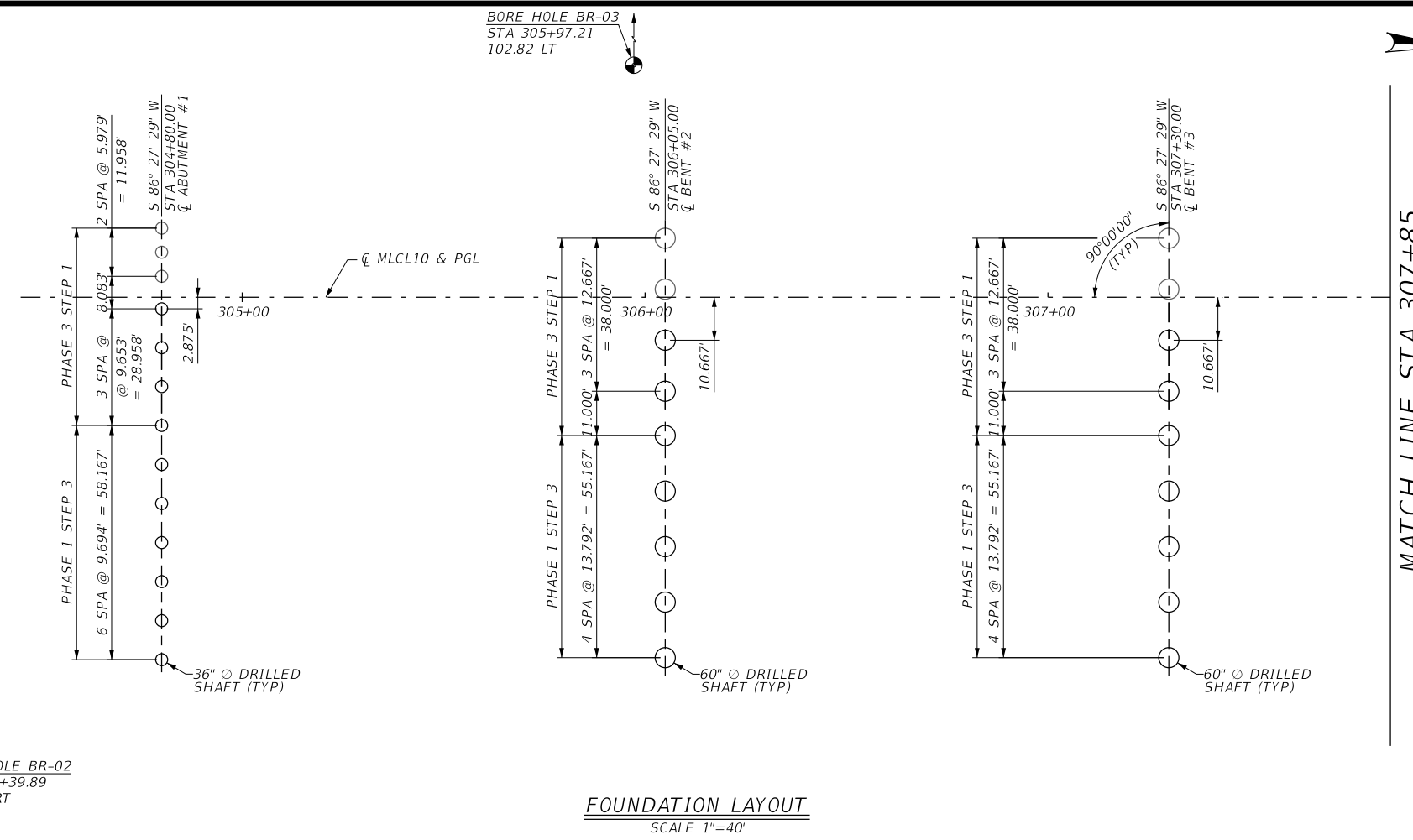
SEE BRIDGE LAYOUT FOR DRILLED SHAFT LENGTHS.

SEE FOUNDATION DETAILS "FD(MOD)" SHEET AND FOUNDATION DETAILS "TYPE H 60" SHAFT SHEET AS PART OF THE COMMON SHEETS FOR FOUNDATION DETAILS AND NOTES NOT SHOWN.

DRILLED SHAFTS SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS ITEM 416. CONTRACTOR SHALL SUBMIT DRILLED SHAFT INSTALLATION PLAN THOROUGHLY OUTLINING THE PROPOSED PROCEDURE FOR SHAFT INSTALLATION PRIOR TO COMMENCEMENT.

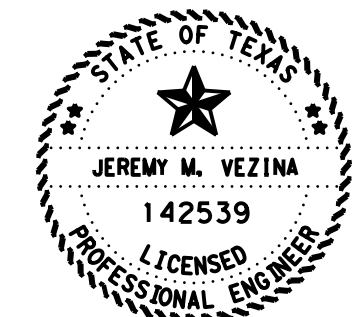
DRILLED SHAFTS HAVE BEEN DESIGNED FOR SIDE FRICTION ONLY (NO TIP BEARING.) REFERENCE FORESIGHT GEOTECHNICAL REPORT FOR DISREGARD DEPTH OF SOIL TO ACCOUNT FOR SOIL DISTURBANCE DURING INSTALLATION.

SEE BORING LOGS SHEETS FOR ESTIMATED GROUNDWATER ELEVATIONS. IF GROUNDWATER IS ENCOUNTERED DURING DRILLING AND CASING IS REQUIRED, THE CASING SHALL REMAIN BELOW THE LEVEL OF CONCRETE DURING PLACEMENT. ENGINEER OF RECORD SHALL BE INFORMED IF CASING WILL BE LEFT IN PLACE SO THAT REVISED SHAFT TIP ELEVATIONS AND CAPACITIES CAN BE PROVIDED.



TIP TESTING NOTES:

- ONE SHAFT AT EACH ABUTMENT AND EACH BENT SHALL BE TESTED PER TXDOT SPECIAL SPECIFICATION 554021, "THERMAL INTEGRITY PROFILER (TIP) TESTING OF DRILLED SHAFTS." TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. THE ENGINEER WILL CHOOSE THE INDIVIDUAL DRILLED SHAFTS TO BE TESTED.
- THE ENGINEER SHALL EVALUATE THE RESULTS OF TIP TESTING AND DETERMINE ACCEPTANCE. SHOULD DEFECTS OR QUESTIONABLE RESULTS BE FOUND, THE ENGINEER MAY REQUIRE REMEDIATION USING HYDROBLASTING AND PRESSURE GROUTING. IF THE ENGINEER DETERMINES THAT FURTHER EVALUATION IS NECESSARY, HIGH-STRAIN DYNAMIC LOAD TESTING (ASTM D4945) PER ITEM 405, "FOUNDATION LOAD TEST," SHALL BE CONSIDERED. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A MITIGATION PLAN TO MITIGATE IDENTIFIED DEFECTS. LOAD TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. TXDOT PERSONNEL, OR THEIR DESIGNATED REPRESENTATIVE, SHALL BE PRESENT DURING TESTING.



Jeremy Vezina 2-20-2024

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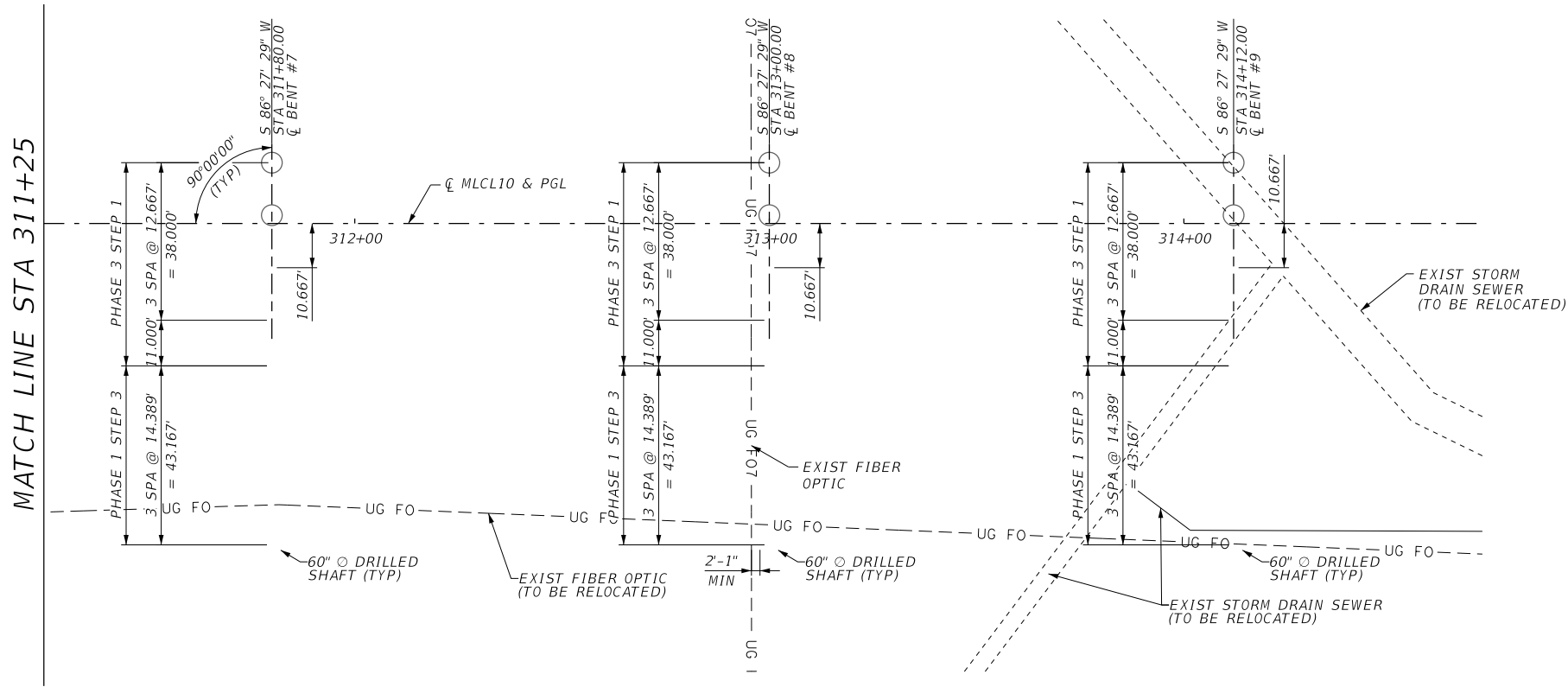


**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EBML
 OVER LAUREL AVE**

SHEET 1 OF 2

DW:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST		COUNTY		SHEET NO.			
	BMT		JEFFERSON				1206

DATE: 20-FEB-2024 13:15
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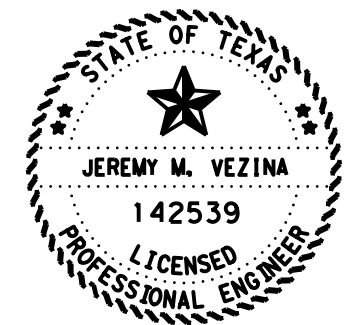


FOUNDATION LAYOUT
 SCALE 1"=40'

BORE HOLE BR-06
 STA 314+10.88
 119.21 RT



NOTES:
 SEE SHEET 1 OF 2 FOR GENERAL NOTES.



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HL93 LOADING

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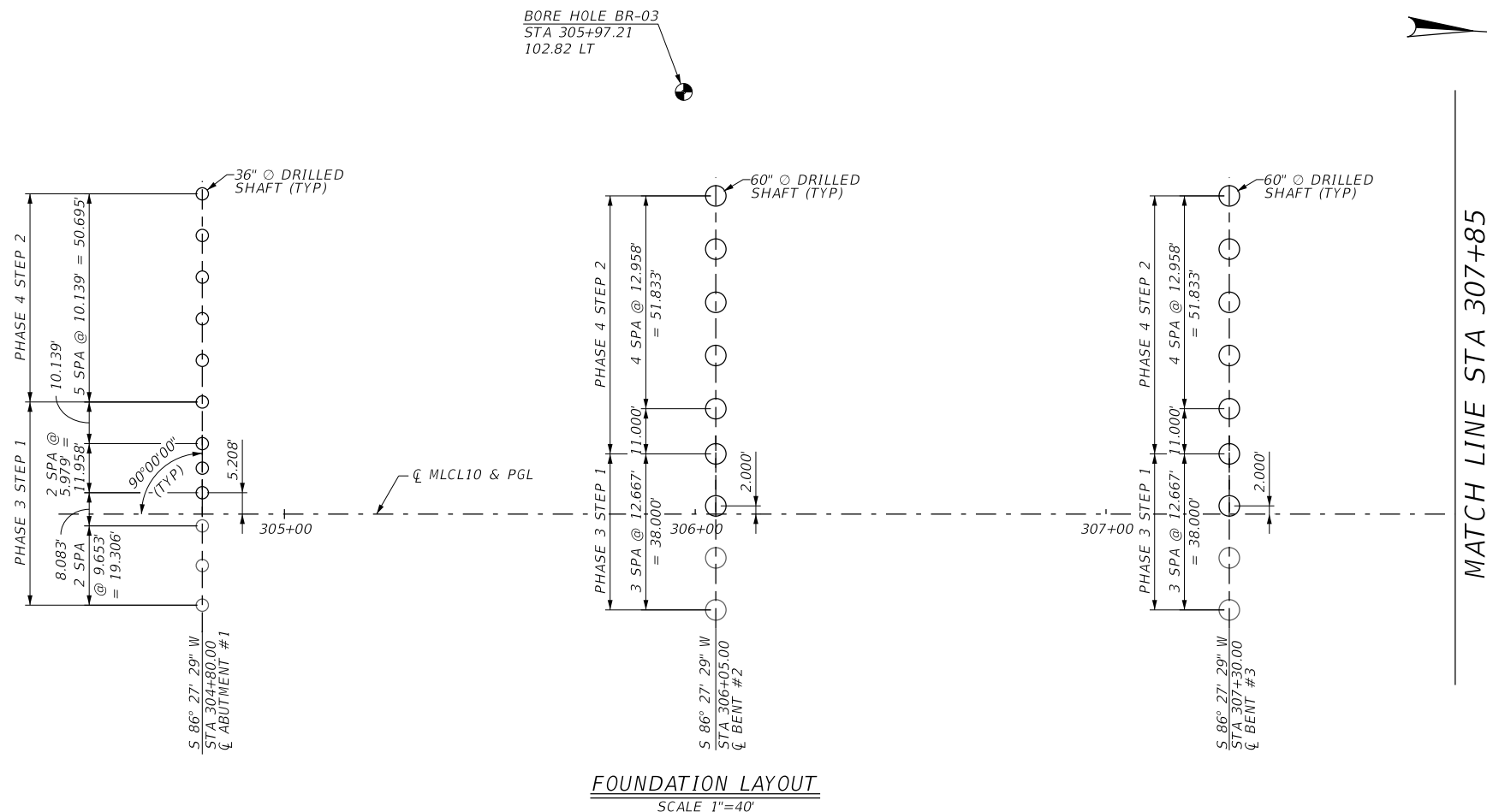


**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EBML
 OVER LAUREL AVE**

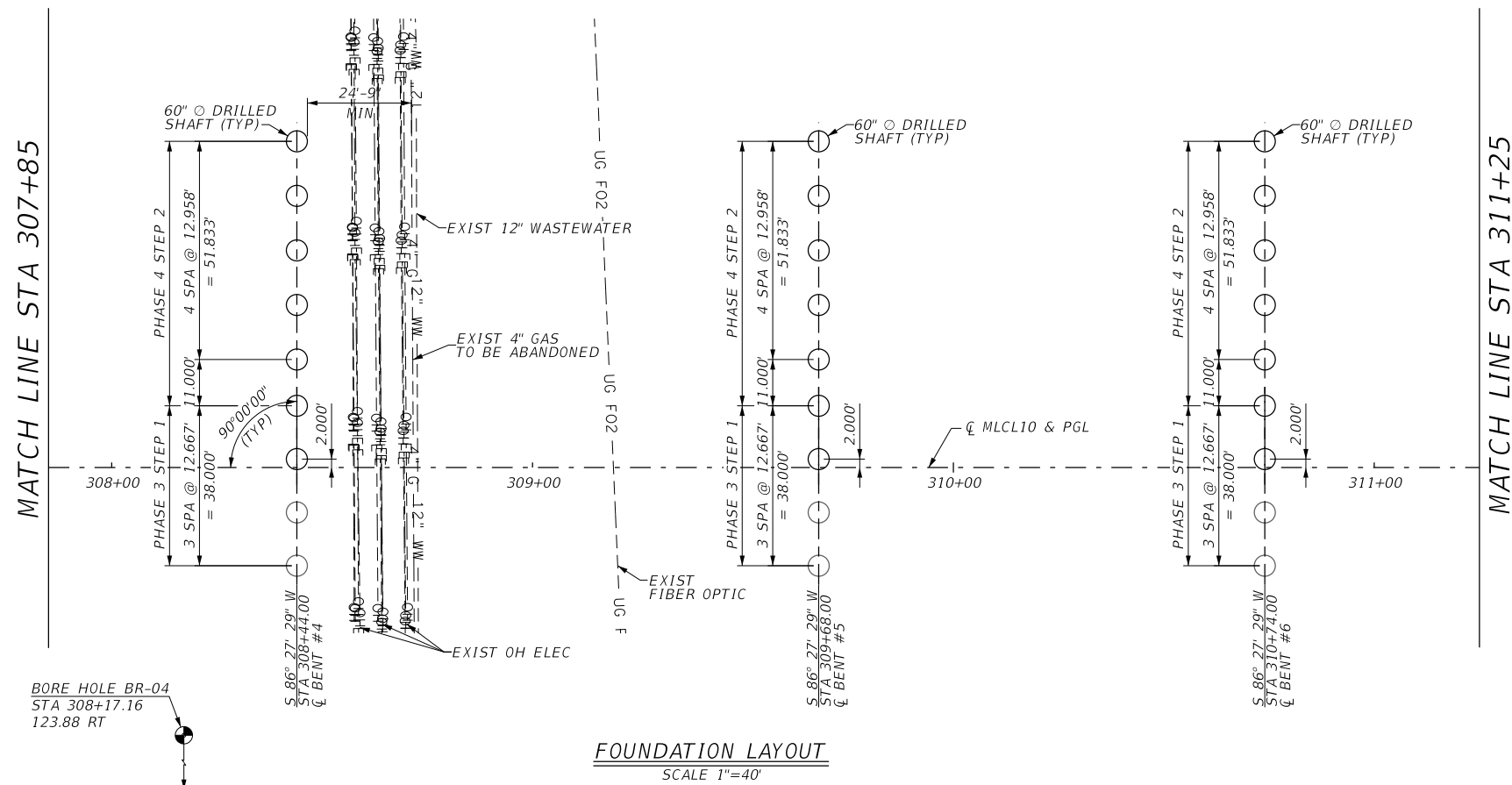
SHEET 2 OF 2

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DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1207		

DATE: 20-FEB-2024 14:47
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FOUNDATION LAYOUT
SCALE 1"=40'



FOUNDATION LAYOUT
SCALE 1"=40'

GENERAL NOTES:

DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

⊙ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.

UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.

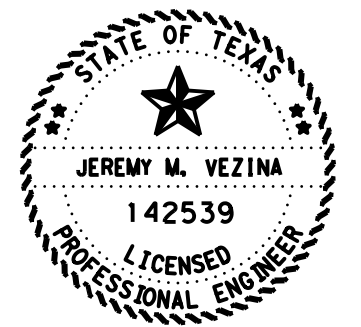
SEE BRIDGE LAYOUT FOR DRILLED SHAFT LENGTHS.

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IH 10 AT US 69
FOUNDATION LAYOUT
IH 10 WBML
OVER LAUREL AVE

SHEET 1 OF 2

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
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0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1208		

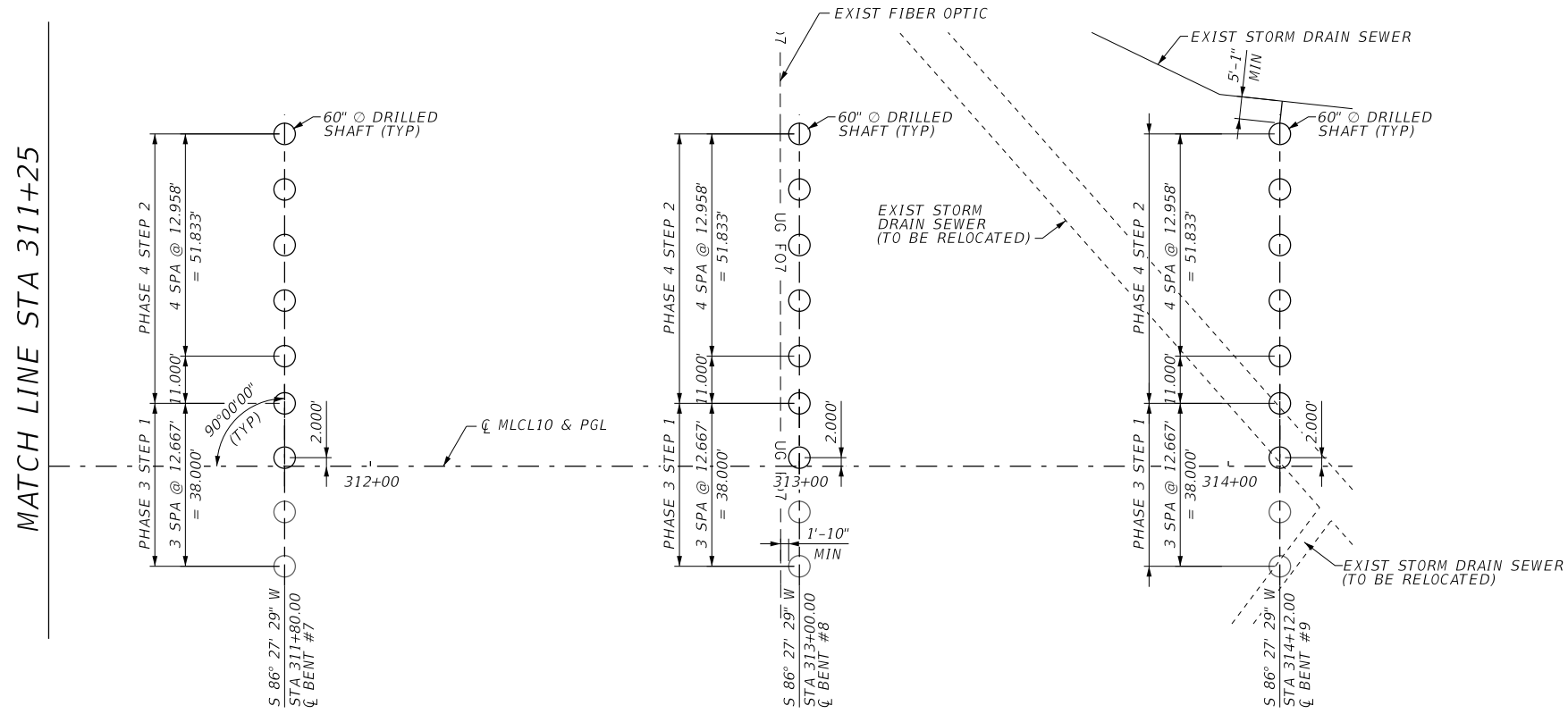
TIP TESTING NOTES:

- ONE SHAFT AT EACH ABUTMENT AND EACH BENT SHALL BE TESTED PER TXDOT SPECIAL SPECIFICATION SS4021, "THERMAL INTEGRITY PROFILER (TIP) TESTING OF DRILLED SHAFTS." TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. THE ENGINEER WILL CHOOSE THE INDIVIDUAL DRILLED SHAFTS TO BE TESTED.
- THE ENGINEER SHALL EVALUATE THE RESULTS OF TIP TESTING AND DETERMINE ACCEPTANCE. SHOULD DEFECTS OR QUESTIONABLE RESULTS BE FOUND, THE ENGINEER MAY REQUIRE REMEDIATION USING HYDROBLASTING AND PRESSURE GROUTING. IF THE ENGINEER DETERMINES THAT FURTHER EVALUATION IS NECESSARY, HIGH-STRAIN DYNAMIC LOAD TESTING (ASTM D4945) PER ITEM 405. "FOUNDATION LOAD TEST" SHALL BE CONSIDERED. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A MITIGATION PLAN TO MITIGATE IDENTIFIED DEFECTS. LOAD TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. TXDOT PERSONNEL, OR THEIR DESIGNATED REPRESENTATIVE, SHALL BE PRESENT DURING TESTING.

DATE: 20-FEB-2024 13:18
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1209_10ML_LAURELAVE_WB_FDNLAY_02.dgn

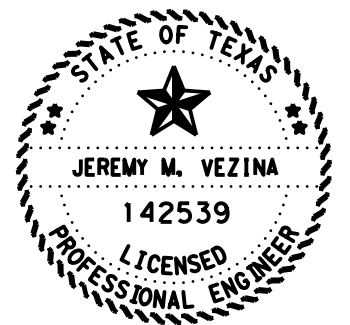
BORE HOLE BR-05
 STA 310+74.11
 121.22 LT

NOTES:
 SEE SHEET 1 OF 2 FOR GENERAL NOTES.



FOUNDATION LAYOUT
 SCALE 1"=40'

BORE HOLE BR-06
 STA 314+10.88
 119.21 RT



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679

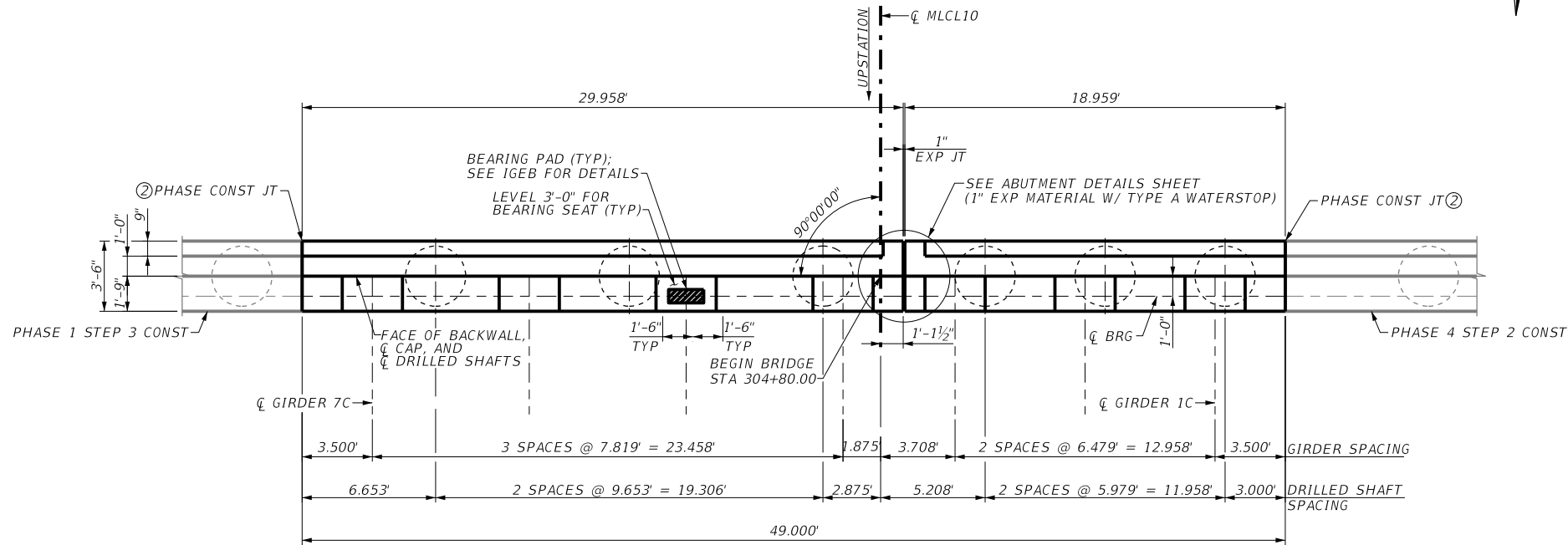


IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 WBML
 OVER LAUREL AVE

SHEET 2 OF 2

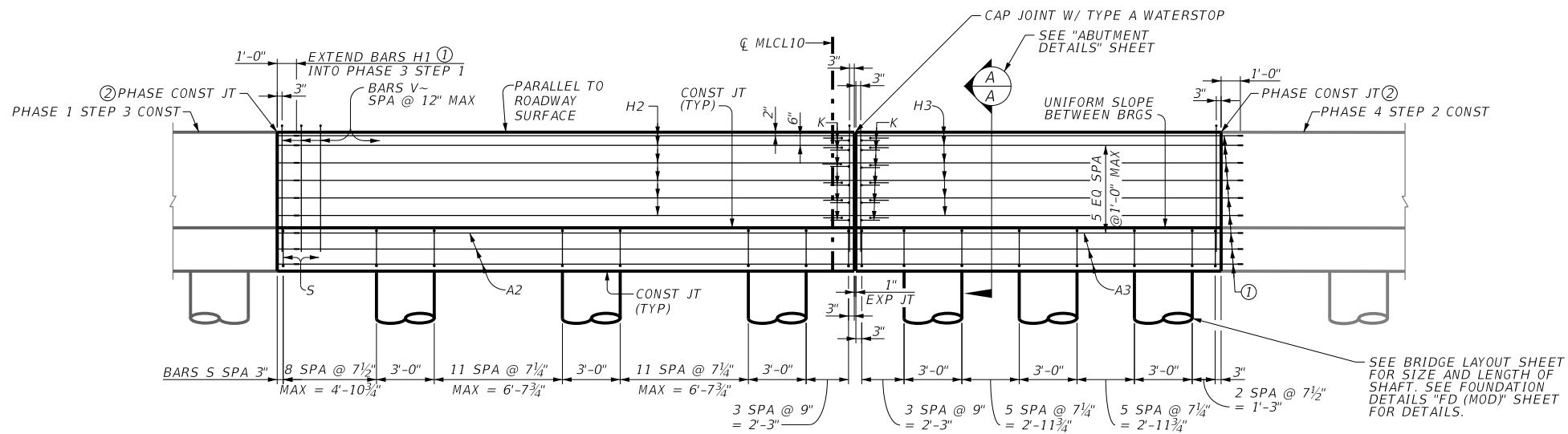
DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1209		

DATE: 20-FEB-2024 14:44
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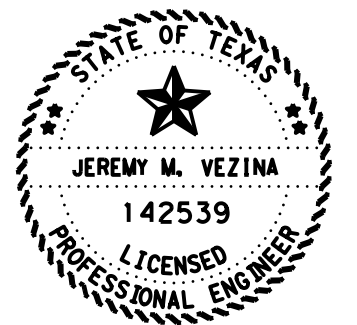
PLAN
 SCALE 1/8"=1'-0"

- ① USE MECHANICAL COUPLERS FOR A & H BARS AT PHASE CONSTRUCTION JOINTS.
- ② SEE PHASE JOINT DETAIL FOR TYPE "B" WATERSTOP DETAILS.



ELEVATION
 SCALE 1/8"=1'-0"

SEE BRIDGE LAYOUT SHEET FOR SIZE AND LENGTH OF SHAFT. SEE FOUNDATION DETAILS "FD (MOD)" SHEET FOR DETAILS.



Jeremy Vezina 2-20-2024

HL93 LOADING

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F-12679

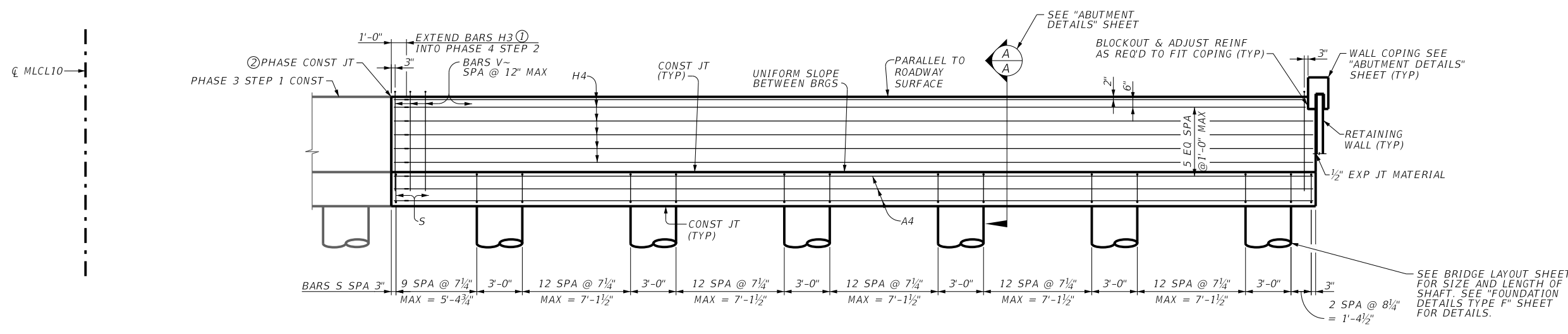
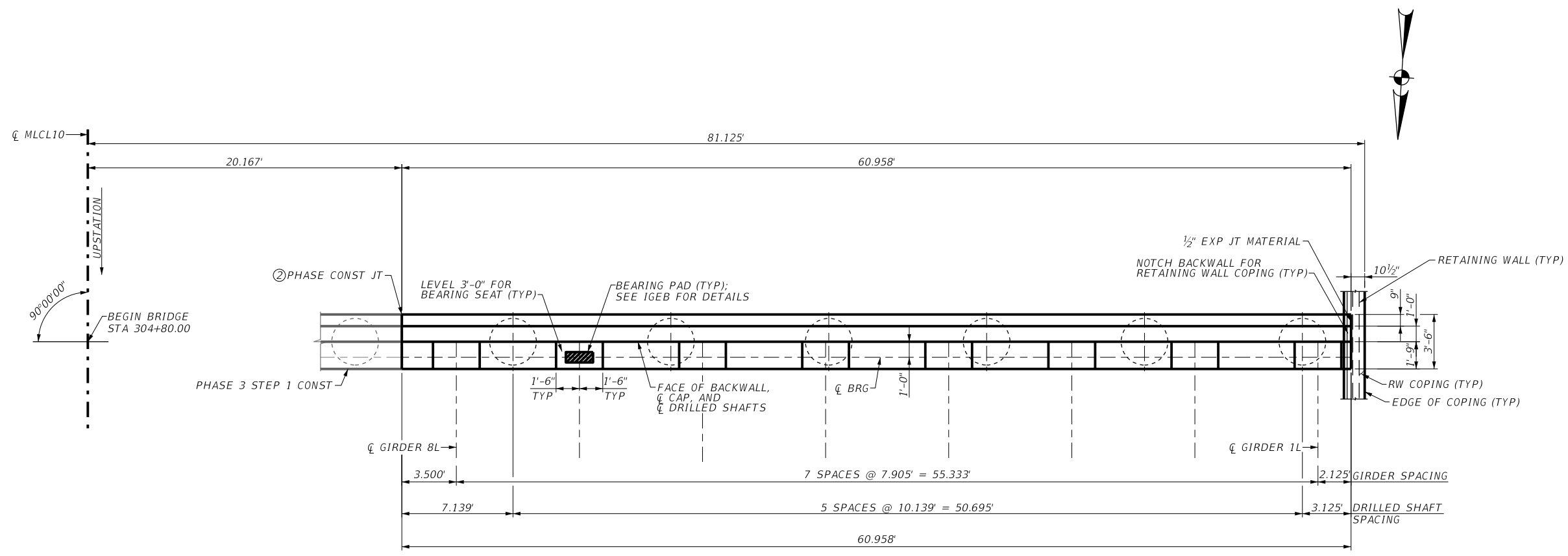


**IH 10 AT US 69
 ABUTMENT 1
 PHASE 3 STEP 1
 IH 10 ML
 OVER LAUREL AVE**

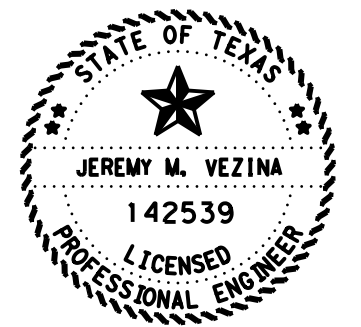
SHEET 2 OF 3

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1211	

DATE: 20-FEB-2024 13:16
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- ① USE MECHANICAL COUPLERS FOR A & H BARS AT PHASE CONSTRUCTION JOINTS.
- ② SEE PHASE JOINT DETAIL FOR TYPE "B" WATERSTOP DETAILS.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT
 F-12679

Texas Department of Transportation

IH 10 AT US 69
 ABUTMENT 1
 PHASE 4 STEP 2
 IH 10 ML
 OVER LAUREL AVE
 SHEET 3 OF 3

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1212		

DATE: 21-FEB-2024 14:10 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1213_10ML_LAURELAVE_ABUT_DET.dgn

TABLE OF ESTIMATED QUANTITIES ABUTMENT 1 EBML PHASE 1 STEP 3					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	72' - 0"	3,825	
H1	12	#6	68' - 0"	1,226	
S	84	#5	11' - 6"	1,008	
U	2	#6	8' - 1"	24	
V	65	#5	15' - 8"	1,062	
REINFORCING STEEL				LB	7,145
CLASS "C" CONCRETE (CAP)				CY	32.5

TABLE OF ESTIMATED QUANTITIES ABUTMENT 1 EBML PHASE 3 STEP 1					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	28' - 10"	1,532	
H2	12	#6	28' - 10"	520	
K	6	#6	8' - 5"	76	
S	25	#5	11' - 6"	300	
U	2	#6	8' - 1"	24	
V	31	#5	15' - 8"	507	
REINFORCING STEEL				LB	2,958
CLASS "C" CONCRETE (CAP)				CY	15.2

TABLE OF ESTIMATED QUANTITIES ABUTMENT 1 WBML PHASE 3 STEP 1					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	19' - 10"	1,054	
H3	12	#6	19' - 10"	357	
K	6	#6	8' - 5"	76	
S	19	#5	11' - 6"	228	
U	2	#6	8' - 1"	24	
V	20	#5	15' - 8"	327	
REINFORCING STEEL				LB	2,066
CLASS "C" CONCRETE (CAP)				CY	9.6

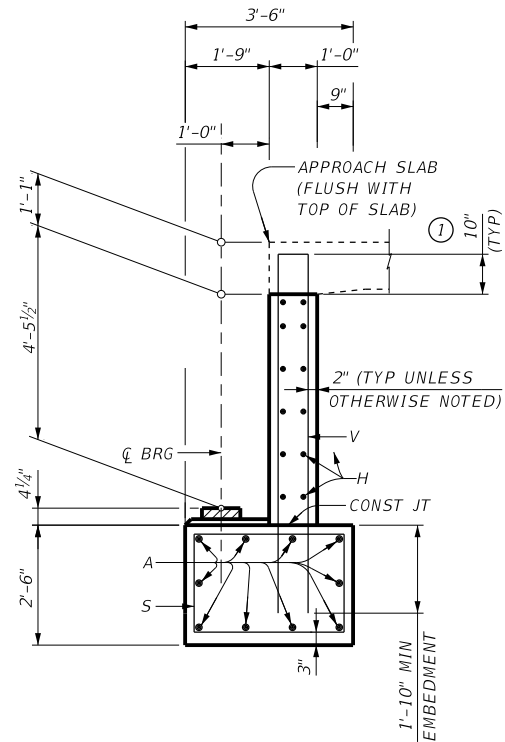
TABLE OF ESTIMATED QUANTITIES ABUTMENT 1 WBML PHASE 4 STEP 2					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A4	10	#11	59' - 10"	3,179	
H4	12	#6	59' - 10"	1,078	
S	78	#5	11' - 6"	936	
U	2	#6	8' - 1"	24	
V	62	#5	15' - 8"	1,013	
REINFORCING STEEL				LB	6,230
CLASS "C" CONCRETE (CAP)				CY	30.9

- GENERAL NOTES:
- DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020), AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 - SEE FOUNDATION DETAILS "FD (MOD)" SHEET FOR FOUNDATION DETAILS AND NOTES.
 - MAXIMUM FOUNDATION LOAD = 108 TONS/DR SHAFT AT ABUTMENT 1.
- MATERIAL NOTES:
- PROVIDE GRADE 60 REINFORCING STEEL
 - PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI)

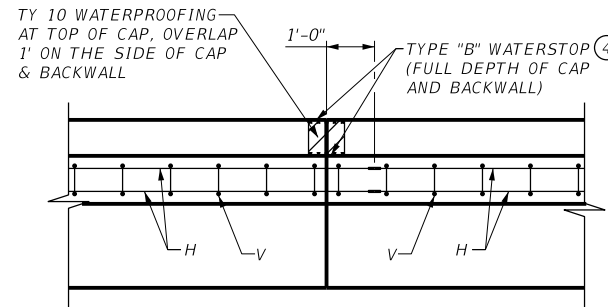
COVER DIMENSIONS ARE CLEAR DIMENSIONS UNLESS NOTED OTHERWISE.

REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BARS.

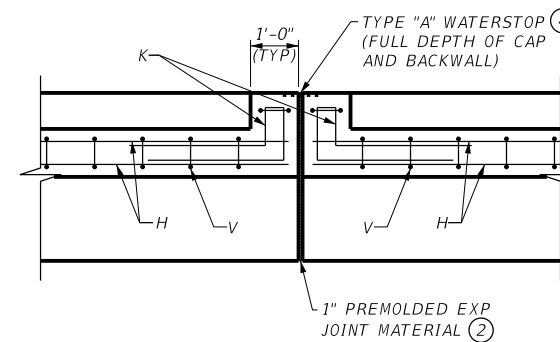
- INCREASE AS REQUIRED TO MAINTAIN 3" FROM FINISHED GRADE.
- 1" BITUMINOUS EXPANSION MATERIAL
- REFERENCE "TXDOT RETAINING WALL TRAFFIC RAILING FOUNDATIONS RW(TRF)" FOR COPING REINFORCEMENT & ADDITIONAL DETAILS.
- REFERENCE "TXDOT SPREAD FOOTING RETAINING WALL MISCELLANEOUS DETAILS RW" (SF) FOR WATERSTOP TYPE "A" AND "B" DETAILS, TO BE PLACED THE FULL HEIGHT OF THE ABUTMENT.
- USE 2'-10" LAP SPLICE.



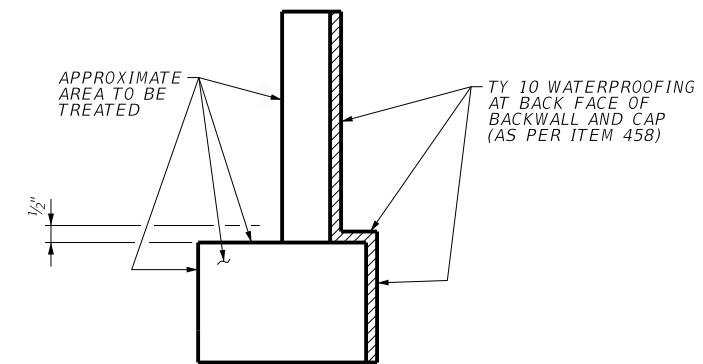
SECTION A-A



PHASE JOINT DETAIL

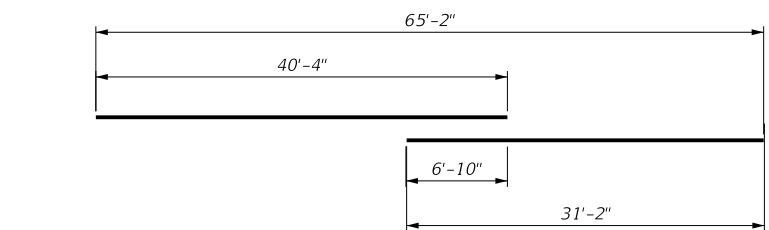


CAP JOINT DETAIL

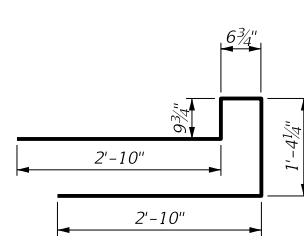


WATERPROOFING DETAIL

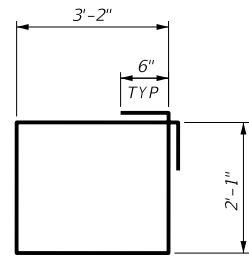
(TREAT THE FACE OF BACKWALL AND TOP, FRONT, AND ENDS OF CAP AS SHOWN, EXCEPT BEARING SEATS, WITH SILICONE RESIN PAINT FINISH AS PER ITEM 427. INCLUDE COMPATIBLE PRIMER AS SPECIFIED BY THE PAINT MANUFACTURER. SEE SPECIFICATIONS AND GENERAL NOTES FOR COLOR REQUIREMENTS. TYPE 10 WATERPROOFING MEMBRANE (ITEM 458) IS CONSIDERED SUBSIDIARY TO CLASS "C" CONC (ABUT).



BARS A1



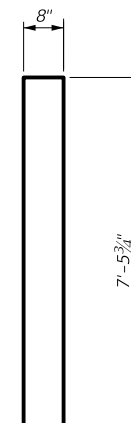
BARS K



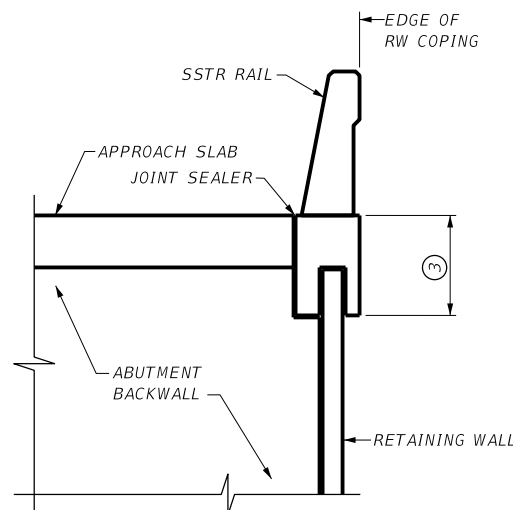
BARS S



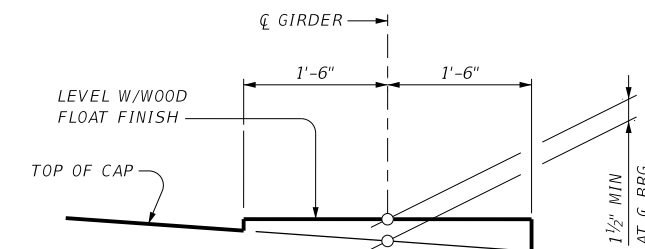
BARS U



BARS V

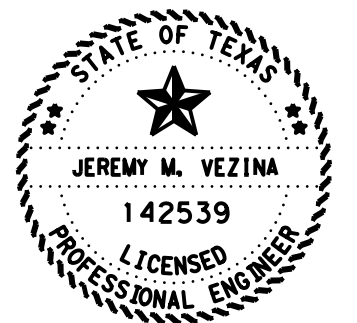


COPING DETAIL



BEARING SEAT DETAIL

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD.)



Jeremy Vezina 2-21-2024

HL93 LOADING

VOLKERT

F-12679

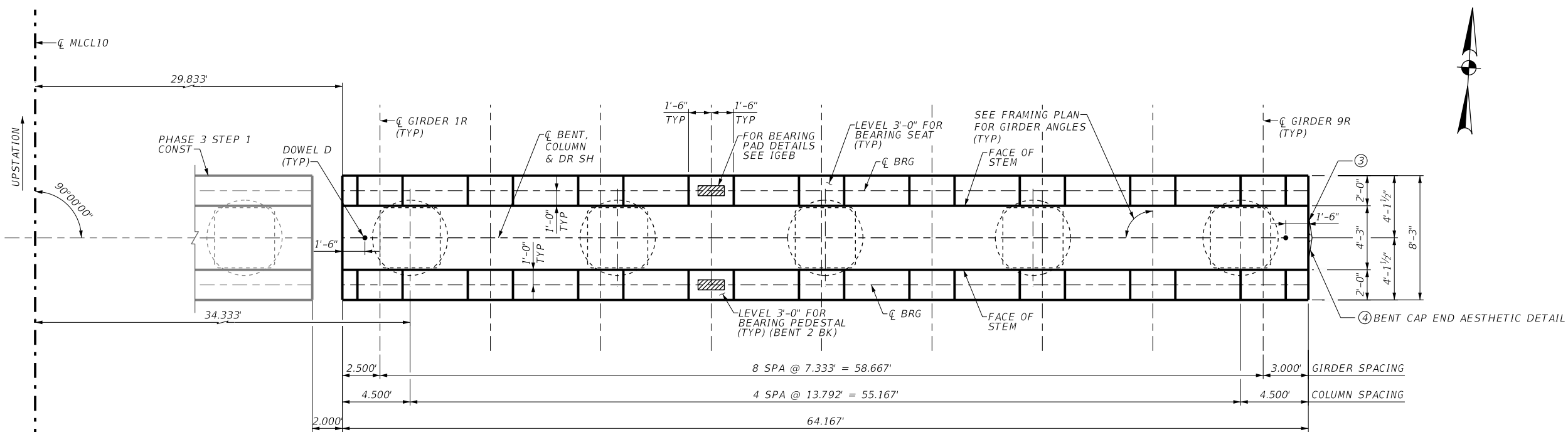
Texas Department of Transportation

IH 10 AT US 69
ABUTMENT DETAILS
IH 10 ML
OVER LAUREL AVE

SHEET 1 OF 1

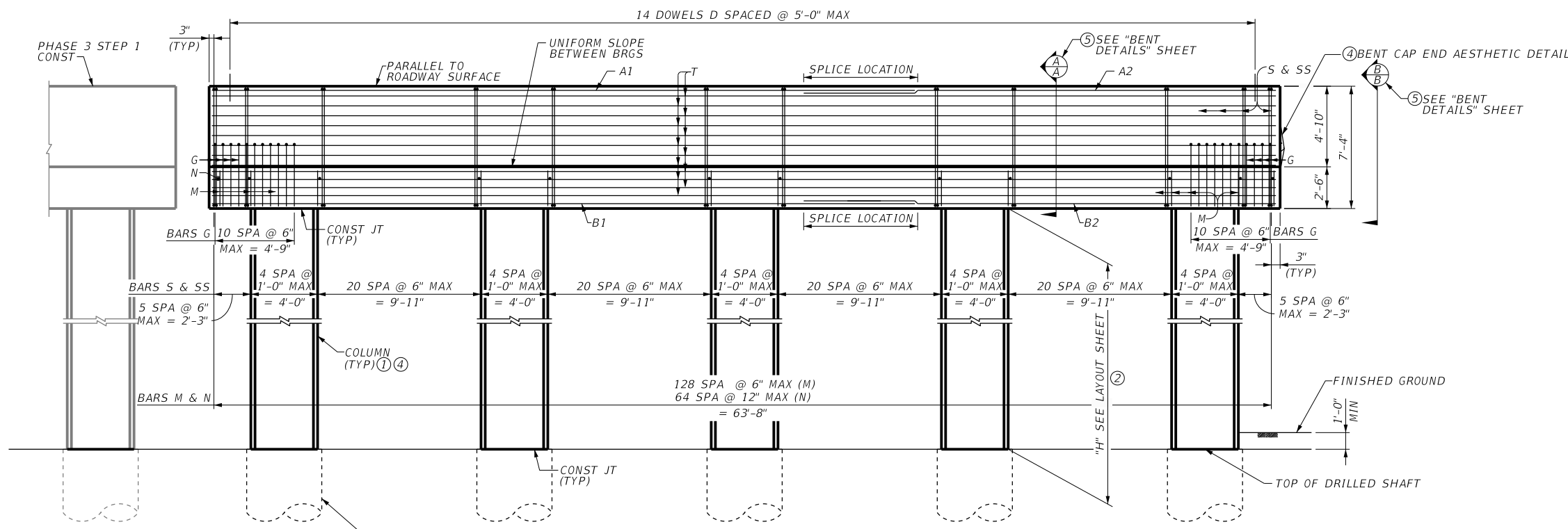
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CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1213		

DATE: 20-FEB-2024 13:14
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1214.10ML LAUREL AVE BENTPE 2-3_1_3.dgn

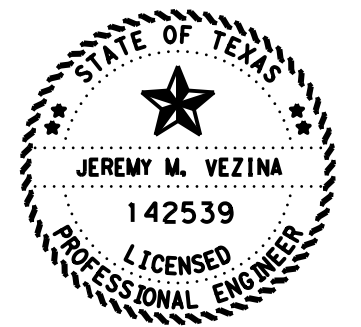


PLAN
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 3 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE 4'x4' COLUMN AESTHETIC DETAILS SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



ELEVATION
 1/8" = 1'-0"



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

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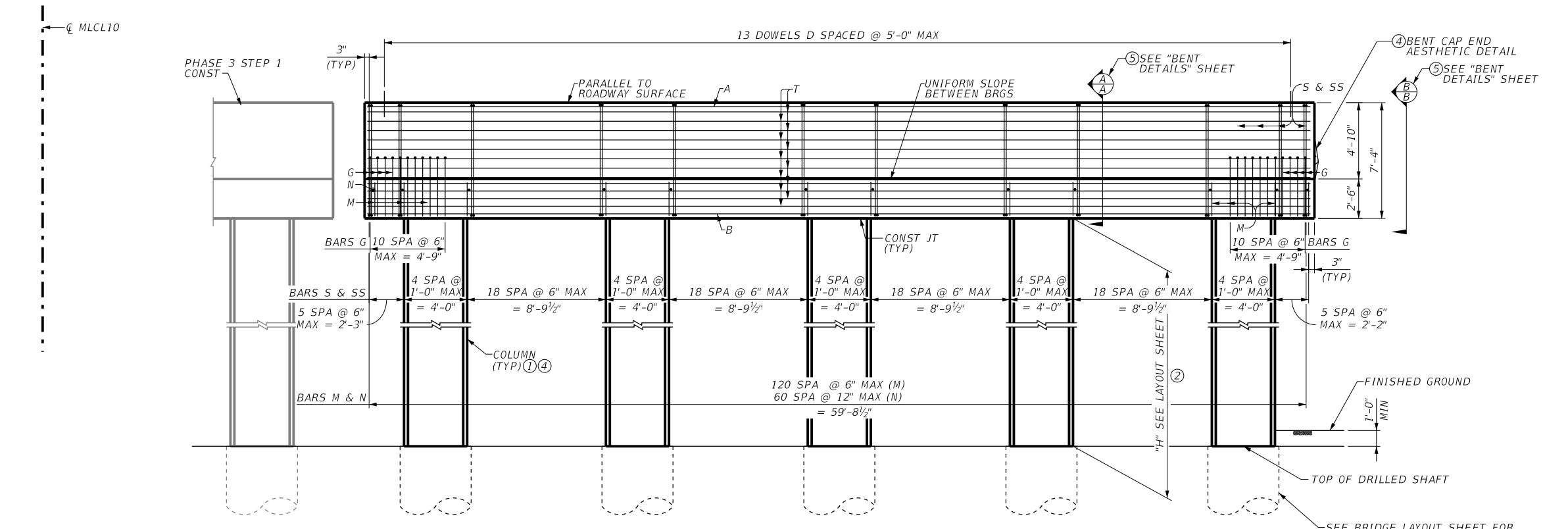
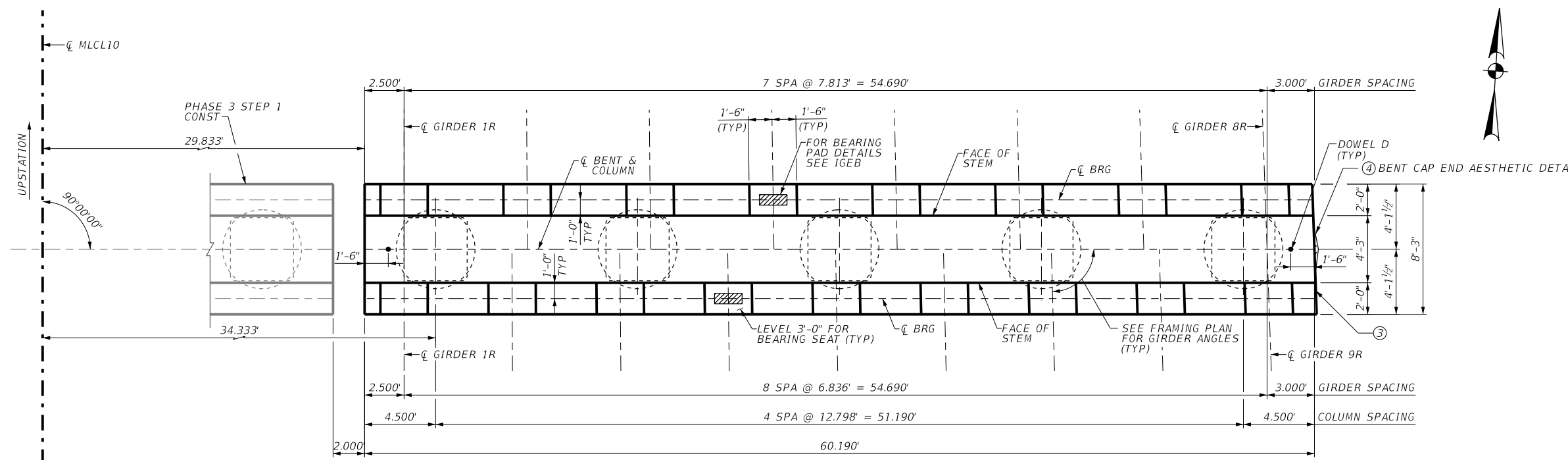
Texas Department of Transportation

**IH 10 AT US 69
 BENTS 2 & 3
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER LAUREL AVE**

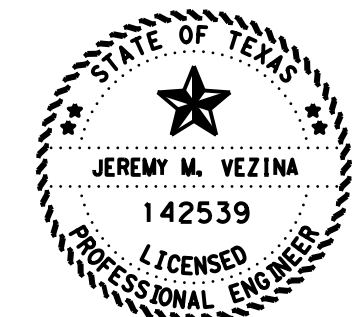
SHEET 1 OF 1

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1214			

DATE: 20-FEB-2024 13:15
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1215_10ML LAUREL AVE BENT PE 4_1_3.dgn



- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 4 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE 4'x4' COLUMN AESTHETIC DETAILS SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

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Texas Department of Transportation

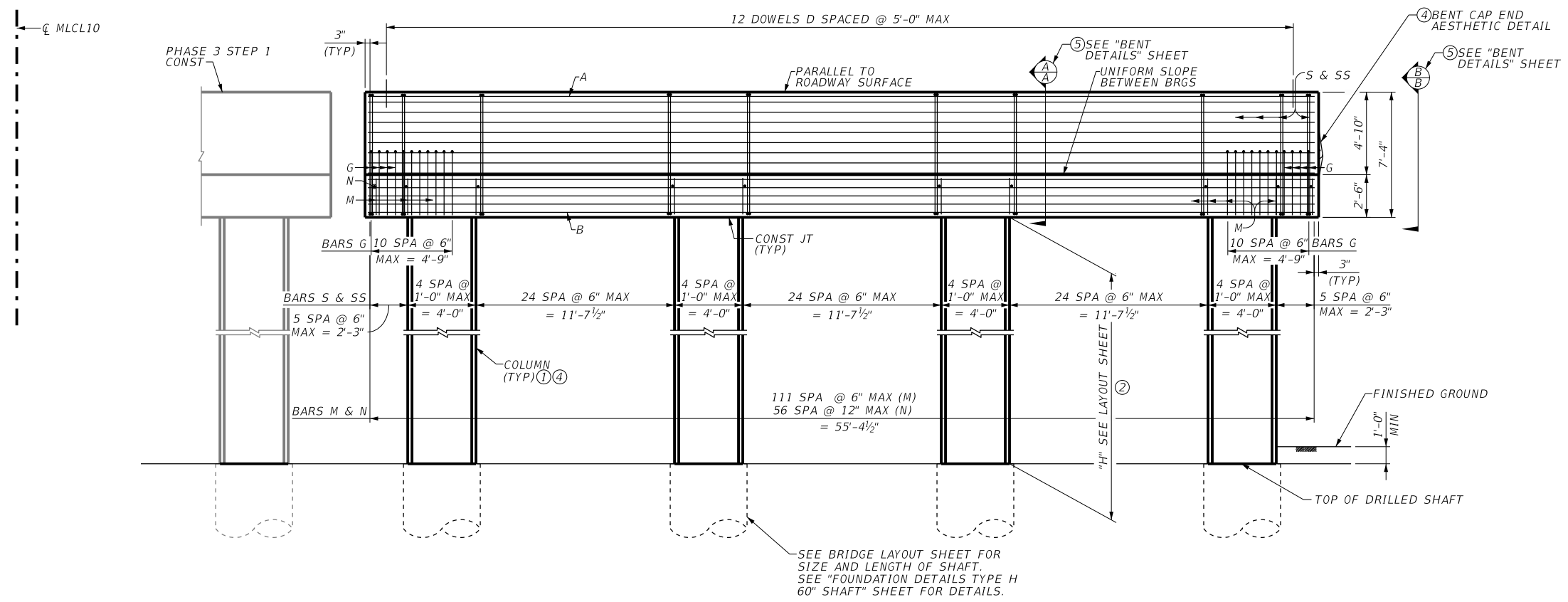
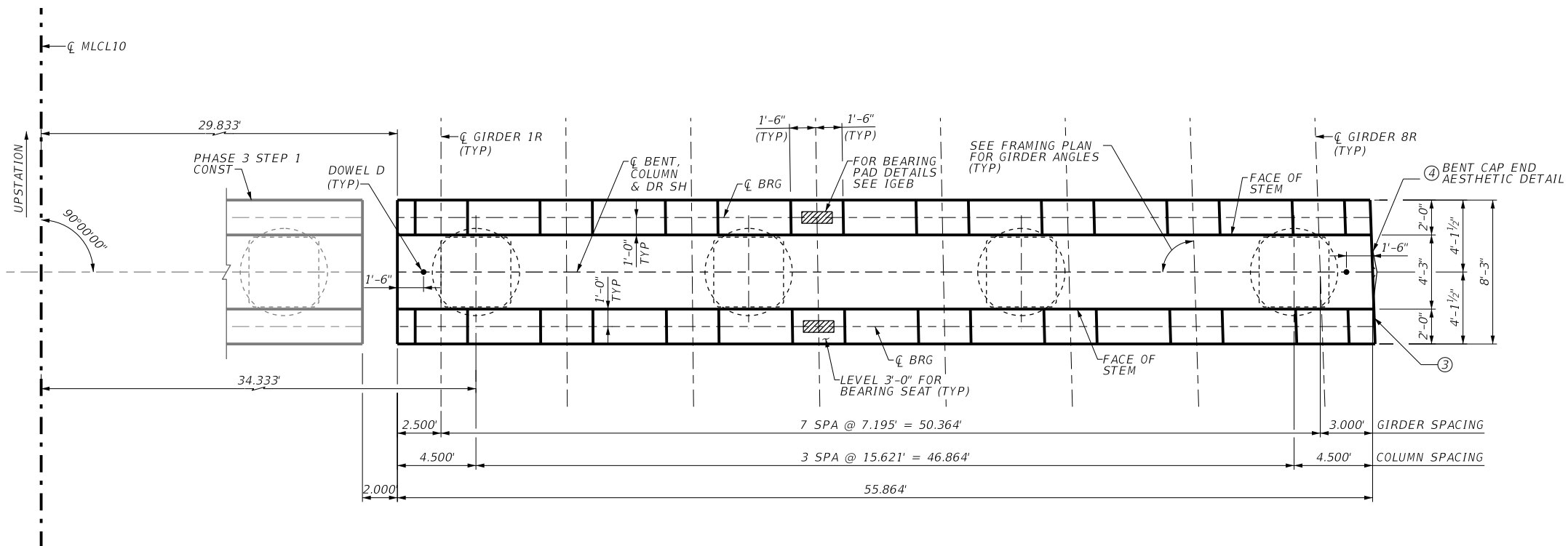
**IH 10 AT US 69
 BENT 4
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 1 OF 1

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1215	

SEE BRIDGE LAYOUT SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS TYPE H 60" SHAFT" SHEET FOR DETAILS.

DATE: 20-FEB-2024 13:15
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1216_10ML LAURELANE_BENTPE_5_1_3.dgn



- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 4 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE 4"x4" COLUMN AESTHETIC DETAILS SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



HL93 LOADING

VOLKERT

F-12679

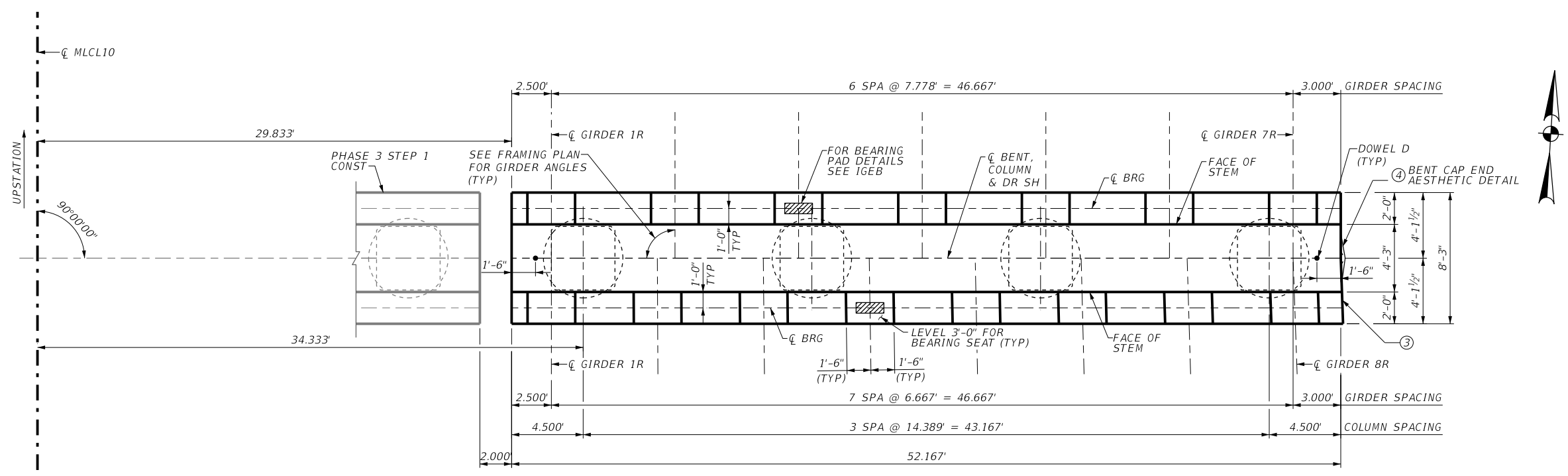
Texas Department of Transportation

**IH 10 AT US 69
 BENT 5
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 1 OF 1

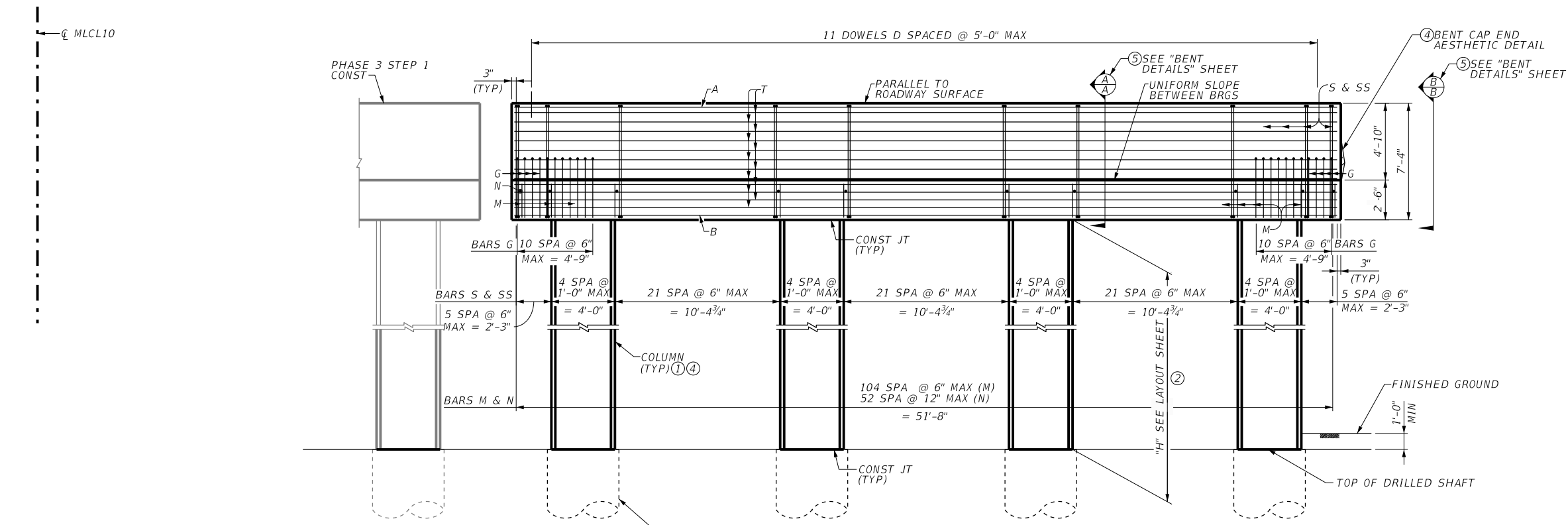
DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1216

DATE: 20-FEB-2024 14:47
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1217_10ML LAUREL AVE BENT PE 6_1_3.dgn

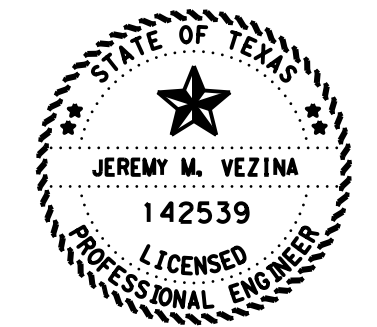


PLAN
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 4 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE 4'x4' COLUMN AESTHETIC DETAILS SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



ELEVATION
 1/8" = 1'-0"



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT
 F-12679

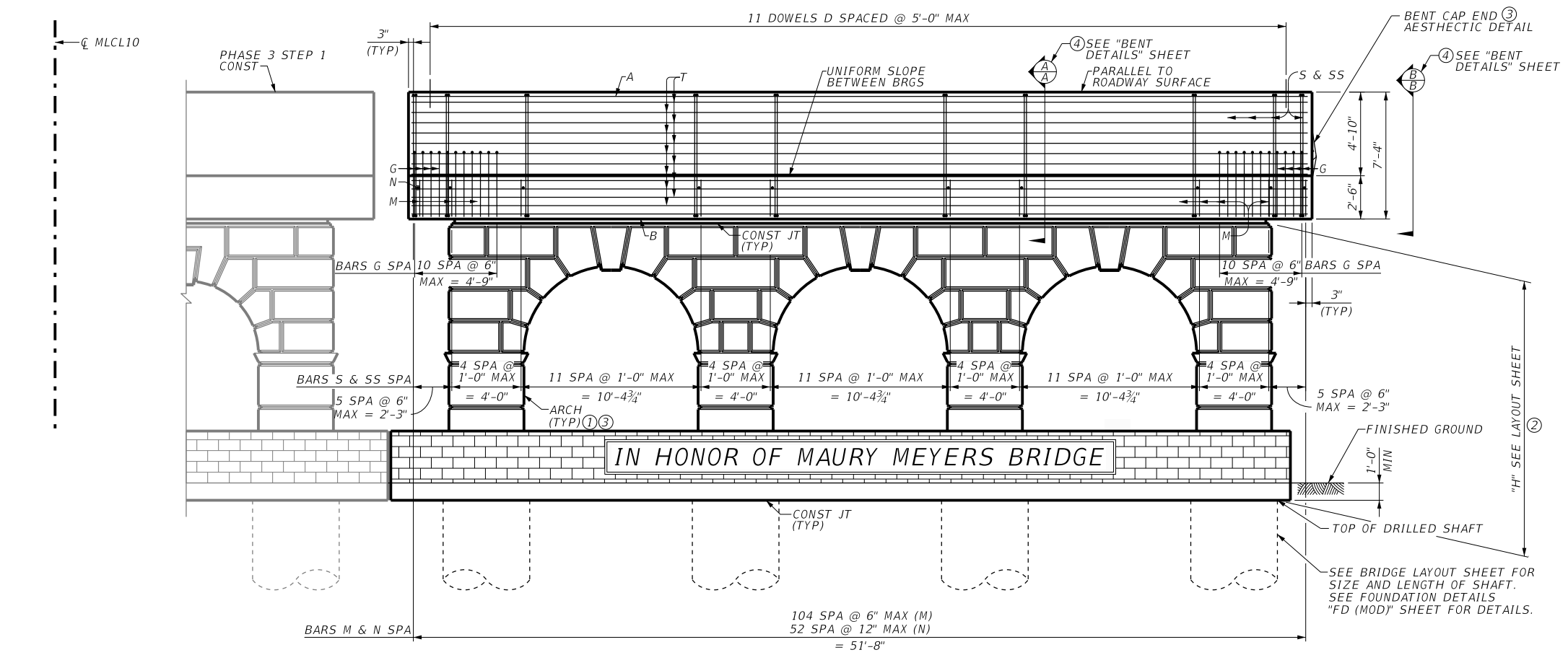
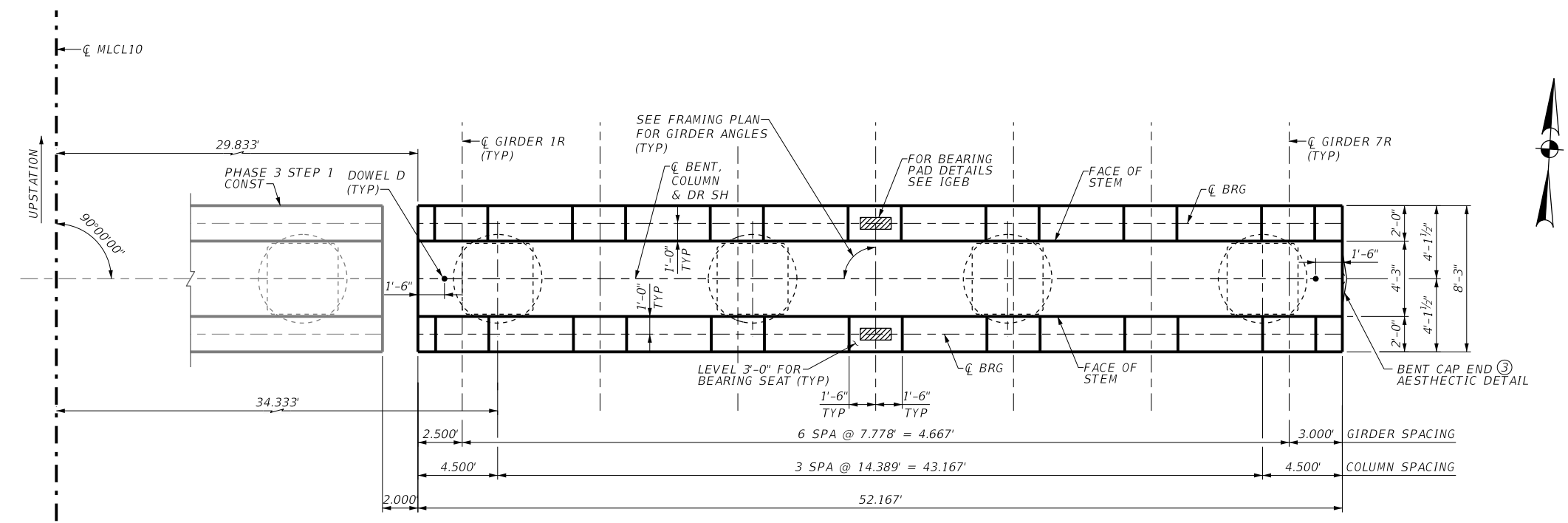
Texas Department of Transportation

**IH 10 AT US 69
 BENT 6
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER LAUREL AVE**

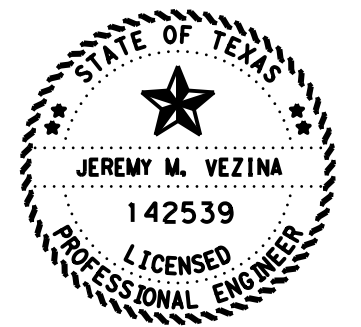
SHEET 1 OF 1

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1217	

DATE: 20-FEB-2024 14:46
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1218_10ML LAUREL AVE_BENTPE_7-8_1_3.dgn



- ① SEE "ARCH DETAILS" SHEETS FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CLCL10. ADJUST HEIGHT OF COLUMNS UNDER ARCHES AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "ARCH AESTHETIC DETAILS" SHEETS.
- ④ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679

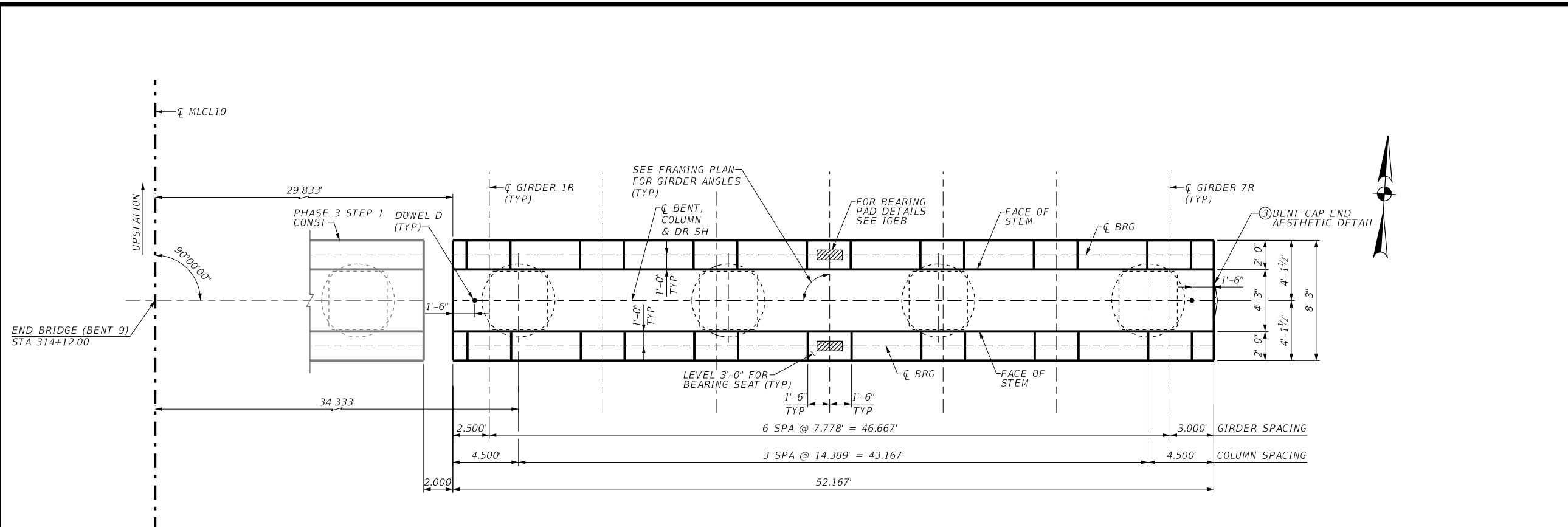
Texas Department of Transportation

IN HONOR OF MAURY MEYERS BRIDGE
 BENT 7 & 8
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER LAUREL AVE

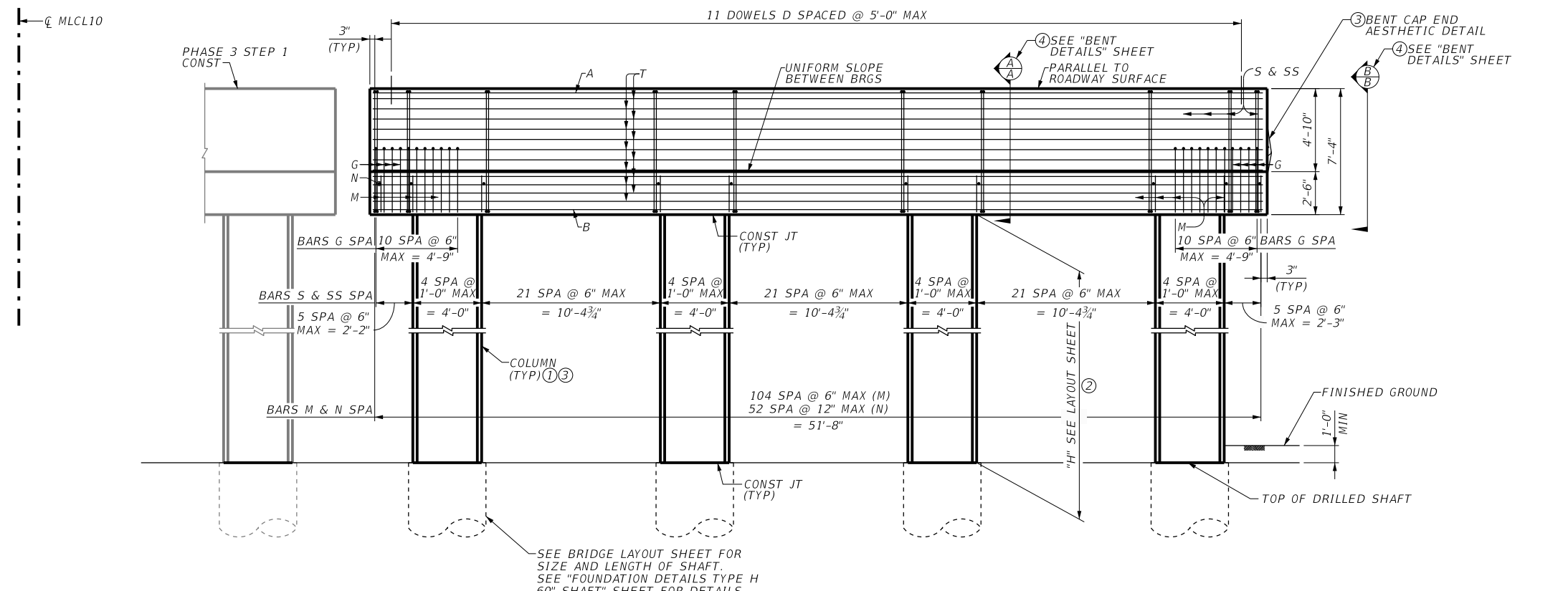
SHEET 1 OF 1

DN: JMV	CK: FB	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1218	

DATE: 20-FEB-2024 13:18
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1219_10ML LAUREL AVE BENT PE 9_1_3.dgn

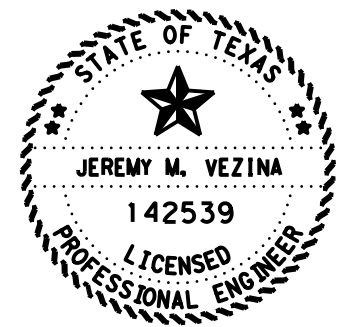


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE 4'x4' COLUMN AESTHETIC DETAILS SHEET.
- ④ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

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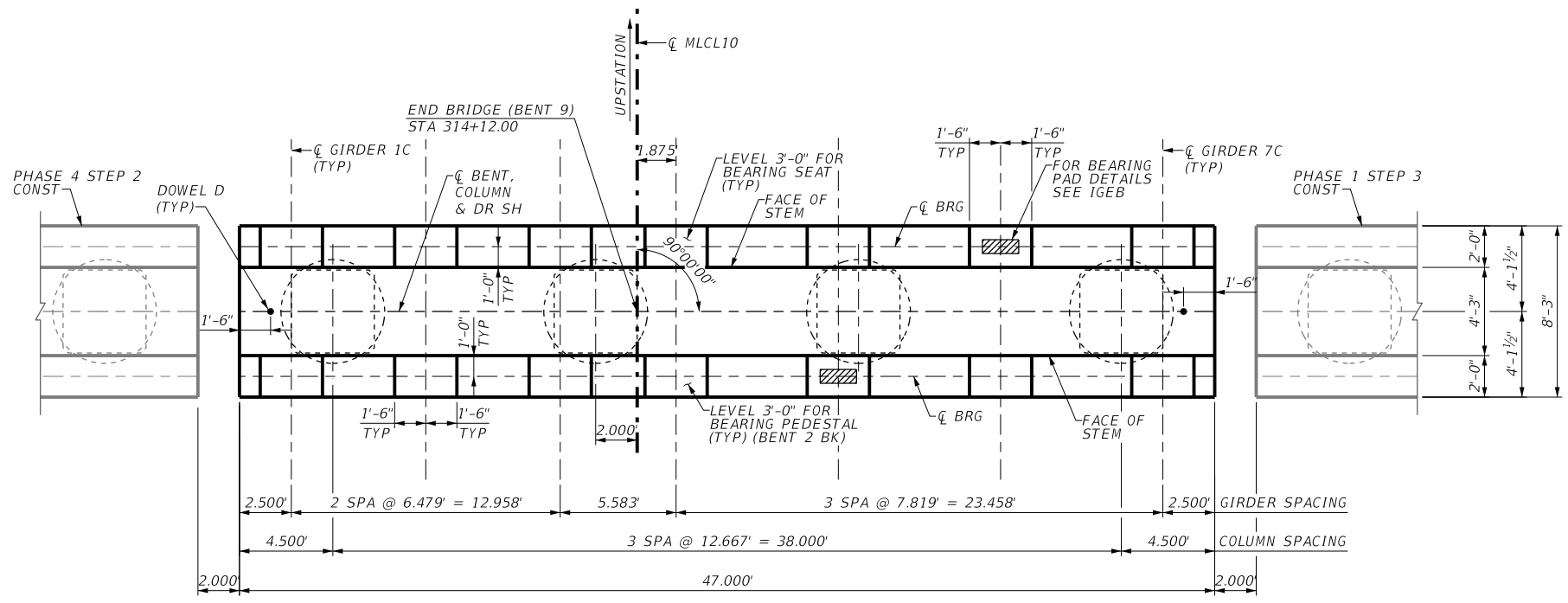
Texas Department of Transportation

**IH 10 AT US 69
 BENT 9
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER LAUREL AVE**

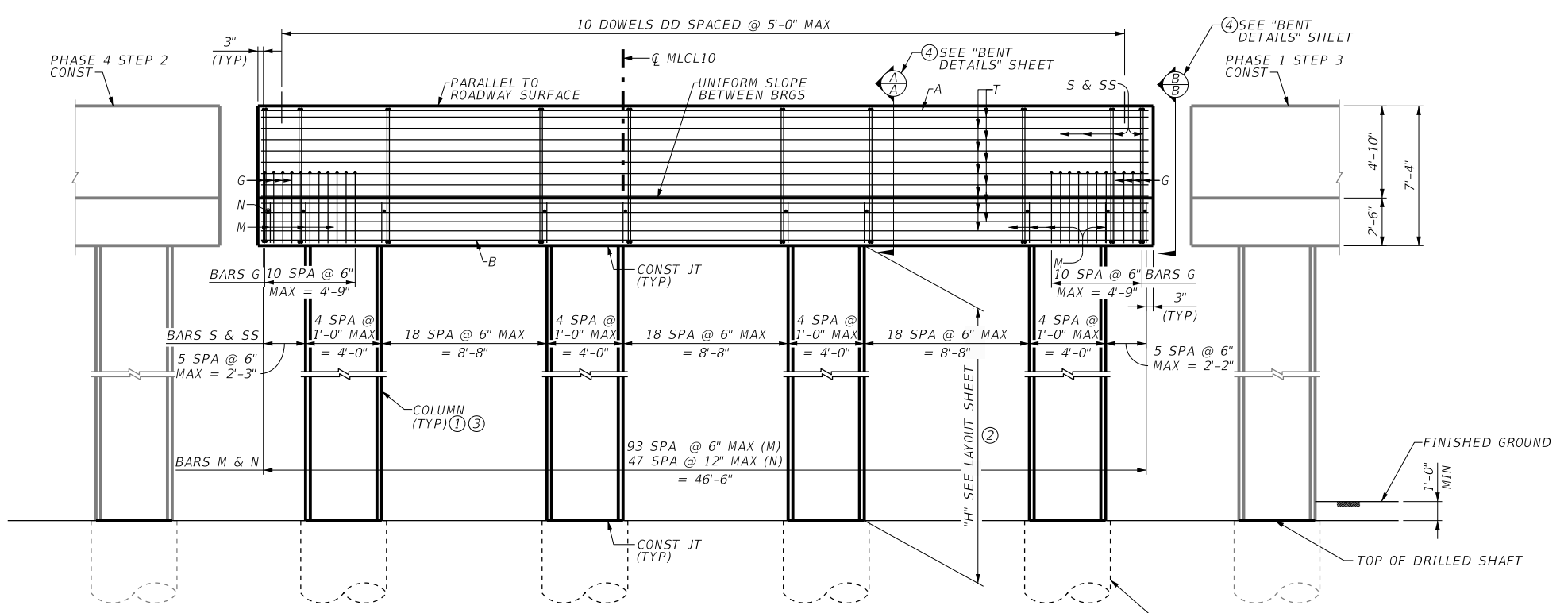
SHEET 1 OF 1

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1219	

DATE: 20-FEB-2024 13:14
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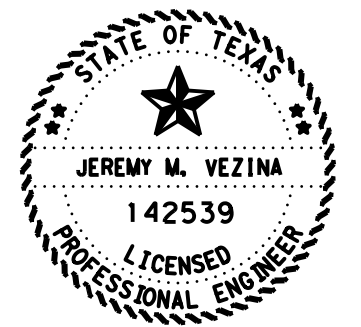


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE 4'x4' COLUMN AESTHETIC DETAILS SHEET.
- ④ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679

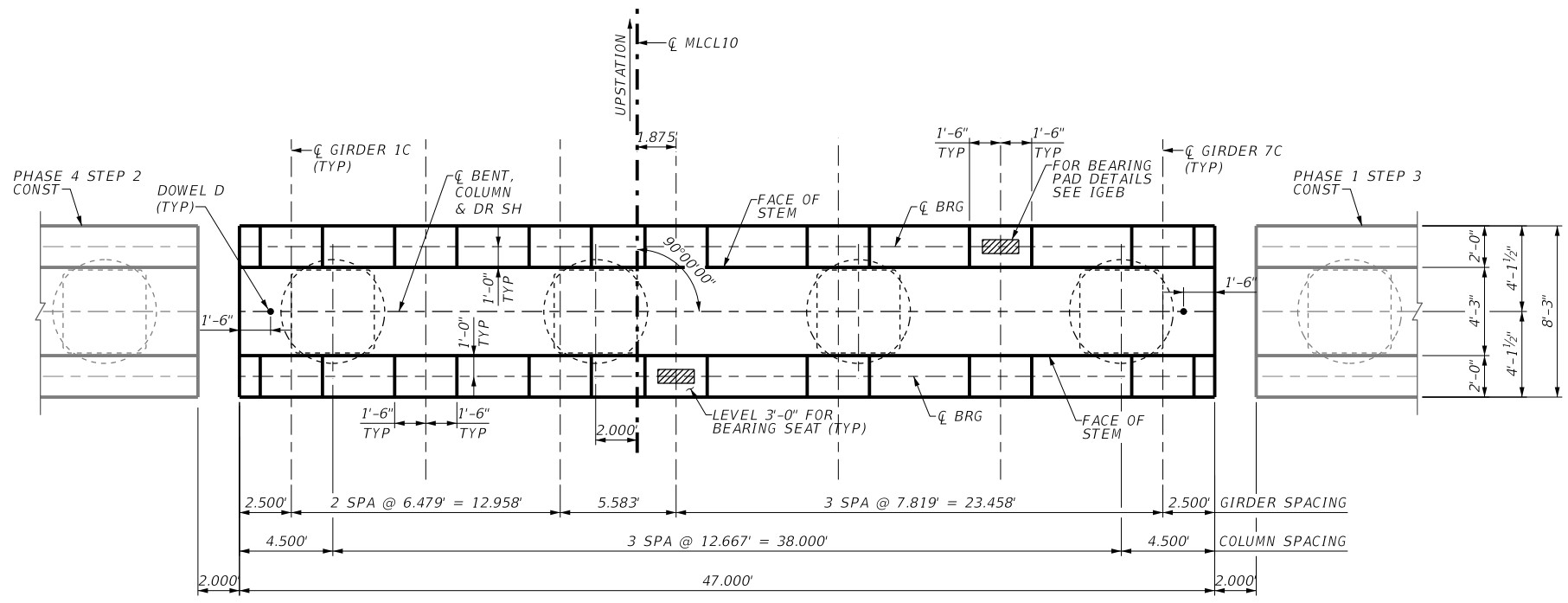
Texas Department of Transportation

IH 10 AT US 69
 BENTS 2-6, 9
 PHASE 3 STEP 1
 IH 10 MAINLANE
 OVER LAUREL AVE

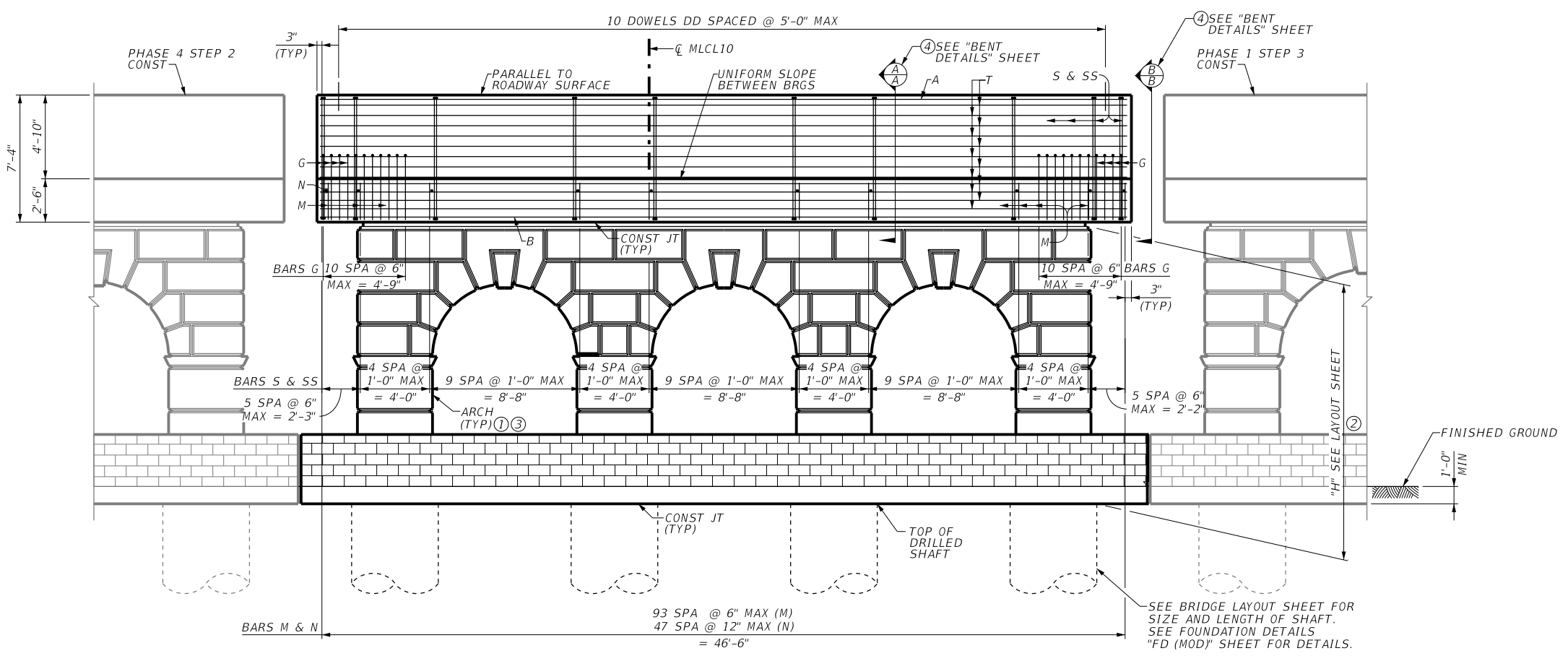
SHEET 1 OF 1

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1220	

DATE: 20-FEB-2024 13:17
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1221_10ML_LAURELAVE_BENTPE_7-8_3_1.dgn

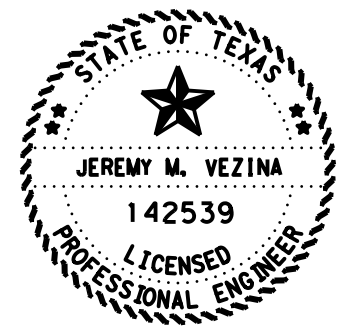


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "ARCH DETAILS" SHEETS FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS UNDER ARCHES AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "ARCH AESTHETIC DETAILS" SHEETS.
- ④ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679

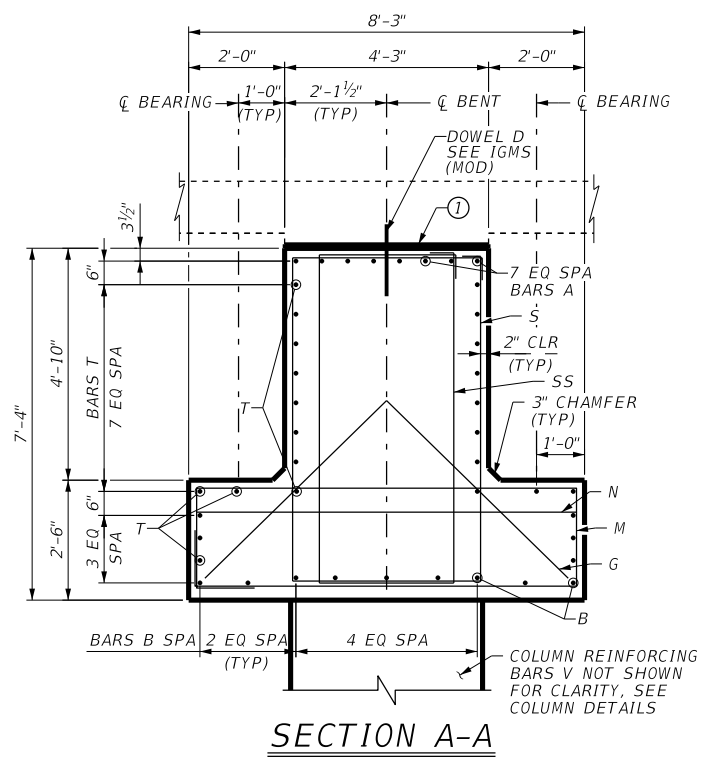


**IH 10 AT US 69
 BENTS 7 & 8
 PHASE 3 STEP 1
 IH 10 MAINLANE
 OVER LAUREL AVE**

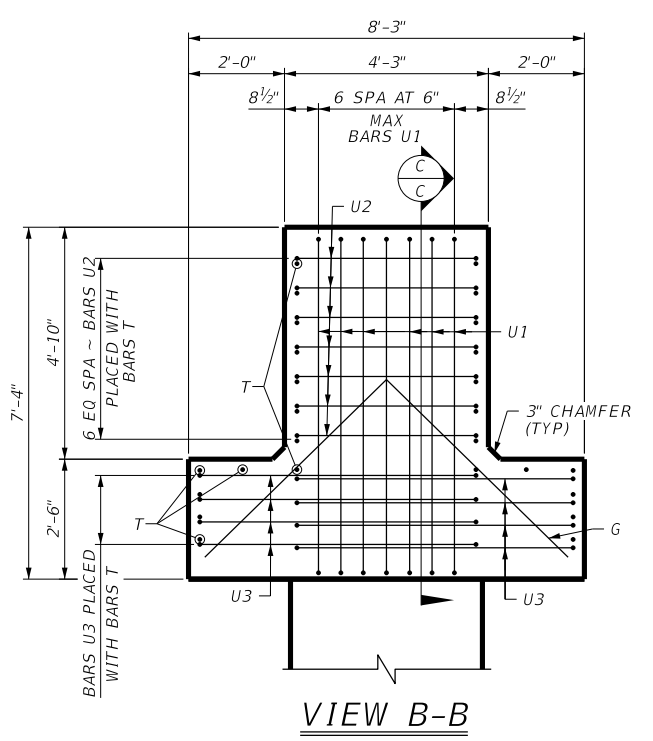
SHEET 1 OF 1

DN: JMV	CK: FB	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1221	

DATE: 20-FEB-2024 13:18
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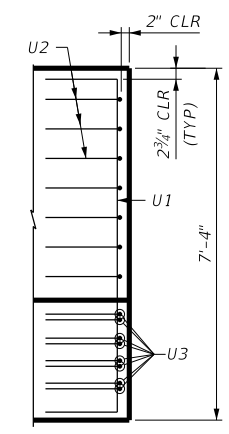


SECTION A-A



VIEW B-B

(BARS A, B, D, M, N, S AND SS NOT SHOWN FOR CLARITY)
 (DIMENSIONS SHOWN ARE PERPENDICULAR TO ϕ BENT)



SECTION C-C

(BARS A, B, G, M, N, S, SS AND T NOT SHOWN FOR CLARITY)

GENERAL NOTES:
 DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, (2020) AND TxDOT BRIDGE MANUAL (JAN 2023). SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.

SEE "COLUMN DETAILS TYPE A" SHEET FOR ALL COLUMN DETAILS AND NOTES.

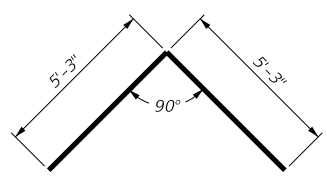
SEE "FOUNDATION DETAILS TYPE H 60" SHAFT" SHEET FOR ALL FOUNDATION DETAILS AND NOTES.

MATERIAL NOTES:
 PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

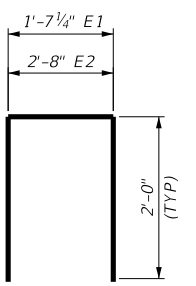
① SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL. DOES NOT APPLY TO EXPANSION JOINT END BENTS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

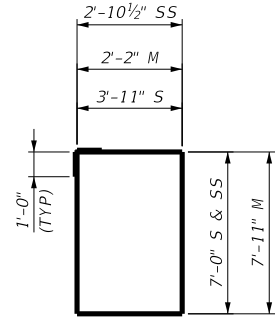
COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE. REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



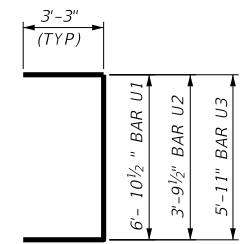
BARS G



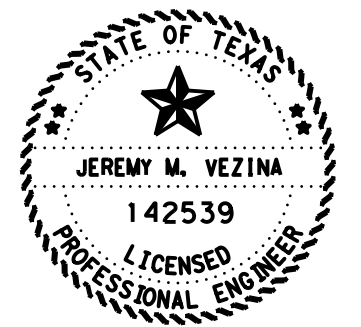
BARS E1 & E2



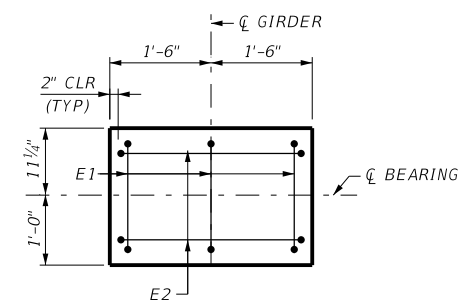
BARS S, SS & M



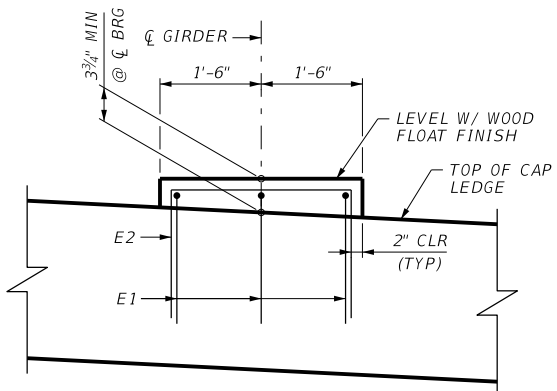
BARS U1, U2 & U3



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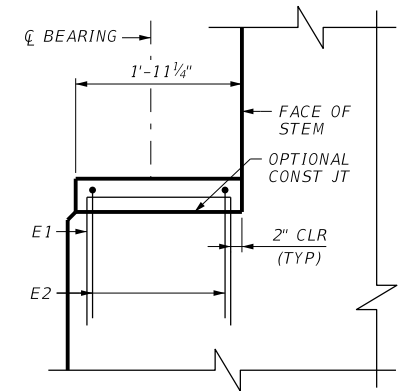


BEARING PEDESTAL PLAN



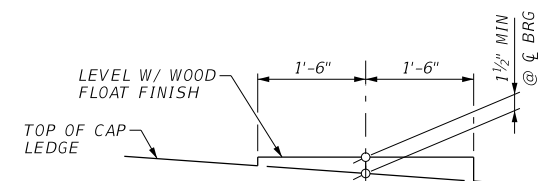
BEARING PEDESTAL ELEVATION

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



BEARING PEDESTAL SECTION

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



BEARING SEAT DETAIL

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)

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Texas Department of Transportation

**IH 10 AT US 69
 BENT DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE**

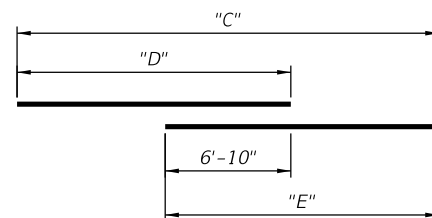
SHEET 1 OF 3

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1224		

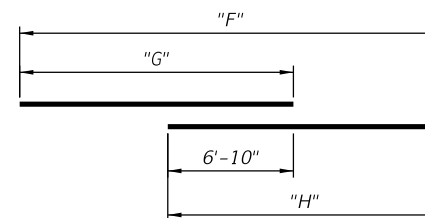
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① QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.
 ② USE 1'-10" MIN LAP SPLICE.

BENT ID	BAR SPLICE LENGTHS					
	BARS A1, A2			BARS B		
	C	D	E	F	G	H
2 & 3 - PHASE 1 STEP 3	63'-10"	42' - 3"	28' - 5"	63'-10"	42' - 3"	28' - 5"
2-9 - PHASE 4 STEP 2	60' - 6"	40' - 2"	27' - 2"	60' - 6"	40' - 2"	27' - 2"



BARS A1, A2



BARS B1, B2

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	42' - 3"	1,796
A2	8	#11	28' - 5"	1,208
B1	9	#11	42' - 3"	2,020
B2	9	#11	28' - 5"	1,359
D	14	#11	1' - 6"	112
E1	27	#5	5' - 8"	160
E2	18	#5	6' - 8"	125
G	22	#7	10' - 6"	472
M	129	#6	22' - 2"	4,295
N	65	#6	7' - 11"	773
S	111	#6	23' - 10"	3,974
SS	111	#6	21' - 9"	3,626
T ②	26	#5	65' - 8"	1,781
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	22,497
CLASS "C" CONCRETE (CAP)			CY	98.4
CLASS "C" CONCRETE (COL)			CY	32.5

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	42' - 3"	1,796
A2	8	#11	28' - 5"	1,208
B1	9	#11	42' - 3"	2,020
B2	9	#11	28' - 5"	1,359
D	14	#11	1' - 6"	112
G	22	#7	10' - 6"	472
M	129	#6	22' - 2"	4,295
N	65	#6	7' - 11"	773
S	111	#6	23' - 10"	3,974
SS	111	#6	21' - 9"	3,626
T ②	26	#5	65' - 8"	1,781
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	22,213
CLASS "C" CONCRETE (CAP)			CY	98.4
CLASS "C" CONCRETE (COL)			CY	44.5

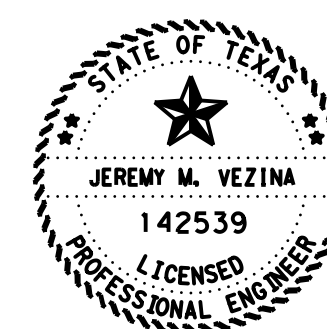
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	59' - 11"	2,547
B	9	#11	59' - 11"	2,865
D	13	#11	1' - 6"	104
G	22	#7	10' - 6"	472
M	121	#6	22' - 2"	4,029
N	61	#6	7' - 11"	725
S	103	#6	23' - 10"	3,687
SS	103	#6	21' - 9"	3,365
T	26	#5	59' - 11"	1,625
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	20,216
CLASS "C" CONCRETE (CAP)			CY	92.5
CLASS "C" CONCRETE (COL)			CY	53.5

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	55' - 7"	2,363
B	9	#11	55' - 7"	2,658
D	12	#11	1' - 6"	96
G	22	#7	10' - 6"	472
M	112	#6	22' - 2"	3,729
N	57	#6	7' - 11"	678
S	99	#6	23' - 10"	3,544
SS	99	#6	21' - 9"	3,234
T	26	#5	55' - 7"	1,507
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	19,078
CLASS "C" CONCRETE (CAP)			CY	85.9
CLASS "C" CONCRETE (COL)			CY	35.6

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51' - 10"	2,203
B	9	#11	51' - 10"	2,479
D	12	#11	1' - 6"	96
G	22	#7	10' - 6"	472
M	105	#6	22' - 2"	3,496
N	53	#6	7' - 11"	630
S	90	#6	23' - 10"	3,222
SS	90	#6	21' - 9"	2,940
T	26	#5	51' - 10"	1,406
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	17,741
CLASS "C" CONCRETE (CAP)			CY	80.2
CLASS "C" CONCRETE (COL)			CY	35.6

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51' - 10"	2,203
B	9	#11	51' - 10"	2,479
D	12	#11	1' - 6"	96
G	22	#7	10' - 6"	472
M	105	#6	22' - 2"	3,496
N	53	#6	7' - 11"	630
S	60	#6	23' - 10"	2,148
SS	60	#6	21' - 9"	1,960
T	26	#5	51' - 10"	1,406
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	15,687
CLASS "C" CONCRETE (CAP)			CY	80.0
CLASS "C" CONCRETE (ARCH)			CY	38.1
CLASS "C" CONCRETE (COL)			CY	12.8
CLASS "C" CONCRETE (WALL)			CY	35.2

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51' - 10"	2,203
B	9	#11	51' - 10"	2,479
D	12	#11	1' - 6"	96
G	22	#7	10' - 6"	472
M	105	#6	22' - 2"	3,496
N	53	#6	7' - 11"	630
S	90	#6	23' - 10"	3,222
SS	90	#6	21' - 9"	2,940
T	26	#5	51' - 10"	1,406
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	17,741
CLASS "C" CONCRETE (CAP)			CY	80.0
CLASS "C" CONCRETE (COL)			CY	38.0



Jeremy Veжина 2-20-2024

HL93 LOADING

VOLKERT

F-12679



**IH 10 AT US 69
 BENT DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 2 OF 3

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST	COUNTY			SHEET NO.			
BMT	JEFFERSON			1225			

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TABLE OF ESTIMATED QUANTITIES BENT 2 (H=11')\PHASE 3 STEP 1)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46' - 8"	1,984
B	9	#11	46' - 8"	2,231
D	10	#11	1' - 6"	80
E1	21	#5	5' - 8"	124
E2	14	#5	6' - 8"	97
G	22	#7	10' - 6"	472
M	94	#6	22' - 2"	3,130
N	48	#6	7' - 11"	571
S	81	#6	23' - 10"	2,900
SS	81	#6	21' - 9"	2,646
T	26	#5	46' - 8"	1,266
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		16,298
CLASS "C" CONCRETE (CAP)		CY		72.1
CLASS "C" CONCRETE (COL)		CY		26.0

TABLE OF ESTIMATED QUANTITIES BENT 3 (H=15')\PHASE 3 STEP 1)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46' - 8"	1,984
B	9	#11	46' - 8"	2,231
D	10	#11	1' - 6"	80
G	22	#7	10' - 6"	472
M	94	#6	22' - 2"	3,130
N	48	#6	7' - 11"	571
S	81	#6	23' - 10"	2,900
SS	81	#6	21' - 9"	2,646
T	26	#5	46' - 8"	1,266
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		16,076
CLASS "C" CONCRETE (CAP)		CY		72.1
CLASS "C" CONCRETE (COL)		CY		35.6

TABLE OF ESTIMATED QUANTITIES BENT 4 (H=18')\PHASE 3 STEP 1)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46' - 8"	1,984
B	9	#11	46' - 8"	2,231
D	10	#11	1' - 6"	80
G	22	#7	10' - 6"	472
M	94	#6	22' - 2"	3,130
N	48	#6	7' - 11"	571
S	81	#6	23' - 10"	2,900
SS	81	#6	21' - 9"	2,646
T	26	#5	46' - 8"	1,266
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		16,076
CLASS "C" CONCRETE (CAP)		CY		72.1
CLASS "C" CONCRETE (COL)		CY		42.4

TABLE OF ESTIMATED QUANTITIES BENT 5 (H=15')\PHASE 3 STEP 1)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46' - 8"	1,984
B	9	#11	46' - 8"	2,231
D	10	#11	1' - 6"	80
G	22	#7	10' - 6"	472
M	94	#6	22' - 2"	3,130
N	48	#6	7' - 11"	571
S	81	#6	23' - 10"	2,900
SS	81	#6	21' - 9"	2,646
T	26	#5	46' - 8"	1,266
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		16,076
CLASS "C" CONCRETE (CAP)		CY		72.1
CLASS "C" CONCRETE (COL)		CY		35.6

① QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.
 ② USE 2'-2" MIN LAP SPLICE.

TABLE OF ESTIMATED QUANTITIES BENT 6 (H=15')\PHASE 3 STEP 1)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51' - 10"	2,203
B	9	#11	51' - 10"	2,479
D	12	#11	1' - 6"	96
G	22	#7	10' - 6"	472
M	105	#6	22' - 2"	3,496
N	53	#6	7' - 11"	630
S	90	#6	23' - 10"	3,222
SS	90	#6	21' - 9"	2,940
T	26	#5	51' - 10"	1,406
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		17,741
CLASS "C" CONCRETE (CAP)		CY		80.2
CLASS "C" CONCRETE (COL)		CY		35.6

TABLE OF ESTIMATED QUANTITIES BENTS 7 & 8 (H=16')\PHASE 3 STEP 1)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46' - 8"	1,984
B	9	#11	46' - 8"	2,231
D	10	#11	1' - 6"	80
G	22	#7	10' - 6"	472
M	94	#6	22' - 2"	3,130
N	48	#6	7' - 11"	571
S	54	#6	23' - 10"	1,933
SS	54	#6	21' - 9"	1,764
T	26	#5	46' - 8"	1,266
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		14,228
CLASS "C" CONCRETE (CAP)		CY		72.1
CLASS "C" CONCRETE (ARCH)		CY		37.8
CLASS "C" CONCRETE (COL)		CY		12.7
CLASS "C" CONCRETE (WALL)		CY		33.8

TABLE OF ESTIMATED QUANTITIES BENT 9 (H=16')\PHASE 3 STEP 1)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46' - 8"	1,984
B	9	#11	46' - 8"	2,231
D	10	#11	1' - 6"	80
G	22	#7	10' - 6"	472
M	94	#6	22' - 2"	3,130
N	48	#6	7' - 11"	571
S	81	#6	23' - 10"	2,900
SS	81	#6	21' - 9"	2,646
T	26	#5	46' - 8"	1,266
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		16,076
CLASS "C" CONCRETE (CAP)		CY		72.1
CLASS "C" CONCRETE (COL)		CY		38.0

TABLE OF ESTIMATED QUANTITIES BENT 2 (H=11')\PHASE 4 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40' - 2"	1,707
A2	8	#11	27' - 2"	1,155
B1	9	#11	40' - 2"	1,921
B2	9	#11	27' - 2"	1,299
D	13	#11	1' - 6"	104
E1	24	#5	5' - 8"	142
E2	16	#5	10' - 0"	167
G	22	#7	10' - 6"	472
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	103	#6	23' - 10"	3,687
SS	103	#6	21' - 9"	3,365
T (2)	26	#5	62' - 4"	1,690
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		21,339
CLASS "C" CONCRETE (CAP)		CY		93.2
CLASS "C" CONCRETE (COL)		CY		32.5

TABLE OF ESTIMATED QUANTITIES BENT 3 (H=15')\PHASE 4 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40' - 2"	1,707
A2	8	#11	27' - 2"	1,155
B1	9	#11	40' - 2"	1,921
B2	9	#11	27' - 2"	1,299
D	13	#11	1' - 6"	104
G	22	#7	10' - 6"	472
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	103	#6	23' - 10"	3,687
SS	103	#6	21' - 9"	3,365
T (2)	26	#5	62' - 4"	1,690
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		21,030
CLASS "C" CONCRETE (CAP)		CY		93.2
CLASS "C" CONCRETE (COL)		CY		44.5

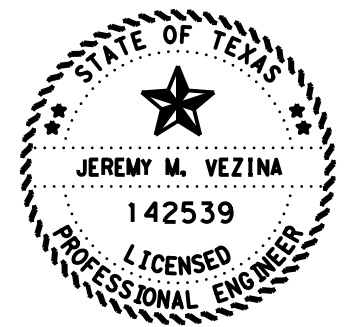
TABLE OF ESTIMATED QUANTITIES BENT 4 (H=18')\PHASE 4 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40' - 2"	1,707
A2	8	#11	27' - 2"	1,155
B1	9	#11	40' - 2"	1,921
B2	9	#11	27' - 2"	1,299
D	13	#11	1' - 6"	104
G	22	#7	10' - 6"	472
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	103	#6	23' - 10"	3,687
SS	103	#6	21' - 9"	3,365
T (2)	26	#5	62' - 4"	1,690
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		21,030
CLASS "C" CONCRETE (CAP)		CY		93.2
CLASS "C" CONCRETE (COL)		CY		53.0

TABLE OF ESTIMATED QUANTITIES BENT 5 (H=15')\PHASE 4 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40' - 2"	1,707
A2	8	#11	27' - 2"	1,155
B1	9	#11	40' - 2"	1,921
B2	9	#11	27' - 2"	1,299
D	13	#11	1' - 6"	104
G	22	#7	10' - 6"	472
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	103	#6	23' - 10"	3,687
SS	103	#6	21' - 9"	3,365
T (2)	26	#5	62' - 4"	1,690
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		21,030
CLASS "C" CONCRETE (CAP)		CY		93.2
CLASS "C" CONCRETE (COL)		CY		44.5

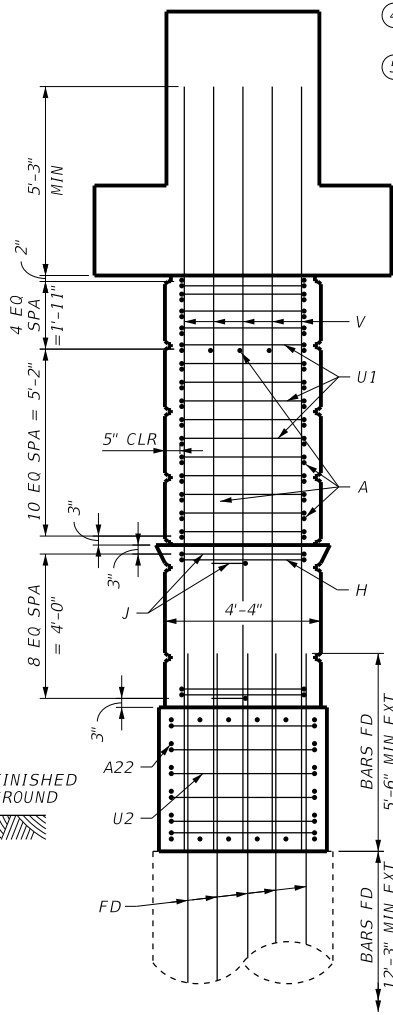
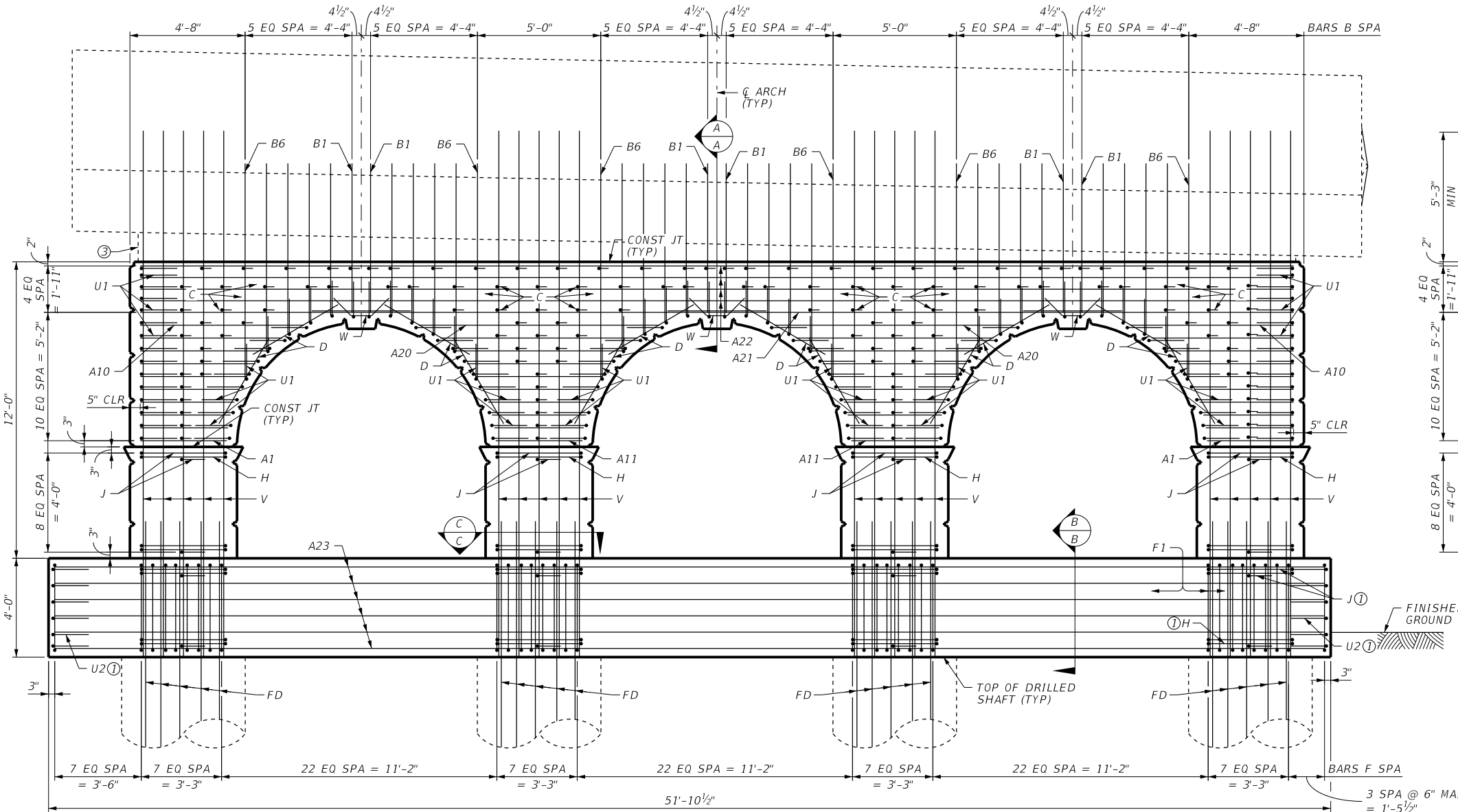
TABLE OF ESTIMATED QUANTITIES BENT 6 (H=15')\PHASE 4 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40' - 2"	1,707
A2	8	#11	27' - 2"	1,155
B1	9	#11	40' - 2"	1,921
B2	9	#11	27' - 2"	1,299
D	13	#11	1' - 6"	104
G	22	#7	10' - 6"	472
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	103	#6	23' - 10"	3,687
SS	103	#6	21' - 9"	3,365
T (2)	26	#5	62' - 4"	1,690
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		21,030
CLASS "C" CONCRETE (CAP)		CY		93.2
CLASS "C" CONCRETE (COL)		CY		44.5

TABLE OF ESTIMATED QUANTITIES BENTS 7 & 8 (H=16')\PHASE 4 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40' - 2"	1,707
A2	8	#11	27' - 2"	1,155
B1	9	#11	40' - 2"	1,921
B2	9	#11	27' - 2"	1,299
D	13	#11	1' - 6"	104
G	22	#7	10' - 6"	472
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	67	#6	23' - 10"	2,398
SS	67	#6	21' - 9"	2,189
T (2)	26	#5	62' - 4"	1,690
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		18,565
CLASS "C" CONCRETE (CAP)		CY		93.2
CLASS "C" CONCRETE (ARCH)		CY		48.9
CLASS "C" CONCRETE (COL)		CY		15.9
CLASS "C" CONCRETE (WALL)		CY		41.2

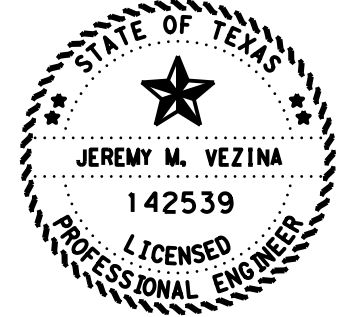
TABLE OF ESTIMATED QUANTITIES BENT 9 (H=16')\PHASE 4 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40' - 2"	1,707
A2	8	#11	27' - 2"	1,155
B1	9	#11	40' - 2"	1,921
B2	9	#11	27' - 2"	1,299
D	13	#11	1' - 6"	104
G	22	#7	10' - 6"	472
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	103	#6	23' - 10"	3,687
SS	103	#6	21' - 9"	3,365
T (2)	26	#5	62' - 4"	1,690
U1	14	#6	13' - 5"	282
U2	14	#6	10' - 4"	217
U3	16	#6	12' - 5"	298
REINFORCING STEEL		LB		21,030
CLASS "C" CONCRETE (CAP)		CY		93.2
CLASS "C" CONCRETE (COL)		CY		47.5



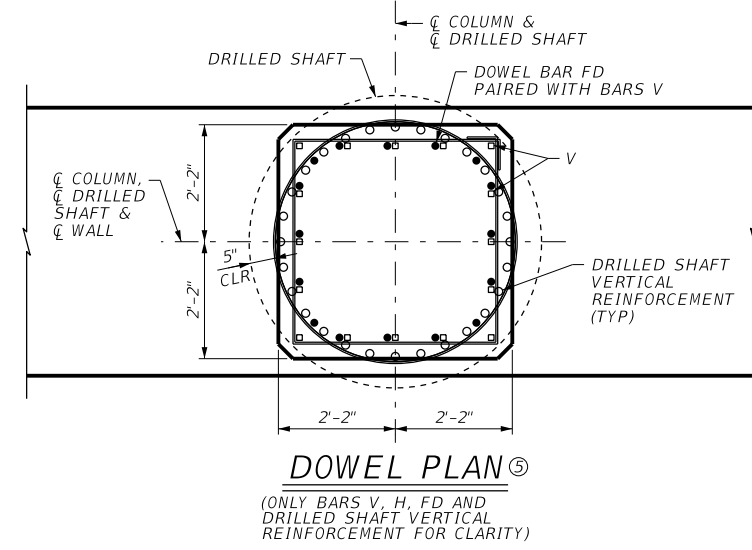
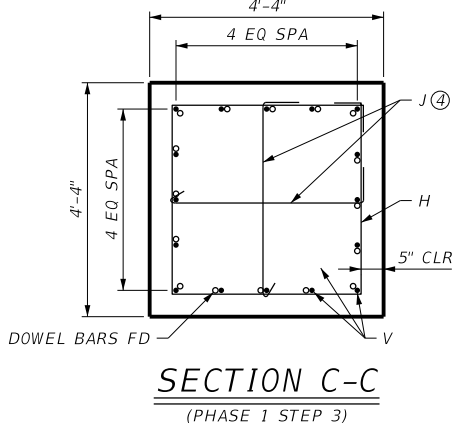
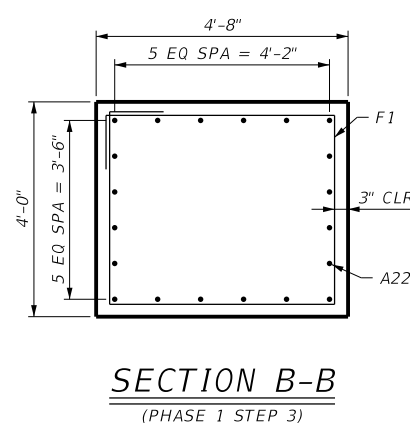
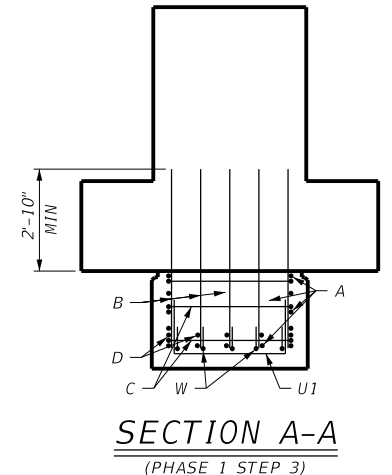
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- NOTES:
- 1 SPACED WITH BARS A23.
 - 2 BARS H, J, F AND D IN WALL NOT SHOWN FOR CLARITY.
 - 3 PLINTH REINFORCING NOT SHOWN FOR CLARITY, SEE ARCH DETAILS SHEET 4 OF 7 FOR DETAILS.
 - 4 ALTERNATE TIE ENDS WITH 90 DEGREE HOOKS (VERTICALLY AND HORIZONTALLY).
 - 5 SEE "FOUNDATION DETAILS TYPE H 60" SHAFT" SHEET FOR DRILLED SHAFT DETAILS AND OTHER INFORMATION NOT SHOWN.



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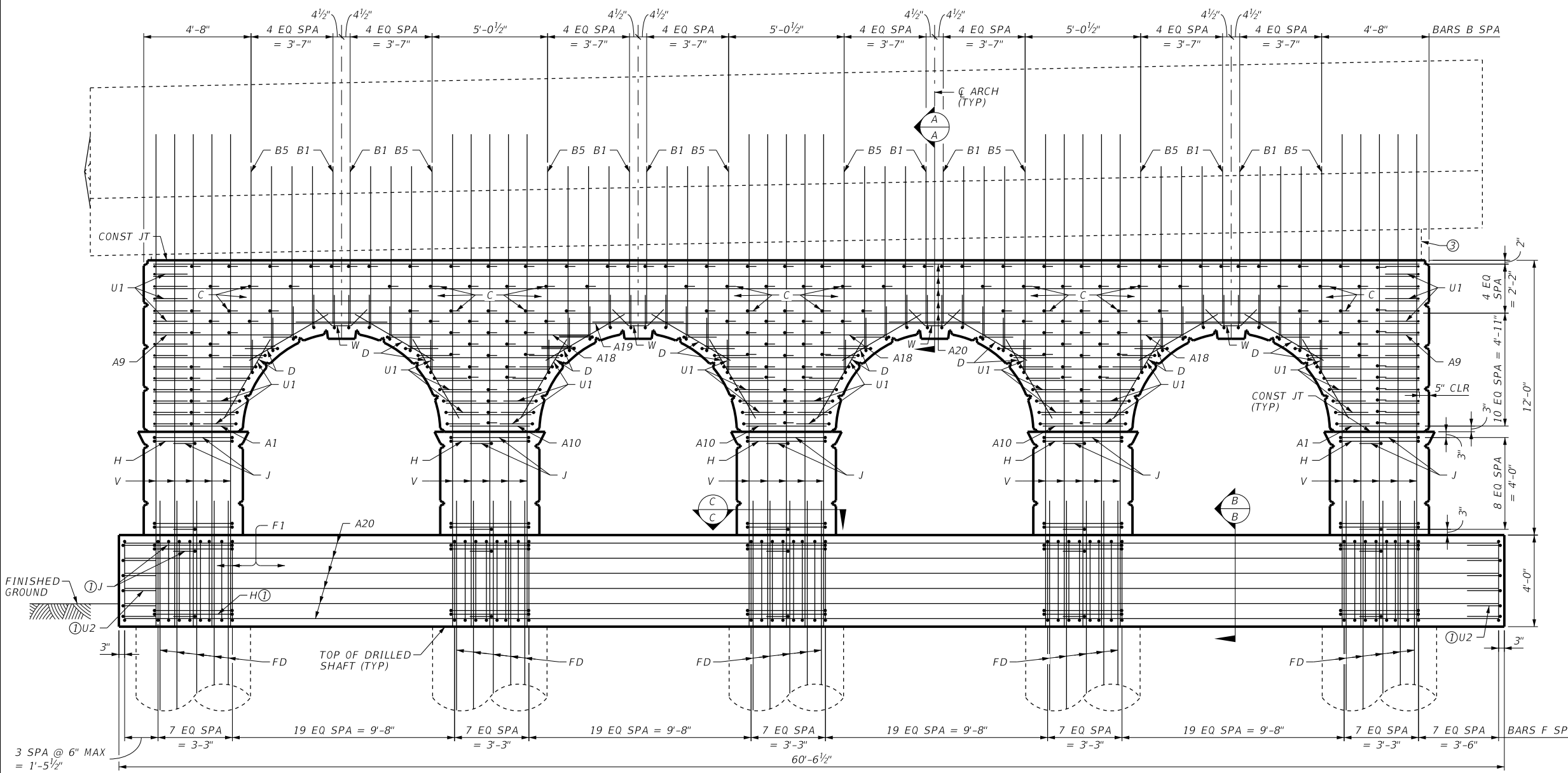
IH 10 AT US 69
 BENT 7 & 8 ARCH DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE

SHEET 1 OF 7

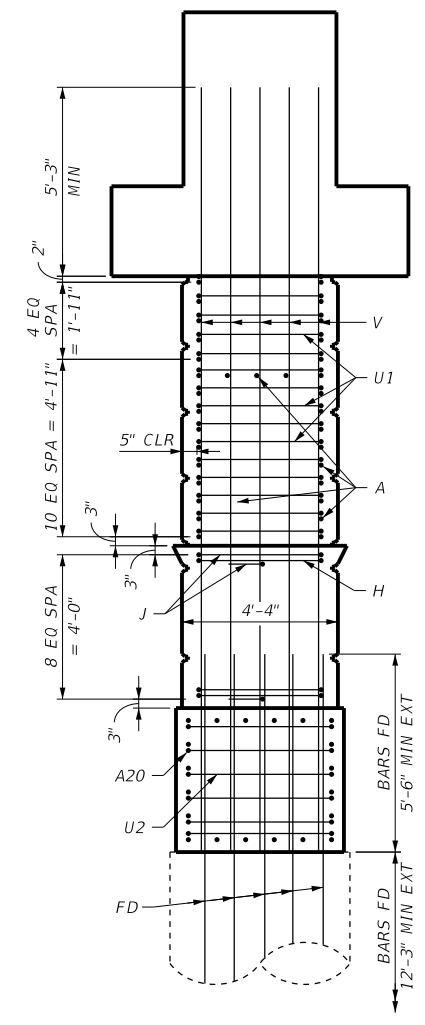
DW:	JMV	CK:	FB	DW:	KAH	CK:	FB
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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1227		

DATE: 20-FEB-2024 19:12
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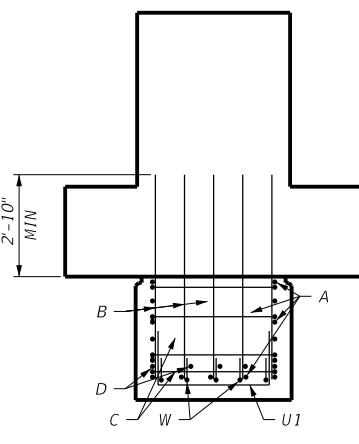
- NOTES:**
- 1 SPACED WITH BARS A12.
 - 2 BARS H, J, F AND D IN WALL NOT SHOWN FOR CLARITY.
 - 3 PLINTH REINFORCING NOT SHOWN FOR CLARITY, SEE ARCH DETAILS SHEET 6 OF 7 FOR DETAILS.
 - 4 ALTERNATE TIE ENDS WITH 90 DEGREE HOOKS (VERTICALLY AND HORIZONTALLY).
 - 5 SEE "FOUNDATION DETAILS TYPE H 60" SHAFT" SHEET FOR DRILLED SHAFT DETAILS AND OTHER INFORMATION NOT SHOWN.



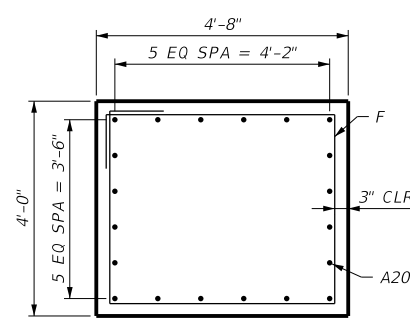
ARCH ELEVATION
 (PHASE 4 STEP 2)



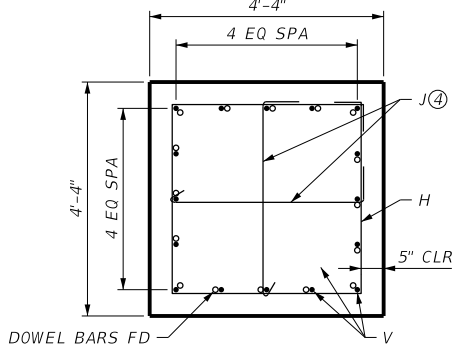
END VIEW
 (PHASE 4 STEP 2)



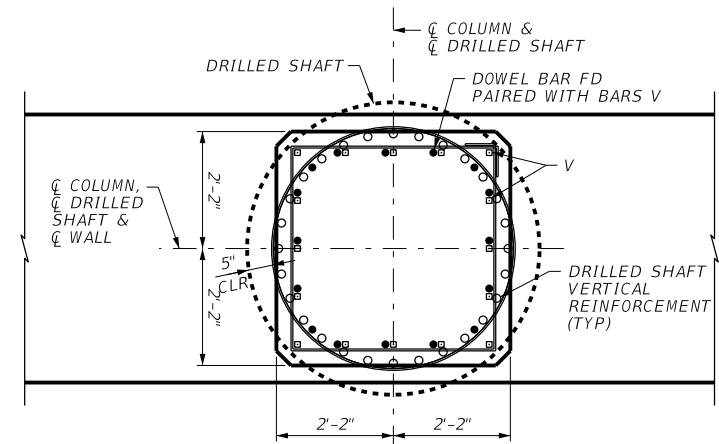
SECTION A-A
 (PHASE 4 STEP 2)



SECTION B-B
 (PHASE 4 STEP 2)

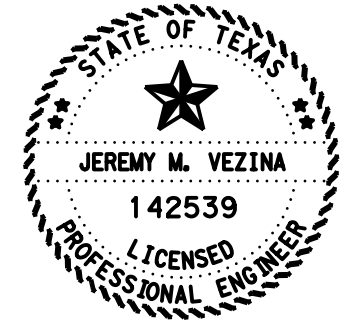


SECTION C-C
 (PHASE 4 STEP 2)



DOWEL PLAN
 (PHASE 4 STEP 2)

(ONLY BARS V, H, FD AND DRILLED SHAFT VERTICAL REINFORCEMENT FOR CLARITY)



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**IH 10 AT US 69
 BENT 7 & 8 ARCH DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 3 OF 7

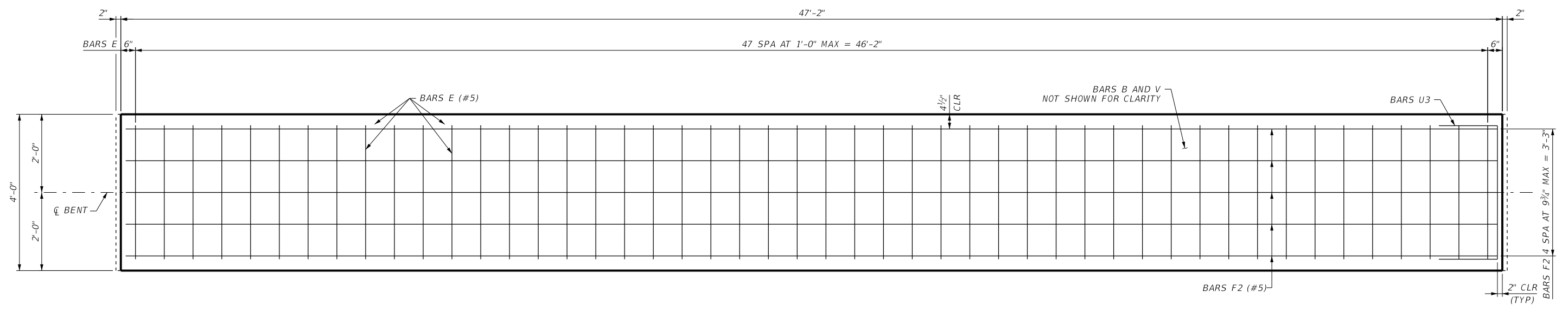
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1229	

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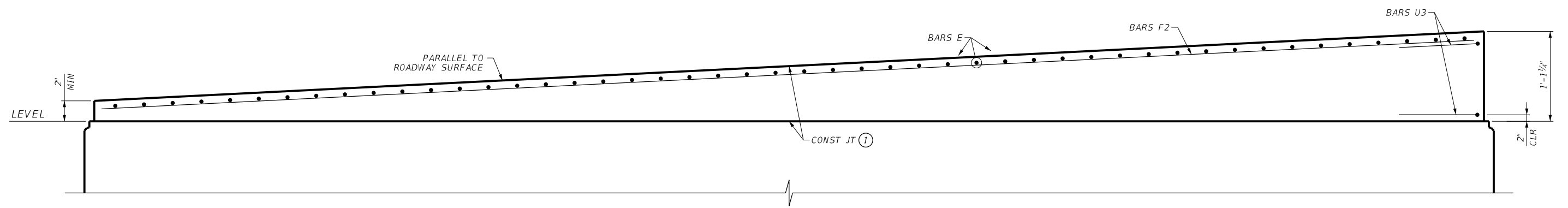
GENERAL NOTES:
 PLINTH QUANTITIES INCLUDED WITH ARCH.

COVER DIMENSIONS ARE CLEAR DIMENSIONS,
 UNLESS NOTED OTHERWISE.

① CONSTRUCTION JOINT PERMITTED AT THE TOP
 OF ARCH OR TOP OF PLINTH. ROUGHEN SURFACE
 TO 1/4" AMPLITUDE.

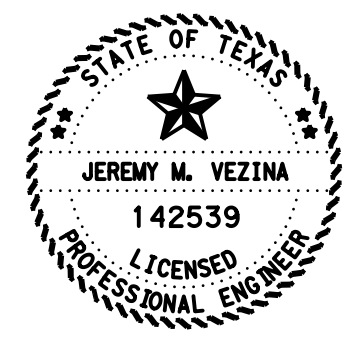


PLAN



ELEVATION

PLINTH DETAILS



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IH 10 AT US 69
 BENT 7 & 8 ARCH DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE

SHEET 4 OF 7

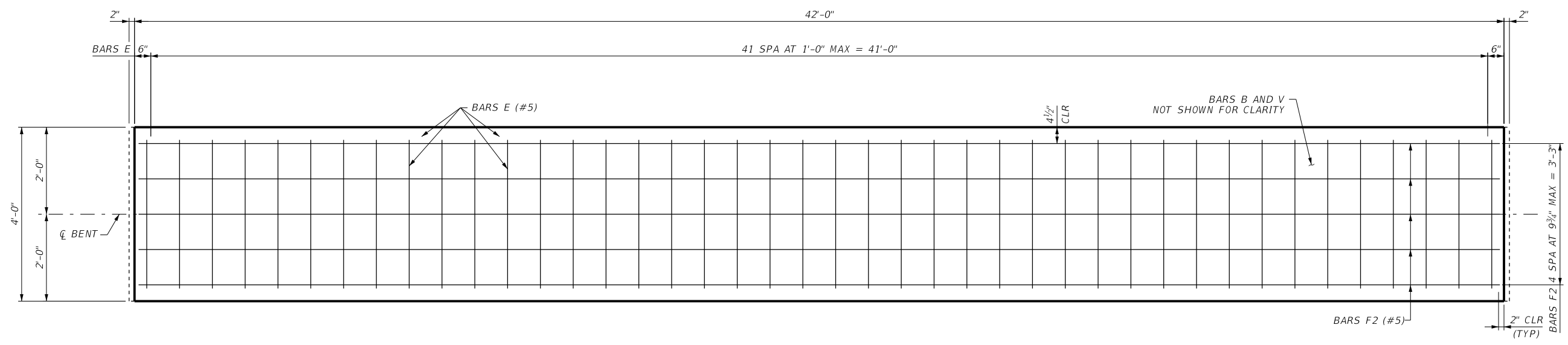
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	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1230				

DATE: 20-FEB-2024 15:03
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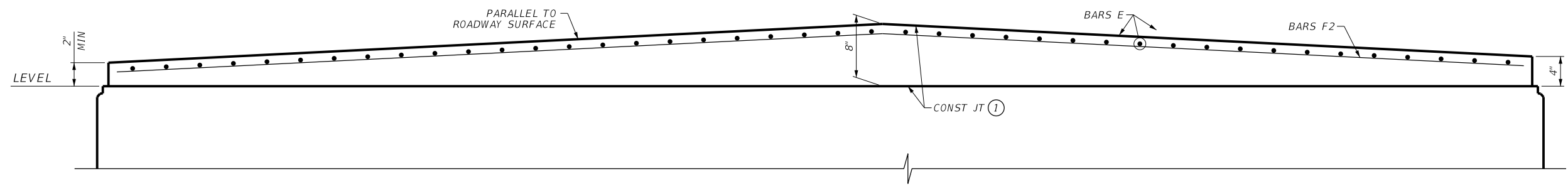
GENERAL NOTES:
 PLINTH QUANTITIES INCLUDED WITH ARCH.

COVER DIMENSIONS ARE CLEAR DIMENSIONS,
 UNLESS NOTED OTHERWISE.

① CONSTRUCTION JOINT PERMITTED AT THE TOP OF ARCH OR TOP OF PLINTH. ROUGHEN SURFACE TO 1/4" AMPLITUDE.

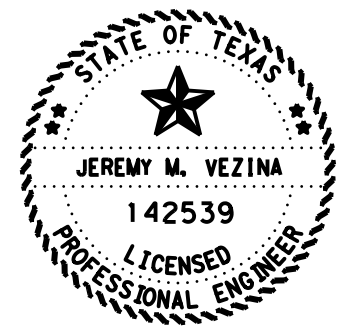


PLAN



ELEVATION

PLINTH DETAILS



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**IH 10 AT US 69
 BENT 7 & 8 ARCH DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 5 OF 7

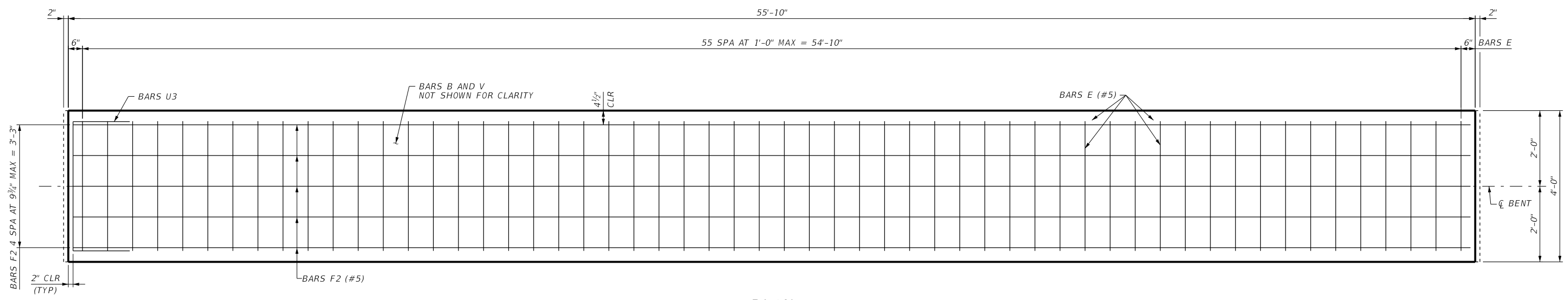
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DIST	COUNTY		SHEET NO.				
	BMT		JEFFERSON		1231		

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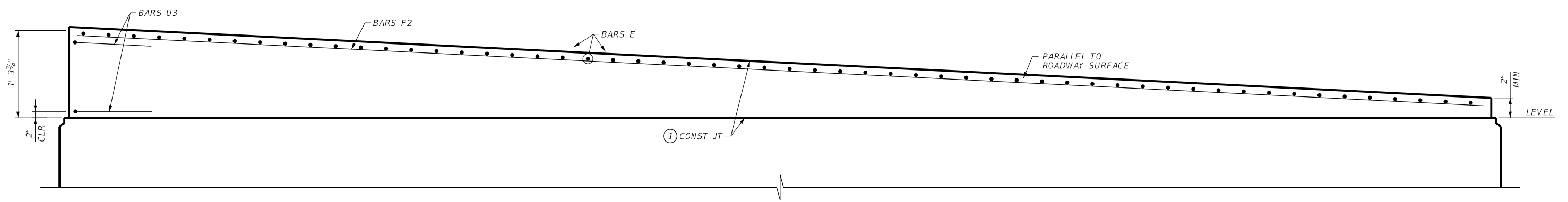
GENERAL NOTES:
 PLINTH QUANTITIES INCLUDED WITH ARCH.

COVER DIMENSIONS ARE CLEAR DIMENSIONS,
 UNLESS NOTED OTHERWISE.

① CONSTRUCTION JOINT PERMITTED AT THE TOP
 OF ARCH OR TOP OF PLINTH. ROUGHEN SURFACE
 TO 1/4" AMPLITUDE.

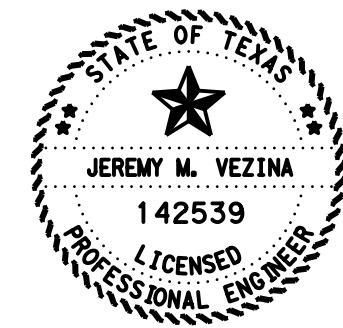


PLAN



ELEVATION

PLINTH DETAILS



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**IH 10 AT US 69
 BENT 7 & 8 ARCH DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE**

SHEET 6 OF 7

DN: JMV	CK: SJN	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1232	

DATE: 20-FEB-2024 13:16
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TABLE OF ESTIMATED QUANTITIES
 ARCH, COLUMN, & WALL (H=16') PHASE 1 STEP 3

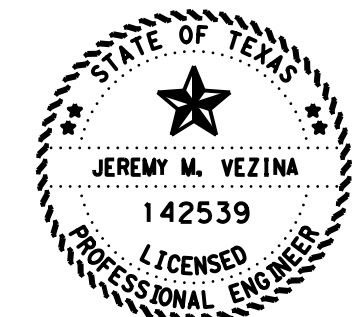
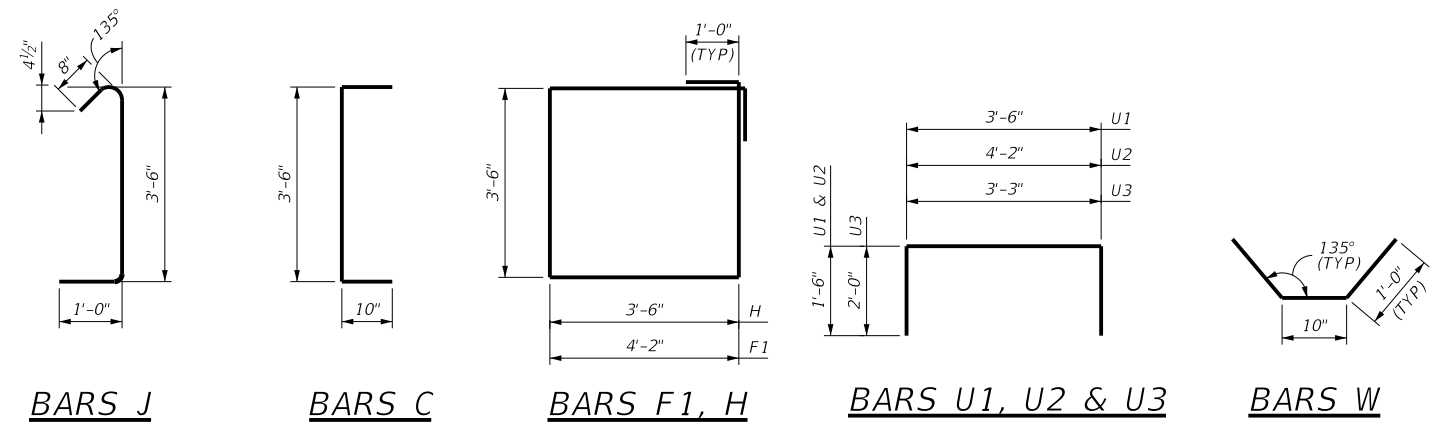
BAR	NO.	SIZE	LENGTH	WEIGHT
A1-A10	40	#6	4' - 6"	270
A11-20	40	#6	5' - 6"	330
A21	5	#6	46' - 8"	350
A22	8	#11	46' - 8"	1,984
A23	20	#6	51' - 7"	1,550
B1-B6	180	#6	5' - 10"	1,577
C	128	#6	5' - 6"	1,057
D	75	#6	4' - 0"	451
E	48	#5	3' - 8"	184
F1	105	#6	17' - 4"	2,734
F2	5	#5	46' - 10"	244
H	60	#6	16' - 0"	1,442
J	120	#6	5' - 2"	931
U1	126	#6	8' - 6"	1,609
U2	12	#6	9' - 2"	165
U3	2	#6	7' - 3"	22
V	64	#11	21' - 3"	7,226
W	15	#6	2' - 10"	64
FD	64	#11	17' - 6"	5,951
REINFORCING STEEL		LB		451
CLASS "C" CONCRETE (ARCH)		CY		42.6
CLASS "C" CONCRETE (COL)		CY		12.8
CLASS "C" CONCRETE (WALL)		CY		35.9

TABLE OF ESTIMATED QUANTITIES
 ARCH, COLUMN, & WALL (H=16') PHASE 3 STEP 1

BAR	NO.	SIZE	LENGTH	WEIGHT
A1-A8	32	#6	4' - 4"	208
A9-A16	32	#6	5' - 2"	248
A17	5	#6	41' - 6"	312
A18	10	#11	41' - 6"	2,205
A19	20	#6	48' - 5"	1,454
B1-B5	120	#6	6' - 7"	1,187
C	126	#6	5' - 6"	1,041
D	75	#6	4' - 0"	451
E	42	#5	3' - 8"	161
F1	97	#6	17' - 4"	2,525
F2	5	#5	41' - 8"	217
H	60	#6	16' - 0"	1,442
J	120	#6	5' - 2"	931
U1	106	#6	8' - 6"	1,353
U2	12	#6	9' - 2"	165
V	64	#11	21' - 3"	7,226
W	15	#6	2' - 10"	64
FD	64	#11	17' - 6"	5,951
REINFORCING STEEL		LB		451
CLASS "C" CONCRETE (ARCH)		CY		40.7
CLASS "C" CONCRETE (COL)		CY		12.8
CLASS "C" CONCRETE (WALL)		CY		33.8

TABLE OF ESTIMATED QUANTITIES
 ARCH, COLUMN, & WALL (H=16') PHASE 4 STEP 2

BAR	NO.	SIZE	LENGTH	WEIGHT
A1-A9	36	#6	4' - 5"	239
A10-A18	54	#6	5' - 3"	426
A19	5	#6	53' - 4"	401
A20	10	#11	53' - 4"	2,834
A21	20	#6	60' - 2"	1,807
B1-B5	160	#6	6' - 4"	1,522
C	166	#6	5' - 6"	1,371
D	100	#6	4' - 0"	601
E	56	#5	3' - 8"	214
F1	122	#6	17' - 4"	3,176
F2	5	#5	55' - 6"	289
H	75	#6	16' - 0"	1,802
J	150	#6	5' - 2"	1,164
U1	144	#6	8' - 6"	1,838
U2	16	#6	9' - 2"	220
U3	2	#6	7' - 3"	22
V	80	#11	21' - 3"	9,032
W	20	#6	2' - 10"	85
FD	80	#11	17' - 6"	7,438
REINFORCING STEEL		LB		601
CLASS "C" CONCRETE (ARCH)		CY		54.9
CLASS "C" CONCRETE (COL)		CY		15.9
CLASS "C" CONCRETE (WALL)		CY		41.9



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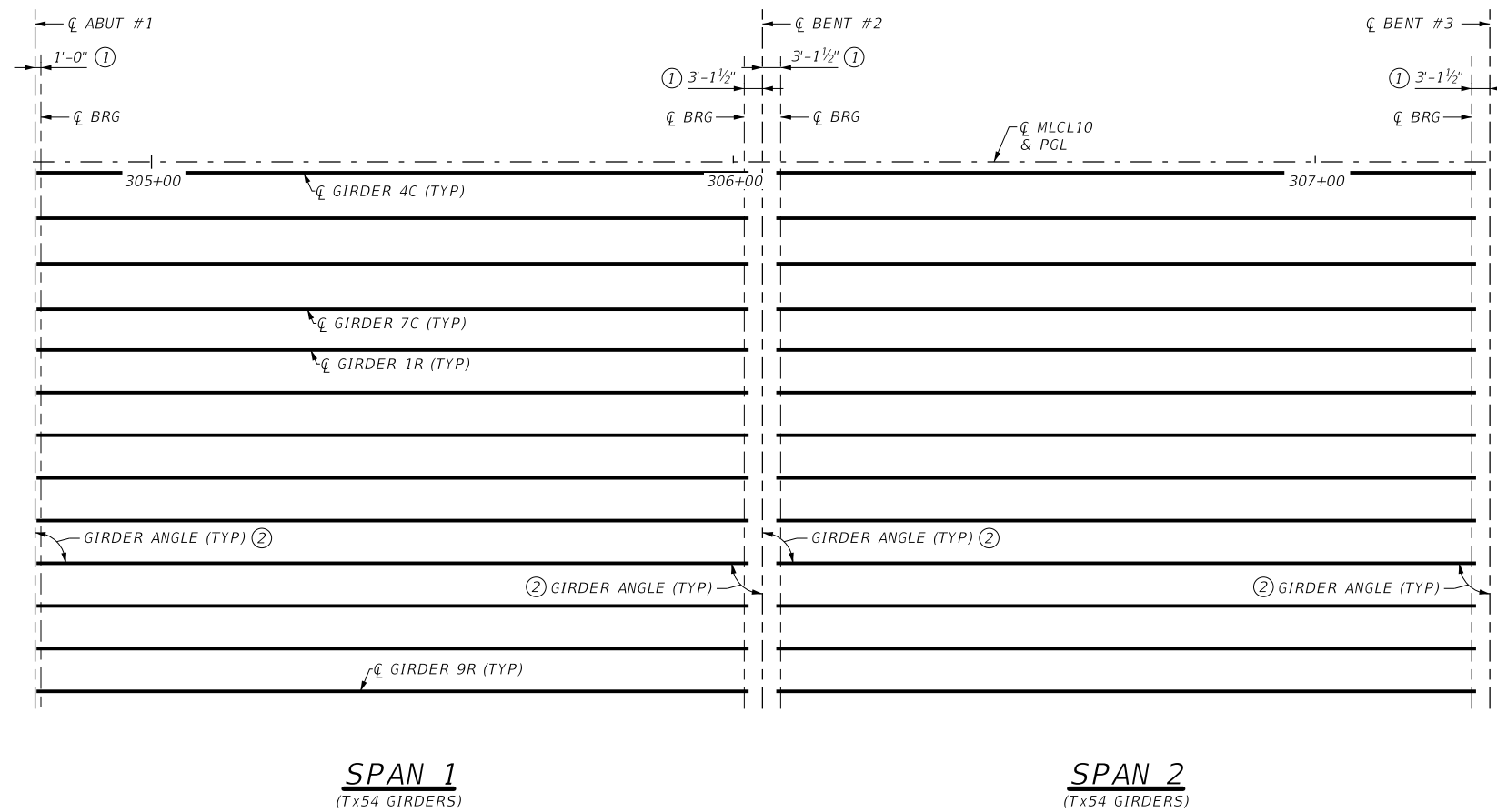


IH 10 AT US 69
 BENT 7 & 8 ARCH DETAILS
 IH 10 MAINLANE
 OVER LAUREL AVE

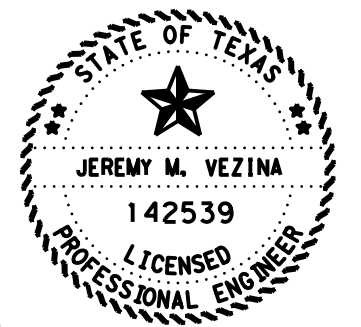
SHEET 7 OF 7

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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1233	

DATE: 20-FEB-2024 14:53
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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



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HL93 LOADING

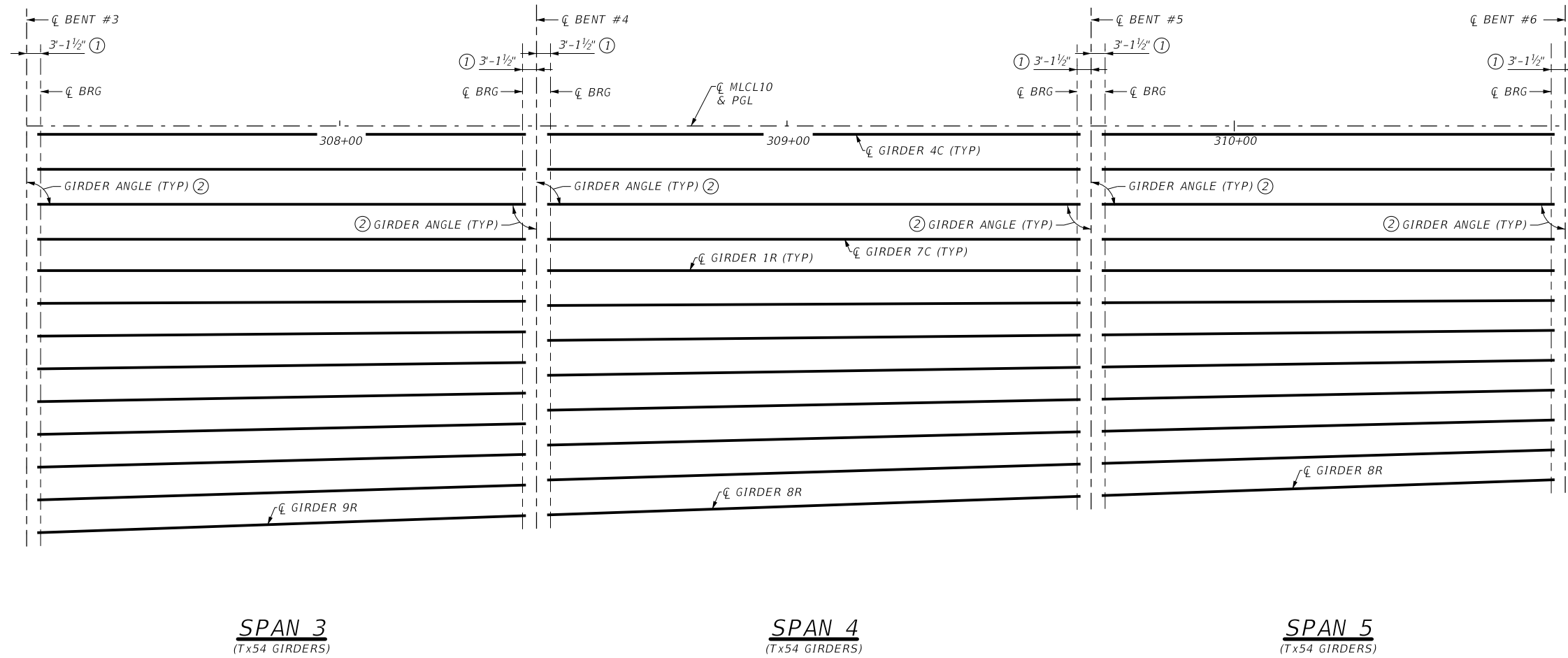


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 1-2)
 IH 10 EBML
 OVER LAUREL AVE**

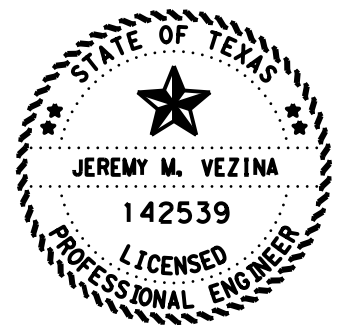
SHEET 1 OF 5

DN:	JMV	CK:	ZZ	DW:	RF	CK:	JMV
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1234				

DATE: 20-FEB-2024 14:53
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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



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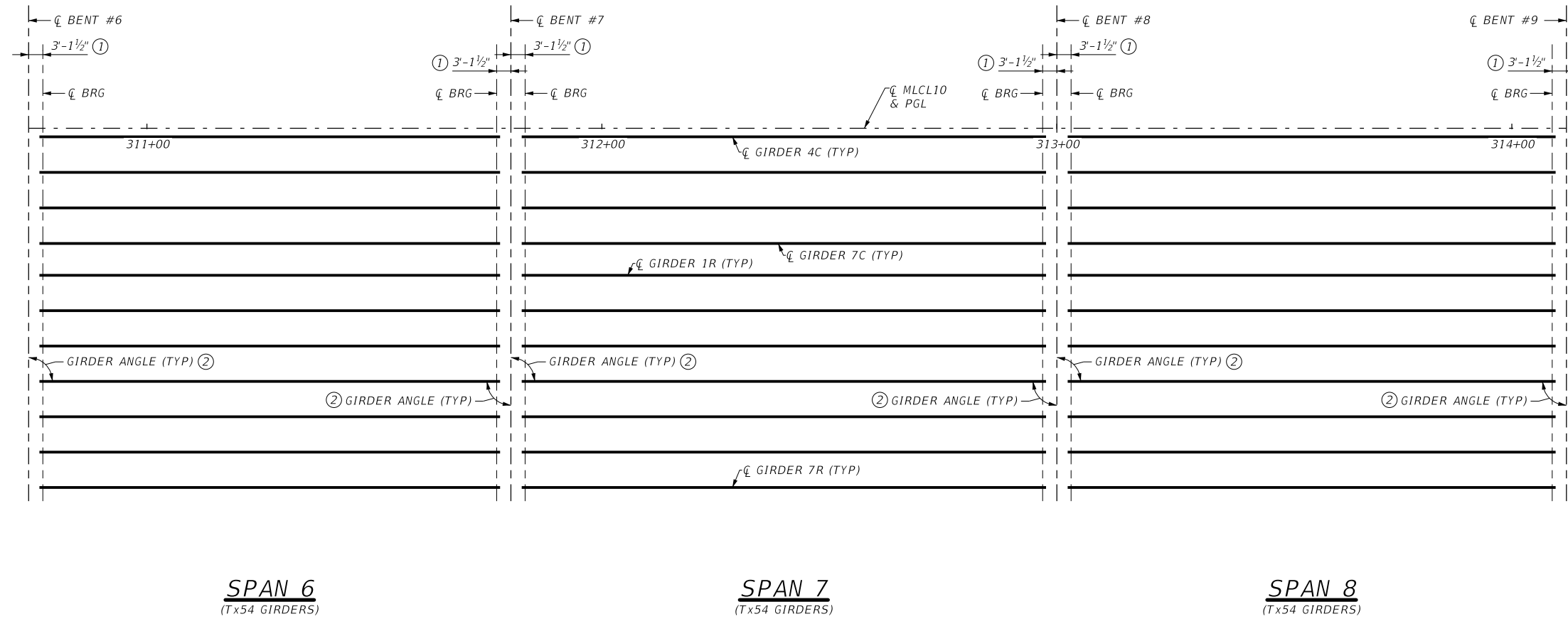


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 3-5)
 IH 10 EBML
 OVER LAUREL AVE**

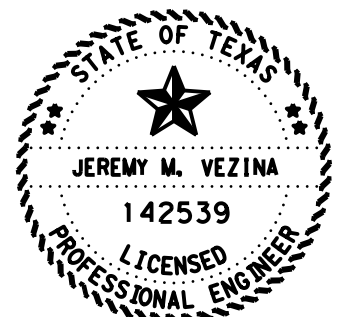
SHEET 2 OF 5

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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1235				

DATE: 20-FEB-2024 13:18
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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



Jeremy Vezina 2-20-2024

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IH 10 AT US 69
 FRAMING PLAN
 (SPANS 6-8)
 IH 10 EBML
 OVER LAUREL AVE

SHEET 3 OF 5

DN:	JMV	CK:	ZZ	DW:	RF	CK:	JMV
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1236				

DATE: 20-FEB-2024 14:54
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg P. (IH 10 Mainlanes over Laurel Ave)\1237_10ML_LAUREL_AVE_EB_BENT_RPT_01.dgn

EBML BENT REPORT

ABUTMENT NO. 1 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 1 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	7.333	90	0	0
GIRDER 3R	7.333	90	0	0
GIRDER 4R	7.333	90	0	0
GIRDER 5R	7.333	90	0	0
GIRDER 6R	7.333	90	0	0
GIRDER 7R	7.333	90	0	0
GIRDER 8R	7.333	90	0	0
GIRDER 9R	7.333	90	0	0
TOTAL	89.125			

BENT NO. 2 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 1 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	7.333	90	0	0
GIRDER 3R	7.333	90	0	0
GIRDER 4R	7.333	90	0	0
GIRDER 5R	7.333	90	0	0
GIRDER 6R	7.333	90	0	0
GIRDER 7R	7.333	90	0	0
GIRDER 8R	7.333	90	0	0
GIRDER 9R	7.333	90	0	0
TOTAL	89.125			

BENT NO. 3 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 2 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	7.333	90	0	0
GIRDER 3R	7.333	90	0	0
GIRDER 4R	7.333	90	0	0
GIRDER 5R	7.333	90	0	0
GIRDER 6R	7.333	90	0	0
GIRDER 7R	7.333	90	0	0
GIRDER 8R	7.333	90	0	0
GIRDER 9R	7.333	90	0	0
TOTAL	89.125			

BENT NO. 4 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 3 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	6.836	89	45	1
GIRDER 3R	6.836	89	30	1
GIRDER 4R	6.836	89	15	2
GIRDER 5R	6.836	89	0	3
GIRDER 6R	6.836	88	45	4
GIRDER 7R	6.836	88	30	5
GIRDER 8R	6.836	88	15	7
GIRDER 9R	6.836	88	0	8
TOTAL	85.148			

BENT NO. 5 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 4 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	7.195	89	42	52
GIRDER 3R	7.195	89	25	44
GIRDER 4R	7.195	89	8	37
GIRDER 5R	7.195	88	51	29
GIRDER 6R	7.195	88	34	22
GIRDER 7R	7.195	88	17	14
GIRDER 8R	7.195	88	0	8
TOTAL	80.823			

SPAN 2 GIRDER 4C 0.000 90 0 0
 GIRDER 5C 7.986 90 0 0
 GIRDER 6C 7.986 90 0 0
 GIRDER 7C 7.986 90 0 0

GIRDER 1R 7.000 90 0 0
 GIRDER 2R 7.333 90 0 0
 GIRDER 3R 7.333 90 0 0
 GIRDER 4R 7.333 90 0 0
 GIRDER 5R 7.333 90 0 0
 GIRDER 6R 7.333 90 0 0
 GIRDER 7R 7.333 90 0 0
 GIRDER 8R 7.333 90 0 0
 GIRDER 9R 7.333 90 0 0
 TOTAL 89.625

SPAN 3 GIRDER 4C 0.000 90 0 0
 GIRDER 5C 7.986 90 0 0
 GIRDER 6C 7.986 90 0 0
 GIRDER 7C 7.986 90 0 0

GIRDER 1R 7.000 90 0 0
 GIRDER 2R 7.333 89 45 1
 GIRDER 3R 7.333 89 30 1
 GIRDER 4R 7.333 89 15 2
 GIRDER 5R 7.333 89 0 3
 GIRDER 6R 7.333 88 45 4
 GIRDER 7R 7.333 88 30 5
 GIRDER 8R 7.333 88 15 7
 GIRDER 9R 7.333 88 0 8
 TOTAL 89.625

SPAN 4 GIRDER 4C 0.000 90 0 0
 GIRDER 5C 7.986 90 0 0
 GIRDER 6C 7.986 90 0 0
 GIRDER 7C 7.986 90 0 0

GIRDER 1R 7.000 90 0 0
 GIRDER 2R 7.813 89 42 52
 GIRDER 3R 7.813 89 25 44
 GIRDER 4R 7.813 89 8 37
 GIRDER 5R 7.813 88 51 29
 GIRDER 6R 7.813 88 34 22
 GIRDER 7R 7.813 88 17 14
 GIRDER 8R 7.813 88 0 8
 TOTAL 85.648

SPAN 5 GIRDER 5C 7.986 90 0 0
 GIRDER 6C 7.986 90 0 0
 GIRDER 7C 7.986 90 0 0

GIRDER 1R 7.000 90 0 0
 GIRDER 2R 7.195 89 42 52
 GIRDER 3R 7.195 89 25 44
 GIRDER 4R 7.195 89 8 37
 GIRDER 5R 7.195 88 51 29
 GIRDER 6R 7.195 88 34 22
 GIRDER 7R 7.195 88 17 14
 GIRDER 8R 7.195 88 0 8
 TOTAL 81.323

BENT NO. 6 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 5 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	6.667	89	42	52
GIRDER 3R	6.667	89	25	44
GIRDER 4R	6.667	89	8	37
GIRDER 5R	6.667	88	51	29
GIRDER 6R	6.667	88	34	22
GIRDER 7R	6.667	88	17	14
GIRDER 8R	6.667	88	0	8
TOTAL	77.125			

BENT NO. 7 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 6 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	7.778	90	0	0
GIRDER 3R	7.778	90	0	0
GIRDER 4R	7.778	90	0	0
GIRDER 5R	7.778	90	0	0
GIRDER 6R	7.778	90	0	0
GIRDER 7R	7.778	90	0	0
TOTAL	77.125			

BENT NO. 8 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 7 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	7.778	90	0	0
GIRDER 3R	7.778	90	0	0
GIRDER 4R	7.778	90	0	0
GIRDER 5R	7.778	90	0	0
GIRDER 6R	7.778	90	0	0
GIRDER 7R	7.778	90	0	0
TOTAL	77.125			

BENT NO. 9 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 4C 1.875 R

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 8 GIRDER 4C	0.000	90	0	0
GIRDER 5C	7.819	90	0	0
GIRDER 6C	7.819	90	0	0
GIRDER 7C	7.819	90	0	0
GIRDER 1R	7.000	90	0	0
GIRDER 2R	7.778	90	0	0
GIRDER 3R	7.778	90	0	0
GIRDER 4R	7.778	90	0	0
GIRDER 5R	7.778	90	0	0
GIRDER 6R	7.778	90	0	0
GIRDER 7R	7.778	90	0	0
TOTAL	77.125			

SPAN 6 GIRDER 4C 0.000 90 0 0
 GIRDER 5C 7.986 90 0 0
 GIRDER 6C 7.986 90 0 0
 GIRDER 7C 7.986 90 0 0

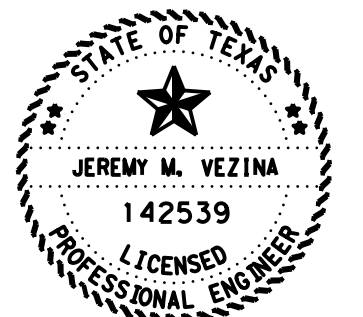
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 GIRDER 2R 7.778 90 0 0
 GIRDER 3R 7.778 90 0 0
 GIRDER 4R 7.778 90 0 0
 GIRDER 5R 7.778 90 0 0
 GIRDER 6R 7.778 90 0 0
 GIRDER 7R 7.778 90 0 0
 TOTAL 77.625

SPAN 7 GIRDER 4C 0.000 90 0 0
 GIRDER 5C 7.986 90 0 0
 GIRDER 6C 7.986 90 0 0
 GIRDER 7C 7.986 90 0 0

GIRDER 1R 7.000 90 0 0
 GIRDER 2R 7.778 90 0 0
 GIRDER 3R 7.778 90 0 0
 GIRDER 4R 7.778 90 0 0
 GIRDER 5R 7.778 90 0 0
 GIRDER 6R 7.778 90 0 0
 GIRDER 7R 7.778 90 0 0
 TOTAL 77.625

SPAN 8 GIRDER 4C 0.000 90 0 0
 GIRDER 5C 7.986 90 0 0
 GIRDER 6C 7.986 90 0 0
 GIRDER 7C 7.986 90 0 0

GIRDER 1R 7.000 90 0 0
 GIRDER 2R 7.778 90 0 0
 GIRDER 3R 7.778 90 0 0
 GIRDER 4R 7.778 90 0 0
 GIRDER 5R 7.778 90 0 0
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 GIRDER 7R 7.778 90 0 0
 TOTAL 77.625



Jeremy Veжина 2-20-2024

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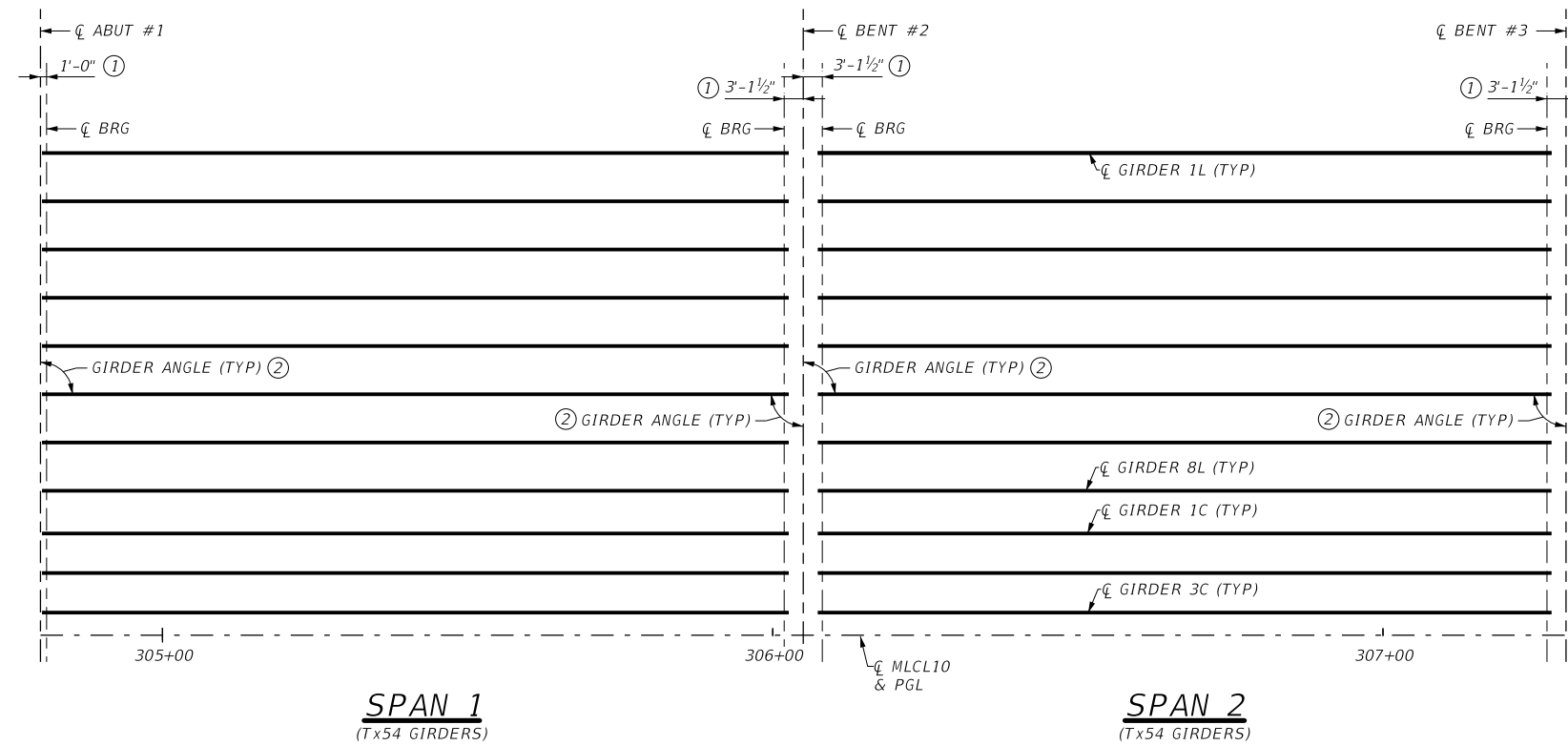
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Texas Department of Transportation

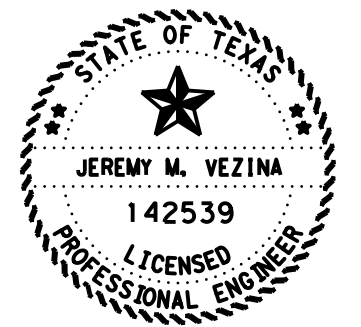
**IH 10 AT US 69
 FRAMING PLAN
 BENT REPORT
 IH 10 EBML
 OVER LAUREL AVE**
 SHEET 4 OF 5

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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1237	

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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



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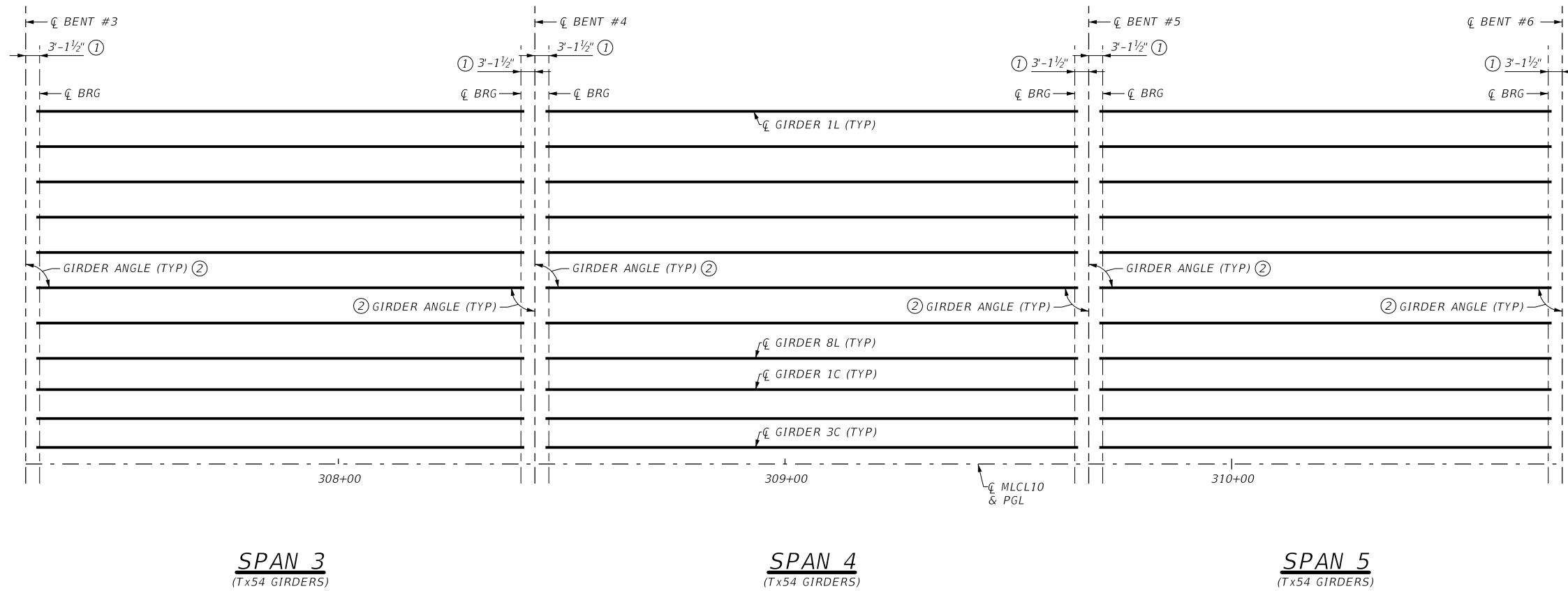
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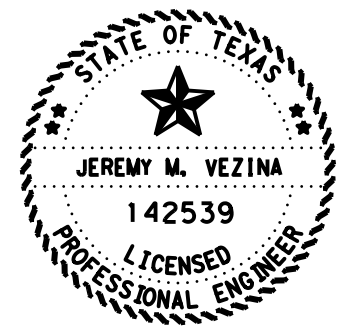
**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 1-2)
 IH 10 WBML
 OVER LAUREL AVE**
 SHEET 1 OF 5

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CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679

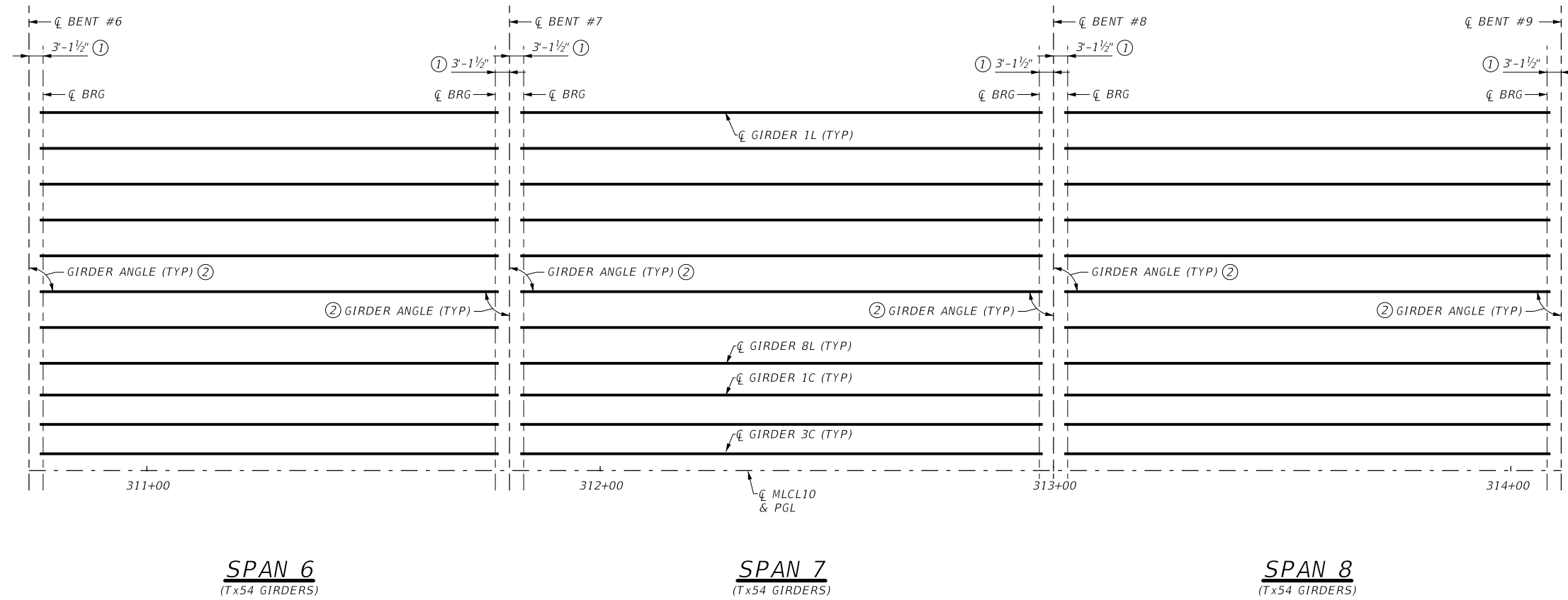


IH 10 AT US 69
 FRAMING PLAN
 (SPANS 3-5)
 IH 10 WBML
 OVER LAUREL AVE

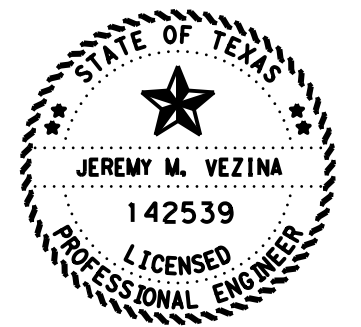
SHEET 2 OF 5

DN:	JMV	CK:	ZZ	DW:	RF	CK:	JMV
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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1240				

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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



Jeremy Vezina 2-20-2024

HL93 LOADING



**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 6-8)
 IH 10 WBML
 OVER LAUREL AVE**
 SHEET 3 OF 5

DN:	JMV	CK:	ZZ	DW:	RF	CK:	JMV
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1241				

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 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg P. (IH 10 Mainlanes over Laurel Ave)\1242_10ML_LAURELAVE_WB_BENT_RPT_01.dgn

WBML BENT REPORT

ABUTMENT NO. 1 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 1 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

BENT NO. 2 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 1 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

BENT NO. 3 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 2 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

BENT NO. 4 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 3 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

BENT NO. 5 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 4 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

SPAN 2 GIRDER 1L 0.000 90 0 0
 GIRDER 2L 7.905 90 0 0
 GIRDER 3L 7.905 90 0 0
 GIRDER 4L 7.905 90 0 0
 GIRDER 5L 7.905 90 0 0
 GIRDER 6L 7.905 90 0 0
 GIRDER 7L 7.905 90 0 0
 GIRDER 8L 7.905 90 0 0
 GIRDER 1C 7.000 90 0 0
 GIRDER 2C 6.479 90 0 0
 GIRDER 3C 6.479 90 0 0
 TOTAL 75.292

SPAN 3 GIRDER 1L 0.000 90 0 0
 GIRDER 2L 7.905 90 0 0
 GIRDER 3L 7.905 90 0 0
 GIRDER 4L 7.905 90 0 0
 GIRDER 5L 7.905 90 0 0
 GIRDER 6L 7.905 90 0 0
 GIRDER 7L 7.905 90 0 0
 GIRDER 8L 7.905 90 0 0
 GIRDER 1C 7.000 90 0 0
 GIRDER 2C 6.479 90 0 0
 GIRDER 3C 6.479 90 0 0
 TOTAL 75.292

SPAN 4 GIRDER 1L 0.000 90 0 0
 GIRDER 2L 7.905 90 0 0
 GIRDER 3L 7.905 90 0 0
 GIRDER 4L 7.905 90 0 0
 GIRDER 5L 7.905 90 0 0
 GIRDER 6L 7.905 90 0 0
 GIRDER 7L 7.905 90 0 0
 GIRDER 8L 7.905 90 0 0
 GIRDER 1C 7.000 90 0 0
 GIRDER 2C 6.479 90 0 0
 GIRDER 3C 6.479 90 0 0
 TOTAL 75.292

SPAN 5 GIRDER 1L 0.000 90 0 0
 GIRDER 2L 7.905 90 0 0
 GIRDER 3L 7.905 90 0 0
 GIRDER 4L 7.905 90 0 0
 GIRDER 5L 7.905 90 0 0
 GIRDER 6L 7.905 90 0 0
 GIRDER 7L 7.905 90 0 0
 GIRDER 8L 7.905 90 0 0
 GIRDER 1C 7.000 90 0 0
 GIRDER 2C 6.479 90 0 0
 GIRDER 3C 6.479 90 0 0
 TOTAL 75.292

BENT NO. 6 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 5 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

BENT NO. 7 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 6 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

BENT NO. 8 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 7 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

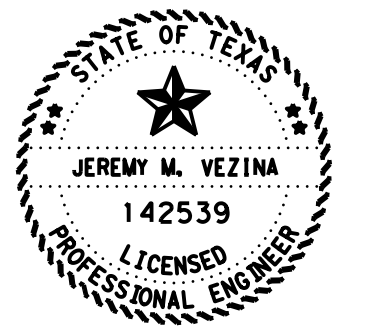
BENT NO. 9 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1L 79.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 8 GIRDER 1L	0.000	90	0	0
GIRDER 2L	7.905	90	0	0
GIRDER 3L	7.905	90	0	0
GIRDER 4L	7.905	90	0	0
GIRDER 5L	7.905	90	0	0
GIRDER 6L	7.905	90	0	0
GIRDER 7L	7.905	90	0	0
GIRDER 8L	7.905	90	0	0
		0	0	0
GIRDER 1C	7.000	90	0	0
GIRDER 2C	6.479	90	0	0
GIRDER 3C	6.479	90	0	0
TOTAL	75.292			

SPAN 6 GIRDER 1L 0.000 90 0 0
 GIRDER 2L 7.905 90 0 0
 GIRDER 3L 7.905 90 0 0
 GIRDER 4L 7.905 90 0 0
 GIRDER 5L 7.905 90 0 0
 GIRDER 6L 7.905 90 0 0
 GIRDER 7L 7.905 90 0 0
 GIRDER 8L 7.905 90 0 0
 GIRDER 1C 7.000 90 0 0
 GIRDER 2C 6.479 90 0 0
 GIRDER 3C 6.479 90 0 0
 TOTAL 75.292

SPAN 7 GIRDER 1L 0.000 90 0 0
 GIRDER 2L 7.905 90 0 0
 GIRDER 3L 7.905 90 0 0
 GIRDER 4L 7.905 90 0 0
 GIRDER 5L 7.905 90 0 0
 GIRDER 6L 7.905 90 0 0
 GIRDER 7L 7.905 90 0 0
 GIRDER 8L 7.905 90 0 0
 GIRDER 1C 7.000 90 0 0
 GIRDER 2C 6.479 90 0 0
 GIRDER 3C 6.479 90 0 0
 TOTAL 75.292

SPAN 8 GIRDER 1L 0.000 90 0 0
 GIRDER 2L 7.905 90 0 0
 GIRDER 3L 7.905 90 0 0
 GIRDER 4L 7.905 90 0 0
 GIRDER 5L 7.905 90 0 0
 GIRDER 6L 7.905 90 0 0
 GIRDER 7L 7.905 90 0 0
 GIRDER 8L 7.905 90 0 0
 GIRDER 1C 7.000 90 0 0
 GIRDER 2C 6.479 90 0 0
 GIRDER 3C 6.479 90 0 0
 TOTAL 75.292



Jeremy Vezina 2-20-2024

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**IH 10 AT US 69
 FRAMING PLAN
 BENT REPORT
 IH 10 WBML
 OVER LAUREL AVE**

SHEET 4 OF 5

DN: JMV	CK: ZZ	DW: RF	CK: JMV
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1242	

DATE: 20-FEB-2024 13:16
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WBML GIRDER REPORT

GIRDER REPORT, SPAN 1 ①

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE	
GIRDER 1L	125.000	120.875	122.405	0.0220	
GIRDER 2L	125.000	120.875	122.405	0.0220	
GIRDER 3L	125.000	120.875	122.405	0.0220	
PHASE 4 STEP 2	GIRDER 4L	125.000	120.875	122.405	0.0220
	GIRDER 5L	125.000	120.875	122.405	0.0220
	GIRDER 6L	125.000	120.875	122.405	0.0220
	GIRDER 7L	125.000	120.875	122.405	0.0220
	GIRDER 8L	125.000	120.875	122.405	0.0220
PHASE 3 STEP 1	GIRDER 1C	125.000	120.875	122.405	0.0220
	GIRDER 2C	125.000	120.875	122.405	0.0220
	GIRDER 3C	125.000	120.875	122.405	0.0220

GIRDER REPORT, SPAN 2 ①

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
GIRDER 1L	125.000	118.75	120.272	0.0193
GIRDER 2L	125.000	118.75	120.272	0.0193
GIRDER 3L	125.000	118.75	120.272	0.0193
GIRDER 4L	125.000	118.75	120.272	0.0193
GIRDER 5L	125.000	118.75	120.272	0.0193
GIRDER 6L	125.000	118.75	120.272	0.0193
GIRDER 7L	125.000	118.75	120.272	0.0193
GIRDER 8L	125.000	118.75	120.272	0.0193
GIRDER 1C	125.000	118.75	120.272	0.0193
GIRDER 2C	125.000	118.75	120.272	0.0193
GIRDER 3C	125.000	118.75	120.272	0.0193

GIRDER REPORT, SPAN 3 ①

	HORIZONTAL DISTANCE C-C BEN	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
GIRDER 1L	114.000	107.75	109.262	0.0146
GIRDER 2L	114.000	107.75	109.262	0.0146
GIRDER 3L	114.000	107.75	109.262	0.0146
GIRDER 4L	114.000	107.75	109.262	0.0146
GIRDER 5L	114.000	107.75	109.262	0.0146
GIRDER 6L	114.000	107.75	109.262	0.0146
GIRDER 7L	114.000	107.75	109.262	0.0146
GIRDER 8L	114.000	107.75	109.262	0.0146
GIRDER 1C	114.000	107.75	109.262	0.0146
GIRDER 2C	114.000	107.75	109.262	0.0146
GIRDER 3C	114.000	107.75	109.262	0.0146

GIRDER REPORT, SPAN 4 ①

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
GIRDER 1L	124.000	117.75	119.256	0.0100
GIRDER 2L	124.000	117.75	119.256	0.0100
GIRDER 3L	124.000	117.75	119.256	0.0100
GIRDER 4L	124.000	117.75	119.256	0.0100
GIRDER 5L	124.000	117.75	119.256	0.0100
GIRDER 6L	124.000	117.75	119.256	0.0100
GIRDER 7L	124.000	117.75	119.256	0.0100
GIRDER 8L	124.000	117.75	119.256	0.0100
GIRDER 1C	124.000	117.75	119.256	0.0100
GIRDER 2C	124.000	117.75	119.256	0.0100
GIRDER 3C	124.000	117.75	119.256	0.0100

GIRDER REPORT, SPAN 5 ①

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE	
GIRDER 1L	106.000	99.75	101.252	0.0055	
GIRDER 2L	106.000	99.75	101.252	0.0055	
GIRDER 3L	106.000	99.75	101.252	0.0055	
PHASE 4 STEP 2	GIRDER 4L	106.000	99.75	101.252	0.0055
	GIRDER 5L	106.000	99.75	101.252	0.0055
	GIRDER 6L	106.000	99.75	101.252	0.0055
	GIRDER 7L	106.000	99.75	101.252	0.0055
	GIRDER 8L	106.000	99.75	101.252	0.0055
PHASE 3 STEP 1	GIRDER 1C	106.000	99.75	101.252	0.0055
	GIRDER 2C	106.000	99.75	101.252	0.0055
	GIRDER 3C	106.000	99.75	101.252	0.0055

GIRDER REPORT, SPAN 6 ①

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
GIRDER 1L	106.000	99.75	101.251	0.0040
GIRDER 2L	106.000	99.75	101.251	0.0040
GIRDER 3L	106.000	99.75	101.251	0.0040
GIRDER 4L	106.000	99.75	101.251	0.0040
GIRDER 5L	106.000	99.75	101.251	0.0040
GIRDER 6L	106.000	99.75	101.251	0.0040
GIRDER 7L	106.000	99.75	101.251	0.0040
GIRDER 8L	106.000	99.75	101.251	0.0040
GIRDER 1C	106.000	99.75	101.251	0.0040
GIRDER 2C	106.000	99.75	101.251	0.0040
GIRDER 3C	106.000	99.75	101.251	0.0040

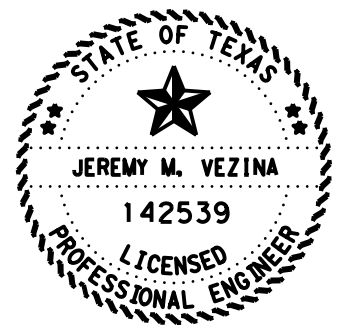
GIRDER REPORT, SPAN 7 ①

	HORIZONTAL DISTANCE C-C BEN	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
GIRDER 1L	120.000	113.75	115.251	0.0040
GIRDER 2L	120.000	113.75	115.251	0.0040
GIRDER 3L	120.000	113.75	115.251	0.0040
GIRDER 4L	120.000	113.75	115.251	0.0040
GIRDER 5L	120.000	113.75	115.251	0.0040
GIRDER 6L	120.000	113.75	115.251	0.0040
GIRDER 7L	120.000	113.75	115.251	0.0040
GIRDER 8L	120.000	113.75	115.251	0.0040
GIRDER 1C	120.000	113.75	115.251	0.0040
GIRDER 2C	120.000	113.75	115.251	0.0040
GIRDER 3C	120.000	113.75	115.251	0.0040

GIRDER REPORT, SPAN 8 ①

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
GIRDER 1L	112.000	105.75	107.251	0.0040
GIRDER 2L	112.000	105.75	107.251	0.0040
GIRDER 3L	112.000	105.75	107.251	0.0040
GIRDER 4L	112.000	105.75	107.251	0.0040
GIRDER 5L	112.000	105.75	107.251	0.0040
GIRDER 6L	112.000	105.75	107.251	0.0040
GIRDER 7L	112.000	105.75	107.251	0.0040
GIRDER 8L	112.000	105.75	107.251	0.0040
GIRDER 1C	112.000	105.75	107.251	0.0040
GIRDER 2C	112.000	105.75	107.251	0.0040
GIRDER 3C	112.000	105.75	107.251	0.0040

① GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.



Jeremy Vezina 2-20-2024

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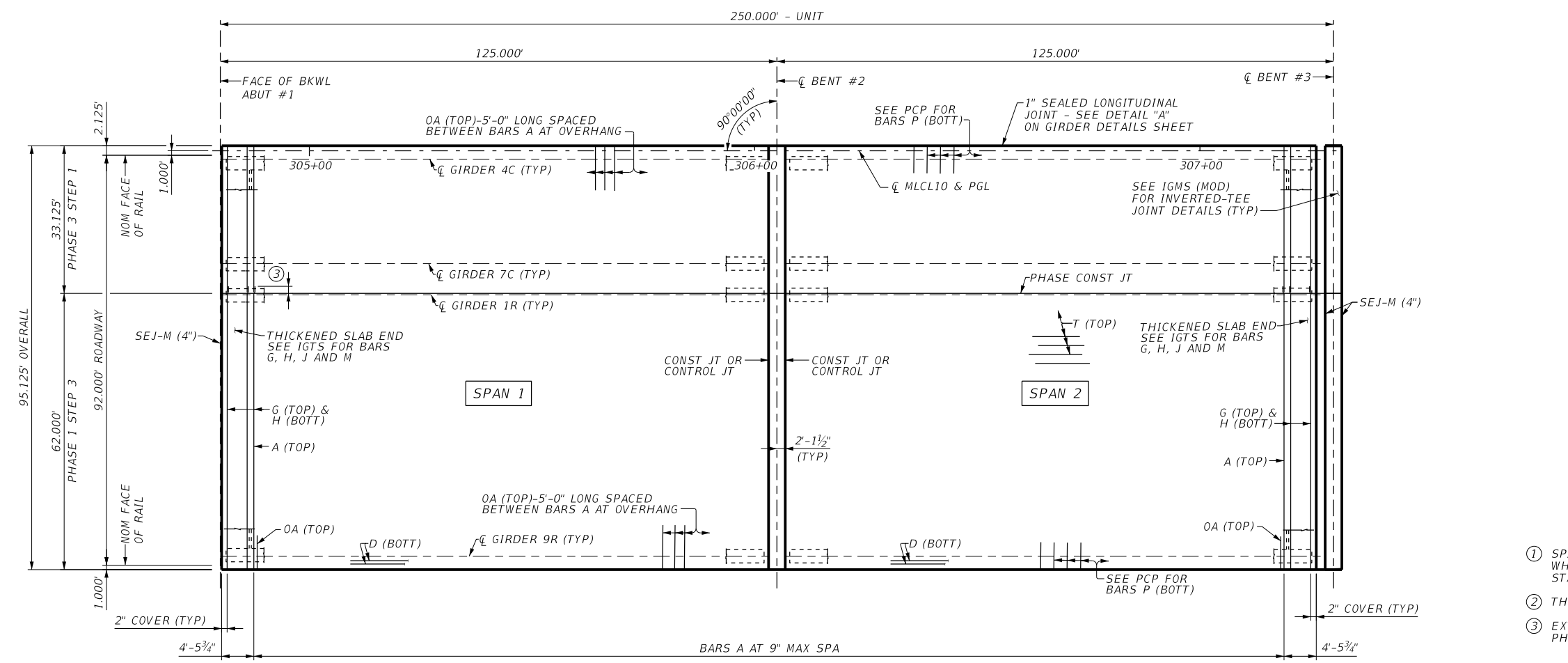
Texas Department of Transportation

**IH 10 AT US 69
FRAMING PLAN
GIRDER REPORT
IH 10 WBML
OVER LAUREL AVE**

SHEET 5 OF 5

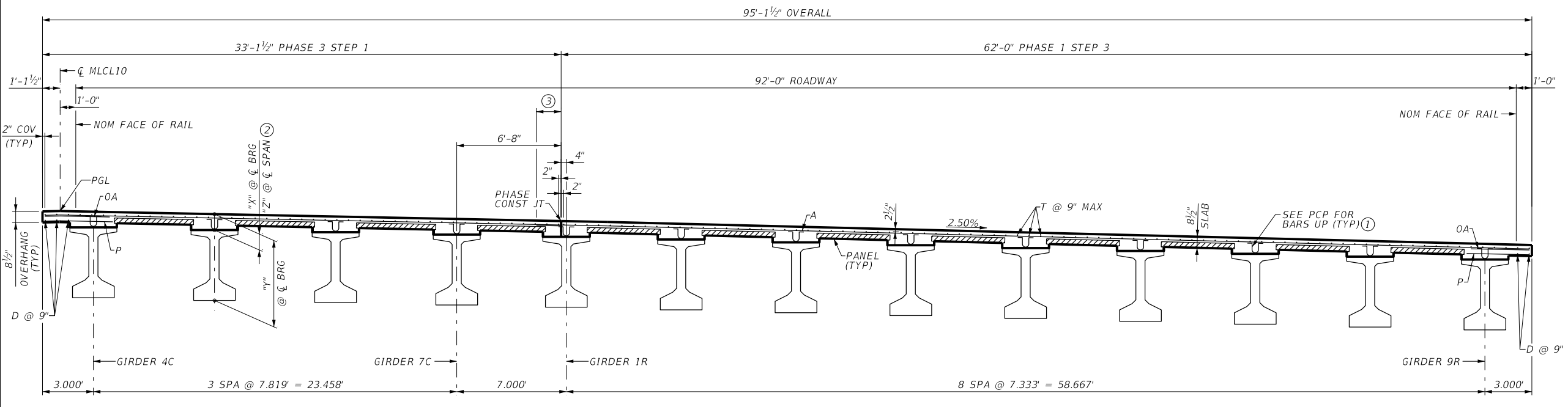
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0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1243	

DATE: 20-FEB-2024 14:55
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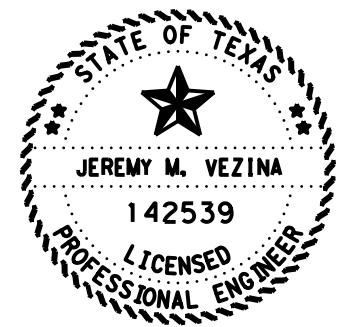


- ① SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ② THEORETICAL DIMENSION.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G, H 1'-7" INTO PHASE 3 STEP 1 CONSTRUCTION.

PLAN



SPANS 1 & 2 TRANSVERSE SECTION



Jeremy Vezina 2-20-2024

HL93 LOADING

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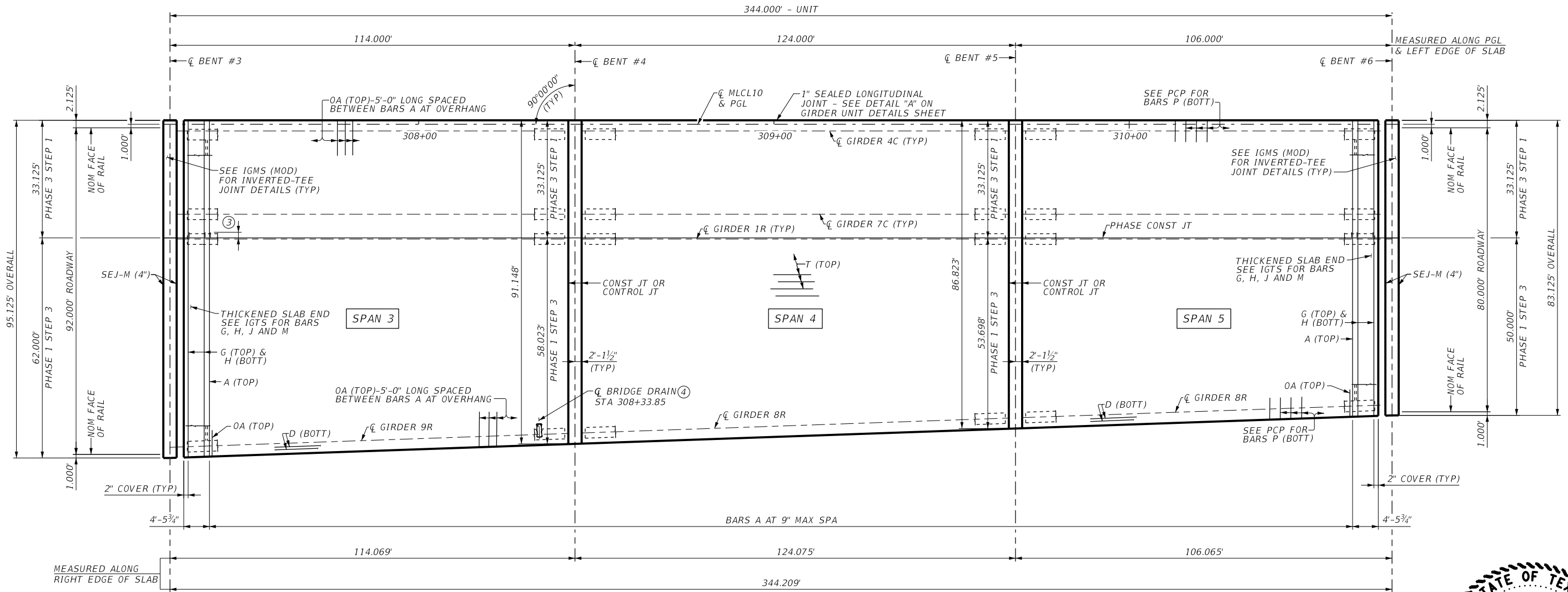
Texas Department of Transportation

IH 10 AT US 69
250.00' PRESTR CONC
GIRDER UNIT 1
IH 10 EBML
OVER LAUREL AVE

SHEET 1 OF 1

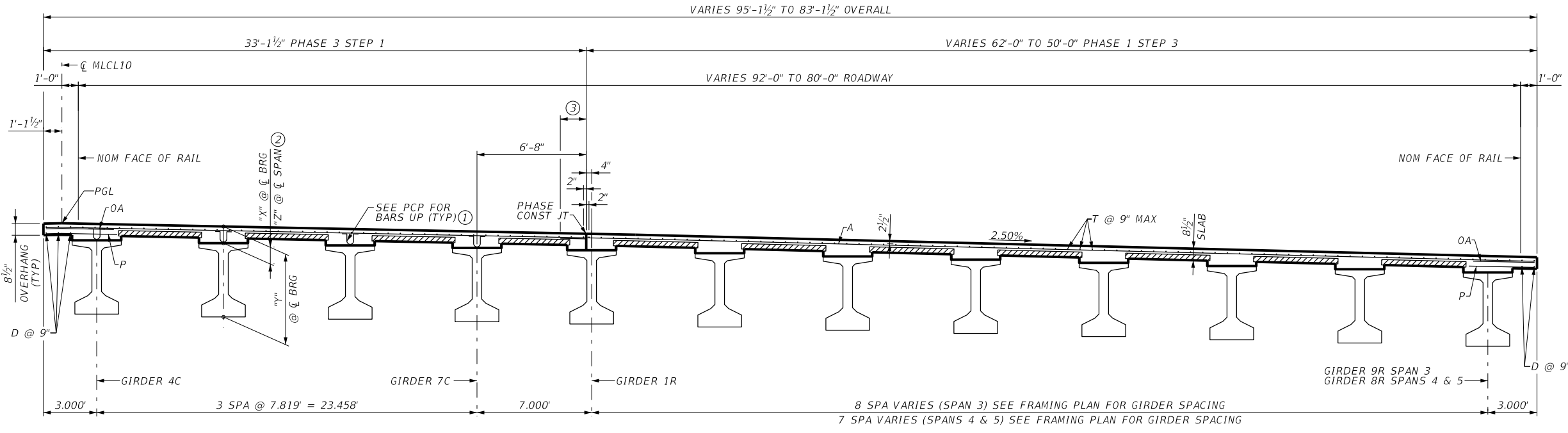
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1244	

DATE: 20-FEB-2024 14:55
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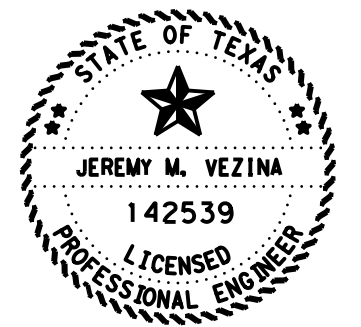


PLAN

- ① SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3/4". SEE PCP STANDARD FOR DETAILS.
- ② THEORETICAL DIMENSION.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G, H 1'-7" INTO PHASE 3 STEP 1 CONSTRUCTION.
- ④ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



SPANS 3, 4 & 5 TRANSVERSE SECTION



Jeremy Veжина 2-20-2024

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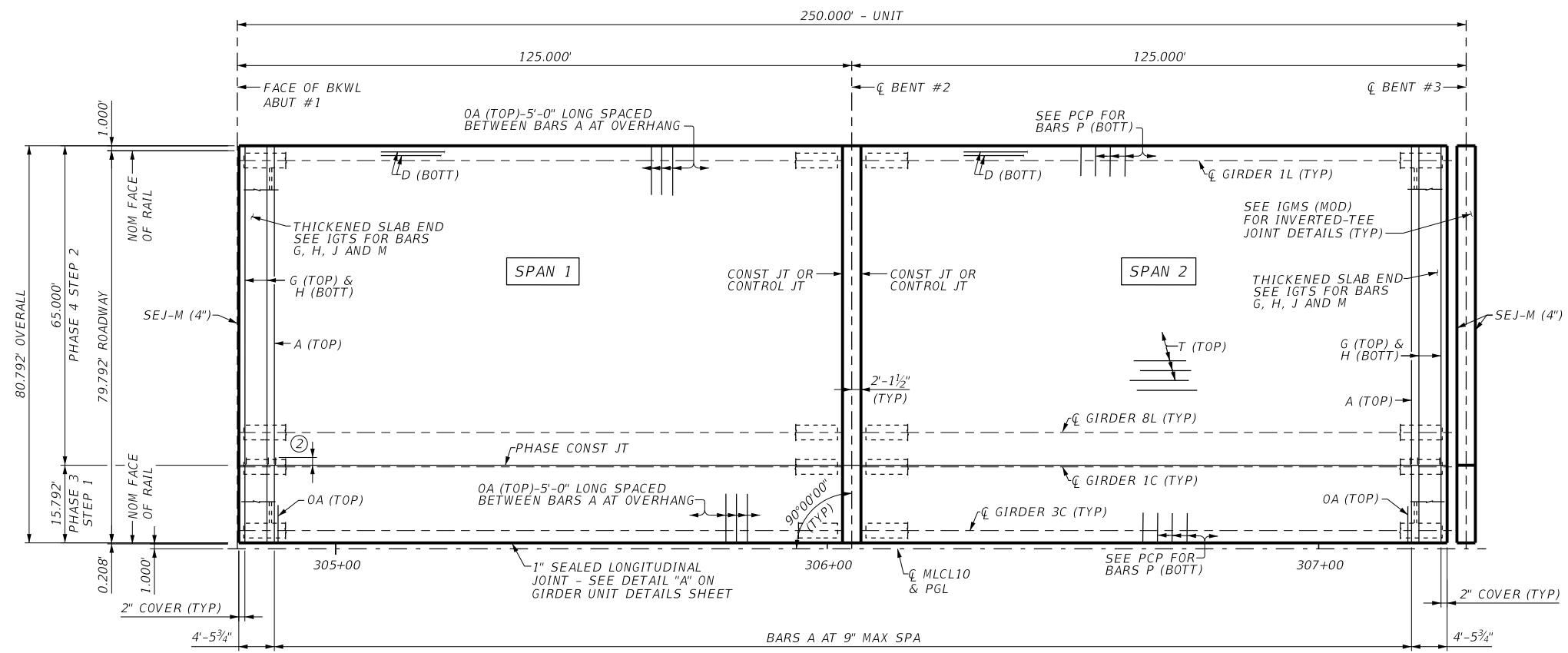
Texas Department of Transportation

**IH 10 AT US 69
 344.00' PRESTR CONC
 GIRDER UNIT 2
 IH 10 EBML
 OVER LAUREL AVE**

SHEET 1 OF 1

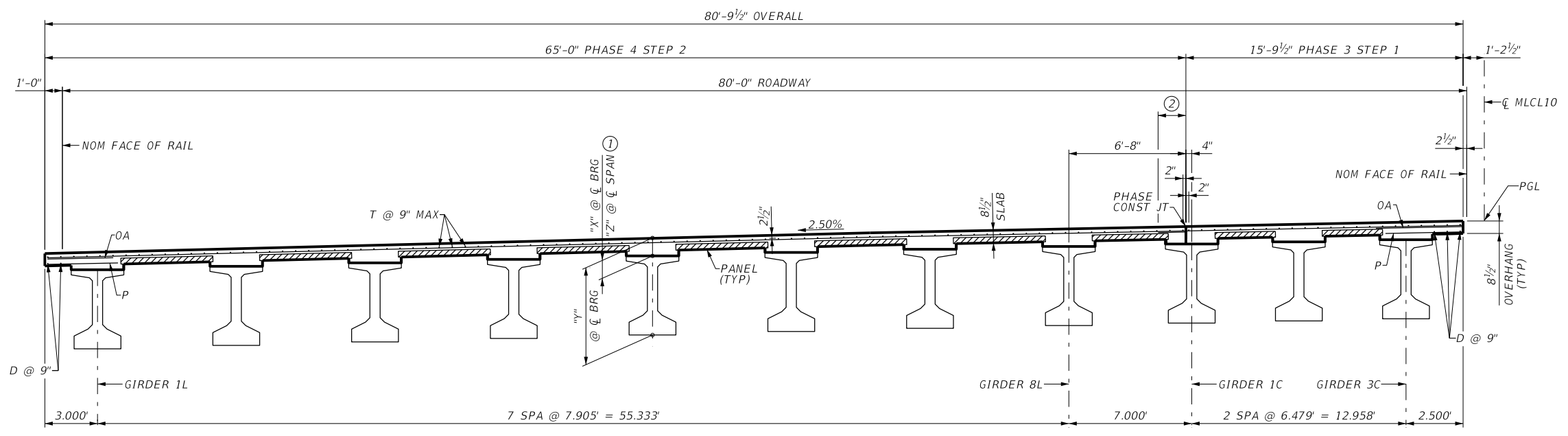
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1245	

DATE: 20-FEB-2024 14:56
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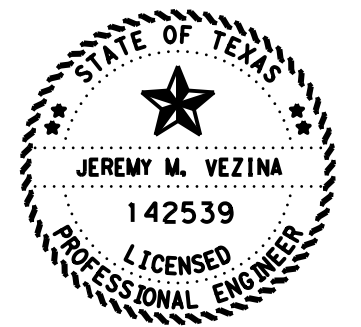


- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 1 STEP 3 BARS A, G, H 1'-7" INTO PHASE 3 STEP 1 CONSTRUCTION.

PLAN



SPANS 1 & 2 TRANSVERSE SECTION



Jeremy Veжина 2-20-2024

HL93 LOADING

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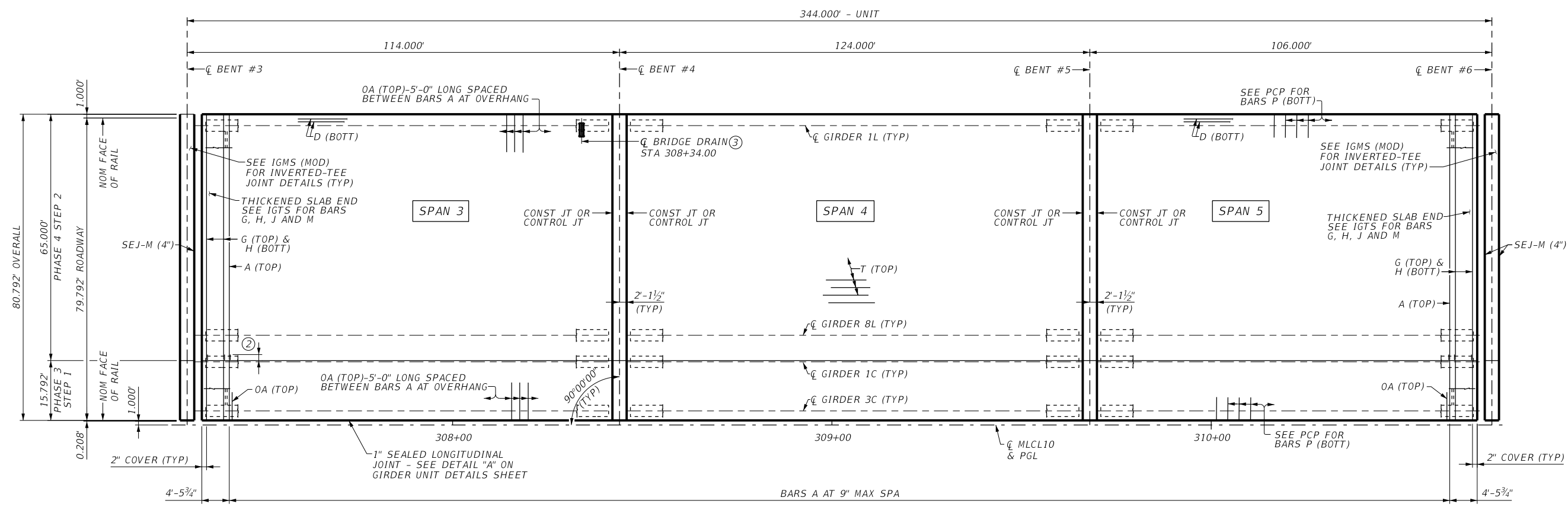
Texas Department of Transportation

**IH 10 AT US 69
 250.00' PRESTR CONC
 GIRDER UNIT 1
 IH 10 WBML
 OVER LAUREL AVE**

SHEET 1 OF 1

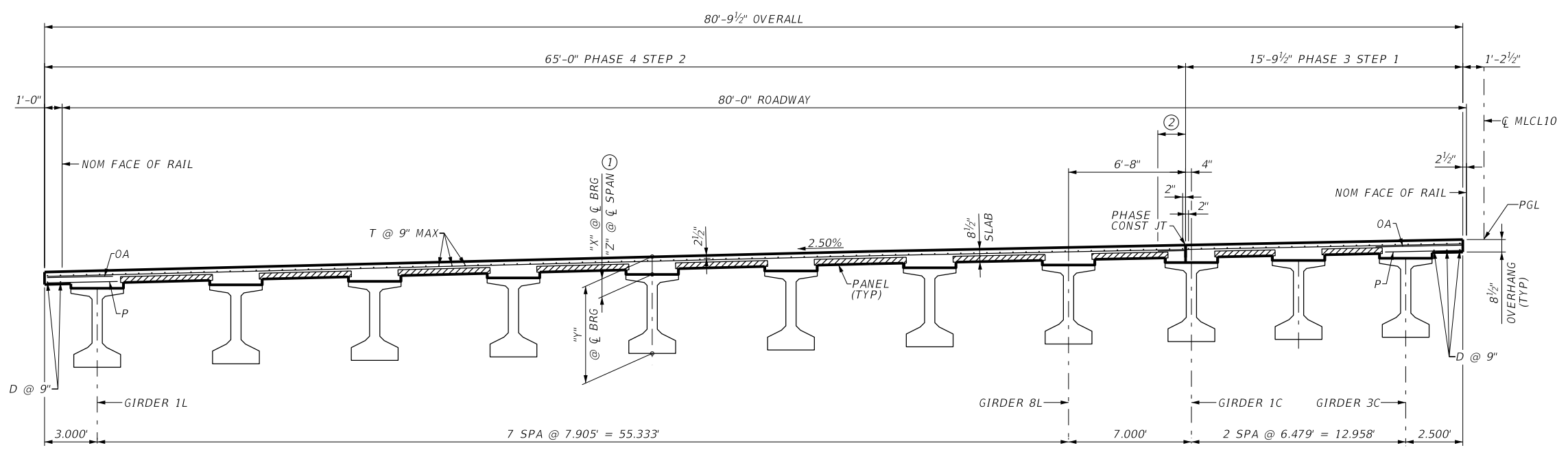
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1247	

DATE: 20-FEB-2024 15:03
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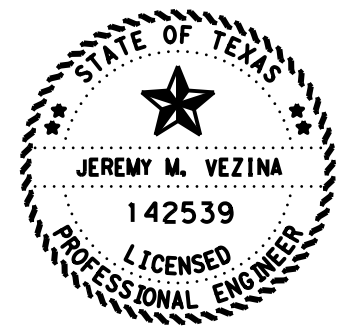


- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 1 STEP 3 BARS A, G, H 1'-7" INTO PHASE 3 STEP 1 CONSTRUCTION.
- ③ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.

PLAN



SPANS 3, 4 & 5 TRANSVERSE SECTION



Jeremy Vezina 2-20-2024

HL93 LOADING



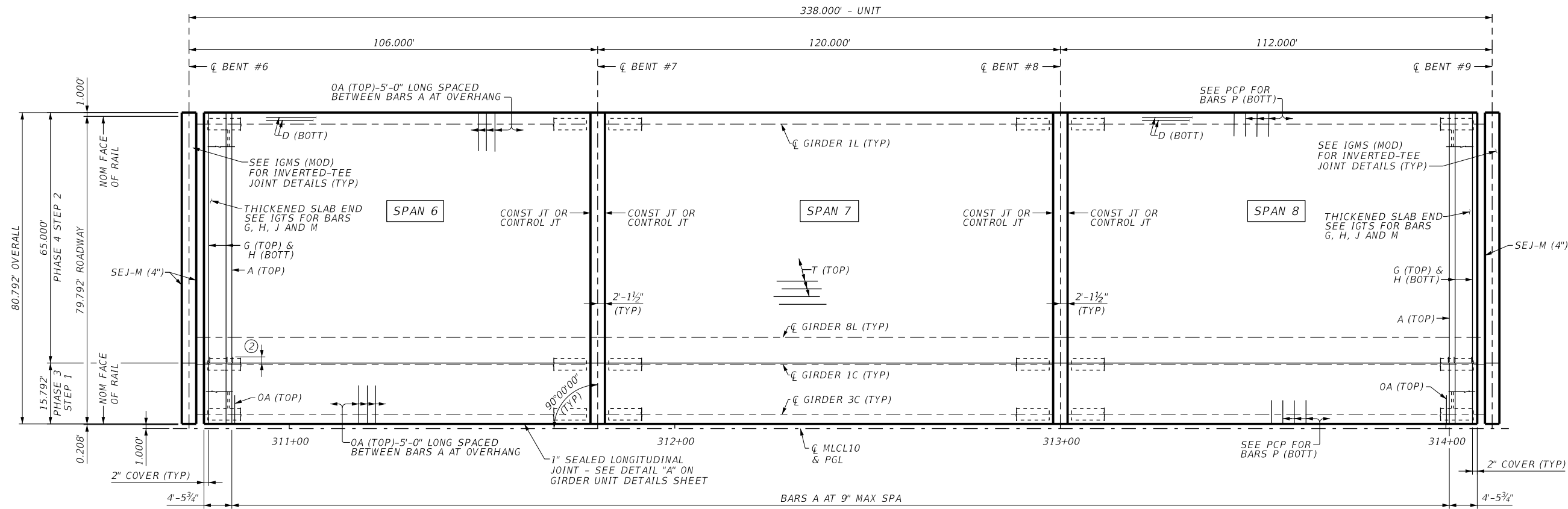
Texas Department of Transportation

IH 10 AT US 69
344.00' PRESTR CONC
GIRDER UNIT 2
IH 10 WBML
OVER LAUREL AVE

SHEET 1 OF 1

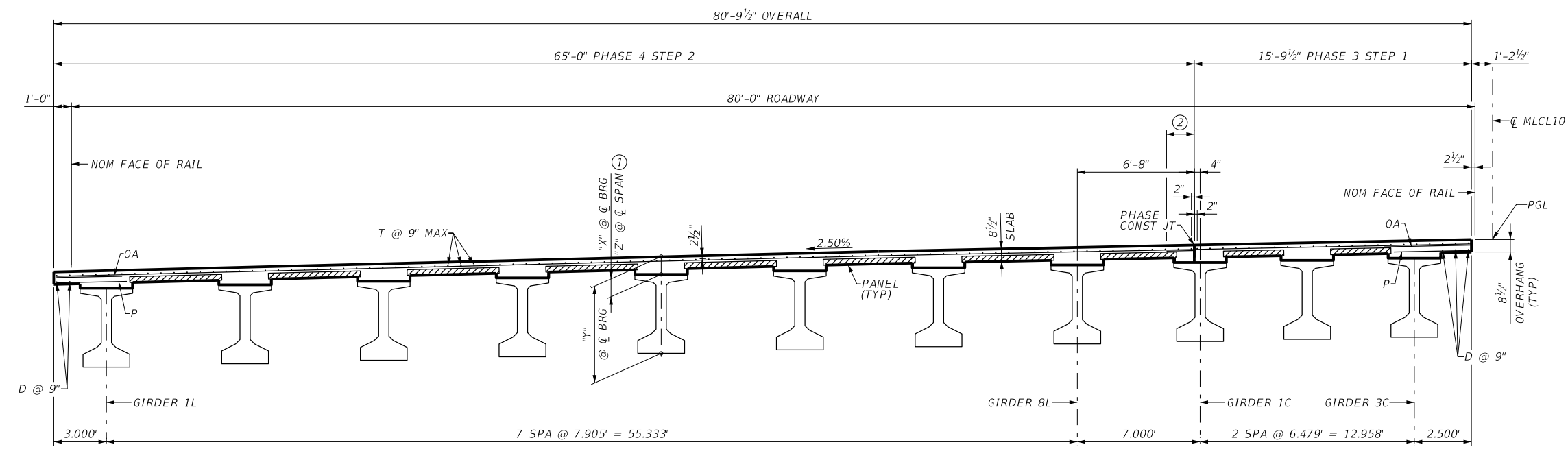
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0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1248	

DATE: 20-FEB-2024 13:19
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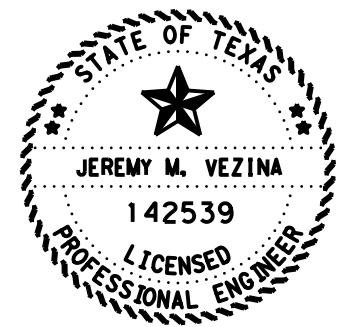


PLAN

- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 1 STEP 3 BARS A, G, H 1'-7" INTO PHASE 3 STEP 1 CONSTRUCTION.



SPANS 6, 7 & 8 TRANSVERSE SECTION



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IH 10 AT US 69
 338.00' PRESTR CONC
 GIRDER UNIT 3
 IH 10 WBML
 OVER LAUREL AVE

SHEET 1 OF 1

DN: JMV	CK: ZZ	DW: RF	CK: JMV
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1249	

DATE: 20-FEB-2024 15:04
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PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	1R	-0.080	-0.114
	2R - 8R	-0.146	-0.208
	9R	-0.133	-0.189
2	1R	-0.074	-0.106
	2R - 8R	-0.136	-0.194
	9R	-0.124	-0.176

PHASE 1 - STEP 3 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	1R	12 1/2"	5' - 6 1/2"	9 1/2"
	2R - 8R	12 1/2"	5' - 6 1/2"	10 1/2"
	9R	12 1/2"	5' - 6 1/2"	10 1/4"
2	1R	11 3/4"	5' - 5 3/4"	9 5/8"
	2R - 8R	11 3/4"	5' - 5 3/4"	10 1/2"
	9R	11 3/4"	5' - 5 3/4"	10 3/8"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	4C	-0.138	-0.196
	5C & 6C	-0.156	-0.222
	7C	-0.148	-0.210
2	4C	-0.128	-0.183
	5C & 6C	-0.145	-0.207
	7C	-0.138	-0.196

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	4C	12 1/2"	5' - 6 1/2"	10"
	5C & 6C	12 1/2"	5' - 6 1/2"	10 3/8"
	7C	12 1/2"	5' - 6 1/2"	10 1/4"
2	4C	11 3/4"	5' - 5 3/4"	10 1/8"
	5C & 6C	11 3/4"	5' - 5 3/4"	10 3/8"
	7C	11 3/4"	5' - 5 3/4"	10 1/4"

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	TOTAL REINF STEEL ④
		SF	LF	LB
1	PHASE 1 STEP 3	7750	1101.65	17825
	PHASE 3 STEP 1	4141	489.62	9523
2	PHASE 1 STEP 3	7750	1082.45	17825
	PHASE 3 STEP 1	4141	481.09	9523
BRIDGE TOTAL		23781	3154.80	54697

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.

SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN.

SEE IGMS (MOD) STANDARD FOR MISCELLANEOUS DETAILS.

SEE APPLICABLE RAIL DETAILS FOR RAIL ANCHORAGE IN SLAB.

SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.

MATERIAL NOTES:
 PROVIDE CLASS 5 CONCRETE (F'C = 4,000 PSI).

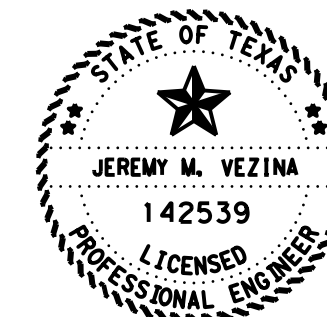
PROVIDE GRADE 60 REINFORCING STEEL.

PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 UNCOATED ~ #4 = 1'-7"

DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T, UNLESS NOTED OTHERWISE.

PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.

- ① BACKER ROD SHALL BE 25% LARGER THAN JOINT OPENING AND SHALL BE COMPATIBLE WITH THE SEALANT; NO REACTION SHALL OCCUR BETWEEN THE ROD AND THE SEALANT.
- ② SEALANT SHALL BE CLASS 7 SILICONE SEALANT. INSTALL WHEN AMBIENT TEMPERATURE IS BETWEEN 55°F AND 85°F AND RISING. ENGINEER TO DETERMINE ALLOWABLE HOURS FOR SEALANT APPLICATION.
- ③ THEORETICAL DIMENSION.
- ④ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679



IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 EBML
 OVER LAUREL AVE

SHEET 1 OF 2

DN:	JMV	CK:	ZZ	DW:	RF	CK:	JMV
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST		COUNTY		SHEET NO.			
	BMT		JEFFERSON				1250

DATE: 20-FEB-2024 13:16
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7 - Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1251_10ML LAUREL AVE EB GRDUNIT_DET_02.dwg

- ① THEORETICAL DIMENSION.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF.

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
3	1R	-0.049	-0.070
	2R - 8R	-0.090	-0.127
	9R	-0.083	-0.118
4	1R	-0.074	-0.105
	2R - 7R	-0.135	-0.192
	8R	-0.122	-0.173
5	1R	-0.035	-0.050
	2R - 7R	-0.064	-0.091
	8R	-0.060	-0.085

PHASE 1 - STEP 3 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
3	1R	11 3/4"	5' - 5 3/4"	9 7/8"
	2R - 8R	11 3/4"	5' - 5 3/4"	10 3/8"
	9R	11 3/4"	5' - 5 3/4"	10 3/8"
4	1R	11 3/4"	5' - 5 3/4"	9 5/8"
	2R - 7R	11 3/4"	5' - 5 3/4"	10 1/2"
	8R	11 3/4"	5' - 5 3/4"	10 1/4"
5	1R	11 3/4"	5' - 5 3/4"	10 1/4"
	2R - 7R	11 3/4"	5' - 5 3/4"	10 5/8"
	8R	11 3/4"	5' - 5 3/4"	10 1/2"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
3	4C	-0.087	-0.124
	5C & 6C	-0.099	-0.140
	7C	-0.093	-0.133
4	4C	-0.124	-0.177
	5C & 6C	-0.141	-0.200
	7C	-0.133	-0.189
5	4C	-0.064	-0.091
	5C & 6C	-0.072	-0.103
	7C	-0.069	-0.098

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
3	4C	11 3/4"	5' - 5 3/4"	10 1/4"
	5C & 6C	11 3/4"	5' - 5 3/4"	10 3/8"
	7C	11 3/4"	5' - 5 3/4"	10 1/4"
4	4C	11 3/4"	5' - 5 3/4"	10"
	5C & 6C	11 3/4"	5' - 5 3/4"	10 1/4"
	7C	11 3/4"	5' - 5 3/4"	10 1/8"
5	4C	11 3/4"	5' - 5 3/4"	10 3/8"
	5C & 6C	11 3/4"	5' - 5 3/4"	10 1/2"
	7C	11 3/4"	5' - 5 3/4"	10 1/2"

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
6	1R	-0.039	-0.056
	2R - 6R	-0.072	-0.102
	7R	-0.064	-0.091
7	1R	-0.066	-0.094
	2R - 6R	-0.122	-0.173
	7R	-0.108	-0.153
8	1R	-0.081	-0.115
	2R - 6R	-0.091	-0.129
	7R	-0.081	-0.115

PHASE 1 - STEP 3 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
6	1R	11 3/4"	5' - 5 3/4"	9 5/8"
	2R - 6R	11 3/4"	5' - 5 3/4"	10 1/8"
	7R	11 3/4"	5' - 5 3/4"	10"
7	1R	12 1/4"	5' - 6 1/4"	9 7/8"
	2R - 6R	12 1/4"	5' - 6 1/4"	10 5/8"
	7R	12 1/4"	5' - 6 1/4"	10 3/8"
8	1R	12"	5' - 6"	10 1/8"
	2R - 6R	12"	5' - 6"	10 1/4"
	7R	12"	5' - 6"	10 1/8"

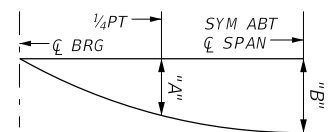
PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
6	4C	-0.064	-0.091
	5C & 6C	-0.072	-0.103
	7C	-0.069	-0.098
7	4C	-0.108	-0.154
	5C & 6C	-0.122	-0.174
	7C	-0.116	-0.165
8	4C	-0.081	-0.115
	5C & 6C	-0.091	-0.130
	7C	-0.087	-0.123

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
6	4C	11 3/4"	5' - 5 3/4"	9 7/8"
	5C & 6C	11 3/4"	5' - 5 3/4"	10"
	7C	11 3/4"	5' - 5 3/4"	9 7/8"
7	4C	12 1/4"	5' - 6 1/4"	9 7/8"
	5C & 6C	12 1/4"	5' - 6 1/4"	10 1/8"
	7C	12 1/4"	5' - 6 1/4"	10"
8	4C	12"	5' - 6"	9 7/8"
	5C & 6C	12"	5' - 6"	10"
	7C	12"	5' - 6"	10"

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB		TOTAL REINF STEEL ②
		SF	LF	LB
3	PHASE 1 STEP 3	6841	983.58	15735
	PHASE 3 STEP 1	3776	437.05	8685
4	PHASE 1 STEP 3	6927	954.26	15931
	PHASE 3 STEP 1	4108	477.02	9447
5	PHASE 1 STEP 3	5496	810.19	12641
	PHASE 3 STEP 1	3511	405.01	8076
BRIDGE TOTAL		30659	4067.11	70516

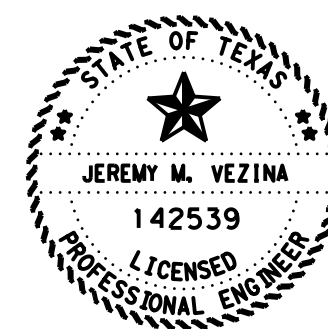
TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB		TOTAL REINF STEEL ②
		SF	LF	LB
6	PHASE 1 STEP 3	5300	708.76	12190
	PHASE 3 STEP 1	3511	405.00	8076
7	PHASE 1 STEP 3	6000	806.76	13800
	PHASE 3 STEP 1	3975	461.00	9143
8	PHASE 1 STEP 3	5600	750.76	12880
	PHASE 3 STEP 1	3710	429.00	8533
BRIDGE TOTAL		28096	3561.28	64621

BAR TABLE	
BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY (EC = 5000 KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.



Jeremy Vezina 2-20-2024

HL93 LOADING



F-12679



**IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 EBML
 OVER LAUREL AVE**

SHEET 2 OF 2

DN: JMV	CK: ZZ	DW: RF	CK: JMV
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1251	

DATE: 20-FEB-2024 13:15
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1252_10ML LAURELAVE.WB.GRDUNIT_DET_01.dwg

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	1C	-0.071	-0.101
	2C	-0.129	-0.184
	3C	-0.115	-0.163
2	1C	-0.066	-0.094
	2C	-0.120	-0.171
	3C	-0.107	-0.152

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	1C	12"	5' - 6"	9 5/8"
	2C	12"	5' - 6"	10 3/8"
	3C	12"	5' - 6"	9 7/8"
2	1C	11"	5' - 5"	9 5/8"
	2C	11"	5' - 5"	10 3/8"
	3C	11"	5' - 5"	9 7/8"

PHASE 4 - STEP 2 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	1L	-0.139	-0.197
	2L - 7L	-0.158	-0.224
	8L	-0.149	-0.211
2	1L	-0.129	-0.184
	2L - 7L	-0.147	-0.209
	8L	-0.139	-0.197

PHASE 4 - STEP 2 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	1L	12"	5' - 6"	9 7/8"
	2L - 7L	12"	5' - 6"	10 1/8"
	8L	12"	5' - 6"	10"
2	1L	11"	5' - 5"	9 5/8"
	2L - 7L	11"	5' - 5"	9 7/8"
	8L	11"	5' - 5"	9 3/4"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
3	1C	-0.045	-0.064
	2C	-0.082	-0.116
	3C	-0.072	-0.103
4	1C	-0.064	-0.091
	2C	-0.116	-0.166
	3C	-0.103	-0.147
5	1C	-0.033	-0.047
	2C	-0.060	-0.085
	3C	-0.053	-0.076

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
3	1C	11"	5' - 5"	9 3/4"
	2C	11"	5' - 5"	10 1/4"
	3C	11"	5' - 5"	9 7/8"
4	1C	11"	5' - 5"	9 5/8"
	2C	11"	5' - 5"	10 1/4"
	3C	11"	5' - 5"	9 7/8"
5	1C	11"	5' - 5"	10"
	2C	11"	5' - 5"	10 3/8"
	3C	11"	5' - 5"	10"

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023)

SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.

SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN.

SEE IGMS (MOD) STANDARD FOR MISCELLANEOUS DETAILS.

SEE APPLICABLE RAIL DETAILS FOR RAIL ANCHORAGE IN SLAB.

SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.

MATERIAL NOTES:
 PROVIDE CLASS 5 CONCRETE (F'C = 4,000 PSI).

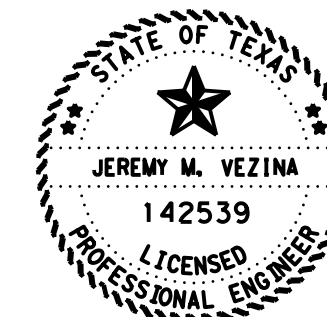
PROVIDE GRADE 60 REINFORCING STEEL.

PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 UNCOATED ~ #4 = 1'-7"

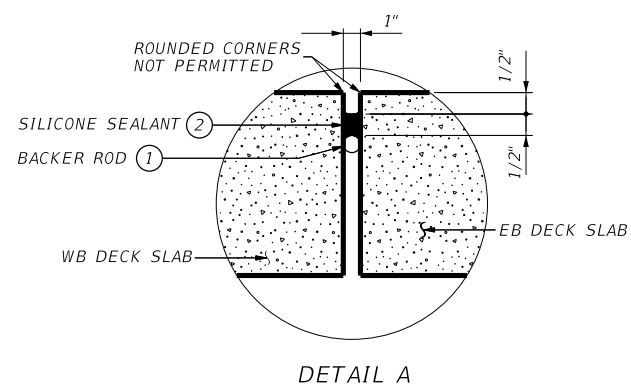
DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T, UNLESS NOTED OTHERWISE.

PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.

- ① BACKER ROD SHALL BE 25% LARGER THAN JOINT OPENING AND SHALL BE COMPATIBLE WITH THE SEALANT; NO REACTION SHALL OCCUR BETWEEN THE ROD AND THE SEALANT.
- ② SEALANT SHALL BE CLASS 7 SILICONE SEALANT. INSTALL WHEN AMBIENT TEMPERATURE IS BETWEEN 55°F AND 85°F AND RISING. ENGINEER TO DETERMINE ALLOWABLE HOURS FOR SEALANT APPLICATION.
- ③ THEORETICAL DIMENSION.



Jeremy Vezina 2-20-2024



HL93 LOADING

VOLKERT

F-12679



**IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 WBML
 OVER LAUREL AVE**

SHEET 1 OF 2

DN:	JMV	CK:	ZZ	DW:	RF	CK:	JMV
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST		COUNTY		SHEET NO.			
	BMT		JEFFERSON				1252

DATE: 20-FEB-2024 14:55
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan_Sets\7 - Bridge\Bridg P (IH 10 Mainlanes over Laurel Ave)\1253_10ML LAURELAVE WB GRDUNIT_DET_02.dwg

PHASE 4 - STEP 2 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
3	1L	-0.088	-0.125
	2L - 7L	-0.100	-0.142
	8L	-0.094	-0.134
4	1L	-0.125	-0.178
	2L - 7L	-0.142	-0.202
	8L	-0.134	-0.190
5	1L	-0.064	-0.092
	2L - 7L	-0.073	-0.104
	8L	-0.069	-0.098

PHASE 4 - STEP 2 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
3	1L	11"	5' - 5"	9 7/8"
	2L - 7L	11"	5' - 5"	10"
	8L	11"	5' - 5"	10"
4	1L	11"	5' - 5"	9 3/4"
	2L - 7L	11"	5' - 5"	10"
	8L	11"	5' - 5"	9 7/8"
5	1L	11"	5' - 5"	10"
	2L - 7L	11"	5' - 5"	10 1/8"
	8L	11"	5' - 5"	10"

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	TOTAL REINF STEEL ②
		SF	LF	LB
1	PHASE 3 STEP 1	1973.96	367.22	4540
	PHASE 4 STEP 2	8125	979.24	18688
2	PHASE 3 STEP 1	1973.96	360.82	4540
	PHASE 4 STEP 2	8125	962.18	18688
BRIDGE TOTAL		20198	2669.45	46455

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
6	1C	-0.033	-0.047
	2C	-0.060	-0.085
	3C	-0.053	-0.076
7	1C	-0.056	-0.080
	2C	-0.101	-0.144
	3C	-0.090	-0.128
8	1C	-0.042	-0.059
	2C	-0.076	-0.108
	3C	-0.067	-0.095

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
6	1C	11 1/2"	5' - 5 1/2"	9 7/8"
	2C	11 1/2"	5' - 5 1/2"	10 1/4"
	3C	11 1/2"	5' - 5 1/2"	9 7/8"
7	1C	11 3/4"	5' - 5 3/4"	9 5/8"
	2C	11 3/4"	5' - 5 3/4"	10 1/4"
	3C	11 3/4"	5' - 5 3/4"	9 3/4"
8	1C	11 3/4"	5' - 5 3/4"	9 3/4"
	2C	11 3/4"	5' - 5 3/4"	10 1/4"
	3C	11 3/4"	5' - 5 3/4"	10 1/8"

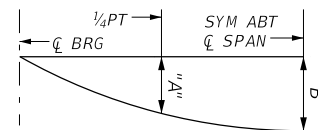
TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	TOTAL REINF STEEL ②
		SF	LF	LB
3	PHASE 3 STEP 1	1800	327.79	4141
	PHASE 4 STEP 2	7410	874.10	17043
4	PHASE 3 STEP 1	1958	357.77	4504
	PHASE 4 STEP 2	8060	954.05	18538
5	PHASE 3 STEP 1	1674	303.76	3850
	PHASE 4 STEP 2	6890	810.02	15847
BRIDGE TOTAL		27792	3627.47	63922

PHASE 4 - STEP 2 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
6	1L	-0.064	-0.092
	2L - 7L	-0.073	-0.104
	8L	-0.069	-0.098
7	1L	-0.109	-0.155
	2L - 7L	-0.124	-0.176
	8L	-0.117	-0.166
8	1L	-0.081	-0.116
	2L - 7L	-0.092	-0.131
	8L	-0.087	-0.124

PHASE 4 - STEP 2 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
6	1L	11 1/2"	5' - 5 1/2"	9 7/8"
	2L - 7L	11 1/2"	5' - 5 1/2"	10"
	8L	11 1/2"	5' - 5 1/2"	10"
7	1L	11 3/4"	5' - 5 3/4"	9 3/4"
	2L - 7L	11 3/4"	5' - 5 3/4"	10"
	8L	11 3/4"	5' - 5 3/4"	9 7/8"
8	1L	11 3/4"	5' - 5 3/4"	9 7/8"
	2L - 7L	11 3/4"	5' - 5 3/4"	10"
	8L	11 3/4"	5' - 5 3/4"	10"

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	TOTAL REINF STEEL ②
		SF	LF	LB
6	PHASE 3 STEP 1	1674	303.75	3850
	PHASE 4 STEP 2	6890	810.01	15847
7	PHASE 3 STEP 1	1895	345.75	4359
	PHASE 4 STEP 2	7800	922.01	17940
8	PHASE 3 STEP 1	1769	321.75	4068
	PHASE 4 STEP 2	7280	858.01	16744
BRIDGE TOTAL		27308	3561.28	62807

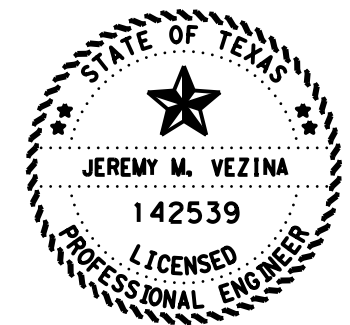
BAR TABLE	
BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY (EC = 5000 KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.

- ① THEORETICAL DIMENSION.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679



IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 WBML
 OVER LAUREL AVE

SHEET 2 OF 2

DN: JMV	CK: ZZ	DW: RF	CK: JMV
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1253	

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DATE: FILE:

STRUCTURE	DESIGNED GIRDERS									DEPRESSED STRAND PATTERN		CONCRETE		OPTIONAL DESIGN				LOAD RATING FACTORS			
	SPAN NO.	GIRDER NO.	GIRDER TYPE	PRESTRESSING STRANDS					TO END (in)			f'ci (ksi)	f'c (ksi)	DESIGN LOAD COMP STRESS (TOP ϵ) (SERVICE I) fct(ksi)	DESIGN LOAD TENSILE STRESS (BOT ϵ) (SERVICE III) fcb(ksi)	REQUIRED MINIMUM ULTIMATE MOMENT CAPACITY (STRENGTH I) (kip-ft)	LIVE LOAD DISTRIBUTION FACTOR		STRENGTH I		SERVICE III
				NON-STD STRAND PATTERN	TOTAL NO.	SIZE (in)	STRGTH fpu (ksi)	"e" \bar{c} (in)		"e" END (in)	Moment						Shear	Inv	Opp	Inv	
IH10 EBML OVER LAUREL AVE	1	4C	Tx54		48	0.6	270	18.51	11.51	8	50.5	6.100	7.000	4.516	-4.570	9717	0.910	0.910	1.30	1.80	1.03
	1	5C - 7C	Tx54		46	0.6	270	18.66	11.36	8	50.5	5.800	7.000	4.552	-4.468	8583	0.609	0.802	1.63	2.19	1.07
	1	1R - 9R	Tx54		44	0.6	270	18.83	11.55	8	48.5	5.600	7.200	4.414	-4.236	8083	0.582	0.767	1.77	2.35	1.17
	2	4C - 7C	Tx54		46	0.6	270	18.66	11.36	8	50.5	5.800	7.000	4.395	-4.429	9439	0.910	0.910	1.28	1.79	1.01
	2	1R - 9R	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.600	6.900	4.262	-4.099	7850	0.585	0.767	1.80	2.33	1.18
	3	4C - 7C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	5.800	3.651	-3.740	8067	0.910	0.910	1.34	1.79	1.07
	3	1R - 9R	Tx54		34	0.6	270	19.34	12.01	6	50.5	4.700	5.500	3.492	-3.390	6591	0.586	0.749	1.88	2.44	1.34
	4	4C - 7C	Tx54		46	0.6	270	18.66	11.36	8	50.5	5.800	6.600	4.323	-4.372	9321	0.910	0.910	1.33	1.82	1.04
	4	1R - 8R	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.600	6.900	4.230	-4.083	7845	0.596	0.779	1.78	2.34	1.19
	5	4C - 7C	Tx54		32	0.6	270	19.63	11.38	6	50.5	4.100	5.000	3.149	-3.258	7105	0.910	0.910	1.34	1.74	1.04
	5	1R - 8R	Tx54		30	0.6	270	19.81	12.21	6	44.5	4.000	5.000	2.993	-2.930	5773	0.591	0.741	1.80	2.34	1.34
	6	4C - 7C	Tx54		32	0.6	270	19.63	11.38	6	50.5	4.100	5.000	3.122	-3.237	7078	0.910	0.910	1.35	1.75	1.06
	6	1R - 7R	Tx54		30	0.6	270	19.81	12.21	6	44.5	4.000	5.000	3.083	-3.065	6113	0.638	0.799	1.67	1.67	1.18
	7	4C - 7C	Tx54		44	0.6	270	19.01	12.72	6	50.5	5.800	6.600	4.042	-4.115	8812	0.910	0.910	1.31	1.78	1.07
	7	1R - 7R	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.500	6.500	3.996	-3.893	7557	0.616	0.799	1.69	2.19	1.11
	8	4C - 7C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.400	3.503	-3.602	7802	0.910	0.910	1.31	1.76	1.04
8	1R - 7R	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.100	3.461	-3.409	6717	0.628	0.799	1.72	2.24	1.14	

NON-STANDARD STRAND PATTERNS	
PATTERN	STRAND ARRANGEMENT AT \bar{c} OF GIRDER

① Based on the following allowable stresses (ksi):

Compression = 0.65 f'ci

Tension = 0.24 $\sqrt{f'ci}$

Optional designs must likewise conform.

② Portion of full HL93.

DESIGN NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications. Load rated using Load and Resistance Factor Rating according to AASHTO Manual for Bridge Evaluation.

Optional designs for girders 120 feet or longer must have a calculated residual camber equal to or greater than that of the designed girder.

Prestress losses for the designed girders have been calculated for a relative humidity of 60 percent. Optional designs must likewise conform.

FABRICATION NOTES:

Provide Class H concrete.

Provide Grade 60 reinforcing steel bars.

Use low relaxation strands, each pretensioned to 75 percent of fpu.

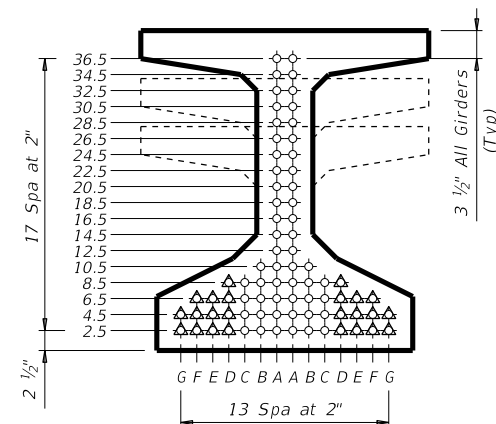
Strand debonding must comply with Item 424.4.2.2.4. Full-length debonded strands are only permitted in positions marked Δ . Double wrap full-length debonded strands in outer most position of each row.

When shown on this sheet, the Fabricator has the option of furnishing either the designed girder or an approved optional design. All optional design submittals must be signed, sealed and dated by a Professional Engineer registered in the State of Texas.

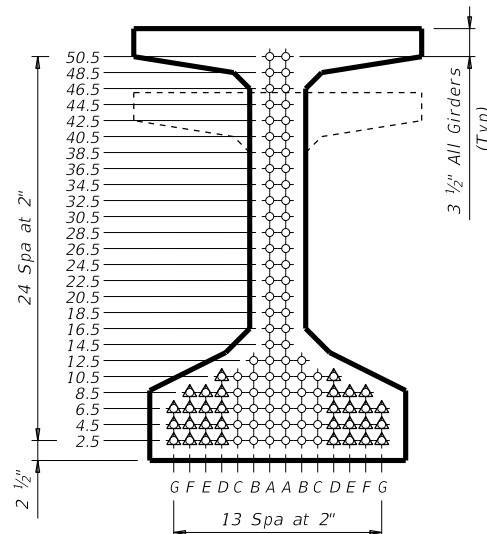
Seal cracks in girder ends exceeding 0.005" in width as directed by the Engineer. The fabricator is permitted to decrease the spacing of Bars R and S by providing additional bars to help limit crack width provided the decreased spacing results in no less than 1" clear between bars. The fabricator must take an approved corrective action if cracks greater than 0.005" form on a repetitive basis.

DEPRESSED STRAND DESIGNS:

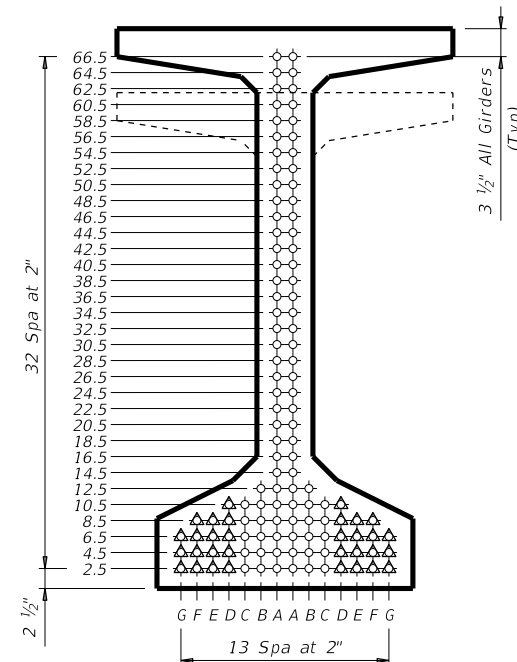
Locate strands for the designed girder as low as possible on the 2" grid system unless a non-standard strand pattern is indicated. Fill row "2.5", then row "4.5", then row "6.5", etc., beginning each row in the "A" position and working outward until the required number of strands is reached. All strands in the "A" position must be depressed, maintaining the 2" spacing so that, at the girder ends, the upper two strands are in the position shown in the table.



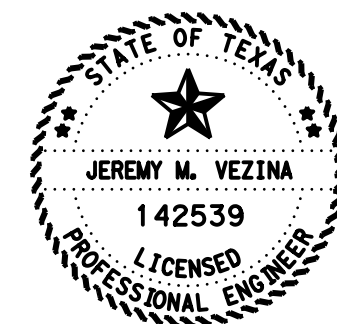
TYPE Tx28, Tx34 & Tx40



TYPE Tx46 & Tx54



TYPE Tx62 & Tx70



Jeremy Vezina 2-20-2024

HL93 LOADING

Texas Department of Transportation		Bridge Division Standard	
PRESTRESSED CONCRETE I-GIRDER DESIGNS (NON-STANDARD SPANS)			
IH10 EBML OVER LAUREL AVE IGND			
FILE: igndst1-22.dgn	DN: TxDOT	CK: TxDOT	OW: EFC
©TxDOT August 2017	CONT	SECT	JOB
REVISIONS	0028	13	135
10-19: Modified for depressed strands only	DIST	COUNTY	SHEET NO.
3-22: Added Load Rating	BMT	JEFFERSON	1254

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

DATE: FILE:

STRUCTURE	DESIGNED GIRDERS									DEPRESSED STRAND PATTERN		CONCRETE		OPTIONAL DESIGN				LOAD RATING FACTORS			
	SPAN NO.	GIRDER NO.	GIRDER TYPE	PRESTRESSING STRANDS					NO.	TO END (in)	RELEASE STRGTH (1) f'ci (ksi)	MINIMUM 28 DAY COMP STRGTH f'c (ksi)	DESIGN LOAD COMP STRESS (TOP @) (SERVICE I) fct(ksi)	DESIGN LOAD TENSILE STRESS (BOT @) (SERVICE III) fcb(ksi)	REQUIRED MINIMUM ULTIMATE MOMENT CAPACITY (STRENGTH I) (kip-ft)	LIVE LOAD DISTRIBUTION FACTOR (2)		STRENGTH I SERVICE III			
				NON-STD STRAND PATTERN	TOTAL NO.	SIZE (in)	STRGTH fpu (ksi)	"e" @ (in)								"e" END (in)	Moment	Shear	Inv	Opr	Inv
IH10 WBML OVER LAUREL AVE	1	1L - 8L	Tx54		44	0.6	270	18.83	11.55	8	48.5	5.600	6.800	4.487	-4.331	8331	0.613	0.808	1.64	2.21	1.06
	1	1C & 2C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	6.300	4.183	-3.877	7346	0.549	0.724	1.73	2.24	1.09
	1	3C	Tx54		40	0.6	270	19.11	12.51	6	50.5	5.300	6.200	4.005	-3.686	7009	0.664	0.706	1.48	1.92	1.07
	2	1L - 8L	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.600	6.500	4.312	-4.176	8073	0.616	0.808	1.67	2.24	1.09
	2	1C & 2C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	6.200	4.019	-3.737	7116	0.551	0.724	1.69	2.19	1.07
	2	3C	Tx54		38	0.6	270	19.22	13.22	6	44.5	5.200	6.100	4.040	-3.951	7913	0.664	0.706	1.43	1.86	1.01
	3	1L - 8L	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.300	3.573	-3.510	6913	0.632	0.808	1.65	2.15	1.05
	3	1C & 2C	Tx54		30	0.6	270	19.81	12.21	6	44.5	4.000	5.000	3.333	-3.140	6095	0.566	0.724	1.66	2.16	1.13
	3	3C	Tx54		32	0.6	270	19.63	11.38	6	50.5	4.100	5.000	3.349	-3.305	6708	0.664	0.706	1.48	1.92	1.07
	4	1L - 8L	Tx54		40	0.6	270	19.11	13.71	6	42.5	5.500	6.500	4.242	-4.113	7964	0.618	0.808	1.65	2.18	1.03
	4	1C & 2C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.900	3.954	-3.681	7020	0.553	0.724	1.72	2.23	1.10
	4	3C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	5.900	3.974	-3.890	7800	0.664	0.706	1.46	1.90	1.03
	5	1L - 8L	Tx54		28	0.6	270	20.01	14.29	4	44.5	4.000	5.000	3.080	-3.060	6120	0.645	0.808	1.51	1.96	1.05
	5	1C & 2C	Tx54		24	0.6	270	20.17	18.17	4	16.5	4.000	5.000	2.875	-2.739	5397	0.577	0.724	1.44	1.87	1.10
	5	3C	Tx54		26	0.6	270	20.08	16.39	4	28.5	4.000	5.000	2.887	-2.870	5888	0.664	0.706	1.37	1.78	1.09
	6	1L - 8L	Tx54		28	0.6	270	20.01	14.29	4	44.5	4.000	5.000	3.082	-3.062	6122	0.645	0.808	1.51	1.96	1.05
	6	1C & 2C	Tx54		24	0.6	270	20.17	18.17	4	16.5	4.000	5.000	2.877	-2.740	5399	0.577	0.724	1.44	1.87	1.10
	6	3C	Tx54		26	0.6	270	20.08	16.39	4	28.5	4.000	5.000	2.888	-2.872	5889	0.664	0.706	1.37	1.78	1.09
	7	1L - 8L	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	6.000	3.976	-3.873	7544	0.623	0.808	1.67	2.21	1.05
	7	1C & 2C	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.500	3.708	-3.466	6652	0.558	0.724	1.73	2.24	1.13
	7	3C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.500	3.726	-3.657	7364	0.664	0.706	1.49	1.94	1.07
	8	1L - 8L	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.100	3.460	-3.405	6724	0.635	0.808	1.73	2.25	1.14
	8	1C - 3C	Tx54		28	0.6	270	20.01	14.29	4	44.5	4.000	5.000	3.243	-3.204	6512	0.664	0.724	1.42	1.85	1.04

NON-STANDARD STRAND PATTERNS	
PATTERN	STRAND ARRANGEMENT AT @ OF GIRDER

① Based on the following allowable stresses (ksi):

Compression = 0.65 f'ci

Tension = 0.24 √ f'ci

Optional designs must likewise conform.

② Portion of full HL93.

DESIGN NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications. Load rated using Load and Resistance Factor Rating according to AASHTO Manual for Bridge Evaluation.

Optional designs for girders 120 feet or longer must have a calculated residual camber equal to or greater than that of the designed girder.

Prestress losses for the designed girders have been calculated for a relative humidity of 60 percent. Optional designs must likewise conform.

FABRICATION NOTES:

Provide Class H concrete.

Provide Grade 60 reinforcing steel bars.

Use low relaxation strands, each pretensioned to 75 percent of fpu.

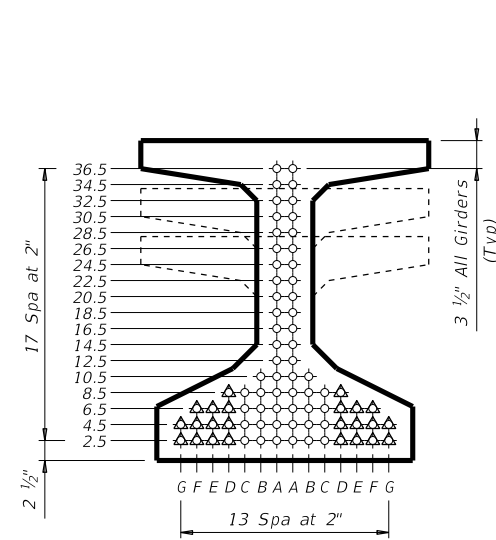
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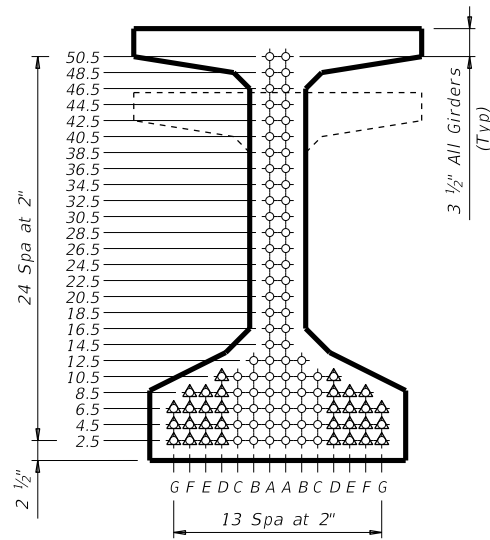
Seal cracks in girder ends exceeding 0.005" in width as directed by the Engineer. The fabricator is permitted to decrease the spacing of Bars R and S by providing additional bars to help limit crack width provided the decreased spacing results in no less than 1" clear between bars. The fabricator must take an approved corrective action if cracks greater than 0.005" form on a repetitive basis.

DEPRESSED STRAND DESIGNS:

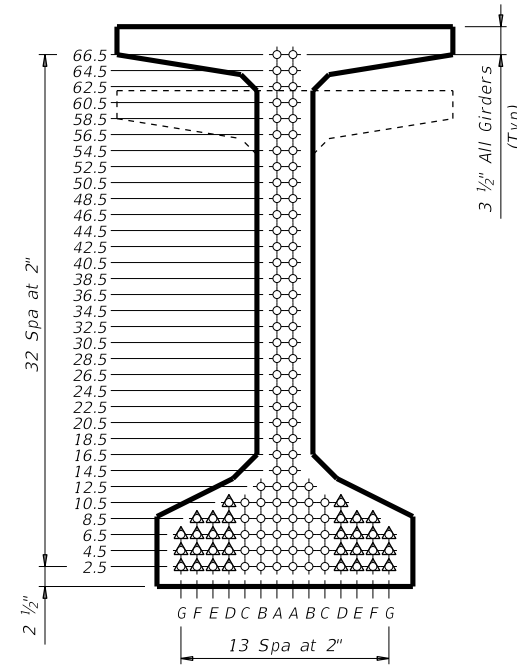
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TYPE Tx28, Tx34 & Tx40

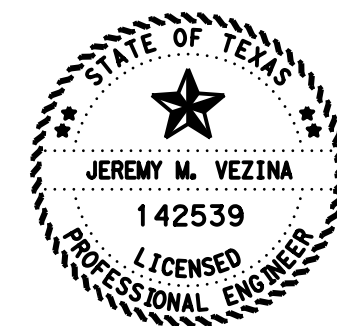


TYPE Tx46 & Tx54



TYPE Tx62 & Tx70

HL93 LOADING



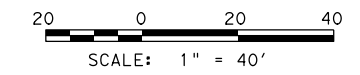
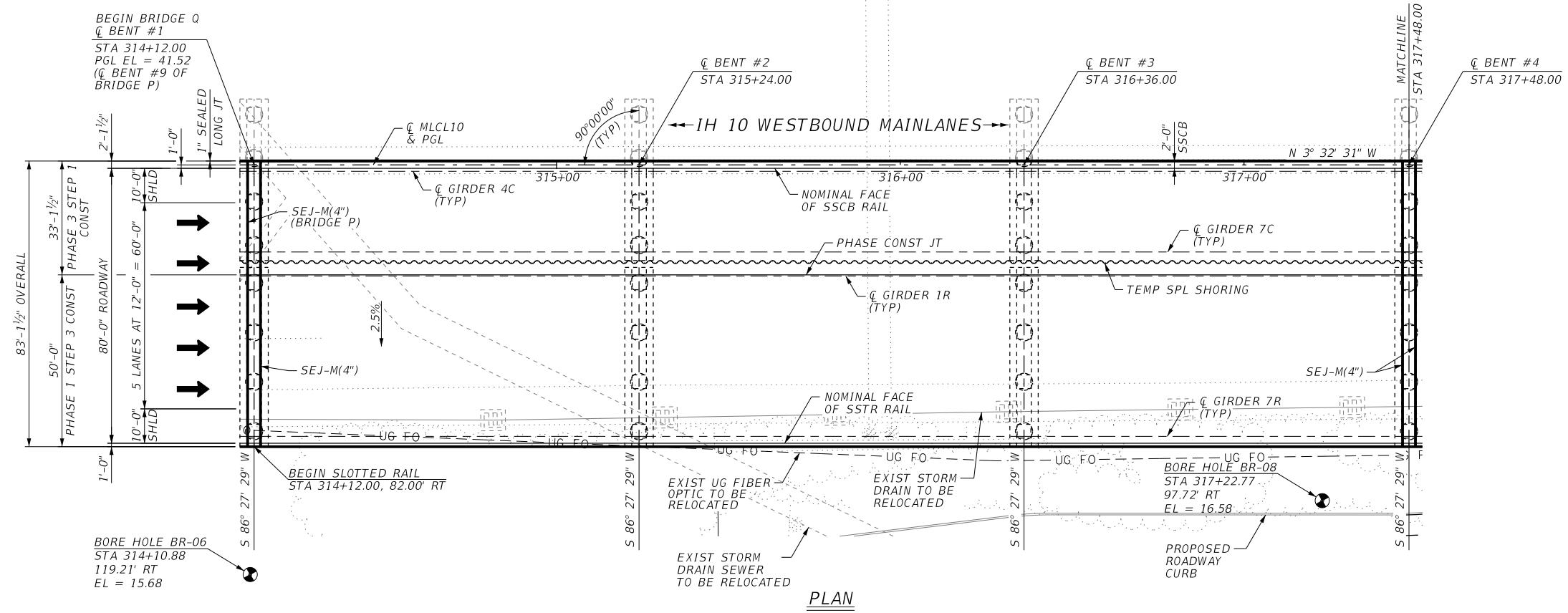
Jeremy Vezina 2-20-2024

Texas Department of Transportation		Bridge Division Standard	
PRESTRESSED CONCRETE I-GIRDER DESIGNS (NON-STANDARD SPANS)			
IH10 WBML OVER LAUREL AVE IGND			
FILE: igndsts1-22.dgn	DN: TxDOT	CK: TxDOT	OW: EFC
©TxDOT August 2017	CONT	SECT	JOB
REVISIONS	0028	13	135
10-19: Modified for depressed strands only	DIST	COUNTY	SHEET NO.
3-22: Added Load Rating.	BMT	JEFFERSON	1255

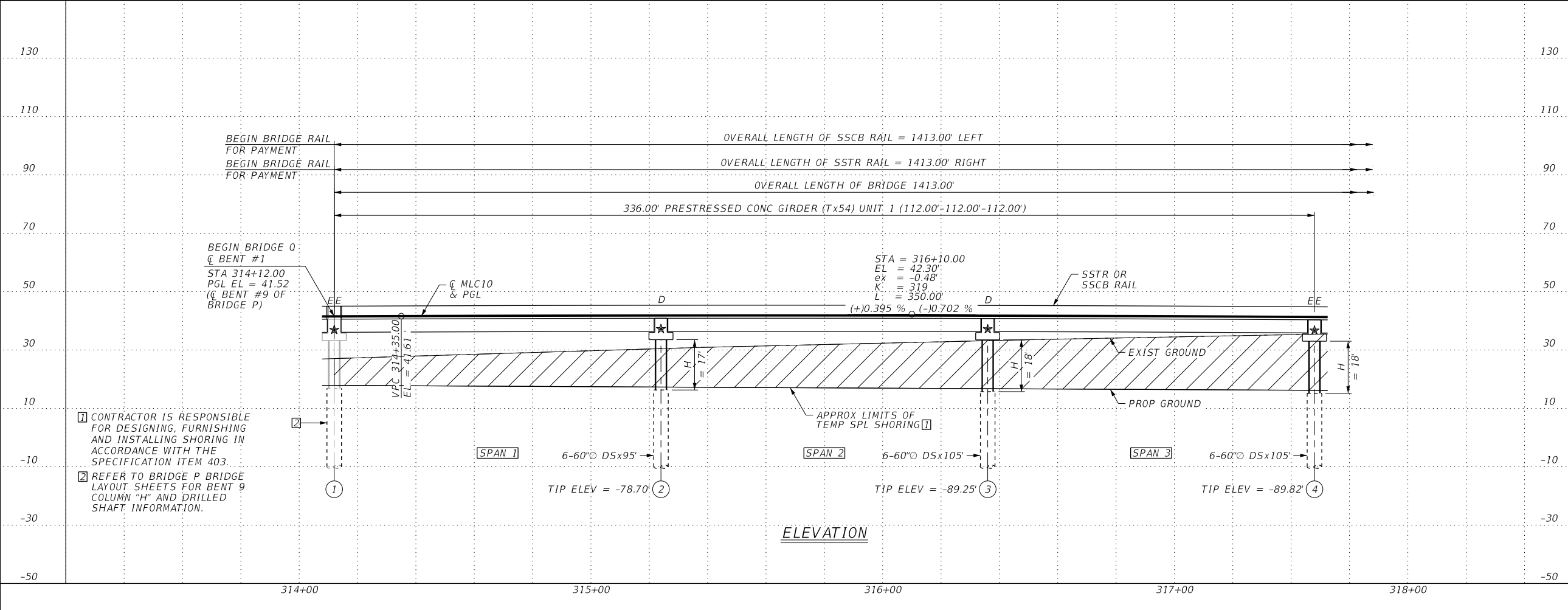
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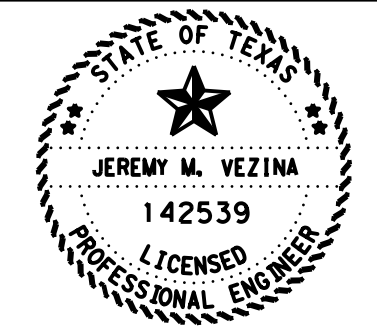
- GENERAL NOTES:**
- DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATION, 9TH EDITION, 2020 AND TxDOT BRIDGE DESIGN MANUAL (JAN 2023).
 - SLAB RESTRAINT CONDITIONS:
 D-DENOTES DOWELED SLAB
 E-DENOTES SLAB EXPANSION
 "SEE IGMS (MOD) STANDARDS FOR DETAILS"
 - ⊙ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.
 - THE "H" VALUES SHOWN ARE ESTIMATED COLUMN HEIGHTS. CONTRACTOR IS RESPONSIBLE FOR CALCULATING ACTUAL COLUMN HEIGHTS BASED ON FIELD CONDITIONS.
 - UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.
 - SEE TRAFFIC CONTROL PLANS FOR CONSTRUCTION PHASING.
 - EXISTING BRIDGES AT CALDER AVE & NORTH ST TO BE REPLACED ARE TWO 3-SPAN-230' LONGx64' WIDE AND 3-SPAN-230' LONGx70' WIDE CONCRETE C-BEAM BRIDGE ON BATTERED PILE FOUNDATIONS. NBI:20-124-0-0028-13-224 AND NBI:20-124-0-0028-13-226.
 - FOR MORE DETAILS ON SUPERELEVATION TRANSITION ZONES, SEE ROADWAY PLAN SHEETS.
 - DECK DRAIN OFFSET MEASURED TO CENTER OF DRAIN. SLOTTED RAIL OFFSET MEASURED TO BACK FACE OF RAIL. SEE QUANTITY SUMMARY SHEET FOR SLOTTED RAIL AND NON-SLOTTED RAIL OVERALL LENGTHS.



FUNCTIONAL CLASS =
 PRINCIPAL ARTERIAL (INTERSTATE)
 DESIGN SPEED = 70 MPH
 ADT (2025) = 66,550
 ADT (2045) = 89,100
 ADT (2055) = 100,250



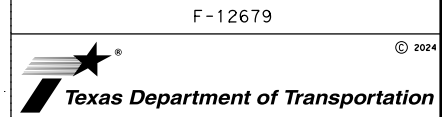
- CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH THE SPECIFICATION ITEM 403.
- REFER TO BRIDGE P BRIDGE LAYOUT SHEETS FOR BENT 9 COLUMN "H" AND DRILLED SHAFT INFORMATION.



Jeremy Vezina 2-20-2024

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

VOLKERT
 F-12679

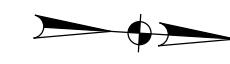


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 EBLM OVER CALDER AVE
 NBI: 20-124-0-0028-13-533
 BRIDGE Q**

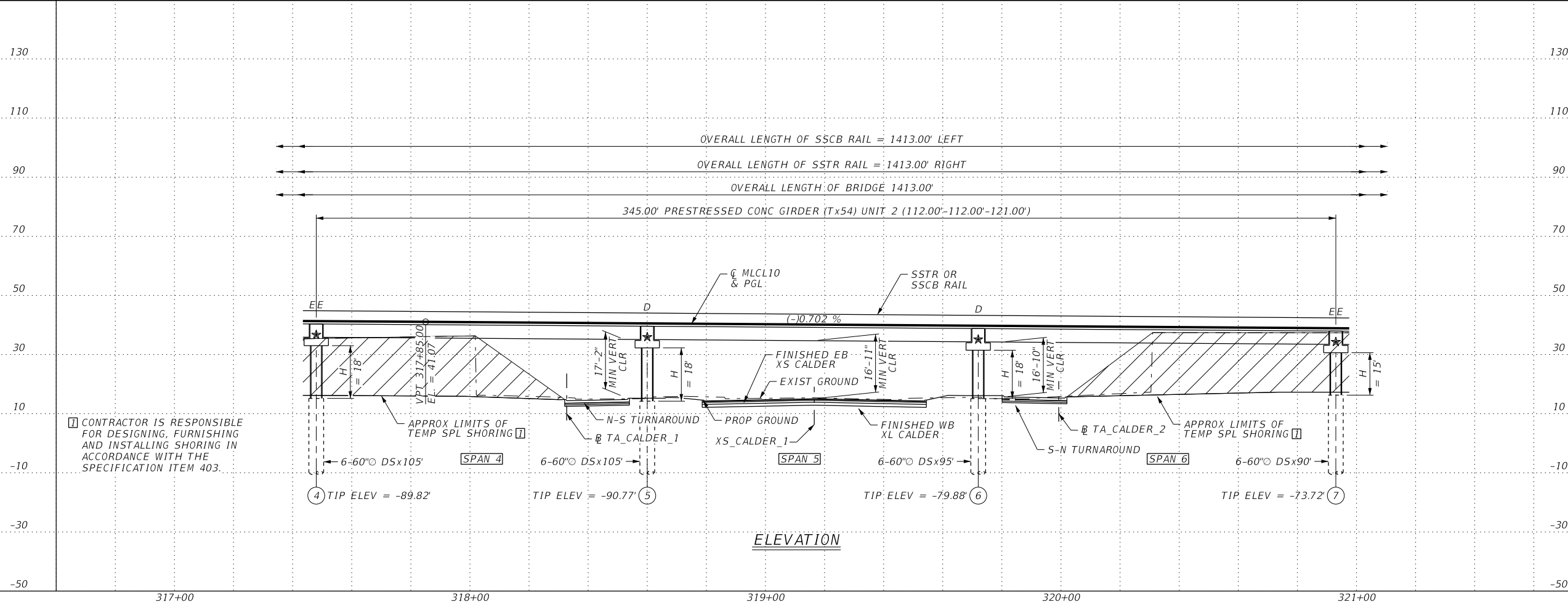
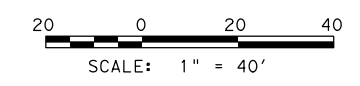
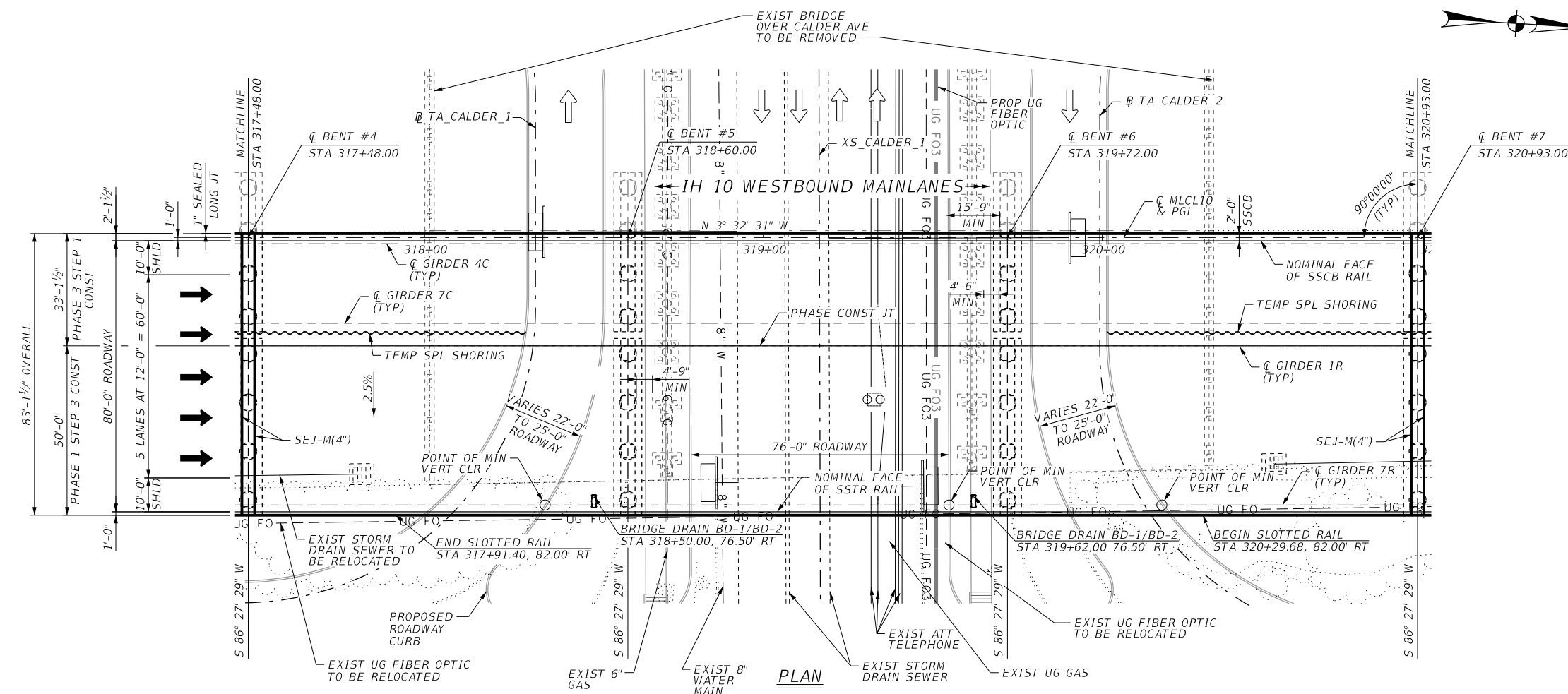
SHEET 1 OF 4

DW:	JMV	CK:	FB	DW:	MTM	CK:	FB
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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1256		

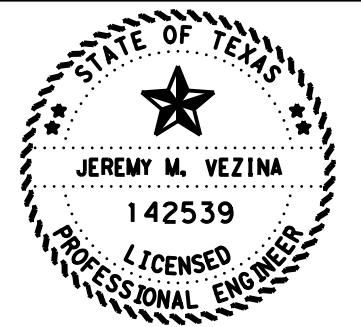
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NOTES:
 SEE SHEET 1 OF 4 FOR GENERAL NOTES.



CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH THE SPECIFICATION ITEM 403.



Jeremy Vezina 2-20-2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

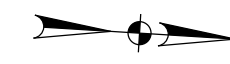


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 EBLM OVER CALDER AVE
 NBI: 20-124-0-0028-13-533
 BRIDGE Q**

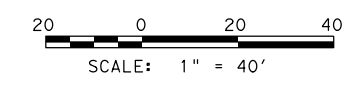
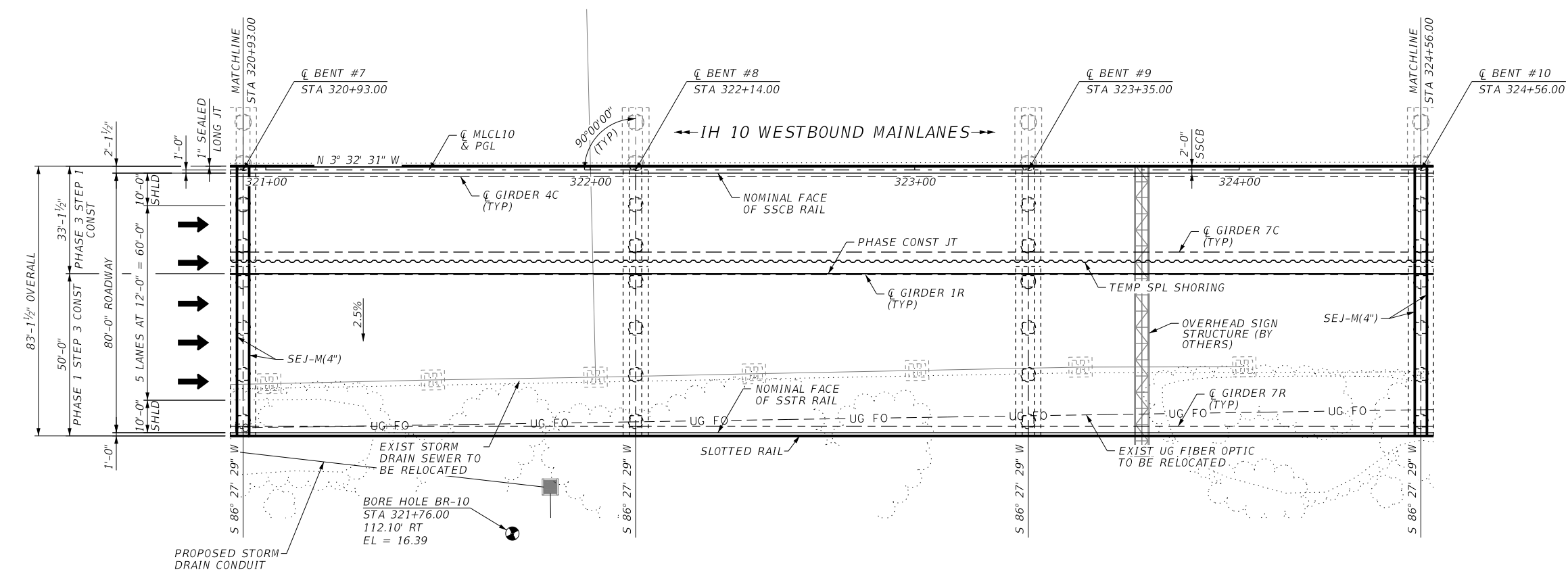
SHEET 2 OF 4

DW: JMV	CK: FB	DW: MTM	CK: FB
CONT: 0028	SECT: 13	JOB: 135	HIGHWAY: IH 10
DIST: BMT	COUNTY: JEFFERSON	SHEET NO.: 1257	

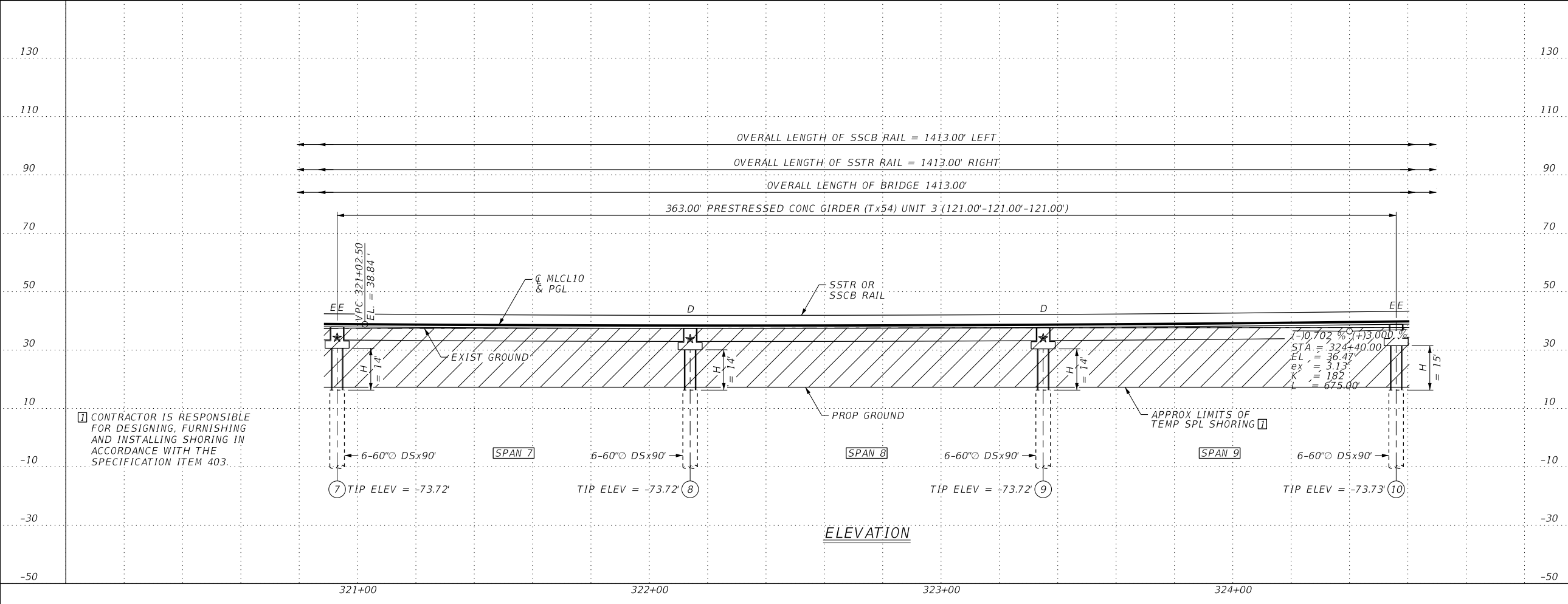
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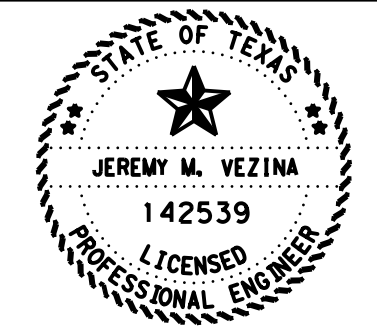
NOTES:
 SEE SHEET 1 OF 4 FOR GENERAL NOTES.



PLAN



ELEVATION



Jeremy Vezina 2-20-2024

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75



**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 EBML OVER CALDER AVE
 NBI: 20-124-0-0028-13-533
 BRIDGE Q**

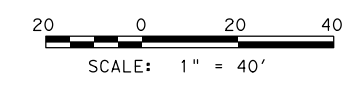
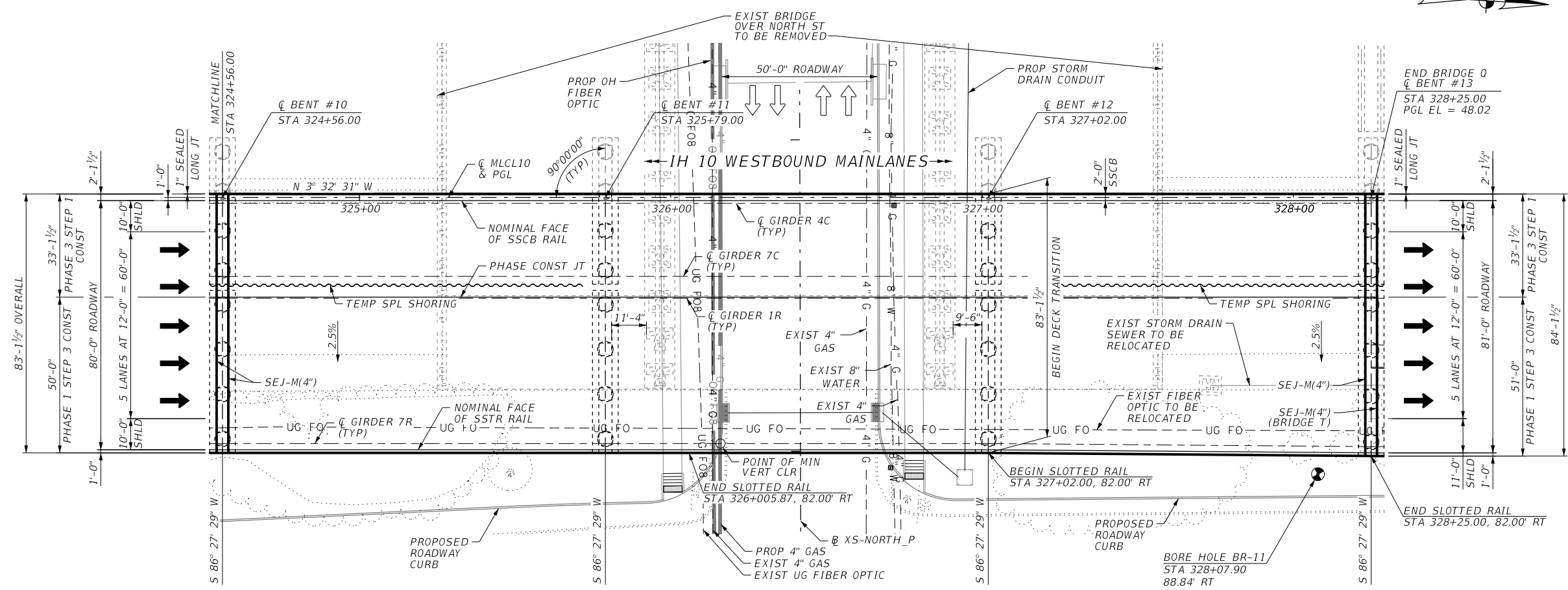
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1258	

SHEET 3 OF 4

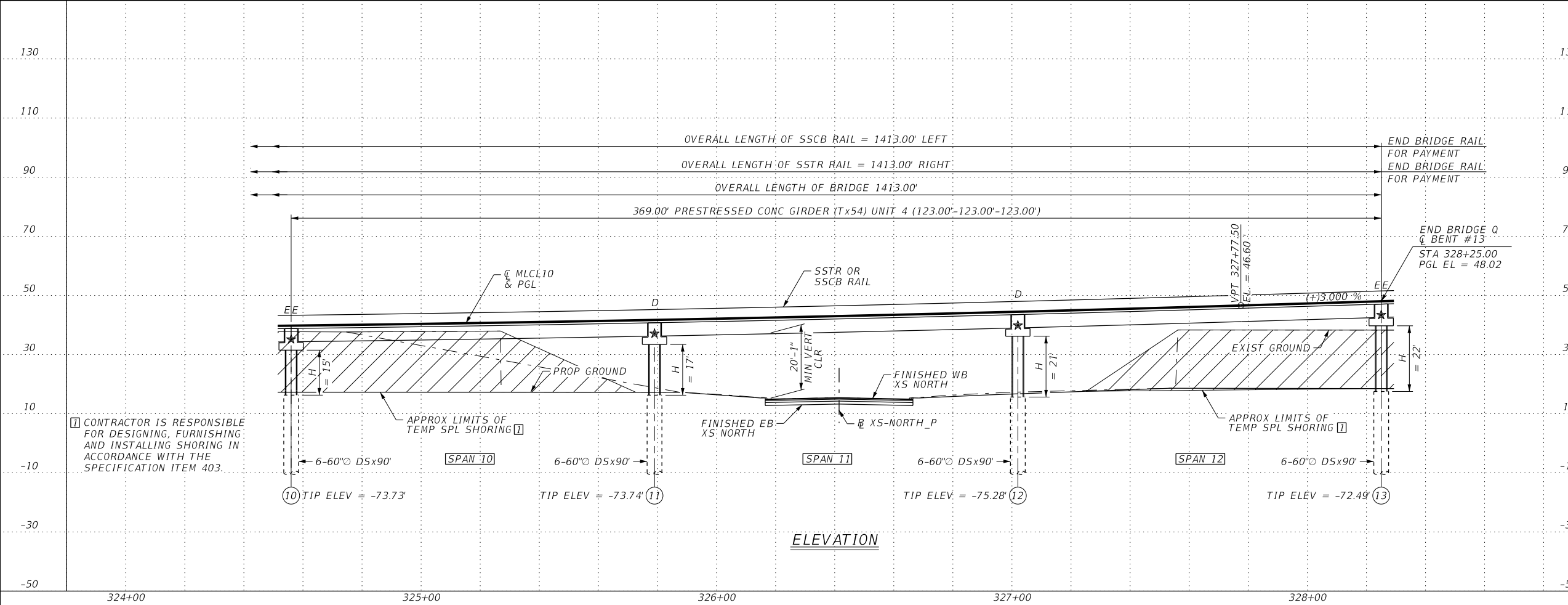
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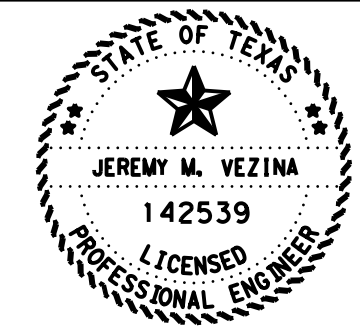
NOTES:
 SEE SHEET 1 OF 4 FOR GENERAL NOTES.



PLAN



ELEVATION



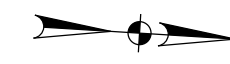
Jeremy Vezina 2-20-2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75



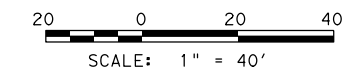
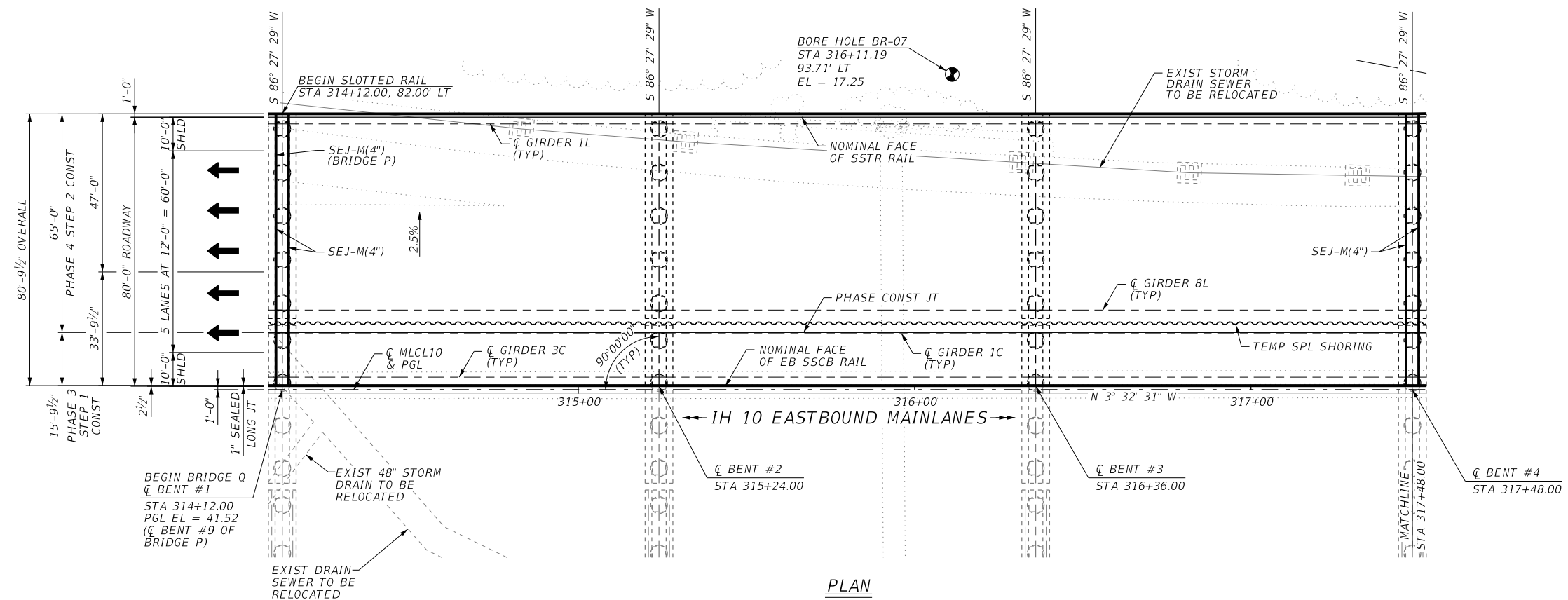
IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 EBML OVER CALDER AVE
 NBI: 20-124-0-0028-13-533
 BRIDGE Q
 SHEET 4 OF 4

DW:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1259		

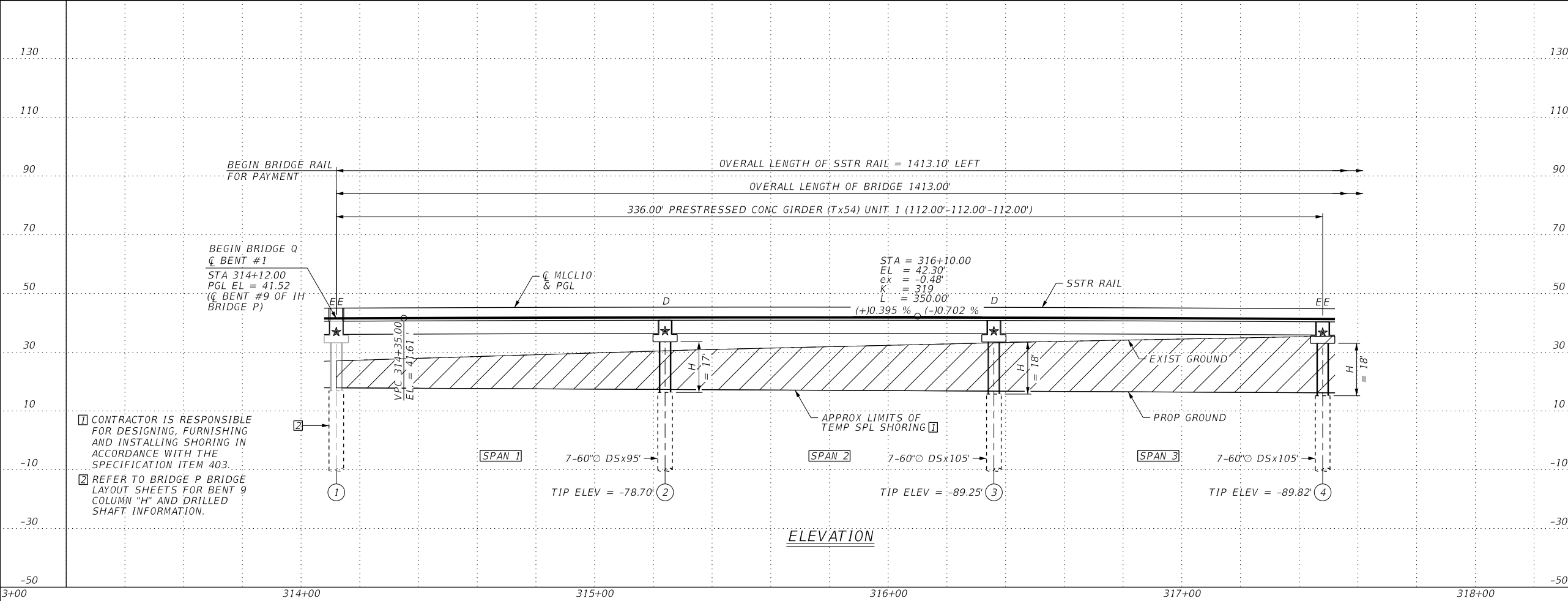
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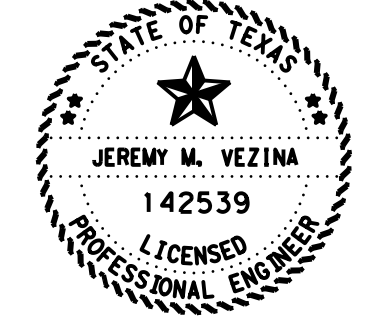
- GENERAL NOTES:**
- DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATION, 9TH EDITION, 2020 AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 - SLAB RESTRAINT CONDITIONS:
 D-DENOTES DOWELED SLAB
 E-DENOTES SLAB EXPANSION
 "SEE IGMS (MOD) STANDARD FOR DETAILS"
 - ⊙ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.
 - THE "H" VALUES SHOWN ARE ESTIMATED COLUMN HEIGHTS. CONTRACTOR IS RESPONSIBLE FOR CALCULATING ACTUAL COLUMN HEIGHTS BASED ON FIELD CONDITIONS.
 - UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.
 - SEE TRAFFIC CONTROL PLANS FOR CONSTRUCTION PHASING.
 - EXISTING BRIDGES AT CALDER AVE & NORTH ST TO BE REPLACED ARE TWO 3-SPAN-230' LONGX64' WIDE AND 3-SPAN-230' LONGX70' WIDE CONCRETE C-BEAM BRIDGE ON BATTERED PILE FOUNDATIONS. NBI:20-124-0-0028-13-224 AND NBI:20-124-0-0028-13-226.
 - FOR MORE DETAILS ON SUPERELEVATION TRANSITION ZONES, SEE ROADWAY PLAN SHEETS.
 - DECK DRAIN OFFSET MEASURED TO CENTER OF DRAIN. SLOTTED RAIL OFFSET MEASURED TO BACK FACE OF RAIL. SEE QUANTITY SUMMARY SHEET FOR SLOTTED RAIL AND NON-SLOTTED RAIL OVERALL LENGTHS.



FUNCTIONAL CLASS = PRINCIPAL ARTERIAL (INTERSTATE)
 DESIGN SPEED = 70 MPH
 ADT (2025) = 66,900
 ADT (2045) = 89,500
 ADT (2055) = 100,800



- CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH THE SPECIFICATION ITEM 403.
- REFER TO BRIDGE P BRIDGE LAYOUT SHEETS FOR BENT 9 COLUMN "H" AND DRILLED SHAFT INFORMATION.



Jeremy Vezina 2-20-2024

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.84

VOLKERT
 F-12679

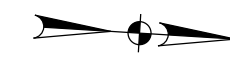


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 WBML OVER CALDER AVE
 NBI: 20-124-0-0028-13-534
 BRIDGE 0**

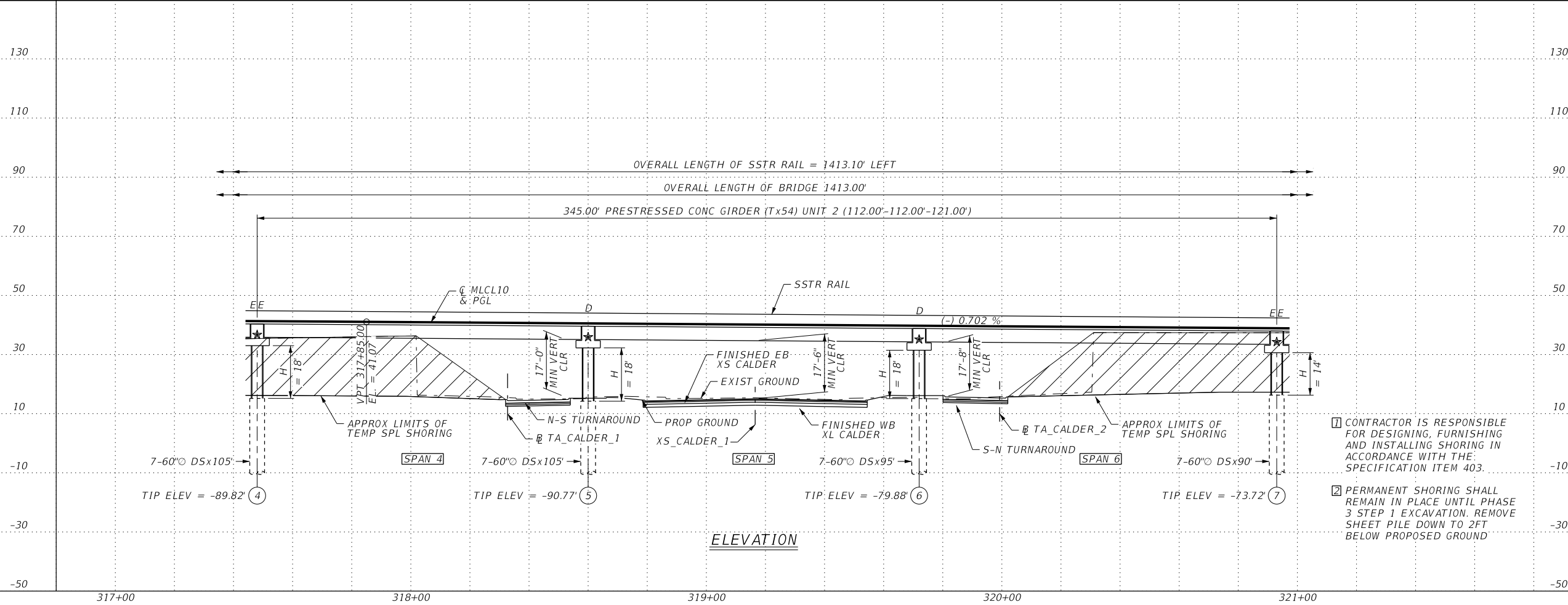
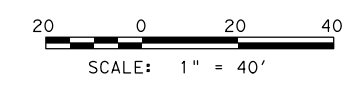
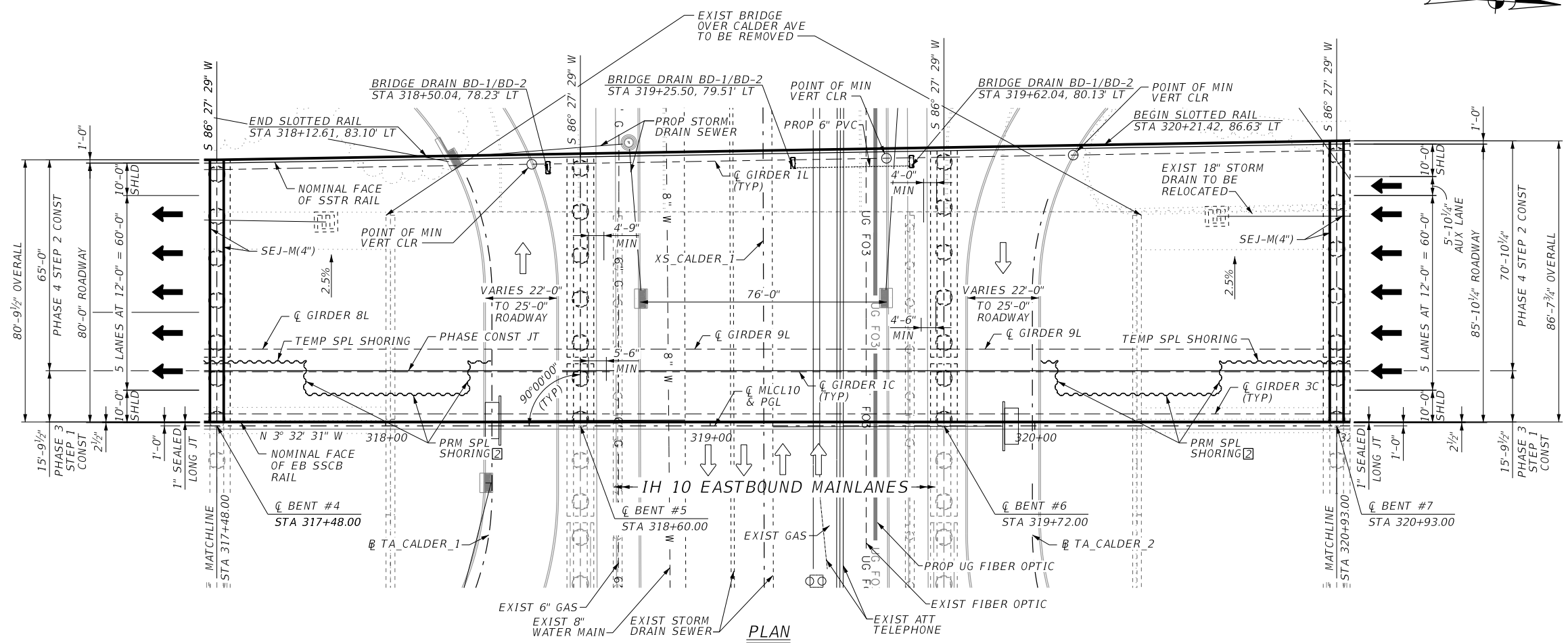
SHEET 1 OF 4

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1260

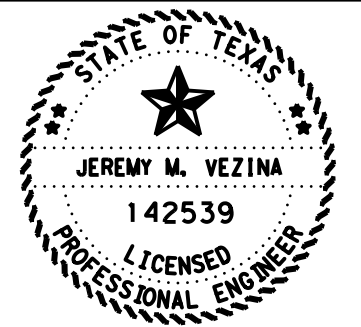
DATE: 20-FEB-2024 15:36
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NOTES:
 SEE SHEET 1 OF 4 FOR GENERAL NOTES.



- 1 CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH THE SPECIFICATION ITEM 403.
- 2 PERMANENT SHORING SHALL REMAIN IN PLACE UNTIL PHASE 3 STEP 1 EXCAVATION. REMOVE SHEET PILE DOWN TO 2FT BELOW PROPOSED GROUND



Jeremy Vezina 2-20-2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.84

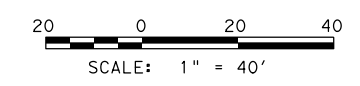
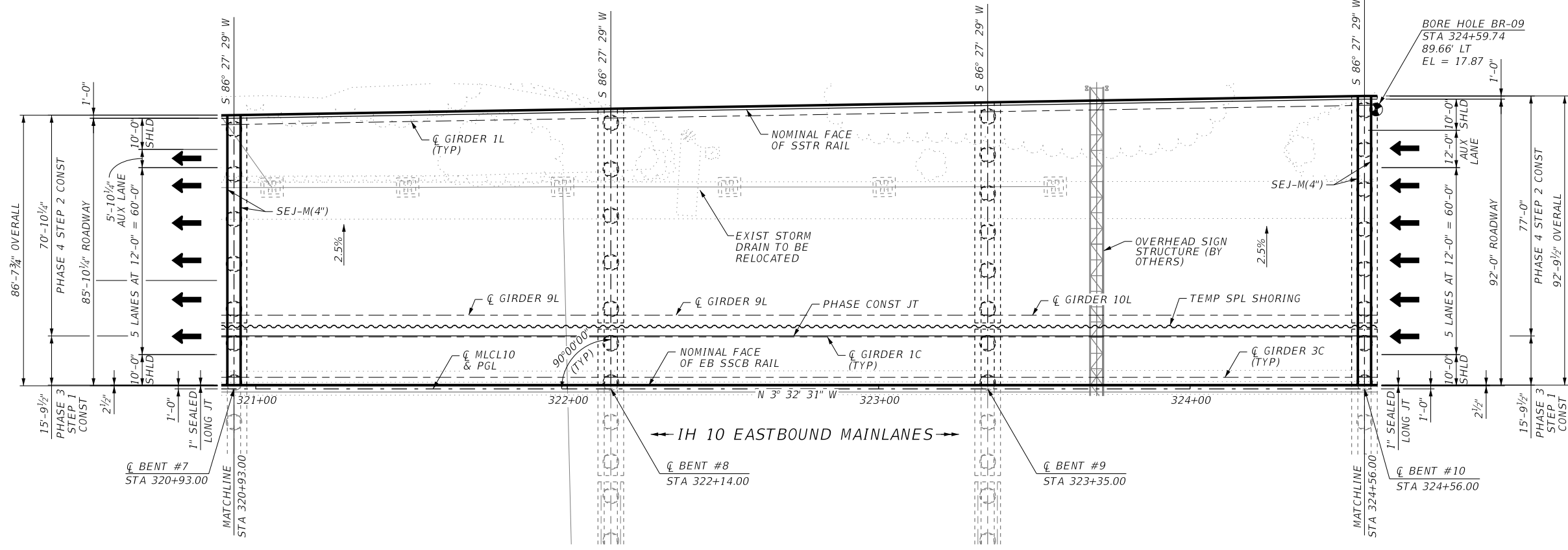


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 WBML OVER CALDER AVE
 NBI: 20-124-0-0028-13-534
 BRIDGE Q**

SHEET 2 OF 4	
DIST	COUNTY
BMT	JEFFERSON
CONTRACT	SECTION
0028	13
JOB	HIGHWAY
135	IH 10
SHEET NO.	
1261	

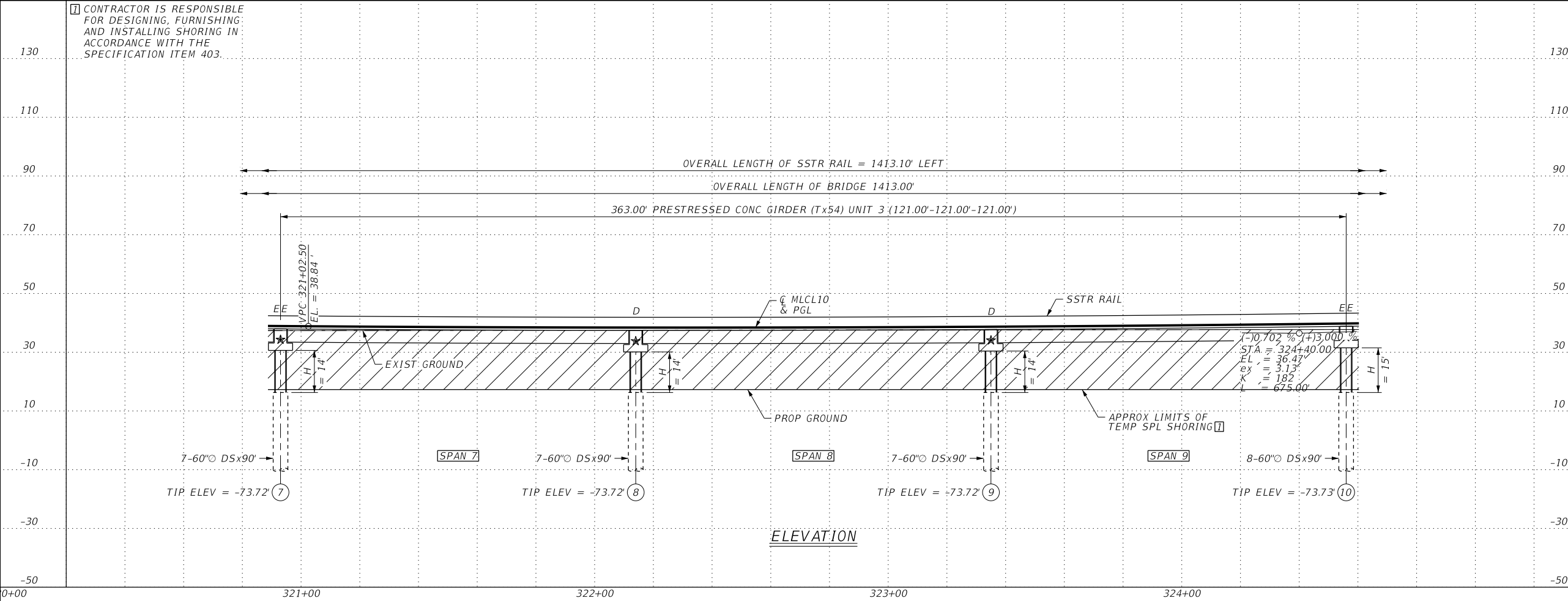
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NOTES:
 SEE SHEET 1 OF 4 FOR GENERAL NOTES.

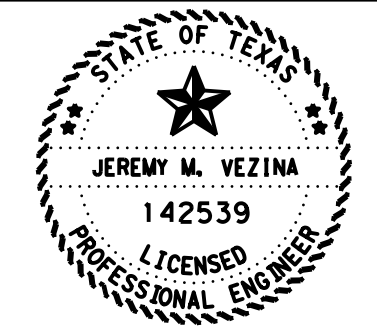


PLAN

CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH THE SPECIFICATION ITEM 403.



ELEVATION



Jeremy Veжина 2-20-2024

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.84



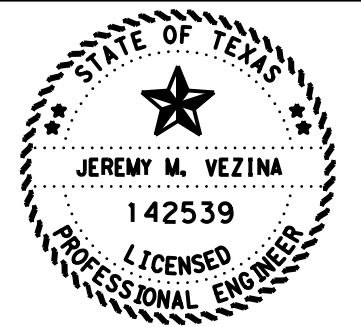
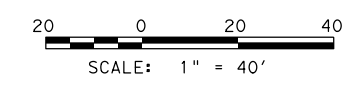
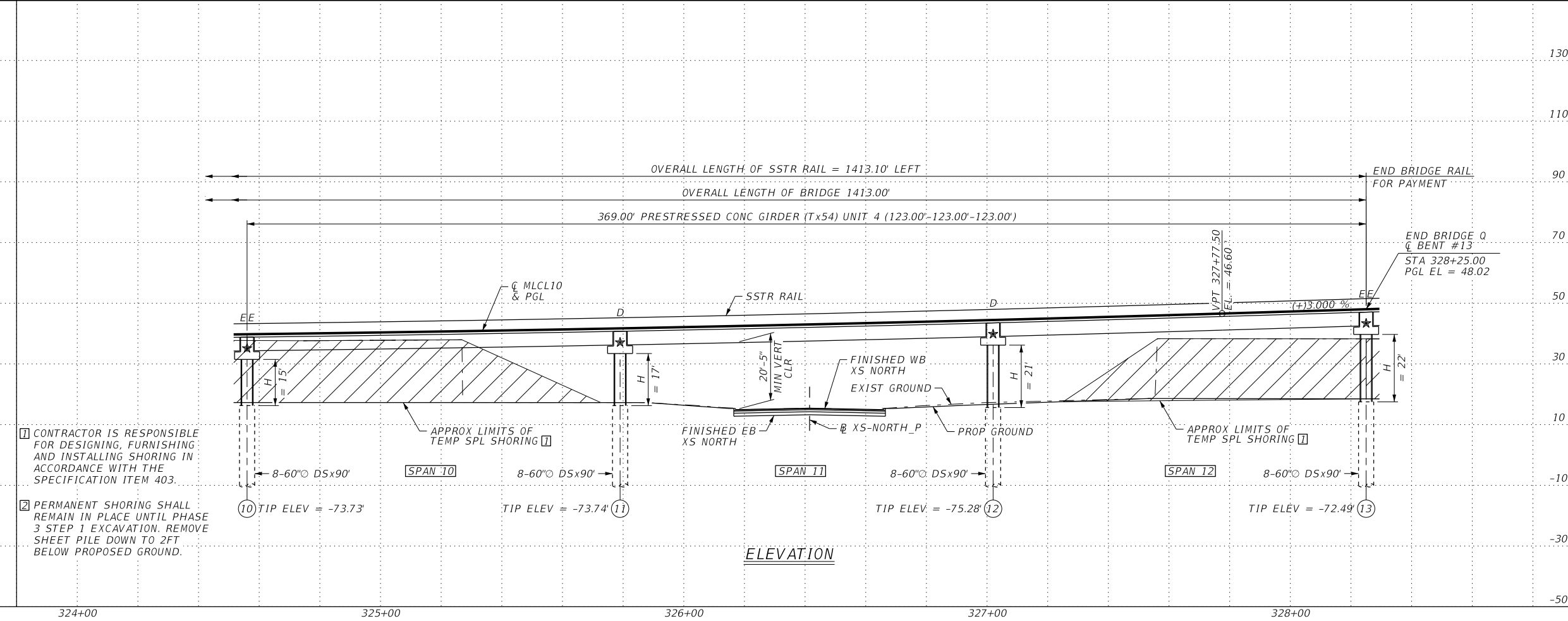
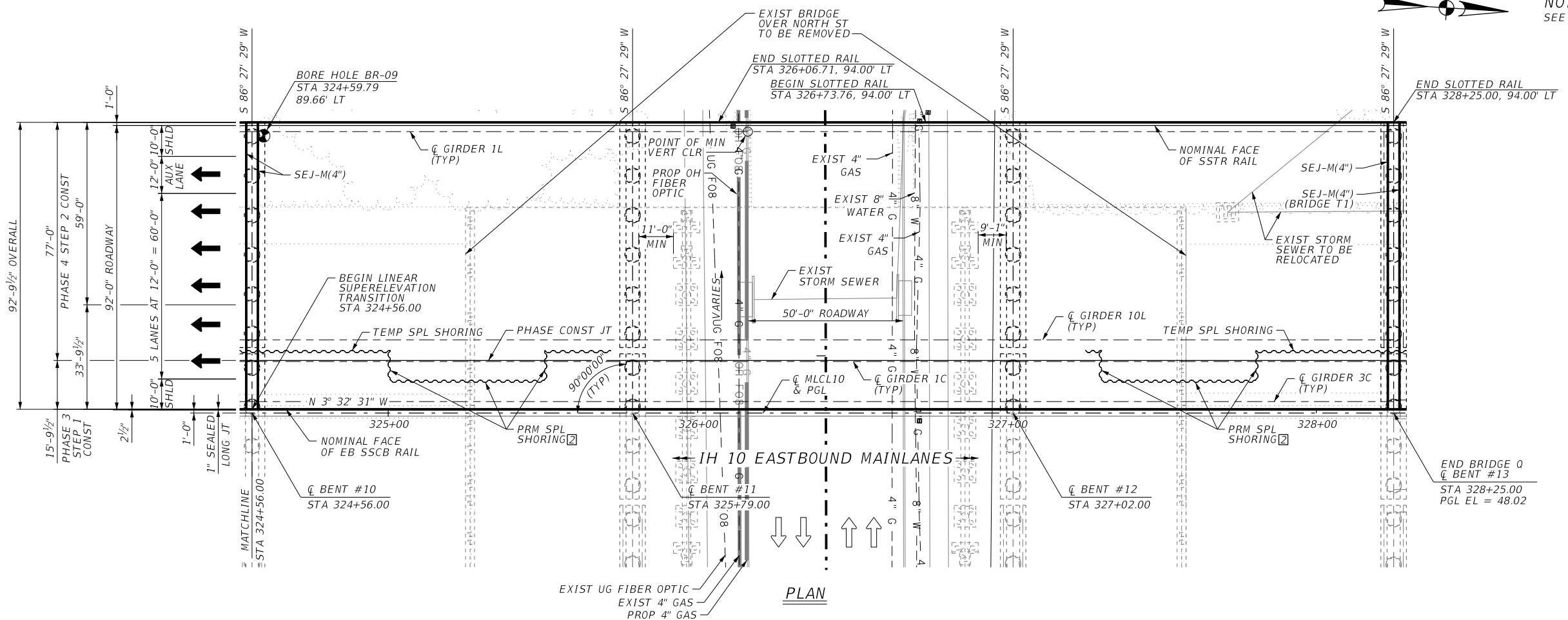
IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 WBL OVER CALDER AVE
 NBI: 20-124-0-0028-13-534
 BRIDGE Q

SHEET 3 OF 4

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1262

DATE: 20-FEB-2024 19:09
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NOTES:
 SEE SHEET 1 OF 4 FOR GENERAL NOTES.



Jeremy Vezina 2-20-2024

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.01/1.84

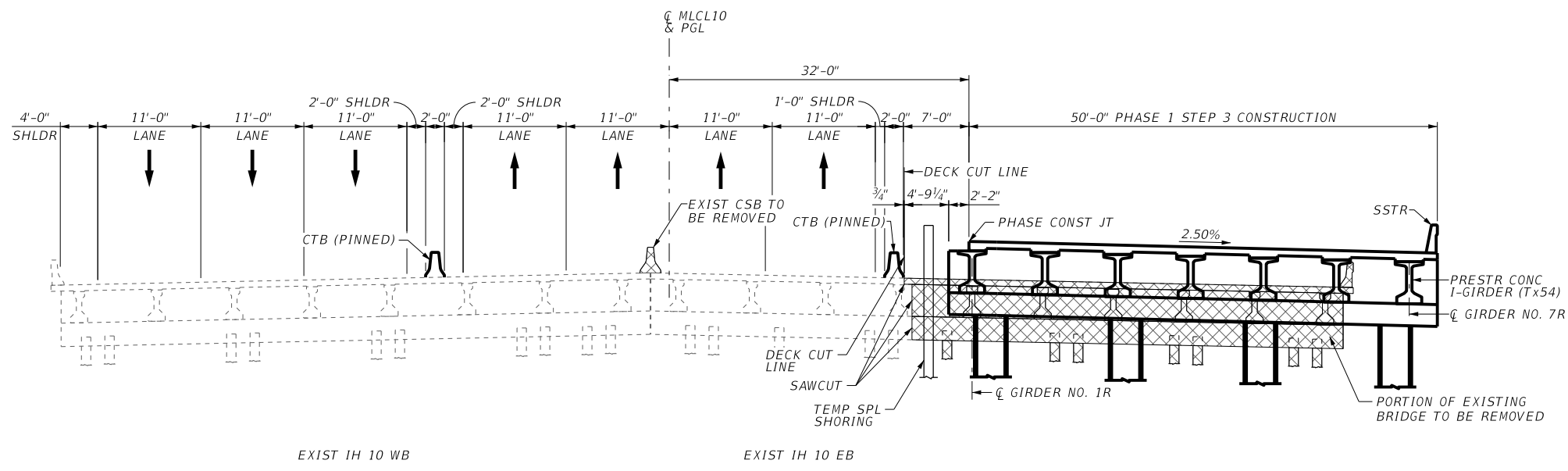


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH10 WBML OVER CALDER AVE
 NBI: 20-124-0-0028-13-534
 BRIDGE Q**

SHEET 4 OF 4

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1263

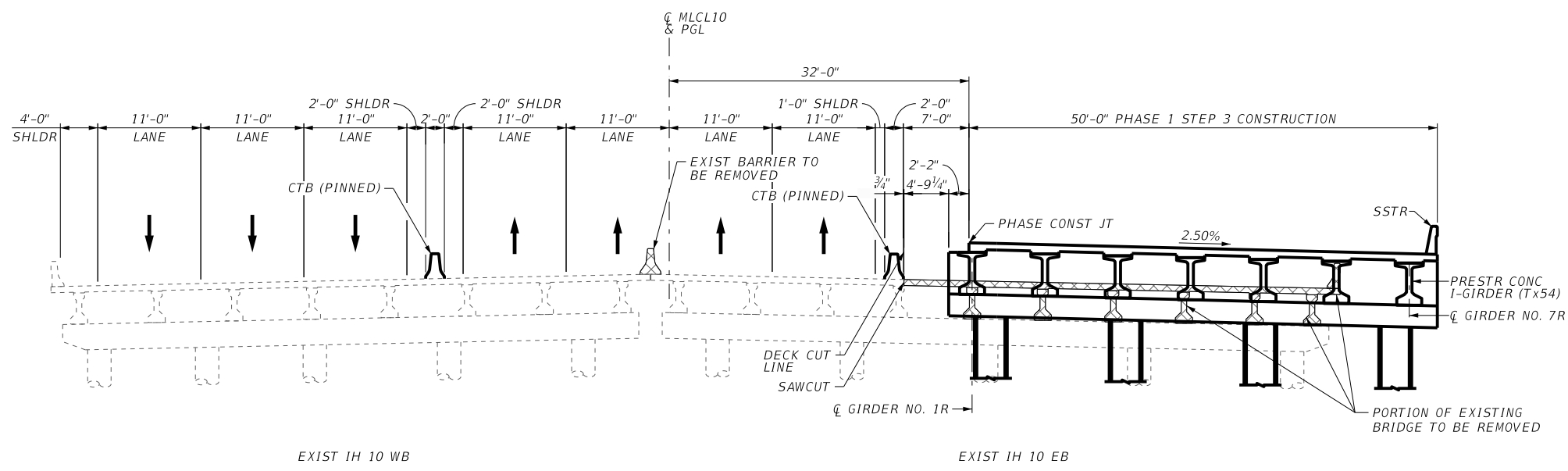
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EXIST IH 10 WB

EXIST IH 10 EB

PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 4)
 (EXISTING CALDER AVE ABUTMENT 1 SHOWN)



EXIST IH 10 WB

EXIST IH 10 EB

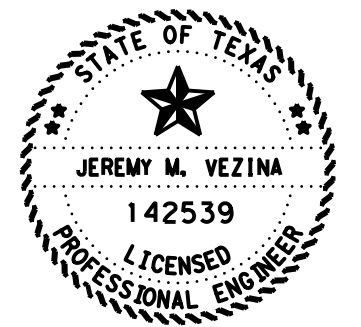
PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 4)
 (EXISTING CALDER AVE BENT 2 BK SHOWN)

LEGEND

CONSTRUCTION THIS PHASE

STRUCTURE TO BE REMOVED

- NOTES:**
1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING BRIDGE DIMENSIONS AND ELEVATIONS PRIOR TO ANY FABRICATION AND CONSTRUCTION.
 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
 3. SEE TRAFFIC CONTROL PLAN SHEETS FOR ADDITIONAL STEPS, TEMPORARY SHOULDER WIDTHS, CTB RAIL LOCATIONS, LENGTHS & QUANTITIES WITHIN LIMITS OF BENTS 1-13, AND INFORMATION NOT SHOWN HERE.
 4. RETROFITTED EXISTING MSE WALLS WITH SOLDIER PILES LOCATED BETWEEN EAST AND WEST OF NORTH ST AND HARRISON ST ALONG EXISTING IH10. AS-BUILTS OF THE SOLDIER PILES AND TIED BACK ANCHORS ARE NOT AVAILABLE. CONTRACTOR SHALL USE EXTRA CAUTION TO AVOID THE ANCHOR TIED BACKS DURING PHASING EXCAVATION. NOTIFY THE ENGINEER AND GEOTECHNICAL ENGINEER IF ANY INTERFERENCE BETWEEN PROPOSED FOOTINGS/ FOUNDATIONS AND SOLDIER PILES OR PRESTRESSED GROUND ANCHORS ARE ENCOUNTERED DURING CONSTRUCTION.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679

Texas Department of Transportation


**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**


SHEET 1 OF 15

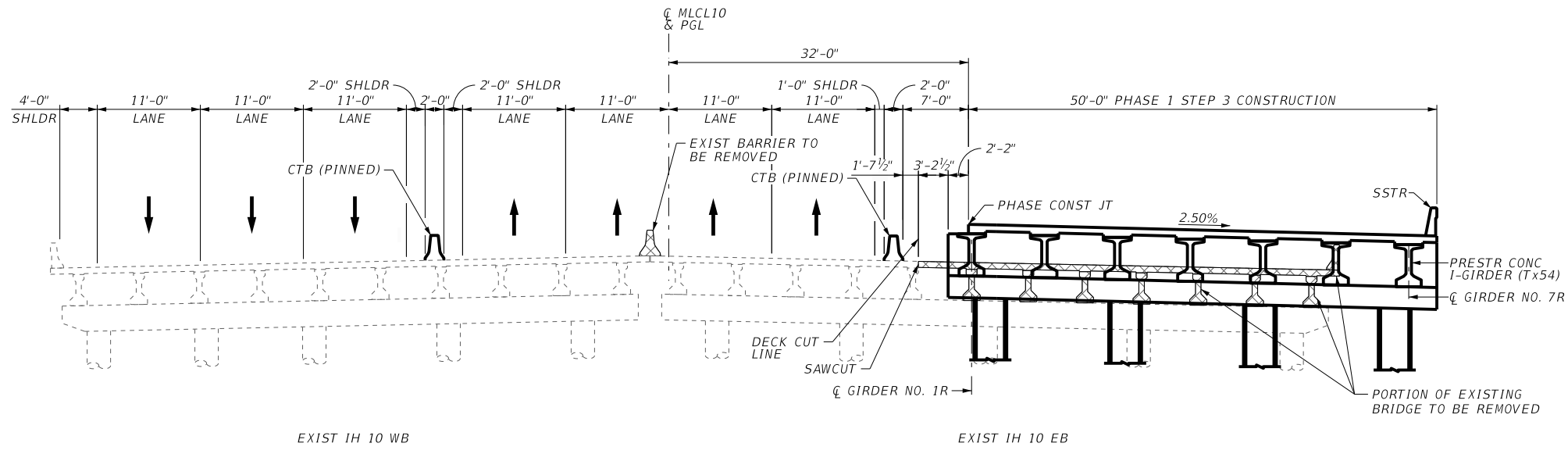
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1264	

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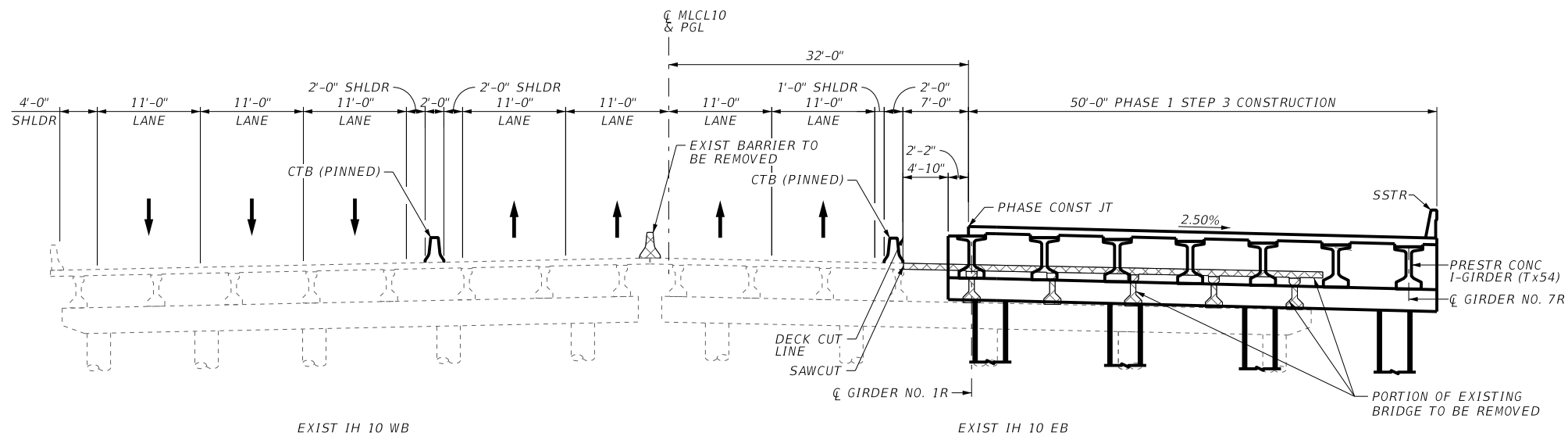
LEGEND

 CONSTRUCTION THIS PHASE

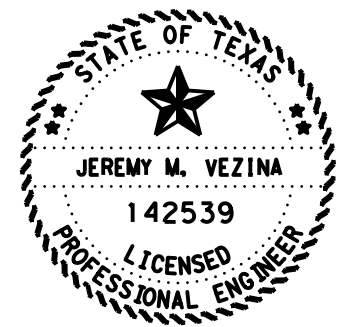
 STRUCTURE TO BE REMOVED



PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 5)
 (EXISTING CALDER AVE BENT 2 FWD & BENT 3 BK SHOWN)



PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 6)
 (EXISTING CALDER AVE BENT 3 FWD SHOWN)



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679

Texas Department of Transportation

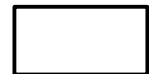
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**


SHEET 2 OF 15

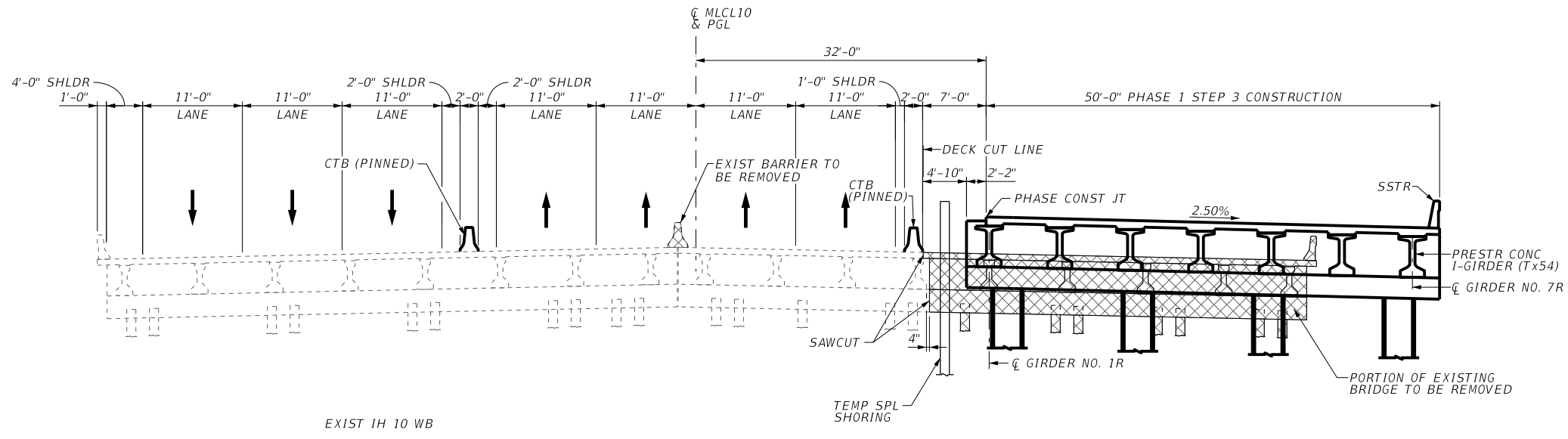
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CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1265	

DATE: 20-FEB-2024 15:32
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1266_10M_CALDERAVE_CONPHS_03.dgn

LEGEND

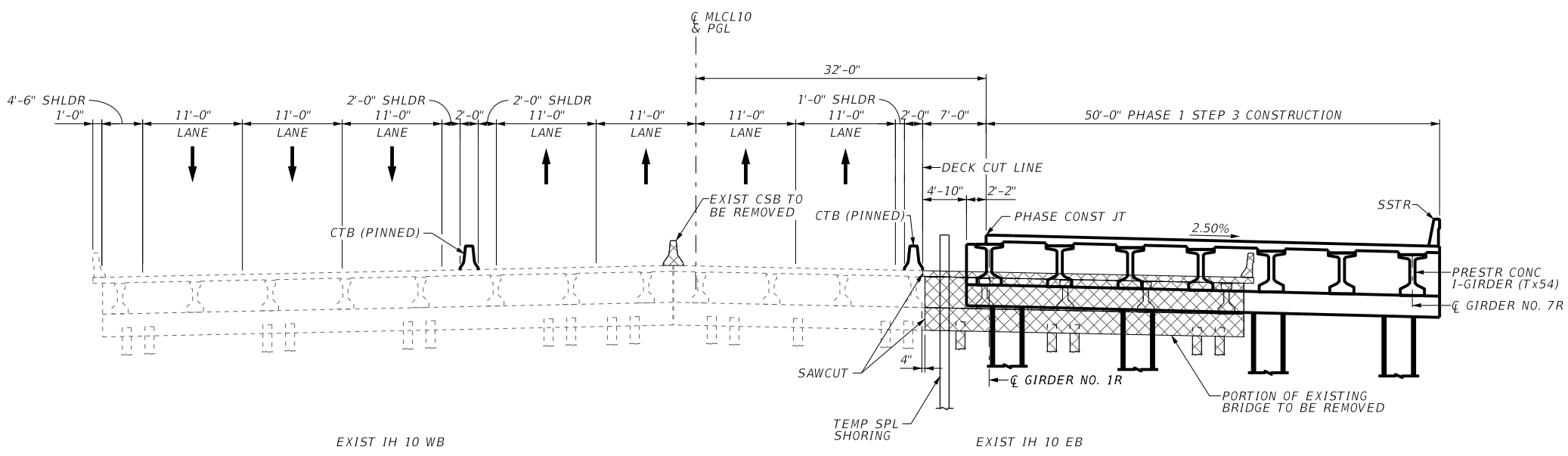
 CONSTRUCTION THIS PHASE

 STRUCTURE TO BE REMOVED



EXIST IH 10 WB

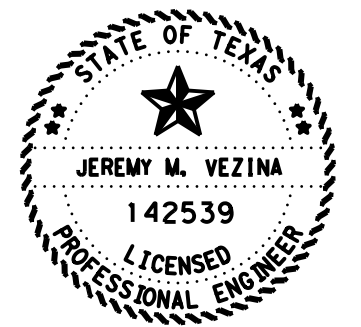
PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 6)
 (EXISTING CALDER AVE ABUTMENT 4 SHOWN)



EXIST IH 10 WB

EXIST IH 10 EB

PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 10)
 (EXISTING NORTH ST ABUTMENT 1 SHOWN)



Jeremy Veжина 2-20-2024

HL93 LOADING




**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**


SHEET 3 OF 15

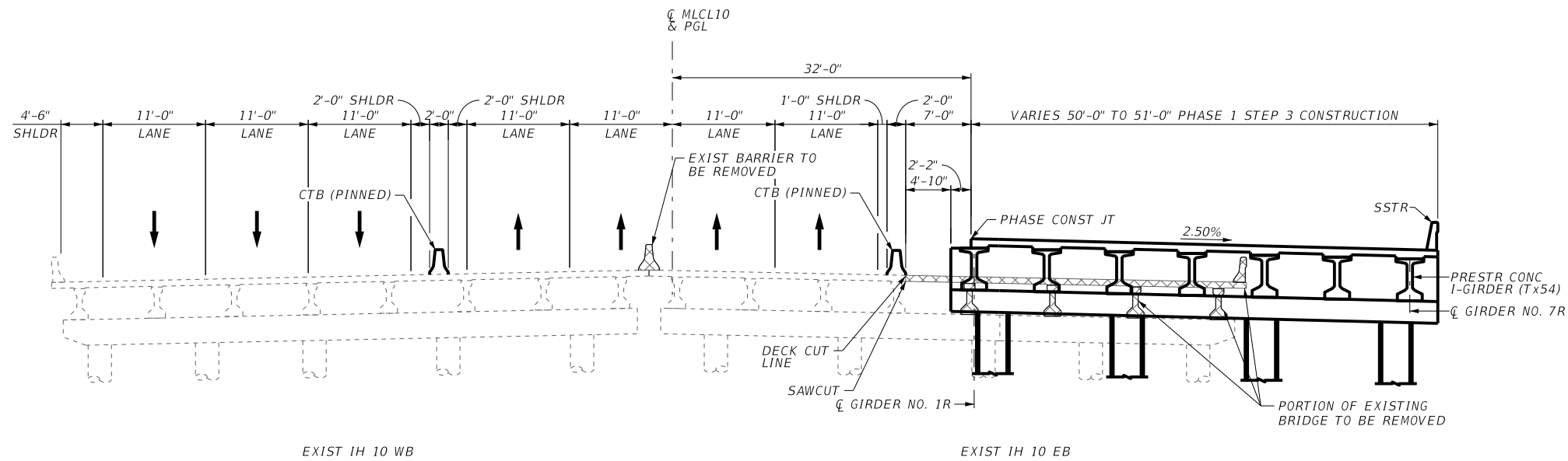
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CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1266				

DATE: 20-FEB-2024 15:31
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LEGEND

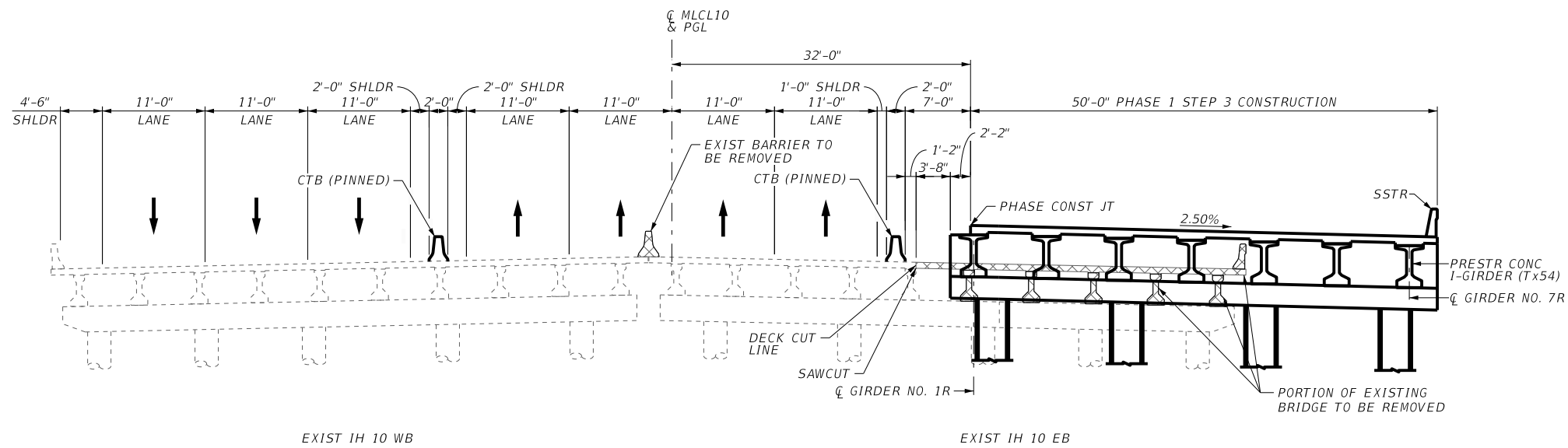
 CONSTRUCTION THIS PHASE

 STRUCTURE TO BE REMOVED



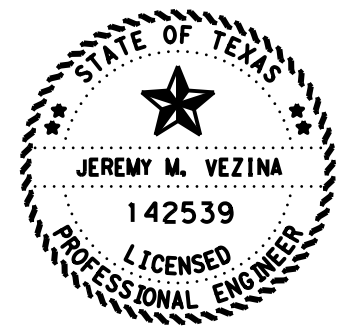
PHASE 1 STEP 3 CONSTRUCTION

(SPAN 10 & SPAN 12)
 (EXISTING NORTH ST BENT 2 BK &
 BENT 3 FWD SHOWN)
 (SPAN 10 & SPAN 12)
 (EXISTING NORTH ST BENT 2 BK &
 BENT 3 FWD SHOWN)



PHASE 1 STEP 3 CONSTRUCTION

(SPAN 11)
 (EXISTING NORTH ST BENT 2 FWD &
 BENT 3 BK SHOWN)
 (SPAN 11)
 (EXISTING NORTH ST BENT 2 FWD &
 BENT 3 BK SHOWN)



Jeremy Veжина 2-20-2024

HL93 LOADING

VOLKERT

F-12679



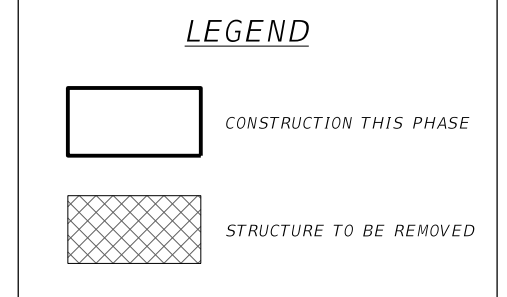
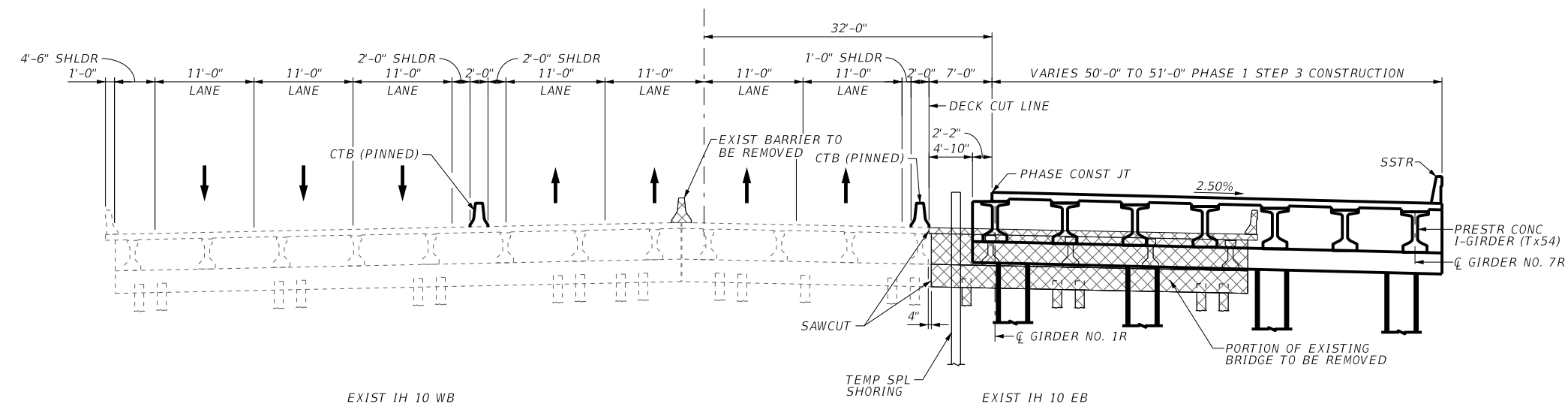
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 4 OF 15

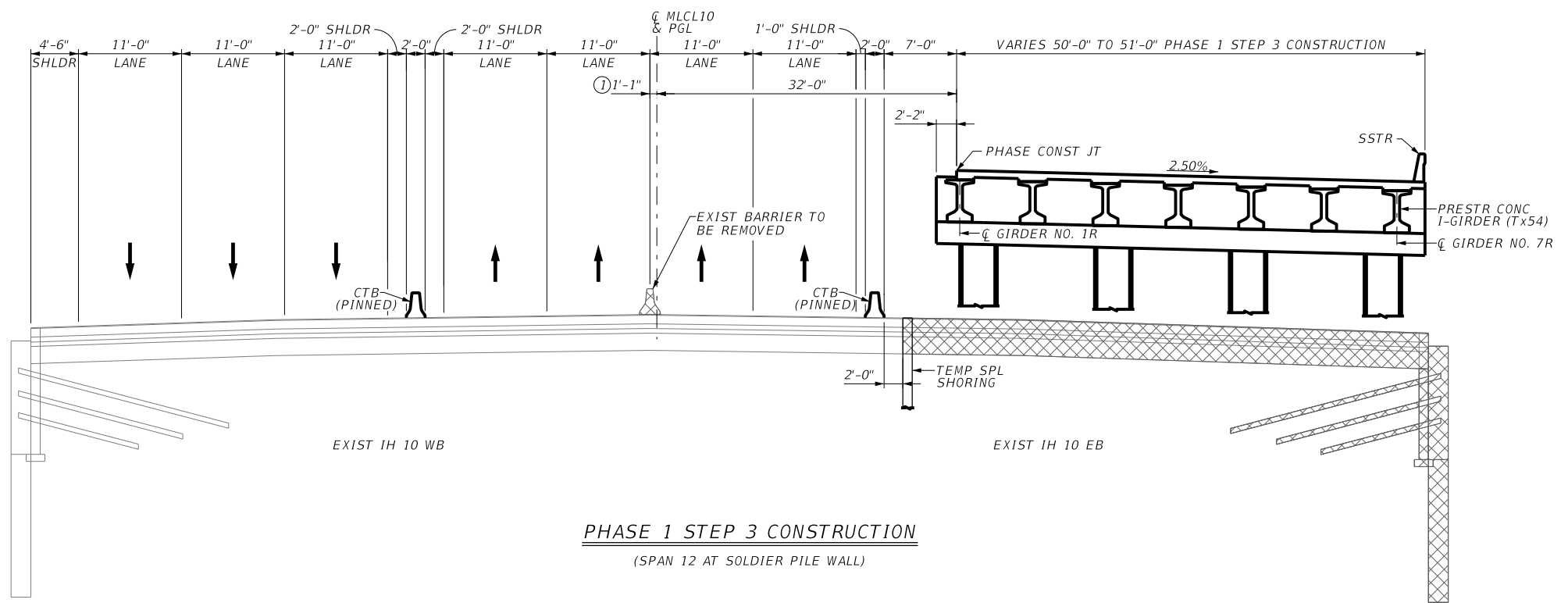
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CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1267				

DATE: 20-FEB-2024 15:30
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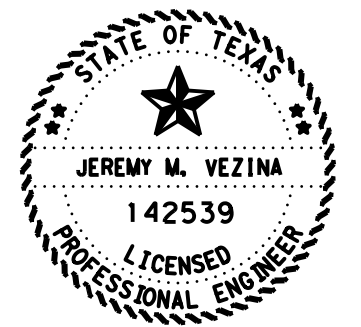
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② PERMANENT SHORING SHALL REMAIN IN PLACE UNTIL PHASE 3 STEP 1 EXCAVATION. REMOVE SHEET PILE DOWN TO 2FT BELOW PROPOSED GROUND.



PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 12)
 (EXISTING ABUTMENT 4 SHOWN)



PHASE 1 STEP 3 CONSTRUCTION
 (SPAN 12 AT SOLDIER PILE WALL)



Jeremy Veжина 2-20-2024

HL93 LOADING

F-12679

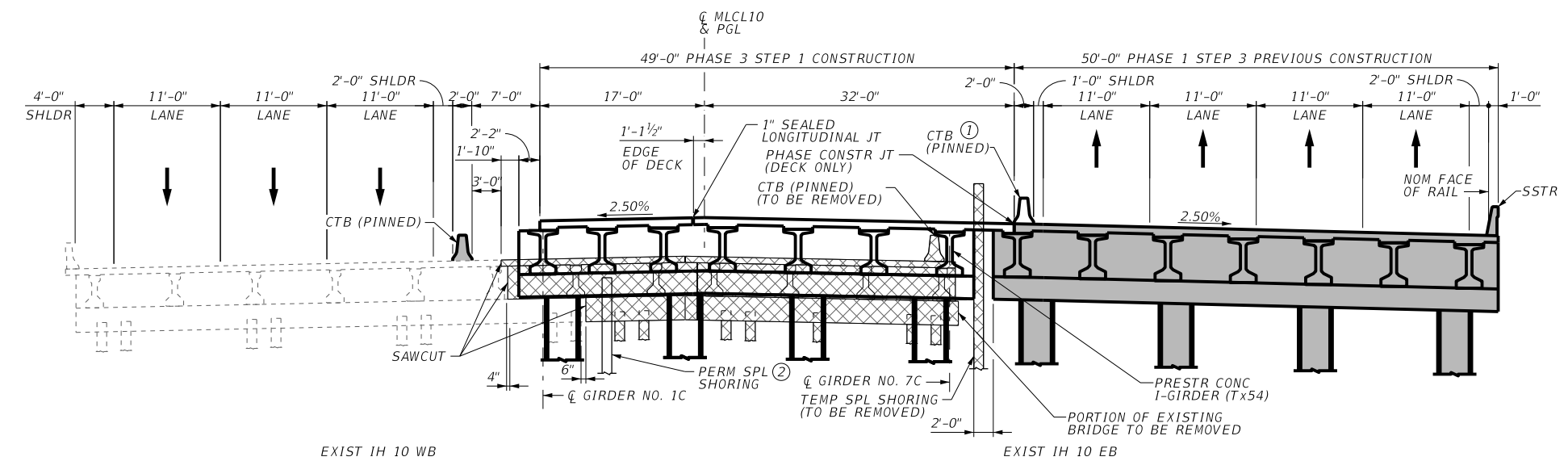
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 5 OF 15

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1268		

DATE: 20-FEB-2024 15:33
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① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.



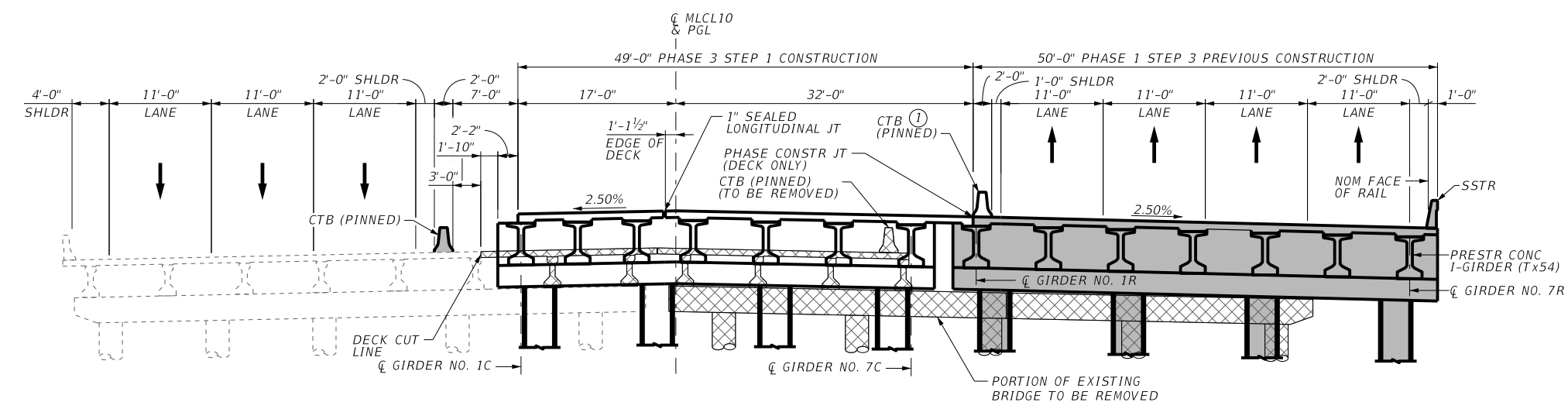
EXIST IH 10 WB

EXIST IH 10 EB

PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 4)
 (EXISTING CALDER AVE ABUTMENT 1 SHOWN)

LEGEND

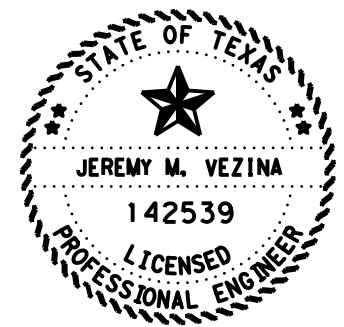
- CONSTRUCTION THIS PHASE
- STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



EXIST IH 10 WB

EXIST IH 10 EB

PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 4)
 (EXISTING CALDER AVE BENT 2 BK SHOWN)



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT
 F-12679



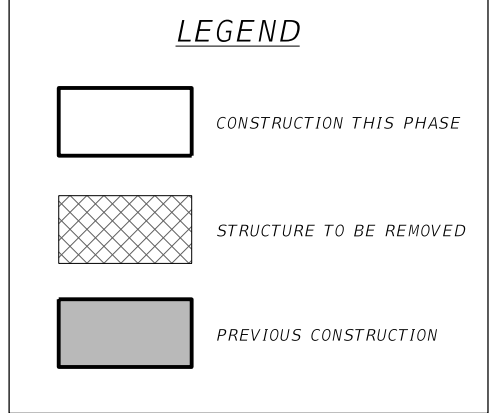
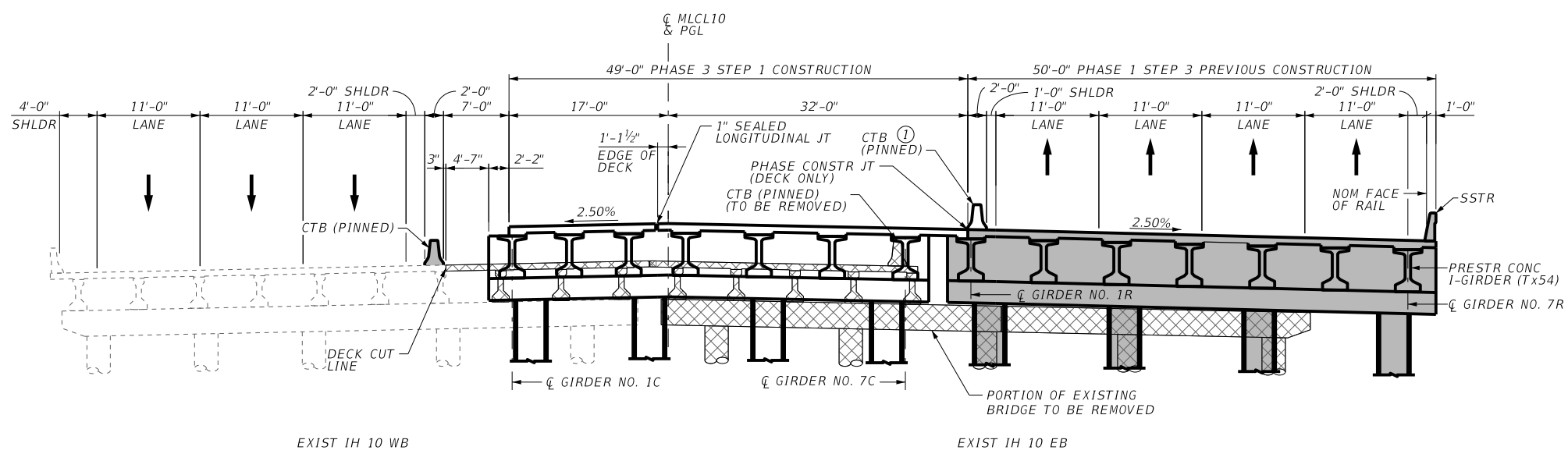
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 6 OF 15

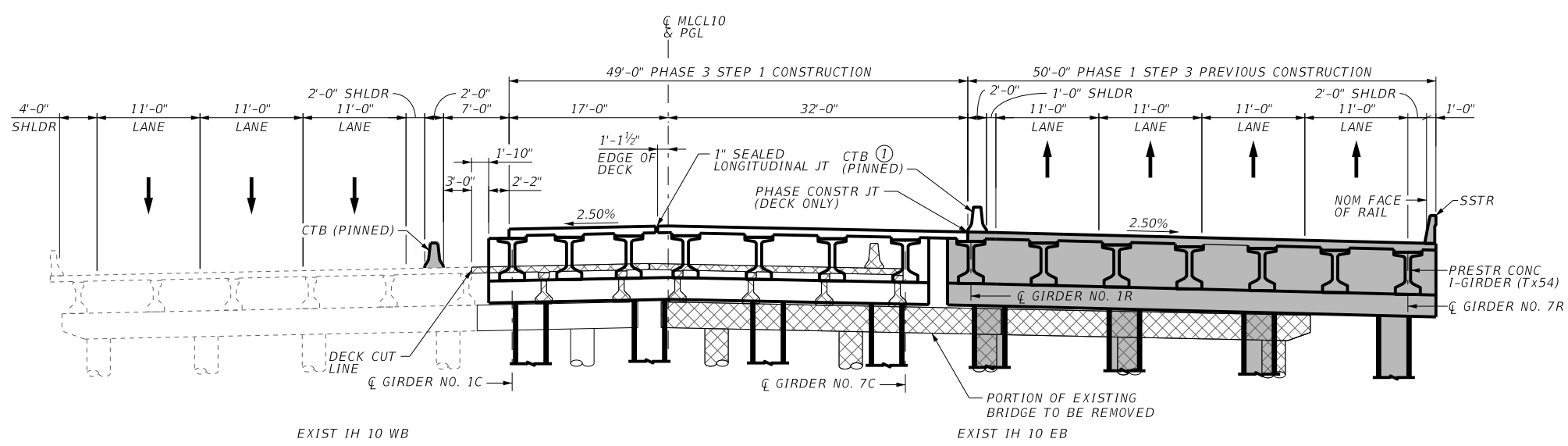
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DIST	COUNTY		SHEET NO.				
	BMT		JEFFERSON		1269		

DATE: 20-FEB-2024 15:32
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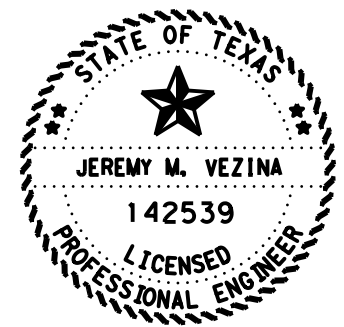
① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.



PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 5)
 (EXISTING CALDER AVE BENT 2 FWD & BENT 3 BK SHOWN)



PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 6)
 (EXISTING CALDER AVE BENT 3 FWD SHOWN)



Jeremy Vezina 2-20-2024

HL93 LOADING

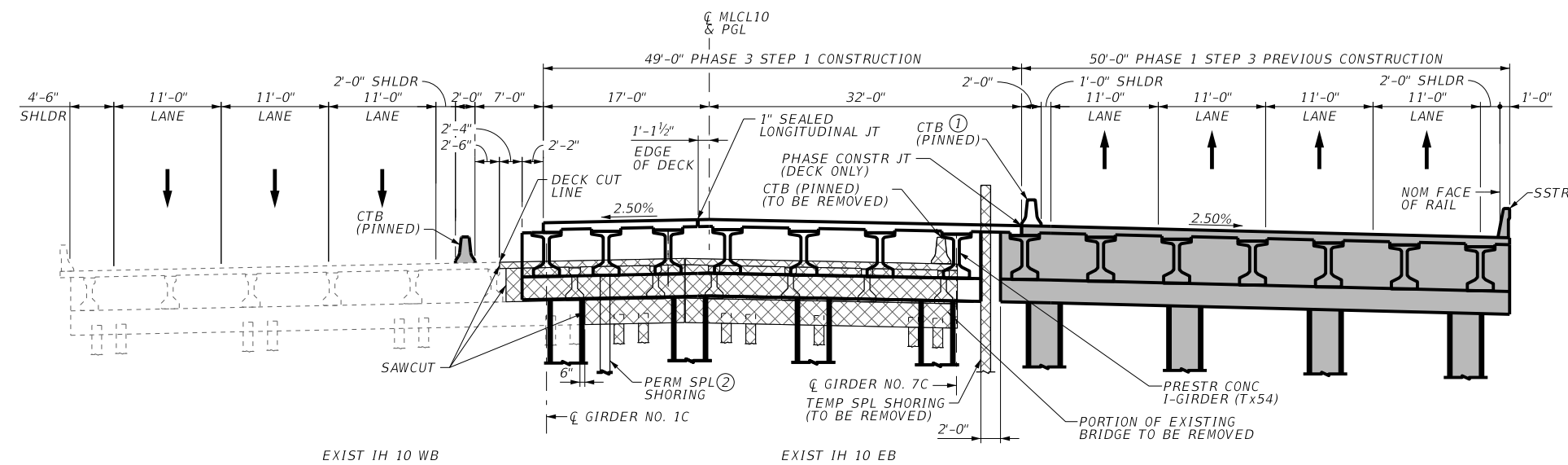
F-12679

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

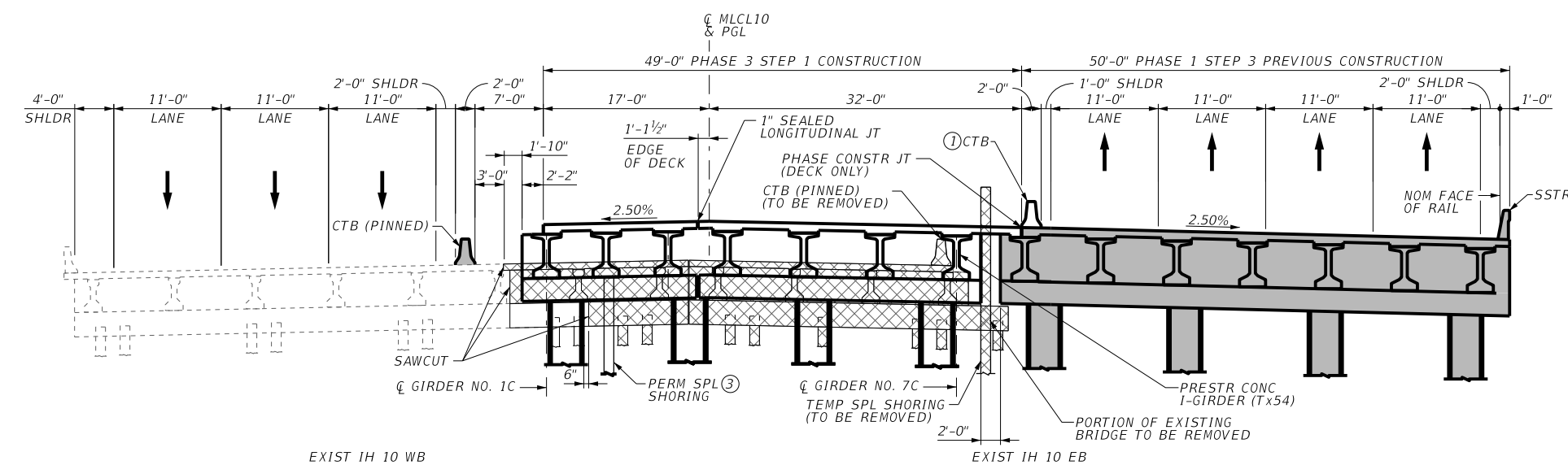
SHEET 7 OF 15

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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1270				

DATE: 20-FEB-2024 15:31
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PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 10)
 (EXISTING NORTH ST ABUTMENT 1 SHOWN)

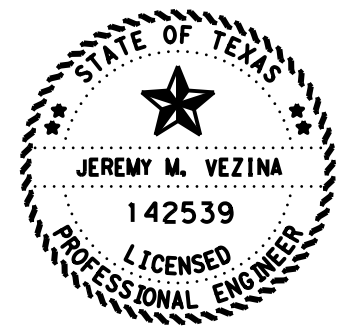


PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 6)
 (EXISTING CALDER AVE ABUTMENT 4 SHOWN)

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② PERMANENT SHORING SHALL REMAIN IN PLACE UNTIL PHASE 3 STEP 1 EXCAVATION. REMOVE SHEET PILE DOWN 2FT BELOW PROPOSED GROUND.

LEGEND

- CONSTRUCTION THIS PHASE
- STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



Jeremy Veжина 2-20-2024

HL93 LOADING

VOLKERT

F-12679

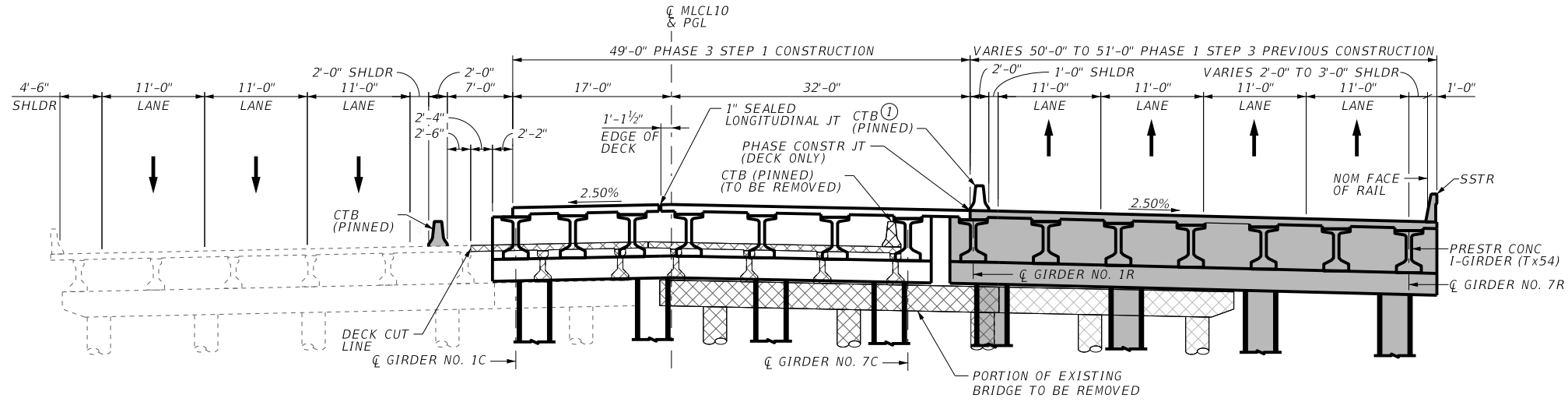
Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

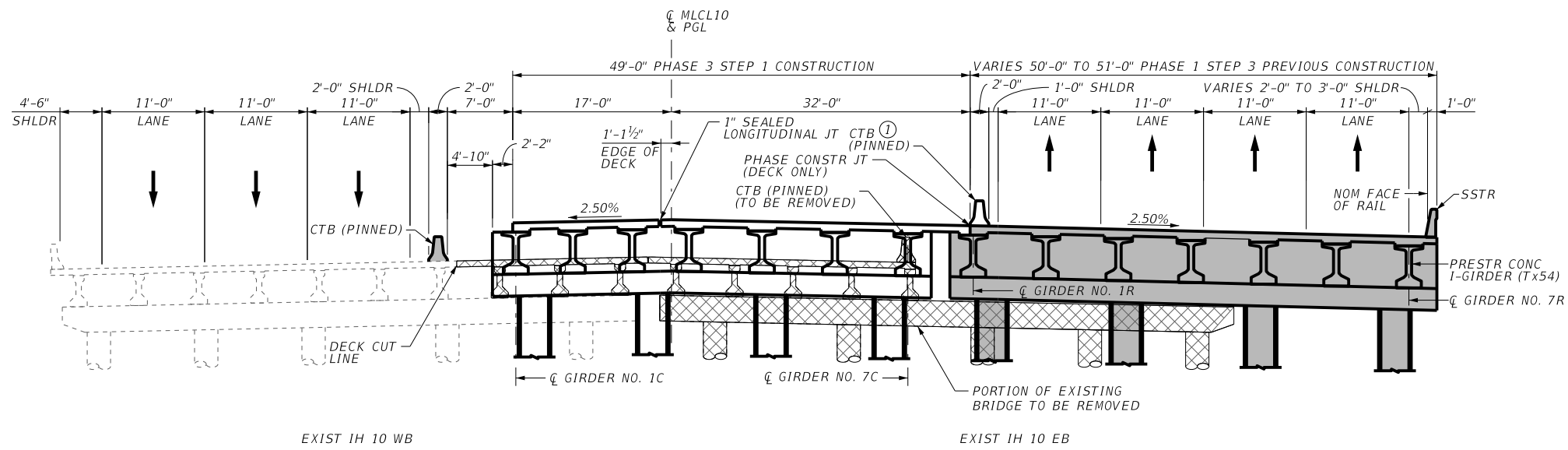
SHEET 8 OF 15

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0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1271				

DATE: 20-FEB-2024 15:35
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PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 10 & SPAN 12)
 (EXISTING SPANS 1 & 3 OVERLAP
 CALDER AVE/NORTH ST)

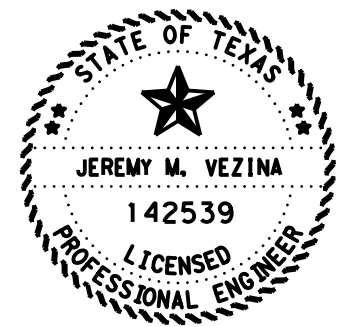


PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 11)
 (EXISTING SPAN 2 OVERLAP
 CALDER AVE/NORTH ST)

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② PERMANENT SHORING SHALL REMAIN IN PLACE UNTIL PHASE 3 STEP 1 EXCAVATION. REMOVE SHEET PILE DOWN 2FT BELOW PROPOSED GROUND.

LEGEND

- CONSTRUCTION THIS PHASE
- STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



Jeremy Veжина 2-20-2024

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 F-12679

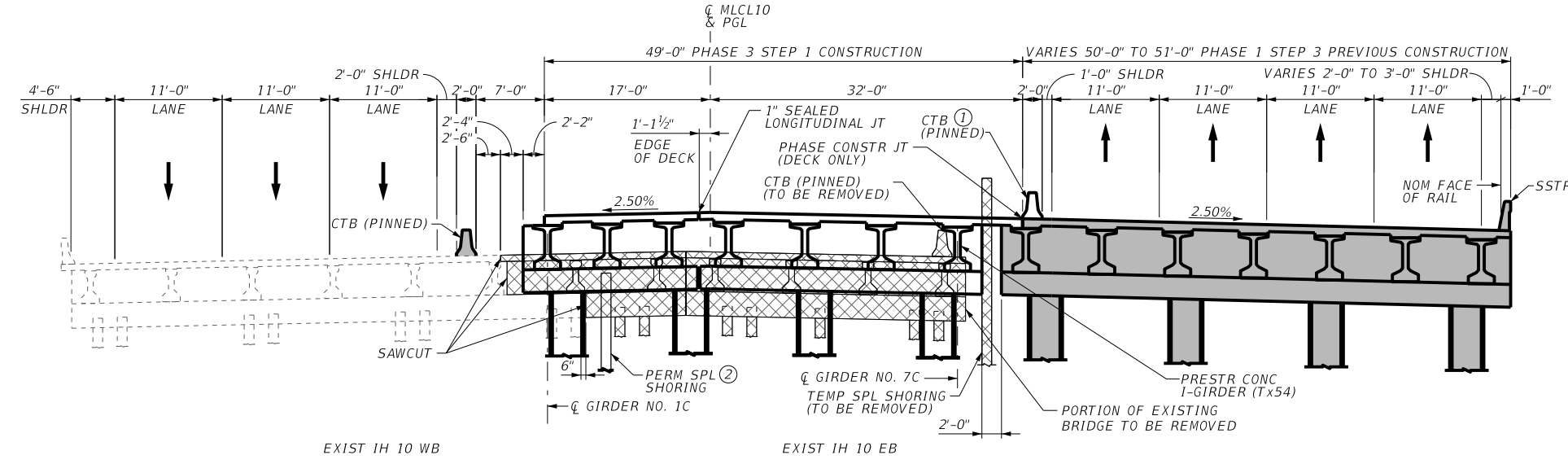
Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

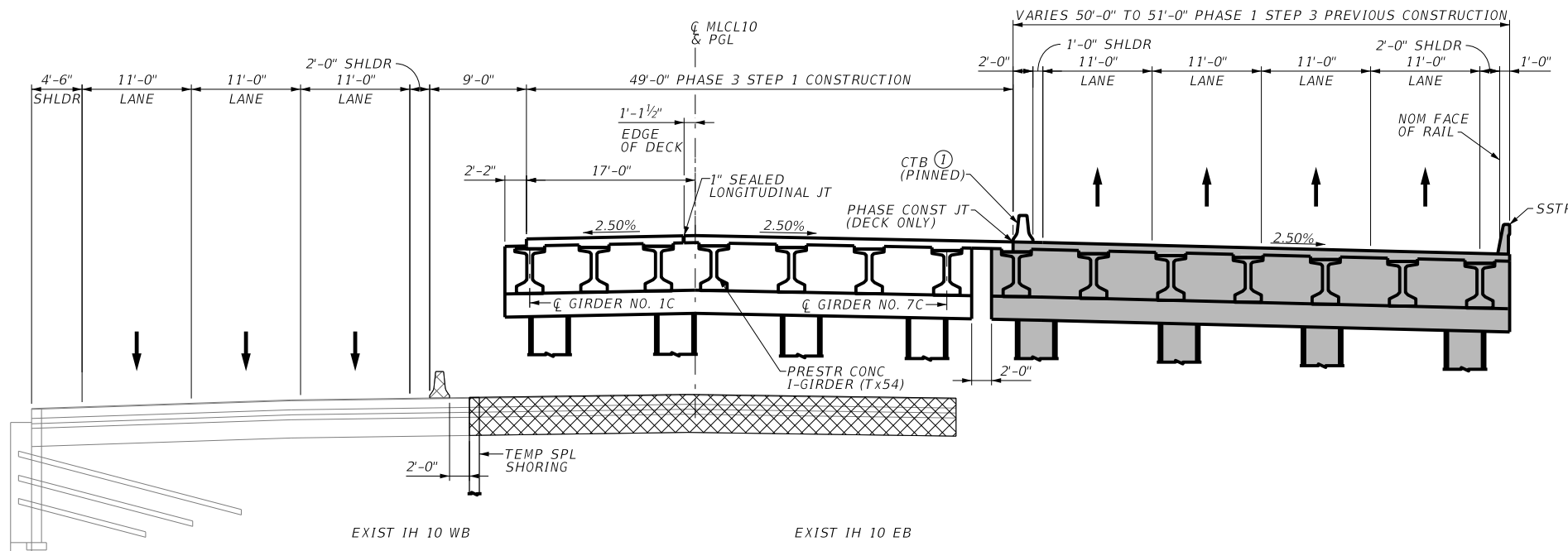
SHEET 9 OF 15

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CONT	SECT	JOB		HIGHWAY			
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DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1272		

DATE: 20-FEB-2024 15:39
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1273_10ML_CALDERAVE_COMPHS_10.dgn






PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 12)
 (EXISTING NORTH ST ABUTMENT 4 SHOWN)

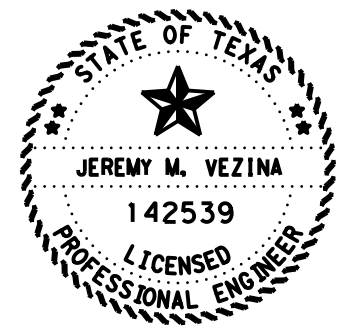


PHASE 3 STEP 1 CONSTRUCTION
 (SPAN 12 AT SOLDIER PILE WALL)

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② PERMANENT SHORING SHALL REMAIN IN PLACE UNTIL PHASE 3 STEP 1 EXCAVATION. REMOVE SHEET PILE DOWN 2FT BELOW PROPOSED GROUND.

LEGEND

-  CONSTRUCTION THIS PHASE
-  STRUCTURE TO BE REMOVED
-  PREVIOUS CONSTRUCTION



Jeremy Veжина 2-20-2024

HL93 LOADING

VOLKERT
 F-12679

Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**


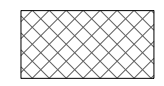

SHEET 10 OF 15

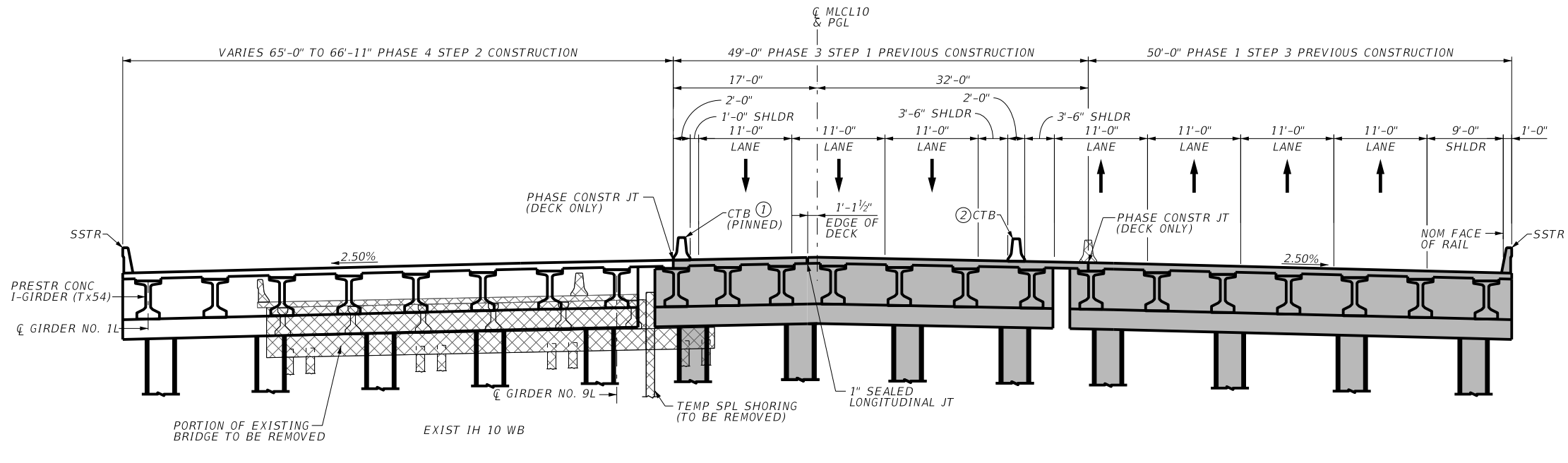
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0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1273		

DATE: 20-FEB-2024 15:36
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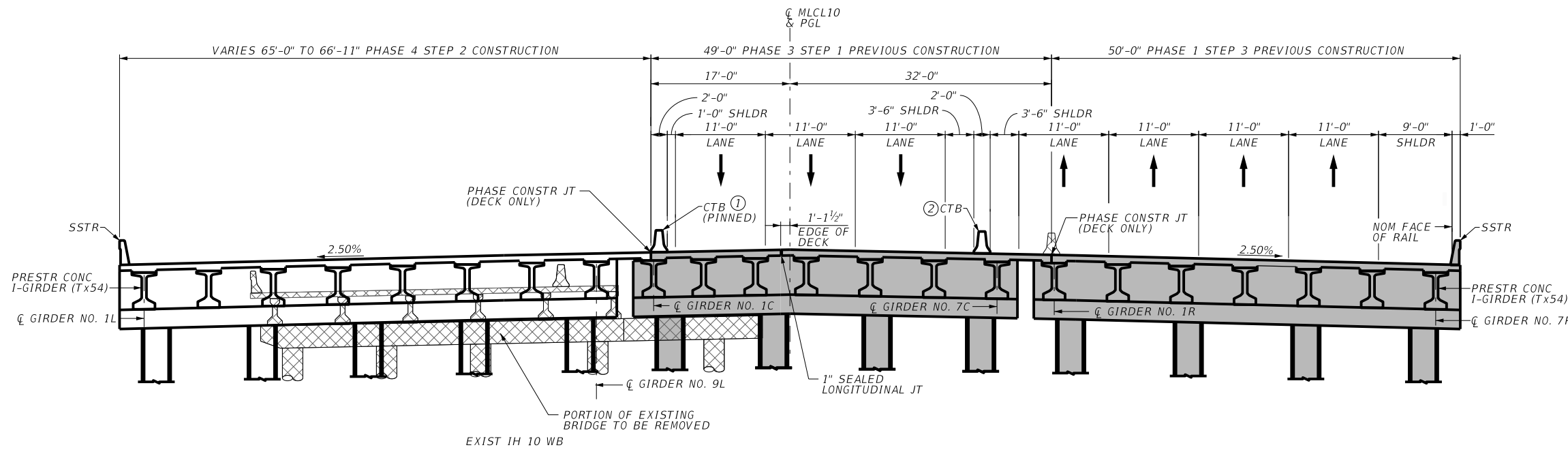
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② TEMPORARY BARRIER SHALL BE MOVED FROM INITIAL POSITION SHOWN IN PHASE 3 STEP 1 DURING PHASE 4 STEP 2 CONSTRUCTION AND SHALL NOT BE PINNED TO NEW DECK LOCATION.

LEGEND

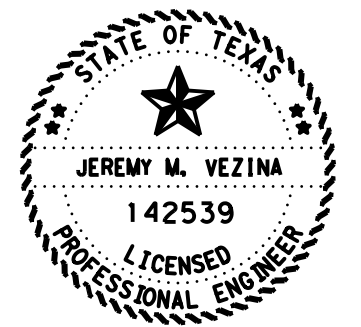
-  CONSTRUCTION THIS PHASE
-  STRUCTURE TO BE REMOVED
-  PREVIOUS CONSTRUCTION



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 4)
 (EXISTING CALDER AVE ABUTMENT 1 SHOWN)



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 4)
 (EXISTING CALDER AVE BENT 2 BK SHOWN)



Jeremy Veжина 2-20-2024

HL93 LOADING

VOLKERT
 F-12679

Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**


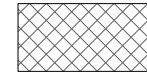

SHEET 11 OF 15

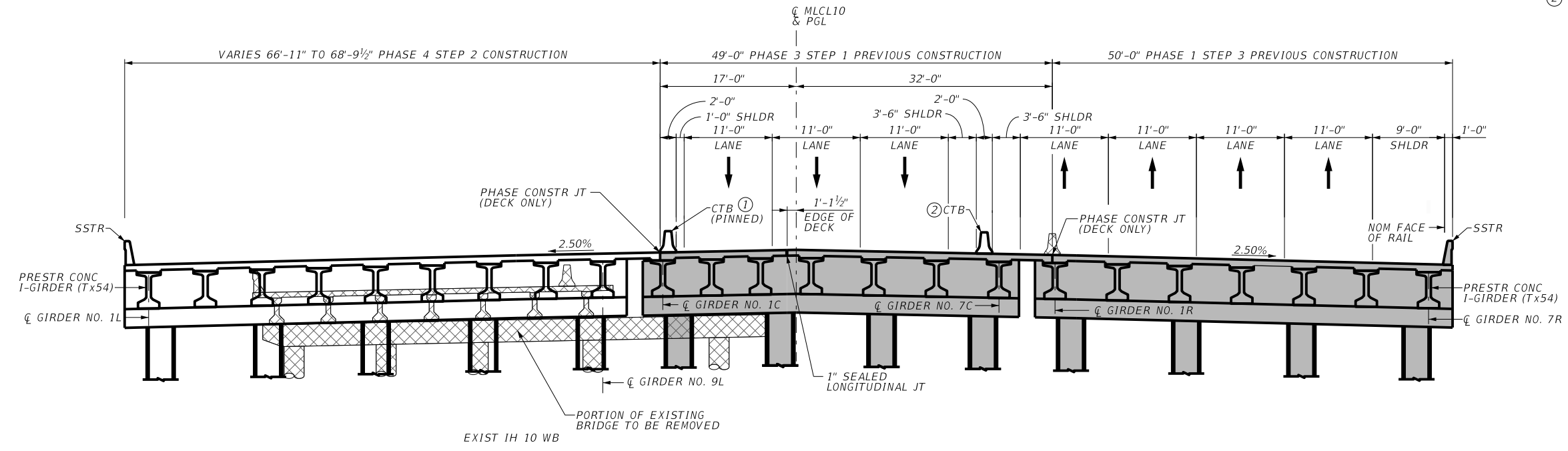
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1274	

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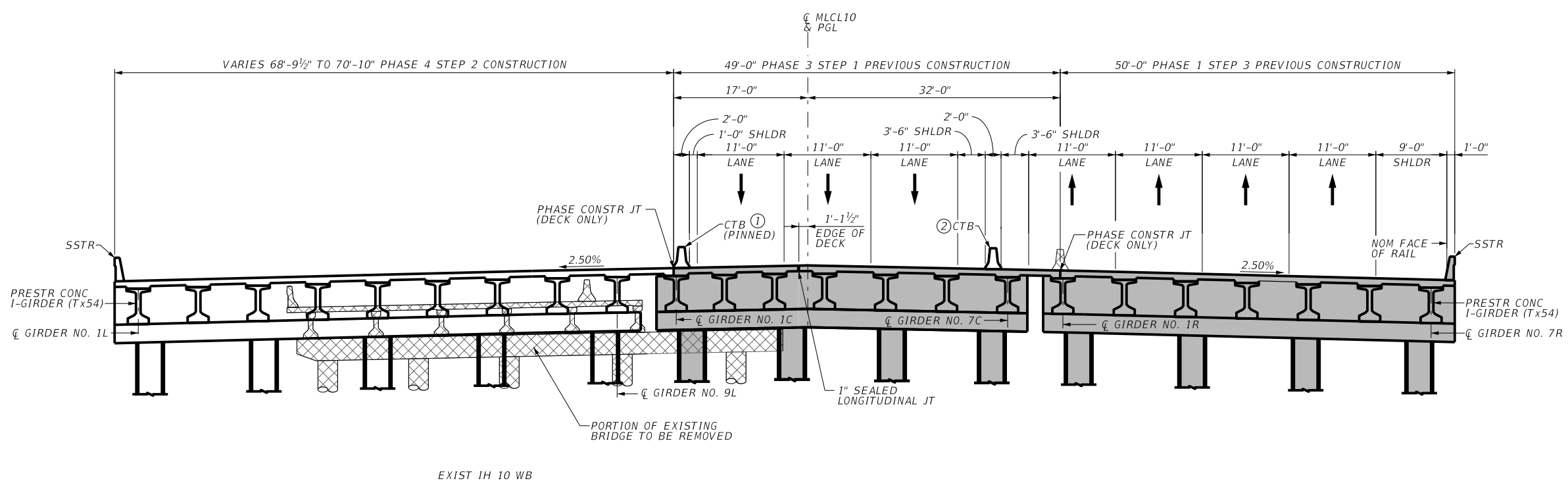
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② TEMPORARY BARRIER SHALL BE MOVED FROM INITIAL POSITION SHOWN IN PHASE 3 STEP 1 DURING PHASE 4 STEP 2 CONSTRUCTION AND SHALL NOT BE PINNED TO NEW DECK LOCATION.

LEGEND

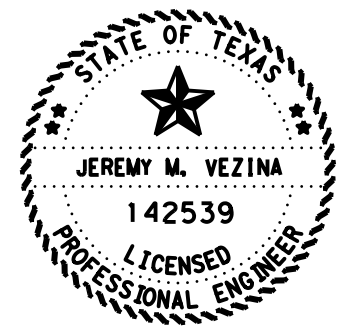
-  CONSTRUCTION THIS PHASE
-  STRUCTURE TO BE REMOVED
-  PREVIOUS CONSTRUCTION



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 5)
 (EXISTING CALDER AVE BENT 2 FWD & BENT 3 BK SHOWN)



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 6)
 (EXISTING CALDER AVE BENT 3 FWD SHOWN)



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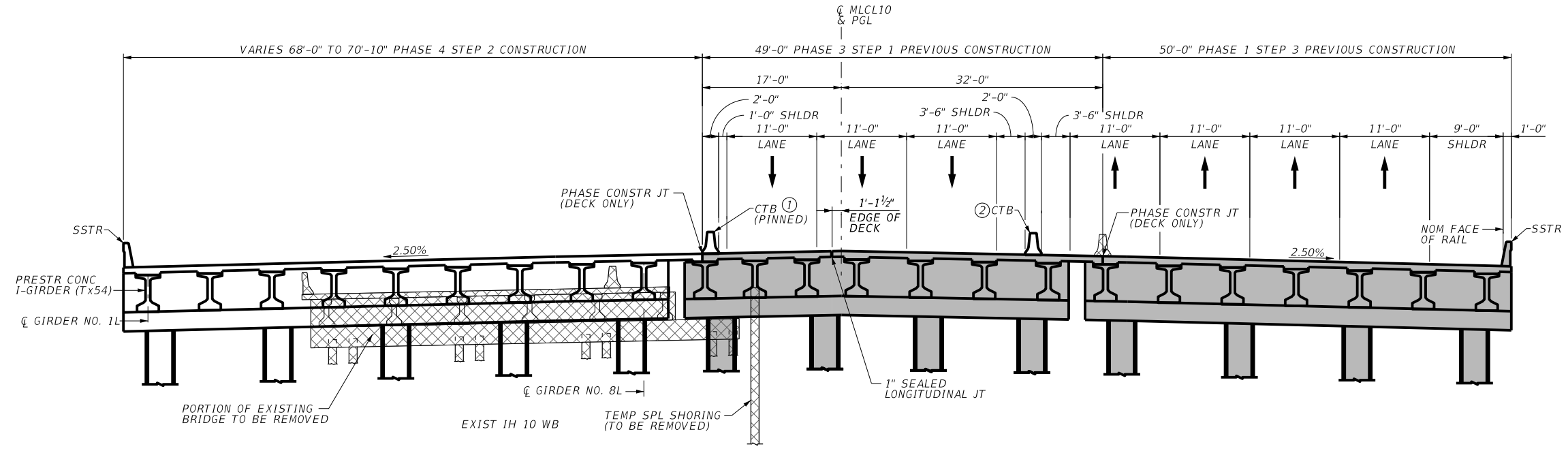
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 12 OF 15

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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1275	

DATE: 20-FEB-2024 15:35
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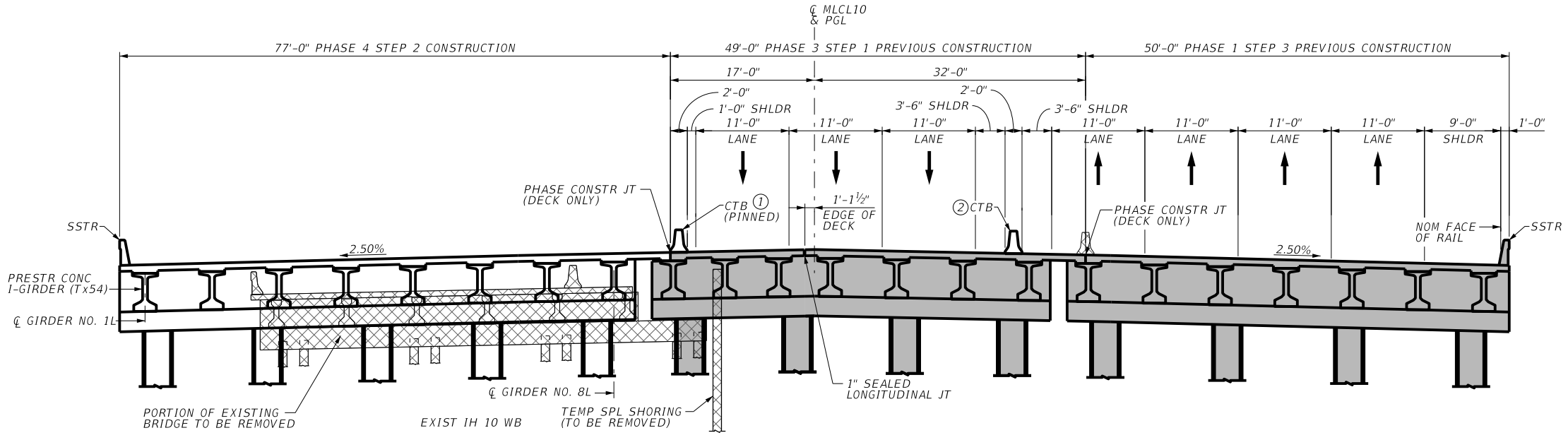
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② TEMPORARY BARRIER SHALL BE MOVED FROM INITIAL POSITION SHOWN IN PHASE 3 STEP 1 DURING PHASE 4 STEP 2 CONSTRUCTION AND SHALL NOT BE PINNED TO NEW DECK LOCATION.



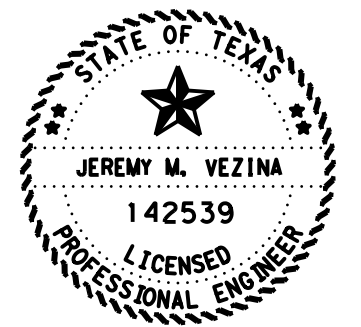
PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 6)
 (EXISTING CALDER AVE ABUTMENT 4 SHOWN)

LEGEND

- CONSTRUCTION THIS PHASE
- STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 10)
 (EXISTING NORTH ST ABUTMENT 1 SHOWN)



Jeremy Vezina 2-20-2024

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 F-12679



**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**




SHEET 13 OF 15

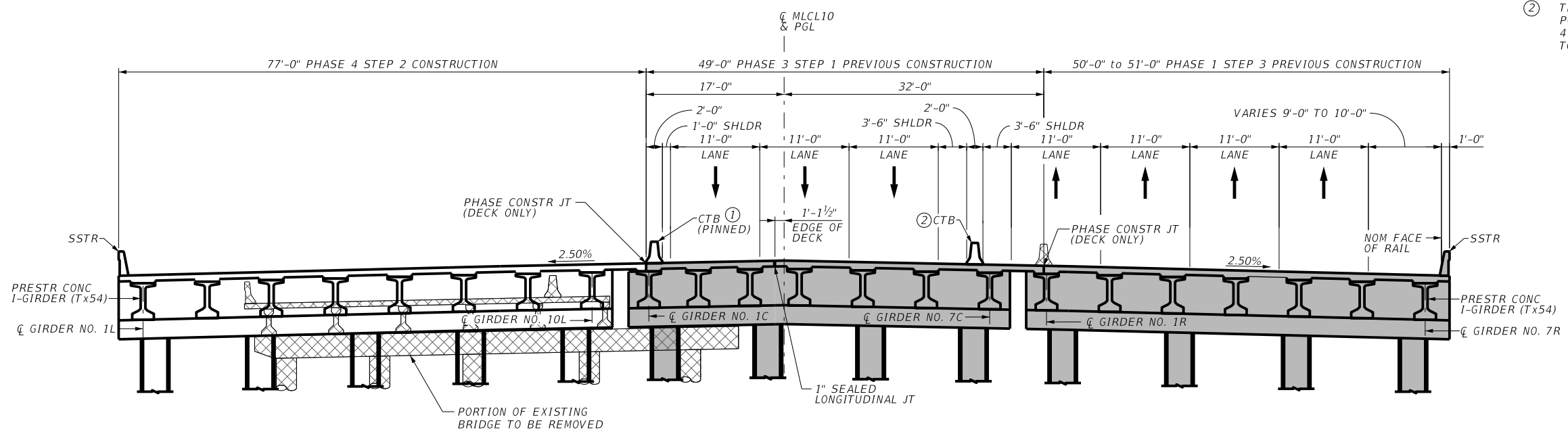
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DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1276	

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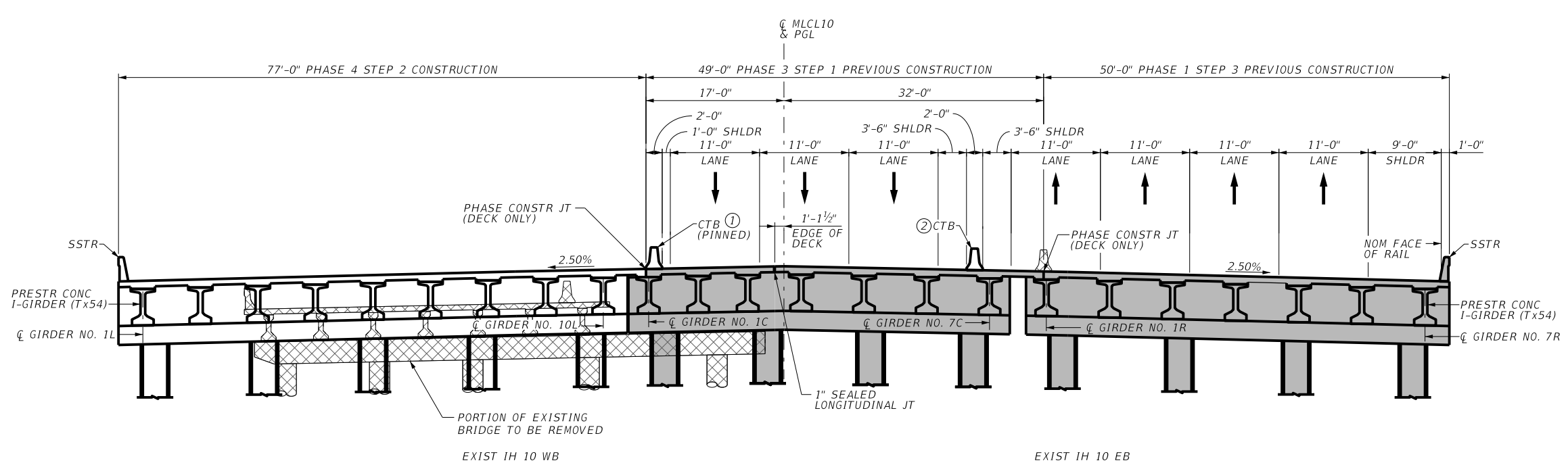
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② TEMPORARY BARRIER SHALL BE MOVED FROM INITIAL POSITION SHOWN IN PHASE 3 STEP 1 DURING PHASE 4 STEP 2 CONSTRUCTION AND SHALL NOT BE PINNED TO NEW DECK LOCATION.

LEGEND

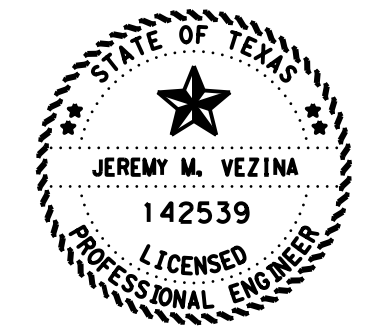
-  CONSTRUCTION THIS PHASE
-  STRUCTURE TO BE REMOVED
-  PREVIOUS CONSTRUCTION



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 10 & SPAN 12)
 (EXISTING NORTH ST BENT 2 BK & BENT 3 FWD SHOWN)



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 11)
 (EXISTING NORTH ST BENT 2 FWD & BENT 3 BK SHOWN)



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 F-12679



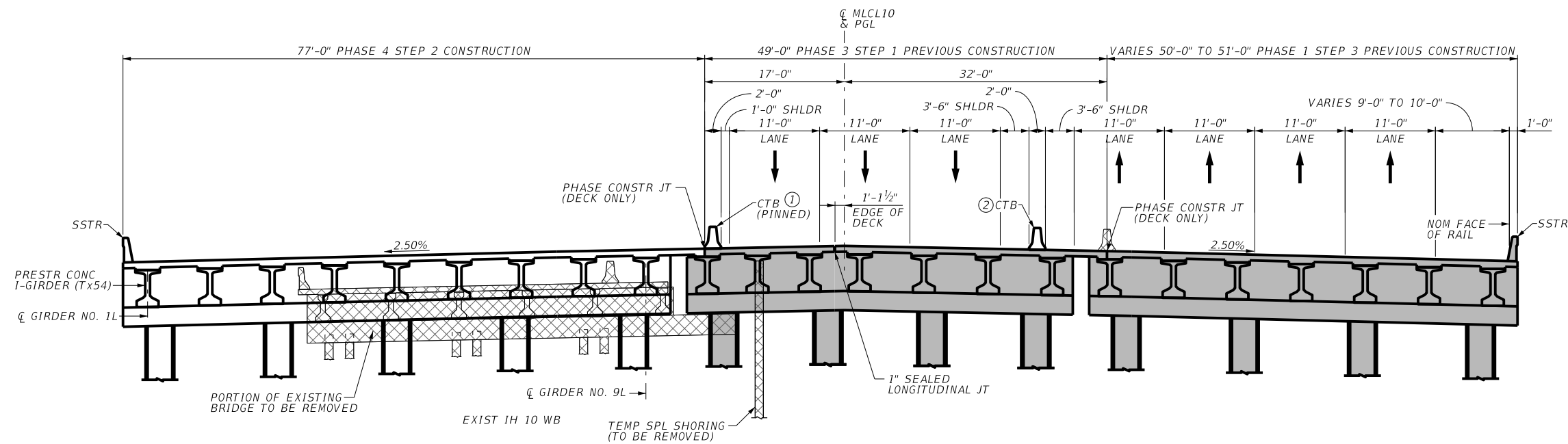
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 14 OF 15

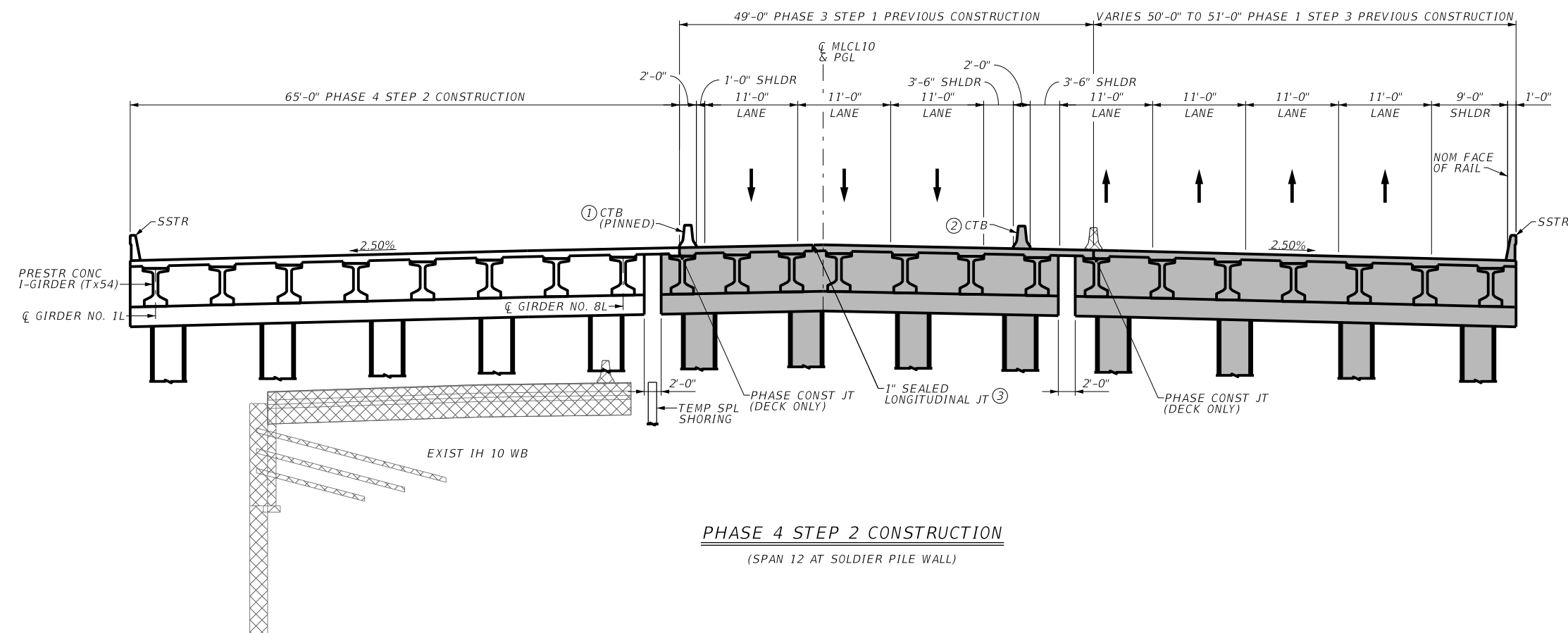
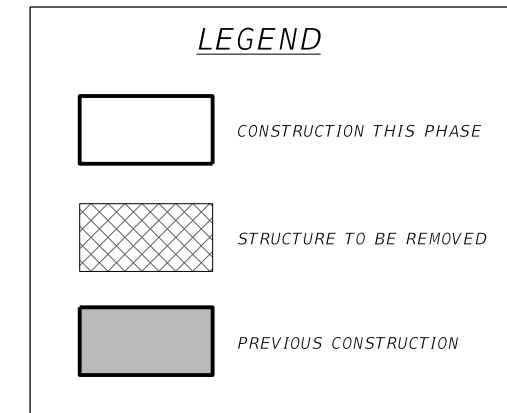
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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1277				

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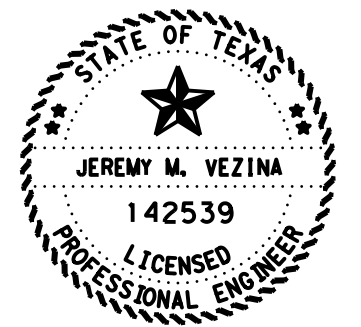
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10. PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② TEMPORARY BARRIER SHALL BE MOVED FROM INITIAL POSITION SHOWN IN PHASE 3 STEP 1 DURING PHASE 4 STEP 2 CONSTRUCTION AND SHALL NOT BE PINNED TO NEW DECK LOCATION.



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 12)
 (EXISTING NORTH ST ABUTMENT 4 SHOWN)



PHASE 4 STEP 2 CONSTRUCTION
 (SPAN 12 AT SOLDIER PILE WALL)



Jeremy Veжина 2-20-2024

HL93 LOADING

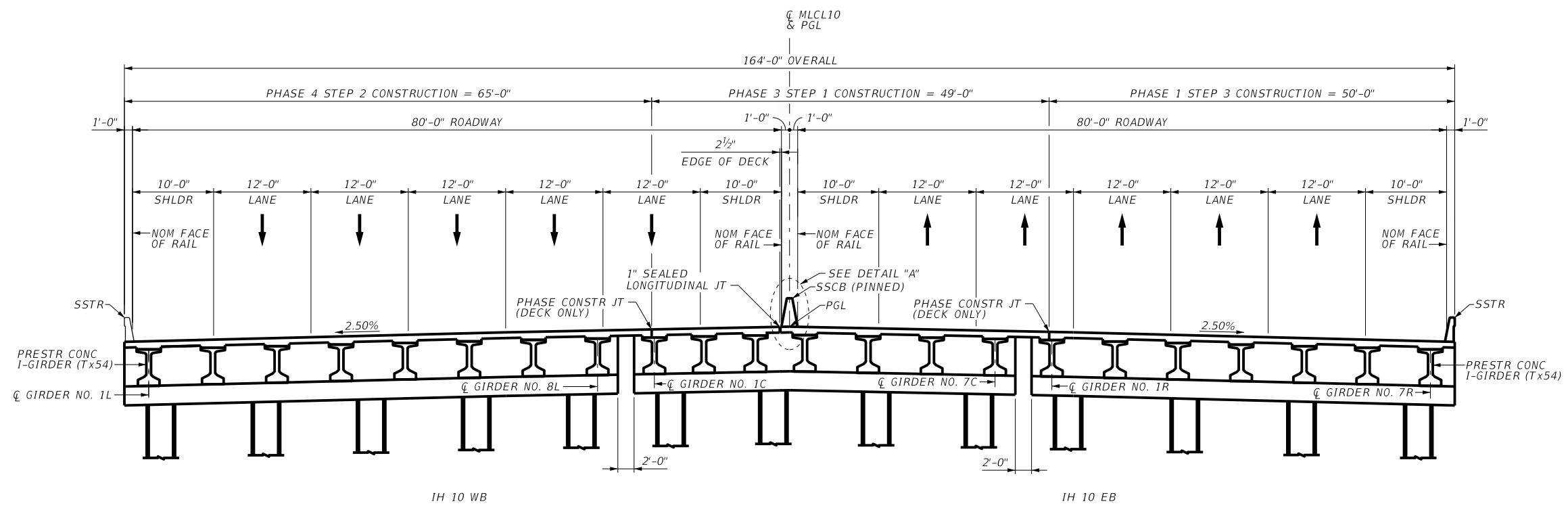


**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 MAINLANE
 OVER CALDER AVE**

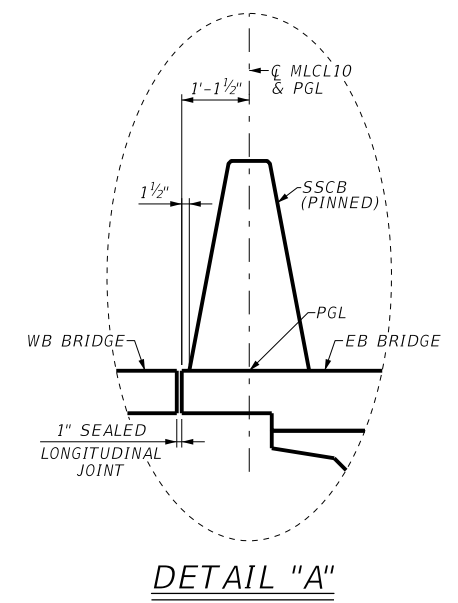
SHEET 15 OF 15

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0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1278		

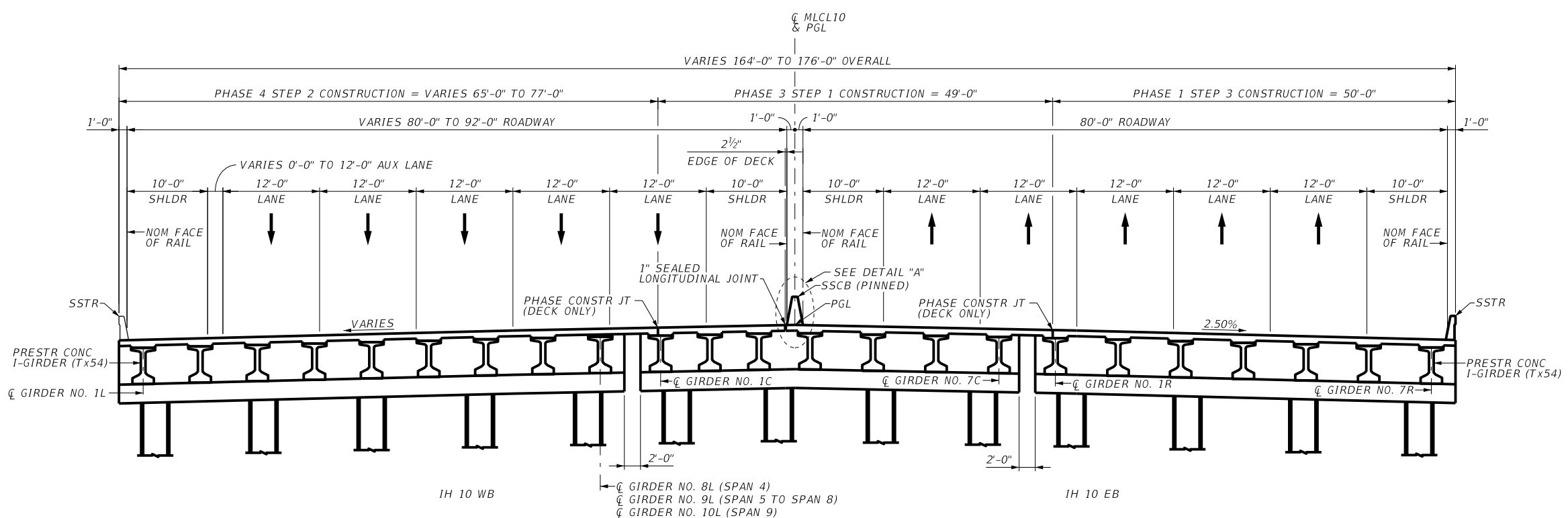
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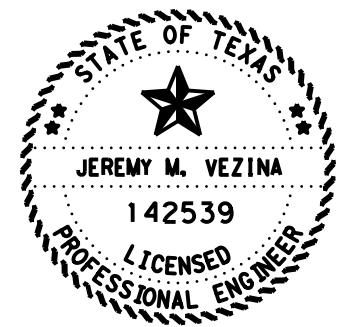
TYPICAL TRANSVERSE SECTION
 (SPAN 1 TO SPAN 3)



DETAIL "A"



TYPICAL TRANSVERSE SECTION
 (SPAN 4 TO SPAN 9)



Jeremy Veжина 2-20-2024

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 F-12679

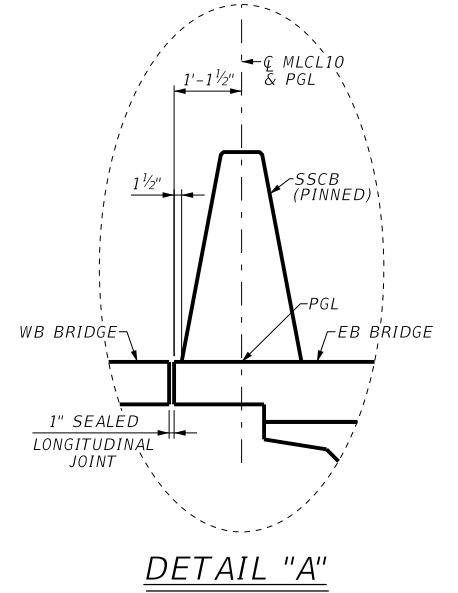
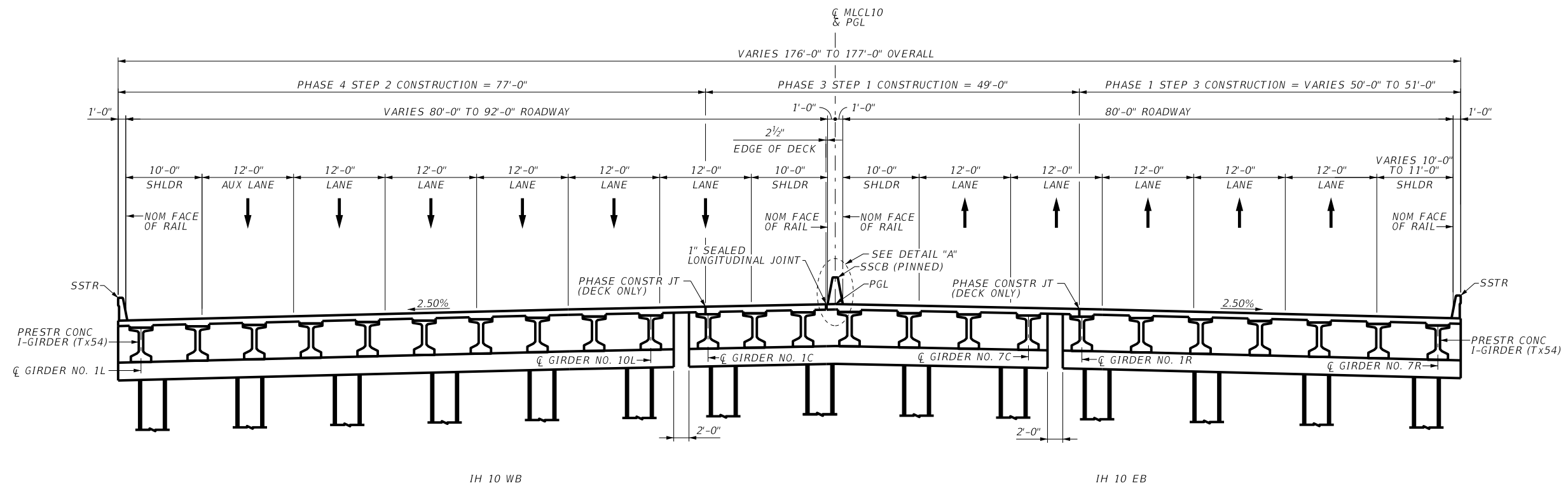
Texas Department of Transportation

IH 10 AT US 69
 TYPICAL SECTION
 IH 10 MAINLANE OVER
 CALDER AVE

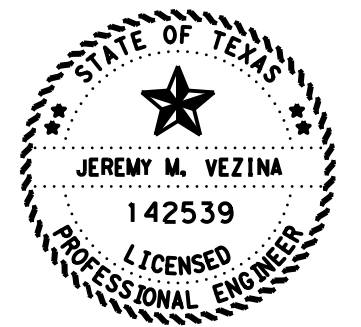
SHEET 1 OF 2

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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1279	

DATE: 20-FEB-2024 15:31
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TYPICAL TRANSVERSE SECTION
 (SPAN 12)



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT
 F-12679

Texas Department of Transportation

**IH 10 AT US 69
 TYPICAL SECTION
 IH 10 MAINLANE OVER
 CALDER AVE**

SHEET 2 OF 2

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1280				

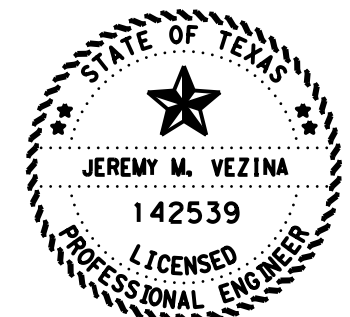
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SUMMARY OF BRIDGE QUANTITIES (PHASE 1 - STEP 3)											
ITEM	403	416	420		422	425	450	450	454	471	4021
DESCRIPTION CODE	6001	6008	6029	6037	6001	6039	6023	6054	6018	6007	6001
DESCRIPTION	TEMPORARY SPL SHORING	DRILL SHAFT (60 IN)	CL C CONC (CAP)	CL C CONC (COLUMN)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (TY SSTR) (W/ DRAIN SLOTS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	TIP TESTING DRILL SHAFT
BRIDGE ELEMENT	SF	LF	CY	CY	SF	LF	LF	LF	LF	EA	EA
12-INTERIOR BENTS (EBML)	18,900	4,540	961.5	486.4	-	-	-	-	-	-	12
1-336.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	16,800	2,252.26	-	336.0	100	-	-
1-345.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	17,250	2,315.31	238.3	106.7	100	2	-
1-363.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	18,150	2,441.29	-	363.0	100	-	-
1-369.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	18,512	2,483.92	96.1	272.9	101	-	-
TOTAL (EBML)	18,900	4,540	961.5	486.4	70,712	9,492.78	334.4	1078.6	401	2	12
TOTAL	18,900	4,540	961.5	486.4	70,712	9,492.78	334.4	1078.6	401	2	12

SUMMARY OF BRIDGE QUANTITIES (PHASE 3 - STEP 1)										
ITEM	403	416	420		422	425	454	514		
DESCRIPTION CODE	6001	6008	6029	6037	6001	6039	6018	6001		
DESCRIPTION	TEMPORARY SPL SHORING	DRILL SHAFT (60 IN)	CL C CONC (CAP)	CL C CONC (COLUMN)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	SEALED EXPANSION JT (4 IN) (SEJ-M)	PERM CTB (SGL SLOPE) (TY 1) (42)		
BRIDGE ELEMENT	SF	LF	CY	CY	SF	LF	LF	LF		
12-INTERIOR BENTS (EBML)	-	2,270	512.4	243.2	-	-	-	-		
12-INTERIOR BENTS (WBML)	18,900	2,270	352.8	243.2	-	-	-	-		
1-336.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	11,130	1,287.00	68	336.0		
1-336.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	5,306	965.25	32	-		
1-345.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	11,428	1,323.04	68	345.0		
1-345.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	5,448	992.28	32	-		
1-363.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	12,024	1,395.02	68	363.0		
1-363.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	5,732	1,046.27	32	-		
1-369.00' PRESTR CONC I-GIRDER UNIT (EBML)	-	-	-	-	12,223	1,419.38	68	369.0		
1-369.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	5,827	1,064.49	32	-		
TOTAL (EBML)	0	2,270	512.4	243.2	46,806	5,424.44	272	1,413.0		
TOTAL (WBML)	18,900	2,270	352.8	243.2	22,314	4,068.29	128	0.0		
TOTAL	18,900	4,540	865.2	486.4	69,120	9,492.73	400	1,413.0		

SUMMARY OF BRIDGE QUANTITIES (PHASE 4 - STEP 2)										
ITEM	403	416	420		422	425	450	450	454	471
DESCRIPTION CODE	6001	6008	6029	6037	6001	6039	6023	6054	6018	6007
DESCRIPTION	TEMPORARY SPL SHORING	DRILL SHAFT (60 IN)	CL C CONC (CAP)	CL C CONC (COLUMN)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (TY SSTR) (W/ DRAIN SLOTS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)
BRIDGE ELEMENT	SF	LF	CY	CY	SF	LF	LF	LF	LF	EA
12-INTERIOR BENTS (WBML)	-	6,125	1237.7	660.6	-	-	-	-	-	-
1-336.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	21,840	2,574.01	-	336.0	130	-
1-345.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	23,434	2,869.73	208.8	136.2	136	3
1-363.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	26,834	3,138.98	-	363.1	148	-
1-369.00' PRESTR CONC I-GIRDER UNIT (WBML)	-	-	-	-	28,413	3,193.80	67.1	302.0	154	-
TOTAL (WBML)	0	6,125	1237.7	660.6	100,521	11,776.51	275.9	1137.2	568	3
TOTAL	0	6,125	1237.7	660.6	100,521	11,776.51	275.9	1137.2	568	3

NOTE: INTERIOR BENT QUANTITIES ARE FOR BENT 2 TO BENT 13. BENT 1 QUANTITIES ARE INCLUDED IN BRIDGE P.



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**IH 10 AT US 69
 ESTIMATED QUANTITIES &
 BEARING SEAT ELEVATIONS
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 1 OF 2

DN:	JMV	CK:	FB	DW:	BB	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
	BMT		JEFFERSON		1281		

DATE: 20-FEB-2024 15:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1282_10ML_CALDERAVE_QTY_BFG_02.dgn

BEARING SEAT ELEVATIONS

PHASE 1 STEP 3

	GIRDER 1L	GIRDER 2L	GIRDER 3L	GIRDER 4L	GIRDER 5L	GIRDER 6L	GIRDER 7L	GIRDER 8L	GIRDER 9L	GIRDER 10L
① BENT 1 (FWD)	33.932	34.130	34.327	34.525	34.723	34.920	35.118	35.315		
BENT 2 (BK)	34.234	34.432	34.630	34.827	35.025	35.222	35.420	35.618		
BENT 2 (FWD)	34.242	34.439	34.637	34.834	35.032	35.230	35.427	35.625		
BENT 3 (BK)	34.179	34.376	34.574	34.772	34.969	35.167	35.364	35.562		
BENT 3 (FWD)	34.164	34.362	34.559	34.757	34.954	35.152	35.350	35.547		
BENT 4 (BK)	33.730	33.927	34.125	34.323	34.520	34.718	34.916	35.113		
BENT 4 (FWD)	33.629	33.827	34.025	34.223	34.421	34.618	34.816	35.014		
BENT 5 (BK)	32.860	33.064	33.269	33.473	33.677	33.881	34.085	34.290		
BENT 5 (FWD)	32.834	33.013	33.192	33.371	33.550	33.730	33.909	34.088	34.267	
BENT 6 (BK)	32.047	32.232	32.416	32.601	32.786	32.970	33.155	33.340	33.524	
BENT 6 (FWD)	31.980	32.165	32.350	32.535	32.720	32.905	33.090	33.275	33.459	
BENT 7 (BK)	31.126	31.317	31.508	31.699	31.890	32.081	32.272	32.463	32.654	
BENT 7 (FWD)	30.975	31.166	31.358	31.549	31.741	31.932	32.123	32.315	32.506	
BENT 8 (BK)	30.443	30.640	30.838	31.035	31.232	31.430	31.627	31.825	32.022	
BENT 8 (FWD)	30.434	30.632	30.830	31.028	31.225	31.423	31.621	31.819	32.016	
BENT 9 (BK)	30.662	30.866	31.070	31.274	31.478	31.682	31.885	32.089	32.293	
BENT 9 (FWD)	30.695	30.877	31.058	31.240	31.421	31.603	31.784	31.966	32.147	32.329
BENT 10 (BK)	31.685	31.872	32.058	32.245	32.432	32.619	32.806	32.993	33.180	33.367
BENT 10 (FWD)	31.804	31.990	32.175	32.360	32.545	32.730	32.915	33.100	33.285	33.471
BENT 11 (BK)	34.539	34.650	34.762	34.873	34.984	35.096	35.207	35.318	35.430	35.541
BENT 11 (FWD)	34.706	34.813	34.920	35.028	35.135	35.243	35.350	35.458	35.565	35.672
BENT 12 (BK)	38.228	38.261	38.295	38.329	38.362	38.396	38.430	38.463	38.497	38.531
BENT 12 (FWD)	38.457	38.487	38.517	38.546	38.576	38.606	38.636	38.665	38.695	38.725
② BENT 13 (BK)	42.713	42.669	42.625	42.581	42.537	42.493	42.449	42.405	42.361	42.317

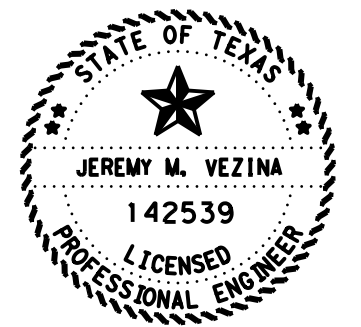
① SEE IH 10 ML OVER LAUREL AVE QUANTITY AND BEARING SEAT ELEVATIONS SHEET FOR BENT 1 (BK) ELEVATIONS
 ② SEE IH 10 EBML & IH 10 WBML QUANTITY AND BEARING SEAT ELEVATIONS SHEET FOR BENT 13 (FWD) ELEVATIONS

PHASE 3 STEP 1

	GIRDER 1C	GIRDER 2C	GIRDER 3C	GIRDER 4C	GIRDER 5C	GIRDER 6C	GIRDER 7C
① BENT 1 (FWD)	35.449	35.611	35.773	35.819	35.623	35.428	35.232
BENT 2 (BK)	35.751	35.913	36.075	36.121	35.925	35.730	35.534
BENT 2 (FWD)	35.779	35.941	36.103	36.128	35.933	35.737	35.542
BENT 3 (BK)	35.716	35.878	36.040	36.065	35.870	35.674	35.479
BENT 3 (FWD)	35.701	35.863	36.025	36.050	35.855	35.659	35.464
BENT 4 (BK)	35.267	35.429	35.591	35.616	35.421	35.225	35.030
BENT 4 (FWD)	35.189	35.351	35.513	35.538	35.342	35.147	34.951
BENT 5 (BK)	34.465	34.627	34.789	34.814	34.618	34.423	34.227
BENT 5 (FWD)	34.267	34.400	34.562	34.770	34.574	34.379	34.183
BENT 6 (BK)	33.658	33.819	33.981	34.027	33.832	33.636	33.441
BENT 6 (FWD)	33.593	33.755	33.917	33.963	33.767	33.572	33.376
BENT 7 (BK)	32.787	32.949	33.111	33.157	32.962	32.766	32.571
BENT 7 (FWD)	32.660	32.822	32.984	33.030	32.834	32.639	32.443
BENT 8 (BK)	32.176	32.338	32.500	32.546	32.351	32.155	31.960
BENT 8 (FWD)	32.171	32.333	32.495	32.540	32.345	32.149	31.954
BENT 9 (BK)	32.447	32.609	32.771	32.817	32.622	32.426	32.231
BENT 9 (FWD)	32.483	32.645	32.807	32.853	32.657	32.462	32.266
BENT 10 (BK)	33.521	33.683	33.845	33.891	33.695	33.500	33.304
BENT 10 (FWD)	33.581	33.742	33.902	33.947	33.751	33.556	33.360
BENT 11 (BK)	35.583	35.679	35.776	35.784	35.589	35.393	35.198
BENT 11 (FWD)	35.710	35.803	35.896	35.903	35.707	35.512	35.316
BENT 12 (BK)	38.500	38.529	38.558	38.528	38.332	38.137	37.941
BENT 12 (FWD)	38.690	38.716	38.742	38.730	38.535	38.339	38.144
② BENT 13 (BK)	42.213	42.175	42.137	42.089	41.893	41.698	41.502

PHASE 4 STEP 2

	GIRDER 1R	GIRDER 2R	GIRDER 3R	GIRDER 4R	GIRDER 5R	GIRDER 6R	GIRDER 7R
① BENT 1 (FWD)	35.036	34.842	34.647	34.453	34.259	34.064	33.870
BENT 2 (BK)	35.338	35.144	34.950	34.755	34.561	34.366	34.172
BENT 2 (FWD)	35.346	35.151	34.957	34.762	34.568	34.374	34.179
BENT 3 (BK)	35.283	35.088	34.894	34.700	34.505	34.311	34.116
BENT 3 (FWD)	35.268	35.074	34.879	34.685	34.490	34.296	34.101
BENT 4 (BK)	34.834	34.640	34.445	34.251	34.056	33.862	33.667
BENT 4 (FWD)	34.776	34.582	34.388	34.193	33.999	33.804	33.610
BENT 5 (BK)	34.052	33.858	33.663	33.469	33.274	33.080	32.885
BENT 5 (FWD)	33.987	33.793	33.598	33.404	33.210	33.015	32.821
BENT 6 (BK)	33.245	33.051	32.856	32.662	32.467	32.273	32.078
BENT 6 (FWD)	33.159	32.965	32.771	32.576	32.382	32.187	31.993
BENT 7 (BK)	32.354	32.159	31.965	31.771	31.576	31.382	31.187
BENT 7 (FWD)	32.227	32.032	31.838	31.643	31.449	31.255	31.060
BENT 8 (BK)	31.743	31.549	31.354	31.160	30.965	30.771	30.576
BENT 8 (FWD)	31.737	31.543	31.348	31.154	30.960	30.765	30.571
BENT 9 (BK)	32.014	31.819	31.625	31.431	31.236	31.042	30.847
BENT 9 (FWD)	32.049	31.855	31.661	31.466	31.272	31.077	30.883
BENT 10 (BK)	33.088	32.893	32.699	32.504	32.310	32.115	31.921
BENT 10 (FWD)	33.144	32.949	32.755	32.560	32.366	32.171	31.977
BENT 11 (BK)	34.981	34.786	34.592	34.398	34.203	34.009	33.814
BENT 11 (FWD)	35.100	34.905	34.711	34.516	34.322	34.128	33.933
BENT 12 (BK)	37.725	37.530	37.336	37.141	36.947	36.752	36.558
BENT 12 (FWD)	37.927	37.733	37.538	37.343	37.149	36.954	36.760
② BENT 13 (BK)	41.286	41.087	40.889	40.690	40.492	40.293	40.095



Jeremy Vezina 2-20-2024

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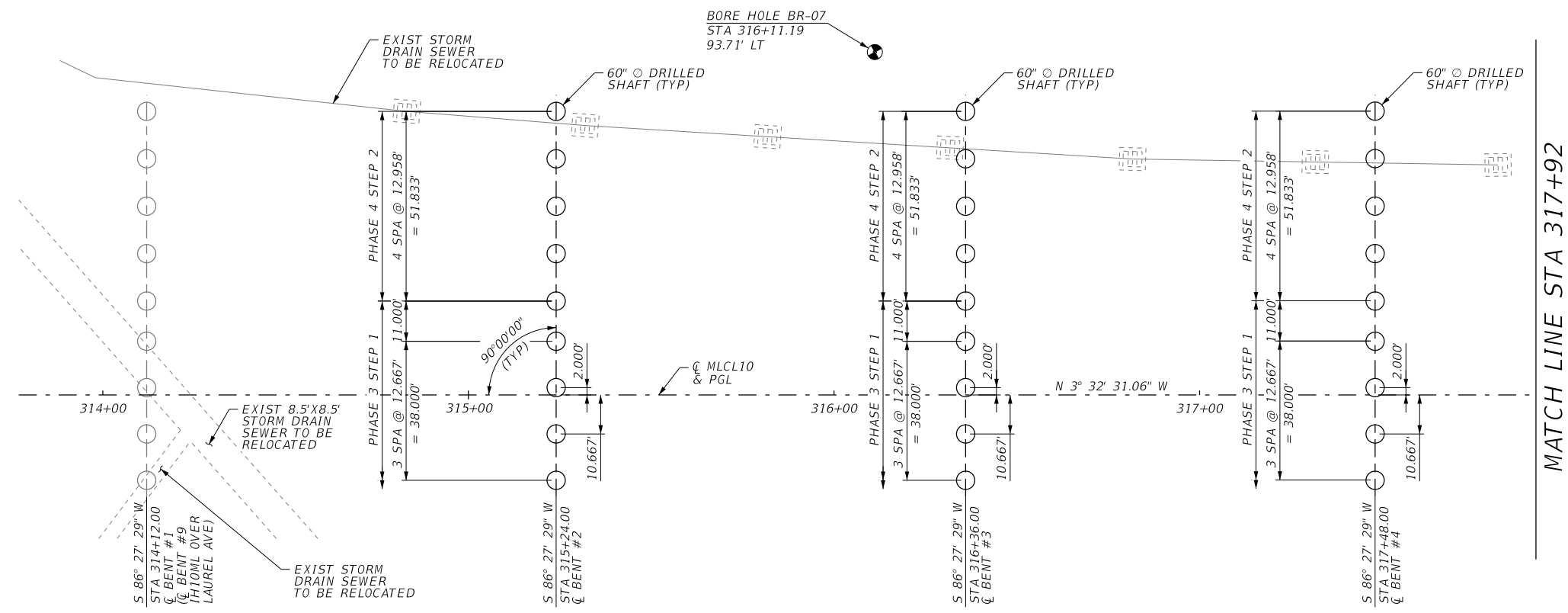
Texas Department of Transportation

IH 10 AT US 69 ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS IH 10 MAINLANE OVER CALDER AVE

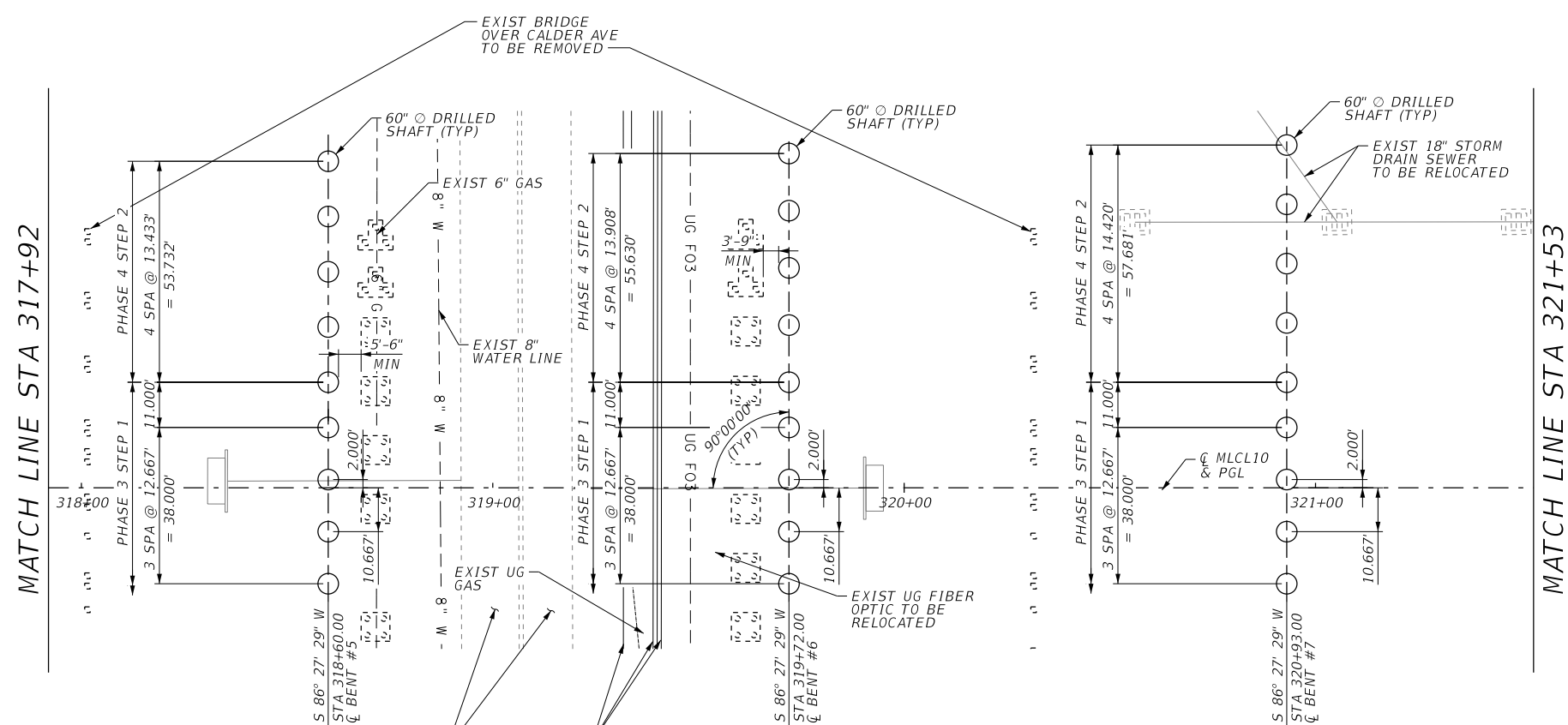
SHEET 2 OF 2

DN:	JMV	CK:	FB	DW:	BB	CK:	FB
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST	COUNTY				SHEET NO.		
BMT	JEFFERSON				1282		

DATE: 20-FEB-2024 15:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1. Calder Ave\1285_10ML_Calderave_WB_FDNLAY_01.dgn



FOUNDATION LAYOUT
SCALE 1"=40'



FOUNDATION LAYOUT
SCALE 1"=40'



GENERAL NOTES:

DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

⊙ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.

UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.

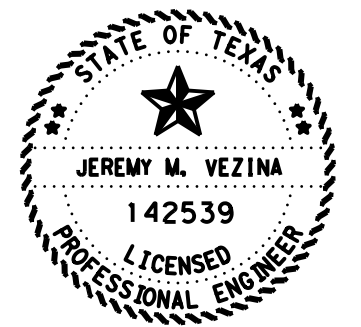
SEE BRIDGE LAYOUT FOR DRILLED SHAFT LENGTHS.

SEE FOUNDATION DETAILS FD(MOD) SHEET AND FOUNDATION DETAILS SHEETS AS PART OF THE COMMON SHEETS FOR FOUNDATION DETAILS AND NOTES NOT SHOWN.

DRILLED SHAFTS SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS ITEM 416. CONTRACTOR SHALL SUBMIT DRILLED SHAFT INSTALLATION PLAN THOROUGHLY OUTLINING THE PROPOSED PROCEDURE FOR SHAFT INSTALLATION PRIOR TO COMMENCEMENT.

DRILLED SHAFTS HAVE BEEN DESIGNED FOR SIDE FRICTION ONLY (NO TIP BEARING.) REFERENCE FORESIGHT GEOTECHNICAL REPORT FOR DISREGARD DEPTH OF SOIL TO ACCOUNT FOR SOIL DISTURBANCE DURING INSTALLATION.

SEE BORING LOGS SHEETS FOR ESTIMATED GROUNDWATER ELEVATIONS. IF GROUNDWATER IS ENCOUNTERED DURING DRILLING AND CASING IS REQUIRED, THE CASING SHALL REMAIN BELOW THE LEVEL OF CONCRETE DURING PLACEMENT. ENGINEER OF RECORD SHALL BE INFORMED IF CASING WILL BE LEFT IN PLACE SO THAT REVISED SHAFT TIP ELEVATIONS AND CAPACITIES CAN BE PROVIDED.



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IH 10 AT US 69
FOUNDATION LAYOUT
IH 10 WBML
OVER CALDER AVE

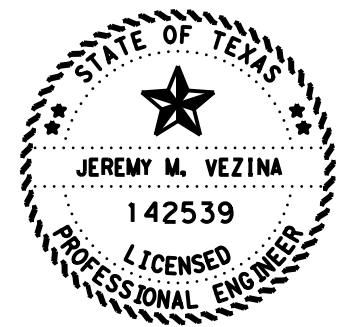
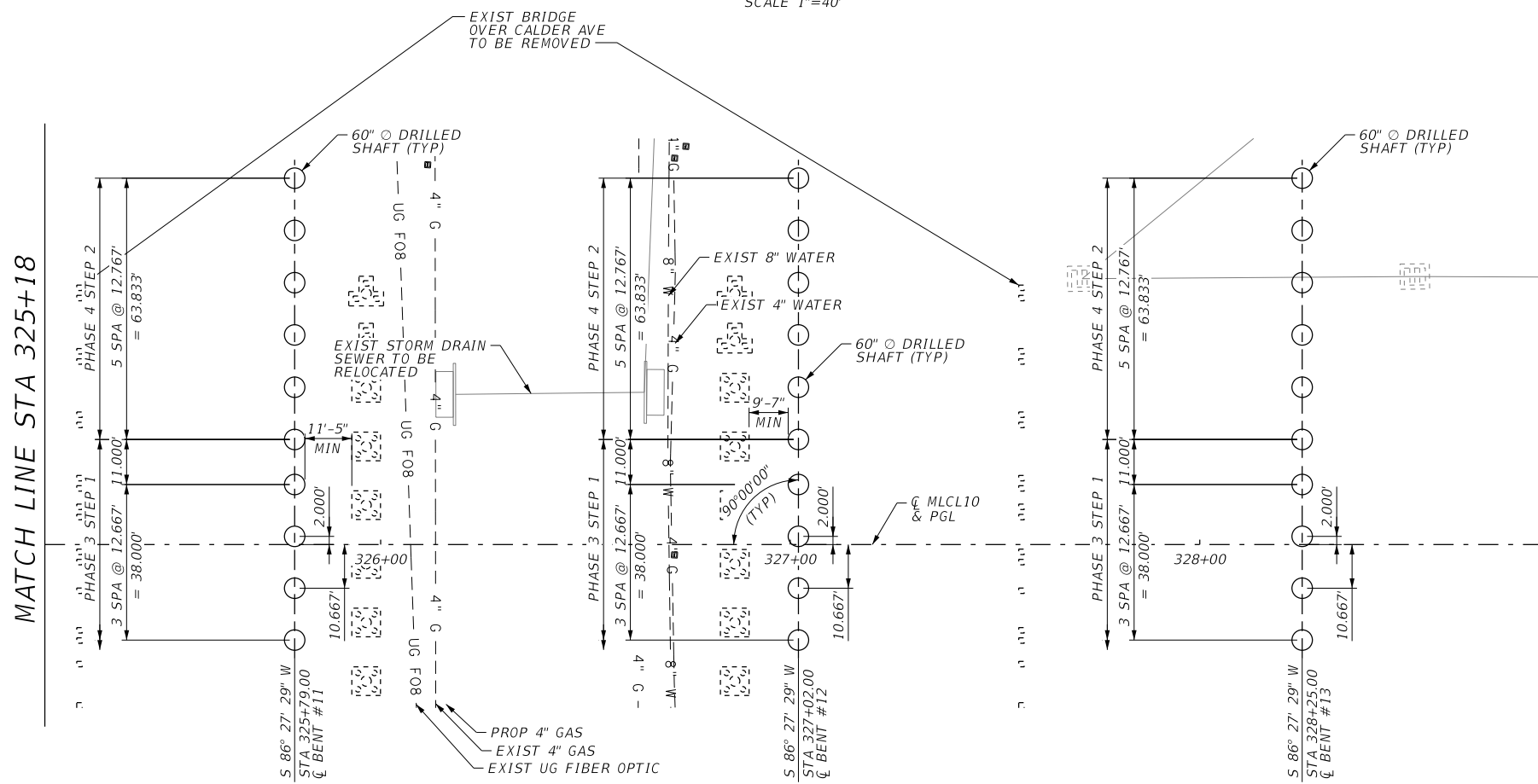
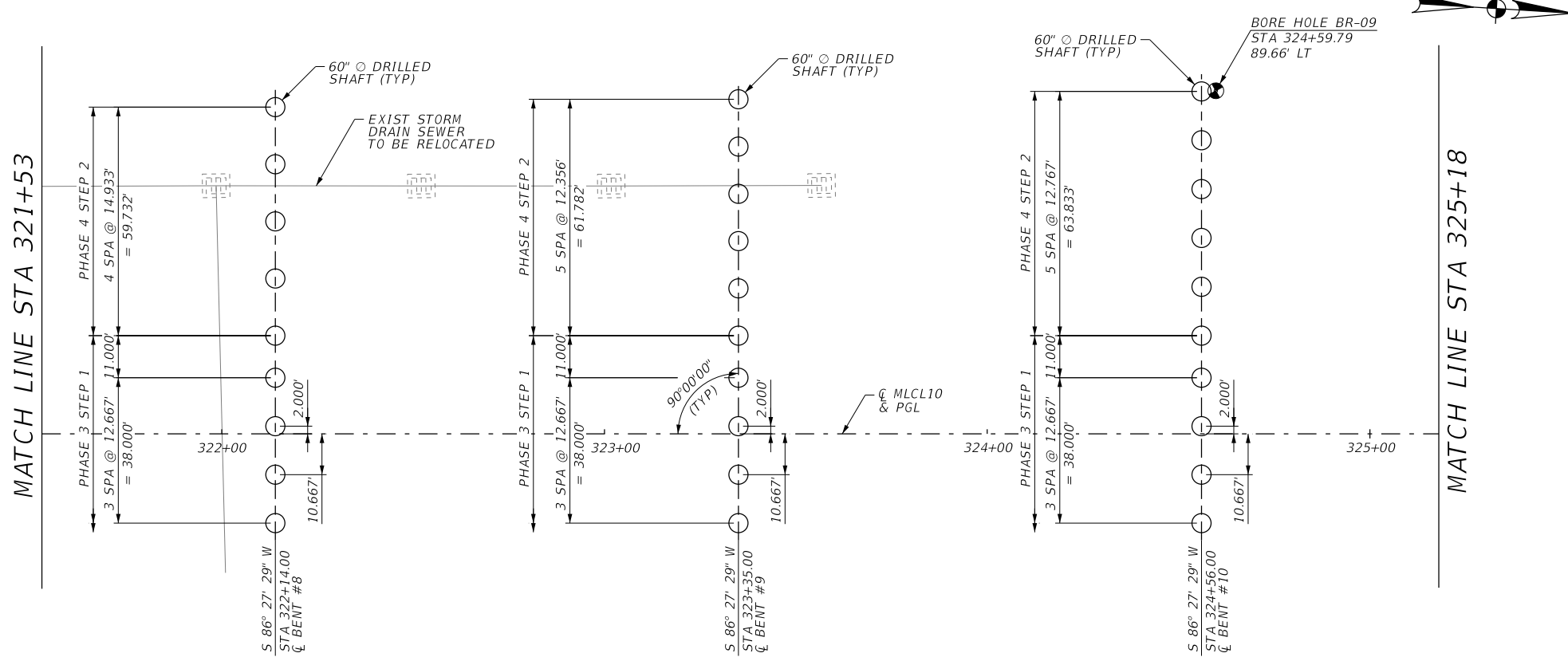
SHEET 1 OF 2

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	13	135	135	135	135	135	135
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1285				

TIP TESTING NOTES:

- ONE SHAFT AT EACH ABUTMENT AND EACH BENT SHALL BE TESTED PER TXDOT SPECIAL SPECIFICATION S54021. "THERMAL INTEGRITY PROFILER (TIP) TESTING OF DRILLED SHAFTS." TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. THE ENGINEER WILL CHOOSE THE INDIVIDUAL DRILLED SHAFTS TO BE TESTED.
- THE ENGINEER SHALL EVALUATE THE RESULTS OF TIP TESTING AND DETERMINE ACCEPTANCE. SHOULD DEFECTS OR QUESTIONABLE RESULTS BE FOUND, THE ENGINEER MAY REQUIRE REMEDIATION USING HYDROBLASTING AND PRESSURE GROUTING. IF THE ENGINEER DETERMINES THAT FURTHER EVALUATION IS NECESSARY, HIGH-STRAIN DYNAMIC LOAD TESTING (ASTM D4945) PER ITEM 405. "FOUNDATION LOAD TEST." SHALL BE CONSIDERED. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A MITIGATION PLAN TO MITIGATE IDENTIFIED DEFECTS. LOAD TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. TXDOT PERSONNEL, OR THEIR DESIGNATED REPRESENTATIVE, SHALL BE PRESENT DURING TESTING.

NOTES:
 SEE SHEET 1 OF 2 FOR GENERAL NOTES.



Jeremy Vezina 2-20-2024

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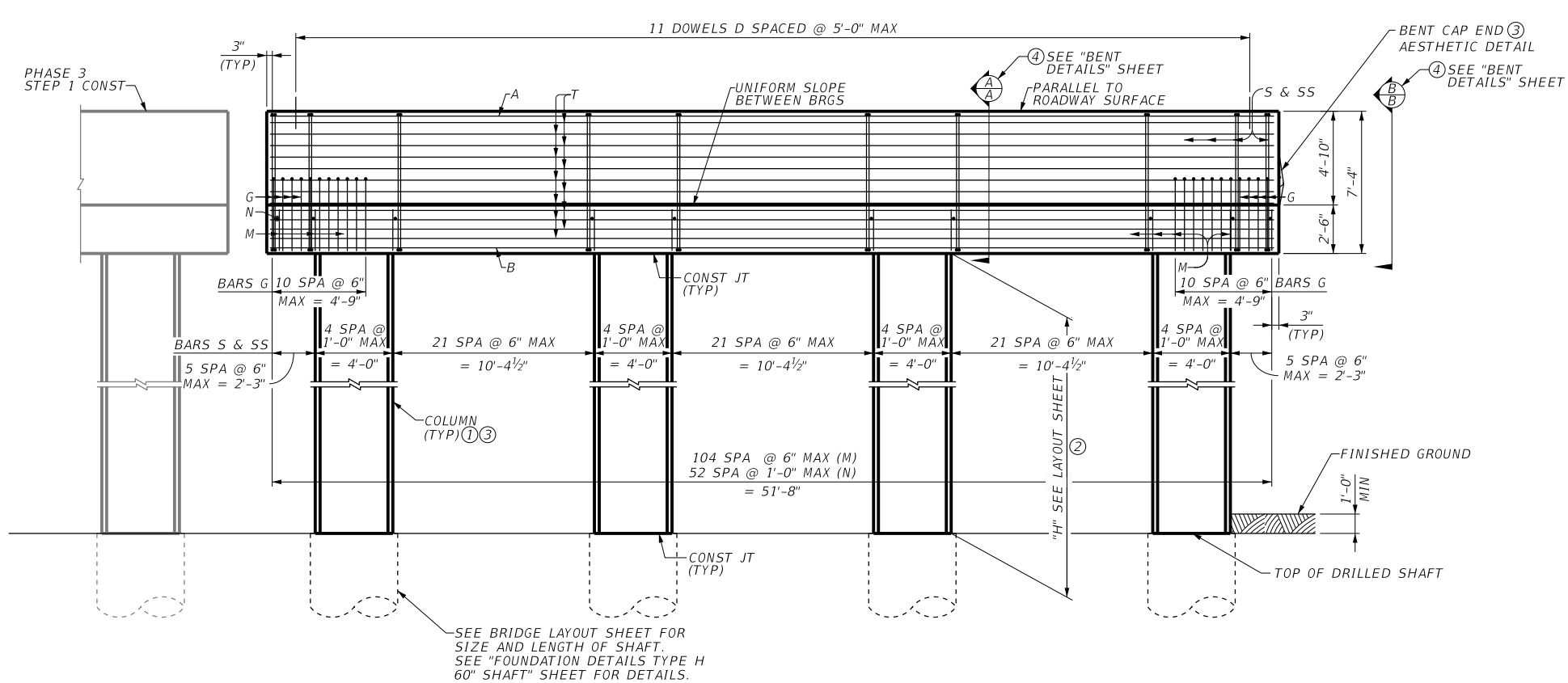
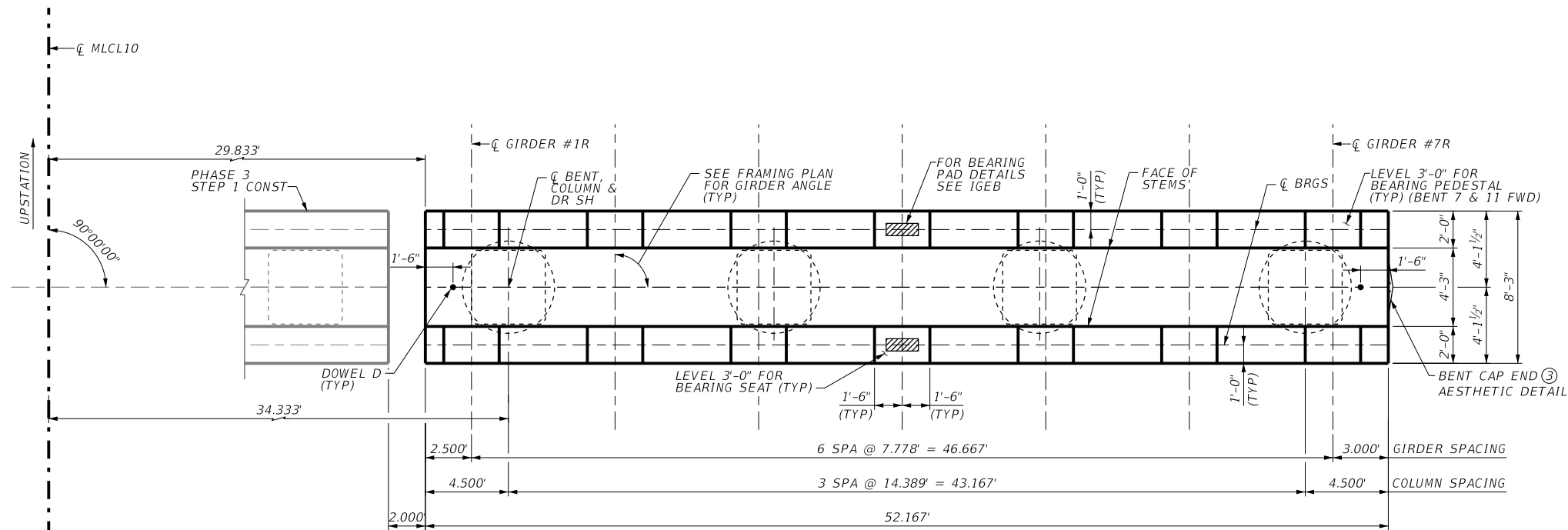
Texas Department of Transportation

IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 WBML
 OVER CALDER AVE

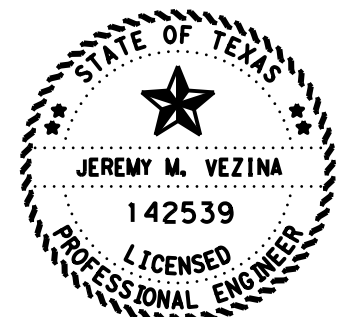
SHEET 2 OF 2

DN: JMV	CK: FB	DW: MTM	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1286	

DATE: 20-FEB-2024 15:33
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1287_10M_CALDERAVE_BENTPE_2-11_1_3.dgn



- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ④ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

HL93 LOADING

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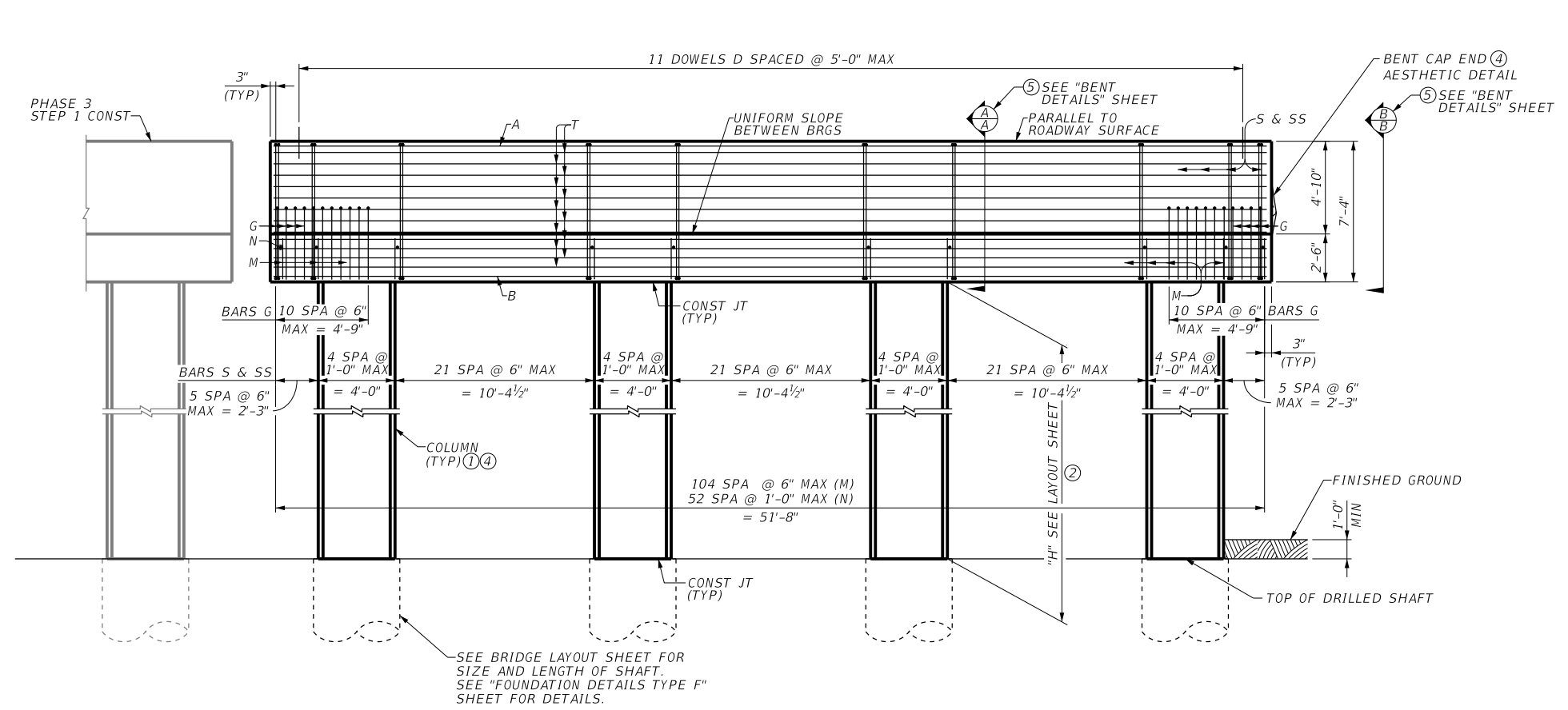
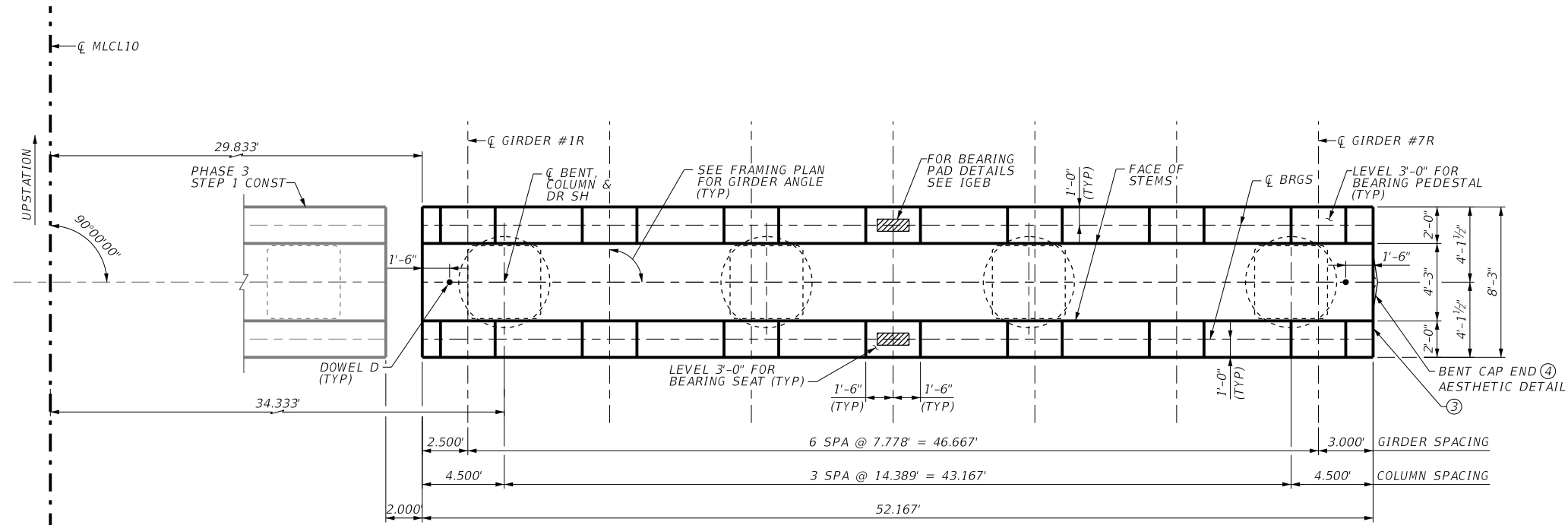


**IH 10 AT US 69
 BENTS 2-11
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER CALDER AVE**

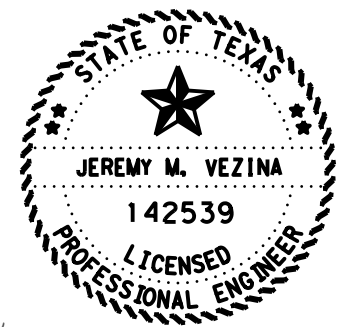
SHEET 1 OF 1

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1287

DATE: 20-FEB-2024 15:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1288_10ML_CALDERAVE_BENTPE_12_1_3.dgn



- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT G MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 12 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE "4'x4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

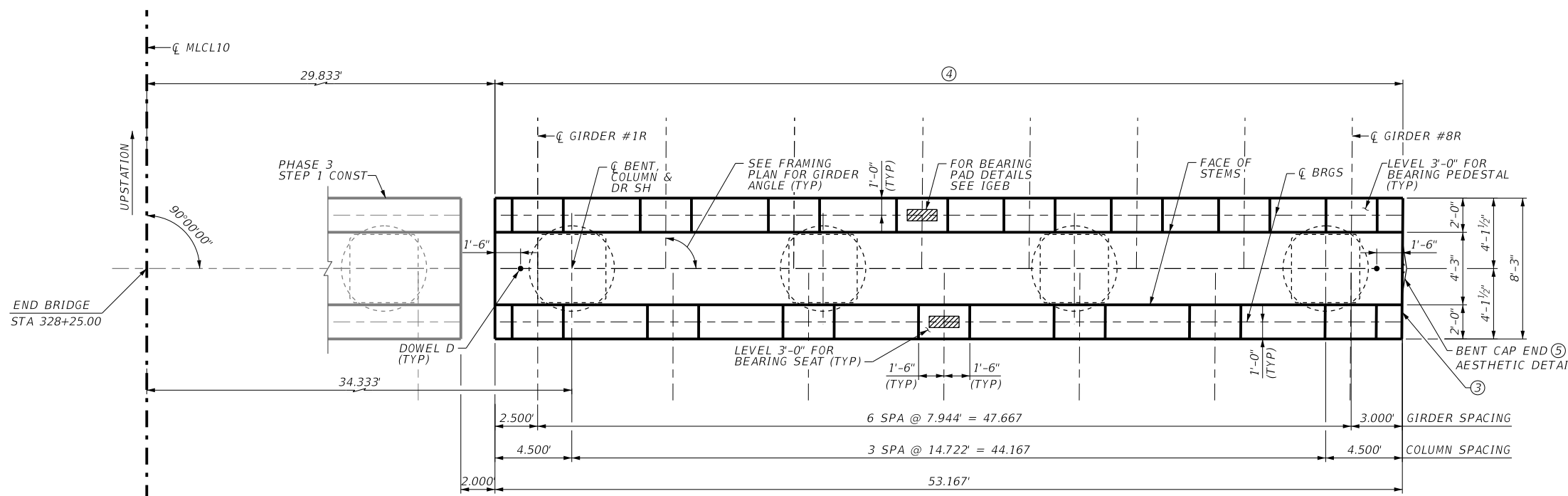
HL93 LOADING



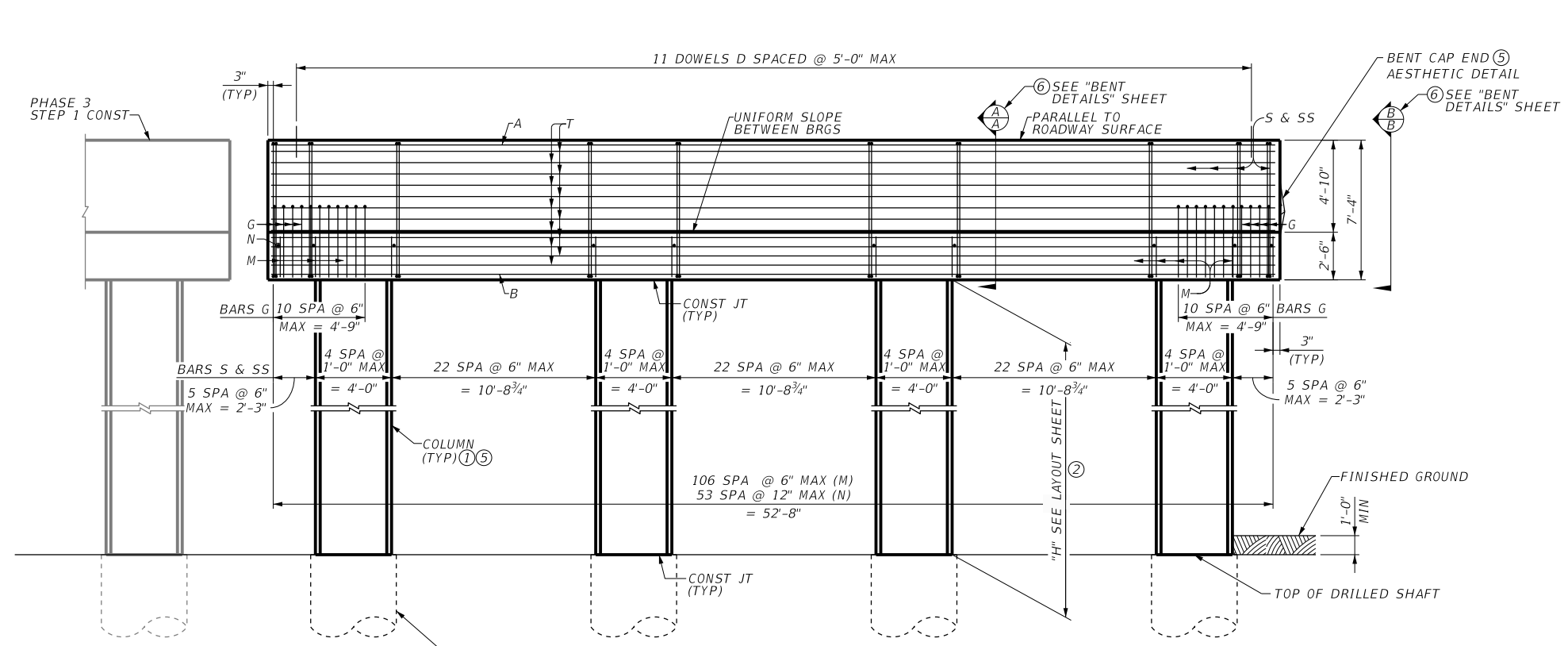
**IH 10 AT US 69
 BENT 12
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER CALDER AVE**
 SHEET 1 OF 1

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1288		

DATE: 20-FEB-2024 15:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1289_10ML_CALDERAVE_BENTPE_13_1_3.dgn

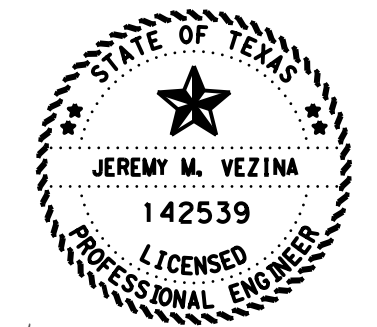


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT G MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 13 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ REFER TO BRIDGE T SHEETS FOR GIRDER SPACINGS AND ANGLES.
- ⑤ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑥ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



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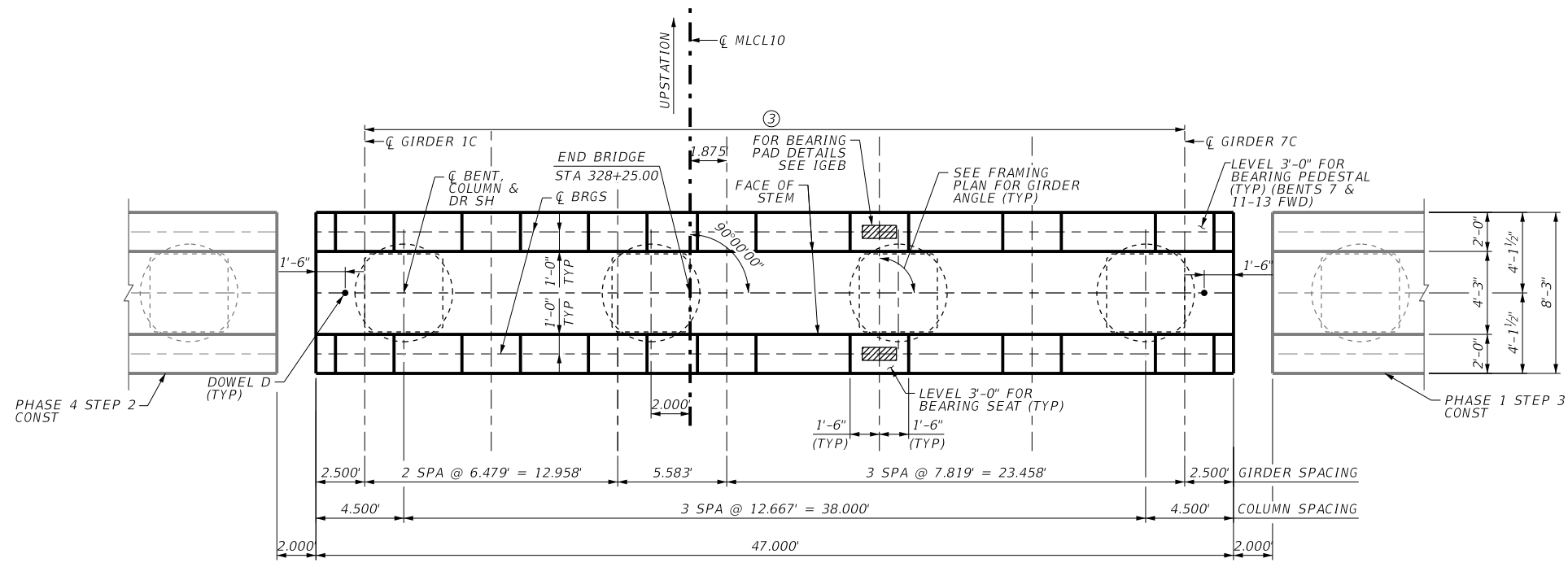


**IH 10 AT US 69
 BENT 13
 PHASE 1 STEP 3
 IH 10 MAINLANE
 OVER CALDER AVE**

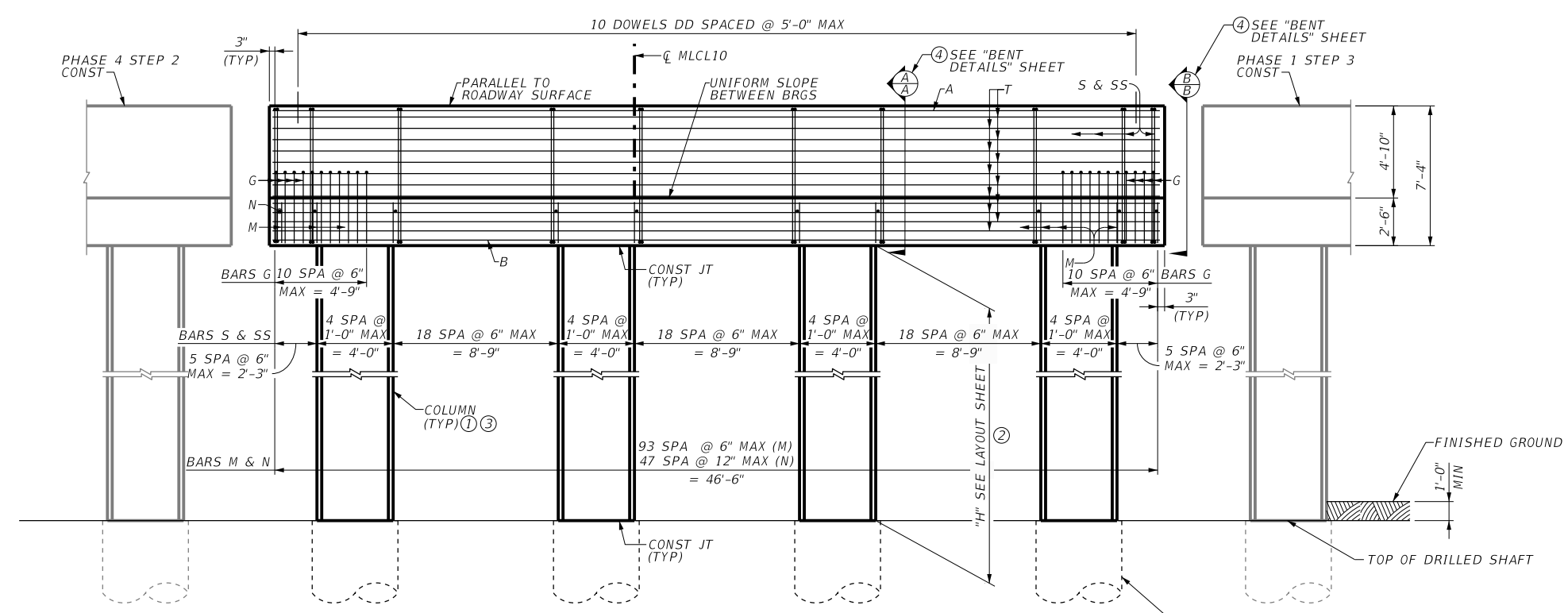
SHEET 1 OF 1

DN: JMV	CK: FB	DW: MTM	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1289	

DATE: 20-FEB-2024 15:37
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10 ML Calderave Bent\PE_2-13_3_1.dgn

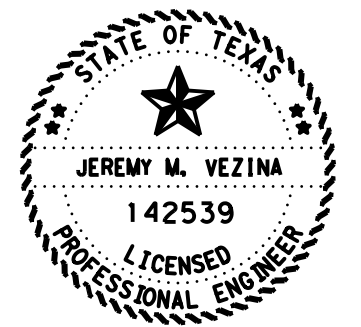


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ REFER TO BRIDGE T AND BRIDGE T1 SHEETS FOR SPACINGS AND ANGLES ON BENT 13.
- ④ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



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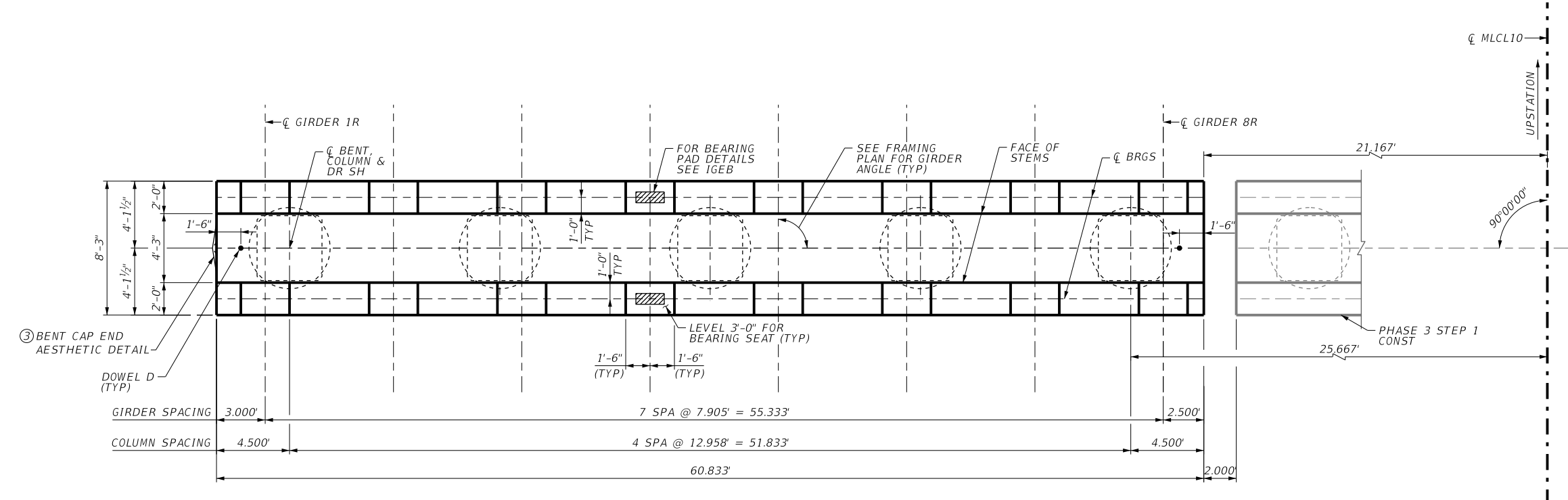
**IH 10 AT US 69
 BENTS 2-13
 PHASE 3 STEP 1
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 1 OF 1

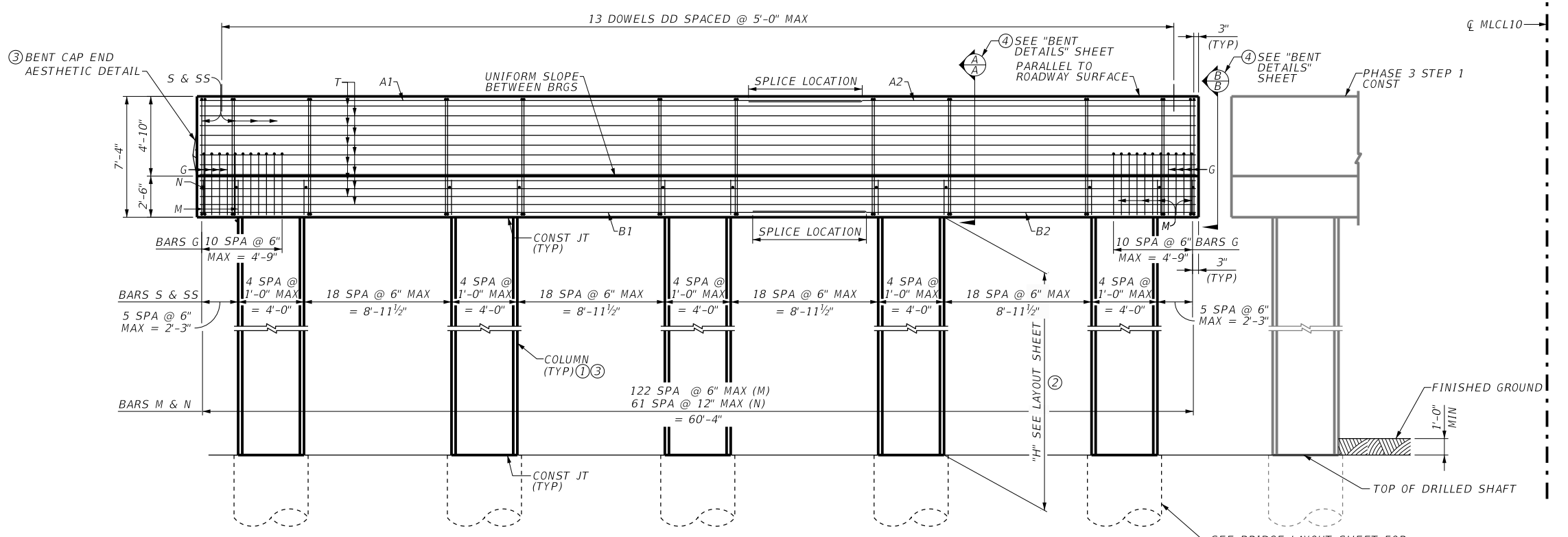
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CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1290	

DATE: 20-FEB-2024 15:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1.0 ML Calderave Bent\PE 2-3 4 2.dgn

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ④ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.

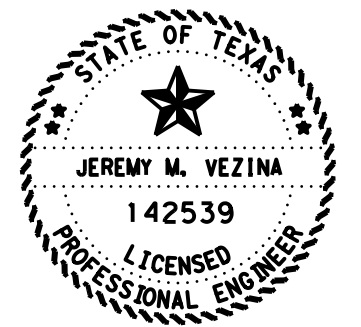


PLAN
 $\frac{1}{8}'' = 1'-0''$



ELEVATION
 $\frac{1}{8}'' = 1'-0''$

SEE BRIDGE LAYOUT SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS TYPE F" SHEET FOR DETAILS.



Jeremy Veжина 2-20-2024

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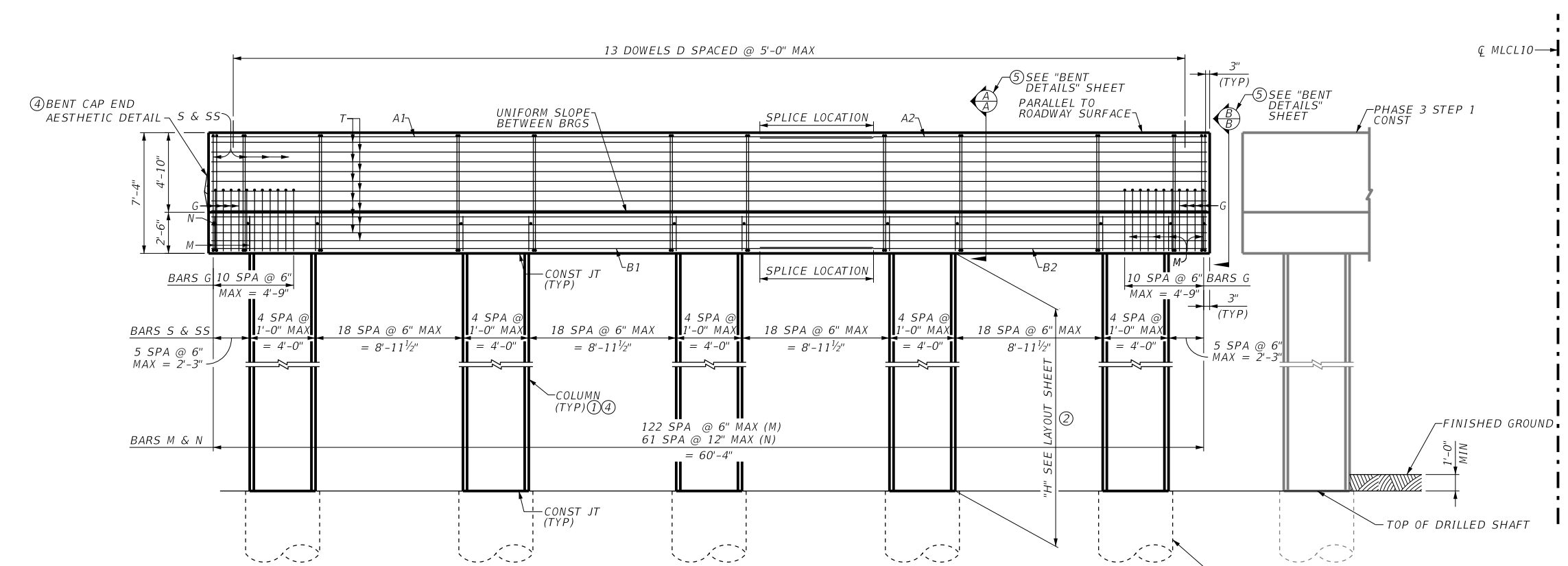
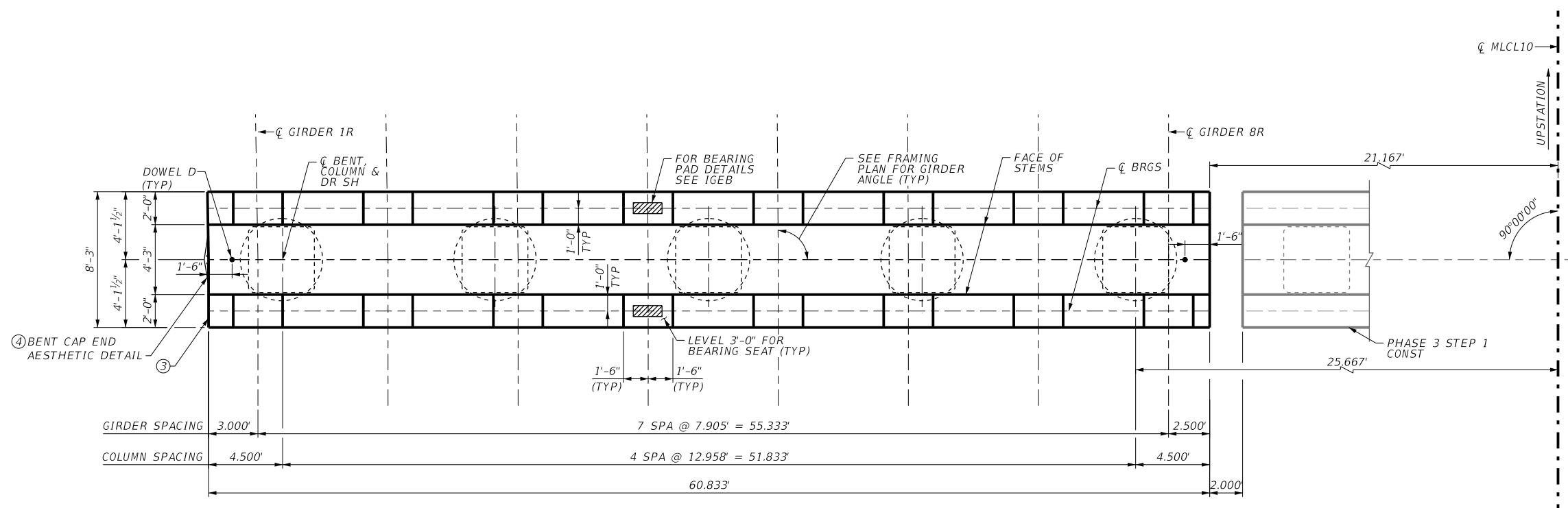
Texas Department of Transportation

IH 10 AT US 69
 BENTS 2 & 3
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE

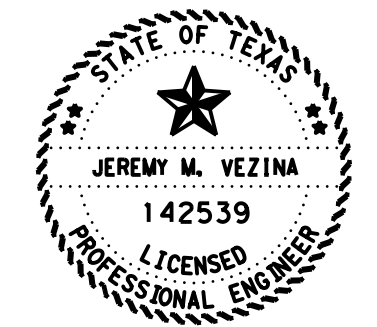
SHEET 1 OF 1

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1291	

DATE: 20-FEB-2024 15:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1. Bridge\10ML_Calderave_BentPE_4_4_2.dgn



- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 4 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



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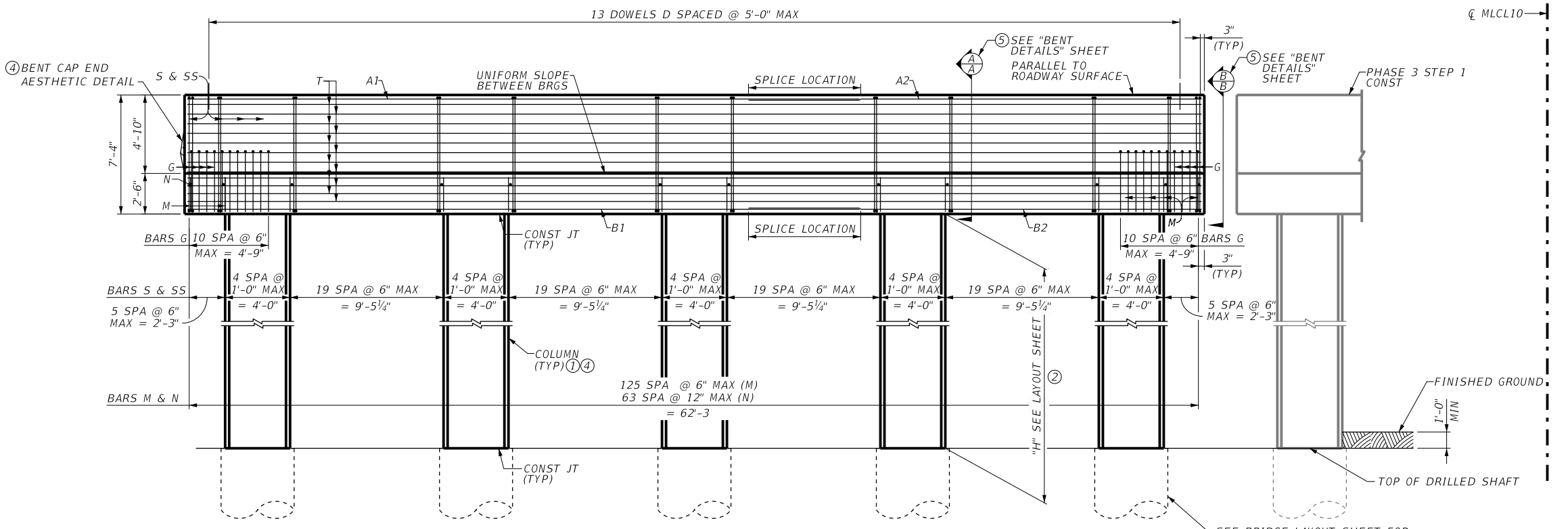
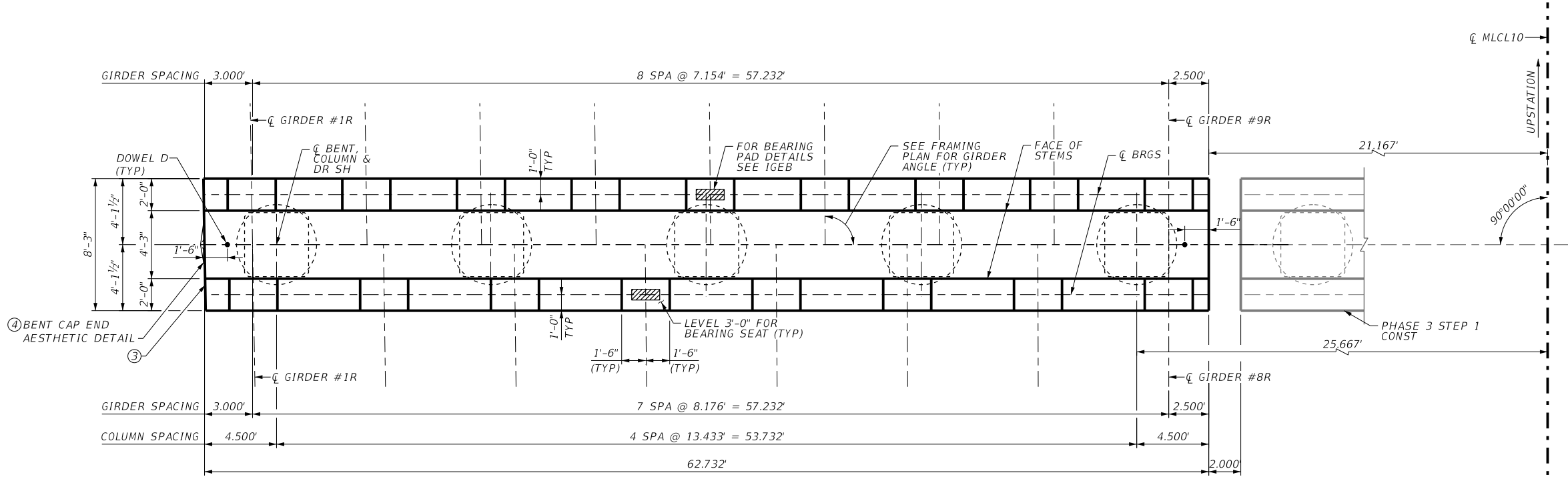
Texas Department of Transportation

**IH 10 AT US 69
 BENT 4
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE**

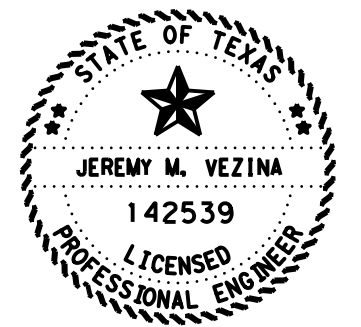
SHEET 1 OF 1

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1292		

DATE: 20-FEB-2024 19:08
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1074500 - BMT 10 69 Interchanges over Calder Ave)\1293_10ML_CALDERAVE_BENTPE_5_4_2.dgn



- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 5 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



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IH 10 AT US 69
 BENT 5
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE

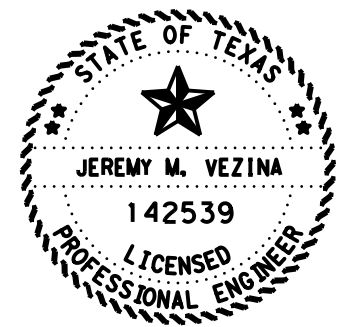
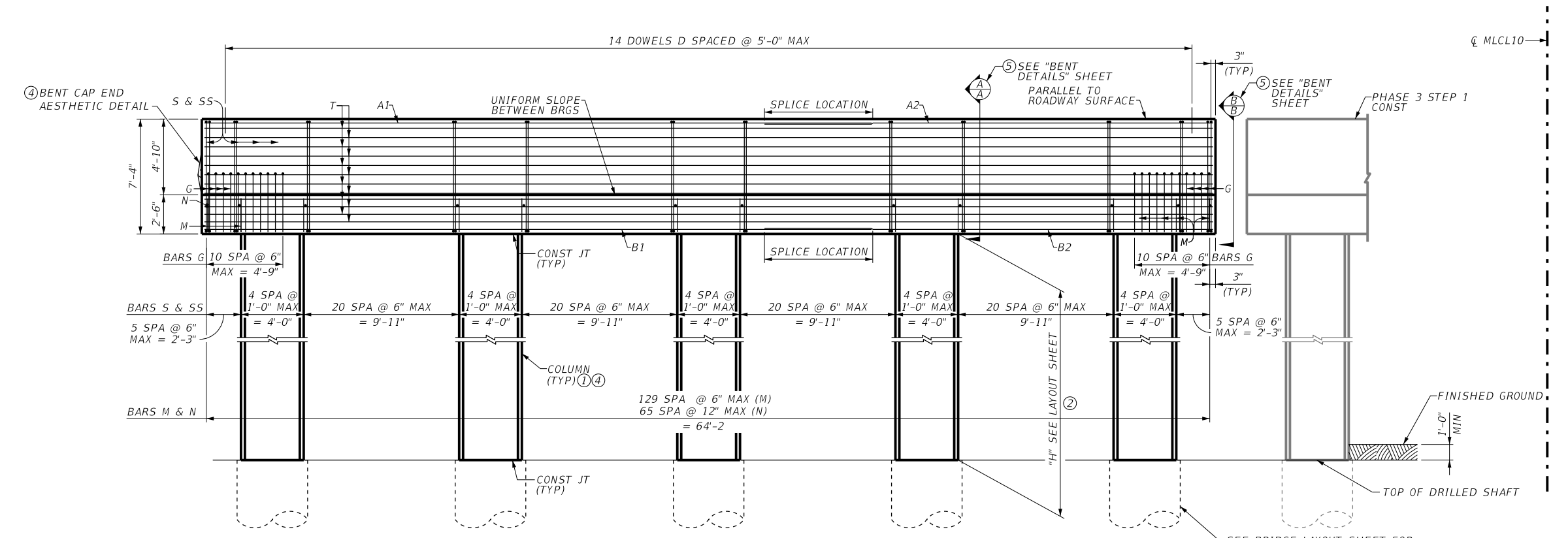
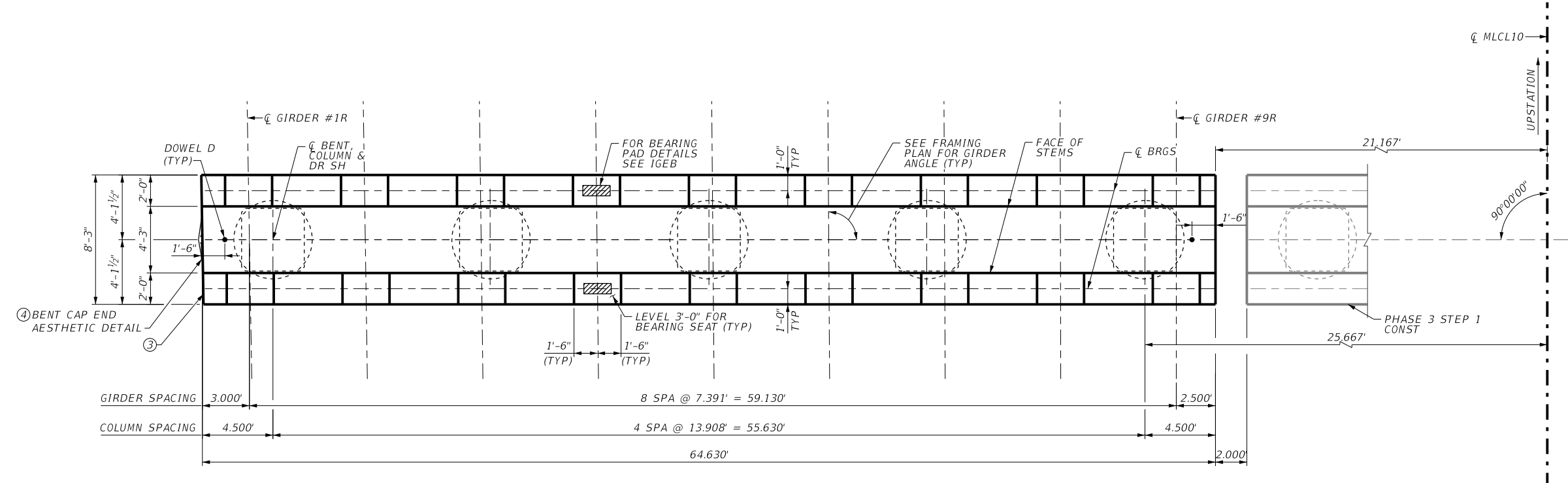
SHEET 1 OF 1

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1293		

SEE BRIDGE LAYOUT SHEET FOR SIZE AND LENGTH OF SHAFT. SEE "FOUNDATION DETAILS TYPE F" SHEET FOR DETAILS.

DATE: 20-FEB-2024 15:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1. Bridge\10ML_Calderave_Bent\PE_6_4_2.dgn

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 6 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS
- ④ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Veжина 2-20-2024

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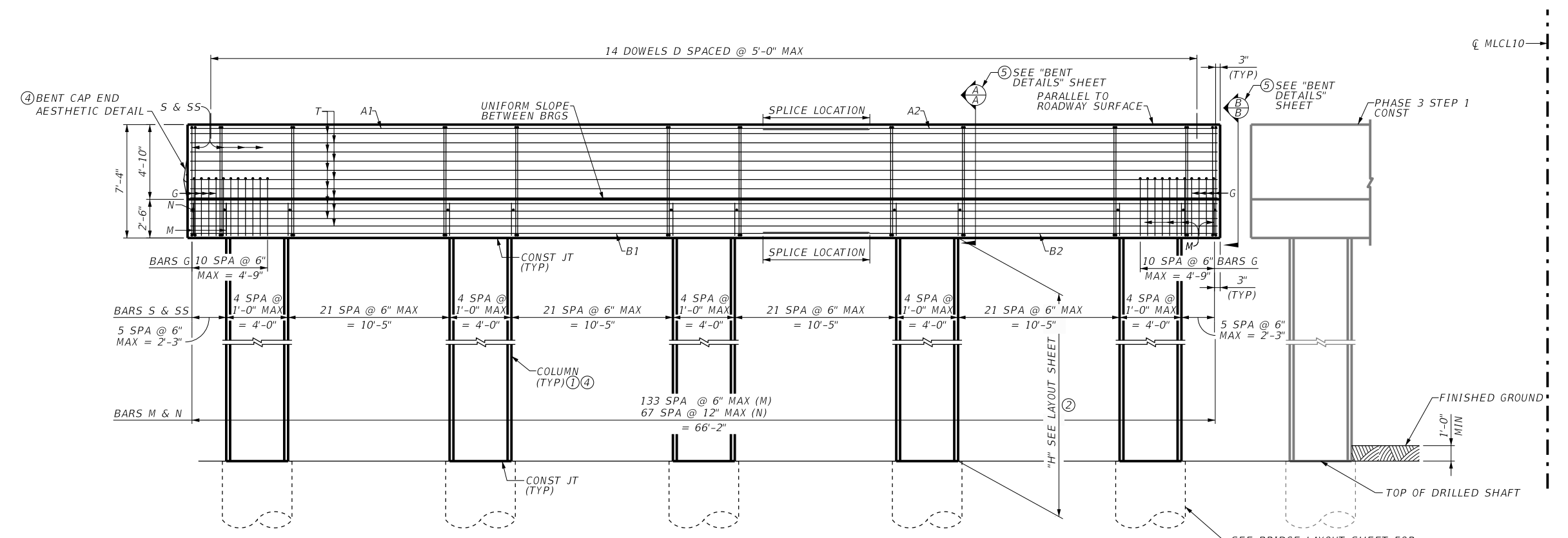
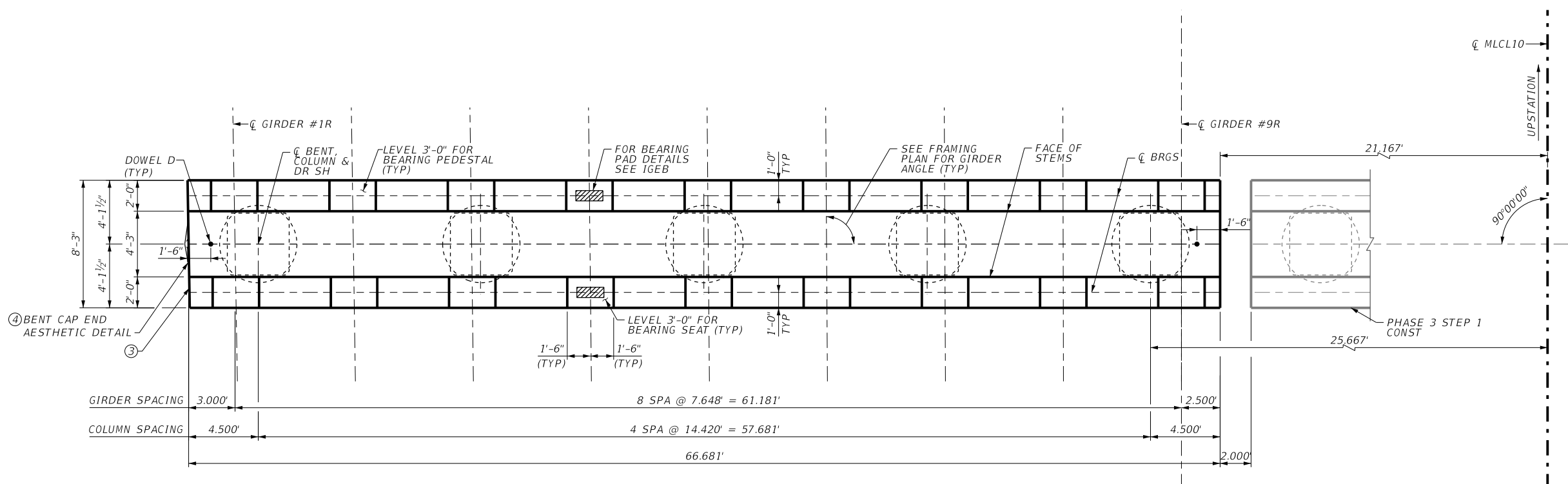
Texas Department of Transportation

**IH 10 AT US 69
 BENT 6
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE**

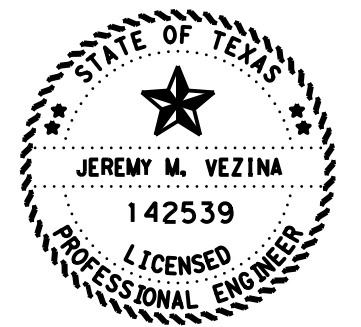
SHEET 1 OF 1

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	13	SECT	135	JOB	135	CK:	FB
0028							
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1294				

DATE: 20-FEB-2024 15:36
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10ML_Calderave_BentPE_7.4.2.dgn



- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 7 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS
- ④ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

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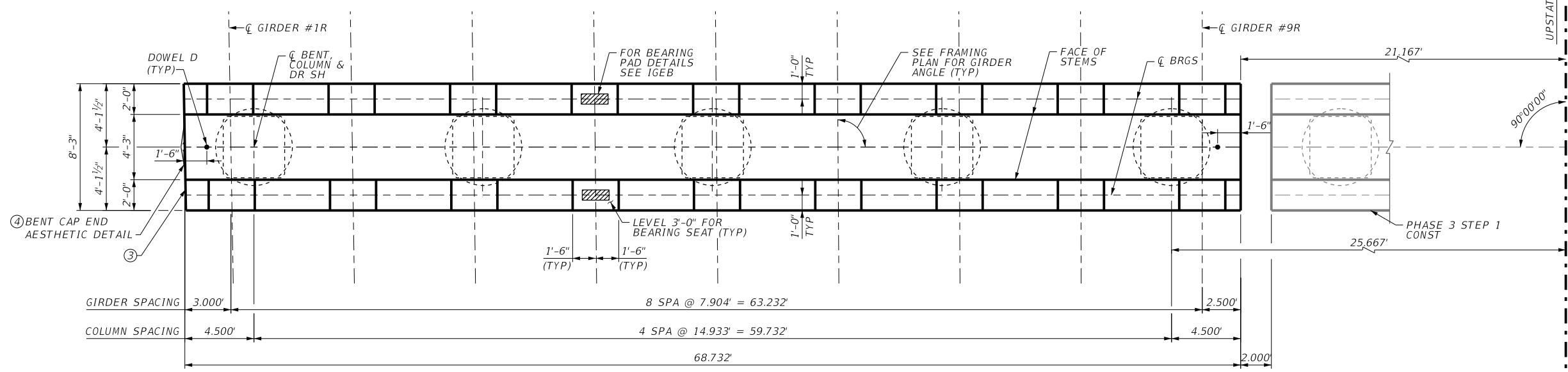
Texas Department of Transportation

**IH 10 AT US 69
 BENT 7
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE**

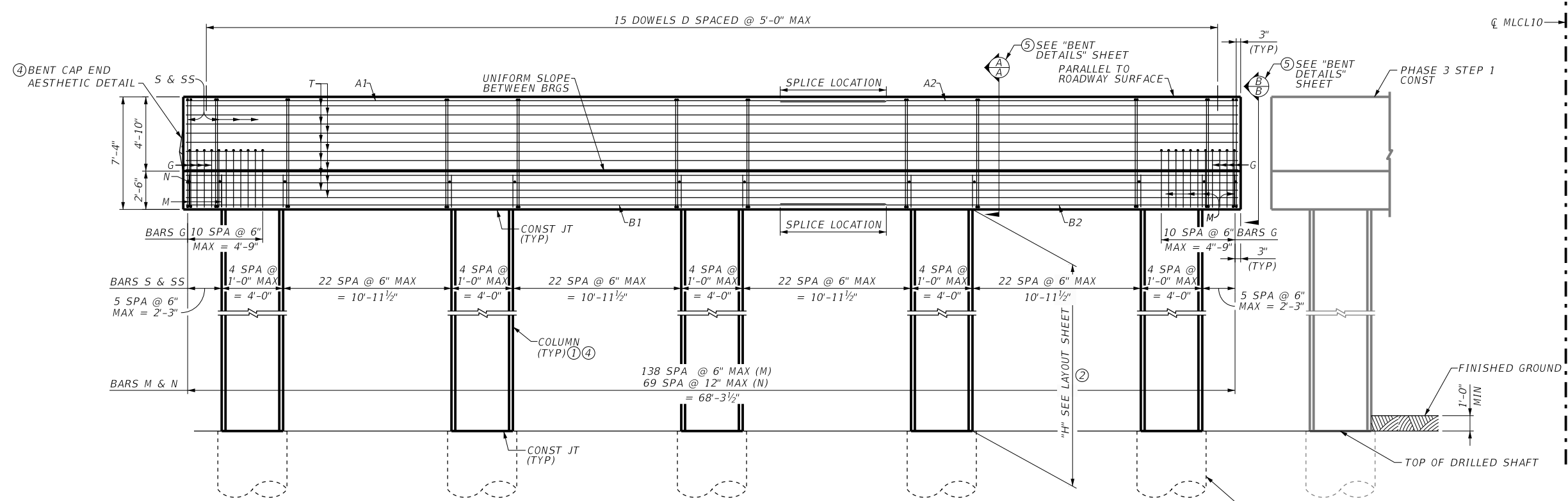
SHEET 1 OF 1

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1295	

DATE: 20-FEB-2024 15:34
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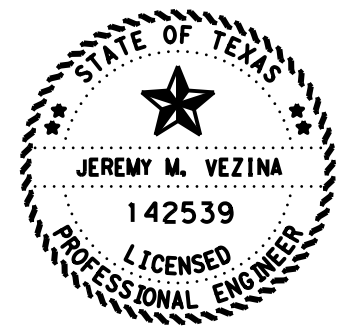


PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 8 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

HL93 LOADING

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Texas Department of Transportation

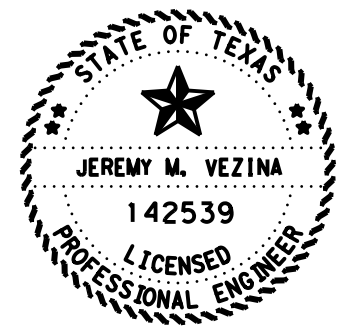
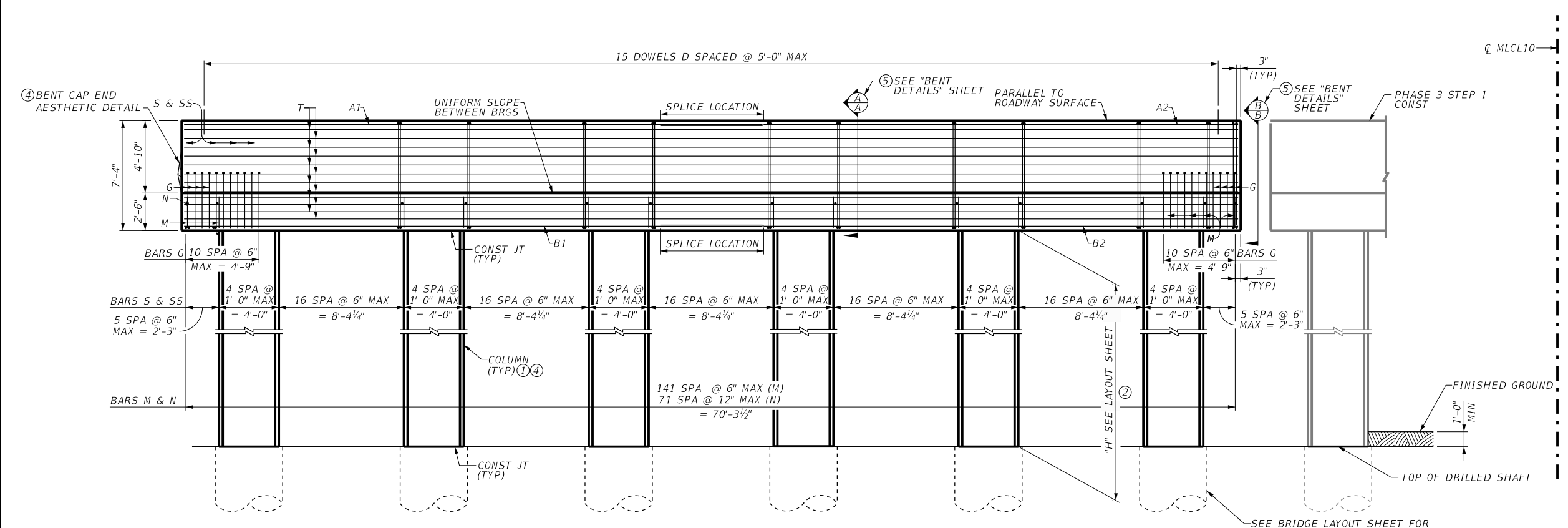
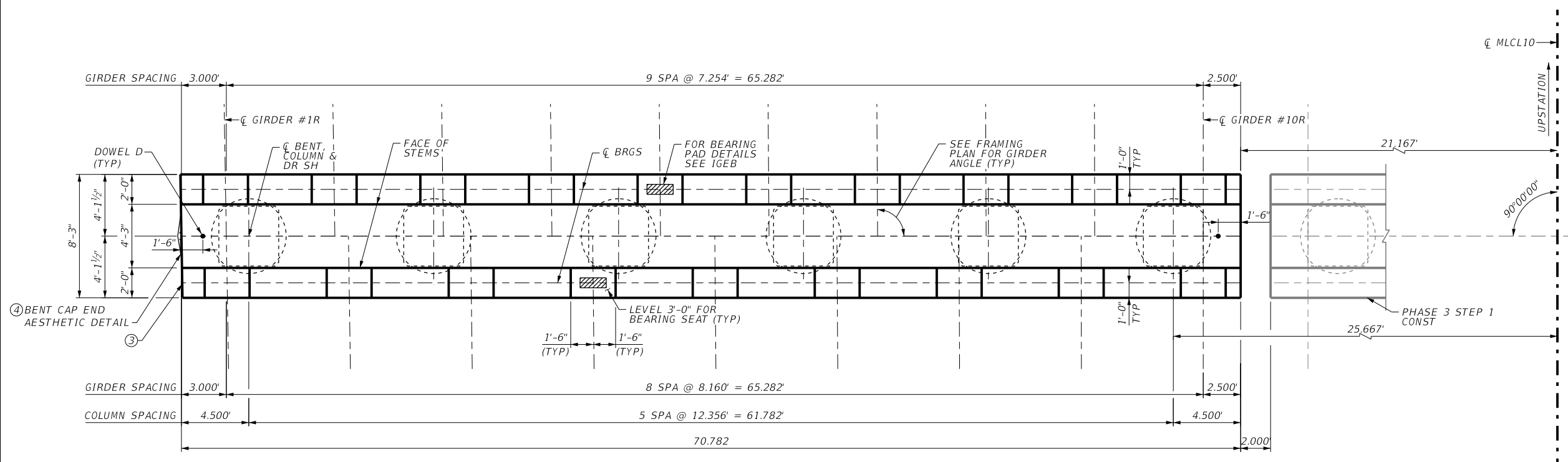
**IH 10 AT US 69
 BENT 8
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 1 OF 1

DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1296		

DATE: 20-FEB-2024 15:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10ML_Calderave_BentPE_9_4_2.dgn

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 9 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS
- ④ SEE "4'X4' COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

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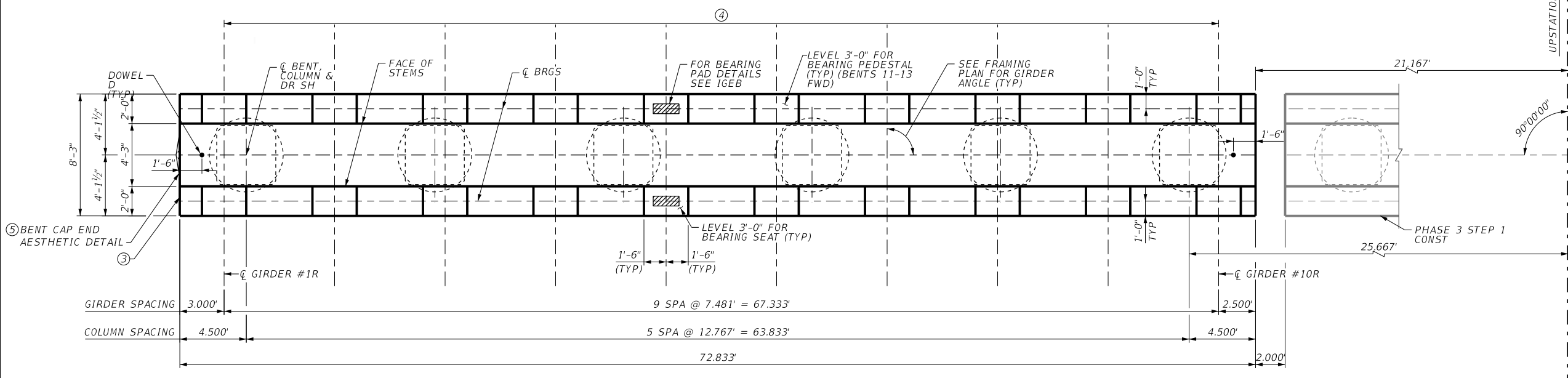
IH 10 AT US 69
 BENT 9
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE

SHEET 1 OF 1

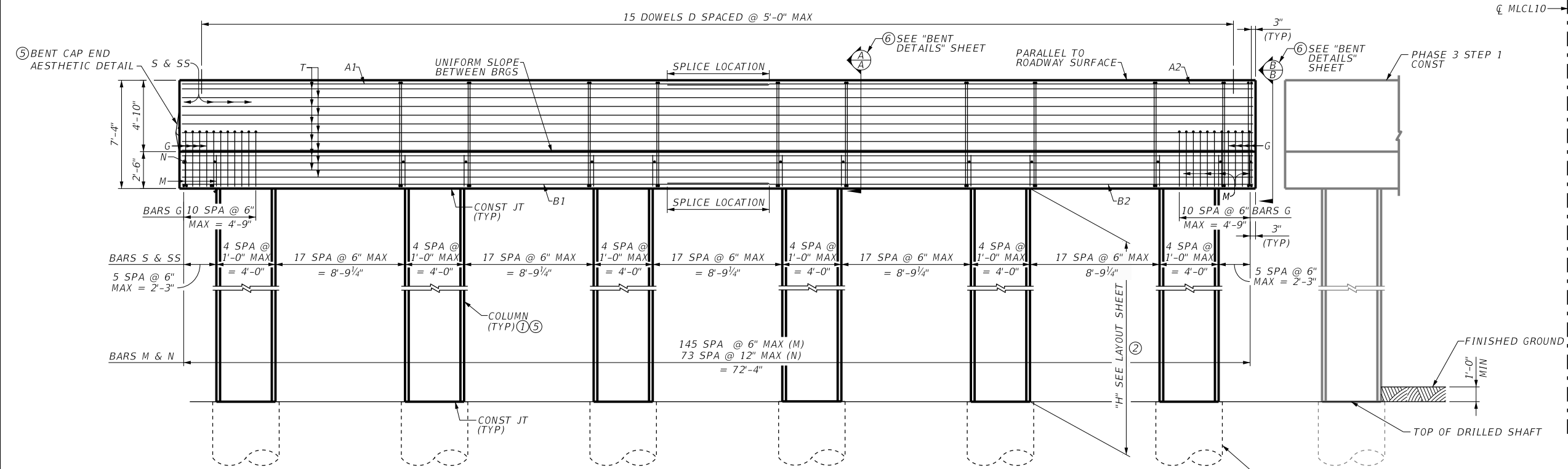
DN:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1297		

SEE BRIDGE LAYOUT SHEET FOR SIZE AND LENGTH OF SHAFT. SEE "FOUNDATION DETAILS TYPE F" SHEET FOR DETAILS.

DATE: 20-FEB-2024 15:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10ML_Calderave_BentPE_10-13_4-2.dwg

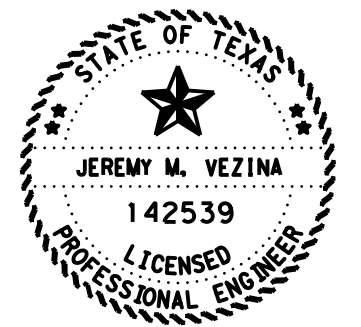


PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

- ① SEE "COLUMN DETAILS TYPE A" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ BENT 10-13 CAP EDGE TO FOLLOW ALONG DECK TAPER. SEE SPAN UNIT SHEETS FOR DETAILS.
- ④ REFER TO BRIDGE T1 SHEETS FOR GIRDER SPACINGS AND ANGLES BENT 13.
- ⑤ SEE 4'X4' COLUMN AESTHETIC DETAILS SHEET.
- ⑥ SEE BENT DETAILS SHEET FOR ADDITIONAL CAP REINFORCING AND DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024

HL93 LOADING

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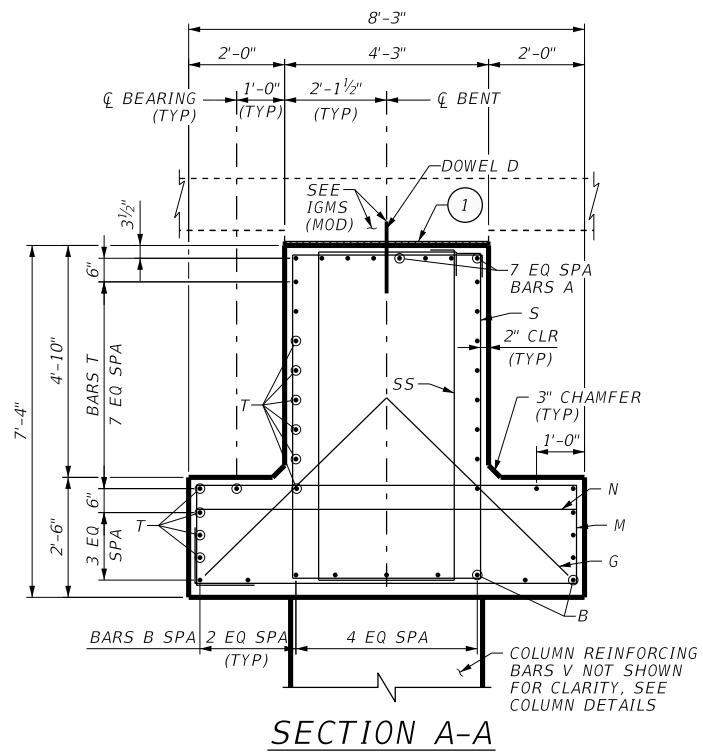
Texas Department of Transportation

**IH 10 AT US 69
 BENTS 10-13
 PHASE 4 STEP 2
 IH 10 MAINLANE
 OVER CALDER AVE**

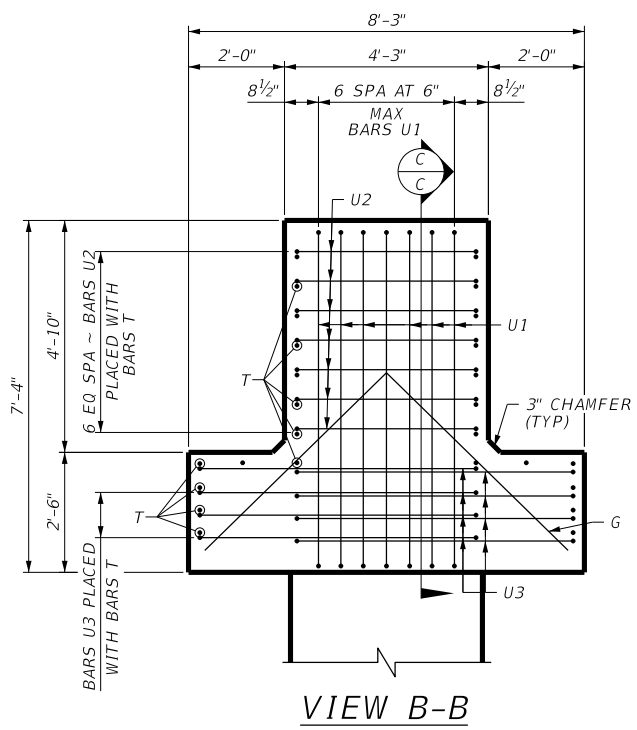
SHEET 1 OF 1

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1298	

DATE: 20-FEB-2024 15:37
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1299_10ML_CALDERAVE_BENT_DET_01

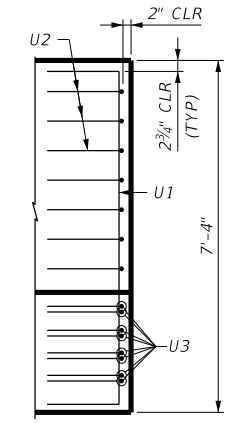


SECTION A-A



VIEW B-B

(BARS A, B, D, M, N, S AND SS NOT SHOWN FOR CLARITY)
 (DIMENSIONS SHOWN ARE PERPENDICULAR TO ϕ BENT)



SECTION C-C

(BARS A, B, G, M, N, S, SS AND T NOT SHOWN FOR CLARITY)

GENERAL NOTES:
 DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, (2020), AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023). SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.

SEE "COLUMN DETAILS TYPE A" SHEET FOR ALL COLUMN DETAILS AND NOTES.

SEE "FOUNDATION DETAILS TYPE H 60" SHAFT" SHEET FOR ALL FOUNDATION DETAILS AND NOTES.

CALCULATED FOUNDATION LOADS FOR EACH BENT:
 BENTS 2-5 = 341 TONS/SHAFT
 BENTS 6-13 = 356 TONS/SHAFT

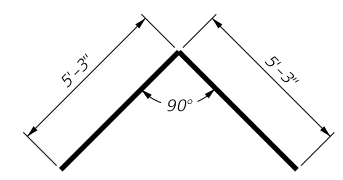
MATERIAL NOTES:
 PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI).

PROVIDE GRADE 60 REINFORCING STEEL.

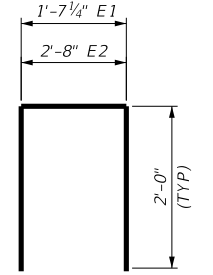
1 SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL. DOES NOT APPLY TO EXPANSION JOINT END BENTS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

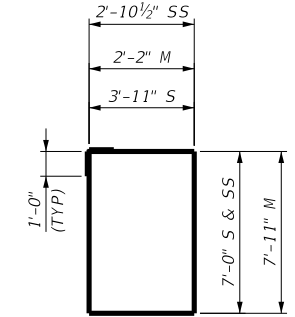
COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



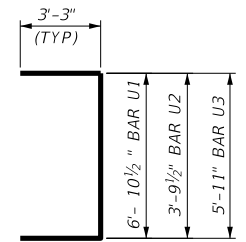
BARS G



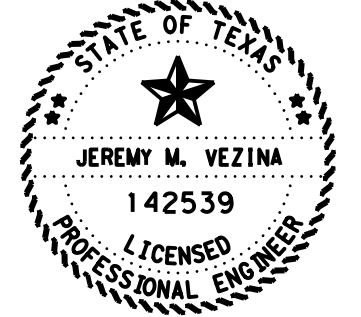
BARS E1 & E2



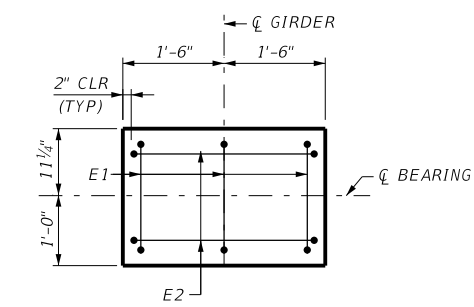
BARS S, SS & M



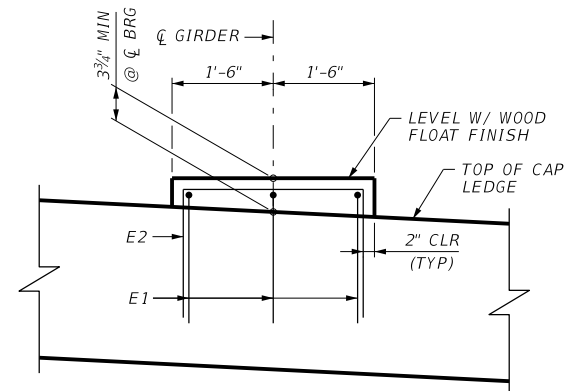
BARS U1, U2 & U3



Jeremy Vezina 2-20-2024

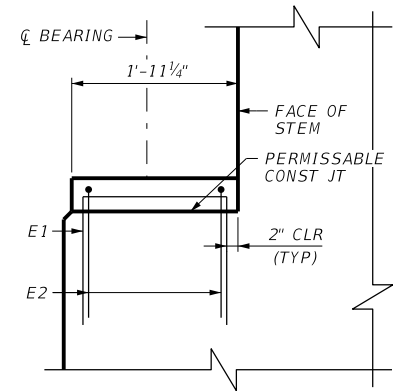


BEARING PEDESTAL PLAN



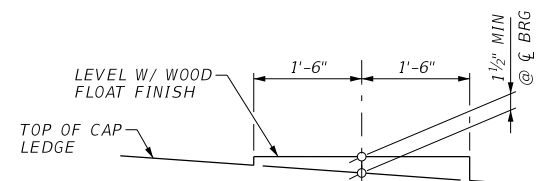
BEARING PEDESTAL ELEVATION

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



BEARING PEDESTAL SECTION

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



BEARING DETAIL SEAT

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)

HL93 LOADING

VOLKERT

F-12679



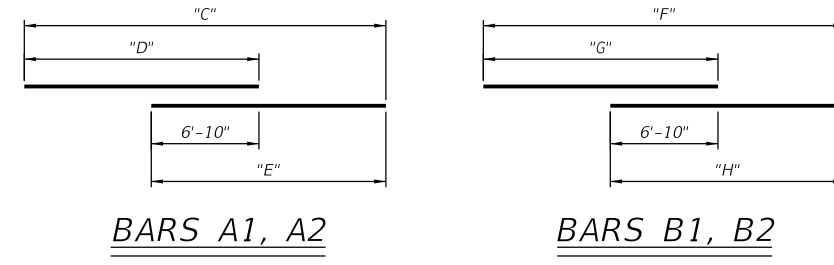
**IH 10 AT US 69
 BENT DETAILS
 IH 10 MAINLANE
 OVER CALDER AVE**

SHEET 1 OF 3

DN: JMV	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1299	

① QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.

BENT ID	BAR SPLICE LENGTHS					
	BARS A			BARS B		
	C	D	E	F	G	H
2 - 4 - PHASE 4 STEP 2	60' - 6"	40' - 2"	27' - 2"	60' - 6"	40' - 2"	27' - 2"
5 - PHASE 4 STEP 2	62' - 6"	41' - 5"	27' - 11"	62' - 6"	41' - 5"	27' - 11"
6 - PHASE 4 STEP 2	64' - 4"	42' - 6"	28' - 8"	64' - 4"	42' - 6"	28' - 8"
7 - PHASE 4 STEP 2	66' - 5"	43' - 10"	29' - 5"	66' - 5"	43' - 10"	29' - 5"
8 - PHASE 4 STEP 2	68' - 5"	45' - 1"	30' - 2"	68' - 5"	45' - 1"	30' - 2"
9 - PHASE 4 STEP 2	70' - 6"	38' - 8"	38' - 8"	70' - 6"	38' - 8"	38' - 8"
10 - 13 - PHASE 4 STEP 2	72' - 6"	39' - 8"	39' - 8"	72' - 6"	39' - 8"	39' - 8"



DATE: 20-FEB-2024 15:38 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Bridges\1074500_MAINLANE_OVER_CALDER_AVE_DET_02

TABLE OF ESTIMATED QUANTITIES
BENT 2 (H=17') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,733
CLASS "C" CONCRETE (CAP)			CY	80.0
CLASS "C" CONCRETE (COL)			CY	40.0

① TABLE OF ESTIMATED QUANTITIES
BENTS 3 - 6 (H=18') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,733
CLASS "C" CONCRETE (CAP)			CY	80
CLASS "C" CONCRETE (COL)			CY	42.4

TABLE OF ESTIMATED QUANTITIES
BENT 7 (H=14') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
E1	21	#5	5'-8"	124
E2	14	#5	6'-8"	97
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,954
CLASS "C" CONCRETE (CAP)			CY	80
CLASS "C" CONCRETE (COL)			CY	33.2

① TABLE OF ESTIMATED QUANTITIES
BENTS 8 & 9 (H=14') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,733
CLASS "C" CONCRETE (CAP)			CY	80
CLASS "C" CONCRETE (COL)			CY	33.2

TABLE OF ESTIMATED QUANTITIES
BENT 10 (H=15') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,733
CLASS "C" CONCRETE (CAP)			CY	80
CLASS "C" CONCRETE (COL)			CY	35.6

TABLE OF ESTIMATED QUANTITIES
BENT 11 (H=17') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
E1	21	#5	5'-8"	124
E2	14	#5	6'-8"	97
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,954
CLASS "C" CONCRETE (CAP)			CY	80
CLASS "C" CONCRETE (COL)			CY	40.0

TABLE OF ESTIMATED QUANTITIES
BENT 12 (H=21') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
E1	21	#5	5'-8"	124
E2	14	#5	6'-8"	97
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,954
CLASS "C" CONCRETE (CAP)			CY	80
CLASS "C" CONCRETE (COL)			CY	49.6

TABLE OF ESTIMATED QUANTITIES
BENT 13 (H=22') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	52'-10"	2,246
B	9	#11	52'-10"	2,526
D	12	#11	1'-6"	96
E1	21	#5	5'-8"	124
E2	14	#5	6'-8"	97
G	22	#7	10'-6"	472
M	107	#6	22'-2"	3,562
N	54	#6	7'-11"	642
S	93	#6	23'-10"	3,329
SS	93	#6	21'-9"	3,038
T	26	#5	52'-10"	1,433
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	18,364
CLASS "C" CONCRETE (CAP)			CY	81.5
CLASS "C" CONCRETE (COL)			CY	52.0

TABLE OF ESTIMATED QUANTITIES
BENT 2 (H=17') (PHASE 3 STEP 1)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46'-8"	1,984
B	9	#11	46'-8"	2,231
D	10	#11	1'-6"	80
G	22	#7	10'-6"	472
M	94	#6	22'-2"	3,130
N	48	#6	7'-11"	571
S	81	#6	23'-10"	2,900
SS	81	#6	21'-9"	2,646
T	26	#5	46'-8"	1,266
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	16,076
CLASS "C" CONCRETE (CAP)			CY	61.7
CLASS "C" CONCRETE (COL)			CY	40.0

① TABLE OF ESTIMATED QUANTITIES
BENTS 3 - 6 (H=18') (PHASE 3 STEP 1)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46'-8"	1,984
B	9	#11	46'-8"	2,231
D	10	#11	1'-6"	80
G	22	#7	10'-6"	472
M	94	#6	22'-2"	3,130
N	48	#6	7'-11"	571
S	81	#6	23'-10"	2,900
SS	81	#6	21'-9"	2,646
T	26	#5	46'-8"	1,266
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	16,076
CLASS "C" CONCRETE (CAP)			CY	61.7
CLASS "C" CONCRETE (COL)			CY	42.4

TABLE OF ESTIMATED QUANTITIES
BENT 7 (H=14') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	51'-10"	2,203
B	9	#11	51'-10"	2,479
D	11	#11	1'-6"	88
E1	21	#5	5'-8"	124
E2	14	#5	6'-8"	97
G	22	#7	10'-6"	472
M	105	#6	22'-2"	3,496
N	53	#6	7'-11"	630
S	90	#6	23'-10"	3,222
SS	90	#6	21'-9"	2,940
T	26	#5	51'-10"	1,406
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	17,954
CLASS "C" CONCRETE (CAP)			CY	80
CLASS "C" CONCRETE (COL)			CY	33.2

① TABLE OF ESTIMATED QUANTITIES
BENTS 8 & 9 (H=14') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46'-8"	1,984
B	9	#11	46'-8"	2,231
D	10	#11	1'-6"	80
G	22	#7	10'-6"	472
M	94	#6	22'-2"	3,130
N	48	#6	7'-11"	571
S	81	#6	23'-10"	2,900
SS	81	#6	21'-9"	2,646
T	26	#5	46'-8"	1,266
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	16,076
CLASS "C" CONCRETE (CAP)			CY	61.7
CLASS "C" CONCRETE (COL)			CY	33.2

TABLE OF ESTIMATED QUANTITIES
BENT 10 (H=15') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46'-8"	1,984
B	9	#11	46'-8"	2,231
D	10	#11	1'-6"	80
G	22	#7	10'-6"	472
M	94	#6	22'-2"	3,130
N	48	#6	7'-11"	571
S	81	#6	23'-10"	2,900
SS	81	#6	21'-9"	2,646
T	26	#5	46'-8"	1,266
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	16,076
CLASS "C" CONCRETE (CAP)			CY	61.7
CLASS "C" CONCRETE (COL)			CY	35.6

TABLE OF ESTIMATED QUANTITIES
BENT 11 (H=17') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46'-8"	1,984
B	9	#11	46'-8"	2,231
D	10	#11	1'-6"	80
E1	21	#5	5'-8"	124
E2	14	#5	6'-8"	97
G	22	#7	10'-6"	472
M	94	#6	22'-2"	3,130
N	48	#6	7'-11"	571
S	81	#6	23'-10"	2,900
SS	81	#6	21'-9"	2,646
T	26	#5	46'-8"	1,266
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298
REINFORCING STEEL			LB	16,298
CLASS "C" CONCRETE (CAP)			CY	61.7
CLASS "C" CONCRETE (COL)			CY	40.0

TABLE OF ESTIMATED QUANTITIES
BENT 12 (H=21') (PHASE 1 STEP 3)

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46'-8"	1,984
B				

① QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.
② USE 1'-10" MIN LAP SPLICE.

BAR	NO.	SIZE	LENGTH	WEIGHT
A	8	#11	46'-8"	1,984
B	9	#11	46'-8"	2,231
D	10	#11	1'-6"	80
E1	21	#5	5'-8"	124
E2	14	#5	6'-8"	97
G	22	#7	10'-6"	472
M	94	#6	22'-2"	3,130
N	48	#6	7'-11"	571
S	81	#6	23'-10"	2,900
SS	81	#6	21'-9"	2,646
T	26	#5	46'-8"	1,266
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	16,298
CLASS "C" CONCRETE (CAP)	CY	61.7
CLASS "C" CONCRETE (COL)	CY	52.0

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40'-2"	1,707
A2	8	#11	27'-2"	1,155
B1	9	#11	40'-2"	1,921
B2	9	#11	27'-2"	1,299
D	13	#11	1'-6"	104
G	22	#7	10'-6"	472
M	123	#6	22'-2"	4,095
N	62	#6	7'-11"	737
S	103	#6	23'-10"	3,687
SS	103	#6	20'-11"	3,236
T(2)	26	#5	62'-4"	1,690
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	20,901
CLASS "C" CONCRETE (CAP)	CY	93.2
CLASS "C" CONCRETE (COL)	CY	50.0

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	40'-2"	1,707
A2	8	#11	27'-2"	1,155
B1	9	#11	40'-2"	1,921
B2	9	#11	27'-2"	1,299
D	13	#11	1'-6"	104
G	22	#7	10'-6"	472
M	122	#6	22'-2"	4,062
N	62	#6	7'-11"	737
S	103	#6	23'-10"	3,687
SS	103	#6	20'-11"	3,236
T(2)	26	#5	62'-4"	1,690
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	20,868
CLASS "C" CONCRETE (CAP)	CY	93.2
CLASS "C" CONCRETE (COL)	CY	53.0

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	41'-5"	1,760
A2	8	#11	27'-11"	1,187
B1	9	#11	69'-4"	3,315
B2	9	#11	69'-4"	3,315
D	13	#11	1'-6"	104
G	22	#7	10'-6"	472
M	126	#6	22'-2"	4,195
N	64	#6	7'-11"	761
S	107	#6	23'-10"	3,830
SS	107	#6	20'-11"	3,362
T(2)	26	#5	64'-4"	1,745
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	24,844
CLASS "C" CONCRETE (CAP)	CY	93.2
CLASS "C" CONCRETE (COL)	CY	53.0

BAR	NO.	SIZE	LENGTH	WEIGHT
A2	8	#11	28'-8"	1,218
B1	9	#11	42'-6"	2,032
B2	9	#11	28'-8"	1,371
D	14	#11	1'-6"	112
E	14	#11	1'-6"	112
G	22	#7	10'-6"	472
M	130	#6	22'-2"	4,328
N	66	#6	7'-11"	785
S	111	#6	23'-10"	3,974
SS	111	#6	20'-11"	3,487
T(2)	26	#5	66'-2"	1,794
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	20,371
CLASS "C" CONCRETE (CAP)	CY	99.1
CLASS "C" CONCRETE (COL)	CY	53.0

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	43'-10"	1,863
A2	8	#11	29'-5"	1,250
B1	9	#11	43'-10"	2,096
B2	9	#11	29'-5"	1,407
D	14	#11	1'-6"	112
E1	27	#5	5'-8"	160
E2	18	#5	6'-8"	125
G	22	#7	10'-6"	472
M	134	#6	22'-2"	4,461
N	68	#6	7'-11"	809
S	115	#6	23'-10"	4,117
SS	115	#6	20'-11"	3,613
T(2)	26	#5	68'-4"	1,853
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	23,135
CLASS "C" CONCRETE (CAP)	CY	102.2
CLASS "C" CONCRETE (COL)	CY	41.5

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	45'-1"	1,916
A2	8	#11	30'-2"	1,282
B1	9	#11	45'-1"	2,156
B2	9	#11	30'-2"	1,442
D	15	#11	1'-6"	120
G	22	#7	10'-6"	472
M	139	#6	22'-2"	4,628
N	70	#6	7'-11"	832
S	119	#6	23'-10"	4,260
SS	119	#6	20'-11"	3,739
T(2)	26	#5	70'-3"	1,905
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	23,550
CLASS "C" CONCRETE (CAP)	CY	105.3
CLASS "C" CONCRETE (COL)	CY	49.8

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	38'-8"	1,643
A2	8	#11	38'-8"	1,643
B1	9	#11	38'-8"	1,849
B2	9	#11	38'-8"	1,849
D	15	#11	1'-6"	120
G	22	#7	10'-6"	472
M	142	#6	22'-2"	4,728
N	72	#6	7'-11"	856
S	115	#6	23'-10"	4,117
SS	115	#6	20'-11"	3,613
T(2)	26	#5	72'-4"	1,962
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	23,649
CLASS "C" CONCRETE (CAP)	CY	108.6
CLASS "C" CONCRETE (COL)	CY	49.8

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	39'-8"	1,686
A2	8	#11	39'-8"	1,686
B1	9	#11	39'-8"	1,897
B2	9	#11	39'-8"	1,897
D	16	#11	1'-6"	128
G	22	#7	10'-6"	472
M	146	#6	22'-2"	4,861
N	74	#6	7'-11"	880
S	120	#6	23'-10"	4,296
SS	120	#6	20'-11"	3,770
T(2)	26	#5	74'-4"	2,016
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	24,385
CLASS "C" CONCRETE (CAP)	CY	111.7
CLASS "C" CONCRETE (COL)	CY	53.4

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	39'-8"	1,686
A2	8	#11	39'-8"	1,686
B1	9	#11	39'-8"	1,897
B2	9	#11	39'-8"	1,897
D	16	#11	1'-6"	128
E1	27	#5	5'-8"	160
E2	18	#5	6'-8"	125
G	22	#7	10'-6"	472
M	146	#6	22'-2"	4,861
N	74	#6	7'-11"	880
S	120	#6	23'-10"	4,296
SS	120	#6	20'-11"	3,770
T(2)	26	#5	74'-4"	2,016
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

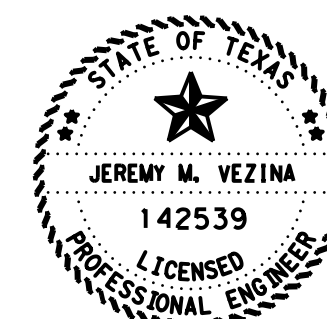
REINFORCING STEEL	LB	24,670
CLASS "C" CONCRETE (CAP)	CY	111.7
CLASS "C" CONCRETE (COL)	CY	60.0

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	39'-8"	1,686
A2	8	#11	39'-8"	1,686
B1	9	#11	39'-8"	1,897
B2	9	#11	39'-8"	1,897
D	16	#11	1'-6"	128
E1	27	#5	5'-8"	160
E2	18	#5	6'-8"	125
G	22	#7	10'-6"	472
M	146	#6	22'-2"	4,861
N	74	#6	7'-11"	880
S	120	#6	23'-10"	4,296
SS	120	#6	20'-11"	3,770
T(2)	26	#5	74'-4"	2,016
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	24,670
CLASS "C" CONCRETE (CAP)	CY	111.7
CLASS "C" CONCRETE (COL)	CY	74.4

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	8	#11	39'-8"	1,686
A2	8	#11	39'-8"	1,686
B1	9	#11	39'-8"	1,897
B2	9	#11	39'-8"	1,897
D	16	#11	1'-6"	128
E1	27	#5	5'-8"	160
E2	18	#5	6'-8"	125
G	22	#7	10'-6"	472
M	146	#6	22'-2"	4,861
N	74	#6	7'-11"	880
S	120	#6	23'-10"	4,296
SS	120	#6	20'-11"	3,770
T(2)	26	#5	74'-4"	2,016
U1	14	#6	13'-5"	282
U2	14	#6	10'-4"	217
U3	16	#6	12'-5"	298

REINFORCING STEEL	LB	24,670
CLASS "C" CONCRETE (CAP)	CY	111.7
CLASS "C" CONCRETE (COL)	CY	78.0



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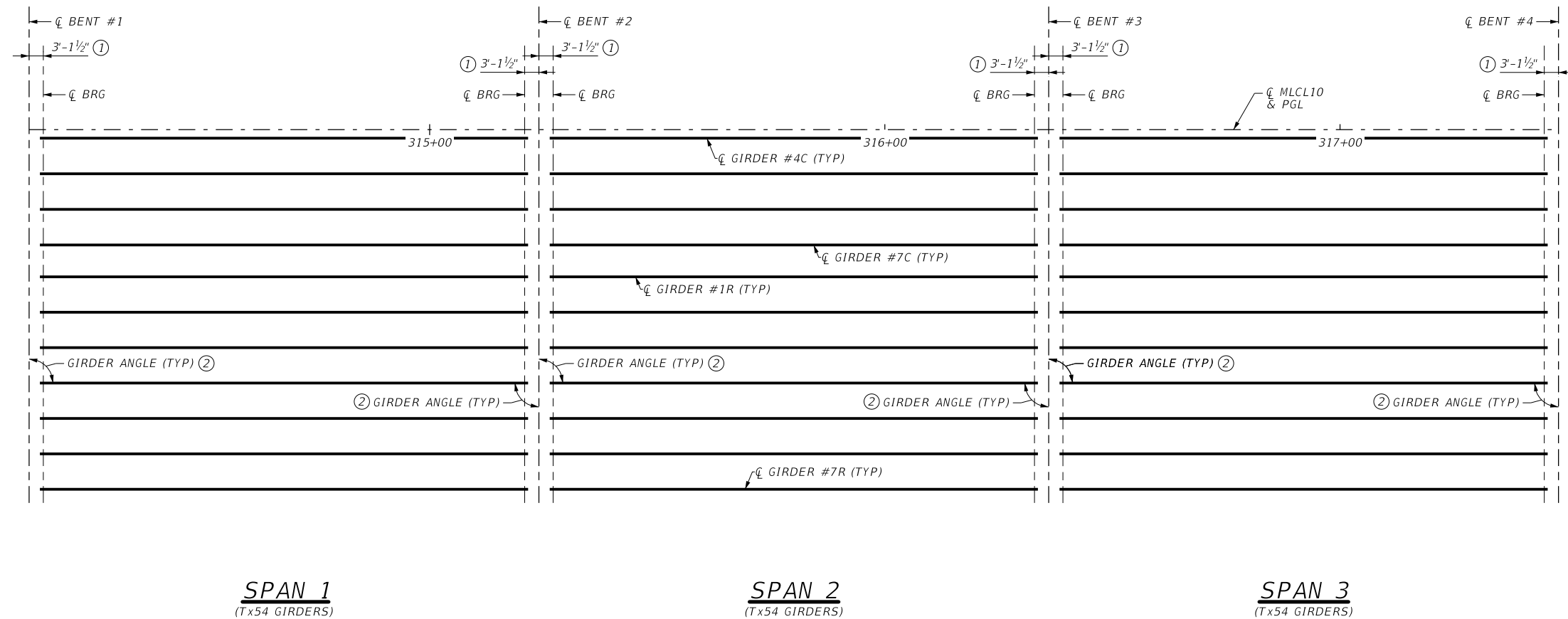


**IH 10 AT US 69
BENT DETAILS
IH 10 MAINLANE
OVER CALDER AVE**

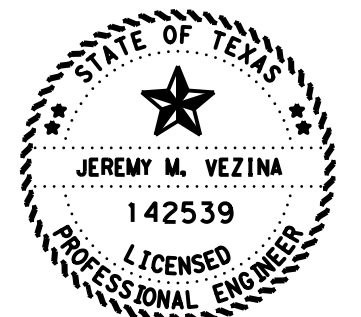
SHEET 3 OF 3

DWG:	JMV	CK:	FB	DW:	RF	CK:	FB
CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:		COUNTY:		SHEET NO.:			
	BMT		JEFFERSON				1301

DATE: 20-FEB-2024 15:35
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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



Jeremy Vezina 2-20-2024

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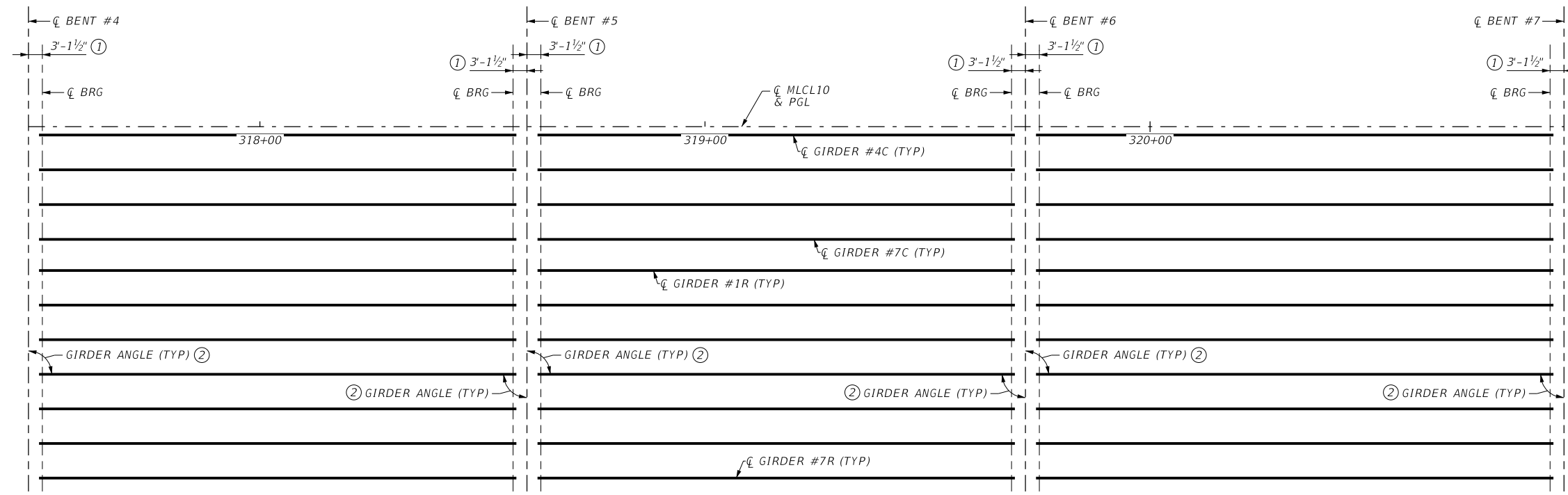


IH 10 AT US 69
FRAMING PLAN
(SPANS 1-3)
IH 10 EBML
OVER CALDER AVE

SHEET 1 OF 6

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1302		

DATE: 20-FEB-2024 15:35
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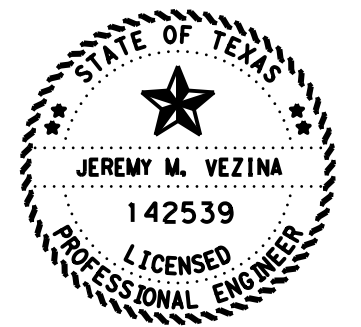


SPAN 4
(Tx54 GIRDERS)

SPAN 5
(Tx54 GIRDERS)

SPAN 6
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



Jeremy Vezina 2-20-2024

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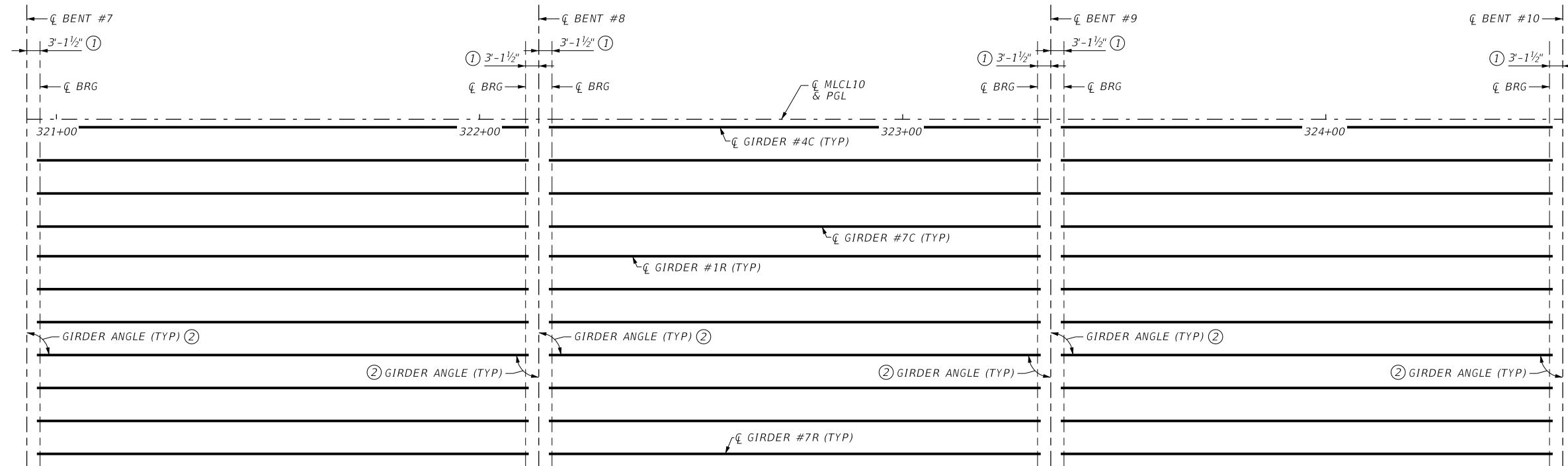


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 4-6)
 IH 10 EBML
 OVER CALDER AVE**

SHEET 2 OF 6

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	SECT	JOB		HIGHWAY			
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DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1303		

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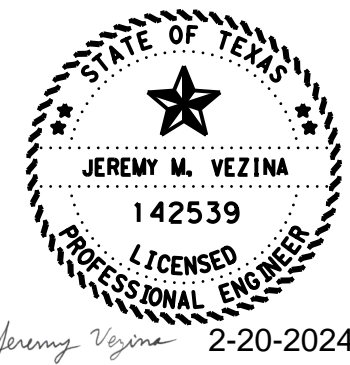


SPAN 7
(Tx54 GIRDERS)

SPAN 8
(Tx54 GIRDERS)

SPAN 9
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



HL93 LOADING

VOLKERT

F-12679

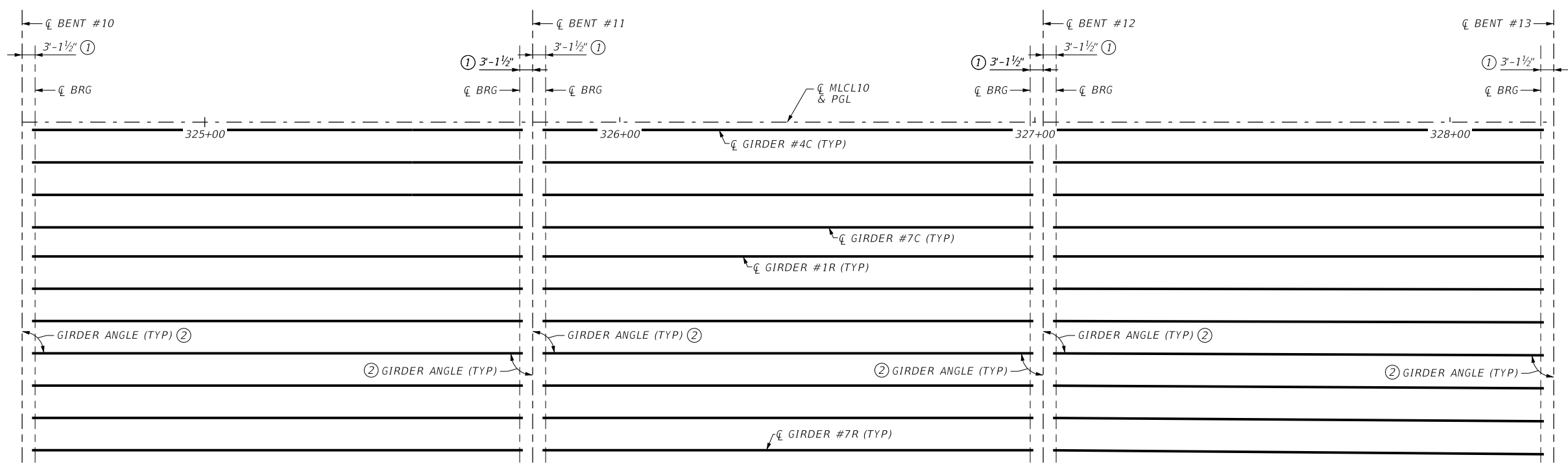


IH 10 AT US 69
FRAMING PLAN
(SPANS 7-9)
IH 10 EBML
OVER CALDER AVE

SHEET 3 OF 6

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	SECT	JOB		HIGHWAY			
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DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1304		

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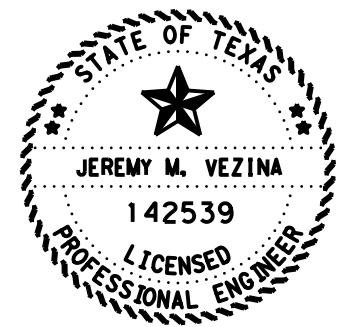


SPAN 10
(Tx54 GIRDERS)

SPAN 11
(Tx54 GIRDERS)

SPAN 12
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



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**IH 10 AT US 69
FRAMING PLAN
(SPANS 10-12)
IH 10 EBML
OVER CALDER AVE**

SHEET 4 OF 6

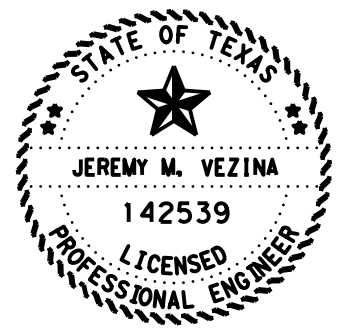
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DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1305		

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EBML GIRDER REPORT

GIRDER REPORT, SPAN 1					GIRDER REPORT, SPAN 2					GIRDER REPORT, SPAN 3					GIRDER REPORT, SPAN 4					
	HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR		HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR		HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR		HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR					
	C-C BENT	C-C BRG.	BOT. GRDR FLG.	SLOPE	C-C BENT	C-C BRG.	BOT. GRDR FLG.	SLOPE	C-C BEN	C-C BRG.	BOT. GRDR FLG.	SLOPE	C-C BENT	C-C BRG.	BOT. GRDR FLG.	SLOPE				
PHASE 3 STEP 1	GIRDER 4C	112.000	105.750	107.250	0.0029	GIRDER 1L	112.000	105.750	107.250	-0.0006	GIRDER 1L	112.000	105.750	107.251	-0.0041	GIRDER 1L	112.000	105.750	107.253	-0.0068
	GIRDER 5C	112.000	105.750	107.250	0.0029	GIRDER 2L	112.000	105.750	107.250	-0.0006	GIRDER 2L	112.000	105.750	107.251	-0.0041	GIRDER 2L	112.000	105.750	107.253	-0.0068
	GIRDER 6C	112.000	105.750	107.250	0.0029	GIRDER 3L	112.000	105.750	107.250	-0.0006	GIRDER 3L	112.000	105.750	107.251	-0.0041	GIRDER 3L	112.000	105.750	107.253	-0.0068
	GIRDER 7C	112.000	105.750	107.250	0.0029	GIRDER 4L	112.000	105.750	107.250	-0.0006	GIRDER 4L	112.000	105.750	107.251	-0.0041	GIRDER 4L	112.000	105.750	107.253	-0.0068
PHASE 1 STEP 3	GIRDER 1R	112.000	105.750	107.250	0.0029	GIRDER 1R	112.000	105.750	107.250	-0.0006	GIRDER 1R	112.000	105.750	107.251	-0.0041	GIRDER 1R	112.000	105.750	107.253	-0.0068
	GIRDER 2R	112.000	105.750	107.250	0.0029	GIRDER 2R	112.000	105.750	107.250	-0.0006	GIRDER 2R	112.000	105.750	107.251	-0.0041	GIRDER 2R	112.000	105.750	107.253	-0.0068
	GIRDER 3R	112.000	105.750	107.250	0.0029	GIRDER 3R	112.000	105.750	107.250	-0.0006	GIRDER 3R	112.000	105.750	107.251	-0.0041	GIRDER 3R	112.000	105.750	107.253	-0.0068
	GIRDER 4R	112.000	105.750	107.250	0.0029	GIRDER 4R	112.000	105.750	107.250	-0.0006	GIRDER 4R	112.000	105.750	107.251	-0.0041	GIRDER 4R	112.000	105.750	107.253	-0.0068
	GIRDER 5R	112.000	105.750	107.250	0.0029	GIRDER 5R	112.000	105.750	107.250	-0.0006	GIRDER 5R	112.000	105.750	107.251	-0.0041	GIRDER 5R	112.000	105.750	107.253	-0.0068
	GIRDER 6R	112.000	105.750	107.250	0.0029	GIRDER 6R	112.000	105.750	107.250	-0.0006	GIRDER 6R	112.000	105.750	107.251	-0.0041	GIRDER 6R	112.000	105.750	107.253	-0.0068
	GIRDER 7R	112.000	105.750	107.250	0.0029	GIRDER 7R	112.000	105.750	107.250	-0.0006	GIRDER 7R	112.000	105.750	107.251	-0.0041	GIRDER 7R	112.000	105.750	107.253	-0.0068
PHASE 3 STEP 1	GIRDER 4C	112.000	105.750	107.253	-0.0070	GIRDER 1L	121.000	114.750	116.253	-0.0070	GIRDER 1L	121.000	114.750	116.251	-0.0042	GIRDER 1L	121.000	114.750	116.250	0.0024
	GIRDER 5C	112.000	105.750	107.253	-0.0070	GIRDER 2L	121.000	114.750	116.253	-0.0070	GIRDER 2L	121.000	114.750	116.251	-0.0042	GIRDER 2L	121.000	114.750	116.250	0.0024
	GIRDER 6C	112.000	105.750	107.253	-0.0070	GIRDER 3L	121.000	114.750	116.253	-0.0070	GIRDER 3L	121.000	114.750	116.251	-0.0042	GIRDER 3L	121.000	114.750	116.250	0.0024
	GIRDER 7C	112.000	105.750	107.253	-0.0070	GIRDER 4L	121.000	114.750	116.253	-0.0070	GIRDER 4L	121.000	114.750	116.251	-0.0042	GIRDER 4L	121.000	114.750	116.250	0.0024
PHASE 1 STEP 3	GIRDER 1R	112.000	105.750	107.253	-0.0070	GIRDER 1R	121.000	114.750	116.253	-0.0070	GIRDER 1R	121.000	114.750	116.251	-0.0042	GIRDER 1R	121.000	114.750	116.250	0.0024
	GIRDER 2R	112.000	105.750	107.253	-0.0070	GIRDER 2R	121.000	114.750	116.253	-0.0070	GIRDER 2R	121.000	114.750	116.251	-0.0042	GIRDER 2R	121.000	114.750	116.250	0.0024
	GIRDER 3R	112.000	105.750	107.253	-0.0070	GIRDER 3R	121.000	114.750	116.253	-0.0070	GIRDER 3R	121.000	114.750	116.251	-0.0042	GIRDER 3R	121.000	114.750	116.250	0.0024
	GIRDER 4R	112.000	105.750	107.253	-0.0070	GIRDER 4R	121.000	114.750	116.253	-0.0070	GIRDER 4R	121.000	114.750	116.251	-0.0042	GIRDER 4R	121.000	114.750	116.250	0.0024
	GIRDER 5R	112.000	105.750	107.253	-0.0070	GIRDER 5R	121.000	114.750	116.253	-0.0070	GIRDER 5R	121.000	114.750	116.251	-0.0042	GIRDER 5R	121.000	114.750	116.250	0.0024
	GIRDER 6R	112.000	105.750	107.253	-0.0070	GIRDER 6R	121.000	114.750	116.253	-0.0070	GIRDER 6R	121.000	114.750	116.251	-0.0042	GIRDER 6R	121.000	114.750	116.250	0.0024
	GIRDER 7R	112.000	105.750	107.253	-0.0070	GIRDER 7R	121.000	114.750	116.253	-0.0070	GIRDER 7R	121.000	114.750	116.251	-0.0042	GIRDER 7R	121.000	114.750	116.250	0.0024
PHASE 3 STEP 1	GIRDER 4C	121.000	114.750	116.255	0.0090	GIRDER 1L	123.000	116.750	118.265	0.0157	GIRDER 1L	123.000	116.750	118.28	0.0225	GIRDER 1L	123.000	116.750	118.299	0.0288
	GIRDER 5C	121.000	114.750	116.255	0.0090	GIRDER 2L	123.000	116.750	118.265	0.0157	GIRDER 2L	123.000	116.750	118.28	0.0225	GIRDER 2L	123.000	116.750	118.299	0.0288
	GIRDER 6C	121.000	114.750	116.255	0.0090	GIRDER 3L	123.000	116.750	118.265	0.0157	GIRDER 3L	123.000	116.750	118.28	0.0225	GIRDER 3L	123.000	116.750	118.299	0.0288
	GIRDER 7C	121.000	114.750	116.255	0.0090	GIRDER 4L	123.000	116.750	118.265	0.0157	GIRDER 4L	123.000	116.750	118.28	0.0225	GIRDER 4L	123.000	116.750	118.299	0.0288
PHASE 1 STEP 3	GIRDER 1R	121.000	114.750	116.255	0.0090	GIRDER 1R	123.000	116.750	118.265	0.0157	GIRDER 1R	123.000	116.750	118.28	0.0225	GIRDER 1R	123.000	116.750	118.299	0.0288
	GIRDER 2R	121.000	114.750	116.255	0.0090	GIRDER 2R	123.000	116.750	118.265	0.0157	GIRDER 2R	123.000	116.750	118.28	0.0225	GIRDER 2R	123.000	116.750	118.299	0.0287
	GIRDER 3R	121.000	114.750	116.255	0.0090	GIRDER 3R	123.000	116.750	118.265	0.0157	GIRDER 3R	123.000	116.750	118.28	0.0225	GIRDER 3R	123.000	116.750	118.299	0.0287
	GIRDER 4R	121.000	114.750	116.255	0.0090	GIRDER 4R	123.000	116.750	118.265	0.0157	GIRDER 4R	123.000	116.750	118.28	0.0225	GIRDER 4R	123.001	116.751	118.300	0.0287
	GIRDER 5R	121.000	114.750	116.255	0.0090	GIRDER 5R	123.000	116.750	118.265	0.0157	GIRDER 5R	123.000	116.750	118.28	0.0225	GIRDER 5R	123.002	116.752	118.300	0.0286
	GIRDER 6R	121.000	114.750	116.255	0.0090	GIRDER 6R	123.000	116.750	118.265	0.0157	GIRDER 6R	123.000	116.750	118.28	0.0225	GIRDER 6R	123.003	116.753	118.301	0.0286
	GIRDER 7R	121.000	114.750	116.255	0.0090	GIRDER 7R	123.000	116.750	118.265	0.0157	GIRDER 7R	123.000	116.750	118.28	0.0225	GIRDER 7R	123.004	116.754	118.302	0.0286

① GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.



Jeremy Vezina 2-20-2024

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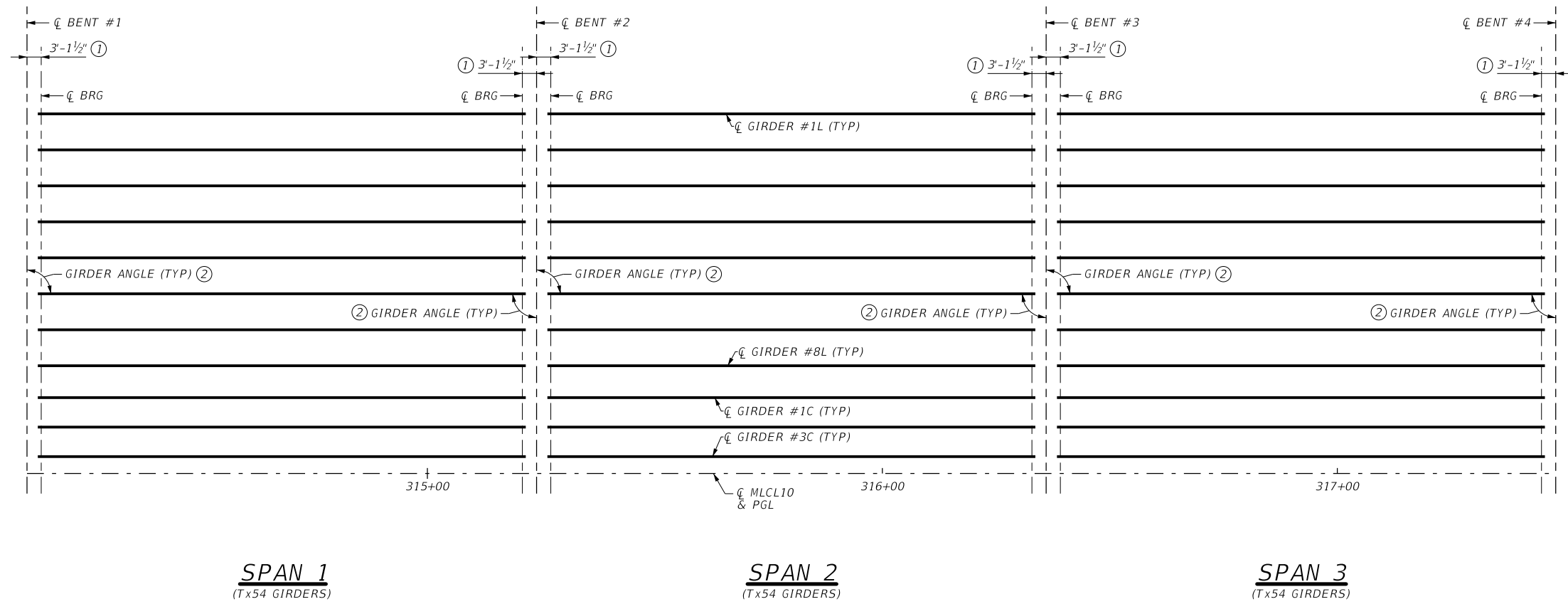
Texas Department of Transportation

**IH 10 AT US 69
FRAMING PLAN
GIRDER REPORT
IH 10 EBML
OVER CALDER AVE**

SHEET 6 OF 6

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	13		SECT	135		JOB	
0028		13		135		HIGHWAY	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1307			

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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



HL93 LOADING

VOLKERT

F-12679

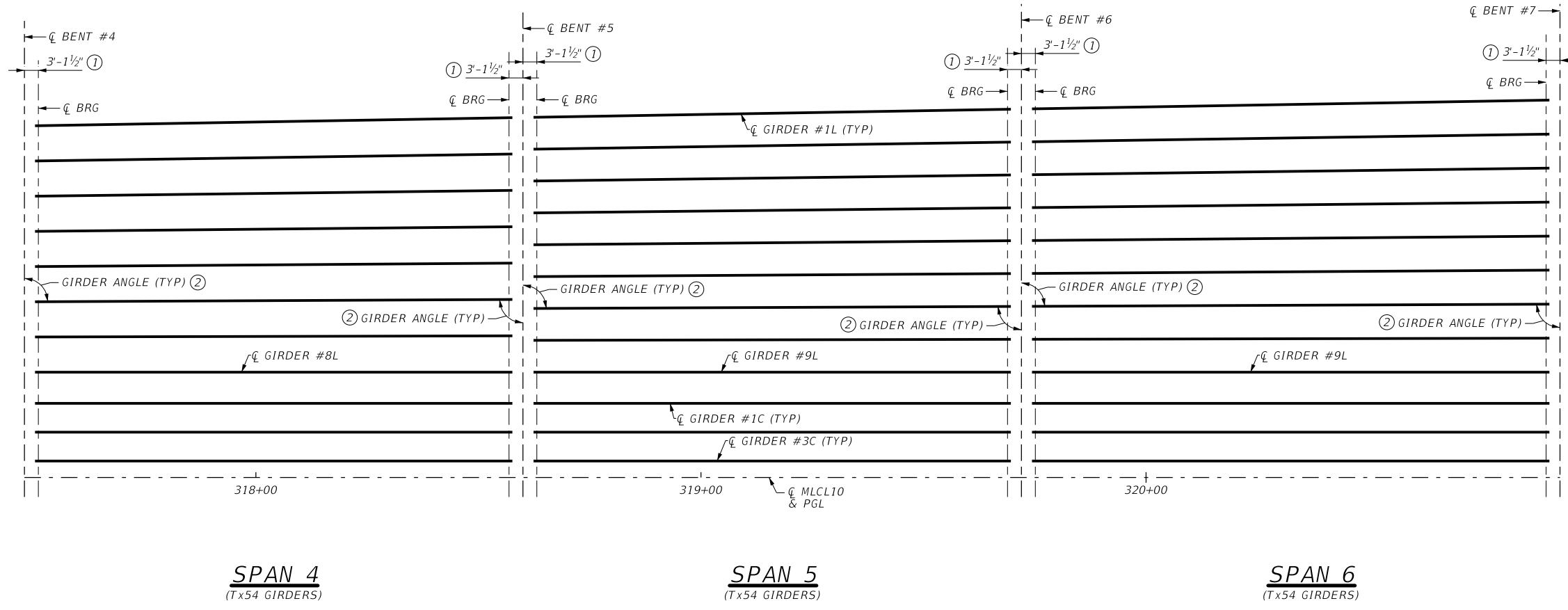
Texas Department of Transportation

**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 1-3)
 IH 10 WBML
 OVER CALDER AVE**

SHEET 1 OF 6

DN: JMV	CK: FB	DW: MTM	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1308	

DATE: 20-FEB-2024 15:36
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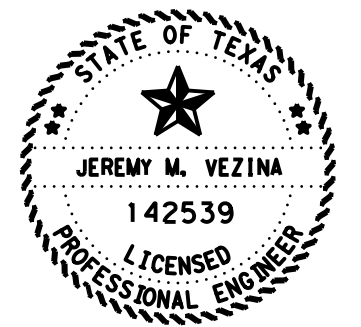


SPAN 4
(Tx54 GIRDERS)

SPAN 5
(Tx54 GIRDERS)

SPAN 6
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT
F-12679

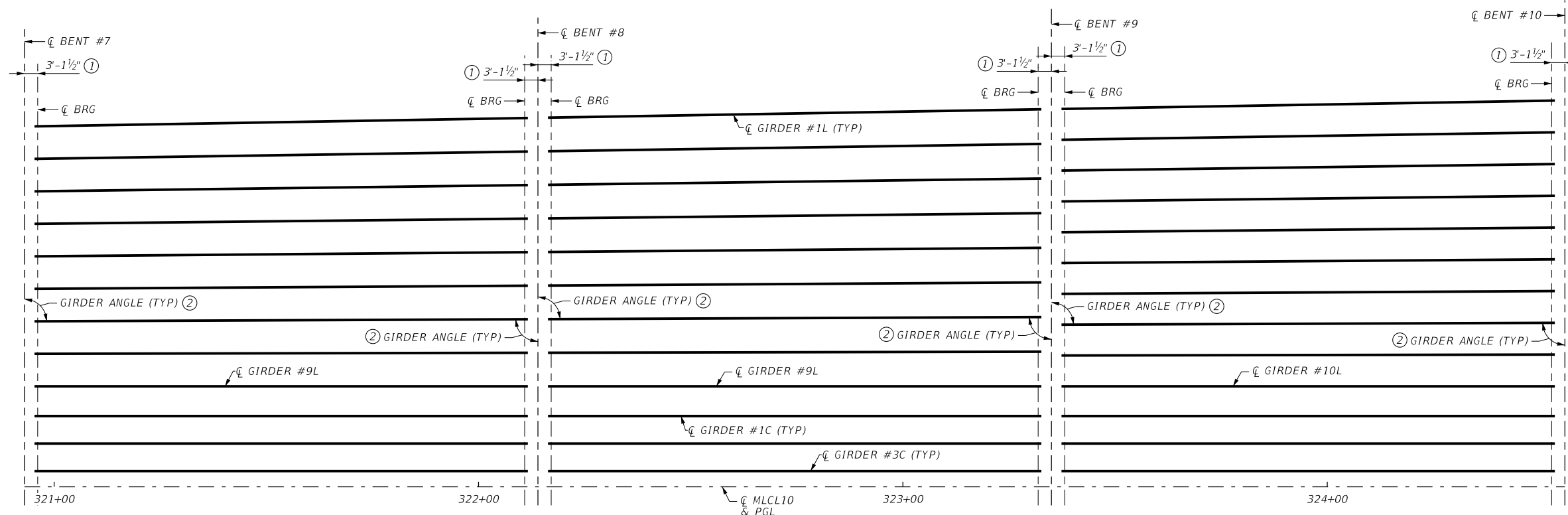
Texas Department of Transportation

**IH 10 AT US 69
FRAMING PLAN
(SPANS 4-6)
IH 10 WBML
OVER CALDER AVE**

SHEET 2 OF 6

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
	BMT		JEFFERSON		1309		

DATE: 20-FEB-2024 15:44
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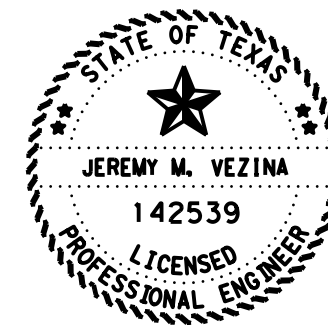


SPAN 7
(T x 54 GIRDERS)

SPAN 8
(T x 54 GIRDERS)

SPAN 9
(T x 54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



Jeremy Vezina 2-20-2024

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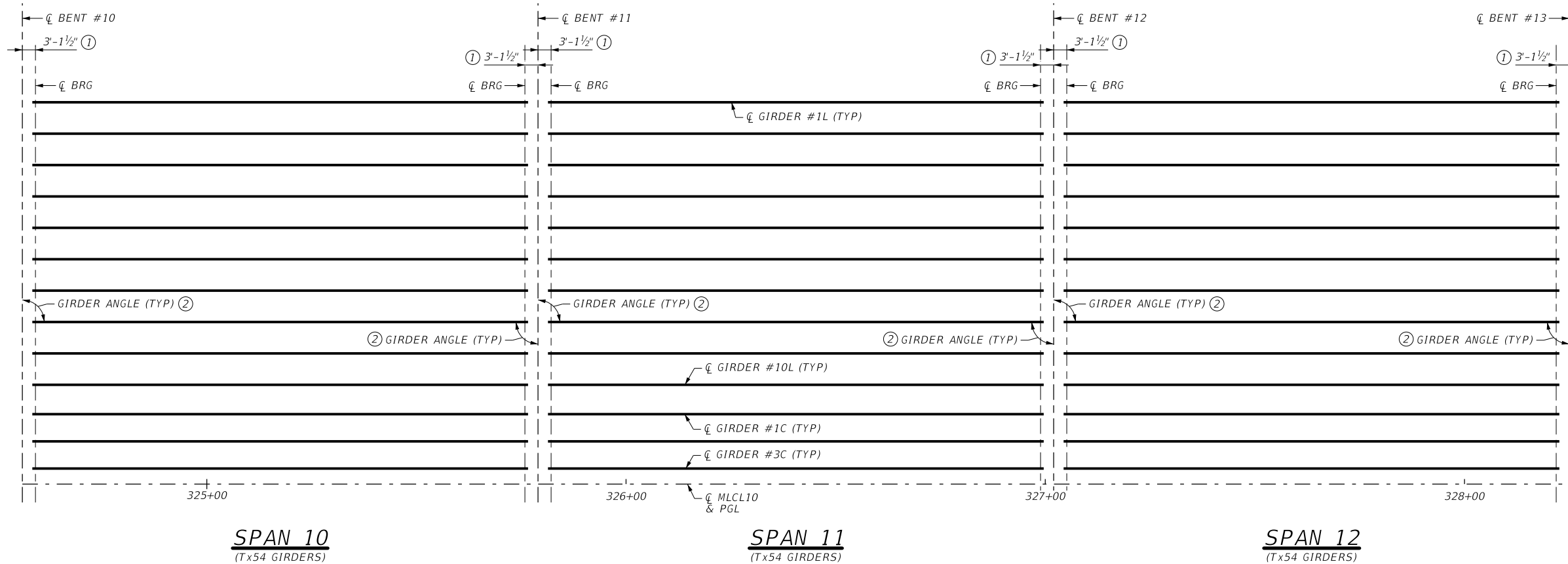


IH 10 AT US 69
 FRAMING PLAN
 (SPANS 7-9)
 IH 10 WBML
 OVER CALDER AVE

SHEET 3 OF 6

DN:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT		SECT		JOB		HIGHWAY	
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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1310				

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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② SEE "BENT REPORT" SHEET FOR GIRDER ANGLES.



HL93 LOADING

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F-12679

Texas Department of Transportation

IH 10 AT US 69
 FRAMING PLAN
 (SPANS 10-12)
 IH 10 WBML
 OVER CALDER AVE

SHEET 4 OF 6

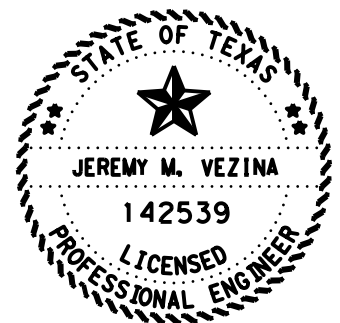
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WBML GIRDER REPORT

GIRDER REPORT, SPAN 1					GIRDER REPORT, SPAN 2					GIRDER REPORT, SPAN 3					GIRDER REPORT, SPAN 4					
	HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR		HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR		HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR		HORIZONTAL DISTANCE	TRUE DISTANCE	GRDR					
	C-C BENT	C-C BRG.	BOT. GRDR FLG.	SLOPE	C-C BENT	C-C BRG.	BOT. GRDR FLG.	SLOPE	C-C BEN	C-C BRG.	BOT. GRDR FLG.	SLOPE	C-C BENT	C-C BRG.	BOT. GRDR FLG.	SLOPE				
PHASE 4 STEP 2	GIRDER 1L	112.000	105.750	107.250	0.0029	GIRDER 1L	112.000	105.750	107.250	-0.0006	GIRDER 1L	112.000	105.750	107.251	-0.0041	GIRDER 1L	112.016	105.766	107.269	-0.0073
	GIRDER 2L	112.000	105.750	107.250	0.0029	GIRDER 2L	112.000	105.750	107.250	-0.0006	GIRDER 2L	112.000	105.750	107.251	-0.0041	GIRDER 2L	112.012	105.762	107.265	-0.0072
	GIRDER 3L	112.000	105.750	107.250	0.0029	GIRDER 3L	112.000	105.750	107.250	-0.0006	GIRDER 3L	112.000	105.750	107.251	-0.0041	GIRDER 3L	112.008	105.758	107.261	-0.0072
	GIRDER 4L	112.000	105.750	107.250	0.0029	GIRDER 4L	112.000	105.750	107.250	-0.0006	GIRDER 4L	112.000	105.750	107.251	-0.0041	GIRDER 4L	112.005	105.755	107.258	-0.0071
	GIRDER 5L	112.000	105.750	107.250	0.0029	GIRDER 5L	112.000	105.750	107.250	-0.0006	GIRDER 5L	112.000	105.750	107.251	-0.0041	GIRDER 5L	112.003	105.753	107.256	-0.0070
	GIRDER 6L	112.000	105.750	107.250	0.0029	GIRDER 6L	112.000	105.750	107.250	-0.0006	GIRDER 6L	112.000	105.750	107.251	-0.0041	GIRDER 6L	112.001	105.751	107.254	-0.0070
	GIRDER 7L	112.000	105.750	107.250	0.0029	GIRDER 7L	112.000	105.750	107.250	-0.0006	GIRDER 7L	112.000	105.750	107.251	-0.0041	GIRDER 7L	112.000	105.750	107.253	-0.0069
	GIRDER 8L	112.000	105.750	107.250	0.0029	GIRDER 8L	112.000	105.750	107.250	-0.0006	GIRDER 8L	112.000	105.750	107.251	-0.0041	GIRDER 8L	112.000	105.750	107.253	-0.0068
PHASE 3 STEP 1	GIRDER 1C	112.000	105.750	107.250	0.0029	GIRDER 1C	112.000	105.750	107.250	-0.0006	GIRDER 1C	112.000	105.750	107.251	-0.0041	GIRDER 1C	112.000	105.750	107.253	-0.0068
	GIRDER 2C	112.000	105.750	107.250	0.0029	GIRDER 2C	112.000	105.750	107.250	-0.0006	GIRDER 2C	112.000	105.750	107.251	-0.0041	GIRDER 2C	112.000	105.750	107.253	-0.0068
	GIRDER 3C	112.000	105.750	107.250	0.0029	GIRDER 3C	112.000	105.750	107.250	-0.0006	GIRDER 3C	112.000	105.750	107.251	-0.0041	GIRDER 3C	112.000	105.750	107.253	-0.0068
PHASE 4 STEP 2	GIRDER 1L	112.016	105.766	107.269	-0.0074	GIRDER 1L	121.017	114.767	116.269	-0.0074	GIRDER 1L	121.017	114.767	116.269	-0.0046	GIRDER 1L	121.017	114.767	116.268	0.0020
	GIRDER 2L	112.012	105.762	107.265	-0.0074	GIRDER 2L	121.013	114.763	116.266	-0.0074	GIRDER 2L	121.013	114.763	116.265	-0.0046	GIRDER 2L	121.013	114.763	116.264	0.0020
	GIRDER 3L	112.009	105.759	107.262	-0.0073	GIRDER 3L	121.010	114.760	116.263	-0.0073	GIRDER 3L	121.010	114.760	116.261	-0.0045	GIRDER 3L	121.010	114.760	116.260	0.0021
	GIRDER 4L	112.006	105.756	107.259	-0.0073	GIRDER 4L	121.007	114.757	116.260	-0.0073	GIRDER 4L	121.007	114.757	116.258	-0.0045	GIRDER 4L	121.007	114.757	116.257	0.0021
	GIRDER 5L	112.004	105.754	107.257	-0.0072	GIRDER 5L	121.004	114.754	116.257	-0.0072	GIRDER 5L	121.004	114.754	116.255	-0.0044	GIRDER 5L	121.004	114.754	116.255	0.0022
	GIRDER 6L	112.002	105.752	107.255	-0.0072	GIRDER 6L	121.002	114.752	116.255	-0.0072	GIRDER 6L	121.002	114.752	116.254	-0.0044	GIRDER 6L	121.002	114.752	116.253	0.0023
	GIRDER 7L	112.001	105.751	107.254	-0.0071	GIRDER 7L	121.001	114.751	116.254	-0.0071	GIRDER 7L	121.001	114.751	116.252	-0.0043	GIRDER 7L	121.001	114.751	116.251	0.0023
	GIRDER 8L	112.000	105.750	107.253	-0.0071	GIRDER 8L	121.000	114.750	116.253	-0.0071	GIRDER 8L	121.000	114.750	116.251	-0.0043	GIRDER 8L	121.000	114.750	116.251	0.0024
	GIRDER 9L	112.000	105.750	107.253	-0.0070	GIRDER 9L	121.000	114.750	116.253	-0.0070	GIRDER 9L	121.000	114.750	116.251	-0.0042	GIRDER 9L	121.000	114.750	116.250	0.0024
PHASE 3 STEP 1	GIRDER 1C	112.000	105.750	107.253	-0.0070	GIRDER 1C	121.000	114.750	116.253	-0.0070	GIRDER 1C	121.000	114.750	116.251	-0.0042	GIRDER 1C	121.000	114.750	116.250	0.0024
	GIRDER 2C	112.000	105.750	107.253	-0.0070	GIRDER 2C	121.000	114.750	116.253	-0.0070	GIRDER 2C	121.000	114.750	116.251	-0.0042	GIRDER 2C	121.000	114.750	116.250	0.0024
	GIRDER 3C	112.000	105.750	107.253	-0.0070	GIRDER 3C	121.000	114.750	116.253	-0.0070	GIRDER 3C	121.000	114.750	116.251	-0.0042	GIRDER 3C	121.000	114.750	116.250	0.0024
PHASE 4 STEP 2	GIRDER 1L	121.017	114.767	116.272	0.0086	GIRDER 1L	123.000	116.750	118.282	0.0234	GIRDER 1L	123.000	116.750	118.304	0.0302	GIRDER 1L	123.000	116.750	118.304	0.0302
	GIRDER 2L	121.014	114.764	116.268	0.0087	GIRDER 2L	123.000	116.750	118.281	0.0228	GIRDER 2L	123.000	116.750	118.302	0.0295	GIRDER 2L	123.000	116.750	118.302	0.0295
	GIRDER 3L	121.011	114.761	116.265	0.0087	GIRDER 3L	123.000	116.750	118.279	0.0222	GIRDER 3L	123.000	116.750	118.299	0.0289	GIRDER 3L	123.000	116.750	118.299	0.0289
	GIRDER 4L	121.008	114.758	116.262	0.0088	GIRDER 4L	123.000	116.750	118.277	0.0215	GIRDER 4L	123.000	116.750	118.297	0.0283	GIRDER 4L	123.000	116.750	118.297	0.0283
	GIRDER 5L	121.005	114.755	116.260	0.0088	GIRDER 5L	123.000	116.750	118.276	0.0209	GIRDER 5L	123.000	116.750	118.295	0.0276	GIRDER 5L	123.000	116.750	118.295	0.0276
	GIRDER 6L	121.003	114.753	116.258	0.0089	GIRDER 6L	123.000	116.750	118.274	0.0203	GIRDER 6L	123.000	116.750	118.293	0.0270	GIRDER 6L	123.000	116.750	118.293	0.0270
	GIRDER 7L	121.002	114.752	116.257	0.0089	GIRDER 7L	123.000	116.750	118.273	0.0196	GIRDER 7L	123.000	116.750	118.291	0.0264	GIRDER 7L	123.000	116.750	118.291	0.0264
	GIRDER 8L	121.001	114.751	116.256	0.0090	GIRDER 8L	123.000	116.750	118.271	0.0190	GIRDER 8L	123.000	116.750	118.289	0.0257	GIRDER 8L	123.000	116.750	118.289	0.0257
	GIRDER 9L	121.000	114.750	116.255	0.0090	GIRDER 9L	123.000	116.750	118.270	0.0184	GIRDER 9L	123.000	116.750	118.287	0.0251	GIRDER 9L	123.000	116.750	118.287	0.0251
	GIRDER	121.000	114.750	116.255	0.0090	GIRDER 10L	123.000	116.750	118.269	0.0177	GIRDER 10L	123.000	116.750	118.285	0.0245	GIRDER 10L	123.000	116.750	118.285	0.0245
PHASE 3 STEP 1	GIRDER 1C	121.000	114.750	116.255	0.0090	GIRDER 1C	123.000	116.750	118.267	0.0171	GIRDER 1C	123.000	116.750	118.284	0.0239	GIRDER 1C	123.000	116.750	118.284	0.0239
	GIRDER 2C	121.000	114.750	116.255	0.0090	GIRDER 2C	123.000	116.750	118.266	0.0166	GIRDER 2C	123.000	116.750	118.282	0.0233	GIRDER 2C	123.000	116.750	118.282	0.0233
	GIRDER 3C	121.000	114.750	116.255	0.0090	GIRDER 3C	123.000	116.750	118.265	0.0161	GIRDER 3C	123.000	116.750	118.281	0.0228	GIRDER 3C	123.000	116.750	118.281	0.0228

① GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.



Jeremy Veжина 2-20-2024

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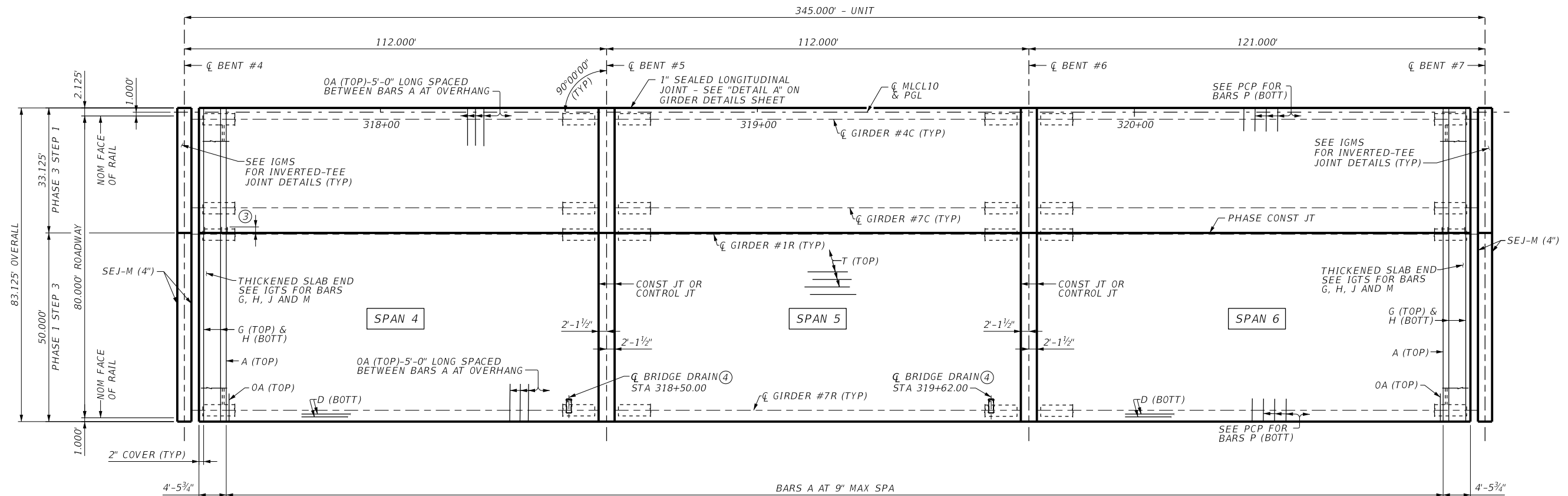
Texas Department of Transportation

IH 10 AT US 69 FRAMING PLAN GIRDER REPORT IH 10 WBML OVER CALDER AVE

SHEET 6 OF 6

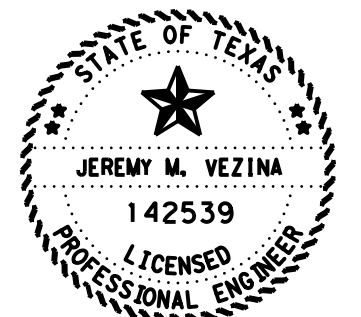
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BMT	JEFFERSON			1313			

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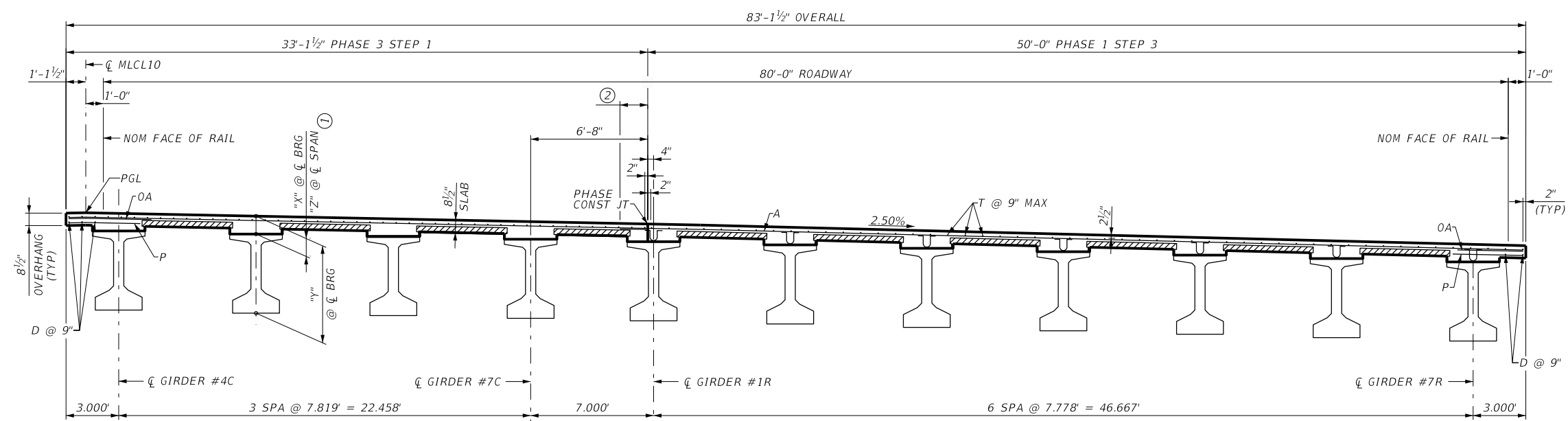


PLAN

- ① SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ② THEORETICAL DIMENSION.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 3 STEP 1 CONSTRUCTION.
- ④ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



Jeremy Vezina 2-20-2024



SPANS 4, 5 & 6 TRANSVERSE SECTION

HL93 LOADING

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F-12679

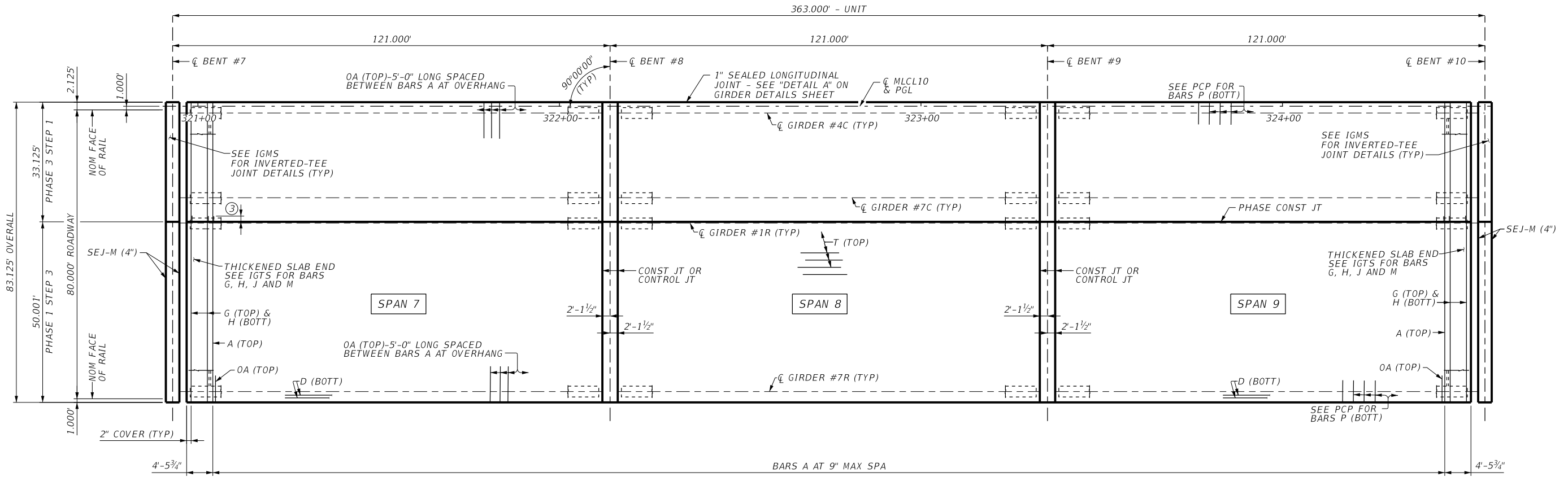
Texas Department of Transportation

**IH 10 AT US 69
345.00' PRESTR CONC
GIRDER UNIT 2
IH 10 EBML
OVER CALDER AVE**

SHEET 2 OF 4

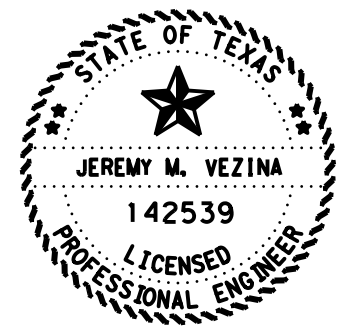
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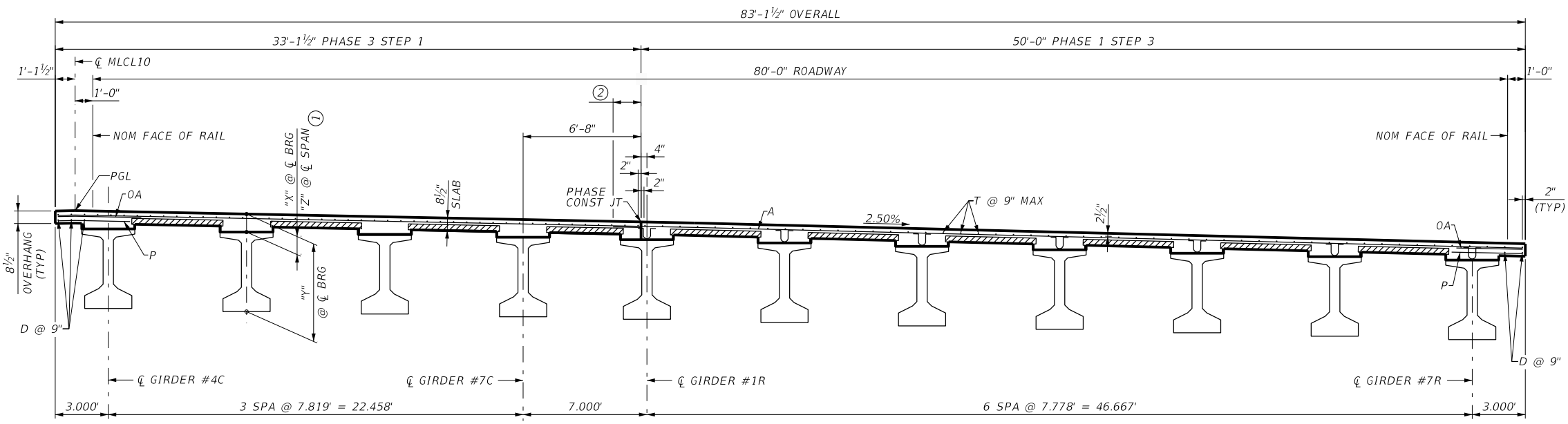


PLAN

- ① SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ② THEORETICAL DIMENSION.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 3 STEP 1 CONSTRUCTION.



Jeremy Vezina 2-20-2024



SPANS 7, 8 & 9 TRANSVERSE SECTION

HL93 LOADING

VOLKERT

F-12679

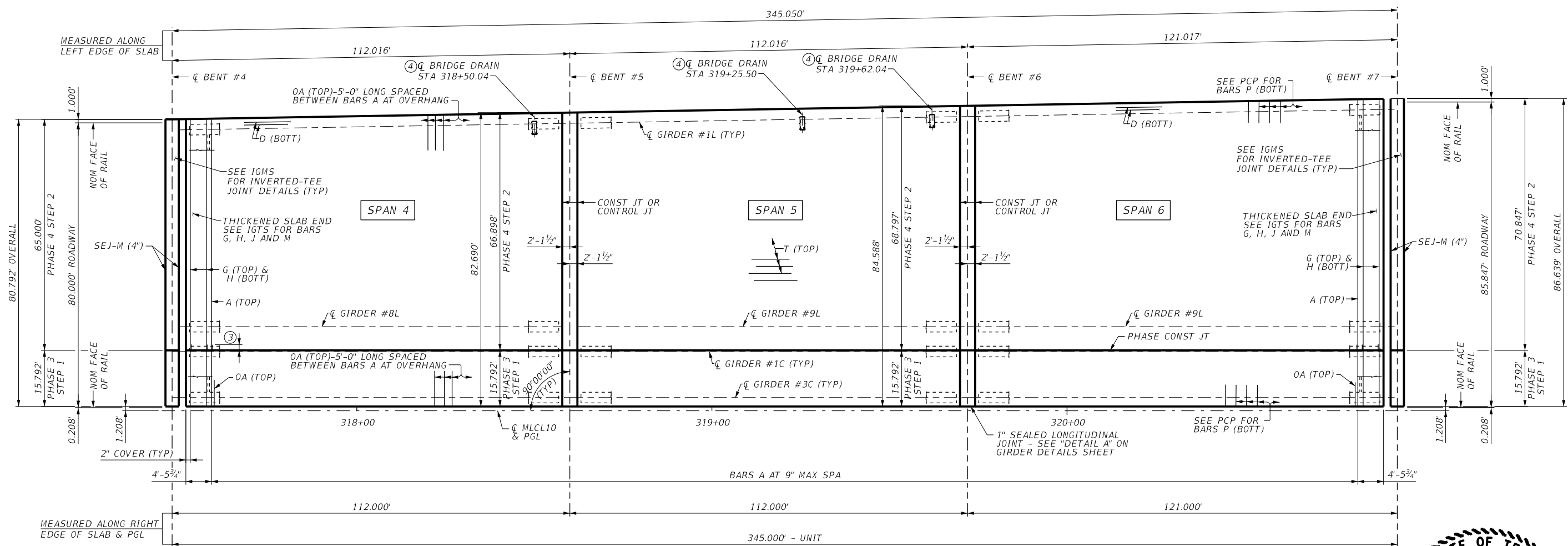
Texas Department of Transportation

IH 10 AT US 69
 363.00' PRESTR CONC
 GIRDER UNIT 3
 IH 10 EBML
 OVER CALDER AVE

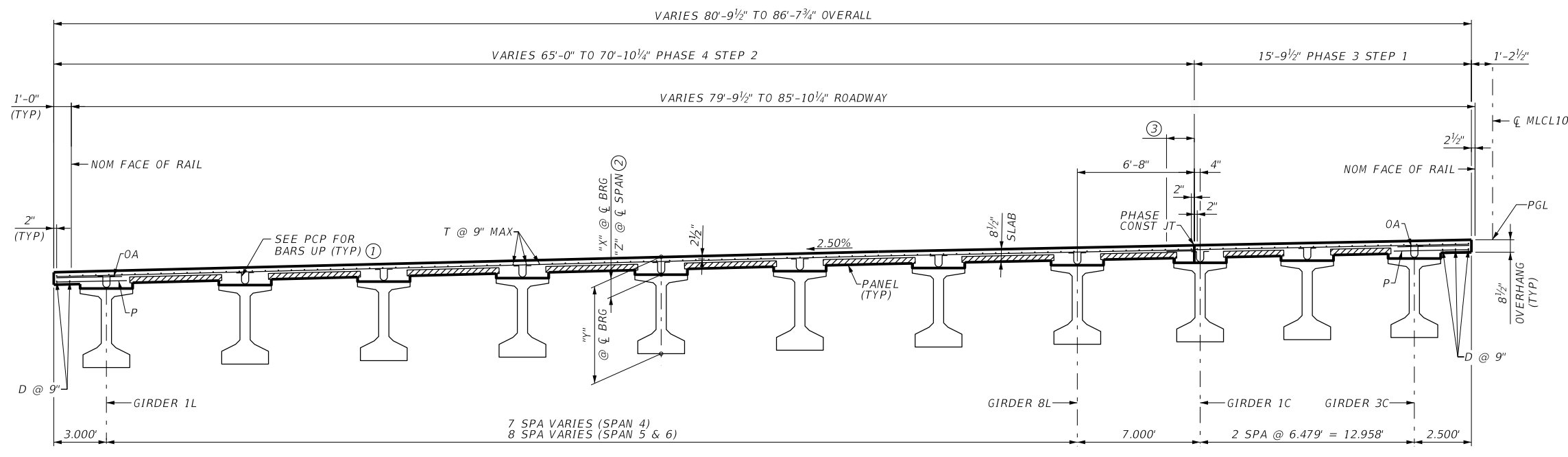
SHEET 3 OF 4

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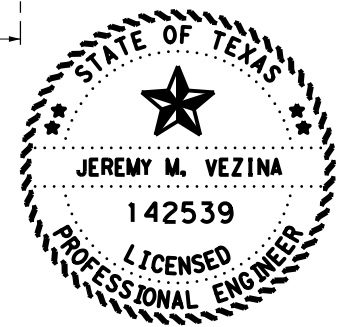
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- PLAN**
- ① SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
 - ② THEORETICAL DIMENSION.
 - ③ EXTEND PHASE 3 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 CONSTRUCTION.
 - ④ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



SPANS 4, 5 & 6 TRANSVERSE SECTION



Jeremy Vezina 2-20-2024

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 F-12679

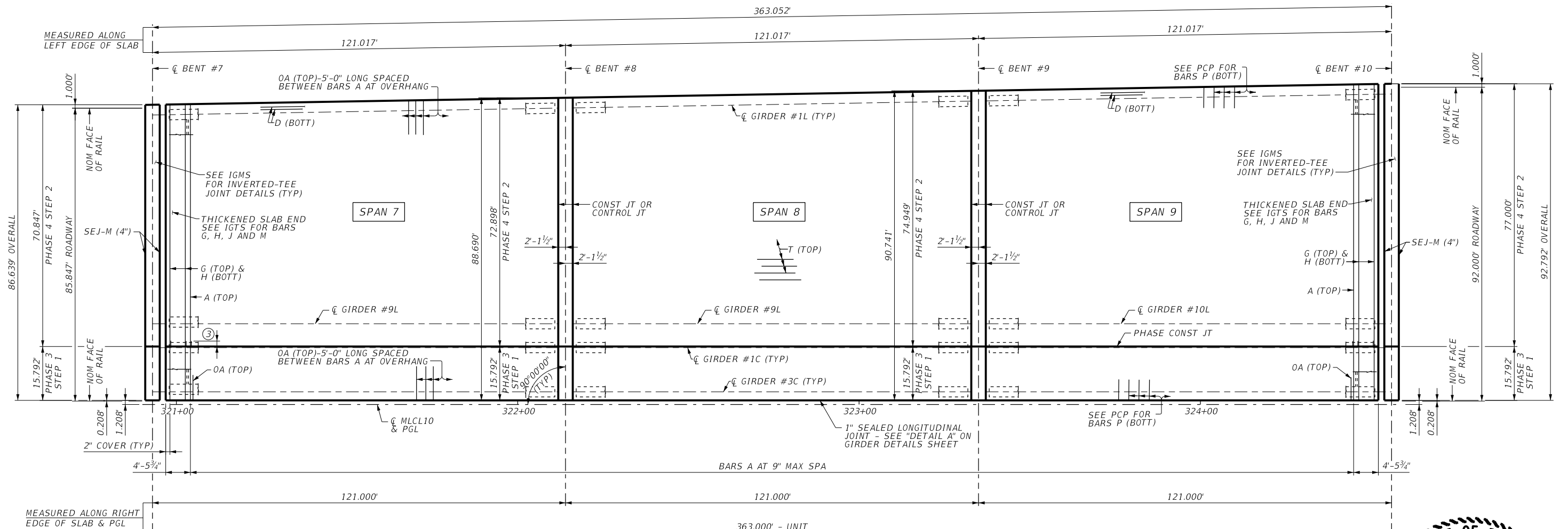
Texas Department of Transportation

**IH 10 AT US 69
 345.00' PRESTR CONC
 GIRDER UNIT 2
 IH 10 WBML
 OVER CALDER AVE**

SHEET 2 OF 4

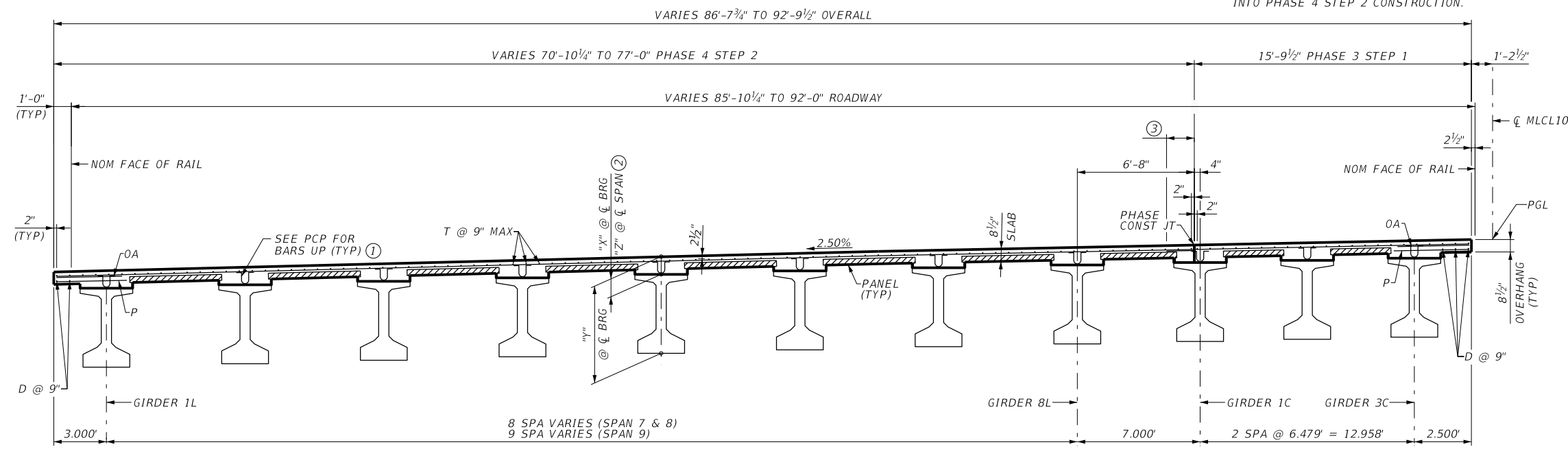
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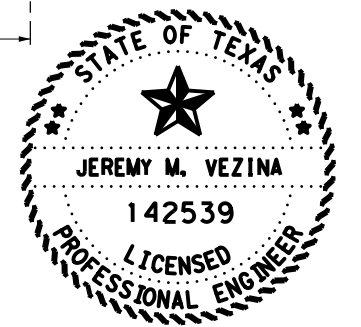


PLAN

- ① SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ② THEORETICAL DIMENSION.
- ③ EXTEND PHASE 3 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 CONSTRUCTION.



SPANS 7, 8 & 9 TRANSVERSE SECTION



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT
 F-12679

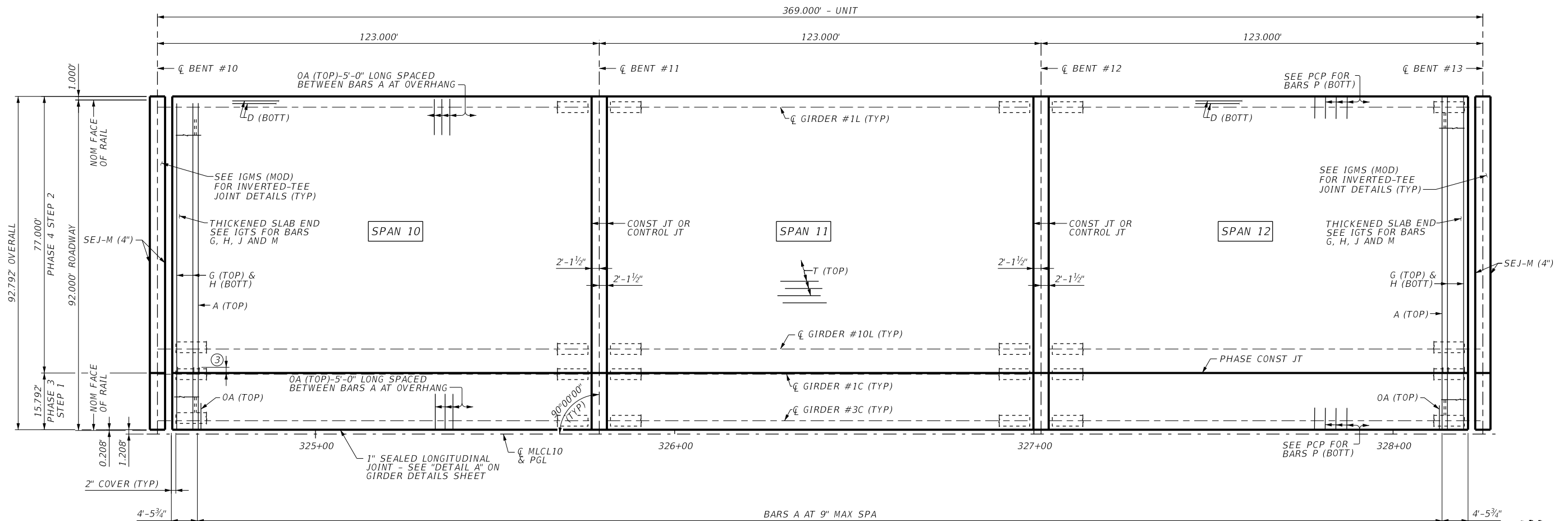
Texas Department of Transportation

**IH 10 AT US 69
 363.00' PRESTR CONC
 GIRDER UNIT 3
 IH 10 WBML
 OVER CALDER AVE**

SHEET 3 OF 4

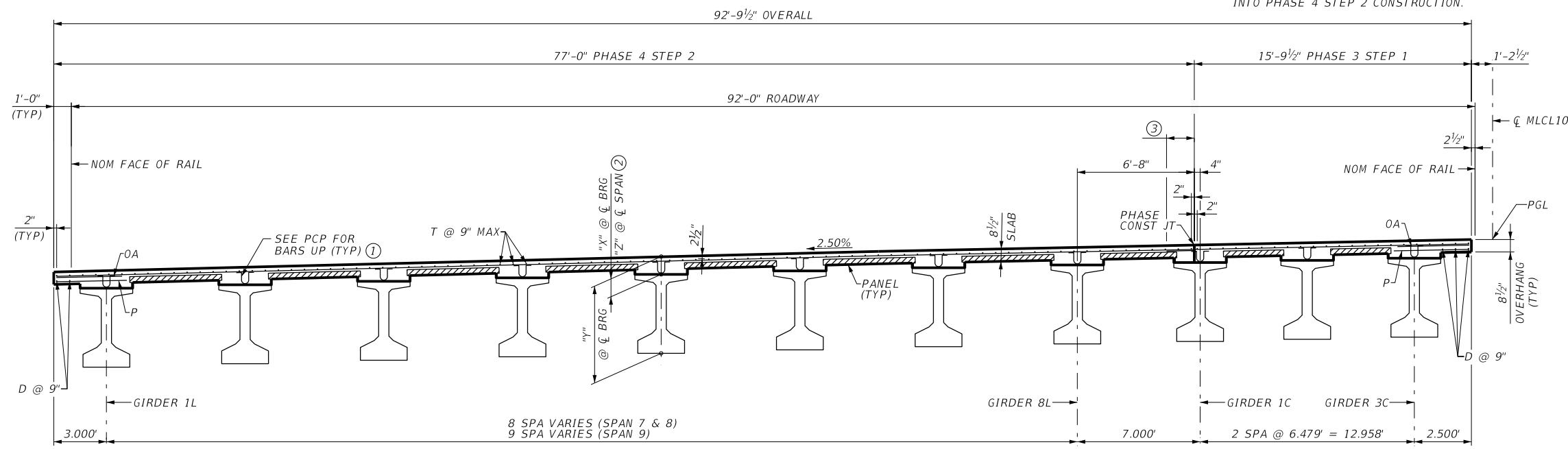
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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1320		

DATE: 20-FEB-2024 15:33
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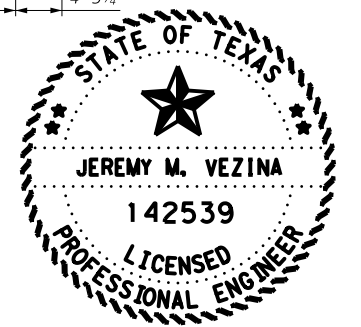


PLAN

- ① SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ② THEORETICAL DIMENSION.
- ③ EXTEND PHASE 3 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 CONSTRUCTION.



SPANS 10, 11 & 12 TRANSVERSE SECTION



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT
 F-12679

Texas Department of Transportation

**IH 10 AT US 69
 369.00' PRESTR CONC
 GIRDER UNIT 4
 IH 10 WBML
 OVER CALDER AVE**

SHEET 4 OF 4

DN: JMV	CK: FB	DW: MTM	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1321	

DATE: 20-FEB-2024 15:37
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\10 Mainlanes over Calder Ave\1322_10M_Calderave_EB_GRDUNIT_DET_01.dwg

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	1R	-0.049	-0.070
	2R - 6R	-0.091	-0.129
	7R	-0.081	-0.115
2	1R	-0.049	-0.070
	2R - 6R	-0.091	-0.129
	7R	-0.081	-0.115
3	1R	-0.049	-0.070
	2R - 6R	-0.091	-0.129
	7R	-0.081	-0.115

PHASE 1 - STEP 3 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	1R	11 1/2"	5' - 5 1/2"	9 5/8"
	2R - 6R	11 1/2"	5' - 5 1/2"	10 1/4"
	7R	11 1/2"	5' - 5 1/2"	10 1/8"
2	1R	11 1/2"	5' - 5 1/2"	9 3/4"
	2R - 6R	11 1/2"	5' - 5 1/2"	10 1/4"
	7R	11 1/2"	5' - 5 1/2"	10 1/8"
3	1R	11 1/2"	5' - 5 1/2"	9 3/4"
	2R - 6R	11 1/2"	5' - 5 1/2"	10 1/4"
	7R	11 1/2"	5' - 5 1/2"	10 1/8"

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
4	1R	-0.049	-0.070
	2R - 6R	-0.091	-0.129
	7R	-0.081	-0.115
5	1R	-0.049	-0.070
	2R - 6R	-0.091	-0.129
	7R	-0.081	-0.115
6	1R	-0.068	-0.097
	2R - 6R	-0.126	-0.179
	7R	-0.112	-0.159

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	4C	11 1/4"	5' - 5 1/4"	9 5/8"
	5C & 6C	11 1/4"	5' - 5 1/4"	9 3/4"
	7C	11 1/4"	5' - 5 1/4"	9 3/4"
2	4C	11 1/4"	5' - 5 1/4"	9 5/8"
	5C & 6C	11 1/4"	5' - 5 1/4"	9 7/8"
	7C	11 1/4"	5' - 5 1/4"	9 3/4"
3	4C	11 1/4"	5' - 5 1/4"	9 5/8"
	5C & 6C	11 1/4"	5' - 5 1/4"	9 7/8"
	7C	11 1/4"	5' - 5 1/4"	9 3/4"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	4C	-0.081	-0.115
	5C & 6C	-0.091	-0.130
	7C	-0.087	-0.123
2	4C	-0.081	-0.115
	5C & 6C	-0.091	-0.130
	7C	-0.087	-0.123
3	4C	-0.081	-0.115
	5C & 6C	-0.091	-0.130
	7C	-0.087	-0.123

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	4C	11 1/4"	5' - 5 1/4"	9 5/8"
	5C & 6C	11 1/4"	5' - 5 1/4"	9 3/4"
	7C	11 1/4"	5' - 5 1/4"	9 3/4"
2	4C	11 1/4"	5' - 5 1/4"	9 5/8"
	5C & 6C	11 1/4"	5' - 5 1/4"	9 7/8"
	7C	11 1/4"	5' - 5 1/4"	9 3/4"
3	4C	11 1/4"	5' - 5 1/4"	9 5/8"
	5C & 6C	11 1/4"	5' - 5 1/4"	9 7/8"
	7C	11 1/4"	5' - 5 1/4"	9 3/4"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
4	4C	-0.081	-0.115
	5C & 6C	-0.091	-0.130
	7C	-0.087	-0.123
5	4C	-0.081	-0.115
	5C & 6C	-0.091	-0.130
	7C	-0.087	-0.123
6	4C	-0.112	-0.159
	5C & 6C	-0.127	-0.180
	7C	-0.120	-0.171

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
4	4C	11 3/4"	5' - 5 3/4"	9 3/4"
	5C & 6C	11 3/4"	5' - 5 3/4"	9 7/8"
	7C	11 3/4"	5' - 5 3/4"	9 7/8"
5	4C	11 3/4"	5' - 5 3/4"	9 5/8"
	5C & 6C	11 3/4"	5' - 5 3/4"	9 3/4"
	7C	11 3/4"	5' - 5 3/4"	9 3/4"
6	4C	12"	5' - 6"	9 5/8"
	5C & 6C	12"	5' - 6"	9 7/8"
	7C	12"	5' - 6"	9 3/4"

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ④
		SF	LF	LB
1	PHASE 1 STEP 3	5600	750.75	12880
	PHASE 3 STEP 1	3710	429.00	8533
2	PHASE 1 STEP 3	5600	750.75	12880
	PHASE 3 STEP 1	3710	429.00	8533
3	PHASE 1 STEP 3	5600	750.76	12880
	PHASE 3 STEP 1	3710	429.00	8533
BRIDGE TOTAL		27930	3539	64239

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ④
		SF	LF	LB
4	PHASE 1 STEP 3	5600	750.77	12880
	PHASE 3 STEP 1	3710	429.01	8533
5	PHASE 1 STEP 3	5600	750.77	12880
	PHASE 3 STEP 1	3710	429.01	8533
6	PHASE 1 STEP 3	6050	813.77	13915
	PHASE 3 STEP 1	4008	465.01	9219
BRIDGE TOTAL		28678	3638	65960

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.

SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN.

SEE IGMS (MOD) STANDARD FOR MISCELLANEOUS DETAILS.

SEE APPLICABLE RAIL DETAILS FOR RAIL ANCHORAGE IN SLAB.

SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.

MATERIAL NOTES:

PROVIDE CLASS 5 CONCRETE ($f'c = 4,000$ PSI).

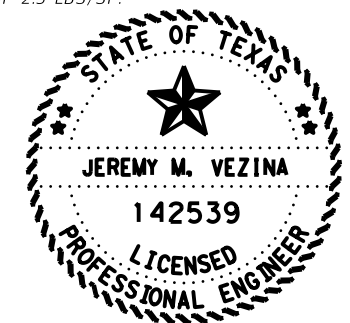
PROVIDE GRADE 60 REINFORCING STEEL.

PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 UNCOATED ~ #4 = 1'-7"

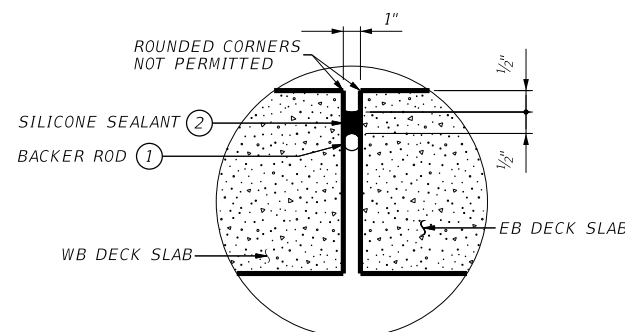
DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T, UNLESS NOTED OTHERWISE.

PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.

- ① BACKER ROD SHALL BE 25% LARGER THAN JOINT OPENING AND SHALL BE COMPATIBLE WITH THE SEALANT; NO REACTION SHALL OCCUR BETWEEN THE ROD AND THE SEALANT.
- ② SEALANT SHALL BE CLASS 7 SILICONE SEALANT. INSTALL WHEN AMBIENT TEMPERATURE IS BEING 55°F AND 85°F AND RISING. ENGINEER TO DETERMINE ALLOWABLE HOURS FOR SEALANT APPLICATION.
- ③ THEORETICAL DIMENSION.
- ④ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF.



Jeremy Vezina 2-20-2024



DETAIL A
 N.T.S.

HL93 LOADING

VOLKERT

F-12679



**IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 EBML
 OVER CALDER AVE**

SHEET 1 OF 2

DN: JMV	CK: FB	DW: MTM	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1322	

DATE: 20-FEB-2024 15:39
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7 - Bridge\Bridg 0 (IH 10 Mainlanes over Calder Ave)\1323_10ML_CALDERAVE_EB_GRDUNIT_DET_02.dwg

- ① THEORETICAL DIMENSION.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF.

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
7	1R	-0.068	-0.097
	2R - 6R	-0.126	-0.179
	7R	-0.112	-0.159
8	1R	-0.068	-0.097
	2R - 6R	-0.126	-0.179
	7R	-0.112	-0.159
9	1R	-0.068	-0.097
	2R - 6R	-0.126	-0.179
	7R	-0.112	-0.159

PHASE 1 - STEP 3 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
7	1R	13 1/2"	5' - 7 1/2"	9 5/8"
	2R - 6R	13 1/2"	5' - 7 1/2"	10 1/2"
	7R	13 1/2"	5' - 7 1/2"	10 1/4"
8	1R	13 1/2"	5' - 7 1/2"	9 5/8"
	2R - 6R	13 1/2"	5' - 7 1/2"	10 1/2"
	7R	13 1/2"	5' - 7 1/2"	10 1/4"
9	1R	13 1/2"	5' - 7 1/2"	9 5/8"
	2R - 6R	13 1/2"	5' - 7 1/2"	10 1/2"
	7R	13 1/2"	5' - 7 1/2"	10 1/4"

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
10	1R	-0.135	-0.192
	2R - 6R	-0.135	-0.192
	7R	-0.120	-0.170
11	1R	-0.073	-0.104
	2R - 6R	-0.135	-0.192
	7R	-0.120	-0.170
12	1R	-0.074	-0.105
	2R - 6R	-0.136	-0.194
	7R	-0.120	-0.171

PHASE 1 - STEP 3 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
10	1R	13 3/4"	5' - 7 3/4"	9 3/4"
	2R - 6R	13 3/4"	5' - 7 3/4"	10 5/8"
	7R	13 3/4"	5' - 7 3/4"	10 3/8"
11	1R	13 3/4"	5' - 7 3/4"	9 3/4"
	2R - 6R	13 3/4"	5' - 7 3/4"	10 5/8"
	7R	13 3/4"	5' - 7 3/4"	10 3/8"
12	1R	13 1/4"	5' - 7 1/4"	9 5/8"
	2R - 6R	13 1/4"	5' - 7 1/4"	10 3/8"
	7R	13 1/4"	5' - 7 1/4"	10 1/4"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
7	4C	-0.112	-0.159
	5C & 6C	-0.127	-0.180
	7C	-0.120	-0.171
8	4C	-0.112	-0.159
	5C & 6C	-0.127	-0.180
	7C	-0.120	-0.171
9	4C	-0.112	-0.159
	5C & 6C	-0.127	-0.180
	7C	-0.120	-0.171

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
7	4C	13"	5' - 7"	9 1/2"
	5C & 6C	13"	5' - 7"	9 3/4"
	7C	13"	5' - 7"	9 5/8"
8	4C	13"	5' - 7"	9 1/2"
	5C & 6C	13"	5' - 7"	9 3/4"
	7C	13"	5' - 7"	9 5/8"
9	4C	13"	5' - 7"	9 1/2"
	5C & 6C	13"	5' - 7"	9 3/4"
	7C	13"	5' - 7"	9 5/8"

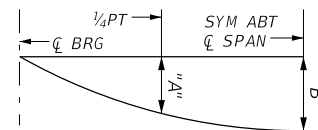
PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
10	4C	-0.120	-0.171
	5C & 6C	-0.136	-0.193
	7C	-0.129	-0.183
11	4C	-0.120	-0.171
	5C & 6C	-0.136	-0.193
	7C	-0.129	-0.183
12	4C	-0.120	-0.171
	5C & 6C	-0.136	-0.193
	7C	-0.129	-0.183

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
10	4C	13 1/4"	5' - 7 1/4"	9 3/4"
	5C & 6C	13 1/4"	5' - 7 1/4"	10"
	7C	13 1/4"	5' - 7 1/4"	9 7/8"
11	4C	13 1/4"	5' - 7 1/4"	9 3/4"
	5C & 6C	13 1/4"	5' - 7 1/4"	10"
	7C	13 1/4"	5' - 7 1/4"	9 7/8"
12	4C	12 3/4"	5' - 6 3/4"	9 5/8"
	5C & 6C	12 3/4"	5' - 6 3/4"	9 7/8"
	7C	12 3/4"	5' - 6 3/4"	9 3/4"

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ②
		SF	LF	LB
7	PHASE 1 STEP 3	6050	813.76	13915
	PHASE 3 STEP 1	4008	465.00	9219
8	PHASE 1 STEP 3	6050	813.75	13915
	PHASE 3 STEP 1	4008	465.00	9219
9	PHASE 1 STEP 3	6050	813.79	13915
	PHASE 3 STEP 1	4008	465.02	9219
BRIDGE TOTAL		30174	3836	69401

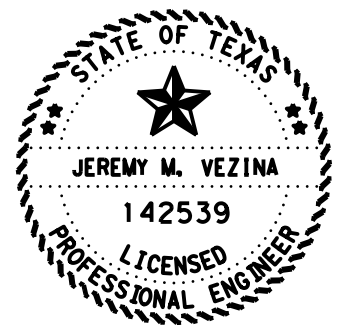
TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ②
		SF	LF	LB
10	PHASE 1 STEP 3	6150	827.86	14145
	PHASE 3 STEP 1	4074	473.06	9371
11	PHASE 1 STEP 3	6150	827.96	14145
	PHASE 3 STEP 1	4074	473.12	9371
12	PHASE 1 STEP 3	6212	828.10	14286
	PHASE 3 STEP 1	4074	473.20	9371
BRIDGE TOTAL		30735	3903	70690

BAR TABLE	
BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY (EC = 5000 KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679



IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 EBML
 OVER CALDER AVE

SHEET 2 OF 2

DW:	JMV	CK:	FB	DW:	MTM	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1323		

DATE: 20-FEB-2024 15:39
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\10 69 Interchanges over Calder Ave\1324_10ML_CALDERAVE_WB_GRDUNIT_DET_01.dwg

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS

SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	1C	-0.042	-0.059
	2C	-0.076	-0.108
	3C	-0.067	-0.095
2	1C	-0.042	-0.059
	2C	-0.076	-0.108
	3C	-0.067	-0.095
3	1C	-0.042	-0.059
	2C	-0.076	-0.108
	3C	-0.067	-0.095

PHASE 3 - STEP 1 SECTION DEPTHS

SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	1C	11 1/4"	5' - 5 1/4"	9 3/4"
	2C	11 1/4"	5' - 5 1/4"	10 1/4"
	3C	11 1/4"	5' - 5 1/4"	10 1/8"
2	1C	11"	5' - 5"	9 1/2"
	2C	11"	5' - 5"	10"
	3C	11"	5' - 5"	9 7/8"
3	1C	11"	5' - 5"	9 1/2"
	2C	11"	5' - 5"	10"
	3C	11"	5' - 5"	9 7/8"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS

SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
4	1C	-0.042	-0.059
	2C	-0.076	-0.108
	3C	-0.067	-0.095
5	1C	-0.042	-0.059
	2C	-0.076	-0.108
	3C	-0.067	-0.095
6	1C	-0.058	-0.082
	2C	-0.105	-0.149
	3C	-0.093	-0.132

PHASE 3 - STEP 1 SECTION DEPTHS

SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
4	1C	11 1/2"	5' - 5 1/2"	9 5/8"
	2C	11 1/2"	5' - 5 1/2"	10 1/8"
	3C	11 1/2"	5' - 5 1/2"	10"
5	1C	11 3/4"	5' - 5 3/4"	9 3/4"
	2C	11 3/4"	5' - 5 3/4"	10 1/4"
	3C	11 3/4"	5' - 5 3/4"	10 1/8"
6	1C	12"	5' - 6"	9 5/8"
	2C	12"	5' - 6"	10 1/4"
	3C	12"	5' - 6"	10"

PHASE 4 - STEP 2 DEAD LOAD DEFLECTIONS

SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	1L	-0.081	-0.116
	2L - 7L	-0.092	-0.131
	8L	-0.087	-0.124
2	1L	-0.081	-0.116
	2L - 7L	-0.092	-0.131
	8L	-0.087	-0.124
3	1L	-0.081	-0.116
	2L - 8L	-0.092	-0.131
	8L	-0.087	-0.124

PHASE 4 - STEP 2 SECTION DEPTHS

SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
1	1L	10 3/4"	5' - 4 3/4"	9 1/2"
	2L - 7L	10 3/4"	5' - 4 3/4"	9 3/4"
	8L	10 3/4"	5' - 4 3/4"	9 5/8"
2	1L	10 3/4"	5' - 4 3/4"	9 5/8"
	2L - 7L	10 3/4"	5' - 4 3/4"	9 3/4"
	8L	10 3/4"	5' - 4 3/4"	9 5/8"
3	1L	10 3/4"	5' - 4 3/4"	9 5/8"
	2L - 7L	10 3/4"	5' - 4 3/4"	9 3/4"
	8L	10 3/4"	5' - 4 3/4"	9 5/8"

PHASE 4 - STEP 2 DEAD LOAD DEFLECTIONS

SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
4	1L	-0.082	-0.117
	2L - 7L	-0.094	-0.134
	8L	-0.088	-0.125
5	1L	-0.078	-0.110
	2L - 8L	-0.085	-0.121
	9L	-0.083	-0.119
6	1L	-0.110	-0.156
	2L - 8L	-0.122	-0.173
	9L	-0.118	-0.167

PHASE 4 - STEP 2 SECTION DEPTHS

SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ③
4	1L	11 1/2"	5' - 5 1/2"	9 3/4"
	2L - 7L	11 1/2"	5' - 5 1/2"	9 7/8"
	8L	11 1/2"	5' - 5 1/2"	9 3/4"
5	1L	11 1/4"	5' - 5 1/4"	9 3/4"
	2L - 8L	11 1/4"	5' - 5 1/4"	9 3/4"
	9L	11 1/4"	5' - 5 1/4"	9 3/4"
6	1L	11 1/2"	5' - 5 1/2"	9 1/2"
	2L - 8L	11 1/2"	5' - 5 1/2"	9 3/4"
	9L	11 1/2"	5' - 5 1/2"	9 5/8"

TABLE OF ESTIMATED QUANTITIES

SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ④
		SF	LF	LB
1	PHASE 3 STEP 1	1769	321.75	4068
	PHASE 4 STEP 2	7280	858.00	16744
2	PHASE 3 STEP 1	1769	321.75	4068
	PHASE 4 STEP 2	7280	858.00	16744
3	PHASE 1 STEP 3	1769	321.75	4068
	PHASE 4 STEP 2	7280	858.01	16744
BRIDGE TOTAL		27146	3539	62436

TABLE OF ESTIMATED QUANTITIES

SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ④
		SF	LF	LB
4	PHASE 3 STEP 1	1769	321.76	4068
	PHASE 4 STEP 2	7386	858.07	16989
5	PHASE 3 STEP 1	1769	321.76	4068
	PHASE 4 STEP 2	7599	965.33	17478
6	PHASE 3 STEP 1	1911	348.76	4395
	PHASE 4 STEP 2	8448	1046.33	19431
BRIDGE TOTAL		28882	3862	66428

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.

SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN.

SEE IGMS (MOD) STANDARD FOR MISCELLANEOUS DETAILS.

SEE APPLICABLE RAIL DETAILS FOR RAIL ANCHORAGE IN SLAB.

SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.

MATERIAL NOTES:
 PROVIDE CLASS 5 CONCRETE (f'c = 4,000 PSI).

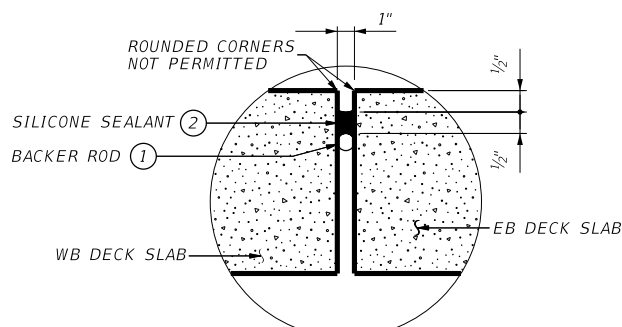
PROVIDE GRADE 60 REINFORCING STEEL.

PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 UNCOATED ~ #4 = 1'-7"

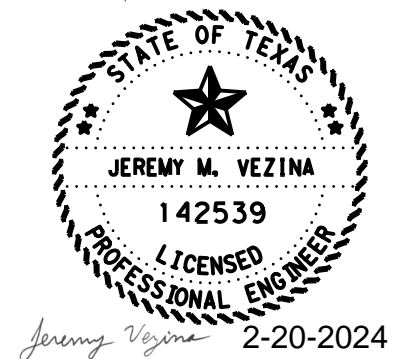
DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T, UNLESS NOTED OTHERWISE.

PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.

- ① BACKER ROD SHALL BE 25% LARGER THAN JOINT OPENING AND SHALL BE COMPATIBLE WITH THE SEALANT; NO REACTION SHALL OCCUR BETWEEN THE ROD AND THE SEALANT.
- ② SEALANT SHALL BE CLASS 7 SILICONE SEALANT. INSTALL WHEN AMBIENT TEMPERATURE IS BEING 55°F AND 85°F AND RISING. ENGINEER TO DETERMINE ALLOWABLE HOURS FOR SEALANT APPLICATION.
- ③ THEORETICAL DIMENSION.
- ④ REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF.



DETAIL A
 N.T.S.



HL93 LOADING

VOLKERT

F-12679
 Texas Department of Transportation

**IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 WBML
 OVER CALDER AVE**

SHEET 1 OF 2

DN: JMV	CK: FB	DW: MTM	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1324	

DATE: 20-FEB-2024 19:08
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\I10_Calderave_WB_GrdUnit_DET_02.dwg

- ① THEORETICAL DIMENSION.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF.

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
7	1C	-0.058	-0.082
	2C	-0.105	-0.149
	3C	-0.093	-0.132
8	1C	-0.058	-0.082
	2C	-0.105	-0.149
	3C	-0.093	-0.132
9	1C	-0.058	-0.082
	2C	-0.105	-0.149
	3C	-0.093	-0.132

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
7	1C	13"	5' - 7"	9 1/2"
	2C	13"	5' - 7"	10 1/8"
	3C	13"	5' - 7"	10"
8	1C	13"	5' - 7"	9 1/2"
	2C	13"	5' - 7"	10 1/8"
	3C	13"	5' - 7"	10"
9	1C	13"	5' - 7"	9 1/2"
	2C	13"	5' - 7"	10 1/2"
	3C	13"	5' - 7"	10"

PHASE 3 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
10	1C	-0.062	-0.088
	2C	-0.113	-0.160
	3C	-0.100	-0.142
11	1C	-0.062	-0.088
	2C	-0.113	-0.160
	3C	-0.100	-0.142
12	1C	-0.062	-0.088
	2C	-0.113	-0.160
	3C	-0.100	-0.142

PHASE 3 - STEP 1 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
10	1C	13 1/4"	5' - 7 1/4"	9 1/2"
	2C	13 1/4"	5' - 7 1/4"	10 3/8"
	3C	13 1/4"	5' - 7 1/4"	10 1/8"
11	1C	13 1/4"	5' - 7 1/4"	9 1/2"
	2C	13 1/4"	5' - 7 1/4"	10 3/8"
	3C	13 1/4"	5' - 7 1/4"	10 1/8"
12	1C	13"	5' - 7"	9 5/8"
	2C	13"	5' - 7"	10 5/8"
	3C	13"	5' - 7"	10 1/8"

PHASE 4 - STEP 2 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
7	1L	-0.112	-0.159
	2L - 8L	-0.126	-0.179
	9L	-0.120	-0.170
8	1L	-0.114	-0.162
	2L - 8L	-0.130	-0.185
	9L	-0.122	-0.173
9	1L	-0.108	-0.154
	2L - 9L	-0.119	-0.170
	10L	-0.116	-0.166

PHASE 4 - STEP 2 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
7	1L	12 3/4"	5' - 6 3/4"	9 3/4"
	2L - 8L	12 3/4"	5' - 6 3/4"	10"
	9L	12 3/4"	5' - 6 3/4"	9 7/8"
8	1L	12 3/4"	5' - 6 3/4"	9 3/4"
	2L - 8L	12 3/4"	5' - 6 3/4"	9 7/8"
	9L	12 3/4"	5' - 6 3/4"	9 3/4"
9	1L	12 3/4"	5' - 6 3/4"	9 3/4"
	2L - 9L	12 3/4"	5' - 6 3/4"	9 7/8"
	10L	12 3/4"	5' - 6 3/4"	9 7/8"

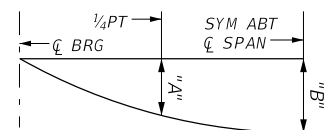
PHASE 4 - STEP 2 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
10	1L	-0.117	-0.166
	2L - 9L	-0.130	-0.185
	10L	-0.126	-0.179
11	1L	-0.117	-0.166
	2L - 9L	-0.130	-0.185
	10L	-0.126	-0.179
12	1L	-0.117	-0.166
	2L - 9L	-0.130	-0.185
	10L	-0.126	-0.179

PHASE 4 - STEP 2 SECTION DEPTHS				
SPAN NO	GIRDER ID	"X" (in)	"Y" (ft - in)	"Z" (in) ①
10	1L	12 1/2"	5' - 6 1/2"	9 1/2"
	2L - 9L	12 1/2"	5' - 6 1/2"	9 5/8"
	10L	12 1/2"	5' - 6 1/2"	9 5/8"
11	1L	12 1/2"	5' - 6 1/2"	9 1/2"
	2L - 9L	12 1/2"	5' - 6 1/2"	9 5/8"
	10L	12 1/2"	5' - 6 1/2"	9 5/8"
12	1L	12 1/4"	5' - 6 1/4"	9 5/8"
	2L - 9L	12 1/4"	5' - 6 1/4"	9 3/4"
	10L	12 1/4"	5' - 6 1/4"	9 3/4"

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ②
		SF	LF	LB
7	PHASE 3 STEP 1	1911	348.75	4395
	PHASE 4 STEP 2	8697	1046.32	20002
8	PHASE 3 STEP 1	1911	348.75	4395
	PHASE 4 STEP 2	8945	1046.31	20573
9	PHASE 3 STEP 1	1911	348.77	4395
	PHASE 4 STEP 2	9193	1162.61	21144
BRIDGE TOTAL		32567	4302	74903

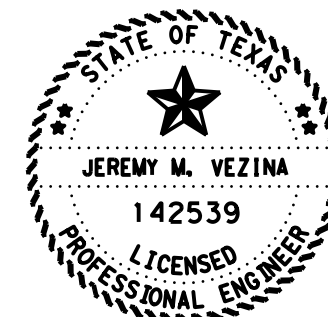
TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL ②
		SF	LF	LB
10	PHASE 3 STEP 1	1942	354.80	4467
	PHASE 4 STEP 2	9471	1182.75	21783
11	PHASE 3 STEP 1	1942	354.85	4467
	PHASE 4 STEP 2	9471	1182.94	21783
12	PHASE 3 STEP 1	1942	354.85	4467
	PHASE 4 STEP 2	9471	1182.94	21783
BRIDGE TOTAL		34240	4613	78752

BAR TABLE	
BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY (EC = 5000 KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.



Jeremy Vezina 2-20-2024

HL93 LOADING

VOLKERT

F-12679



**IH 10 AT US 69
 PRESTR CONC GIRDER
 UNIT DETAILS
 IH 10 WBML
 OVER CALDER AVE**

SHEET 2 OF 2

DN: JMV	CK: FB	DW: MTM	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT		COUNTY JEFFERSON	SHEET NO. 1325

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DATE: FILE:

STRUCTURE	DESIGNED GIRDERS									DEPRESSED STRAND PATTERN		CONCRETE		OPTIONAL DESIGN					LOAD RATING FACTORS		
	SPAN NO.	GIRDER NO.	GIRDER TYPE	PRESTRESSING STRANDS					NO.	TO END (in)	RELEASE STRGTH (1) f'ci (ksi)	MINIMUM 28 DAY COMP STRGTH f'c (ksi)	DESIGN LOAD COMP STRESS (TOP) (SERVICE I) fct(ksi)	DESIGN LOAD TENSILE STRESS (BOT) (SERVICE III) fcb(ksi)	REQUIRED MINIMUM ULTIMATE MOMENT CAPACITY (STRENGTH I) (kip-ft)	LIVE LOAD DISTRIBUTION FACTOR (2)		STRENGTH I SERVICE III			
				NON-STANDARD STRAND PATTERN	TOTAL NO.	SIZE (in)	STRGTH fpu (ksi)	"e" (in)								"e" END (in)	Moment	Shear	Inv	Opp	Inv
IH 10 EB MAINLANES OVER CALDER AVE (SPANS 1-8)	1	4C - 7C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.400	3.481	-3.585	7779	0.910	0.910	1.32	1.76	1.05
	1	1R - 7R	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.400	3.481	-3.585	7779	0.910	0.910	1.32	1.76	1.05
	2	4C - 7C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.400	3.483	-3.587	7782	0.910	0.910	1.32	1.76	1.05
	2	1R - 7R	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.400	3.483	-3.587	7782	0.910	0.910	1.32	1.76	1.05
	3	4C - 7C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.400	3.483	-3.587	7782	0.910	0.910	1.32	1.76	1.05
	3	1R - 7R	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.400	3.457	-3.406	6713	0.628	0.799	1.74	2.26	1.15
	4	4C - 7C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.400	3.494	-3.595	7792	0.910	0.910	1.32	1.76	1.05
	4	1R - 7R	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.400	3.451	-3.401	6707	36.000	0.799	1.74	2.26	1.16
	5	4C - 7C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.400	4.090	-3.590	7786	0.910	0.910	1.32	1.76	1.05
	5	1R - 7R	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.400	3.461	-3.409	6717	36.000	0.799	1.74	2.26	1.15
	6	4C - 7C	Tx54		36	0.6	270	19.34	12.01	6	50.5	4.700	5.400	4.090	-4.165	8920	0.910	0.910	1.26	1.75	1.02
	6	1R - 7R	Tx54		34	0.6	270	19.48	11.71	6	50.5	4.400	5.400	4.083	-3.968	7683	0.631	0.802	1.74	2.26	1.13
7	4C - 7C	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.600	6.600	4.099	-4.172	8928	0.910	0.910	1.26	1.75	1.02	
7	1R - 7R	Tx54		40	0.6	270	19.11	12.51	6	50.5	5.300	6.600	4.091	-3.975	7786	0.910	0.910	1.32	1.76	1.05	
8	4C - 7C	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.600	6.600	4.098	-4.171	8928	0.910	0.910	1.26	1.75	1.02	
8	1R - 7R	Tx54		40	0.6	270	19.11	12.51	6	50.5	5.300	6.600	4.090	-4.165	8920	0.910	0.910	1.26	1.75	1.02	
9	4C - 7C	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.600	6.600	4.098	-4.171	8928	0.910	0.910	1.26	1.75	1.02	
9	1R - 7R	Tx54		40	0.6	270	19.11	12.51	6	50.5	5.300	6.600	4.090	-3.974	7691	0.617	0.802	1.78	2.31	1.12	
10	4C - 7C	Tx54		44	0.6	270	18.83	11.19	8	50.5	5.700	6.600	4.245	-4.189	8102	0.614	0.802	1.68	2.25	1.18	
10	1R - 7R	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.700	6.900	4.245	-4.172	8928	0.910	0.910	1.26	1.75	1.02	
11	4C - 7C	Tx54		44	0.6	270	18.83	11.19	8	50.5	5.700	6.600	4.245	-4.189	8102	44.000	0.802	1.68	2.25	1.18	
11	1R - 7R	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.700	6.900	4.245	-4.112	7923	0.615	0.799	1.75	2.31	1.12	
12	4C - 7C	Tx54		44	0.6	270	18.83	11.19	8	50.5	5.700	6.600	4.236	-4.302	9186	0.910	0.910	1.27	1.77	1.02	
12	1R - 7R	Tx54		42	0.6	270	19.01	12.72	6	50.5	5.700	6.900	4.244	-4.171	8928	0.910	0.910	1.26	1.75	1.02	

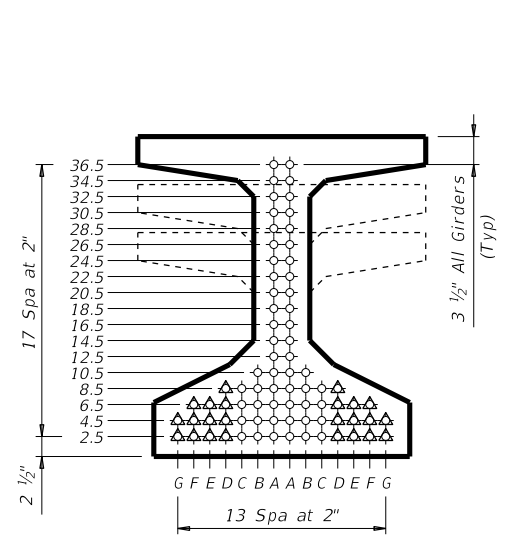
NON-STANDARD STRAND PATTERNS	
PATTERN	STRAND ARRANGEMENT AT E OF GIRDER

- ① Based on the following allowable stresses (ksi):
 Compression = 0.65 f'ci
 Tension = 0.24 √ f'ci
 Optional designs must likewise conform.
- ② Portion of full HL93.

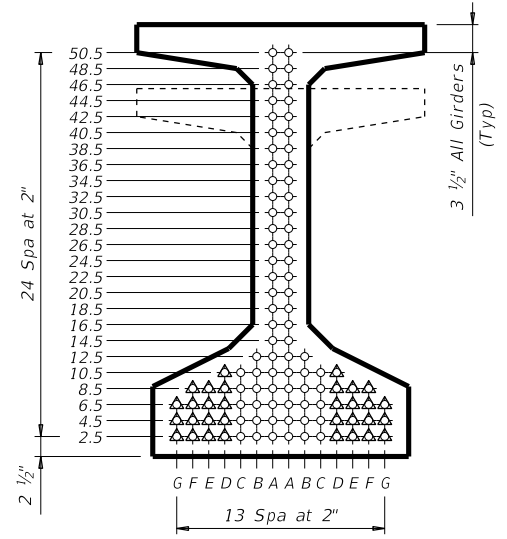
DESIGN NOTES:
 Designed according to AASHTO LRFD Bridge Design Specifications. Load rated using Load and Resistance Factor Rating according to AASHTO Manual for Bridge Evaluation. Optional designs for girders 120 feet or longer must have a calculated residual camber equal to or greater than that of the designed girder. Prestress losses for the designed girders have been calculated for a relative humidity of 60 percent. Optional designs must likewise conform.

FABRICATION NOTES:
 Provide Class H concrete. Provide Grade 60 reinforcing steel bars. Use low relaxation strands, each pretensioned to 75 percent of fpu. Strand debonding must comply with Item 424.4.2.2.4. Full-length debonded strands are only permitted in positions marked Δ. Double wrap full-length debonded strands in outer most position of each row. When shown on this sheet, the Fabricator has the option of furnishing either the designed girder or an approved optional design. All optional design submittals must be signed, sealed and dated by a Professional Engineer registered in the State of Texas. Seal cracks in girder ends exceeding 0.005" in width as directed by the Engineer. The fabricator is permitted to decrease the spacing of Bars R and S by providing additional bars to help limit crack width provided the decreased spacing results in no less than 1" clear between bars. The fabricator must take an approved corrective action if cracks greater than 0.005" form on a repetitive basis.

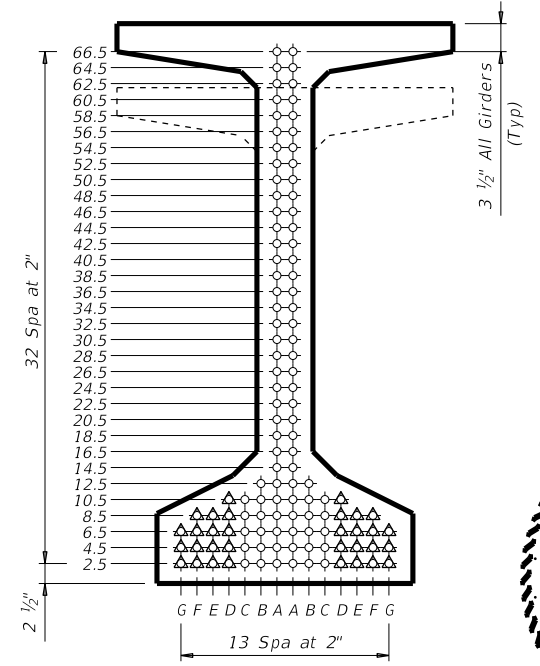
DEPRESSED STRAND DESIGNS:
 Locate strands for the designed girder as low as possible on the 2" grid system unless a non-standard strand pattern is indicated. Fill row "2.5", then row "4.5", then row "6.5", etc., beginning each row in the "A" position and working outward until the required number of strands is reached. All strands in the "A" position must be depressed, maintaining the 2" spacing so that, at the girder ends, the upper two strands are in the position shown in the table.



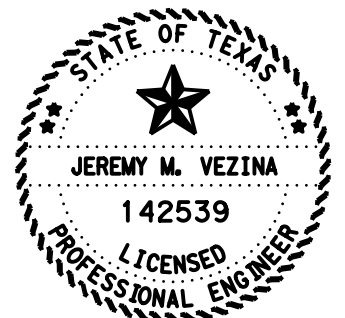
TYPE Tx28, Tx34 & Tx40



TYPE Tx46 & Tx54



TYPE Tx62 & Tx70



Jeremy Veziina 2-20-2024

Texas Department of Transportation			Bridge Division Standard		
PRESTRESSED CONCRETE I-GIRDER DESIGNS (NON-STANDARD SPANS) IH 10 EBML OVER CALDER AVE IGND 1 OF 3					
FILE: 1326_10ML_CALDERAVE_IGNDST	DwgIDB	ck: JMV	dw: JDB	ck: ZZ	
©TxDOT August 2017	CONT SECT	JOB	HIGHWAY		
REVISIONS	0028 13	135	IH 10		
10-19: Modified for depressed strands only.	DIST	COUNTY	SHEET NO.		
	BMT	JEFFERSON	1326		

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DATE: FILE:

STRUCTURE	DESIGNED GIRDERS									DEPRESSED STRAND PATTERN		CONCRETE		OPTIONAL DESIGN				LOAD RATING FACTORS			
	SPAN NO.	GIRDER NO.	GIRDER TYPE	PRESTRESSING STRANDS					NO.	TO END (in)	RELEASE STRGTH (1) f'ci (ksi)	MINIMUM 28 DAY COMP STRGTH f'c (ksi)	DESIGN LOAD COMP STRESS (TOP ϵ) (SERVICE I) fct(ksi)	DESIGN LOAD TENSILE STRESS (BOTT ϵ) (SERVICE III) fcb(ksi)	REQUIRED MINIMUM ULTIMATE MOMENT CAPACITY (STRENGTH I) (kip-ft)	LIVE LOAD DISTRIBUTION FACTOR (2)		STRENGTH I SERVICE III			
				NON-STD STRAND PATTERN	TOTAL NO.	SIZE (in)	STRGTH fpu (ksi)	"e" $\bar{\epsilon}$ (in)								"e" END (in)	Moment	Shear	Inv	Opp	Inv
IH 10 WB MAINLANES OVER CALDER AVE (SPANS 10-12)	10	1R - 10L	Tx54		38	0.6	270	19.22	13.22	6	44.5	5.200	6.100	4.080	-3.939	7609	0.596	0.778	1.67	2.17	1.03
	10	1C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	6.500	4.214	-3.875	7257	0.554	0.725	1.79	2.32	1.09
	10	2C	Tx54		36	0.6	270	19.34	13.67	6	40.5	5.000	6.300	4.193	-3.833	7140	0.539	0.706	1.70	2.20	1.01
	10	3C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	5.900	4.181	-3.911	7746	0.665	0.706	1.48	1.92	1.01
	11	1R - 10L	Tx54		38	0.6	270	19.22	13.22	6	44.5	5.200	6.100	4.080	-3.939	7609	0.596	0.778	1.67	2.17	1.03
	11	1C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	6.500	4.214	-3.875	7257	38.000	0.725	1.79	2.32	1.09
	11	2C	Tx54		36	0.6	270	19.34	13.67	6	40.5	5.000	6.300	4.193	-3.833	7140	36.000	0.706	1.70	2.20	1.01
	11	3C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	5.900	4.181	-3.911	7624	38.000	0.706	1.53	1.98	1.01
	12	1R - 10L	Tx54		38	0.6	270	19.22	13.22	6	44.5	5.200	6.200	4.115	-3.967	7645	0.596	0.778	1.65	2.16	1.01
	12	1C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	6.500	4.217	-3.877	7260	0.554	0.725	1.79	2.32	1.08
	12	2C	Tx54		36	0.6	270	19.34	12.01	6	50.5	5.000	6.300	4.196	-3.836	7143	0.539	0.706	1.70	2.20	1.01
	12	3C	Tx54		38	0.6	270	19.22	12.27	6	50.5	5.000	5.900	4.184	-3.913	7750	0.665	0.706	1.48	1.92	1.01

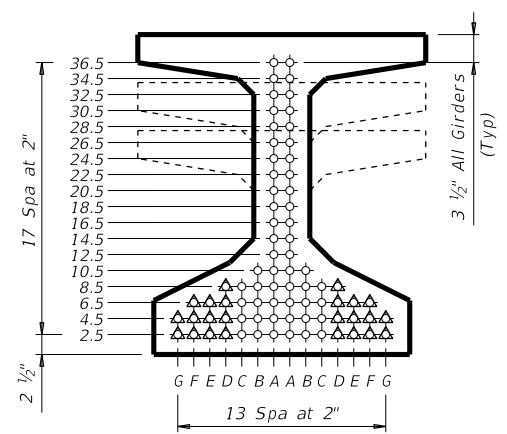
NON-STANDARD STRAND PATTERNS	
PATTERN	STRAND ARRANGEMENT AT $\bar{\epsilon}$ OF GIRDER

- (1) Based on the following allowable stresses (ksi):
 Compression = 0.65 f'ci
 Tension = 0.24 $\sqrt{f'ci}$
 Optional designs must likewise conform.
- (2) Portion of full HL93.

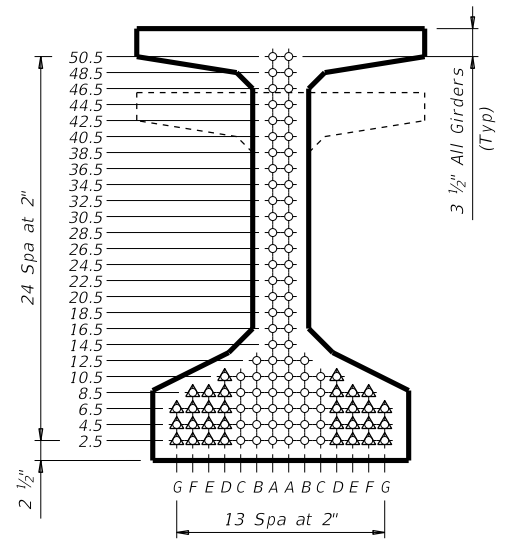
DESIGN NOTES:
 Designed according to AASHTO LRFD Bridge Design Specifications. Load rated using Load and Resistance Factor Rating according to AASHTO Manual for Bridge Evaluation. Optional designs for girders 120 feet or longer must have a calculated residual camber equal to or greater than that of the designed girder. Prestress losses for the designed girders have been calculated for a relative humidity of 60 percent. Optional designs must likewise conform.

FABRICATION NOTES:
 Provide Class H concrete. Provide Grade 60 reinforcing steel bars. Use low relaxation strands, each pretensioned to 75 percent of fpu. Strand debonding must comply with Item 424.4.2.2.4. Full-length debonded strands are only permitted in positions marked Δ . Double wrap full-length debonded strands in outer most position of each row. When shown on this sheet, the Fabricator has the option of furnishing either the designed girder or an approved optional design. All optional design submittals must be signed, sealed and dated by a Professional Engineer registered in the State of Texas. Seal cracks in girder ends exceeding 0.005" in width as directed by the Engineer. The fabricator is permitted to decrease the spacing of Bars R and S by providing additional bars to help limit crack width provided the decreased spacing results in no less than 1" clear between bars. The fabricator must take an approved corrective action if cracks greater than 0.005" form on a repetitive basis.

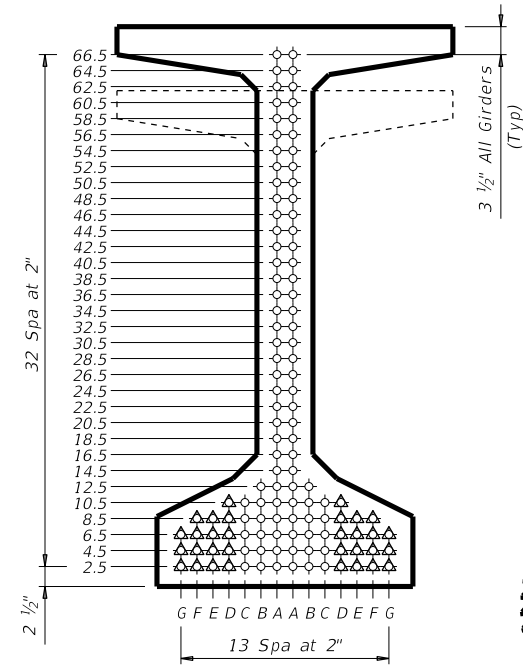
DEPRESSED STRAND DESIGNS:
 Locate strands for the designed girder as low as possible on the 2" grid system unless a non-standard strand pattern is indicated. Fill row "2.5", then row "4.5", then row "6.5", etc., beginning each row in the "A" position and working outward until the required number of strands is reached. All strands in the "A" position must be depressed, maintaining the 2" spacing so that, at the girder ends, the upper two strands are in the position shown in the table.



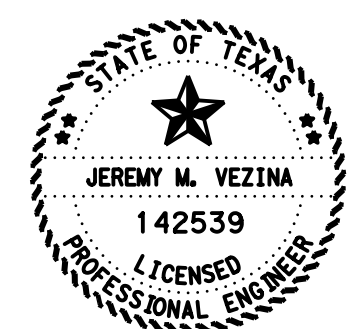
TYPE Tx28, Tx34 & Tx40



TYPE Tx46 & Tx54



TYPE Tx62 & Tx70



Jeremy Veziina 2-20-2024

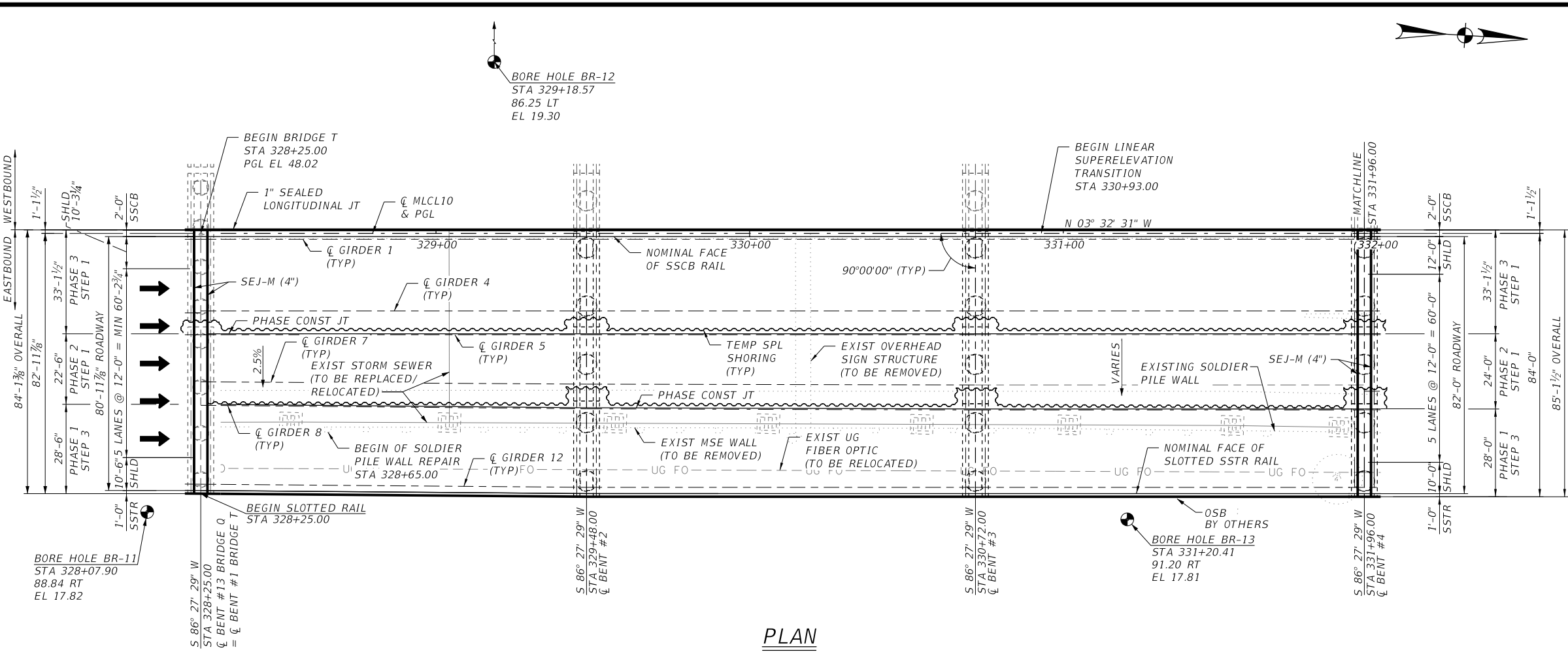
HL93 LOADING

Texas Department of Transportation
 Bridge Division Standard

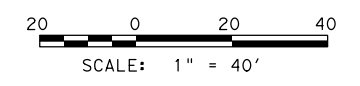
PRESTRESSED CONCRETE I-GIRDER DESIGNS (NON-STANDARD SPANS)
 IH 10 WBML OVER CALDER AVE
 IGND 3 OF 3

FILE: 1328_10ML_CALDERAVE_IGNDST	03dgdB	ck: JMV	dw: JDB	ck: ZZ
©TxDOT August 2017	CONT SECT	JOB	HIGHWAY	
REVISIONS	0028 13	135	IH 10	
10-19: Modified for depressed strands only.	DIST	COUNTY	SHEET NO.	
	BMT	JEFFERSON	1328	

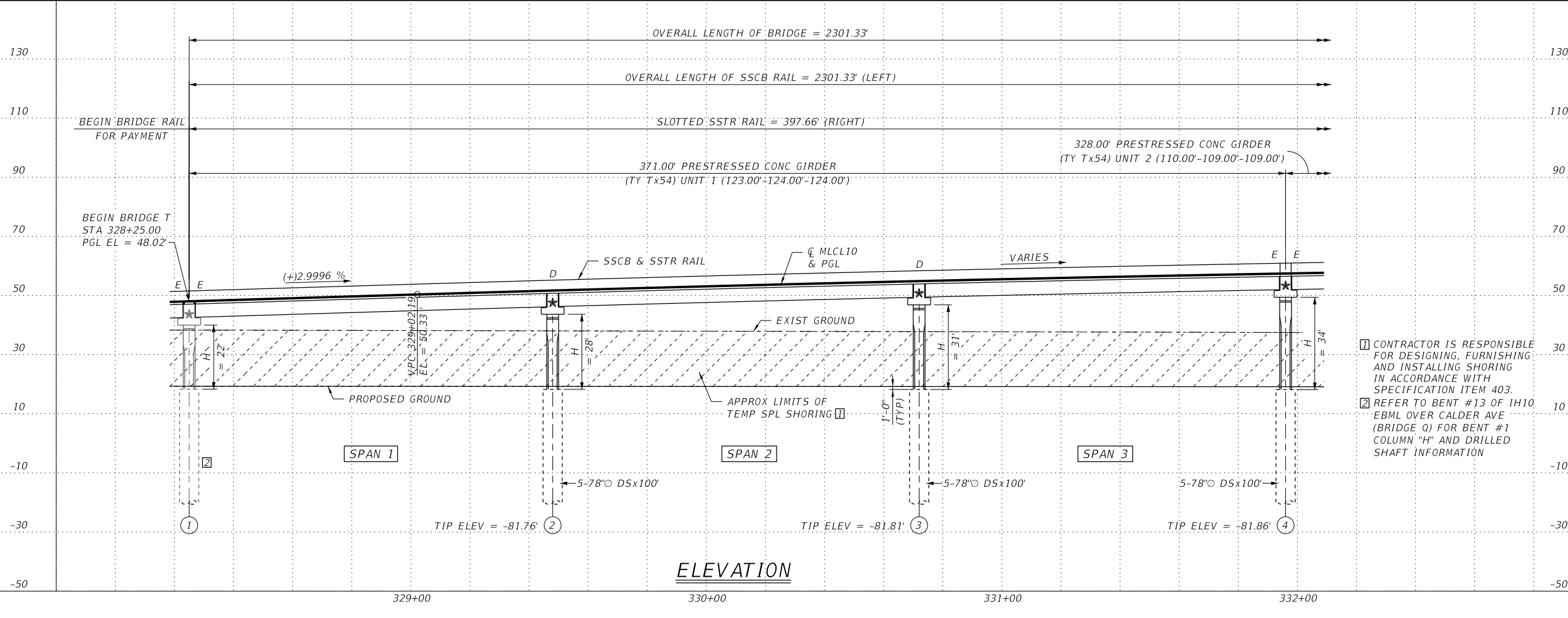
DATE: 22-FEB-2024 00:03
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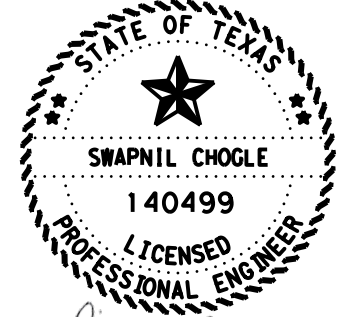
- GENERAL NOTES:**
- DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020 FOR HL 93 LOADING.
 - SLAB RESTRAINT OR GIRDER END CONDITIONS:
 D-DENOTES DOWELED SLAB
 E/E-DENOTES SLAB EXPANSION
 - DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE "IH10 AT US 69 BORING LOGS" SHEETS.
 - THE "H" VALUES SHOWN ARE ESTIMATED COLUMN HEIGHTS. CONTRACTOR IS RESPONSIBLE FOR CALCULATING ACTUAL COLUMN HEIGHTS BASED ON FIELD CONDITIONS.
 - SEE FOUNDATION LAYOUT SHEETS FOR DRILLED SHAFT NOTES.
 - UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.
 - SEE TRAFFIC CONTROL PLANS FOR CONSTRUCTION PHASING.
 - EXISTING OVERPASS AT HARRISON AVENUE TO BE REMOVED IS A 3-SPAN UNIT, 230' LONG, VARIABLE OUT TO OUT WIDTH OF 134.94' MINIMUM TO 155.80' MAXIMUM, PRESTRESSED CONCRETE TYPE 'C' BEAMS ON CONCRETE BATTERED PILE FOUNDATIONS.
 - EXISTING US 69 NB DIRECT CONNECTOR TO BE REMOVED IS A 16 SPAN - 7 UNIT, 1828' LONG, 40' WIDE PRESTRESSED CONCRETE TYPE IV / STEEL PLATE GIRDER ON BATTERED PILE FOUNDATIONS.
 - FOR MORE DETAILS ON SUPERELEVATION TRANSITION ZONES, SEE ROADWAY PLAN SHEETS.
 - DECK DRAIN OFFSET MEASURED TO CENTER OF DRAIN. SLOTTED RAIL OFFSET MEASURED TO BACK FACE OF RAIL.



FUNCTIONAL CLASS = PRINCIPAL ARTERIAL (INTERSTATE)
 DESIGN SPEED = 70 MPH
 ADT (2025) = 31,900
 ADT (2045) = 42,700
 ADT (2055) = 48,050



- CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.
- REFER TO BENT #13 OF IH10 EBML OVER CALDER AVE (BRIDGE 0) FOR BENT #1 COLUMN "H" AND DRILLED SHAFT INFORMATION



Swapnil Chogle
 HL93 LOADING 2/20/2024
 SUPERSTRUCTURE INV/OPR RATINGS: 1.13/2.11



IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML AT US 69
 NBI: 20-124-0-0028-13-535
 BRIDGE T
 SHEET 1 OF 7

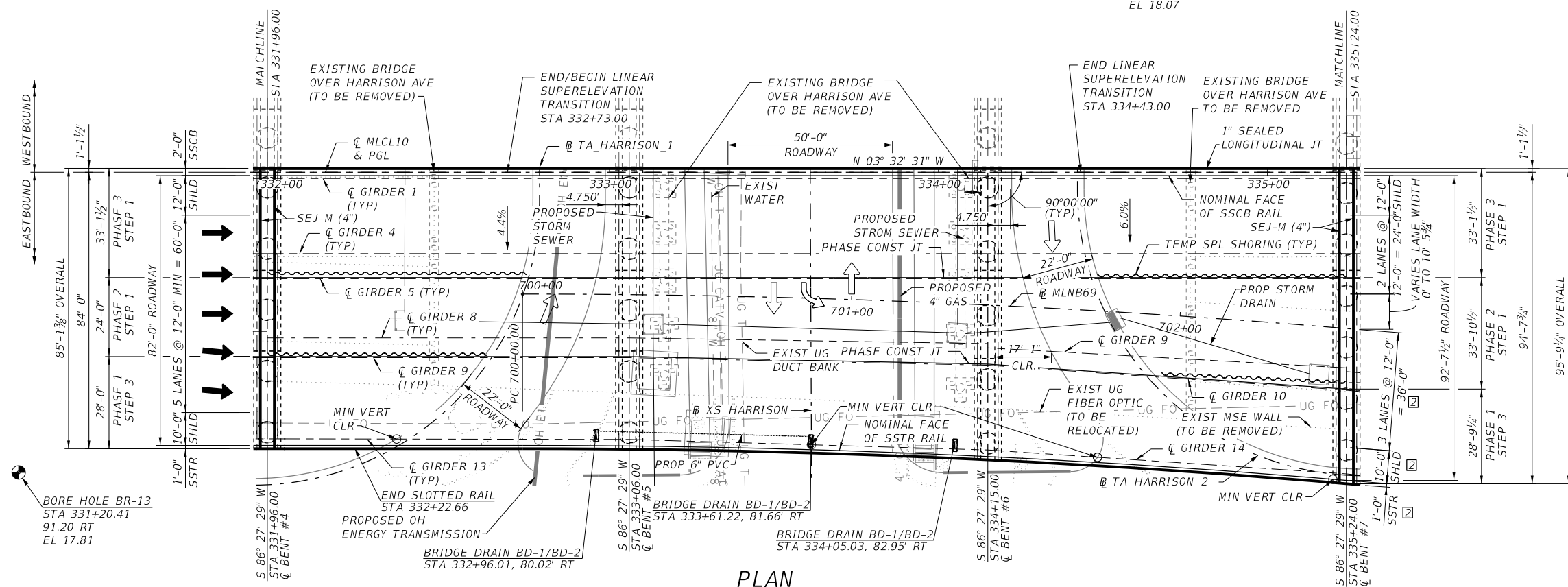
DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1329

DATE: 21-FEB-2024 23:58
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7 - Bridge\Plan Set\7 - Bridge\1330_10EB_MAINLANES_LAYOUT_02.dwg

BORE HOLE BR-14
 STA 335+03.10
 93.77 LT
 EL 18.07

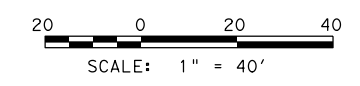


NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

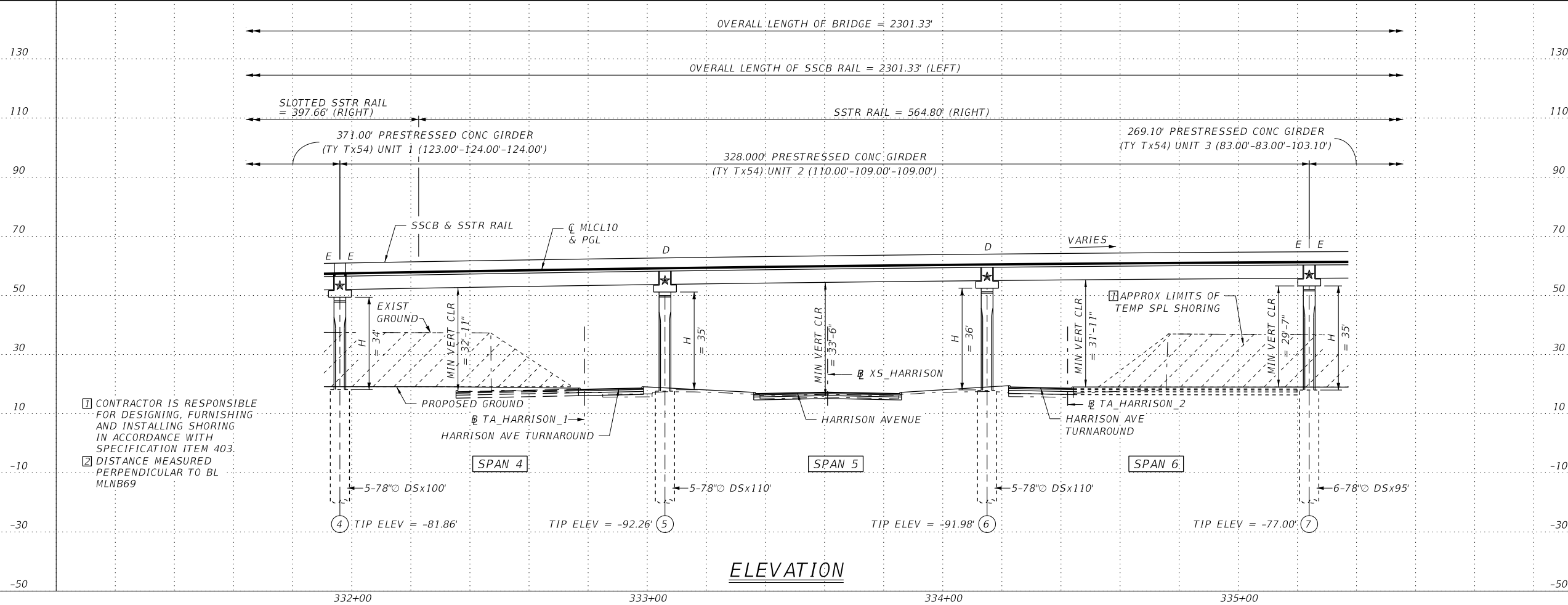


**HORIZONTAL CURVE DATA
 @ MLNB69_1**

PI STATION	= 703+13.56
DELTA	= 11° 56' 01.58" (RT)
DEGREE OF CURVE	= 1° 54' 35.49"
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LENGTH	= 624.85
RADIUS	= 3,000.00
PC STATION	= 700+00.00
PT STATION	= 706+24.85

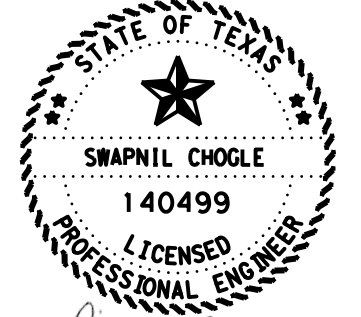


PLAN



ELEVATION

- 1 CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.
- 2 DISTANCE MEASURED PERPENDICULAR TO BL MLNB69



Swapnil Chogle
 2/20/2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.13/2.11

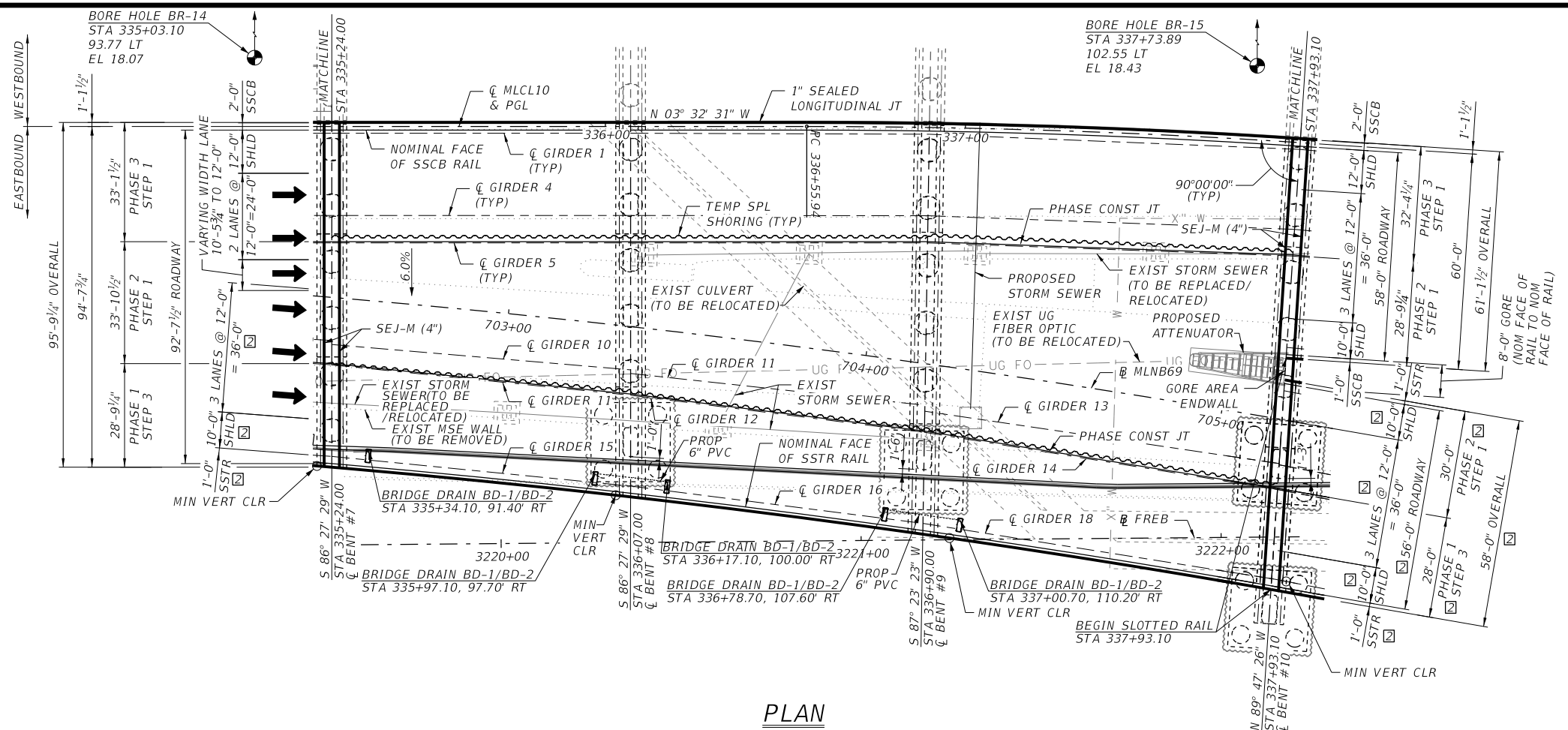


F-12679
 Texas Department of Transportation

**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML AT US 69
 NBI: 20-124-0-0028-13-535
 BRIDGE T**

DN: CBF	CK: CSU	DW: MAG	CK: CSU
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1330	

DATE: 21-FEB-2024 20:28
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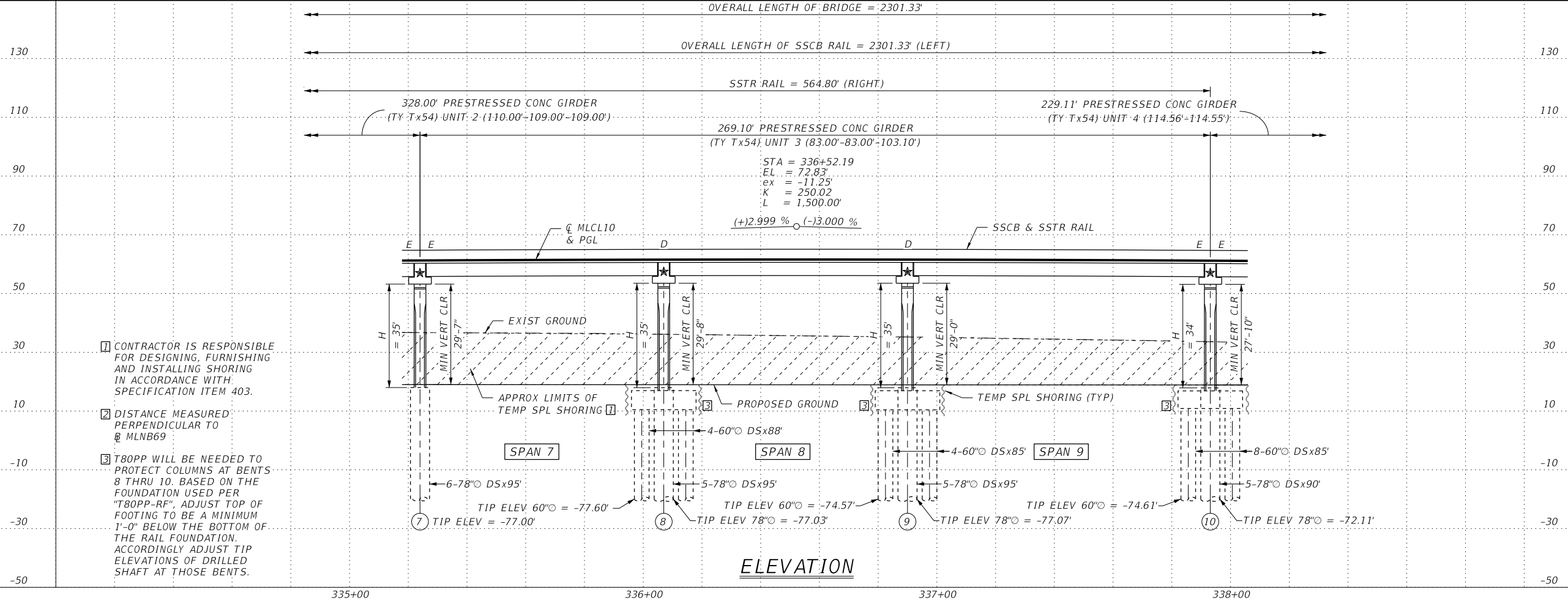
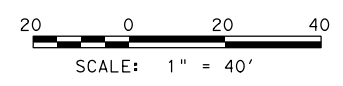


**HORIZONTAL CURVE DATA
 @ MLCL10_12**

PI STATION = 359+36.66
 DELTA = 94° 51' 39.18" (RT)
 DEGREE OF CURVE = 2° 44' 05.58"
 TANGENT = 2,280.73
 LENGTH = 3,468.55
 RADIUS = 2,095.00
 PC STATION = 336+55.94
 PT STATION = 371+24.49

**HORIZONTAL CURVE DATA
 @ MLNB69_1**

PI STATION = 703+13.56
 DELTA = 11° 56' 01.58" (RT)
 DEGREE OF CURVE = 1° 54' 35.49"
 TANGENT = 313.56
 LENGTH = 624.85
 RADIUS = 3,000.00
 PC STATION = 700+00.00
 PT STATION = 706+24.85



- 1 CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.
- 2 DISTANCE MEASURED PERPENDICULAR TO @ MLNB69
- 3 T80PP WILL BE NEEDED TO PROTECT COLUMNS AT BENTS 8 THRU 10. BASED ON THE FOUNDATION USED PER "T80PP-RF", ADJUST TOP OF FOOTING TO BE A MINIMUM 1'-0" BELOW THE BOTTOM OF THE RAIL FOUNDATION. ACCORDINGLY ADJUST TIP ELEVATIONS OF DRILLED SHAFT AT THOSE BENTS.

STATE OF TEXAS
 SWAPNIL CHOGLA
 140499
 LICENSED PROFESSIONAL ENGINEER
 Swapnil Chogle 2/20/2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.13/2.11

VOLKERT
 F-12679

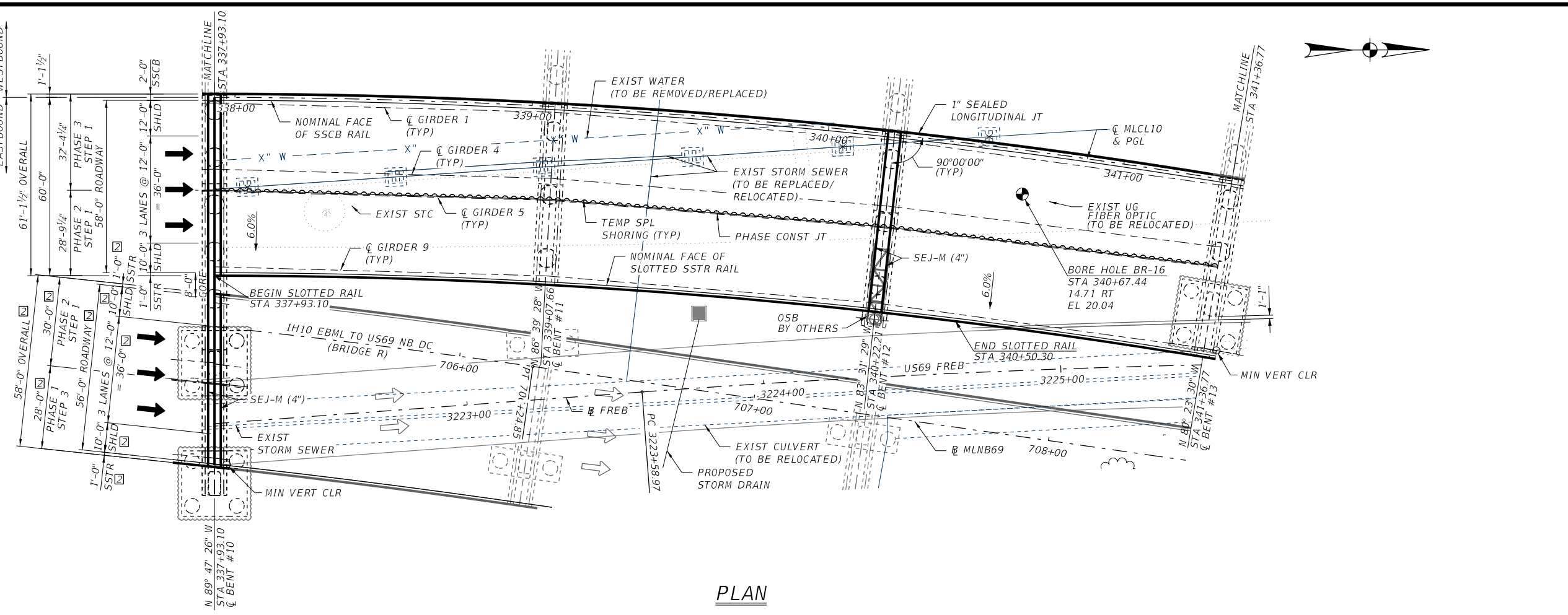
Texas Department of Transportation

IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML AT US 69
 NBI: 20-124-0-0028-13-535
 BRIDGE T

SHEET 3 OF 7

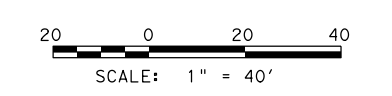
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DIST: BMT	COUNTY: JEFFERSON	SHEET NO. 1331	

DATE: 22-FEB-2024 00:22
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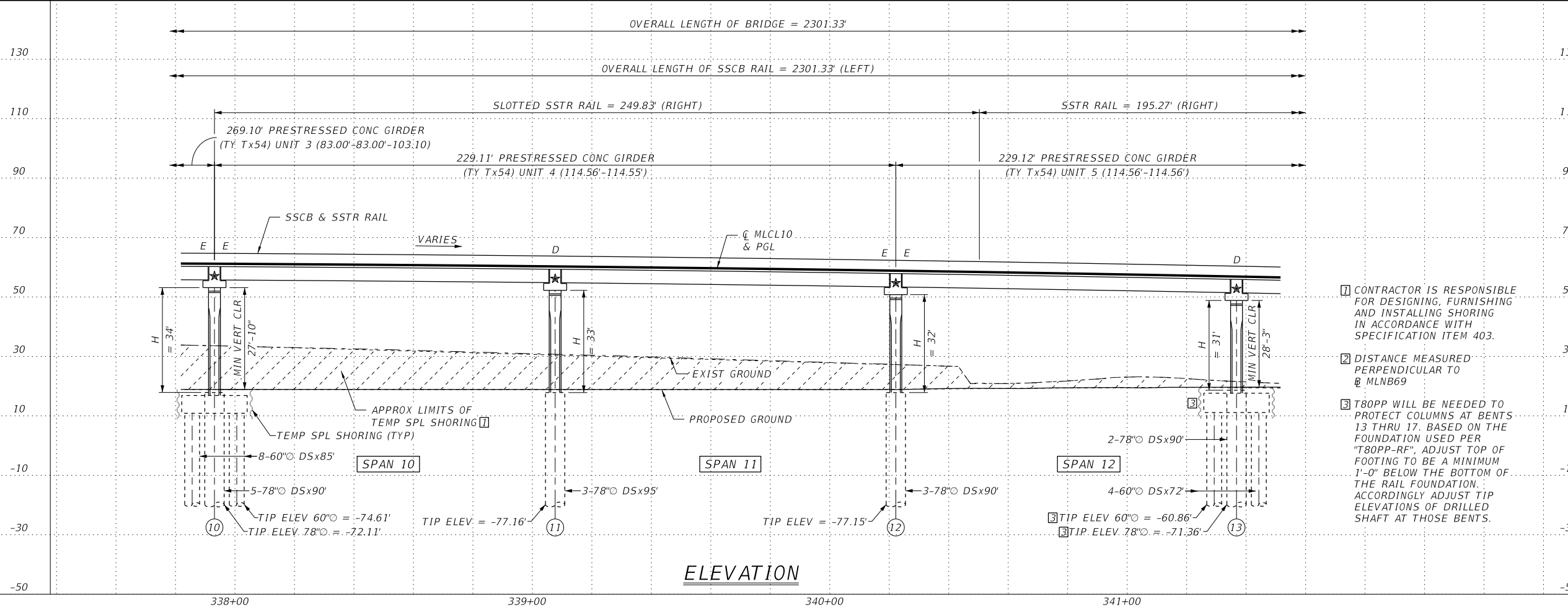


HORIZONTAL CURVE DATA
 @ MLCL10_12

PI STATION	= 359+36.66
DELTA	= 94° 51' 39.18" (RT)
DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49



PLAN



ELEVATION

STATE OF TEXAS
 SWAPNIL CHOGLA
 140499
 LICENSED PROFESSIONAL ENGINEER
 Swapnil Chogle 2/20/2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.13/2.11

VOLKERT
 F-12679
 Texas Department of Transportation

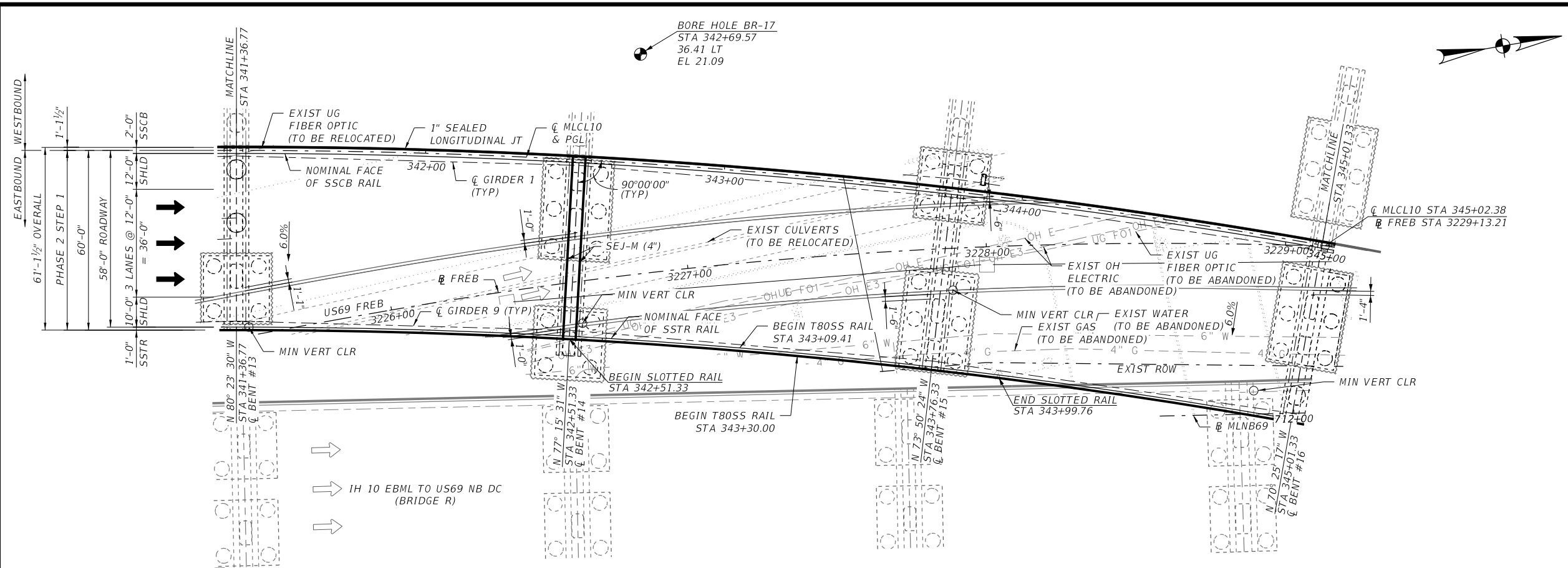
**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML AT US 69
 NBI: 20-124-0-0028-13-535
 BRIDGE T**

SHEET 4 OF 7

DN:	CBF	CK:	CSU	DW:	MAG	CK:	CSU
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DIST:	GMT	COUNTY:	JEFFERSON	SHEET NO.:	1332		

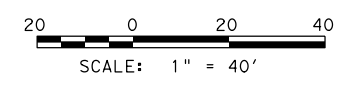
- 1 CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.
- 2 DISTANCE MEASURED PERPENDICULAR TO @ MLNB69
- 3 T80PP WILL BE NEEDED TO PROTECT COLUMNS AT BENTS 13 THRU 17. BASED ON THE FOUNDATION USED PER "T80PP-RF", ADJUST TOP OF FOOTING TO BE A MINIMUM 1'-0" BELOW THE BOTTOM OF THE RAIL FOUNDATION. ACCORDINGLY ADJUST TIP ELEVATIONS OF DRILLED SHAFT AT THOSE BENTS.

DATE: 22-FEB-2024 00:31
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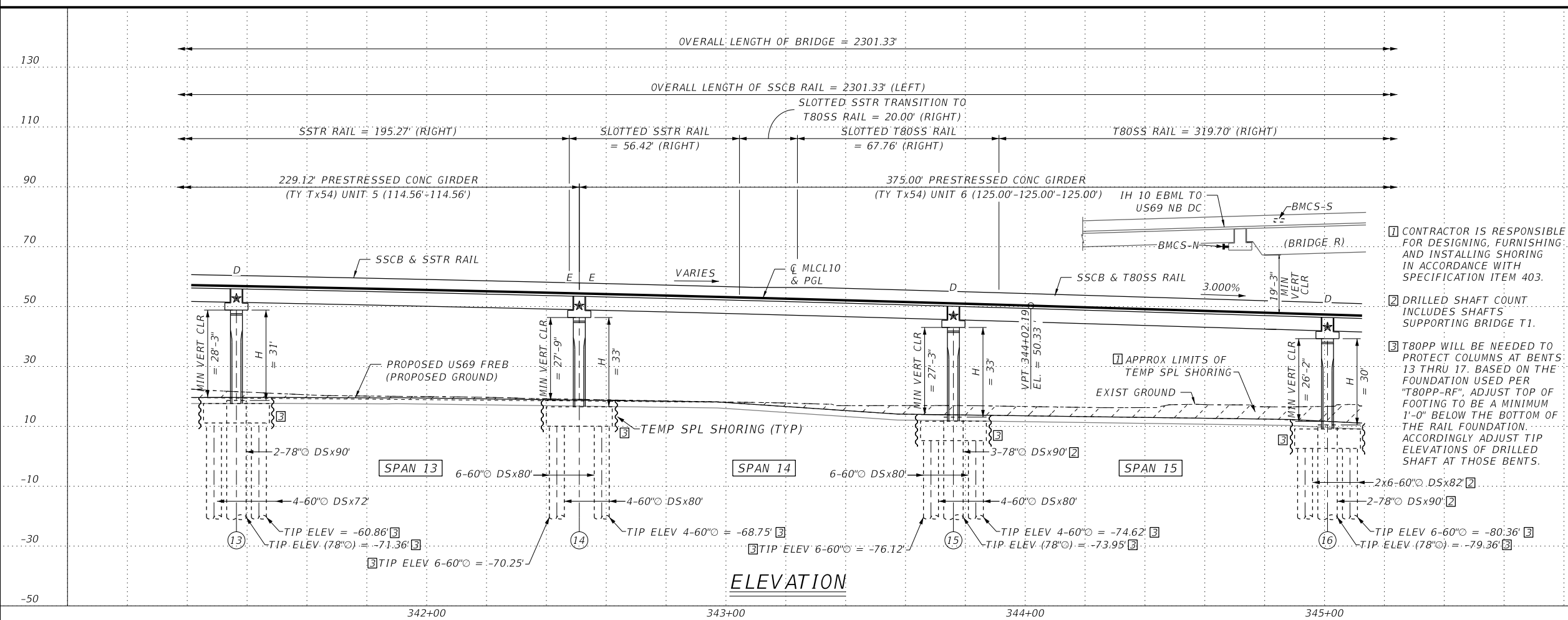


**HORIZONTAL CURVE DATA
 CLCL10_12**

PI STATION	= 359+36.66
DELTA	= 94° 51' 39.18" (RT)
DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49

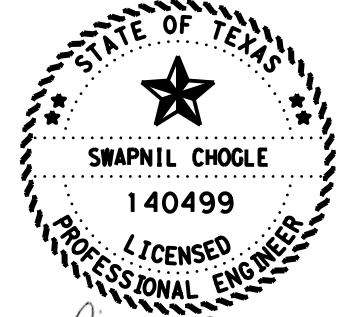


PLAN



ELEVATION

- 1 CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING, AND INSTALLING SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.
- 2 DRILLED SHAFT COUNT INCLUDES SHAFTS SUPPORTING BRIDGE T1.
- 3 T80PP WILL BE NEEDED TO PROTECT COLUMNS AT BENTS 13 THRU 17. BASED ON THE FOUNDATION USED PER "T80PP-RF", ADJUST TOP OF FOOTING TO BE A MINIMUM 1'-0" BELOW THE BOTTOM OF THE RAIL FOUNDATION. ACCORDINGLY ADJUST TIP ELEVATIONS OF DRILLED SHAFT AT THOSE BENTS.



Swapnil Chogle
 2/20/2024
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.13/2.11



Texas Department of Transportation

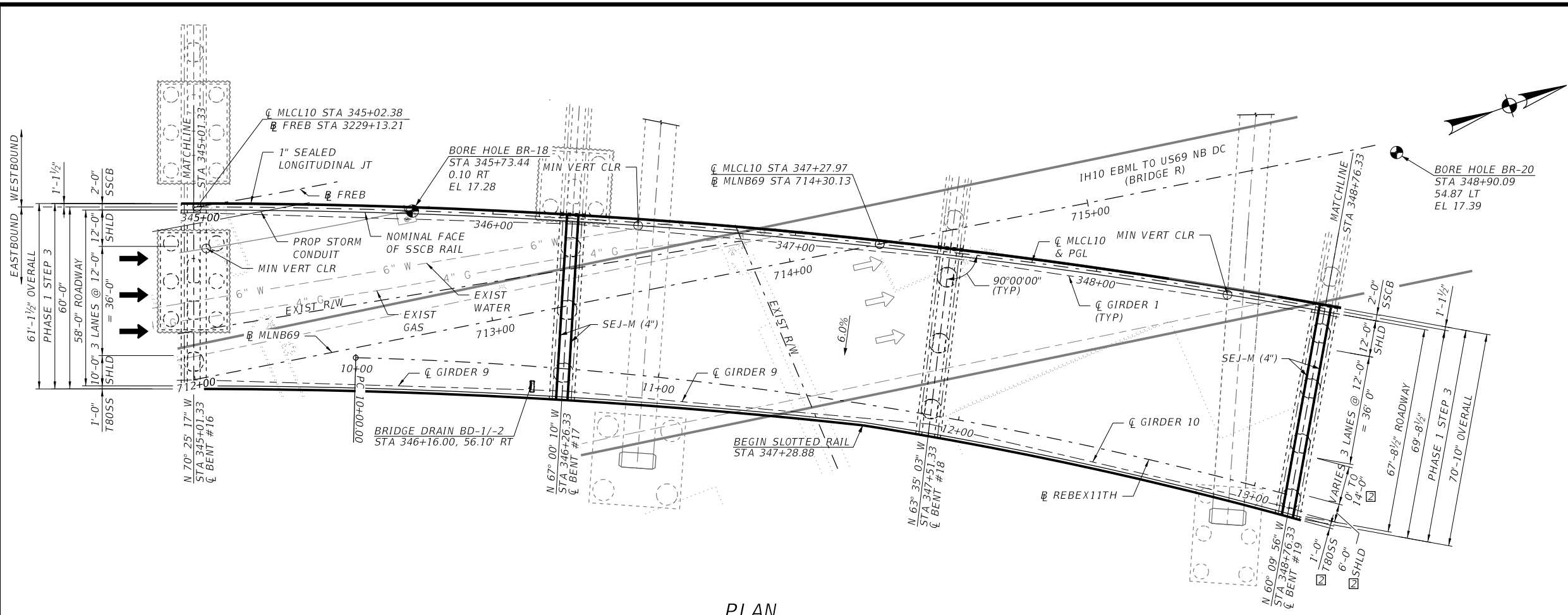
**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML AT US 69
 NBI: 20-124-0-0028-13-535
 BRIDGE T**

SHEET 5 OF 7

DW:	CBF	CK:	CSU	DW:	MAG	CK:	CSU
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1333		

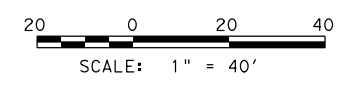
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NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

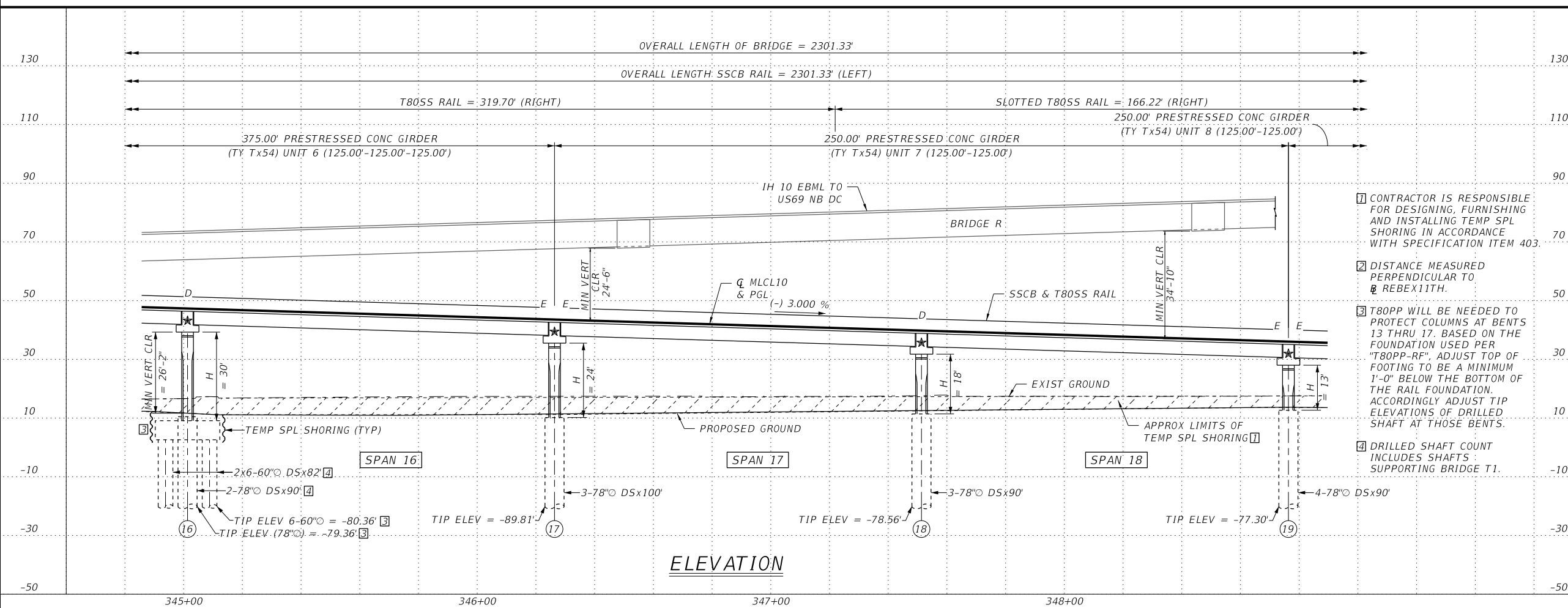


**HORIZONTAL CURVE DATA
 CL MLCL10_12**

PI STATION	= 359+36.66
DELTA	= 94° 51' 39.18" (RT)
DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49

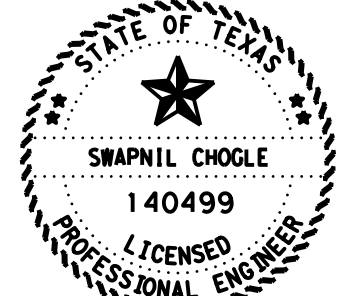


PLAN



ELEVATION

- 1 CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING TEMP SPL SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.
- 2 DISTANCE MEASURED PERPENDICULAR TO REBEX11TH.
- 3 T80PP WILL BE NEEDED TO PROTECT COLUMNS AT BENTS 13 THRU 17, BASED ON THE FOUNDATION USED PER "T80PP-RF", ADJUST TOP OF FOOTING TO BE A MINIMUM 1'-0" BELOW THE BOTTOM OF THE RAIL FOUNDATION. ACCORDINGLY ADJUST TIP ELEVATIONS OF DRILLED SHAFT AT THOSE BENTS.
- 4 DRILLED SHAFT COUNT INCLUDES SHAFTS SUPPORTING BRIDGE T1.



Swapnil Chogle 3/8/24
 HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.13/2.11



Texas Department of Transportation

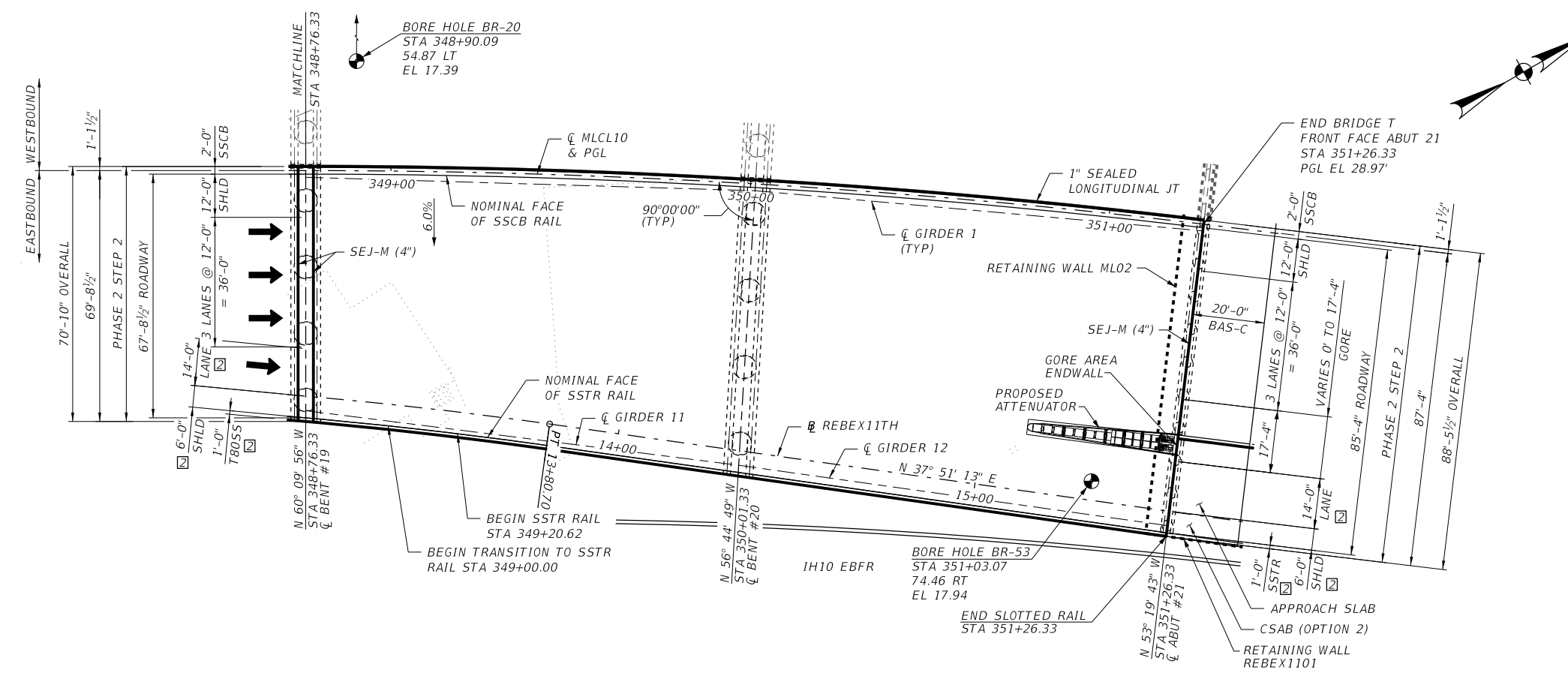
**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML AT US 69
 NBI: 20-124-0-0028-13-535
 BRIDGE T**

SHEET 6 OF 7

DN:	CBF	CK:	CSU	DW:	MAG	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1334			

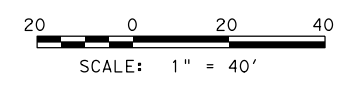
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NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

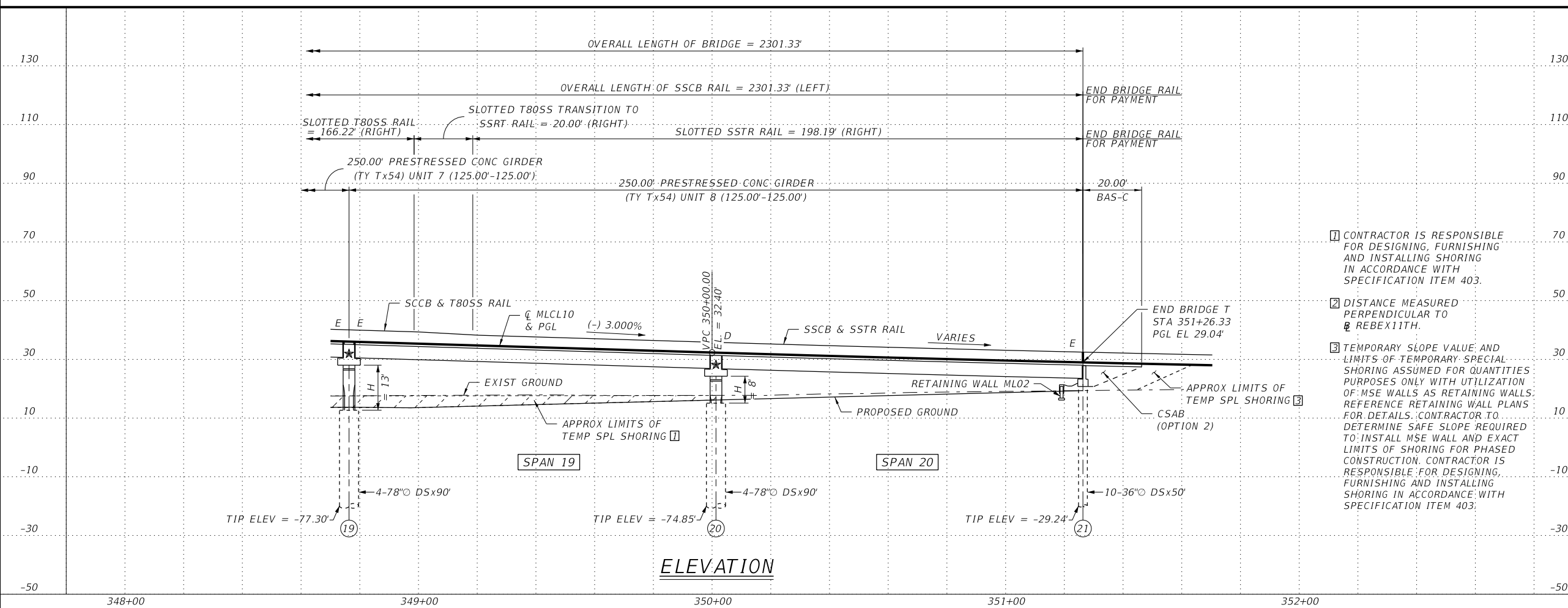


**HORIZONTAL CURVE DATA
 CL MLCL10_12**

PI STATION	= 359+36.66
DELTA	= 94° 51' 39.18" (RT)
DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49

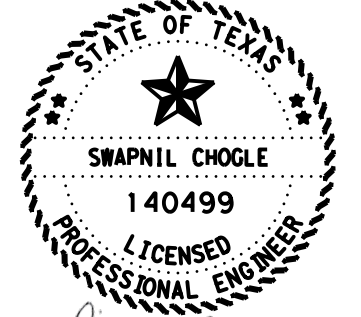


PLAN



ELEVATION

- 1 CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.
- 2 DISTANCE MEASURED PERPENDICULAR TO REBEX11TH.
- 3 TEMPORARY SLOPE VALUE; AND LIMITS OF TEMPORARY SPECIAL SHORING ASSUMED FOR QUANTITIES PURPOSES ONLY WITH UTILIZATION OF MSE WALLS AS RETAINING WALLS. REFERENCE RETAINING WALL PLANS FOR DETAILS. CONTRACTOR TO DETERMINE SAFE SLOPE REQUIRED TO INSTALL MSE WALL AND EXACT LIMITS OF SHORING FOR PHASED CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DESIGNING, FURNISHING AND INSTALLING SHORING IN ACCORDANCE WITH SPECIFICATION ITEM 403.



Swapnil Chogle
 HL93 LOADING 2/20/2024
 SUPERSTRUCTURE INV/OPR RATINGS: 1.13/2.11



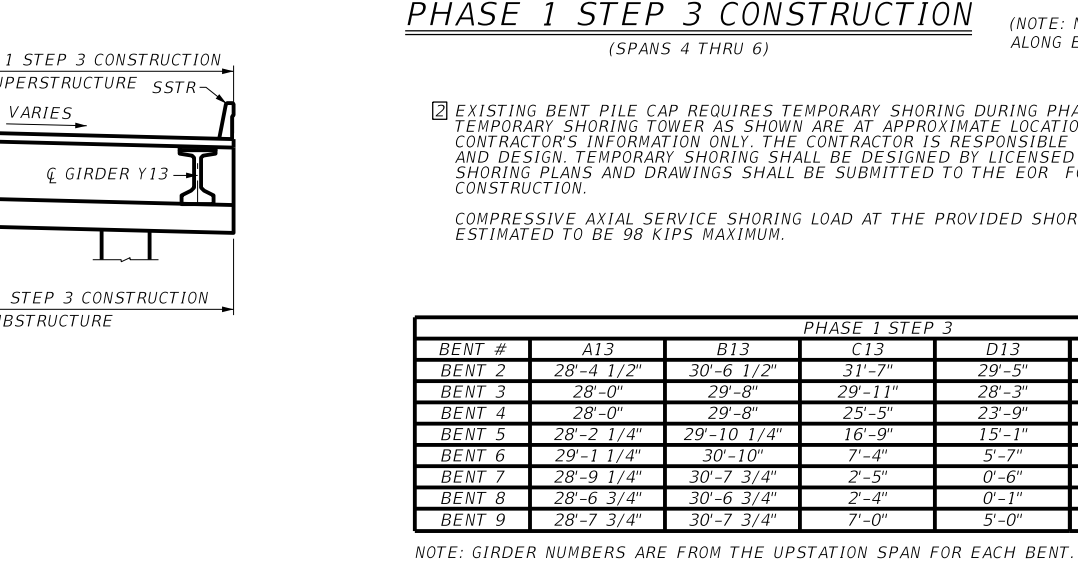
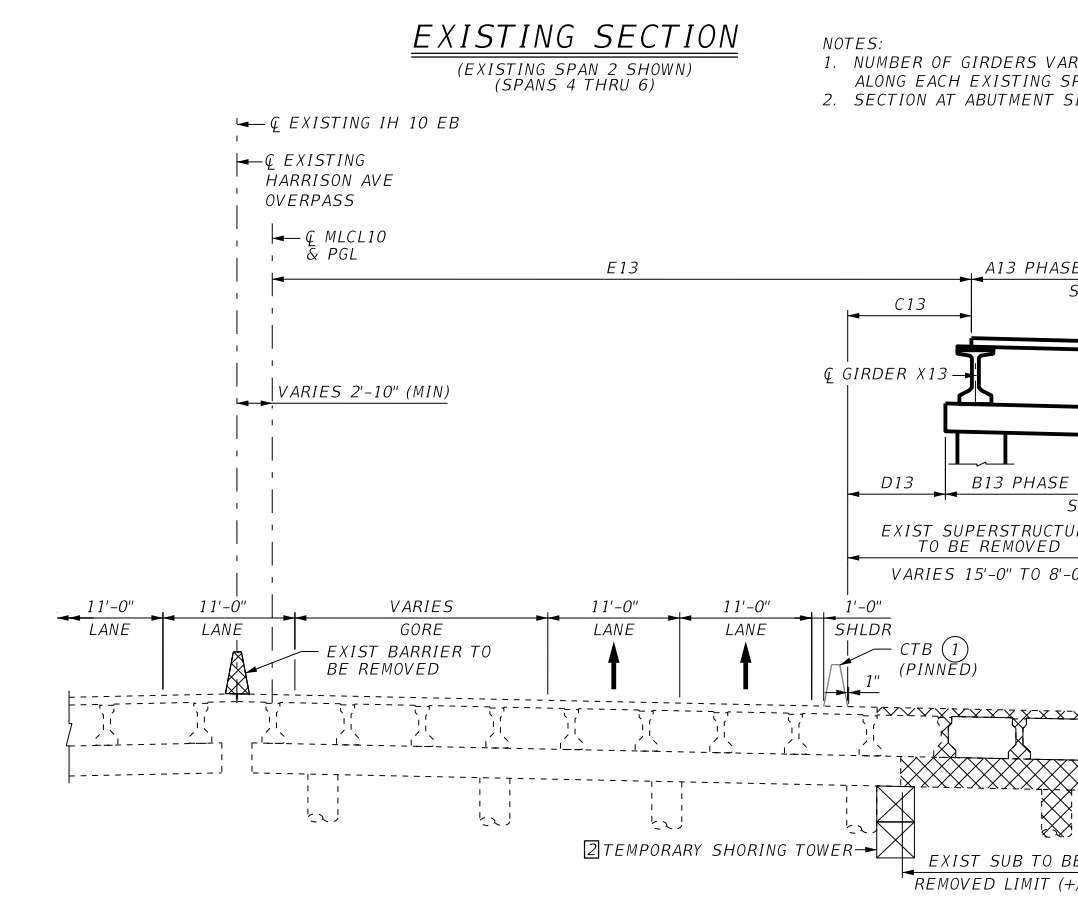
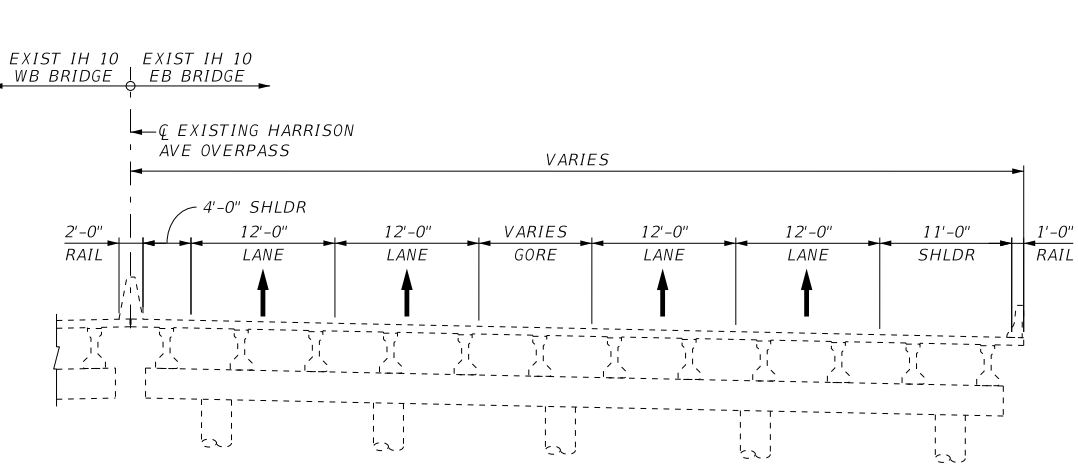
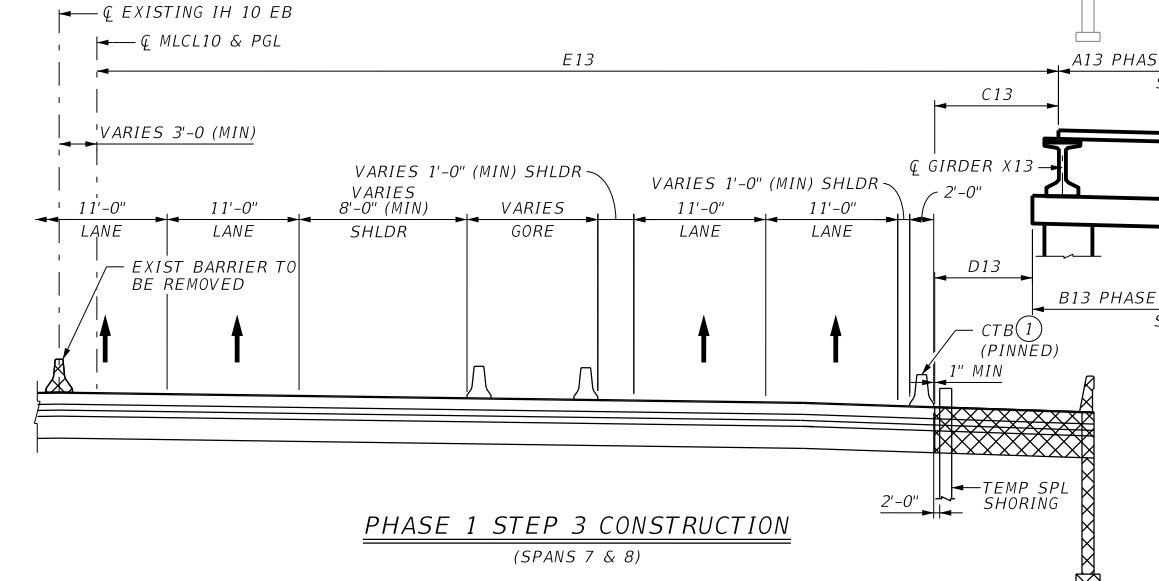
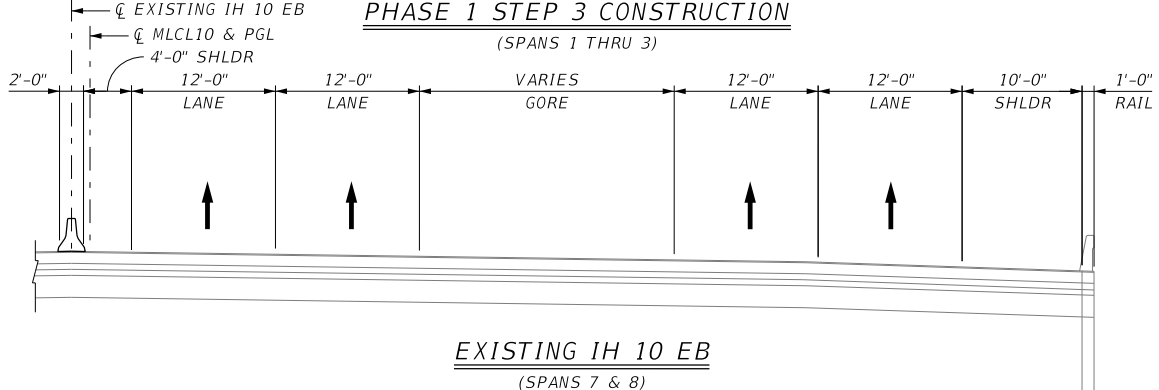
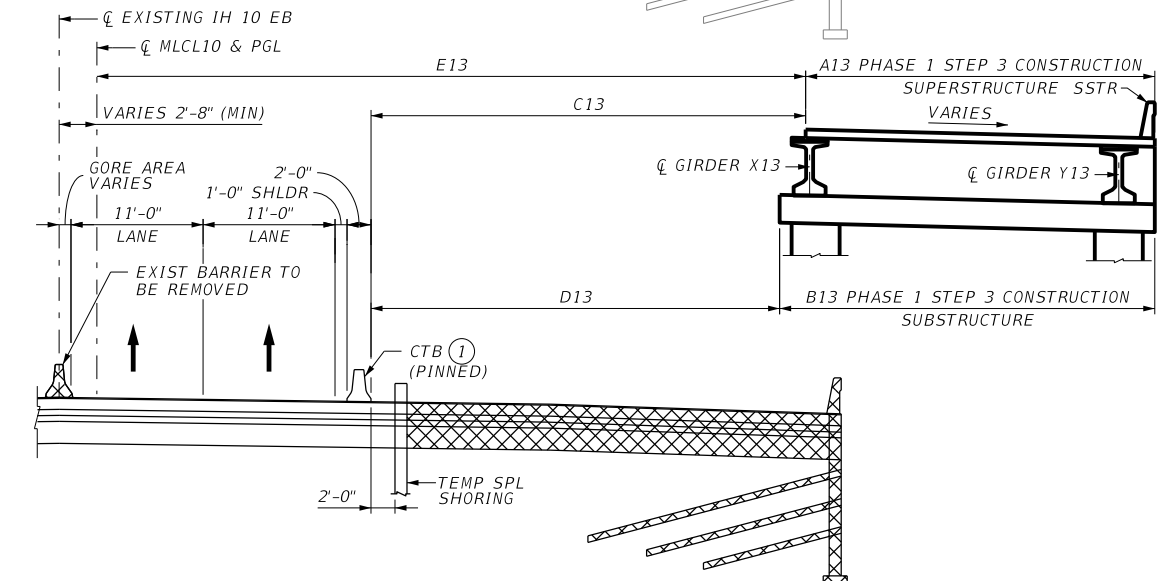
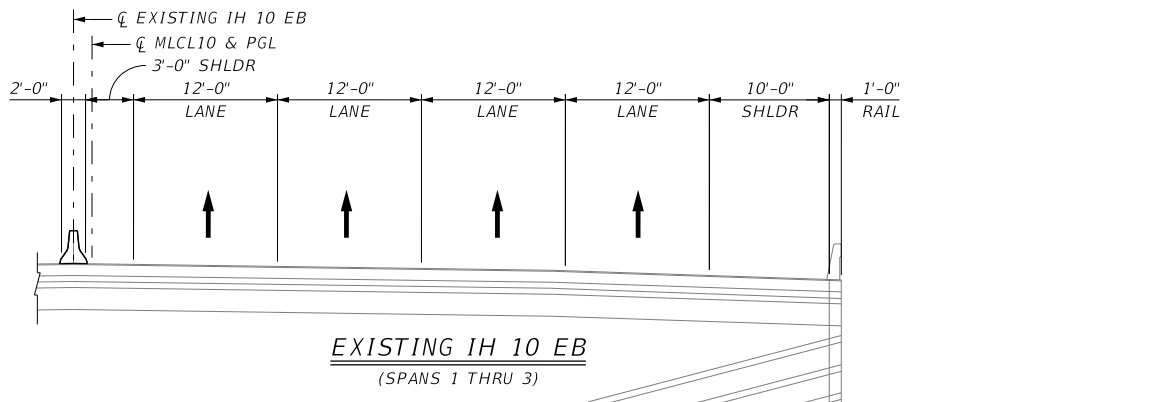
Texas Department of Transportation

**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML AT US 69
 NBI: 20-124-0-0028-13-535
 BRIDGE T**

SHEET 7 OF 7

DW:	CBF	CK:	CSU	DW:	MAG	CK:	CSU
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1335		

DATE: 21-FEB-2024 22:19
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\10 EB Mainlanes over US 69 NBFR\1336_10EB_MAINLANE_CONPHS_01.dgn



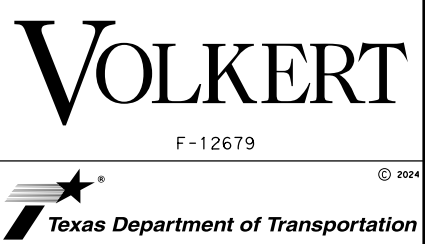
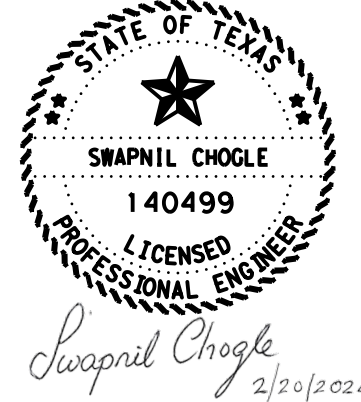
- NOTES:**
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING BRIDGE DIMENSIONS AND ELEVATIONS PRIOR TO ANY FABRICATION AND CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
 - SEE TRAFFIC CONTROL PLAN SHEETS FOR ADDITIONAL STEPS, TEMPORARY SHOULDER WIDTHS, CTB RAIL LOCATIONS, LENGTHS & QUANTITIES WITHIN LIMITS OF BENT 1 TO ABUTMENT 21, AND INFORMATION NOT SHOWN HERE.
 - RETROFITTED EXISTING WALLS WITH SOLDIER PILES LOCATED BETWEEN EAST AND WEST NORTH STREET AND HARRISON STREET ALONG EXISTING IH10. AS-BUILT OF SOLDIER PILES AND TIED BACK ANCHORS ARE NOT AVAILABLE. CONTRACTOR SHALL USE EXTRA CAUTION TO AVOID THE ANCHOR TIED BACKS DURING PHASING EXCAVATION. NOTIFY THE ENGINEER AND GEOTECHNICAL ENGINEER IF ANY INTERFERENCE BETWEEN PROPOSED FOOTING/FOUNDATION AND SOLDIER PILES OR PRESTRESSED GROUND ANCHORS ARE ENCOUNTERED DURING CONSTRUCTION.
 - MAX DIMENSIONS IS SHOWN, IF THE LIMITS OF CONSTRUCTION VARIES.

① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.

CONTRACTOR SHALL FIELD VERIFY THE DIMENSION BETWEEN EXISTING AND PROPOSED PGL PRIOR TO CONSTRUCTION.

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 6

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1336			

EXISTING SECTION

(EXISTING SPAN 2 SHOWN)
 (SPANS 4 THRU 6)

- NOTES:**
- NUMBER OF GIRDERS VARIES ALONG EACH EXISTING SPANS
 - SECTION AT ABUTMENT SIMILAR

PHASE 1 STEP 3 CONSTRUCTION

(SPANS 4 THRU 6)

(NOTE: NUMBER OF GIRDERS VARIES ALONG EACH EXISTING SPANS)

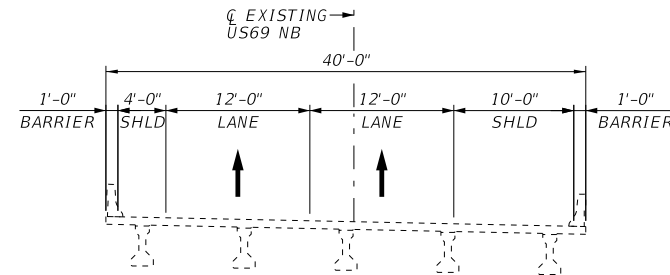
② EXISTING BENT PILE CAP REQUIRES TEMPORARY SHORING DURING PHASING CONSTRUCTION. TEMPORARY SHORING TOWER AS SHOWN ARE AT APPROXIMATE LOCATIONS AND ARE FOR CONTRACTOR'S INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FINAL VERIFICATION AND DESIGN. TEMPORARY SHORING SHALL BE DESIGNED BY LICENSED PROFESSIONAL ENGINEER. SHORING PLANS AND DRAWINGS SHALL BE SUBMITTED TO THE EOR FOR REVIEW PRIOR TO CONSTRUCTION.

COMPRESSIVE AXIAL SERVICE SHORING LOAD AT THE PROVIDED SHORING LOCATION IS ESTIMATED TO BE 98 KIPS MAXIMUM.

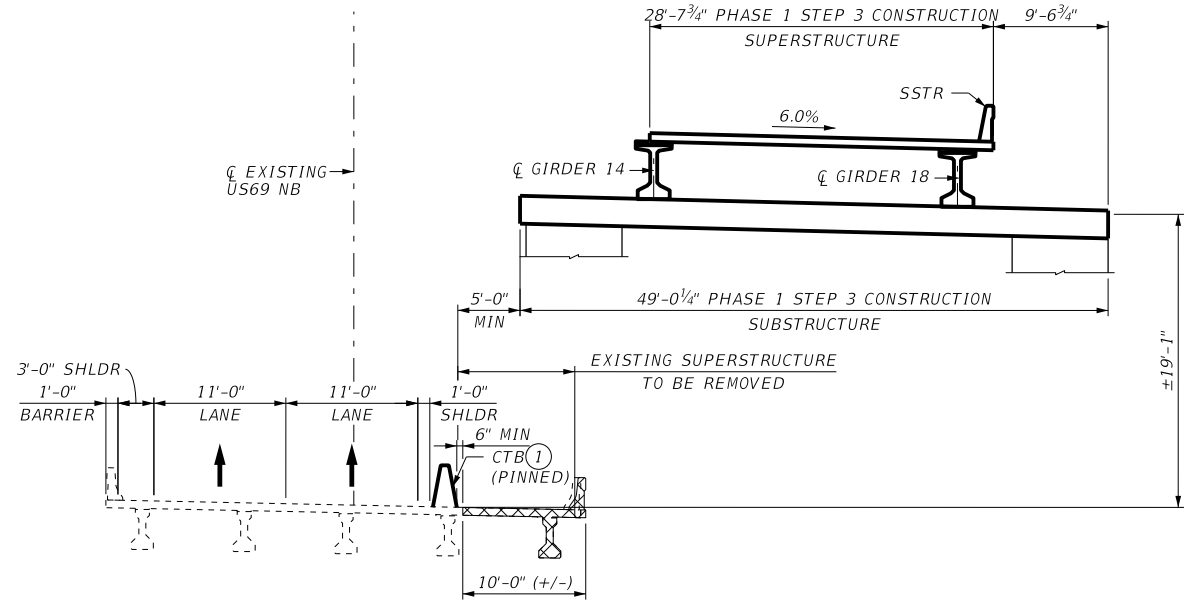
BENT #	PHASE 1 STEP 3					
	A13	B13	C13	D13	X13	Y13
BENT 2	28'-4 1/2"	30'-6 1/2"	31'-7"	29'-5"	82' - 0"	8
BENT 3	28'-0"	29'-8"	29'-11"	28'-3"	82' - 0"	8
BENT 4	28'-0"	29'-8"	25'-5"	23'-9"	82' - 0"	9
BENT 5	28'-2 1/4"	29'-10 1/4"	16'-9"	15'-1"	82' - 2"	9
BENT 6	29'-1 1/4"	30'-10"	7'-4"	5'-7"	85' - 5"	10
BENT 7	28'-9 1/4"	30'-7 3/4"	2'-5"	0'-6"	92' - 8"	11
BENT 8	28'-6 3/4"	30'-6 3/4"	2'-4"	0'-1"	100' - 11"	12
BENT 9	28'-7 3/4"	30'-7 3/4"	7'-0"	5'-0"	111' - 0"	14

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.

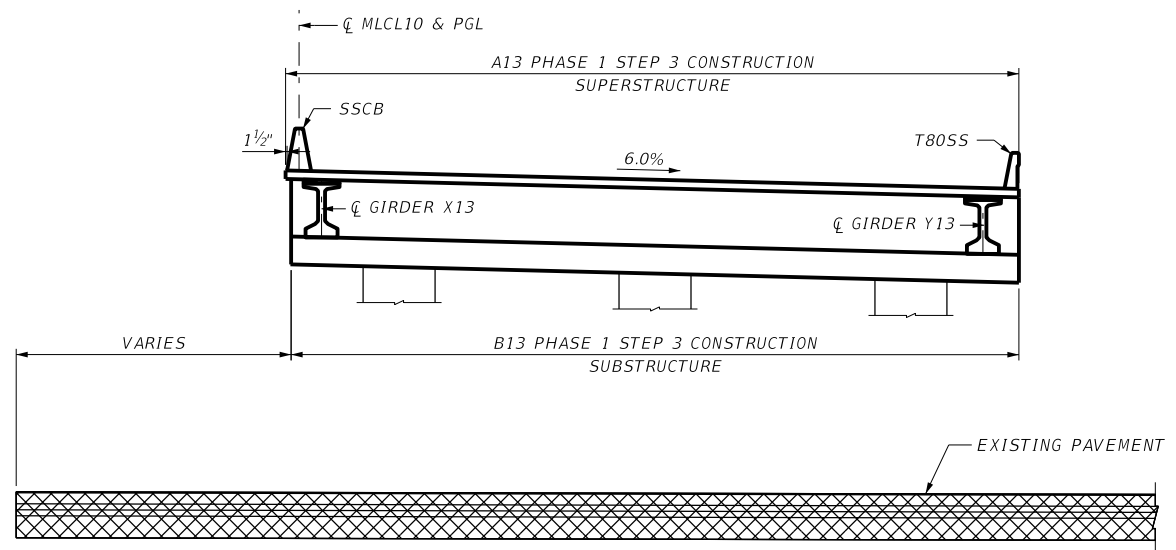
DATE: 21-FEB-2024 22:18
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Plan_Set\10 EB Mainlanes over US 69 NBFR\1337_10EB_MAINLANE_COMPHS_02.dgn



EXISTING SECTION
(SPAN 9)



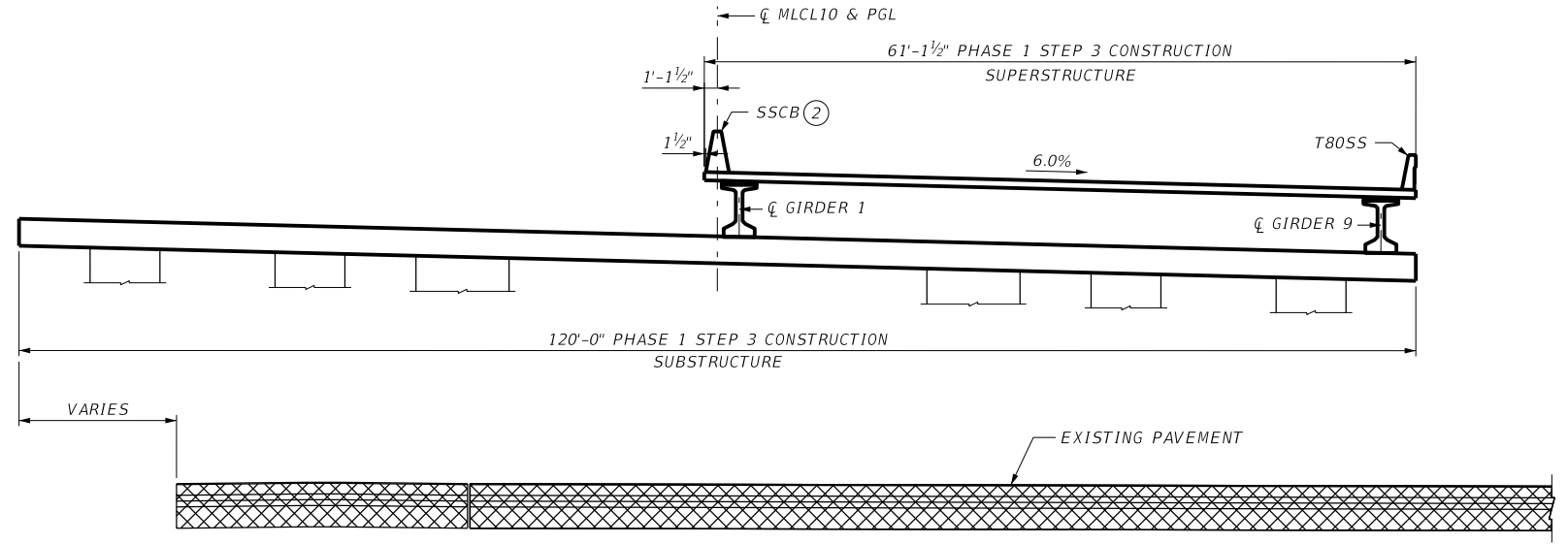
PHASE 1 STEP 3 CONSTRUCTION
(SPAN 9)



PHASE 1 STEP 3 CONSTRUCTION
(SPANS 17 THRU 19)

NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8.

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② SSCB RAILING TO BE INSTALLED AFTER COMPLETION OF PHASE 4 STEP2.



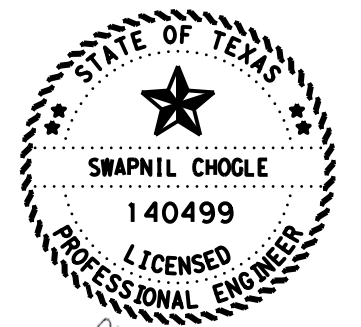
PHASE 1 STEP 3 CONSTRUCTION
(SPAN 16)

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION

BENT #	PHASE 1 STEP 3			
	A13	B13	X13	Y13
BENT 17	61'-1 1/2"	60'-8"	0	61'-1 1/2"
BENT 18	62'-2 3/4"	61'-9 1/4"	0	61'-1 1/2"
BENT 19	70'-10"	70'-4 1/2"	0	62'-3"

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.



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 HL93 LOADING



**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EB MAINLANE
 AT US 69**

SHEET 2 OF 6

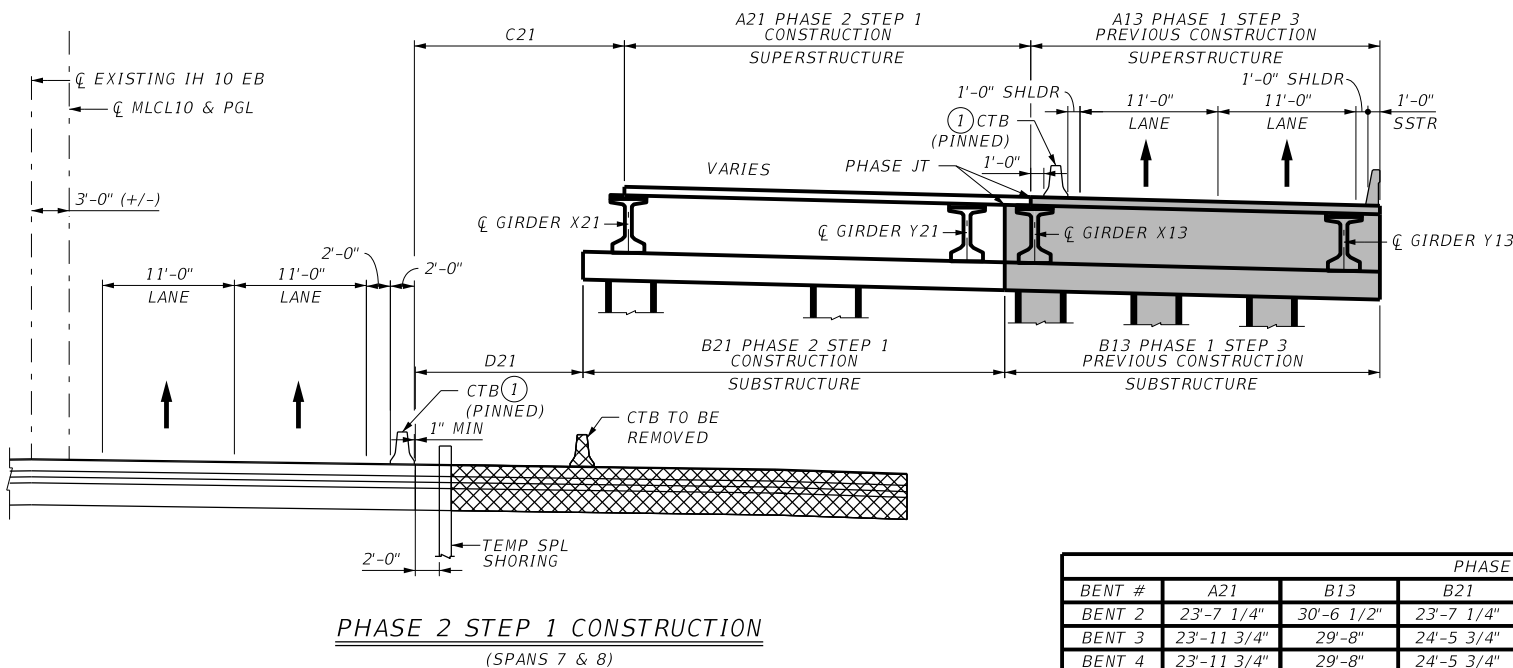
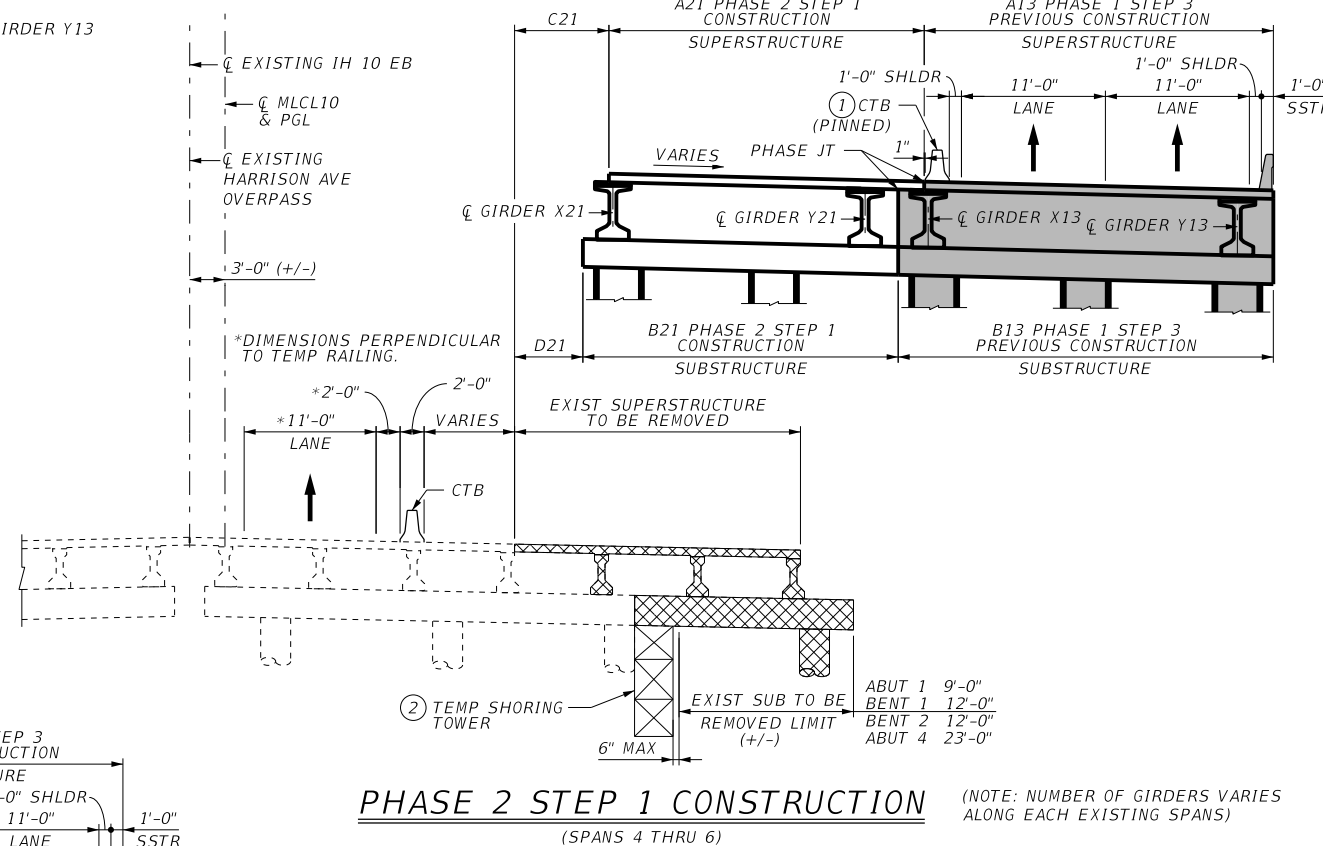
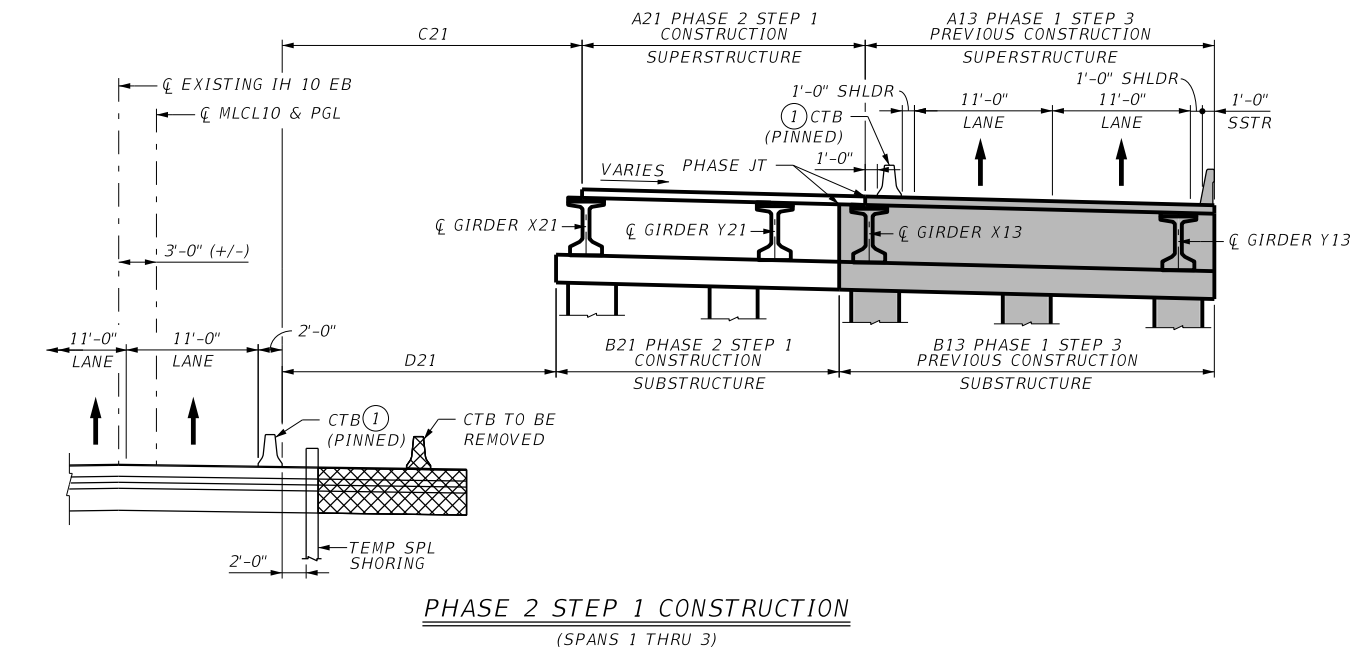
DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1337

DATE: 21-FEB-2024 19:26
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10 EB Mainlanes over US 69 NBFR\1338_10EB_MAINLANE_CONPHS_03.dgn

NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8.

- TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- EXISTING BENT PILE CAP REQUIRES TEMPORARY SHORING DURING PHASING CONSTRUCTION. TEMPORARY SHORING TOWER AS SHOWN ARE AT APPROXIMATE LOCATIONS AND ARE FOR CONTRACTOR'S INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FINAL VERIFICATION AND DESIGN. TEMPORARY SHORING SHALL BE DESIGNED BY LICENSED PROFESSIONAL ENGINEER SHORING PLANS AND DRAWINGS SHALL BE SUBMITTED TO THE EOR FOR REVIEW PRIOR TO CONSTRUCTION.

COMPRESSIVE AXIAL SERVICE SHORING LOAD AT THE PROVIDED SHORING LOCATION IS ESTIMATED TO BE 98 KIPS MAXIMUM.

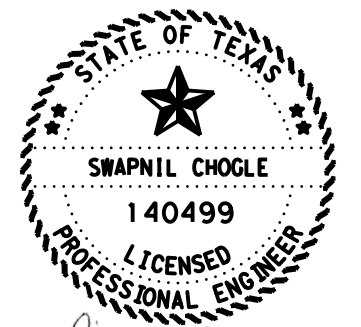


LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION

BENT #	PHASE 2 STEP 1							
	A21	B13	B21	C21	D21	X21	Y21	
BENT 2	23'-7 1/4"	30'-6 1/2"	23'-7 1/4"	28'-0"	25'-10"	5	7	
BENT 3	23'-11 3/4"	29'-8"	24'-5 3/4"	28'-0"	25'-10"	5	7	
BENT 4	23'-11 3/4"	29'-8"	24'-5 3/4"	27'-8"	25'-6"	5	8	
BENT 5	23'-11 3/4"	29'-10 1/4"	24'-5 3/4"	25'-4"	23'-2"	5	8	
BENT 6	26'-3 1/2"	30'-10"	26'-8 1/2"	20'-6"	18'-4"	5	9	
BENT 7	33'-10 1/2"	30'-7 3/4"	34'-1 3/4"	14'-2"	12'-0"	5	10	
BENT 8	42'-3 3/4"	30'-6 3/4"	42'-6"	9'-4"	7'-2"	5	11	
BENT 9	52'-7 1/4"	30'-7 3/4"	53'-2 1/2"	5'-9"	3'-1"	5	13	

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.



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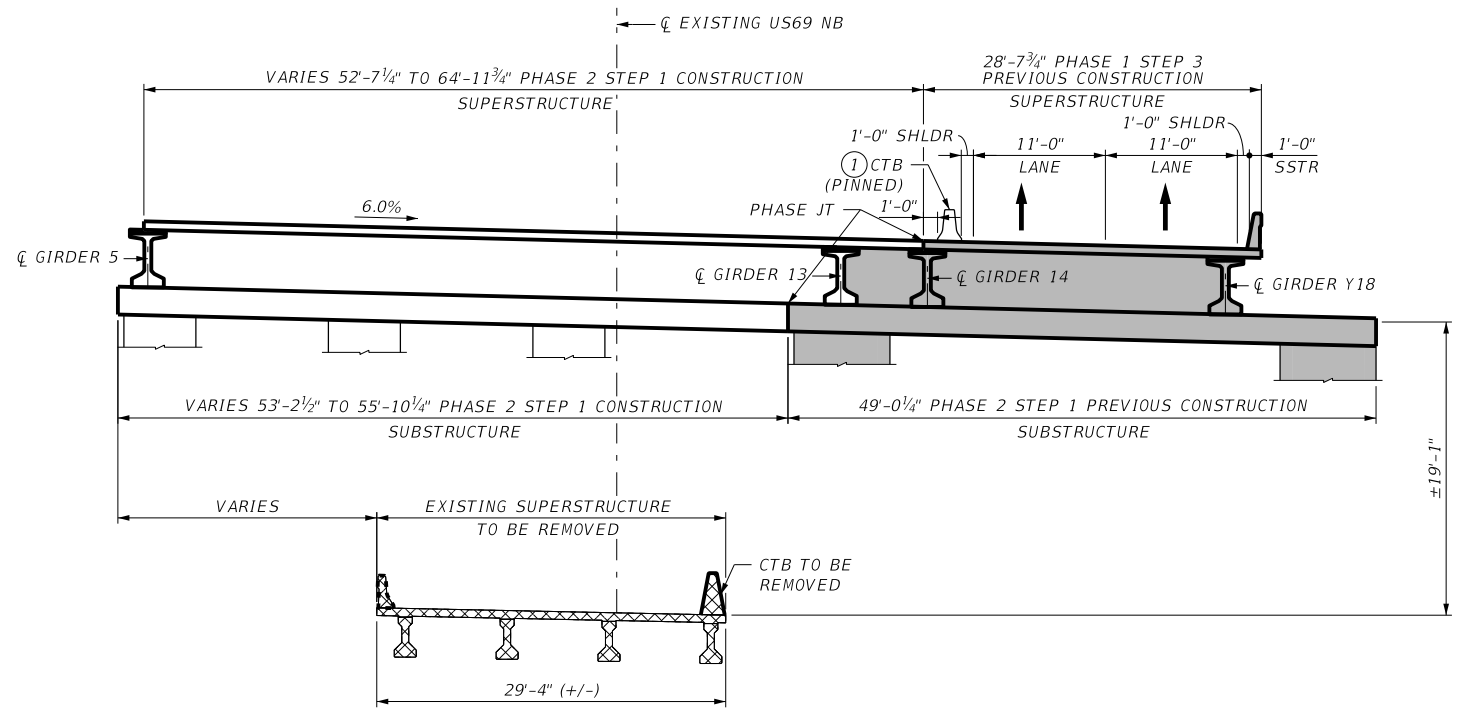
F-12679
 Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EB MAINLANE
 AT US 69**

SHEET 3 OF 6

DN: CBF	CK: CSU	DW: KAH	CK: CSU
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1338	

DATE: 21-FEB-2024 20:15
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1339_10EB_Mainlanes_CONPHS_04.dgn

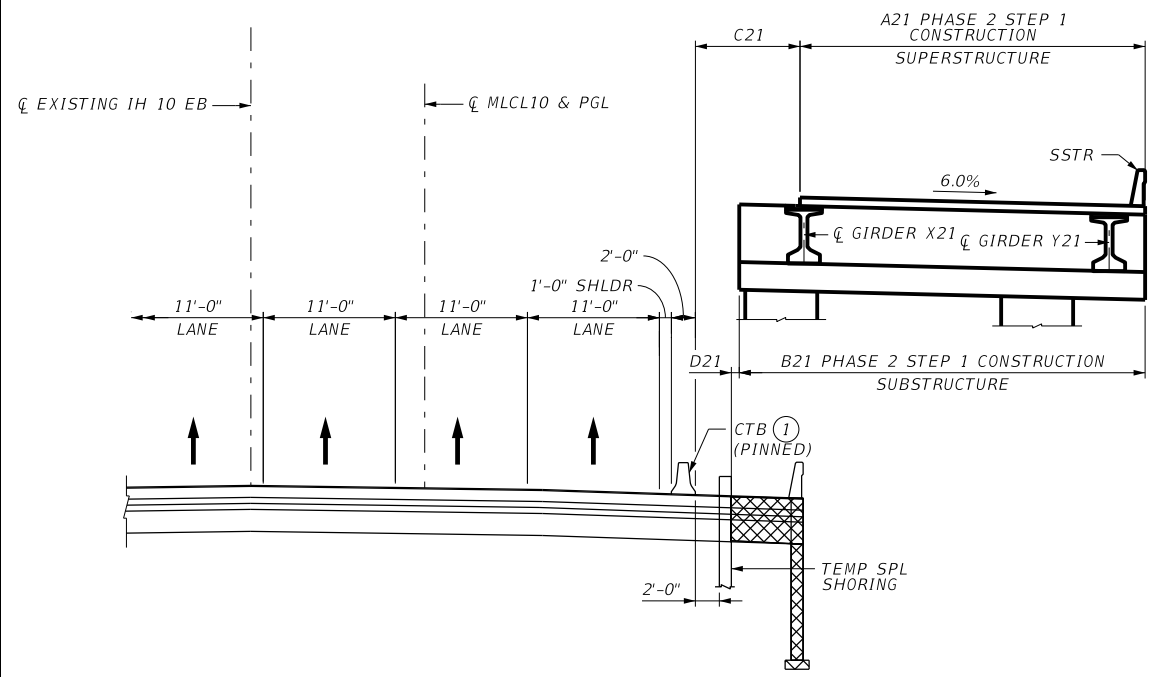


PHASE 2 STEP 1 CONSTRUCTION
(SPAN 9)

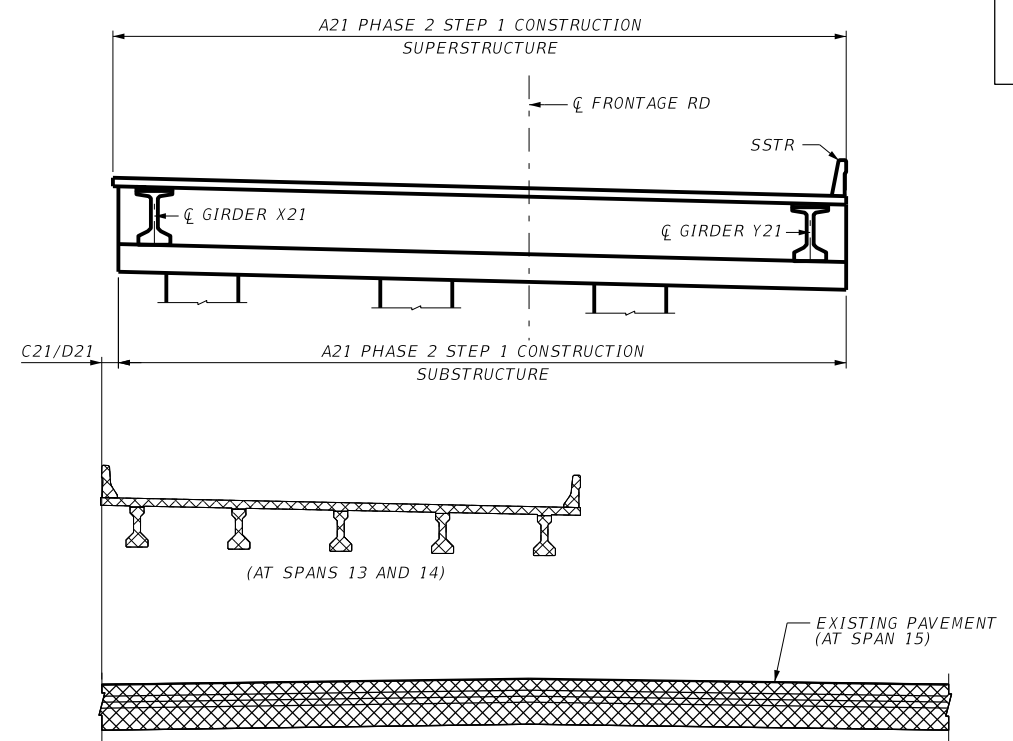
NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8.
 ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



PHASE 2 STEP 1 CONSTRUCTION
(SPANS 10 THRU 12)



PHASE 2 STEP 1 CONSTRUCTION
(SPANS 13 THRU 15)

STATE OF TEXAS
 ★
 SWAPNIL CHOGLA
 140499
 LICENSED PROFESSIONAL ENGINEER
Swapnil Chogle
 2/20/2024
 HL93 LOADING

VOLKERT
 F-12679
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 Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EB MAINLANE
 AT US 69**

BENT #	PHASE 2 STEP 1					
	A21	B21	C21	D21	X21	Y21
BENT 11	28'-9 1/4"	33'-10"	17'-1"	29'-3"	5	9
BENT 12	28'-9 1/4"	38'-10"	34'-3"	12'-0"	5	9
BENT 13	61'-1 1/2"	60'-8"	VARIES	VARIES	1	9
BENT 14	61'-1 1/2"	66'-2 1/4"	VARIES	VARIES	1	9
BENT 15	61'-1 1/2"	68'-9"	VARIES	VARIES	1	9

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.

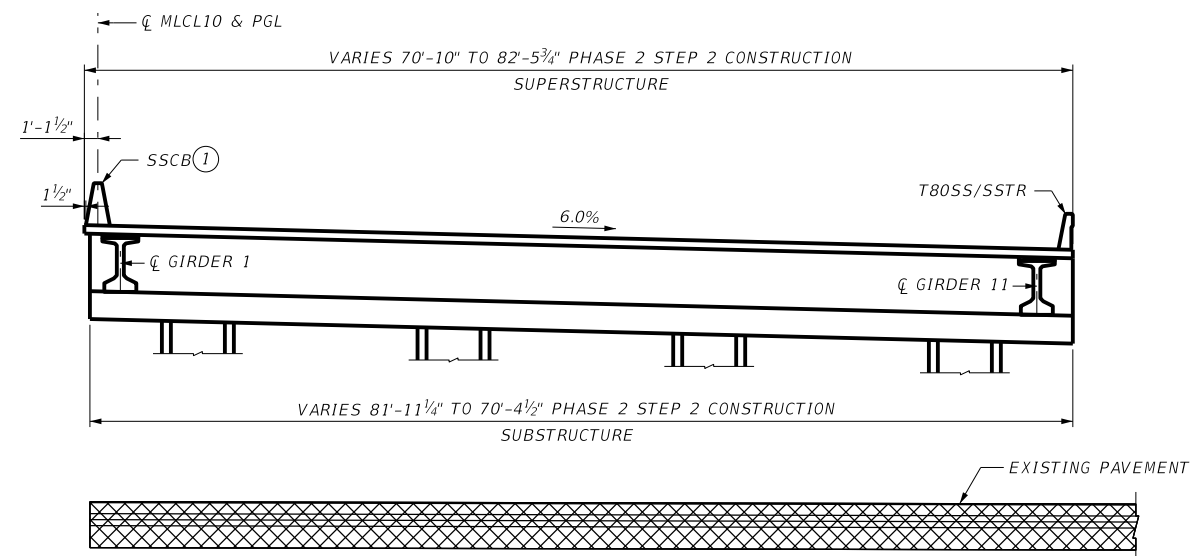
SHEET 4 OF 6

DN: CBF	CK: CSU	DW: KAH	CK: CSU
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT		COUNTY JEFFERSON	SHEET NO. 1339

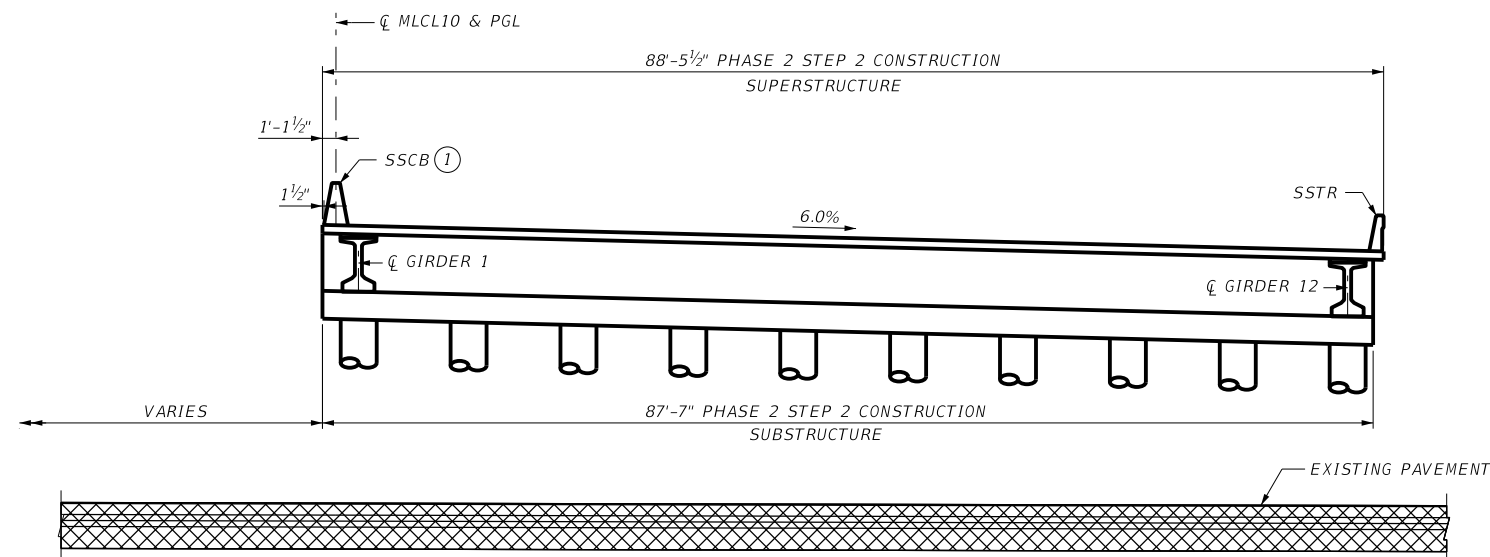
DATE: 21-FEB-2024 19:26
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T (IH 10 EB Mainlanes over US 69 NBFR)\1340_10EB_Mainlane_CONPHS_05.dgn

NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8.

① SSCB RAILING TO BE INSTALLED AFTER COMPLETION OF PHASE 4 STEP2.



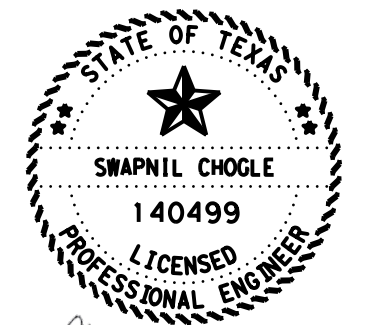
PHASE 2 STEP 2 CONSTRUCTION
(SPAN 19)



PHASE 2 STEP 2 CONSTRUCTION
(SPAN 20)

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



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VOLKERT
 F-12679



**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EB MAINLANE
 AT US 69**

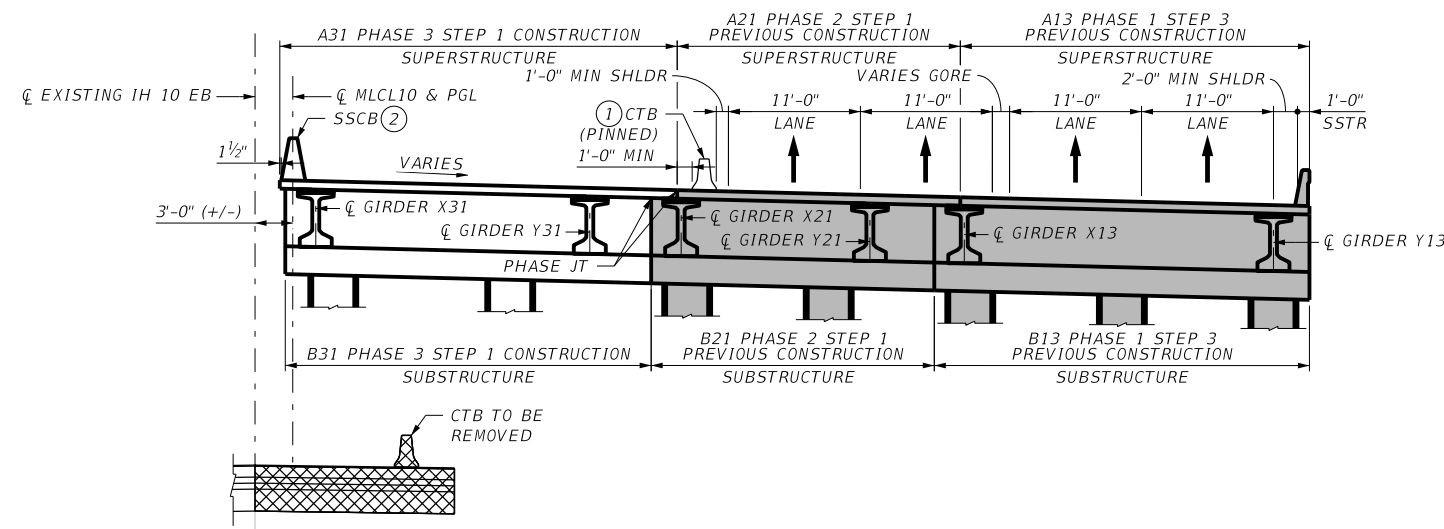
SHEET 5 OF 6

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1340				

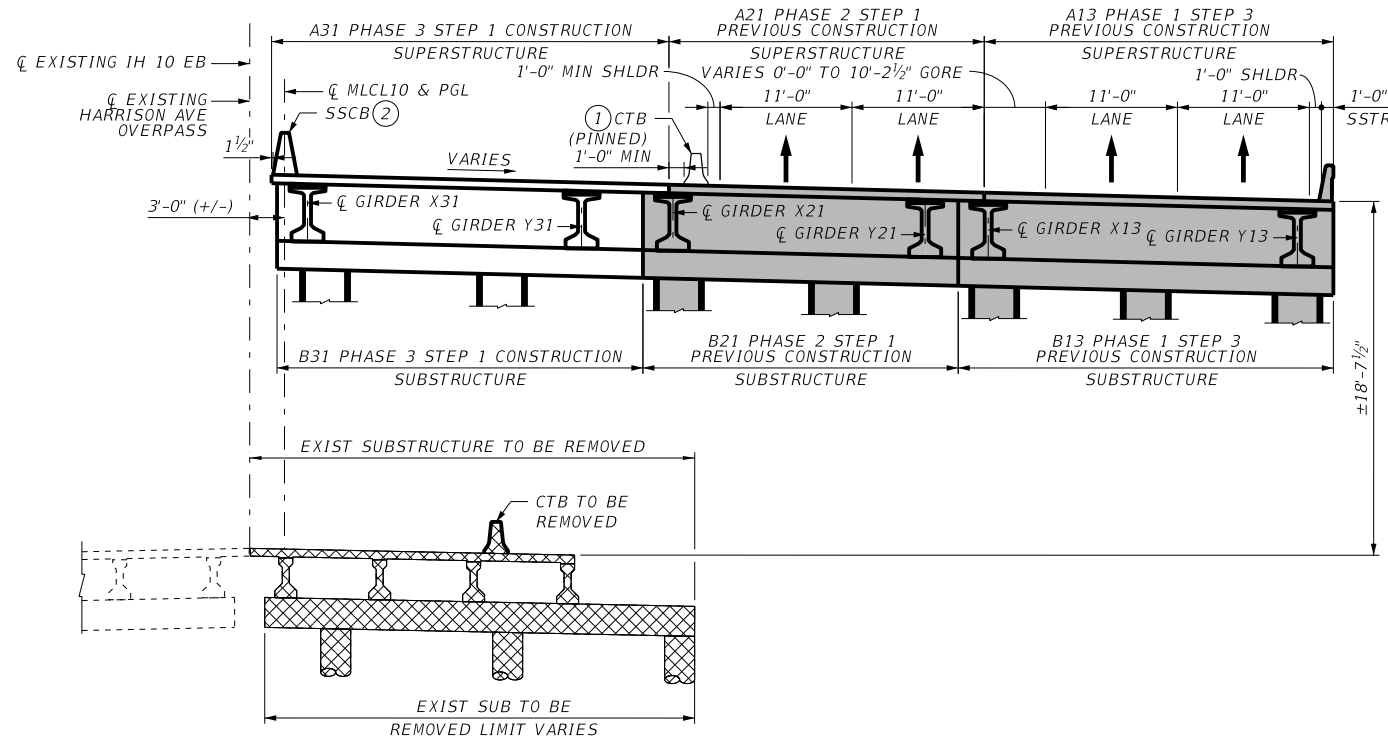
DATE: 21-FEB-2024 19:27
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T. (IH 10 EB Mainlanes over US 69 NBFR)\1341_10EB_MAINLANE_CONPHS_06.dgn

NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8.

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② SSCB BARRIER TO BE INSTALLED AFTER COMPLETION OF PHASE 4 STEP 2.

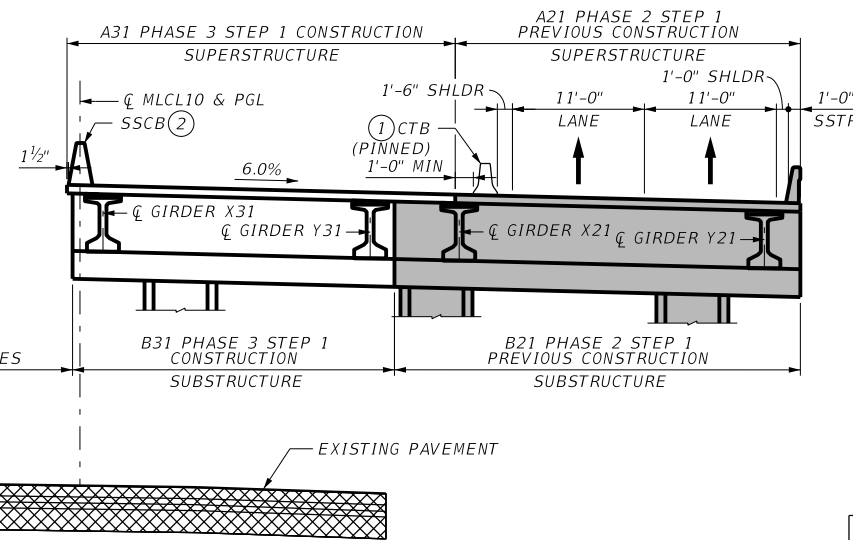


PHASE 3 STEP 1 CONSTRUCTION
 (SPANS 1 THRU 3 & 7 THRU 9)



PHASE 3 STEP 1 CONSTRUCTION
 (SPANS 4 THRU 6)

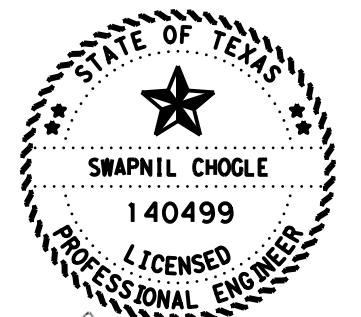
(NOTE: NUMBER OF GIRDERS VARIES ALONG EACH EXISTING SPANS)



PHASE 3 STEP 1 CONSTRUCTION
 (SPANS 10 THRU 12)

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



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 HL93 LOADING



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**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EB MAINLANE
 AT US 69**

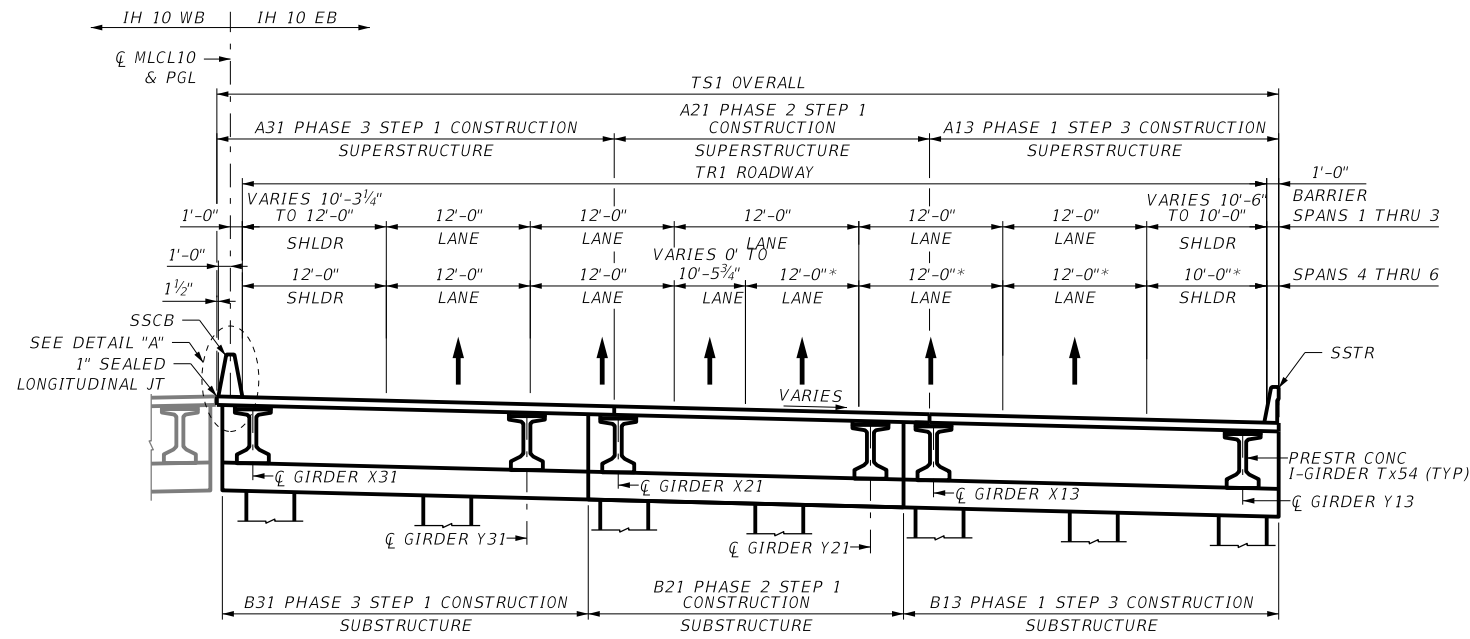
PHASE 3 STEP 1				
BENT #	A31	B31	X31	Y31
BENT 2	33'-1 1/2"	30'-6"	1	4
BENT 3	33'-1 1/2"	30'-6"	1	4
BENT 4	33'-1 1/2"	30'-6"	1	4
BENT 5	33'-1 1/2"	30'-6"	1	4
BENT 6	33'-1 1/2"	30'-6"	1	4
BENT 7	33'-1 1/2"	30'-6"	1	4
BENT 8	33'-1 1/2"	30'-6"	1	4
BENT 9	32'-10 1/4"	29'-9 1/2"	1	4
BENT 10	32'-4 1/4"	29'-8 3/4"	1	4
BENT 11	32'-4 1/4"	26'-10"	1	4
BENT 12	32'-4 1/4"	26'-10"	1	4

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.

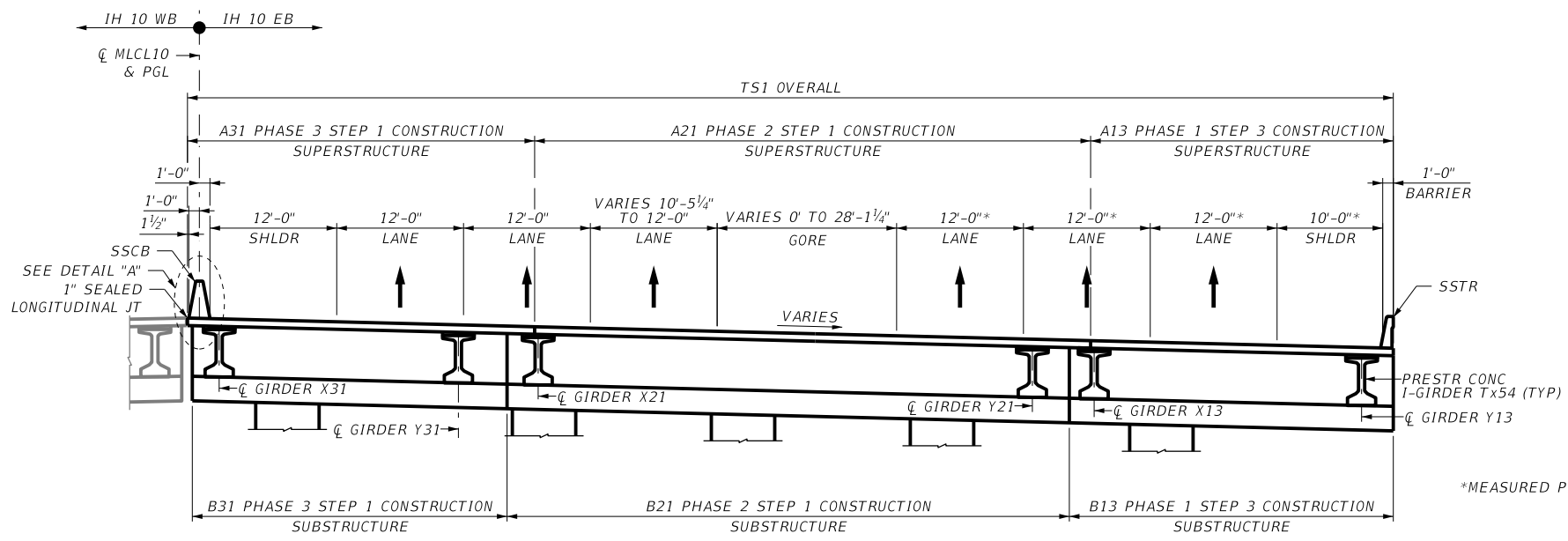
SHEET 6 OF 6

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1341

DATE: 21-FEB-2024 22:50
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\1342_10EB_Mainlanes over US 69 NBFR\1342_10EB_Mainlanes_TYPSECT_01.dgn



TYPICAL TRANSVERSE SECTION
(SPANS 1 THRU 6)

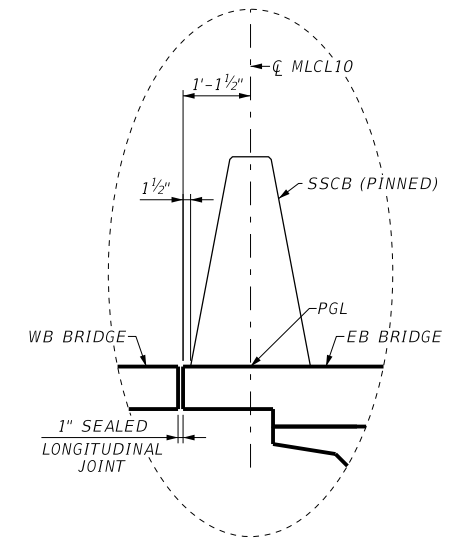


TYPICAL TRANSVERSE SECTION
(SPANS 7 THRU 9)

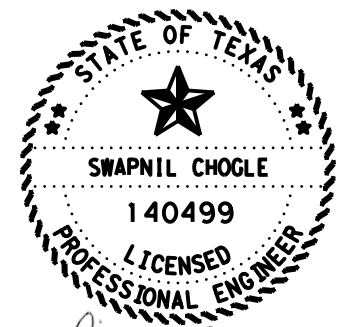
*MEASURED PERPENDICULAR TO TRAVEL LANE

NOTES:

1. ROADWAY DIMENSIONS ARE ESTIMATES, FOR MORE DETAILS SEE ROADWAY PLANS.
2. SEE ROADWAY PLANS FOR SUPERELEVATION.



DETAIL "A"



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BENT #	A13	A21	A31	B13	B21	B31	TS1	TR1	X13	Y13	X21	Y21	X31	Y31
BENT 2	28'-4 1/2"	23'-7 1/4"	33'-1 1/2"	30'-6 1/2"	23'-7 1/4"	30'-6"	85'-1"	82'-0"	8	12	5	7	1	4
BENT 3	28'-0"	23'-11 3/4"	33'-1 1/2"	29'-8"	24'-5 3/4"	30'-6"	85'-1"	82'-0"	8	12	5	7	1	4
BENT 4	28'-0"	23'-11 3/4"	33'-1 1/2"	29'-8"	24'-5 3/4"	30'-6"	85'-1 1/2"	82'-0"	9	13	5	8	1	4
BENT 5	28'-2 1/4"	23'-11 3/4"	33'-1 1/2"	29'-10 1/4"	24'-5 3/4"	30'-6"	85'-4"	82'-2"	9	13	5	8	1	4
BENT 6	29'-1 1/4"	26'-3 1/2"	33'-1 1/2"	30'-10"	26'-8 1/2"	30'-6"	88'-6 1/4"	85'-5"	10	14	5	9	1	4
BENT 7	28'-9 1/4"	33'-10 1/2"	33'-1 1/2"	30'-7 3/4"	34'-1 3/4"	30'-6"	95'-9"	92'-8"	11	15	5	10	1	4
BENT 8	28'-6 3/4"	42'-3 3/4"	33'-1 1/2"	30'-6 3/4"	43'-6"	30'-6"	104'-0"	100'-11"	12	16	5	11	1	4
BENT 9	28'-7 3/4"	52'-7 1/4"	32'-10 1/4"	30'-7 3/4"	53'-2 1/2"	29'-9 1/2"	114'-1"	111'-0"	14	18	5	13	1	4
BENT 10	28'-2"	65'-0"	32'-4 1/4"	49'-0"	49'-0"	29'-8 3/4"	125'-6"	122'-4"			5	9	1	4

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATIONSPAN FOR EACH BENT.

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**IH 10 AT US 69
TYPICAL SECTION
IH 10 EB MAINLANE
AT US 69**

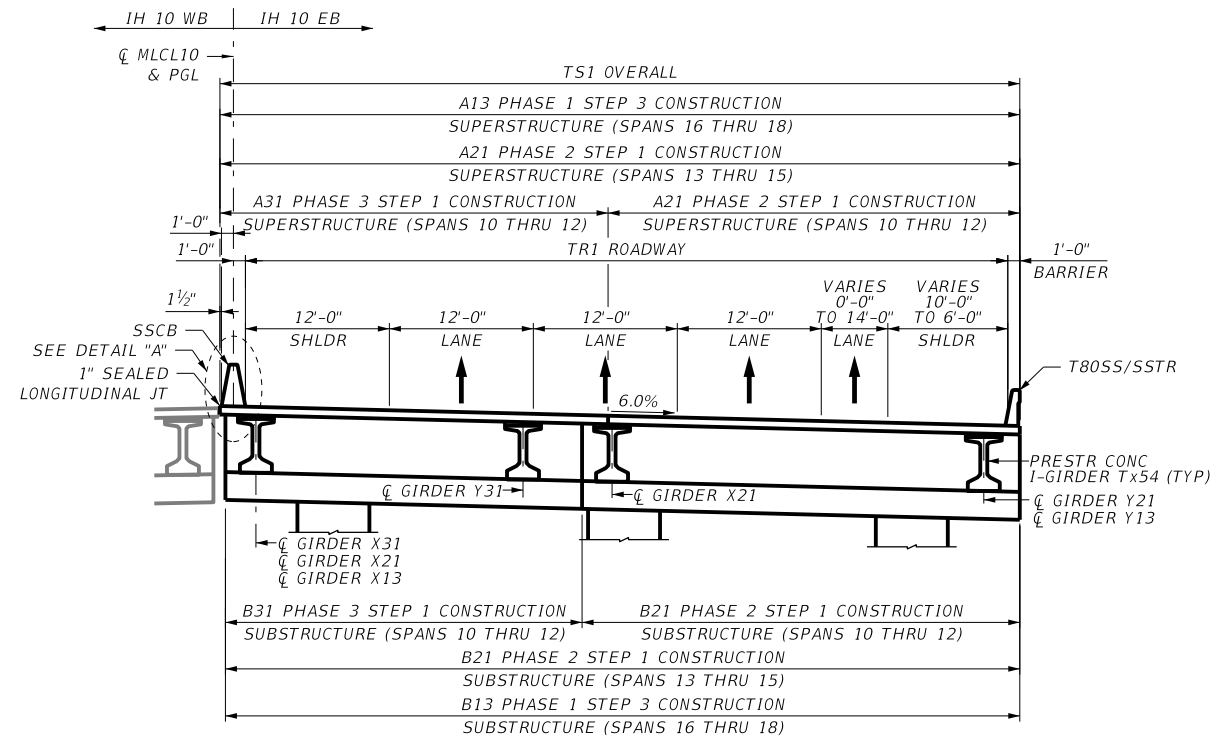
SHEET 1 OF 2

DN: CBF	CK: CSU	DW: KAH	CK: CSU
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1342	

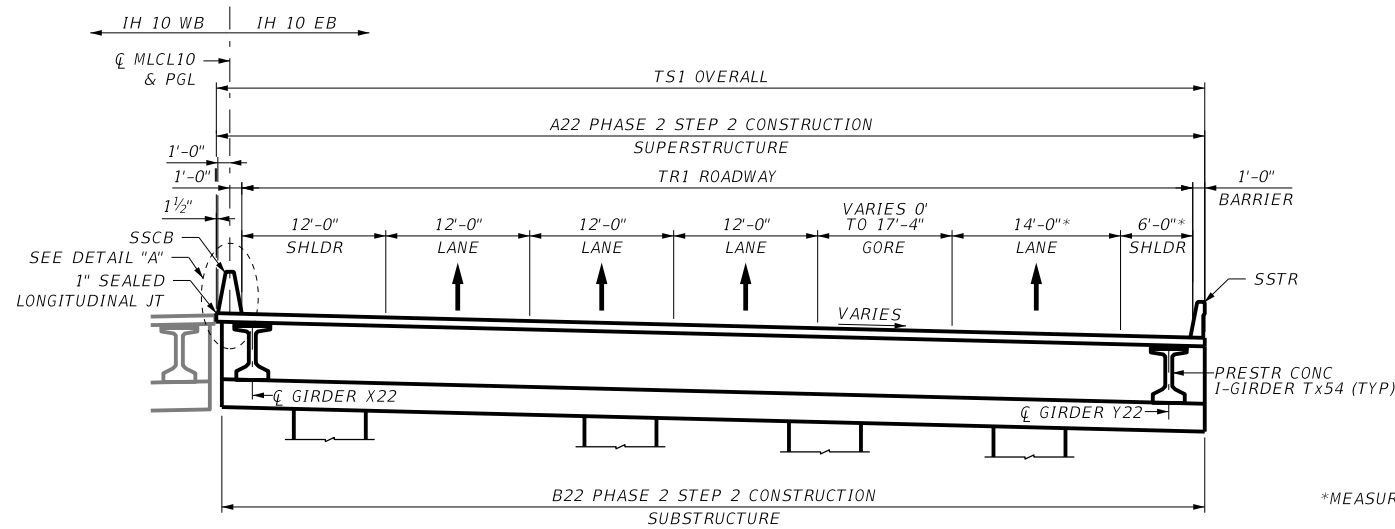
DATE: 21-FEB-2024 00:36
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10 EB Mainlanes over US 69 NBFR\1343_10EB_MAINLANE_TYPSECT_02.dgn

NOTES:

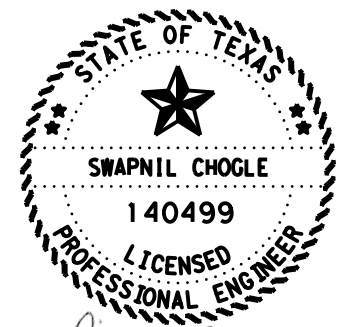
- FOR DETAIL "A", SEE "TYPICAL SECTION 1 OF 2" SHEET.
- ROADWAY DIMENSIONS ARE ESTIMATES, FOR MORE DETAILS SEE ROADWAY PLANS.
- SEE ROADWAY PLANS FOR SUPERELEVATION.



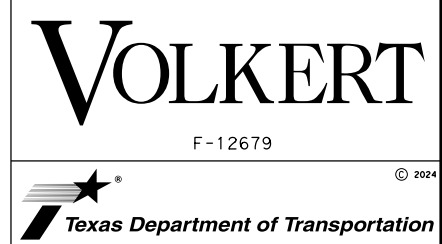
TYPICAL TRANSVERSE SECTION
(SPANS 10 THRU 18)



TYPICAL TRANSVERSE SECTION
(SPANS 19 THRU 20)



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BENT #	A13	A21	A22	A31	B13	B21	B22	B31	TS1	TR1	X13	Y13	X21	Y21	X22	X31	X31	Y31
BENT 11		28'-9 1/4"		32'-4 1/4"		33'-10"		26'-10"	61'-1 1/2"	58'-0"			5	9			1	4
BENT 12		28'-9 1/4"		32'-4 1/4"		38'-10"		26'-10"	61'-1 1/2"	58'-0"			5	9			1	4
BENT 13		61'-1 1/2"				60'-8"			61'-1 1/2"	58'-0"			1	9				
BENT 14		61'-1 1/2"				66'-2 1/4"			61'-1 1/2"	58'-0"			1	9				
BENT 15		61'-1 1/2"				68'-9"			61'-1 1/2"	58'-0"			1	9				
BENT 16	61'-1 1/2"				120'-0"				61'-1 1/2"	58'-0"	1	9						
BENT 17	61'-1 1/2"				60'-8"				61'-1 1/2"	58'-0"	1	9						
BENT 18	62'-2 3/4"				61'-9 1/4"				62'-3"	59'-1"	1	10						
BENT 19	70'-10"				70'-4 1/2"				70'-10"	67'-8"					1	11		
BENT 20			82'-5"				82'-2"		82'-5"	79'-3"					1	12		
ABUT 21			88'-5 1/2"				87'-7"		88'-5 1/2"	85'-4"								

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATIONSPAN FOR EACH BENT.

DATE: 20-FEB-2024 14:28
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1344_10EB_MAINLANE_SUM_QTY_01.dgn

SUMMARY OF BRIDGE QUANTITIES (PHASE 1 - STEP 3)

ITEM	403	416		420			422	425	450			454	471	514	4021	
DESCRIPTION CODE	6001	6008	6011	6082	6090	6100	6001	6039	6023	6054	6027	6065	6018	6007	6001	
DESCRIPTION	TEMPORARY SPL SHORING	DRILL SHAFT (60 IN)	DRILL SHAFT (78 IN)	CL F CONC (CAP)	CL F CONC (COLUMN)	CL F CONC (FOOTING) (MASS)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (TYP SSTR) (W/DRAIN SLOTS)	RAIL (TY T80SS)	RAIL (TYP T80SS) (W/DRAIN SLOTS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	PERM CTB (SGL SLOPE) (TY 1) (42)	6001
BRIDGE ELEMENT	SF	LF	LF	CY	CY	CY	SF	LF	LF	LF	LF	LF	LF	EA	(TY 1) (42)	TIP TESTING DRILL SHAFT
IH 10 EBML AT US69																
19-INTERIOR BENTS	43,017	2,464	2,340	927.2	827.8	892.2										13
1-371.00' PRESTR CONC I-GIRDER UNIT 1							10,481	1,784.29				371.0				
1-328.00' PRESTR CONC I-GIRDER UNIT 2							9,290	1,570.15	301.6	26.7			57		3	
1-269.10' PRESTR CONC I-GIRDER UNIT 3							7,440	1,249.27	263.2				57		5	
1-375.00' PRESTR CONC I-GIRDER UNIT 6							7,541	1,066.75			121.5				1	125.0
1-250.00' PRESTR CONC I-GIRDER UNIT 7							15,696	2,251.92			99.7	134.4	129			250.0
TOTAL	43,017	2,464	2,340	927.2	827.8	892.2	50,447	7,922.38	564.9	397.7	221.2	134.4	360	9	375.0	13

SUMMARY OF BRIDGE QUANTITIES (PHASE 2 - STEP 1)

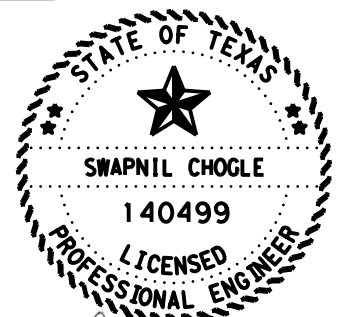
ITEM	403	416		420			422	425	450			454	514	4021	
DESCRIPTION CODE	6001	6008	6011	6082	6090	6100	6001	6039	6023	6054	6027	6065	6018	6001	
DESCRIPTION	TEMPORARY SPL SHORING	DRILL SHAFT (60 IN)	DRILL SHAFT (78 IN)	CL F CONC (CAP)	CL F CONC (COLUMN)	CL F CONC (FOOTING) (MASS)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (TYP SSTR) (W/DRAIN SLOTS)	RAIL (TY T80SS)	RAIL (TYP T80SS) (W/DRAIN SLOTS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	PERM CTB (SGL SLOPE) (TY 1) (42)	TIP TESTING DRILL SHAFT
BRIDGE ELEMENT	SF	LF	LF	CY	CY	CY	SF	LF	LF	LF	LF	LF	LF	(TY 1) (42)	EA
IH 10 EBML AT US69															
19-INTERIOR BENTS	4,816	1,888	2,100	881.4	880.7	775.7									5
1-371.00' PRESTR CONC I-GIRDER UNIT 1							8,760	1,070.58					47		
1-328.00' PRESTR CONC I-GIRDER UNIT 2							8,656	1,359.62					58		
1-269.10' PRESTR CONC I-GIRDER UNIT 3							12,943	1,873.81					100		
1-229.11' PRESTR CONC I-GIRDER UNIT 4							6,352	1,073.74		222.6			58		
1-229.12' PRESTR CONC I-GIRDER UNIT 5							10,193	1,511.02	195.3	27.2			89	114.5	
1-375.00' PRESTR CONC I-GIRDER UNIT 6							15,073	2,133.39		56.4	98.7	87.8	60	250.0	
TOTAL	4,816	1,888	2,100	881.4	880.7	775.7	61,977	9,022.15	195.3	306.2	98.7	87.8	412	364.5	5

SUMMARY OF BRIDGE QUANTITIES (PHASE 2 - STEP 2)

ITEM	400	416		420			422		425	450			454	514	4021
DESCRIPTION CODE	6005	6004	6011	6013	6082	6090	6001	6015	6039	6054	6065	6018	6001	6001	
DESCRIPTION	CEM STABIL BK FILL	DRILL SHAFT (36 IN)	DRILL SHAFT (78 IN)	CL C CONC (ABUT)	CL F CONC (CAP)	CL F CONC (COLUMN)	REINF CONC SLAB	APPROACH SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TYP SSTR) (W/DRAIN SLOTS)	RAIL (TYP T80SS) (W/DRAIN SLOTS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	PERM CTB (SGL SLOPE) (TY 1) (42)	TIP TESTING DRILL SHAFT	
BRIDGE ELEMENT	CY	LF	LF	CY	CY	CY	SF	CY	LF	LF	LF	LF	(TY 1) (42)	EA	
IH 10 EBML AT US69															
1-ABUTMENT	64	500		44.9				84.0						1	
19-INTERIOR BENTS			360		125.6	27.6								1	
1-250.00' PRESTR CONC I-GIRDER UNIT 8							19,945		2,740.55	218.2	31.8	157	250.0		
TOTAL	64	500	360	44.9	125.6	27.6	19,945	84.0	2,740.55	218.2	31.8	157	250.0	2	

SUMMARY OF BRIDGE QUANTITIES (PHASE 3 - STEP 1)

ITEM	416	420		422	425	454	514
DESCRIPTION CODE	6011	6082	6090	6001	6039	6018	6001
DESCRIPTION	DRILL SHAFT (78 IN)	CL F CONC (CAP)	CL F CONC (COLUMN)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	SEALED EXPANSION JT (4 IN) (SEJ-M)	PERM CTB (SGL SLOPE) (TY 1) (42)
BRIDGE ELEMENT	LF	CY	CY	SF	LF	LF	LF
IH 10 EBML AT US69							
19-INTERIOR BENTS	1,975	501.3	578.7				
1-371.00' PRESTR CONC I-GIRDER UNIT 1				12,293	1,427.46	64	371.0
1-328.00' PRESTR CONC I-GIRDER UNIT 2				10,865	1,255.08	64	328.0
1-269.10' PRESTR CONC I-GIRDER UNIT 3				8,879	1,015.91	63	269.0
1-229.11' PRESTR CONC I-GIRDER UNIT 4				7,484	872.64	62	229.0
1-229.12' PRESTR CONC I-GIRDER UNIT 5				3,616	436.43	31	114.5
TOTAL	1,975	501.3	578.7	43,139	5,007.52	284	1311.5



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**IH 10 AT US 69
QTY & BEARING SEAT ELEV
IH 10 EB MAINLANE
AT US 69**

SHEET 1 OF 2

DN: CBF	CK: FB	DW: MAG	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1344	

DATE: 20-FEB-2024 16:53
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T. (H 10 EB Mainlanes over US 69 NBFR)\1345_10EB_MAINLANE_SUM_QTY_02.dgn

**BEARING SEAT ELEVATIONS
 PHASE 1 STEP3**

	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	GIRDER 11	GIRDER 12	GIRDER 13	GIRDER 14	GIRDER 15	GIRDER 16	GIRDER 17	GIRDER 18
BENT 1 (FWD)								40.990	40.854	40.696	40.539	40.382						
BENT 2 (BK)								44.429	44.294	44.137	43.980	43.824						
BENT 2 (FWD)								44.626	44.532	44.375	44.219	44.062						
BENT 3 (BK)								47.641	47.549	47.395	47.241	47.086						
BENT 3 (FWD)								47.828	47.737	47.582	47.428	47.274						
BENT 4 (BK)								49.675	49.518	49.299	49.080	48.860						
BENT 4 (FWD)								49.669	49.487	49.243	49.040	48.817						
BENT 5 (BK)								50.736	50.486	50.175	49.905	49.614						
BENT 5 (FWD)								50.807	50.533	50.238	49.943	49.648						
BENT 6 (BK)								51.337	50.990	50.623	50.256	49.888						
BENT 6 (FWD)								51.241	50.891	50.519	50.127	49.756						
BENT 7 (BK)								51.425	51.064	50.682	50.280	49.898						
BENT 7 (FWD)								51.612	51.272	50.870	50.489	50.108						
BENT 8 (BK)								51.409	51.073	50.673	50.294	49.916						
BENT 8 (FWD)								51.378	51.020	50.642	50.263	49.885						
BENT 9 (BK)								50.832	50.474	50.094	49.715	49.335						
BENT 9 (FWD)								50.691	50.333	49.953	49.573	49.090						
BENT 10(BK)								49.679	49.327	48.955	48.582	48.105						
BENT 16 (BK)																		
BENT 16 (FW	41.311	40.897	40.483	40.069	39.656	39.242	38.828	38.414	37.980									
BENT 17 (BK	37.748	37.335	36.922	36.509	36.096	35.683	35.269	34.856	34.422									
BENT 17 (FWD	37.561	37.147	36.733	36.319	35.905	35.492	35.078	34.664	34.229									
BENT 18 (BK	33.998	33.584	33.170	32.757	32.343	31.929	31.515	31.101	30.666									
BENT 18 (FW	33.811	33.440	33.070	32.700	32.330	31.960	31.589	31.219	30.849	30.458								
BENT 19 (BK	30.248	29.818	29.388	28.957	28.527	28.097	27.666	27.236	26.806	26.355								

**BEARING SEAT ELEVATIONS
 PHASE 2 STEP 2**

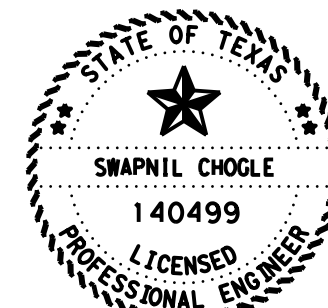
	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	GIRDER 11	GIRDER 12
BENT 19 (FW	30.061	29.669	29.278	28.887	28.496	28.105	27.714	27.323	26.931	26.540	26.128	
BENT 20 (BK	26.498	26.042	25.585	25.129	24.673	24.216	23.760	23.304	22.847	22.391	21.914	
BENT 20 (FW	26.228	25.831	25.413	24.975	24.557	24.139	23.721	23.303	22.885	22.467	22.049	21.610
ABUT 21 (BK	23.033	22.604	22.155	21.685	21.235	20.786	20.336	19.887	19.437	18.988	18.538	18.068

PHASE 2 STEP 1

	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	GIRDER 11	GIRDER 12	GIRDER 13
BENT 1 (FWD)					41.553	41.428	41.240						
BENT 2 (BK)					45.019	44.885	44.688						
BENT 2 (FWD)					45.237	45.102	44.906						
BENT 3 (BK)					48.261	48.124	47.924						
BENT 3 (FWD)					48.428	48.311	48.111						
BENT 4 (BK)					50.527	50.326	50.042						
BENT 4 (FWD)					50.558	50.361	50.144	49.927					
BENT 5 (BK)					51.879	51.619	51.339	51.058					
BENT 5 (FWD)					51.947	51.683	51.398	51.113					
BENT 6 (BK)					52.833	52.480	52.106	51.732					
BENT 6 (FWD)					52.811	52.526	52.220	51.894	51.588				
BENT 7 (BK)					53.486	53.103	52.699	52.274	51.870				
BENT 7 (FWD)					53.643	53.363	53.021	52.638	52.317	51.975			
BENT 8 (BK)					53.909	53.551	53.131	52.669	52.270	51.850			
BENT 8 (FWD)					53.962	53.616	53.250	52.884	52.518	52.152	51.744		
BENT 9 (BK)					53.986	53.560	53.112	52.664	52.217	51.769	51.280		
BENT 9 (FWD)					53.872	53.540	53.186	52.833	52.479	52.126	51.773	51.419	51.066
BENT 10(BK)					53.554	53.144	52.714	52.283	51.852	51.422	50.991	50.561	50.130
BENT 16 (BK	41.519	41.106	40.693	40.280	39.846	39.433	39.019	38.606	38.172				

PHASE 3 STEP 1

	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4
BENT 1 (FWD	42.356	42.166	41.975	41.785
BENT 2 (BK)	45.822	45.631	45.441	45.251
BENT 2 (FWD	46.040	45.850	45.659	45.469
BENT 3 (BK)	49.064	48.874	48.683	48.493
BENT 3 (FWD	49.210	49.019	48.829	48.639
BENT 4 (BK)	51.630	51.360	51.089	50.819
BENT 4 (FWD	51.681	51.405	51.130	50.854
BENT 5 (BK)	53.326	52.969	52.613	52.257
BENT 5 (FWD	53.411	53.051	52.690	52.329
BENT 6 (BK)	54.592	54.157	53.723	53.288
BENT 6 (FWD	54.650	54.211	53.730	53.291
BENT 7 (BK)	55.396	54.940	54.441	53.984
BENT 7 (FWD	55.533	55.076	54.619	54.162
BENT 8 (BK)	55.799	55.342	54.885	54.428
BENT 8 (FWD	55.809	55.353	54.896	54.439
BENT 9 (BK)	55.819	55.366	54.913	54.460
BENT 9 (FWD	55.703	55.250	54.798	54.345
BENT 10(BK)	55.357	54.911	54.466	54.020
BENT 10 (FWD	55.237	54.792	54.347	53.901
BENT 11 (BK	54.379	53.934	53.488	53.043
BENT 11 (FWD	54.315	53.869	53.424	52.978
BENT 12 (BK	52.960	52.514	52.069	51.624
BENT 12 (FWD	52.867	52.422	51.977	51.533
BENT 13 (BK	51.016	50.601	50.187	49.773



Swapnil Chogle
 2/20/2024

HL93 LOADING

VOLKERT

F-12679

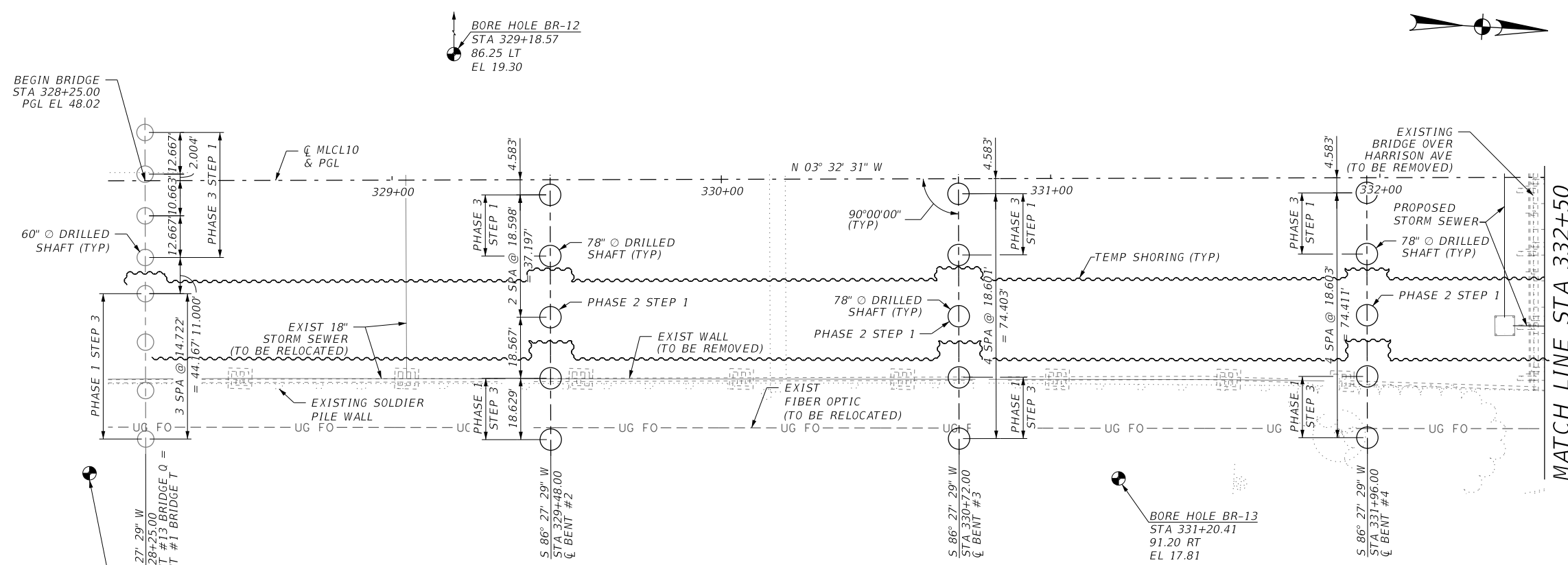


**IH 10 AT US 69
 QTY & BEARING SEAT ELEV
 IH 10 EB MAINLANE
 AT US 69**

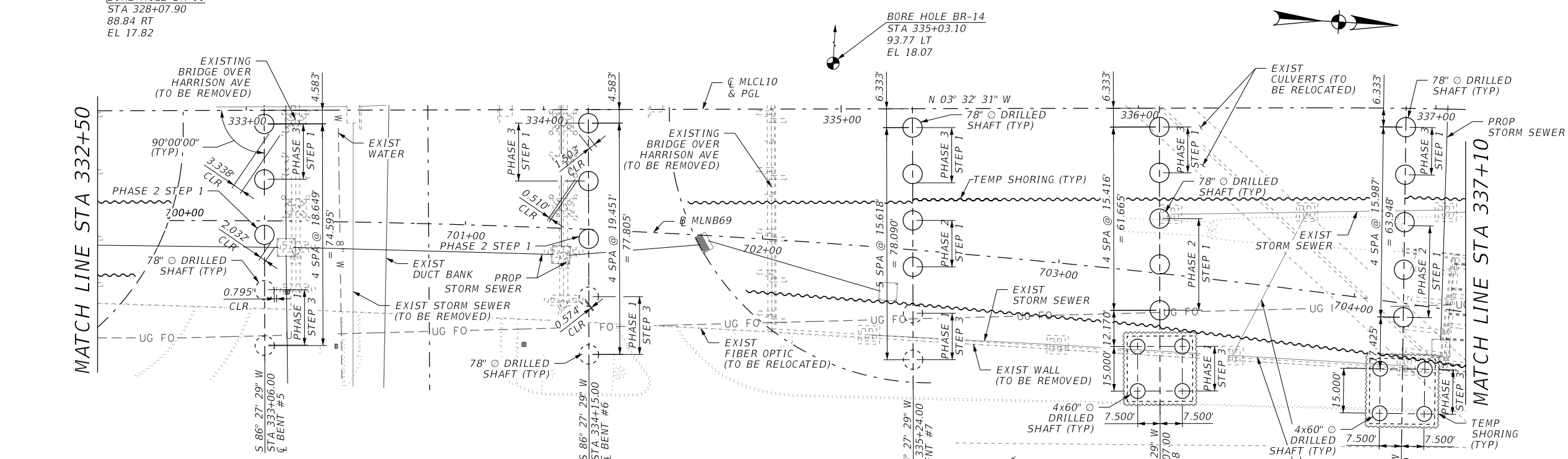
SHEET 2 OF 2

DN:	CBF	CK:	FB	DW:	MAG	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST		COUNTY		SHEET NO.			
	BMT		JEFFERSON				1345

DATE: 21-FEB-2024 19:48
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design East\4 - Design\Plan Set\7. Bridge\Bridge I (IH 10 EB Mainlanes over US 69 NBFR)\1346_10EB_MAINLANE_FDNLAY_01.dgn



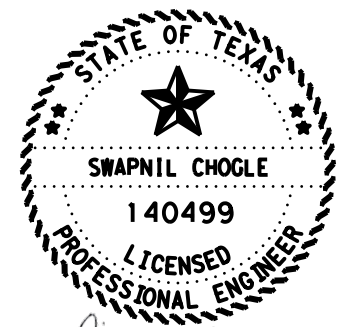
FOUNDATION LAYOUT



FOUNDATION LAYOUT

TIP TESTING NOTES:
 1. ONE SHAFT AT EACH ABUTMENT AND EACH BENT SHALL BE TESTED PER TxDOT SPECIAL SPECIFICATION S54021. "THERMAL INTEGRITY PROFILER (TIP) TESTING OF DRILLED SHAFTS" TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. THE ENGINEER WILL CHOOSE THE INDIVIDUAL DRILLED SHAFTS TO BE TESTED.
 2. THE ENGINEER SHALL EVALUATE THE RESULTS OF TIP TESTING AND DETERMINE ACCEPTANCE. SHOULD DEFECTS OR QUESTIONABLE RESULTS BE FOUND, THE ENGINEER MAY REQUIRE REMEDIATION USING HYDROBLASTING AND PRESSURE GROUTING. IF THE ENGINEER DETERMINES THAT FURTHER EVALUATION IS NECESSARY, HIGH-STRAIN DYNAMIC LOAD TESTING (ASTM D4945) PER ITEM 405, "FOUNDATION LOAD TEST," SHALL BE CONSIDERED. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A MITIGATION PLAN TO MITIGATE IDENTIFIED DEFECTS. LOAD TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. TxDOT PERSONNEL, OR THEIR DESIGNATED REPRESENTATIVE, SHALL BE PRESENT DURING TESTING.

GENERAL NOTES:
 DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TxDOT BRIDGE DESIGN MANUAL (JAN 2023).
 ⊕ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.
 UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.
 SEE BRIDGE LAYOUT FOR DRILLED SHAFT LENGTHS.
 SEE FOUNDATION DETAILS FD(MOD) SHEET AND FOUNDATION DETAILS SHEETS AS PART OF THE COMMON SHEETS FOR FOUNDATION DETAILS AND NOTES NOT SHOWN.
 DRILLED SHAFTS SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS ITEM 416. CONTRACTOR SHALL SUBMIT DRILLED SHAFT INSTALLATION PLAN THOROUGHLY OUTLINING THE PROPOSED PROCEDURE FOR SHAFT INSTALLATION PRIOR TO COMMENCEMENT.
 FOUNDATIONS HAVE BEEN DESIGNED FOR SIDE FRICTION ONLY (NO TIP BEARING.) REFERENCE FORESIGHT GEOTECHNICAL REPORT FOR DISREGARD DEPTH OF SOIL TO ACCOUNT FOR SOIL DISTURBANCE DURING INSTALLATION.
 SEE "BORING LOGS" SHEETS FOR ESTIMATED GROUNDWATER ELEVATIONS. IF GROUNDWATER IS ENCOUNTERED DURING DRILLING AND CASING IS REQUIRED, THE CASING SHALL REMAIN BELOW THE LEVEL OF CONCRETE DURING PLACEMENT. ENGINEER OF RECORD SHALL BE INFORMED IF CASING WILL BE LEFT IN PLACE SO THAT REVISED SHAFT TIP ELEVATIONS AND CAPACITIES CAN BE PROVIDED.
 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FOUNDATION LOCATIONS DURING CONSTRUCTION. NOTIFY THE ENGINEER IF INTERFERENCE OCCURS BETWEEN EXISTING AND PROPOSED FOUNDATIONS.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

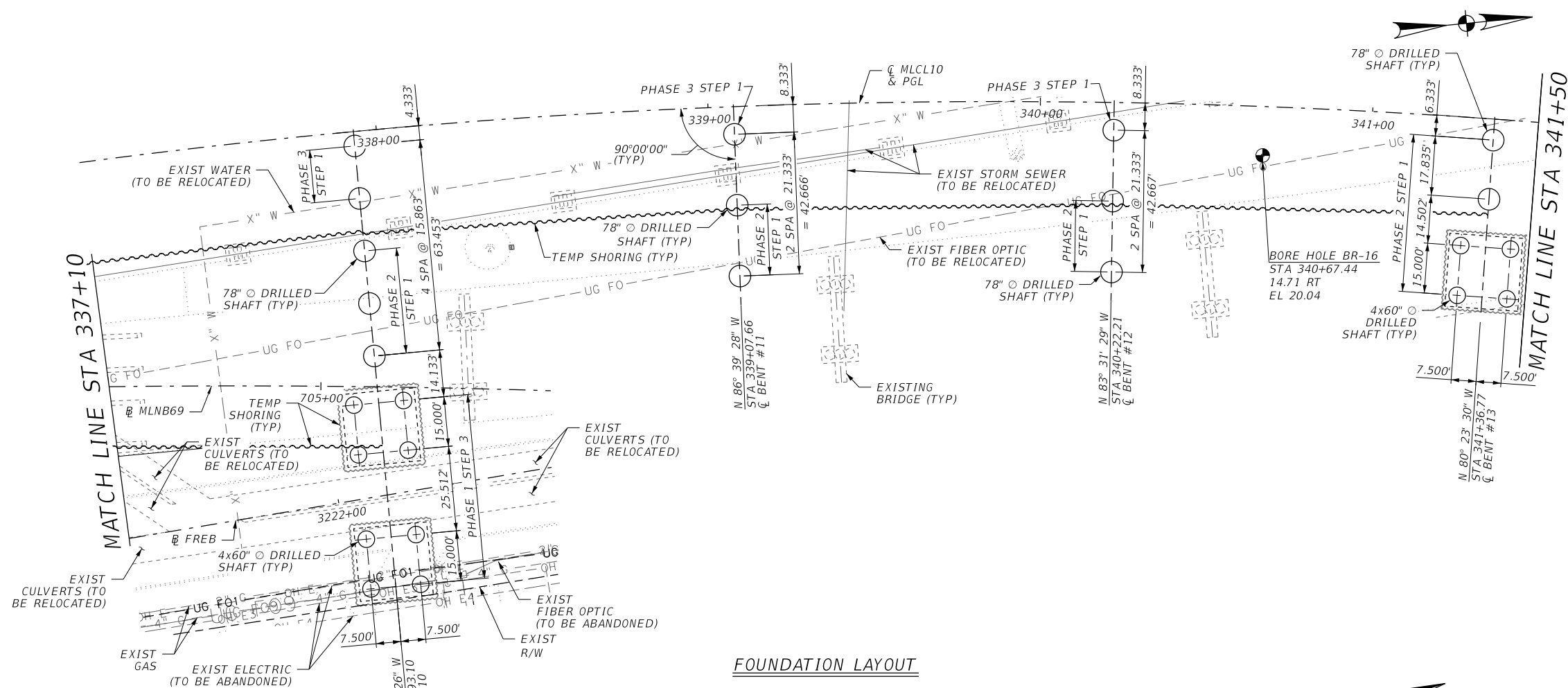


**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EB MAINLANE
 AT US 69**

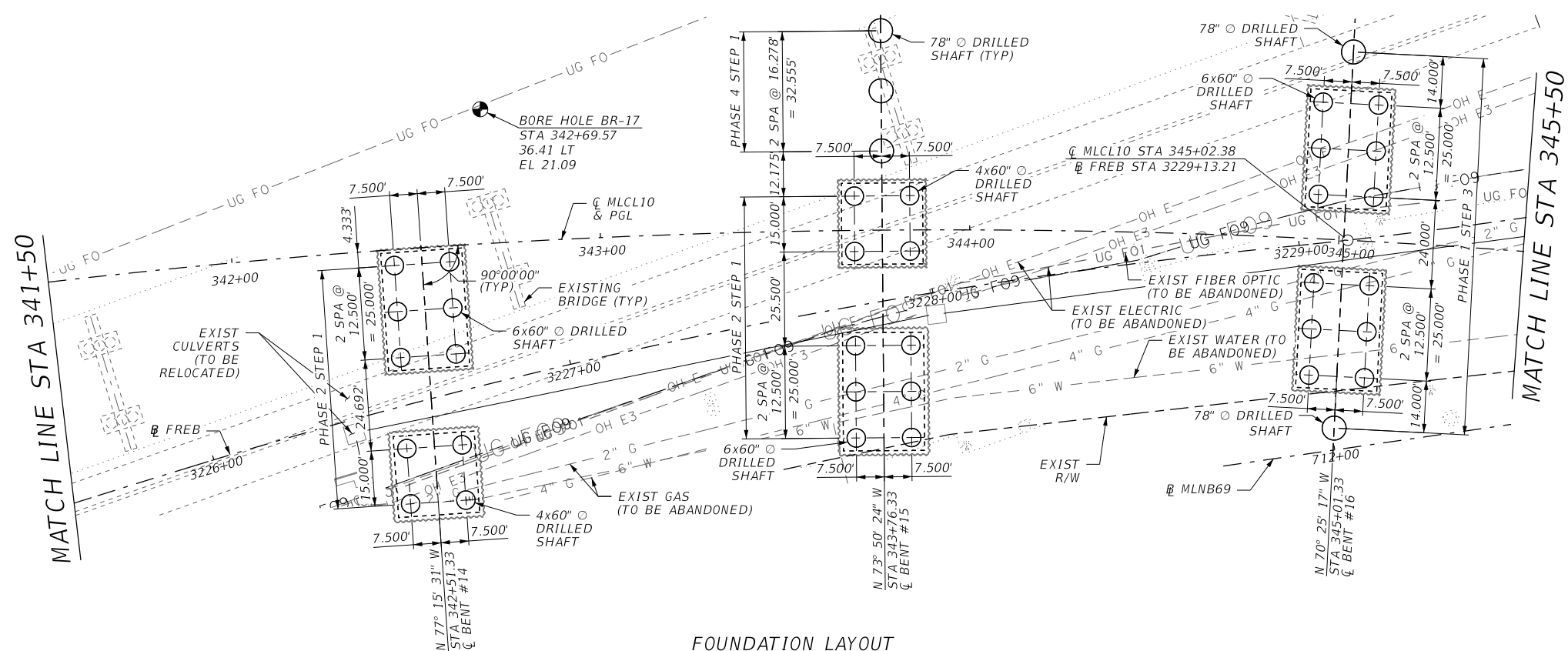
SHEET 1 OF 3

DW:	CBF	CK:	CBF	DW:	KAH	CK:	CSU
CONT:	0028	SECT:	13	JOB:	135	CK:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1346		

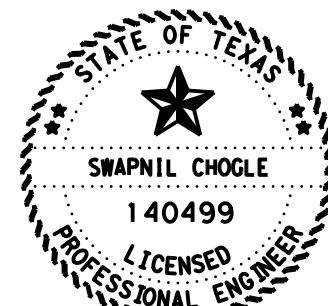
DATE: 8-MAR-2024 19:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10 EB Mainlanes over US 69 NBFR\1347_10EB_MAINLANE_FDNLAY_02.dgn



FOUNDATION LAYOUT



FOUNDATION LAYOUT



Swapnil Chogle 3/8/24

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 F-12679



**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EB MAINLANE
 AT US 69**

SHEET 2 OF 3

DN:	CBF	CK:	CBF	DW:	KAH	CK:	CSU
CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:		COUNTY:		SHEET NO.:			
	BMT		JEFFERSON				1347

DATE: 21-FEB-2024 23:12
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Plan Set\7. Bridge\1349_10EB_Mainlane_AbutPE_21.dgn

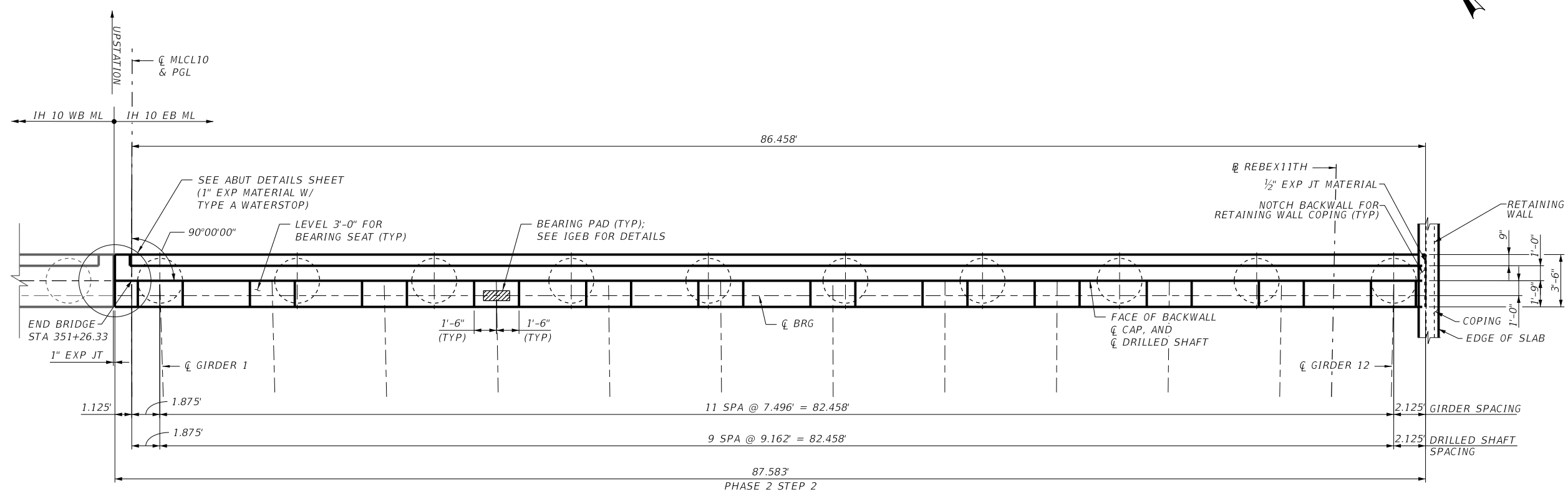
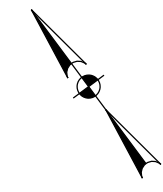
GENERAL NOTES:

1. SEE ABUTMENT DETAIL SHEET, FOR DETAILS AND NOTES.

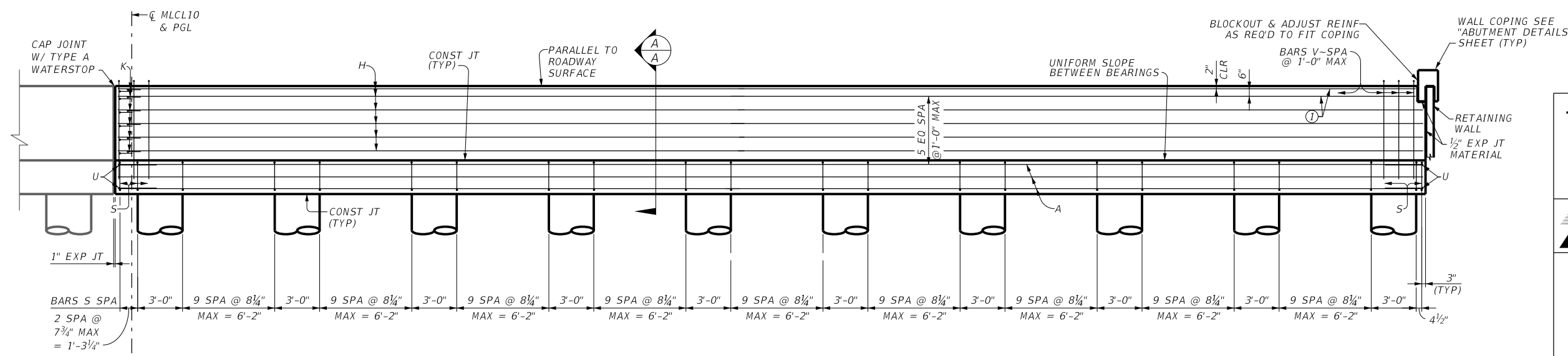
MATERIAL NOTES:

1. PROVIDE GRADE 60 REINFORCING STEEL
2. PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI)

COVER DIMENSIONS ARE CLEAR DIMENSIONS UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BARS

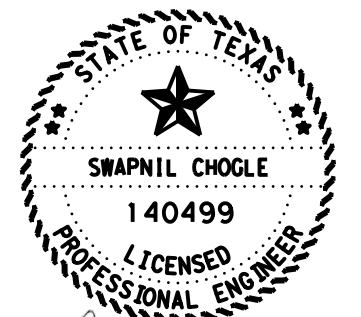


PLAN
 SCALE 1/8"=1'-0"



ELEVATION
 SCALE 1/8"=1'-0"

① INCREASE LAP SPICE LENGTH OF H BARS AS NEEDED TO ACCOMODATE BACKWALL NOTCH FOR RETAINING WALL.



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**IH 10 AT US 69
 ABUTMENT 21
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1

DN:	CBF	CK:	CBF	DW:	MA	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1349				

DATE: 21-FEB-2024 23:26
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10EB MAINLANE_ABUT_DET.dgn

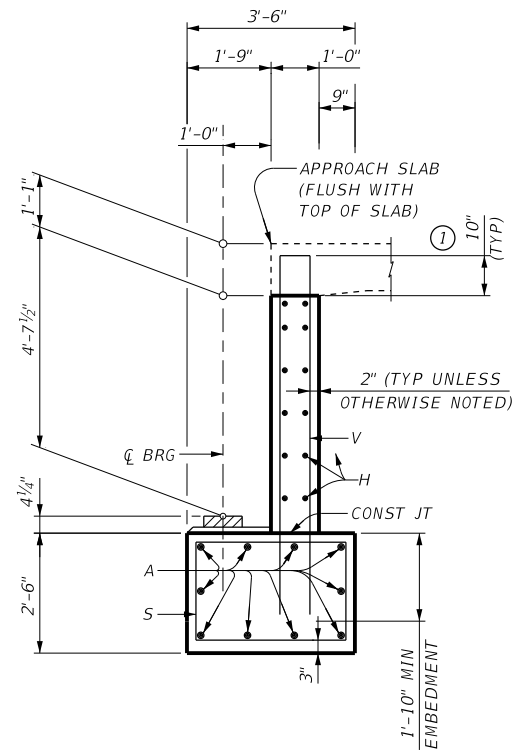
TABLE OF ESTIMATED QUANTITIES ABUTMENT 21 (PHASE 2 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	10	#11	93' - 5"	4963
(5) H	12	#6	89' - 11"	1621
K	6	#6	8' - 5"	76
S	95	#5	11' - 6"	1139
U	4	#6	8' - 1"	49
V	88	#5	15' - 6"	1423
REINFORCING STEEL			LB	9,271
CLASS "C" CONCRETE (CAP)			CY	44.9

- GENERAL NOTES:
- DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020 AND TxDOT BRIDGE DESIGN MANUAL (JAN 2023).
 - SEE FOUNDATION DETAIL SHEETS, FD(MOD), FOR FOUNDATION DETAILS AND NOTES.
 - MAXIMUM FOUNDATION LOAD = 101 TONS/DR SHAFT AT ABUTMENT 21.
- MATERIAL NOTES:
- PROVIDE GRADE 60 REINFORCING STEEL
 - PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI)

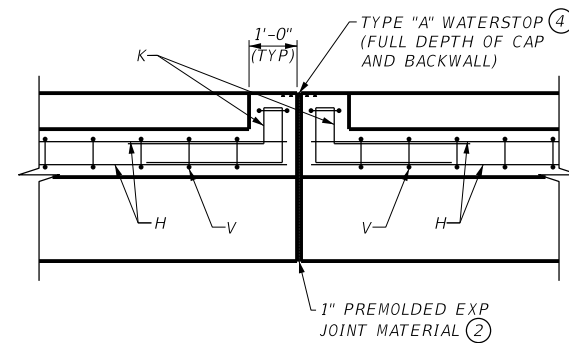
COVER DIMENSIONS ARE CLEAR DIMENSIONS UNLESS NOTED OTHERWISE.

REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BARS

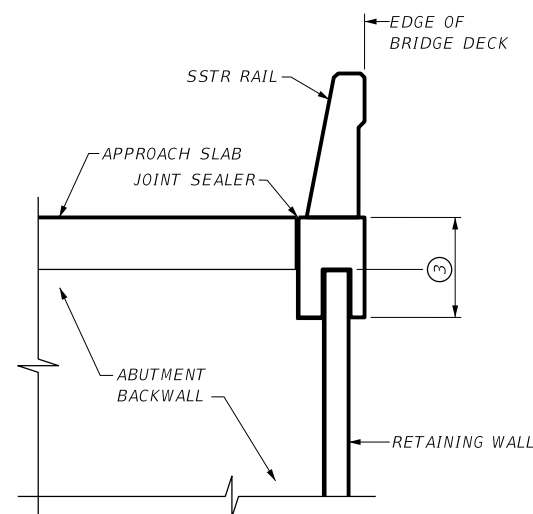
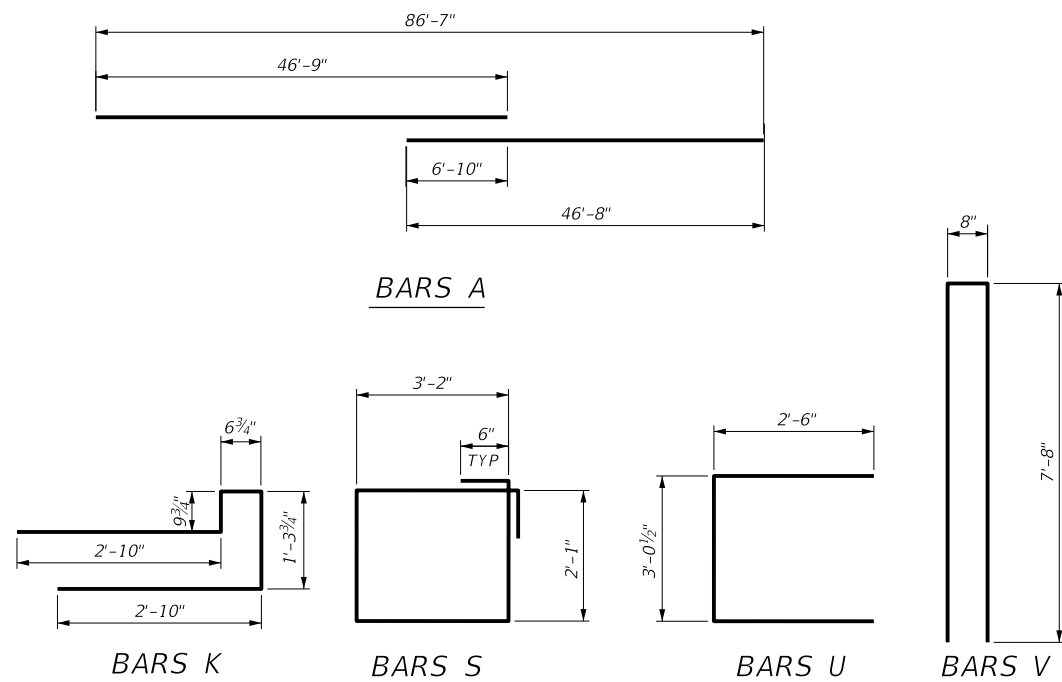
- INCREASE AS REQUIRED TO MAINTAIN 3" FROM FINISHED GRADE.
- 1" BITUMINOUS EXPANSION MATERIAL
- REFERENCE "TxDOT RETAINING WALL TRAFFIC RAILING FOUNDATIONS RW(TRF)" FOR COPING REINFORCEMENT & ADDITIONAL DETAILS
- REFERENCE "TxDOT SPREAD FOOTING RETAINING WALL MISCELLANEOUS DETAILS RW(SF)" FOR WATERSTOP TYPE "A" DETAILS, TO BE PLACED THE FULL HEIGHT OF THE ABUTMENT.
- USE 2'-10" LAP SPLICE.



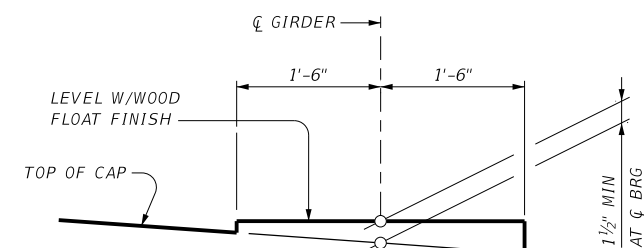
SECTION A-A



CAP JOINT DETAIL

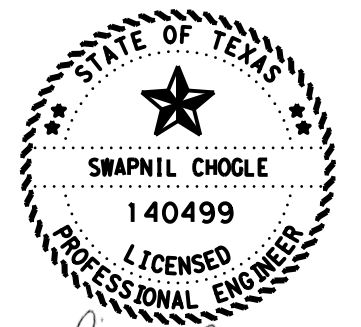


COPING DETAIL

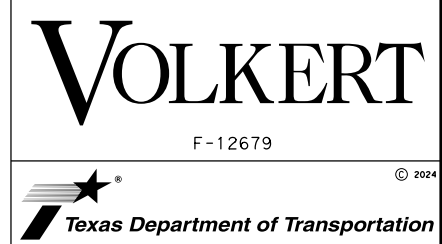


BEARING SEAT DETAIL

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD.)



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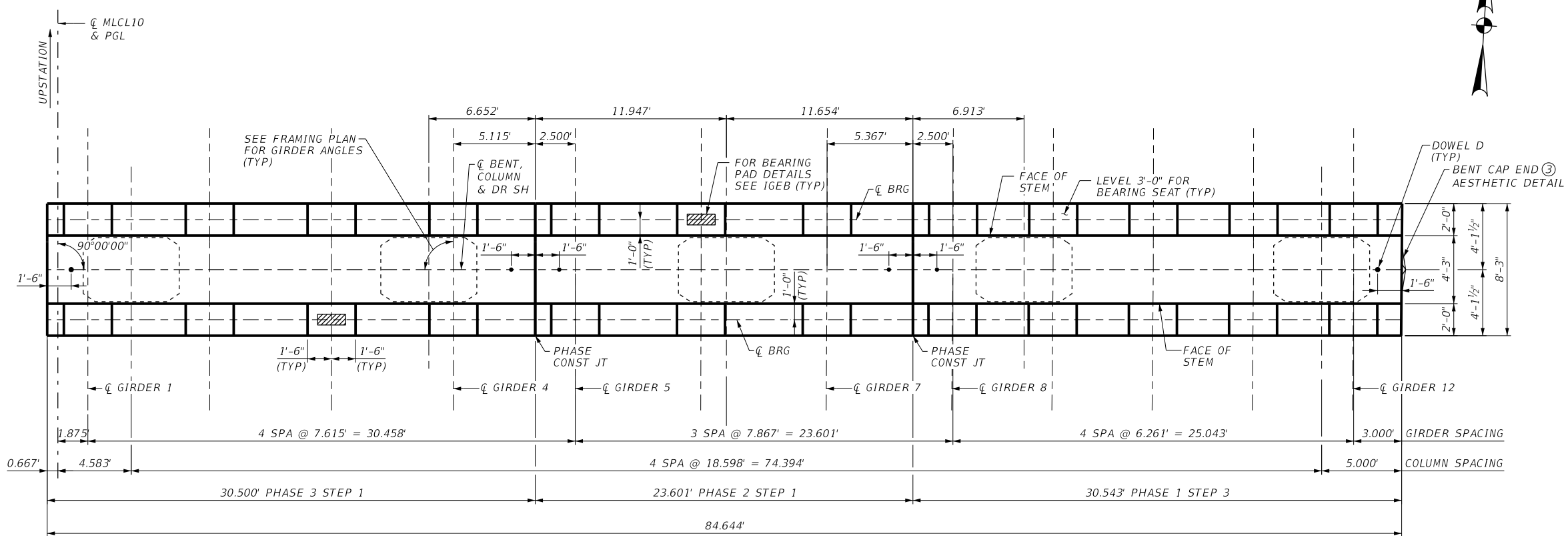


IH 10 AT US 69
 ABUTMENT DETAILS
 IH 10 EB MAINLANE
 AT US 69

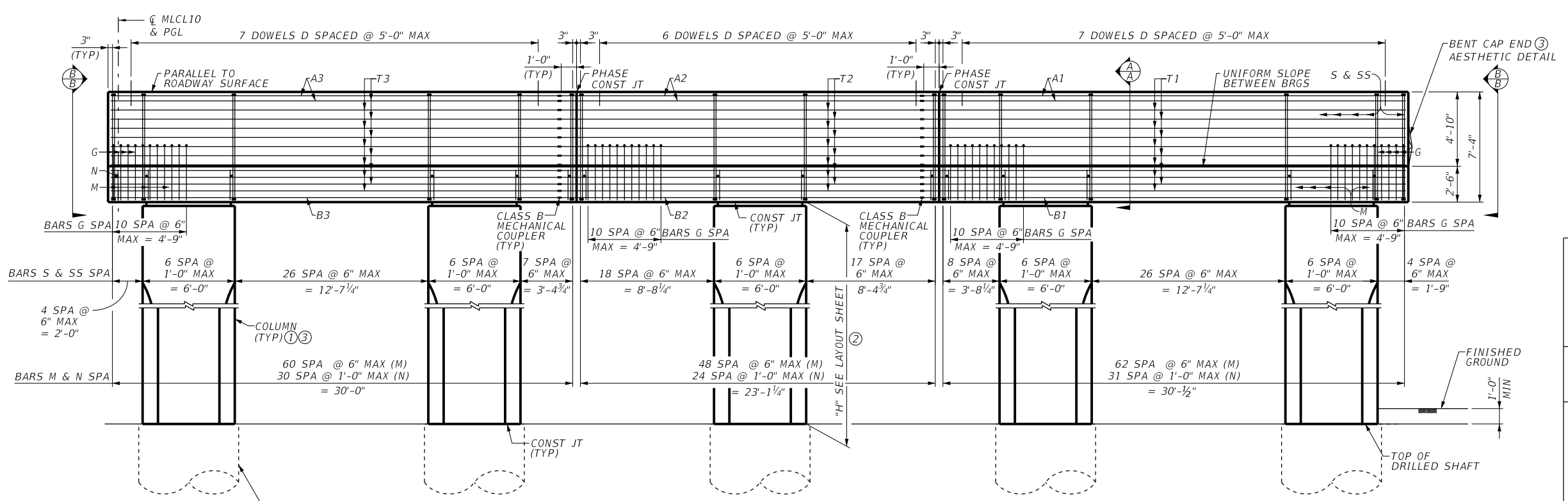
SHEET 1 OF 1

DW: CBF	CK: FB	DW: RF	CK: FB
CONT: 0028	SECT: 13	JOB: 135	HIGHWAY: IH 10
DIST: BMT	COUNTY: JEFFERSON	SHEET NO.: 1350	

DATE: 21-FEB-2024 19:33
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Bridg T (IH 10 EB Mainlanes over US 69 NBFR)\1351_10EB_MAINLANE_BENTPE_2.dgn



PLAN
 1/8" = 1'-0"

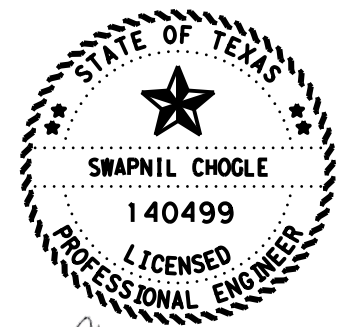


ELEVATION
 1/8" = 1'-0"

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS TYPE 1" SHEET FOR DETAILS.

- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

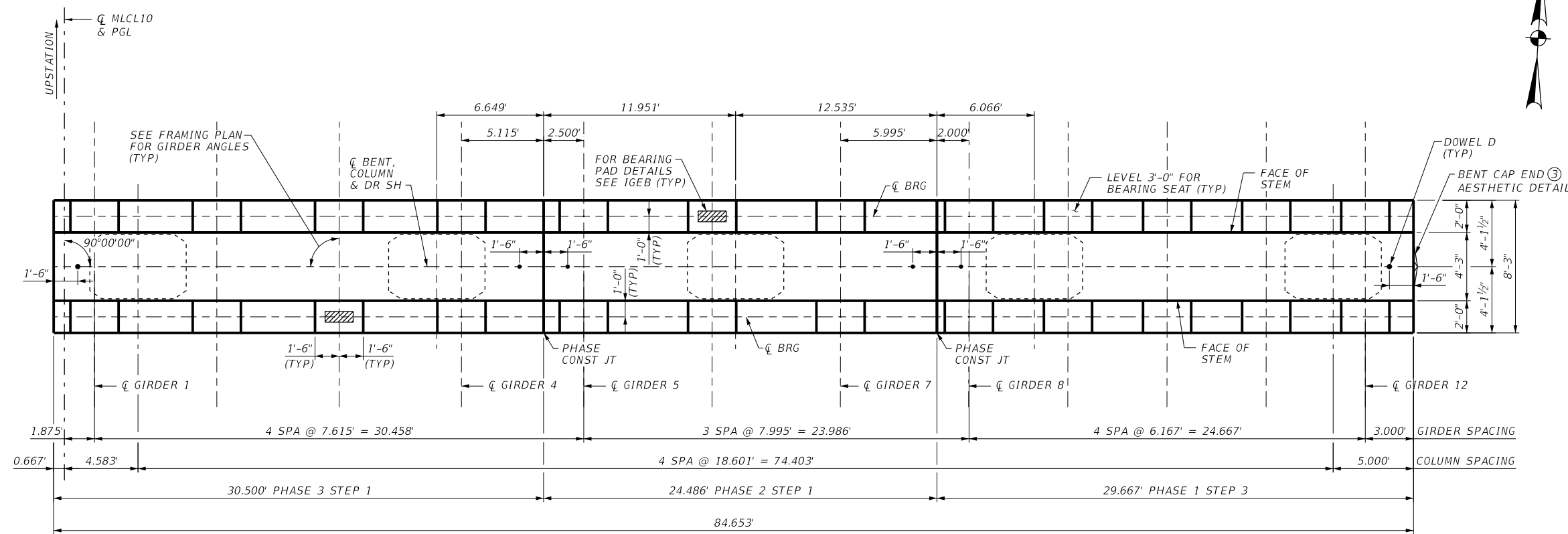


Texas Department of Transportation

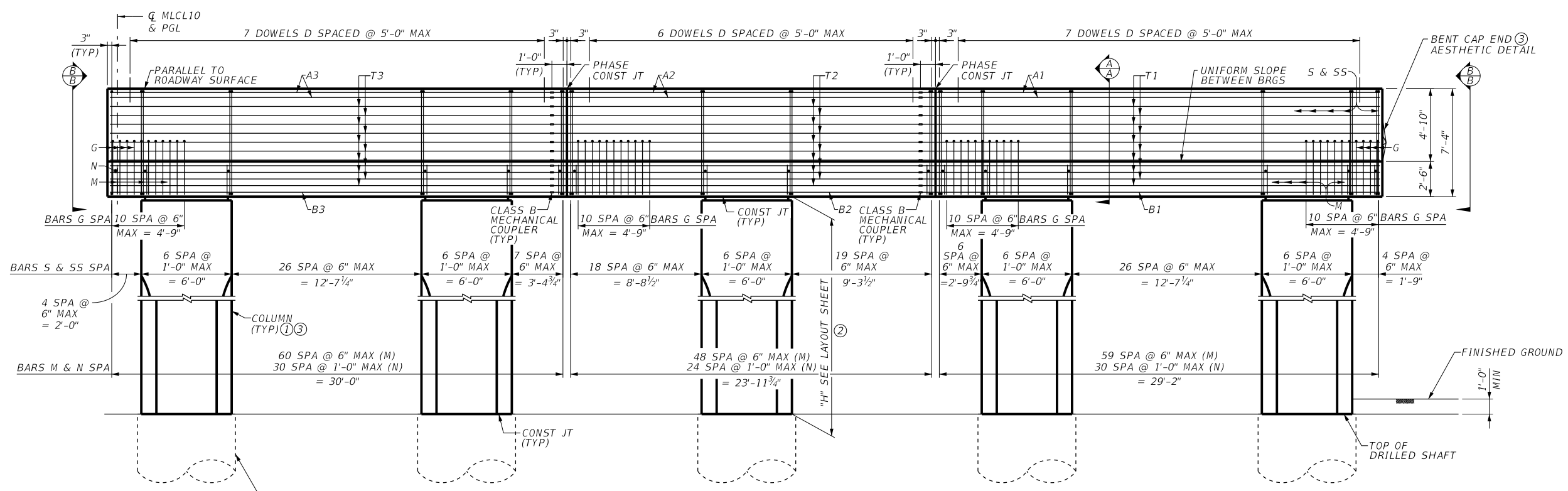
**IH 10 AT US 69
 BENT 2
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1			
DN: CBF	CK: CBF	DW: MAG	CK: CSU
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1351	

DATE: 21-FEB-2024 19:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1352_10EB_MAINLANE_BENTPE_3.dgn



PLAN
 1/8"=1'-0"

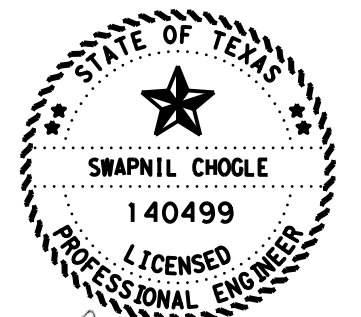


ELEVATION
 1/8"=1'-0"

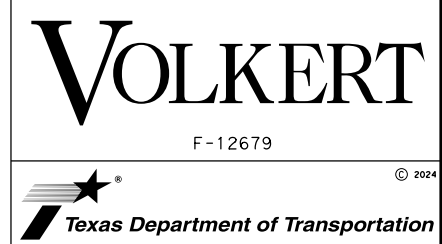
SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT. SEE "FOUNDATION DETAILS" TYPE "I" SHEET FOR DETAILS.

- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT G MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-T EE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
 HL93 LOADING



**IH 10 AT US 69
 BENT 3
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1

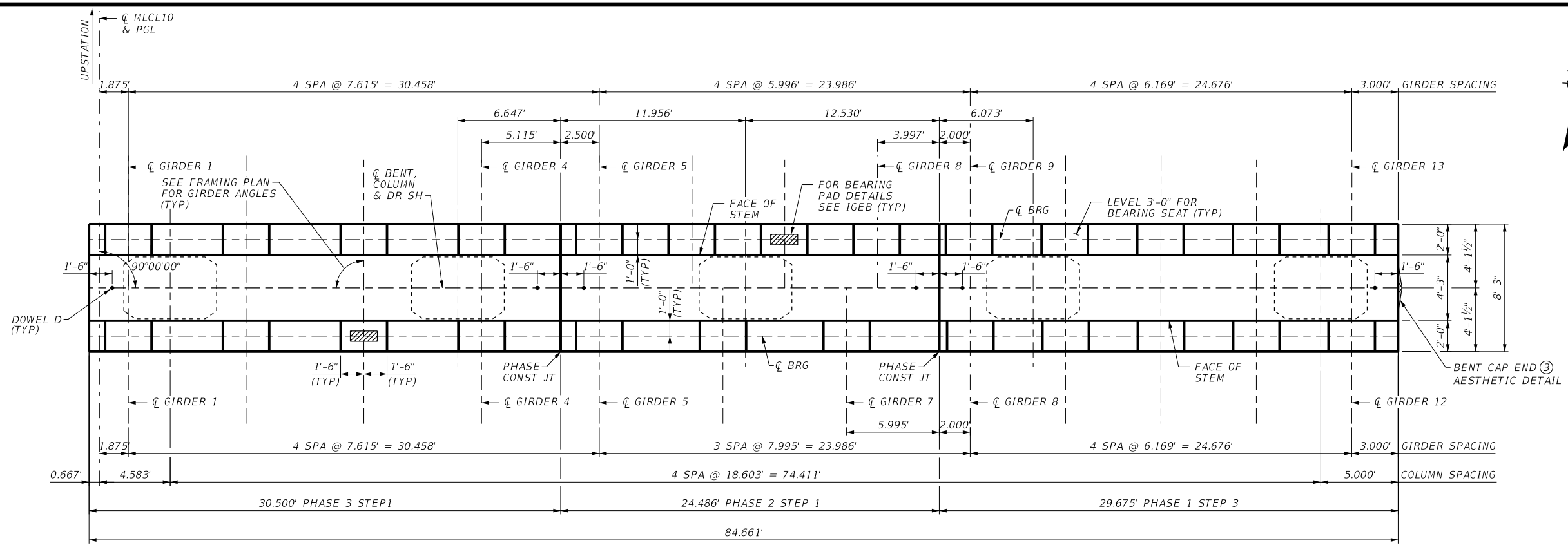
DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1352		

DATE: 21-FEB-2024 19:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Bridg I (I) 10 EB Mainlanes over US 69 NBFR)\1353_10EB_MAINLANE_BENTPE_4.dgn

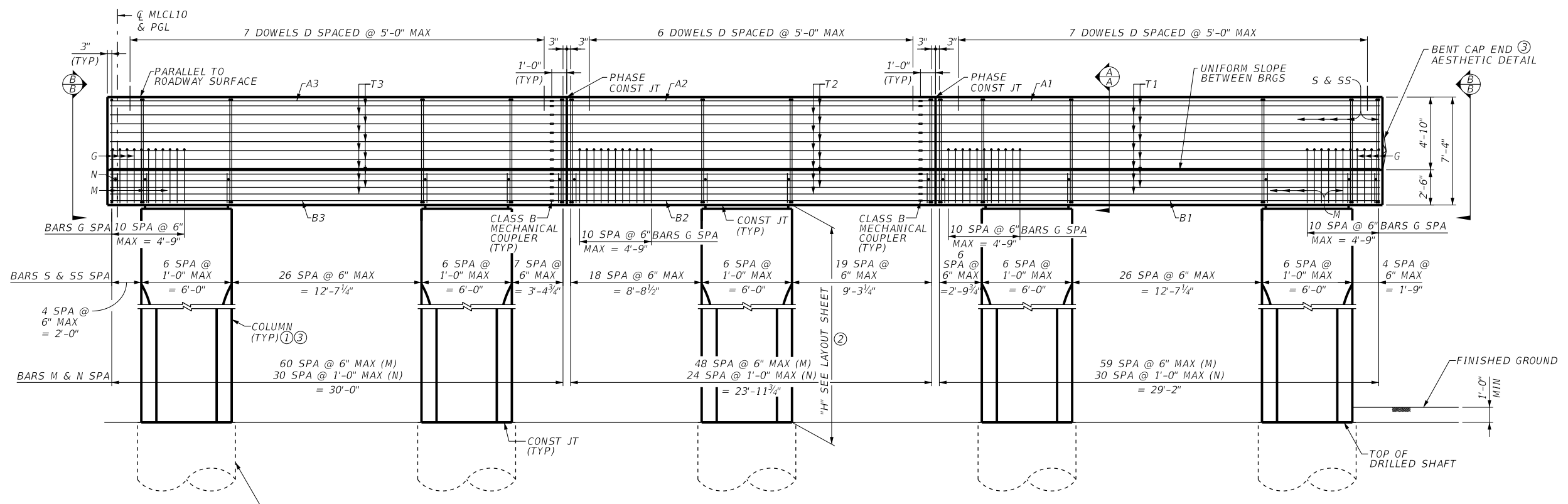


- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

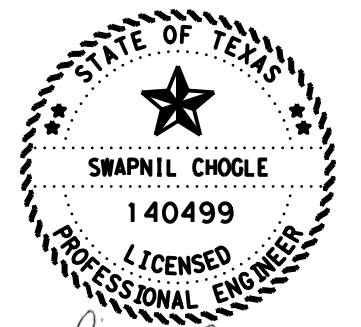
CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



PLAN
 $1/8"=1'-0"$



ELEVATION
 $1/8"=1'-0"$



Swapnil Chogle
 2/20/2024
 HL93 LOADING



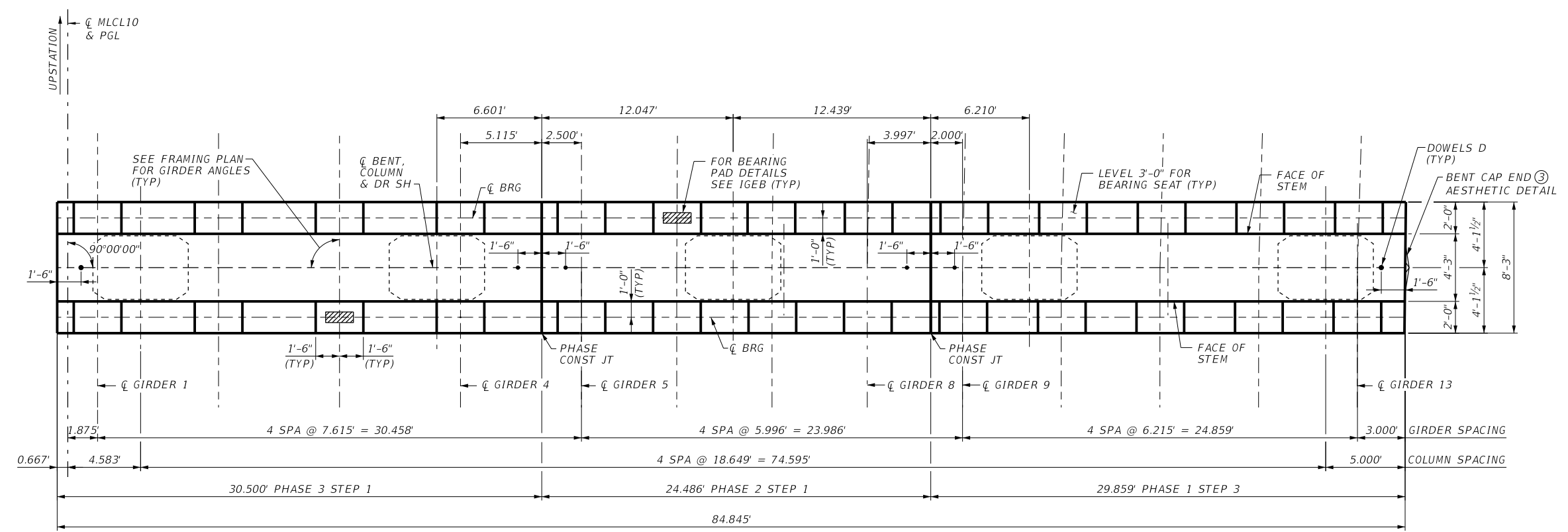
Texas Department of Transportation

**IH 10 AT US 69
 BENT 4
 IH 10 EB MAINLANE
 AT US 69**

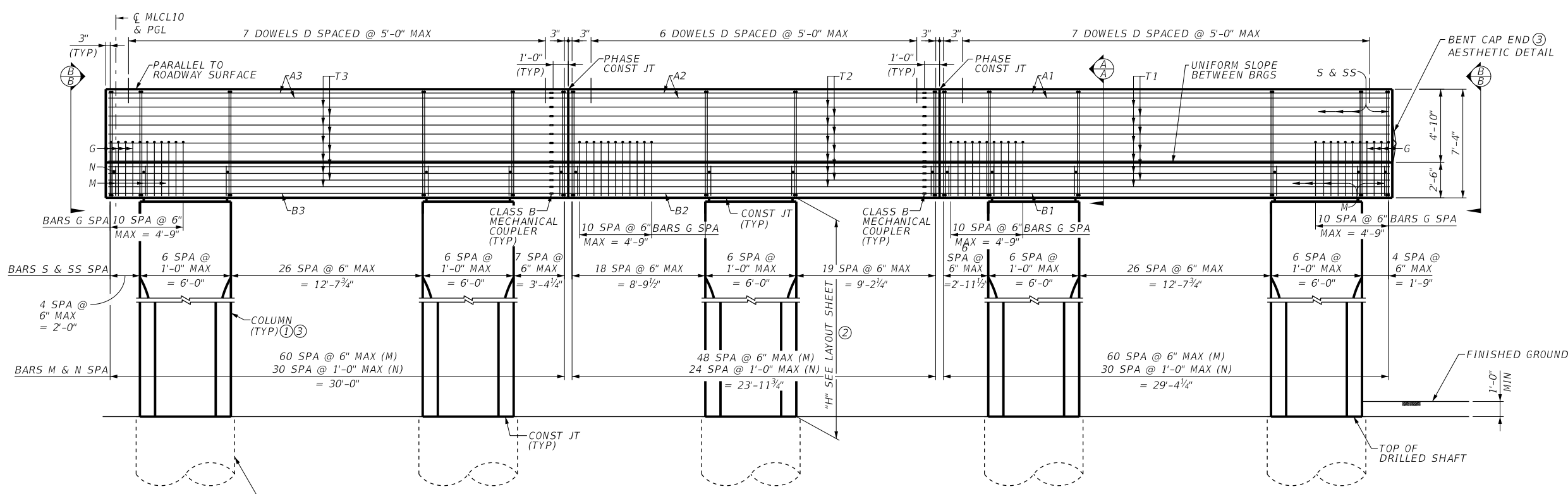
SHEET 1 OF 1

DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1353				

DATE: 21-FEB-2024 19:36
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (I) 10 EB Mainlanes over US 69 NBFR\1354_10EB_MAINLANE_BENTPE_5.dgn



PLAN
 1/8"=1'-0"

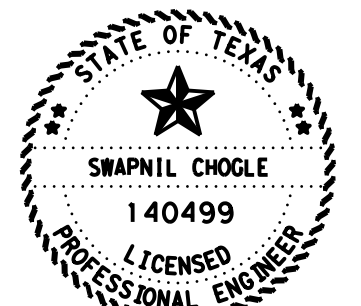


ELEVATION
 1/8"=1'-0"

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT. SEE "FOUNDATION DETAILS" TYPE 1" SHEET FOR DETAILS.

- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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**IH 10 AT US 69
 BENT 5
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1

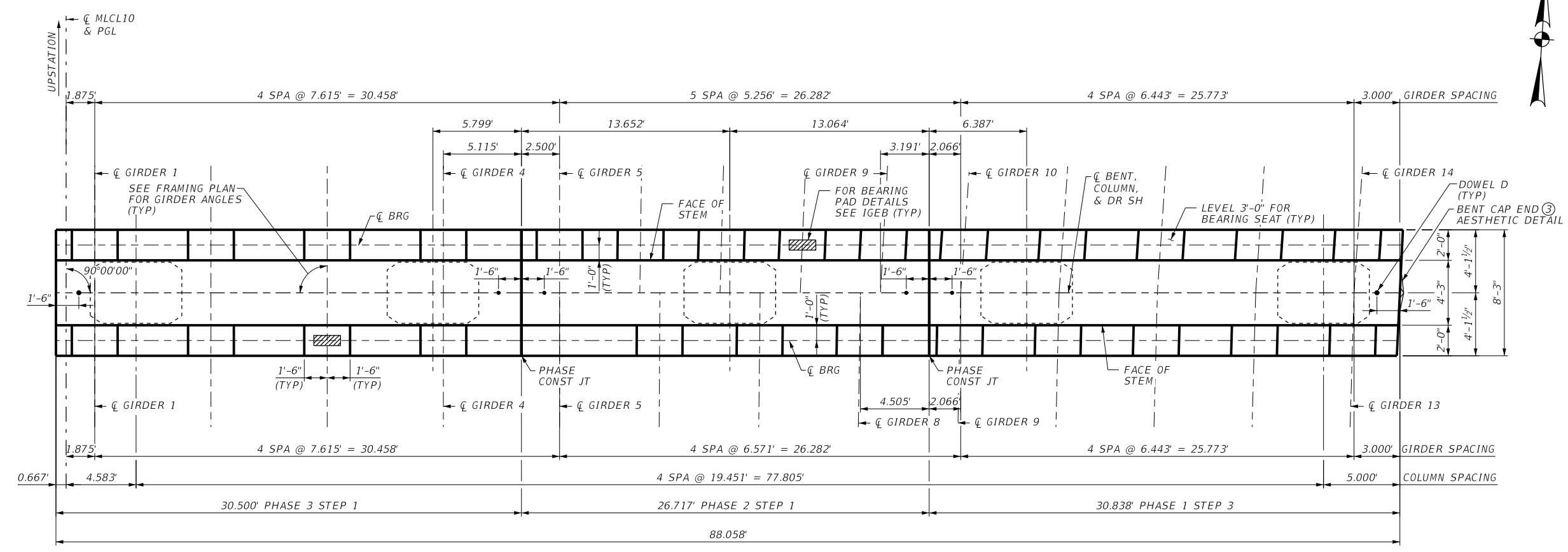
DN: CBF	CK: CBF	DW: MAG	CK: CSU
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1354	

DATE: 21-FEB-2024 19:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T (IH 10 EB Mainlanes over US 69 NBFR)\1355_10EB_MAINLANE_BENTPE_6.dgn

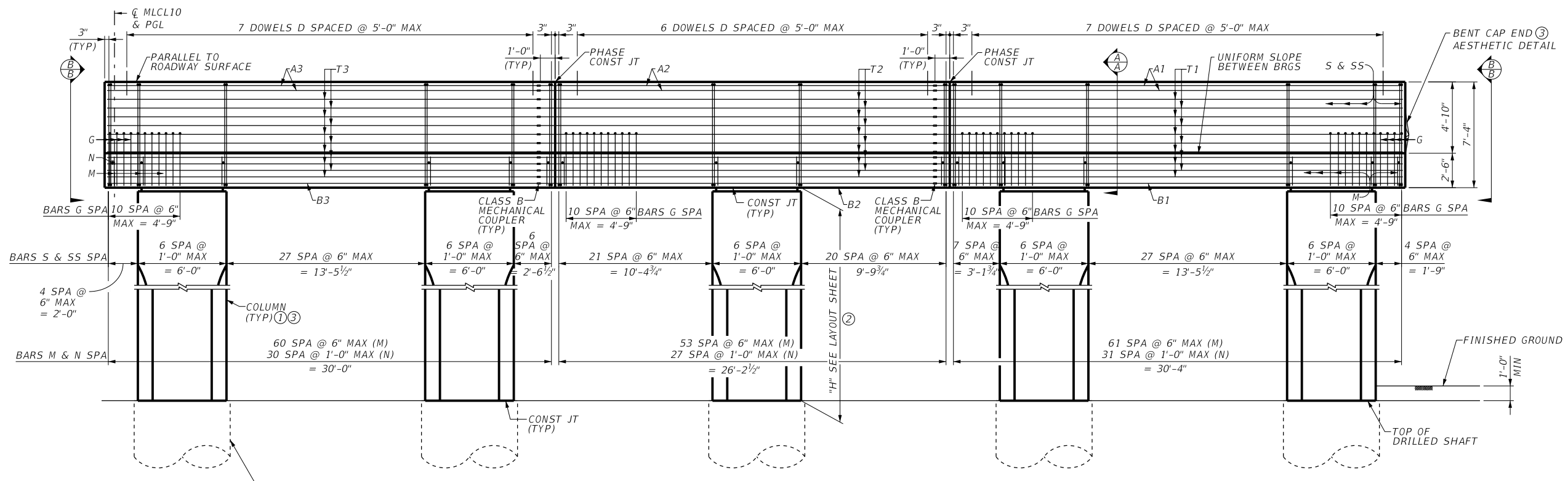


- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

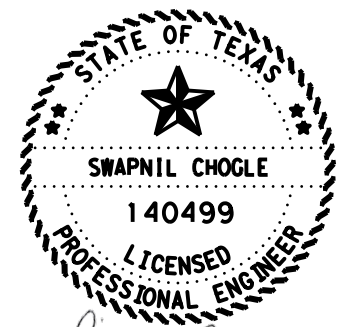


PLAN
 1/8" = 1'-0"

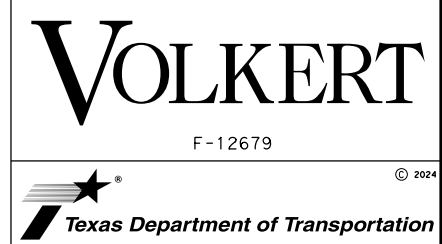


ELEVATION
 1/8" = 1'-0"

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS" TYPE I" SHEET FOR DETAILS.



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 2/20/2024
 HL93 LOADING



**IH 10 AT US 69
 BENT 6
 IH 10 EB MAINLANE
 AT US 69**

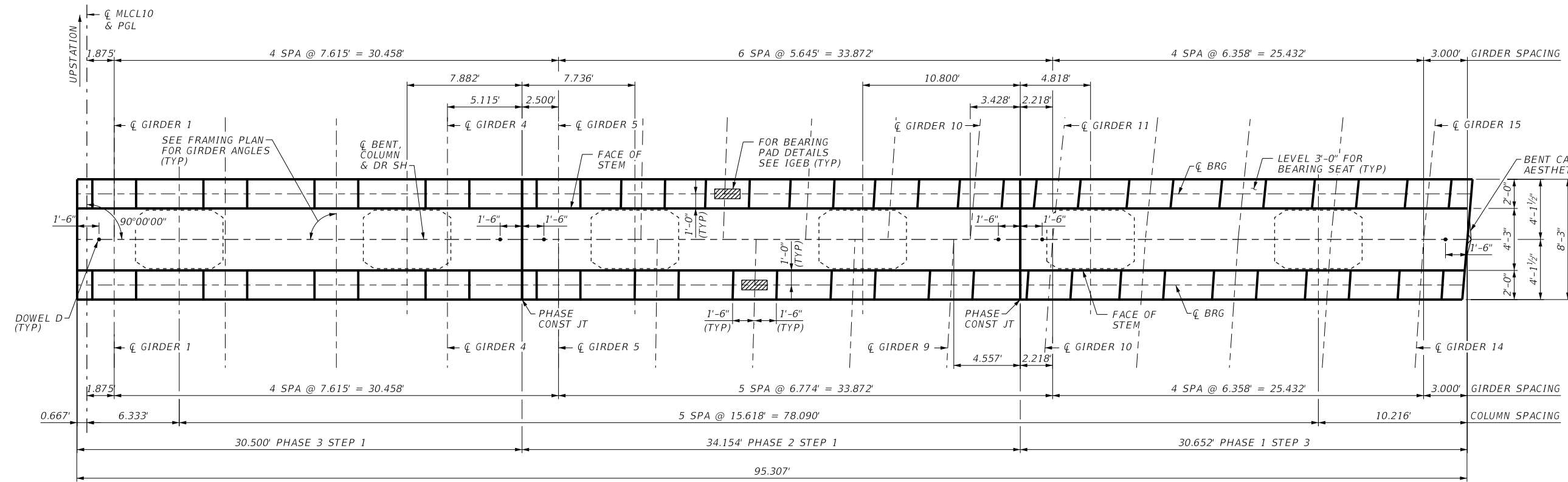
SHEET 1 OF 1

DN: CBF	CK: CBF	DW: MAG	CK: CSU
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1355	

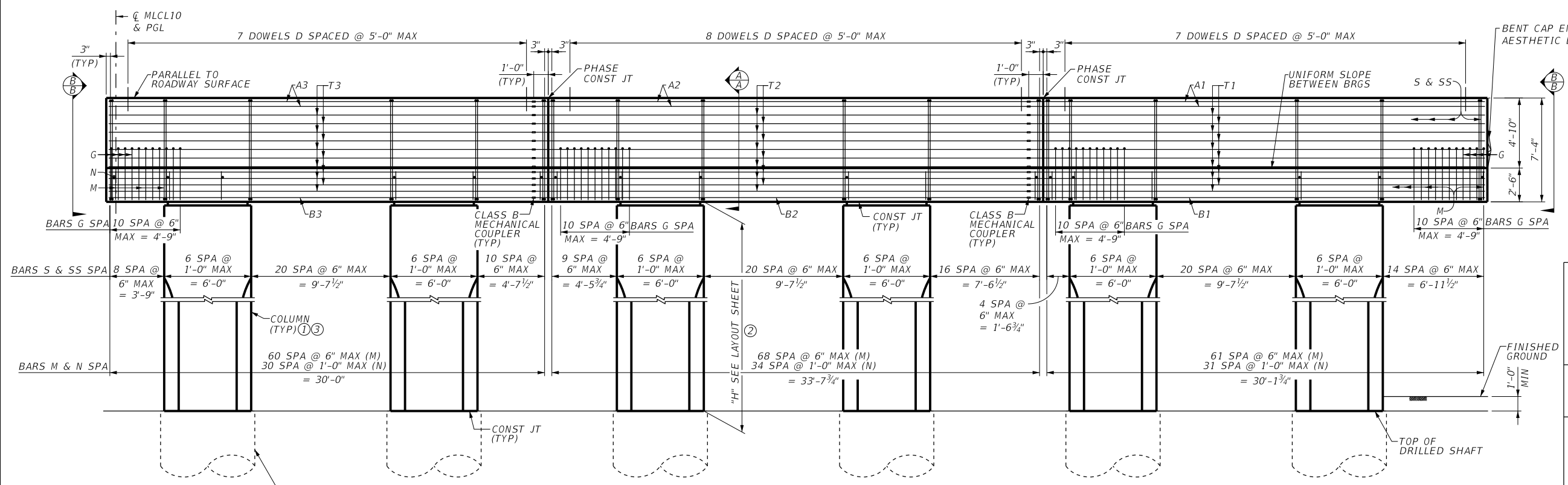
DATE: 21-FEB-2024 19:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10 EB Mainlanes over US 69 NBFR\1356_10EB_MAINLANE_BENTPE_7.dgn

- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL CL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

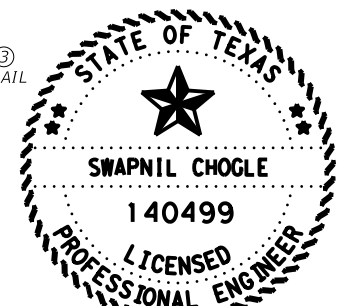
CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"



Swapnil Chogle
 2/20/2024

VOLKERT
 F-12679

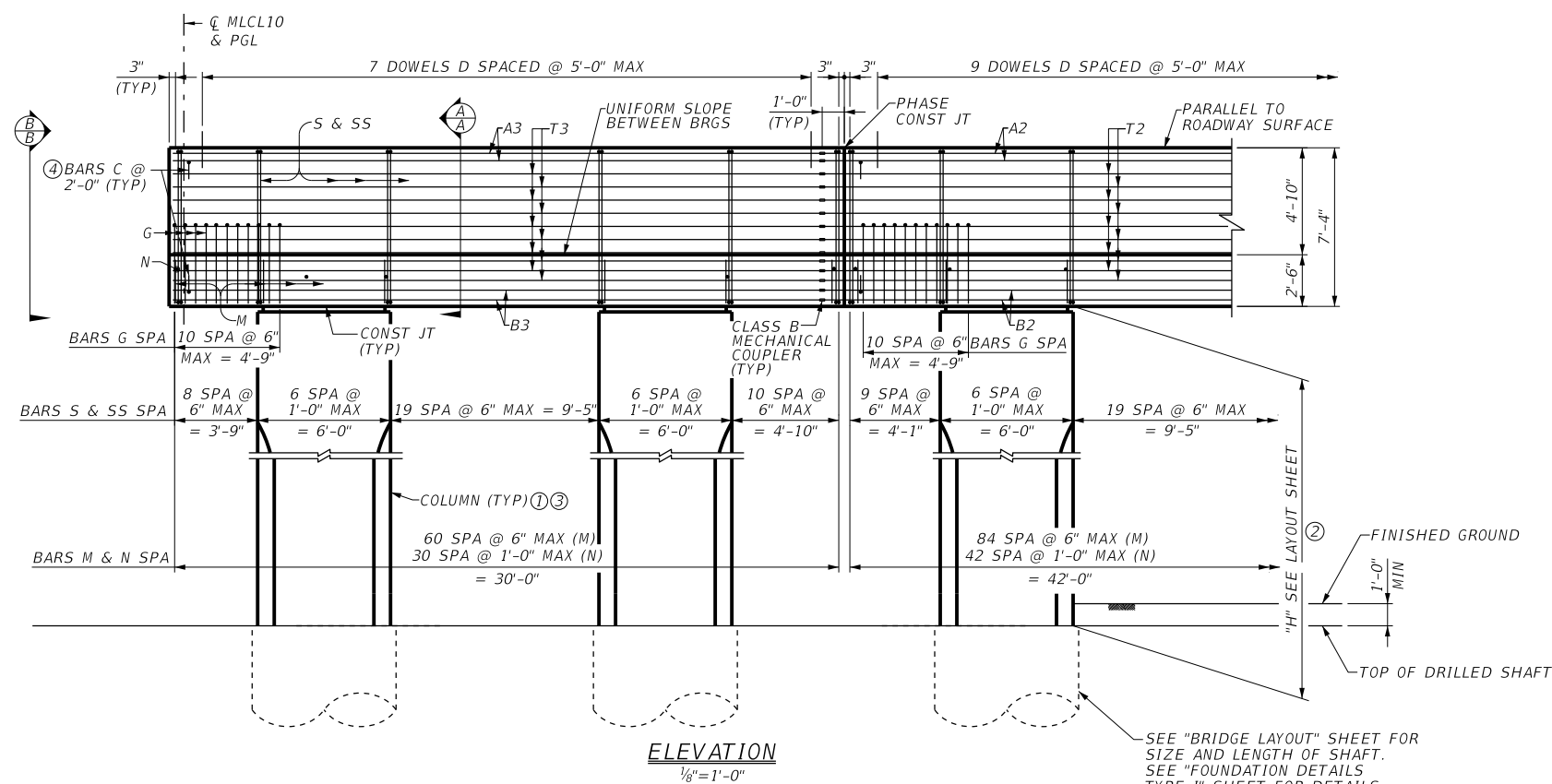
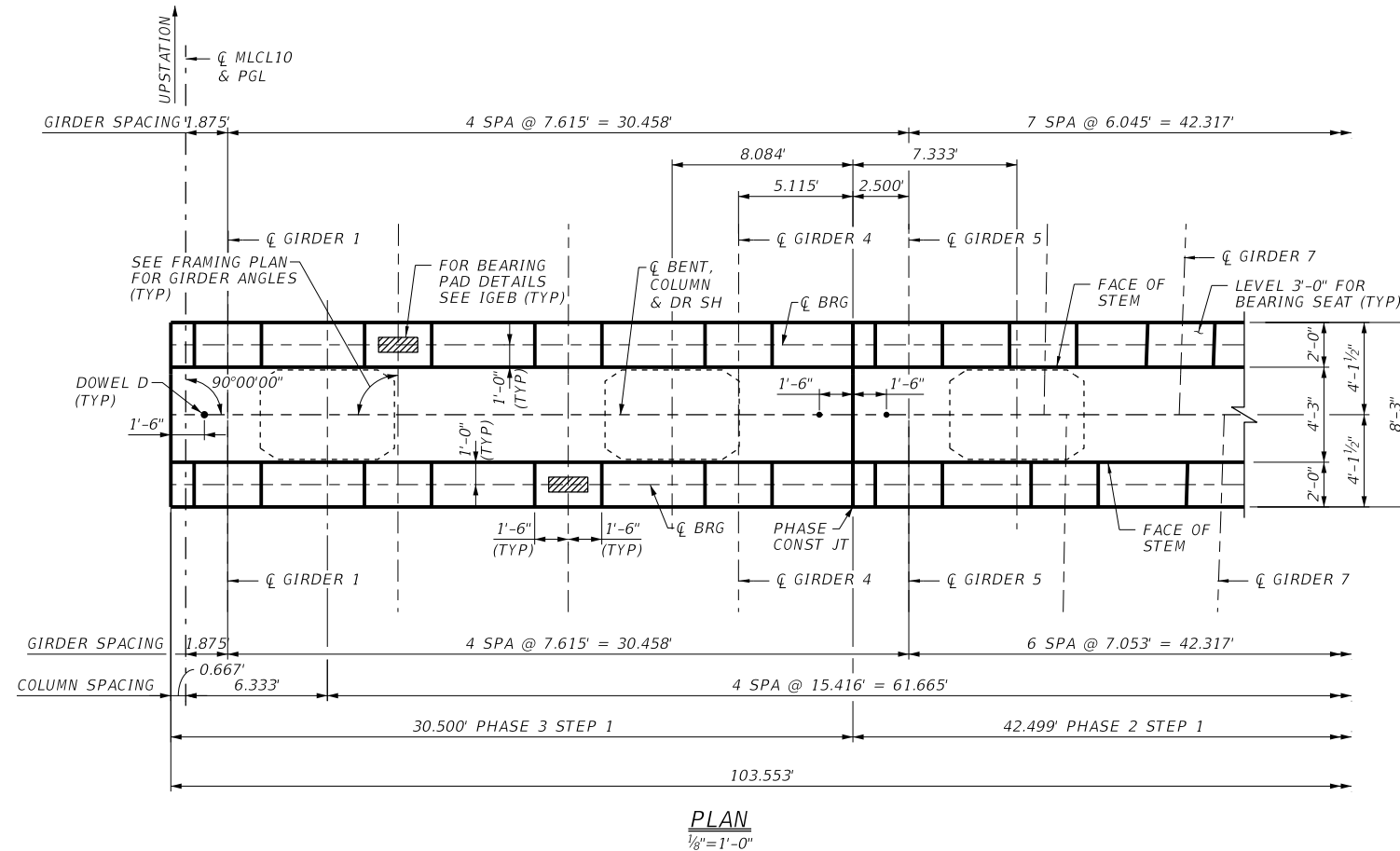
Texas Department of Transportation

**IH 10 AT US 69
 BENT 7
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1

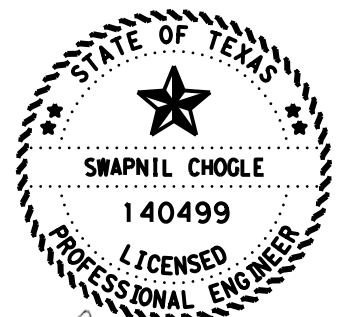
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CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1356		

DATE: 21-FEB-2024 19:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1357_10EB_MAINLANE_BENTPE_8_1.dgn



- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP AND PHASE LINE.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024

HL93 LOADING

VOLKERT
 F-12679

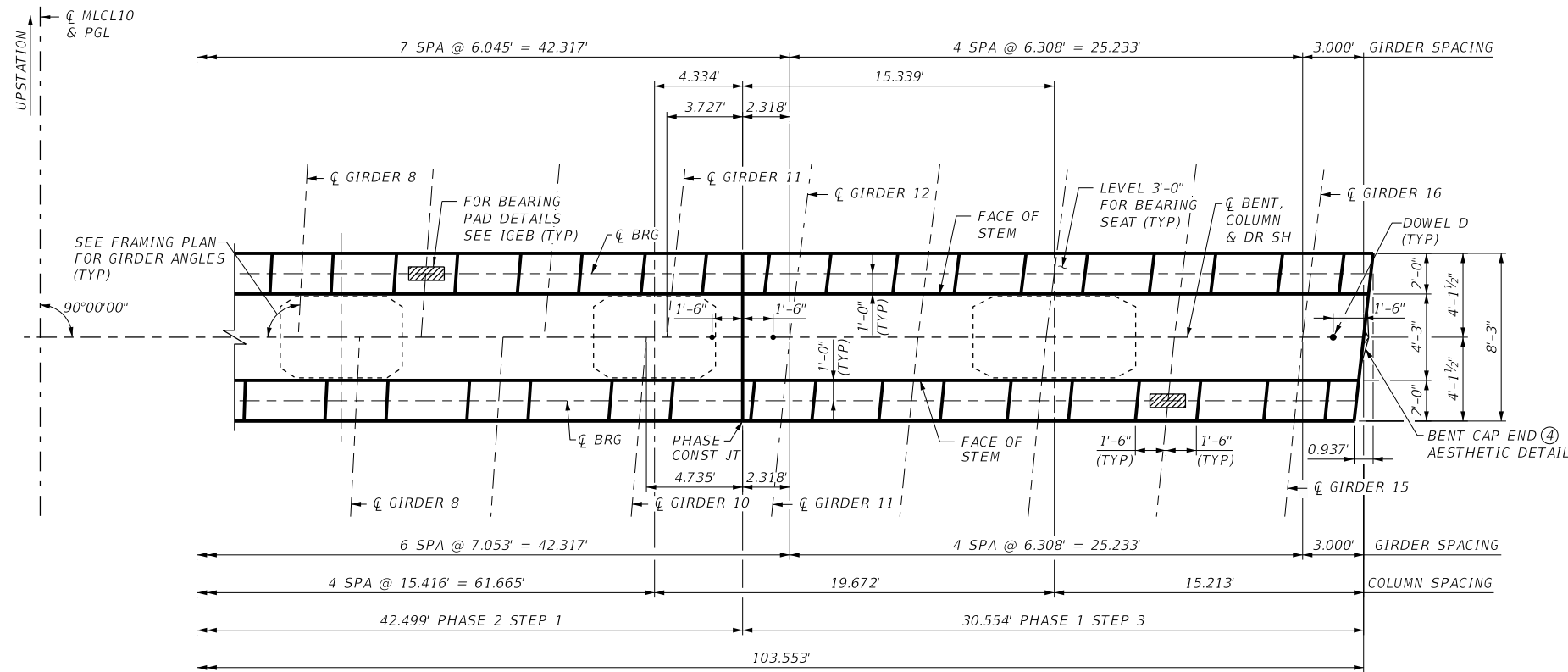
Texas Department of Transportation

IH 10 AT US 69
 BENT 8
 IH 10 EB MAINLANE
 AT US 69

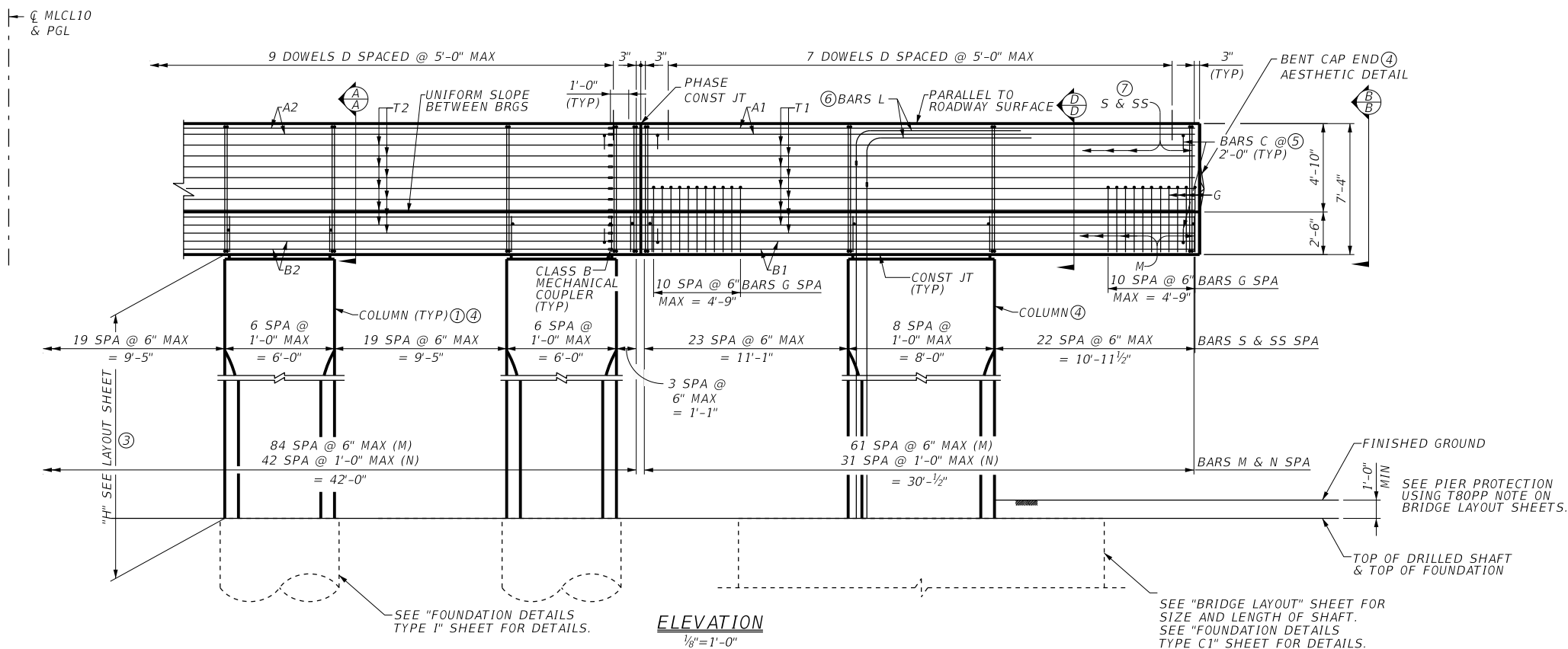
SHEET 1 OF 2

DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1357			

DATE: 21-FEB-2024 19:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1358_10EB_MAINLANE_BENTPE_8_2.dgn



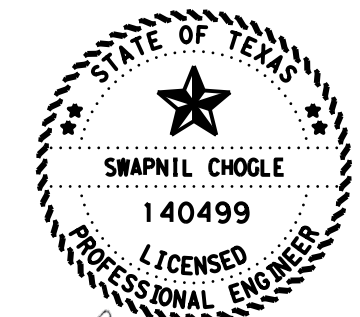
PLAN
 1/8" = 1'-0"



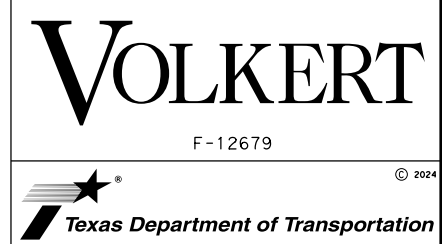
ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② SEE "COLUMN TYPE H DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ③ VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ④ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP AND PHASE LINE.
- ⑥ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".
- ⑦ FLARE LAST THREE S AND SS BARS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
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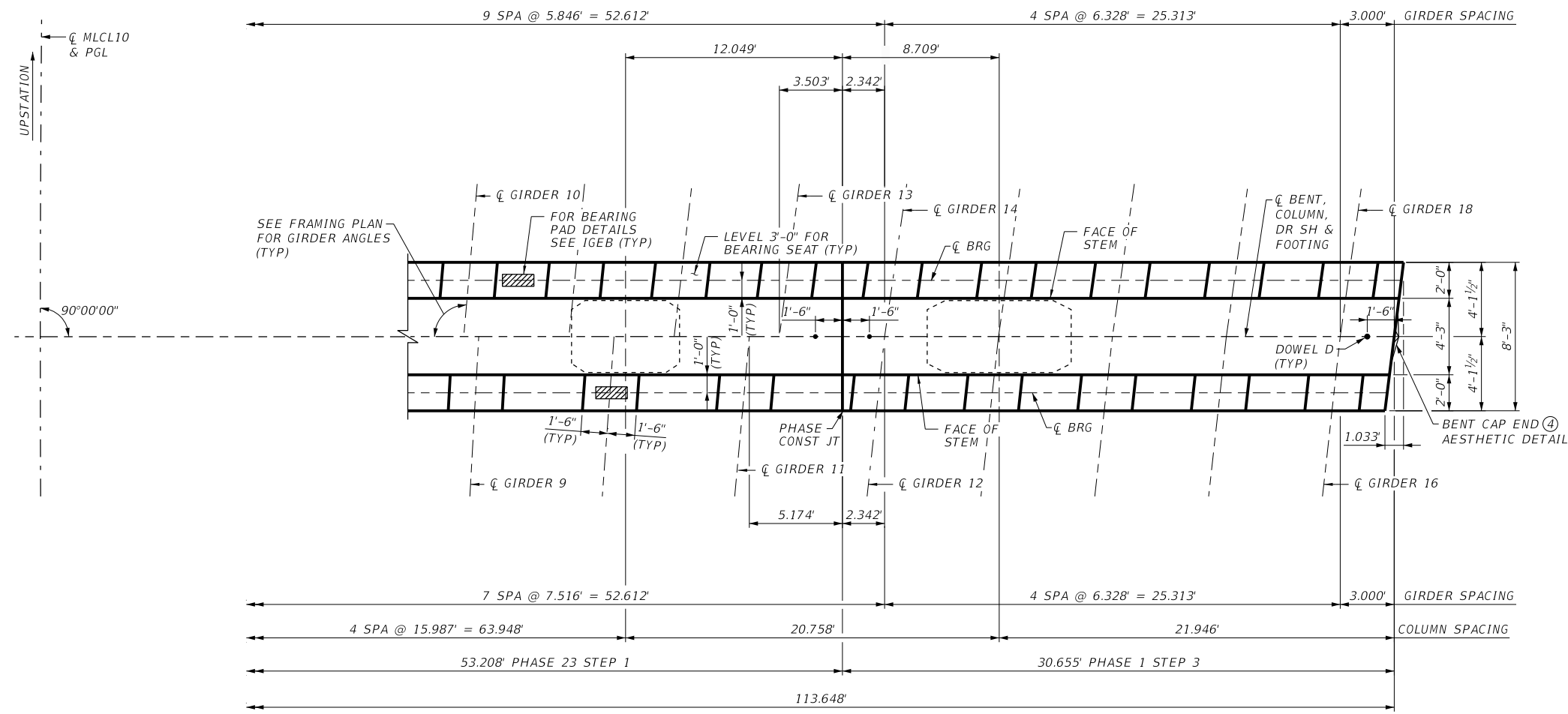


IH 10 AT US 69
 BENT 8
 IH 10 EB MAINLANE
 AT US 69

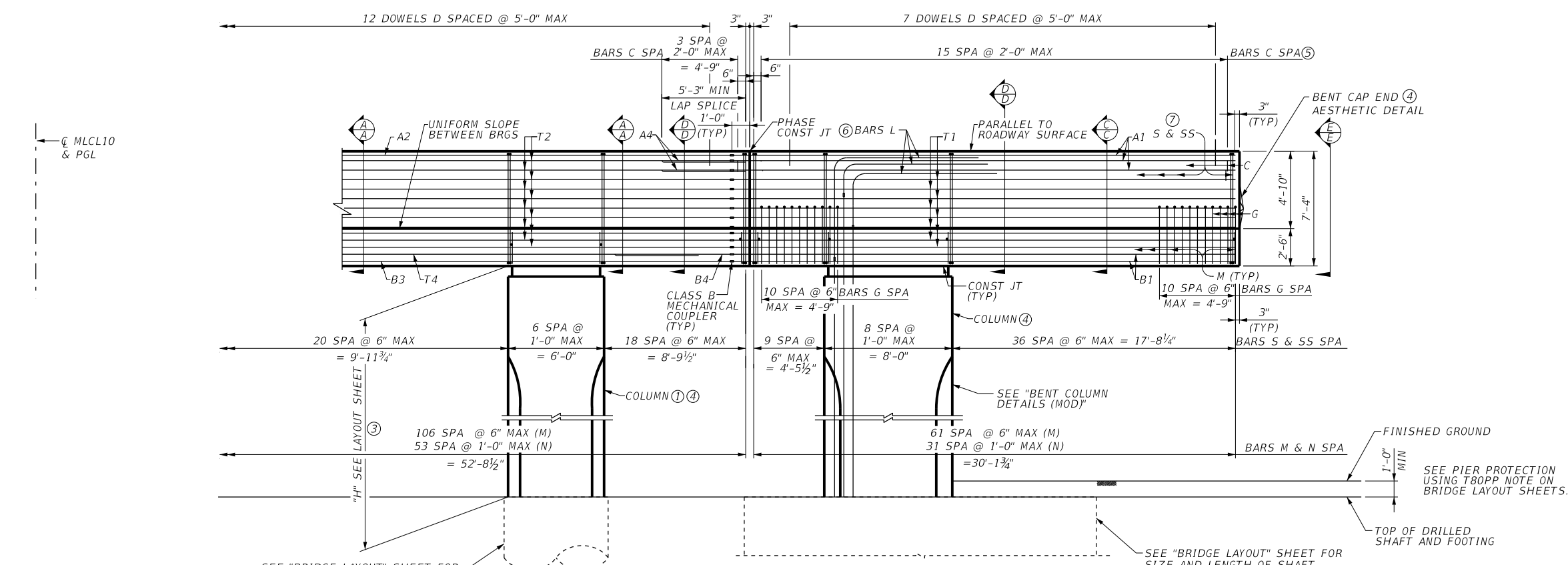
SHEET 2 OF 2

DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1358			

DATE: 8-MAR-2024 19:36
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan Set\1. Bridge\1360_10EB_Mainlane_BentPE_9_2.dgn



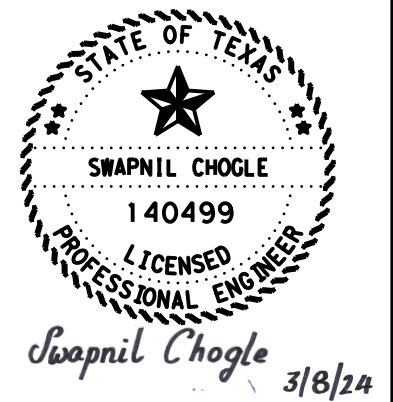
PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② SEE "COLUMN TYPE H DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ③ VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ④ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP AND PHASE LINE.
- ⑥ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".
- ⑦ FLARE LAST THREE S AND SS BARS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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**IH 10 AT US 69
 BENT 9
 IH 10 EB MAINLANE
 AT US 69**

SHEET 2 OF 2

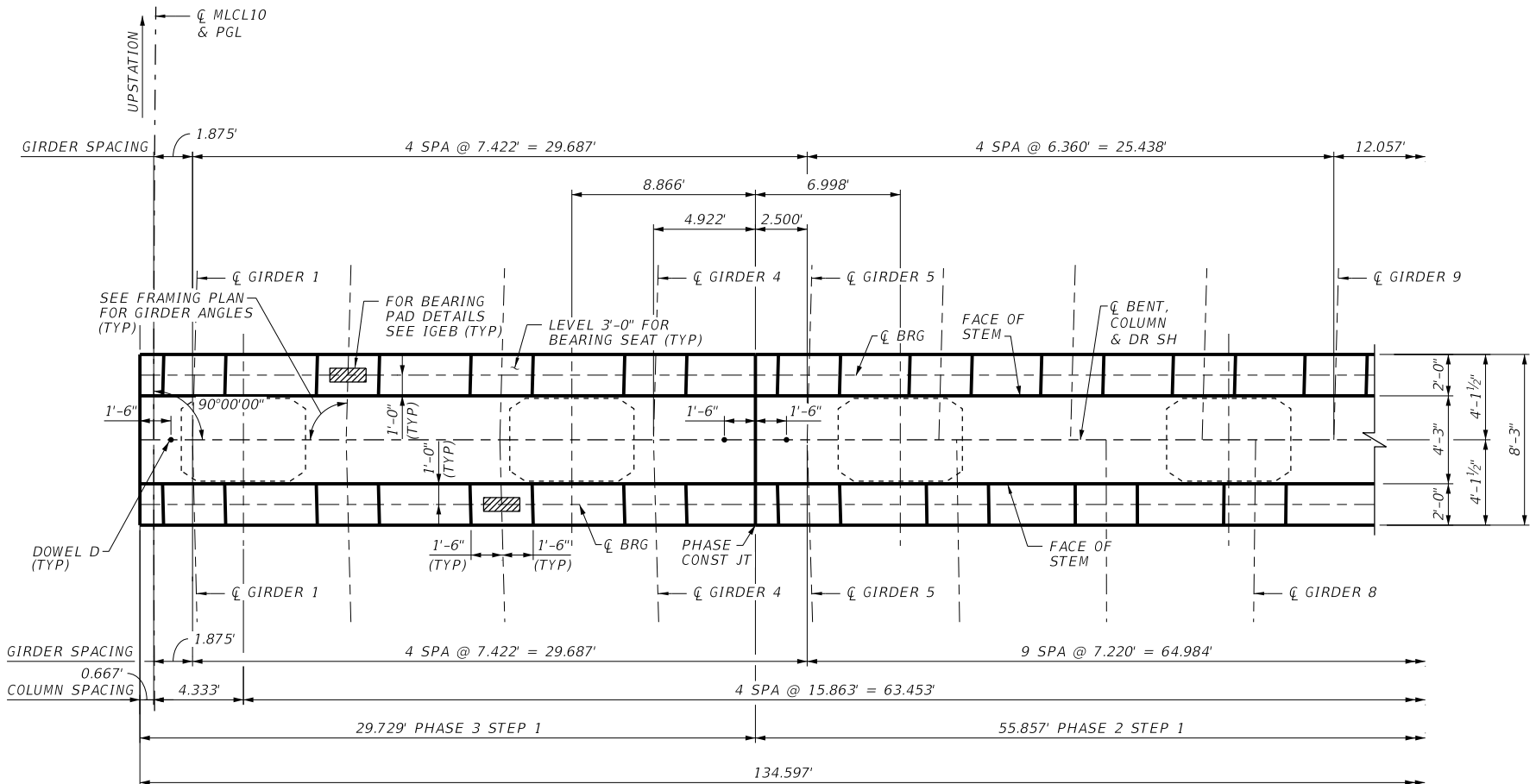
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CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:		COUNTY:		SHEET NO.:			
	BMT		JEFFERSON				1360

SEE PIER PROTECTION USING T80PP NOTE ON BRIDGE LAYOUT SHEETS.
 FINISHED GROUND
 TOP OF DRILLED SHAFT AND FOOTING
 1'-0" MIN

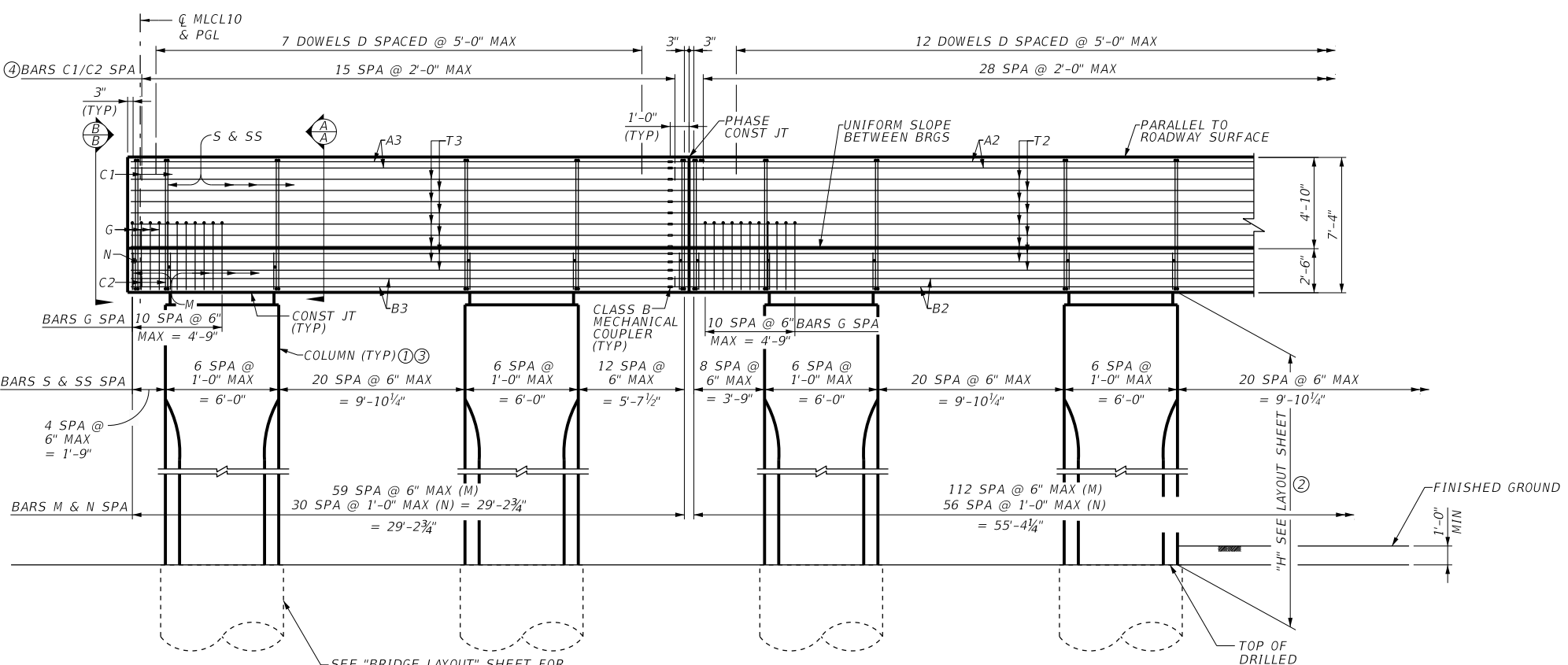
SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT. SEE "FOUNDATION DETAILS TYPE C2" SHEET FOR DETAILS.

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT. SEE "FOUNDATION DETAILS TYPE I" SHEET FOR DETAILS (TYP).

DATE: 21-FEB-2024 19:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Plan_Bent\10 EB Mainlane_Bent\PE_10_1.dgn



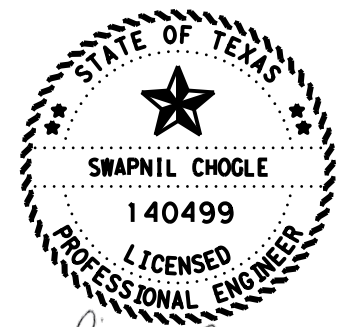
PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ PLACE FIRST BAR C1/C2 AT SECOND BAR S FROM END OF CAP AND PHASE JOINTS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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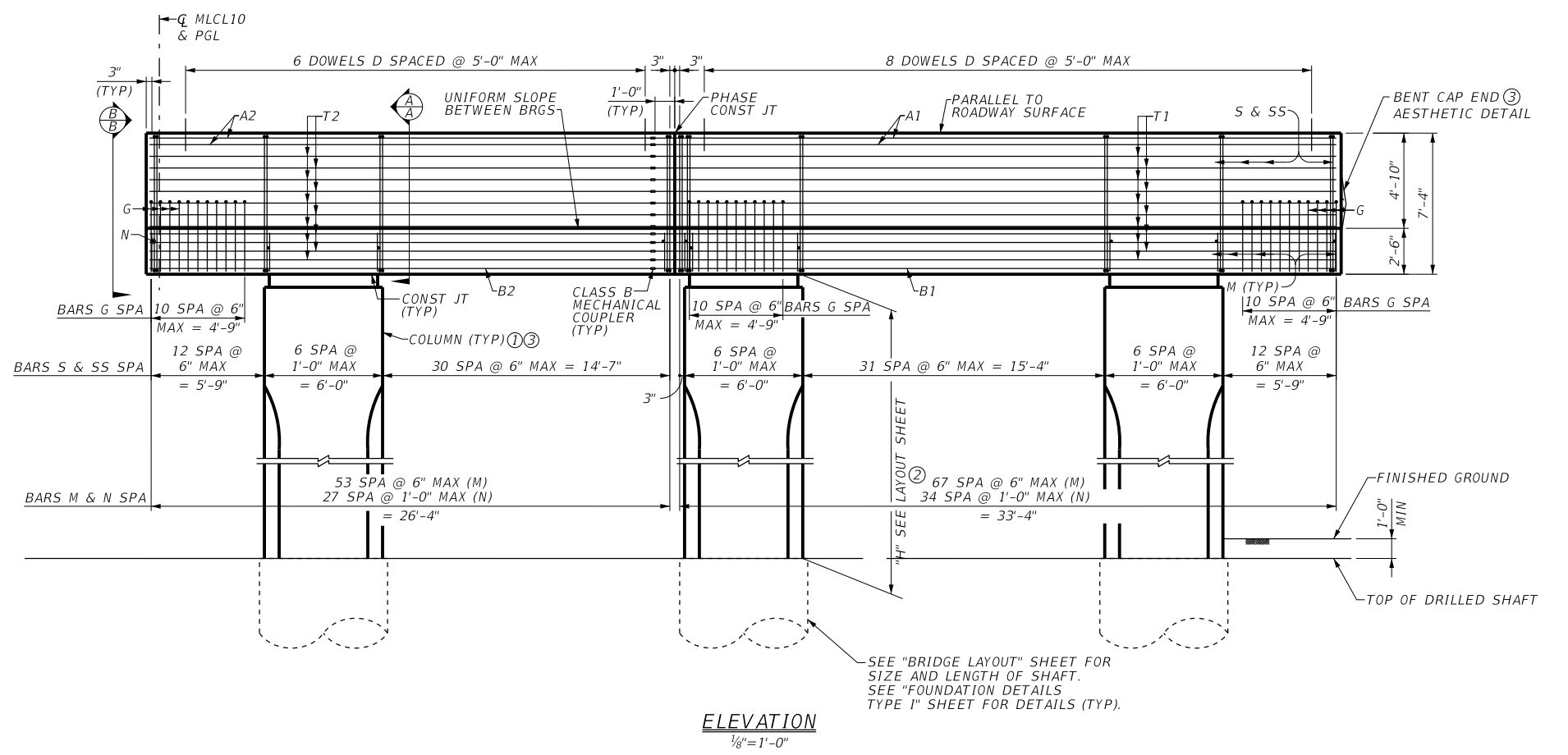
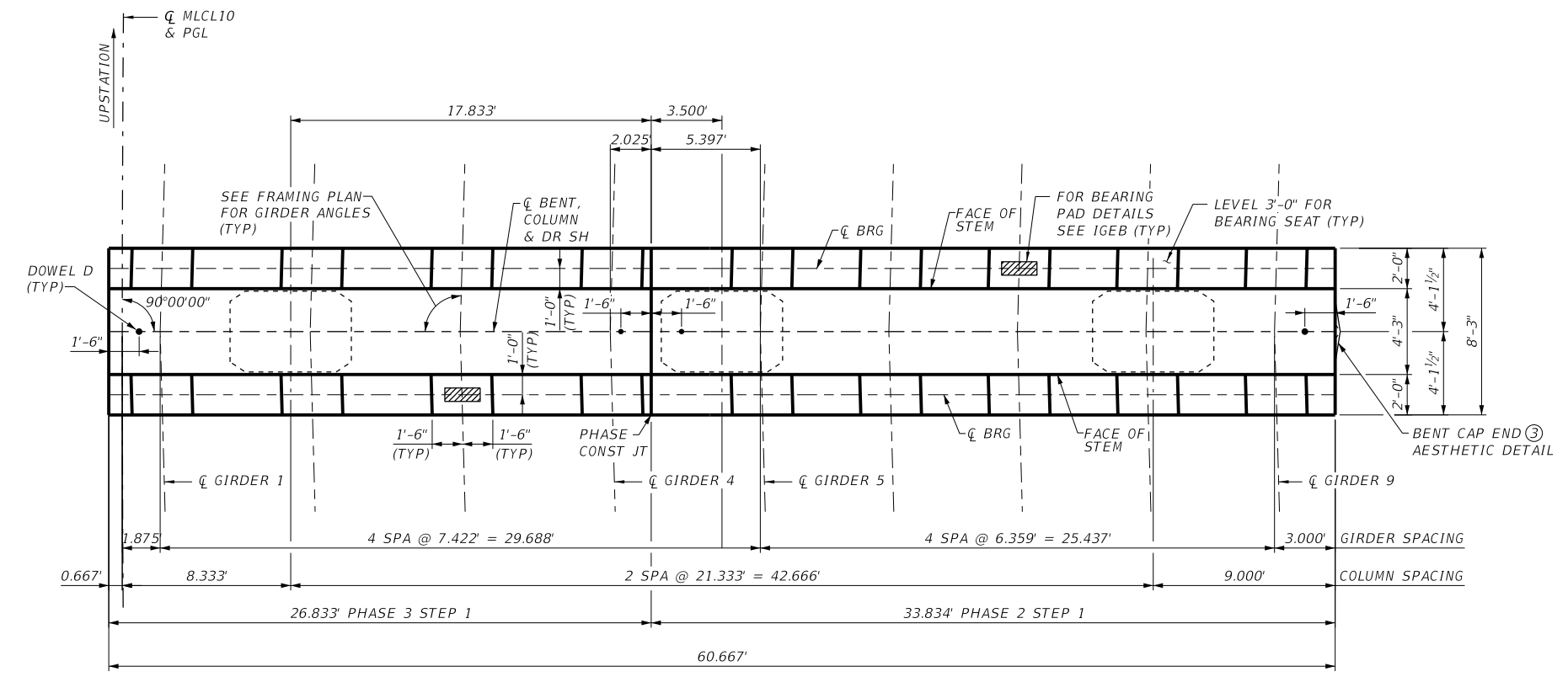


**IH 10 AT US 69
 BENT 10
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 2

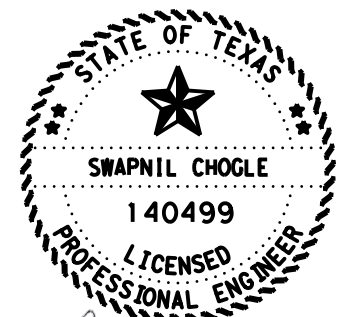
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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:			1361

DATE: 21-FEB-2024 19:34
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T (IH 10 EB Mainlanes over US 69 NBFR)\1363_10EB_MAINLANE_BENTPE_11.dgn

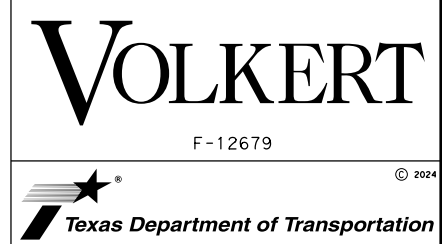


- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

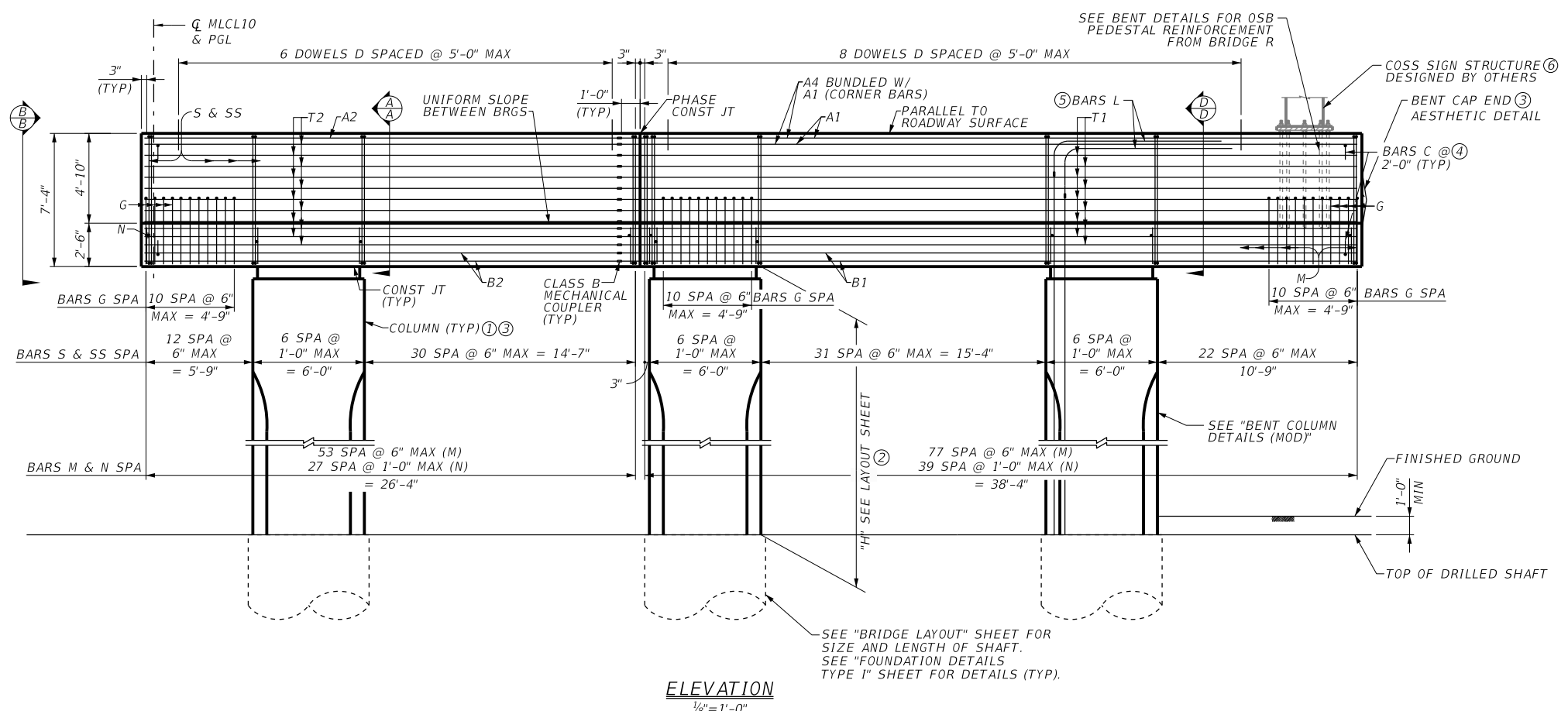
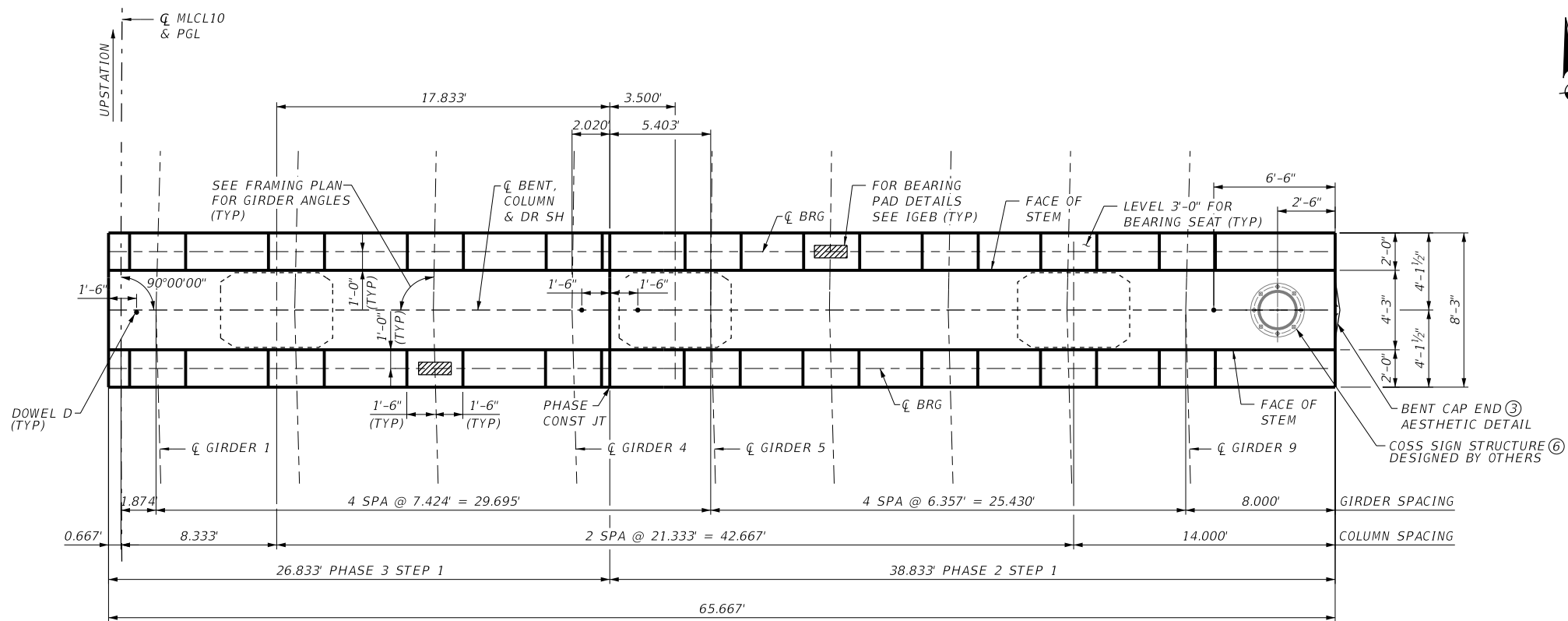


**IH 10 AT US 69
 BENT 11
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1

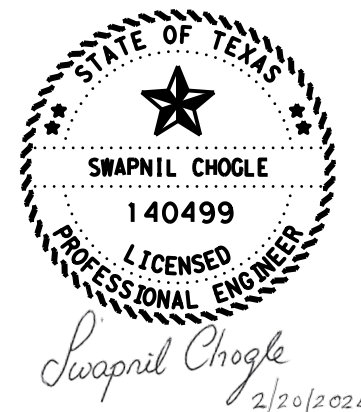
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DIST: BMT	COUNTY: JEFFERSON	SHEET NO.: 1363	

DATE: 21-FEB-2024 19:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\BridgE.T (IH 10 EB Mainlanes over US 69 NBFR)\1364_10EB_MAINLANE_BENTPE_12.dgn



- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP AND PHASE LINE.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".
- ⑥ CONTRACTOR MAY ADJUST BARS A AS NEEDED FOR PLACEMENT OF ANCHOR BOLTS FOR CANTILEVER OVERHEAD SIGN SUPPORT FOUNDATION.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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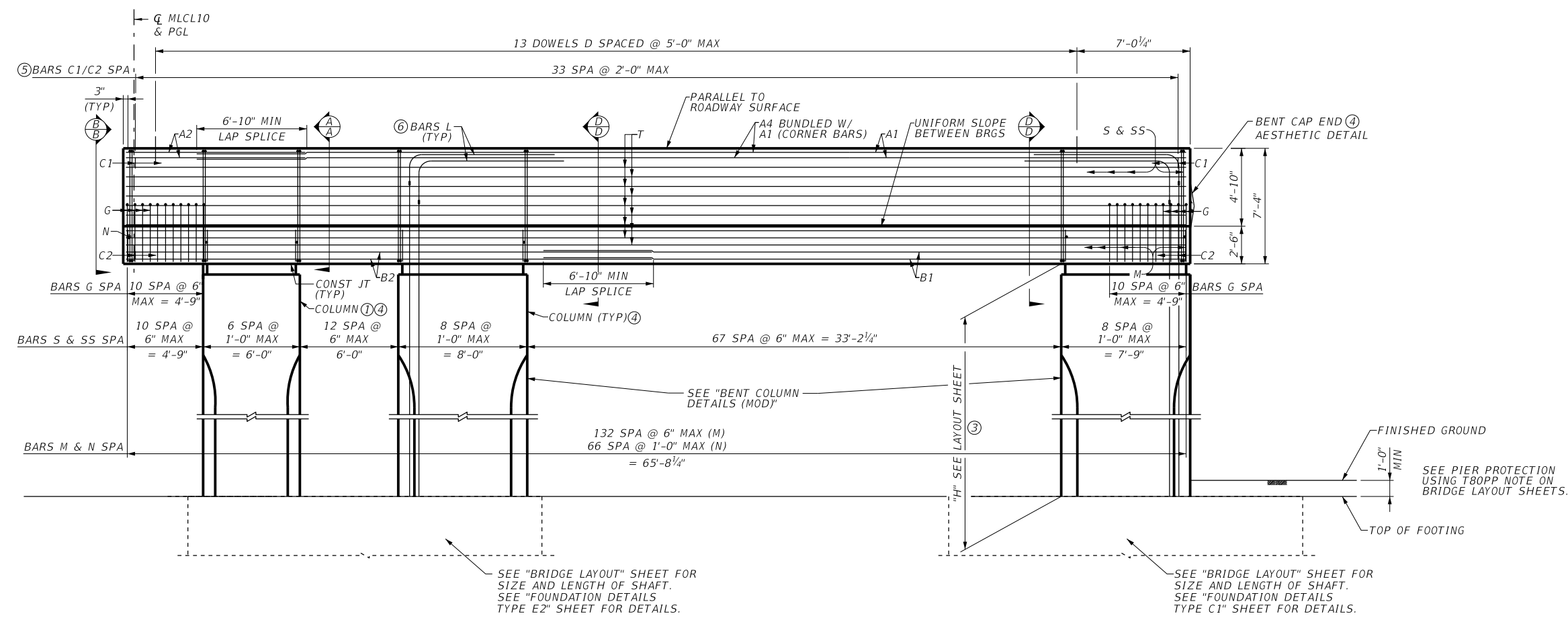
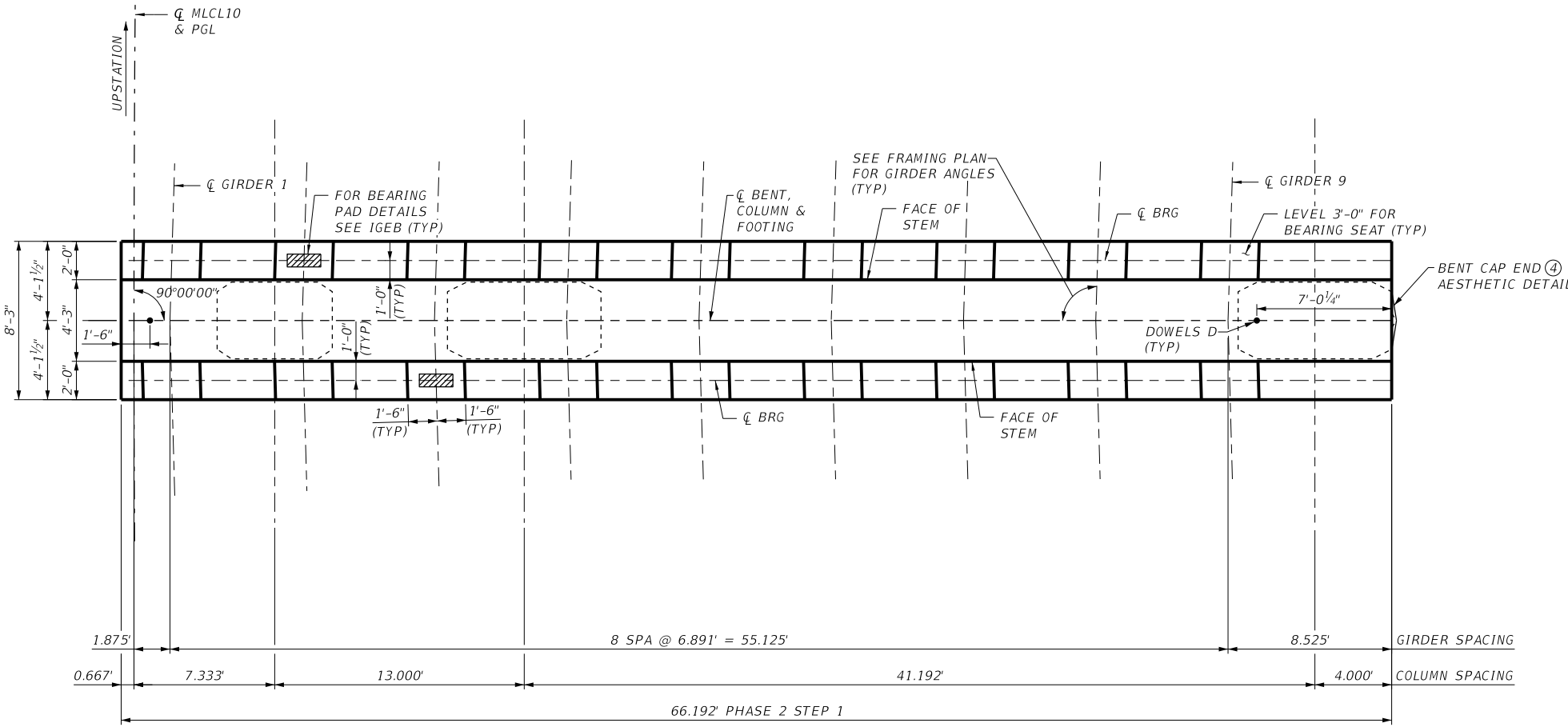
Texas Department of Transportation

**IH 10 AT US 69
 BENT 12
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1

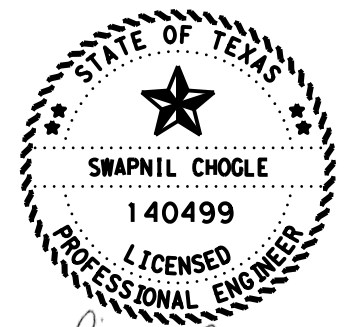
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CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1364		

DATE: 21-FEB-2024 19:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1366_10EB_MainLANE_BENTPE_14.dgn



- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② SEE "COLUMN TYPE H DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ③ VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ④ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ PLACE FIRST CAP BAR C1/C2 AT SECOND BAR S FROM END OF CAP.
- ⑥ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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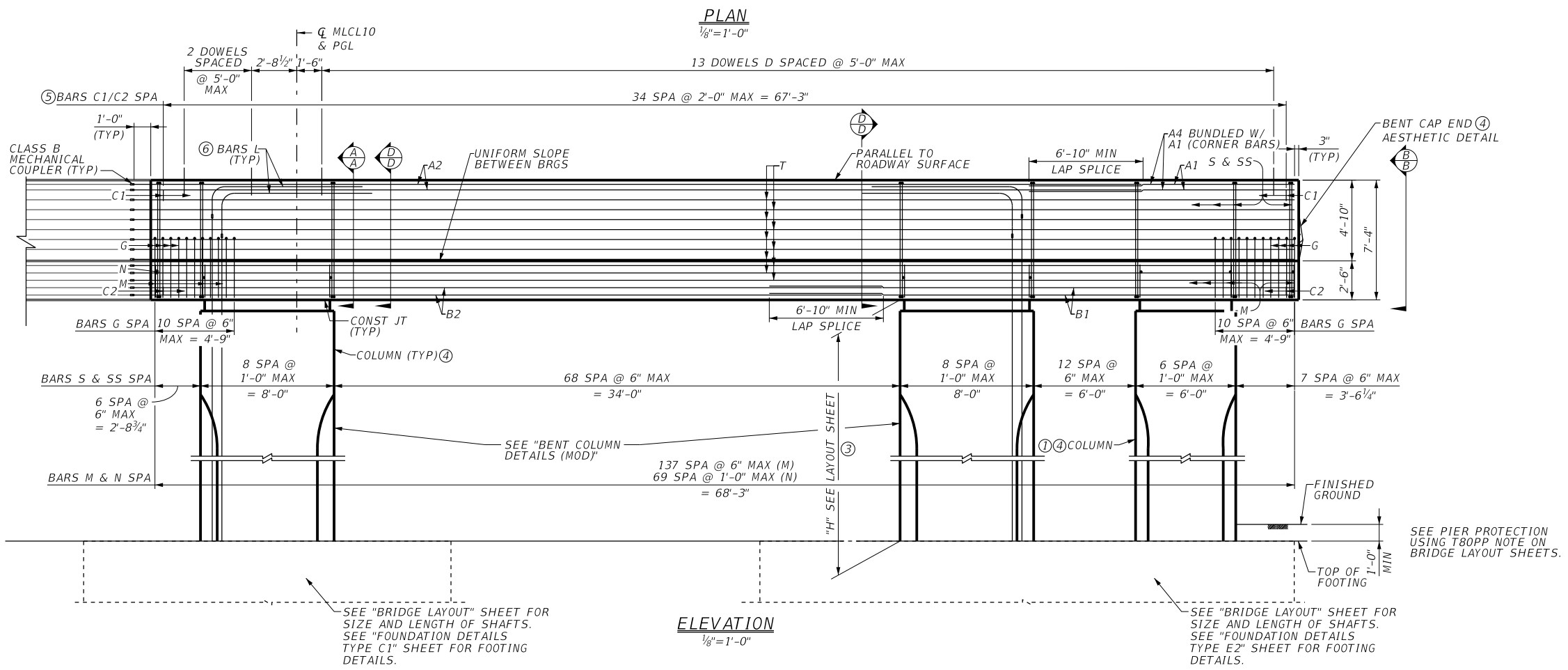
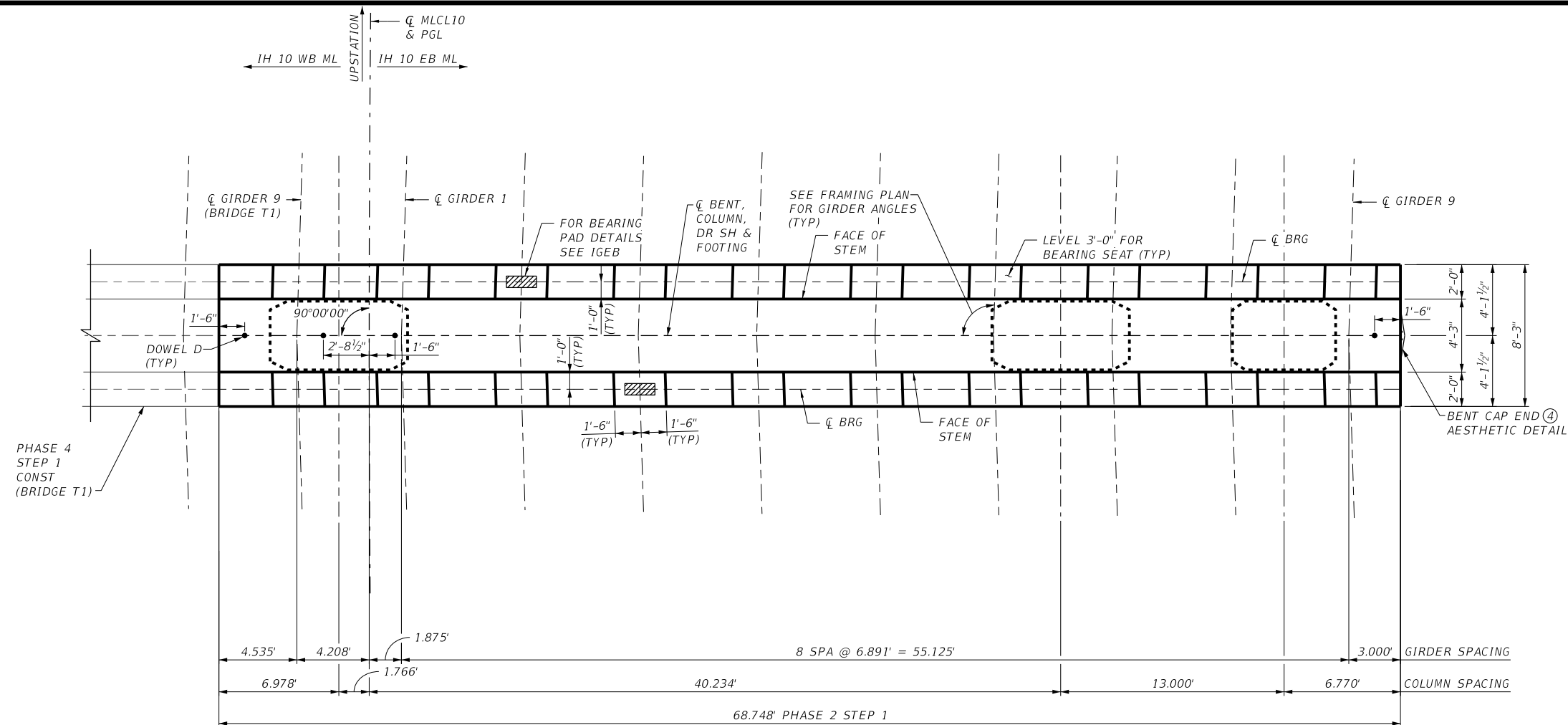


**IH 10 AT US 69
 BENT 14
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 1

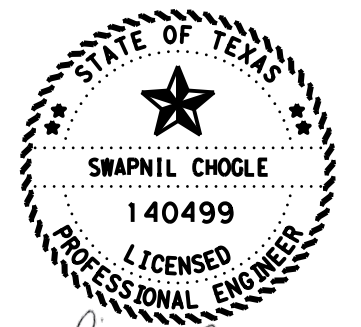
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CONT	13	135	JOB		HIGHWAY		
0028	135		IH 10				
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1366				

DATE: 21-FEB-2024 19:36
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg T (IH 10 EB Mainlanes over US 69 NBFR)\1367_10EB_MAINLANE_BENTPE_15.dgn



- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② SEE "COLUMN TYPE H DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ③ VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLC110. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ④ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ PLACE FIRST CAP BAR C1/C2 AT SECOND BAR S FROM END OF CAP.
- ⑥ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".

CONTRACTOR NOTE:
 INVERTED-TTEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

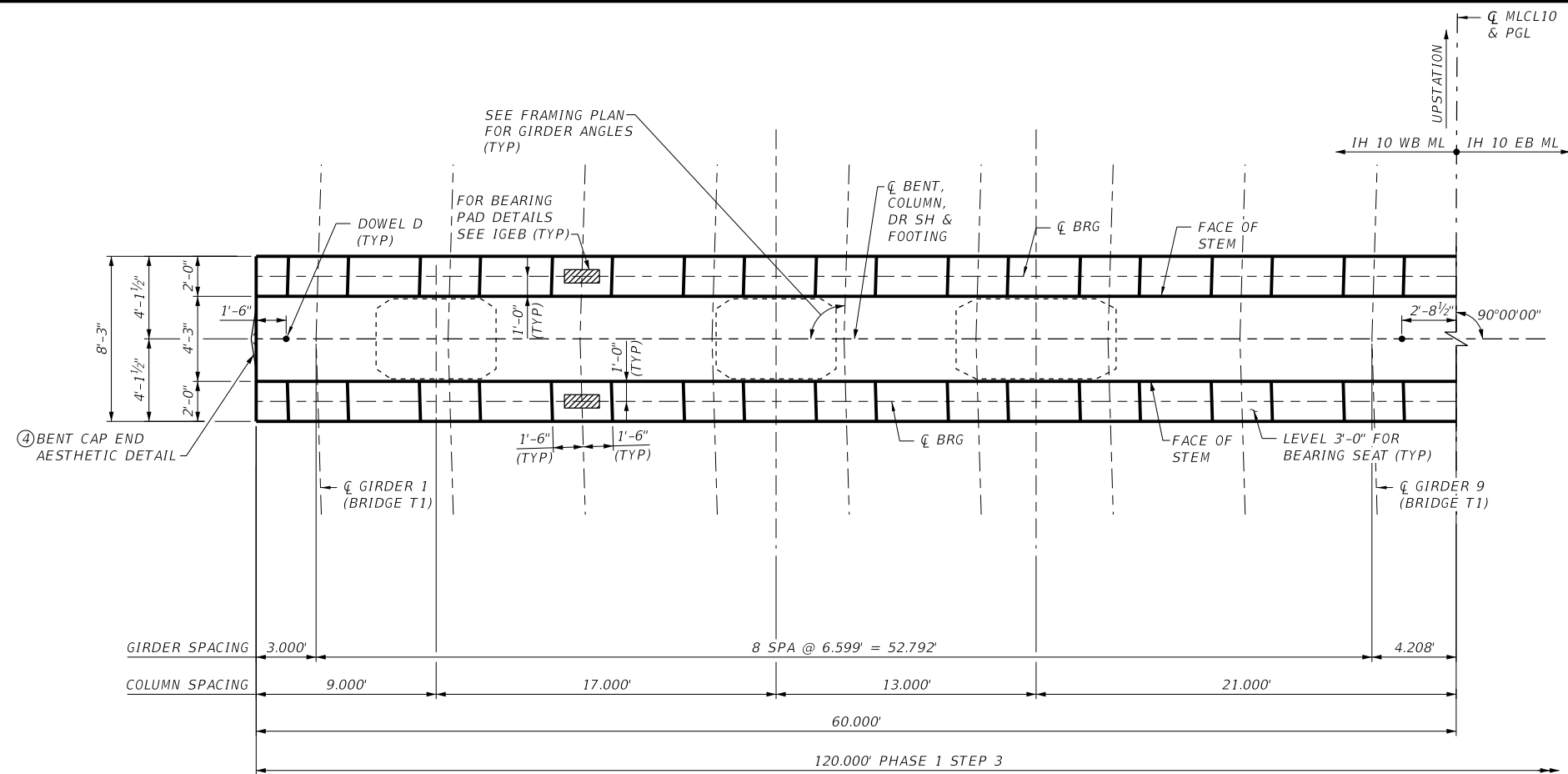
VOLKERT
 F-12679
 Texas Department of Transportation

IH 10 AT US 69
 BENT 15
 IH 10 EB MAINLANE
 AT US 69

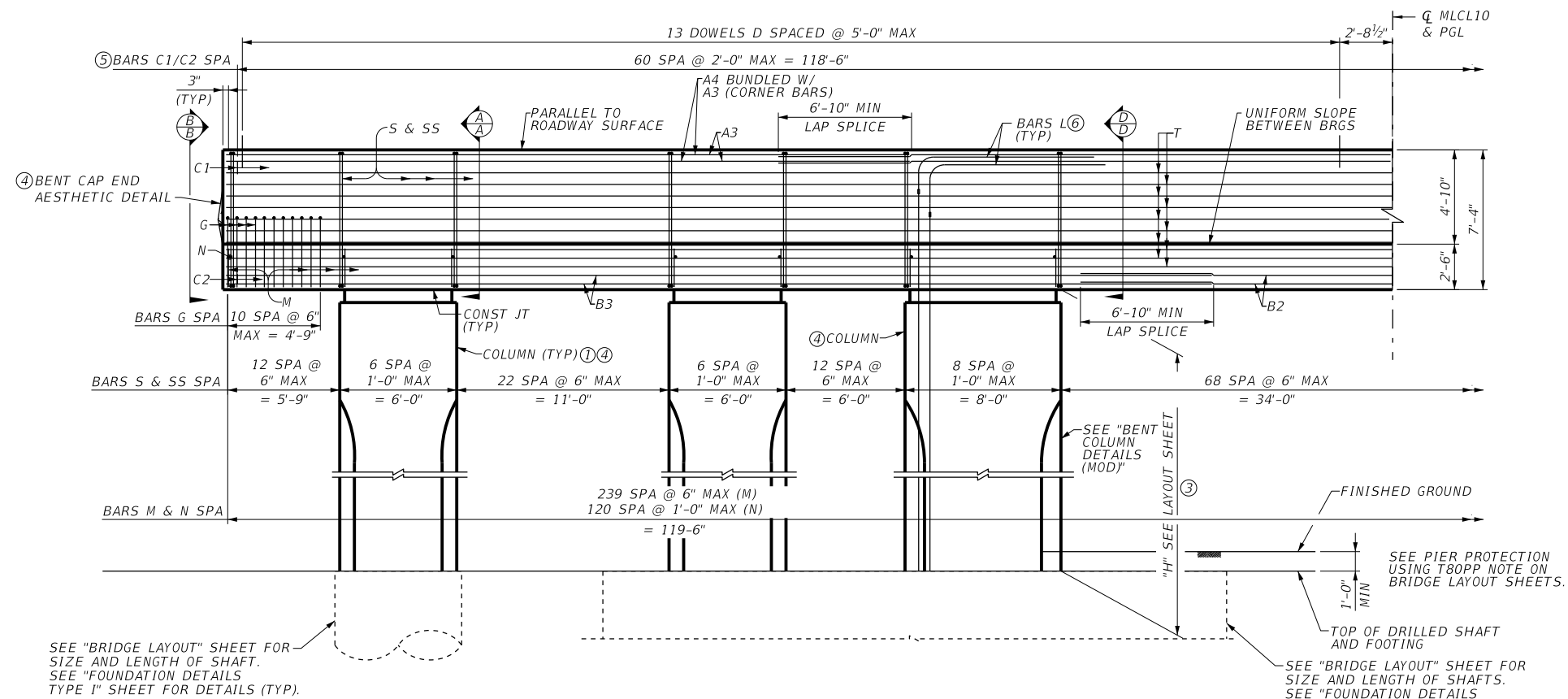
SHEET 1 OF 1

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1367				

DATE: 21-FEB-2024 19:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan - Bridge\10 EB Mainlanes over US 69 NBFR\1368_10EB_Mainlanes over US 69 NBFR\1368_10EB_Mainlanes over US 69 NBFR\1368_10EB_Mainlanes over US 69 NBFR\16_1.dgn



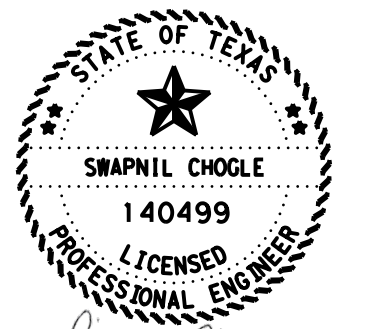
PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN TYPE G DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ② SEE "COLUMN TYPE H DETAILS" SHEET FOR DETAILS NOT SHOWN.
- ③ VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ④ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ PLACE FIRST CAP BAR C1/C2 AT SECOND BAR S FROM END OF CAP.
- ⑥ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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 HL93 LOADING

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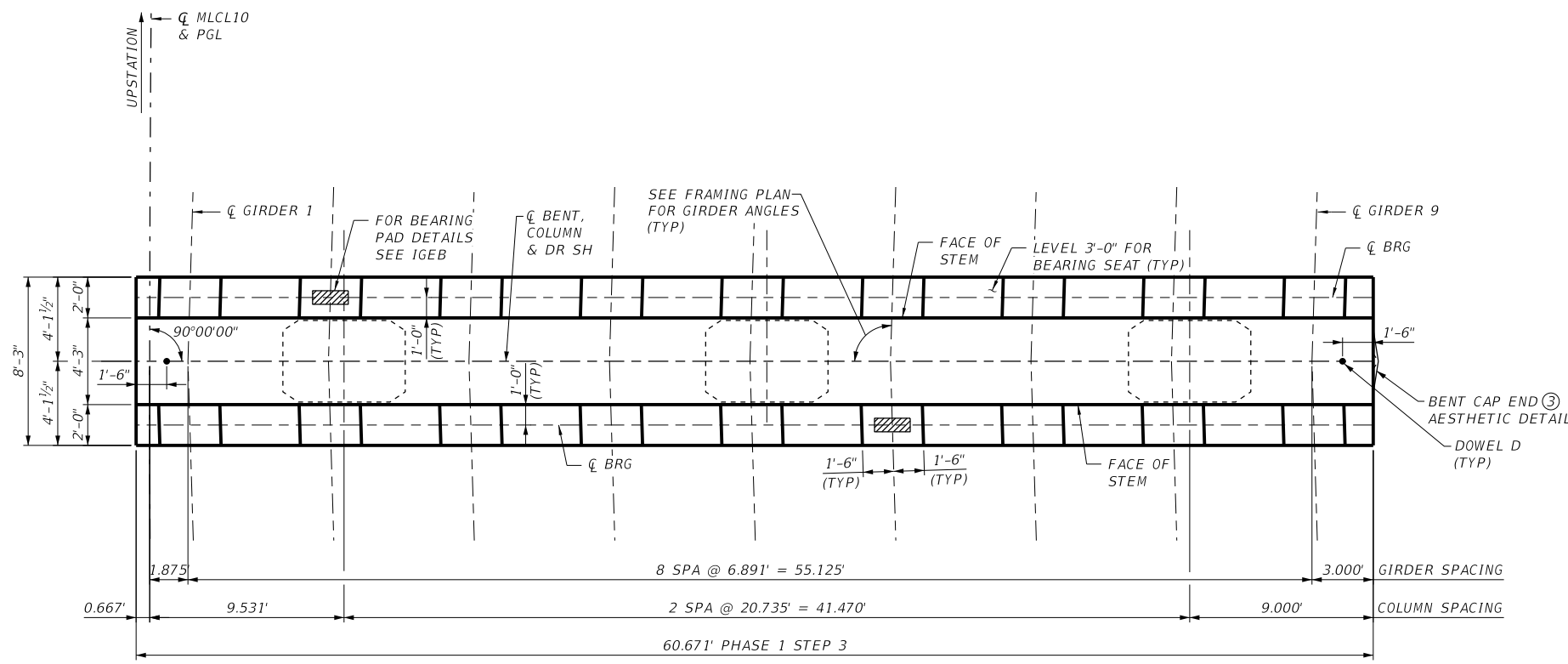


IH 10 AT US 69
 BENT 16
 IH 10 EB MAINLANE
 AT US 69

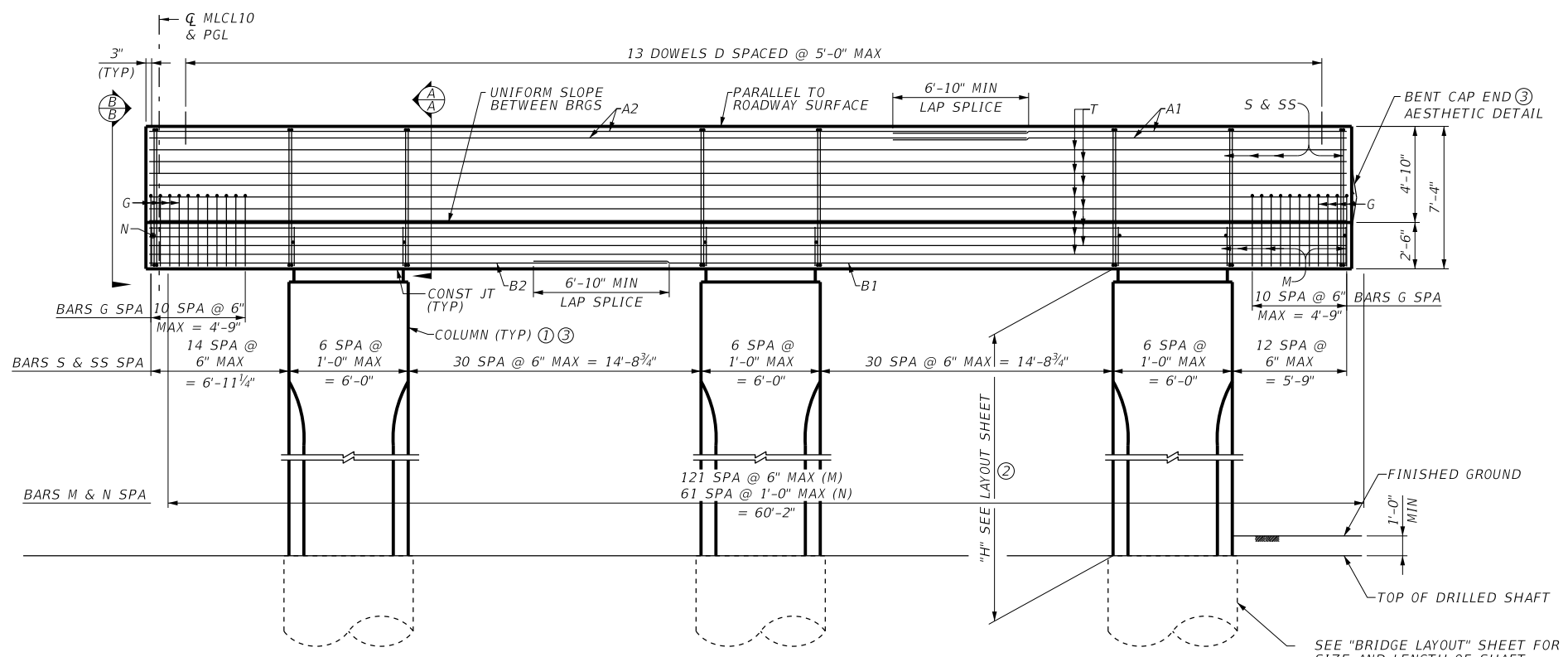
SHEET 1 OF 2

DW:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1368		

DATE: 21-FEB-2024 19:35
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10EB_Mainlane_Bent17.dgn



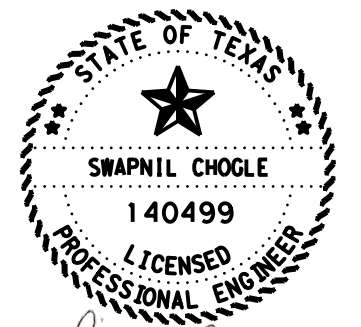
PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
 HL93 LOADING



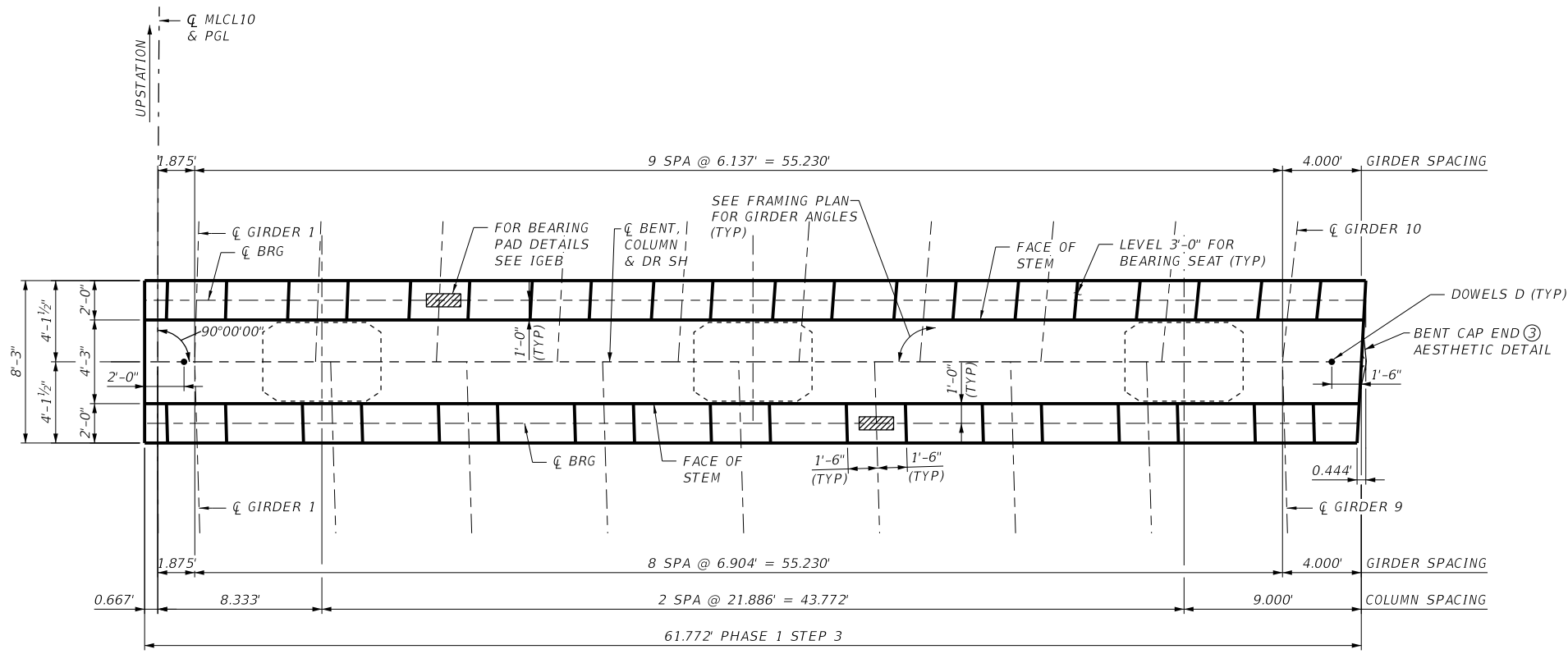
F-12679
 Texas Department of Transportation

**IH 10 AT US 69
 BENT 17
 IH 10 EB MAINLANE
 AT US 69**

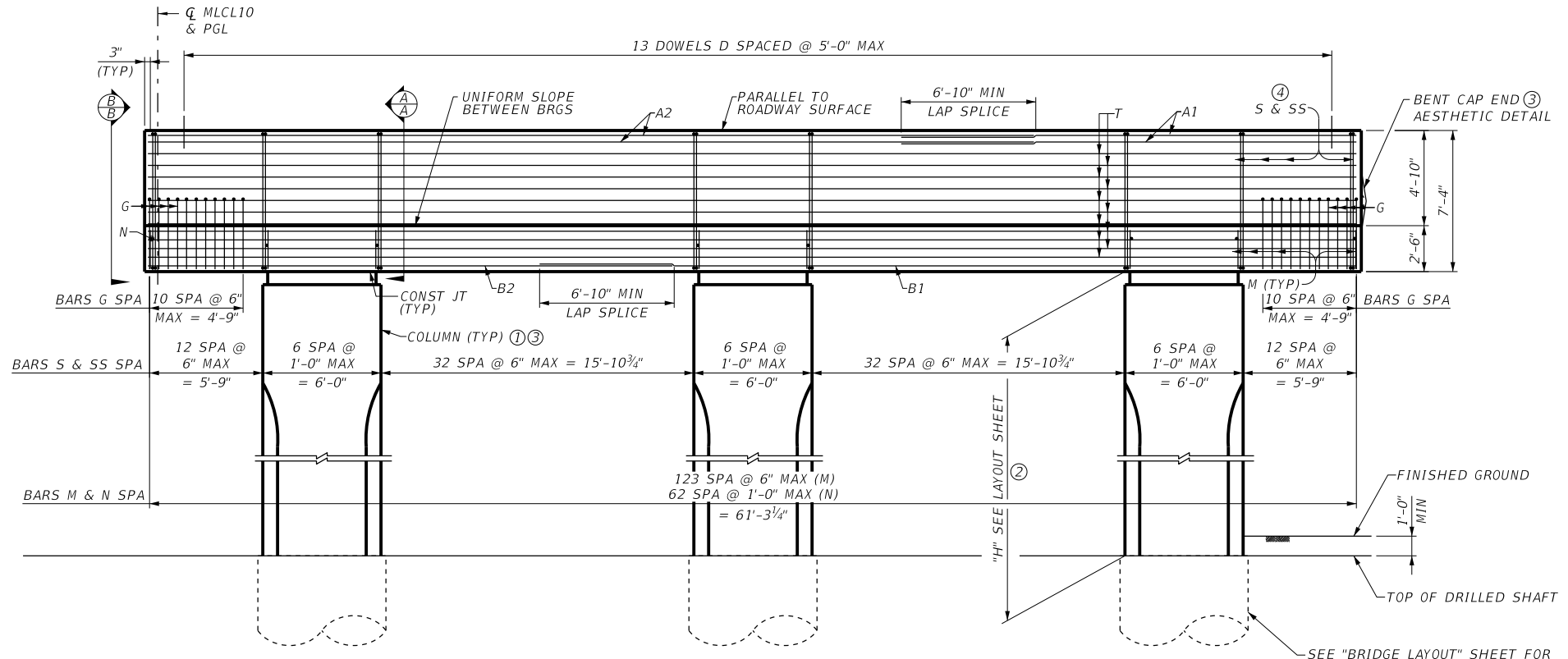
SHEET 1 OF 1

DN:	CBF	CK:	CSU	DW:	MAG	CK:	CBF
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1370			

DATE: 21-FEB-2024 19:36
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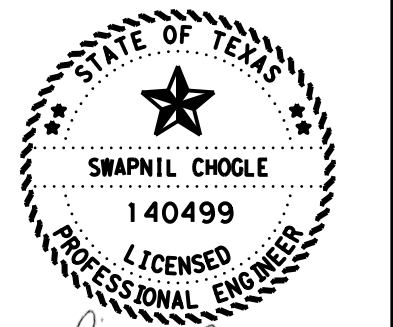
PLAN
 1/8"=1'-0"



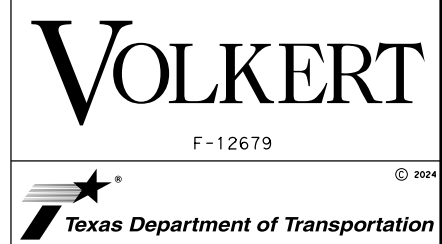
ELEVATION
 1/8"=1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ FLARE LAST THREE S AND SS BARS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

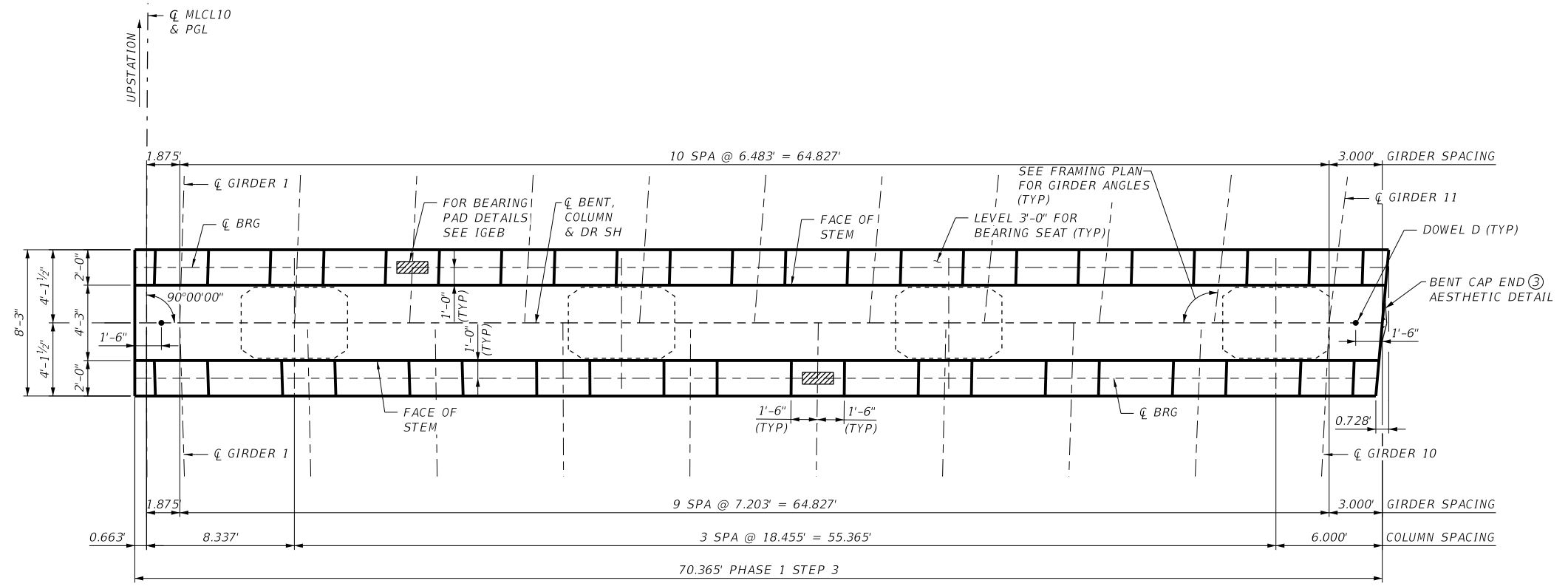


IH 10 AT US 69
 BENT 18
 IH 10 EB MAINLANE
 AT US 69

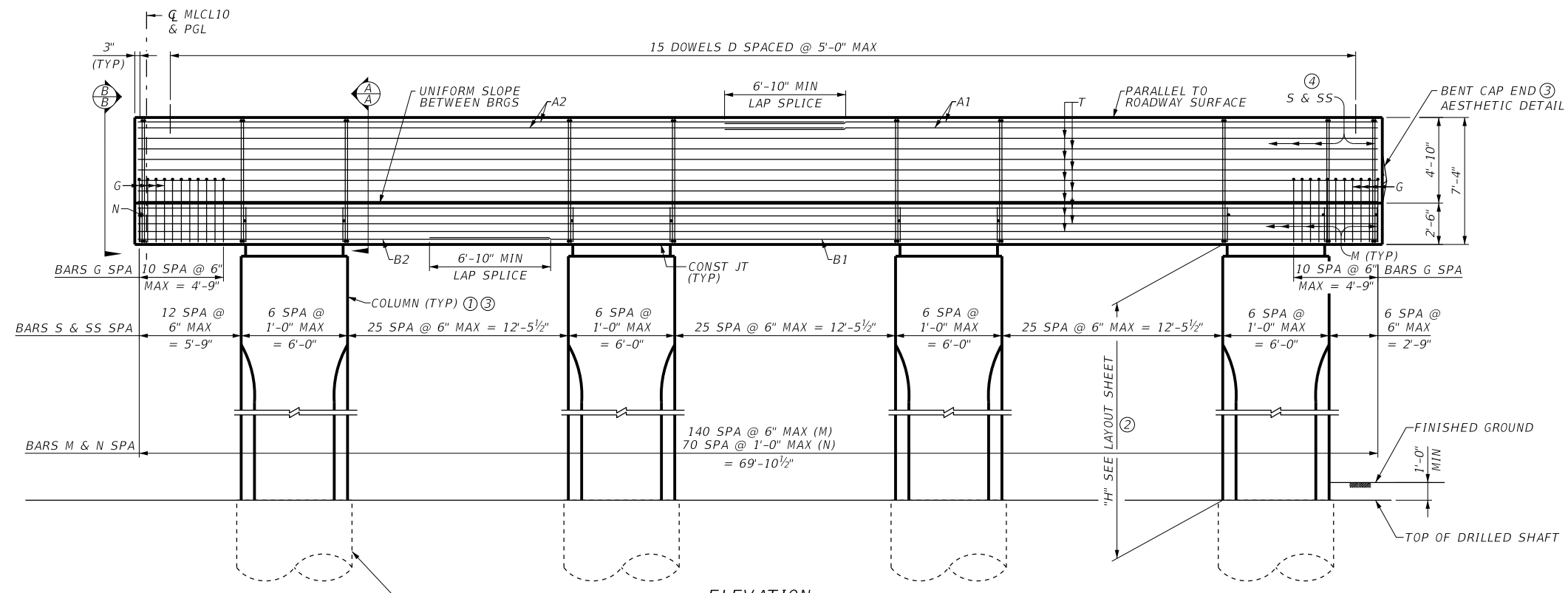
SHEET 1 OF 1

DN:	CBF	CK:	CSU	DW:	MAG	CK:	CBF
CONT		SECT		JOB		CK:	CBF
0028		13		135			IH 10
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1371				

DATE: 21-FEB-2024 19:34
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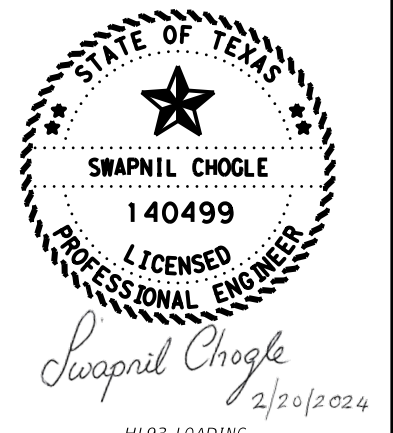
PLAN
 $\frac{1}{8}'' = 1'-0''$



ELEVATION
 $\frac{1}{8}'' = 1'-0''$

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ FLARE LAST THREE S AND SS BARS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



HL93 LOADING

VOLKERT
 F-12679

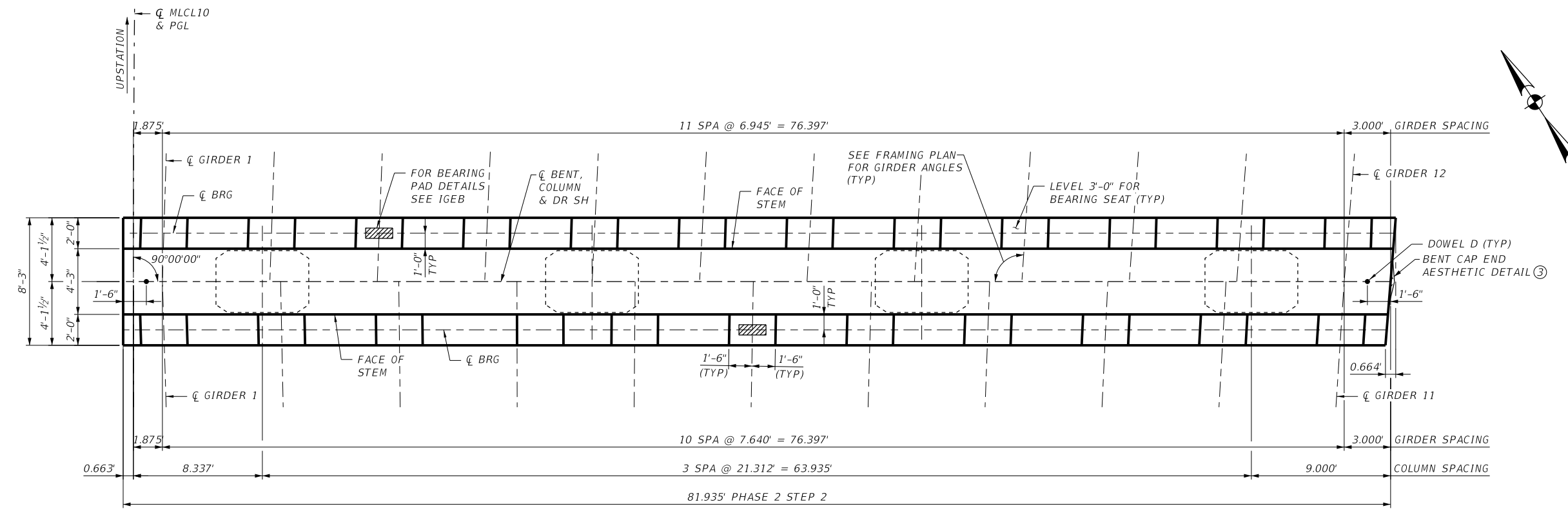
Texas Department of Transportation

**IH 10 AT US 69
 BENT 19
 IH 10 EB MAINLANE
 AT US 69**

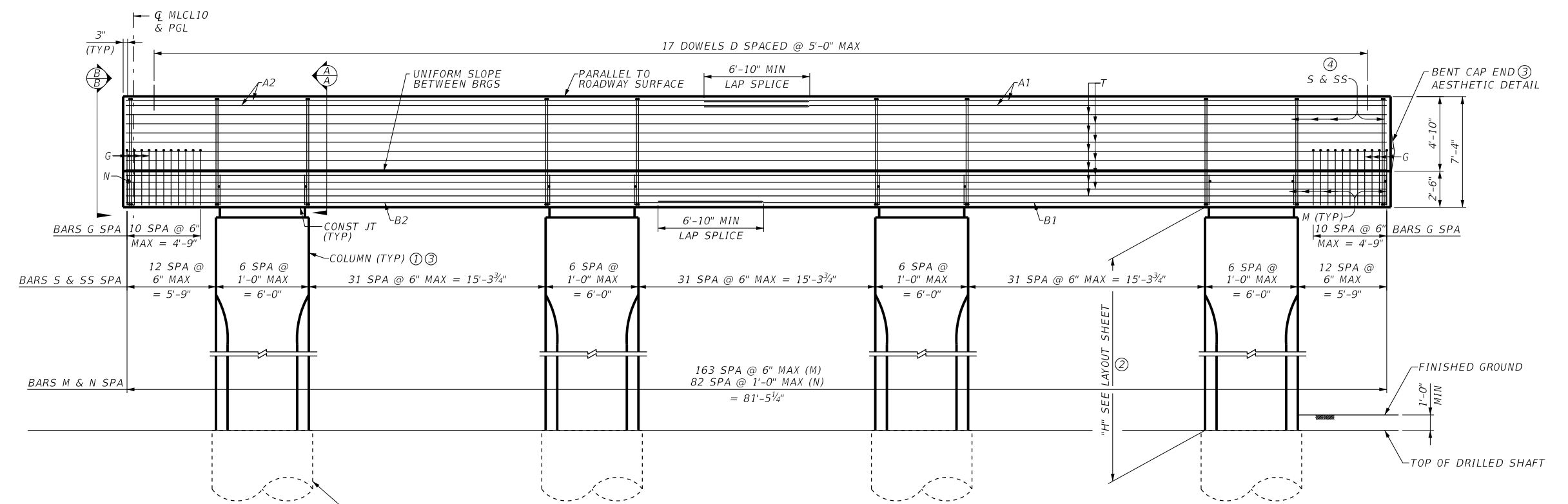
SHEET 1 OF 1

DN: CBF	CK: CSU	DW: MAG	CK: CBF
CONT	SECT	JOB	HIGHWAY
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DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1372	

DATE: 21-FEB-2024 19:34
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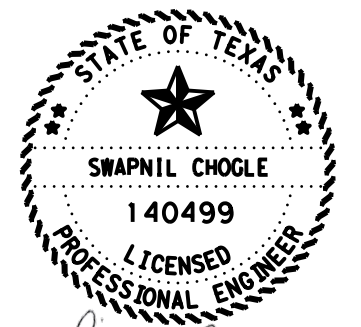
PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ FLARE LAST THREE S AND SS BARS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

VOLKERT
 F-12679

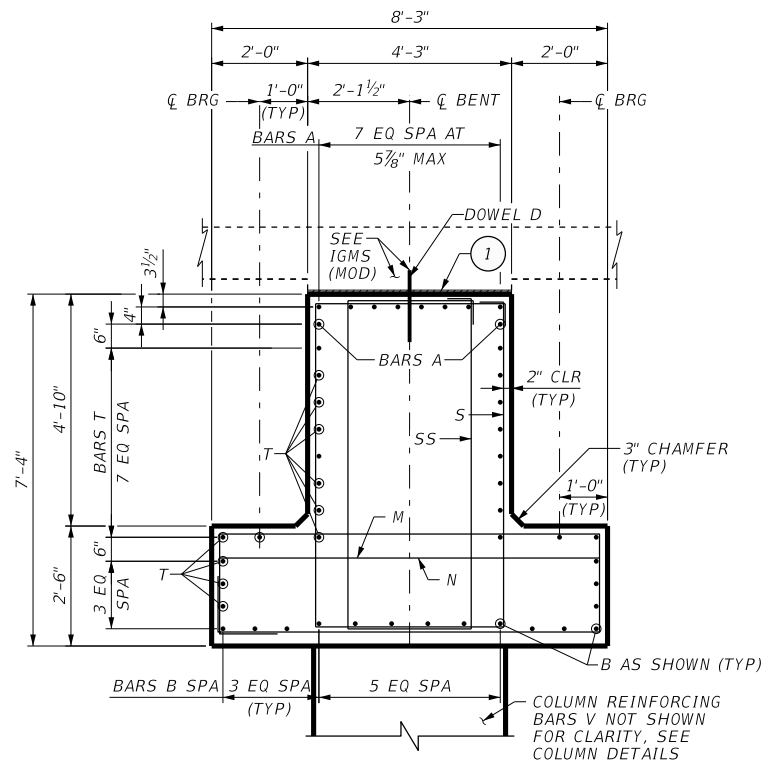
Texas Department of Transportation

**IH 10 AT US 69
 BENT 20
 IH 10 EB MAINLANE
 AT US 69**

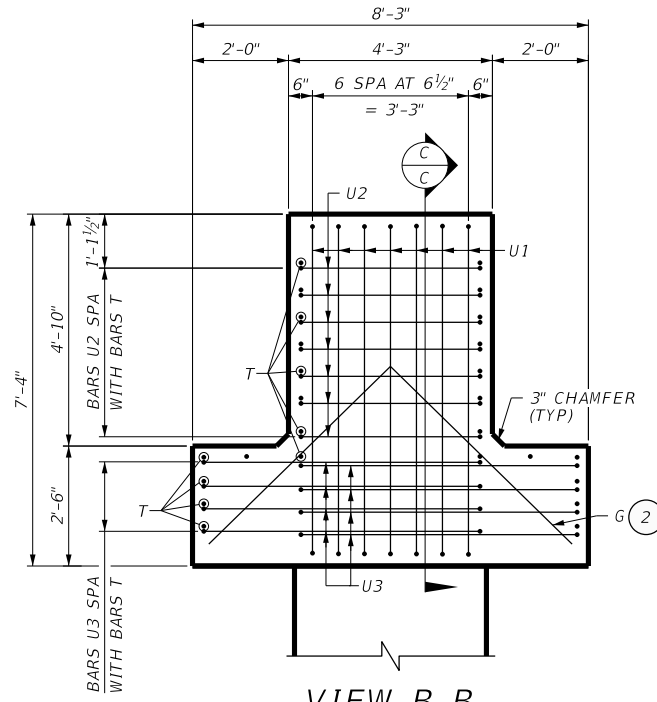
SHEET 1 OF 1

DN: CBF	CK: CSU	DW: MAG	CK: CBF
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1373	

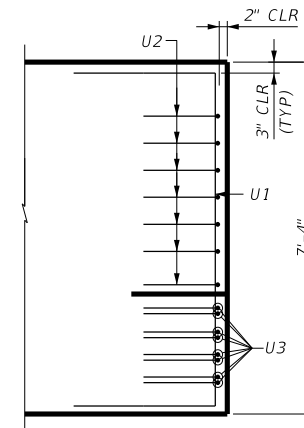
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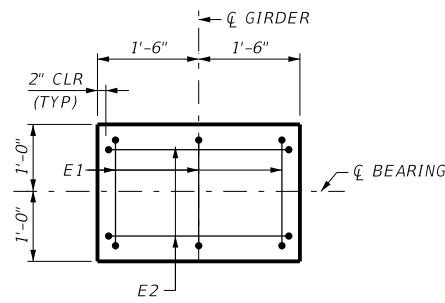
SECTION A-A
 FOR BENTS 2-7, 11 & 17-20



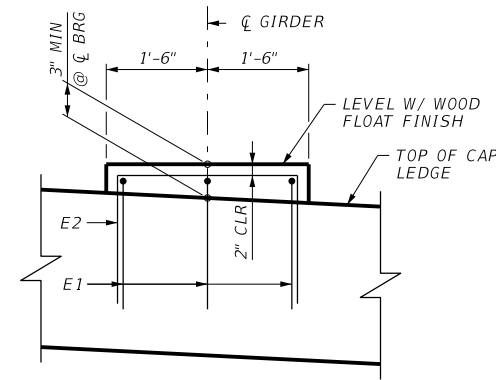
VIEW B-B
 (BARS A, B, D, M, N, S AND SS NOT SHOWN FOR CLARITY)
 (DIMENSIONS SHOWN ARE PERPENDICULAR TO CL BENT)



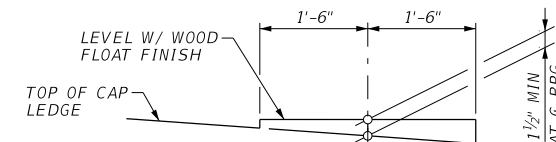
SECTION C-C
 (BARS A, B, G, M, N, S, SS AND T NOT SHOWN FOR CLARITY)



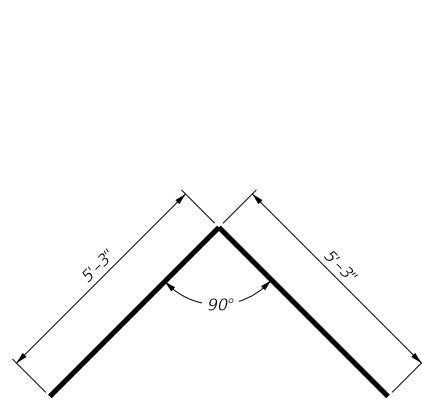
BEARING PEDESTAL PLAN



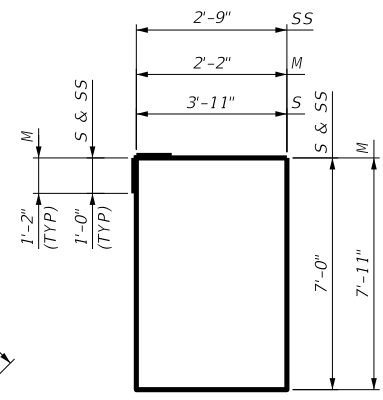
BEARING PEDESTAL SECTION
 (REMOVE ALL LOOSE MATERIAL AND CLEAN BEARING SURFACE BEFORE PLACING BEARING PAD)



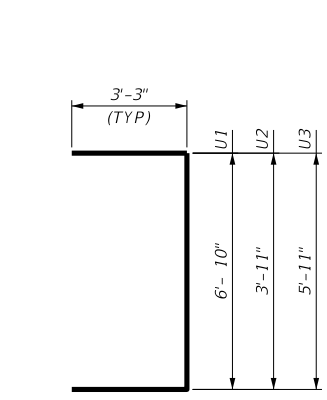
BEARING SEAT DETAIL
 (BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



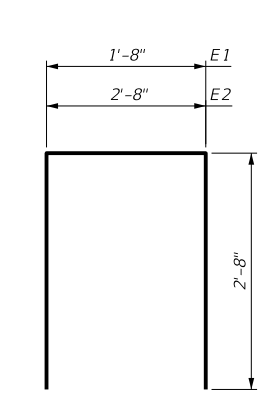
BARS G



BARS S, SS & M



BARS U1, U2 & U3



BARS E1 & E2

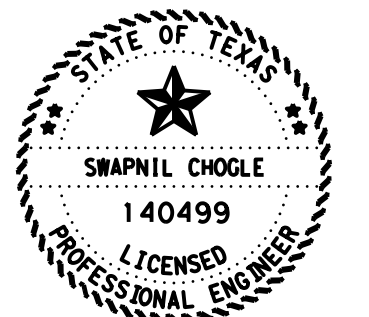
GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE "COLUMN DETAILS TYPE G" SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE "FOUNDATION DETAILS TYPE 1 78" SHAFT" SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 E1 BARS TO BE ALIGNED PARALLEL TO THE CENTERLINE OF GIRDER. E2 BARS TO BE ALIGNED PERPENDICULAR TO THE CENTERLINE OF THE GIRDER.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

- ① SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.
- ② BARS G FIT INSIDE BARS T.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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F-12679

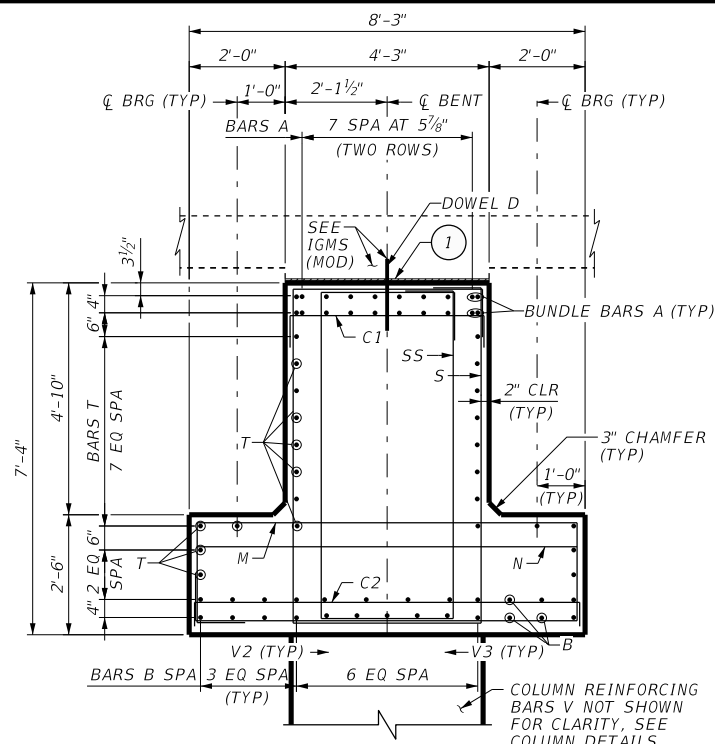


**IH 10 AT US 69
 BENT DETAILS
 (2-7, 11 & 17-20)
 IH 10 EB MAINLANE
 AT US 69**

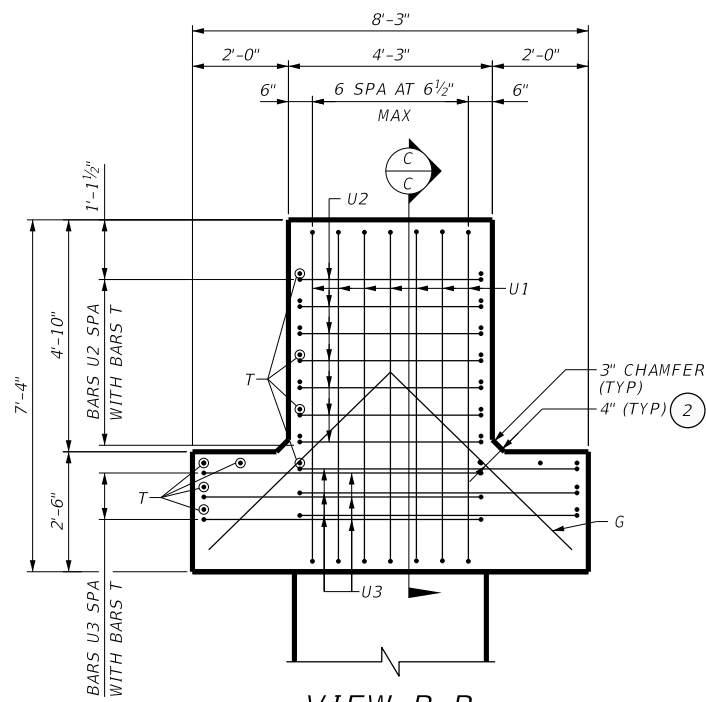
SHEET 1 OF 6

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1374		

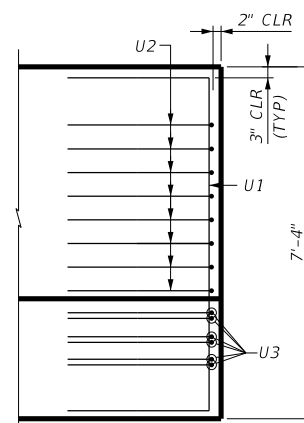
DATE: 8-MAR-2024 19:38
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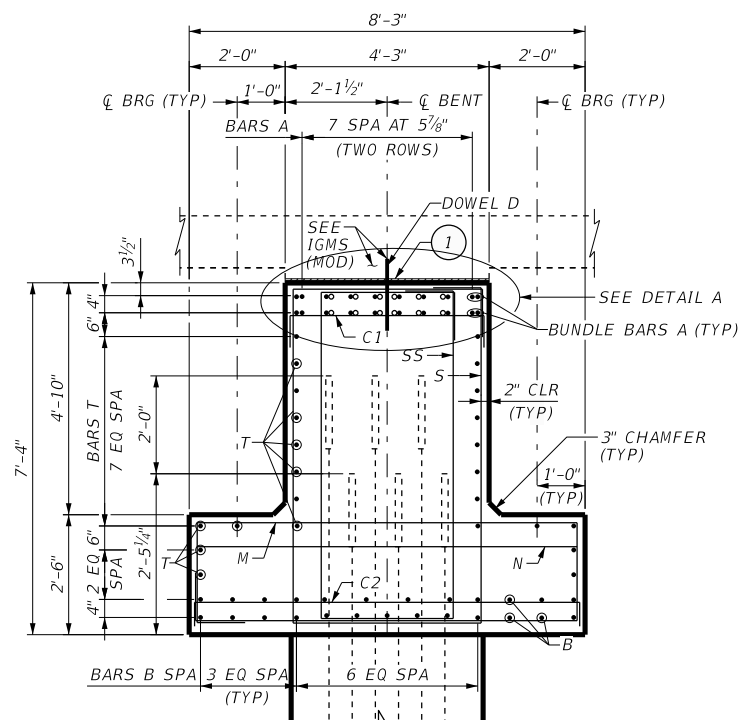
SECTION A-A
 FOR BENTS 8,10,12 & 14-16



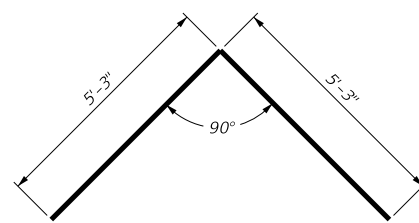
VIEW B-B
 (BARS A, B, D, M, N, S AND SS NOT SHOWN FOR CLARITY)
 (DIMENSIONS SHOWN ARE PERPENDICULAR TO \bar{C} BENT)



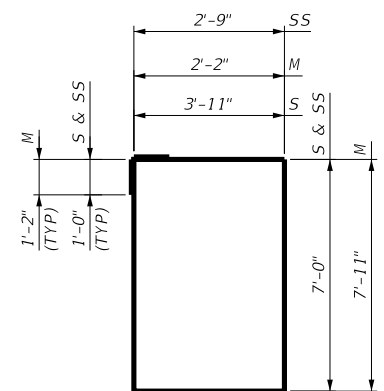
SECTION C-C
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



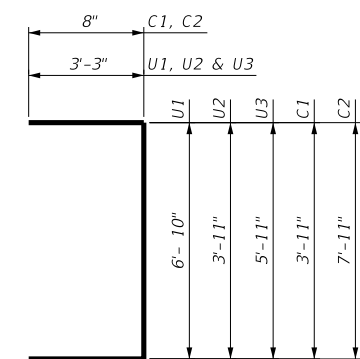
SECTION D-D
 FOR BENTS 8,10,12 & 14-16



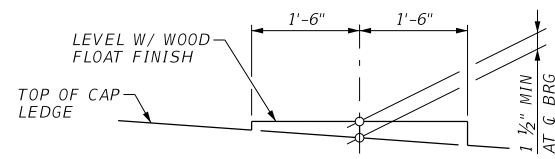
BARS G



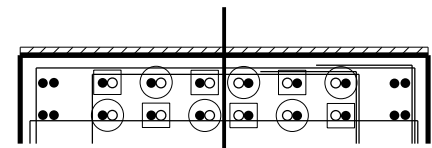
BARS S, SS & M



BARS C1, C2, U1, U2 & U3

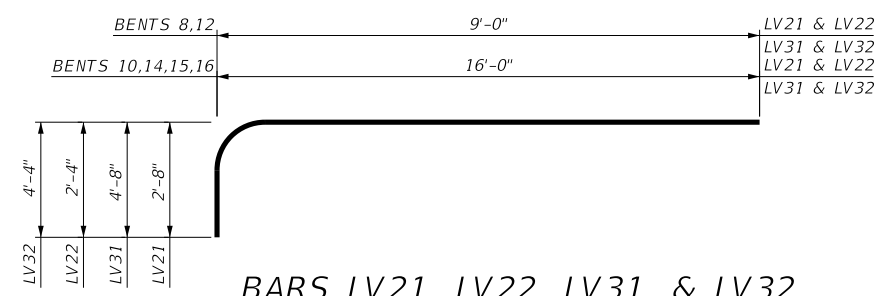


BEARING SEAT DETAIL
 (BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



DETAIL A
 (ALL "LV#/" BARS ARE LAPPED WITH BARS A)
 ● LV21, LV22
 ● LV31, LV32

REPRESENTS
 COLUMN V BAR
 BAR A ROW #



BARS LV21, LV22, LV31, & LV32

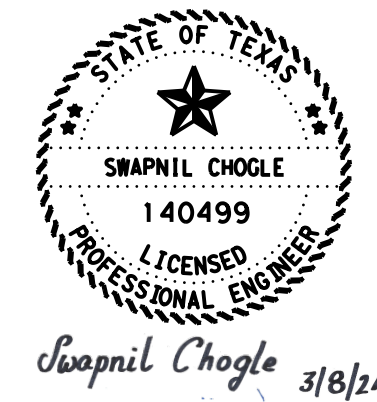
GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE "COLUMN DETAILS TYPE G" SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE "FOUNDATION DETAILS TYPE I 78" SHAFT" SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE " BENT DETAILS 2-7, 11 & 17-20" FOR BEARING SEAT DETAILS IF DEPTH EQUALS OR EXCEEDS 3"

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

- 1 SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.
- 2 BARS G FIT INSIDE BARS T.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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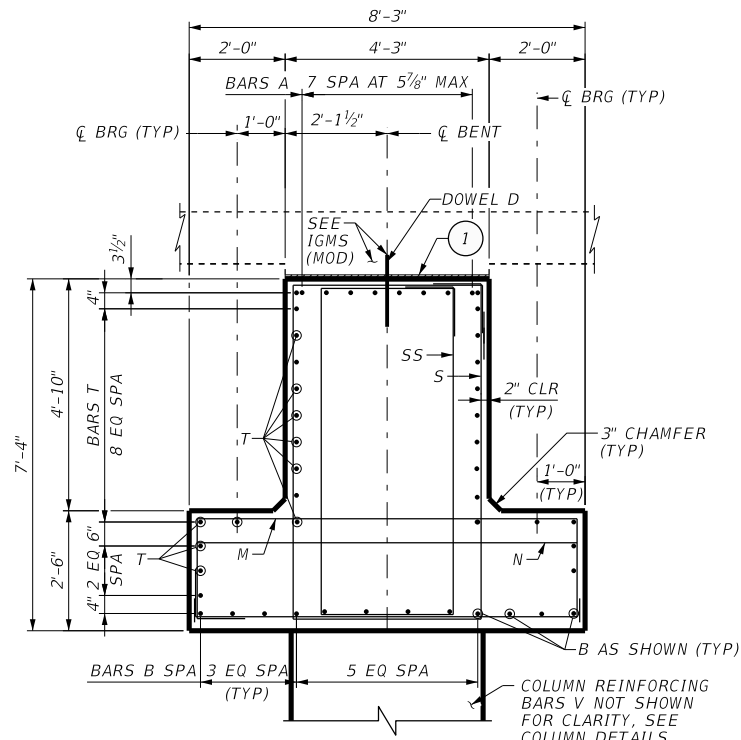
Texas Department of Transportation

**IH 10 AT US 69
 BENT DETAILS
 (8,10,12 & 14-16)
 IH 10 EB MAINLANE
 AT US 69**

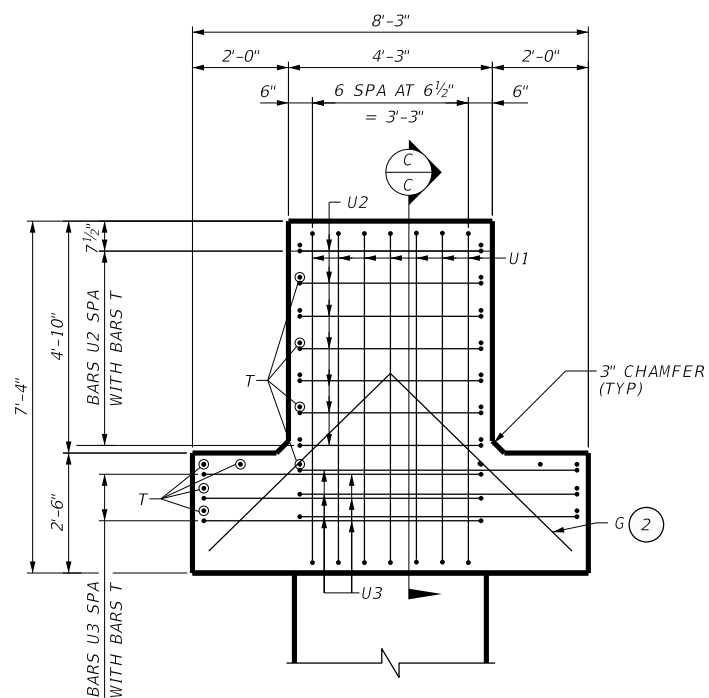
SHEET 2 OF 6

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB	HIGHWAY				
0028	13	135	IH 10				
DIST	COUNTY	SHEET NO.					
BMT	JEFFERSON	1375					

DATE: 8-MAR-2024 19:39
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T (IH 10 EB Mainlanes over US 69 NBFR)\1376.10EB.MAINLANE_BENT_DET_03

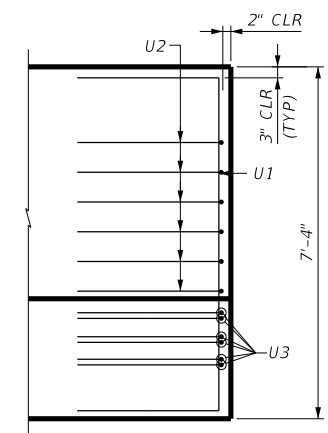


SECTION A-A
FOR BENTS 9 & 13



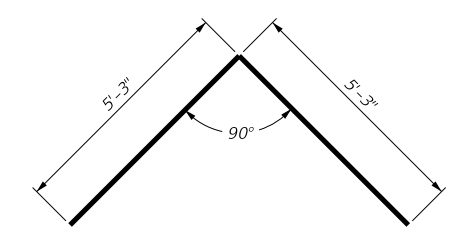
VIEW B-B

(BARS A, B, D, M, N, S AND SS NOT SHOWN FOR CLARITY)
 (DIMENSIONS SHOWN ARE PERPENDICULAR TO \bar{C} BENT)

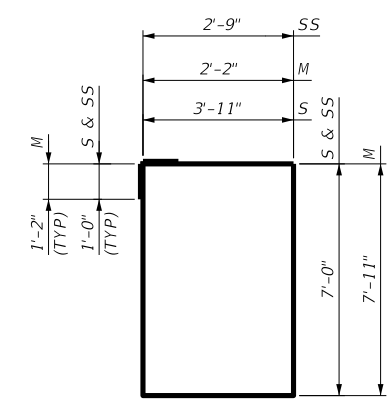


SECTION C-C

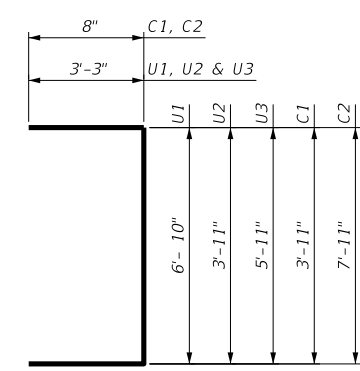
(BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



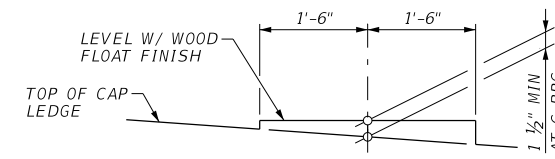
BARS G



BARS S, SS & M

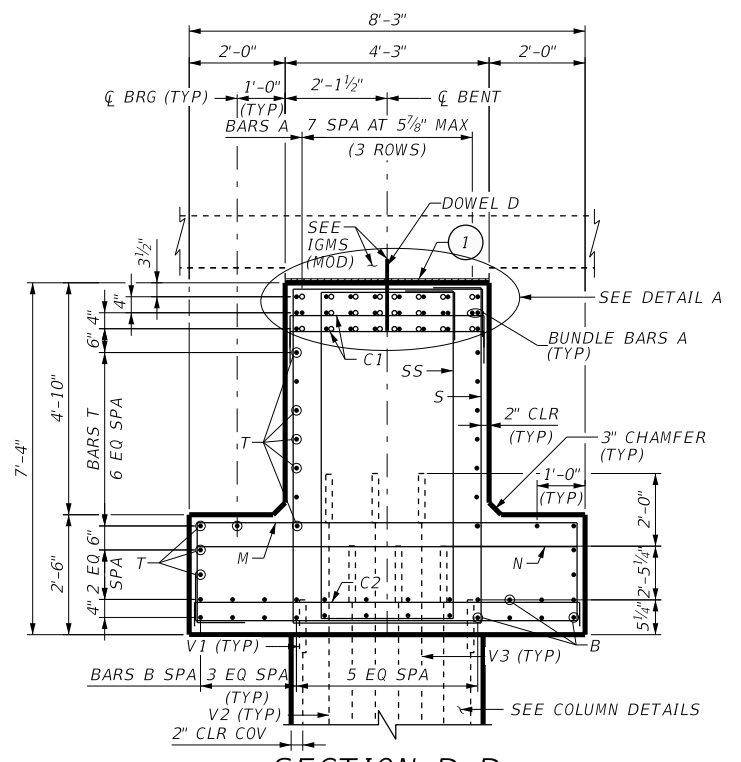


BARS C1, C2, U1, U2 & U3

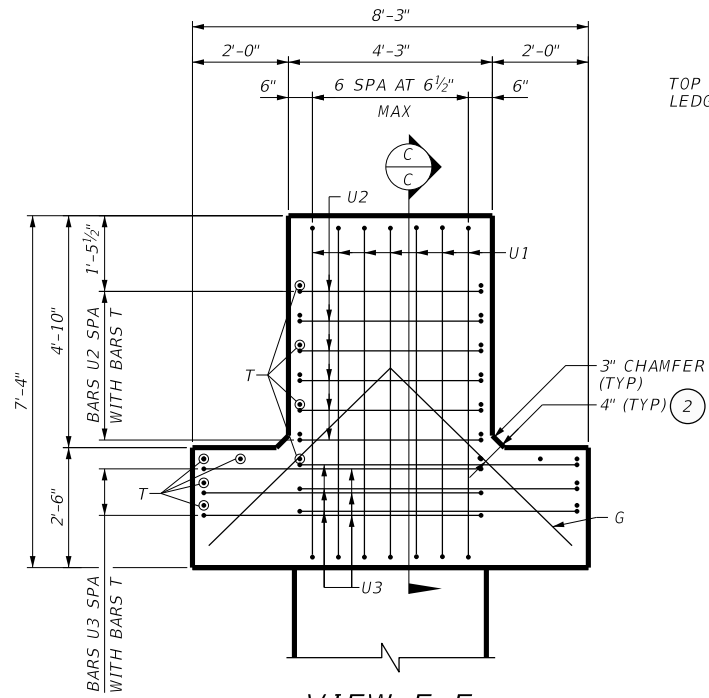


BEARING SEAT DETAIL

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)

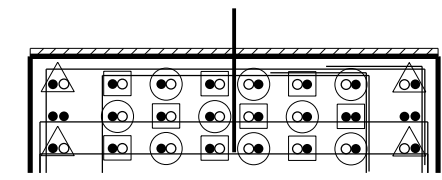


SECTION D-D
FOR BENTS 9 & 13



VIEW E-E

(BARS A, B, D, M, N, S AND SS NOT SHOWN FOR CLARITY)
 (DIMENSIONS SHOWN ARE PERPENDICULAR TO \bar{C} BENT)

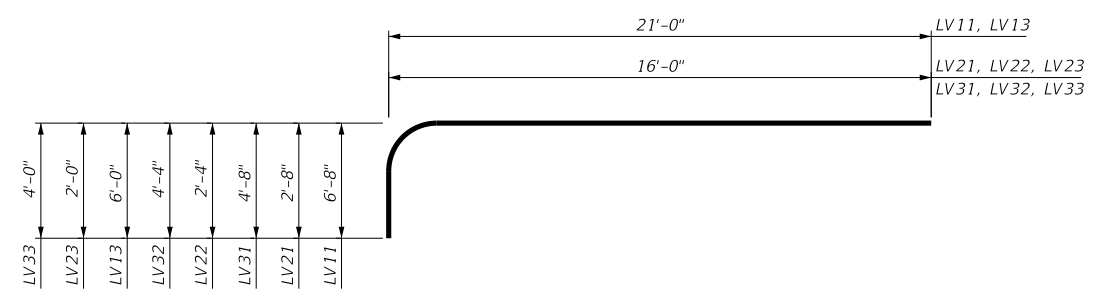


DETAIL A

(ALL "LV##" BARS ARE LAPPED WITH BARS A)

- △ LV11, LV13
- LV21, LV22, LV23
- LV31, LV32, LV33

REPRESENTS
 COLUMN V BAR
 BAR A ROW #



BARS LV11, LV13, LV21, LV22, LV23, LV31, LV32, LV33

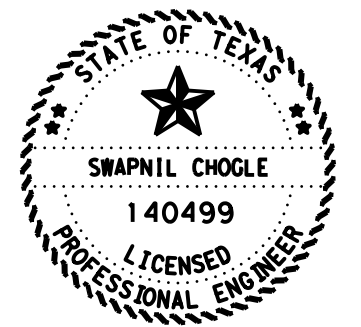
GENERAL NOTES:
 SEE BENT DETAILS SHEET 1 OF 6 FOR GENERAL NOTES.
 SEE "COLUMN DETAILS TYPE G" AND "COLUMN DETAILS TYPE H" FOR ALL COLUMN DETAILS AND NOTES.
 SEE "FOUNDATION DETAILS TYPE 1 78" SHAFT" AND "FOUNDATION DETAILS TYPE C2 SHEET FOR ALL FOUNDATION DETAILS AND NOTES.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

- ① SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.
- ② BARS G FIT INSIDE BARS T.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



Swapnil Chogle 3/8/24

HL93 LOADING



F-12679



**IH 10 AT US 69
 BENT DETAILS
 (9 & 13)
 IH 10 EB MAINLANE
 AT US 69**

SHEET 3 OF 6

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1376		

PHASE 1 STEP 3

NOTES:
BARS T INCLUDE 1'-10" LAP SPLICE.
BARS B INCLUDE 6'-10" LAP SPLICE.

TABLE OF ESTIMATED QUANTITIES BENT 2 EBML (H=26') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	31' - 5"	1,667	
B1	12	#11	31' - 5"	2,000	
D	7	#11	1' - 6"	56	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
M	62	#7	22' - 6"	2,851	
N	32	#6	7' - 11"	381	
S	51	#6	23' - 10"	1,826	
SS	51	#6	21' - 6"	1,647	
T1	26	#5	31' - 5"	851	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	12,348
CLASS "F" CONCRETE (CAP)				CY	46.9

TABLE OF ESTIMATED QUANTITIES BENT 3 EBML (H=30') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	30' - 6"	1,620	
B1	12	#11	30' - 6"	1,945	
D	7	#11	1' - 6"	56	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
M	60	#7	22' - 6"	2,759	
N	31	#6	7' - 11"	369	
S	49	#6	23' - 10"	1,754	
SS	49	#6	21' - 6"	1,582	
T1	26	#5	30' - 6"	827	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,981
CLASS "F" CONCRETE (CAP)				CY	45.6

TABLE OF ESTIMATED QUANTITIES BENT 4 EBML (H=32') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	30' - 6"	1,621	
B1	12	#11	30' - 6"	1,945	
D	7	#11	1' - 6"	56	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
M	60	#7	22' - 6"	2,759	
N	31	#6	7' - 11"	369	
S	49	#6	23' - 10"	1,754	
SS	49	#6	21' - 6"	1,582	
T1	26	#5	30' - 6"	827	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,982
CLASS "F" CONCRETE (CAP)				CY	45.6

TABLE OF ESTIMATED QUANTITIES BENT 5 EBML (H=33') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	30' - 8"	1,631	
B1	12	#11	30' - 8"	1,957	
D	7	#11	1' - 6"	56	
G	22	#7	10' - 6"	472	
M	60	#7	22' - 6"	2,759	
N	31	#6	7' - 11"	369	
S	49	#6	23' - 10"	1,754	
SS	49	#6	21' - 6"	1,582	
T1	26	#5	30' - 6"	827	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,811
CLASS "F" CONCRETE (CAP)				CY	45.9

TABLE OF ESTIMATED QUANTITIES BENT 6 EBML (H=35') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	31' - 8"	1,683	
B1	12	#11	31' - 8"	2,019	
D	7	#11	1' - 6"	56	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
M	62	#7	22' - 6"	2,851	
N	32	#6	7' - 11"	381	
S	56	#6	23' - 10"	2,005	
SS	56	#6	21' - 6"	1,808	
T1	26	#5	31' - 8"	859	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	12,731
CLASS "F" CONCRETE (CAP)				CY	47.3

TABLE OF ESTIMATED QUANTITIES BENT 7 EBML (H=36') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	31' - 6"	1,673	
B1	12	#11	31' - 6"	2,007	
D	7	#11	1' - 6"	56	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
M	62	#7	22' - 6"	2,851	
N	32	#6	7' - 11"	381	
S	51	#6	23' - 10"	1,826	
SS	51	#6	21' - 6"	1,647	
T1	26	#5	31' - 6"	854	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	12,364
CLASS "F" CONCRETE (CAP)				CY	47.1

TABLE OF ESTIMATED QUANTITIES BENT 8 EBML (H=36') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	16	#11	31' - 5"	2,668	
A4	4	#11	30' - 2"	641	
B1	26	#11	31' - 5"	4,336	
C1	16	#4	5' - 3"	56	
C2	16	#4	9' - 3"	99	
D	7	#11	1' - 6"	56	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
LV21	3	#11	11' - 8"	186	
LV22	3	#11	11' - 4"	181	
LV31	3	#11	13' - 8"	218	
LV32	3	#11	13' - 4"	213	
M	62	#7	22' - 6"	2,851	
N	32	#6	7' - 11"	381	
S	54	#6	23' - 10"	1,933	
SS	54	#6	21' - 6"	1,744	
T1	24	#5	31' - 5"	786	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	6	#6	12' - 5"	112	
REINFORCING STEEL				LB	17,381
CLASS "F" CONCRETE (CAP)				CY	46.9

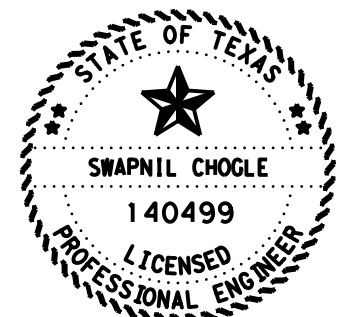
TABLE OF ESTIMATED QUANTITIES BENT 9 EBML (H=36') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	26	#11	31' - 6"	4,350	
B1	24	#11	31' - 6"	4,015	
C1	16	#4	5' - 3"	56	
C2	16	#4	9' - 3"	99	
D	7	#11	1' - 6"	56	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
LV11	2	#11	22' - 8"	241	
LV13	2	#11	22' - 0"	234	
LV21	3	#11	18' - 8"	298	
LV22	3	#11	18' - 4"	292	
LV23	3	#11	18' - 0"	287	
LV31	3	#11	20' - 8"	329	
LV32	3	#11	20' - 4"	324	
LV33	3	#11	20' - 0"	319	
M	62	#7	22' - 6"	2,851	
N	32	#6	7' - 11"	381	
S	54	#6	23' - 10"	1,933	
SS	54	#6	21' - 6"	1,744	
T1	22	#5	31' - 6"	723	
U1	7	#6	13' - 4"	140	
U2	6	#6	10' - 5"	94	
U3	6	#6	12' - 5"	112	
REINFORCING STEEL				LB	19,548
CLASS "F" CONCRETE (CAP)				CY	47.1

TABLE OF ESTIMATED QUANTITIES BENT 10 EBML (H=36') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	16	#11	49' - 10"	4,237	
A4	4	#11	48' - 8"	1,034	
B1	26	#11	49' - 10"	6,885	
C1	25	#4	5' - 3"	88	
C2	25	#4	9' - 3"	154	
D	9	#11	1' - 6"	72	
G	22	#7	10' - 6"	472	
LV21	6	#11	18' - 8"	595	
LV22	6	#11	18' - 4"	584	
LV31	6	#11	20' - 8"	659	
LV32	6	#11	20' - 4"	648	
M	99	#7	22' - 6"	4,553	
N	50	#6	7' - 11"	595	
S	84	#6	23' - 10"	3,007	
SS	84	#6	21' - 6"	2,713	
T1	24	#5	49' - 10"	1,248	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	6	#6	12' - 5"	112	
REINFORCING STEEL				LB	27,906
CLASS "F" CONCRETE (CAP)				CY	75.1

TABLE OF ESTIMATED QUANTITIES BENT 16 EBML (H=31') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	16	#11	36' - 8"	3,117	
A2	16	#11	60' - 0"	5,100	
A3	16	#11	36' - 8"	3,117	
A4	4	#11	49' - 0"	1,041	
B1	26	#11	50' - 8"	6,999	
B2	26	#11	32' - 0"	4,420	
B3	26	#11	50' - 8"	6,999	
C1	61	#4	5' - 3"	214	
C2	61	#4	9' - 3"	377	
D	26	#11	1' - 6"	207	
E1	27	#5	8' - 4"	235	
E2	18	#5	6' - 6"	122	
G	22	#7	10' - 6"	472	
LV21	6	#11	18' - 8"	595	
LV22	6	#11	18' - 4"	584	
LV31	6	#11	20' - 8"	659	
LV32	6	#11	20' - 4"	648	
M	240	#7	22' - 6"	11,038	
N	121	#6	7' - 11"	1,439	
S	201	#6	23' - 10"	7,195	
SS	201	#6	21' - 6"	6,491	
T	24	#5	123' - 4"	3,087	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	12	#6	12' - 5"	224	
REINFORCING STEEL				LB	61,762
CLASS "F" CONCRETE (CAP)				CY	184.0

TABLE OF ESTIMATED QUANTITIES BENT 17 EBML (H=26') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	22' - 7"	1,202	
A2	10	#11	44' - 7"	2,367	
B1	12	#11	40' - 5"	2,576	
B2	12	#11	26' - 9"	1,707	
D	13	#11	1' - 6"	104	
E1	27	#5	8' - 4"	235	
E2	18	#5	6' - 6"	122	
G	22	#7	10' - 6"	472	
M	122	#7	22' - 6"	5,611	
N	62	#6	7' - 11"	737	
S	105	#6	23' - 10"	3,759	
SS	105	#6	21' - 6"	3,391	
T	26	#5	62' - 2"	1,686	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	24,766
CLASS "F" CONCRETE (CAP)				CY	93.0

TABLE OF ESTIMATED QUANTITIES BENT 18 EBML (H=21') (PHASE 1 STEP 3)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	23' - 2"	1,232	
A2	10	#11	45' - 1"	2,395	
B1	12	#11	41' - 7"	2,649	
B2	12	#11	26' - 9"	1,704	
D	13	#11	1' - 6"	104	
E1	9	#5	8' - 4"	78	
E2	6	#5	6' - 6"	41	
G	22	#7	10' - 6"	472	
M	124	#7	22' - 6"	5,703	
N	63	#6	7' - 11"	749	
S	107	#6	23' - 10"	3,830	
SS	107	#6	21' - 6"	3,455	
T	26	#5	63' - 3"	1,716	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	24,925
CLASS "F" CONCRETE (CAP)				CY	94.8



Swapnil Chogle 3/8/24

HL93 LOADING

VOLKERT

F-12679



**IH 10 AT US 69
BENT DETAILS
IH 10 EB MAINLANE
AT US 69**

SHEET 4 OF 6

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1377		

DATE: 8-MAR-2024 19:54 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7 - Design\Plan Set\7 - Bridge\Bridg... I (H 10 EB Mainlanes over US 69 NBFR)\1377_10EB_MAINLANE_BENT_DET_04

PHASE 2 STEP 1

NOTES:
BARS T INCLUDE 1'-10" LAP SPLICE.
BARS B INCLUDE 6'-10" LAP SPLICE.

TABLE OF ESTIMATED QUANTITIES BENT 2 EBML (H=26') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	23' - 7"	1,254	
B2	12	#11	23' - 7"	1,505	
D	6	#11	1' - 6"	48	
E1	9	#5	8' - 4"	78	
E2	6	#5	6' - 6"	41	
G	11	#7	10' - 6"	236	
M	48	#7	22' - 6"	2,208	
N	25	#6	7' - 11"	297	
S	42	#6	23' - 10"	1,504	
SS	42	#6	21' - 6"	1,356	
T2	26	#5	23' - 7"	640	
REINFORCING STEEL				LB	9,167
CLASS "F" CONCRETE (CAP)				CY	36.2

TABLE OF ESTIMATED QUANTITIES BENT 3 EBML (H=30') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	24' - 6"	1,301	
B2	12	#11	24' - 6"	1,561	
D	6	#11	1' - 6"	48	
E1	9	#5	8' - 4"	78	
E2	6	#5	6' - 6"	41	
G	11	#7	10' - 6"	236	
M	49	#7	22' - 6"	2,254	
N	25	#6	7' - 11"	297	
S	44	#6	23' - 10"	1,575	
SS	44	#6	21' - 6"	1,421	
T2	26	#5	24' - 6"	664	
REINFORCING STEEL				LB	9,476
CLASS "F" CONCRETE (CAP)				CY	37.5

TABLE OF ESTIMATED QUANTITIES BENT 4 EBML (H=32') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	24' - 6"	1,301	
B2	12	#11	24' - 6"	1,561	
D	6	#11	1' - 6"	48	
G	11	#7	10' - 6"	236	
M	49	#7	22' - 6"	2,254	
N	25	#6	7' - 11"	297	
S	44	#6	23' - 10"	1,575	
SS	44	#6	21' - 6"	1,421	
T2	26	#5	24' - 6"	664	
REINFORCING STEEL				LB	9,357
CLASS "F" CONCRETE (CAP)				CY	37.5

TABLE OF ESTIMATED QUANTITIES BENT 5 EBML (H=33') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	24' - 6"	1,301	
B2	12	#11	24' - 6"	1,561	
D	6	#11	1' - 6"	48	
G	11	#7	10' - 6"	236	
M	49	#7	22' - 6"	2,254	
N	25	#6	7' - 11"	297	
S	44	#6	23' - 10"	1,575	
SS	44	#6	21' - 6"	1,421	
T2	26	#5	24' - 6"	664	
REINFORCING STEEL				LB	9,357
CLASS "F" CONCRETE (CAP)				CY	37.6

TABLE OF ESTIMATED QUANTITIES BENT 6 EBML (H=35') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	26' - 9"	1,419	
B2	12	#11	26' - 9"	1,703	
D	6	#11	1' - 6"	48	
E1	3	#5	8' - 4"	26	
E2	2	#5	6' - 6"	14	
G	11	#7	10' - 6"	236	
M	54	#7	22' - 6"	2,483	
N	28	#6	7' - 11"	333	
S	48	#6	23' - 10"	1,718	
SS	48	#6	21' - 6"	1,550	
T2	26	#5	26' - 9"	724	
REINFORCING STEEL				LB	10,254
CLASS "F" CONCRETE (CAP)				CY	41.0

TABLE OF ESTIMATED QUANTITIES BENT 7 EBML (H=36') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	34' - 2"	1,815	
B2	12	#11	34' - 2"	2,178	
D	8	#11	1' - 6"	64	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	11	#7	10' - 6"	236	
M	69	#7	22' - 6"	3,173	
N	35	#6	7' - 11"	416	
S	58	#6	23' - 10"	2,076	
SS	58	#6	21' - 6"	1,873	
T2	26	#5	34' - 2"	926	
REINFORCING STEEL				LB	12,955
CLASS "F" CONCRETE (CAP)				CY	52.4

TABLE OF ESTIMATED QUANTITIES BENT 8 EBML (H=36') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	16	#11	42' - 6"	3,613	
B2	26	#11	42' - 6"	5,871	
C1	22	#4	5' - 3"	77	
C2	22	#4	9' - 3"	136	
D	9	#11	1' - 6"	72	
E1	9	#5	8' - 4"	78	
E2	6	#5	6' - 6"	41	
G	11	#7	10' - 6"	236	
M	85	#7	22' - 6"	3,909	
N	43	#6	7' - 11"	511	
S	69	#6	23' - 10"	2,470	
SS	69	#6	21' - 6"	2,228	
T2	24	#5	42' - 6"	1,064	
REINFORCING STEEL				LB	20,306
CLASS "F" CONCRETE (CAP)				CY	65.2

TABLE OF ESTIMATED QUANTITIES BENT 9 EBML (H=36') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	53' - 3"	2,829	
A4	4	#11	7' - 0"	149	
B2	12	#11	53' - 3"	3,395	
B4	2	#11	7' - 1"	75	
C1	4	#4	5' - 3"	14	
D	12	#11	1' - 6"	96	
E1	12	#5	8' - 4"	104	
E2	8	#5	6' - 6"	54	
G	11	#7	10' - 6"	236	
M	107	#7	22' - 6"	4,921	
N	54	#6	7' - 11"	642	
S	89	#6	23' - 10"	3,186	
SS	89	#6	21' - 6"	2,874	
T2	26	#5	53' - 3"	1,444	
T4	2	#5	53' - 3"	111	
REINFORCING STEEL				LB	20,130
CLASS "F" CONCRETE (CAP)				CY	81.6

TABLE OF ESTIMATED QUANTITIES BENT 10 EBML (H=36') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	16	#11	55' - 10"	4,748	
B2	26	#11	55' - 10"	7,716	
C1	29	#4	5' - 3"	102	
C2	29	#4	9' - 3"	179	
D	12	#11	1' - 6"	96	
G	11	#7	10' - 6"	236	
M	112	#7	22' - 6"	5,151	
N	57	#6	7' - 11"	678	
S	95	#6	23' - 10"	3,401	
SS	95	#6	21' - 6"	3,068	
T2	24	#5	55' - 10"	1,398	
REINFORCING STEEL				LB	26,773
CLASS "F" CONCRETE (CAP)				CY	85.7

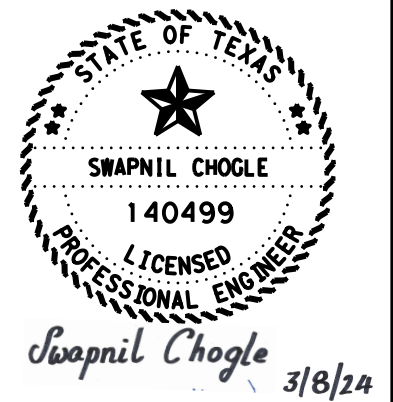
TABLE OF ESTIMATED QUANTITIES BENT 11 EBML (H=35') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	34' - 8"	1,842	
B1	12	#11	34' - 8"	2,210	
D	8	#11	1' - 6"	64	
G	22	#7	10' - 6"	472	
M	68	#7	22' - 6"	3,127	
N	35	#6	7' - 11"	416	
S	57	#6	23' - 10"	2,040	
SS	57	#6	21' - 6"	1,841	
T1	26	#5	34' - 8"	940	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	13,351
CLASS "F" CONCRETE (CAP)				CY	51.9

TABLE OF ESTIMATED QUANTITIES BENT 12 EBML (H=33') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	16	#11	39' - 8"	3,372	
A4	4	#11	48' - 8"	1,034	
B1	26	#11	39' - 8"	5,480	
C1	20	#4	5' - 3"	70	
C2	20	#4	9' - 3"	124	
D	8	#11	1' - 6"	64	
G	22	#7	10' - 6"	472	
LV21	3	#11	11' - 8"	186	
LV22	3	#11	11' - 4"	181	
LV31	3	#11	13' - 8"	218	
LV32	3	#11	13' - 4"	213	
M	78	#7	22' - 6"	3,587	
N	40	#6	7' - 11"	476	
S	67	#6	23' - 10"	2,398	
SS	67	#6	21' - 6"	2,164	
T1	24	#5	39' - 8"	993	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	6	#6	12' - 5"	112	
REINFORCING STEEL				LB	21,394
CLASS "F" CONCRETE (CAP)				CY	51.9

TABLE OF ESTIMATED QUANTITIES BENT 13 EBML (H=31') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	26	#11	30' - 2"	4,167	
A2	10	#11	37' - 0"	1,966	
B1	24	#11	46' - 6"	5,930	
B2	12	#11	20' - 8"	1,318	
C1	31	#4	5' - 3"	109	
C2	31	#4	9' - 3"	192	
D	13	#11	1' - 6"	104	
G	22	#7	10' - 6"	472	
LV11	2	#11	22' - 8"	241	
LV13	2	#11	22' - 0"	234	
LV21	3	#11	18' - 8"	298	
LV22	3	#11	18' - 4"	292	
LV23	3	#11	18' - 0"	287	
LV31	3	#11	20' - 8"	329	
LV32	3	#11	20' - 4"	324	
LV33	3	#11	20' - 0"	319	
M	122	#7	22' - 6"	5,611	
N	62	#6	7' - 11"	737	
S	103	#6	23' - 10"	3,687	
SS	103	#6	21' - 6"	3,326	
T1	24	#5	62' - 2"	1,556	
T2	4	#5	37' - 0"	154	
T3	2	#5	20' - 8"	43	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	12	#6	12' - 5"	224	
REINFORCING STEEL				LB	32,419
CLASS "F" CONCRETE (CAP)				CY	93.1

TABLE OF ESTIMATED QUANTITIES BENT 14 EBML (H=29') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	16	#11	55' - 0"	4,675	
A2	16	#11	17' - 9"	1,509	
A4	4	#11	49' - 0"	1,041	
B1	26	#11	40' - 0"	5,529	
B2	26	#11	32' - 8"	4,513	
C1	34	#4	5' - 3"	119	
C2	34	#4	9' - 3"	210	
D	13	#11	1' - 6"	104	
E1	27	#5	8' - 4"	235	
E2	18	#5	6' - 6"	122	
G	22	#7	10' - 6"	472	
LV21	6	#11	18' - 8"	595	
LV22	6	#11	18' - 4"	584	
LV31	6	#11	20' - 8"	659	
LV32	6	#11	20' - 4"	648	
M	133	#7	22' - 6"	6,117	
N	67	#6	7' - 11"	797	
S	112	#6	23' - 10"	4,009	
SS	112	#6	21' - 6"	3,617	
T	24	#5	67' - 8"	1,694	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	12	#6	12' - 5"	224	
REINFORCING STEEL				LB	37,972
CLASS "F" CONCRETE (CAP)				CY	101.5

TABLE OF ESTIMATED QUANTITIES BENT 15 EBML (H=32') (PHASE 2 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	16	#11	16' - 6"	1,403	
A2	16	#11	59' - 11"	5,093	
A4	4	#11	49' - 0"	1,041	
B1	26	#11	31' - 5"	4,343	
B2	26	#11	45' - 0"	6,216	
C1	35	#4	5' - 3"	123	
C2	35	#4	9' - 3"	216	
D	13	#11	1' - 6"	104	
E1	27	#5	8' - 4"	235	
E2	18	#5	6' - 6"	122	
G	22	#7	10' - 6"	472	
LV21	6	#11	18' - 8"	595	
LV22	6	#11	18' - 4"	584	
LV31	6	#11	20' - 8"	659	
LV32	6	#11	20' - 4"	648	
M	138	#7	22' - 6"	6,347	
N	70	#6	7' - 11"	832	
S	117	#6	23' - 10"	4,188	
SS	117	#6	21' - 6"	3,778	
T	24	#5	71' - 5"	1,788	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	12	#6	12' - 5"	224	
REINFORCING STEEL				LB	39,510
CLASS "F" CONCRETE (CAP)				CY	105.4



HL93 LOADING



F-12679



IH 10 AT US 69
BENT DETAILS
IH 10 EB MAINLANE
AT US 69

PHASE 3 STEP 1

TABLE OF ESTIMATED QUANTITIES BENT 2 EBML (H=26') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	29' - 4"	1,558	
B3	12	#11	29' - 4"	1,870	
D	7	#11	1' - 6"	56	
E1	12	#5	8' - 4"	104	
E2	8	#5	6' - 6"	54	
G	11	#7	10' - 6"	236	
M	61	#7	22' - 6"	2,805	
N	31	#6	7' - 11"	369	
S	50	#6	23' - 10"	1,790	
SS	50	#6	21' - 6"	1,615	
T3	26	#5	29' - 4"	795	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,651
CLASS "F" CONCRETE (CAP)				CY	46.8

TABLE OF ESTIMATED QUANTITIES BENT 3 EBML (H=30') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	29' - 4"	1,558	
B3	12	#11	29' - 4"	1,870	
D	7	#11	1' - 6"	56	
E1	12	#5	8' - 4"	104	
E2	8	#5	6' - 6"	54	
G	11	#7	10' - 6"	236	
M	61	#7	22' - 6"	2,805	
N	31	#6	7' - 11"	369	
S	50	#6	23' - 10"	1,790	
SS	50	#6	21' - 6"	1,615	
T3	26	#5	29' - 4"	795	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,651
CLASS "F" CONCRETE (CAP)				CY	46.8

TABLE OF ESTIMATED QUANTITIES BENT 4 EBML (H=32') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	29' - 4"	1,558	
B3	12	#11	29' - 4"	1,870	
D	7	#11	1' - 6"	56	
G	11	#7	10' - 6"	236	
M	61	#7	22' - 6"	2,805	
N	31	#6	7' - 11"	369	
S	50	#6	23' - 10"	1,790	
SS	50	#6	21' - 6"	1,615	
T3	26	#5	29' - 4"	795	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,493
CLASS "F" CONCRETE (CAP)				CY	46.8

TABLE OF ESTIMATED QUANTITIES BENT 5 EBML (H=33') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	29' - 4"	1,558	
B3	12	#11	29' - 4"	1,870	
D	7	#11	1' - 6"	56	
G	11	#7	10' - 6"	236	
M	61	#7	22' - 6"	2,805	
N	31	#6	7' - 11"	369	
S	50	#6	23' - 10"	1,790	
SS	50	#6	21' - 6"	1,615	
T3	26	#5	29' - 4"	795	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,493
CLASS "F" CONCRETE (CAP)				CY	46.8

TABLE OF ESTIMATED QUANTITIES BENT 6 EBML (H=35') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	29' - 4"	1,558	
B3	12	#11	29' - 4"	1,870	
D	7	#11	1' - 6"	56	
G	11	#7	10' - 6"	236	
M	61	#7	22' - 6"	2,805	
N	31	#6	7' - 11"	369	
S	50	#6	23' - 10"	1,790	
SS	50	#6	21' - 6"	1,615	
T3	26	#5	29' - 4"	795	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,493
CLASS "F" CONCRETE (CAP)				CY	46.8

TABLE OF ESTIMATED QUANTITIES BENT 7 EBML (H=36') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	29' - 4"	1,558	
B3	12	#11	29' - 4"	1,870	
D	7	#11	1' - 6"	56	
E1	12	#5	8' - 4"	104	
E2	8	#5	6' - 6"	54	
G	11	#7	10' - 6"	236	
M	61	#7	22' - 6"	2,805	
N	31	#6	7' - 11"	369	
S	51	#6	23' - 10"	1,826	
SS	51	#6	21' - 6"	1,647	
T3	26	#5	29' - 4"	795	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,719
CLASS "F" CONCRETE (CAP)				CY	46.8

TABLE OF ESTIMATED QUANTITIES BENT 8 EBML (H=36') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	16	#11	29' - 4"	2,494	
B3	26	#11	29' - 4"	4,052	
C1	16	#4	5' - 3"	56	
C2	16	#4	9' - 3"	99	
D	7	#11	1' - 6"	56	
G	11	#7	10' - 6"	236	
M	61	#7	22' - 6"	2,805	
N	31	#6	7' - 11"	369	
S	50	#6	23' - 10"	1,790	
SS	50	#6	21' - 6"	1,615	
T3	24	#5	29' - 4"	734	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	6	#6	12' - 5"	112	
REINFORCING STEEL				LB	14,668
CLASS "F" CONCRETE (CAP)				CY	46.8

TABLE OF ESTIMATED QUANTITIES BENT 9 EBML (H=36') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	28' - 7"	1,520	
B3	12	#11	28' - 7"	1,825	
D	7	#11	1' - 6"	56	
G	11	#7	10' - 6"	236	
M	60	#7	22' - 6"	2,759	
N	31	#6	7' - 11"	369	
S	49	#6	23' - 10"	1,754	
SS	49	#6	21' - 6"	1,582	
T3	28	#5	28' - 7"	836	
U1	7	#6	13' - 4"	140	
U2	8	#6	10' - 5"	125	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	11,351
CLASS "F" CONCRETE (CAP)				CY	45.7

TABLE OF ESTIMATED QUANTITIES BENT 10 EBML (H=36') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	16	#11	28' - 7"	2,428	
B3	26	#11	28' - 7"	3,945	
C1	16	#4	5' - 3"	56	
C2	16	#4	9' - 3"	99	
D	7	#11	1' - 6"	56	
G	11	#7	10' - 6"	236	
M	60	#7	22' - 6"	2,759	
N	31	#6	7' - 11"	369	
S	49	#6	23' - 10"	1,754	
SS	49	#6	21' - 6"	1,582	
T3	24	#5	28' - 7"	715	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	6	#6	12' - 5"	112	
REINFORCING STEEL				LB	14,361
CLASS "F" CONCRETE (CAP)				CY	45.6

TABLE OF ESTIMATED QUANTITIES BENT 11 EBML (H=35') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	25' - 8"	1,364	
B2	12	#11	25' - 8"	1,636	
D	6	#11	1' - 6"	48	
G	11	#7	10' - 6"	236	
M	54	#7	22' - 6"	2,483	
N	28	#6	7' - 11"	333	
S	49	#6	23' - 10"	1,754	
SS	49	#6	21' - 6"	1,582	
T2	26	#5	25' - 8"	696	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	10,531
CLASS "F" CONCRETE (CAP)				CY	41.2

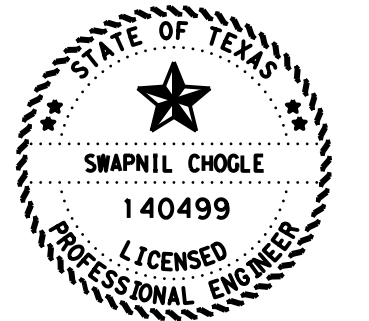
TABLE OF ESTIMATED QUANTITIES BENT 12 EBML (H=33') (PHASE 3 STEP 1)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	16	#11	25' - 8"	2,182	
B2	26	#11	25' - 8"	3,545	
C1	14	#4	5' - 3"	49	
C2	14	#4	9' - 3"	87	
D	6	#11	1' - 6"	48	
G	11	#7	10' - 6"	236	
M	54	#7	22' - 6"	2,483	
N	28	#6	7' - 11"	333	
S	49	#6	23' - 10"	1,754	
SS	49	#6	21' - 6"	1,582	
T2	24	#5	25' - 8"	642	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	6	#6	12' - 5"	112	
REINFORCING STEEL				LB	13,303
CLASS "F" CONCRETE (CAP)				CY	41.2

PHASE 2 STEP 2

TABLE OF ESTIMATED QUANTITIES BENT 19 EBML (H=16') (PHASE 2 STEP 2)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	36' - 11"	1,962	
A2	10	#11	39' - 11"	2,122	
B1	12	#11	53' - 7"	3,416	
B2	12	#11	23' - 4"	1,856	
D	15	#11	1' - 6"	120	
E1	9	#5	8' - 4"	78	
E2	6	#5	6' - 6"	41	
G	22	#7	10' - 6"	472	
M	141	#7	22' - 6"	6,485	
N	71	#6	7' - 11"	844	
S	118	#6	23' - 10"	4,224	
SS	118	#6	21' - 6"	3,811	
T	26	#5	71' - 10"	1,949	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	28,177
CLASS "F" CONCRETE (CAP)				CY	107.9

TABLE OF ESTIMATED QUANTITIES BENT 20 EBML (H=10') (PHASE 2 STEP 2)					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	44' - 3"	2,351	
A2	10	#11	44' - 3"	2,351	
B1	12	#11	47' - 5"	3,023	
B2	12	#11	41' - 0"	2,614	
D	17	#11	1' - 6"	135	
E1	15	#5	8' - 4"	130	
E2	10	#5	6' - 6"	68	
G	22	#7	10' - 6"	472	
M	164	#7	22' - 6"	7,542	
N	83	#6	7' - 11"	987	
S	142	#6	23' - 10"	5,083	
SS	142	#6	21' - 6"	4,586	
T	26	#5	83' - 6"	2,264	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	32,403
CLASS "F" CONCRETE (CAP)				CY	125.6

NOTES:
BARS T INCLUDE 1'-10" LAP SPLICE.
BARS B INCLUDE 6'-10" LAP SPLICE.
QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.



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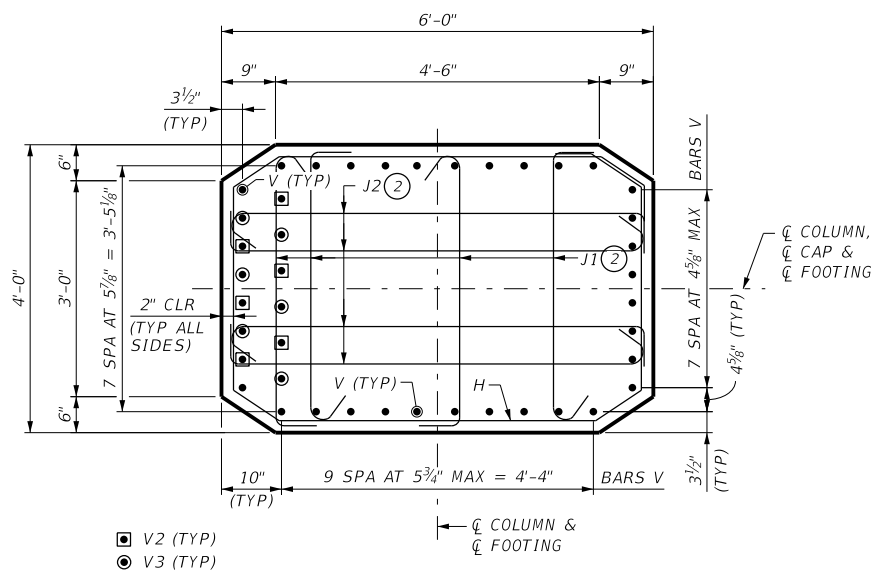


**IH 10 AT US 69
BENT DETAILS
IH 10 EB MAINLANE
AT US 69**

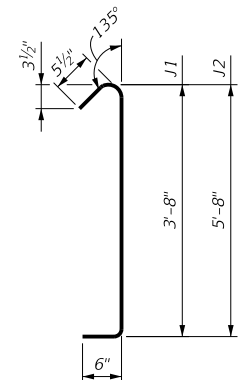
SHEET 6 OF 6

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1378A		

DATE: 8-MAR-2024 20:14
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bent\1379_10EB MAINLANE_BENT_DET_COL_MOD



COLUMN TYPE G (MOD)
(BENT 12)

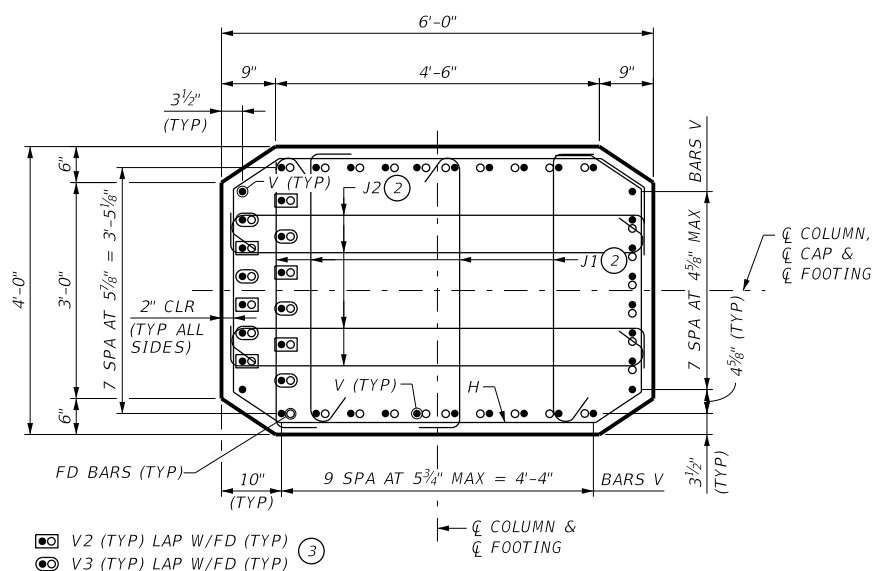


BARS J1 & J2
COLUMN TYPE G (MOD)

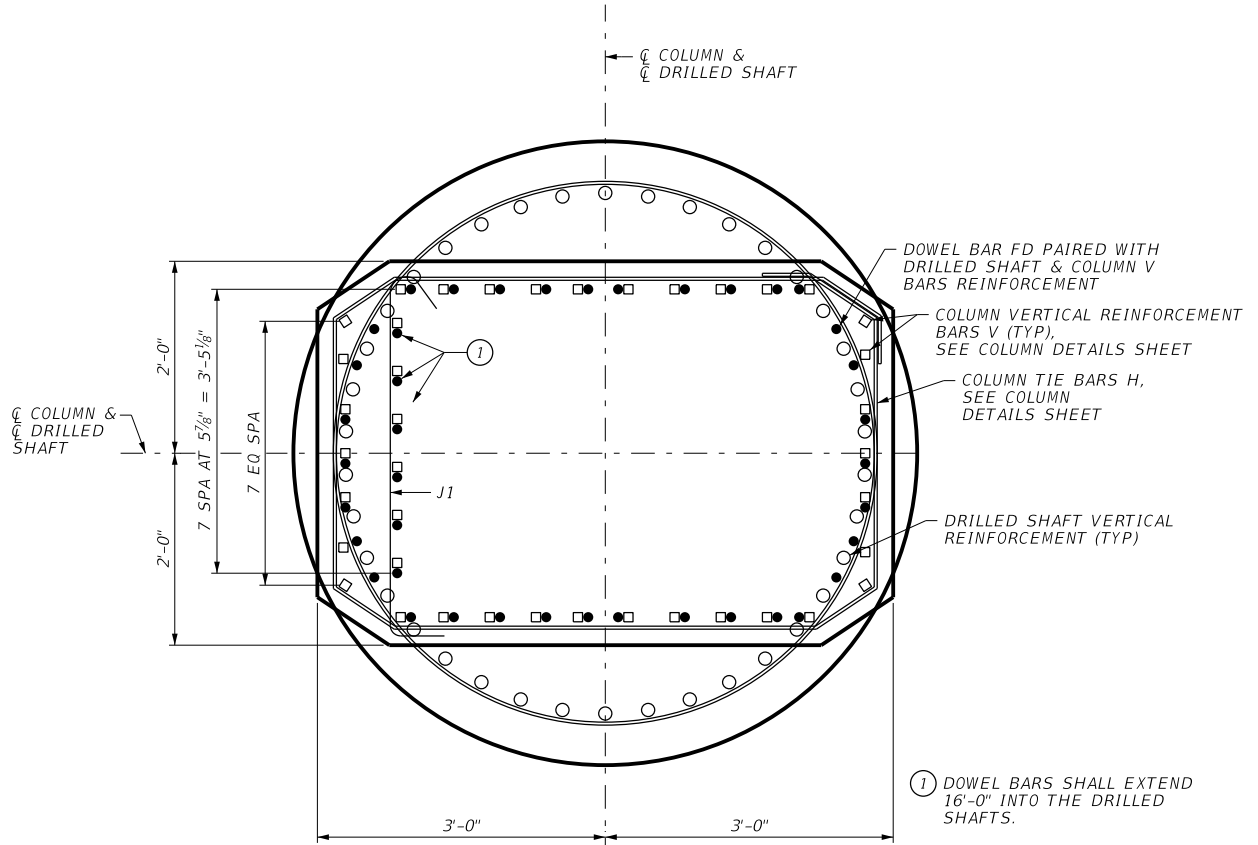
BENT COLUMN TYPE G (MOD)

TABLE OF ESTIMATED COLUMN QUANTITIES (H=33') ①④				
BAR	NO.	SIZE	LENGTH	WEIGHT
E	5	#5	5'-8"	30
E1	6	#5	3'-3"	20
F	6	#5	5'-0"	31
FD	40	#11	21'-6"	1,434
F1	6	#5	5'-2"	27
H	64	#5	19'-3"	1,285
J1	287	#5	4'-8"	1,397
J2	256	#5	6'-8"	1,780
U	10	#4	5'-0"	33
U1	10	#5	7'-3"	15
V	30	#11	38'-5"	6,213
V2	6	#11	35'-5"	1,129
V3	6	#11	37'-5"	1,193
REINFORCING STEEL			LB	12,913
CLASS "F" CONCRETE (COL)			CY	28.5

- ① QUANTITIES SHOWN ARE FOR ONE COLUMN WITH A H=33'-0". SEE BRIDGE LAYOUT SHEETS FOR H VALUES. SEE BENT DETAILS SHEETS FOR CAP QUANTITIES.
- ② ALTERNATE TIE ENDS WITH 90 DEGREE HOOKS (VERTICALLY AND HORIZONTALLY).
- ③ SEE FOUNDATIONS DETAIL SHEETS FOR FD BAR DETAILS.
- ④ FOR EACH LINEAR FOOT OF VARIATION IN "H" VALUE, MAKE THE FOLLOWING ADJUSTMENTS:
 BARS V LENGTH = 1'-0"
 BARS V2 LENGTH = 1'-0"
 BARS V3 LENGTH = 1'-0"
 NO. OF H BARS = 2
 NO. OF J1 BARS = 8
 NO. OF J2 BARS = 8
 REINFORCING STEEL = 358 LBS
 CLASS "F" CONCRETE (COL) = 0.86 CY



COLUMN TYPE G (MOD) NEAR TOP OF 78" DS
(BENT 12)
CORNER FD BARS NO SHOWN FOR CLARITY



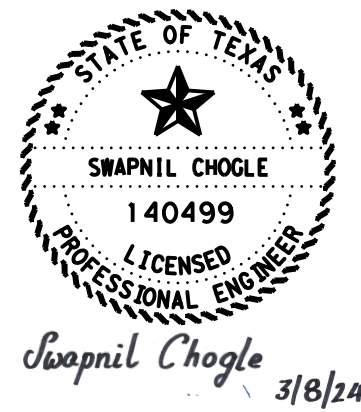
DOWEL PLAN
(BENT 12)

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND D.S. LENGTH.
 SEE FOUNDATION DETAILS SHEET FOR FOUNDATION DETAILS AND NOTES.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE (f'c = 5,000 psi).
 PROVIDE GRADE 60 REINFORCING STEEL.

NOTE: CONTRACTOR TO UTILIZE THIS SHEET WITH COLUMN TYPE G & H DETAILS SHEETS AND FOUNDATION DETAIL TYPE C1, C2 AND TYPE 1 78" SHAFT FOR ADDITIONAL NOTES AND DETAILS.

REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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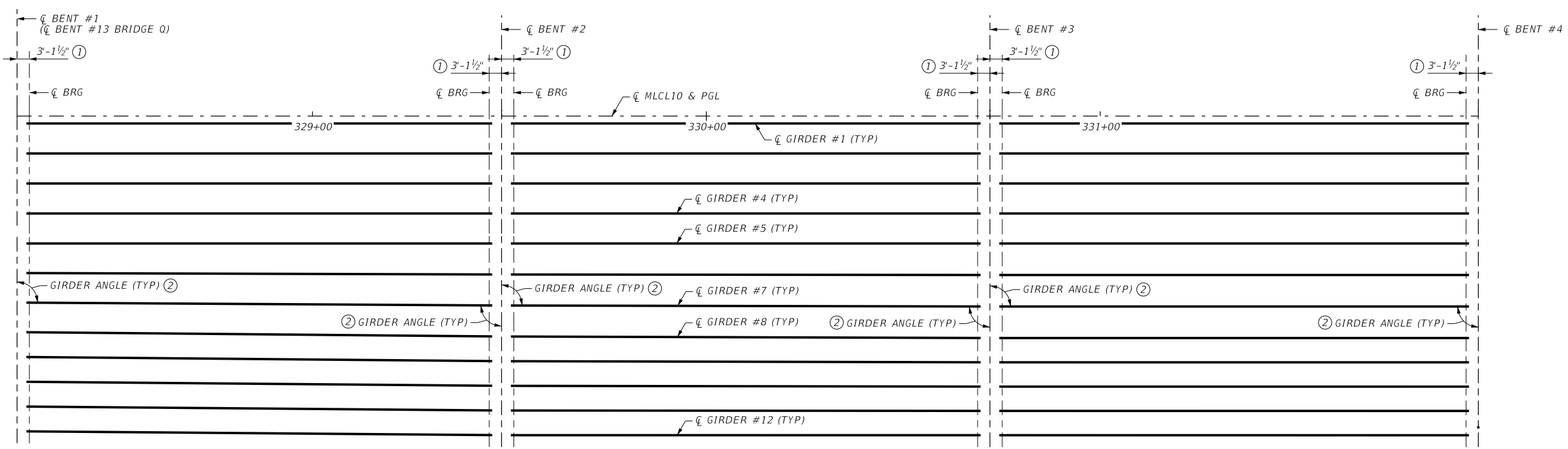
Texas Department of Transportation

**IH 10 AT US 69
 BENT COLUMN
 DETAILS (MOD)
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 2

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1379

DATE: 20-FEB-2024 12:10
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T (IH 10 EB Mainlanes over US 69 NBFR)\1380_10EB_Mainlanes_GRD.LAY_01.dgn

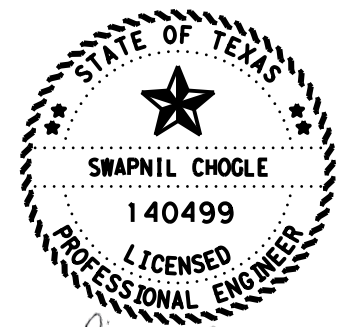


SPAN 1
(Tx54 GIRDERS)

SPAN 2
(Tx54 GIRDERS)

SPAN 3
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Swapnil Chogle
2/20/2024
HL93 LOADING

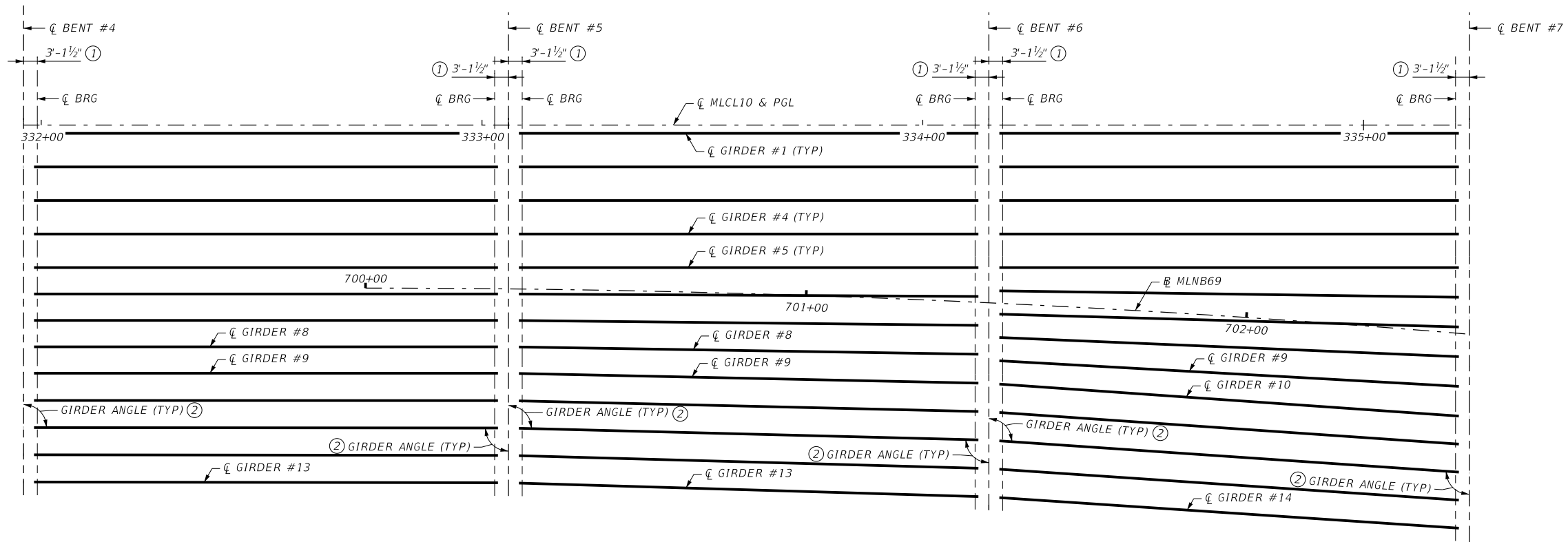


**IH 10 AT US 69
FRAMING PLAN
(SPANS 1-3)
IH 10 EB MAINLANE
AT US 69**

SHEET 1 OF 8

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1380		

DATE: 20-FEB-2024 12:16
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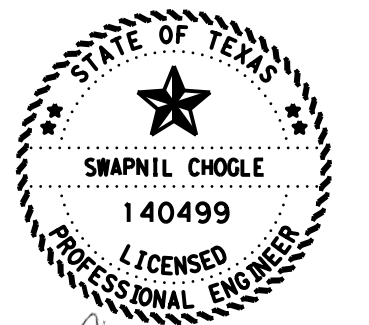


SPAN 4
(Tx54 GIRDERS)

SPAN 5
(Tx54 GIRDERS)

SPAN 6
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Swapnil Chogle
 2/20/2024

HL93 LOADING

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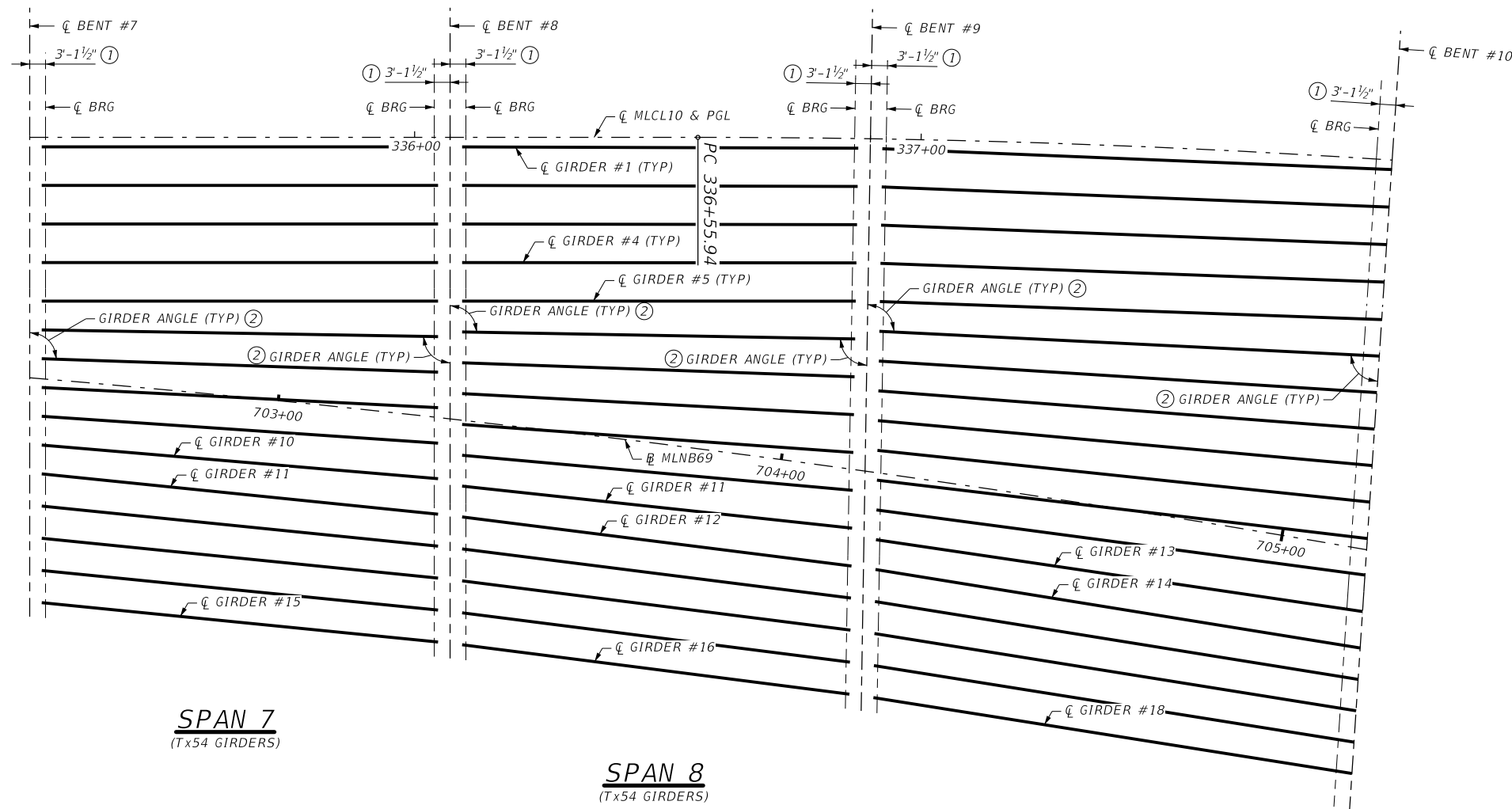


IH 10 AT US 69
 FRAMING PLAN
 (SPANS 4-6)
 IH 10 EB MAINLANE
 AT US 69

SHEET 2 OF 8

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1381		

DATE: 21-FEB-2024 17:41
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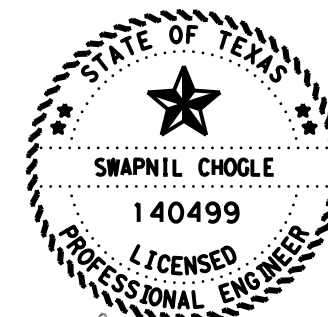


SPAN 7
(Tx54 GIRDERS)

SPAN 8
(Tx54 GIRDERS)

SPAN 9
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Swapnil Chogle
2/20/2024

HL93 LOADING

VOLKERT

F-12679

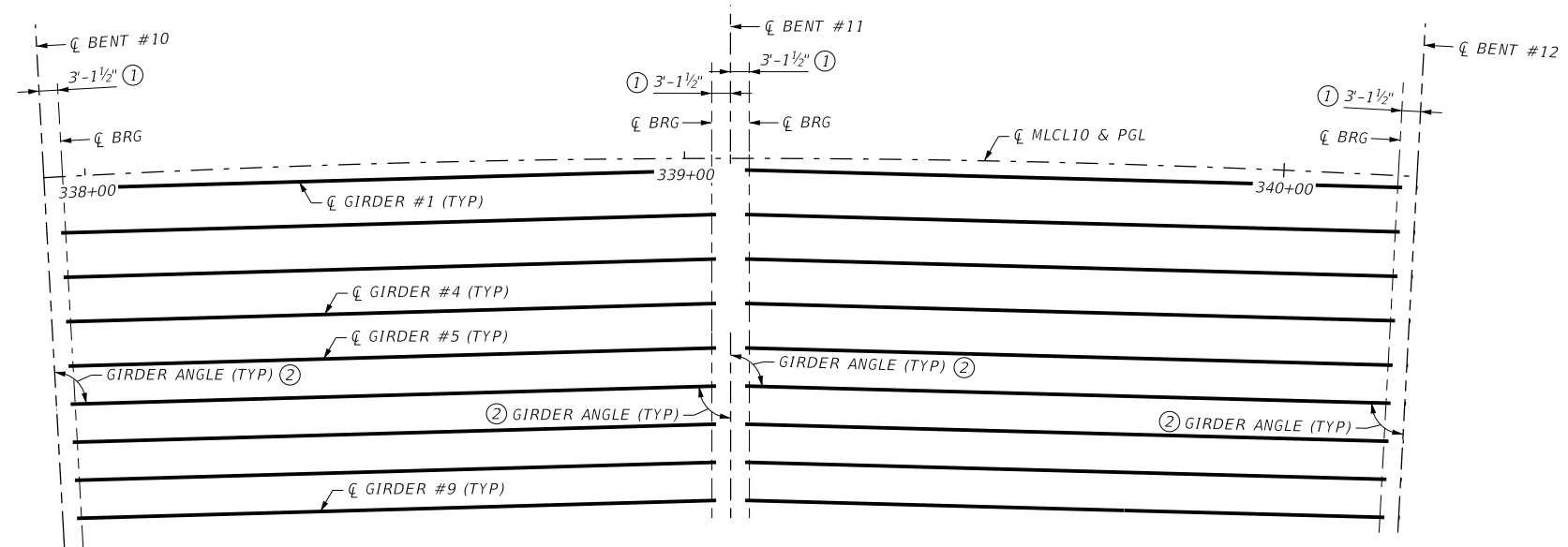


**IH 10 AT US 69
FRAMING PLAN
(SPANS 7-9)
IH 10 EB MAINLANE
AT US 69**

SHEET 3 OF 8

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1382		

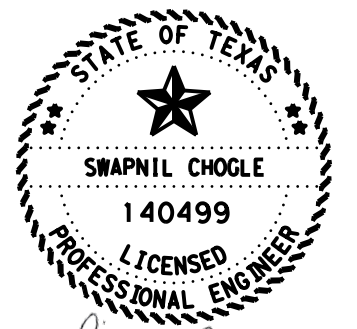
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SPAN 10
 (Tx54 GIRDERS)

SPAN 11
 (Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Swapnil Chogle
 2/20/2024

HL93 LOADING

VOLKERT

F-12679

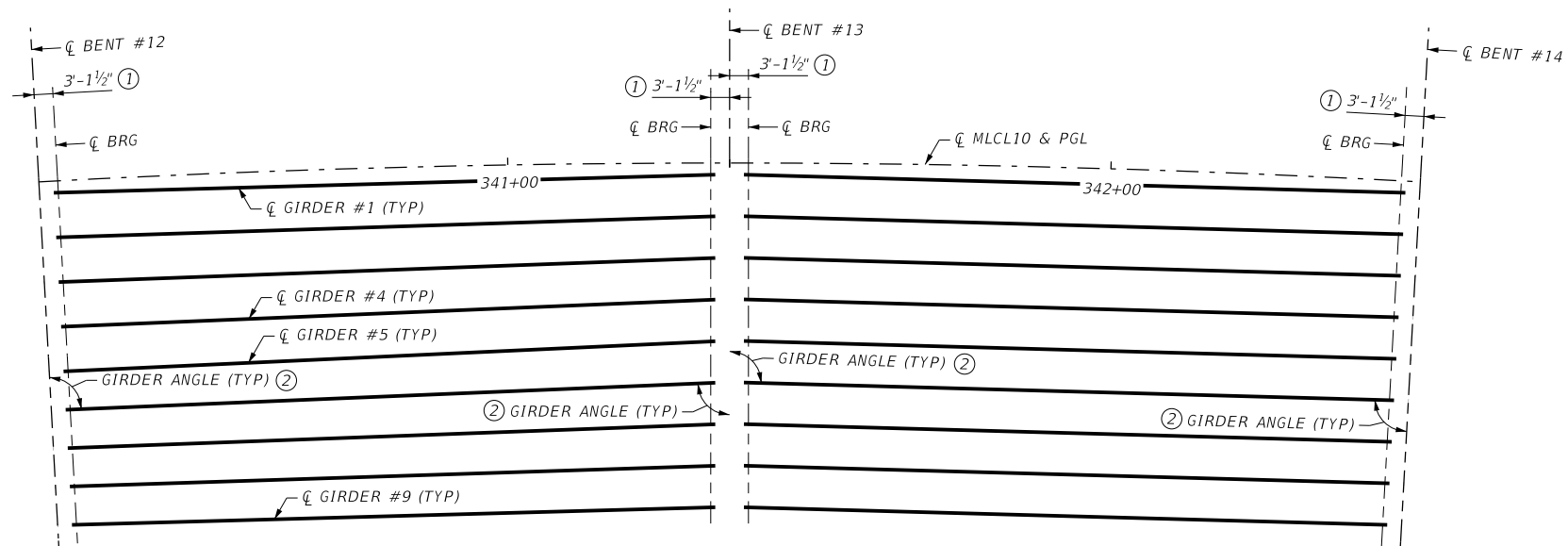


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 10-11)
 IH 10 EB MAINLANE
 AT US 69**

SHEET 4 OF 8

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1383		

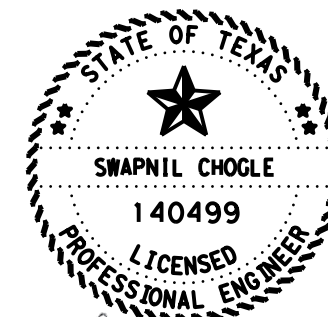
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SPAN 12
(Tx54 GIRDERS)

SPAN 13
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Swapnil Chogle
2/20/2024

HL93 LOADING

VOLKERT

F-12679

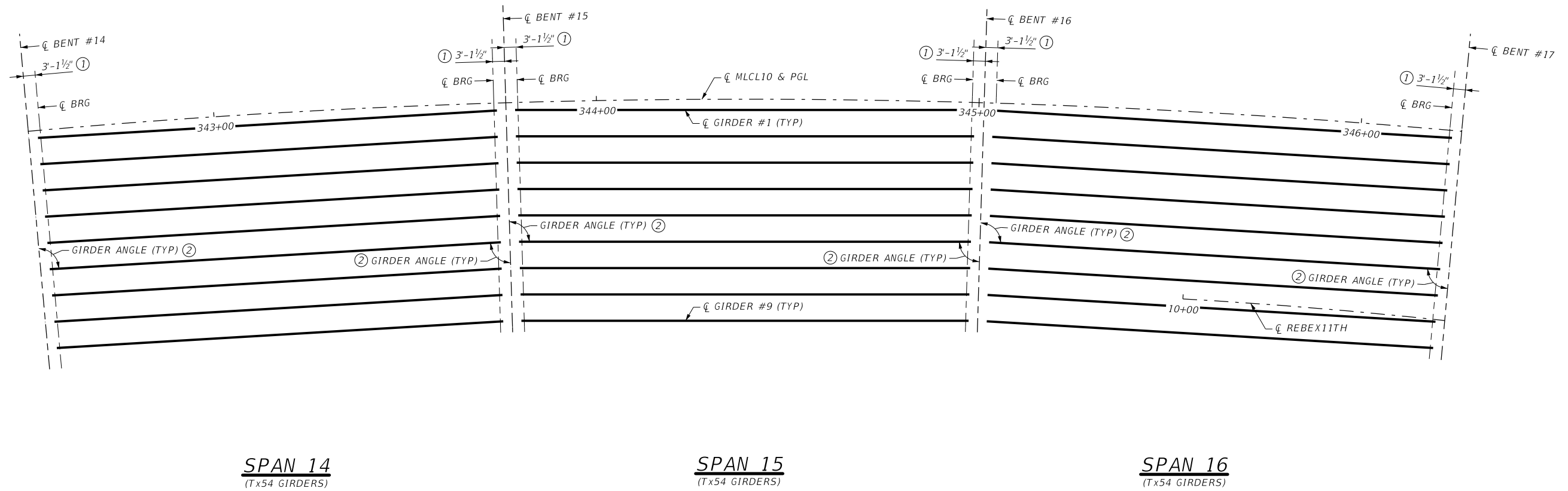


**IH 10 AT US 69
FRAMING PLAN
(SPANS 12-13)
IH 10 EB MAINLANE
AT US 69**

SHEET 5 OF 8

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1384

DATE: 20-FEB-2024 12:11
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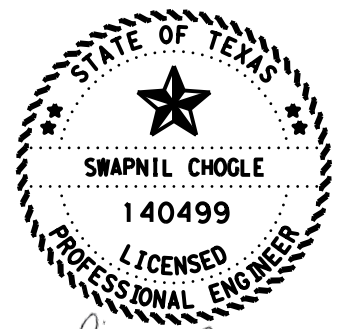


SPAN 14
(Tx54 GIRDERS)

SPAN 15
(Tx54 GIRDERS)

SPAN 16
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Swapnil Chogle
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HL93 LOADING

VOLKERT
F-12679

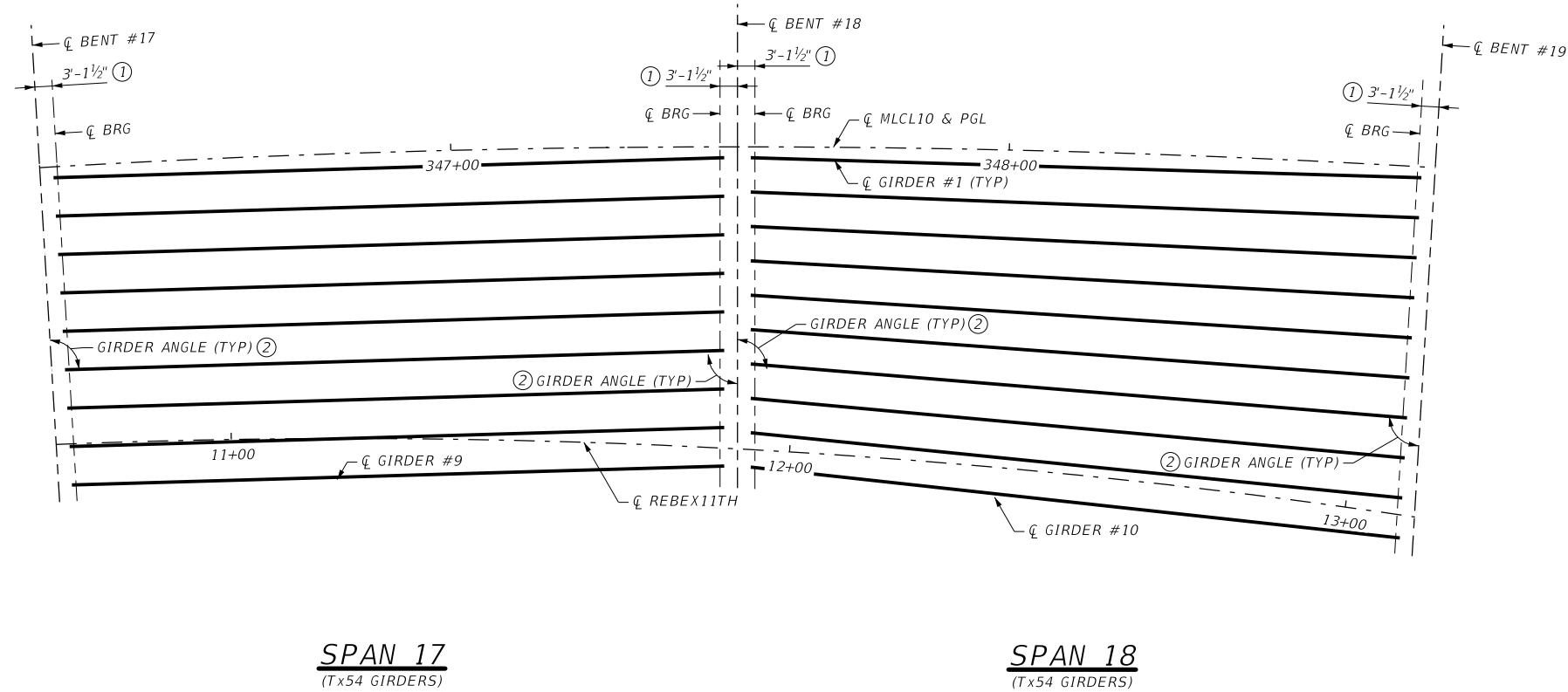


**IH 10 AT US 69
FRAMING PLAN
(SPANS 14-16)
IH 10 EB MAINLANE
AT US 69**

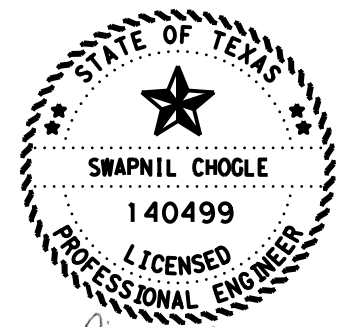
SHEET 6 OF 8

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1385

DATE: 20-FEB-2024 12:15
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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Swapnil Chogle
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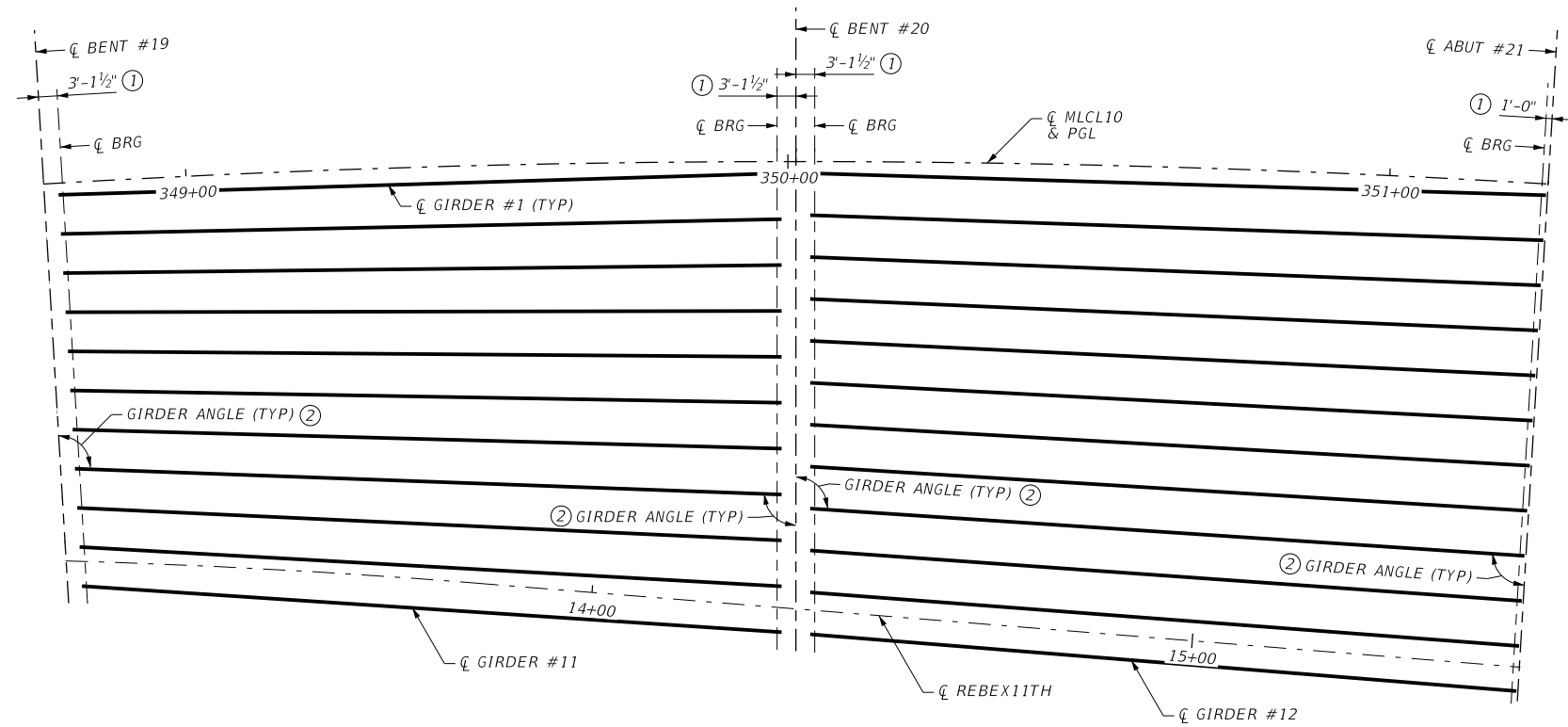


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 17-18)
 IH 10 EB MAINLANE
 AT US 69**

SHEET 7 OF 8

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1386		

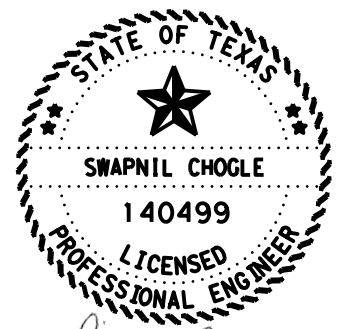
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SPAN 19
 (Tx54 GIRDERS)

SPAN 20
 (Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



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 2/20/2024

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**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 19-20)
 IH 10 EB MAINLANE
 AT US 69**

SHEET 8 OF 8

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1387		

DATE: 20-FEB-2024 23:16
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (H 10 EB Mainlanes over US 69 NBFR)\1388_10EB_Mainlanes_GRDLAY_09.dgn

BENT REPORT

BENT NO. 1 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 1 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	90	0	0
	GIRDER 3	7.615	90	0	0
	GIRDER 4	7.615	90	0	0
SPAN 1 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	7.498	89	49	41
	GIRDER 7	7.498	89	39	22
SPAN 1 PHASE 1 STEP 3	GIRDER 8	7.498	89	29	4
	GIRDER 9	6.290	89	29	52
	GIRDER 10	6.290	89	30	41
	GIRDER 11	6.290	89	31	30
	GIRDER 12	6.290	89	32	18
	TOTAL	78.114			

BENT NO. 2 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 1 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	90	0	0
	GIRDER 3	7.615	90	0	0
	GIRDER 4	7.615	90	0	0
SPAN 1 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	7.867	90	10	19
	GIRDER 7	7.867	90	20	38
SPAN 1 PHASE 1 STEP 3	GIRDER 8	7.867	90	30	56
	GIRDER 9	6.261	90	30	8
	GIRDER 10	6.261	90	29	19
	GIRDER 11	6.261	90	28	30
	GIRDER 12	6.261	90	27	42
	TOTAL	79.105			

BENT NO. 3 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 2 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	90	0	0
	GIRDER 3	7.615	90	0	0
	GIRDER 4	7.615	90	0	0
SPAN 2 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	7.995	90	3	33
	GIRDER 7	7.995	90	7	6
SPAN 2 PHASE 1 STEP 3	GIRDER 8	7.995	90	10	39
	GIRDER 9	6.167	90	8	3
	GIRDER 10	6.167	90	5	26
	GIRDER 11	6.167	90	2	50
	GIRDER 12	6.167	90	0	14
	TOTAL	79.113			

BENT NO. 4 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 3 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	90	0	0
	GIRDER 3	7.615	90	0	0
	GIRDER 4	7.615	90	0	0
SPAN 3 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	7.995	90	0	0
	GIRDER 7	7.995	90	0	0
SPAN 3 PHASE 1 STEP 3	GIRDER 8	7.995	90	0	0
	GIRDER 9	6.169	90	0	3
	GIRDER 10	6.169	90	0	6
	GIRDER 11	6.169	90	0	9
	GIRDER 12	6.169	90	0	13
	TOTAL	79.121			

BENT NO. 5 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 4 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	89	59	59
	GIRDER 3	7.615	89	59	59
	GIRDER 4	7.615	89	59	58
SPAN 4 PHASE 2 STEP 1	GIRDER 5	7.615	89	59	57
	GIRDER 6	5.997	89	59	57
	GIRDER 7	5.997	89	59	57
	GIRDER 8	5.997	89	59	57
SPAN 4 PHASE 1 STEP 3	GIRDER 9	5.997	89	59	57
	GIRDER 10	6.215	90	1	23
	GIRDER 11	6.215	90	2	50
	GIRDER 12	6.215	90	4	16
	GIRDER 13	6.215	90	5	42
	TOTAL	79.308			

SPAN 2 PHASE 3 STEP 1

GIRDER 1	0.000	90	0	0	
GIRDER 2	7.615	90	0	0	
GIRDER 3	7.615	90	0	0	
GIRDER 4	7.615	90	0	0	
SPAN 2 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	7.867	89	56	27
	GIRDER 7	7.867	89	52	54
SPAN 2 PHASE 1 STEP 3	GIRDER 8	7.867	89	49	21
	GIRDER 9	6.261	89	51	57
	GIRDER 10	6.261	89	54	34
	GIRDER 11	6.261	89	57	10
	GIRDER 12	6.261	89	59	46
	TOTAL	79.105			

SPAN 3 PHASE 3 STEP 1

GIRDER 1	0.000	90	0	0	
GIRDER 2	7.615	90	0	0	
GIRDER 3	7.615	90	0	0	
GIRDER 4	7.615	90	0	0	
SPAN 3 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	7.995	90	0	0
	GIRDER 7	7.995	90	0	0
SPAN 3 PHASE 1 STEP 3	GIRDER 8	7.995	90	0	0
	GIRDER 9	6.167	89	59	57
	GIRDER 10	6.167	89	59	54
	GIRDER 11	6.167	89	59	51
	GIRDER 12	6.167	89	59	47
	TOTAL	79.113			

SPAN 4 PHASE 3 STEP 1

GIRDER 1	0.000	90	0	0	
GIRDER 2	7.615	90	0	1	
GIRDER 3	7.615	90	0	2	
GIRDER 4	7.615	90	0	2	
SPAN 4 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	3
	GIRDER 6	5.997	90	0	3
	GIRDER 7	5.997	90	0	3
	GIRDER 8	5.997	90	0	3
SPAN 4 PHASE 1 STEP 3	GIRDER 9	5.997	90	0	3
	GIRDER 10	6.169	89	58	37
	GIRDER 11	6.169	89	57	10
	GIRDER 12	6.169	89	55	44
	GIRDER 13	6.169	89	54	18
	TOTAL	79.124			

SPAN 5 PHASE 3 STEP 1

GIRDER 1	0.000	90	0	0	
GIRDER 2	7.615	90	0	0	
GIRDER 3	7.615	90	0	0	
GIRDER 4	7.615	90	0	0	
SPAN 5 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	5.997	89	41	55
	GIRDER 7	5.997	89	23	49
	GIRDER 8	5.997	89	5	44
SPAN 5 PHASE 1 STEP 3	GIRDER 9	5.997	88	47	39
	GIRDER 10	6.215	88	40	27
	GIRDER 11	6.215	88	33	16
	GIRDER 12	6.215	88	26	5
	GIRDER 13	6.215	88	18	53
	TOTAL	79.308			

BENT NO. 6 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 5 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	90	0	0
	GIRDER 3	7.615	90	0	0
	GIRDER 4	7.615	90	0	0
SPAN 5 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	6.571	90	18	5
	GIRDER 7	6.571	90	36	11
	GIRDER 8	6.571	90	54	16
SPAN 5 PHASE 1 STEP 3	GIRDER 9	6.571	91	12	21
	GIRDER 10	6.443	91	19	33
	GIRDER 11	6.443	91	26	44
	GIRDER 12	6.443	91	33	55
	GIRDER 13	6.443	91	41	7
	TOTAL	82.516			

BENT NO. 7 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 6 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	90	0	0
	GIRDER 3	7.615	90	0	0
	GIRDER 4	7.615	90	0	0
SPAN 6 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	6.774	90	47	52
	GIRDER 7	6.774	91	35	44
	GIRDER 8	6.774	92	23	33
	GIRDER 9	6.774	93	11	18
SPAN 6 PHASE 1 STEP 3	GIRDER 10	6.774	93	58	60
	GIRDER 11	6.358	93	56	20
	GIRDER 12	6.358	93	53	40
	GIRDER 13	6.358	93	50	59
	GIRDER 14	6.358	93	48	19
	TOTAL	89.762			

BENT NO. 8 (S 86° 27' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 7 PHASE 3 STEP 1	GIRDER 1	0.000	90	0	0
	GIRDER 2	7.615	90	0	0
	GIRDER 3	7.615	90	0	0
	GIRDER 4	7.615	90	0	0
SPAN 7 PHASE 2 STEP 1	GIRDER 5	7.615	90	0	0
	GIRDER 6	7.053	90	58	19
	GIRDER 7	7.053	91	56	35
	GIRDER 8	7.053	92	54	48
	GIRDER 9	7.053	93	52	55
	GIRDER 10	7.053	94	50	53
SPAN 7 PHASE 1 STEP 3	GIRDER 11	7.053	95	48	42
	GIRDER 12	6.308	95	46	39
	GIRDER 13	6.308	95	44	36
	GIRDER 14	6.308	95	42	33
	GIRDER 15	6.308	95	40	30
	TOTAL	98.010			

BENT NO. 9 (S 87° 23' 23" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

	BEAM	SPAC.	GRDR ANGLE		
			(C.L. BENT)	D	M
SPAN 8 PHASE 3 STEP 1	GIRDER 1	0.000	89	15	34
	GIRDER 2	7.546	89	12	41
	GIRDER 3	7.546	89	9	47
	GIRDER 4	7.546	89	6	53
SPAN 8 PHASE 2 STEP 1	GIRDER 5	7.546	89	3	58
	GIRDER 6	7.516	90	5	19
	GIRDER 7	7.516	91	6	49
	GIRDER 8	7.516	92	8	25
	GIRDER 9	7.516	93	10	5
	GIRDER 10	7.516	94	11	47
	GIRDER 11	7.516	95	13	28
SPAN 8 PHASE 1 STEP 3	GIRDER 12	7.516	96	15	5
	GIRDER 13	6.328	96	16	25
	GIRDER 14	6.328	96	17	45

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 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\10 EB Mainlanes over US 69 NBFR\1389_10EB_MAINLANE_GRDLAY_10.dgn

BENT REPORT

BENT NO. 11 (N 86° 39' 28" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
SPAN GIRDER 1	0.000	88	26	0	
10 GIRDER 2	7.422	88	26	1	
PHASE GIRDER 3	7.422	88	26	1	
3 STEP GIRDER 4	7.422	88	26	2	
SPAN GIRDER 5	7.422	88	26	2	
10 GIRDER 6	6.359	88	26	1	
PHASE GIRDER 7	6.359	88	25	60	
2 STEP GIRDER 8	6.359	88	25	59	
1 GIRDER 9	6.359	88	25	57	
TOTAL	55.124				

BENT NO. 12 (N 83° 31' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
SPAN 11 GIRDER 1	0.000	88	26	1	
PHASE GIRDER 2	7.424	88	26	5	
3 STEP GIRDER 3	7.424	88	26	8	
1 GIRDER 4	7.424	88	26	12	
SPAN 11 GIRDER 5	7.424	88	26	16	
PHASE GIRDER 6	6.358	88	26	14	
2 STEP GIRDER 7	6.358	88	26	12	
1 GIRDER 8	6.358	88	26	10	
1 GIRDER 9	6.358	88	26	8	
TOTAL	55.128				

BENT NO. 13 (N 80° 23' 30" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
SPAN GIRDER 1	0.000	88	26	0	
12 GIRDER 2	6.891	88	9	57	
PHASE GIRDER 3	6.891	87	53	47	
3 STEP GIRDER 4	6.891	87	37	30	
SPAN GIRDER 5	6.891	87	21	7	
12 GIRDER 6	6.891	87	37	10	
PHASE GIRDER 7	6.891	87	53	21	
2 STEP GIRDER 8	6.891	88	9	37	
1 GIRDER 9	6.891	88	26	0	
TOTAL	55.128				

BENT NO. 14 (N 77° 15' 33" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	26	0	
GIRDER 2	6.891	88	26	0	
SPAN 13 GIRDER 3	6.891	88	26	0	
PHASE GIRDER 4	6.891	88	26	0	
2 STEP GIRDER 5	6.891	88	26	0	
1 GIRDER 6	6.891	88	26	0	
GIRDER 7	6.891	88	26	0	
GIRDER 8	6.891	88	26	0	
GIRDER 9	6.891	88	26	0	
TOTAL	55.128				

BENT NO. 15 (N 73° 50' 24" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	17	27	
GIRDER 2	6.891	88	17	27	
SPAN 14 GIRDER 3	6.891	88	17	28	
PHASE GIRDER 4	6.891	88	17	29	
2 STEP GIRDER 5	6.891	88	17	29	
1 GIRDER 6	6.891	88	17	30	
GIRDER 7	6.891	88	17	31	
GIRDER 8	6.891	88	17	31	
GIRDER 9	6.891	88	17	32	
TOTAL	55.128				

BENT NO. 16 (N 70° 25' 17" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	17	27	
GIRDER 2	6.891	88	17	27	
SPAN 15 GIRDER 3	6.891	88	17	27	
PHASE GIRDER 4	6.891	88	17	27	
2 STEP GIRDER 5	6.891	88	17	27	
1 GIRDER 6	6.891	88	17	27	
GIRDER 7	6.891	88	17	27	
GIRDER 8	6.891	88	17	27	
GIRDER 9	6.891	88	17	27	
TOTAL	55.128				

BENT NO. 17 (N 67° 00' 10" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	17	27	
GIRDER 2	6.891	88	17	27	
SPAN 16 GIRDER 3	6.891	88	17	27	
PHASE GIRDER 4	6.891	88	17	27	
1 STEP GIRDER 5	6.891	88	17	27	
3 GIRDER 6	6.891	88	17	27	
GIRDER 7	6.891	88	17	27	
GIRDER 8	6.891	88	17	27	
GIRDER 9	6.891	88	17	27	
TOTAL	55.128				

BENT NO. 18 (N 63° 35' 03" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	17	27	
GIRDER 2	6.904	88	17	48	
SPAN 17 GIRDER 3	6.904	88	18	10	
PHASE GIRDER 4	6.904	88	18	32	
1 STEP GIRDER 5	6.904	88	18	54	
3 GIRDER 6	6.904	88	19	16	
GIRDER 7	6.904	88	19	38	
GIRDER 8	6.904	88	20	0	
GIRDER 9	6.904	88	20	23	
TOTAL	55.232				

BENT NO. 19 (N 60° 09' 56" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

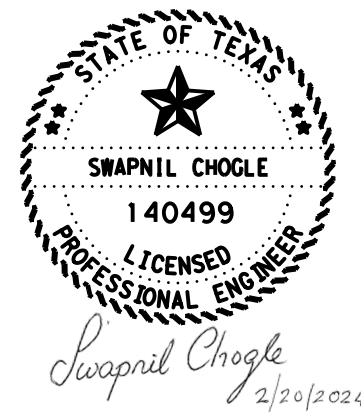
BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	17	27	
GIRDER 2	7.203	88	46	53	
SPAN 18 GIRDER 3	7.203	89	16	30	
PHASE GIRDER 4	7.203	89	46	18	
1 STEP GIRDER 5	7.203	90	16	17	
3 GIRDER 6	7.203	90	46	26	
GIRDER 7	7.203	91	16	46	
GIRDER 8	7.203	91	47	16	
GIRDER 9	7.203	92	17	56	
GIRDER 10	7.203	92	48	45	
TOTAL	64.827				

BENT NO. 20 (N 56° 44' 49" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	17	27	
GIRDER 2	7.640	88	49	23	
SPAN 19 GIRDER 3	7.640	89	21	33	
PHASE GIRDER 4	7.640	89	53	55	
2 STEP GIRDER 5	7.640	90	26	29	
1 GIRDER 6	7.640	90	59	15	
GIRDER 7	7.640	91	32	13	
GIRDER 8	7.640	92	5	22	
GIRDER 9	7.640	92	38	43	
GIRDER 10	7.640	93	12	14	
GIRDER 11	7.640	93	45	57	
TOTAL	76.400				

ABUT NO. 21 (N 53° 19' 43" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 1.875 R

BEAM	SPAC.	GRDR ANGLE			
(C.L. BENT)	D	M	S		
GIRDER 1	0.000	88	17	27	
GIRDER 2	7.496	88	32	39	
GIRDER 3	7.496	88	47	59	
GIRDER 4	7.496	89	3	24	
SPAN 20 GIRDER 5	7.496	89	18	56	
PHASE GIRDER 6	7.496	89	34	34	
2 STEP GIRDER 7	7.496	89	50	19	
1 GIRDER 8	7.496	90	6	10	
GIRDER 9	7.496	90	22	8	
GIRDER 10	7.496	90	38	12	
GIRDER 11	7.496	90	54	23	
GIRDER 12	7.496	91	10	40	
TOTAL	82.456				



HL93 LOADING



F-12679



**IH10 AT US 69
 BENT AND GIRDER REPORT
 IH 10 EB MAINLANE
 AT US 69**

SHEET 2 OF 4

DN:	CBF	CK:	FB	DW:	MFR	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1389		

DATE: 20-FEB-2024 15:26
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridge.T (IH 10 EB MainLanes over US 69 NBFR)\1390_10EB_MAINLANE_GRDLAY_11.dgn

GIRDER REPORT

GIRDER REPORT, SPAN 1

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	123.000	116.750	118.302	0.0297
	GIRDER 2	123.000	116.750	118.302	0.0297
	GIRDER 3	123.000	116.750	118.302	0.0297
	GIRDER 4	123.000	116.750	118.302	0.0297
PHASE 2 STEP 1	GIRDER 5	123.000	116.750	118.302	0.0297
	GIRDER 6	123.001	116.751	118.302	0.0296
	GIRDER 7	123.002	116.752	118.304	0.0295
PHASE 1 STEP 3	GIRDER 8	123.005	116.755	118.306	0.0295
	GIRDER 9	123.005	116.754	118.306	0.0295
	GIRDER 10	123.004	116.754	118.306	0.0295
	GIRDER 11	123.004	116.754	118.305	0.0295
	GIRDER 12	123.004	116.754	118.305	0.0295

GIRDER REPORT, SPAN 2

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	124.000	117.750	119.289	0.0257
	GIRDER 2	124.000	117.750	119.289	0.0257
	GIRDER 3	124.000	117.750	119.289	0.0257
	GIRDER 4	124.000	117.750	119.289	0.0257
PHASE 2 STEP 1	GIRDER 5	124.000	117.750	119.289	0.0257
	GIRDER 6	124.000	117.750	119.289	0.0257
	GIRDER 7	124.000	117.750	119.289	0.0256
PHASE 1 STEP 3	GIRDER 8	124.001	117.751	119.290	0.0256
	GIRDER 9	124.000	117.750	119.289	0.0256
	GIRDER 10	124.000	117.750	119.289	0.0256
	GIRDER 11	124.000	117.750	119.289	0.0257
	GIRDER 12	124.000	117.750	119.289	0.0257

GIRDER REPORT, SPAN 3

	HORIZONTAL C-C BEN	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	124.000	117.750	119.275	0.0206
	GIRDER 2	124.000	117.750	119.274	0.0199
	GIRDER 3	124.000	117.750	119.272	0.0192
	GIRDER 4	124.000	117.750	119.270	0.0185
PHASE 2 STEP 1	GIRDER 5	124.000	117.750	119.269	0.0178
	GIRDER 6	124.000	117.750	119.267	0.0171
	GIRDER 7	124.000	117.750	119.266	0.0164
PHASE 1 STEP 3	GIRDER 8	124.000	117.750	119.265	0.0157
	GIRDER 9	124.000	117.750	119.264	0.0151
	GIRDER 10	124.000	117.750	119.263	0.0146
	GIRDER 11	124.000	117.750	119.262	0.0140
	GIRDER 12	124.000	117.750	119.261	0.0135

GIRDER REPORT, SPAN 4

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	110.000	103.750	105.263	0.0159
	GIRDER 2	110.000	103.750	105.262	0.0151
	GIRDER 3	110.000	103.750	105.261	0.0143
	GIRDER 4	110.000	103.750	105.260	0.0135
PHASE 2 STEP 1	GIRDER 5	110.000	103.750	105.259	0.0127
	GIRDER 6	110.000	103.750	105.258	0.0121
	GIRDER 7	110.000	103.750	105.257	0.0115
	GIRDER 8	110.000	103.750	105.256	0.0109
PHASE 1 STEP 3	GIRDER 9	110.000	103.750	105.256	0.0103
	GIRDER 10	110.000	103.750	105.255	0.0096
	GIRDER 11	110.000	103.750	105.254	0.0090
	GIRDER 12	110.000	103.750	105.254	0.0083
	GIRDER 13	110.000	103.750	105.253	0.0077

GIRDER REPORT, SPAN 5

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	109.000	102.750	104.257	0.0115
	GIRDER 2	109.000	102.750	104.256	0.0108
	GIRDER 3	109.000	102.750	104.255	0.0101
	GIRDER 4	109.000	102.750	104.255	0.0093
PHASE 2 STEP 1	GIRDER 5	109.000	102.750	104.254	0.0086
	GIRDER 6	109.002	102.751	104.255	0.0078
	GIRDER 7	109.006	102.756	104.258	0.0069
	GIRDER 8	109.014	102.763	104.265	0.0060
PHASE 1 STEP 3	GIRDER 9	109.024	102.773	104.274	0.0052
	GIRDER 10	109.029	102.778	104.279	0.0045
	GIRDER 11	109.035	102.783	104.284	0.0037
	GIRDER 12	109.041	102.788	104.289	0.0030
	GIRDER 13	109.047	102.794	104.295	0.0023

GIRDER REPORT, SPAN 6

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	109.000	102.750	104.253	0.0073
	GIRDER 2	109.000	102.750	104.253	0.0071
	GIRDER 3	109.000	102.750	104.252	0.0069
	GIRDER 4	109.000	102.750	104.252	0.0067
PHASE 2 STEP 1	GIRDER 5	109.000	102.750	104.252	0.0066
	GIRDER 6	109.011	102.760	104.262	0.0056
	GIRDER 7	109.042	102.790	104.292	0.0047
	GIRDER 8	109.095	102.840	104.342	0.0037
	GIRDER 9	109.169	102.909	104.412	0.0027
PHASE 1 STEP 3	GIRDER 10	109.264	102.999	104.503	0.0018
	GIRDER 11	109.258	102.993	104.497	0.0017
	GIRDER 12	109.252	102.988	104.491	0.0016
	GIRDER 13	109.247	102.982	104.486	0.0015
	GIRDER 14	109.241	102.977	104.48	0.0014

GIRDER REPORT, SPAN 7

	HORIZONTAL C-C BEN	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	83.000	76.750	78.250	0.0035
	GIRDER 2	83.000	76.750	78.250	0.0035
	GIRDER 3	83.000	76.750	78.250	0.0035
	GIRDER 4	83.000	76.750	78.250	0.0035
PHASE 2 STEP 1	GIRDER 5	83.000	76.750	78.250	0.0035
	GIRDER 6	83.012	76.761	78.261	0.0024
	GIRDER 7	83.048	76.794	78.295	0.0014
	GIRDER 8	83.107	76.849	78.351	0.0004
	GIRDER 9	83.191	76.926	78.430	-0.0006
	GIRDER 10	83.298	77.026	78.531	-0.0016
PHASE 1 STEP 3	GIRDER 11	83.429	77.147	78.655	-0.0026
	GIRDER 12	83.424	77.142	78.650	-0.0026
	GIRDER 13	83.419	77.137	78.645	-0.0026
	GIRDER 14	83.414	77.133	78.640	-0.0025
	GIRDER 15	83.409	77.128	78.636	-0.0025

GIRDER REPORT, SPAN 8

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	82.968	76.718	78.218	0.0001
	GIRDER 2	82.846	76.595	78.095	0.0002
	GIRDER 3	82.723	76.472	77.972	0.0002
	GIRDER 4	82.600	76.350	77.850	0.0003
PHASE 2 STEP 1	GIRDER 5	82.477	76.227	77.727	0.0003
	GIRDER 6	82.368	76.118	77.618	-0.0007
	GIRDER 7	82.285	76.033	77.533	-0.0018
	GIRDER 8	82.229	75.972	77.474	-0.0029
	GIRDER 9	82.199	75.936	77.440	-0.0040
	GIRDER 10	82.195	75.924	77.430	-0.0050
	GIRDER 11	82.218	75.937	77.446	-0.0061
PHASE 1 STEP 3	GIRDER 12	82.267	75.974	77.486	-0.0072
	GIRDER 13	82.168	75.874	77.387	-0.0072
	GIRDER 14	82.068	75.774	77.287	-0.0072
	GIRDER 15	81.968	75.674	77.187	-0.0073
	GIRDER 16	81.869	75.574	77.087	-0.0073

GIRDER REPORT, SPAN 9

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	102.997	96.745	98.247	-0.0036
	GIRDER 2	102.629	96.377	97.878	-0.0035
	GIRDER 3	102.261	96.009	97.510	-0.0035
	GIRDER 4	101.893	95.641	97.142	-0.0034
PHASE 2 STEP 1	GIRDER 5	101.525	95.274	96.775	-0.0033
	GIRDER 6	101.207	94.954	96.456	-0.0042
	GIRDER 7	100.906	94.653	96.155	-0.0050
	GIRDER 8	100.625	94.369	95.872	-0.0058
	GIRDER 9	100.363	94.103	95.608	-0.0067
	GIRDER 10	100.120	93.855	95.361	-0.0075
	GIRDER 11	99.896	93.625	95.134	-0.0083
	GIRDER 12	99.692	93.414	94.924	-0.0092
	GIRDER 13	99.507	93.220	94.734	-0.0100

GIRDER REPORT, SPAN 10

	HORIZONTAL C-C BENT	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	114.443	108.191	109.695	-0.0079
	GIRDER 2	114.037	107.785	109.289	-0.0080
	GIRDER 3	113.632	107.379	108.883	-0.0080
	GIRDER 4	113.226	106.973	108.478	-0.0080
PHASE 2 STEP 1	GIRDER 5	112.820	106.568	108.072	-0.0081
	GIRDER 6	112.472	106.220	107.724	-0.0081
	GIRDER 7	112.125	105.872	107.376	-0.0081
	GIRDER 8	111.777	105.525	107.029	-0.0081
	GIRDER 9	111.429	105.177	106.681	-0.0082

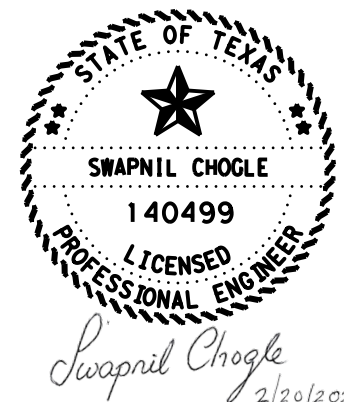
GIRDER REPORT, SPAN 11

	HORIZONTAL C-C BEN	DISTANCE C-C BRG.	TRUE DISTANCE BOT. GRDR FLG.	GRDR SLOPE	
PHASE 3 STEP 1	GIRDER 1	114.433	108.181	109.681	-0.0125
	GIRDER 2	114.027	107.775	109.276	-0.0126
	GIRDER 3	113.622	107.369	108.870	-0.0126
	GIRDER 4	113.216	106.963	108.464	-0.0127
PHASE 2 STEP 1	GIRDER 5	106.558	108.058	108.067	-0.0127
	GIRDER 6	106.210	107.711	107.719	-0.0127
	GIRDER 7	105.862	107.363	107.372	-0.0128
	GIRDER 8	105.515	107.015	107.024	-0.0128
	GIRDER 9	105.167	106.668	106.676	-0.0129

PHASE 1 STEP 3

GIRDER 14	99.342	93.045	94.562	-0.0109
GIRDER 15	99.022	92.725	94.242	-0.0108
GIRDER 16	98.701	92.406	93.922	-0.0108
GIRDER 17	98.381	92.086	93.602	-0.0108
GIRDER 18	98.061	91.766	93.282	-0.0107

① GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.



HL93 LOADING



IH 10 AT US 69
BENT AND GIRDER REPORT
IH 10 EB MAINLANE
AT US 69

SHEET 3 OF 4

DIST	COUNTY	SHEET NO.
0028	JEFFERSON	1390

DATE: 20-FEB-2024 15:25
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1391_10EB_MAINLANE_GRDLAY_12.dgn

GIRDER REPORT

GIRDER REPORT, SPAN 12

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 3 STEP 1 GIRDER 1	114.443	108.191	109.691	-0.0171
GIRDER 2	114.053	107.801	109.301	-0.0169
GIRDER 3	113.666	107.413	108.914	-0.0167
GIRDER 4	113.280	107.028	108.528	-0.0164
GIRDER 5	112.898	106.645	108.145	-0.0162
PHASE 2 STEP 1 GIRDER 6	112.527	106.274	107.775	-0.0165
GIRDER 7	112.159	105.906	107.407	-0.0169
GIRDER 8	111.793	105.540	107.041	-0.0172
GIRDER 9	111.429	105.177	106.677	-0.0176

GIRDER REPORT, SPAN 13

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 2 STEP 1 GIRDER 1	114.443	108.191	109.717	-0.0217
GIRDER 2	114.066	107.814	109.341	-0.0218
GIRDER 3	113.690	107.437	108.964	-0.0218
GIRDER 4	113.313	107.061	108.587	-0.0219
PHASE 2 STEP 1 GIRDER 5	112.936	106.684	108.210	-0.0220
GIRDER 6	112.559	106.307	107.834	-0.0221
GIRDER 7	112.183	105.930	107.457	-0.0221
GIRDER 8	111.806	105.553	107.080	-0.0222
GIRDER 9	111.429	105.177	106.704	-0.0223

GIRDER REPORT, SPAN 14

	HORIZONTAL DISTANCE C-C BEN	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 2 STEP 1 GIRDER 1	124.870	118.617	120.160	-0.0265
GIRDER 2	124.459	118.206	119.749	-0.0266
GIRDER 3	124.047	117.795	119.338	-0.0267
GIRDER 4	123.636	117.384	118.927	-0.0268
PHASE 2 STEP 1 GIRDER 5	123.225	116.972	118.516	-0.0268
GIRDER 6	122.814	116.561	118.105	-0.0269
GIRDER 7	122.403	116.150	117.694	-0.0270
GIRDER 8	121.992	115.739	117.283	-0.0271
GIRDER 9	121.581	115.328	116.872	-0.0272

GIRDER REPORT, SPAN 15

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 2 STEP 1 GIRDER 1	124.870	118.617	120.171	-0.0299
GIRDER 2	124.459	118.206	119.760	-0.0300
GIRDER 3	124.047	117.795	119.350	-0.0301
GIRDER 4	123.636	117.384	118.939	-0.0302
PHASE 2 STEP 1 GIRDER 5	123.225	116.973	118.528	-0.0303
GIRDER 6	122.814	116.561	118.117	-0.0304
GIRDER 7	122.403	116.150	117.706	-0.0305
GIRDER 8	121.992	115.739	117.295	-0.0307
GIRDER 9	121.581	115.328	116.884	-0.0308

GIRDER REPORT, SPAN 16

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 1 STEP 3 GIRDER 1	124.870	118.617	120.172	-0.0300
GIRDER 2	124.459	118.206	119.761	-0.0301
GIRDER 3	124.047	117.795	119.350	-0.0302
GIRDER 4	123.636	117.384	118.939	-0.0303
PHASE 1 STEP 3 GIRDER 5	123.225	116.973	118.528	-0.0304
GIRDER 6	122.814	116.561	118.117	-0.0305
GIRDER 7	122.403	116.150	117.706	-0.0306
GIRDER 8	121.992	115.739	117.295	-0.0307
GIRDER 9	121.581	115.328	116.884	-0.0308

GIRDER REPORT, SPAN 17

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 1 STEP 3 GIRDER 1	124.870	118.617	120.172	-0.0300
GIRDER 2	124.458	118.205	119.760	-0.0301
GIRDER 3	124.047	117.794	119.349	-0.0302
GIRDER 4	123.635	117.382	118.938	-0.0304
PHASE 1 STEP 3 GIRDER 5	123.224	116.971	118.527	-0.0305
GIRDER 6	122.812	116.559	118.115	-0.0306
GIRDER 7	122.401	116.148	117.704	-0.0307
GIRDER 8	121.989	115.736	117.293	-0.0308
GIRDER 9	121.578	115.325	116.881	-0.0309

GIRDER REPORT, SPAN 18

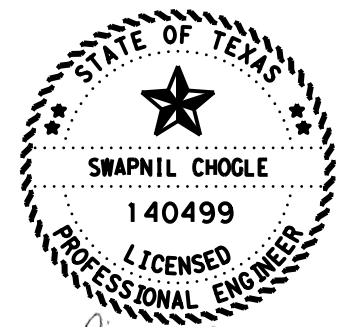
	HORIZONTAL DISTANCE C-C BEN	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 1 STEP 3 GIRDER 1	124.870	118.617	120.172	-0.0300
GIRDER 2	124.476	118.223	119.780	-0.0306
GIRDER 3	124.092	117.838	119.398	-0.0313
GIRDER 4	123.717	117.462	119.024	-0.0319
PHASE 1 STEP 3 GIRDER 5	123.352	117.095	118.659	-0.0325
GIRDER 6	122.996	116.737	118.304	-0.0331
GIRDER 7	122.649	116.388	117.957	-0.0337
GIRDER 8	122.312	116.048	117.620	-0.0343
GIRDER 9	121.985	115.717	117.292	-0.0349
GIRDER 10	121.667	115.395	116.974	-0.0356

GIRDER REPORT, SPAN 19

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 2 STEP 2 GIRDER 1	124.870	118.617	120.172	-0.0300
GIRDER 2	124.454	118.201	119.758	-0.0307
GIRDER 3	124.049	117.795	119.354	-0.0314
GIRDER 4	123.655	117.399	118.961	-0.0320
PHASE 2 STEP 2 GIRDER 5	123.271	117.014	118.579	-0.0327
GIRDER 6	122.899	116.640	118.208	-0.0333
GIRDER 7	122.539	116.276	117.847	-0.0340
GIRDER 8	122.189	115.923	117.497	-0.0347
GIRDER 9	121.851	115.580	117.159	-0.0353
GIRDER 10	121.525	115.249	116.831	-0.0360
GIRDER 11	121.210	114.929	116.514	-0.0367

GIRDER REPORT, SPAN 20

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG.	GRDR SLOPE
			①	
PHASE 2 STEP 2 GIRDER 1	124.870	120.743	122.286	-0.0265
GIRDER 2	124.440	120.313	121.857	-0.0268
GIRDER 3	124.013	119.885	121.431	-0.0272
GIRDER 4	123.588	119.460	121.007	-0.0275
GIRDER 5	123.166	119.038	120.585	-0.0279
PHASE 2 STEP 2 GIRDER 6	122.747	118.617	120.166	-0.0283
GIRDER 7	122.330	118.200	119.750	-0.0286
GIRDER 8	121.915	117.784	119.336	-0.0290
GIRDER 9	121.503	117.372	118.924	-0.0294
GIRDER 10	121.094	116.961	118.516	-0.0297
GIRDER 11	120.688	116.554	118.109	-0.0301
GIRDER 12	120.284	116.149	117.706	-0.0305



Swapnil Chogle
2/20/2024

HL93 LOADING



F-12679



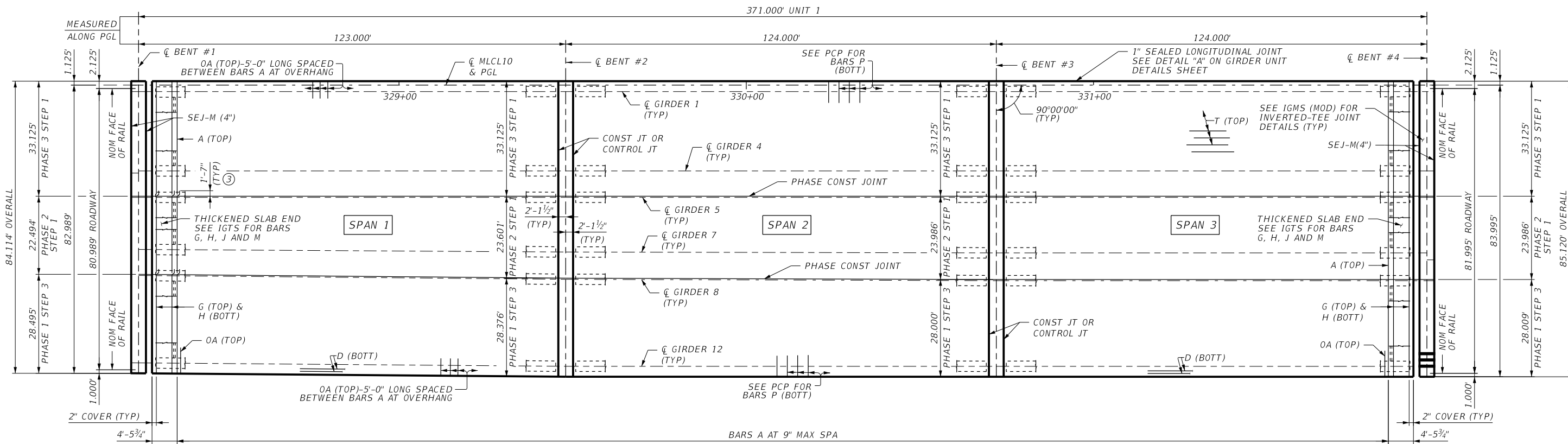
**IH 10 AT US 69
BENT AND GIRDER REPORT
IH 10 EB MAINLANE
AT US 69**

SHEET 4 OF 4

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST		COUNTY		SHEET NO.			
	BMT		JEFFERSON				1391

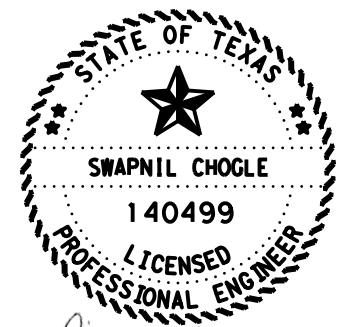
① GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

DATE: 21-FEB-2024 20:49 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10EB Mainlane GRDUNIT_01.dgn

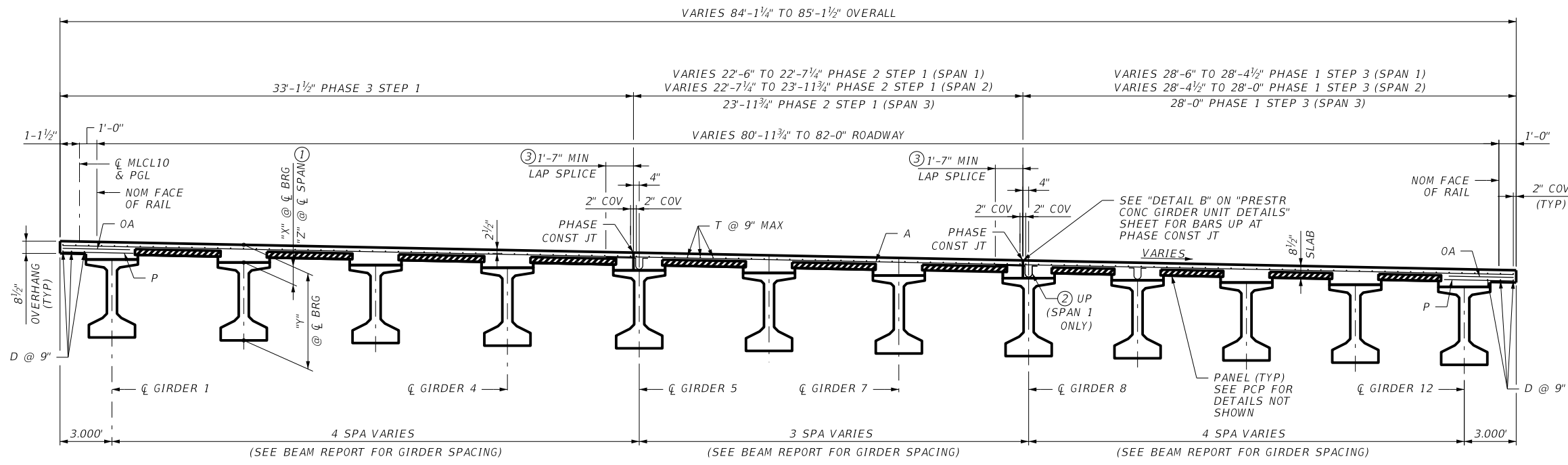


PLAN

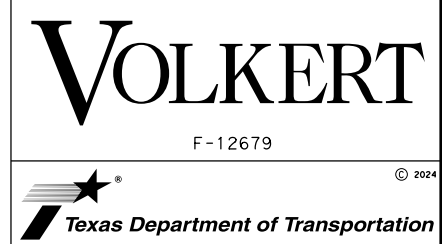
- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3/2". SEE PCP STANDARD FOR DETAILS.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 2 STEP 1 TO LAP WITH BARS A, G & H. EXTEND PHASE 2 STEP 1 BARS A, G & H 1'-7" INTO PHASE 3 STEP 1 TO LAP WITH BARS A, G & H.
- ④ SEE BRIDGE LAYOUT SHEETS FOR DECK CROSS SLOPE/SUPERELEVATION.



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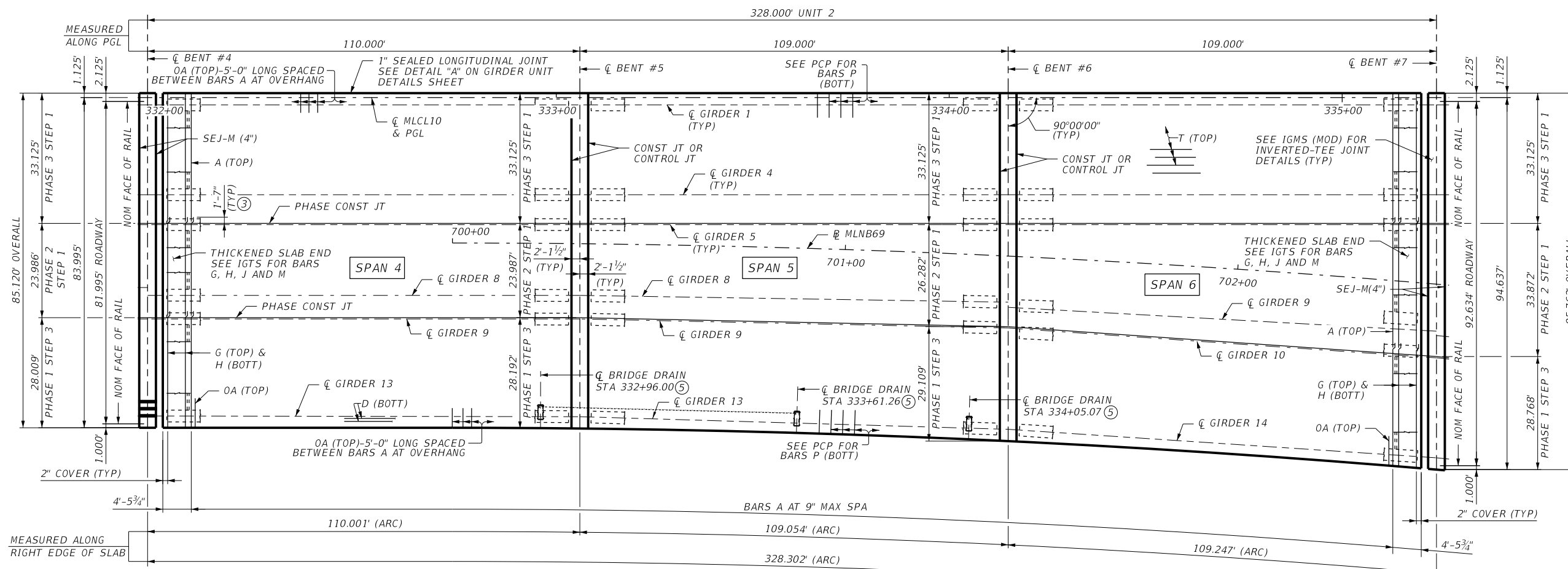
SPANS 1, 2, AND 3 TRANSVERSE SECTION



**IH 10 AT US 69
371.00' PRESTR CONC
GIRDER UNIT 1
IH 10 EB MAINLANE
AT US 69**

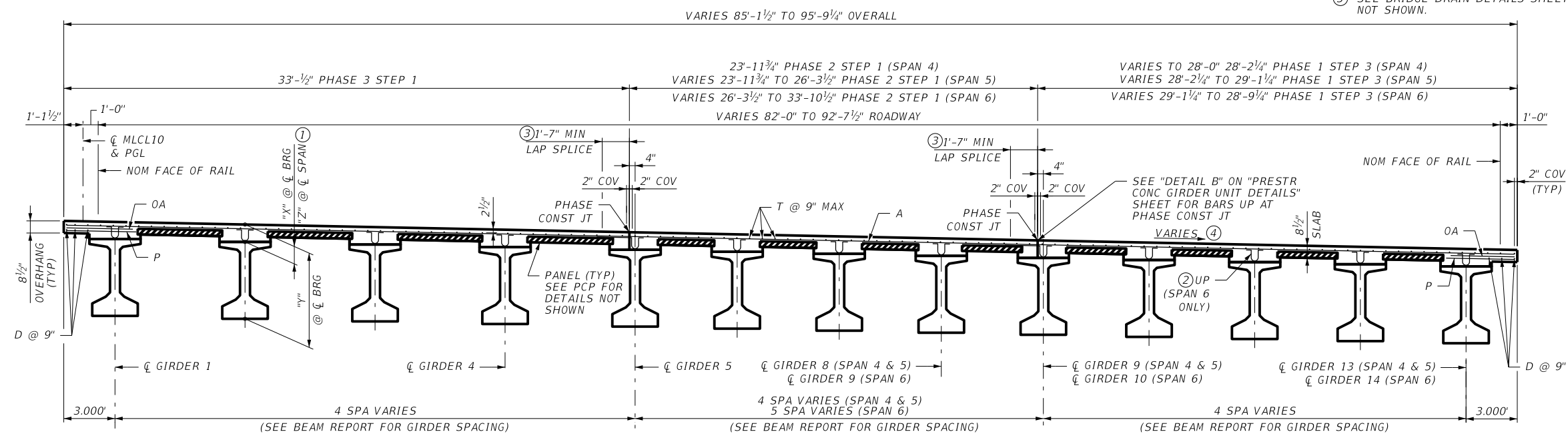
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CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1392	

DATE: 21-FEB-2024 20:49
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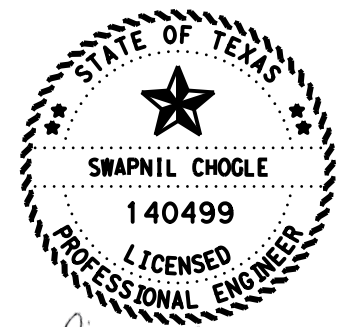


PLAN

- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 2 STEP 1 TO LAP WITH BARS A, G & H. EXTEND PHASE 2 STEP 1 BARS A, G & H 1'-7" INTO PHASE 3 STEP 1 TO LAP WITH BARS A, G & H.
- ④ SEE BRIDGE LAYOUT SHEETS FOR DECK CROSS SLOPE/SUPERELEVATION.
- ⑤ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



SPAN 4, 5, AND 6 TRANSVERSE SECTION



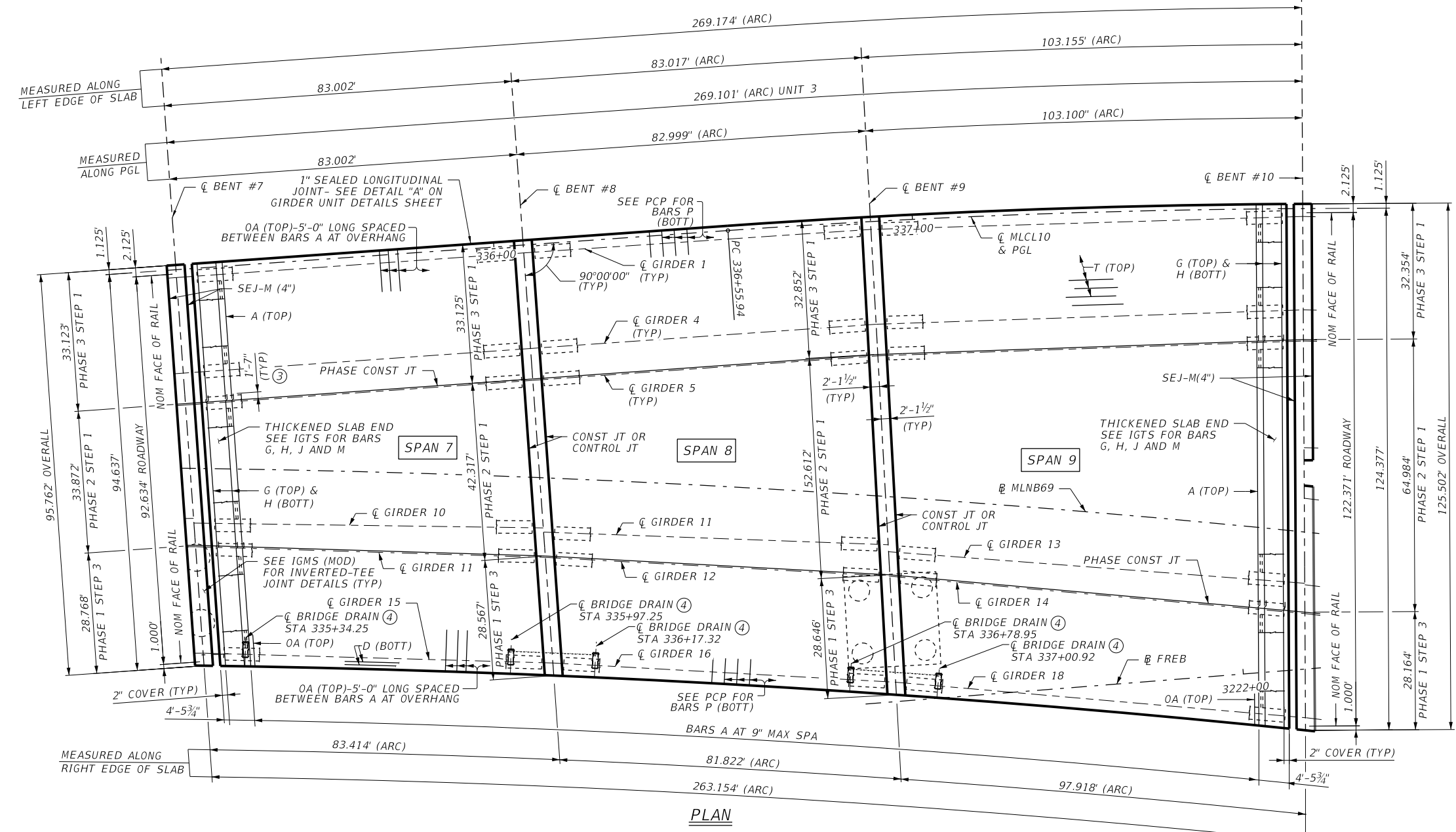
Swapnil Chogle
 2/20/2024
 HL93 LOADING

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 F-12679
 Texas Department of Transportation

IH 10 AT US 69
 328.00' PRESTR CONC GIRDER UNIT 2
 IH 10 EB MAINLANE AT US 69
 SHEET 2 OF 8

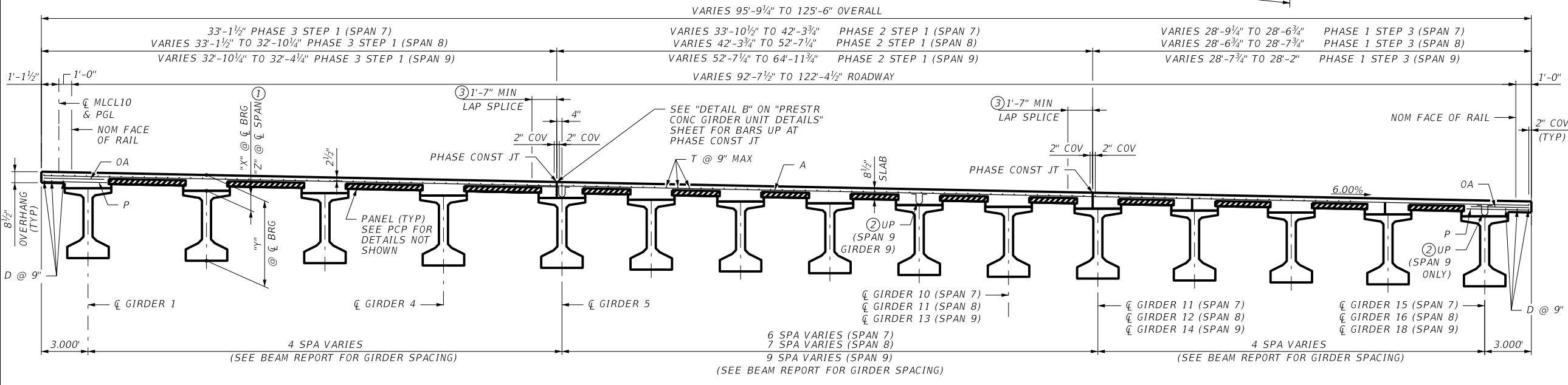
DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1393

DATE: 21-FEB-2024 20:49
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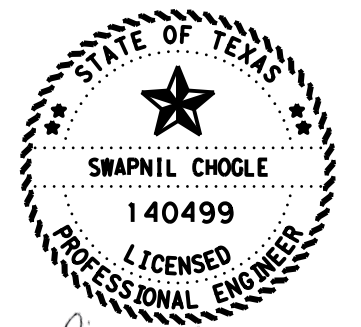


- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 2 STEP 1 TO LAP WITH BARS A, G & H. EXTEND PHASE 2 STEP 1 BARS A, G & H 1'-7" INTO PHASE 3 STEP 1 TO LAP WITH BARS A, G & H.
- ④ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.

PLAN



SPANS 7, 8, AND 9 TRANSVERSE SECTION



Swapnil Chogle
 2/20/2024
 HL93 LOADING



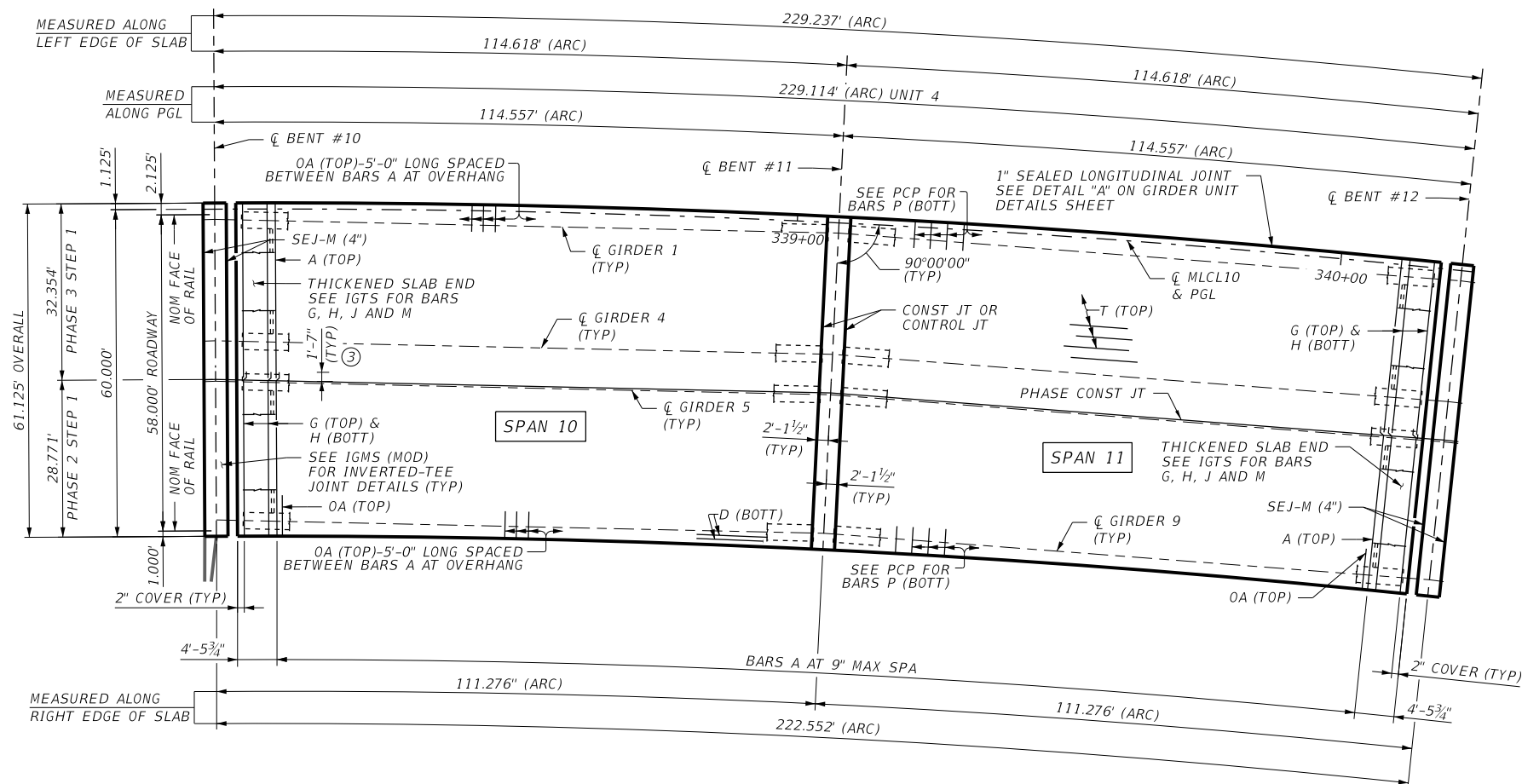
F-12679
 Texas Department of Transportation

**IH 10 AT US 69
 269.10' PRESTR CONC
 GIRDER UNIT 3
 IH 10 EB MAINLANE
 AT US 69**

SHEET 3 OF 8

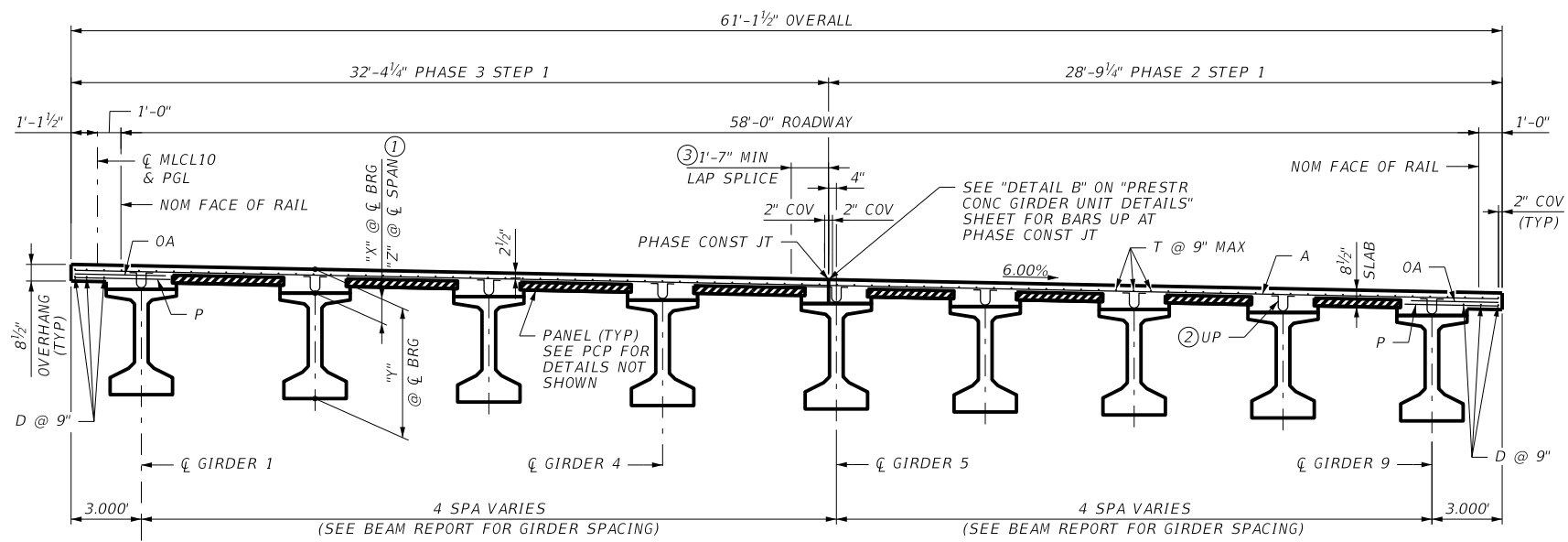
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0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1394	

DATE: 21-FEB-2024 20:49
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1.0 EB Mainlanes over US 69 NBFR\1395_10EB_MAINLANE_GROUNDUNIT_04.dgn

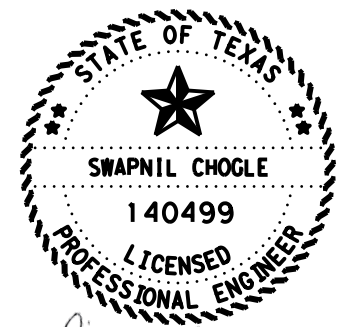


PLAN

- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3/2". SEE PCP STANDARD FOR DETAILS.
- ③ EXTEND PHASE 2 STEP 1 BARS A, G & H 1'-7" INTO PHASE 3 STEP 1 TO LAP WITH BARS A, G & H.



SPANS 10 AND 11 TRANSVERSE SECTION



Swapnil Chogle
 2/20/2024
 HL93 LOADING

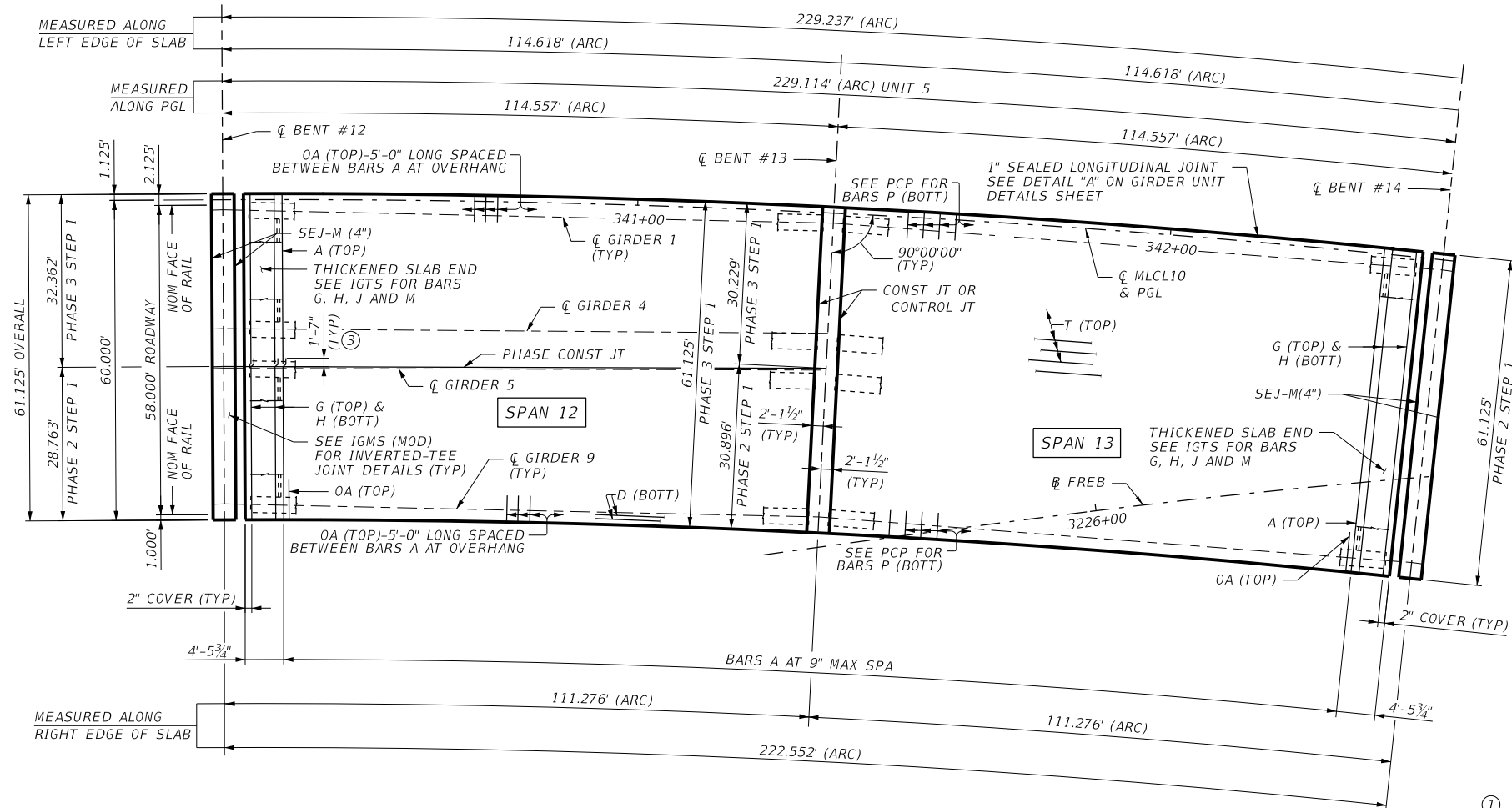


Texas Department of Transportation

IH 10 AT US 69
 229.11' PRESTR CONC
 GIRDER UNIT 4
 IH 10 EB MAINLANE
 AT US 69

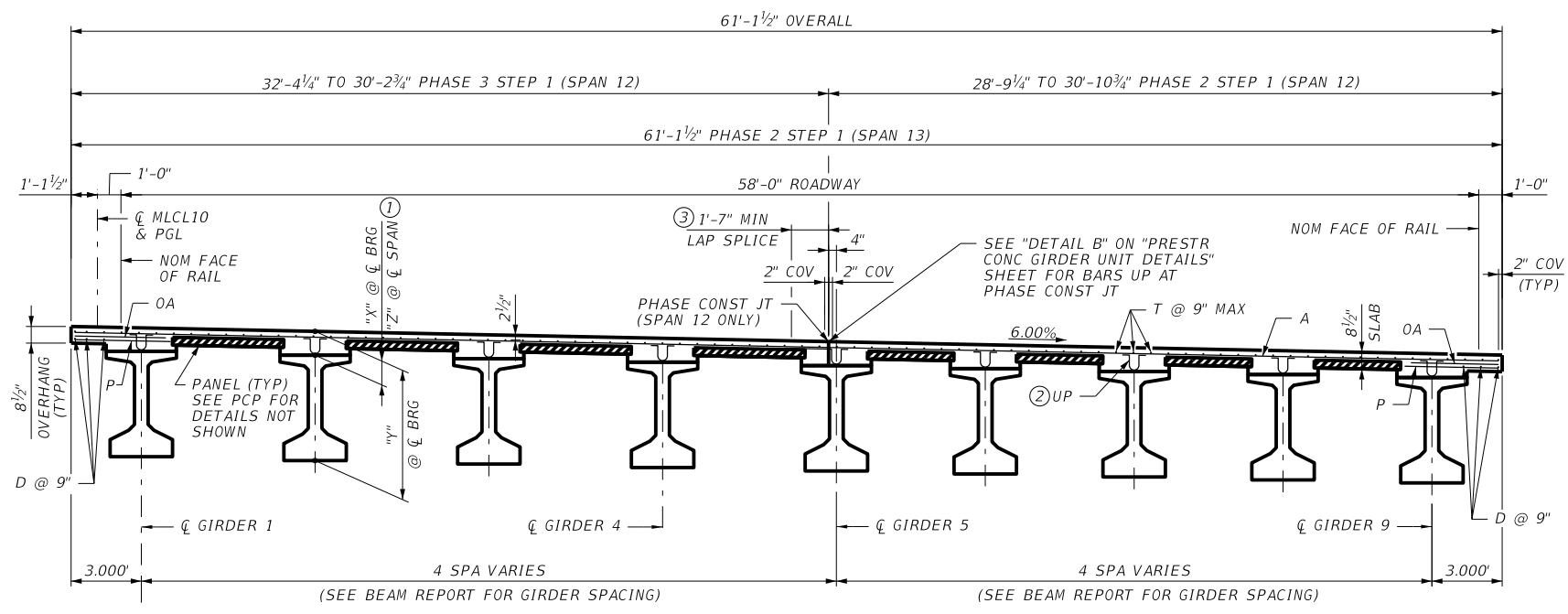
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CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1395			

DATE: 21-FEB-2024 20:48
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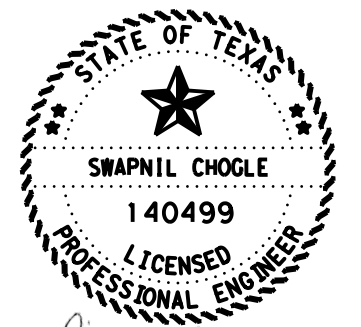


PLAN

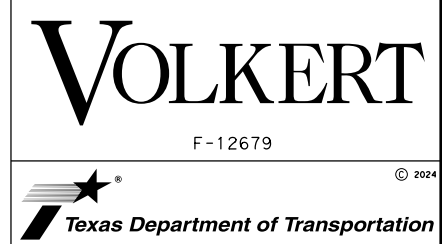
- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ③ EXTEND PHASE 2 STEP 1 BARS A, G & H INTO PHASE 3 STEP 1 TO LAP WITH BARS A, G & H.



SPANS 12 AND 13 TRANSVERSE SECTION



Swapnil Chogle
 2/20/2024
 HL93 LOADING

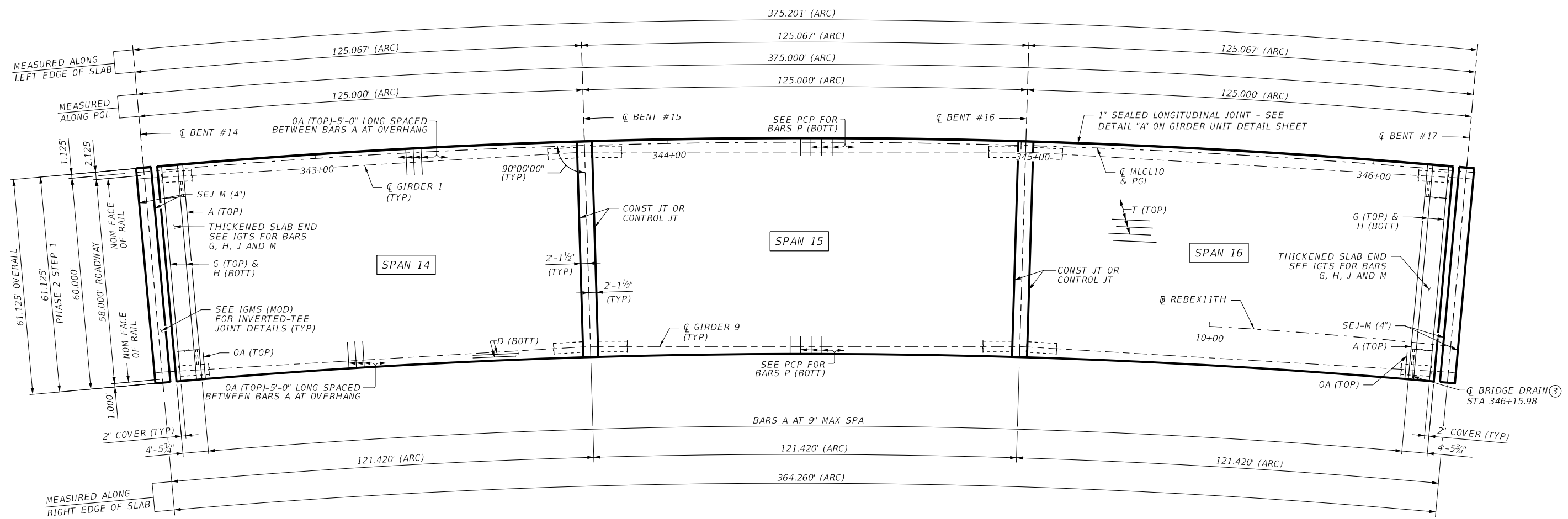


IH 10 AT US 69
 229.11' PRESTR CONC
 GIRDER UNIT 5
 IH 10 EB MAINLANE
 AT US 69

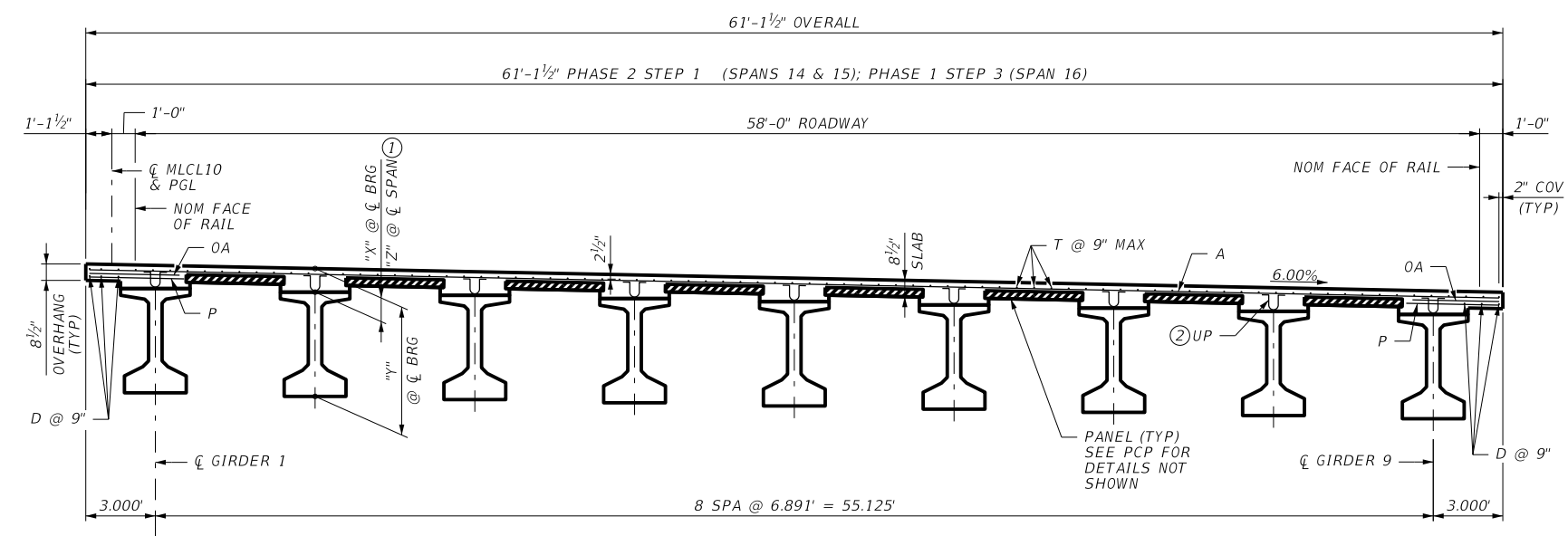
SHEET 5 OF 8

DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1396			

DATE: 21-FEB-2024 20:49
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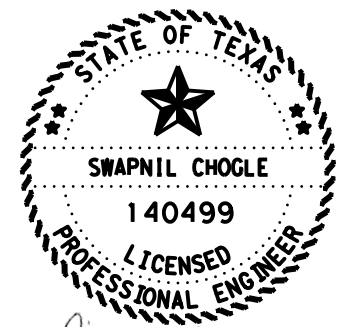


PLAN



SPANS 14, 15, AND 16 TRANSVERSE SECTION

- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2\"/>
- ③ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

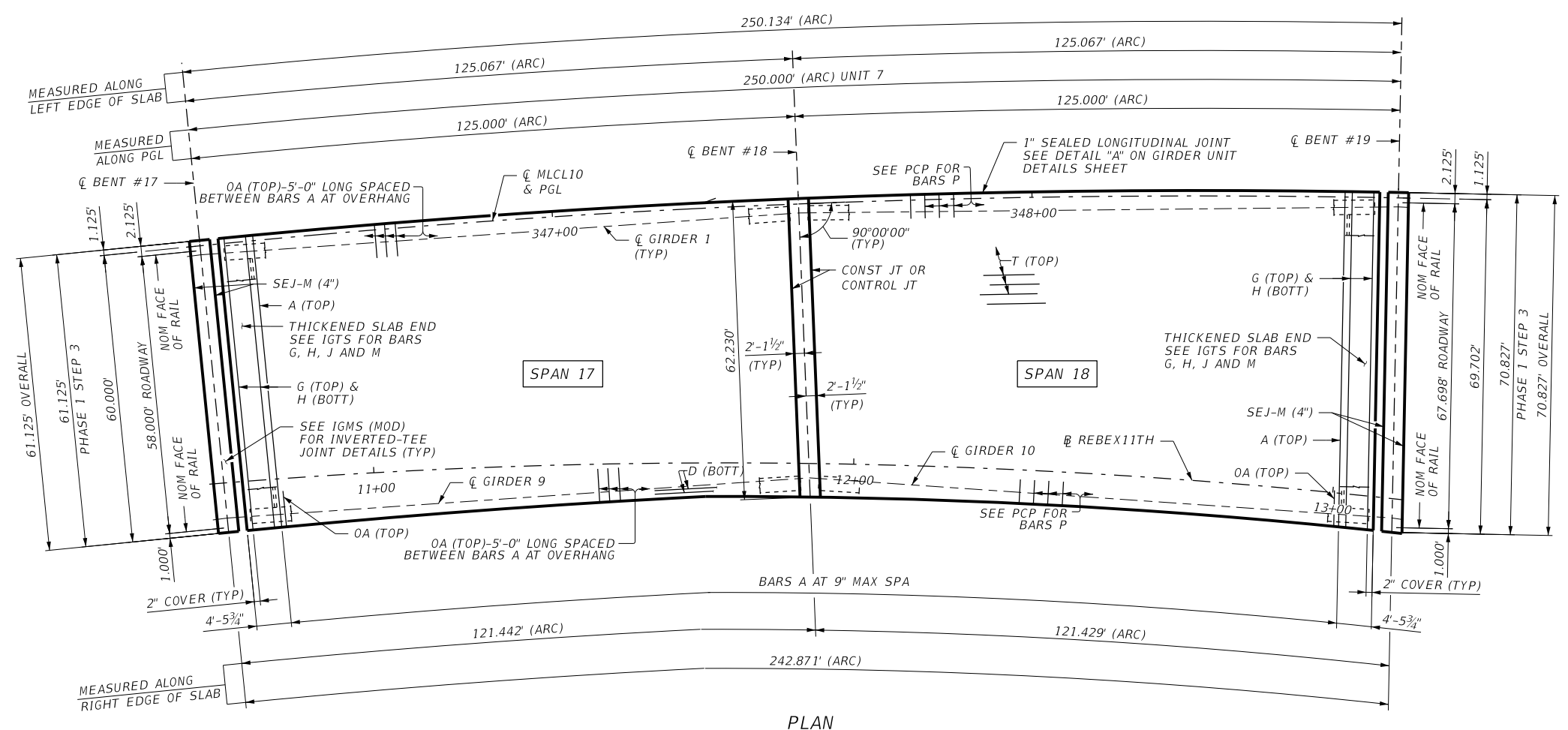


IH 10 AT US 69
375.00' PRESTR CONC
GIRDER UNIT 6
IH 10 EB MAINLANE
AT US 69

SHEET 6 OF 8

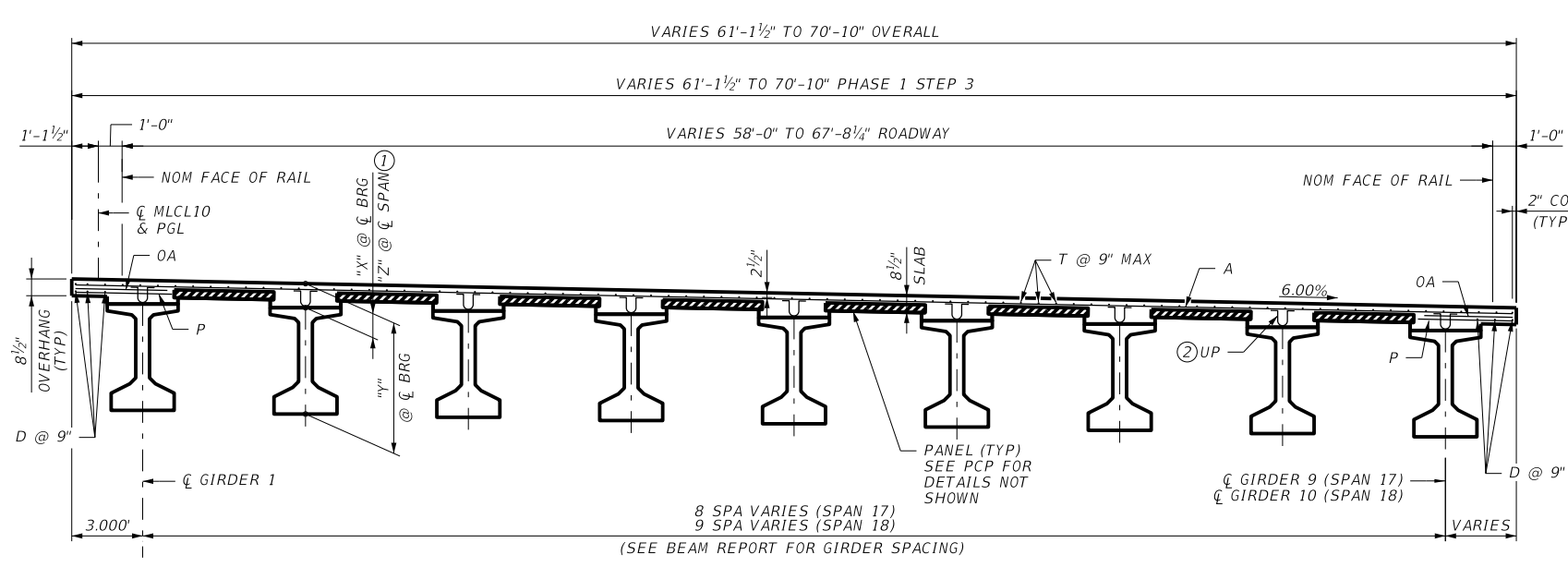
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DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1397	

DATE: 21-FEB-2024 20:48
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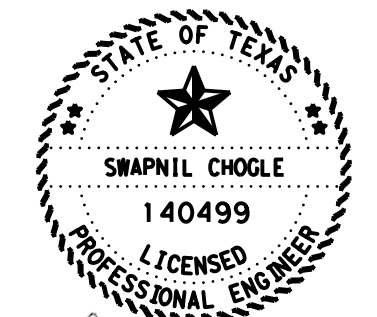


PLAN

- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



SPANS 17 AND 18 TRANSVERSE SECTION



Swapnil Chogle
 2/20/2024
 HL93 LOADING

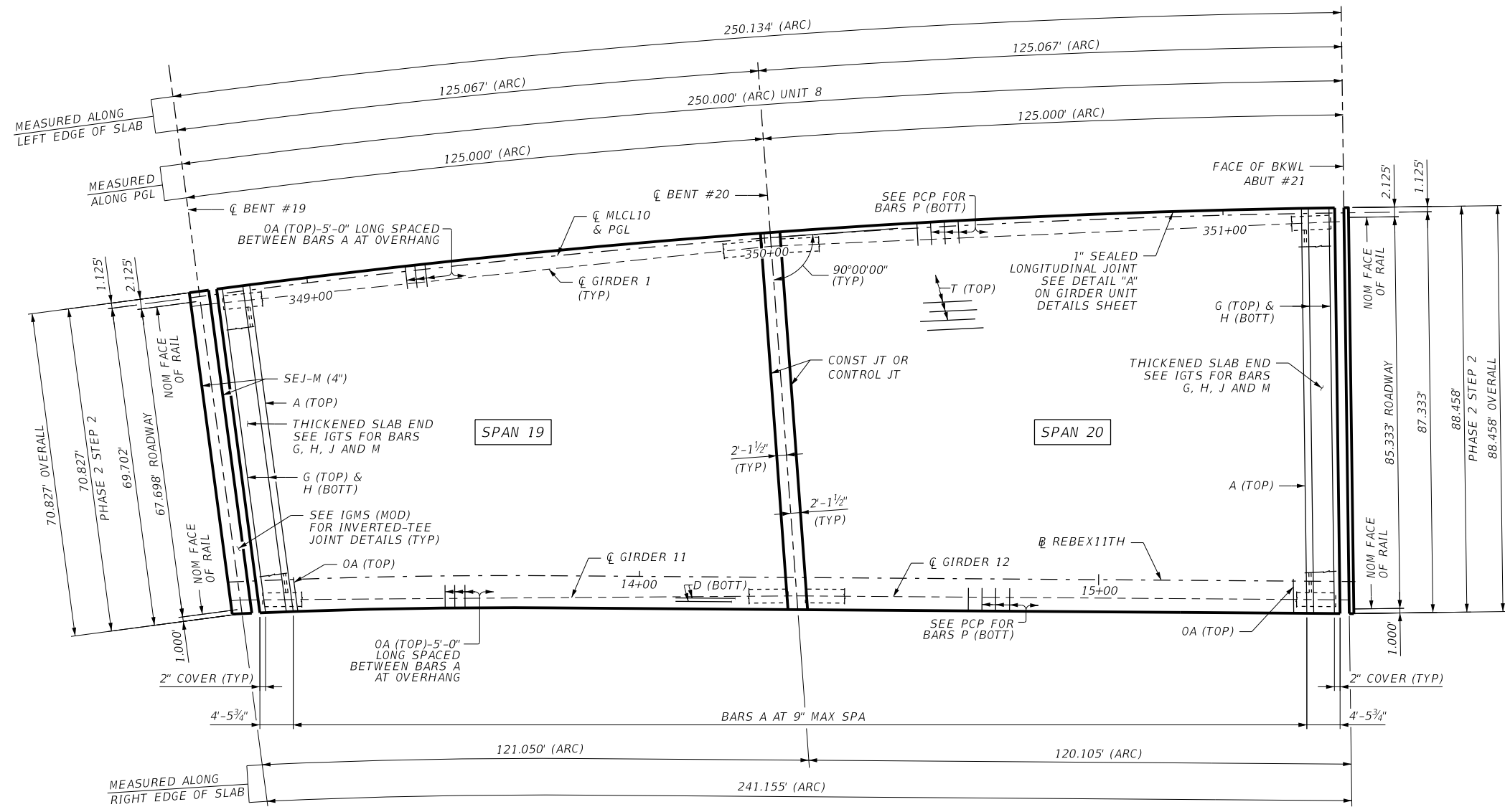


IH 10 AT US 69
250.00' PRESTR CONC
GIRDER UNIT 7
IH 10 EB MAINLANE
AT US 69

SHEET 7 OF 8

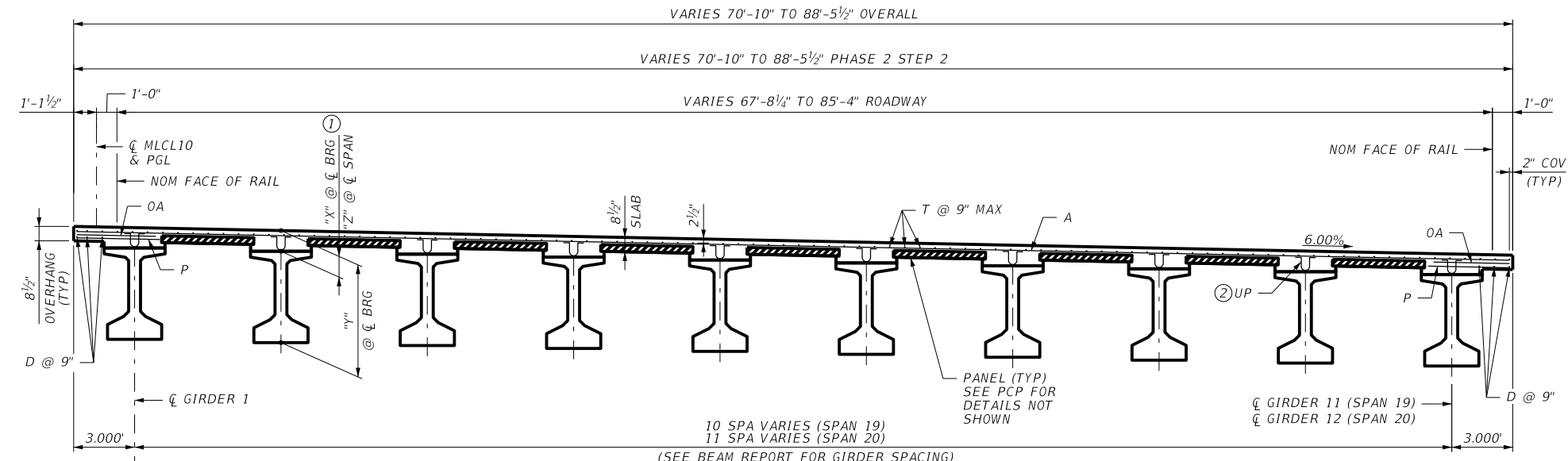
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CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1398	

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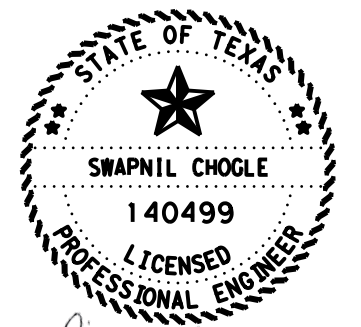


PLAN

- ① THEORETICAL DIMENSION
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



SPANS 19 AND 20 TRANSVERSE SECTION



Swapnil Chogle
 2/20/2024
 HL93 LOADING



F-12679
 Texas Department of Transportation

IH 10 AT US 69
 250.00' PRESTR CONC
 GIRDER UNIT 8
 IH 10 EB MAINLANE
 AT US 69

SHEET 8 OF 8

DN:	CBF	CK:	CSU	DW:	MAG	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1399				

DATE: 8-MAR-2024 19:31
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg I (IH 10 EB Mainlanes over US 69 NBFR)\1400_10EB_MAINLANE_GROUND.IT_01.dgn

TABLE OF ESTIMATED QUANTITIES UNIT 1				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
1	PHASE 3 STEP 1	4074	473.21	9371.12
	PHASE 2 STEP 1	2835	354.91	6519.35
	PHASE 1 STEP 3	3496		8039.65
2	PHASE 3 STEP 1	4108	477.16	9447.25
	PHASE 2 STEP 1	2965	357.87	6820.19
	PHASE 1 STEP 3	3493	596.45	8034.82
3	PHASE 3 STEP 1	4108	477.09	9447.25
	PHASE 2 STEP 1	2975	357.80	6841.35
	PHASE 1 STEP 3	3472	596.32	7986.06
TOTAL		31525	3690.79	72507.04

TABLE OF ESTIMATED QUANTITIES UNIT 2				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
4	PHASE 3 STEP 1	3644	421.05	8380.74
	PHASE 2 STEP 1	2639	421.03	6068.55
	PHASE 1 STEP 3	3080	526.27	7084.23
5	PHASE 3 STEP 1	3611	417.02	8304.38
	PHASE 2 STEP 1	2740	417.03	6301.08
	PHASE 1 STEP 3	3091	521.42	7108.15
6	PHASE 3 STEP 1	3611	417.01	8304.38
	PHASE 2 STEP 1	3278	417.15	7540.32
	PHASE 1 STEP 3	3119	522.39	7173.93
TOTAL		28811	4080.37	66265.76

TABLE OF ESTIMATED QUANTITIES UNIT 3				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
7	PHASE 3 STEP 1	2750	313.00	6323.85
	PHASE 2 STEP 1	3162	470.12	7272.37
	PHASE 1 STEP 3	2364	393.23	5436.97
8	PHASE 3 STEP 1	2737	312.14	6295.79
	PHASE 2 STEP 1	3897	542.67	8961.95
	PHASE 1 STEP 3	2316	386.43	5327.26
9	PHASE 3 STEP 1	3378	390.78	7769.17
	PHASE 2 STEP 1	5884	861.02	13533.89
	PHASE 1 STEP 3	2759	469.61	6344.78
TOTAL		29246	4138.99	67266.03

TABLE OF ESTIMATED QUANTITIES UNIT 4				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
10	PHASE 3 STEP 1	3732	436.35	8584.29
	PHASE 2 STEP 1	3172	536.88	7294.68
11	PHASE 3 STEP 1	3737	436.29	8595.56
	PHASE 2 STEP 1	3169	536.86	7288.24
TOTAL		13810	1946.38	31762.77

TABLE OF ESTIMATED QUANTITIES UNIT 5				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
12	PHASE 3 STEP 1	3618	436.43	8320.25
	PHASE 2 STEP 1	3287	537.05	7560.1
13	PHASE 2 STEP 1	6907	973.89	15885.87
TOTAL		13811	1947.37	31766.22

TABLE OF ESTIMATED QUANTITIES UNIT 6				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
14	PHASE 2 STEP 1	7541	1066.64	17344.3
15	PHASE 2 STEP 1	7534	1066.75	17327.05
16	PHASE 1 STEP 3	7521	1066.75	17298.76
TOTAL		22596	3200.15	51970.11

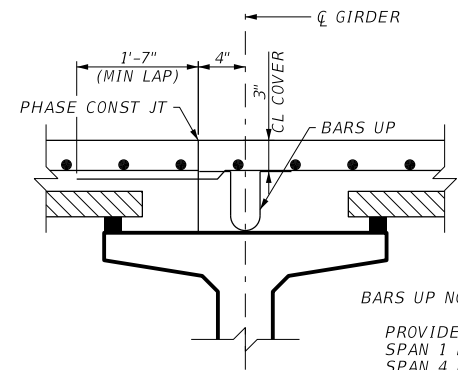
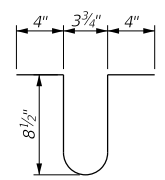
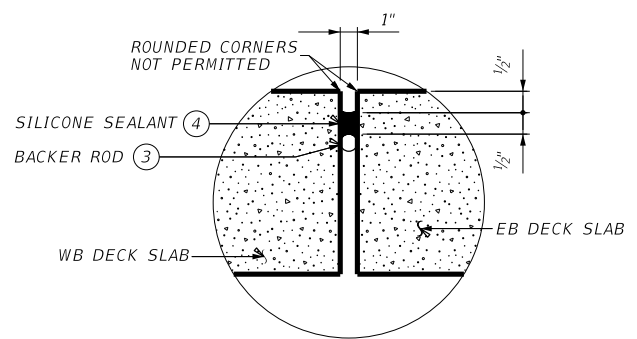
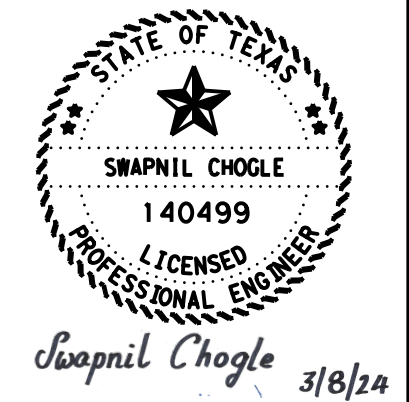
TABLE OF ESTIMATED QUANTITIES UNIT 7				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
17	PHASE 1 STEP 3	7548	1066.74	17359.94
18	PHASE 1 STEP 3	8146	1185.18	18735.11
TOTAL		15693.5	2251.92	36095.05

TABLE OF ESTIMATED QUANTITIES UNIT 7				
SPAN		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY Tx54) ①	TOTAL REINF STEEL ②
NO		SF	LF	LB
19	PHASE 2 STEP 2	9414	1300.88	21651.51
20	PHASE 2 STEP 2	10536	1439.67	24233.49
TOTAL		19950	2740.55	45885

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.
 SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN.
 SEE IGMS (MOD) STANDARD FOR MISCELLANEOUS DETAILS.
 SEE APPLICABLE RAIL DETAILS FOR RAIL ANCHORAGE IN SLAB.
 SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.

MATERIAL NOTES:
 PROVIDE CLASS S CONCRETE (f'c = 4,000 PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.
 PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 UNCOATED ~ #4 = 1'-7"
 DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T, UNLESS NOTED OTHERWISE.
 PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.



BARS UP NOTES:
 PROVIDE "UP" BARS AT:
 SPAN 1 BEAMS 5 AND 8
 SPAN 4 BEAMS 5 AND 9
 SPAN 5 BEAMS 5 AND 9
 SPAN 6 BEAMS 3, 4, 6, 7, 10 THRU 14
 SPAN 9 BEAMS 5, 14, 18
 SPAN 10 BEAM 5
 SPANS 11 THRU 20 ALL BEAMS

SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.
- ③ BACKER ROD SHALL BE 25% LARGER THAN JOINT OPENING AND SHALL BE COMPATIBLE WITH THE SEALANT; NO REACTION SHALL OCCUR BETWEEN THE ROD AND THE SEALANT.
- ④ SEALANT SHALL BE CLASS 7 SILICONE SEALANT. INSTALL WHEN AMBIENT TEMPERATURE IS BEING 55°F AND 85°F AND RISING. ENGINEER TO DETERMINE ALLOWABLE HOURS FOR SEALANT APPLICATION.

HL93 LOADING

VOLKERT

F-12679

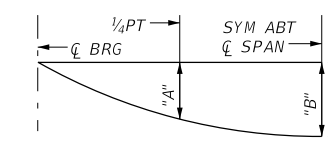
Texas Department of Transportation

**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 EB MAINLANE
 AT US 69**

SHEET 1 OF 5

DN: CBF	CK: CSU	DW: MAG	CK: CSU
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1400	

DATE: 20-FEB-2024 15:28
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DEAD LOAD DEFLECTION DIAGRAM

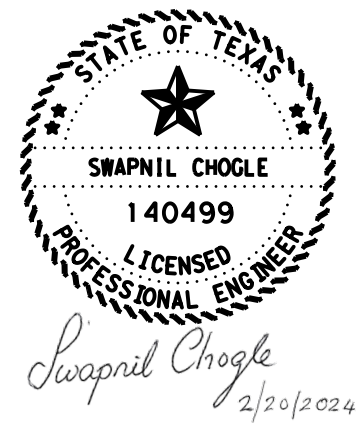
CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY (Ec = 5000 KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.

TABLE OF SECTION DEPTHS						
Span No.	Beam No.	"X" at CL of Brg	"Y" at CL of Brg	"Z" at CL of Span		
1	PHASE 3 STEP 1	1	11 3/4"	5'-5 3/4"	9 5/8"	
	2-4	11 3/4"	5'-5 3/4"	9 3/4"		
	PHASE 2 STEP 1	5	1'-0 1/4"	5'-6 1/4"	9 1/2"	
	6-7	11 1/2"	5'-5 1/2"	9 5/8"		
	8	1'-0 1/2"	5'-6 1/2"	9 1/2"		
	PHASE 1 STEP 3	9-11	1'-0 "	5'-6 "	9 3/4"	
12	1'-0 "	5'-6 "	9 5/8"			
2	PHASE 3 STEP 1	1	11 1/4"	5'-5 1/4"	9 3/4"	
	2-4	11 1/4"	5'-5 1/4"	10 "		
	PHASE 2 STEP 1	5	11 3/4"	5'-5 3/4"	9 3/4"	
	6-7	11 "	5'-5 "	9 7/8"		
	8	1'-0 "	5'-6 "	9 5/8"		
	PHASE 1 STEP 3	9-11	11 1/4"	5'-5 1/4"	9 5/8"	
12	11 1/4"	5'-5 1/4"	9 5/8"			
3	PHASE 3 STEP 1	1	11 1/4"	5'-5 1/4"	9 3/4"	
	2-3	11 1/4"	5'-5 1/4"	10 1/8"		
	4	11 1/4"	5'-5 1/4"	10 1/4"		
	PHASE 2 STEP 1	5	11 1/2"	5'-5 1/2"	9 7/8"	
	6	10 1/2"	5'-4 1/2"	9 7/8"		
	7	10 1/2"	5'-4 1/2"	9 7/8"		
	8	11 1/2"	5'-5 1/2"	9 7/8"		
	PHASE 1 STEP 3	9-10	10 3/4"	5'-4 3/4"	9 7/8"	
	11	10 3/4"	5'-4 3/4"	10 "		
	12	10 3/4"	5'-4 3/4"	10 "		
	4	PHASE 3 STEP 1	1	1'-0 "	5'-6 "	10 1/4"
		2	1'-0 "	5'-6 "	10 3/8"	
3-4		1'-0 "	5'-6 "	10 1/4"		
PHASE 2 STEP 1		5	1'-0 1/4"	5'-6 1/4"	10 "	
6-8		1'-0 "	5'-6 "	10 1/8"		
9		1'-0 1/2"	5'-6 1/2"	10 "		
PHASE 1 STEP 3		10	1'-0 "	5'-6 "	10 "	
11-12		1'-0 "	5'-6 "	9 7/8"		
13		1'-0 "	5'-6 "	9 7/8"		
5		PHASE 3 STEP 1	1	1'-0 "	5'-6 "	10 1/4"
	2-4	1'-0 "	5'-6 "	10 1/4"		
	PHASE 2 STEP 1	5	1'-0 1/4"	5'-6 1/4"	10 "	
	6-8	1'-0 "	5'-6 "	10 1/4"		
	9	1'-0 1/4"	5'-6 1/4"	10 3/8"		
	PHASE 1 STEP 3	10-12	1'-0 "	5'-6 "	10 1/4"	
	13	1'-0 "	5'-6 "	10 1/4"		

TABLE OF DEFLECTIONS					
Span No.	Beam No.	"A" Ft	"B" Ft		
1	PHASE 3 STEP 1	1	-0.118	-0.168	
	2-4	-0.132	-0.188		
	PHASE 2 STEP 1	5	-0.072	-0.103	
	6-7	-0.133	-0.190		
	8	-0.060	-0.086		
	PHASE 1 STEP 3	9-11	-0.109	-0.155	
12	-0.107	-0.152			
2	PHASE 3 STEP 1	1	-0.122	-0.174	
	2-4	-0.137	-0.195		
	PHASE 2 STEP 1	5	-0.077	-0.110	
	6-7	-0.142	-0.203		
	8	-0.062	-0.088		
	PHASE 1 STEP 3	9-11	-0.112	-0.159	
12	-0.110	-0.156			
3	PHASE 3 STEP 1	1	-0.122	-0.174	
	2-3	-0.137	-0.195		
	4	-0.137	-0.195		
	PHASE 2 STEP 1	5	-0.078	-0.111	
	6	-0.144	-0.204		
	7	-0.144	-0.204		
	8	-0.061	-0.087		
	PHASE 1 STEP 3	9-10	-0.111	-0.158	
	11	-0.111	-0.158		
	12	-0.109	-0.155		
	4	PHASE 3 STEP 1	1	-0.074	-0.105
		2	-0.083	-0.117	
3-4		-0.083	-0.117		
PHASE 2 STEP 1		5	-0.036	-0.051	
6-8		-0.065	-0.092		
9		-0.037	-0.053		
PHASE 1 STEP 3		10	-0.067	-0.095	
11-12		-0.067	-0.095		
13		-0.066	-0.094		
5		PHASE 3 STEP 1	1	-0.071	-0.101
	2-4	-0.079	-0.113		
	PHASE 2 STEP 1	5	-0.036	-0.051	
	6-8	-0.065	-0.093		
	9	-0.066	-0.093		
	PHASE 1 STEP 3	10-12	-0.066	-0.094	
13	-0.064	-0.091			

BAR TABLE

BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4



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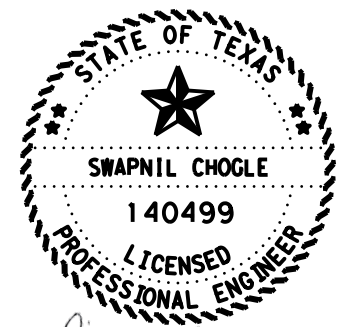
**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 EB MAINLANE
 AT US 69**

SHEET 2 OF 5

DN:	CBF	CK:	CSU	DW:	MAG	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1401			

TABLE OF SECTION DEPTHS					
Span No.	Beam No.	"X" at \bar{C} of Brg	"Y" at \bar{C} of Brg	"Z" at \bar{C} of Span	
6	PHASE 3 STEP 1	1	1'-0"	5'-6"	10 1/2"
		2	1'-0"	5'-6"	10 1/8"
		3	1'-0 1/2"	5'-6 1/2"	10 3/8"
		4	1'-0 1/2"	5'-6 1/2"	10 1/2"
	PHASE 2 STEP 1	5	1'-1"	5'-7"	10 1/4"
		6	1'-0 3/4"	5'-6 3/4"	10 3/8"
		7	1'-0 3/4"	5'-6 3/4"	10 1/4"
		8	1'-1"	5'-7"	10 1/2"
		9	1'-1"	5'-7"	10 3/8"
		10	1'-1 1/2"	5'-7 1/2"	10 3/8"
	PHASE 1 STEP 3	11-12	1'-1 1/4"	5'-7 1/4"	10 3/8"
		13	1'-1 1/2"	5'-7 1/2"	10 1/2"
		14	1'-1 1/2"	5'-7 1/2"	10 3/8"
		1	10 3/4"	5'-4 3/4"	10 1/4"
7	PHASE 3 STEP 1	2-4	10 3/4"	5'-4 3/4"	10 3/8"
		5	11 1/2"	5'-5 1/2"	10 7/8"
	PHASE 2 STEP 1	6-7	10 3/4"	5'-4 3/4"	10 1/4"
		8	11 1/4"	5'-5 1/4"	10 3/4"
	PHASE 1 STEP 3	9-10	11"	5'-5"	10 1/2"
		11	11 1/4"	5'-5 1/4"	10 3/8"
		12	10 3/4"	5'-4 3/4"	10 1/4"
		13-14	11"	5'-5"	10 1/2"
15	11"	5'-5"	10 1/2"		
8	PHASE 3 STEP 1	1	10 3/4"	5'-4 3/4"	10 1/4"
		2	10 3/4"	5'-4 3/4"	10 1/4"
		3-4	10 3/4"	5'-4 3/4"	10 1/4"
	PHASE 2 STEP 1	5	11"	5'-5"	10 1/4"
		6-7	10 3/4"	5'-4 3/4"	10 1/4"
		8-10	10 3/4"	5'-4 3/4"	10 1/8"
		11	11 1/4"	5'-5 1/4"	10 3/8"
	PHASE 1 STEP 3	12	11 1/4"	5'-5 1/4"	10 1/2"
13		11"	5'-5"	10 3/8"	
14-15		11"	5'-5"	10 3/8"	
16	11"	5'-5"	10 3/8"		
9	PHASE 3 STEP 1	1	1'-0"	5'-6"	10 3/8"
		2	1'-0"	5'-6"	10 1/2"
		3	1'-0"	5'-6"	10 1/2"
		4	1'-0"	5'-6"	10 1/2"
	PHASE 2 STEP 1	5	1'-0 1/4"	5'-6 1/4"	10 3/8"
		6	1'-0"	5'-6"	10 3/8"
		7	1'-0"	5'-6"	10 3/8"
		8	1'-0"	5'-6"	10 3/8"
		9	1'-0"	5'-6"	10 3/8"
		10	1'-0"	5'-6"	10 3/8"
		11-12	1'-0"	5'-6"	10 3/8"
		13	1'-0"	5'-6"	10 3/8"
		14	1'-0 1/4"	5'-6 1/4"	10 3/8"
		PHASE 1 STEP 3	15	1'-0"	5'-6"
	16-17		1'-0"	5'-6"	10 3/8"
	18		1'-1 1/4"	5'-7 1/4"	11 3/8"
	1		1'-1"	5'-7"	10 3/8"
	10	PHASE 3 STEP 1	2	1'-1"	5'-7"
3			1'-1"	5'-7"	10 3/8"
4			1'-1"	5'-7"	10 3/8"
5			1'-1 1/4"	5'-7 1/4"	10 3/8"
PHASE 2 STEP 1		6	1'-1"	5'-7"	10 1/2"
		7	1'-1"	5'-7"	10 1/2"
		8	1'-1"	5'-7"	10 1/2"
		9	1'-1"	5'-7"	10 3/8"

TABLE OF DEFLECTIONS				
Span No.	Beam No.	"A" Ft	"B" Ft	
6	PHASE 3 STEP 1	1	-0.071	-0.101
		2	-0.079	-0.113
		3	-0.079	-0.113
		4	-0.079	-0.113
	PHASE 2 STEP 1	5	-0.034	-0.049
		6	-0.062	-0.089
		7	-0.062	-0.089
		8	-0.062	-0.089
		9	-0.062	-0.089
		10	-0.037	-0.053
	PHASE 1 STEP 3	11-12	-0.067	-0.096
		13	-0.067	-0.096
		14	-0.065	-0.093
		1	-0.022	-0.031
7	PHASE 3 STEP 1	2-4	-0.025	-0.035
		5	-0.011	-0.016
	PHASE 2 STEP 1	6-7	-0.020	-0.029
		8	-0.020	-0.029
	PHASE 1 STEP 3	9-10	-0.021	-0.029
		11	-0.012	-0.016
		12	-0.021	-0.030
		13-14	-0.021	-0.030
15	-0.020	-0.029		
8	PHASE 3 STEP 1	1	-0.022	-0.031
		2	-0.024	-0.035
		3-4	-0.024	-0.034
	PHASE 2 STEP 1	5	-0.012	-0.017
		6-7	-0.021	-0.030
		8-10	-0.021	-0.030
		11	-0.021	-0.030
	PHASE 1 STEP 3	12	-0.011	-0.015
13		-0.019	-0.028	
14-15		-0.019	-0.027	
16	-0.019	-0.027		
9	PHASE 3 STEP 1	1	-0.055	-0.079
		2	-0.060	-0.086
		3	-0.059	-0.085
		4	-0.059	-0.083
	PHASE 2 STEP 1	5	-0.029	-0.042
		6	-0.049	-0.070
		7	-0.049	-0.069
		8	-0.048	-0.068
		9	-0.047	-0.068
		10	-0.047	-0.067
		11-12	-0.046	-0.066
		13	-0.045	-0.065
		14	-0.024	-0.034
		PHASE 1 STEP 3	15	-0.043
	16-17		-0.042	-0.060
	18		-0.041	-0.058
	1		-0.094	-0.134
	10	PHASE 3 STEP 1	2	-0.094
3			-0.092	-0.131
4			-0.091	-0.129
5			-0.050	-0.071
PHASE 2 STEP 1		6	-0.076	-0.108
		7	-0.075	-0.106
		8	-0.074	-0.105
		9	-0.064	-0.090



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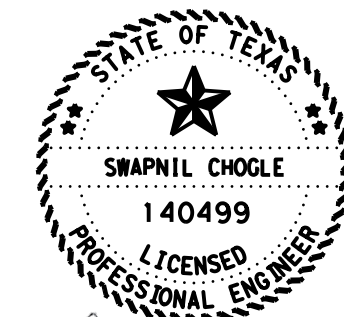
**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 EB MAINLANE
 AT US 69**

SHEET 3 OF 5

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1402

TABLE OF SECTION DEPTHS						
Span No.	Beam No.	"X" at ζ of Brg	"Y" at ζ of Brg	"Z" at ζ of Span		
				"A" Ft	"B" Ft	
11	PHASE 3 STEP 1	1	1'-1"	5'-7"	10 $\frac{5}{8}$ "	
		2	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
		3	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
		4	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
	PHASE 2 STEP 1	5	1'-1 $\frac{1}{4}$ "	5'-7 $\frac{1}{4}$ "	10 $\frac{1}{4}$ "	
		6	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		7	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		8	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		9	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
12	PHASE 3 STEP 1	1	1'-1"	5'-7"	10 $\frac{5}{8}$ "	
		2	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		3	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		4	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
	PHASE 2 STEP 1	5	1'-1 $\frac{1}{4}$ "	5'-7 $\frac{1}{4}$ "	10 $\frac{1}{4}$ "	
		6	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		7	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		8	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		9	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
13	PHASE 2 STEP 1	1	1'-1"	5'-7"	10 $\frac{5}{8}$ "	
		2	1'-1"	5'-7"	10 $\frac{5}{8}$ "	
		3	1'-1"	5'-7"	10 $\frac{5}{8}$ "	
		4	1'-1"	5'-7"	10 $\frac{5}{8}$ "	
		5	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		6	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		7	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		8	1'-1"	5'-7"	10 $\frac{1}{2}$ "	
		9	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
14	PHASE 2 STEP 1	1	1'-1"	5'-7"	11 $\frac{1}{8}$ "	
		2	1'-1"	5'-7"	11"	
		3	1'-1"	5'-7"	11"	
		4	1'-1"	5'-7"	11"	
		5	1'-1"	5'-7"	11"	
		6	1'-1"	5'-7"	11"	
		7	1'-1"	5'-7"	10 $\frac{7}{8}$ "	
		8	1'-1"	5'-7"	10 $\frac{7}{8}$ "	
		9	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
15	PHASE 2 STEP 1	1	1'-1"	5'-7"	10 $\frac{3}{8}$ "	
		2	1'-1"	5'-7"	10 $\frac{1}{4}$ "	
		3	1'-1"	5'-7"	10 $\frac{1}{4}$ "	
		4	1'-1"	5'-7"	10 $\frac{1}{4}$ "	
		5	1'-1 $\frac{1}{4}$ "	5'-7 $\frac{1}{4}$ "	10 $\frac{1}{2}$ "	
		6	1'-1 $\frac{1}{4}$ "	5'-7 $\frac{1}{4}$ "	10 $\frac{3}{8}$ "	
		7	1'-1 $\frac{1}{4}$ "	5'-7 $\frac{1}{4}$ "	10 $\frac{3}{8}$ "	
		8	1'-1 $\frac{1}{4}$ "	5'-7 $\frac{1}{4}$ "	10 $\frac{3}{8}$ "	
		9	1'-1 $\frac{1}{2}$ "	5'-7 $\frac{1}{2}$ "	10 $\frac{3}{8}$ "	

TABLE OF DEFLECTIONS				
Span No.	Beam No.	"A" Ft	"B" Ft	
			"A" Ft	"B" Ft
11	PHASE 3 STEP 1	1	-0.094	-0.134
		2	-0.094	-0.133
		3	-0.092	-0.131
		4	-0.091	-0.129
	PHASE 2 STEP 1	5	-0.042	-0.060
		6	-0.076	-0.108
		7	-0.075	-0.106
		8	-0.074	-0.105
		9	-0.063	-0.090
12	PHASE 3 STEP 1	1	-0.093	-0.132
		2	-0.091	-0.129
		3	-0.089	-0.127
		4	-0.088	-0.125
	PHASE 2 STEP 1	5	-0.044	-0.063
		6	-0.079	-0.112
		7	-0.078	-0.111
		8	-0.077	-0.109
		9	-0.065	-0.092
13	PHASE 2 STEP 1	1	-0.091	-0.129
		2	-0.087	-0.124
		3	-0.086	-0.122
		4	-0.085	-0.120
		5	-0.083	-0.119
		6	-0.082	-0.117
		7	-0.081	-0.115
		8	-0.080	-0.114
		9	-0.067	-0.095
14	PHASE 2 STEP 1	1	-0.133	-0.190
		2	-0.126	-0.179
		3	-0.124	-0.176
		4	-0.122	-0.174
		5	-0.121	-0.171
		6	-0.119	-0.169
		7	-0.117	-0.167
		8	-0.116	-0.164
		9	-0.094	-0.134
15	PHASE 2 STEP 1	1	-0.133	-0.190
		2	-0.126	-0.179
		3	-0.124	-0.176
		4	-0.122	-0.174
		5	-0.121	-0.171
		6	-0.119	-0.169
		7	-0.117	-0.167
		8	-0.116	-0.164
		9	-0.094	-0.134



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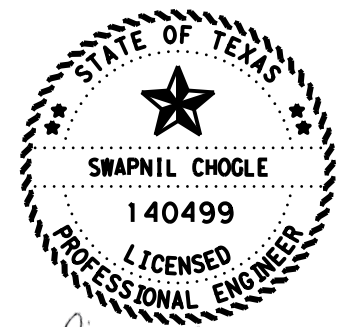
**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 EB MAINLANE
 AT US 69**

DN:	CBF	CK:	CSU	DW:	MAG	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY					SHEET NO.	
BMT	JEFFERSON					1403	

DATE: 20-FEB-2024 15:25
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TABLE OF SECTION DEPTHS					
Span No.	Beam No.	"X"	"Y"	"Z"	
		at ζ of Brg	at ζ of Brg	at ζ of Span	
16	PHASE 1 STEP 3	1	1'-1 1/4"	5'-7 1/4"	10 1/2"
		2	1'-1 1/4"	5'-7 1/4"	10 3/8"
		3	1'-1 1/4"	5'-7 1/4"	10 3/8"
		4	1'-1 1/4"	5'-7 1/4"	10 3/8"
		5	1'-1 1/4"	5'-7 1/4"	10 1/4"
		6	1'-1 1/4"	5'-7 1/4"	10 1/4"
		7	1'-1 1/4"	5'-7 1/4"	10 1/4"
		8	1'-1 1/4"	5'-7 1/4"	10 1/4"
		9	1'-1 1/2"	5'-7 1/2"	10 1/4"
17	PHASE 1 STEP 3	1	1'-1 1/4"	5'-7 1/4"	10 1/4"
		2	1'-1 1/4"	5'-7 1/4"	10 3/8"
		3	1'-1 1/4"	5'-7 1/4"	10 3/8"
		4	1'-1 1/4"	5'-7 1/4"	10 3/8"
		5	1'-1 1/4"	5'-7 1/4"	10 3/8"
		6	1'-1 1/4"	5'-7 1/4"	10 1/4"
		7	1'-1 1/4"	5'-7 1/4"	10 1/4"
		8	1'-1 1/4"	5'-7 1/4"	10 1/4"
		9	1'-1 1/2"	5'-7 1/2"	10 1/2"
18	PHASE 1 STEP 3	1	1'-1 1/4"	5'-7 1/4"	10 1/4"
		2	1'-1 1/4"	5'-7 1/4"	10 3/8"
		3	1'-1 1/4"	5'-7 1/4"	10 1/4"
		4	1'-1 1/4"	5'-7 1/4"	10 1/4"
		5	1'-1 1/4"	5'-7 1/4"	10 1/4"
		6	1'-1 1/4"	5'-7 1/4"	10 1/4"
		7	1'-1 1/4"	5'-7 1/4"	10 1/4"
		8	1'-1 1/4"	5'-7 1/4"	10 1/4"
		9	1'-1 1/4"	5'-7 1/4"	10 1/4"
		10	1'-1 1/2"	5'-7 1/2"	10 1/2"
19	PHASE 2 STEP 2	1	1'-1 1/4"	5'-7 1/4"	10 1/4"
		2	1'-1 1/4"	5'-7 1/4"	10 3/8"
		3	1'-1 1/4"	5'-7 1/4"	10 3/8"
		4	1'-1 1/4"	5'-7 1/4"	10 3/8"
		5	1'-1 1/4"	5'-7 1/4"	10 3/8"
		6	1'-1 1/4"	5'-7 1/4"	10 3/8"
		7	1'-1 1/4"	5'-7 1/4"	10 3/8"
		8	1'-1 1/4"	5'-7 1/4"	10 3/8"
		9	1'-1 1/4"	5'-7 1/4"	10 3/8"
		10	1'-1 1/4"	5'-7 1/4"	10 3/8"
		11	1'-1 1/2"	5'-7 1/2"	10 1/2"
20	PHASE 2 STEP 2	1	1'-2 "	5'-8 "	10 1/4"
		2	1'-2 "	5'-8 "	10 1/8"
		3	1'-2 "	5'-8 "	10 1/8"
		4	1'-2 1/4"	5'-8 1/4"	10 3/8"
		5	1'-2 1/4"	5'-8 1/4"	10 3/8"
		6	1'-2 1/4"	5'-8 1/4"	10 3/8"
		7	1'-2 1/4"	5'-8 1/4"	10 3/8"
		8	1'-2 1/4"	5'-8 1/4"	10 3/8"
		9	1'-2 1/4"	5'-8 1/4"	10 3/8"
		10	1'-2 1/4"	5'-8 1/4"	10 3/8"
		11	1'-2 1/4"	5'-8 1/4"	10 1/4"
		12	1'-2 1/2"	5'-8 1/2"	10 3/8"

TABLE OF DEFLECTIONS				
Span No.	Beam No.	"A"	"B"	
		Ft	Ft	
16	PHASE 1 STEP 3	1	-0.133	-0.190
		2	-0.126	-0.179
		3	-0.124	-0.176
		4	-0.122	-0.174
		5	-0.121	-0.171
		6	-0.119	-0.169
		7	-0.117	-0.167
		8	-0.116	-0.164
		9	-0.094	-0.134
17	PHASE 1 STEP 3	1	-0.119	-0.170
		2	-0.126	-0.179
		3	-0.124	-0.176
		4	-0.122	-0.174
		5	-0.121	-0.172
		6	-0.119	-0.169
		7	-0.117	-0.167
		8	-0.116	-0.164
		9	-0.115	-0.163
18	PHASE 1 STEP 3	1	-0.117	-0.166
		2	-0.121	-0.173
		3	-0.119	-0.170
		4	-0.118	-0.168
		5	-0.116	-0.166
		6	-0.115	-0.164
		7	-0.114	-0.162
		8	-0.112	-0.160
		9	-0.111	-0.158
		10	-0.113	-0.161
19	PHASE 2 STEP 2	1	-0.120	-0.171
		2	-0.128	-0.183
		3	-0.126	-0.180
		4	-0.125	-0.178
		5	-0.123	-0.175
		6	-0.121	-0.173
		7	-0.120	-0.171
		8	-0.118	-0.169
		9	-0.117	-0.166
		10	-0.115	-0.164
		11	-0.106	-0.151
20	PHASE 2 STEP 2	1	-0.131	-0.187
		2	-0.141	-0.201
		3	-0.139	-0.198
		4	-0.137	-0.195
		5	-0.135	-0.192
		6	-0.133	-0.190
		7	-0.131	-0.187
		8	-0.130	-0.184
		9	-0.128	-0.182
		10	-0.126	-0.179
		11	-0.124	-0.177
		12	-0.112	-0.160



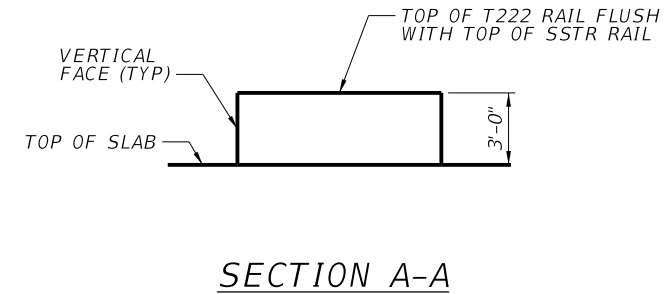
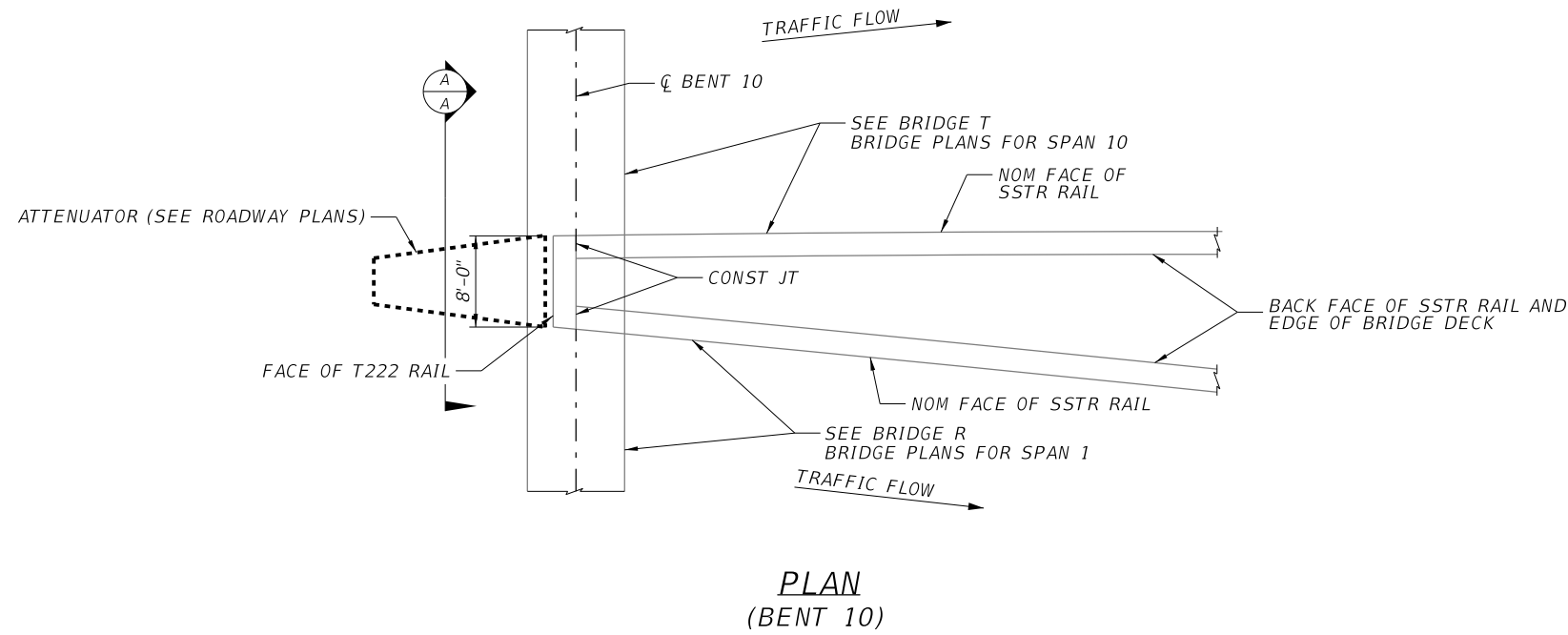
Swapnil Chogle
2/20/2024



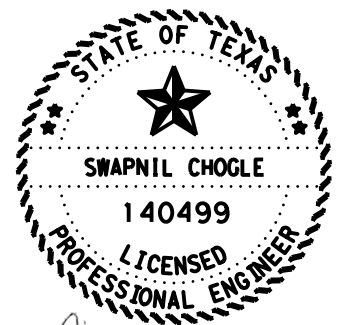
**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 EB MAINLANE
 AT US 69**
 SHEET 5 OF 5

DN:	CBF	CK:	CSU	DW:	MAG	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1404				

DATE: 21-FEB-2024 17:44
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- NOTES:
1. SEE RAILING STANDARDS FOR REINFORCING.
 2. PRESTRESSED CONCRETE PANELS ARE NOT ALLOWED IN AREA OF GORE ENDWALL. SSTR AND T222 RAILING TO BE ANCHORED IN FULL DEPTH CAST IN PLACE SLAB. REFER TO IGMS(MOD) FOR FURTHER INFORMATION.



Swapnil Chogle
 2/20/2024
 HL93 LOADING

VOLKERT

F-12679



IH 10 AT US 69
 GORE AREA
 ENDWALL DETAILS
 IH 10 EB MAINLANE
 AT US 69

SHEET 1 OF 1

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1405				

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

STRUCTURE	DESIGNED GIRDERS									DEPRESSED STRAND PATTERN		CONCRETE		OPTIONAL DESIGN				LOAD RATING FACTORS			NON-STANDARD STRAND PATTERNS			
	SPAN NO.	GIRDER NO.	GIRDER TYPE	PRESTRESSING STRANDS					NO.	TO END (in)	RELEASE STRGTH (ksi)	MINIMUM 28 DAY COMP STRGTH (ksi)	DESIGN LOAD COMP STRESS (TOP ϵ) (SERVICE I) fct(ksi)	DESIGN LOAD TENSILE STRESS (BOT ϵ) (SERVICE III) fcb(ksi)	REQUIRED MINIMUM ULTIMATE MOMENT CAPACITY (STRENGTH I) (kip-ft)	LIVE LOAD DISTRIBUTION FACTOR (2)		STRENGTH I		SERVICE III	PATTERN	STRAND ARRANGEMENT AT ϵ OF GIRDER		
				NON-STD STRAND PATTERN	TOTAL NO.	SIZE (in)	STRGTH fpu (ksi)	"e" ϵ (in)								"e" END (in)	Moment	Shear	Inv	Opr			Inv	
																								Inv
IH10 EBML OVER US 69 NBFR PHASE 1 STEP 3	1	8-12	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.081	-3.791	7187	0.579	0.742	2.04	2.65	1.61			
	2	8-12	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.170	-3.840	7319	0.583	0.749	2.01	2.61	1.53			
	3	8-12	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.181	-3.849	7334	0.584	0.749	2.02	2.62	1.52			
	4	9-13	Tx54	0	40	0.6	270	19.11	13.11	6	46.5	6.000	8.000	3.216	-3.068	6755	0.550	0.685	2.37	3.07	2.22			
	5	9-13	Tx54	0	40	0.6	270	19.11	13.11	6	46.5	6.000	8.000	3.190	-3.053	6763	0.559	0.695	2.38	3.08	2.22			
	6	10-14	Tx54	0	40	0.6	270	19.11	13.11	6	46.5	6.000	8.000	3.234	-3.094	6761	0.563	0.700	2.35	3.05	2.17			
	7	11-15	Tx54	0	20	0.6	270	20.41	11.21	4	50.5	4.500	6.000	1.869	-1.847	4352	0.603	0.696	1.89	2.45	2.06			
	8	12-16	Tx54	0	20	0.6	270	20.41	11.21	4	50.5	4.500	6.000	1.810	-1.791	4361	0.620	0.711	1.95	2.53	2.16			
	9	14-18	Tx54	0	32	0.6	270	19.63	11.38	6	50.5	5.000	6.000	2.631	-2.540	5675	0.578	0.700	2.27	2.94	2.17			
	16	1-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.403	-4.185	7919	0.575	0.735	1.92	2.49	1.26			
	17	1-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.358	-4.101	7799	0.637	0.736	1.90	2.46	1.33			
	18	1-10	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.337	-4.042	7678	0.625	0.719	1.92	2.49	1.39			
	IH10 EBML OVER US 69 NBFR PHASE 2 STEP 1	1	5-7	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.322	-4.183	8056	0.619	0.792	1.85	2.41	1.24		
		2	5-7	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.410	-4.284	8286	0.632	0.809	1.78	2.33	1.15		
		3	5-7	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.424	-4.297	8319	0.635	0.814	1.77	2.32	1.14		
		4	5-8	Tx54	0	40	0.6	270	19.11	12.51	6	50.5	6.000	8.000	3.334	-3.224	6761	0.586	0.729	2.35	3.04	1.99		
		5	5-8	Tx54	0	40	0.6	270	19.11	12.51	6	50.5	6.000	8.000	3.289	-3.180	6766	0.597	0.740	2.37	3.07	2.03		
		6	5-9	Tx54	0	40	0.6	270	19.11	12.51	6	50.5	6.000	8.000	3.285	-3.178	6764	0.589	0.730	2.39	3.10	2.04		
7		5-10	Tx54	0	20	0.6	270	20.41	11.21	4	50.5	4.500	6.000	1.933	-1.940	4368	0.647	0.742	1.75	2.26	1.87			
8		5-11	Tx54	0	20	0.6	270	20.41	11.21	4	50.5	4.500	6.000	1.906	-1.927	4383	0.661	0.756	1.74	2.25	1.88			
9		5-13	Tx54	0	32	0.6	270	19.63	11.38	6	50.5	5.000	6.000	2.882	-2.821	5683	0.612	0.744	2.09	2.71	1.76			
10		5-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	3.565	-3.433	7084	0.587	0.735	2.34	3.13	1.97			
11		5-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	3.551	-3.422	7084	0.587	0.735	2.34	3.13	1.98			
12		5-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	3.569	-3.437	7096	0.587	0.735	2.33	3.10	1.96			
13		1-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	3.706	-3.556	7145	0.589	0.735	2.27	3.04	1.84			
14		1-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.439	-4.213	7956	0.575	0.735	1.91	2.48	1.23			
15		1-9	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.388	-4.173	7956	0.575	0.735	1.93	2.50	1.27			
IH10 EBML OVER US 69 NBFR PHASE 2 STEP 2	19	1-11	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.373	-4.140	7891	0.586	0.748	1.91	2.47	1.29			
	20	1-6	Tx54	0	44	0.6	270	18.83	11.19	8	50.5	6.000	8.000	4.571	-4.328	8235	0.591	0.759	1.79	2.32	1.13			
	20	7-12	Tx54	0	42	0.6	270	19.01	12.72	6	50.5	6.000	8.000	4.341	-4.079	7769	0.594	0.759	1.85	2.39	1.24			
IH10 EBML OVER US 69 NBFR PHASE 3 STEP 1	1	1-4	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.293	-4.157	8015	0.615	0.787	1.87	2.45	1.26			
	2	1-4	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.362	-4.220	8124	0.614	0.787	1.84	2.40	1.21			
	3	1-4	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	4.383	-4.236	8145	0.614	0.787	1.84	2.39	1.19			
	4	1-4	Tx54	0	40	0.6	270	19.11	12.51	6	50.5	6.000	8.000	3.445	-3.382	6787	0.635	0.787	2.17	2.82	1.77			
	5	1-4	Tx54	0	40	0.6	270	19.11	12.51	6	50.5	6.000	8.000	3.384	-3.325	6793	0.636	0.787	2.22	2.87	1.83			
	6	1-4	Tx54	0	40	0.6	270	19.11	12.51	6	50.5	6.000	8.000	3.438	-3.367	6785	0.636	0.787	2.20	2.85	1.79			
	7	1-4	Tx54	0	20	0.6	270	20.41	11.21	4	50.5	4.500	6.000	1.961	-2.001	4389	0.688	0.787	1.63	2.11	1.74			
	8	1-4	Tx54	0	20	0.6	270	20.41	11.21	4	50.5	4.500	6.000	1.793	-1.742	4355	0.620	0.711	1.99	2.58	2.23			
	9	1-4	Tx54	0	32	0.6	270	19.63	11.38	6	50.5	5.000	6.000	2.995	-2.957	5881	0.640	0.778	1.94	2.51	1.58			
	10	1-4	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	3.730	-3.624	7088	0.618	0.773	2.14	2.88	1.74			
	11	1-4	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	3.729	-3.624	7088	0.618	0.773	2.14	2.87	1.74			
	12	1-4	Tx54	0	44	0.6	270	18.83	11.55	8	48.5	6.000	8.000	3.711	-3.586	7081	0.603	0.754	2.21	2.95	1.79			

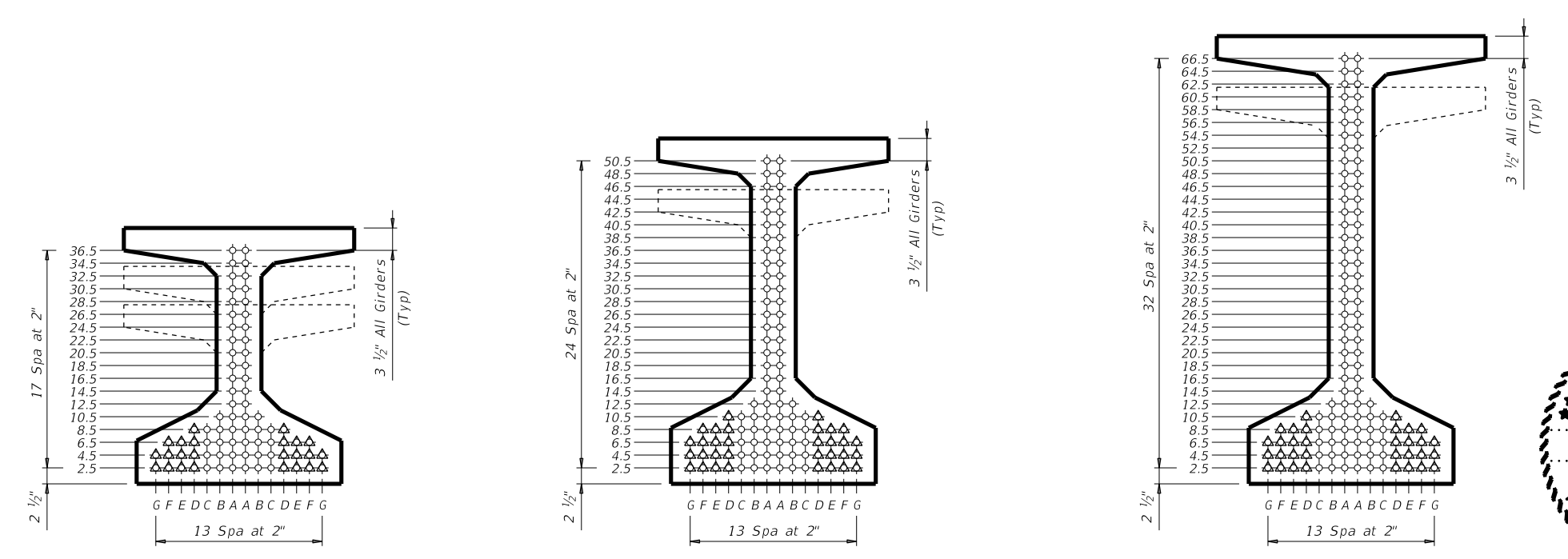
① Based on the following allowable stresses (ksi):
 Compression = 0.65 f'ci
 Tension = 0.24 $\sqrt{f'ci}$
 Optional designs must likewise conform.
 ② Portion of full HL93.

DESIGN NOTES:
 Designed according to AASHTO LRFD Bridge Design Specifications. Load rated using Load and Resistance Factor Rating according to AASHTO Manual for Bridge Evaluation. Optional designs for girders 120 feet or longer must have a calculated residual camber equal to or greater than that of the designed girder. Prestress losses for the designed girders have been calculated for a relative humidity of __ percent. Optional designs must likewise conform.

FABRICATION NOTES:
 Provide Class H concrete. Provide Grade 60 reinforcing steel bars. Use low relaxation strands, each pretensioned to 75 percent of fpu. Strand debonding must comply with Item 424.4.2.2.4. Full-length debonded strands are only permitted in positions marked Δ . Double wrap full-length debonded strands in outer most position of each row. When shown on this sheet, the Fabricator has the option of furnishing either the designed girder or an approved optional design. All optional design submittals must be signed, sealed and dated by a Professional Engineer registered in the State of Texas. Seal cracks in girder ends exceeding 0.005" in width as directed by the Engineer. The fabricator is permitted to decrease the spacing of Bars R and S by providing additional bars to help limit crack width provided the decreased spacing results in no less than 1" clear between bars. The fabricator must take an approved corrective action if cracks greater than 0.005" form on a repetitive basis.

DEPRESSED STRAND DESIGNS:
 Locate strands for the designed girder as low as possible on the 2" grid system unless a non-standard strand pattern is indicated. Fill row "2.5", then row "4.5", then row "6.5", etc., beginning each row in the "A" position and working outward until the required number of strands is reached. All strands in the "A" position must be depressed, maintaining the 2" spacing so that, at the girder ends, the upper two strands are in the position shown in the table.

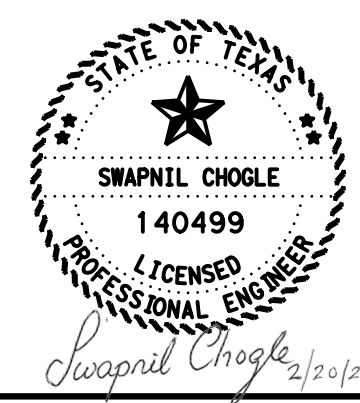
To complete this sheet input the girder designs in the table and the relative humidity under Design Notes. In all cases, remove this block. This sheet must be signed, sealed, and dated by a registered Professional Engineer.



TYPE Tx28, Tx34 & Tx40

TYPE Tx46 & Tx54

TYPE Tx62 & Tx70

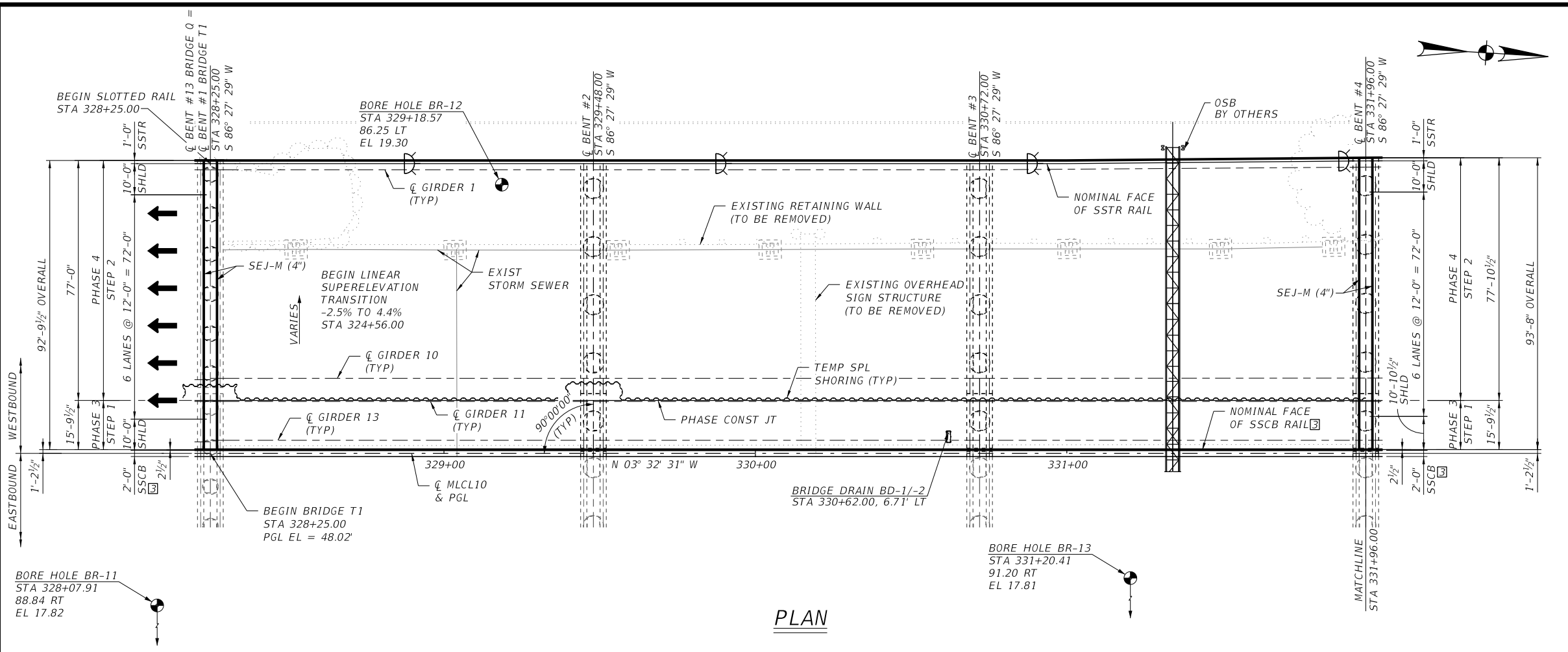


HL93 LOADING

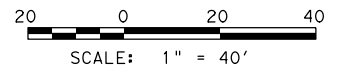
Texas Department of Transportation		Bridge Division Standard	
PRESTRESSED CONCRETE I-GIRDER DESIGNS (NON-STANDARD SPANS)			
IGND			
FILE: igndsts1-22.dgn	DN: CBF	CK: BB	DW: KAH
©TxDOT August 2017	CONT	SECT	JOB
REVISIONS	0028	13	135
10-19: Modified for depressed strands only	DIST	COUNTY	HIGHWAY
3-22: Added Load Rating	BMT	JEFFERSON	IH 10
			SHEET NO. 1406

DATE: FILE:

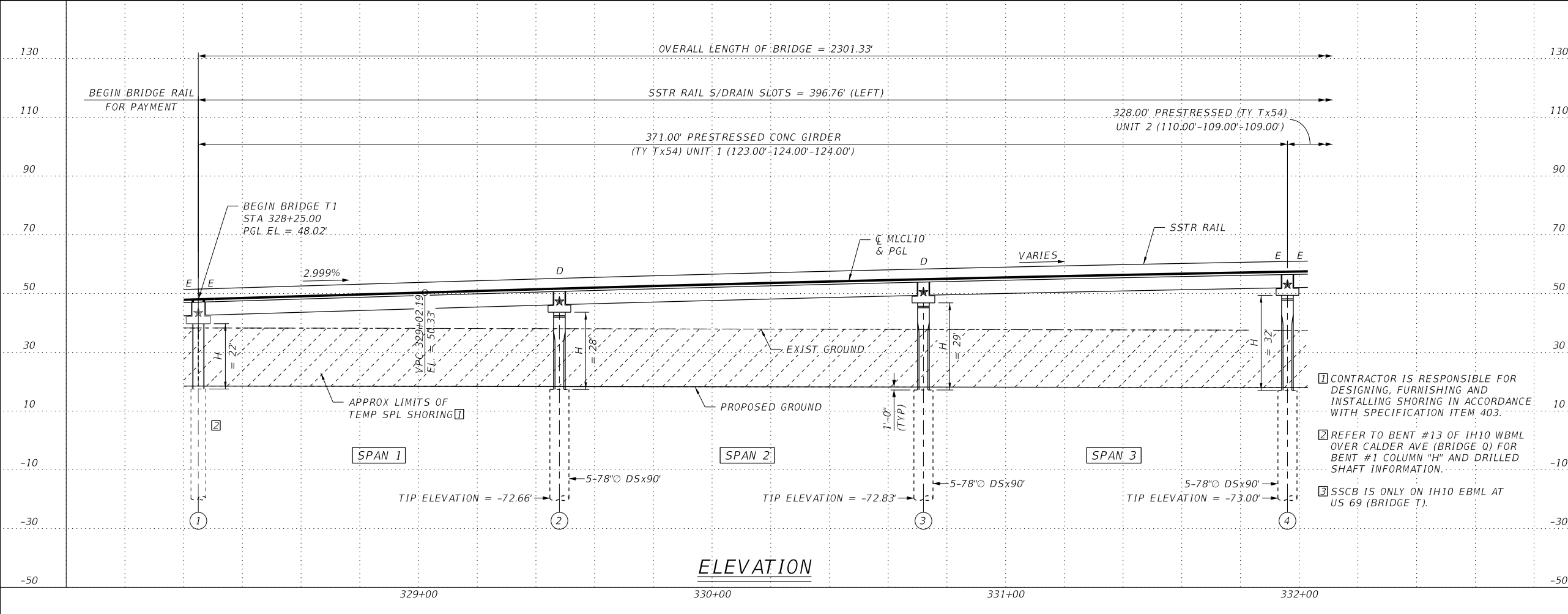
DATE: 21-FEB-2024 15:46
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\7. Bridge\10WB Mainline Layout_01.dgn



- GENERAL NOTES:**
- DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020 FOR HL 93 LOADING.
 - SLAB RESTRAINT OR GIRDER END CONDITIONS:
 D-DENOTES DOWELED SLAB
 E/E-DENOTES SLAB EXPANSION
 - ⊙ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.
 - THE "H" VALUES SHOWN ARE ESTIMATED COLUMN HEIGHTS. CONTRACTOR IS RESPONSIBLE FOR CALCULATING ACTUAL COLUMN HEIGHTS BASED ON FIELD CONDITIONS.
 - SEE FOUNDATION LAYOUT SHEETS FOR DRILLED SHAFT NOTES.
 - UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.
 - SEE TRAFFIC CONTROL PLANS FOR CONSTRUCTION PHASING.
 - EXISTING OVERPASS AT HARRISON AVENUE TO BE REMOVED IS A 3-SPAN UNIT, 230' LONG, VARIABLE OUT TO OUT WIDTH OF 134.45' MINIMUM TO 154.44' MAXIMUM, PRESTRESSED CONCRETE TYPE 'C' BEAMS ON CONCRETE BATTERED PILE FOUNDATIONS.
 NBI 20-124-0-0028-13-502 (IH-10 EB/US69 NB)
 NBI 20-124-0-0028-13-222 (IH-10 WB/US69 SB)
 - EXISTING US 69 DIRECT CONNECTOR TO BE REMOVED IS A 14 SPAN - 4 UNIT, 1660' LONG, 40' WIDE PRESTRESSED CONCRETE TYPE IV BEAMS/STEEL PLATE GIRDER ON BATTERED PILE FOUNDATIONS.
 NBI: 20-124-0-0028-13-221
 - FOR MORE DETAILS ON SUPERELEVATION TRANSITION ZONES, SEE ROADWAY PLAN SHEETS.



FUNCTIONAL CLASS = PRINCIPAL ARTERIAL (INTERSTATE)
 DESIGN SPEED = 70 MPH
 ADT (2025) = 29,900
 ADT (2045) = 42,700
 ADT (2055) = 48,050



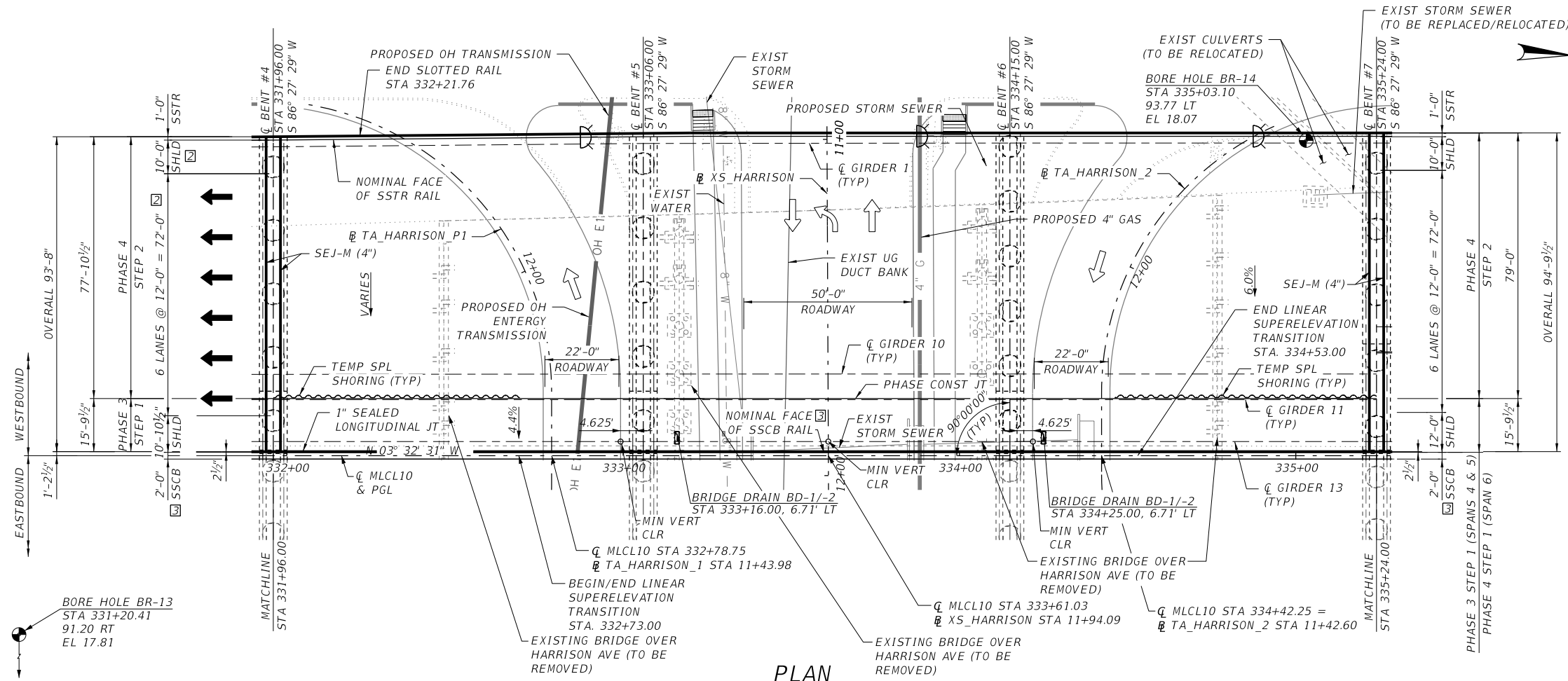
STATE OF TEXAS
 CHRISTOPHER B. FULLER
 145228
 LICENSED PROFESSIONAL ENGINEER
 02/21/2024
 HL93 LOADING
 SUPERSTRUCTURE OPR/INV RATINGS: 1.80/1.12

VOLKERT
 F-12679
 Texas Department of Transportation

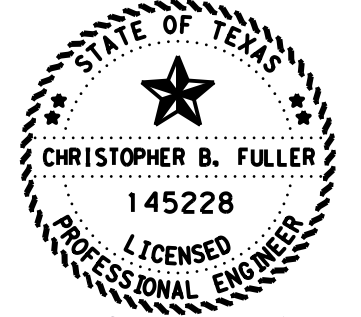
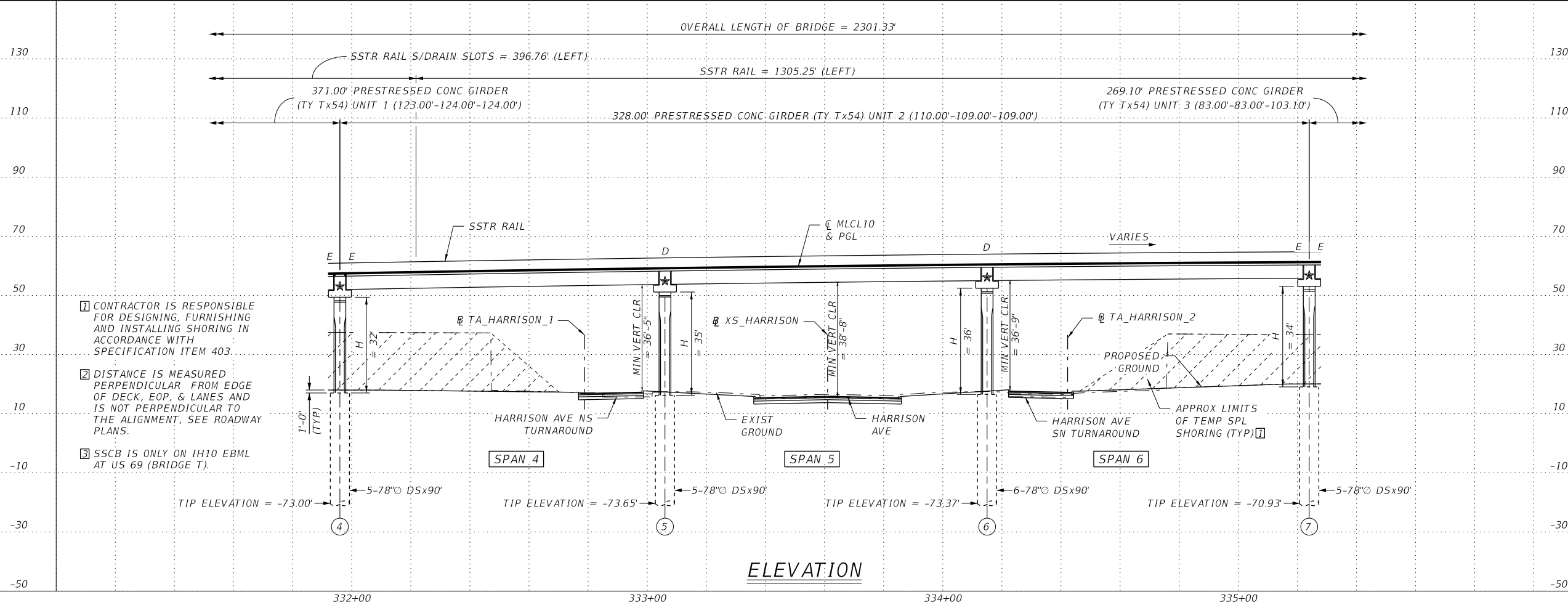
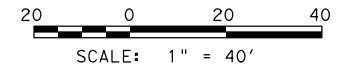
IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 WBML
 NBI: 20-124-0-0028-13-536
 BRIDGE T1
 SHEET 1 OF 7

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1407			

DATE: 21-FEB-2024 20:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7 - Bridge\Plan Set\7 - Bridge\10WB MAINLANE_LAYOUT_02.dwg



NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.



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 HL93 LOADING

SUPERSTRUCTURE OPR/INV RATINGS: 1.80/1.12

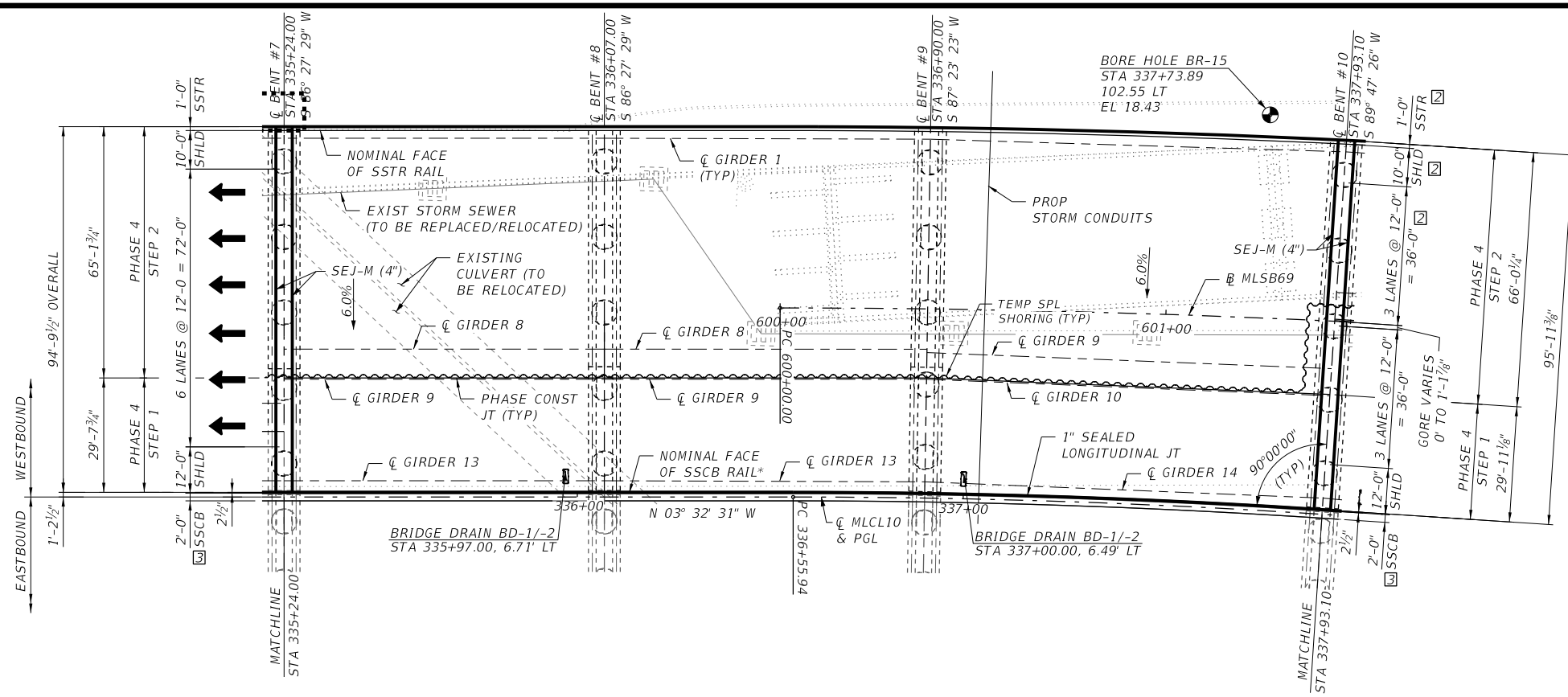
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IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 WBML
 NBI: 20-124-0-0028-13-536
 BRIDGE T1
 SHEET 2 OF 7

DW:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1408		

DATE: 21-FEB-2024 22:11
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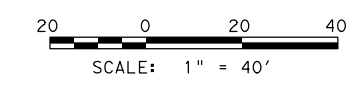
NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

**HORIZONTAL CURVE DATA
 CL MLCL10**

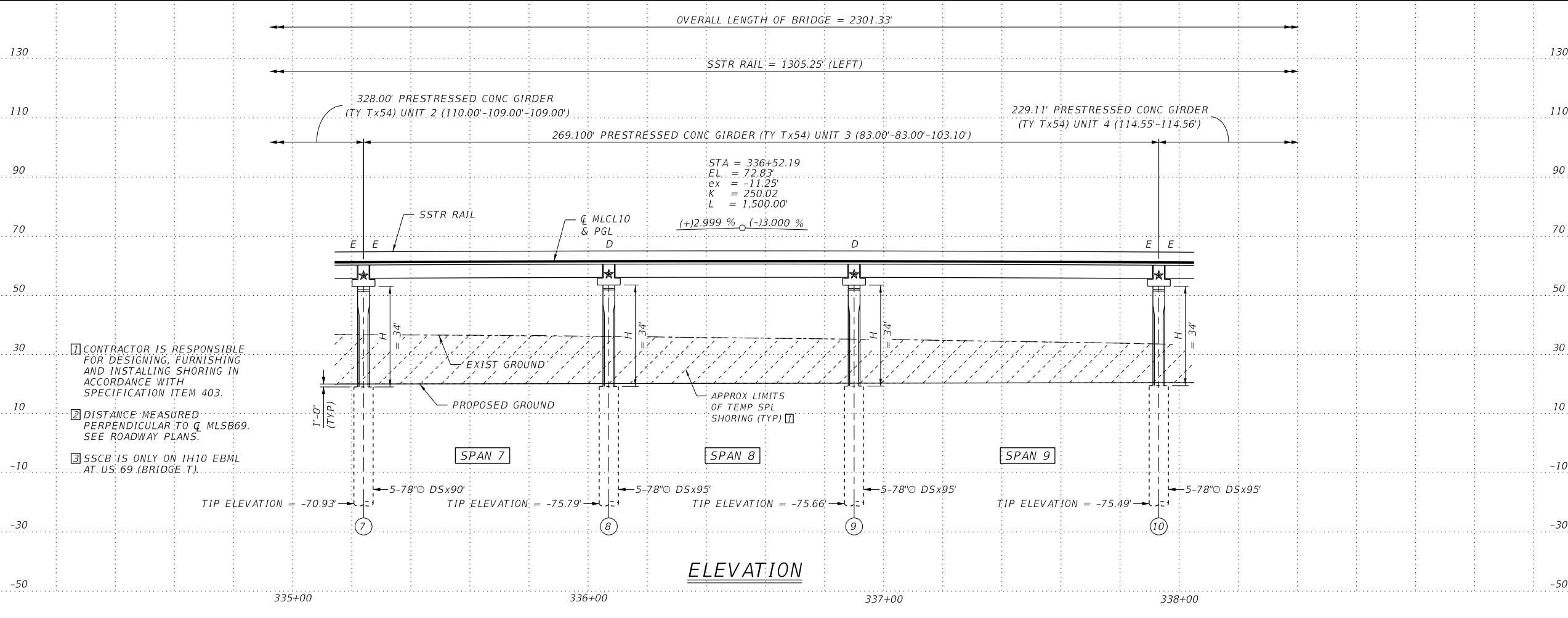
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DELTA	= 94° 51' 39.18" (RT)
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LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49

**HORIZONTAL CURVE DATA
 CL MLNB69_1**

PI STATION	= 703+13.56
DELTA	= 11° 56' 01.58" (RT)
DEGREE OF CURVE	= 1° 54' 35.49"
TANGENT	= 313.56
LENGTH	= 624.85
RADIUS	= 3,000.00
PC STATION	= 700+00.00
PT STATION	= 706+24.85



PLAN



ELEVATION

STATE OF TEXAS
 CHRISTOPHER B. FULLER
 145228
 LICENSED PROFESSIONAL ENGINEER
 02/21/2024
 HL93 LOADING
 SUPERSTRUCTURE OPR/INV RATINGS: 1.80/1.12

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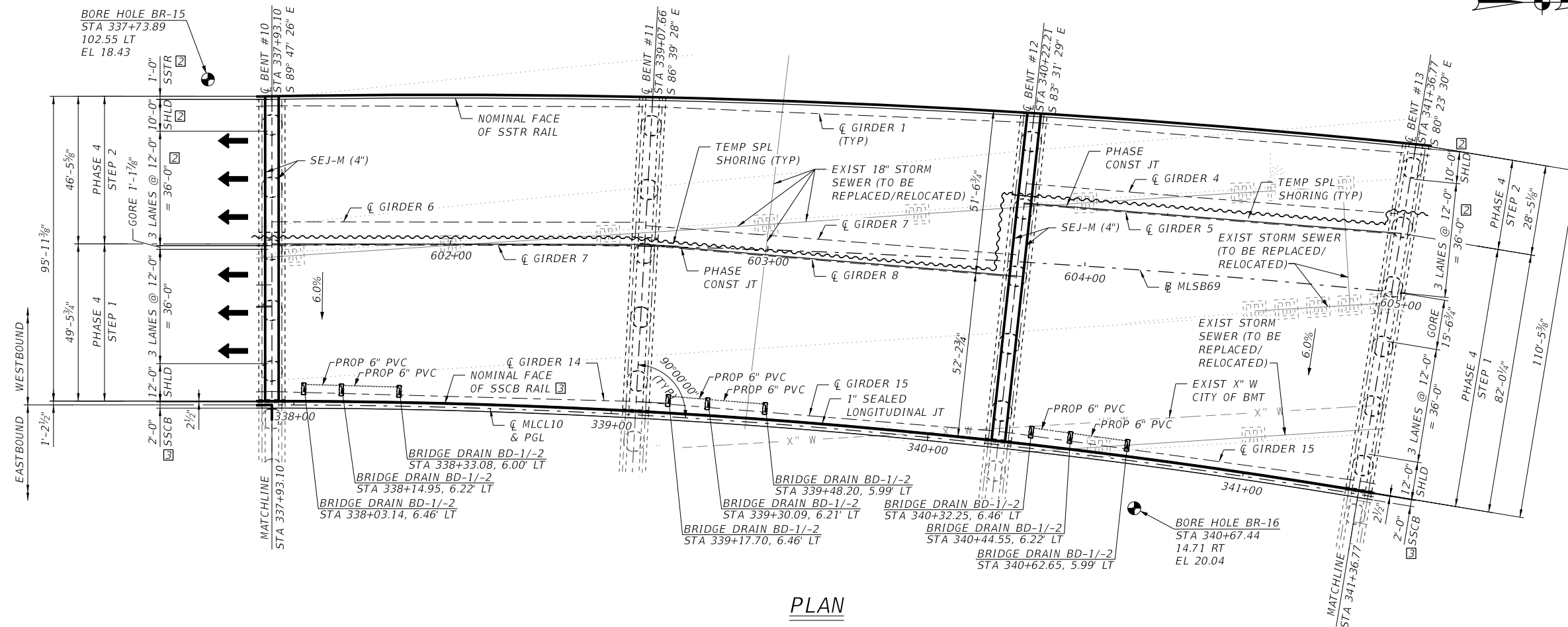
**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 WBML
 NBI: 20-124-0-0028-13-536
 BRIDGE T1**

SHEET 3 OF 7

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT:		SECT:		JOB:		CK:	FB
0028		13		135			IH 10
DIST:		COUNTY:		SHEET NO.:			
BMT		JEFFERSON		1409			

DATE: 21-FEB-2024 15:57
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NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

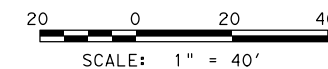


**HORIZONTAL CURVE DATA
 @ MLCL10**

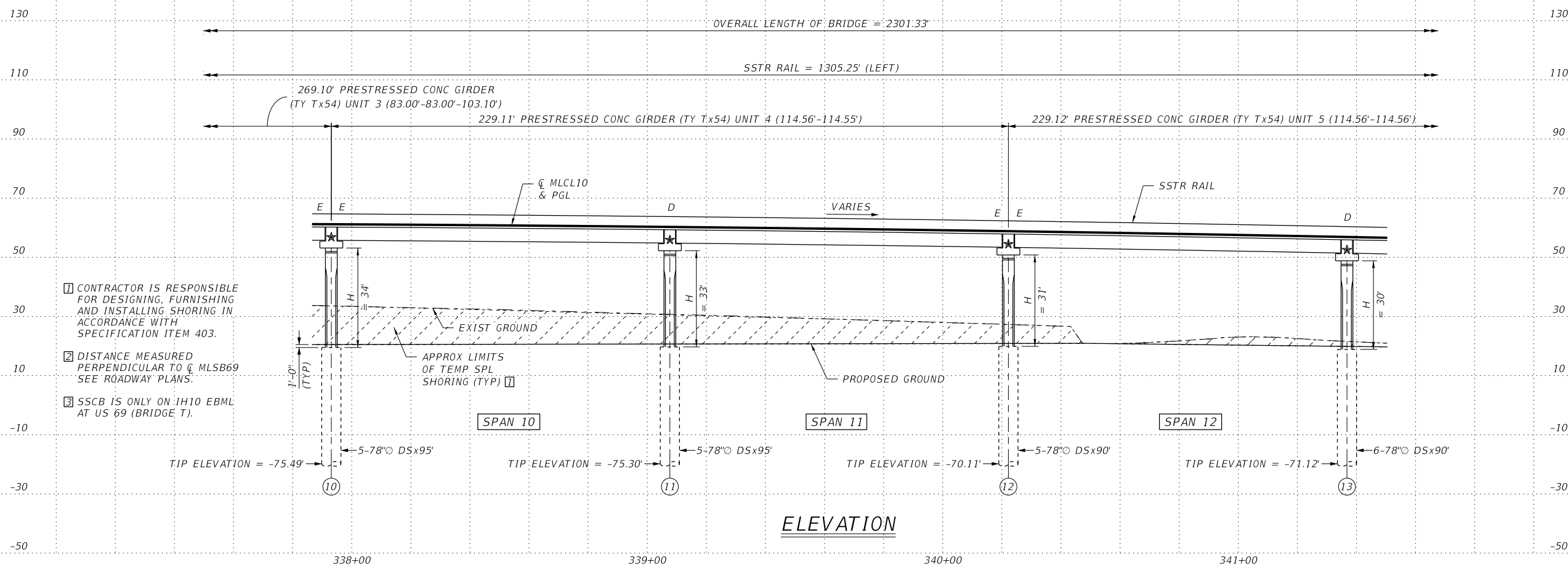
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DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49

**HORIZ CURVE DATA
 @ MLNB69_1**

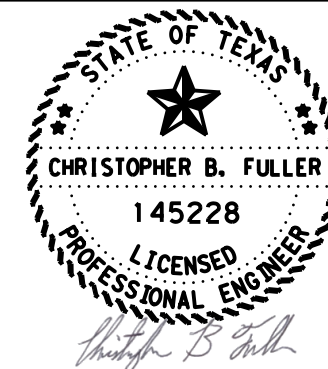
PI STATION	= 703+13.56
DELTA	= 11° 56' 01.58" (RT)
DEGREE OF CURVE	= 1° 54' 35.49"
TANGENT	= 313.56
LENGTH	= 624.85
RADIUS	= 3,000.00
PC STATION	= 700+00.00
PT STATION	= 706+24.85



PLAN



ELEVATION



02/21/2024
 HL93 LOADING
 SUPERSTRUCTURE OPR/INV RATINGS: 1.80/1.12



**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 WBML
 NBI: 20-124-0-0028-13-536
 BRIDGE T1**

SHEET 4 OF 7

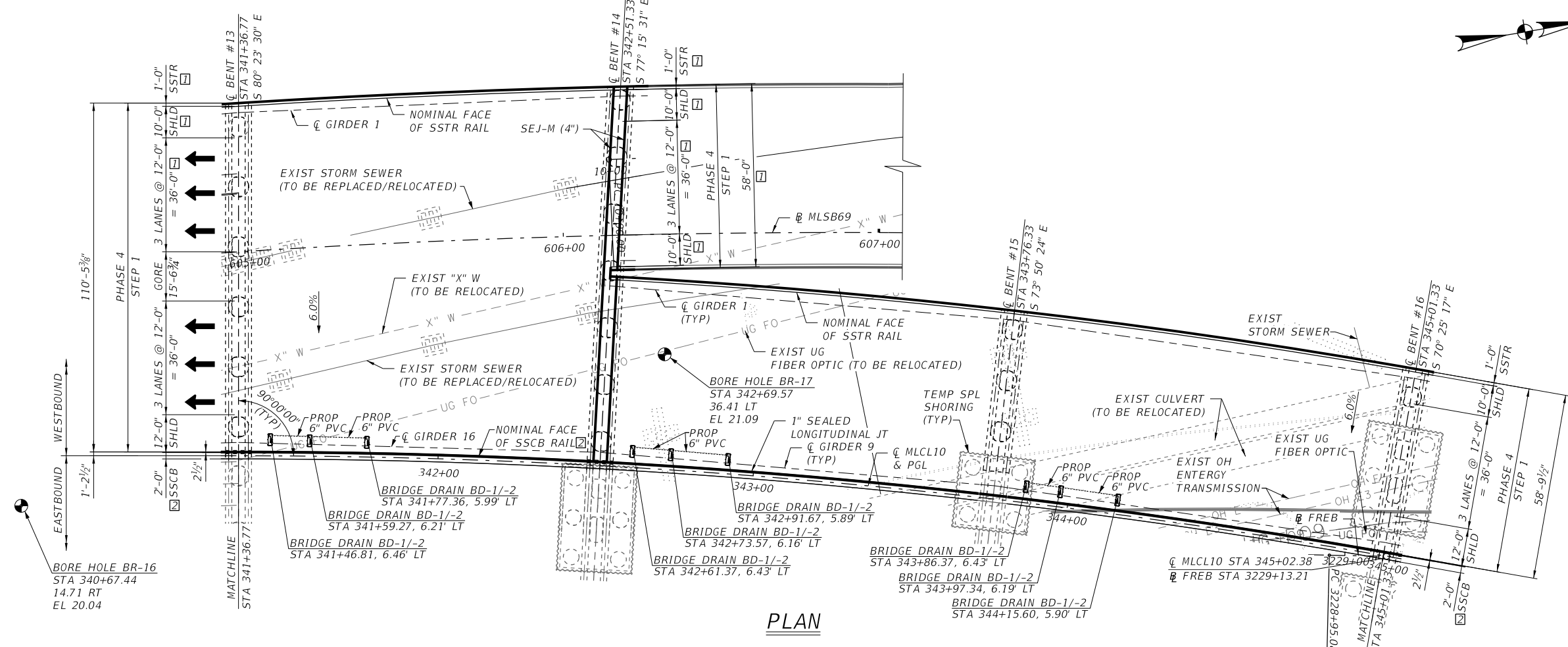
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CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1410		

DATE: 21-FEB-2024 16:42
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7 - Bridge\Plan Set\7 - Bridge\10 WB Mainlanes over US 69 NBER\1411_10WB_MAINLANE_LAYOUT_05.dgn

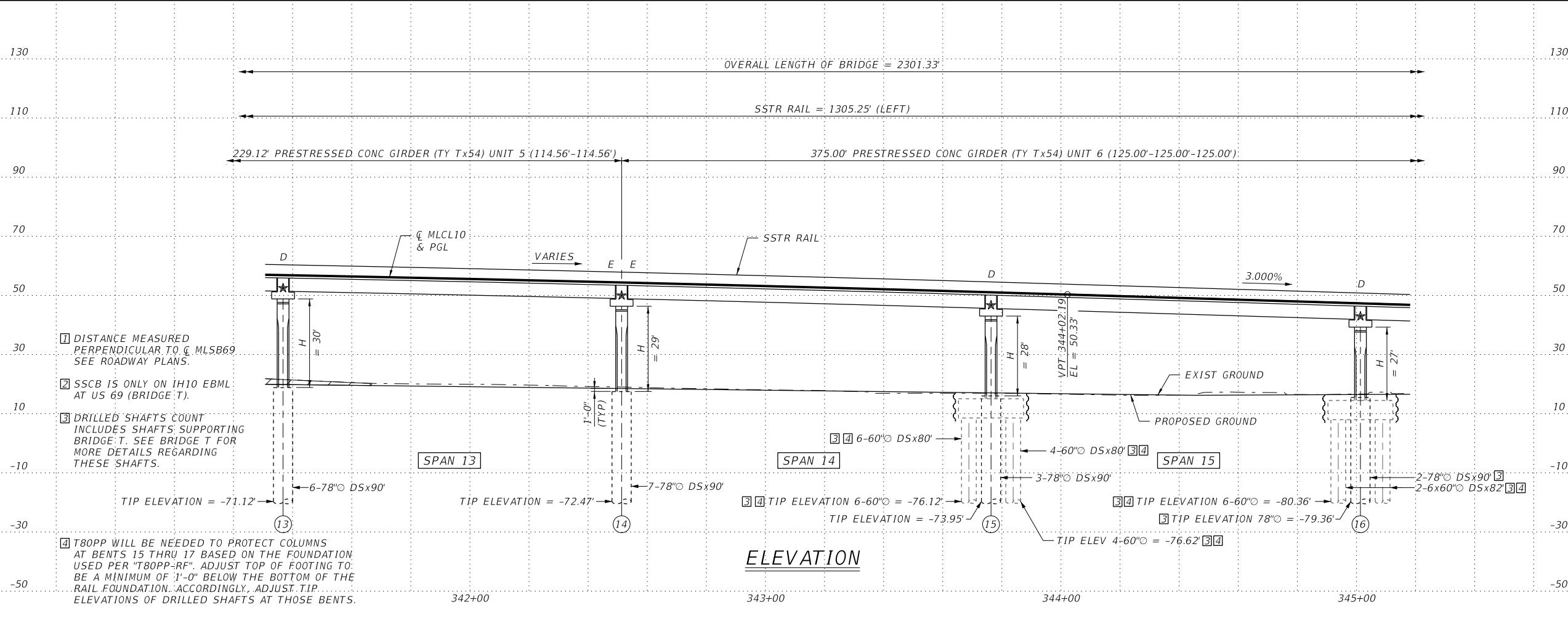


NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

HORIZONTAL CURVE DATA CLCL10	
PI STATION	= 359+36.66
DELTA	= 94° 51' 39.18" (RT)
DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49

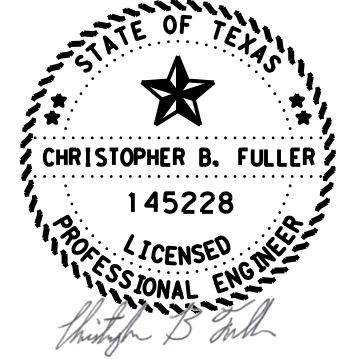


PLAN



ELEVATION

- 1 DISTANCE MEASURED PERPENDICULAR TO CL MLSB69 SEE ROADWAY PLANS.
- 2 SSCB IS ONLY ON IH10 EBML AT US 69 (BRIDGE T).
- 3 DRILLED SHAFTS COUNT INCLUDES SHAFTS SUPPORTING BRIDGE T. SEE BRIDGE T FOR MORE DETAILS REGARDING THESE SHAFTS.
- 4 T8OPP WILL BE NEEDED TO PROTECT COLUMNS AT BENTS 15 THRU 17 BASED ON THE FOUNDATION USED PER "T8OPP-RF". ADJUST TOP OF FOOTING TO BE A MINIMUM OF 3'-0" BELOW THE BOTTOM OF THE RAIL FOUNDATION. ACCORDINGLY, ADJUST TIP ELEVATIONS OF DRILLED SHAFTS AT THOSE BENTS.



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 SUPERSTRUCTURE OPR/INV RATINGS: 1.80/1.12



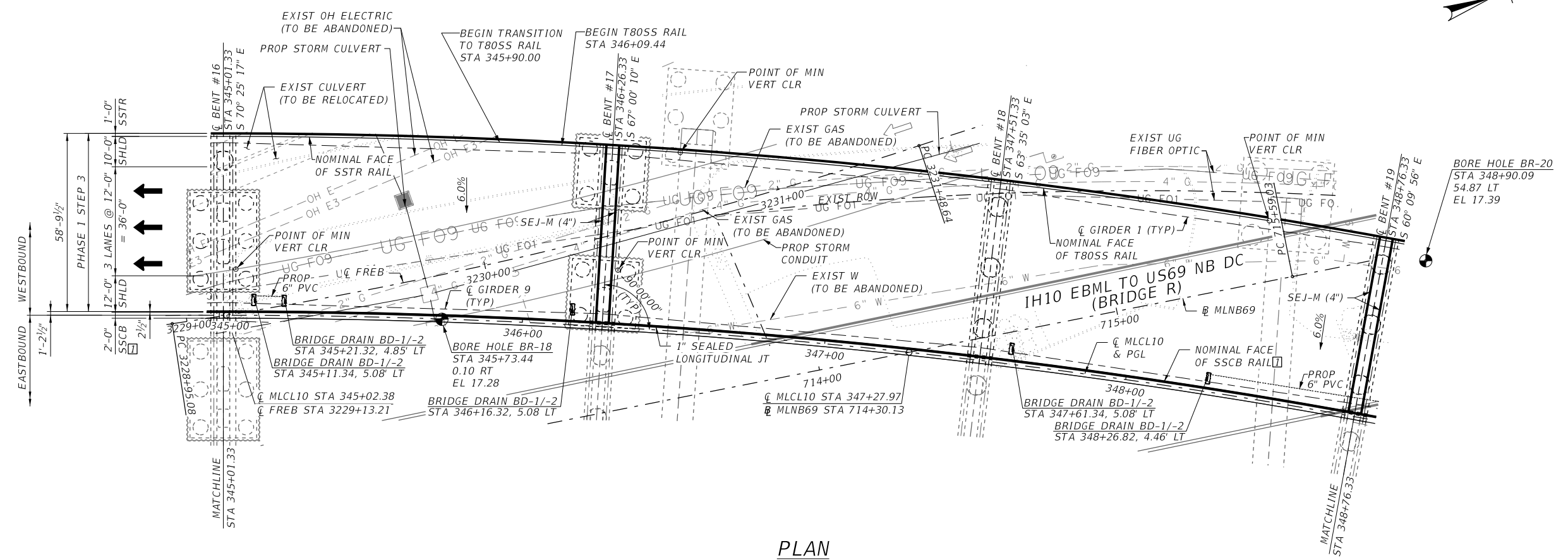
Texas Department of Transportation

IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 WBML
 NBI: 20-124-0-0028-13-536
 BRIDGE T1
 SHEET 5 OF 7

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		CK:	FB
0028		13		135			IH 10
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1411			

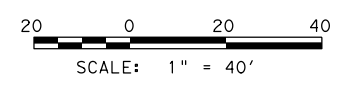
DATE: 21-FEB-2024 16:42
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NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

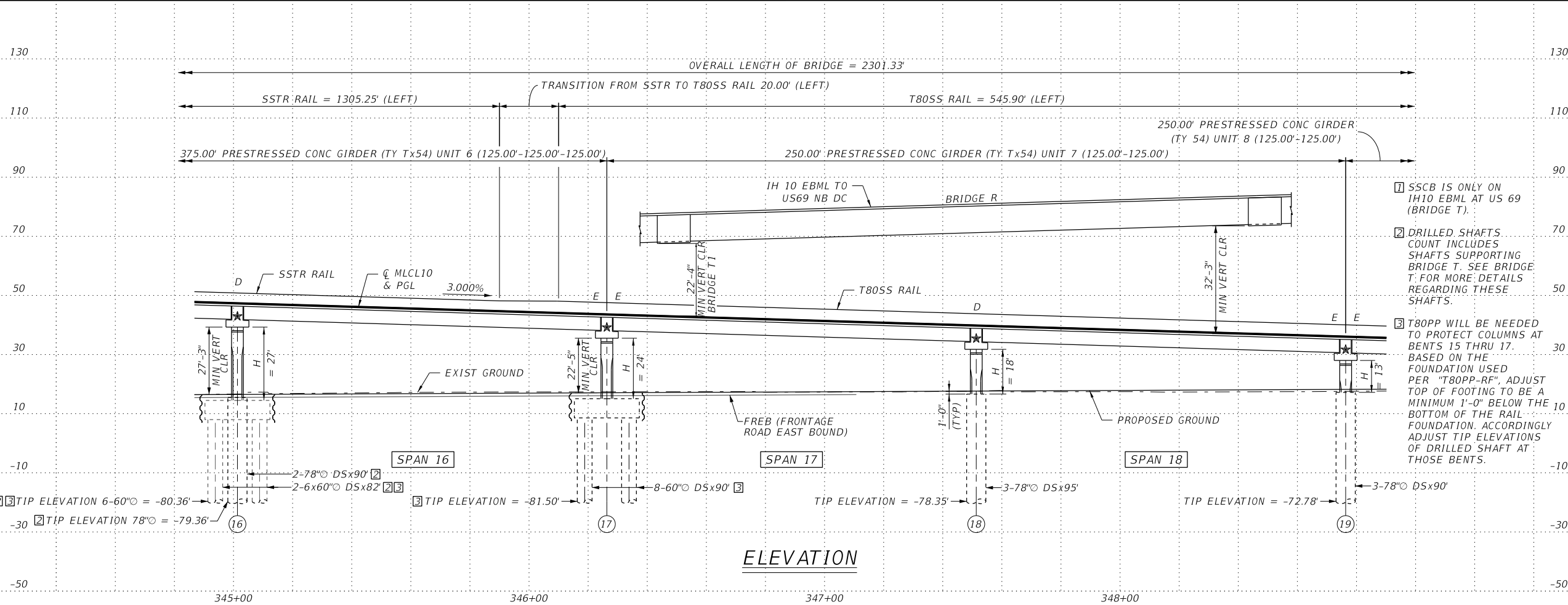


**HORIZONTAL CURVE DATA
 @ MLCL10**

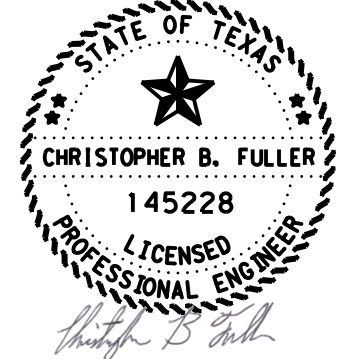
PI STATION	= 359+36.66
DELTA	= 94° 51' 39.18" (RT)
DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49



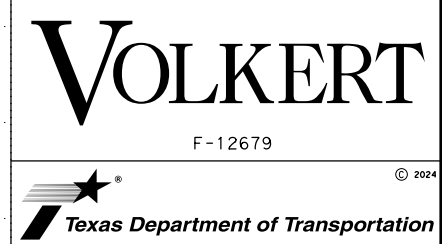
PLAN



ELEVATION



02/21/2024
 HL93 LOADING
 SUPERSTRUCTURE OPR/INV RATINGS: 1.80/1.12

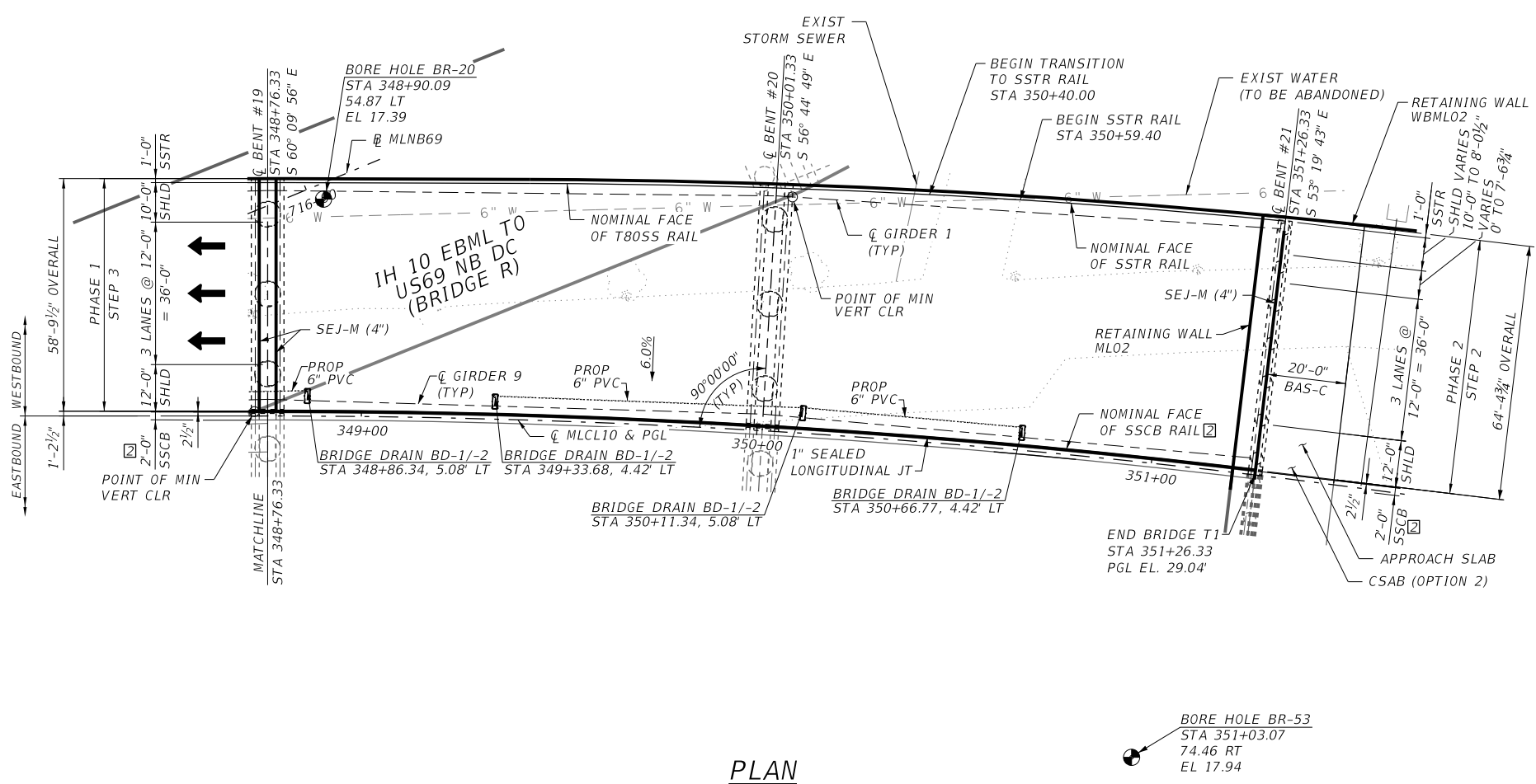


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 WBML
 NBI: 20-124-0-0028-13-536
 BRIDGE T1**

SHEET 6 OF 7

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1412				

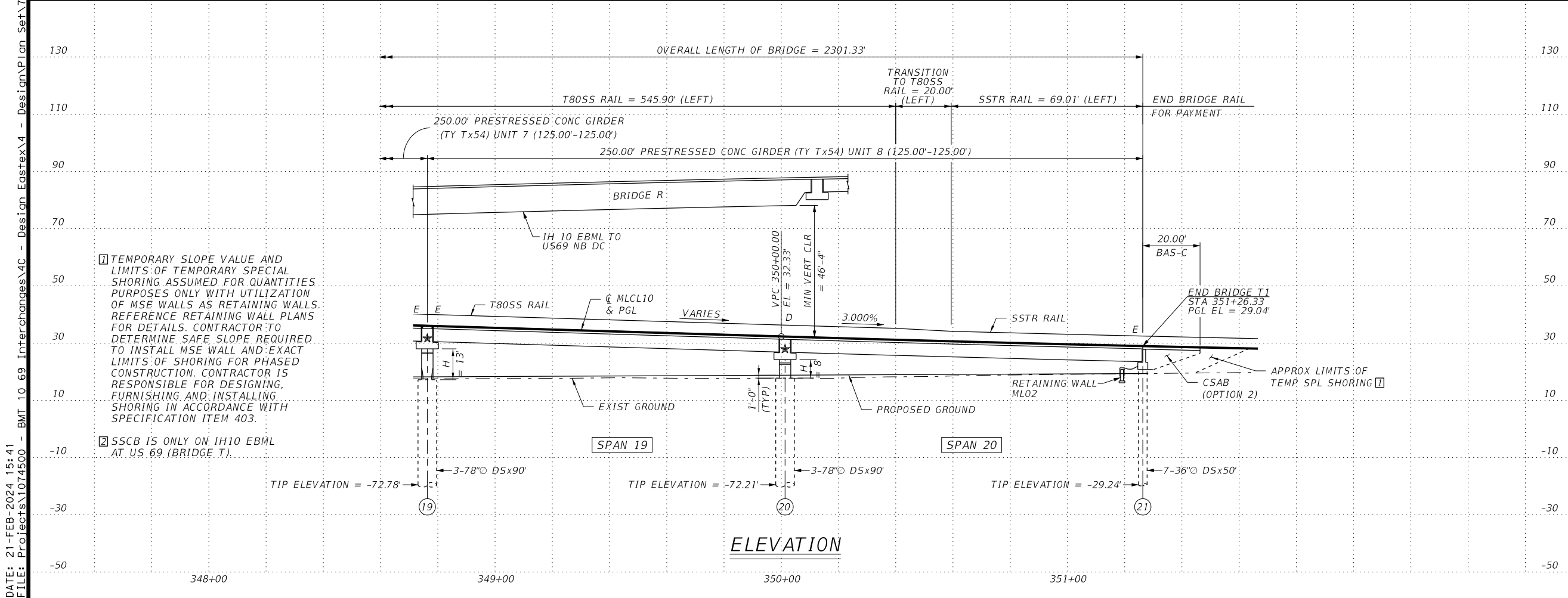
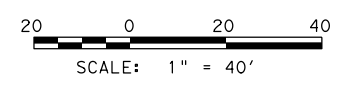
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NOTES:
 SEE SHEET 1 OF 7 FOR GENERAL NOTES.

**HORIZONTAL CURVE DATA
 CL MLCL10**

PI STATION	= 359+36.66
DELTA	= 94° 51' 39.18" (RT)
DEGREE OF CURVE	= 2° 44' 05.58"
TANGENT	= 2,280.73
LENGTH	= 3,468.55
RADIUS	= 2,095.00
PC STATION	= 336+55.94
PT STATION	= 371+24.49



STATE OF TEXAS
 CHRISTOPHER B. FULLER
 145228
 LICENSED PROFESSIONAL ENGINEER
 02/21/2024
 HL93 LOADING
 SUPERSTRUCTURE OPR/INV RATINGS: 1.80/1.12

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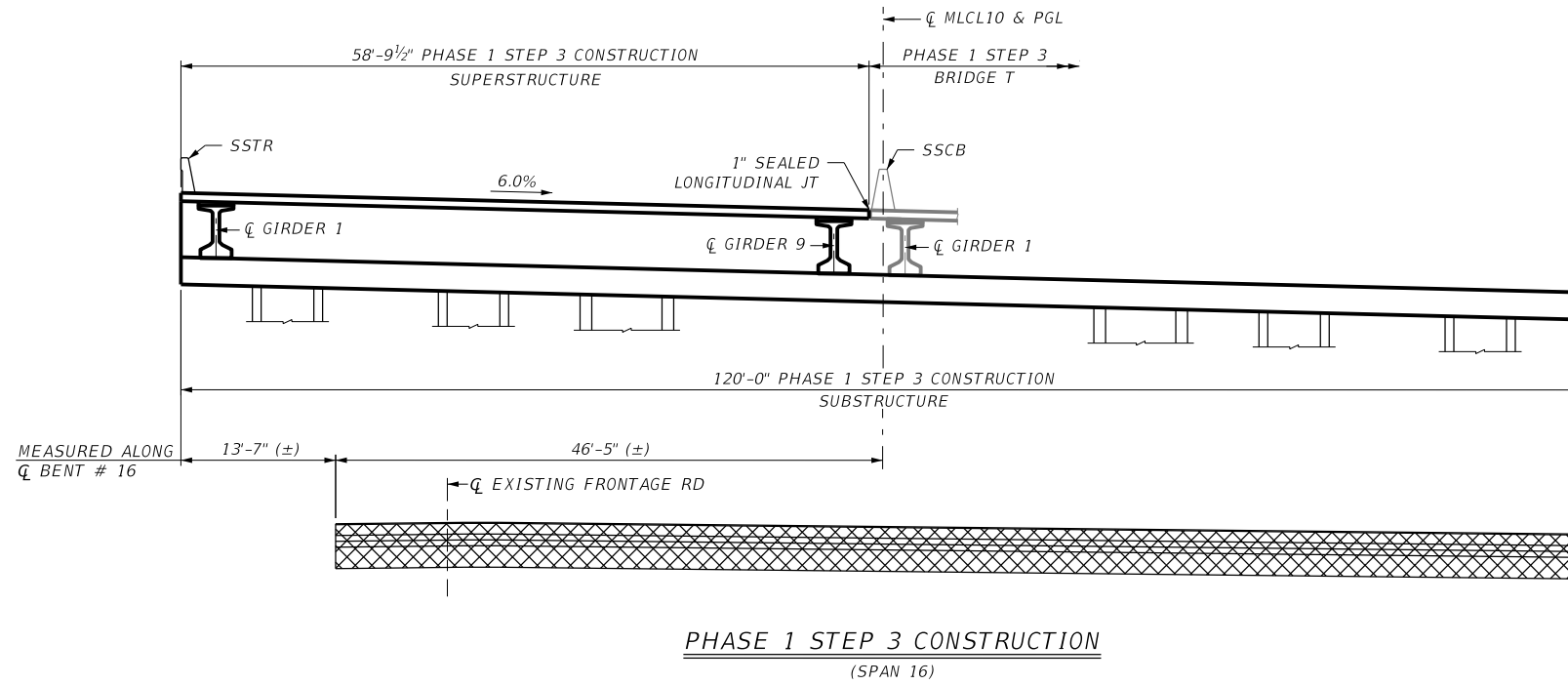
Texas Department of Transportation

**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 WBML
 NBI: 20-124-0-0028-13-536
 BRIDGE T1**

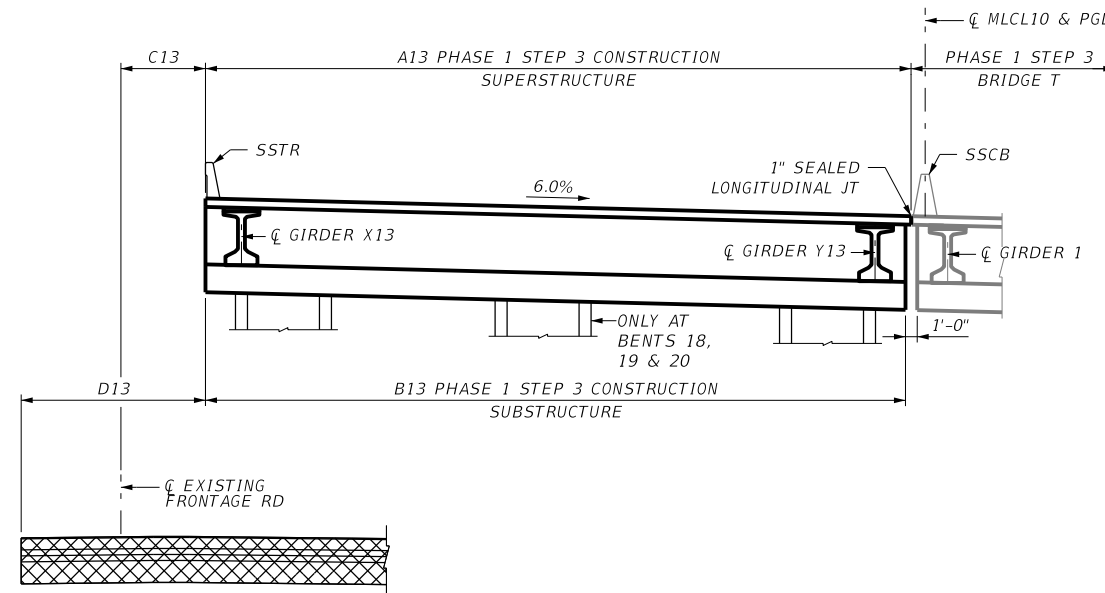
SHEET 7 OF 7

DW:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1413		

DATE: 21-FEB-2024 20:39
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T1 (TH 10 WB Mainlane COMPHS_01.dgn



PHASE 1 STEP 3 CONSTRUCTION
(SPAN 16)



PHASE 1 STEP 3 CONSTRUCTION
(SPANS 17 THRU 19)

NOTE:
 DIMENSION C13 & D13 IS
 MEASURED ALONG PROPOSED CL
 BENT 17 AND IS APPLICABLE
 FOR SPAN 17 ONLY.

NO EXISTING ROADWAY BELOW
 SPANS 18 & 19.

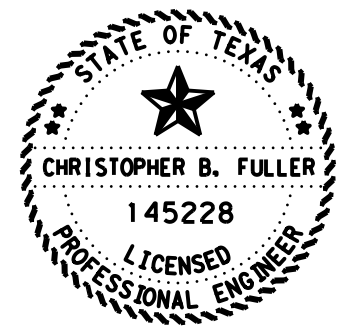
CONTRACTOR SHALL FIELD VERIFY THE
 DIMENSION BETWEEN EXISTING AND
 PROPOSED PGL PRIOR TO CONSTRUCTION.

NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING BRIDGE DIMENSIONS AND ELEVATIONS PRIOR TO ANY FABRICATION AND CONSTRUCTION.
 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
 3. SEE TRAFFIC CONTROL PLAN SHEETS FOR ADDITIONAL STEPS, TEMPORARY SHOULDER WIDTHS, CTB RAIL LOCATIONS, LENGTHS & QUANTITIES WITHIN LIMITS OF BENT 1 TO ABUTMENT 21, AND INFORMATION NOT SHOWN HERE.
 4. RETROFITTED EXISTING WALLS WITH SOLDIER PILES LOCATED BETWEEN EAST AND WEST NORTH STREET AND HARRISON STREET ALONG EXISTING IH10. AS-BUILT OF SOLDIER PILES AND TIED BACK ANCHORS ARE NOT AVAILABLE. CONTRACTOR SHALL USE EXTRA CAUTION TO AVOID THE ANCHOR TIED BACKS DURING PHASING EXCAVATION. NOTIFY THE ENGINEER AND GEOTECHNICAL ENGINEER IF ANY INTERFERENCE BETWEEN PROPOSED FOOTING/FOUNDATION AND SOLDIER PILES OR PRESTRESSED GROUND ANCHORS ARE ENCOUNTERED DURING CONSTRUCTION.
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



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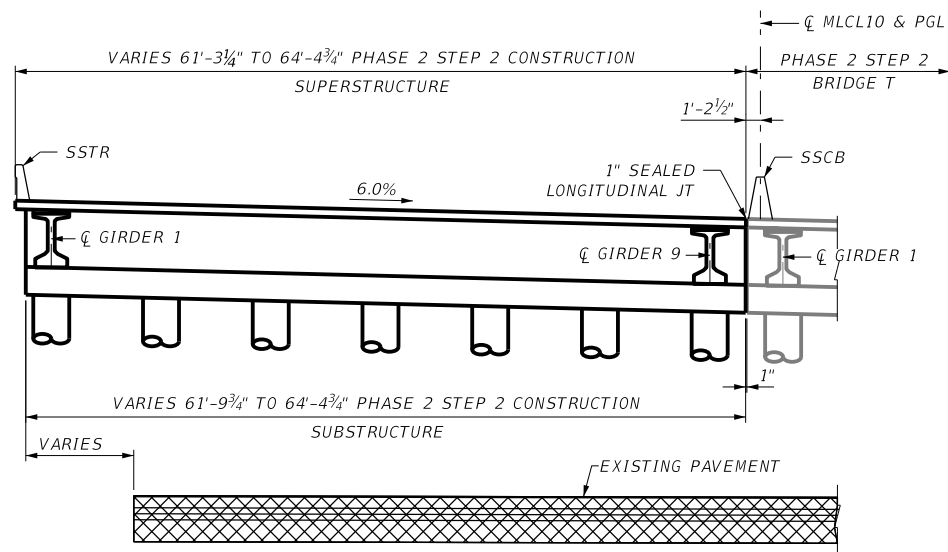
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 8

BENT #	PHASE 1 STEP 3					
	A13	B13	C13	D13	X13	Y13
BENT 17	58'-9 1/2"	58'-4"	2'-3 3/4"	14'-7 1/2"	1	9
BENT 18	58'-9 1/2"	58'-4"	N/A	N/A	1	9
BENT 19	58'-9 1/2" TO 61'-3 1/4"	58'-4"	N/A	N/A	1	9
BENT 20	61'-3 1/4"	60'-9 3/4"	N/A	N/A	1	9

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1414		

DATE: 21-FEB-2024 20:56
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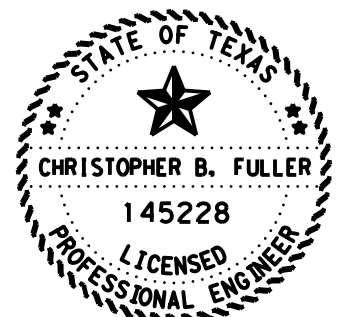


PHASE 2 STEP 2 CONSTRUCTION
 (SPAN 20)

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION

NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8.



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02/21/2024

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IH 10 AT US 69
CONSTRUCTION PHASING
IH 10 WB MAINLANE
AT US 69

SHEET 2 OF 8

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY				SHEET NO.	
BMT		JEFFERSON				1415	

DATE: 21-FEB-2024 22:23
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\10 WB Mainlanes over US 69 NBFR\11416_10WB_MAINLANE_COMPHS_03.dgn

THE PROPOSED BRIDGE STRUCTURES ARE POSITIONED TO AVOID INTERFERENCE WITH THE EXISTING BRIDGE. THE CONTRACTOR SHALL FIELD VERIFY MEASUREMENTS PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE EOR TO DETERMINE IF ANY ADJUSTMENTS WILL BE REQUIRED.




NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8.

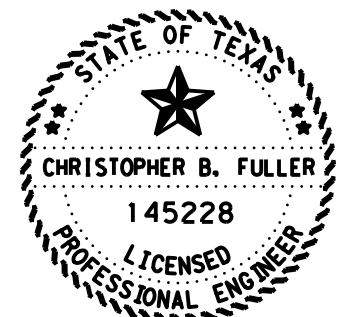
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② SSCB BARRIER TO BE INSTALLED AFTER COMPLETION OF PHASE 4 STEP 2.
- ③ EXISTING BENT PILE CAP REQUIRES TEMPORARY SHORING DURING PHASING CONSTRUCTION. TEMPORARY SHORING TOWER AS SHOWN ARE AT APPROXIMATE LOCATIONS AND ARE FOR CONTRACTOR'S INFORMATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FINAL VERIFICATION AND DESIGN. TEMPORARY SHORING SHALL BE DESIGNED BY LICENSED PROFESSIONAL ENGINEER. SHORING PLANS AND DRAWINGS SHALL BE SUBMITTED TO THE EOR FOR REVIEW PRIOR TO CONSTRUCTION.

COMPRESSIVE AXIAL SERVICE SHORING LOAD AT THE PROVIDED SHORING LOCATION IS ESTIMATED TO BE 98 KIPS MAXIMUM.

SEE ROADWAY AND TCP PLANS FOR LANE CONFIGURATIONS, DURING CONSTRUCTION.

LEGEND

-  CONSTRUCTION THIS PHASE
-  EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
-  PREVIOUS CONSTRUCTION



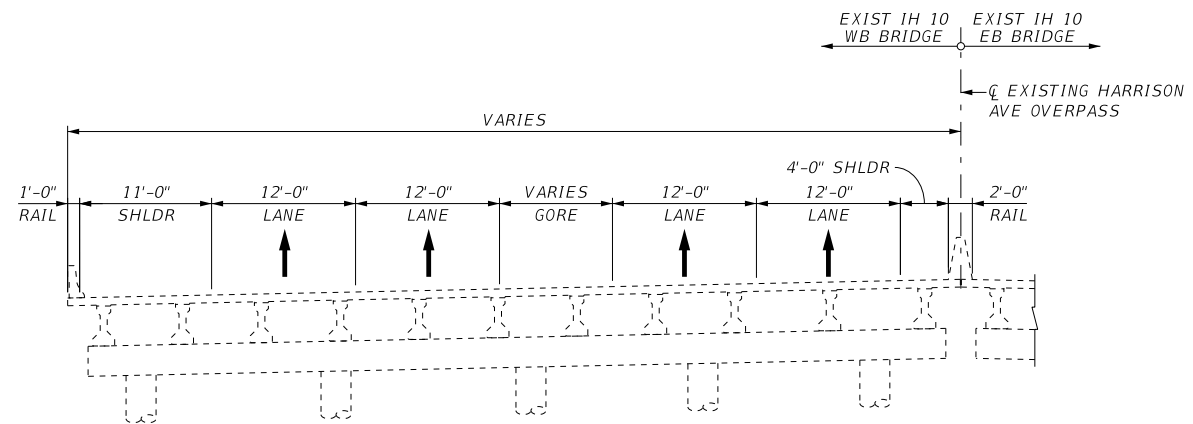
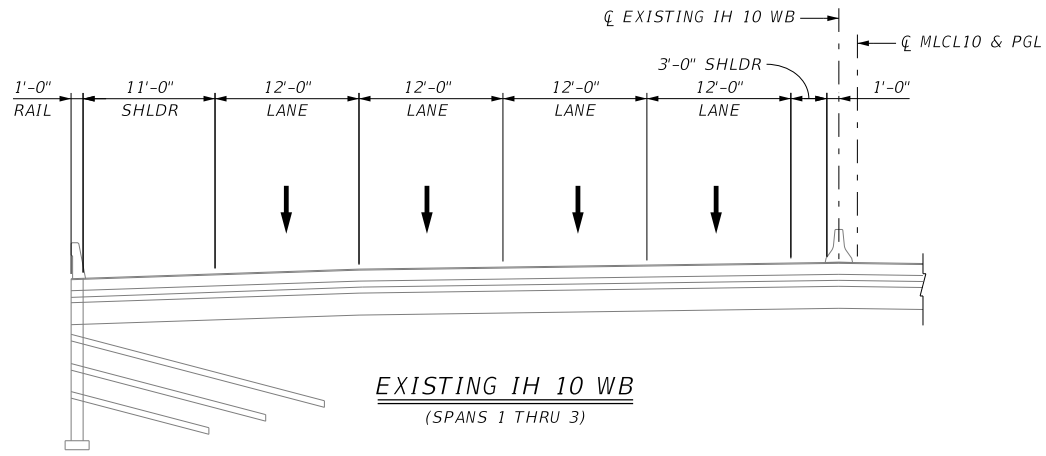
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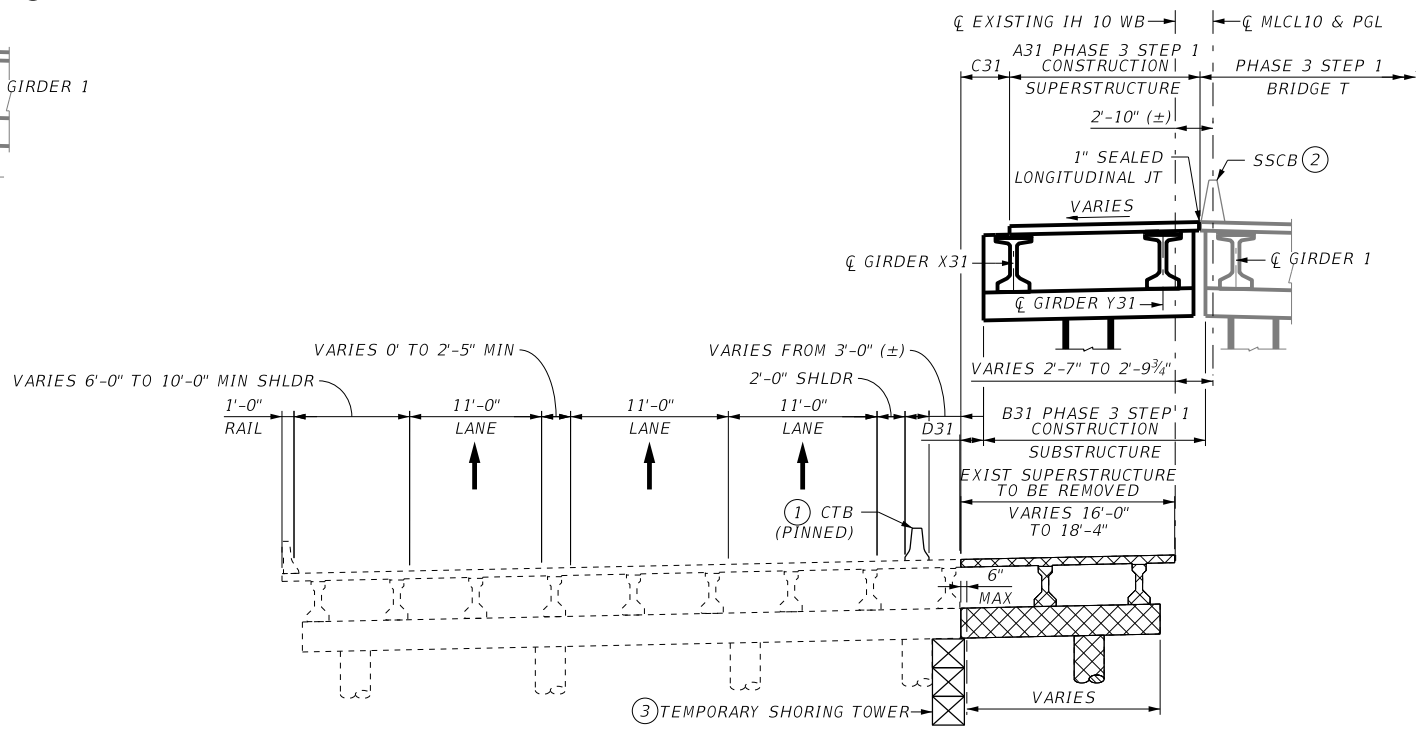
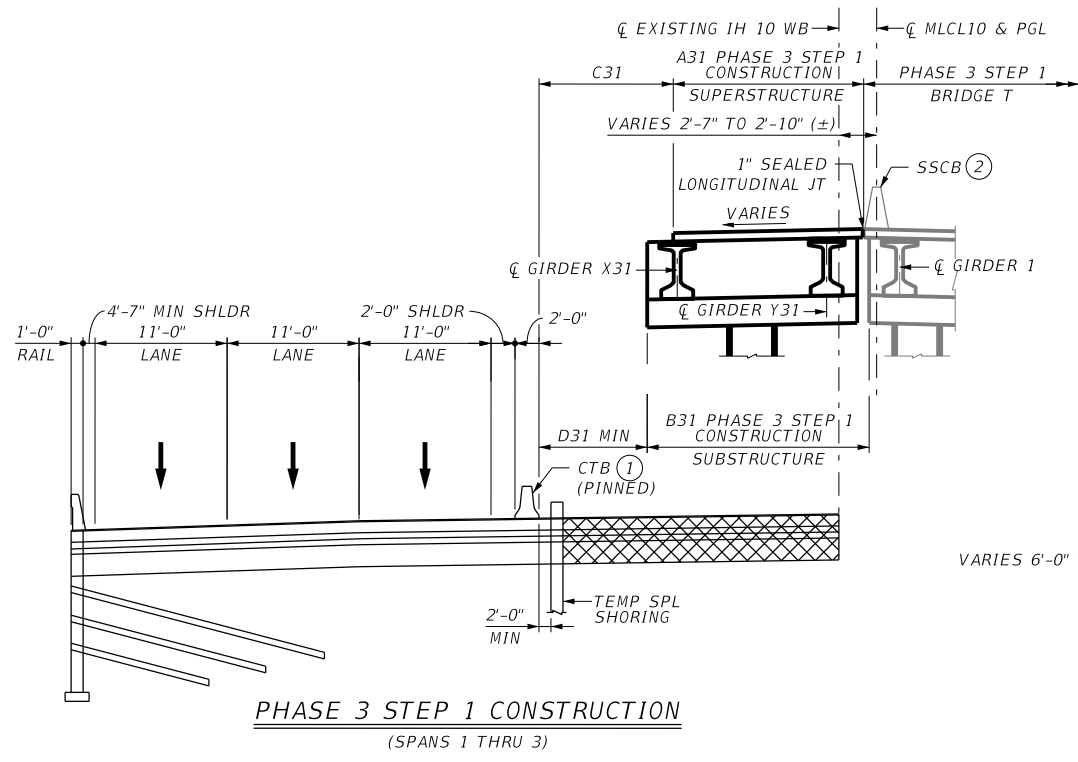
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 WB MAINLANE
 AT US 69**

SHEET 3 OF 8

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1416		



EXISTING SECTION
 (EXISTING SPAN 2 SHOWN)
 (SPANS 4 & 5)



PHASE 3 STEP 1 CONSTRUCTION
 (SPANS 4 & 5)

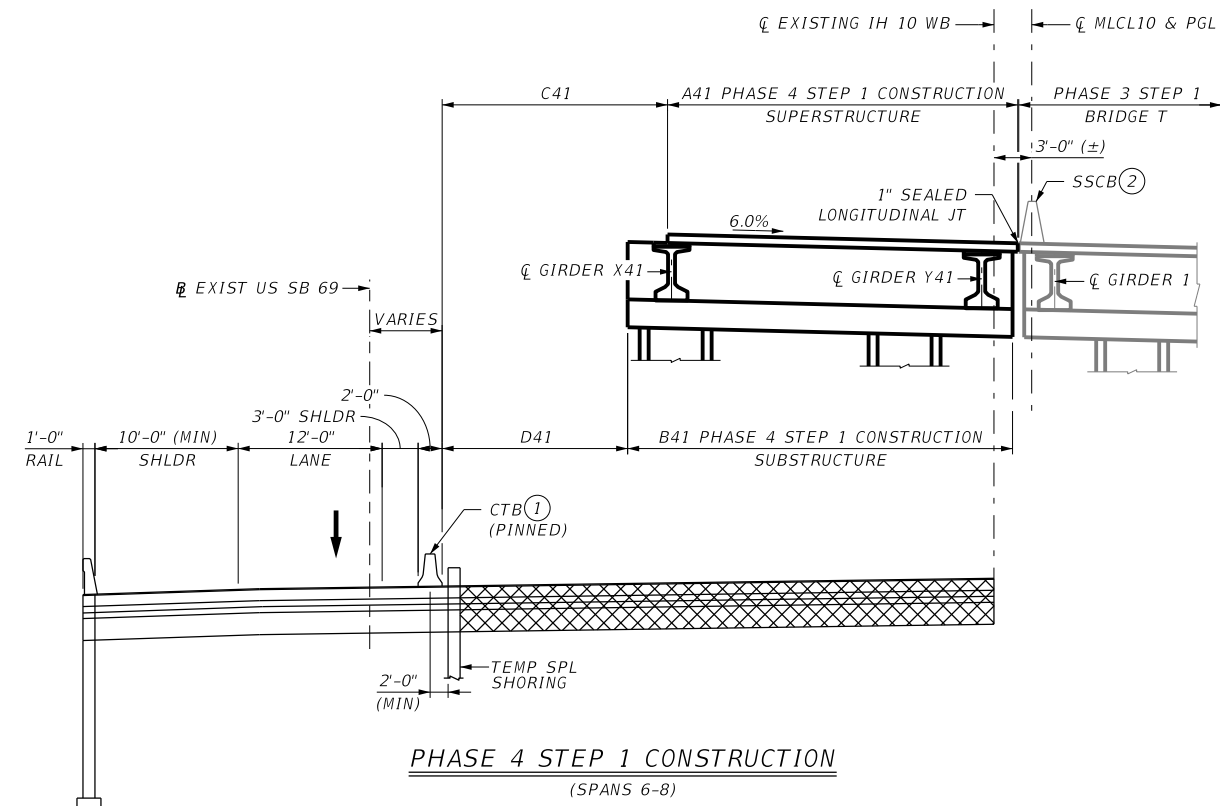
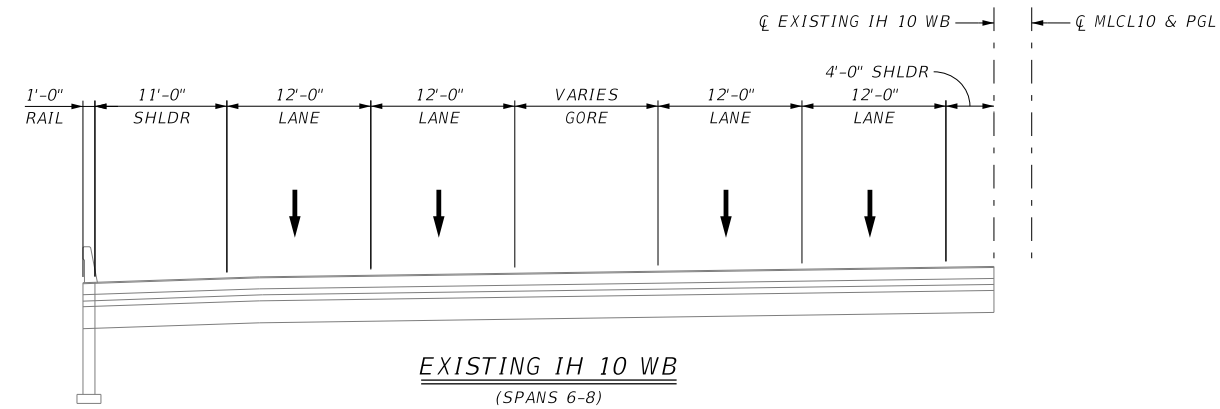
BENT #	PHASE 3 STEP 1					
	A31	B31	C31	D31	X31	Y31
BENT 2	15'-9 1/2"	17'-6"	7'-0"	4'-10"	11	13
BENT 3	15'-9 1/2"	17'-6"	7'-0"	4'-10"	11	13
BENT 4	15'-9 1/2"	17'-6"	7'-0"	4'-10"	11	13
BENT 5	15'-9 1/2"	17'-6"	6'-4"	4'-2"	11	13
BENT 6	15'-9 1/2"	17'-6"	4'-5"	2'-3"	11	13

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.

DATE: 21-FEB-2024 20:40
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\10 WB Mainlanes over US 69 NBFR\11417_10WB_MAINLANE_COMPHS_04.dgn

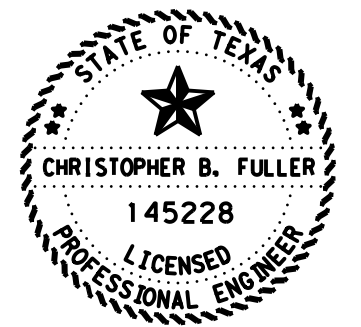
NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SDHEET 1 OF 8.

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② SSCB BARRIER TO BE INSTALLED AFTER COMPLETION OF PHASE 4 STEP 2.



LEGEND

- CONSTRUCTION THIS PHASE
- PAVEMENT TO BE REMOVED
- PREVIOUS CONSTRUCTION



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 02/21/2024
 HL93 LOADING

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**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 WB MAINLANE
 AT US 69**

PHASE 4 STEP 1						
BENT #	A41	B41	C41	D41	X41	Y41
BENT 7	29'-7 3/4"	31'-7"	16'-6"	14'-1"	11	13
BENT 8	29'-7 3/4"	32'-1"	19'-5"	16'-7"	9	13
BENT 9	29'-11 1/4"	32'-3"	23'-4"	20'-7"	9	13

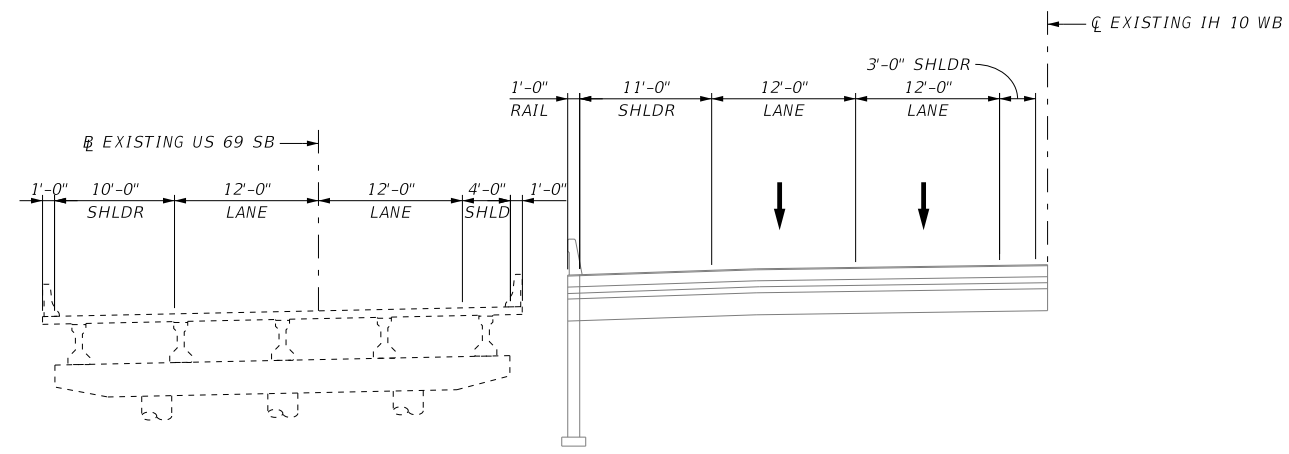
NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.

SHEET 4 OF 8

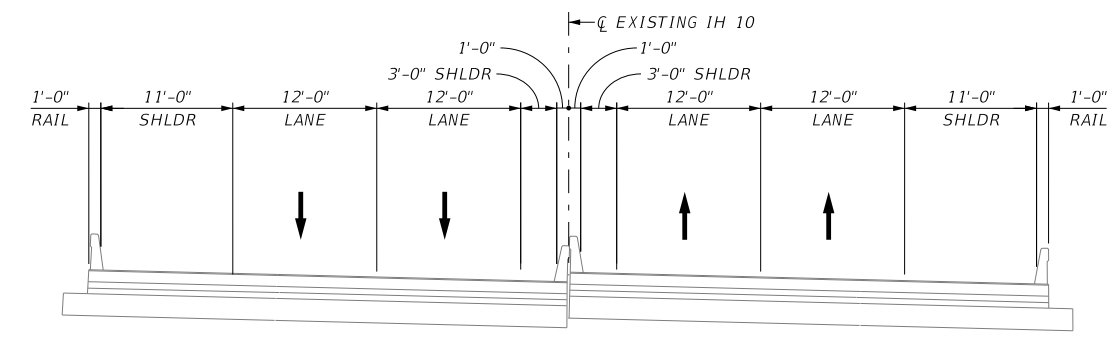
DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1417		

DATE: 21-FEB-2024 20:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridge T1 (IH 10 WB Mainlanes over US 69 NBFR)\1418_10WB_Mainlanes over US 69 NBFR.dgn

- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② SSCB BARRIER TO BE INSTALLED AFTER COMPLETION OF PASHE 4 STEP 2.



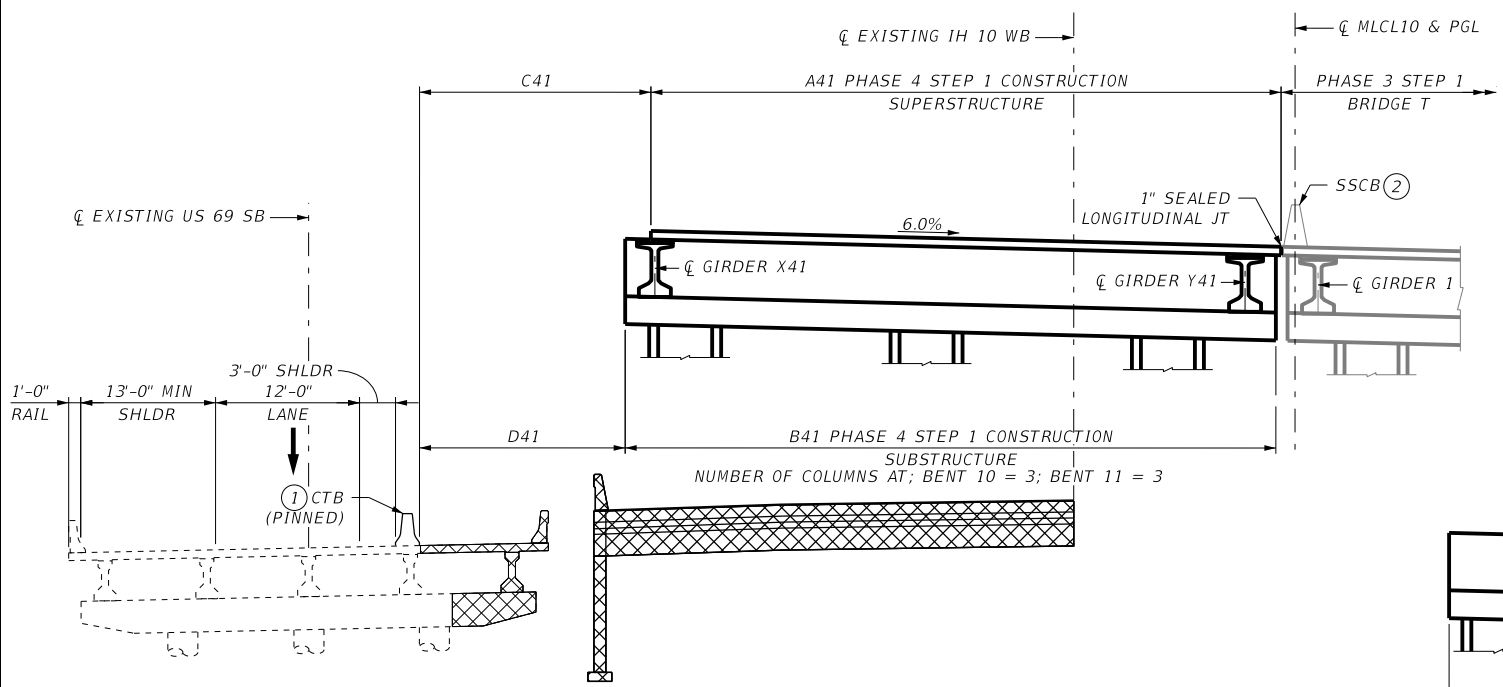
EXISTING IH 10 WB/US 69 SB
 (SPANS 9 THRU 11)



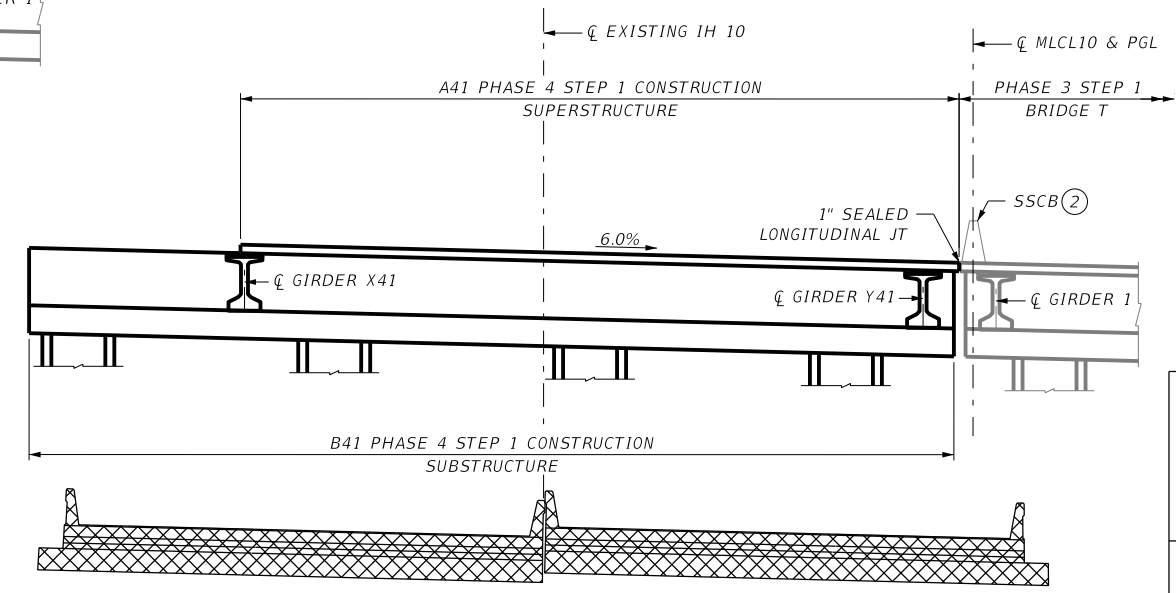
EXISTING IH 10
 (SPAN 12)

LEGEND

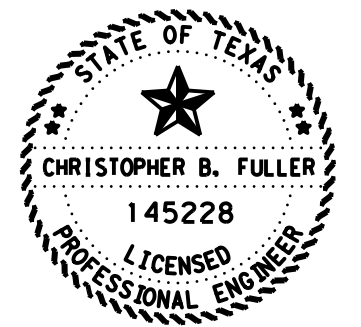
- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



PHASE 4 STEP 1 CONSTRUCTION
 (SPANS 9 THRU 11)



PHASE 4 STEP 1 CONSTRUCTION
 (SPAN 12)



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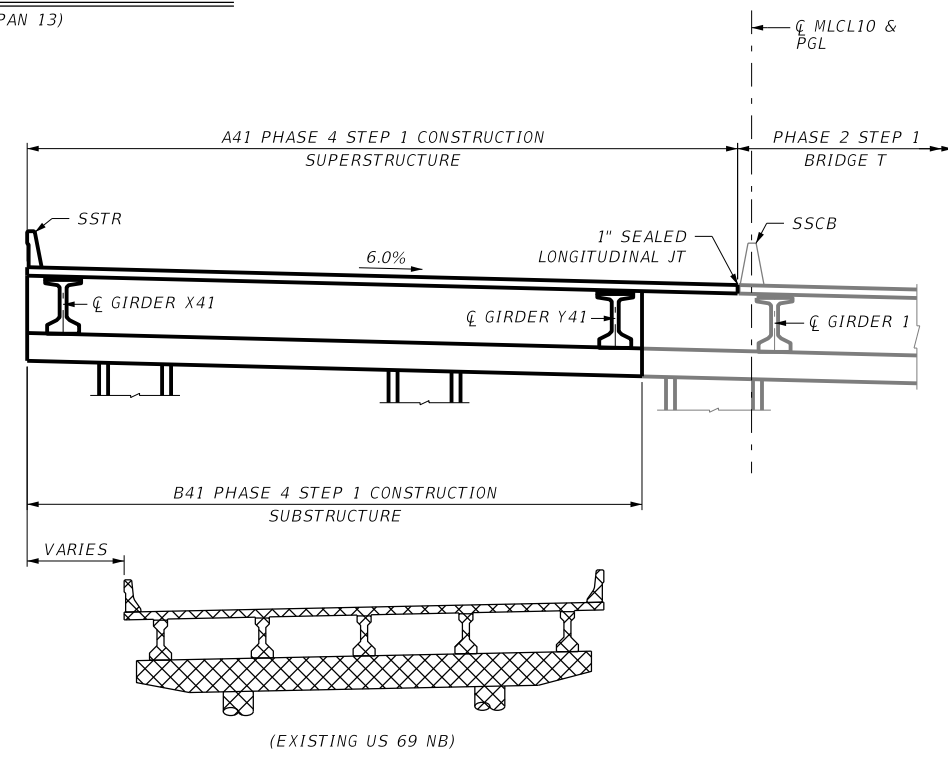
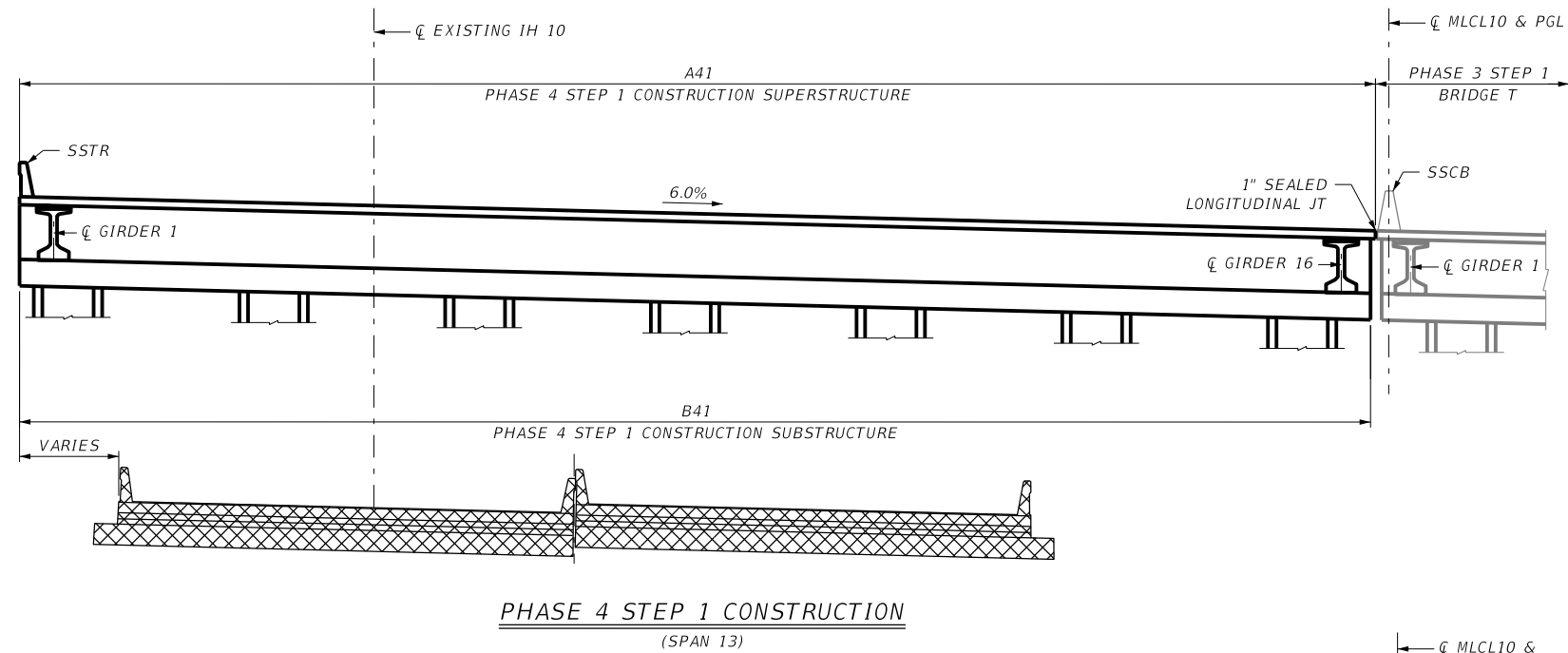
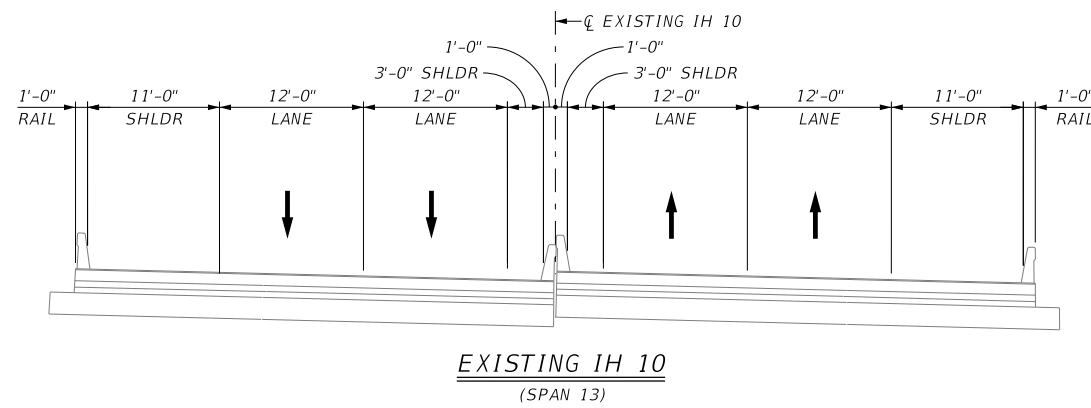
**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 WB MAINLANE
 AT US 69**

SHEET 5 OF 8

BENT #	PHASE 4 STEP 1					
	A41	B41	C41	D41	X41	Y41
BENT 10	49'-5 3/4"	52'-8 1/4"	14'-1"	10'-5"	7	14
BENT 11	52'-6 1/4"	54'-3"	27'-5"	25'-3"	8	15
BENT 12	75'-4"	77'-1"	25'-11"	23'-9"	5	15

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1418

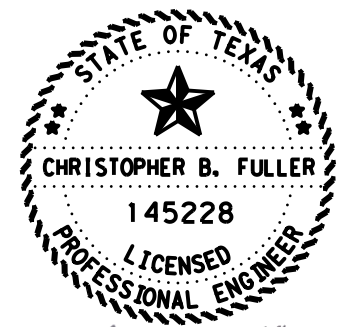


LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION

BENT #	PHASE 4 STEP 1					
	A41	B41	C41	D41	X41	Y41
BENT 13	110'-5 1/4"	110'-0"	N/A	N/A	1	16
BENT 14	118'-11 1/2"	118'-6"	N/A	N/A	1	9
BENT 15	58'-9 1/2"	51'-3"	N/A	N/A	1	9

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT



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**IH 10 AT US 69
CONSTRUCTION PHASING
IH 10 WB MAINLANE
AT US 69**

SHEET 6 OF 8

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1419		

DATE: 21-FEB-2024 20:40
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NB)\1419_10WB_MAINLANE_COMPHS_06.dgn




PHASE 4 STEP 1 CONSTRUCTION
(SPAN 14 SHOWN, 15 SIMILAR)

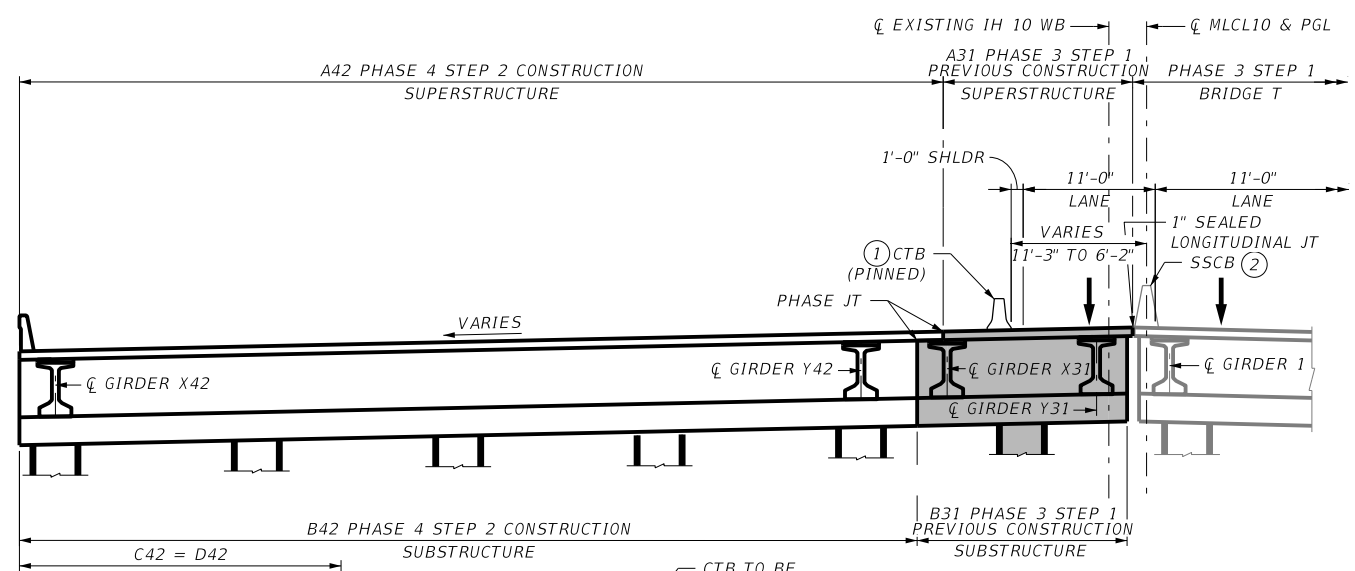
DATE: 21-FEB-2024 20:39
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\10 WB Mainlanes over US 69 NBFR\1420_10WB_MainLANE_COMPHS_07.dgn

NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8

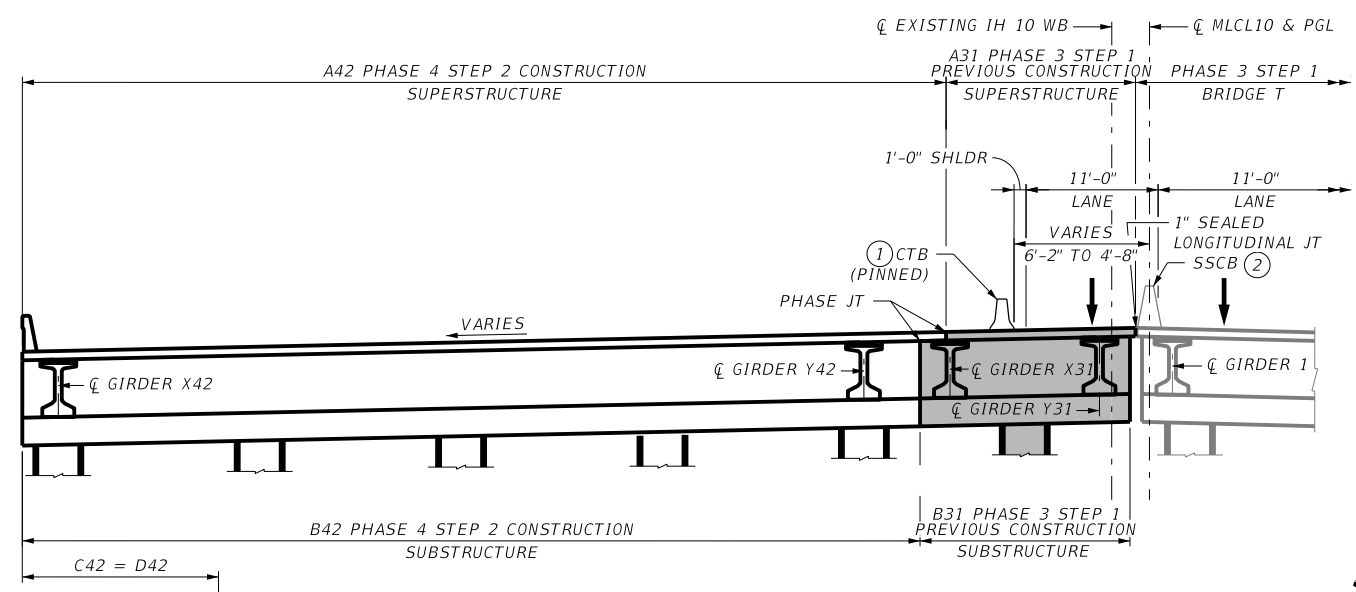
- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CSB.
- ② SSCB BARRIER TO BE INSTALLED AFTER COMPLETION OF PHASE 4 STEP 2.

LEGEND

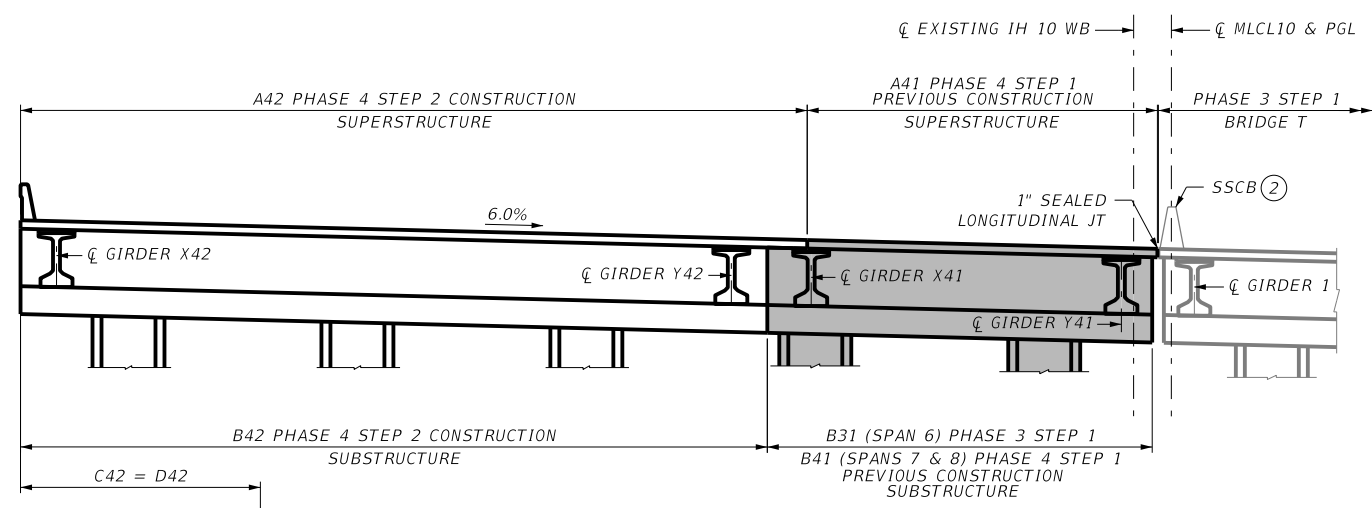
-  CONSTRUCTION THIS PHASE
-  EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
-  PREVIOUS CONSTRUCTION



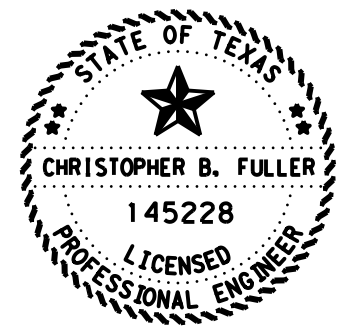
PHASE 4 STEP 2 CONSTRUCTION
(SPANS 1 THRU 3)



PHASE 4 STEP 2 CONSTRUCTION
(SPANS 4 THRU 5)



PHASE 4 STEP 2 CONSTRUCTION
(SPANS 6-8)



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**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 WB MAINLANE
 AT US 69**

SHEET 7 OF 8

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1420		

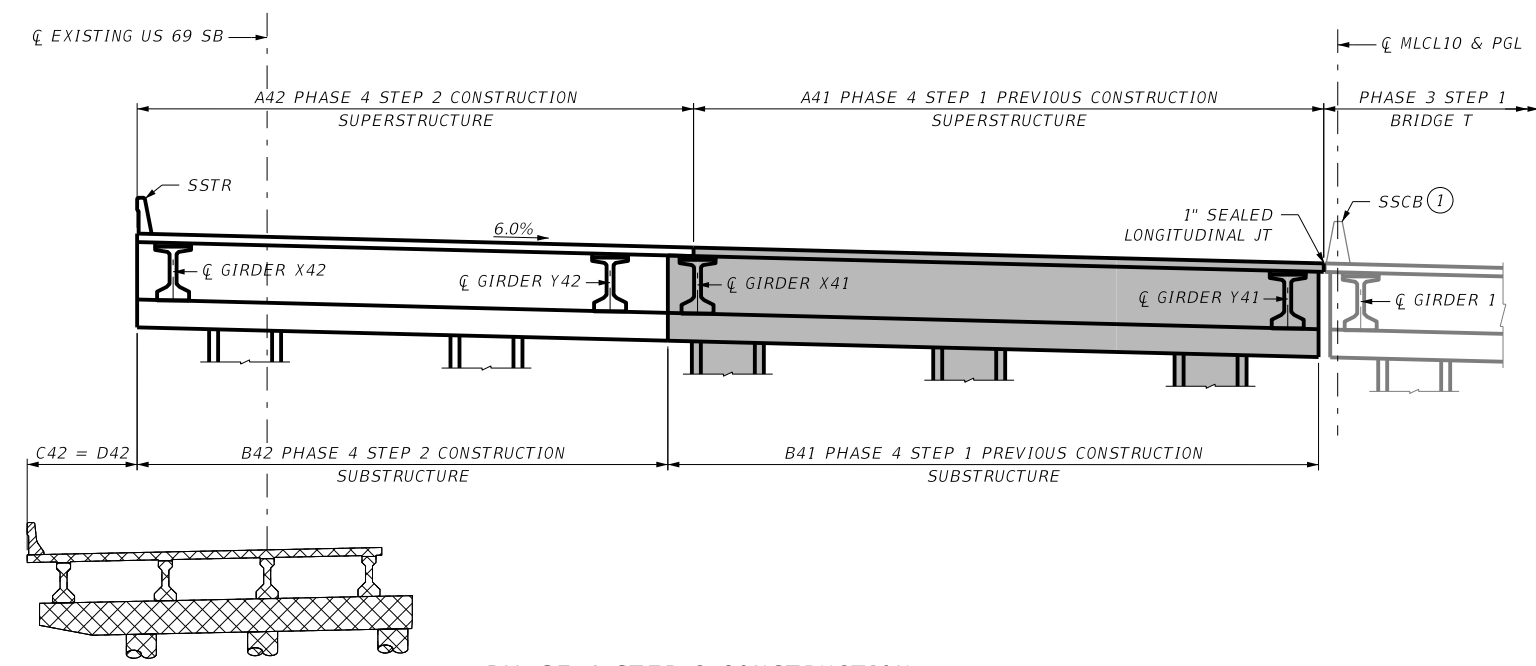
BENT #	PHASE 4 STEP 2					
	A42	B42	C42	D42	X42	Y42
BENT 2	77'-0"	74'-10"	27'-4"	27'-4"	1	10
BENT 3	77'-0"	74'-10"	27'-3"	27'-3"	1	10
BENT 4	77'-10 1/2"	75'-8 1/2"	26'-5"	26'-5"	1	10
BENT 5	78'-10 1/2"	76'-8 1/2"	24'-5"	24'-5"	1	10
BENT 6	79'-0"	76'-10"	21'-0"	21'-0"	1	10
BENT 7	65'-1 3/4"	62'-9"	16'-5"	16'-5"	1	8
BENT 8	65'-1 3/4"	62'-3"	12'-9"	12'-9"	1	8
BENT 9	64'-10 3/4"	62'-1 1/2"	8'-9"	8'-9"	1	9

NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.

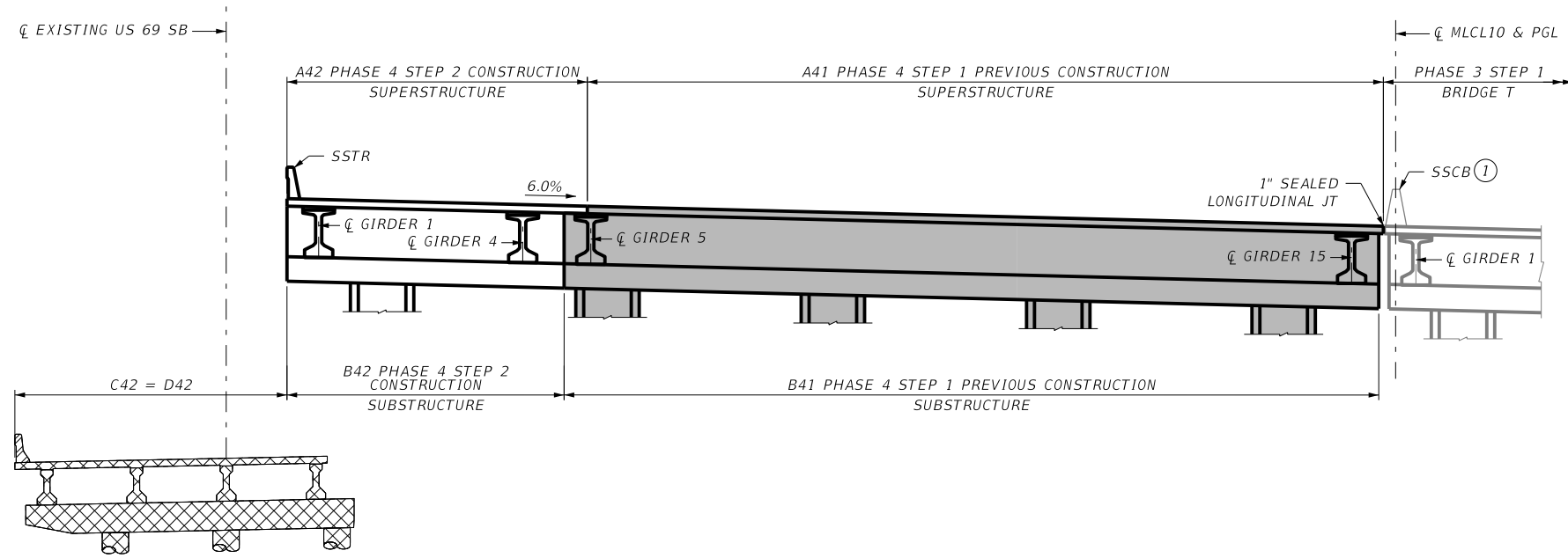
DATE: 21-FEB-2024 20:40
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBER)\1421_10WB_Mainlane_COMPHS_08.dgn

NOTES: FOR CONSTRUCTION PHASING NOTES, SEE SHEET 1 OF 8

① SSCB BARRIER TO BE INSTALLED AFTER COMPLETION OF PHASE 4 STEP 2.



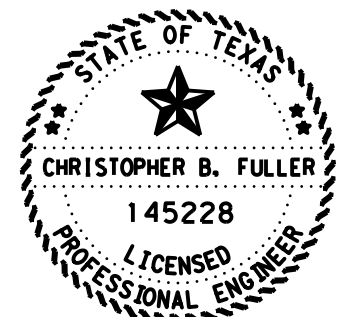
PHASE 4 STEP 2 CONSTRUCTION
(SPANS 9 THRU 11)



PHASE 4 STEP 2 CONSTRUCTION
(SPAN 12)

LEGEND

- CONSTRUCTION THIS PHASE
- EXISTING PAVEMENT/STRUCTURE TO BE REMOVED
- PREVIOUS CONSTRUCTION



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**IH 10 AT US 69
CONSTRUCTION PHASING
IH 10 WB MAINLANE
AT US 69**

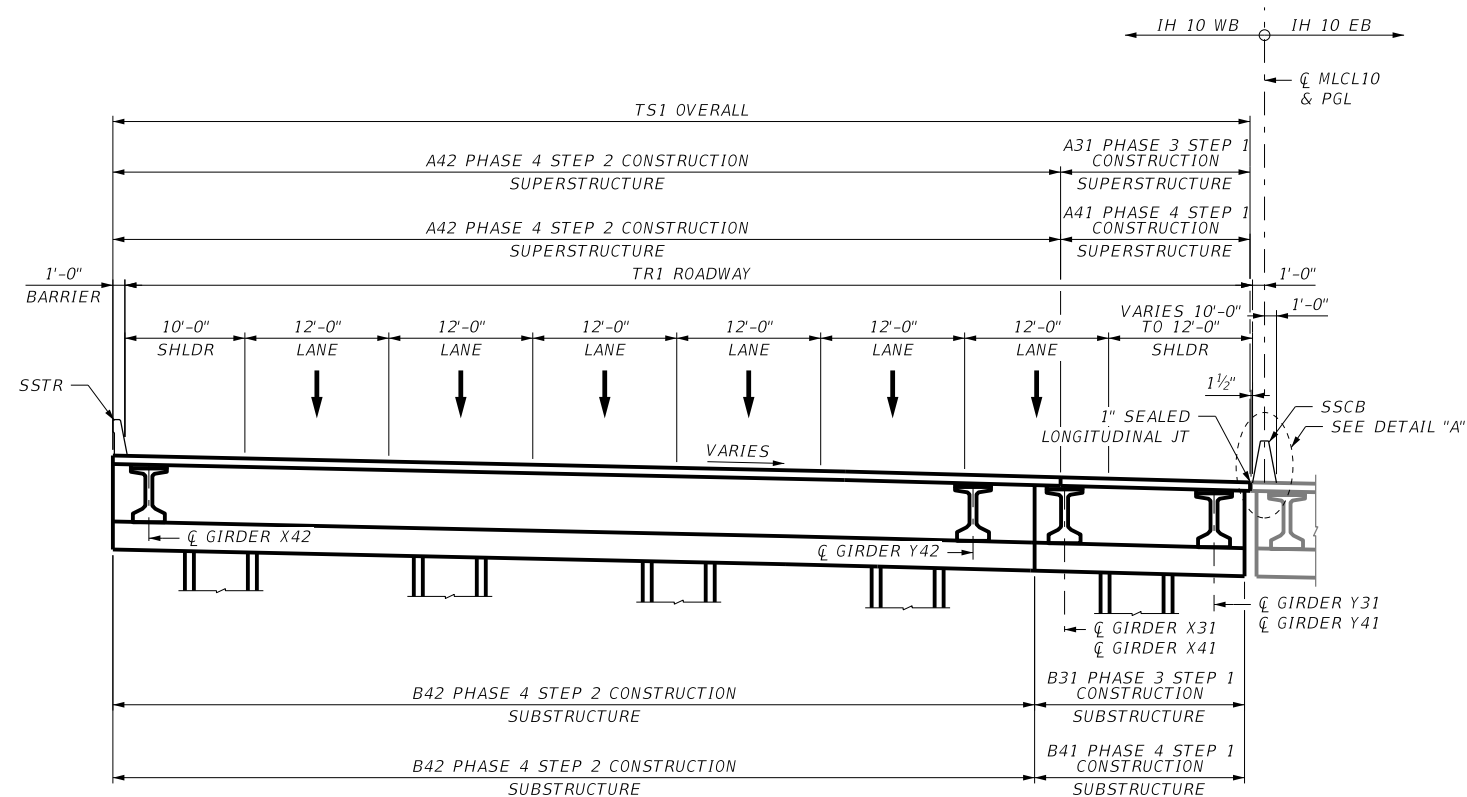
SHEET 8 OF 8

BENT #	PHASE 4 STEP 2					
	A42	B42	C42	D42	X42	Y42
BENT 10	46'-5 3/4"	42'-9 1/2"	0'-0"	0'-0"	1	6
BENT 11	46'-5"	44'-3"	12'-5"	12'-5"	1	7
BENT 12	28'-5 1/2"	26'-2 3/4"	29'-3"	29'-3"	1	4

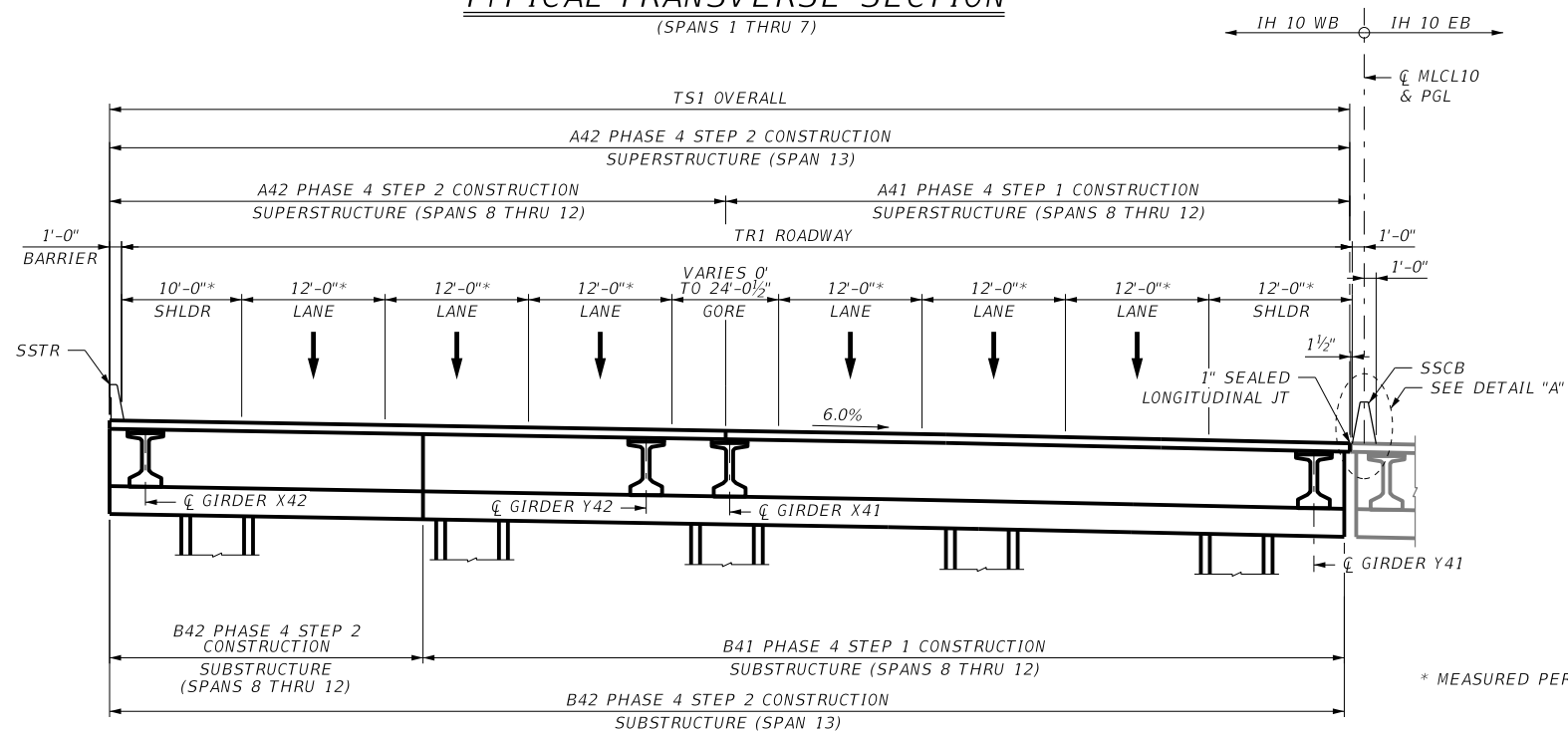
NOTE: GIRDER NUMBERS ARE FROM THE UPSTATION SPAN FOR EACH BENT.

DN:	CBF	CK:	CSU	DW:	KAH	CK:	CSU
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1421		

DATE: 21-FEB-2024 20:40
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\10WB Mainlanes over US 69 NBER\1422_10WB MAINLANE_TYPSPECT_01.dgn



TYPICAL TRANSVERSE SECTION
(SPANS 1 THRU 7)



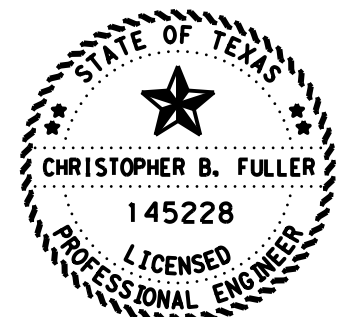
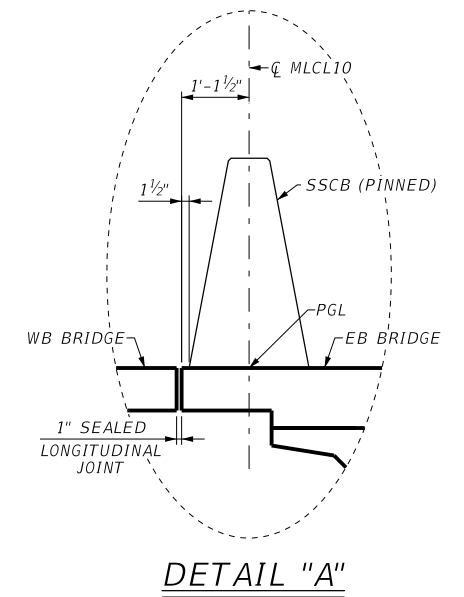
TYPICAL TRANSVERSE SECTION
(SPANS 8 THRU 13)

BENT #	A31	A41	A42	B31	B41	B42	TS1	TR1	X31	Y31	X41	Y41	X42	Y42
BENT 2	15'-9 1/2"		77'-0"	17'-6"		74'-10"	92'-9 1/2"	92'-0"	11	13			1	10
BENT 3	15'-9 1/2"		77'-0"	17'-6"		74'-10"	92'-9 1/2"	92'-0"	11	13			1	10
BENT 4	15'-9 1/2"		77'-10 1/2"	17'-6"		75'-8 1/2"	93'-8"	92'-10 1/2"	11	13			1	10
BENT 5	15'-9 1/2"		78'-10 1/2"	17'-6"		76'-8 1/2"	94'-8"	93'-10 1/2"	11	13			1	10
BENT 6	15'-9 1/2"		79'-0"	17'-6"		76'-10"	94'-9 1/2"	94'-0"	11	13	11	13	1	10
BENT 7		29'-7 3/4"	65'-1 3/4"		31'-7"	62'-9"	94'-9 1/2"	94'-0"			9	13	1	8
BENT 8		29'-7 3/4"	65'-1 3/4"		32'-1"	62'-3"	94'-9 1/2"	94'-0"			9	13	1	8
BENT 9		29'-11 1/4"	64'-10 3/4"		32'-3"	62'-1 1/2"	94'-10"	94'-0 1/2"			10	14	1	9
BENT 10		49'-5 3/4"	46'-5 3/4"		52'-8 1/4"	42'-9 1/2"	95'-11 1/2"	95'-2"			7	14	1	6
BENT 11		52'-6 1/4"	46'-5"		54'-3"	48'-3"	98'-11 1/4"	98'-1 3/4"			8	15	1	7
BENT 12		75'-4"	28'-5 1/2"		77'-1"	26'-2 3/4"	103'-9 1/4"	102'-11 3/4"			5	15	1	4
BENT 13		110'-5 1/4"			110'-0"		110'-5 1/2"	109'-7 3/4"			1	16		
BENT 14		118'-11 1/2"			118'-6"		118'-11 1/2"	118'-2"			1	9		

Note: *Girder numbers are from the upstation span for each bent.

NOTES:

1. ROADWAY DIMENSIONS ARE ESTIMATES, FOR MORE DETAILS SEE ROADWAY PLANS.



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**IH 10 AT US 69
 TYPICAL SECTION
 IH 10 WB MAINLANE
 AT US 69**

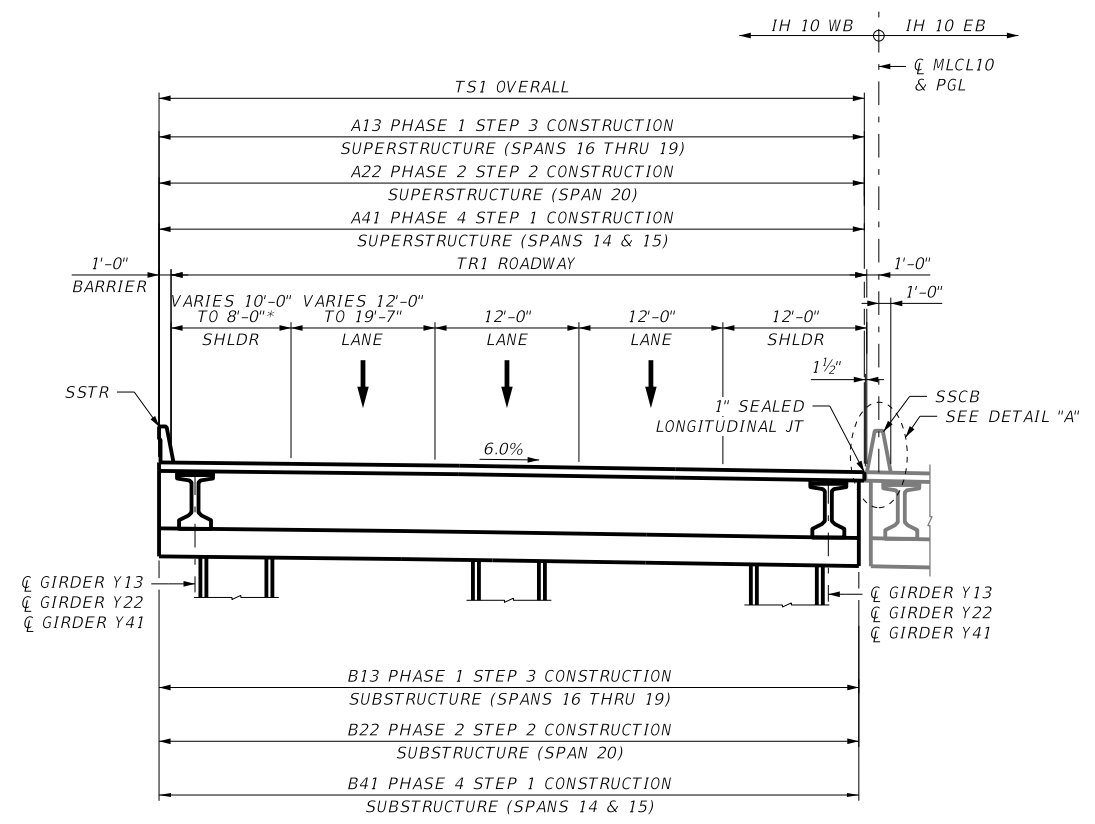
SHEET 1 OF 2

DIST	COUNTY	SHEET NO.
0028	JEFFERSON	1422

DATE: 21-FEB-2024 20:57
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBFR)\1423_10WB_MainLANE_TYPSECT_02.dgn

NOTES:

- 1. FOR DETAIL "A", SEE SHEET 1.
- 2. ROADWAY DIMENSIONS ARE ESTIMATES, FOR MORE DETAILS SEE ROADWAY PLANS.

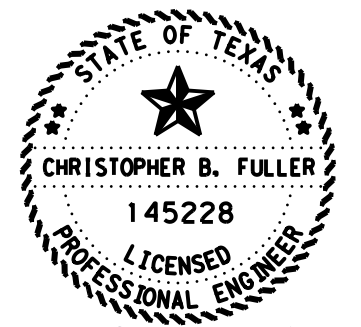


TYPICAL TRANSVERSE SECTION
(SPANS 14 THRU 20)

*MEASURED PERPENDICULAR TO TRAVEL LANE

BENT #	A13	A22	A41	B13	B22	B41	TS1	TR1	X13	Y13	X22	Y22	X41	Y41
BENT 15	**		58'-9 1/2"	**		51'-3"	58'-9 1/2"	58'-0"	1	9			1	9
BENT 17	58'-9 1/2"			58'-4"			58'-9 1/2"	58'-0"	1	9				
BENT 18	58'-9 1/2"			58'-4"			58'-9 1/2"	58'-0"	1	9				
BENT 19	58'-9 1/2"			58'-4"			58'-9 1/2"	58'-0"	1	9				
BENT 20	61'-3 1/4"			60'-9 3/4"			61'-3 1/4"	60'-5 3/4"			1	9		
ABUT 21		64'-4 3/4"			64'-4 3/4"		64'-4 3/4"	63'-7 1/4"						

Note: *Girder numbers are from the upstation span for each bent.
 **See Bridge T Bent 16 construction phasing for table dimensions.



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**IH 10 AT US 69
 TYPICAL SECTION
 IH 10 WB MAINLANE
 AT US 69**

SHEET 2 OF 2

DN:	CBF	CK:	FB	DW:	KAH	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
	BMT		JEFFERSON		1423		

DATE: 21-FEB-2024 20:39
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\10WB Mainlanes over US 69 NBFR\1424_10WB MAINLANE_SUM_QTY_01.dgn

SUMMARY OF BRIDGE QUANTITIES (PHASE 1 - STEP 3)

ITEM	403	416			420		422	425	450		454	471	4021
DESCRIPTION CODE	6001	6008	6011	6082	6090	6100	6001	6039	6023	6027	6018	6007	6001
DESCRIPTION	TEMPORARY SPL SHORING	DRILL SHAFT (60 IN)	DRILL SHAFT (78 IN)	CL F CONC (CAP)	CL F CONC (COLUMN)	CL F CONC (FOOTING) (MASS)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (T80SS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	TIP TESTING DRILL SHAFT
BRIDGE ELEMENT	SF	LF	LF	CY	CY	CY	SF	LF	LF	LF	LF	EA	EA
IH10 WBML AT US69 1-ABUTMENT													
19-INTERIOR BENTS	17,869	720	825	361.8	208.8	233.0							4
1-371.00' PRESTR CONC I-GIRDER UNIT 1													
1-328.00' PRESTR CONC I-GIRDER UNIT 2													
1-269.10' PRESTR CONC I-GIRDER UNIT 3													
1-375.00' PRESTR CONC I-GIRDER UNIT 6								7,475	1,099.00	91.0	27.2	59	3
1-375.00' PRESTR CONC I-GIRDER UNIT 7								14,912	2,197.99		257.1	118	2
1-250.00' PRESTR CONC I-GIRDER UNIT 8								7,636	1,099.38		128.5	59	2
TOTAL	17,869	720	825	361.8	208.8	233.0	30,024	4,396.38	91.0	412.8	236	7	4

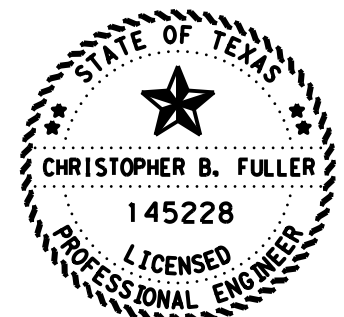
SUMMARY OF BRIDGE QUANTITIES (PHASE 2 - STEP 2)

ITEM	400	416	420	422		425	450		454	471	4021
DESCRIPTION CODE	6005	6004	6013	6001	6015	6039	6023	6027	6018	6007	6001
DESCRIPTION	CEM STABIL BK FILL	DRILL SHAFT (36 IN)	CL C CONC (ABUT)	REINF CONC SLAB	APPROACH SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (T80SS)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	TIP TESTING DRILL SHAFT
BRIDGE ELEMENT	CY	LF	CY	SF	CY	LF	LF	LF	LF	EA	EA
IH10 WBML AT US69 1-ABUTMENT	111	350	32.6		61						1
19-INTERIOR BENTS											
1-250.00' PRESTR CONC I-GIRDER UNIT 8				7,971		1,119.21	69.0	54.1	64	2	
TOTAL	111	350	32.6	7,972	61.0	1,119.21	69.0	54.1	64	2	1

SUMMARY OF BRIDGE QUANTITIES (PHASE 3 - STEP 1)

ITEM	416	420		422	425	454	471	4021
DESCRIPTION CODE	6011	6082	6090	6001	6039	6018	6007	6001
DESCRIPTION	DRILL SHAFT (78 IN)	CL F CONC (CAP)	CL F CONC (COLUMN)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	TIP TESTING DRILL SHAFT
BRIDGE ELEMENT	LF	CY	CY	SF	LF	LF	EA	EA
IH10 WBML AT US69 19-INTERIOR BENTS	360	134.5	155.2					5
1-371.00' PRESTR CONC I-GIRDER UNIT 1				5,859	1,070.62	32	1	
1-328.00' PRESTR CONC I-GIRDER UNIT 2				3,459	628.57	16	2	
1-269.10' PRESTR CONC I-GIRDER UNIT 3								
1-229.11' PRESTR CONC I-GIRDER UNIT 4								
1-229.12' PRESTR CONC I-GIRDER UNIT 5								
TOTAL	360	134.5	155.2	9,318	1,699.19	48	3	5

① SEE IH 10 MAINLANE OVER CALDER AVE (BRIDGE 0)
 "QUANTITY AND BEARING SEAT ELEVATIONS" SHEET
 2 OF 2 FOR BENT 1 (BK) ELEVATIONS



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BEARING SEAT ELEVATIONS

PHASE 1 STEP 3

	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9
BENT 16 (FWD)	44.846	44.450	44.053	43.657	43.261	42.865	42.468	42.072	41.676
BENT 17 (BK)	41.278	40.883	40.487	40.091	39.696	39.300	38.904	38.509	38.113
BENT 17 (FWD)	41.096	40.700	40.303	39.907	39.511	39.115	38.718	38.322	37.926
BENT 18 (BK)	37.528	37.133	36.737	36.341	35.946	35.550	35.154	34.759	34.363
BENT 18 (FWD)	37.346	36.950	36.553	36.157	35.761	35.365	34.968	34.572	34.176
BENT 19 (BK)	33.778	33.383	32.987	32.591	32.196	31.800	31.404	31.009	30.613
BENT 19 (FWD)	33.579	33.182	32.785	32.389	31.992	31.595	31.198	30.802	30.405
BENT 20 (BK)	30.152	29.738	29.325	28.911	28.497	28.083	27.670	27.256	26.842

PHASE 2 STEP 2

	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9
BENT 20 (FWD)	29.896	29.480	29.065	28.650	28.234	27.819	27.404	26.988	26.573
ABUT 21 (BK)	26.879	26.442	26.004	25.566	25.128	24.690	24.253	23.815	23.377

PHASE 3 STEP 1

	GIRDER 11	GIRDER 12	GIRDER 13
① BENT 1 (FWD)	42.489	42.449	42.409
BENT 2 (BK)	46.119	46.018	45.916
BENT 2 (FWD)	46.346	46.241	46.137
BENT 3 (BK)	49.536	49.369	49.203
BENT 3 (FWD)	49.670	49.500	49.330
BENT 4 (BK)	52.276	52.044	51.812
BENT 4 (FWD)	52.420	52.185	51.949
BENT 5 (BK)	54.233	53.942	53.651
BENT 5 (FWD)	54.329	54.035	53.741
BENT 6 (BK)	55.679	55.328	54.978
BENT 6 (FWD)	55.748	55.394	55.039
BENT 7 (BK)	56.550	56.177	55.803

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Texas Department of Transportation

**IH 10 AT US 69
 QTY & BEARING SEAT ELEV
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 2

DN: CBF	CK: FB	DW: MAG	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1424	

DATE: 21-FEB-2024 20:38
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\10 WB Mainlanes over US 69 NBR\1425-10WB MAINLANE_SUM_QTY_02.dgn

SUMMARY OF BRIDGE QUANTITIES (PHASE 4 - STEP 1)									
ITEM	416	420		422	425	450	454	471	4021
DESCRIPTION CODE	6011	6082	6090	6001	6039	6023	6018	6007	6001
DESCRIPTION	DRILL SHAFT (78 IN)	CL F CONC (CAP)	CL F CONC (COLUMN)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	SEALED EXPANSION JT (4 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	TIP TESTING DRILL SHAFT
BRIDGE ELEMENT	LF	CY	CY	SF	LF	LF	LF	EA	EA
IH10 WBML AT US69									
19-INTERIOR BENTS	3,020	858.9	1,049.1						10
1-371.00' PRESTR CONC I-GIRDER UNIT 1							60		
1-328.00' PRESTR CONC I-GIRDER UNIT 2				1,721	312.76		103	1	
1-269.10' PRESTR CONC I-GIRDER UNIT 3				8,112	1,279.92		195	2	
1-229.11' PRESTR CONC I-GIRDER UNIT 4				12,068	1,781.69		59	6	
1-229.12' PRESTR CONC I-GIRDER UNIT 5				22,775	3,043.77	112.6		6	
1-375.00' PRESTR CONC I-GIRDER UNIT 6				14,913	2,197.88	250.2		6	
TOTAL	3,020	858.9	1,049.1	59,589	8,616.02	362.8	417	21	10

SUMMARY OF BRIDGE QUANTITIES (PHASE 4 - STEP 2)								
ITEM	416	420		422	425	450		454
DESCRIPTION CODE	6011	6082	6090	6001	6039	6023	6054	6018
DESCRIPTION	DRILL SHAFT (78 IN)	CL F CONC (CAP)	CL F CONC (COLUMN)	REINF CONC SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	RAIL (TY SSTR) (W/ DRAIN SLOT)	SEALED EXPANSION JT (4 IN) (SEJ-M)
BRIDGE ELEMENT	LF	CY	CY	SF	LF	LF	LF	LF
IH10 WBML AT US69								
19-INTERIOR BENTS	3,200	1041.0	1,164.8					
1-371.00' PRESTR CONC I-GIRDER UNIT 1				28,648	3,569.17	0.0	371.0	155
1-328.00' PRESTR CONC I-GIRDER UNIT 2				25,727	3,137.95	298.3	25.7	157
1-269.10' PRESTR CONC I-GIRDER UNIT 3				17,783	2,174.72	269.1		131
1-229.11' PRESTR CONC I-GIRDER UNIT 4				11,166	1,483.73	229.1		99
1-229.12' PRESTR CONC I-GIRDER UNIT 5				3,409	460.89	120.6		29
1-375.00' PRESTR CONC I-GIRDER UNIT 6								
TOTAL	3,200	1041.0	1,164.8	86,733	10,826.46	917.1	396.7	571

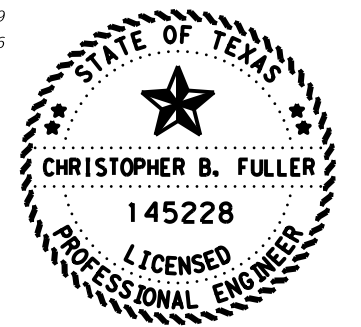
BEARING SEAT ELEVATIONS
 PHASE 4 STEP 2

	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10
BENT 1 (FWD)	42.966	42.918	42.870	42.823	42.775	42.727	42.680	42.632	42.584	42.537
BENT 2 (BK)	47.329	47.208	47.087	46.966	46.845	46.724	46.603	46.482	46.361	46.240
BENT 2 (FWD)	47.595	47.470	47.345	47.220	47.095	46.971	46.846	46.721	46.596	46.471
BENT 3 (BK)	51.524	51.325	51.127	50.928	50.729	50.530	50.331	50.133	49.934	49.735
BENT 3 (FWD)	51.698	51.495	51.292	51.089	50.887	50.684	50.481	50.278	50.075	49.872
BENT 4 (BK)	55.074	54.794	54.514	54.235	53.955	53.675	53.395	53.115	52.835	52.555
BENT 4 (FWD)	55.260	54.976	54.692	54.408	54.124	53.840	53.556	53.272	52.988	52.704
BENT 5 (BK)	57.786	57.431	57.075	56.720	56.365	56.009	55.654	55.299	54.943	54.588
BENT 5 (FWD)	57.926	57.566	57.207	56.847	56.487	56.127	55.768	55.408	55.048	54.688
BENT 6 (BK)	59.980	59.550	59.120	58.690	58.260	57.830	57.400	56.970	56.539	56.109
BENT 6 (FWD)	60.091	59.657	59.223	58.789	58.354	57.920	57.486	57.051	56.617	56.183
BENT 7 (BK)	61.130	60.672	60.214	59.756	59.298	58.840	58.382	57.924	57.466	57.008
BENT 7 (FWD)	61.225	60.757	60.288	59.819	59.351	58.882	58.414	57.945		
BENT 8 (BK)	61.491	61.023	60.554	60.085	59.617	59.148	58.680	58.211		
BENT 8 (FWD)	61.502	61.033	60.565	60.096	59.628	59.159	58.691	58.222		
BENT 9 (BK)	61.513	61.047	60.580	60.113	59.646	59.179	58.713	58.246		
BENT 9 (FWD)	61.358	60.943	60.528	60.113	59.698	59.283	58.868	58.452	58.037	
BENT 10 (BK)	61.074	60.652	60.230	59.808	59.386	58.964	58.542	58.120	57.698	
BENT 10 (FWD)	61.005	60.567	60.129	59.691	59.253	58.815				
BENT 11 (BK)	60.314	59.877	59.439	59.002	58.565	58.127				
BENT 11 (FWD)	60.286	59.910	59.534	59.158	58.781	58.405				
BENT 12 (BK)	59.202	58.785	58.367	57.949	57.531	57.113	56.696			
BENT 12 (FWD)	59.132	58.745	58.358	57.971						
BENT 13 (BK)	57.655	57.269	56.882	56.496						

① SEE IH 10 MAINLANE OVER CALDER AVE (BRIDGE Q) "QUANTITY AND BEARING SEAT ELEVATIONS" SHEET 2 OF 2 FOR BENT 1 (BK) ELEVATIONS

BEARING SEAT ELEVATIONS
 PHASE 4 STEP 1

	GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	GIRDER 11	GIRDER 12	GIRDER 13	GIRDER 14	GIRDER 15	GIRDER 16
BENT 7 (FWD)									57.477	57.082	56.687	56.292	55.898			
BENT 8 (BK)									57.743	57.348	56.953	56.558	56.164			
BENT 8 (FWD)									57.754	57.359	56.964	56.569	56.174			
BENT 9 (BK)									57.779	57.380	56.981	56.583	56.184			
BENT 9 (FWD)									57.622	57.223	56.824	56.425	56.020			
BENT 10 (BK)									57.276	56.877	56.478	56.079	55.680			
BENT 10 (FWD)						58.377	57.980	57.584	57.188	56.791	56.395	55.999	55.602			
BENT 11 (BK)									57.690	57.269	56.848	56.427	56.006	55.585	55.164	54.744
BENT 11 (FWD)									57.652	57.231	56.809	56.387	55.966	55.544	55.122	54.700
BENT 12 (BK)									56.278	55.859	55.440	55.021	54.602	54.183	53.764	53.345
BENT 12 (FWD)					57.584	57.151	56.718	56.285	55.852	55.419	54.985	54.552	54.119	53.686	53.253	
BENT 13 (BK)					56.110	55.639	55.168	54.697	54.226	53.755	53.284	52.814	52.343	51.872	51.401	
BENT 13 (FWD)	57.584	57.165	56.747	56.328	55.909	55.490	55.071	54.652	54.233	53.814	53.395	52.976	52.557	52.139	51.720	51.301
BENT 14 (BK)	55.714	55.263	54.812	54.362	53.911	53.460	53.009	52.559	52.108	51.657	51.206	50.756	50.305	49.854	49.403	48.953
BENT 14 (FWD)	51.972	51.576	51.179	50.783	50.387	49.991	49.595	49.198	48.802							
BENT 15 (BK)	48.824	48.429	48.033	47.637	47.242	46.846	46.450	46.055	45.659							
BENT 15 (FWD)	48.585	48.189	47.793	47.397	47.000	46.604	46.208	45.812	45.416							
BENT 16 (BK)	45.028	44.633	44.237	43.841	43.446	43.050	42.654	42.259	41.863							



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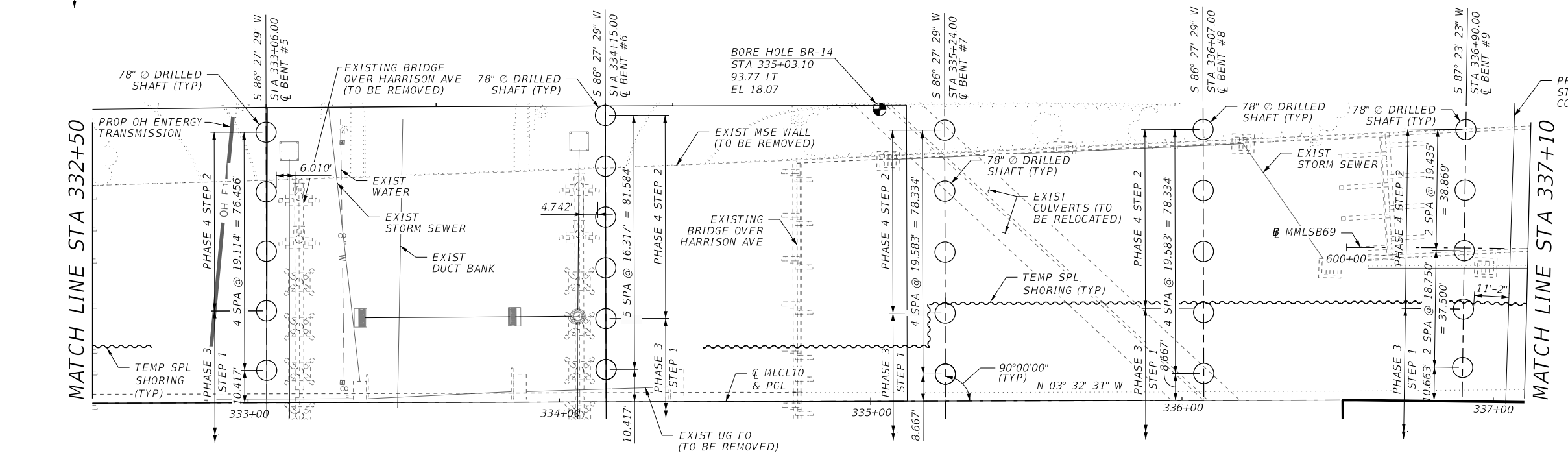
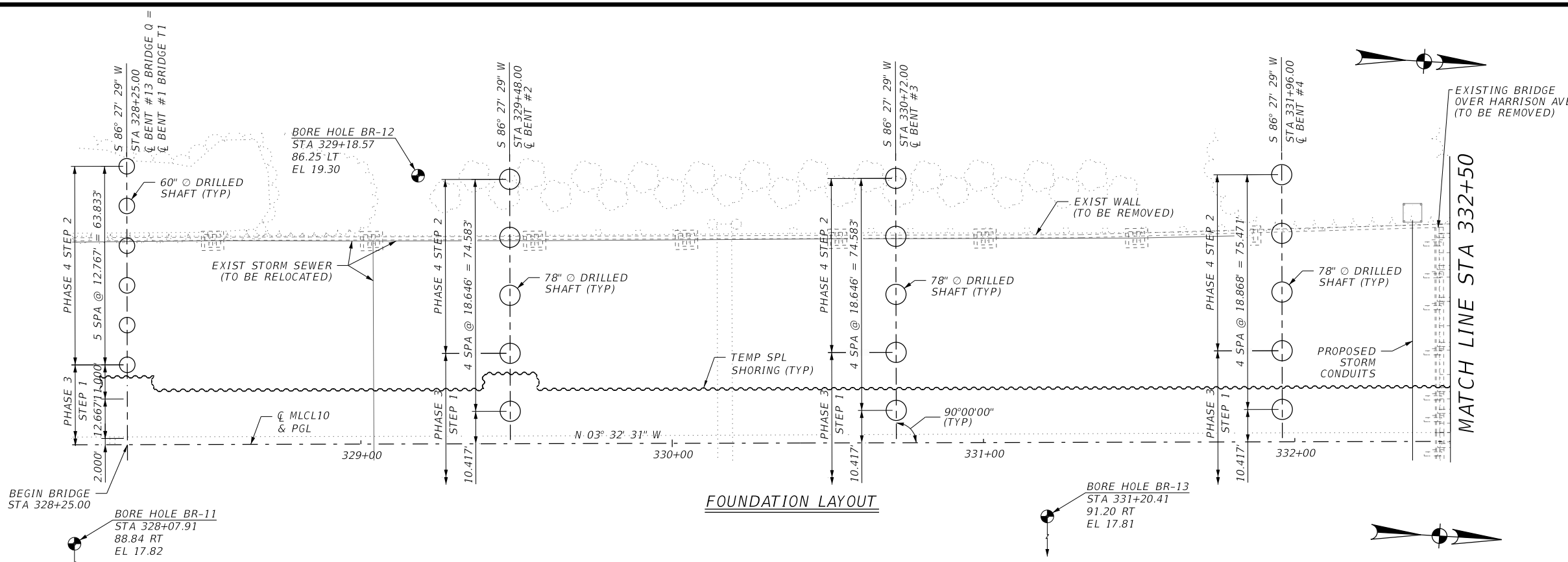


IH 10 AT US 69
 QTY & BEARING SEAT ELEV
 IH 10 WB MAINLANE
 AT US 69

SHEET 2 OF 2

DN:	CBF	CK:	FB	DW:	MAG	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1425			

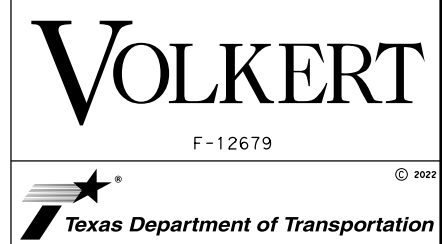
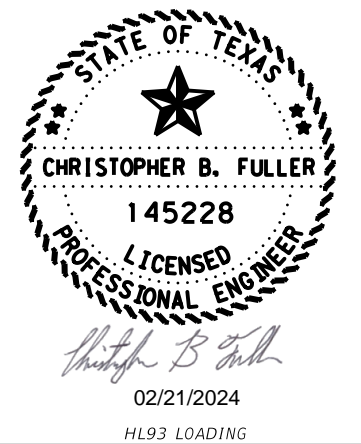
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TIP TESTING NOTES:
 1. ONE SHAFT AT EACH ABUTMENT AND EACH BENT SHALL BE TESTED PER TXDOT SPECIAL SPECIFICATION SS4021, "THERMAL INTEGRITY PROFILER (TIP) TESTING OF DRILLED SHAFTS." TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. THE ENGINEER WILL CHOOSE THE INDIVIDUAL DRILLED SHAFTS TO BE TESTED.

2. THE ENGINEER SHALL EVALUATE THE RESULTS OF TIP TESTING AND DETERMINE ACCEPTANCE. SHOULD DEFECTS OR QUESTIONABLE RESULTS BE FOUND, THE ENGINEER MAY REQUIRE REMEDIATION USING HYDROBLASTING AND PRESSURE GROUTING. IF THE ENGINEER DETERMINES THAT FURTHER EVALUATION IS NECESSARY, HIGH-STRAIN DYNAMIC LOAD TESTING (ASTM D4945) PER ITEM 405, "FOUNDATION LOAD TEST," SHALL BE CONSIDERED. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A MITIGATION PLAN TO MITIGATE IDENTIFIED DEFECTS. LOAD TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. TXDOT PERSONNEL, OR THEIR DESIGNATED REPRESENTATIVE, SHALL BE PRESENT DURING TESTING.

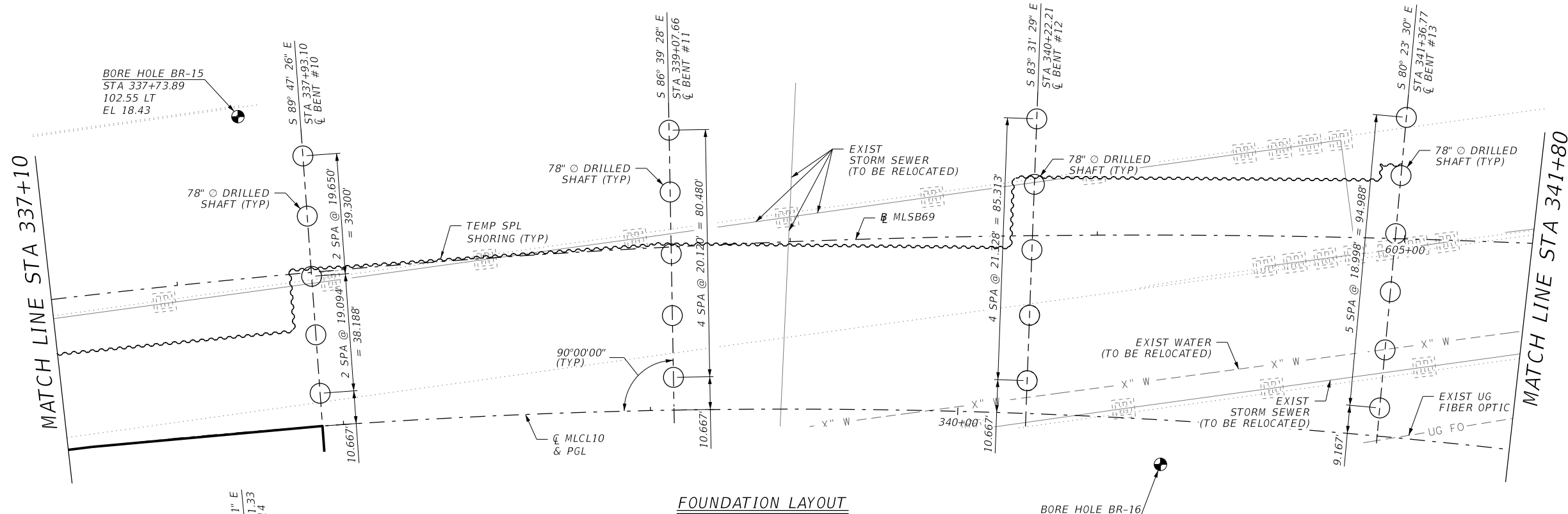
GENERAL NOTES:
 DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 ● DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.
 UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.
 SEE BRIDGE LAYOUT FOR DRILLED SHAFT LENGTHS.
 SEE FOUNDATION DETAILS FD(MOD) SHEET AND FOUNDATION DETAILS SHEETS AS PART OF THE COMMON SHEETS FOR FOUNDATION DETAILS AND NOTES NOT SHOWN.
 DRILLED SHAFTS SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS ITEM 416. CONTRACTOR SHALL SUBMIT DRILLED SHAFT INSTALLATION PLAN THOROUGHLY OUTLINING THE PROPOSED PROCEDURE FOR SHAFT INSTALLATION PRIOR TO COMMENCEMENT.
 FOUNDATIONS HAVE BEEN DESIGNED FOR SIDE FRICTION ONLY (NO TIP BEARING.) REFERENCE FORESIGHT GEOTECHNICAL REPORT FOR DISREGARD DEPTH OF SOIL TO ACCOUNT FOR SOIL DISTURBANCE DURING INSTALLATION.
 SEE BORE LOG SHEETS FOR ESTIMATED GROUNDWATER ELEVATIONS. IF GROUNDWATER IS ENCOUNTERED DURING DRILLING AND CASING IS REQUIRED, THE CASING SHALL REMAIN BELOW THE LEVEL OF CONCRETE DURING PLACEMENT. ENGINEER OF RECORD SHALL BE INFORMED IF CASING WILL BE LEFT IN PLACE SO THAT REVISED SHAFT TIP ELEVATIONS AND CAPACITIES CAN BE PROVIDED.
 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FOUNDATION LOCATIONS DURING CONSTRUCTION. NOTIFY THE ENGINEER IF INTERFERENCE OCCURS BETWEEN EXISTING AND PROPOSED FOUNDATIONS.



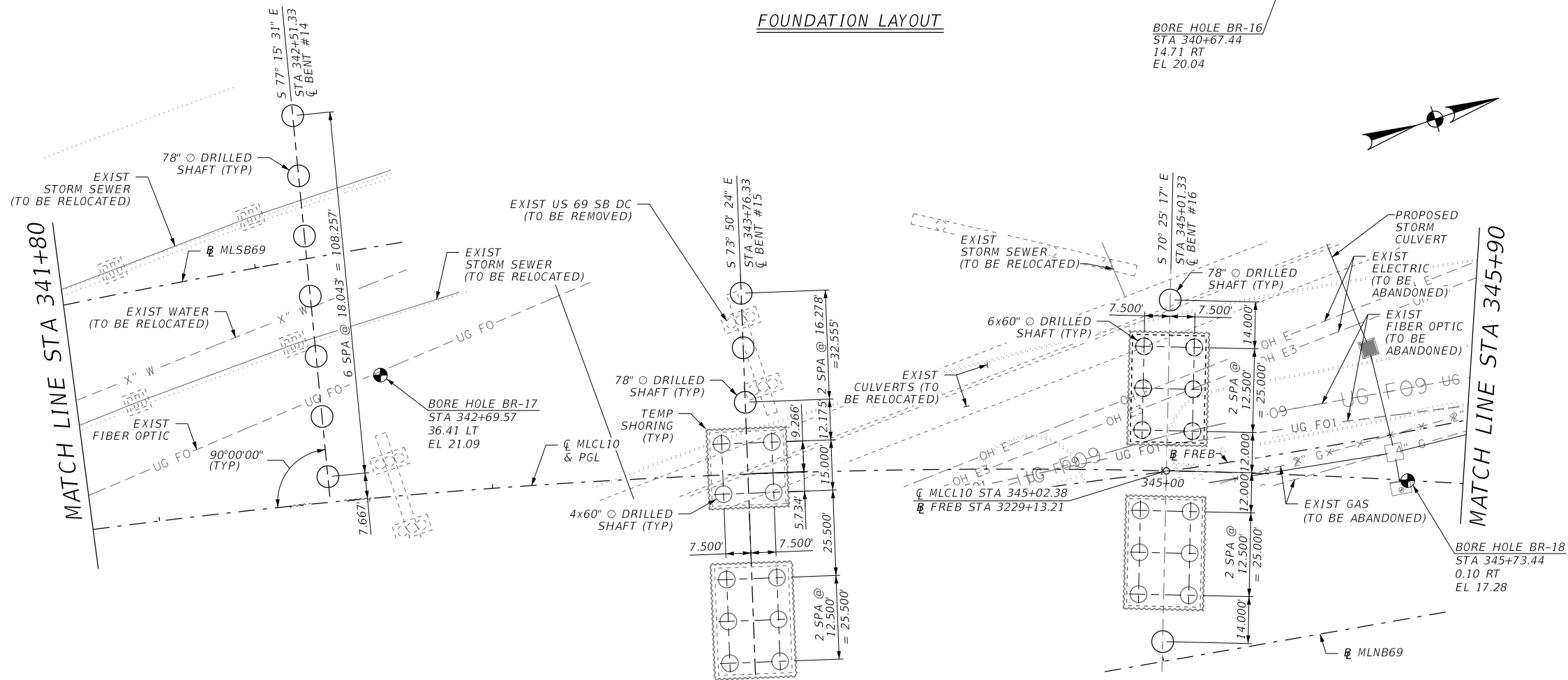
**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 3

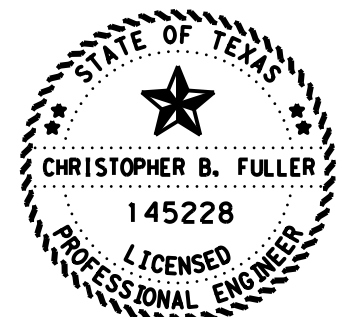
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CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:		COUNTY:		SHEET NO.:			
	BMT		JEFFERSON				1426



FOUNDATION LAYOUT



FOUNDATION LAYOUT



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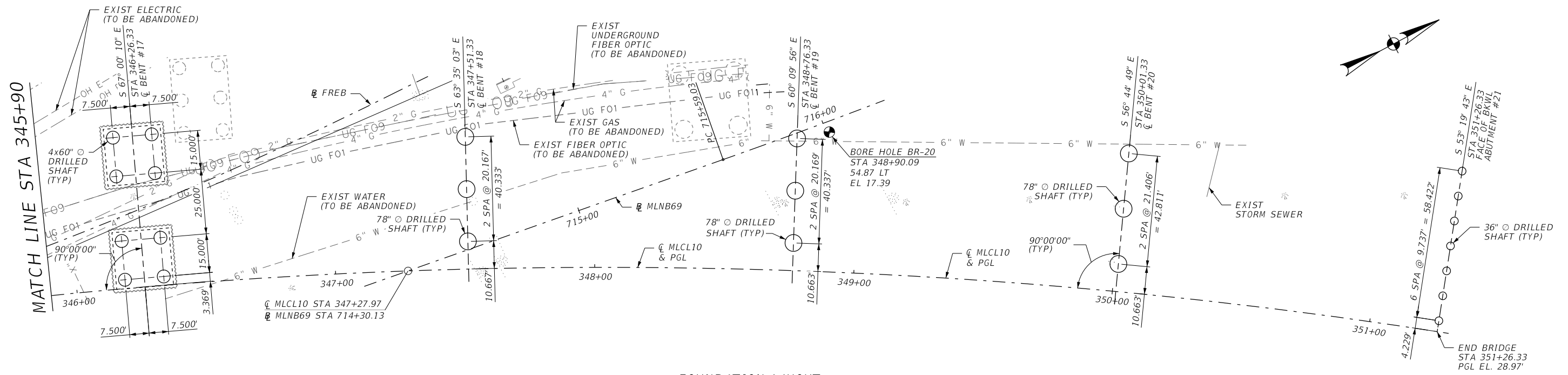


IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 WB MAINLANE
 AT US 69

SHEET 2 OF 3

DN:	CBF	CK:	FB	DW:	MAG	CK:	FB
CONT		SECT		JOB		CK:	FB
0028		13		135			IH 10
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1427				

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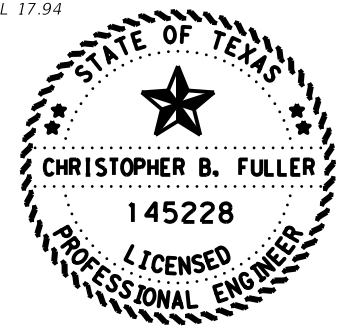
FOUNDATION LAYOUT

FOUNDATION SUMMARY

ABUT / BENT NO.	COLUMN TYPE	FOUNDATION TYPE	DRILLED SHAFT DIAMETER (IN)	SERVICE FOUNDATION LOAD/ SHAFT (TONS)	NUMBER OF DRILLED SHAFTS PER FOOTING
2	G	I	78	629	1
3	G	I	78	629	1
4	G	I	78	629	1
5	G	I	78	629	1
6	G	I	78	629	1
7	G	I	78	629	1
8	G	I	78	629	1
9	G	I	78	629	1
10	G	I	78	622	1
11	G	I	78	622	1
12	G	I	78	622	1
13	G	I	78	560	1
14	G	I	78	560	1
15	G	I	78	547	1
15	H	C1	60	384	4
15	H	E2	60	363	6
16	G	I	78	554	1
16	G	E2	60	380	6
17	H	C1	60	396	4
17	H	C2	60	434	4
18	G	I	78	598	1
19	G	I	78	598	1
20	G	I	78	598	1
21	-	-	36	107	1

SHAFTS ARE INCLUDED FOR INFORMATION ONLY. SEE BRIDGE T FOR MORE DETAILS.

BORE HOLE BR-53
 STA 351+03.07
 74.46 RT
 EL 17.94



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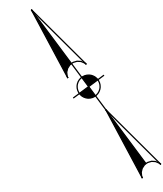


IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 WB MAINLANE
 AT US 69

SHEET 3 OF 3

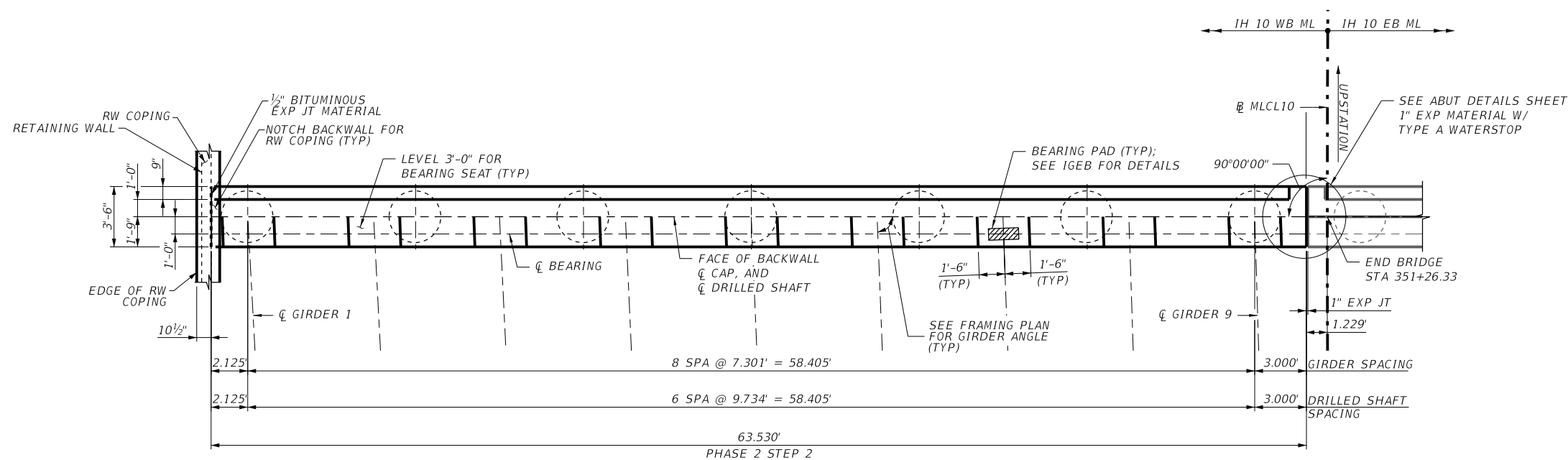
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CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST		COUNTY		SHEET NO.			
	BMT	JEFFERSON					1428

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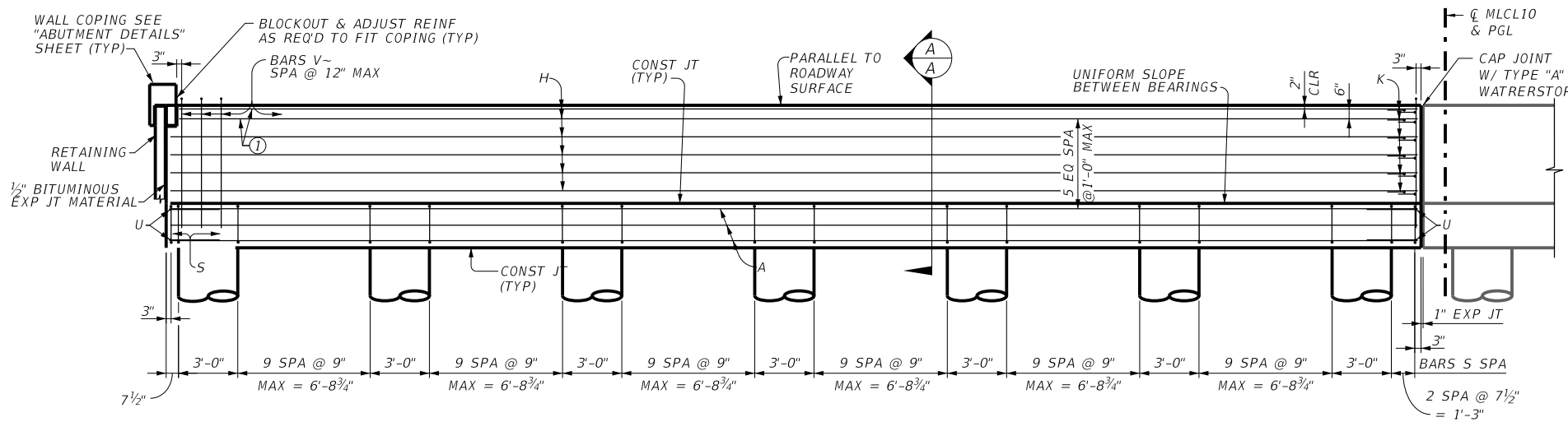


GENERAL NOTES:

1. SEE ABUTMENT DETAIL SHEET, FOR DETAILS AND NOTES.

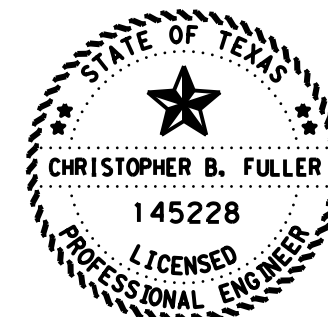


PLAN
 SCALE 1/8"=1'-0"



ELEVATION
 SCALE 1/8"=1'-0"

① FIELD CUT H BARS AS NEEDED TO ACCOMMODATE BACKWALL NOTCH FOR RETAINING WALL.



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02/21/2024

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**IH 10 AT US 69
 ABUTMENT 21
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1429				

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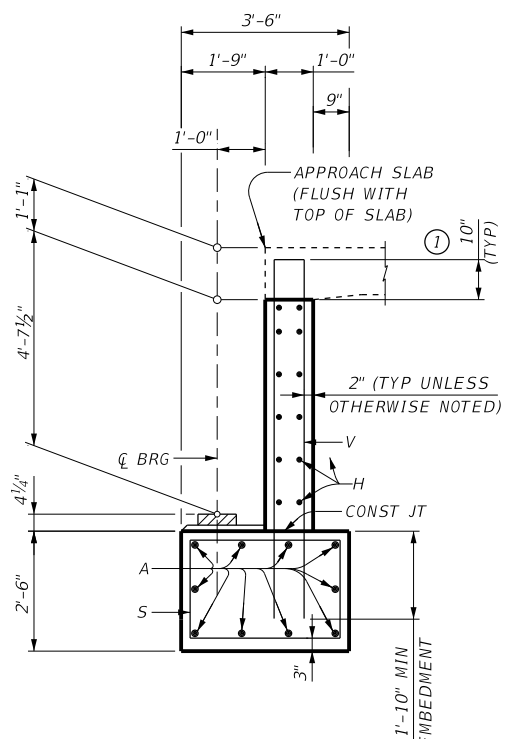
TABLE OF ESTIMATED QUANTITIES ABUTMENT 21 (PHASE 2 STEP 2)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	10	#11	69' - 5"	3688
⑤ H	12	#6	65' - 11"	1188
K	6	#6	8' - 5"	76
S	65	#5	11' - 6"	780
U	4	#6	8' - 1"	49
V	66	#5	16' - 0"	1018
REINFORCING STEEL			LB	6,799
CLASS "C" CONCRETE (CAP)			CY	32.6

- GENERAL NOTES:
- DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020 AND TxDOT BRIDGE MANUAL (JAN 2023).
 - SEE FOUNDATION DETAIL STANDARD SHEETS, FD, FOR FOUNDATION DETAILS AND NOTES.
 - MAXIMUM FOUNDATION LOAD = 107 TONS/DR SHAFT AT ABUTMENT 21.
- MATERIAL NOTES:
- PROVIDE GRADE 60 REINFORCING STEEL
 - PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI)

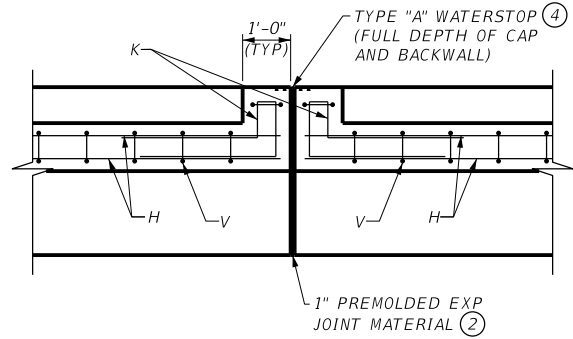
COVER DIMENSIONS ARE CLEAR DIMENSIONS UNLESS NOTED OTHERWISE.

REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BARS

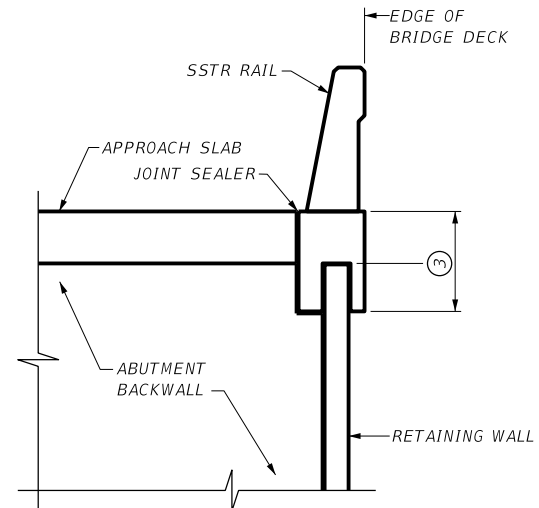
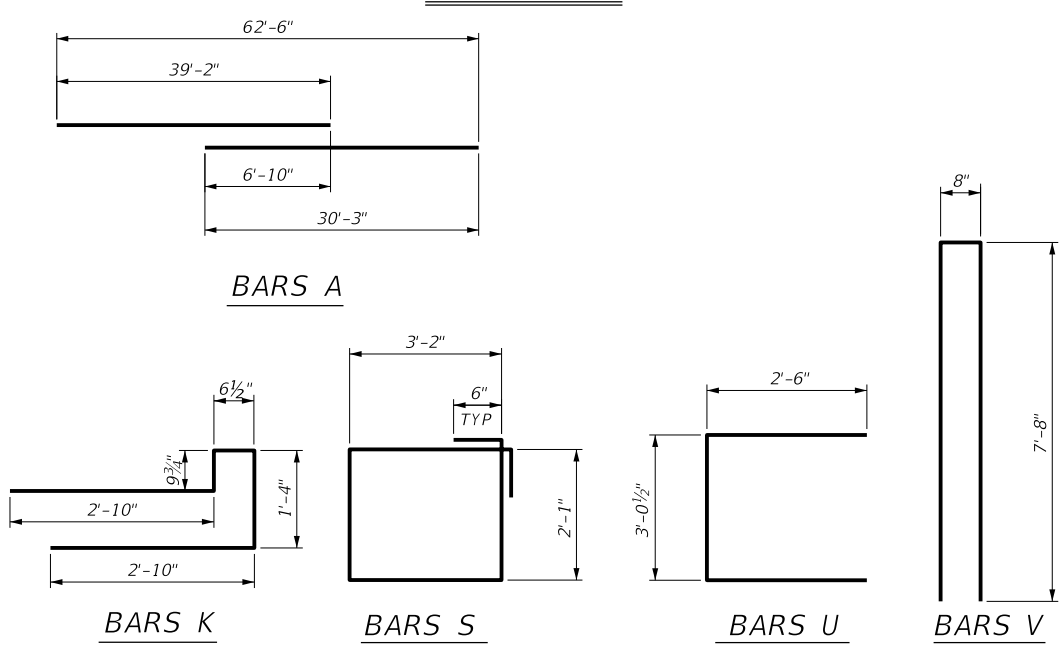
- INCREASE AS REQUIRED TO MAINTAIN 3" FROM FINISHED GRADE.
- 1" BITUMINOUS EXPANSION MATERIAL
- REFERENCE "TxDOT RETAINING WALL TRAFFIC RAILING FOUNDATIONS RW(TRF)" FOR COPING REINFORCEMENT & ADDITIONAL DETAILS.
- REFERENCE "TxDOT SPREAD FOOTING RETAINING WALL MISCELLANEOUS DETAILS RW" (SF) FOR WATERSTOP TYPE "A" DETAILS, TO BE PLACED THE FULL HEIGHT OF THE ABUTMENT.
- USE 2'-10" LAP SPLICE.



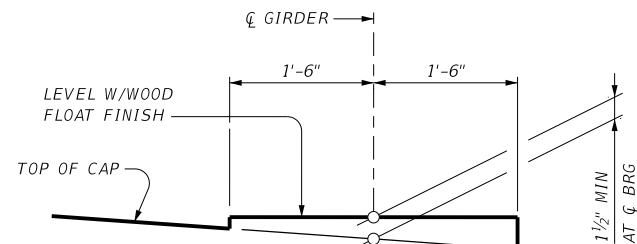
SECTION A-A



CAP JOINT DETAIL

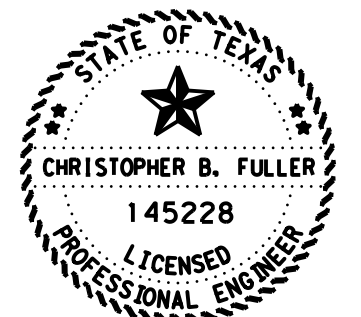


COPING DETAIL

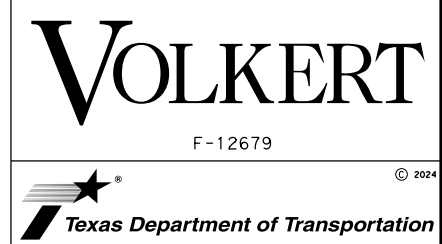


BEARING SEAT DETAIL

(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD.)



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 02/21/2024
 HL93 LOADING



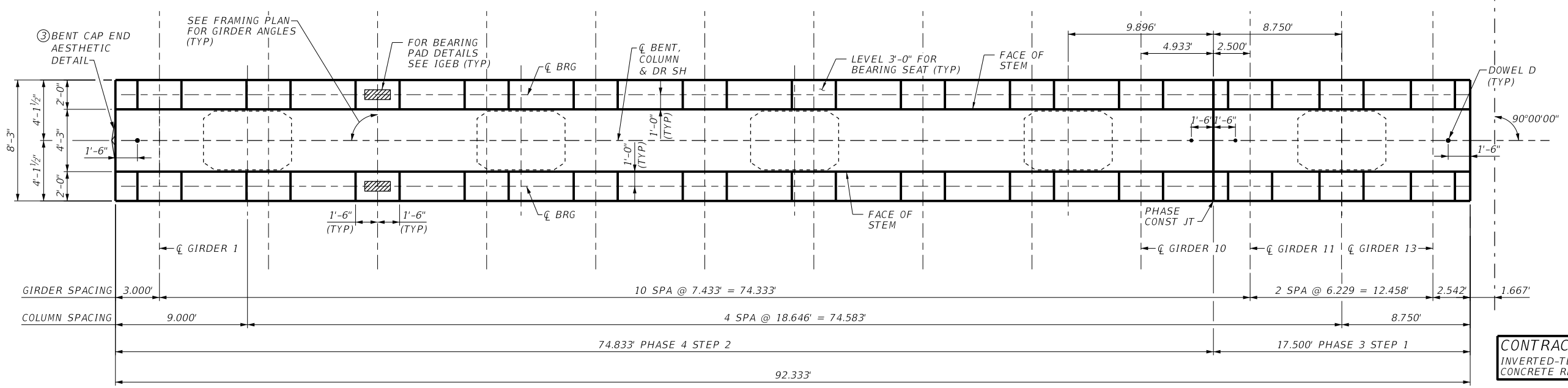
IH 10 AT US 69
 ABUTMENT DETAILS
 IH 10 WB MAINLANE
 AT US 69

SHEET 1 OF 1

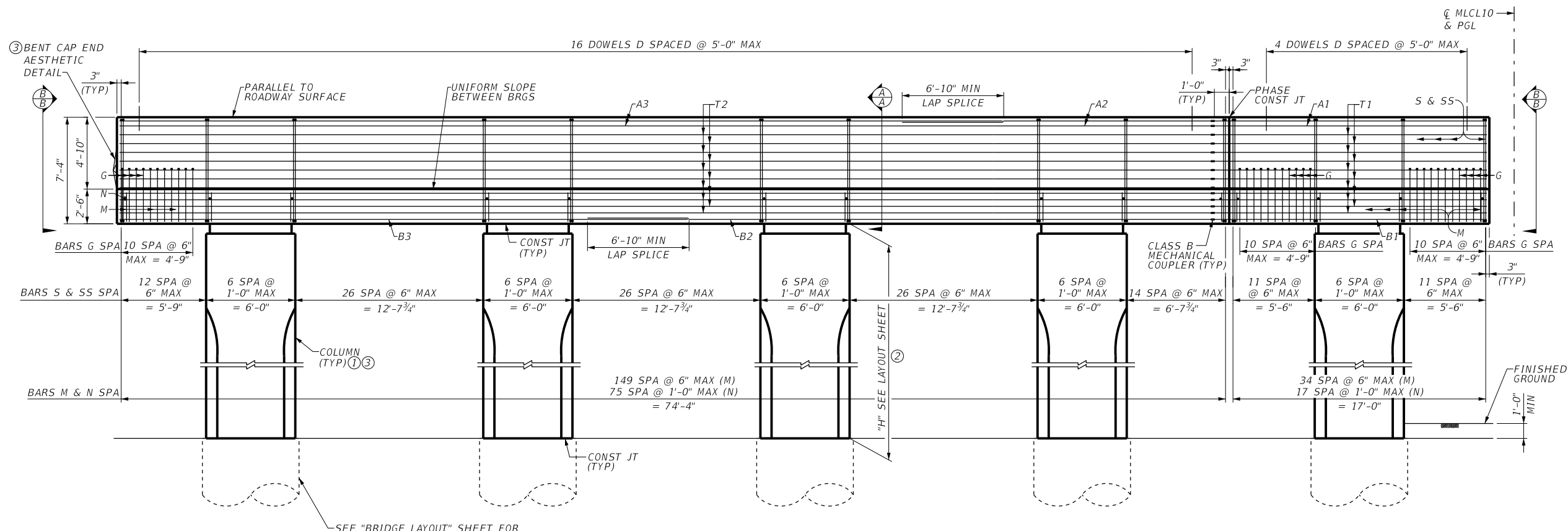
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1430	

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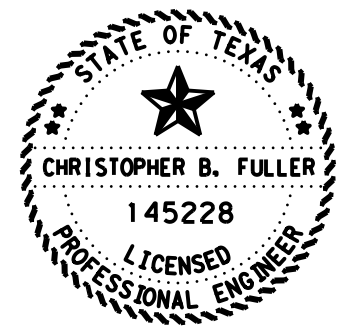
- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT G MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.



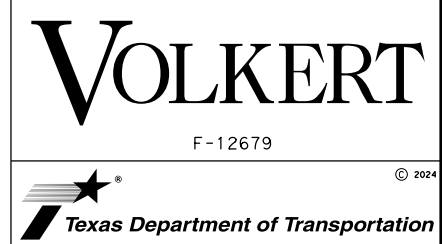
PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"



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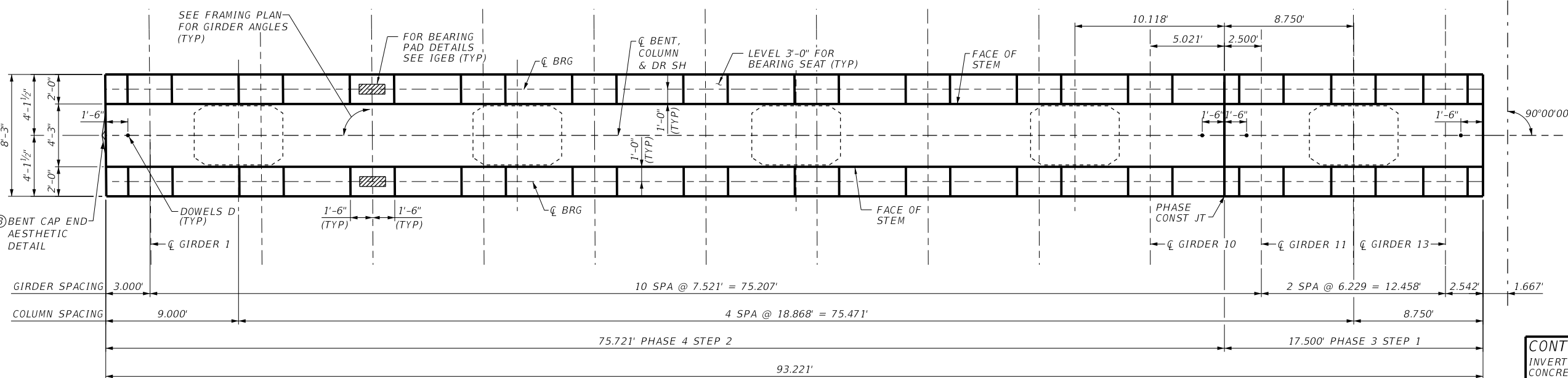


**IH 10 AT US 69
 BENTS 2 & 3
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
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0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1431				

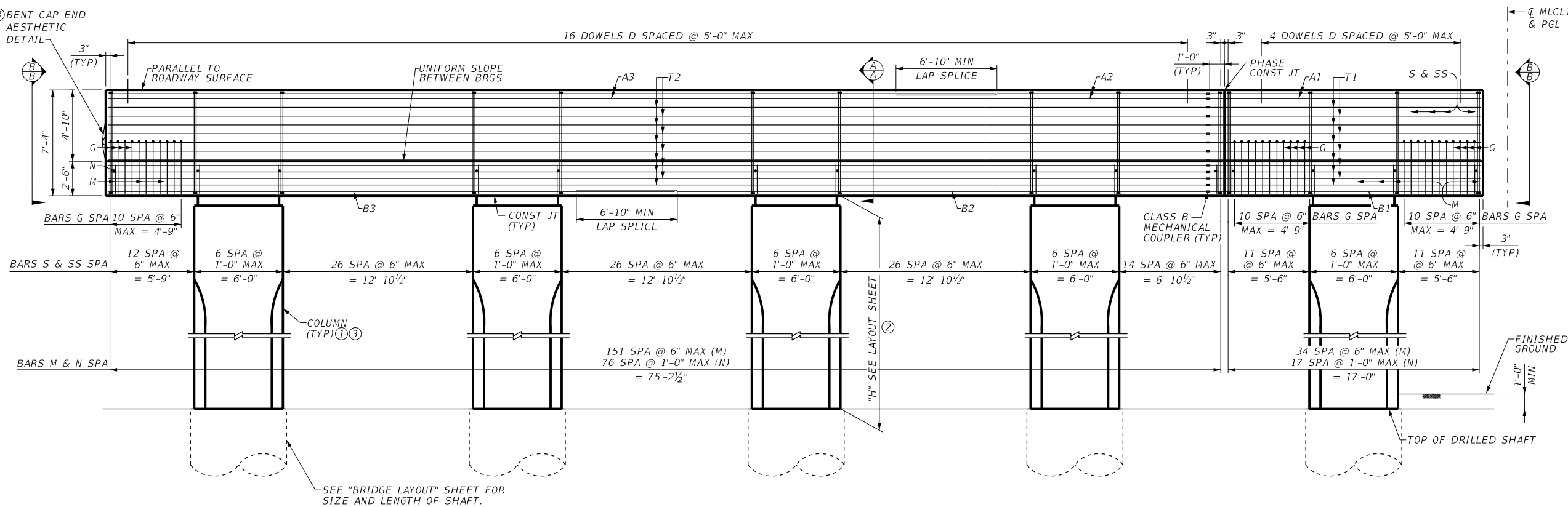
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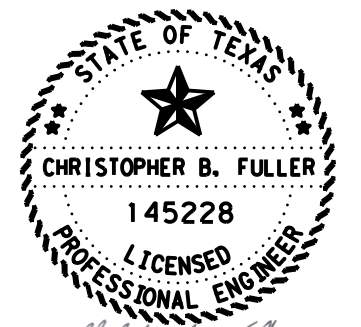
PLAN
 1/8"=1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT G MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



ELEVATION
 1/8"=1'-0"



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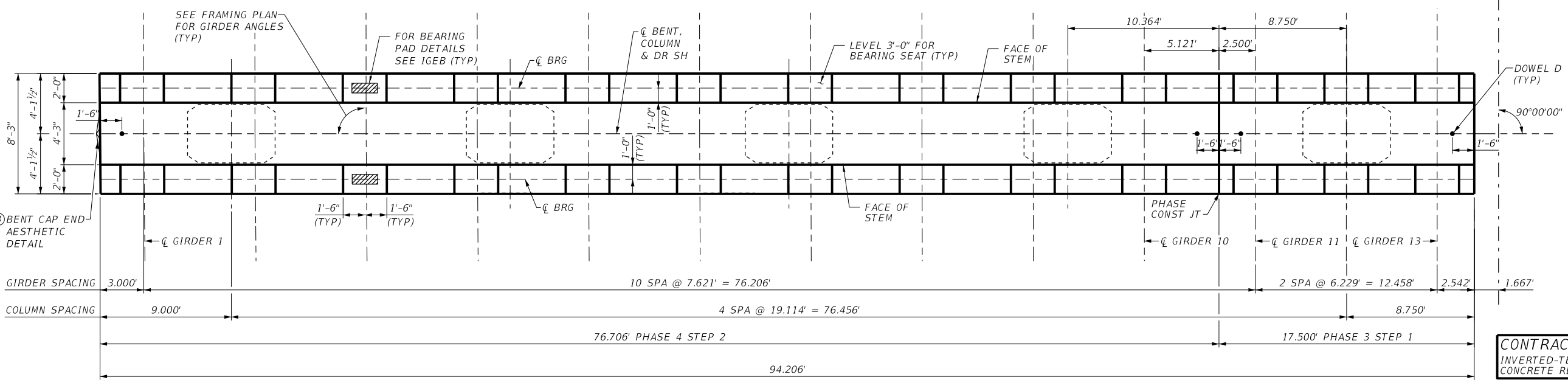


**IH 10 AT US 69
 BENT 4
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

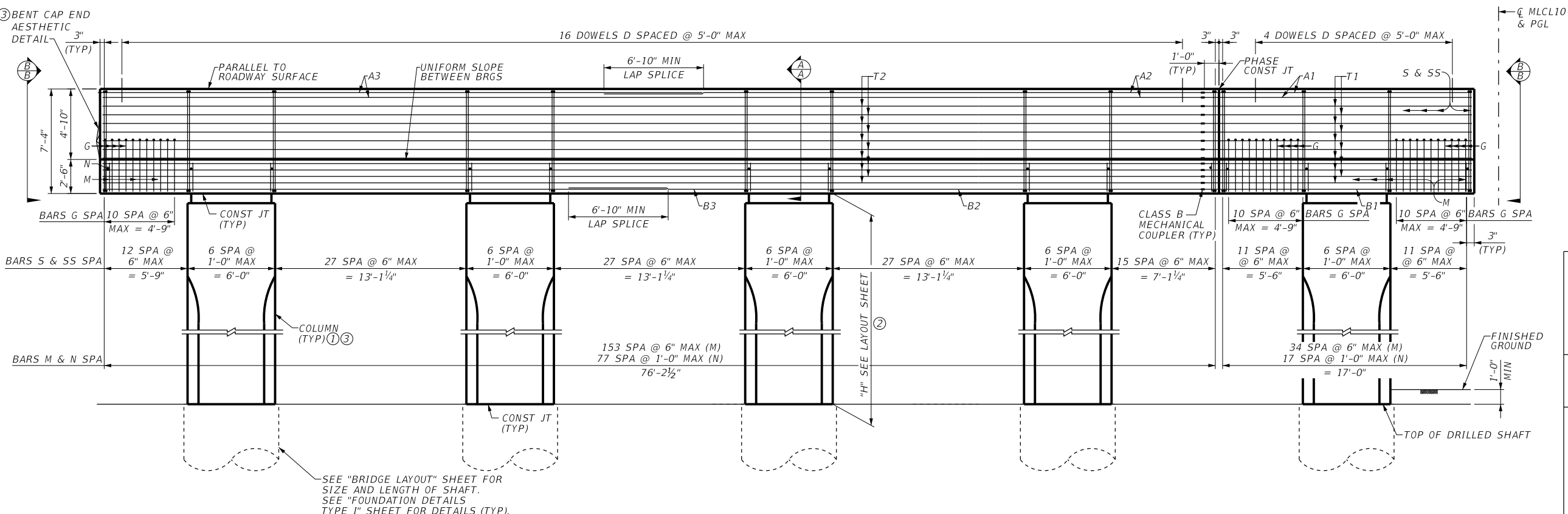
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BMT		JEFFERSON		1432		

DATE: 21-FEB-2024 22:25
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PLAN
 1/8" = 1'-0"

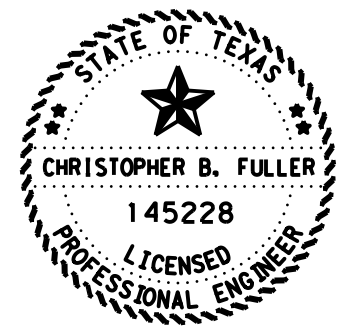
CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



ELEVATION
 1/8" = 1'-0"

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS" TYPE 1" SHEET FOR DETAILS (TYP).

- SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.



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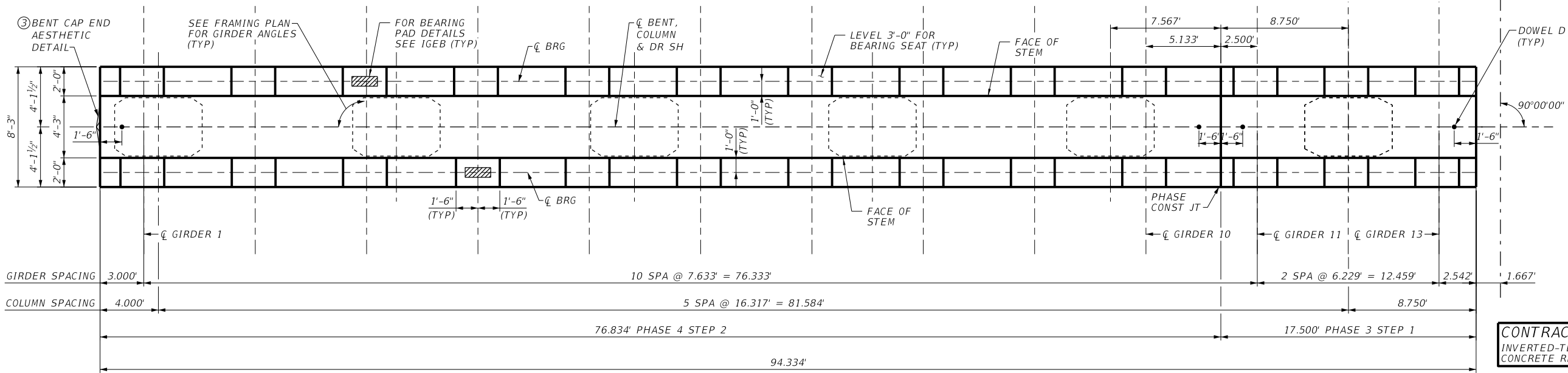
IH 10 AT US 69
 BENT 5
 IH 10 WB MAINLANE
 AT US 69

SHEET 1 OF 1

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1433			

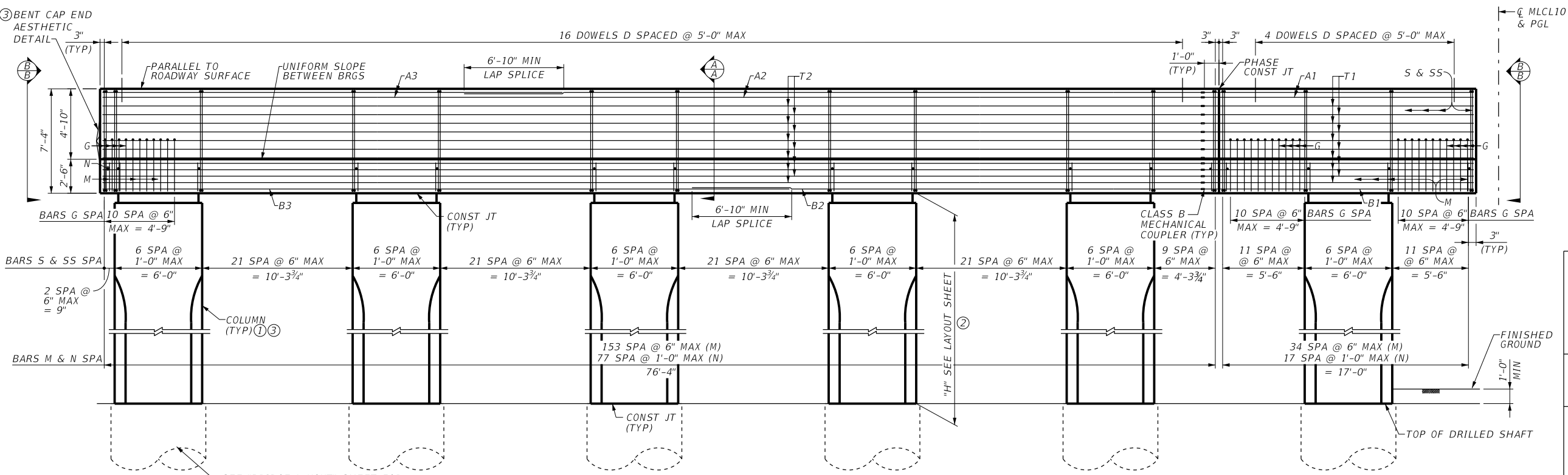
DATE: 21-FEB-2024 22:27
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\7. Bridge\10WB Mainlane BentPE_06.dgn

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.



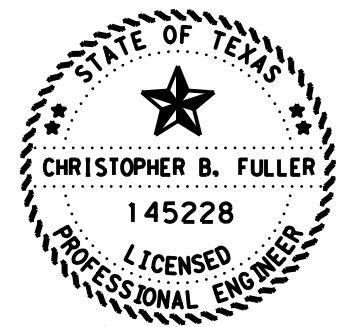
CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

PLAN
 $\frac{1}{8}'' = 1'-0''$

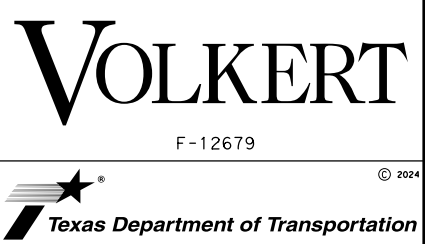


SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS TYPE I" SHEET FOR DETAILS (TYP).

ELEVATION
 $\frac{1}{8}'' = 1'-0''$



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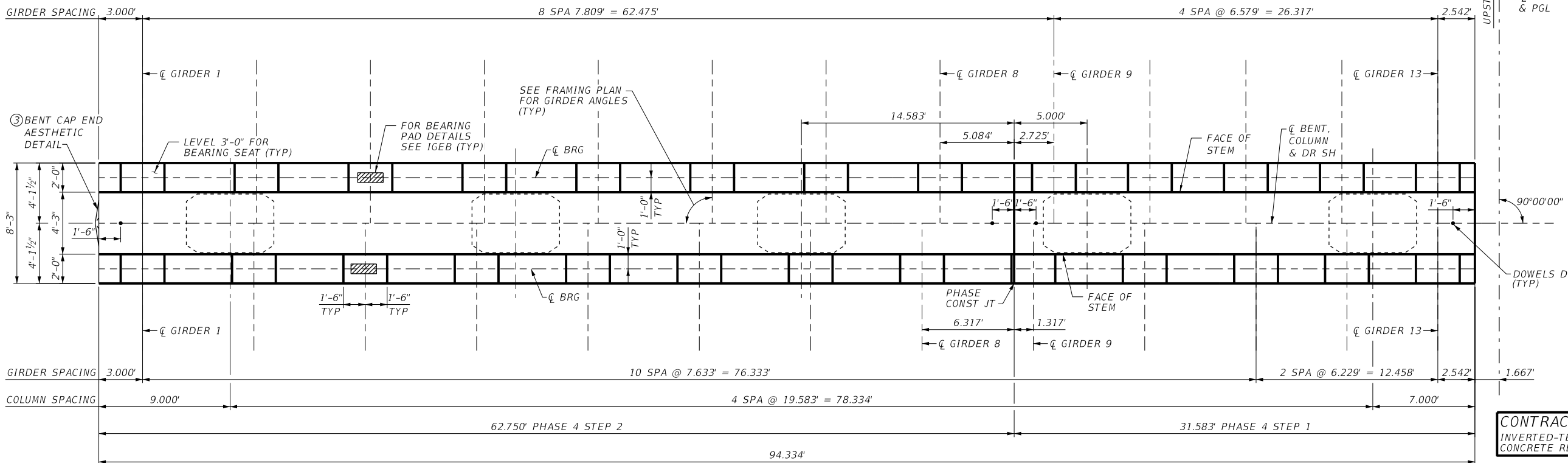


**IH 10 AT US 69
 BENT 6
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

DW:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1434		

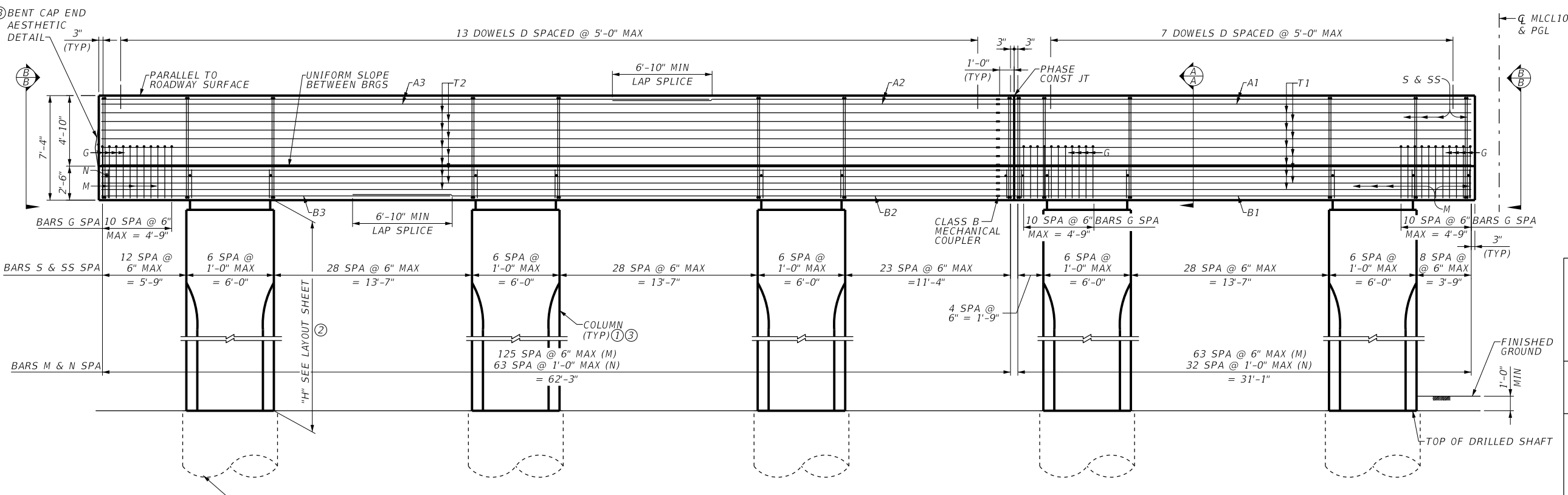
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PLAN
 1/8" = 1'-0"

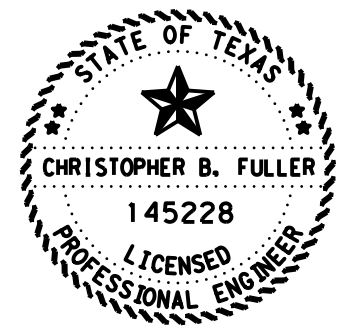
- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-T EE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

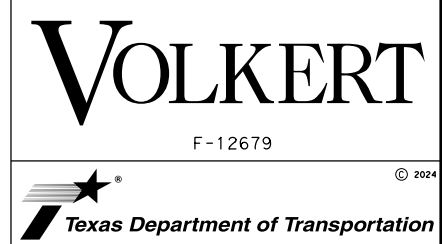


ELEVATION
 1/8" = 1'-0"

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS" TYPE 1" SHEET FOR DETAILS.



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 HL93 LOADING

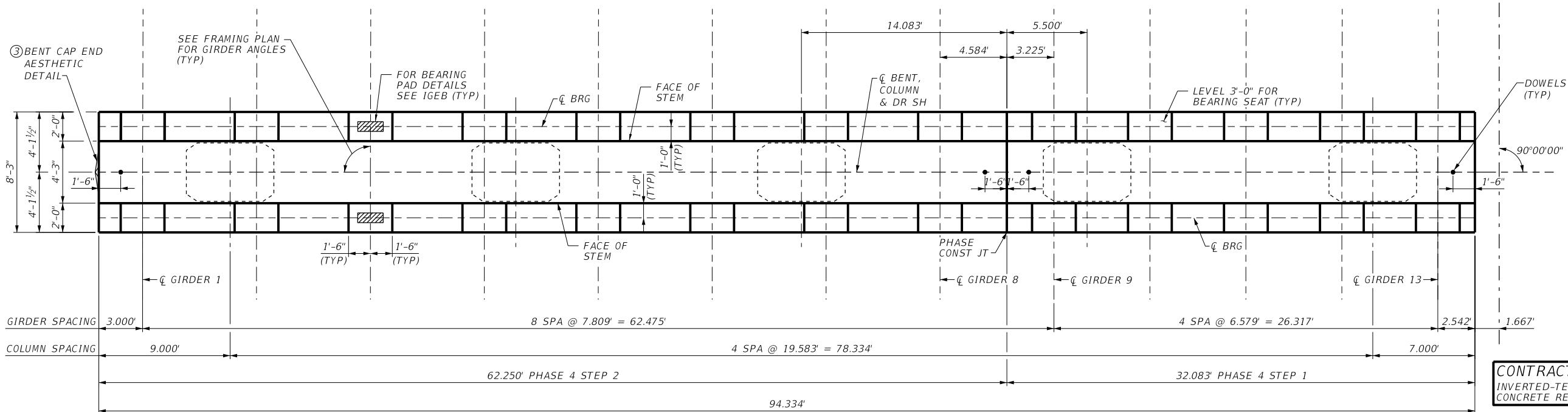


**IH 10 AT US 69
 BENT 7
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

DW:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1435		

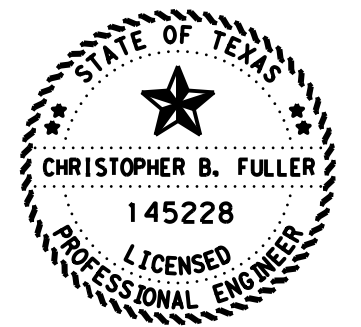
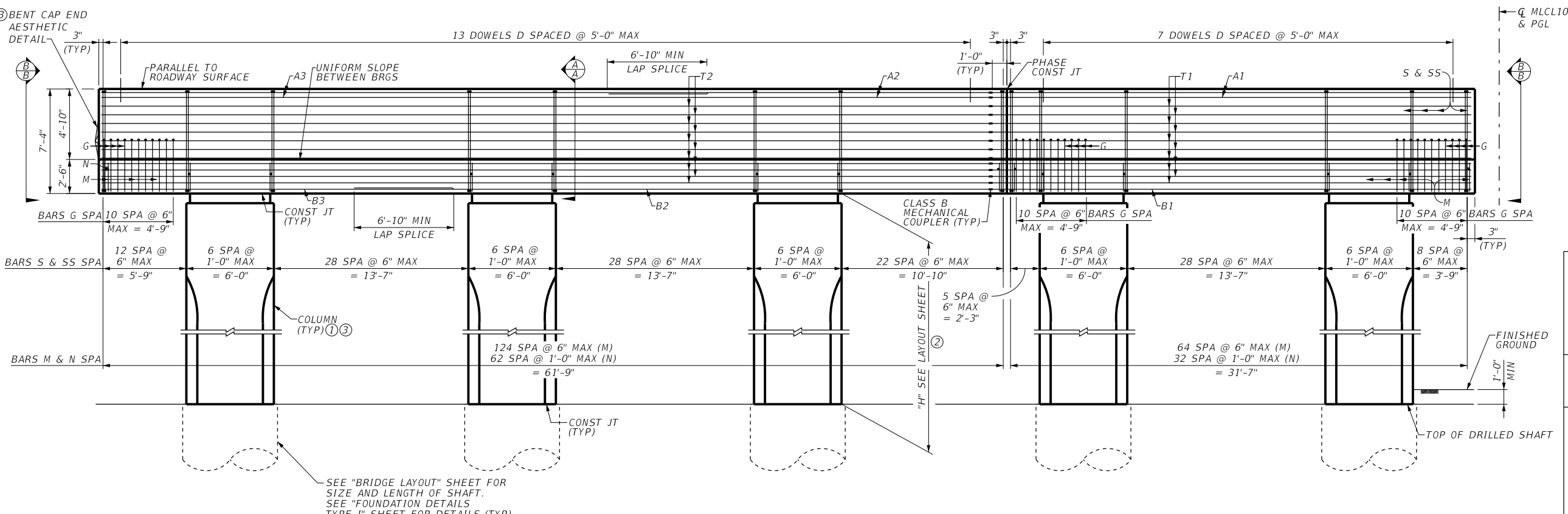
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- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.



CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Christopher B. Fuller
 02/21/2024
 HL93 LOADING

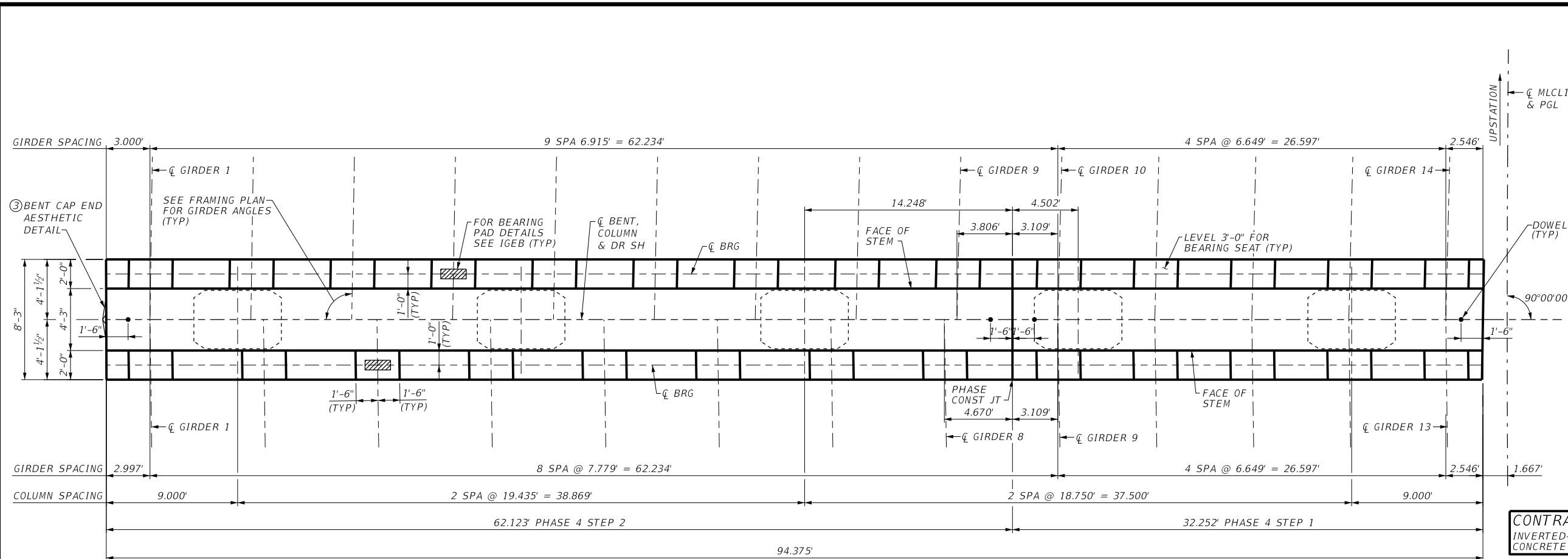
VOLKERT
 F-12679
 Texas Department of Transportation

**IH 10 AT US 69
 BENT 8
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

DW:	CK:	FB:	DW:	RF:	CK:	FB:
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DIST		COUNTY		SHEET NO.		
BMT		JEFFERSON		1436		

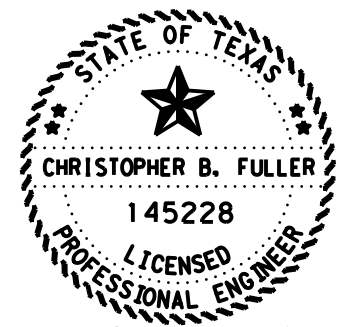
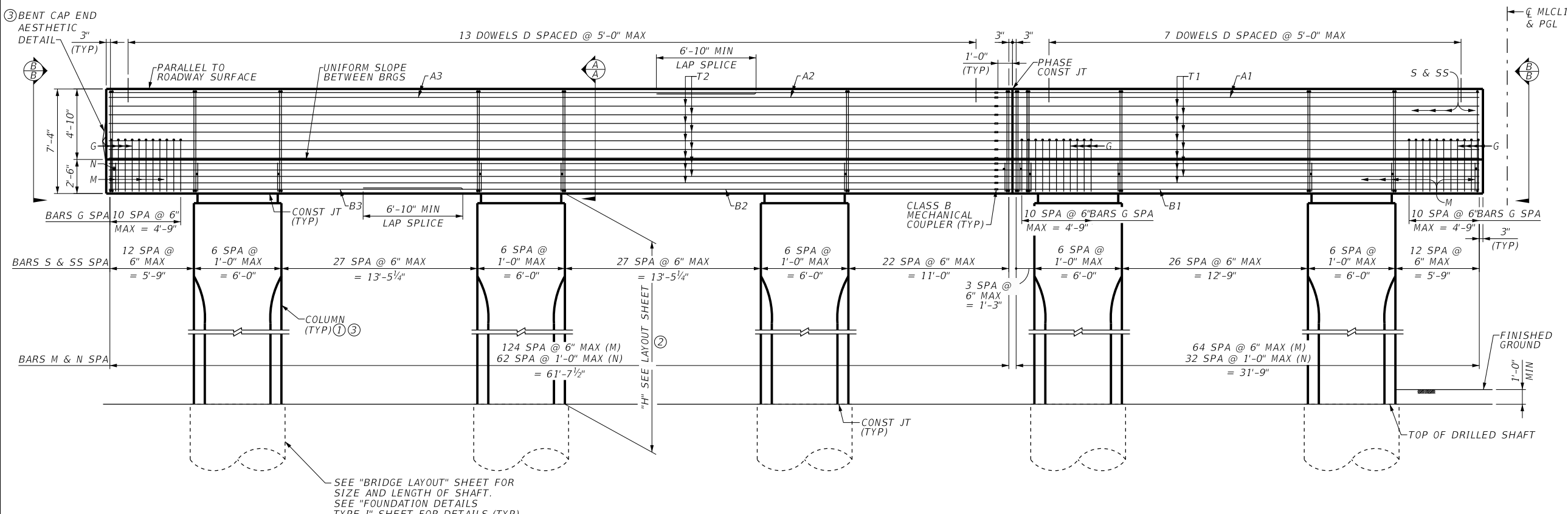
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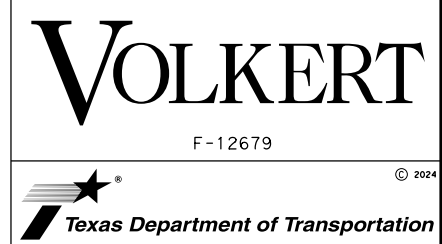
- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLC110. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.



CONTRACTOR NOTE:
 INVERTED-TTEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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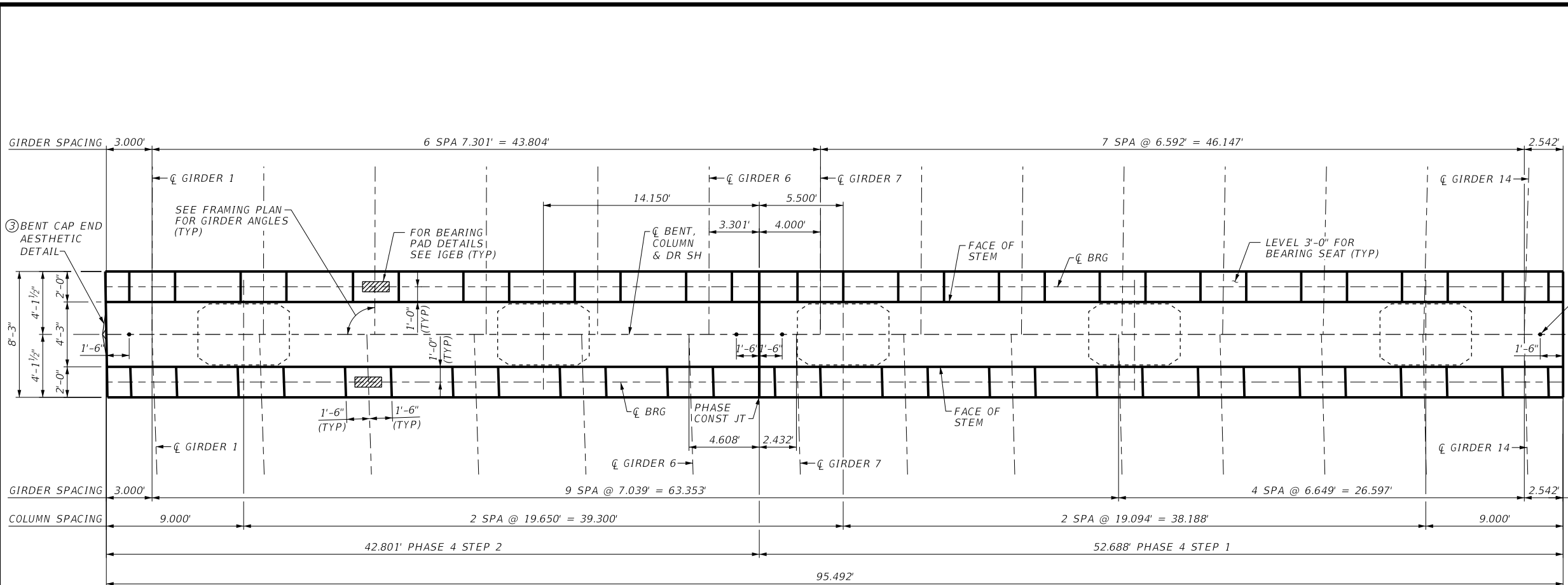


**IH 10 AT US 69
 BENT 9
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

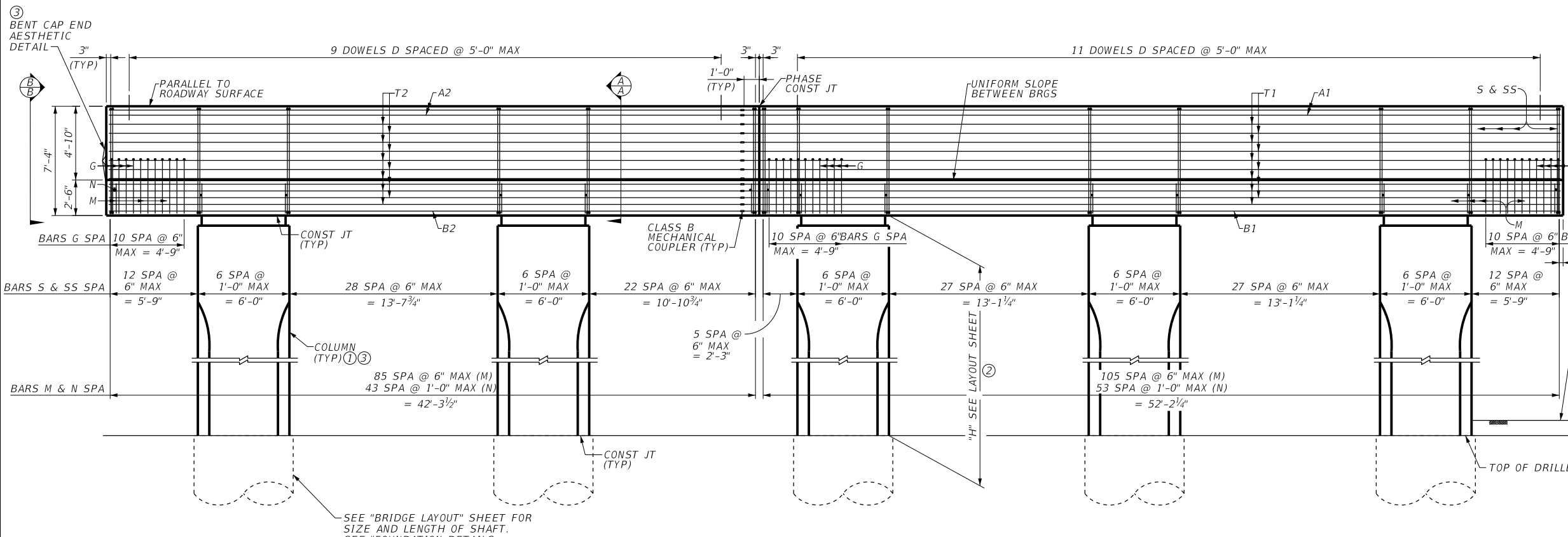
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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1437		

DATE: 21-FEB-2024 22:46
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\10WB Mainlane Bent\PE_10.dwg



- SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TTEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



STATE OF TEXAS
 CHRISTOPHER B. FULLER
 145228
 LICENSED PROFESSIONAL ENGINEER
 02/21/2024
 HL93 LOADING

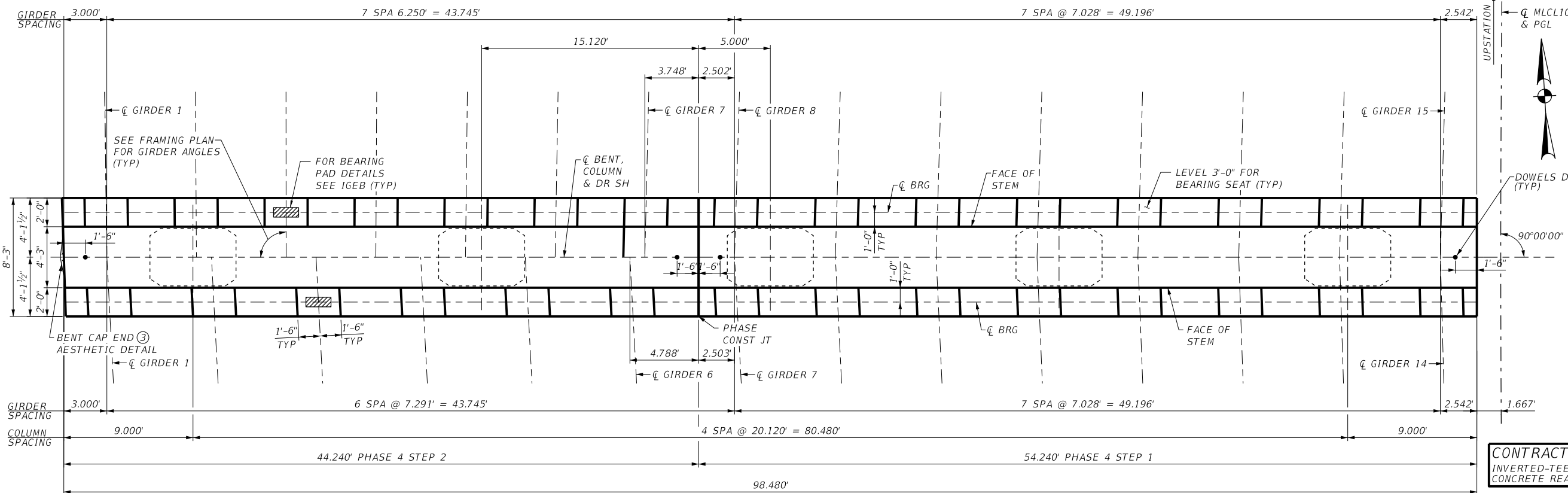
VOLKERT
 F-12679
 Texas Department of Transportation

IH 10 AT US 69
 BENT 10
 IH 10 WB MAINLANE
 AT US 69

SHEET 1 OF 1

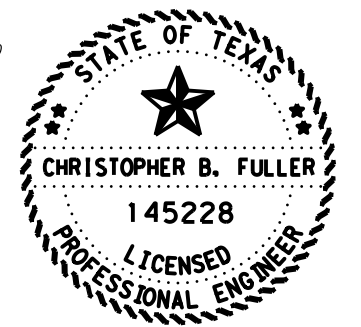
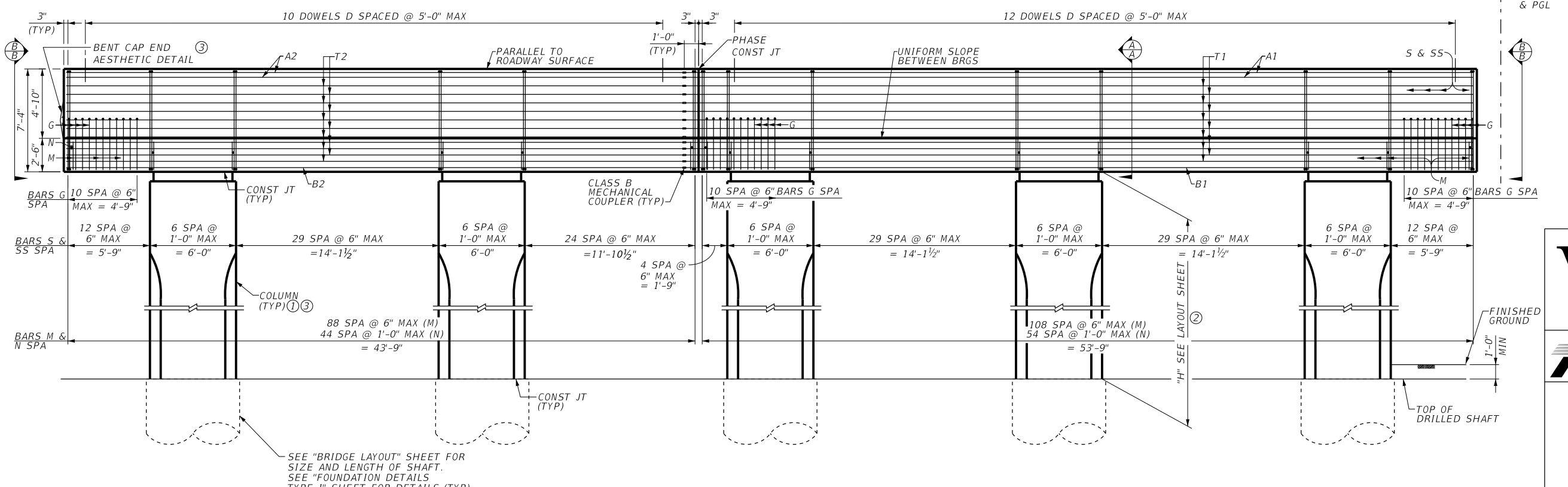
DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1438

DATE: 21-FEB-2024 22:44
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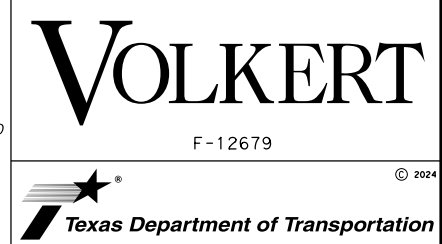


- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-T EE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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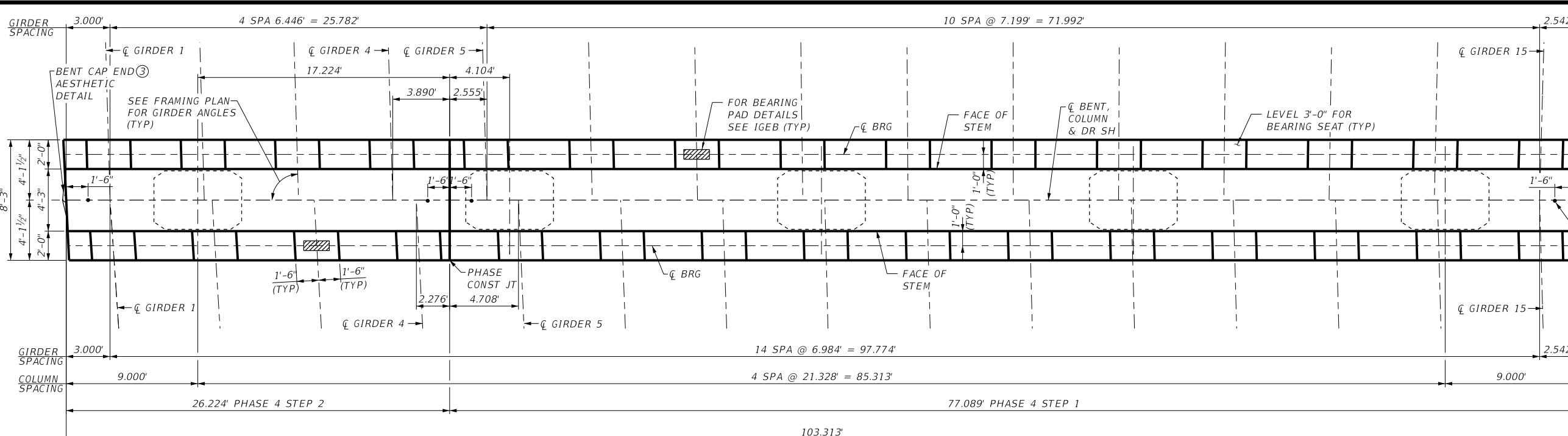


**IH 10 AT US 69
 BENT 11
 IH 10 WB MAINLANE
 AT US 69**

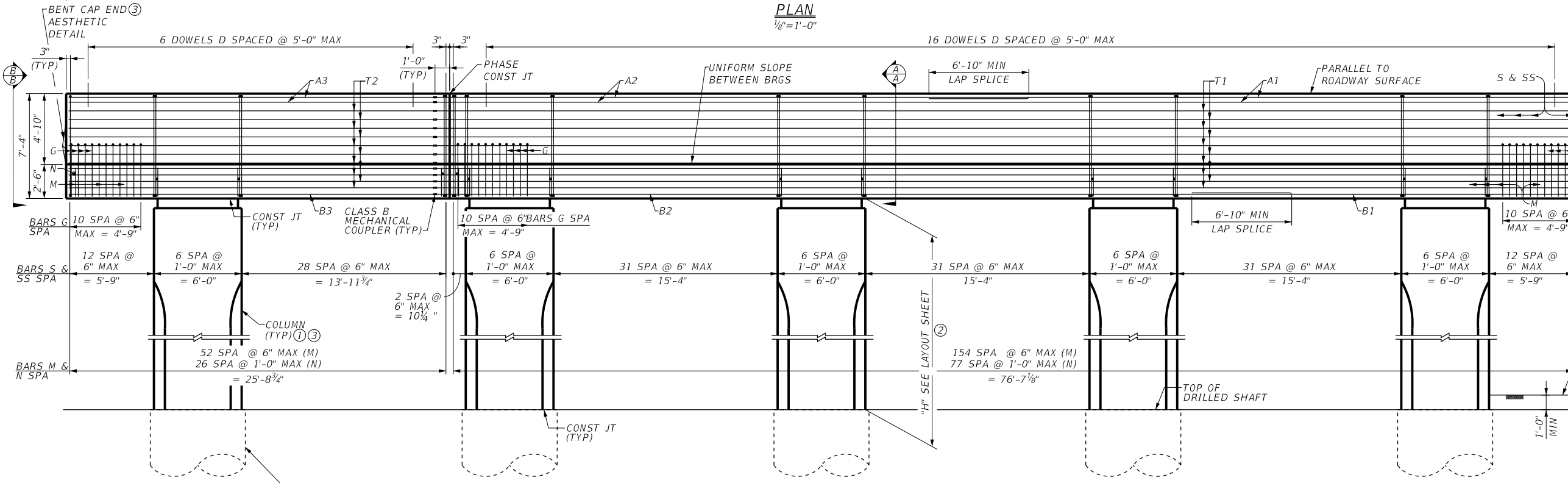
SHEET 1 OF 1

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1439

DATE: 21-FEB-2024 22:40
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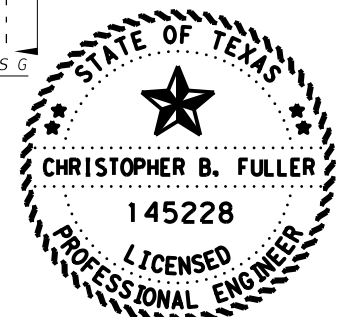


PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

CONTRACTOR NOTE:
 INVERTED-T EE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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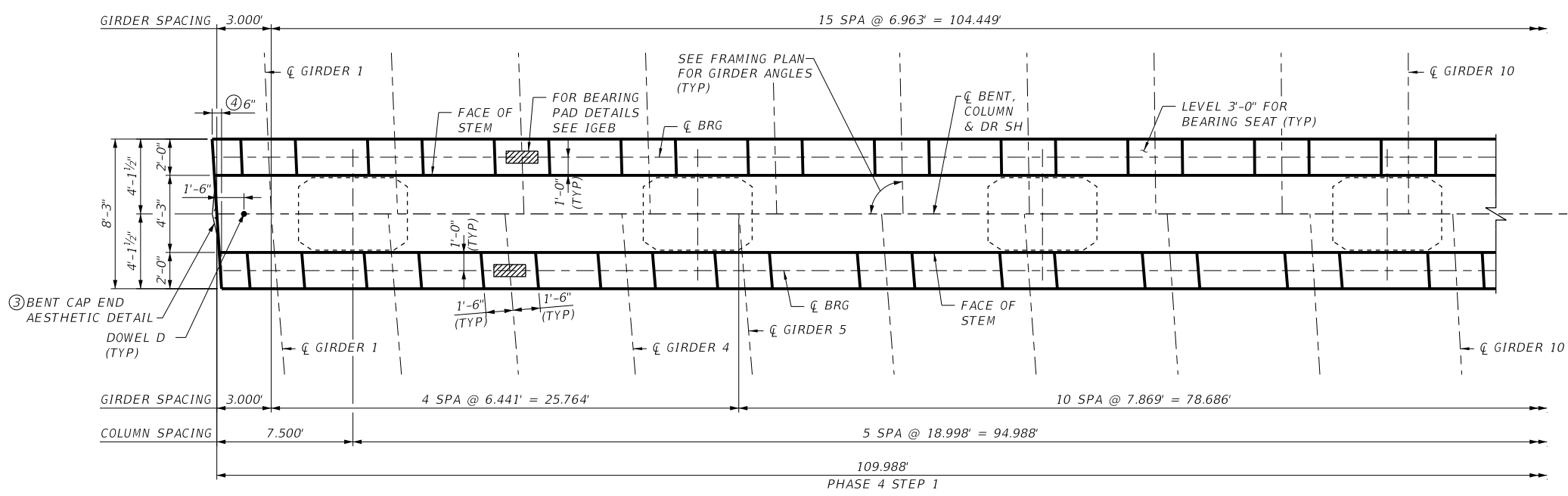
**IH 10 AT US 69
 BENT 12
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

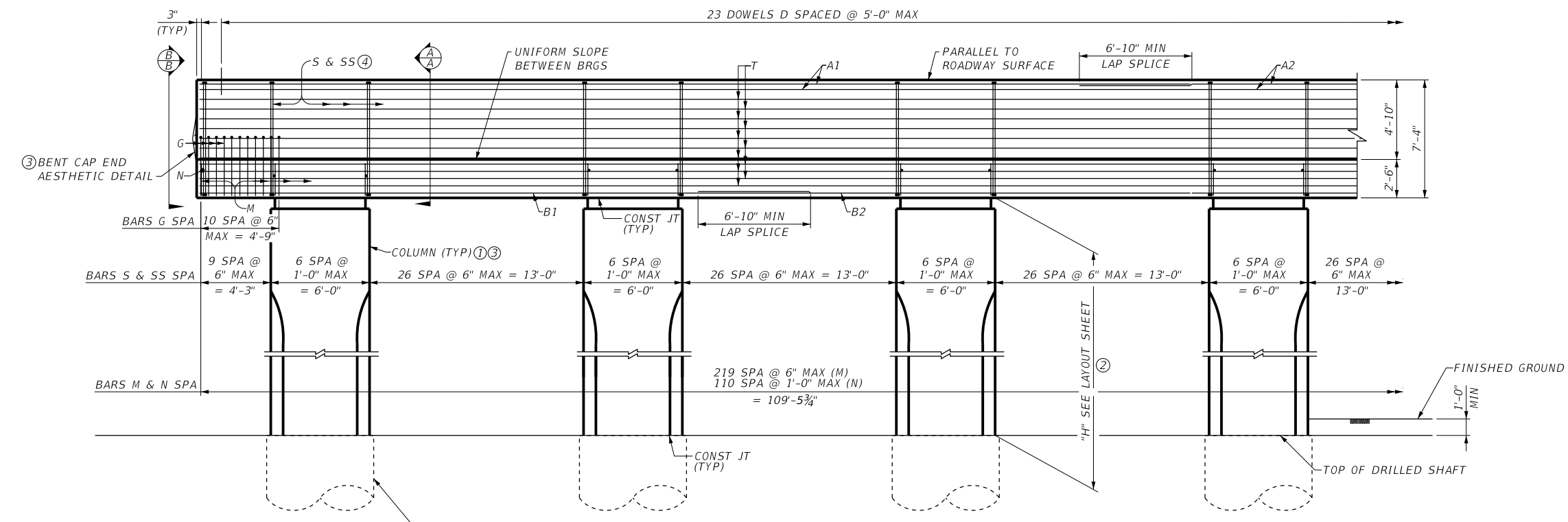
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CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1440		

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT G MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

DATE: 21-FEB-2024 22:40
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10WB_Mainlane_Bent\PE_13_1.dgn



PLAN
 1/8" = 1'-0"

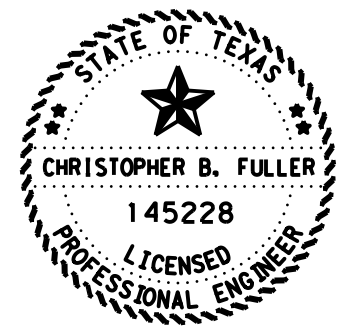


ELEVATION
 1/8" = 1'-0"

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS TYPE 1" SHEET FOR DETAILS (TYP).

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ FLARE LAST THREE S AND SS BARS

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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 HL93 LOADING

VOLKERT
 F-12679

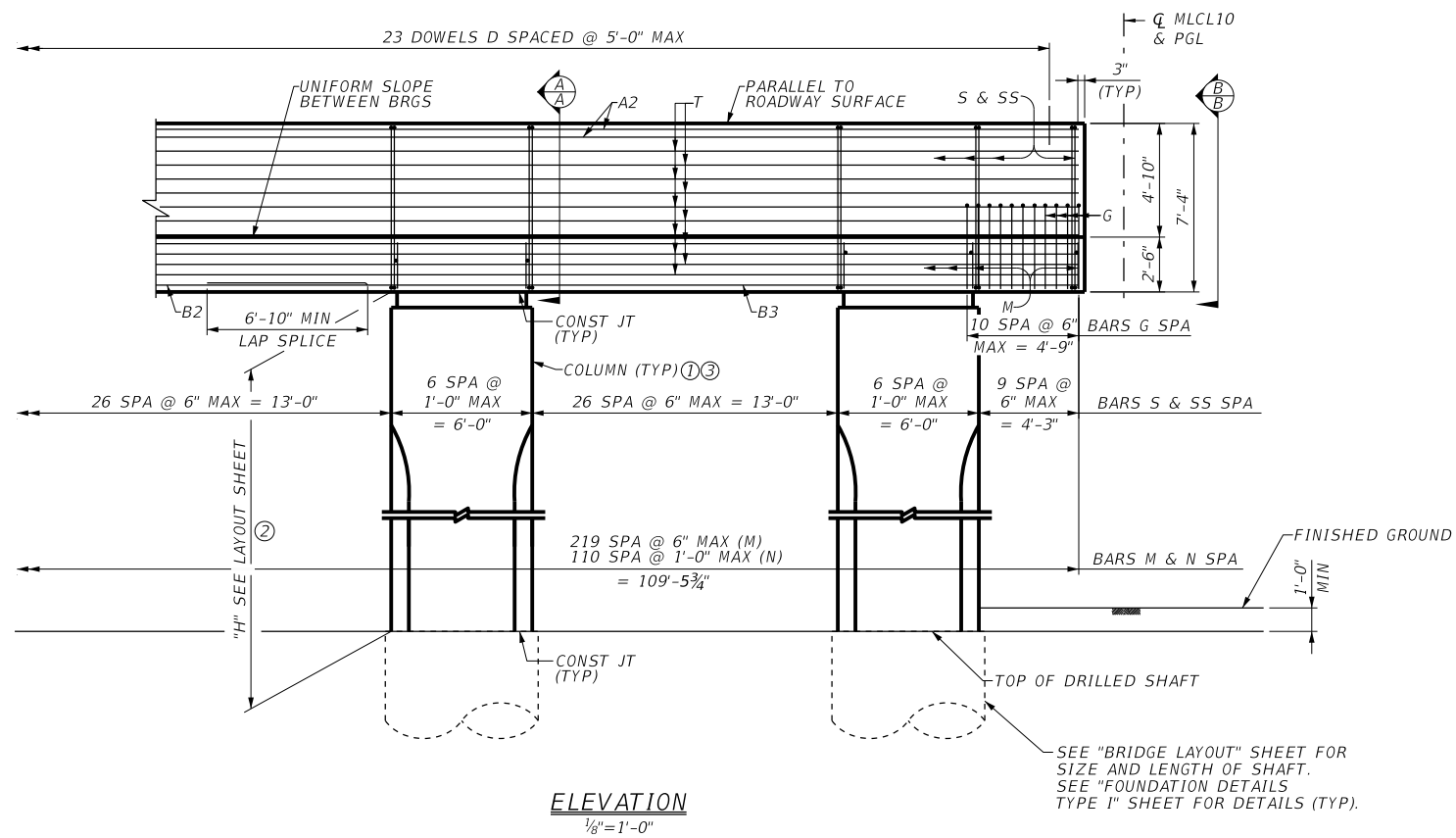
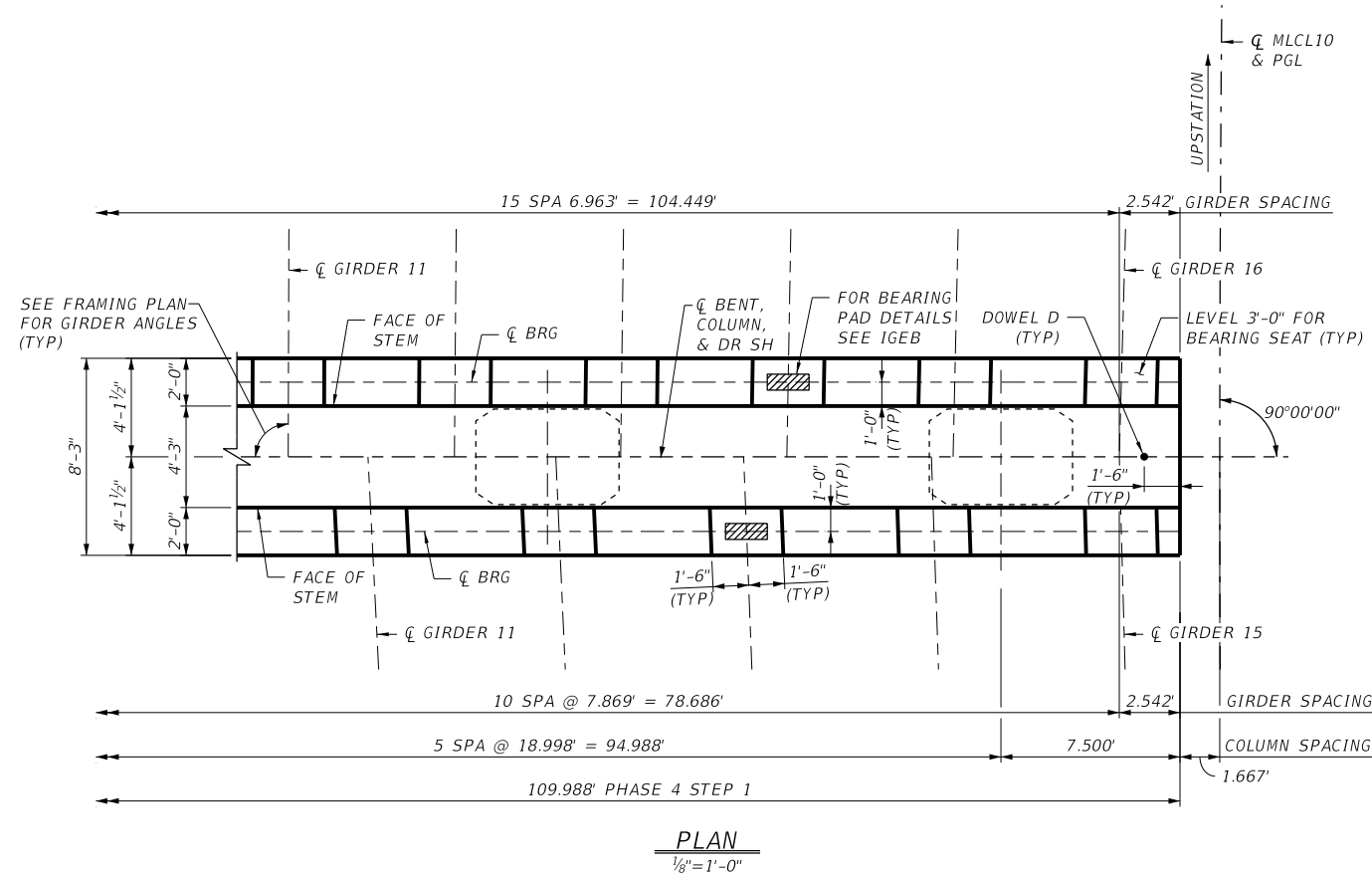
Texas Department of Transportation

**IH 10 AT US 69
 BENT 13
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 2

DN:	CBF	CK:	CBF	DW:	RF	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
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DIST		COUNTY		SHEET NO.			
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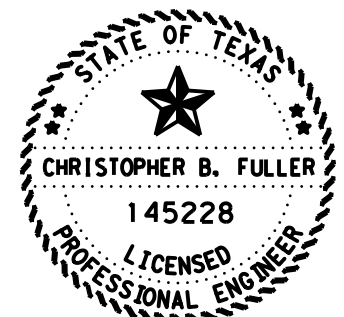
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- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.



CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



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 HL93 LOADING

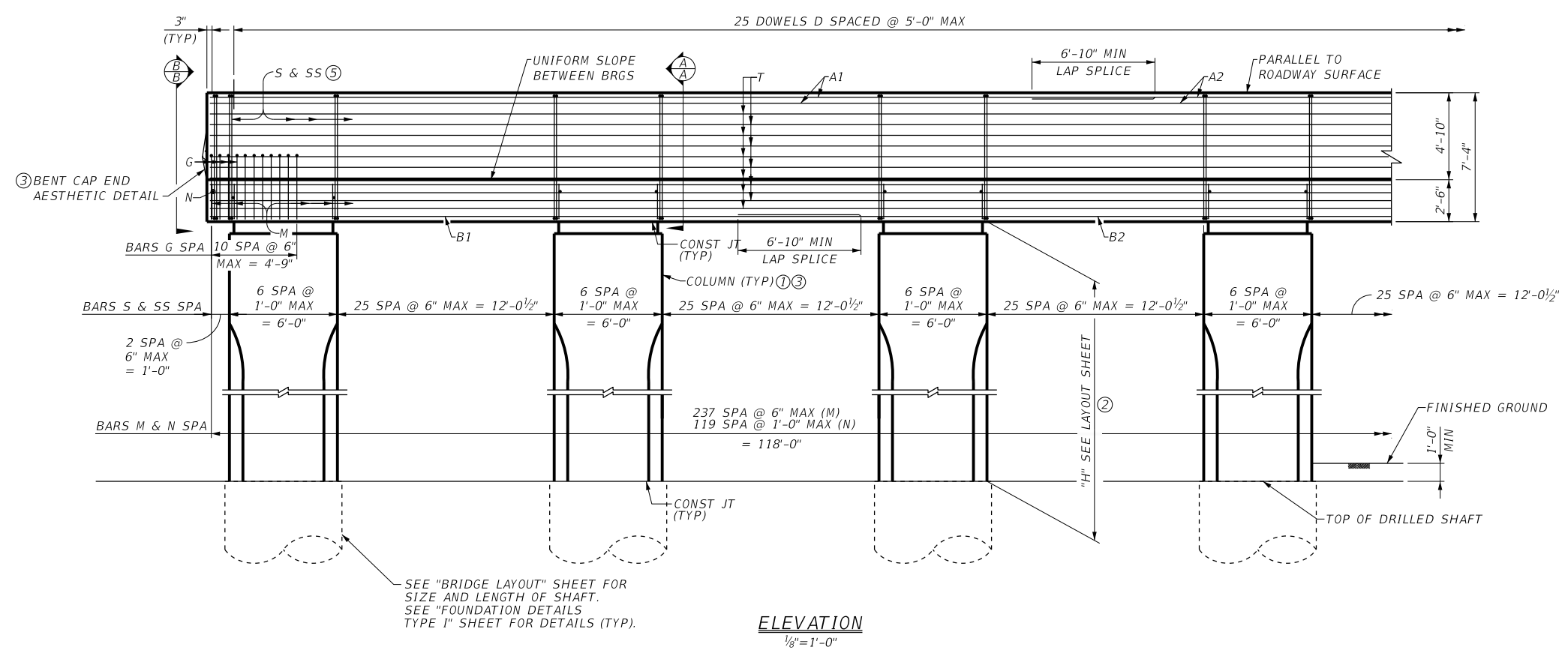
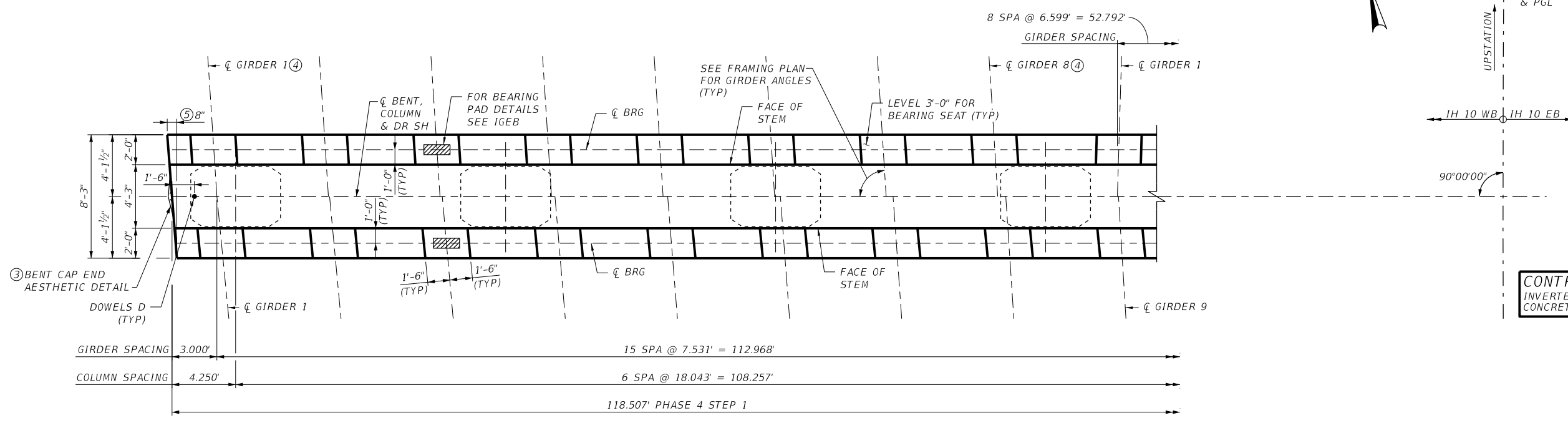
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 F-12679
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IH 10 AT US 69
 BENT 13
 IH 10 WB MAINLANE
 AT US 69

SHEET 2 OF 2

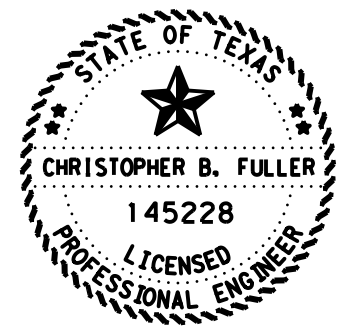
DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1442		

DATE: 21-FEB-2024 22:40
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10WB MAINLANE_BENTPE_14_1.dgn

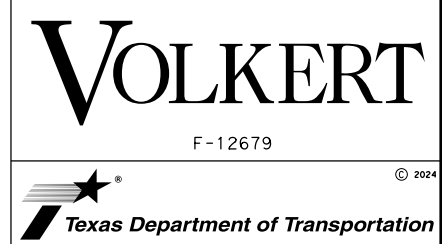


- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ FOR GIRDER SPACING, SEE SHEET "BENT 1" OF US 69 SB EB DC.
- ⑤ FLARE LAST THREE S AND SS BARS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Christopher B. Fuller
 02/21/2024
 HL93 LOADING

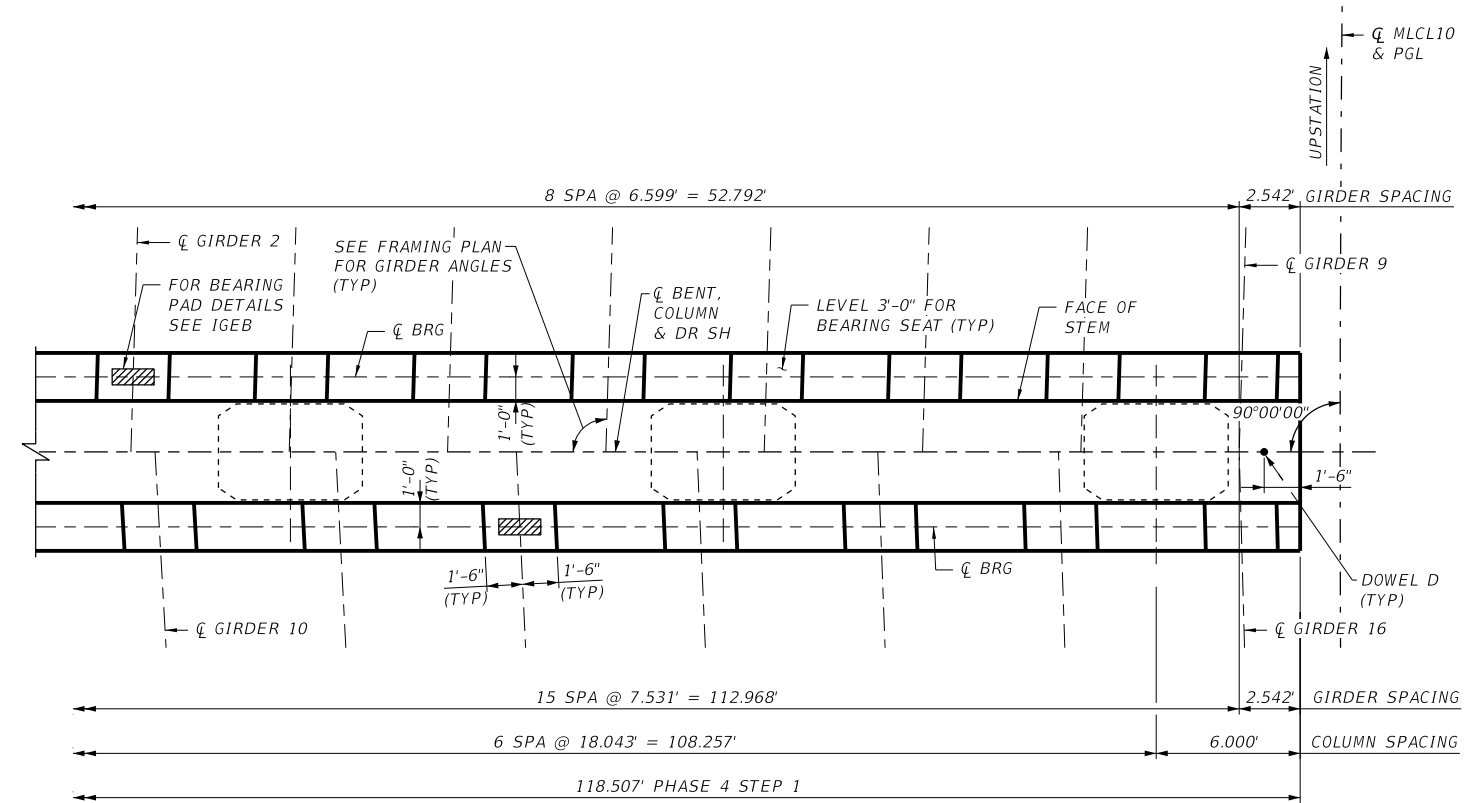


**IH 10 AT US 69
 BENT 14
 IH 10 WB MAINLANE
 AT US 69**

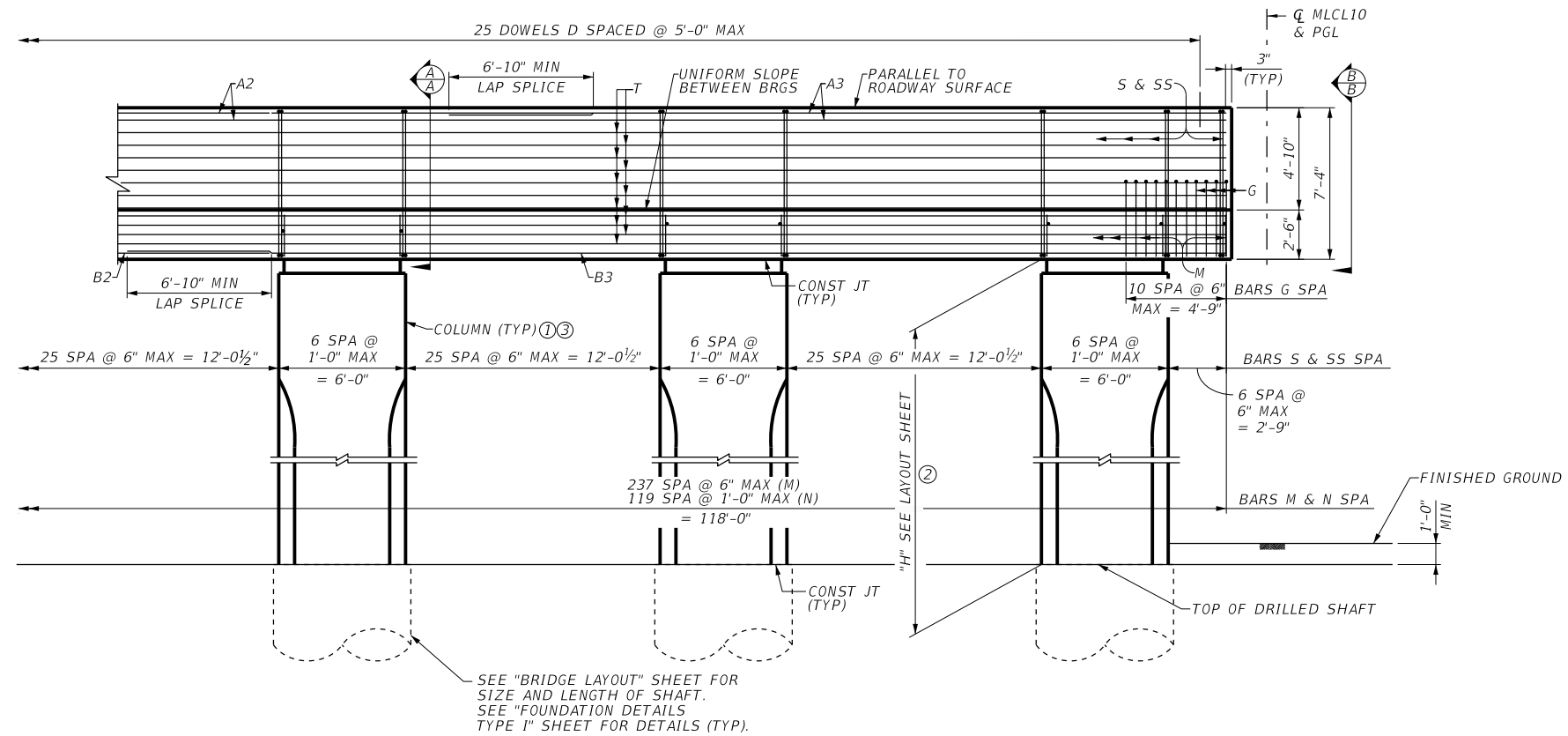
SHEET 1 OF 2

DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1443				

DATE: 21-FEB-2024 22:40
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10WB_Mainlane_Bent14_2.dgn



PLAN
 1/8"=1'-0"

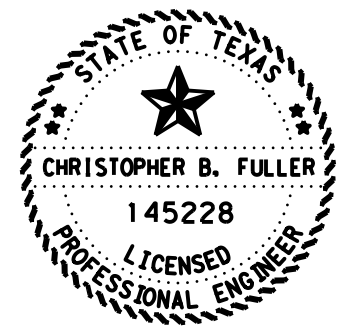


ELEVATION
 1/8"=1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.



CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Christopher B. Fuller
 02/21/2024
 HL93 LOADING

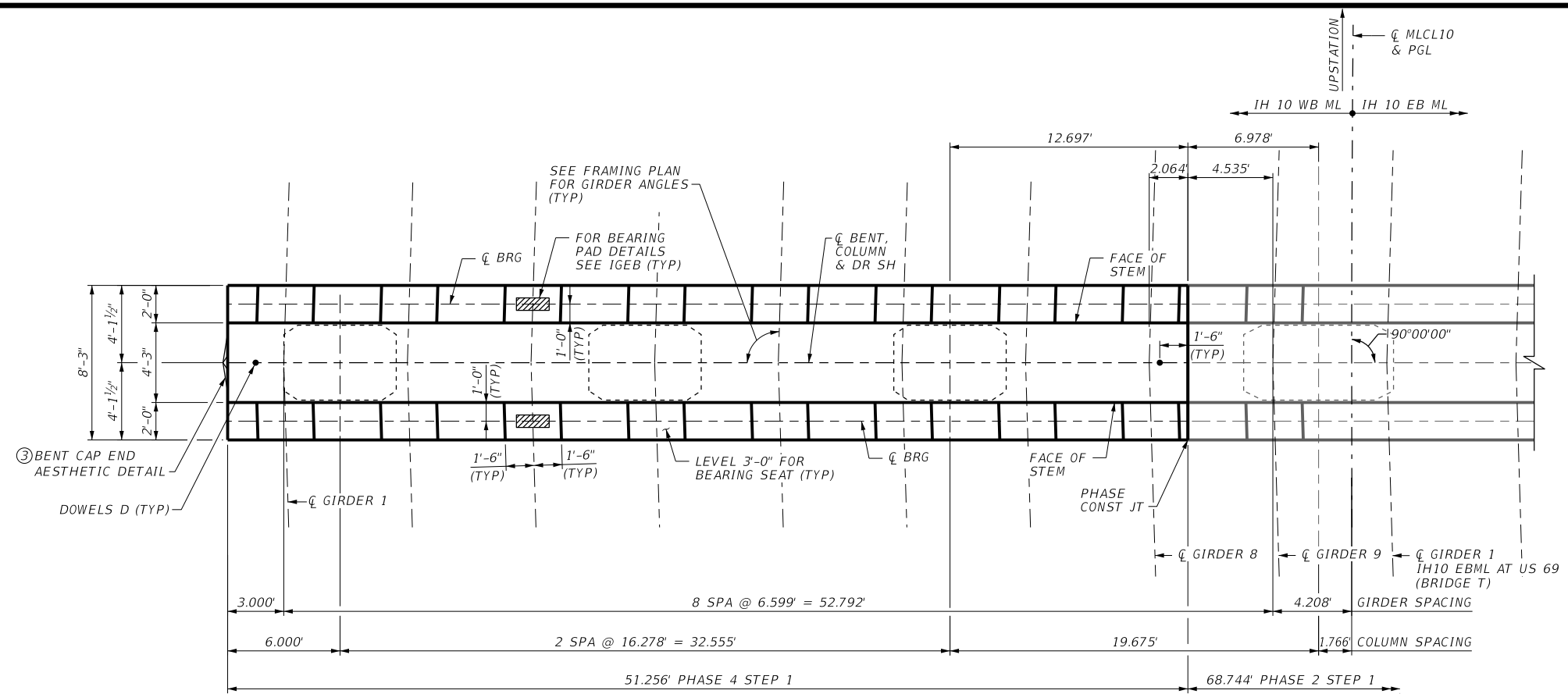


**IH 10 AT US 69
 BENT 14
 IH 10 WB MAINLANE
 AT US 69**

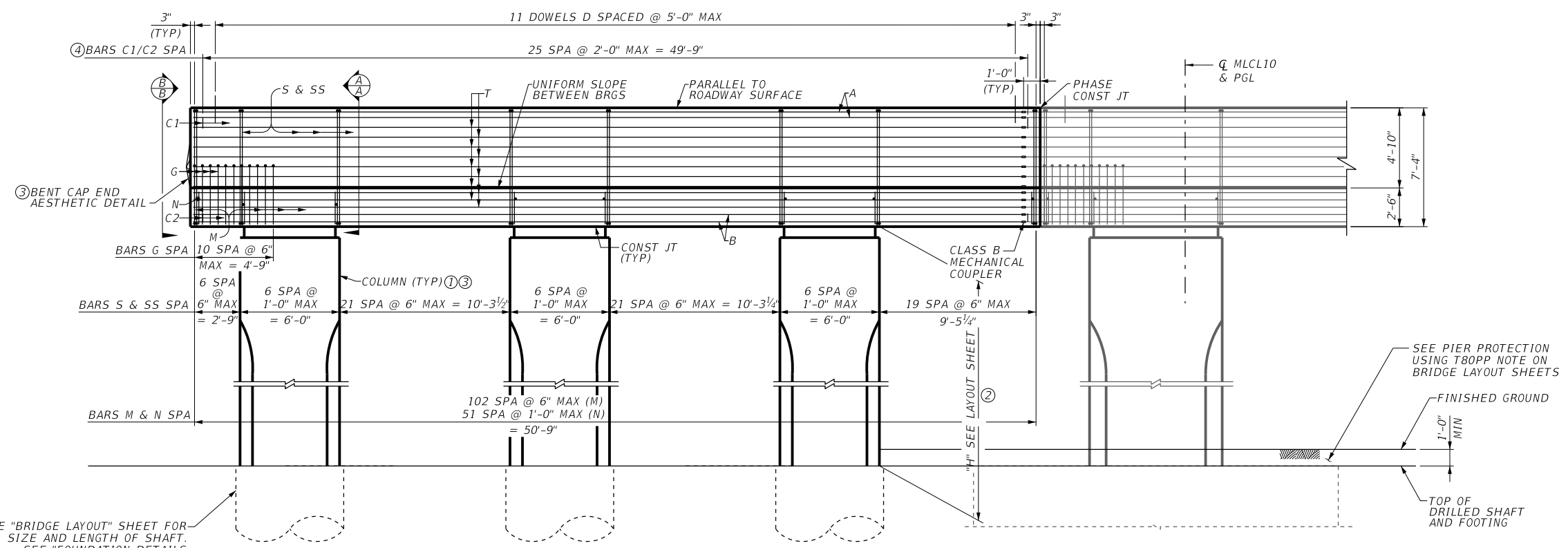
SHEET 2 OF 2

DN:	CBF	CK:	CBF	DW:	MAG	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1444				

DATE: 21-FEB-2024 19:19
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10WB_Mainlane_Bent15.dgn



PLAN
 1/8" = 1'-0"

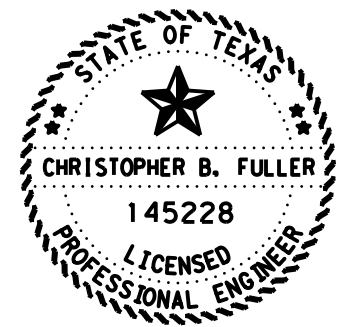


ELEVATION
 1/8" = 1'-0"

SEE "BRIDGE LAYOUT" SHEET FOR SIZE AND LENGTH OF SHAFT.
 SEE "FOUNDATION DETAILS TYPE I" SHEET FOR DETAILS (TYP).

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ PLACE FIRST BAR C1/C2 AT SECOND BAR S FROM END OF CAP AND PHASE JOINTS.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Christopher B. Fuller
 02/21/2024
 HL93 LOADING

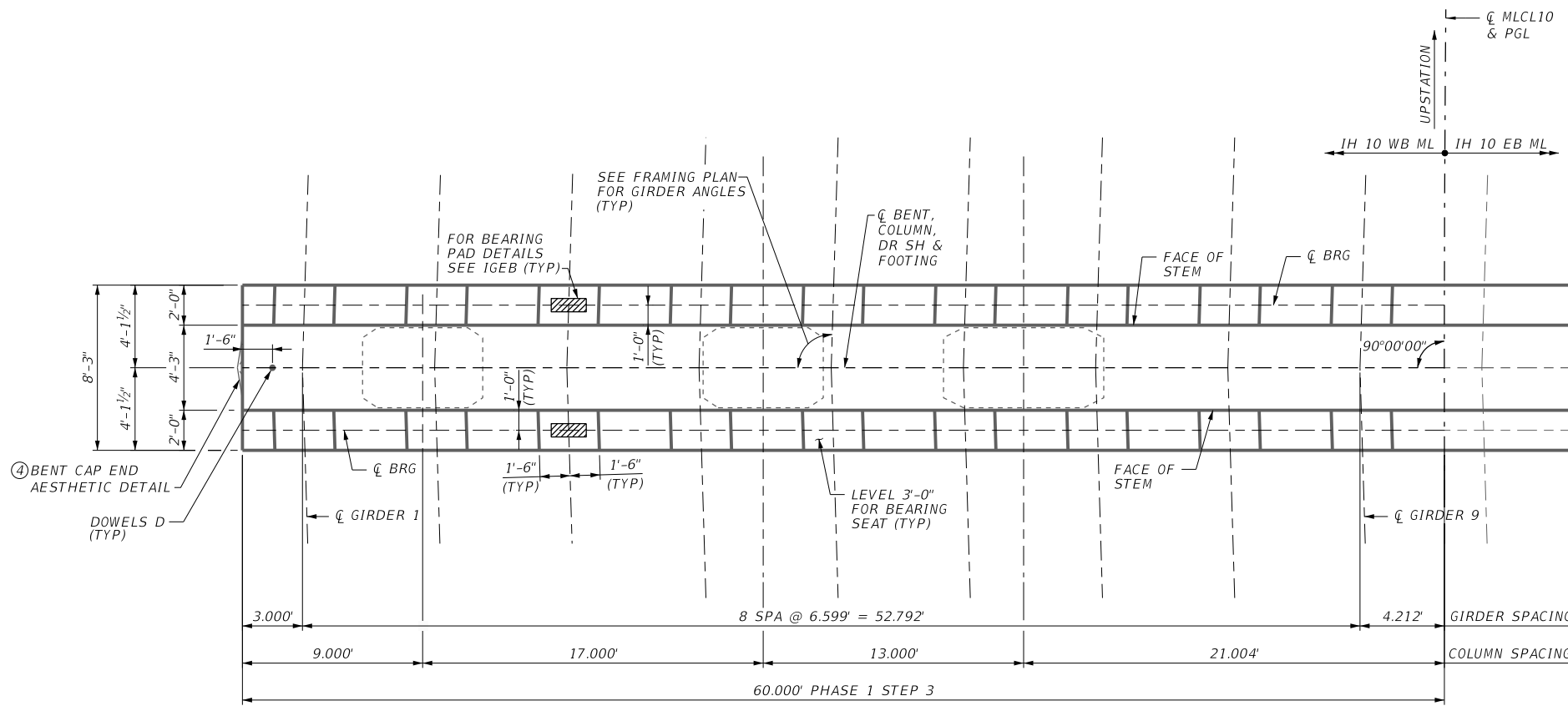


**IH 10 AT US 69
 BENT 15
 IH 10 WB MAINLANE
 AT US 69**

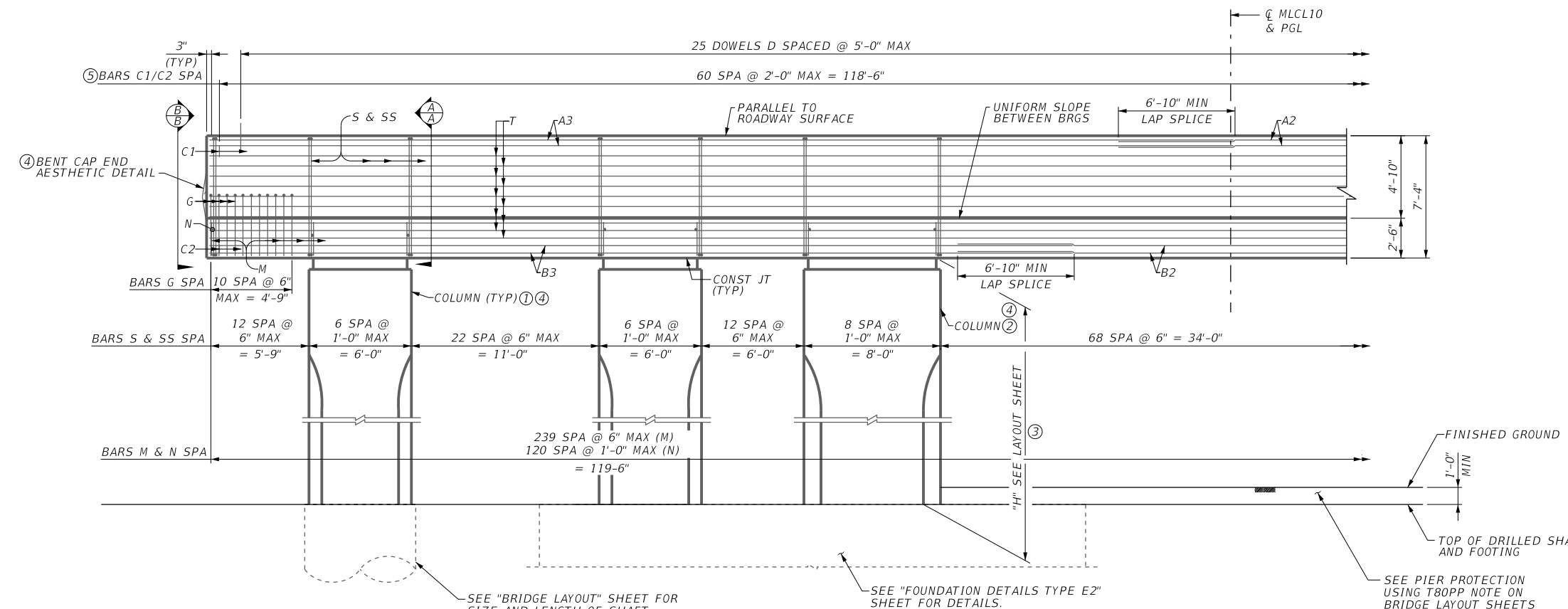
SHEET 1 OF 1

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1445			

DATE: 21-FEB-2024 18:09
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10WB MAINLANE_BENTPE_16.dgn



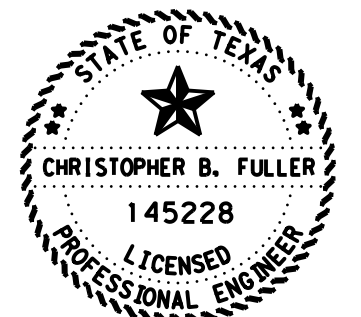
PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② SEE "COLUMN DETAILS TYPE H" SHEET FOR DETAILS NOT SHOWN.
- ③ VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT \bar{C} MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ④ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ⑤ PLACE FIRST BAR C1/C2 AT SECOND BAR S FROM END OF CAP AND PHASE JOINTS.

NOTE:
 THIS SHEET FOR INFORMATION ONLY.
 SEE SHEET "IH 10 EB MAINLANE AT US 69 BENT 16" FOR DETAILS.



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 02/21/2024
 HL93 LOADING

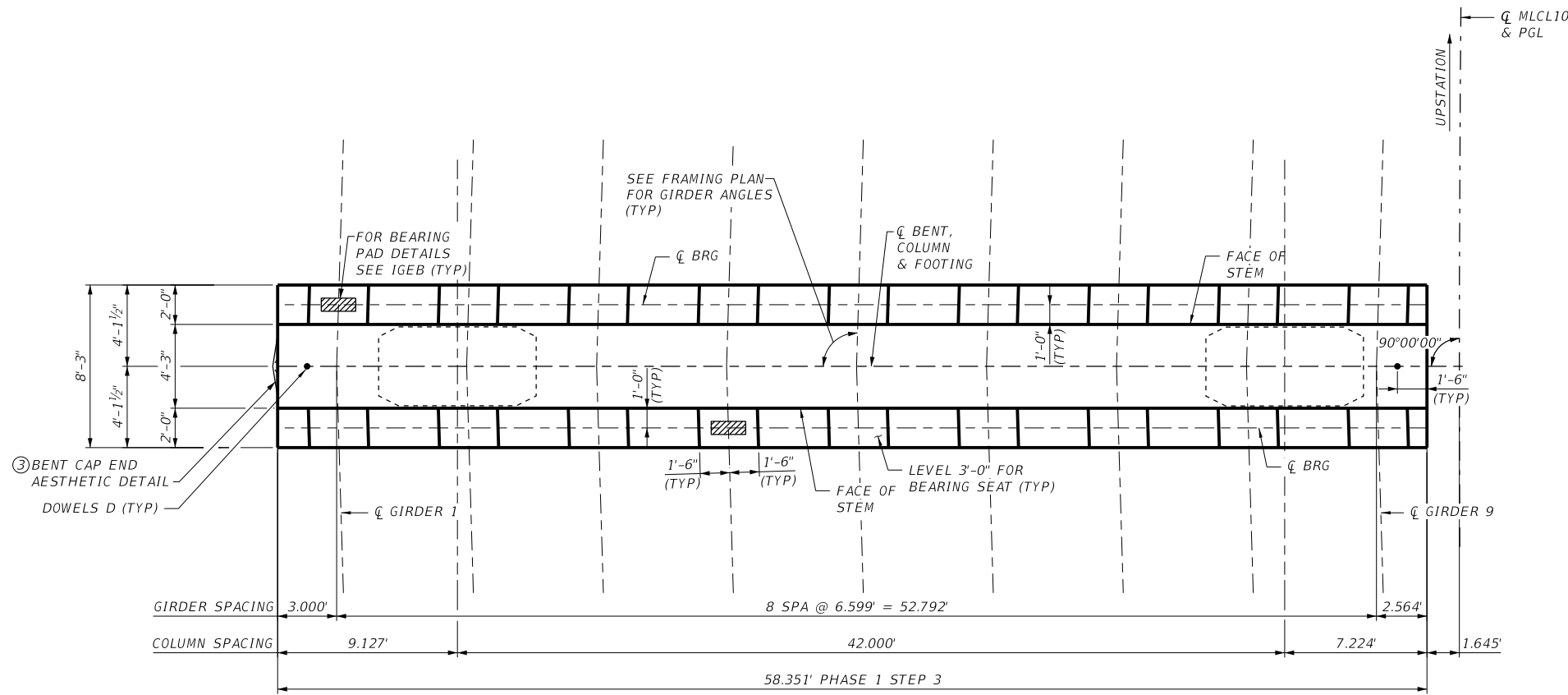


**IH 10 AT US 69
 BENT 16
 IH 10 WB MAINLANE
 AT US 69**

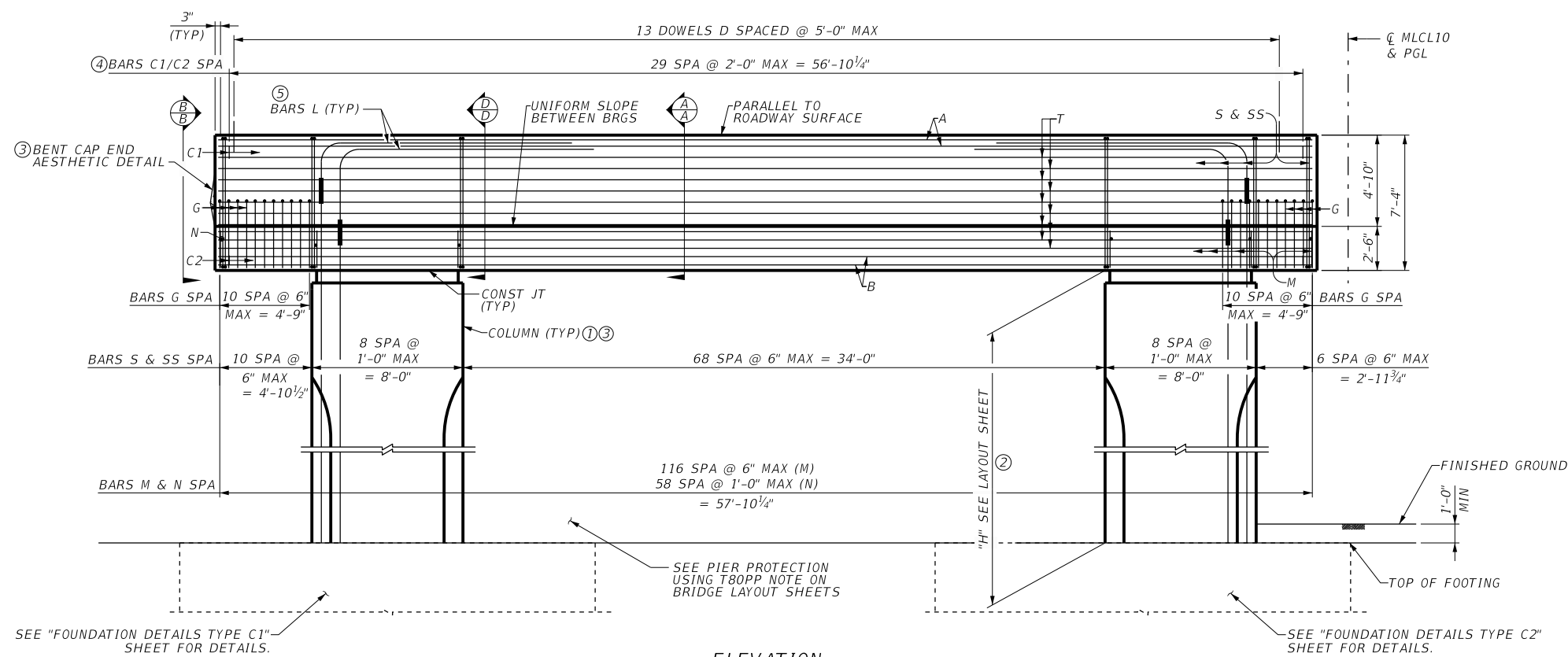
SHEET 1 OF 1

DN:	AYW	CK:	CBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1446			

DATE: 21-FEB-2024 20:29
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10WB_Mainlane_BentPE_17.dgn



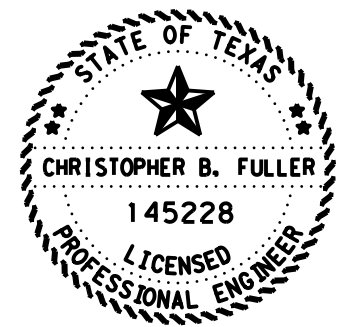
PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE H" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.
- ④ PLACE FIRST BAR C1/C2 AT SECOND BAR S FROM END OF CAP AND PHASE JOINTS.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Christopher B. Fuller
 02/21/2024
 HL93 LOADING



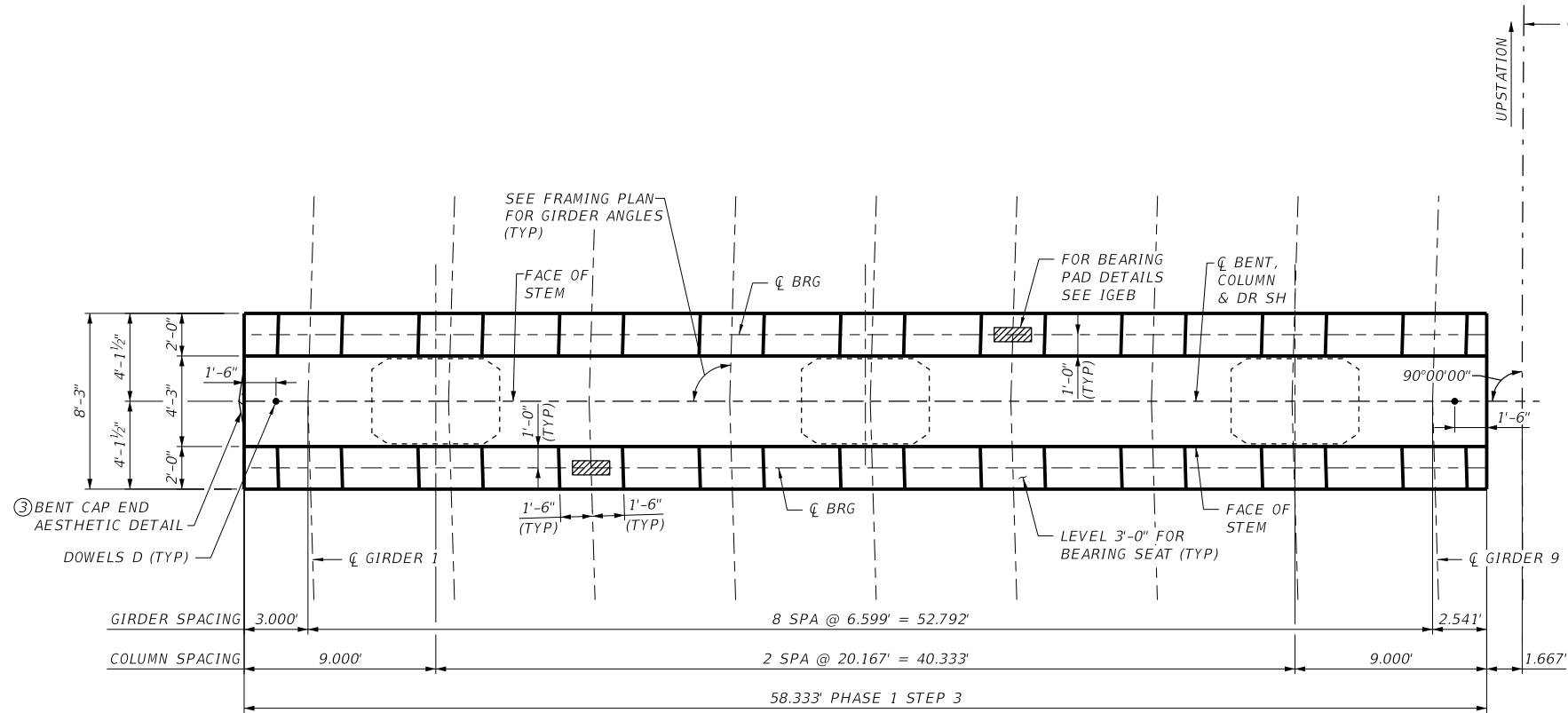
Texas Department of Transportation

**IH 10 AT US 69
 BENT 17
 IH 10 WB MAINLANE
 AT US 69**

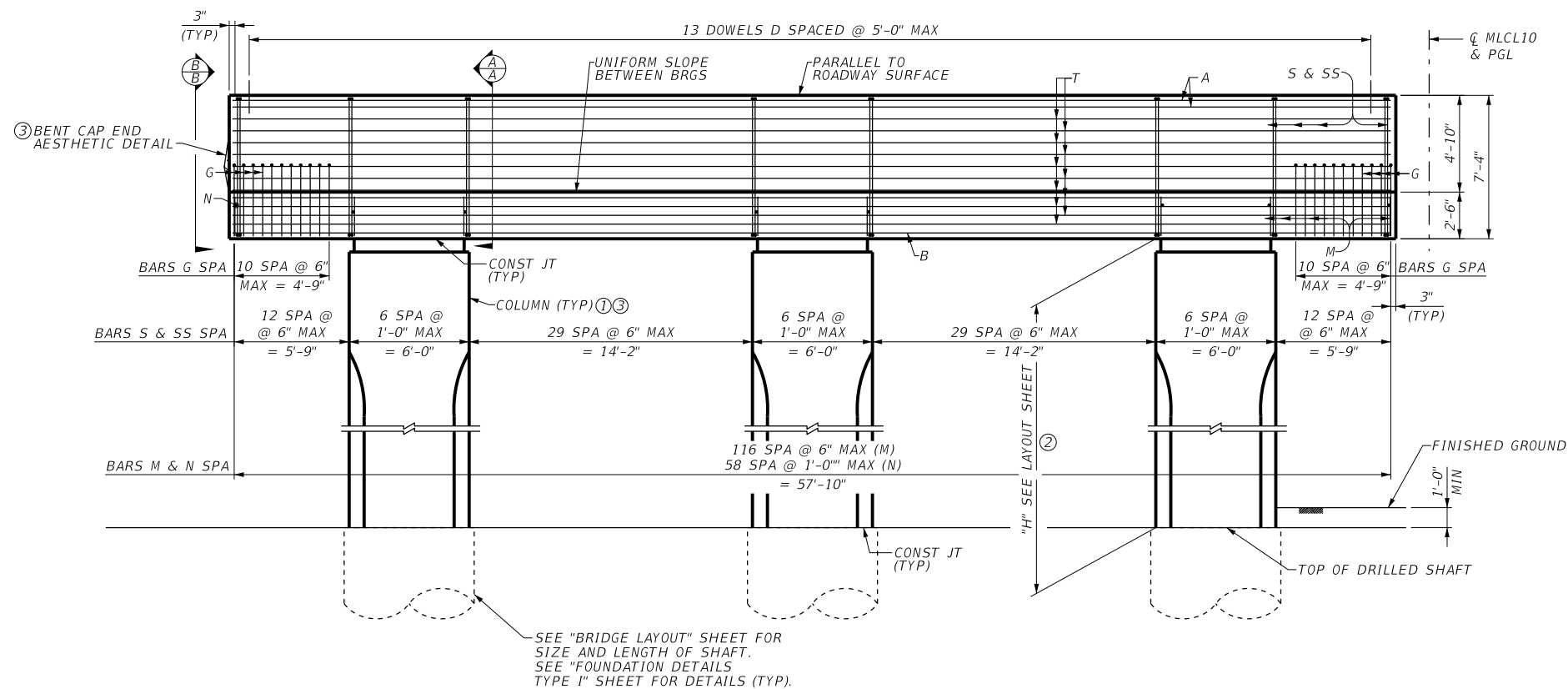
SHEET 1 OF 1

DN:	AYW	CK:	GBF	DW:	MAG	CK:	CSU
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1447			

DATE: 21-FEB-2024 22:24
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Plan_Set\10WB_Mainlane_BentPE_18-19.dgn



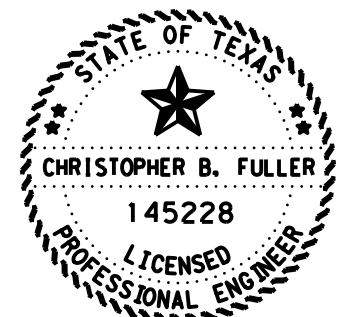
PLAN
 1/8" = 1'-0"



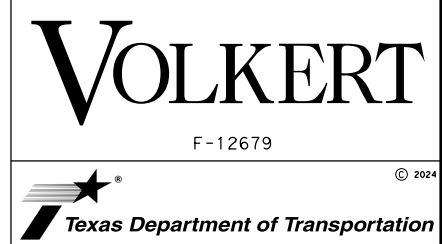
ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLCL10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Christopher B. Fuller
 02/21/2024
 HL93 LOADING

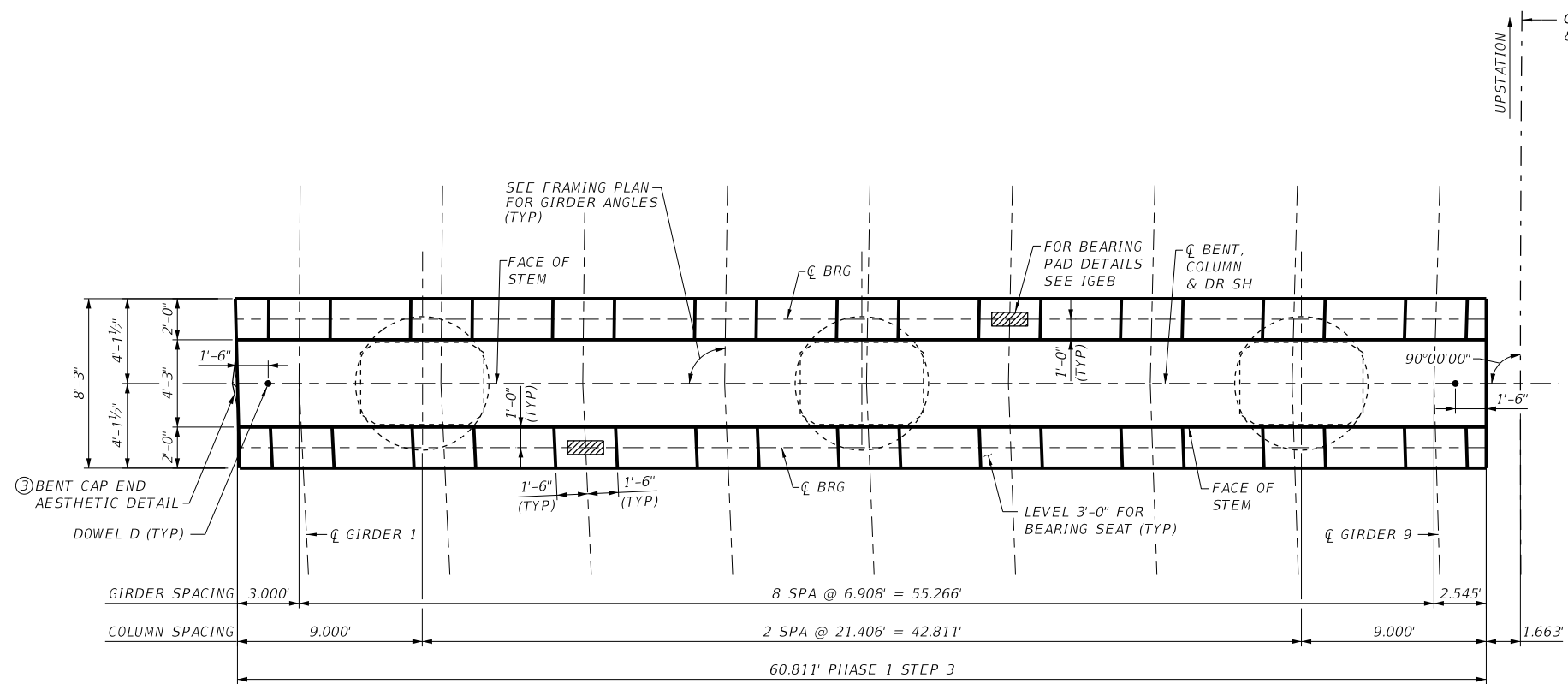


**IH 10 AT US 69
 BENTS 18-19
 IH 10 WB MAINLANE
 AT US 69**

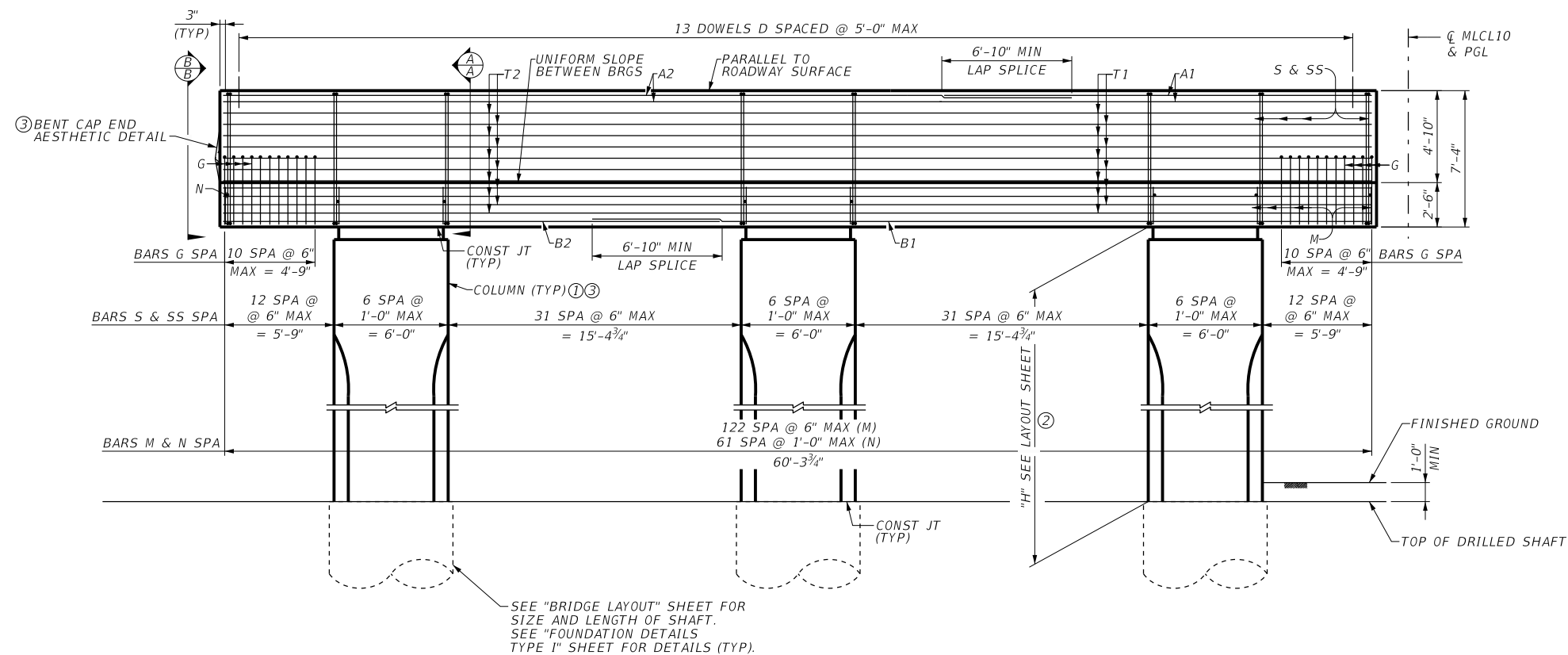
SHEET 1 OF 1

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1448				

DATE: 8-MAR-2024 19:19
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10WB_Mainlane_Bent20.dgn



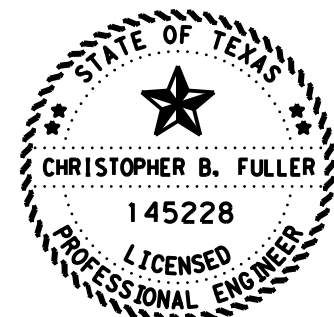
PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE "COLUMN DETAILS TYPE G" SHEET FOR DETAILS NOT SHOWN.
- ② VALUE OF "H" SHOWN ON LAYOUT IS MEASURED AT CL MLC10. ADJUST HEIGHT OF COLUMNS AS REQUIRED WHILE MAINTAINING PROJECT GEOMETRIC REQUIREMENTS.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEET.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.



Christopher B. Fuller
 03/08/2024
 HL93 LOADING

VOLKERT
 F-12679

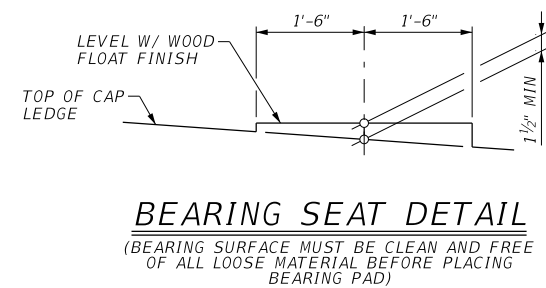
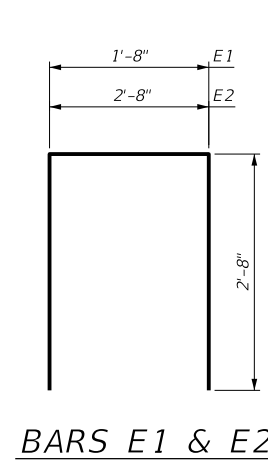
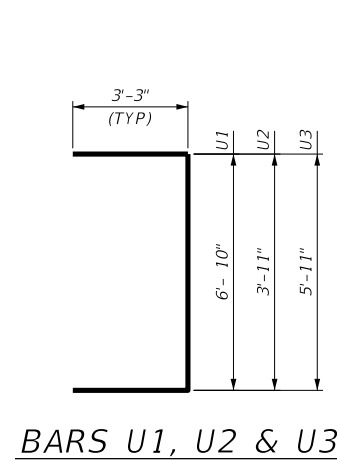
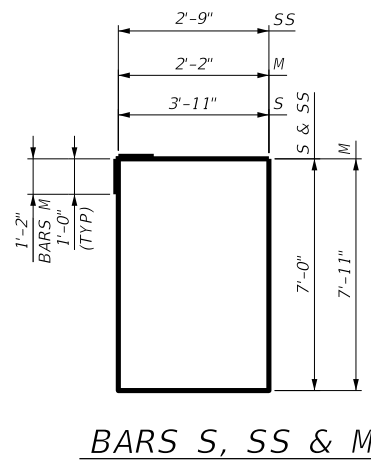
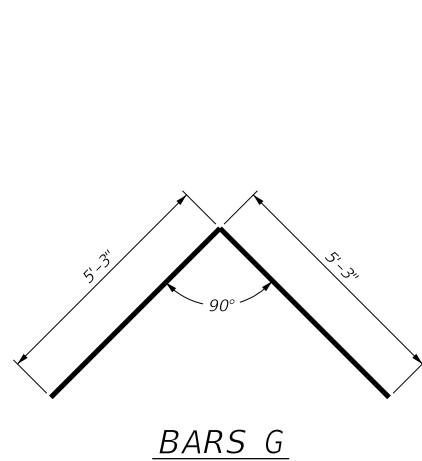
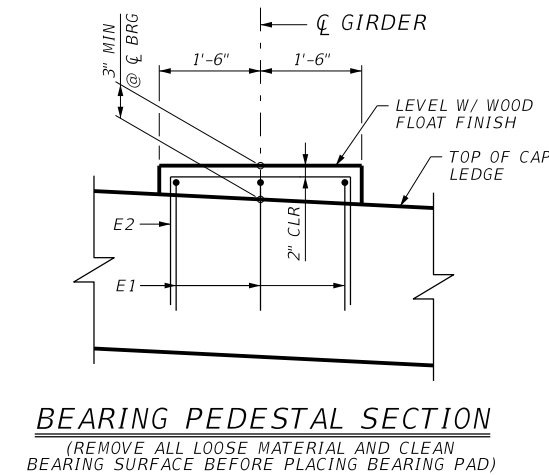
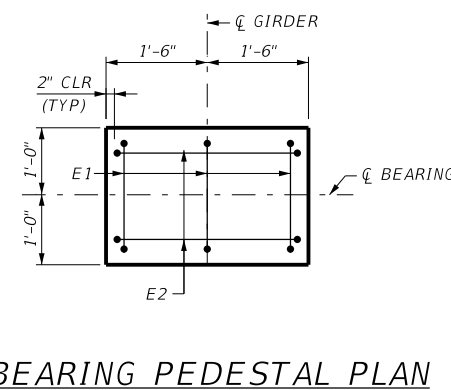
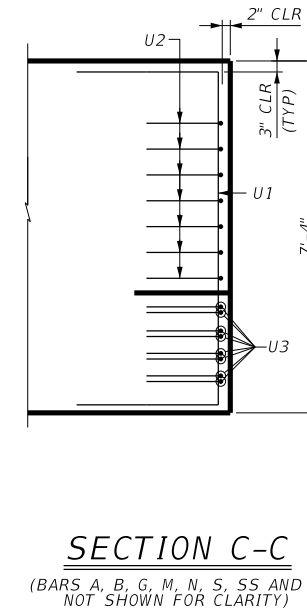
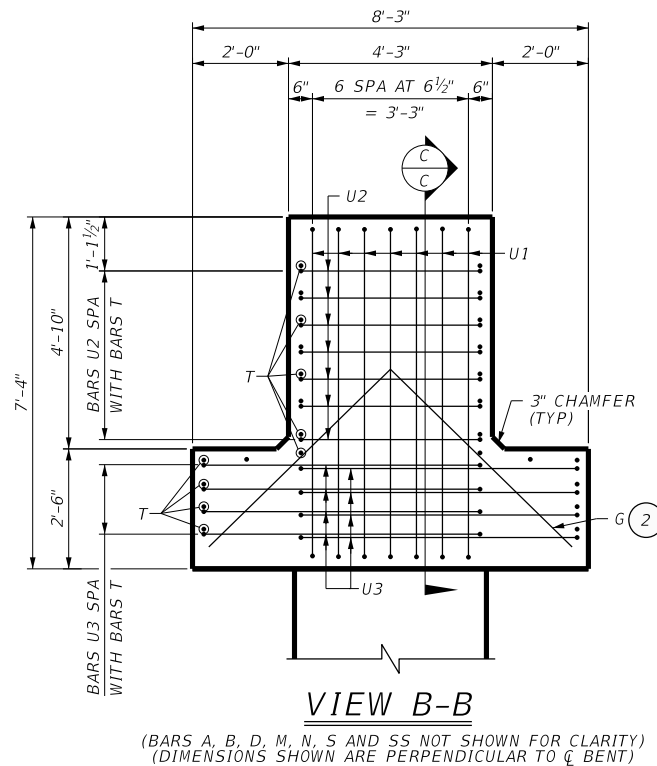
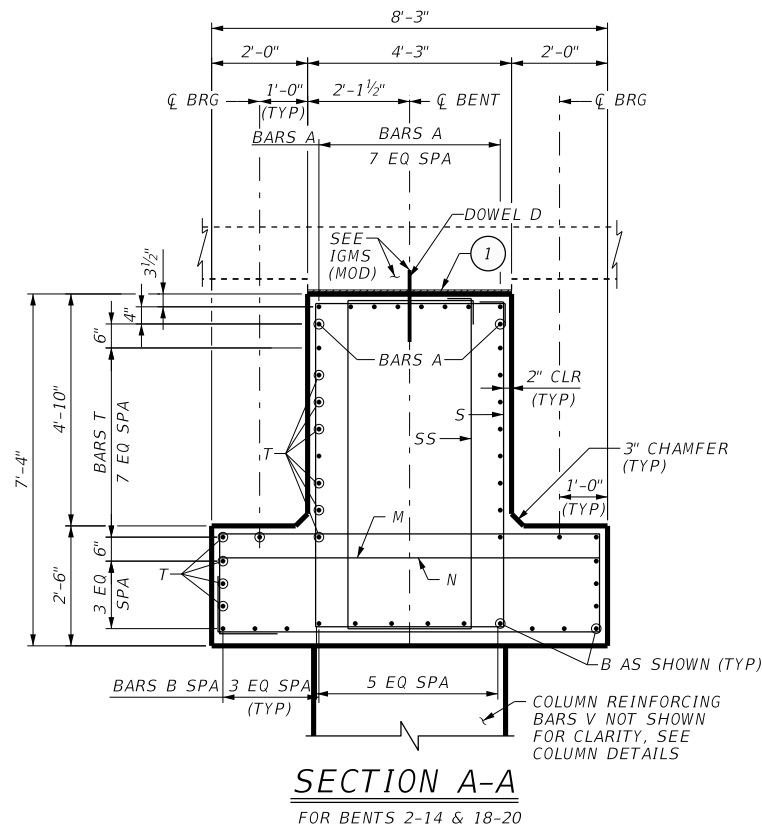


**IH 10 AT US 69
 BENT 20
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1448A				

DATE: 8-MAR-2024 19:24
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bent\10WB MAINLANE_BENT_DET_01



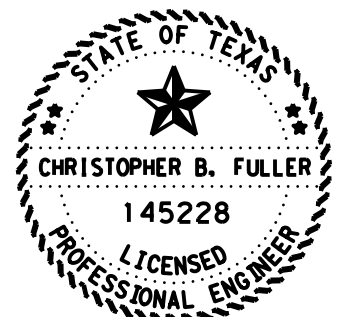
GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE "COLUMN DETAILS TYPE G" SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE "FOUNDATION DETAILS TYPE 1 78" SHAFT" SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 E1 BARS TO BE ALIGNED PARALLEL TO THE CENTERLINE OF GIRDER. E2 BARS TO BE ALIGNED PERPENDICULAR TO THE CENTERLINE OF THE GIRDER.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

- ① SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.
- ② BARS G FIT INSIDE BARS T.

CONTRACTOR NOTE:
 INVERTED-T EE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



Christopher B. Fuller
 03/08/2024
 HL93 LOADING

VOLKERT
 F-12679

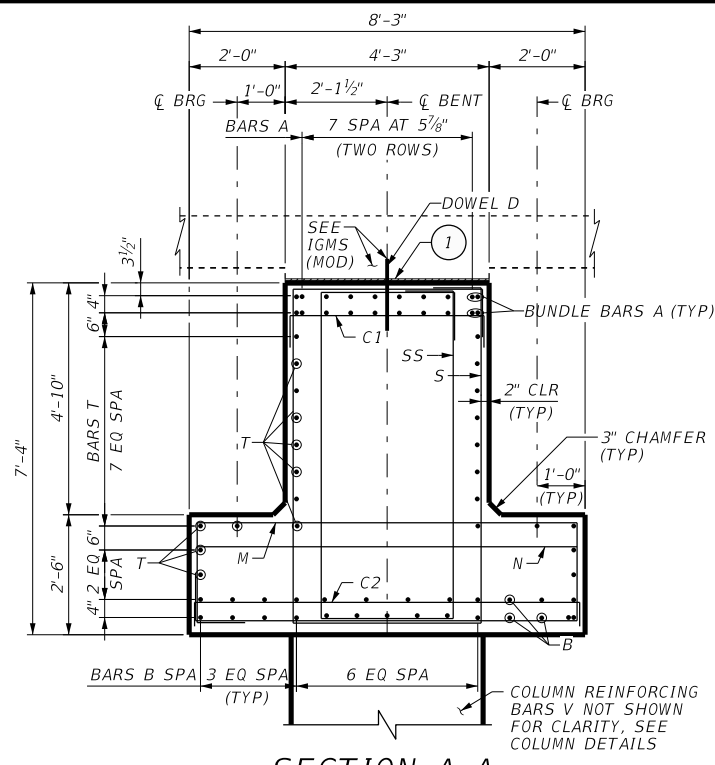


**IH 10 AT US 69
 BENT DETAILS
 (2-14 & 18-20)
 IH 10 WB MAINLANE
 AT US 69**

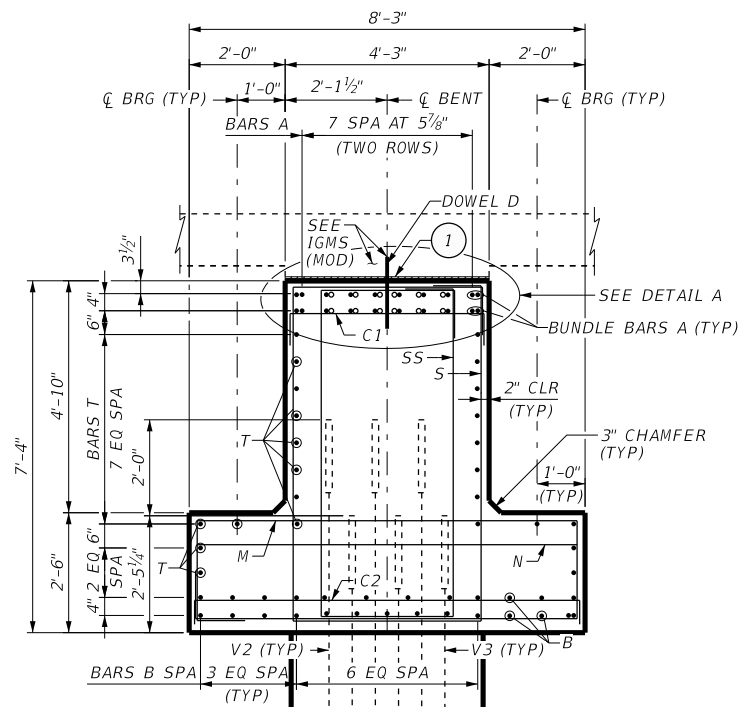
SHEET 1 OF 6

DN: CBF	CK: FB	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1449	

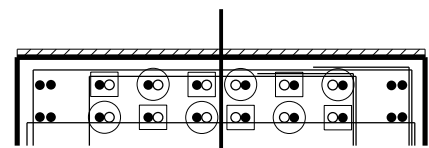
DATE: 8-MAR-2024 19:28
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bent\1450_10WB_MAINLANE_BENT_DET_02



SECTION A-A
FOR BENTS 15 & 17

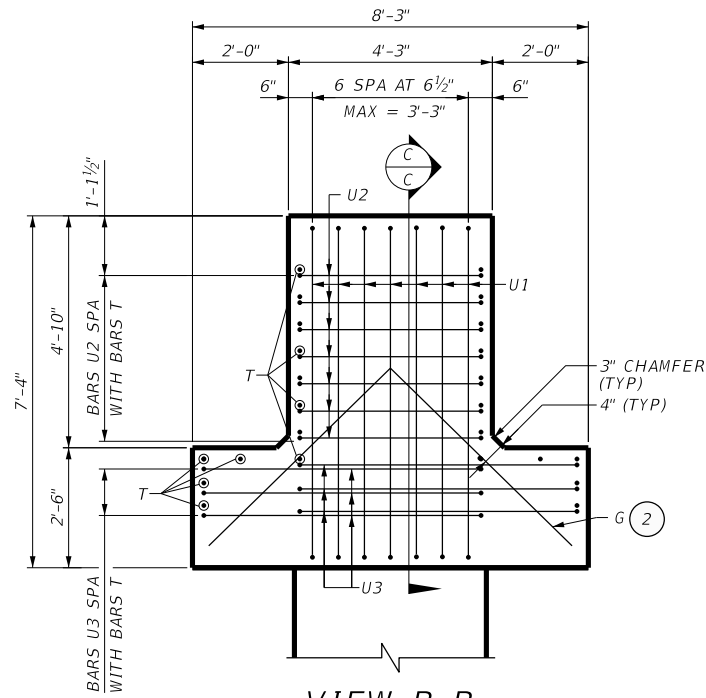


SECTION D-D
FOR BENT 17



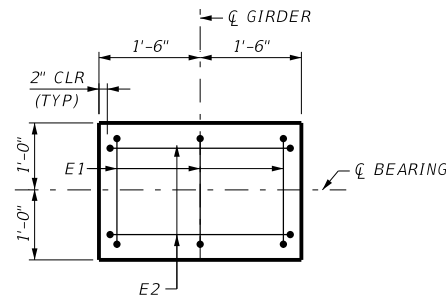
DETAIL A
(ALL "LV#/" BARS ARE LAPPED WITH BARS A)

- LV21, LV22
- LV31, LV32

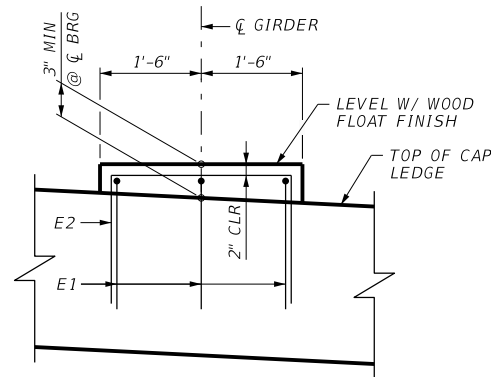


VIEW B-B

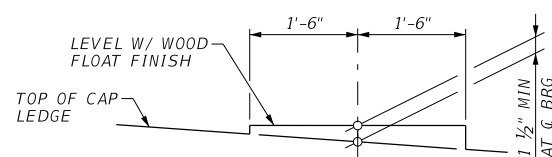
(BARS A, B, D, M, N, S AND SS NOT SHOWN FOR CLARITY)
 (DIMENSIONS SHOWN ARE PERPENDICULAR TO CL BENT)



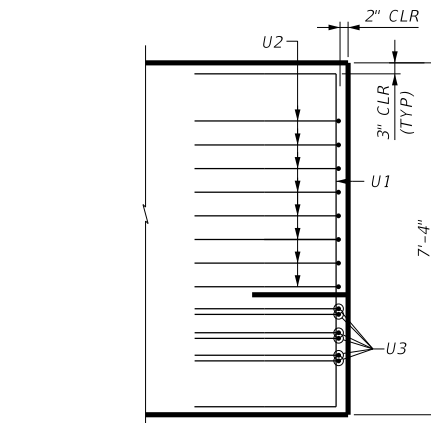
BEARING PEDESTAL PLAN



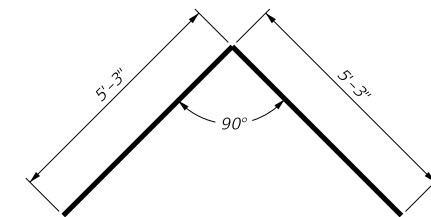
BEARING PEDESTAL SECTION
(REMOVE ALL LOOSE MATERIAL AND CLEAN BEARING SURFACE BEFORE PLACING BEARING PAD)



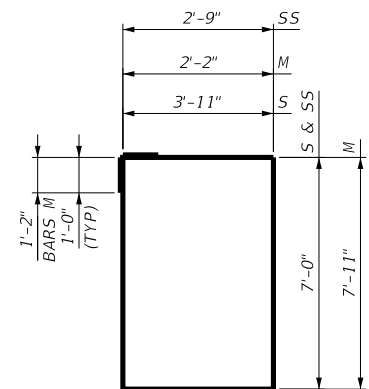
BEARING SEAT DETAIL
(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



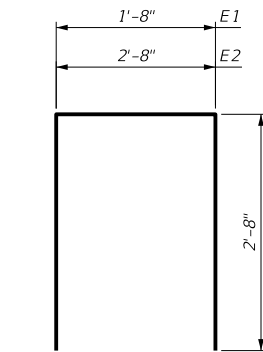
SECTION C-C
(BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



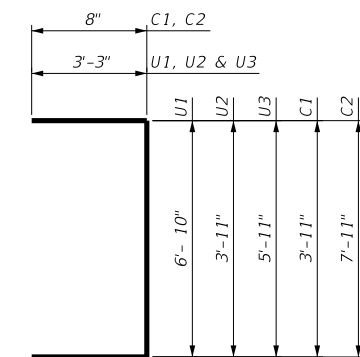
BARS G



BARS S, SS & M

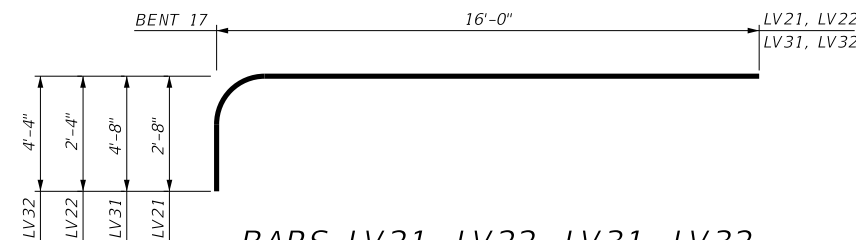


BARS E1 & E2



BARS C1, C2, U1, U2 & U3

REPRESENTS
 COLUMN V BAR
 BAR A ROW #



BARS LV21, LV22, LV31, LV32

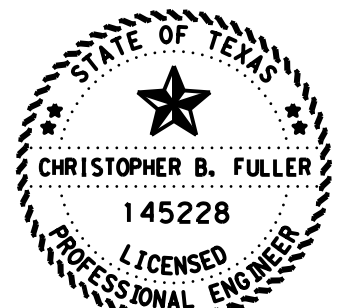
GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE "COLUMN DETAILS TYPE G" AND "COLUMN DETAILS TYPE H" SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE "FOUNDATION DETAILS TYPE C1", "FOUNDATION DETAILS TYPE C2" AND "FOUNDATION DETAILS TYPE 1 78" SHAFT" SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 E1 BARS TO BE ALIGNED PARALLEL TO THE CENTERLINE OF GIRDER. E2 BARS TO BE ALIGNED PERPENDICULAR TO THE CENTERLINE OF THE GIRDER.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

- ① SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.
- ② BARS G FIT INSIDE BARS T.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



Christopher B. Fuller
 03/08/2024
 HL93 LOADING

VOLKERT
 F-12679

Texas Department of Transportation

**IH 10 AT US 69
 BENT DETAILS
 (15 & 17)
 IH 10 WB MAINLANE
 AT US 69**

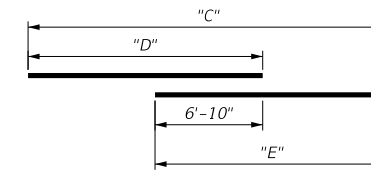
SHEET 2 OF 6

DN:	CBF	CK:	FB	DW:	RF	CK:	FB	
CONT	SECT	JOB	HIGHWAY					
0028	13	135	IH 10					
DIST	COUNTY		SHEET NO.					
BMT	JEFFERSON		1450					

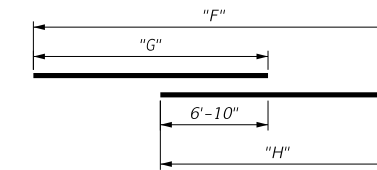
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 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg T1 (IH 10 WB MainlanE_BENT_DET_03

NOTES:
 QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.
 ① BARS T INCLUDE 1'-10" LAP SPLICE.

BENT ID	BAR SPLICE LENGTHS											
	BARS A1-A2			BARS A2-A3			BARS B1-B2			BARS B2-B3		
	C	D	E	C	D	E	F	G	H	F	G	H
2 & 3 - PHASE 4 STEP 2				73' - 7"	58' - 11"	21' - 8"				73' - 7"	38' - 4"	42' - 3"
4 - PHASE 4 STEP 2				74' - 6"	59' - 6"	22' - 0"				74' - 6"	38' - 7"	42' - 11"
5 - PHASE 4 STEP 2				75' - 6"	40' - 11"	41' - 7"				75' - 6"	57' - 11"	24' - 6"
6 - PHASE 4 STEP 2				75' - 7"	31' - 8"	50' - 10"				75' - 7"	47' - 3"	35' - 3"
7 - PHASE 4 STEP 2				61' - 6"	41' - 8"	26' - 10"				61' - 6"	24' - 5"	44' - 0"
8 - PHASE 4 STEP 2				61' - 0"	41' - 8"	26' - 4"				61' - 0"	24' - 5"	43' - 6"
9 - PHASE 4 STEP 2				60' - 10"	41' - 5"	26' - 5"				60' - 10"	24' - 4"	43' - 8"
12 - PHASE 1 STEP 3	76' - 10"	40' - 7"	44' - 3"				76' - 10"	58' - 8"	26' - 2"			
13 - PHASE 1 STEP 3	109' - 9"	58' - 7"	58' - 3"				79' - 6"	37' - 6"	49' - 0"	79' - 6"	49' - 0"	37' - 2"
14 - PHASE 1 STEP 3	88' - 10"	52' - 11"	42' - 11"	72' - 5"	42' - 11"	36' - 4"	72' - 6"	36' - 5"	43' - 0"	88' - 7"	43' - 0"	52' - 10"
20 - PHASE 1 STEP 3	60' - 4"	44' - 5"	23' - 0"				60' - 8"	26' - 4"	41' - 1"			



BARS A1, A2 & A2, A3



BARS B1, B2 & B2, B3

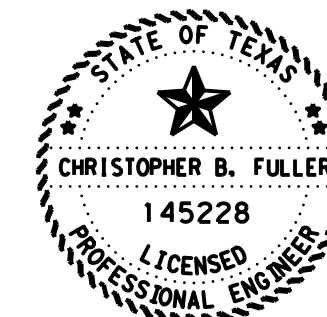
PHASE 1 STEP 3

TABLE OF ESTIMATED QUANTITIES BENT 17 WBML (H=24') (PHASE 1 STEP 3)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	20	#11	58' - 0"	6,163
B	26	#11	58' - 0"	8,012
C1	30	#4	5' - 3"	105
C2	30	#4	9' - 3"	185
D	13	#11	1' - 6"	104
E1	27	#5	7' - 0"	197
E2	18	#5	8' - 0"	150
G	22	#7	10' - 6"	472
LV21	6	#11	18' - 8"	595
LV22	6	#11	18' - 4"	584
LV31	6	#11	20' - 8"	659
LV32	6	#11	20' - 4"	648
M	117	#7	22' - 6"	5,381
N	59	#6	7' - 11"	702
S	101	#6	23' - 10"	3,616
SS	101	#6	21' - 6"	3,262
T1	26	#5	58' - 0"	1,573
U1	14	#6	13' - 4"	280
U2	14	#6	10' - 5"	219
U3	12	#6	12' - 5"	224
REINFORCING STEEL			LB	33,282
CLASS "F" CONCRETE (CAP)			CY	89.5

TABLE OF ESTIMATED QUANTITIES BENT 18 WBML (H=18') (PHASE 1 STEP 3)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	10	#11	58' - 0"	3,082
B	12	#11	58' - 0"	3,698
D	13	#11	1' - 6"	104
E1	27	#5	7' - 0"	197
E2	18	#5	8' - 0"	150
G	22	#7	10' - 6"	472
M	117	#7	22' - 6"	5,381
N	59	#6	7' - 11"	702
S	101	#6	23' - 10"	3,616
SS	101	#6	21' - 6"	3,262
T1	26	#5	58' - 0"	1,573
U1	14	#6	13' - 4"	280
U2	14	#6	10' - 5"	219
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	23,034
CLASS "F" CONCRETE (CAP)			CY	89.5

TABLE OF ESTIMATED QUANTITIES BENT 19 WBML (H=13') (PHASE 1 STEP 3)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	10	#11	58' - 0"	3,082
B	12	#11	58' - 0"	3,698
D	13	#11	1' - 6"	104
E1	27	#5	7' - 0"	197
E2	18	#5	8' - 0"	150
G	22	#7	10' - 6"	472
M	117	#7	22' - 6"	5,381
N	59	#6	7' - 11"	702
S	101	#6	23' - 10"	3,616
SS	101	#6	21' - 6"	3,262
T1	26	#5	58' - 0"	1,573
U1	14	#6	13' - 4"	280
U2	14	#6	10' - 5"	219
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	23,034
CLASS "F" CONCRETE (CAP)			CY	89.5

TABLE OF ESTIMATED QUANTITIES BENT 20 WBML (H=8') (PHASE 1 STEP 3)				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	10	#11	23' - 0"	1,222
A2	10	#11	44' - 5"	2,360
B1	12	#11	26' - 4"	1,679
B2	12	#11	41' - 1"	2,619
D	13	#11	1' - 6"	104
E1	27	#5	7' - 0"	197
E2	18	#5	8' - 0"	150
G	22	#7	10' - 6"	472
M	122	#7	22' - 6"	5,611
N	62	#6	7' - 11"	737
S	105	#6	23' - 10"	3,759
SS	105	#6	21' - 6"	3,391
① T1	26	#5	62' - 4"	1,690
U1	14	#6	13' - 4"	280
U2	14	#6	10' - 5"	219
U3	16	#6	12' - 5"	298
REINFORCING STEEL			LB	24,788
CLASS "F" CONCRETE (CAP)			CY	89.5



03/08/2024
 HL93 LOADING



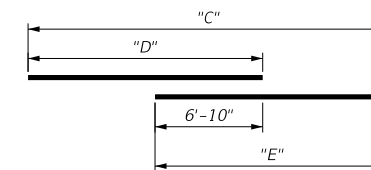
IH 10 AT US 69
 BENT DETAILS
 IH 10 WB MAINLANE
 AT US 69

SHEET 3 OF 6					
DN:	CBF	CK:	FB	DW:	RF
CONT	13	SECT	135	JOB	135
0028				HIGHWAY	IH 10
DIST	COUNTY			SHEET NO.	
BMT	JEFFERSON			1451	

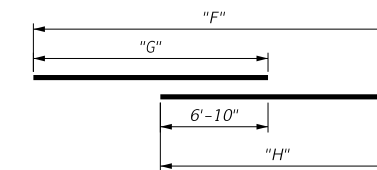
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NOTES:
 QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.
 ① BARS T INCLUDE 1'-10" LAP SPLICE.

BENT ID	BAR SPLICE LENGTHS											
	BARS A1-A2			BARS A2-A3			BARS B1-B2			BARS B2-B3		
	C	D	E	C	D	E	F	G	H	F	G	H
2 & 3 - PHASE 4 STEP 2				73' - 7"	58' - 11"	21' - 8"				73' - 7"	38' - 4"	42' - 3"
4 - PHASE 4 STEP 2				74' - 6"	59' - 6"	22' - 0"				74' - 6"	38' - 7"	42' - 11"
5 - PHASE 4 STEP 2				75' - 6"	40' - 11"	41' - 7"				75' - 6"	57' - 11"	24' - 6"
6 - PHASE 4 STEP 2				75' - 7"	31' - 8"	50' - 10"				75' - 7"	47' - 3"	35' - 3"
7 - PHASE 4 STEP 2				61' - 6"	41' - 8"	26' - 10"				61' - 6"	24' - 5"	44' - 0"
8 - PHASE 4 STEP 2				61' - 0"	41' - 8"	26' - 4"				61' - 0"	24' - 5"	43' - 6"
9 - PHASE 4 STEP 2				60' - 10"	41' - 5"	26' - 5"				60' - 10"	24' - 4"	43' - 8"
12 - PHASE 1 STEP 3	76' - 10"	40' - 7"	44' - 3"				76' - 10"	58' - 8"	26' - 2"			
13 - PHASE 1 STEP 3	109' - 9"	58' - 7"	58' - 3"				79' - 6"	37' - 6"	49' - 0"	79' - 6"	49' - 0"	37' - 2"
14 - PHASE 1 STEP 3	88' - 10"	52' - 11"	42' - 11"	72' - 5"	42' - 11"	36' - 4"	72' - 6"	36' - 5"	43' - 0"	88' - 7"	43' - 0"	52' - 10"
20 - PHASE 1 STEP 3	60' - 4"	44' - 5"	23' - 0"				60' - 8"	26' - 4"	41' - 1"			



BARS A1, A2 & A2, A3



BARS B1, B2 & B2, B3

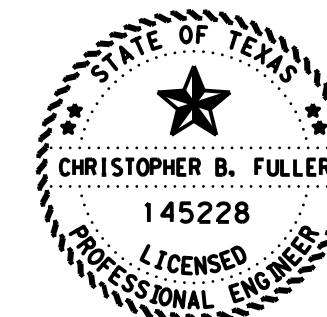
PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	20	#11	58' - 0"	6,163	
B	26	#11	58' - 0"	8,012	
C1	30	#4	5' - 3"	105	
C2	30	#4	9' - 3"	185	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	22	#7	10' - 6"	472	
LV21	6	#11	18' - 8"	595	
LV22	6	#11	18' - 4"	584	
LV31	6	#11	20' - 8"	659	
LV32	6	#11	20' - 4"	648	
M	117	#7	22' - 6"	5,381	
N	59	#6	7' - 11"	702	
S	101	#6	23' - 10"	3,616	
SS	101	#6	21' - 6"	3,262	
T1	26	#5	58' - 0"	1,573	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	12	#6	12' - 5"	224	
REINFORCING STEEL				LB	33,282
CLASS "F" CONCRETE (CAP)				CY	89.5

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	10	#11	58' - 0"	3,082	
B	12	#11	58' - 0"	3,698	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	22	#7	10' - 6"	472	
M	117	#7	22' - 6"	5,381	
N	59	#6	7' - 11"	702	
S	101	#6	23' - 10"	3,616	
SS	101	#6	21' - 6"	3,262	
T1	26	#5	58' - 0"	1,573	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	23,034
CLASS "F" CONCRETE (CAP)				CY	89.5

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	10	#11	58' - 0"	3,082	
B	12	#11	58' - 0"	3,698	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	22	#7	10' - 6"	472	
M	117	#7	22' - 6"	5,381	
N	59	#6	7' - 11"	702	
S	101	#6	23' - 10"	3,616	
SS	101	#6	21' - 6"	3,262	
T1	26	#5	58' - 0"	1,573	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	23,034
CLASS "F" CONCRETE (CAP)				CY	89.5

BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	23' - 0"	1,222	
A2	10	#11	44' - 5"	2,360	
B1	12	#11	26' - 4"	1,679	
B2	12	#11	41' - 1"	2,619	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	22	#7	10' - 6"	472	
M	122	#7	22' - 6"	5,611	
N	62	#6	7' - 11"	737	
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① T1	26	#5	62' - 4"	1,690	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	24,788
CLASS "F" CONCRETE (CAP)				CY	89.5



Christopher B. Fuller
 03/08/2024
 HL93 LOADING



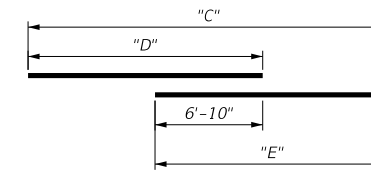
IH 10 AT US 69
 BENT DETAILS
 IH 10 WB MAINLANE
 AT US 69

SHEET 3 OF 6					
DN:	CBF	CK:	FB	DW:	RF
CONT	13	SECT	135	JOB	135
0028				HIGHWAY	IH 10
DIST	COUNTY			SHEET NO.	
BMT	JEFFERSON			1451	

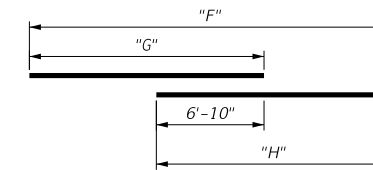
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NOTES:
 QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.
 ① BARS T INCLUDE 1'-10" LAP SPLICE.

BENT ID	BAR SPLICE LENGTHS											
	BARS A1-A2			BARS A2-A3			BARS B1-B2			BARS B2-B3		
	C	D	E	C	D	E	F	G	H	F	G	H
2 & 3 - PHASE 4 STEP 2				73' - 7"	58' - 11"	21' - 8"				73' - 7"	38' - 4"	42' - 3"
4 - PHASE 4 STEP 2				74' - 6"	59' - 6"	22' - 0"				74' - 6"	38' - 7"	42' - 11"
5 - PHASE 4 STEP 2				75' - 6"	40' - 11"	41' - 7"				75' - 6"	57' - 11"	24' - 6"
6 - PHASE 4 STEP 2				75' - 7"	31' - 8"	50' - 10"				75' - 7"	47' - 3"	35' - 3"
7 - PHASE 4 STEP 2				61' - 6"	41' - 8"	26' - 10"				61' - 6"	24' - 5"	44' - 0"
8 - PHASE 4 STEP 2				61' - 0"	41' - 8"	26' - 4"				61' - 0"	24' - 5"	43' - 6"
9 - PHASE 4 STEP 2				60' - 10"	41' - 5"	26' - 5"				60' - 10"	24' - 4"	43' - 8"
12 - PHASE 1 STEP 3	76' - 10"	40' - 7"	44' - 3"				76' - 10"	58' - 8"	26' - 2"			
13 - PHASE 1 STEP 3	109' - 9"	58' - 7"	58' - 3"				79' - 6"	37' - 6"	49' - 0"	79' - 6"	49' - 0"	37' - 2"
14 - PHASE 1 STEP 3	88' - 10"	52' - 11"	42' - 11"	72' - 5"	42' - 11"	36' - 4"	72' - 6"	36' - 5"	43' - 0"	88' - 7"	43' - 0"	52' - 10"
20 - PHASE 1 STEP 3	60' - 4"	44' - 5"	23' - 0"				60' - 8"	26' - 4"	41' - 1"			



BARS A1, A2 & A2, A3



BARS B1, B2 & B2, B3

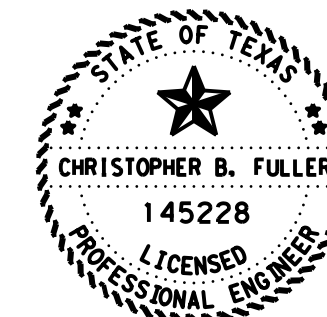
PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	20	#11	58' - 0"	6,163	
B	26	#11	58' - 0"	8,012	
C1	30	#4	5' - 3"	105	
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D	13	#11	1' - 6"	104	
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E2	18	#5	8' - 0"	150	
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SS	101	#6	21' - 6"	3,262	
T1	26	#5	58' - 0"	1,573	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	12	#6	12' - 5"	224	
REINFORCING STEEL				LB	33,282
CLASS "F" CONCRETE (CAP)				CY	89.5

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	10	#11	58' - 0"	3,082	
B	12	#11	58' - 0"	3,698	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	22	#7	10' - 6"	472	
M	117	#7	22' - 6"	5,381	
N	59	#6	7' - 11"	702	
S	101	#6	23' - 10"	3,616	
SS	101	#6	21' - 6"	3,262	
T1	26	#5	58' - 0"	1,573	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	23,034
CLASS "F" CONCRETE (CAP)				CY	89.5

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	10	#11	58' - 0"	3,082	
B	12	#11	58' - 0"	3,698	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	22	#7	10' - 6"	472	
M	117	#7	22' - 6"	5,381	
N	59	#6	7' - 11"	702	
S	101	#6	23' - 10"	3,616	
SS	101	#6	21' - 6"	3,262	
T1	26	#5	58' - 0"	1,573	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	23,034
CLASS "F" CONCRETE (CAP)				CY	89.5

BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	10	#11	23' - 0"	1,222	
A2	10	#11	44' - 5"	2,360	
B1	12	#11	26' - 4"	1,679	
B2	12	#11	41' - 1"	2,619	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	22	#7	10' - 6"	472	
M	122	#7	22' - 6"	5,611	
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S	105	#6	23' - 10"	3,759	
SS	105	#6	21' - 6"	3,391	
① T1	26	#5	62' - 4"	1,690	
U1	14	#6	13' - 4"	280	
U2	14	#6	10' - 5"	219	
U3	16	#6	12' - 5"	298	
REINFORCING STEEL				LB	24,788
CLASS "F" CONCRETE (CAP)				CY	89.5



Christopher B. Fuller
 03/08/2024
 HL93 LOADING



IH 10 AT US 69
 BENT DETAILS
 IH 10 WB MAINLANE
 AT US 69

SHEET 3 OF 6

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1451			

NOTES:
 QUANTITIES SHOWN ARE ONLY FOR ONE INVERTED TEE BENT.
 ① BARS T INCLUDE 1'-10" LAP SPLICE.

PHASE 4 STEP 2

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	21' - 8"	1,150	
A3	10	#11	58' - 10"	3,127	
B2	12	#11	42' - 3"	2,690	
B3	12	#11	38' - 4"	2,443	
D	16	#11	1' - 6"	128	
E1	30	#5	7' - 0"	219	
E2	20	#5	8' - 0"	167	
G	11	#7	10' - 6"	236	
M	150	#7	22' - 6"	6,899	
N	76	#6	7' - 11"	904	
S	129	#6	23' - 10"	4,618	
SS	129	#6	21' - 6"	4,166	
① T2	26	#5	75' - 6"	2,047	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	29,193
CLASS "F" CONCRETE (CAP)				CY	114.7

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	21' - 8"	1,150	
A3	10	#11	58' - 10"	3,127	
B2	12	#11	42' - 3"	2,690	
B3	12	#11	38' - 4"	2,443	
D	16	#11	1' - 6"	128	
E1	30	#5	7' - 0"	219	
E2	20	#5	8' - 0"	167	
G	11	#7	10' - 6"	236	
M	150	#7	22' - 6"	6,899	
N	76	#6	7' - 11"	904	
S	129	#6	23' - 10"	4,618	
SS	129	#6	21' - 6"	4,166	
① T2	26	#5	75' - 6"	2,047	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	29,193
CLASS "F" CONCRETE (CAP)				CY	114.7

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	22' - 0"	1,169	
A3	10	#11	59' - 6"	3,161	
B2	12	#11	42' - 11"	2,736	
B3	12	#11	38' - 7"	2,460	
D	16	#11	1' - 6"	128	
E1	30	#5	7' - 0"	219	
E2	20	#5	8' - 0"	167	
G	11	#7	10' - 6"	236	
M	152	#7	22' - 6"	6,990	
N	77	#6	7' - 11"	916	
S	129	#6	23' - 10"	4,618	
SS	129	#6	21' - 6"	4,166	
① T2	26	#5	76' - 5"	2,071	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	29,436
CLASS "F" CONCRETE (CAP)				CY	116.1

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	41' - 7"	2,209	
A3	10	#11	40' - 11"	2,174	
B2	12	#11	24' - 6"	1,561	
B3	12	#11	57' - 11"	3,691	
D	16	#11	1' - 6"	128	
G	11	#7	10' - 6"	236	
M	154	#7	22' - 6"	7,082	
N	78	#6	7' - 11"	927	
S	133	#6	23' - 10"	4,761	
SS	133	#6	21' - 6"	4,295	
① T2	26	#5	77' - 4"	2,098	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	29,561
CLASS "F" CONCRETE (CAP)				CY	117.6

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	50' - 9"	2,698	
A3	10	#11	31' - 9"	1,686	
B2	12	#11	35' - 2"	2,244	
B3	12	#11	47' - 4"	3,016	
D	16	#11	1' - 6"	128	
G	11	#7	10' - 6"	236	
M	154	#7	22' - 6"	7,082	
N	78	#6	7' - 11"	927	
S	126	#6	23' - 10"	4,511	
SS	126	#6	21' - 6"	4,069	
① T2	26	#5	77' - 6"	2,102	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	29,098
CLASS "F" CONCRETE (CAP)				CY	117.7

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	26' - 10"	1,426	
A3	10	#11	41' - 8"	2,214	
B2	12	#11	44' - 0"	2,805	
B3	12	#11	24' - 5"	1,557	
D	13	#11	1' - 6"	104	
G	11	#7	10' - 6"	236	
M	126	#7	22' - 6"	5,795	
N	64	#6	7' - 11"	761	
S	110	#6	23' - 10"	3,938	
SS	110	#6	21' - 6"	3,552	
① T2	26	#5	61' - 7"	1,670	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	24,457
CLASS "F" CONCRETE (CAP)				CY	96.2

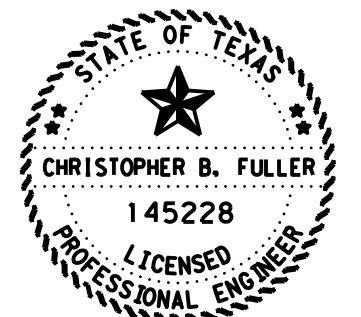
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	26' - 3"	1,397	
A3	10	#11	41' - 8"	2,214	
B2	12	#11	43' - 6"	2,773	
B3	12	#11	24' - 5"	1,557	
D	13	#11	1' - 6"	104	
G	11	#7	10' - 6"	236	
M	125	#7	22' - 6"	5,749	
N	63	#6	7' - 11"	749	
S	109	#6	23' - 10"	3,902	
SS	109	#6	21' - 6"	3,520	
① T2	26	#5	62' - 11"	1,706	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	24,306
CLASS "F" CONCRETE (CAP)				CY	95.3

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	26' - 5"	1,402	
A3	10	#11	41' - 5"	2,200	
B2	12	#11	43' - 7"	2,779	
B3	12	#11	24' - 3"	1,547	
D	13	#11	1' - 6"	104	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	11	#7	10' - 6"	236	
M	125	#7	22' - 6"	5,749	
N	63	#6	7' - 11"	749	
S	107	#6	23' - 10"	3,830	
SS	107	#6	21' - 6"	3,455	
① T2	26	#5	62' - 9"	1,703	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	24,500
CLASS "F" CONCRETE (CAP)				CY	95.1

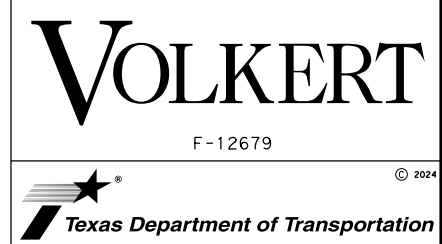
BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	41' - 8"	2,212	
B2	12	#11	41' - 8"	2,654	
D	9	#11	1' - 6"	72	
E1	18	#5	7' - 0"	131	
E2	12	#5	8' - 0"	100	
G	11	#7	10' - 6"	236	
M	86	#7	22' - 6"	3,955	
N	44	#6	7' - 11"	523	
S	75	#6	23' - 10"	2,685	
SS	75	#6	21' - 6"	2,422	
T2	26	#5	41' - 8"	1,129	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	16,518
CLASS "F" CONCRETE (CAP)				CY	65.6

BAR	NO.	SIZE	LENGTH	WEIGHT	
A2	10	#11	43' - 1"	2,288	
B2	12	#11	43' - 1"	2,746	
D	10	#11	1' - 6"	80	
E1	27	#5	7' - 0"	197	
E2	18	#5	8' - 0"	150	
G	11	#7	10' - 6"	236	
M	89	#7	22' - 6"	4,093	
N	45	#6	7' - 11"	535	
S	78	#6	23' - 10"	2,792	
SS	78	#6	21' - 6"	2,519	
T2	26	#5	43' - 1"	1,168	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	17,203
CLASS "F" CONCRETE (CAP)				CY	67.7

BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	10	#11	25' - 1"	1,331	
B3	12	#11	25' - 1"	1,598	
D	6	#11	1' - 6"	48	
G	11	#7	10' - 6"	236	
M	53	#7	22' - 6"	2,437	
N	27	#6	7' - 11"	321	
S	47	#6	23' - 10"	1,682	
SS	47	#6	21' - 6"	1,518	
T2	26	#5	25' - 1"	680	
U1	7	#6	13' - 4"	140	
U2	7	#6	10' - 5"	110	
U3	8	#6	12' - 5"	149	
REINFORCING STEEL				LB	10,250
CLASS "F" CONCRETE (CAP)				CY	40.3



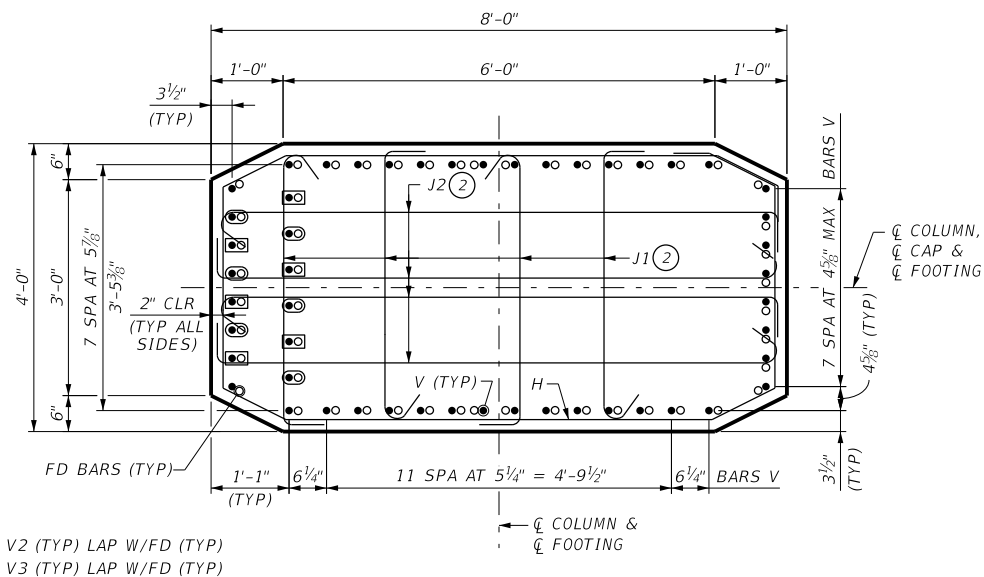
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 03/08/2024
 HL93 LOADING



**IH 10 AT US 69
 BENT DETAILS
 IH 10 WB MAINLANE
 AT US 69**

SHEET 6 OF 6

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST	COUNTY	SHEET NO.					
BMT	JEFFERSON	1452B					



COLUMN TYPE H (MOD) SECTION - NEAR THE FOOTING
 (BENT 17)

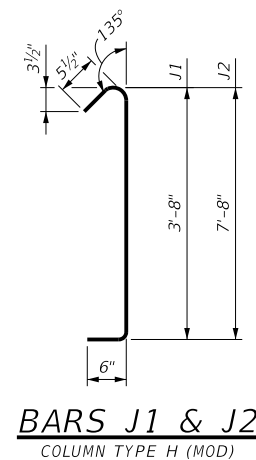
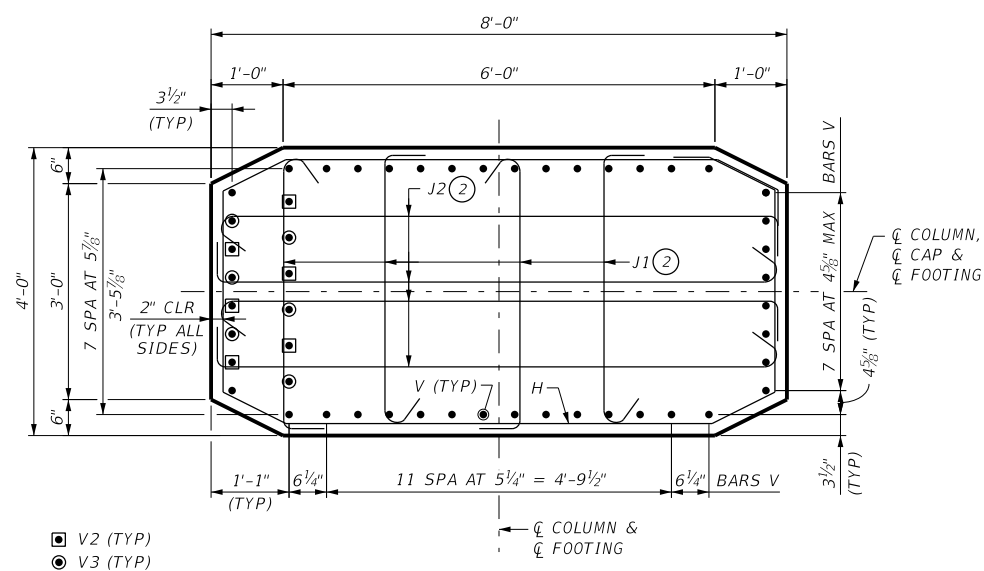


TABLE OF ESTIMATED QUANTITIES BENTS 17 WBML (H=24') (PHASE 1 STEP 3)				
BAR	NO.	SIZE	LENGTH	WEIGHT
E	5	#5	5' - 8"	30
E1	6	#5	3' - 3"	20
F	6	#5	5' - 0"	31
F1	6	#5	5' - 2"	32
FD	6	#11	13' - 6"	430
H	46	#5	23' - 6"	1,127
J1	184	#5	4' - 8"	896
J2	184	#5	6' - 8"	1,279
U	10	#4	5' - 0"	33
U1	10	#5	7' - 3"	76
V	38	#11	29' - 5"	5,939
V2	6	#11	28' - 5"	906
V3	6	#11	26' - 5"	842
REINFORCING STEEL			LB	11800
CLASS "F" CONCRETE (COL)			CY	34.5

- QUANTITIES SHOWN ARE FOR ONE COLUMN WITH A H=24'-0". SEE BRIDGE LAYOUT SHEETS FOR H VALUES. SEE BENT DETAIL SHEETS FOR CAP QUANTITIES.
- ALTERNATE TIE ENDS WITH 90 DEGREE HOOKS (VERTICALLY AND HORIZONTALLY).
- SEE FOUNDATIONS DETAIL SHEETS FOR FD BAR DETAILS.
- FOR EACH LINEAR FOOT OF VARIATION IN "H" VALUE, MAKE THE FOLLOWING ADJUSTMENTS:
 BARS V LENGTH = 1'-0"
 BARS V2 LENGTH = 1'-0"
 BARS V3 LENGTH = 1'-0"
 NO. OF H BARS = 2
 NO. OF J1 BARS = 8
 NO. OF J2 BARS = 8
 REINFORCING STEEL = 426 LBS
 CLASS "F" CONCRETE (COL) = 1.15 CY
- ADDITIONAL FD BARS WILL BE NEEDED FOR BARS V2 & V3. THESE "FD" BARS SHALL BE INSTALLED IN THE TYPE C1/C2 FOOTING BEFORE POURING CONCRETE.



COLUMN TYPE H (MOD) SECTION
 (BENT 17)

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

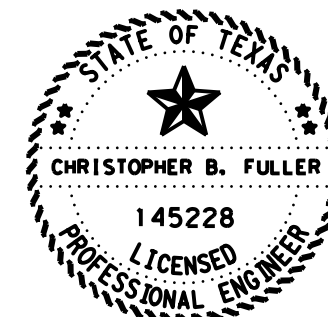
SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND D.S. LENGTH.

WORK THIS SHEET WITH FOUNDATION DETAIL TYPE C1 AND C2 FOR ADDITIONAL NOTES AND DETAILS.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE (f'c = 5,000 psi).
 PROVIDE GRADE 60 REINFORCING STEEL.

NOTE: CONTRACTOR TO UTILIZE THIS SHEET WITH COLUMN TYPE H DETAILS SHEETS FOR ALL OTHER INFORMATION NOT SHOWN.

REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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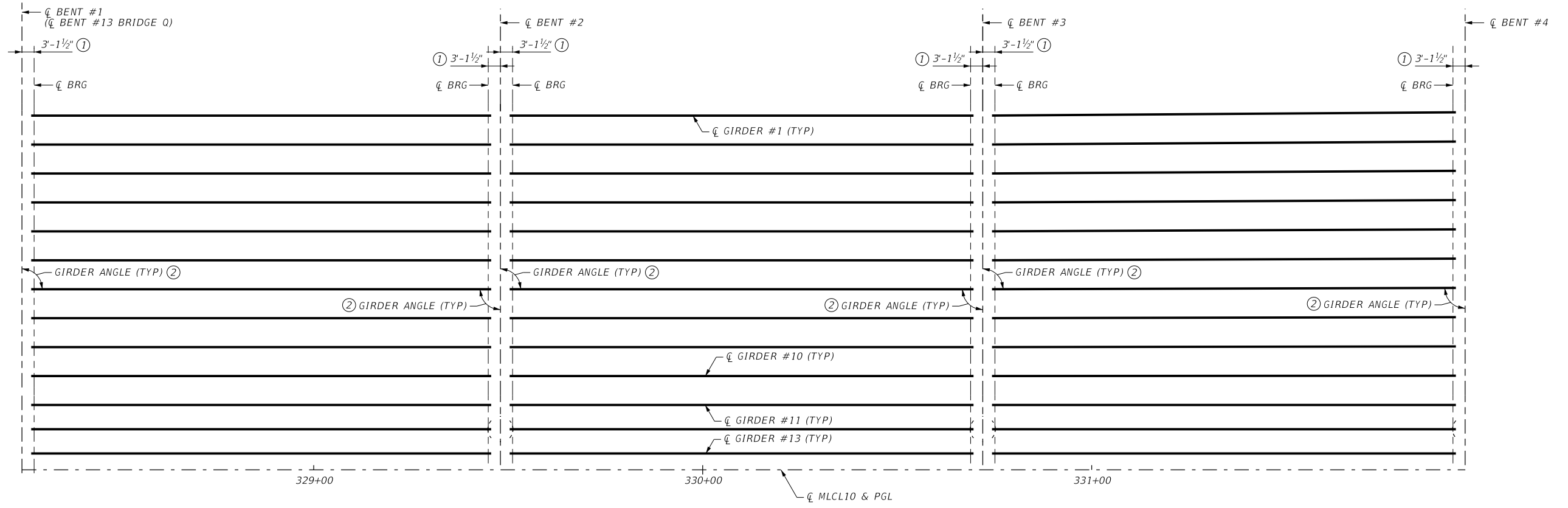


**IH 10 AT US 69
 BENT COLUMN
 DETAILS (MOD)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 1

DN:	CBF	CK:	FB	DW:	CBF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1453			

DATE: 21-FEB-2024 19:20
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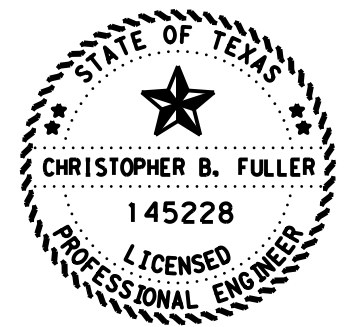


SPAN 1
(Tx54 GIRDERS)

SPAN 2
(Tx54 GIRDERS)

SPAN 3
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



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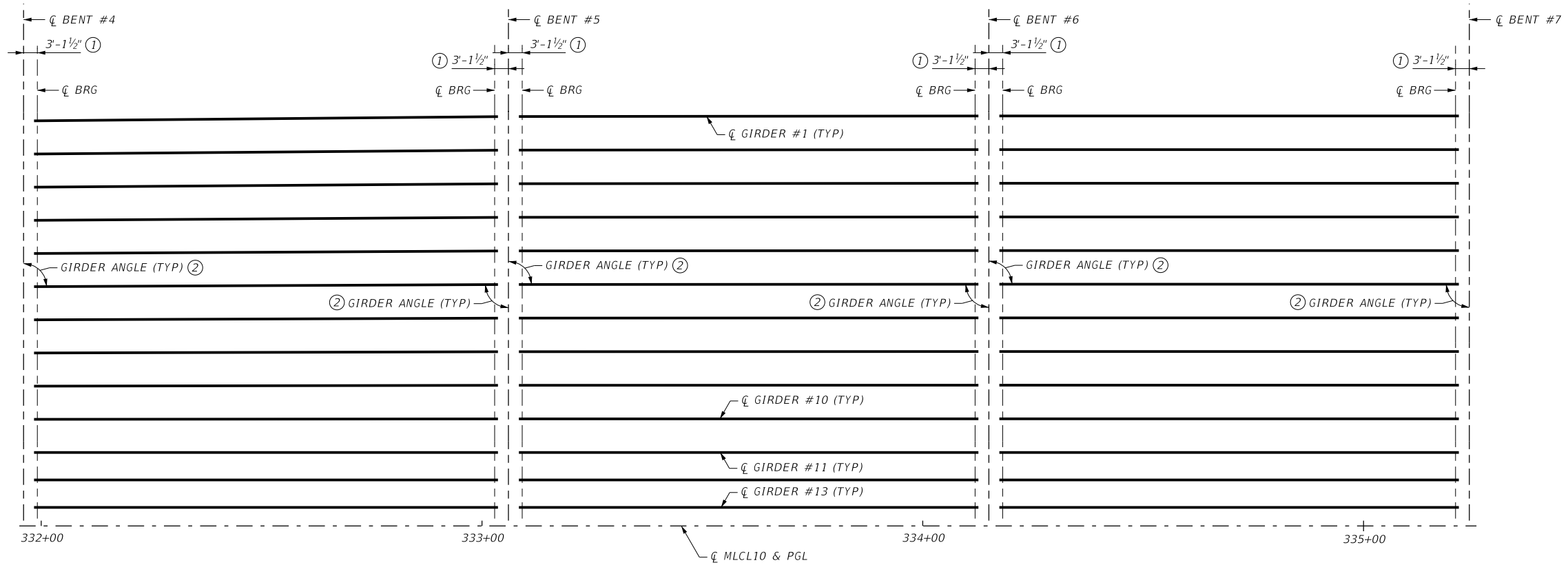


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 1-3)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 1 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1454				

DATE: 21-FEB-2024 18:10
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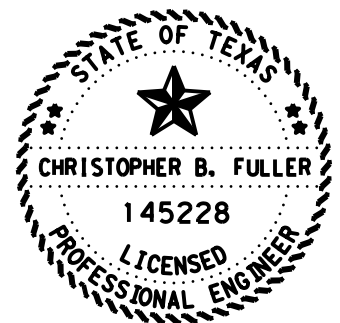


SPAN 4
(Tx54 GIRDERS)

SPAN 5
(Tx54 GIRDERS)

SPAN 6
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



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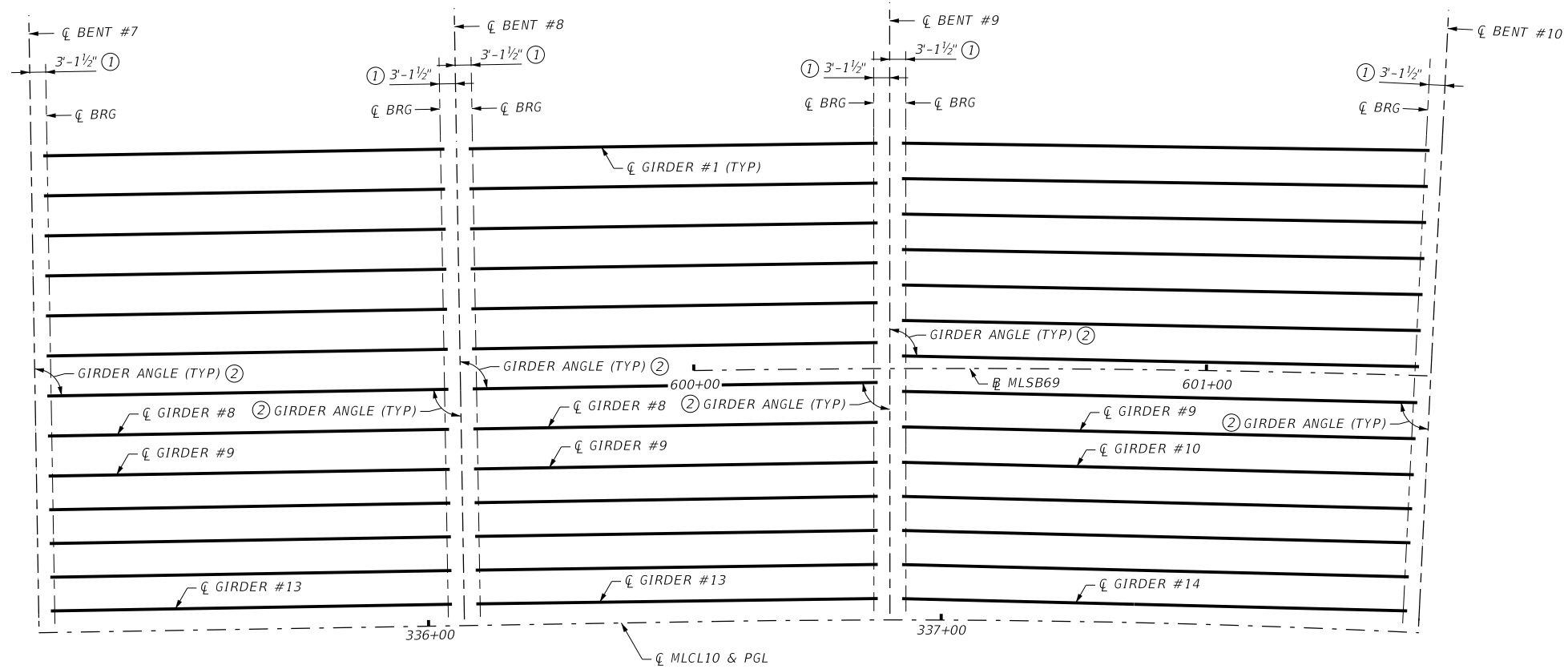


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 4-6)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 2 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1455		

DATE: 21-FEB-2024 18:11
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBFR)\1456_10WB_Mainlanes_GRDLAY_03.dgn

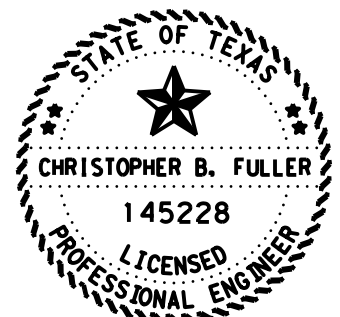


SPAN 7
(Tx54 GIRDERS)

SPAN 8
(Tx54 GIRDERS)

SPAN 9
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



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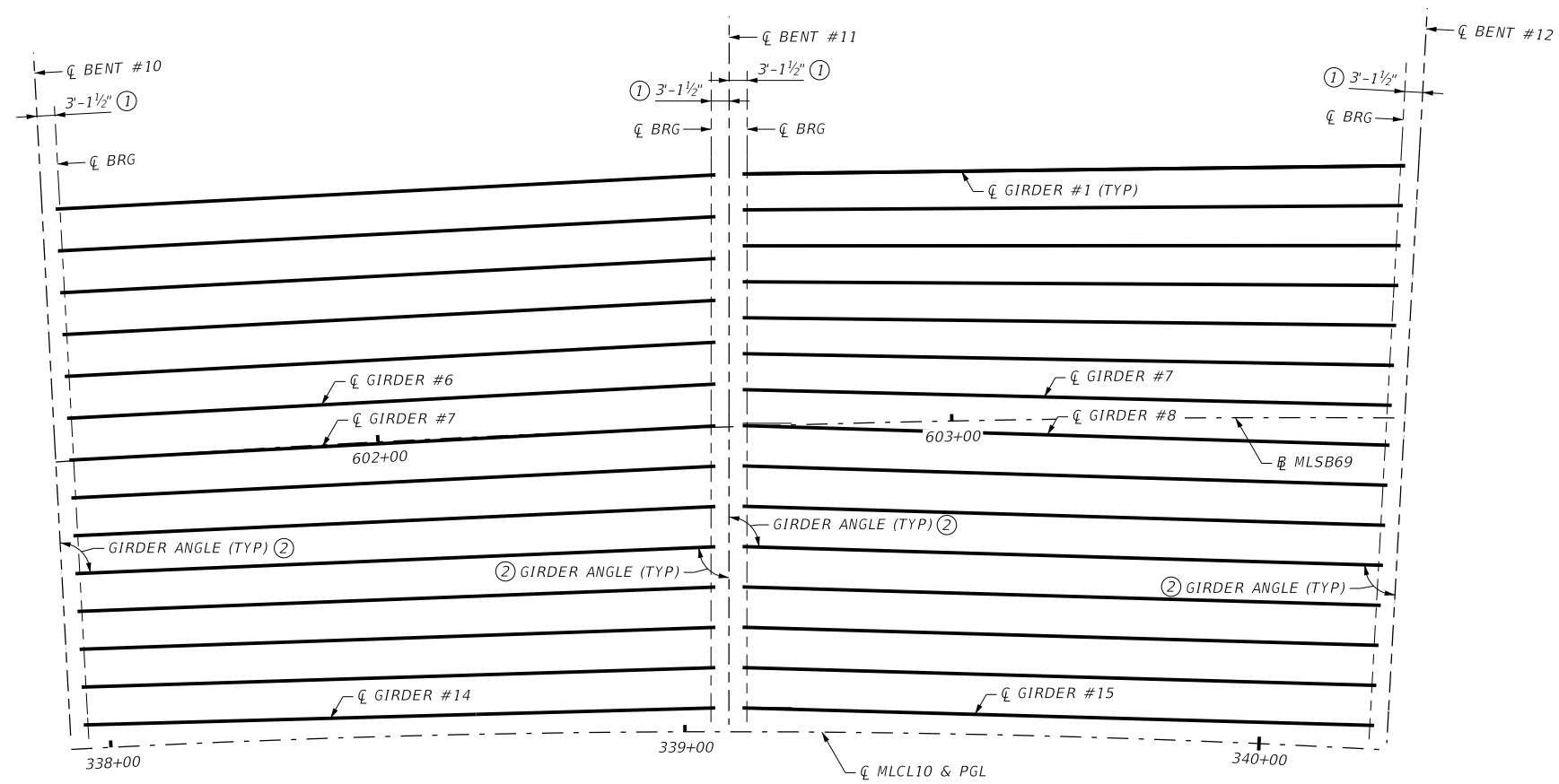


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 7-9)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 3 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1456				

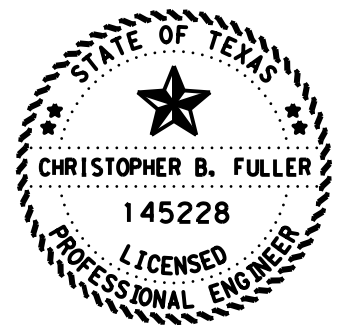
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SPAN 10
(Tx54 GIRDERS)

SPAN 11
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



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HL93 LOADING

VOLKERT

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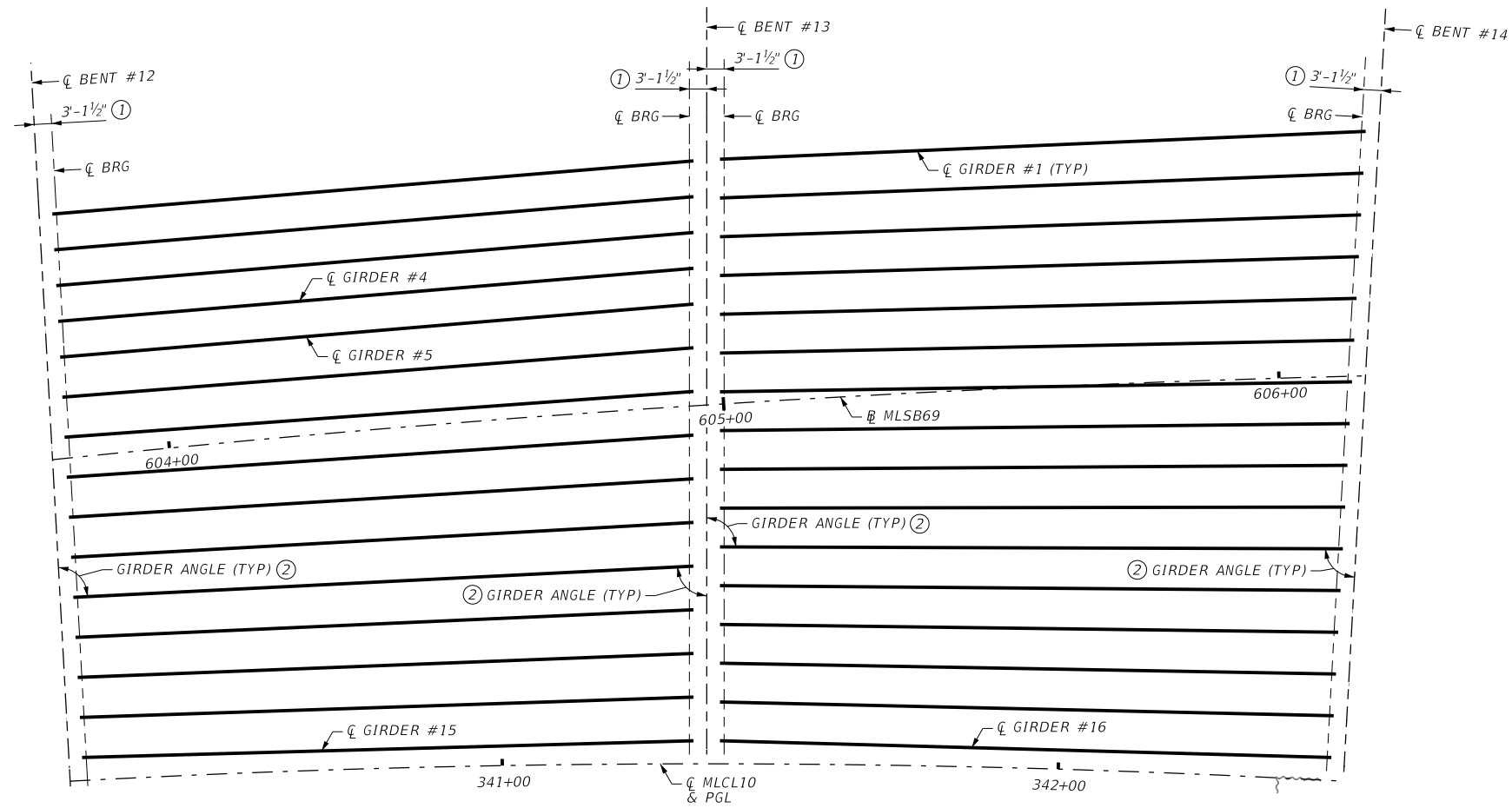


IH 10 AT US 69
 FRAMING PLAN
 (SPANS 10-11)
 IH 10 WB MAINLANE
 AT US 69

SHEET 4 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1457				

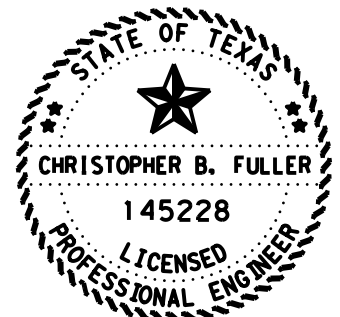
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SPAN 12
(Tx54 GIRDERS)

SPAN 13
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Christopher B. Fuller

02/21/2024
 HL93 LOADING

VOLKERT
 F-12679

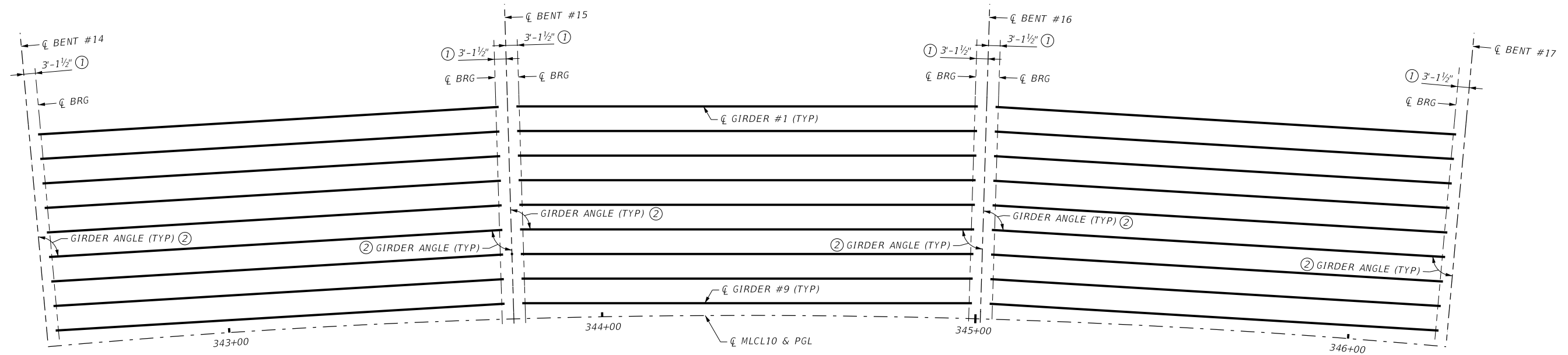


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 12-13)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 5 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1458				

DATE: 21-FEB-2024 18:14
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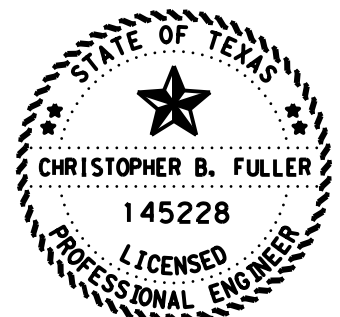


SPAN 14
(Tx54 GIRDERS)

SPAN 15
(Tx54 GIRDERS)

SPAN 16
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



Christopher B. Fuller
 02/21/2024
 HL93 LOADING

VOLKERT
 F-12679

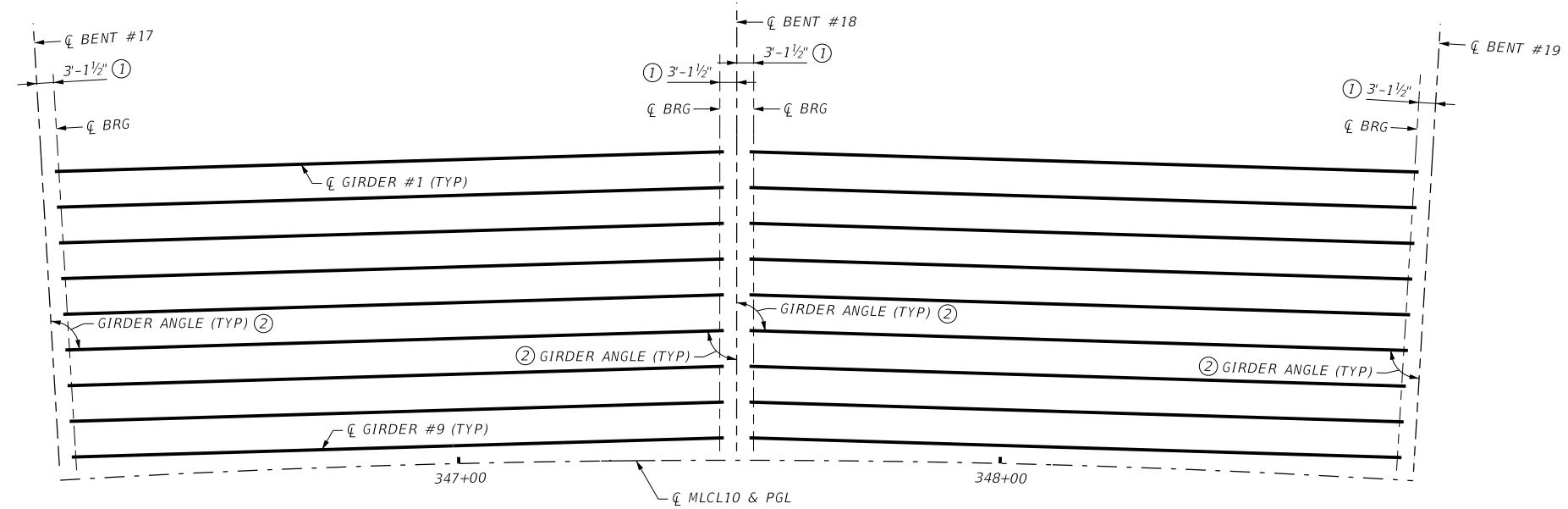


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 14-16)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 6 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0025		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1459				

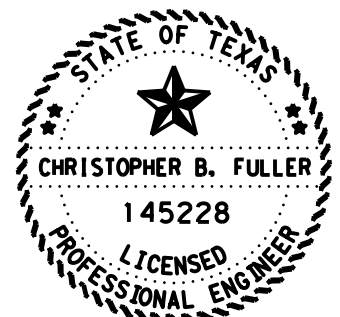
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SPAN 17
 (Tx54 GIRDERS)

SPAN 18
 (Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



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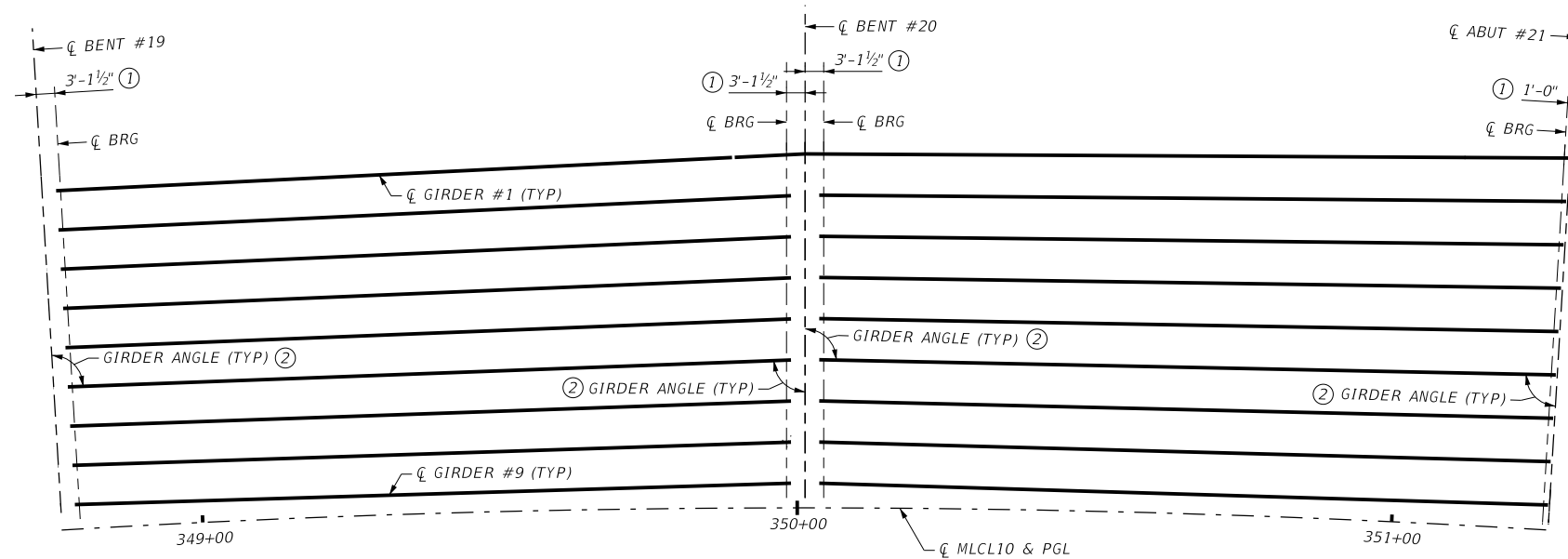


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 17-18)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 7 OF 8

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1460

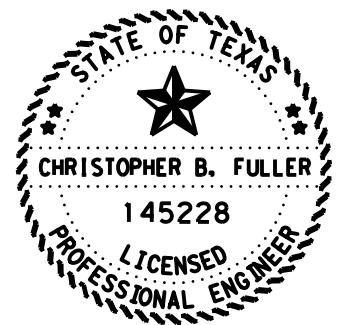
DATE: 21-FEB-2024 18:10
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBER)\1461_10WB_Mainlanes_GRDLAY_08.dgn



SPAN 19
 (Tx54 GIRDERS)

SPAN 20
 (Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.



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 02/21/2024

HL93 LOADING

VOLKERT
 F-12679



**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 19-20)
 IH 10 WB MAINLANE
 AT US 69**

SHEET 8 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1461			

DATE: 21-FEB-2024 18:10
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBFR)\1462_10WB_Mainlanes over US 69 NBFR.dgn

BENT REPORT

BENT NO. 1 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 90.999 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		90	0	0	
GIRDER 2	7.433		90	0	0	
GIRDER 3	7.433		90	0	0	
GIRDER 4	7.433		90	0	0	
SPAN 1 PHASE 4 STEP 2 GIRDER 5	7.433		90	0	0	
GIRDER 6	7.433		90	0	0	
GIRDER 7	7.433		90	0	0	
GIRDER 8	7.433		90	0	0	
GIRDER 9	7.433		90	0	0	
GIRDER 10	7.433		90	0	0	
SPAN 1 PHASE 3 STEP 1 GIRDER 11	7.433		90	0	0	
GIRDER 12	6.229		90	0	0	
GIRDER 13	6.229		90	0	0	
TOTAL	86.788					

BENT NO. 2 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 90.999 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		89	59	60	
GIRDER 2	7.433		89	59	60	
GIRDER 3	7.433		89	59	60	
GIRDER 4	7.433		89	59	60	
SPAN 1 PHASE 4 STEP 2 GIRDER 5	7.433		89	59	60	
GIRDER 6	7.433		89	59	60	
GIRDER 7	7.433		89	59	60	
GIRDER 8	7.433		89	59	60	
GIRDER 9	7.433		89	59	60	
GIRDER 10	7.433		89	59	60	
SPAN 1 PHASE 3 STEP 1 GIRDER 11	7.433		89	59	60	
GIRDER 12	6.229		89	59	60	
GIRDER 13	6.229		90	0	0	
TOTAL	86.788					

BENT NO. 3 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 90.999 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		89	59	60	
GIRDER 2	7.433		89	59	60	
GIRDER 3	7.433		89	59	60	
GIRDER 4	7.433		89	59	60	
SPAN 2 PHASE 4 STEP 2 GIRDER 5	7.433		89	59	60	
GIRDER 6	7.433		89	59	60	
GIRDER 7	7.433		89	59	60	
GIRDER 8	7.433		89	59	60	
GIRDER 9	7.433		89	59	60	
GIRDER 10	7.433		89	59	60	
SPAN 2 PHASE 3 STEP 1 GIRDER 11	7.433		89	59	60	
GIRDER 12	6.229		89	59	60	
GIRDER 13	6.229		90	0	0	
TOTAL	86.788					

BENT NO. 4 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 91.873 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		89	35	46	
GIRDER 2	7.521		89	38	12	
GIRDER 3	7.521		89	40	37	
GIRDER 4	7.521		89	43	2	
SPAN 3 PHASE 4 STEP 2 GIRDER 5	7.521		89	45	28	
GIRDER 6	7.521		89	47	53	
GIRDER 7	7.521		89	50	18	
GIRDER 8	7.521		89	52	44	
GIRDER 9	7.521		89	55	9	
GIRDER 10	7.521		89	57	35	
SPAN 3 PHASE 3 STEP 1 GIRDER 11	7.521		90	0	0	
GIRDER 12	6.229		90	0	0	
GIRDER 13	6.229		90	0	0	
TOTAL	87.668					

BENT NO. 5 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 92.876 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		89	28	47	
GIRDER 2	7.621		89	31	54	
GIRDER 3	7.621		89	35	1	
GIRDER 4	7.621		89	38	9	
SPAN 4 PHASE 4 STEP 2 GIRDER 5	7.621		89	41	16	
GIRDER 6	7.621		89	44	23	
GIRDER 7	7.621		89	47	31	
GIRDER 8	7.621		89	50	38	
GIRDER 9	7.621		89	53	45	
GIRDER 10	7.621		89	56	53	
SPAN 4 PHASE 3 STEP 1 GIRDER 11	7.621		90	0	0	
GIRDER 12	6.229		90	0	0	
GIRDER 13	6.229		90	0	0	
TOTAL	88.668					

SPAN 2 PHASE 4 STEP 2

GIRDER 1	0.000		90	0	0
GIRDER 2	7.433		90	0	0
GIRDER 3	7.433		90	0	0
GIRDER 4	7.433		90	0	0
SPAN 2 PHASE 4 STEP 2 GIRDER 5	7.433		90	0	0
GIRDER 6	7.433		90	0	0
GIRDER 7	7.433		90	0	0
GIRDER 8	7.433		90	0	0
GIRDER 9	7.433		90	0	0
GIRDER 10	7.433		90	0	0
SPAN 2 PHASE 3 STEP 1 GIRDER 11	7.433		90	0	0
GIRDER 12	6.229		90	0	0
GIRDER 13	6.229		90	0	0
TOTAL	86.788				

SPAN 3 PHASE 4 STEP 2

GIRDER 1	0.000		90	24	14
GIRDER 2	7.433		90	21	48
GIRDER 3	7.433		90	19	23
GIRDER 4	7.433		90	16	58
SPAN 3 PHASE 4 STEP 2 GIRDER 5	7.433		90	14	32
GIRDER 6	7.433		90	12	7
GIRDER 7	7.433		90	9	42
GIRDER 8	7.433		90	7	16
GIRDER 9	7.433		90	4	51
GIRDER 10	7.433		90	2	25
SPAN 3 PHASE 3 STEP 1 GIRDER 11	7.433		90	0	0
GIRDER 12	6.229		90	0	0
GIRDER 13	6.229		90	0	0
TOTAL	86.788				

SPAN 4 PHASE 4 STEP 2

GIRDER 1	0.000		90	31	13
GIRDER 2	7.521		90	28	6
GIRDER 3	7.521		90	24	59
GIRDER 4	7.521		90	21	51
SPAN 4 PHASE 4 STEP 2 GIRDER 5	7.521		90	18	44
GIRDER 6	7.521		90	15	37
GIRDER 7	7.521		90	12	29
GIRDER 8	7.521		90	9	22
GIRDER 9	7.521		90	6	15
GIRDER 10	7.521		90	3	7
SPAN 4 PHASE 3 STEP 1 GIRDER 11	7.521		90	0	0
GIRDER 12	6.229		90	0	0
GIRDER 13	6.229		90	0	0
TOTAL	87.668				

SPAN 5 PHASE 4 STEP 2

GIRDER 1	0.000		90	3	53
GIRDER 2	7.621		90	3	29
GIRDER 3	7.621		90	3	6
GIRDER 4	7.621		90	2	43
SPAN 5 PHASE 4 STEP 2 GIRDER 5	7.621		90	2	20
GIRDER 6	7.621		90	1	56
GIRDER 7	7.621		90	1	33
GIRDER 8	7.621		90	1	10
GIRDER 9	7.621		90	0	47
GIRDER 10	7.621		90	0	23
SPAN 5 PHASE 3 STEP 1 GIRDER 11	7.621		90	0	0
GIRDER 12	6.229		90	0	0
GIRDER 13	6.229		90	0	0
TOTAL	88.668				

BENT NO. 6 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 92.999 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		89	56	7	
GIRDER 2	7.633		89	56	31	
GIRDER 3	7.633		89	56	54	
GIRDER 4	7.633		89	57	17	
SPAN 5 PHASE 4 STEP 2 GIRDER 5	7.633		89	57	40	
GIRDER 6	7.633		89	58	4	
GIRDER 7	7.633		89	58	27	
GIRDER 8	7.633		89	58	50	
GIRDER 9	7.633		89	59	13	
GIRDER 10	7.633		89	59	37	
SPAN 5 PHASE 3 STEP 1 GIRDER 11	7.633		90	0	0	
GIRDER 12	6.229		90	0	0	
GIRDER 13	6.229		90	0	0	
TOTAL	88.788					

BENT NO. 7 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 92.999 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		90	0	0	
GIRDER 2	7.633		90	0	0	
GIRDER 3	7.633		90	0	0	
GIRDER 4	7.633		90	0	0	
SPAN 6 PHASE 4 STEP 2 GIRDER 5	7.633		90	0	0	
GIRDER 6	7.633		90	0	0	
GIRDER 7	7.633		90	0	0	
GIRDER 8	7.633		90	0	0	
GIRDER 9	7.633		90	0	0	
GIRDER 10	7.633		90	0	0	
SPAN 6 PHASE 3 STEP 1 GIRDER 11	7.633		90	0	0	
GIRDER 12	6.229		90	0	0	
GIRDER 13	6.229		90	0	0	
TOTAL	88.788					

BENT NO. 8 (S 86° 27' 28.94" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 93.000 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		90	0	0	
GIRDER 2	7.809		90	0	0	
GIRDER 3	7.809		90	0	0	
SPAN 7 PHASE 4 STEP 2 GIRDER 4	7.809		90	0	0	
GIRDER 5	7.809		90	0	0	
GIRDER 6	7.809		90	0	0	
GIRDER 7	7.809		90	0	0	
GIRDER 8	7.809		90	0	0	
GIRDER 9	7.809		90	0	0	
GIRDER 10	6.579		90	0	0	
GIRDER 11	6.579		90	0	0	
GIRDER 12	6.579		90	0	0	
GIRDER 13	6.579		90	0	0	
TOTAL	88.788					

BENT NO. 9 (S 87° 23' 22.82" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 93.039 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		89	14	14	
GIRDER 2	7.779		89	12	58	
GIRDER 3	7.779		89	11	43	
SPAN 8 PHASE 4 STEP 2 GIRDER 4	7.779		89	10	27	
GIRDER 5	7.779		89	9	11	
GIRDER 6	7.779		89	7	55	
GIRDER 7	7.779		89	6	39	
GIRDER 8	7.779		89	5	23	
GIRDER 9	7.779		89	4	6	
GIRDER 10	6.649		89	6	57	
GIRDER 11	6.649		89	9	50	
GIRDER 12	6.649		89	12	42	
GIRDER 13	6.649		89	15	35	
TOTAL	88.828					

BENT NO. 10 (N 89° 47' 26.42" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 94.158 L

	GRDR	SPAC.		GRDR ANGLE		
		(C.L. BENT)	D	M	S	
GIRDER 1	0.000		87	59	42	
GIRDER 2	7.039		88	3	33	
GIRDER 3	7.039		88	7	26	
GIRDER 4	7.039		88	11	21	
SPAN 9 PHASE 4 STEP 2 GIRDER 5	7.039		88	15	17	
GIRDER 6	7.039		88	19	15	
GIRDER 7	7.039		88	23	14	
GIRDER 8	7.039		88	27	15	
GIRDER 9	7.039		88	31	18	
GIRDER 10	7.039		88	35	22	
GIRDER 11	6.649		88	35	22	
GIRDER 12	6.649		88	35	23	
GIRDER 13	6.649		88	35	24	
GIRDER 14	6.649		88	35	25	
TOTAL	89.947					

SPAN 6 PHASE 4 STEP 2

GIRDER 1	0.000		90	0	0
GIRDER 2	7.633		90	0	0
GIRDER 3	7.633		90	0	0
GIRDER 4	7.633		90	0	0
SPAN 6 PHASE 4 STEP 2 GIRDER 5	7.633		90	0	0
GIRDER 6	7.633		90	0	0
GIRDER 7	7.633		90	0	0
GIRDER 8	7.633		90	0	0
GIRDER 9	7.633		90	0	0
GIRDER 10	7.633		90	0	0
SPAN 6 PHASE 3 STEP 1 GIRDER 11	7.633		90	0	0
GIRDER 12	6.229		90	0	0
GIRDER 13	6.229		90	0	0
TOTAL	88.788				

SPAN 7 PHASE 4 STEP 2

GIRDER 1	0.000		90	0	0
GIRDER 2	7.809		90	0	0
GIRDER 3	7.809		90	0	0
SPAN 7 PHASE 4 STEP					

BENT REPORT

BENT NO. 11 (N 89° 39' 27.64" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 97.154 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 87 0 12
GIRDER 2 7.291 86 59 38
GIRDER 3 7.291 86 59 4
GIRDER 4 7.291 86 58 30
GIRDER 5 7.291 86 57 56
GIRDER 6 7.291 86 57 21
GIRDER 7 7.291 86 56 46
GIRDER 8 7.028 87 9 16
GIRDER 9 7.028 87 21 51
GIRDER 10 7.028 87 34 31
GIRDER 11 7.028 87 47 16
GIRDER 12 7.028 88 0 6
GIRDER 13 7.028 88 13 1
GIRDER 14 7.028 88 26 1
TOTAL 92.942

BENT NO. 12 (N 83° 31' 28.86" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 101.982 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 86 7 47
GIRDER 2 6.984 86 28 25
GIRDER 3 6.984 86 49 12
GIRDER 4 6.984 87 10 6
GIRDER 5 6.984 87 31 8
GIRDER 6 6.984 87 52 18
GIRDER 7 6.984 88 13 37
GIRDER 8 6.984 88 35 3
GIRDER 9 6.984 88 33 47
GIRDER 10 6.984 88 32 30
GIRDER 11 6.984 88 31 14
GIRDER 12 6.984 88 29 56
GIRDER 13 6.984 88 28 38
GIRDER 14 6.984 88 27 20
GIRDER 15 6.984 88 26 1
TOTAL 97.776

BENT NO. 13 (N 80° 23' 30.08" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 108.658 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 85 15 31
GIRDER 2 6.441 85 14 49
GIRDER 3 6.441 85 14 7
GIRDER 4 6.441 85 13 25
GIRDER 5 6.441 85 12 42
GIRDER 6 7.869 85 31 24
GIRDER 7 7.868 85 50 14
GIRDER 8 7.869 86 9 12
GIRDER 9 7.869 86 28 19
GIRDER 10 7.868 86 47 35
GIRDER 11 7.868 87 6 59
GIRDER 12 7.869 87 26 31
GIRDER 13 7.868 87 46 12
GIRDER 14 7.869 88 6 2
GIRDER 15 7.869 88 26 1
TOTAL 104.450

BENT NO. 14 (N 77° 15' 31.30" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 117.176 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 84 23 55
GIRDER 2 7.531 84 39 16
GIRDER 3 7.531 84 54 44
GIRDER 4 7.531 85 10 18
GIRDER 5 7.531 85 25 59
GIRDER 6 7.531 85 41 47
GIRDER 7 7.531 85 57 41
GIRDER 8 7.531 86 13 43
GIRDER 9 7.531 86 29 51
GIRDER 10 7.531 86 46 6
GIRDER 11 7.531 87 2 27
GIRDER 12 7.531 87 18 56
GIRDER 13 7.531 87 35 32
GIRDER 14 7.531 87 52 15
GIRDER 15 7.531 88 9 4
GIRDER 16 7.531 88 26 1
TOTAL 112.965

BENT NO. 15 (N 73° 50' 24.33" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 88 17 27
GIRDER 2 6.599 88 17 27
GIRDER 3 6.599 88 17 27
GIRDER 4 6.599 88 17 27
GIRDER 5 6.599 88 17 27
GIRDER 6 6.599 88 17 27
GIRDER 7 6.599 88 17 27
GIRDER 8 6.599 88 17 27
GIRDER 9 6.599 88 17 27
TOTAL 52.792

BENT NO. 16 (N 70° 25' 17.37" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 90 44 14
GIRDER 2 6.250 90 23 36
GIRDER 3 6.250 90 2 50
GIRDER 4 6.250 89 41 55
GIRDER 5 6.250 89 20 53
GIRDER 6 6.250 88 59 43
GIRDER 7 6.250 88 38 25
GIRDER 8 6.250 88 16 59
GIRDER 9 7.028 88 18 14
GIRDER 10 7.028 88 19 31
GIRDER 11 7.028 88 20 48
GIRDER 12 7.028 88 22 5
GIRDER 13 7.028 88 23 23
GIRDER 14 7.028 88 24 42
GIRDER 15 7.028 88 26 0
TOTAL 92.946

BENT NO. 17 (N 67° 00' 10.40" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 91 36 31
GIRDER 2 6.446 91 37 12
GIRDER 3 6.446 91 37 54
GIRDER 4 6.446 91 38 36
GIRDER 5 6.446 91 39 19
GIRDER 6 7.199 91 20 37
GIRDER 7 7.199 91 1 47
GIRDER 8 7.199 90 42 49
GIRDER 9 7.199 90 23 42
GIRDER 10 7.199 90 4 27
GIRDER 11 7.199 89 45 3
GIRDER 12 7.199 89 25 30
GIRDER 13 7.199 89 5 49
GIRDER 14 7.199 89 45 59
GIRDER 15 7.199 88 26 1
TOTAL 97.774

BENT NO. 18 (N 63° 35' 03.43" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 92 28 6
GIRDER 2 6.963 92 12 45
GIRDER 3 6.963 91 57 17
GIRDER 4 6.963 91 41 43
GIRDER 5 6.963 91 26 2
GIRDER 6 6.963 91 10 14
GIRDER 7 6.963 90 54 20
GIRDER 8 6.963 90 38 19
GIRDER 9 6.963 90 22 11
GIRDER 10 6.963 90 5 56
GIRDER 11 6.963 89 49 34
GIRDER 12 6.963 89 33 5
GIRDER 13 6.963 89 16 29
GIRDER 14 6.963 89 59 47
GIRDER 15 6.963 88 42 57
GIRDER 16 6.963 88 26 0
TOTAL 104.445

BENT NO. 19 (N 60° 09' 56.46" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 88 17 27
GIRDER 2 6.599 88 17 27
GIRDER 3 6.599 88 17 27
GIRDER 4 6.599 88 17 27
GIRDER 5 6.599 88 17 27
GIRDER 6 6.599 88 17 27
GIRDER 7 6.599 88 17 27
GIRDER 8 6.599 88 17 27
GIRDER 9 6.599 88 17 27
TOTAL 52.792

BENT NO. 20 (N 56° 44' 49.49" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 59.474 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 87 11 16
GIRDER 2 6.908 87 19 21
GIRDER 3 6.908 87 27 30
GIRDER 4 6.908 87 35 41
GIRDER 5 6.908 87 43 56
GIRDER 6 6.908 87 52 14
GIRDER 7 6.908 88 0 35
GIRDER 8 6.908 88 8 59
GIRDER 9 6.908 88 17 27
TOTAL 55.264

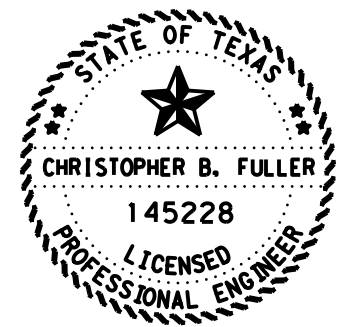
BENT NO. 21 (N 53° 19' 42.52" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 62.613 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 86 53 37
GIRDER 2 7.301 87 3 51
GIRDER 3 7.301 87 14 9
GIRDER 4 7.301 87 24 32
GIRDER 5 7.301 87 34 58
GIRDER 6 7.301 87 45 29
GIRDER 7 7.301 87 56 4
GIRDER 8 7.301 88 6 43
GIRDER 9 7.301 88 17 27
TOTAL 58.408

BENT NO. 17 (N 67° 00' 10.40" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 88 17 27
GIRDER 2 6.599 88 17 27
GIRDER 3 6.599 88 17 27
GIRDER 4 6.599 88 17 27
GIRDER 5 6.599 88 17 27
GIRDER 6 6.599 88 17 27
GIRDER 7 6.599 88 17 27
GIRDER 8 6.599 88 17 27
GIRDER 9 6.599 88 17 27
TOTAL 52.792

BENT NO. 18 (N 63° 35' 03.43" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 88 17 27
GIRDER 2 6.599 88 17 27
GIRDER 3 6.599 88 17 27
GIRDER 4 6.599 88 17 27
GIRDER 5 6.599 88 17 27
GIRDER 6 6.599 88 17 27
GIRDER 7 6.599 88 17 27
GIRDER 8 6.599 88 17 27
GIRDER 9 6.599 88 17 27
TOTAL 52.792

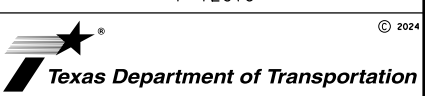
BENT NO. 19 (N 60° 09' 56.46" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 57.000 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 89 23 37
GIRDER 2 6.599 89 15 32
GIRDER 3 6.599 89 7 23
GIRDER 4 6.599 88 59 12
GIRDER 5 6.599 88 50 57
GIRDER 6 6.599 88 42 39
GIRDER 7 6.599 88 34 18
GIRDER 8 6.599 88 25 54
GIRDER 9 6.599 88 17 26
TOTAL 52.792

BENT NO. 20 (N 56° 44' 49.49" W)
DISTANCE BETWEEN STATION LINE & GRDR 1 59.474 L
GRDR SPAC. GRDR ANGLE (C.L. BENT) D M S
GIRDER 1 0.000 89 41 16
GIRDER 2 6.908 89 31 2
GIRDER 3 6.908 89 20 44
GIRDER 4 6.908 89 10 21
GIRDER 5 6.908 88 59 55
GIRDER 6 6.908 88 49 24
GIRDER 7 6.908 88 38 49
GIRDER 8 6.908 88 28 10
GIRDER 9 6.908 88 17 26
TOTAL 55.264



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02/21/2024
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F-12679



IH 10 AT US 69
BENT AND GIRDER REPORT
IH 10 WB MAINLANE
AT US 69

Table with project details: DN: 0028, CBF: 13, CK: 135, DW: 135, RF: 135, CK: 135, FB: 135. DIST: BMT, COUNTY: JEFFERSON, SHEET NO.: 1463.

DATE: 21-FEB-2024 18:12
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBFR)\1463_10WB_Mainlanes_GRDLAY_10.dgn

GIRDER REPORT

DATE: 21-FEB-2024 19:28
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7 - Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBFR)\1464_10WB_MAINLANE_GRDLAY_11.dgn

GIRDER REPORT, SPAN 1

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

GIRDER REPORT, SPAN 2

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

GIRDER REPORT, SPAN 3

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

GIRDER REPORT, SPAN 4

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

PHASE 4 STEP 2

PHASE 4 STEP 2

PHASE 4 STEP 2

PHASE 4 STEP 2

GIRDER REPORT, SPAN 5

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

GIRDER REPORT, SPAN 6

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

GIRDER REPORT, SPAN 7

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

GIRDER REPORT, SPAN 8

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

PHASE 4 STEP 2

PHASE 4 STEP 2

PHASE 4 STEP 2

PHASE 4 STEP 2

PHASE 3 STEP 1

PHASE 3 STEP 1

PHASE 4 STEP 1

PHASE 4 STEP 1

GIRDER REPORT, SPAN 9

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-9.

GIRDER REPORT, SPAN 10

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-10.

GIRDER REPORT, SPAN 11

Table with 5 columns: GIRDER, HORIZONTAL DISTANCE C-C BENT, TRUE DISTANCE C-C BRG., GRDR BOT. GRDR FLG., SLOPE. Rows 1-15.

PHASE 4 STEP 2

PHASE 4 STEP 2

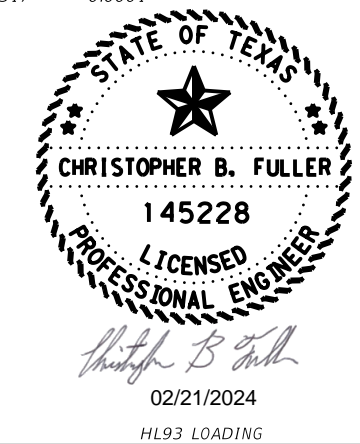
PHASE 4 STEP 2

PHASE 4 STEP 1

PHASE 4 STEP 1

PHASE 4 STEP 1

① GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.



VOLKERT logo, Texas Department of Transportation, IH 10 AT US 69 BENT AND GIRDER REPORT IH 10 WB MAINLANE AT US 69, SHEET 3 OF 4, project details table.

GIRDER REPORT

GIRDER REPORT, SPAN 12

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 4 STEP 2	GIRDER 1	120.489	114.239	115.749 -0.0129
	GIRDER 2	120.137	113.887	115.397 -0.0130
	GIRDER 3	119.786	113.536	115.046 -0.0130
	GIRDER 4	119.435	113.185	114.694 -0.0130
	GIRDER 5	119.083	112.833	114.343 -0.0131
	GIRDER 6	118.731	112.481	113.991 -0.0132
	GIRDER 7	118.380	112.129	113.639 -0.0133
	GIRDER 8	118.028	111.777	113.287 -0.0134
PHASE 4 STEP 1	GIRDER 9	117.677	111.425	112.935 -0.0135
	GIRDER 10	117.325	111.073	112.583 -0.0136
	GIRDER 11	116.974	110.721	112.231 -0.0137
	GIRDER 12	116.622	110.369	111.879 -0.0138
	GIRDER 13	116.271	110.017	111.527 -0.0139
	GIRDER 14	115.919	109.665	111.175 -0.0140
	GIRDER 15	115.568	109.313	110.823 -0.0141

GIRDER REPORT, SPAN 13

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 4 STEP 1	GIRDER 1	121.019	114.769	116.285 -0.0163
	GIRDER 2	120.585	114.335	115.851 -0.0166
	GIRDER 3	120.154	113.904	115.420 -0.0170
	GIRDER 4	119.725	113.475	114.992 -0.0173
	GIRDER 5	119.298	113.048	114.566 -0.0177
	GIRDER 6	118.874	112.624	114.142 -0.0180
	GIRDER 7	118.452	112.202	113.721 -0.0184
	GIRDER 8	118.033	111.783	113.303 -0.0187
	GIRDER 9	117.617	111.367	112.887 -0.0191
	GIRDER 10	117.203	110.953	112.474 -0.0194
	GIRDER 11	116.791	110.541	112.063 -0.0198
	GIRDER 12	116.383	110.133	111.656 -0.0202
	GIRDER 13	115.977	109.727	111.250 -0.0205
	GIRDER 14	115.574	109.324	110.848 -0.0209
	GIRDER 15	115.173	108.923	110.448 -0.0213
	GIRDER 16	114.776	108.526	110.052 -0.0216

GIRDER REPORT, SPAN 14

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 4 STEP 1	GIRDER 1	128.382	122.132	123.673 -0.0258
	GIRDER 2	127.988	121.738	123.279 -0.0258
	GIRDER 3	127.595	121.345	122.886 -0.0259
	GIRDER 4	127.201	120.951	122.492 -0.0260
	GIRDER 5	126.807	120.557	122.099 -0.0261
	GIRDER 6	126.414	120.164	121.705 -0.0262
	GIRDER 7	126.020	119.770	121.312 -0.0263
	GIRDER 8	125.626	119.376	120.918 -0.0263
	GIRDER 9	125.232	118.982	120.525 -0.0264

GIRDER REPORT, SPAN 15

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 4 STEP 1	GIRDER 1	128.382	122.132	123.684 -0.0291
	GIRDER 2	127.988	121.738	123.291 -0.0292
	GIRDER 3	127.595	121.345	122.897 -0.0293
	GIRDER 4	127.201	120.951	122.504 -0.0294
	GIRDER 5	126.807	120.557	122.110 -0.0295
	GIRDER 6	126.414	120.164	121.717 -0.0296
	GIRDER 7	126.020	119.770	121.323 -0.0297
	GIRDER 8	125.626	119.376	120.930 -0.0298
	GIRDER 9	125.232	118.982	120.536 -0.0299

GIRDER REPORT, SPAN 16

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 1 STEP 3	GIRDER 1	128.382	122.132	123.685 -0.0292
	GIRDER 2	127.988	121.738	123.291 -0.0293
	GIRDER 3	127.595	121.345	122.898 -0.0294
	GIRDER 4	127.201	120.951	122.504 -0.0295
	GIRDER 5	126.807	120.557	122.111 -0.0296
	GIRDER 6	126.414	120.164	121.717 -0.0297
	GIRDER 7	126.020	119.770	121.324 -0.0298
	GIRDER 8	125.626	119.376	120.930 -0.0299
	GIRDER 9	125.232	118.982	120.537 -0.0299

GIRDER REPORT, SPAN 17

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 1 STEP 3	GIRDER 1	128.382	122.132	123.685 -0.0292
	GIRDER 2	127.988	121.738	123.291 -0.0293
	GIRDER 3	127.595	121.345	122.898 -0.0294
	GIRDER 4	127.201	120.951	122.504 -0.0295
	GIRDER 5	126.807	120.557	122.111 -0.0296
	GIRDER 6	126.414	120.164	121.717 -0.0297
	GIRDER 7	126.020	119.770	121.324 -0.0298
	GIRDER 8	125.626	119.376	120.930 -0.0299
	GIRDER 9	125.232	118.982	120.537 -0.0299

GIRDER REPORT, SPAN 18

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 1 STEP 3	GIRDER 1	128.382	122.132	123.685 -0.0292
	GIRDER 2	127.988	121.738	123.291 -0.0293
	GIRDER 3	127.595	121.345	122.898 -0.0294
	GIRDER 4	127.201	120.951	122.504 -0.0295
	GIRDER 5	126.807	120.557	122.111 -0.0296
	GIRDER 6	126.414	120.164	121.717 -0.0297
	GIRDER 7	126.020	119.770	121.324 -0.0298
	GIRDER 8	125.626	119.376	120.930 -0.0299
	GIRDER 9	125.232	118.982	120.537 -0.0299

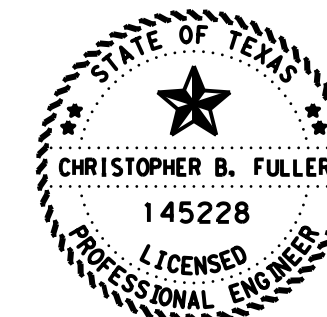
GIRDER REPORT, SPAN 19

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 1 STEP 3	GIRDER 1	128.480	122.230	123.778 -0.0280
	GIRDER 2	128.071	121.821	123.370 -0.0283
	GIRDER 3	127.663	121.413	122.963 -0.0285
	GIRDER 4	127.256	121.006	122.557 -0.0287
	GIRDER 5	126.850	120.600	122.151 -0.0290
	GIRDER 6	126.445	120.195	121.747 -0.0292
	GIRDER 7	126.040	119.790	121.342 -0.0295
	GIRDER 8	125.636	119.386	120.939 -0.0297
	GIRDER 9	125.232	118.982	120.537 -0.0299

GIRDER REPORT, SPAN 20

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.	BOT. GRDR FLG. ^①	SLOPE
PHASE 2 STEP 2	GIRDER 1	128.661	124.535	126.073 -0.0242
	GIRDER 2	128.229	124.102	125.641 -0.0245
	GIRDER 3	127.797	123.671	125.210 -0.0248
	GIRDER 4	127.367	123.241	124.781 -0.0250
	GIRDER 5	126.938	122.812	124.352 -0.0253
	GIRDER 6	126.509	122.384	123.925 -0.0256
	GIRDER 7	126.083	121.957	123.499 -0.0258
	GIRDER 8	125.657	121.531	123.074 -0.0261
	GIRDER 9	125.232	121.107	122.650 -0.0264

① GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.



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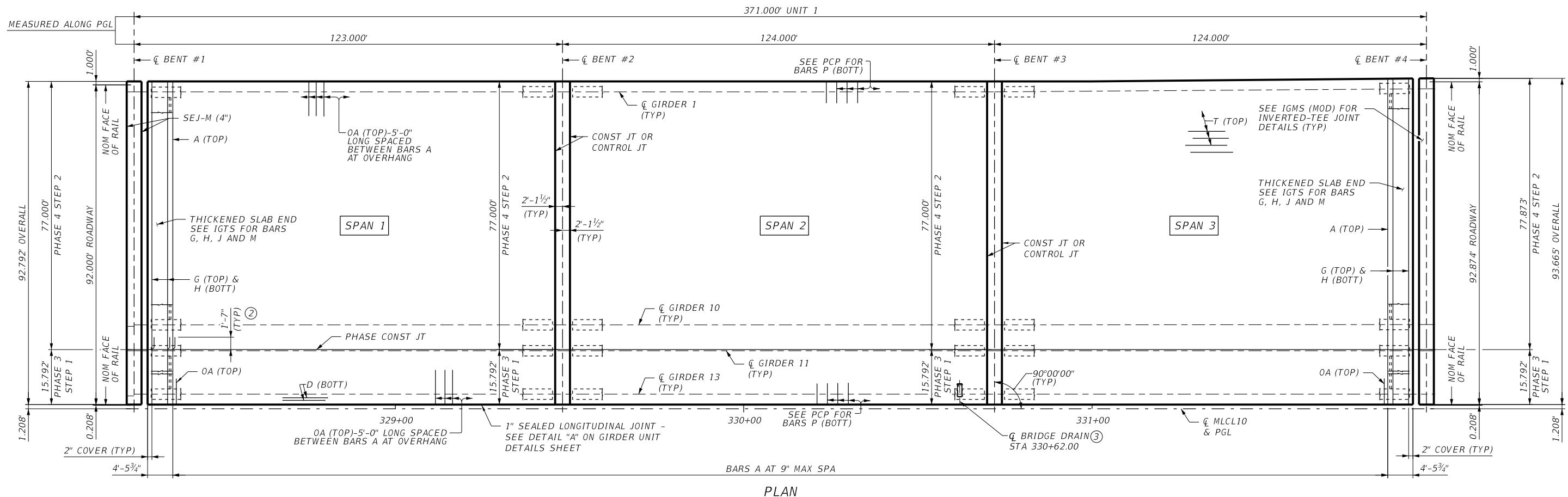


**IH 10 AT US 69
 BENT AND GIRDER REPORT
 IH 10 WB MAINLANE
 AT US 69**

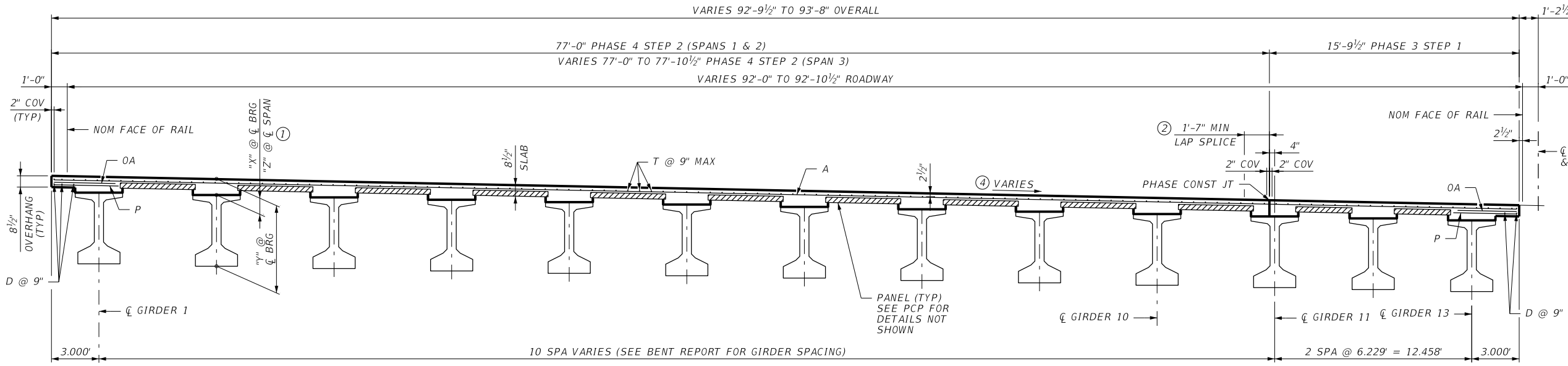
SHEET 4 OF 4

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DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1465		

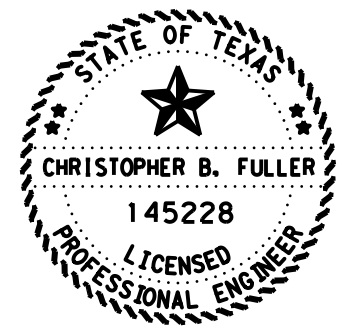
DATE: 21-FEB-2024 18:11
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\7. Bridge\10WB Mainlane_GRDUNIT_01.dgn



- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 3 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 TO LAP WITH BARS A, G & H.
- ③ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.
- ④ SEE BRIDGE LAYOUTS FOR DECK CROSS SLOPE/SUPERELEVATION.



SPANS 1, 2, AND 3 TRANSVERSE SECTION



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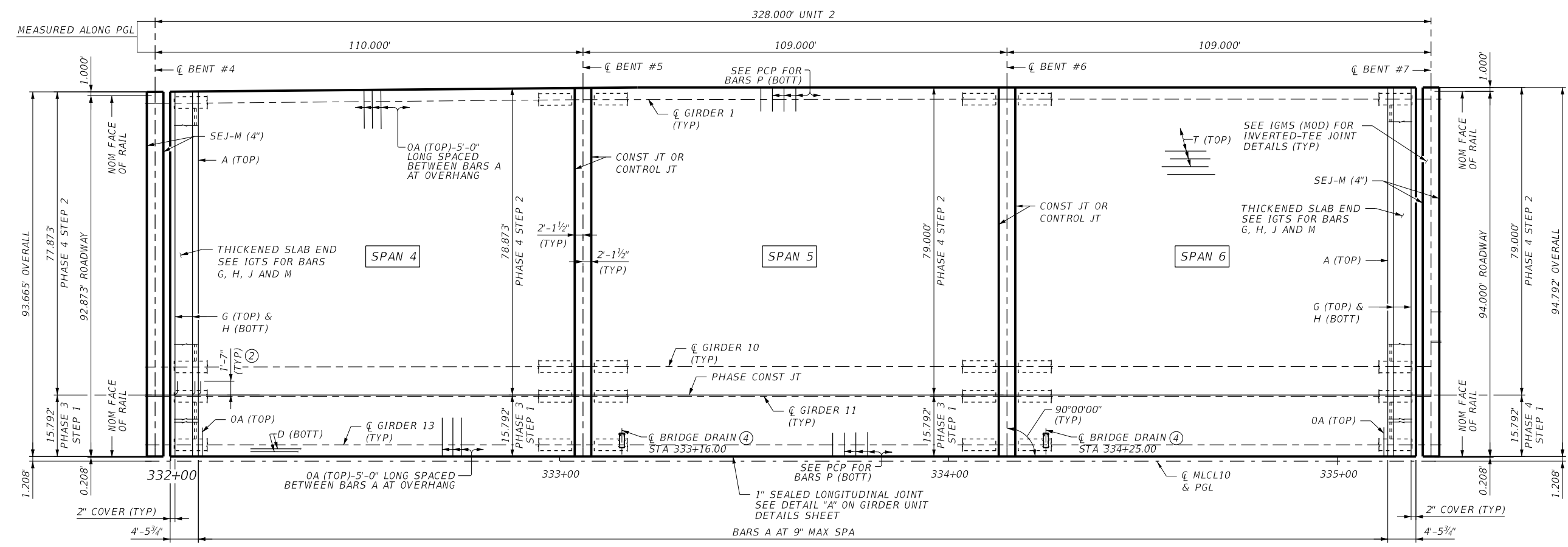
Texas Department of Transportation

IH 10 AT US 69
 371.00' PRESTR CONC
 GIRDER UNIT 1
 IH 10 WB MAINLANE
 AT US 69

SHEET 1 OF 8

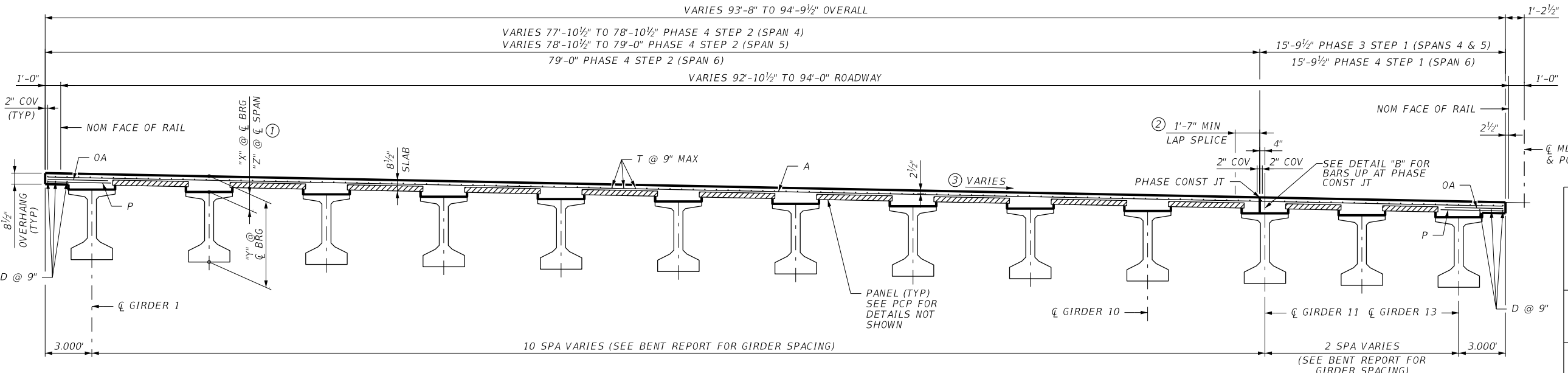
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BMT		JEFFERSON		1466			

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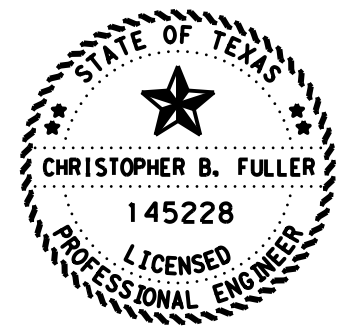


PLAN

- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 3 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 TO LAP WITH BARS A, G & H. EXTEND PHASE 4 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 TO LAP WITH BARS A, G & H.
- ③ SEE BRIDGE LAYOUTS FOR DECK CROSS SLOPE/SUPERELEVATION.
- ④ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



SPANS 4, 5, AND 6 TRANSVERSE SECTION



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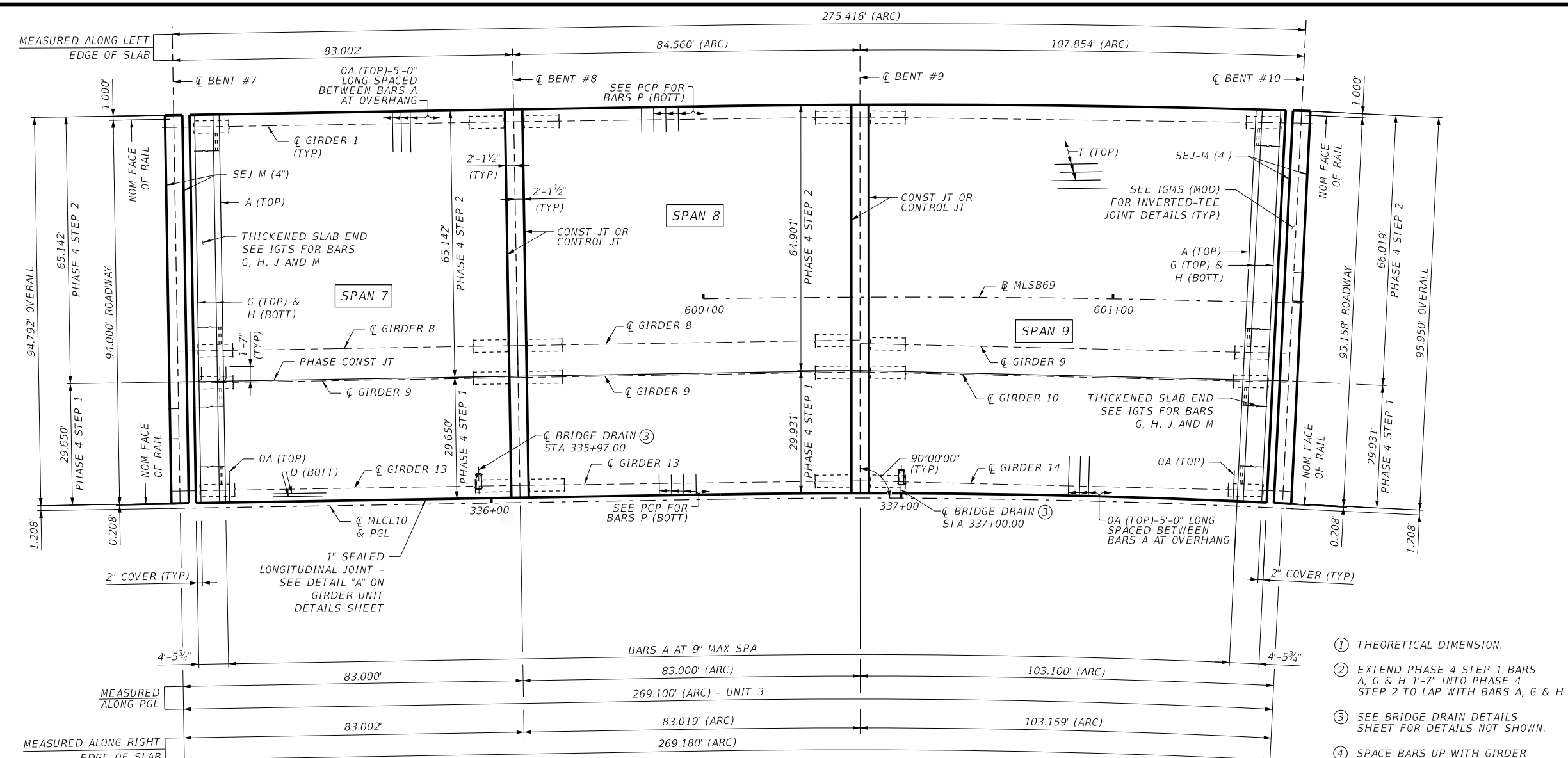


**IH 10 AT US 69
 328.00' PRESTR CONC
 GIRDER UNIT 2
 IH 10 WB MAINLANE
 AT US 69**

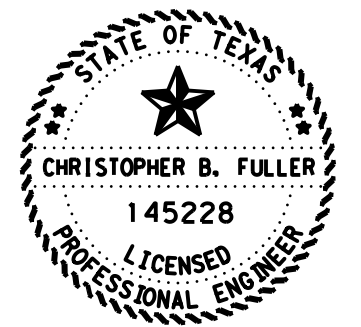
SHEET 2 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
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DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1467			

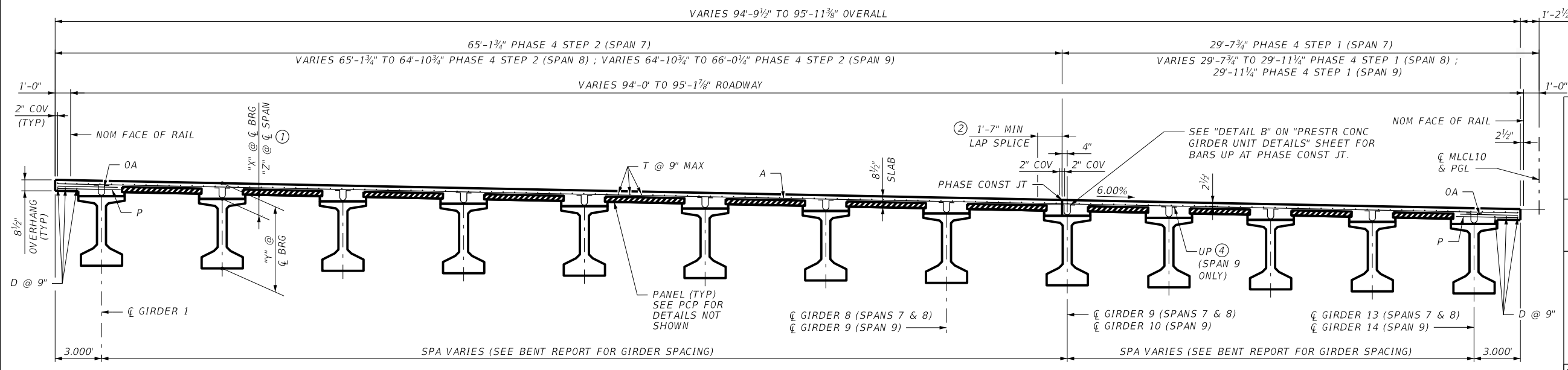
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- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 4 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 TO LAP WITH BARS A, G & H.
- ③ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.
- ④ SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



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SPANS 7, 8, AND 9 TRANSVERSE SECTION



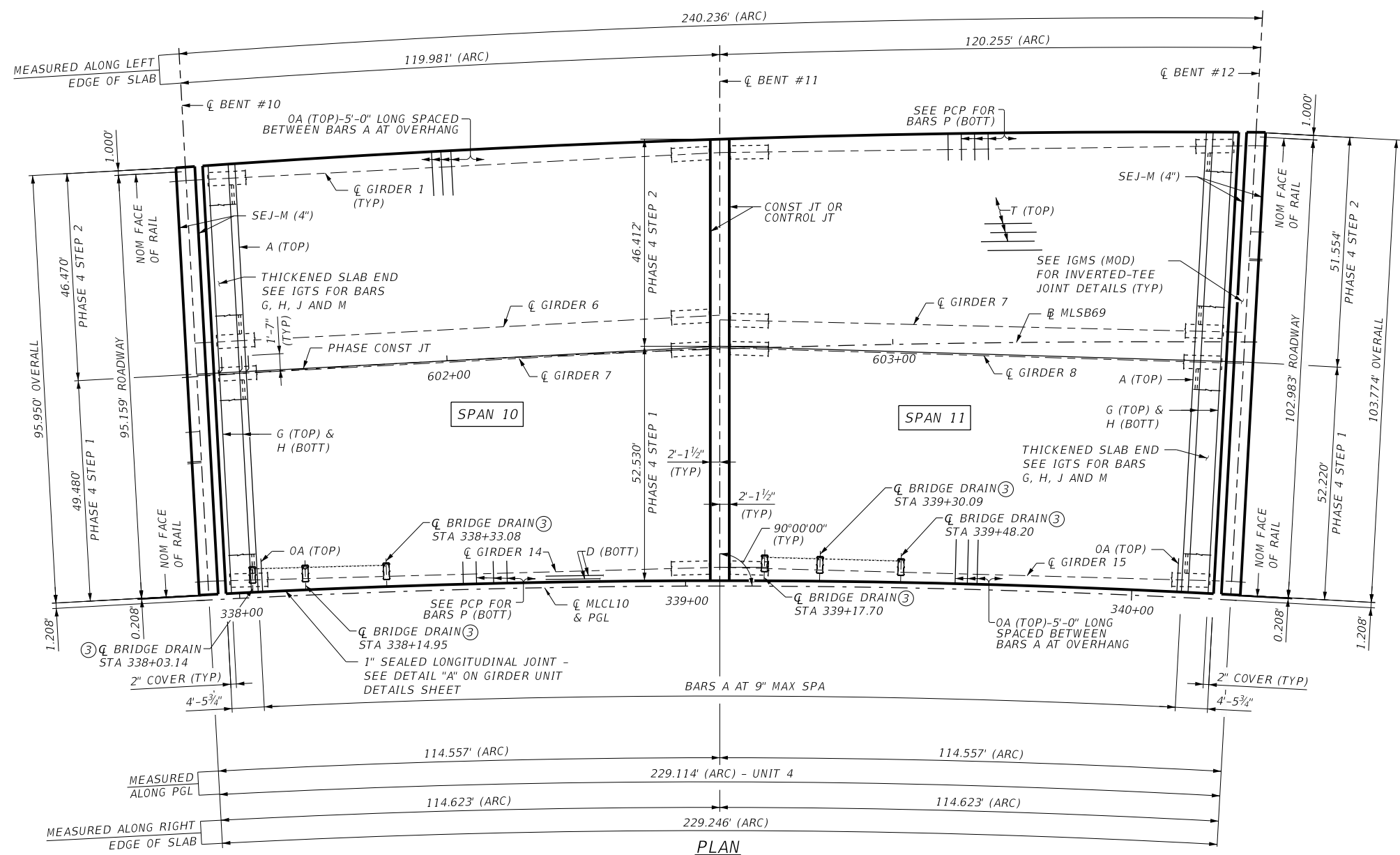
F-12679
 © 2022
 Texas Department of Transportation

IH 10 AT US 69
 269.10' PRESTR CONC
 GIRDER UNIT 3
 IH 10 WB MAINLANE
 AT US 69

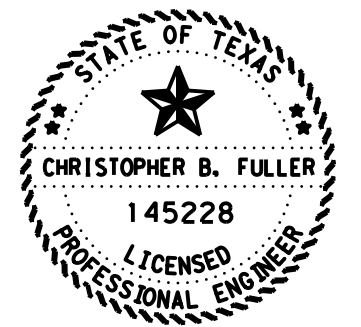
SHEET 3 OF 8

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DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1468			

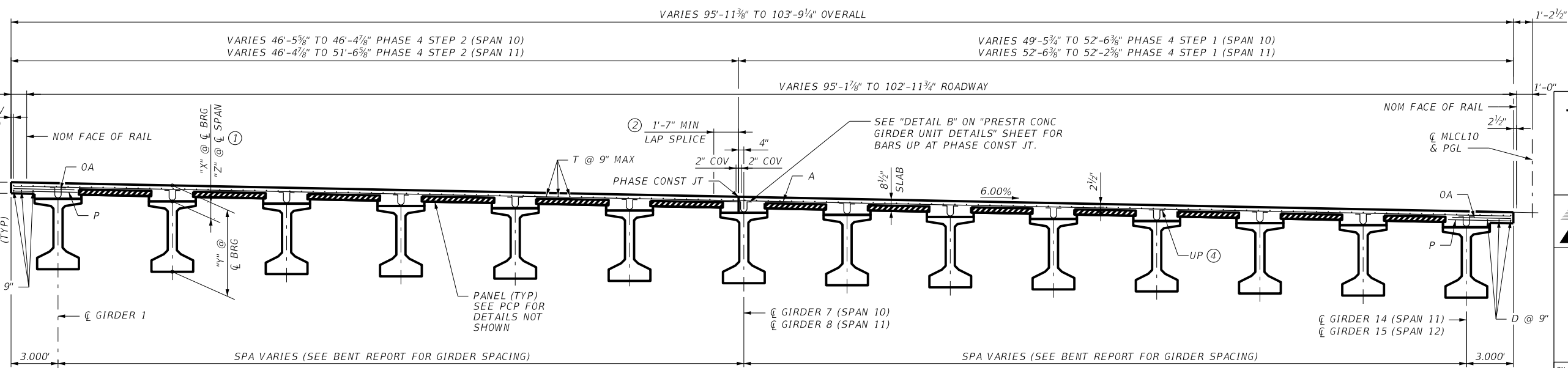
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- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 4 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 TO LAP WITH BARS A, G & H.
- ③ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.
- ④ SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



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VOLKERT

F-12679

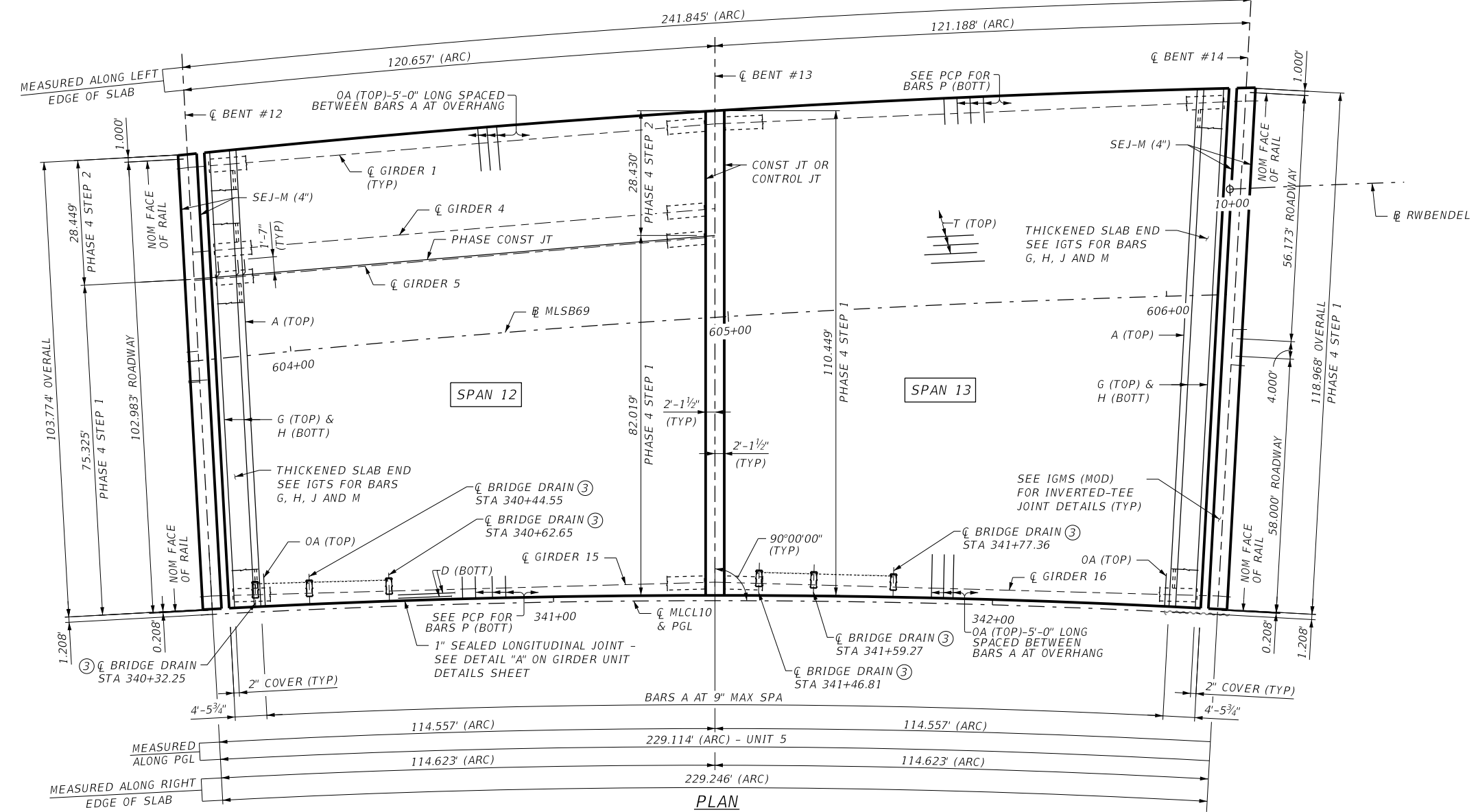
Texas Department of Transportation

IH 10 AT US 69
229.11' PRESTR CONC
GIRDER UNIT 4
IH 10 WB MAINLANE
AT US 69

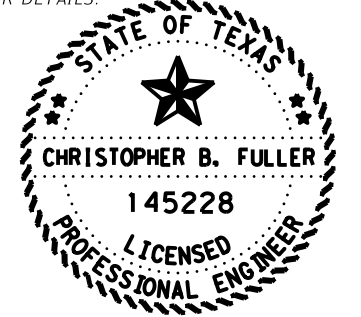
SHEET 4 OF 8

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CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1469	

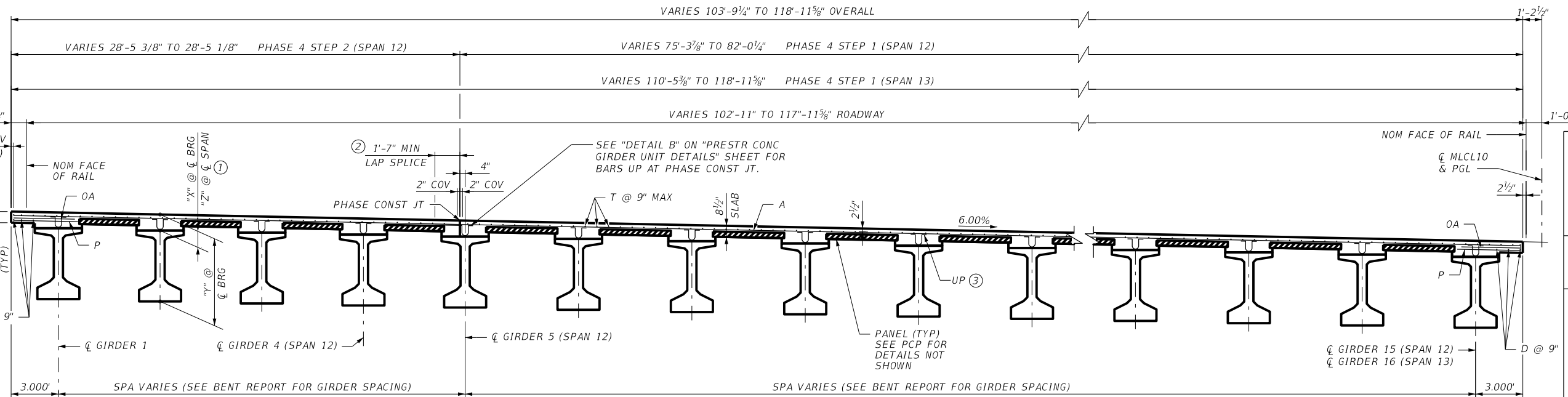
DATE: 21-FEB-2024 19:04
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\10 WB Mainlanes over US 69 NBER\1470_10WB_MAINLANE_GRDUNIT_05.dgn



- ① THEORETICAL DIMENSION.
- ② EXTEND PHASE 4 STEP 1 BARS A, G & H 1'-7" INTO PHASE 4 STEP 2 TO LAP WITH BARS A, G & H.
- ③ SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



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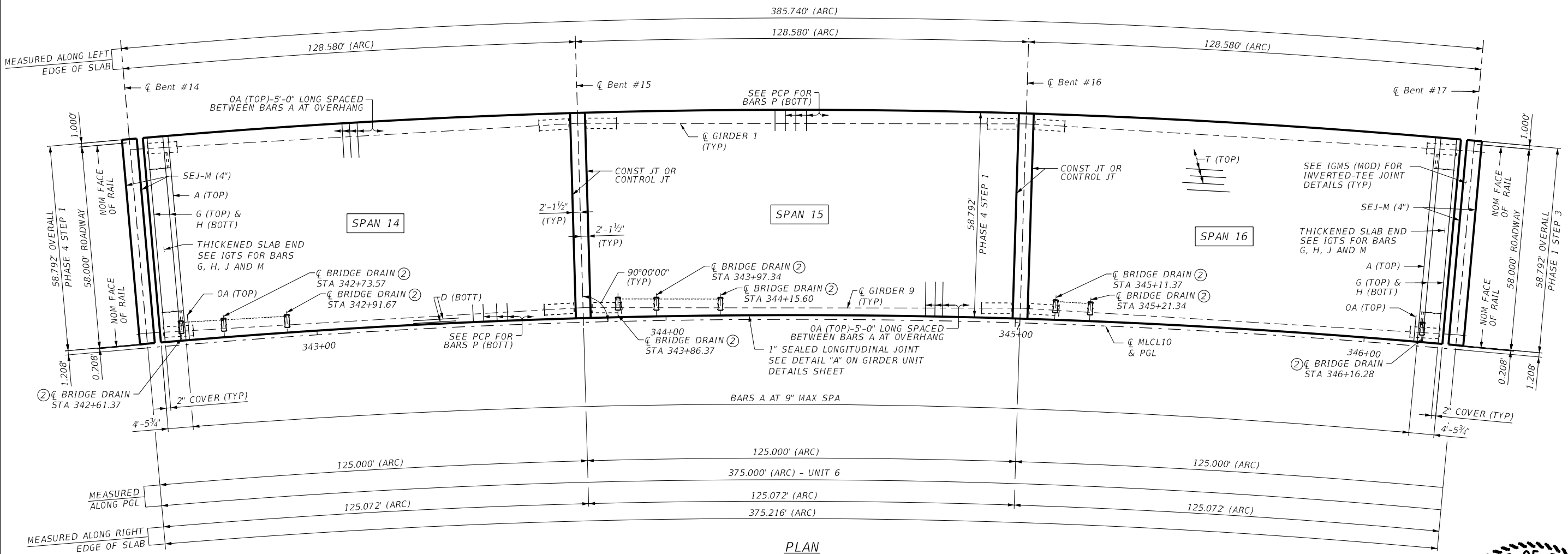
Texas Department of Transportation

IH 10 AT US 69
 229.12' PRESTR CONC
 GIRDER UNIT 5
 IH 10 WB MAINLANE
 AT US 69

SHEET 5 OF 8

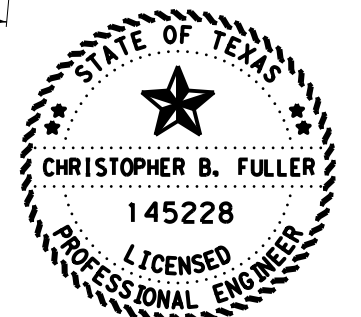
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0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1470			

DATE: 21-FEB-2024 18:08
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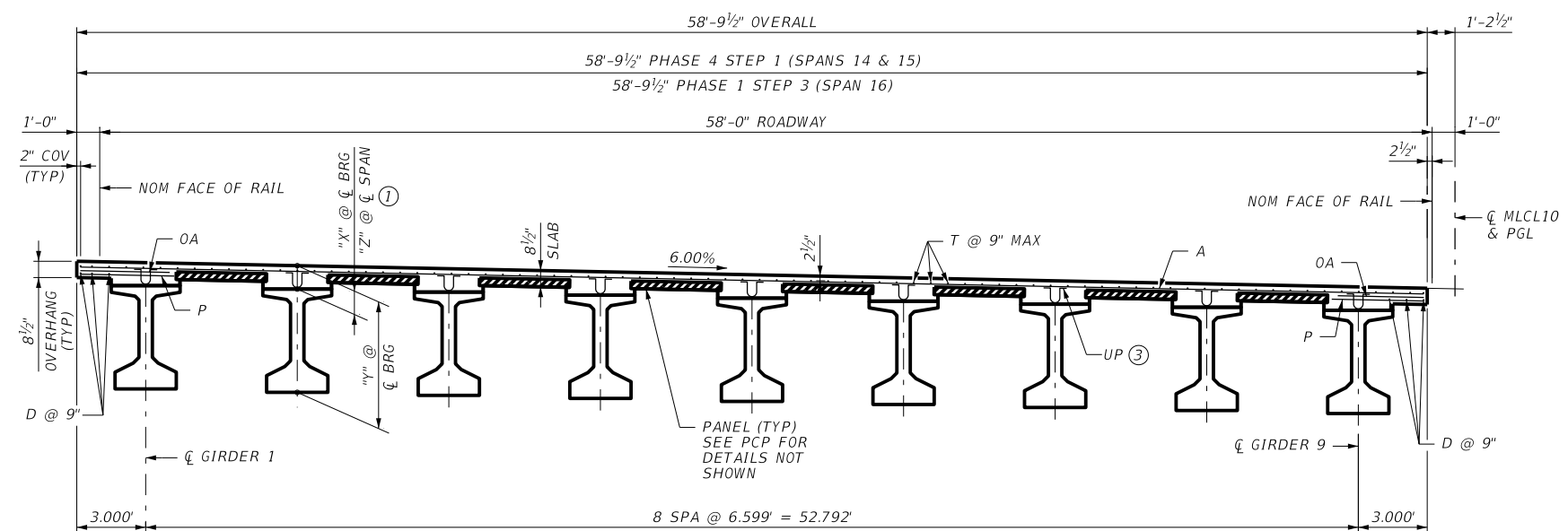


PLAN

- ① THEORETICAL DIMENSION.
- ② SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.
- ③ SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2\"/>



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SPANS 14, 15, AND 16 TRANSVERSE SECTION

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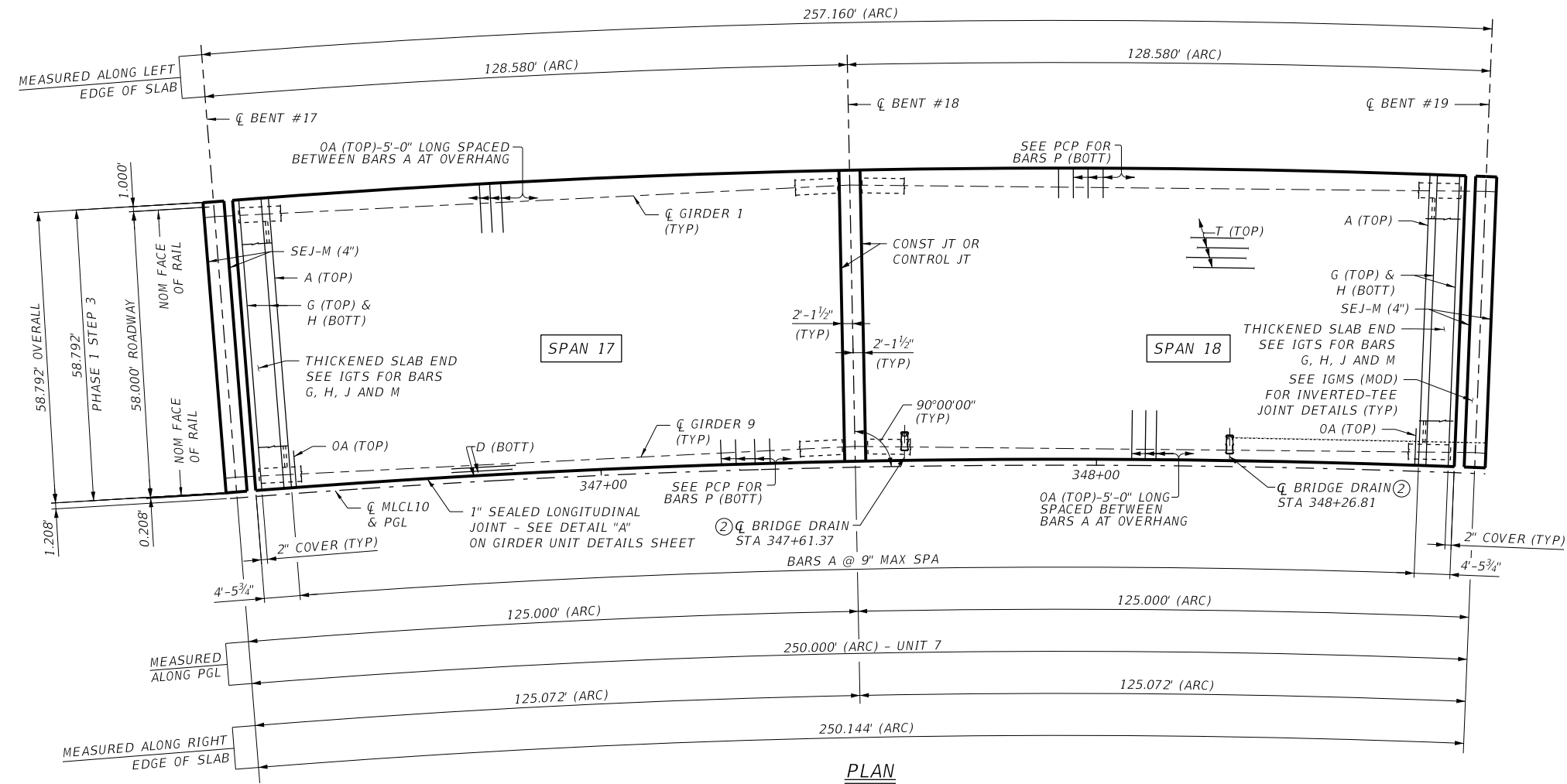
Texas Department of Transportation

IH 10 AT US 69
 375.00' PRESTR CONC
 GIRDER UNIT 6
 IH 10 WB MAINLANE
 AT US 69

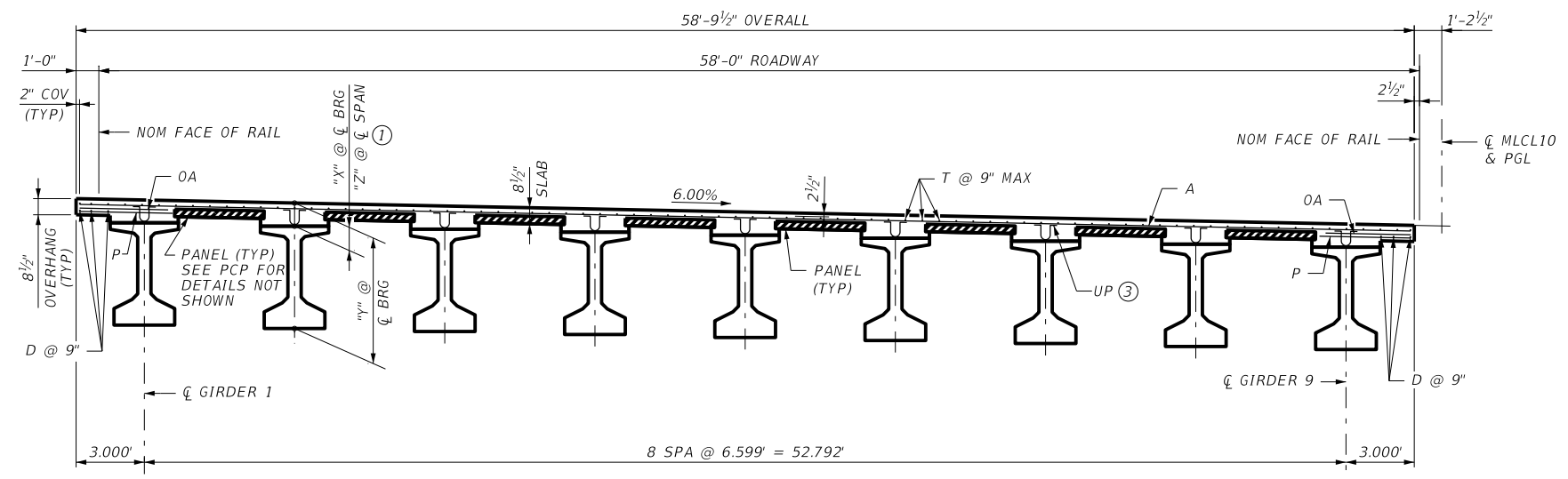
SHEET 6 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:	COUNTY:		SHEET NO.:				
	BMT		JEFFERSON		1471		

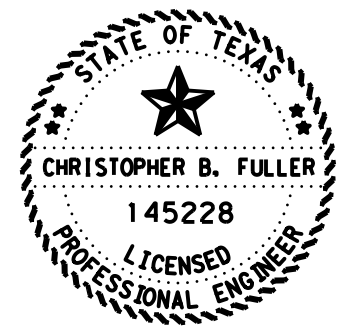
DATE: 21-FEB-2024 18:14
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10WB MAINLANE_GRDUNIT_07.dgn



- ① THEORETICAL DIMENSION.
- ② SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.
- ③ SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



SPANS 17 AND 18 TRANSVERSE SECTION



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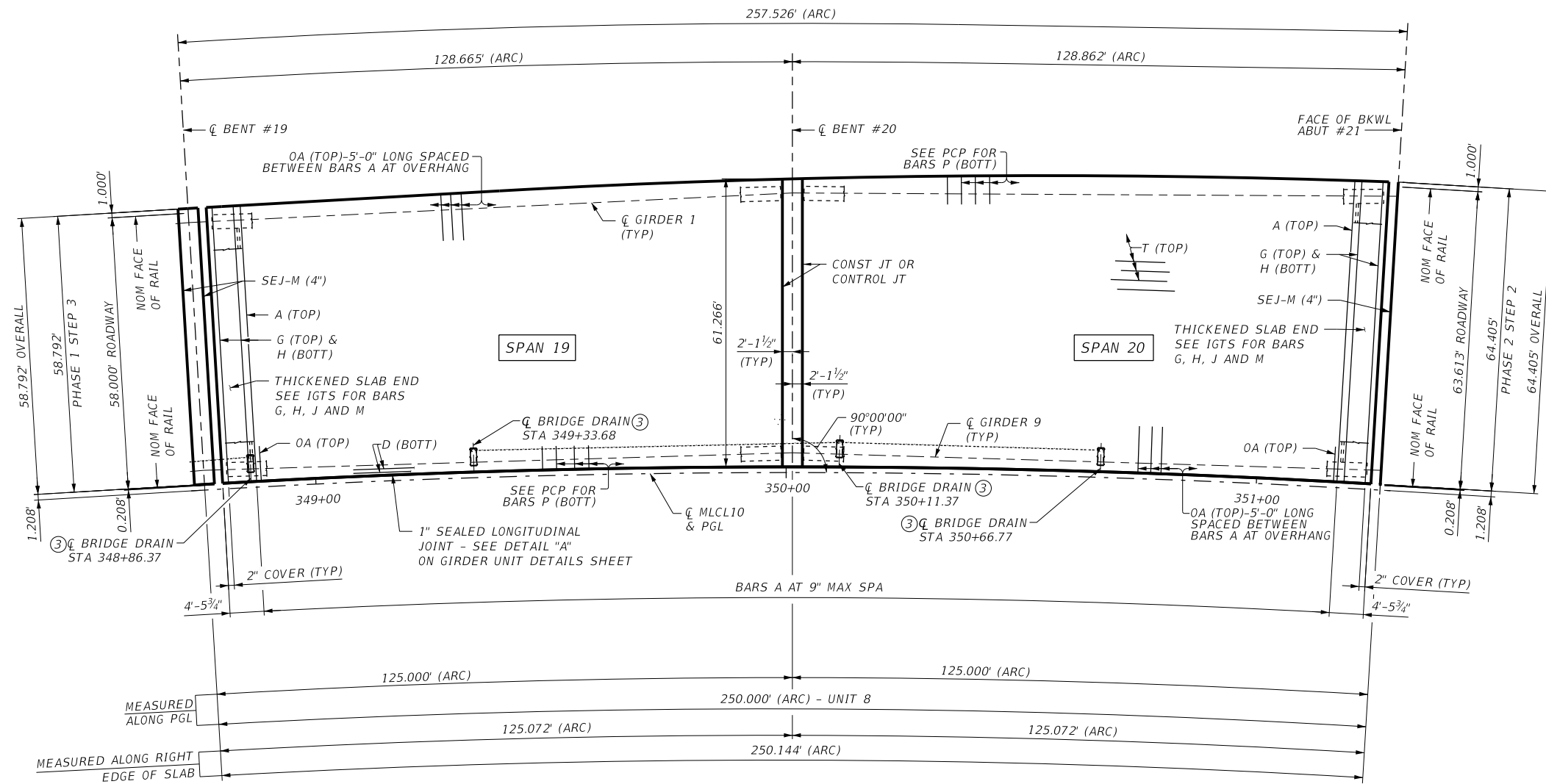


IH 10 AT US 69
 250.00' PRESTR CONC
 GIRDER UNIT 7
 IH 10 WB MAINLANE
 AT US 69

SHEET 7 OF 8

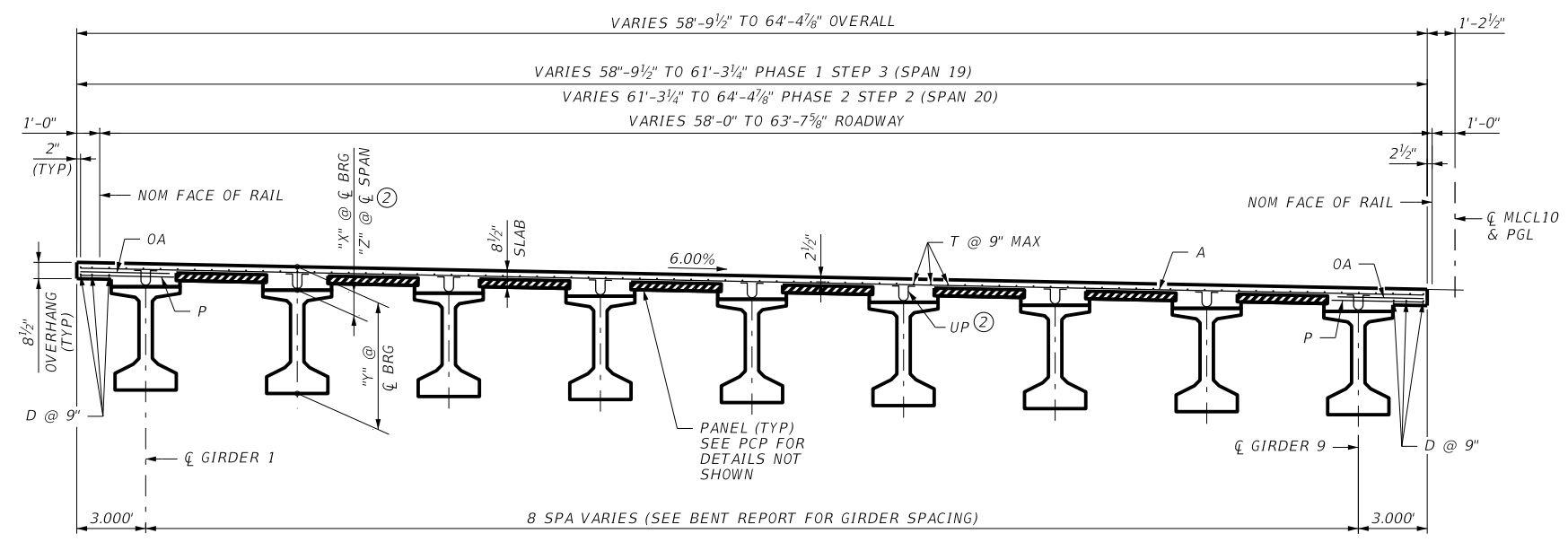
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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1472				

DATE: 21-FEB-2024 18:08
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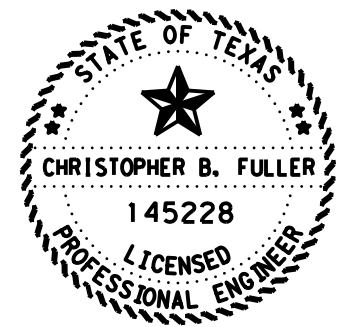


PLAN

- ① THEORETICAL DIMENSION.
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.
- ③ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



SPANS 19 AND 20 TRANSVERSE SECTION



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 IH 10 AT US 69
 250.00' PRESTR CONC
 GIRDER UNIT 8
 IH 10 WB MAINLANE
 AT US 69

SHEET 8 OF 8

DN:	CBF	CK:	FB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1473				

DATE: 21-FEB-2024 18:08
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBER)\1474_10WB_Mainlanes_GRDUNIT_DT_01.dwg

TABLE OF ESTIMATED QUANTITIES UNIT 1				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
1	PHASE 3 STEP 1	1942	354.915	4467.52
	PHASE 4 STEP 2	9471	1183.21	21783.07
2	PHASE 3 STEP 1	1958	357.88	4503.86
	PHASE 4 STEP 2	9548	1193.06	21960.4
3	PHASE 3 STEP 1	1958	357.83	4503.86
	PHASE 4 STEP 2	9592	1192.91	22061.37
TOTAL		34470	4639.80	79280.08

TABLE OF ESTIMATED QUANTITIES UNIT 2				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
4	PHASE 3 STEP 1	1737	315.80	3995.33
	PHASE 4 STEP 2	8621	1052.76	19828.3
5	PHASE 3 STEP 1	1721	312.78	3958.99
	PHASE 4 STEP 2	8609	1042.65	19800.47
6	PHASE 4 STEP 1	1721	312.76	3958.99
	PHASE 4 STEP 2	8611	1042.54	19805.3
TOTAL		31021	4079.28	71347.38

TABLE OF ESTIMATED QUANTITIES UNIT 3				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
7	PHASE 4 STEP 1	2461	391.25	5660.3
	PHASE 4 STEP 2	5407	626.00	12435.87
8	PHASE 4 STEP 1	2466	392.67	5671.8
	PHASE 4 STEP 2	5469	634.55	12578.24
9	PHASE 4 STEP 1	3075	496.01	7072.5
	PHASE 4 STEP 2	6984	914.17	16063.43
TOTAL		25862	3454.65	59482.14

TABLE OF ESTIMATED QUANTITIES UNIT 4				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
10	PHASE 4 STEP 1	5860	890.77	13476.85
	PHASE 4 STEP 2	5556	684.41	12778.8
11	PHASE 4 STEP 1	6020	890.92	13844.85
	PHASE 4 STEP 2	5861	799.32	13480.99
TOTAL		23296	3265.42	53581.49

TABLE OF ESTIMATED QUANTITIES UNIT 5				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
12	PHASE 4 STEP 1	9128	1233.81	20994.17
	PHASE 4 STEP 2	3447	460.89	7927.87
13	PHASE 4 STEP 1	13493	1809.96	31034.59
TOTAL		26068	3504.65	59956.63

TABLE OF ESTIMATED QUANTITIES UNIT 6				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
14	PHASE 4 STEP 1	7453	1098.89	17142.82
15	PHASE 4 STEP 1	7458	1098.99	17153.86
16	PHASE 1 STEP 3	7474	1099.00	17190.2
TOTAL		22385.6	3296.88	51486.88

TABLE OF ESTIMATED QUANTITIES UNIT 7				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
17	PHASE 1 STEP 3	7464	1099.00	17167.2
18	PHASE 1 STEP 3	7456	1099.00	17148.8
TOTAL		14920	2197.99	34316

TABLE OF ESTIMATED QUANTITIES UNIT 8				
SPAN NO		REIN CONCRETE SLAB	PRESTRESSED CONC GIRDER (TY T x 54) ①	TOTAL REINF STEEL ②
		SF	LF	LB
19	PHASE 1 STEP 3	7575	1099.38	17422.5
20	PHASE 2 STEP 2	7981	1119.21	18356.3
TOTAL		15556	2218.59	35778.8

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.

SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN.

SEE IGMS (MOD) STANDARD FOR MISCELLANEOUS DETAILS.

SEE APPLICABLE RAIL DETAILS FOR RAIL ANCHORAGE IN SLAB.

SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.

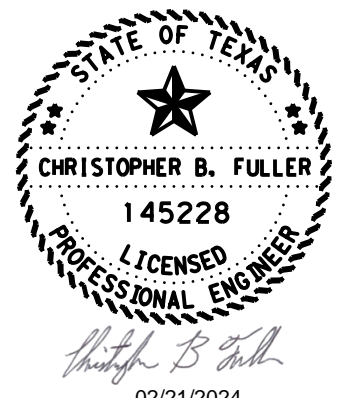
MATERIAL NOTES:
 PROVIDE CLASS 5 CONCRETE ($f'c = 4,000$ PSI).

PROVIDE GRADE 60 REINFORCING STEEL.

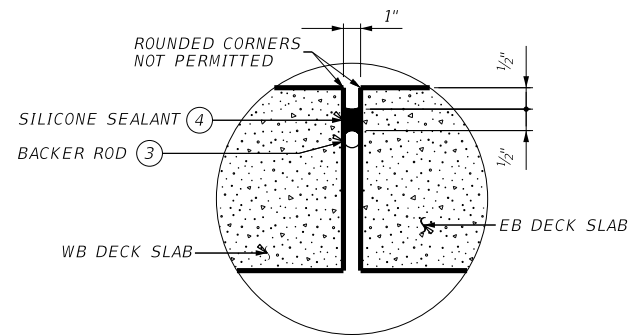
PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 UNCOATED ~ #4 = 1'-7"

DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T, UNLESS NOTED OTHERWISE.

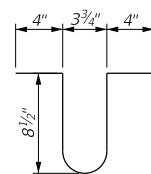
PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.



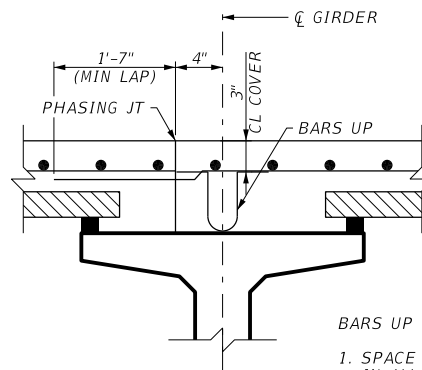
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DETAIL A
 N.T.S.



BARS UP



DETAIL B
 N.T.S.

BARS UP NOTES:

- SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2".

- QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.
- BACKER ROD SHALL BE 25% LARGER THAN JOINT OPENING AND SHALL BE COMPATIBLE WITH THE SEALANT; NO REACTION SHALL OCCUR BETWEEN THE ROD AND THE SEALANT.
- SEALANT SHALL BE CLASS 7 SILICONE SEALANT. INSTALL WHEN AMBIENT TEMPERATURE IS BEING 55°F AND 85°F AND RISING. ENGINEER TO DETERMINE ALLOWABLE HOURS FOR SEALANT APPLICATION.

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IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 WBML AT US 69

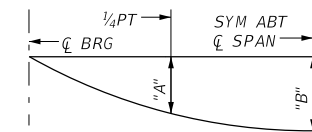
SHEET 1 OF 5

DN: CBF	CK: FB	DW: RF	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1474	

DATE: 21-FEB-2024 18:07
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg T1 (IH 10 WB MainlanE_GRDUNIT_DT_02.dgn

TABLE OF SECTION DEPTHS					
Span No.	Beam No.	"X" at ζ of Brg	"Y" at ζ of Brg	"Z" at ζ of Span	
1	PHASE 4 STEP 2	1	1'-0"	5'-6"	10 1/4"
		2-10	1'-0"	5'-6"	10 1/2"
	PHASE 3 STEP 1	11	1'-0"	5'-6"	9 1/2"
		12	1'-0"	5'-6"	10 1/8"
		13	1'-0"	5'-6"	10 1/8"
2	PHASE 4 STEP 2	1	11 1/2"	5'-5 1/2"	10 1/2"
		2-10	11 1/2"	5'-5 1/2"	10 5/8"
	PHASE 3 STEP 1	11	11 1/2"	5'-5 1/2"	9 5/8"
		12	11 1/2"	5'-5 1/2"	10 3/8"
		13	11 1/2"	5'-5 1/2"	10 1/4"
3	PHASE 4 STEP 2	1	11 3/4"	5'-5 3/4"	10 5/8"
		2-10	11 3/4"	5'-5 3/4"	10 7/8"
	PHASE 3 STEP 1	11	11 3/4"	5'-5 3/4"	9 7/8"
		12	11 3/4"	5'-5 3/4"	10 5/8"
		13	11 3/4"	5'-5 3/4"	10 1/2"
4	PHASE 4 STEP 2	1	11 1/2"	5'-5 1/2"	10 3/8"
		2-4	11 1/2"	5'-5 1/2"	10 1/2"
		5-10	11 1/2"	5'-5 1/2"	10 5/8"
	PHASE 3 STEP 1	11	11 1/2"	5'-5 1/2"	10 "
		12	11 1/2"	5'-5 1/2"	10 3/8"
		13	11 1/2"	5'-5 1/2"	10 3/8"
5	PHASE 4 STEP 2	1	11 1/2"	5'-5 1/2"	10 1/2"
		2-10	11 1/2"	5'-5 1/2"	10 5/8"
	PHASE 3 STEP 1	11	11 1/2"	5'-5 1/2"	10 "
		12	11 1/2"	5'-5 1/2"	10 3/8"
		13	11 1/2"	5'-5 1/2"	10 3/8"

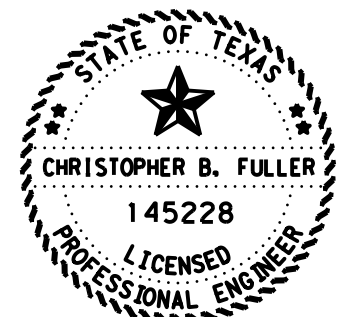
TABLE OF DEFLECTIONS				
Span No.	Beam No.	"A" Ft	"B" Ft	
1	PHASE 4 STEP 2	1	-0.117	-0.166
		2-10	-0.129	-0.184
	PHASE 3 STEP 1	11	-0.060	-0.085
		12	-0.108	-0.154
		13	-0.106	-0.151
2	PHASE 4 STEP 2	1	-0.121	-0.172
		2-10	-0.134	-0.190
	PHASE 3 STEP 1	11	-0.062	-0.088
		12	-0.112	-0.159
		13	-0.110	-0.156
3	PHASE 4 STEP 2	1	-0.121	-0.172
		2-10	-0.134	-0.191
	PHASE 3 STEP 1	11	-0.062	-0.088
		12	-0.112	-0.159
		13	-0.110	-0.156
4	PHASE 4 STEP 2	1	-0.074	-0.105
		2-4	-0.082	-0.117
		5-10	-0.082	-0.117
	PHASE 3 STEP 1	11	-0.037	-0.053
		12	-0.067	-0.096
		13	-0.066	-0.094
5	PHASE 4 STEP 2	1	-0.071	-0.101
		2-10	-0.079	-0.113
	PHASE 3 STEP 1	11	-0.036	-0.051
		12	-0.065	-0.092
		13	-0.064	-0.091



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY ($E_c = 5000$ KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.

BAR TABLE	
BAR	SIZE
A	#4
AA	#5
D	#4
G	#4
H	#4
J	#4
K	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4



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**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 WBML AT US 69**

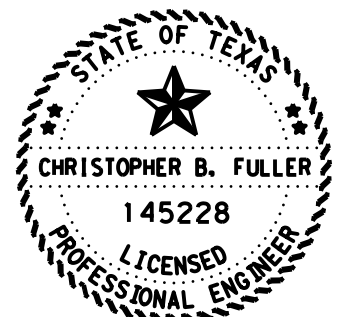
SHEET 2 OF 5

DN:	CBF	CK:	CSU	DW:	MMR	CK:	CSU
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1475		

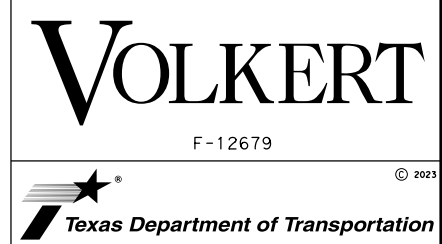
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 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBFR)\1476_10WB_MAINLANE_GRDUNIT_DT_03.dgn

TABLE OF SECTION DEPTHS					
Span No.	Beam No.	"X" at ζ of Brg			
		"Y" at ζ of Brg	"Z" at ζ of Span		
6	PHASE 4 STEP 2	1	11 1/2"	5'-5 1/2"	1'-0 1/4"
		2	11 1/2"	5'-5 1/2"	1'-0 1/8"
		3	11 1/2"	5'-5 1/2"	1'-0 "
		4	11 1/2"	5'-5 1/2"	11 7/8"
		5	11 1/2"	5'-5 1/2"	11 3/4"
		6	11 1/2"	5'-5 1/2"	11 3/8"
		7	11 1/2"	5'-5 1/2"	11 1/2"
		8	11 1/2"	5'-5 1/2"	11 3/8"
		9	11 1/2"	5'-5 1/2"	11 1/8"
		10	11 1/2"	5'-5 1/2"	11 "
	PHASE 4 STEP 1	11	11 1/2"	5'-5 1/2"	10 1/4"
		12	11 1/2"	5'-5 1/2"	10 5/8"
		13	11 1/2"	5'-5 1/2"	10 1/2"
7	PHASE 4 STEP 2	1	10 3/4"	5'-4 3/4"	10 1/2"
		2-8	10 3/4"	5'-4 3/4"	10 1/2"
	PHASE 4 STEP 1	9	10 3/4"	5'-4 3/4"	10 3/8"
		10-12	10 3/4"	5'-4 3/4"	10 1/2"
8	PHASE 4 STEP 2	13	10 3/4"	5'-4 3/4"	10 3/8"
		1	10 3/4"	5'-4 3/4"	10 3/8"
		2	10 3/4"	5'-4 3/4"	10 1/2"
		3-4	10 3/4"	5'-4 3/4"	10 1/2"
		5	10 3/4"	5'-4 3/4"	10 3/8"
		6	10 3/4"	5'-4 3/4"	10 3/8"
	PHASE 4 STEP 1	7-8	10 3/4"	5'-4 3/4"	10 3/8"
		9	10 3/4"	5'-4 3/4"	10 1/4"
9	PHASE 4 STEP 2	10-12	10 3/4"	5'-4 3/4"	10 3/8"
		13	10 3/4"	5'-4 3/4"	10 3/8"
		1	1'-0 1/2"	5'-6 1/2"	10 3/4"
		2	1'-0 1/2"	5'-6 1/2"	10 7/8"
		3	1'-0 1/2"	5'-6 1/2"	10 7/8"
		4	1'-0 1/2"	5'-6 1/2"	10 7/8"
		5	1'-0 1/2"	5'-6 1/2"	10 7/8"
		6	1'-0 1/2"	5'-6 1/2"	10 3/4"
		7	1'-0 1/2"	5'-6 1/2"	10 3/4"
		8	1'-0 1/2"	5'-6 1/2"	10 3/4"
	PHASE 4 STEP 1	9	1'-0 1/2"	5'-6 1/2"	10 3/4"
		10	1'-0 1/2"	5'-6 1/2"	10 3/8"
		11	1'-0 1/2"	5'-6 1/2"	10 3/4"
		12	1'-0 1/2"	5'-6 1/2"	10 3/4"
10	PHASE 4 STEP 2	13	1'-0 1/2"	5'-6 1/2"	10 3/4"
		14	1'-0 1/2"	5'-6 1/2"	10 3/8"
		1	1'-1 "	5'-7 "	11 "
		2	1'-1 "	5'-7 "	11 1/8"
		3	1'-1 "	5'-7 "	11 1/8"
		4	1'-1 "	5'-7 "	11 1/8"
	PHASE 4 STEP 1	5	1'-1 "	5'-7 "	11 1/8"
		6	1'-1 "	5'-7 "	11 1/8"
		7	1'-1 "	5'-7 "	10 3/8"
		8	1'-1 "	5'-7 "	11 "
		9	1'-1 "	5'-7 "	11 "
		10	1'-1 "	5'-7 "	11 "
		11	1'-1 "	5'-7 "	10 7/8"
		12	1'-1 "	5'-7 "	10 7/8"
PHASE 4 STEP 2	13	1'-1 "	5'-7 "	10 7/8"	
	14	1'-1 "	5'-7 "	10 3/4"	

TABLE OF DEFLECTIONS				
Span No.	Beam No.	"A"	"B"	
		Ft	Ft	
6	PHASE 4 STEP 2	1	-0.071	-0.101
		2	-0.080	-0.113
		3	-0.080	-0.113
		4	-0.080	-0.113
		5	-0.080	-0.113
		6	-0.080	-0.113
		7	-0.080	-0.113
		8	-0.080	-0.113
		9	-0.080	-0.113
		10	-0.080	-0.113
	PHASE 4 STEP 1	11	-0.036	-0.051
		12	-0.065	-0.092
		13	-0.064	-0.091
7	PHASE 4 STEP 2	1	-0.022	-0.032
		2-8	-0.025	-0.036
	PHASE 4 STEP 1	9	-0.012	-0.017
		10-12	-0.021	-0.030
8	PHASE 4 STEP 2	13	-0.020	-0.029
		1	-0.025	-0.036
		2	-0.027	-0.039
		3-4	-0.027	-0.038
		5	-0.027	-0.038
		6	-0.026	-0.038
	PHASE 4 STEP 1	7-8	-0.026	-0.037
		9	-0.012	-0.017
9	PHASE 4 STEP 2	10-12	-0.022	-0.031
		13	-0.020	-0.029
		1	-0.064	-0.091
		2	-0.068	-0.097
		3	-0.067	-0.096
		4	-0.066	-0.094
		5	-0.065	-0.093
		6	-0.064	-0.092
		7	-0.064	-0.090
		8	-0.063	-0.089
	PHASE 4 STEP 1	9	-0.062	-0.088
		10	-0.032	-0.045
		11	-0.057	-0.082
		12	-0.057	-0.081
10	PHASE 4 STEP 2	13	-0.056	-0.079
		14	-0.048	-0.068
		1	-0.103	-0.147
		2	-0.112	-0.159
		3	-0.110	-0.157
		4	-0.109	-0.155
	PHASE 4 STEP 1	5	-0.107	-0.152
		6	-0.106	-0.150
		7	-0.053	-0.076
		8	-0.096	-0.136
		9	-0.094	-0.134
		10	-0.093	-0.132
		11	-0.092	-0.131
		12	-0.091	-0.129
PHASE 4 STEP 2	13	-0.089	-0.127	
	14	-0.075	-0.106	



Christopher B. Fuller
 02/21/2024
 HL93 LOADING



**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 WBML AT US 69**

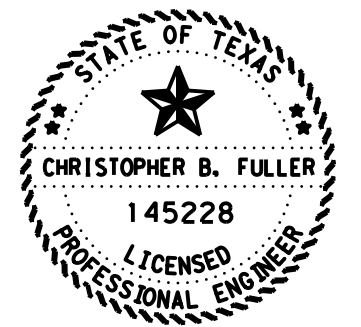
SHEET 3 OF 5

DN:	CBF	CK:	CSU	DW:	MWR	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1476			

DATE: 21-FEB-2024 18:08
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBER)\1477_10WB_MainLANE_GRDUNIT_DT_04.dgn

TABLE OF SECTION DEPTHS					
Span No.	Beam No.	"X" at ζ of Brg	"Y" at ζ of Brg	"Z" at ζ of Span	
11	PHASE 4 STEP 2	1	1'-0 3/4"	5'-6 3/4"	10 3/4"
		2	1'-0 3/4"	5'-6 3/4"	10 3/4"
		3	1'-0 3/4"	5'-6 3/4"	10 3/4"
		4	1'-0 3/4"	5'-6 3/4"	10 3/4"
		5	1'-0 3/4"	5'-6 3/4"	10 3/4"
		6	1'-0 3/4"	5'-6 3/4"	10 3/4"
		7	1'-0 3/4"	5'-6 3/4"	10 3/4"
	PHASE 4 STEP 1	8	1'-0 3/4"	5'-6 3/4"	10 1/8"
		9	1'-0 3/4"	5'-6 3/4"	10 3/4"
		10	1'-0 3/4"	5'-6 3/4"	10 3/4"
		11	1'-0 3/4"	5'-6 3/4"	10 3/4"
		12	1'-0 3/4"	5'-6 3/4"	10 3/4"
		13	1'-0 3/4"	5'-6 3/4"	10 3/4"
		14	1'-0 3/4"	5'-6 3/4"	10 3/4"
		15	1'-0 3/4"	5'-6 3/4"	10 1/2"
12	PHASE 4 STEP 2	1	1'-0 3/4"	5'-6 3/4"	10 3/4"
		2	1'-0 3/4"	5'-6 3/4"	10 3/4"
		3	1'-0 3/4"	5'-6 3/4"	10 3/4"
		4	1'-0 3/4"	5'-6 3/4"	10 3/4"
	PHASE 4 STEP 1	5	1'-0 3/4"	5'-6 3/4"	10 1/4"
		6	1'-0 3/4"	5'-6 3/4"	10 7/8"
		7	1'-0 3/4"	5'-6 3/4"	10 7/8"
		8	1'-0 3/4"	5'-6 3/4"	10 7/8"
		9	1'-0 3/4"	5'-6 3/4"	10 7/8"
		10	1'-0 3/4"	5'-6 3/4"	10 7/8"
		11	1'-0 3/4"	5'-6 3/4"	10 7/8"
		12	1'-0 3/4"	5'-6 3/4"	10 7/8"
		13	1'-0 3/4"	5'-6 3/4"	10 3/4"
		14	1'-0 3/4"	5'-6 3/4"	10 3/4"
		15	1'-0 3/4"	5'-6 3/4"	10 1/2"
13	PHASE 4 STEP 1	1	1'-0 1/2"	5'-6 1/2"	10 5/8"
		2	1'-0 1/2"	5'-6 1/2"	10 5/8"
		3	1'-0 1/2"	5'-6 1/2"	10 5/8"
		4	1'-0 1/2"	5'-6 1/2"	10 5/8"
		5	1'-0 1/2"	5'-6 1/2"	10 5/8"
		6	1'-0 1/2"	5'-6 1/2"	10 5/8"
		7	1'-0 1/2"	5'-6 1/2"	10 5/8"
		8	1'-0 1/2"	5'-6 1/2"	10 5/8"
		9	1'-0 1/2"	5'-6 1/2"	10 1/2"
		10	1'-0 1/2"	5'-6 1/2"	10 1/2"
		11	1'-0 1/2"	5'-6 1/2"	10 1/2"
		12	1'-0 1/2"	5'-6 1/2"	10 1/2"
		13	1'-0 1/2"	5'-6 1/2"	10 1/2"
		14	1'-0 1/2"	5'-6 1/2"	10 1/2"
		15	1'-0 1/2"	5'-6 1/2"	10 1/2"
		16	1'-0 1/2"	5'-6 1/2"	10 1/4"
14	PHASE 4 STEP 1	1	1'-0 1/2"	5'-6 1/2"	10 3/8"
		2	1'-0 1/2"	5'-6 1/2"	10 3/8"
		3	1'-0 1/2"	5'-6 1/2"	10 3/8"
		4	1'-0 1/2"	5'-6 1/2"	10 5/8"
		5	1'-0 1/2"	5'-6 1/2"	10 5/8"
		6	1'-0 1/2"	5'-6 1/2"	10 5/8"
		7	1'-0 1/2"	5'-6 1/2"	10 5/8"
		8	1'-0 1/2"	5'-6 1/2"	10 5/8"
		9	1'-0 1/2"	5'-6 1/2"	10 1/4"
15	PHASE 4 STEP 1	1	1'-1 1/4"	5'-7 1/4"	10 3/4"
		2	1'-1 1/4"	5'-7 1/4"	10 3/4"
		3	1'-1 1/4"	5'-7 1/4"	10 5/8"
		4	1'-1 1/4"	5'-7 1/4"	10 7/8"
		5	1'-1 1/4"	5'-7 1/4"	10 5/8"
		6	1'-1 1/4"	5'-7 1/4"	10 5/8"
		7	1'-1 1/4"	5'-7 1/4"	10 5/8"
		8	1'-1 1/4"	5'-7 1/4"	10 1/2"
		9	1'-1 1/4"	5'-7 1/4"	10 1/4"

TABLE OF DEFLECTIONS				
Span No.	Beam No.	"A"	"B"	
		Ft	Ft	
11	PHASE 4 STEP 2	1	-0.099	-0.140
		2	-0.102	-0.145
		3	-0.101	-0.143
		4	-0.099	-0.141
		5	-0.098	-0.139
		6	-0.097	-0.138
		7	-0.095	-0.136
	PHASE 4 STEP 1	8	-0.055	-0.078
		9	-0.099	-0.140
		10	-0.097	-0.139
		11	-0.096	-0.137
		12	-0.095	-0.135
		13	-0.093	-0.133
		14	-0.092	-0.131
		15	-0.076	-0.108
12	PHASE 4 STEP 2	1	-0.099	-0.141
		2	-0.101	-0.144
		3	-0.100	-0.142
		4	-0.099	-0.140
	PHASE 4 STEP 1	5	-0.062	-0.088
		6	-0.112	-0.159
		7	-0.110	-0.157
		8	-0.108	-0.154
		9	-0.107	-0.152
		10	-0.105	-0.150
		11	-0.103	-0.147
		12	-0.102	-0.145
		13	-0.100	-0.143
		14	-0.099	-0.141
		15	-0.079	-0.113
13	PHASE 4 STEP 1	1	-0.107	-0.152
		2	-0.115	-0.164
		3	-0.113	-0.162
		4	-0.112	-0.159
		5	-0.110	-0.157
		6	-0.109	-0.155
		7	-0.107	-0.152
		8	-0.105	-0.150
		9	-0.104	-0.148
		10	-0.102	-0.146
		11	-0.101	-0.144
		12	-0.099	-0.141
		13	-0.098	-0.139
		14	-0.096	-0.137
		15	-0.095	-0.135
		16	-0.077	-0.110
14	PHASE 4 STEP 1	1	-0.147	-0.210
		2	-0.135	-0.193
		3	-0.134	-0.190
		4	-0.132	-0.188
		5	-0.130	-0.185
		6	-0.129	-0.183
		7	-0.127	-0.180
		8	-0.125	-0.178
		9	-0.104	-0.147
15	PHASE 4 STEP 1	1	-0.147	-0.210
		2	-0.135	-0.193
		3	-0.134	-0.190
		4	-0.132	-0.188
		5	-0.130	-0.185
		6	-0.129	-0.183
		7	-0.127	-0.180
		8	-0.125	-0.178
		9	-0.104	-0.147



Christopher B. Fuller
 02/21/2024
 HL93 LOADING



**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 WBML AT US 69**

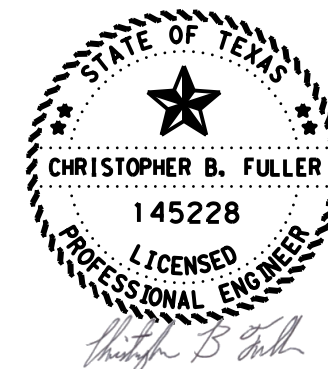
SHEET 4 OF 5

DN:	CBF	CK:	CSU	DW:	MMR	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1477				

DATE: 21-FEB-2024 18:07
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg T1 (IH 10 WB Mainlanes over US 69 NBFR)\1478_10WB_MAINLANE_GRDUNIT_DT_05.dgn

TABLE OF SECTION DEPTHS					
Span No.	Beam No.	"x" at ζ of Brg			"Z" at ζ of Span
		"x" at ζ of Brg	"y" at ζ of Brg	"z" at ζ of Span	
16	PHASE 1 STEP 3	1	1'-1 1/4"	5'-7 1/4"	10 1/4"
		2	1'-1 1/4"	5'-7 1/4"	10 3/8"
		3	1'-1 1/4"	5'-7 1/4"	10 3/8"
		4	1'-1 1/4"	5'-7 1/4"	10 3/8"
		5	1'-1 1/4"	5'-7 1/4"	10 1/2"
		6	1'-1 1/4"	5'-7 1/4"	10 1/2"
		7	1'-1 1/4"	5'-7 1/4"	10 1/2"
		8	1'-1 1/4"	5'-7 1/4"	10 1/2"
		9	1'-1 1/4"	5'-7 1/4"	10 1/4"
17	PHASE 1 STEP 3	1	1'-1 1/4"	5'-7 1/4"	10 1/4"
		2	1'-1 1/4"	5'-7 1/4"	10 3/8"
		3	1'-1 1/4"	5'-7 1/4"	10 3/8"
		4	1'-1 1/4"	5'-7 1/4"	10 3/8"
		5	1'-1 1/4"	5'-7 1/4"	10 1/2"
		6	1'-1 1/4"	5'-7 1/4"	10 1/2"
		7	1'-1 1/4"	5'-7 1/4"	10 1/2"
		8	1'-1 1/4"	5'-7 1/4"	10 1/2"
		9	1'-1 1/4"	5'-7 1/4"	10 1/4"
18	PHASE 1 STEP 3	1	1'-1 1/4"	5'-7 1/4"	10 1/4"
		2	1'-1 1/4"	5'-7 1/4"	10 3/8"
		3	1'-1 1/4"	5'-7 1/4"	10 3/8"
		4	1'-1 1/4"	5'-7 1/4"	10 3/8"
		5	1'-1 1/4"	5'-7 1/4"	10 1/2"
		6	1'-1 1/4"	5'-7 1/4"	10 1/2"
		7	1'-1 1/4"	5'-7 1/4"	10 1/2"
		8	1'-1 1/4"	5'-7 1/4"	10 1/2"
		9	1'-1 1/4"	5'-7 1/4"	10 1/4"
19	PHASE 1 STEP 3	1	1'-1 1/2"	5'-7 1/2"	10 3/8"
		2	1'-1 1/2"	5'-7 1/2"	10 3/8"
		3	1'-1 1/2"	5'-7 1/2"	10 3/8"
		4	1'-1 1/2"	5'-7 1/2"	10 3/8"
		5	1'-1 1/2"	5'-7 1/2"	10 1/2"
		6	1'-1 1/2"	5'-7 1/2"	10 1/2"
		7	1'-1 1/2"	5'-7 1/2"	10 3/4"
		8	1'-1 1/2"	5'-7 1/2"	10 3/4"
		9	1'-1 1/2"	5'-7 1/2"	10 1/2"
20	PHASE 2 STEP 2	1	1'-2 1/2"	5'-8 1/2"	10 3/8"
		2	1'-2 1/2"	5'-8 1/2"	10 1/2"
		3	1'-2 1/2"	5'-8 1/2"	10 1/2"
		4	1'-2 1/2"	5'-8 1/2"	10 1/2"
		5	1'-2 1/2"	5'-8 1/2"	10 1/8"
		6	1'-2 1/2"	5'-8 1/2"	10 1/8"
		7	1'-2 1/2"	5'-8 1/2"	10 1/4"
		8	1'-2 1/2"	5'-8 1/2"	10 3/4"
		9	1'-2 1/2"	5'-8 1/2"	10 3/8"

TABLE OF DEFLECTIONS				
Span No.	Beam No.	"A"	"B"	
		Ft	Ft	
16	PHASE 1 STEP 3	1	-0.147	-0.210
		2	-0.135	-0.193
		3	-0.134	-0.190
		4	-0.132	-0.188
		5	-0.130	-0.185
		6	-0.129	-0.183
		7	-0.127	-0.180
		8	-0.125	-0.178
		9	-0.104	-0.147
17	PHASE 1 STEP 3	1	-0.147	-0.210
		2	-0.135	-0.193
		3	-0.134	-0.190
		4	-0.132	-0.188
		5	-0.130	-0.185
		6	-0.129	-0.183
		7	-0.127	-0.180
		8	-0.125	-0.178
		9	-0.104	-0.147
18	PHASE 1 STEP 3	1	-0.147	-0.210
		2	-0.135	-0.193
		3	-0.134	-0.190
		4	-0.132	-0.188
		5	-0.130	-0.185
		6	-0.129	-0.183
		7	-0.127	-0.180
		8	-0.125	-0.178
		9	-0.104	-0.147
19	PHASE 1 STEP 3	1	-0.133	-0.189
		2	-0.139	-0.197
		3	-0.137	-0.195
		4	-0.135	-0.192
		5	-0.133	-0.190
		6	-0.132	-0.187
		7	-0.130	-0.185
		8	-0.128	-0.182
		9	-0.105	-0.149
20	PHASE 2 STEP 2	1	-0.147	-0.209
		2	-0.157	-0.224
		3	-0.155	-0.221
		4	-0.153	-0.218
		5	-0.151	-0.215
		6	-0.149	-0.212
		7	-0.147	-0.209
		8	-0.145	-0.206
		9	-0.116	-0.165



HL93 LOADING

VOLKERT
 F-12679



**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 WBML AT US 69**

SHEET 5 OF 5

DN:	CBF	CK:	CSU	DW:	MMR	CK:	CSU
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY					SHEET NO.	
BMT	JEFFERSON					1478	

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STRUCTURE	DESIGNED GIRDERS									DEPRESSED STRAND PATTERN		CONCRETE		OPTIONAL DESIGN				LOAD RATING FACTORS			
	SPAN NO.	GIRDER NO.	GIRDER TYPE	PRESTRESSING STRANDS					NO.	TO END (in)	RELEASE STRGTH (ksi)	MINIMUM 28 DAY COMP STRGTH (ksi)	DESIGN LOAD COMP STRESS (TOP ϵ) (SERVICE I) Fct(ksi)	DESIGN LOAD TENSILE STRESS (BOTT ϵ) (SERVICE III) Fcb(ksi)	REQUIRED MINIMUM ULTIMATE MOMENT CAPACITY (STRENGTH I) (kip-ft)	LIVE LOAD DISTRIBUTION FACTOR (2)		STRENGTH I SERVICE III			
				NON-STD STRAND PATTERN	TOTAL NO.	SIZE	STRGTH f_{pu} (ksi)	"e" \bar{c} (in)								"e" END	Moment	Shear	Inv	Opp	Inv
IH 10 AT US 69 IH 10 WBML AT US 69 PHASE 1 STEP 3	16 17 18 19	1 1 1 1	Tx54	*	48	0.6	270	18.42	10.92	10	46.5	6.000	8.000	4.615	-4.531	8955	0.690	0.714	1.65	2.14	1.12
	16 17 18 19	2-9 2-9 2-9 2-9			42	0.6	270	19.01	13.29	6	46.5	6.000	8.000	4.389	-4.190	7923	0.549	0.725	1.80	2.34	1.20
IH 10 AT US 69 IH 10 WBML AT US 69 PHASE 2 STEP 2	20	1-3	Tx54	*	48	0.6	270	18.42	10.92	10	46.5	6.000	8.000	4.615	-4.531	8955	0.690	0.714	1.65	2.14	1.12
	20	4-9			42	0.6	270	19.01	13.29	6	46.5	6.000	8.000	4.389	-4.190	7923	0.549	0.725	1.80	2.34	1.20
IH 10 AT US 69 IH 10 WBML AT US 69 PHASE 3 STEP 1	1 2 3	11-13 11-13 11-13	Tx54		40	0.6	270	19.11	13.11	6	46.5	6.000	8.000	4.196	-4.037	7762	0.594	0.777	1.74	2.26	1.20
	4 5	11-13 11-13			34	0.6	270	19.48	12.42	6	46.5	6.000	8.000	3.330	-3.257	6400	0.625	0.789	1.87	2.42	1.58
IH 10 AT US 69 IH 10 WBML AT US 69 PHASE 4 STEP 1	6	11-13	Tx54		34	0.6	270	19.48	12.42	6	46.5	6.000	8.000	3.330	-3.257	6400	0.625	0.789	1.87	2.42	1.58
	7 8	9-13 9-13			18	0.6	270	20.56	11.23	4	46.5	4.500	6.000	1.942	-1.998	4181	0.686	0.801	1.39	1.80	1.52
	9	10-14			30	0.6	270	19.81	15.81	6	26.5	4.500	6.000	3.088	-3.002	5890	0.589	0.742	1.77	2.30	1.37
	10 11 12 13	7-14 8-15 5-15 1-16			40	0.6	270	19.11	13.11	6	46.5	6.000	8.000	4.196	-4.037	7762	0.594	0.777	1.74	2.26	1.20
	14 15	1 1			48	0.6	270	18.42	10.92	10	46.5	6.000	8.000	4.615	-4.531	8955	0.690	0.714	1.65	2.14	1.12
	14 15	2-9 2-9			42	0.6	270	19.01	13.29	6	46.5	6.000	8.000	4.389	-4.190	7923	0.549	0.725	1.80	2.34	1.20
	1 2 3 10 11 12	1-10 1-10 1-10 1-6 1-7 1-4		Tx54		40	0.6	270	19.11	13.11	6	46.5	6.000	8.000	4.196	-4.037	7762	0.594	0.777	1.74	2.26
4 5 6	1-10 1-10 1-10		34		0.6	270	19.48	12.42	6	46.5	6.000	8.000	3.330	-3.257	6400	0.625	0.789	1.87	2.42	1.58	
7 8	1-8 1-8		18		0.6	270	20.56	11.23	4	46.5	4.500	6.000	1.942	-1.998	4181	0.686	0.801	1.39	1.80	1.52	

NON-STANDARD STRAND PATTERNS	
PATTERN	STRAND ARRANGEMENT AT \bar{c} OF GIRDER
*	2.5(ABCDEFG), 4.5(ABCDEFG), 6.5(ABCDEFG), 8.5(AB), 10.5(A)

① Based on the following allowable stresses (ksi):

Compression = 0.65 f'_{ci}

Tension = 0.24 $\sqrt{f'_{ci}}$

Optional designs must likewise conform.

② Portion of full HL93.

DESIGN NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications. Load rated using Load and Resistance Factor Rating according to AASHTO Manual for Bridge Evaluation.

Optional designs for girders 120 feet or longer must have a calculated residual camber equal to or greater than that of the designed girder.

Prestress losses for the designed girders have been calculated for a relative humidity of 60 percent. Optional designs must likewise conform.

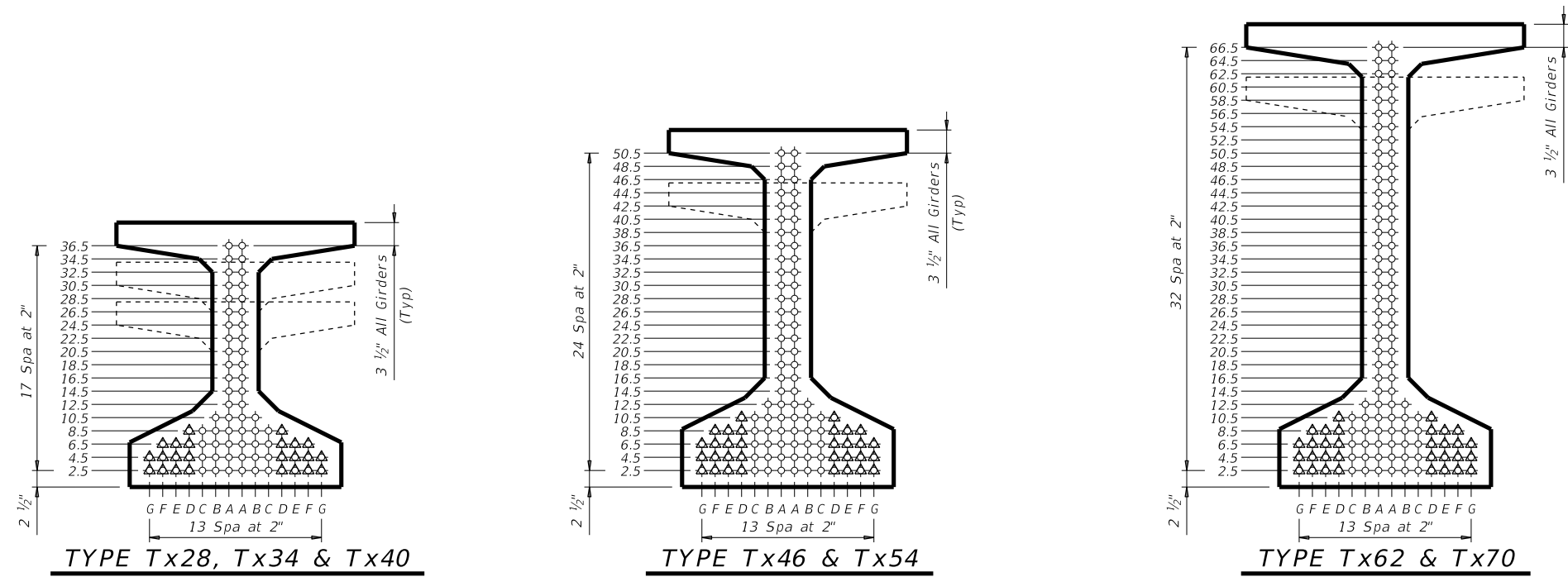
FABRICATION NOTES:

Provide Class H concrete. Provide Grade 60 reinforcing steel bars. Use low relaxation strands, each pretensioned to 75 percent of f_{pu} . Strand debonding must comply with Item 424.4.2.2.4. Full-length debonded strands are only permitted in positions marked Δ . Double wrap full-length debonded strands in outer most position of each row.

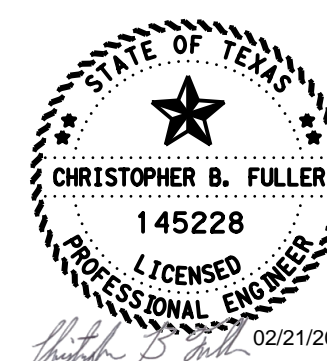
When shown on this sheet, the Fabricator has the option of furnishing either the designed girder or an approved optional design. All optional design submittals must be signed, sealed and dated by a Professional Engineer registered in the State of Texas. Seal cracks in girder ends exceeding 0.005" in width as directed by the Engineer. The fabricator is permitted to decrease the spacing of Bars R and S by providing additional bars to help limit crack width provided the decreased spacing results in no less than 1" clear between bars. The fabricator must take an approved corrective action if cracks greater than 0.005" form on a repetitive basis.

DEPRESSED STRAND DESIGNS:

Locate strands for the designed girder as low as possible on the 2" grid system unless a non-standard strand pattern is indicated. Fill row "2.5", then row "4.5", then row "6.5", etc., beginning each row in the "A" position and working outward until the required number of strands is reached. All strands in the "A" position must be depressed, maintaining the 2" spacing so that, at the girder ends, the upper two strands are in the position shown in the table.



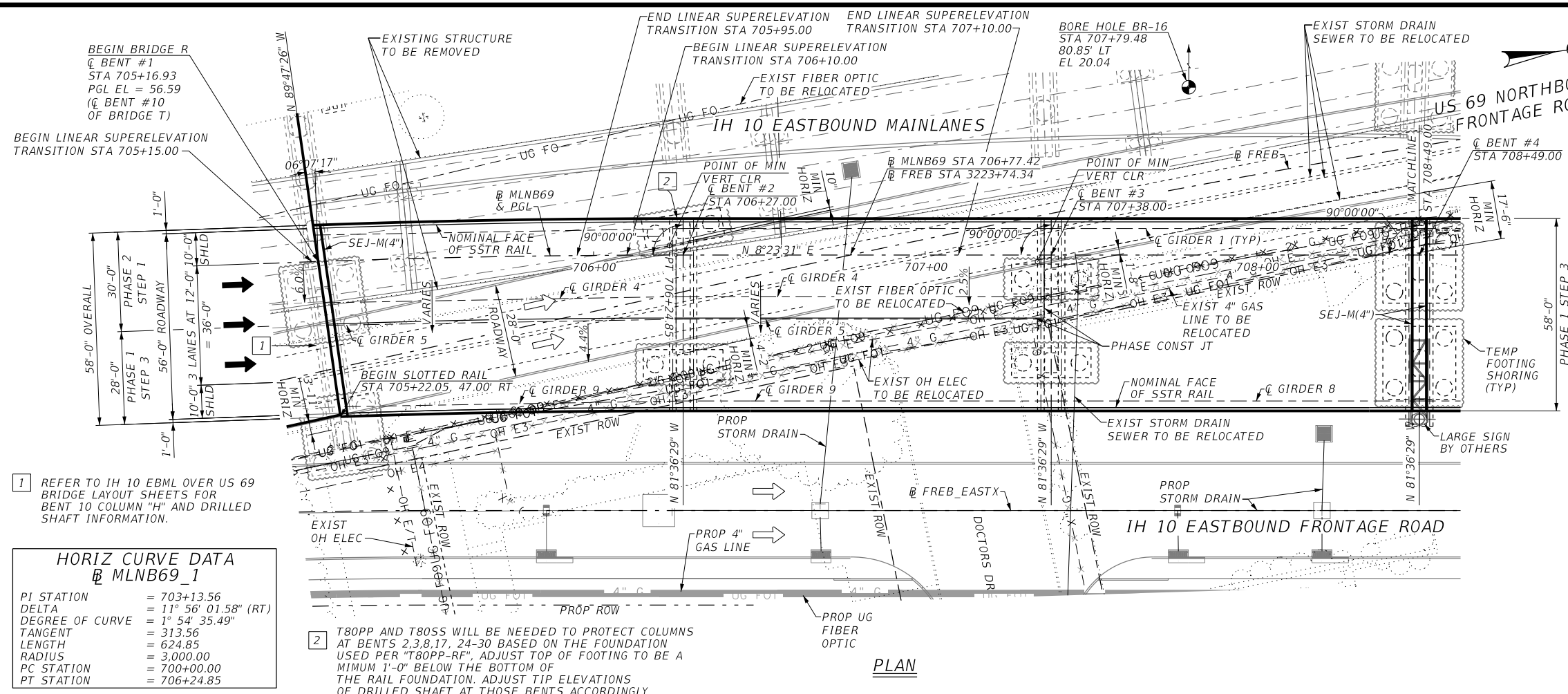
HL93 LOADING



Texas Department of Transportation		Bridge Division Standard	
PRESTRESSED CONCRETE I-GIRDER DESIGNS (NON-STANDARD SPANS)			
IGND			
FILE: igndsts1-22.dgn	DN: CBF	CK: BB	DW: KAH
©TxDOT August 2017	CONT	SECT	JOB
REVISIONS	0028	13	135
10-19: Modified for depressed strands only	DIST	COUNTY	HIGHWAY
3-22: Added Load Rating	BMT	JEFFERSON	IH 10
			SHEET NO. 1479

DATE: FILE:

DATE: 20-FEB-2024 22:46
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\10 EB to US 69 NB DC\1480_10M_10E-69N_LAYOUT_01.dgn



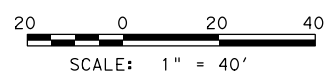
1 REFER TO IH 10 EBML OVER US 69 BRIDGE LAYOUT SHEETS FOR BENT 10 COLUMN "H" AND DRILLED SHAFT INFORMATION.

HORIZ CURVE DATA @ MLNB69_1

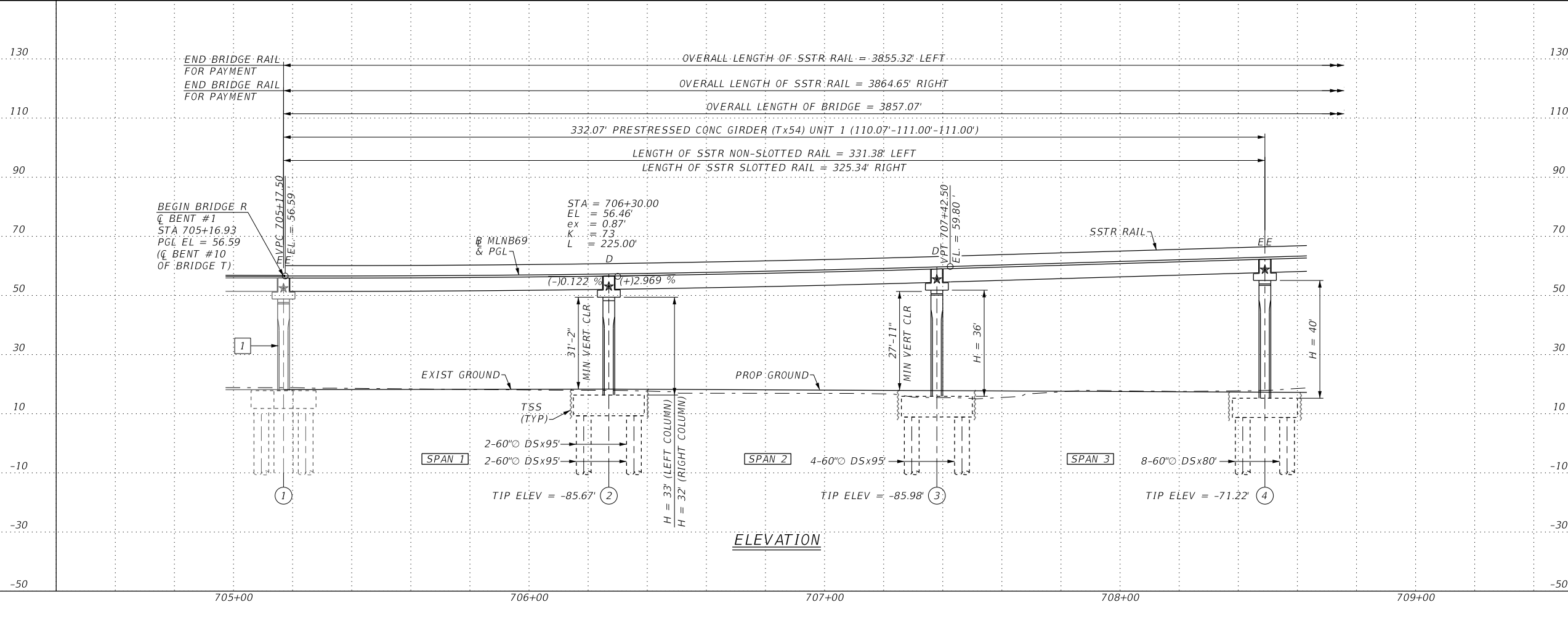
PI STATION	= 703+13.56
DELTA	= 1° 56' 01.58" (RT)
DEGREE OF CURVE	= 1° 54' 35.49"
TANGENT	= 313.56
LENGTH	= 624.85
RADIUS	= 3,000.00
PC STATION	= 700+00.00
PT STATION	= 706+24.85

2 T80PP AND T80SS WILL BE NEEDED TO PROTECT COLUMNS AT BENTS 2,3,8,17, 24-30 BASED ON THE FOUNDATION USED PER "T80PP-RF", ADJUST TOP OF FOOTING TO BE A MINUM 1'-0" BELOW THE BOTTOM OF THE RAIL FOUNDATION. ADJUST TIP ELEVATIONS OF DRILLED SHAFT AT THOSE BENTS ACCORDINGLY.

- GENERAL NOTES:**
- DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATION, 9TH EDITION (2020) AND TxDOT BRIDGE DESIGN MANUAL (JAN 2023).
 - SLAB RESTRAINT OR GIRDER END CONDITIONS:
D-DENOTES DOWELED SLAB. SEE BENT DETAILS FOR DOWEL LOCATION AND IGMS (MOD) FOR DETAILS.
E-E-DENOTES SLAB EXPANSION. SEE IGMS (MOD) FOR DETAILS.
E-DENOTES EXPANSION BEARINGS.
F-DENOTES FIXED BEARINGS.
 - ⊙ DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.
 - THE "H" VALUES SHOWN ARE ESTIMATED COLUMN HEIGHTS ALONG PGL. THE CONTRACTOR IS RESPONSIBLE FOR CALCULATING ACTUAL COLUMN HEIGHTS BASED ON ACTUAL FIELD CONDITIONS.
 - UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.
 - SEE TRAFFIC CONTROL PLANS FOR CONSTRUCTION PHASING.
 - SEE CONSTRUCTION PHASING AND TYPICAL SECTIONS SHEETS FOR TYPICAL TRANSVERSE SECTION.
 - FOR MORE DETAILS ON SUPERELEVATION TRANSITION ZONES, SEE ROADWAY PLAN SHEETS.
 - DECK DRAIN OFFSET MEASURED TO CENTER OF DRAIN. SLOTTED RAIL OFFSET MEASURED TO BACK FACE OF RAIL.



FUNCTIONAL CLASS = PRINCIPAL ARTERIAL (FREEWAY)
DESIGN SPEED = 60 MPH
ADT (2025) = 34,650
ADT (2045) = 46,400
ADT (2055) = 52,200



HL93 LOADING
SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

VOLKERT

F-12679

Texas Department of Transportation

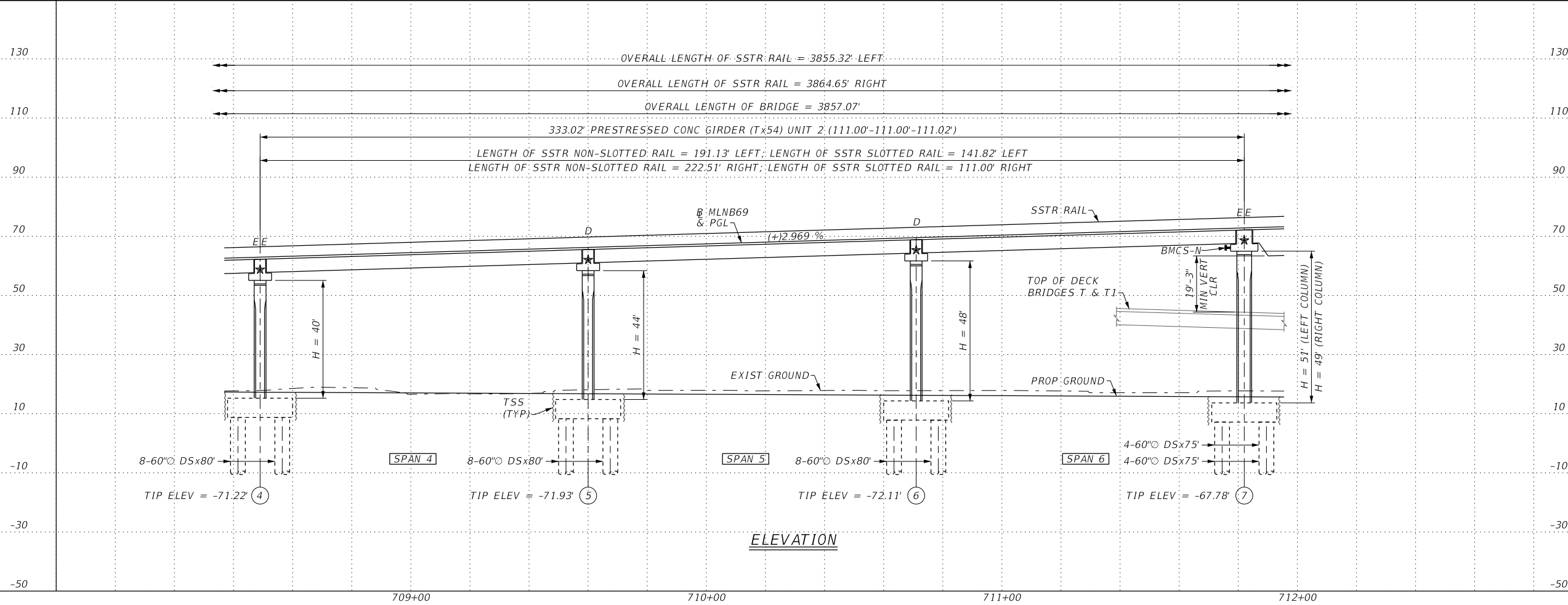
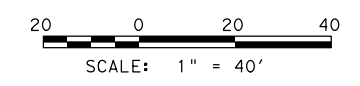
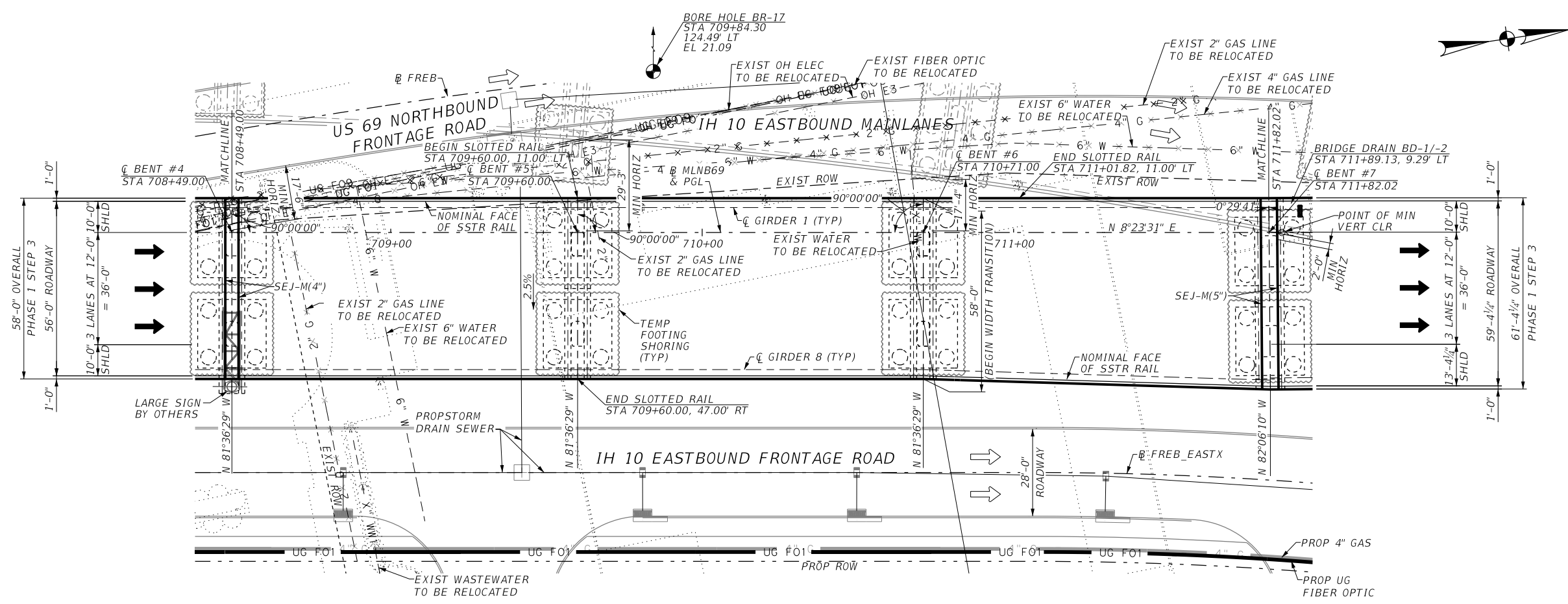
**IH 10 AT US 69
BRIDGE LAYOUT
IH 10 EBML TO US 69 NB DC
NBI: 20-124-0-0028-13-537
BRIDGE R**

SHEET 1 OF 12

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:			

DATE: 20-FEB-2024 22:46
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\4 - Design\Plan_Sett\7 - Bridge\Layout\10_EB-69N_LAYOUT_02.dgn

NOTES:
 SEE SHEET 1 OF 12 FOR GENERAL NOTES.



STATE OF TEXAS
 FEIFEI BAI
 120727
 LICENSED PROFESSIONAL ENGINEER
 2-20-24

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

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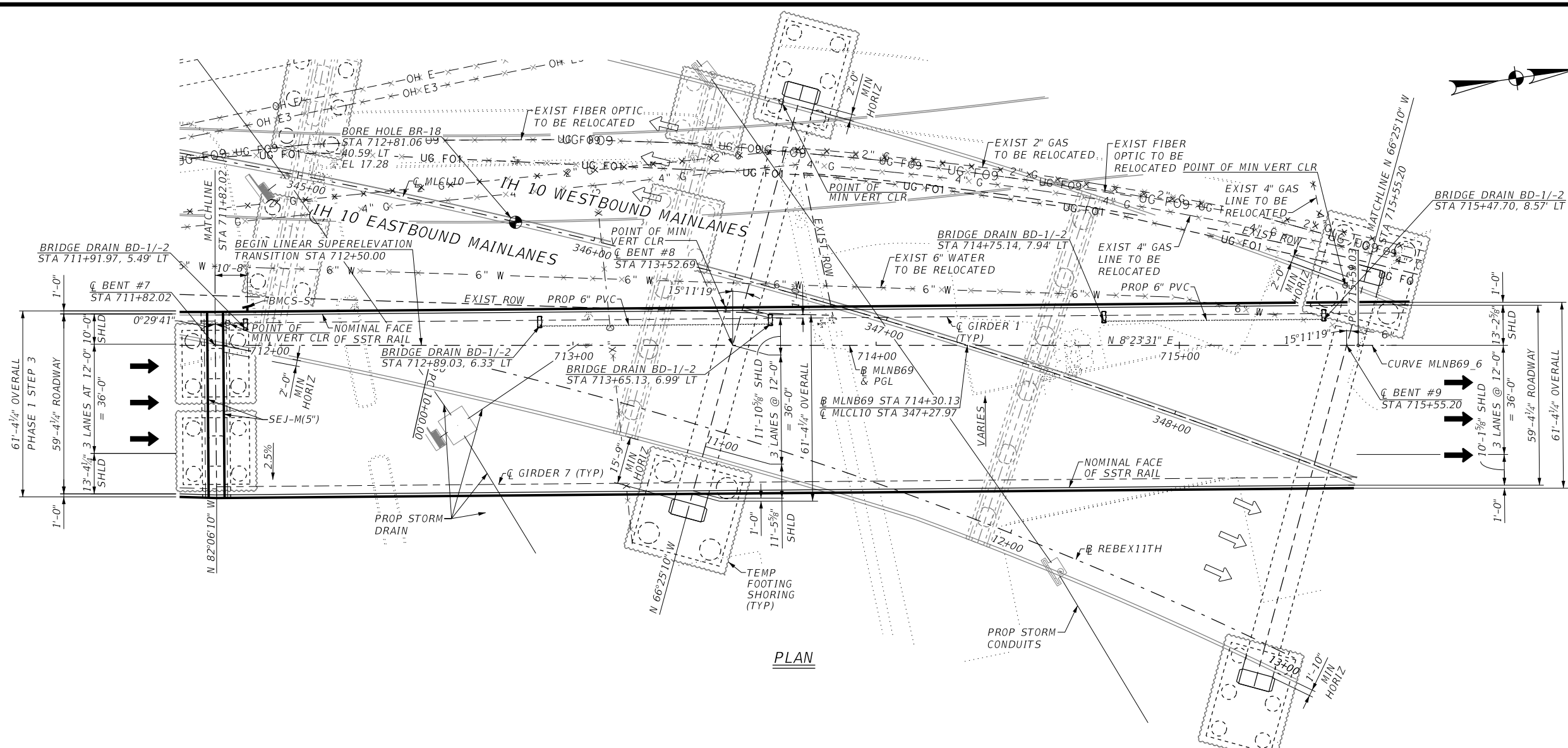
Texas Department of Transportation

**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML TO US 69 NB DC
 NBI: 20-124-0-0028-13-537
 BRIDGE R**

SHEET 2 OF 12

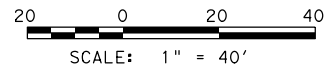
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CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1481	

NOTES:
SEE SHEET 1 OF 12 FOR GENERAL NOTES.

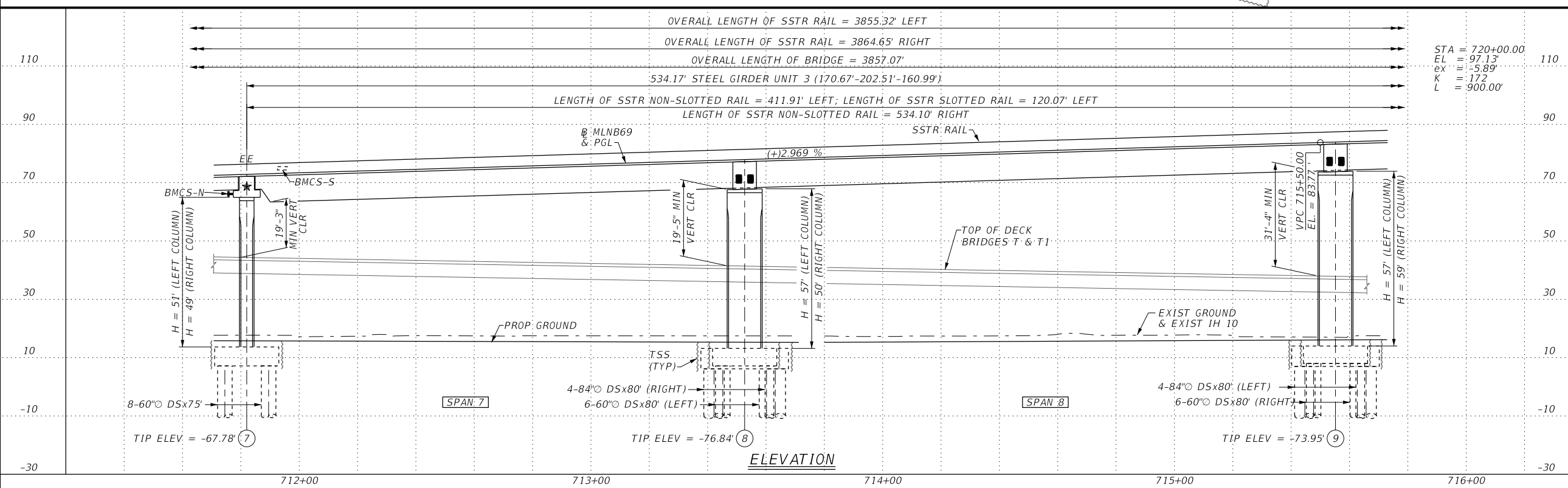


**HORIZONTAL CURVE DATA
MLNB69_6**

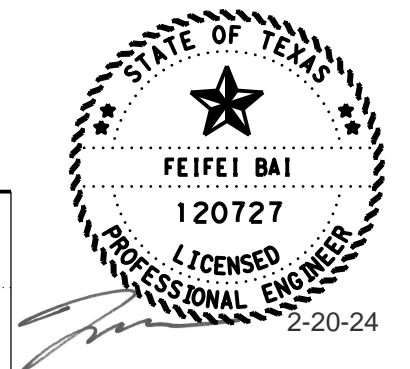
PI STATION	= 721+77.27
DELTA	= 26° 45' 04.49" (LT)
DEGREE OF CURVE	= 2° 12' 13.26"
TANGENT	= 618.24
LENGTH	= 1,213.93
RADIUS	= 2,600.00
PC STATION	= 715+59.03
PT STATION	= 727+72.96



PLAN



ELEVATION



HL93 LOADING
SUPERSTRUCTURE INV/OPR RATINGS: 1.09/1.41



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**IH 10 AT US 69
BRIDGE LAYOUT
IH 10 EBML TO US 69 NB DC
NBI: 20-124-0-0028-13-537
BRIDGE R**

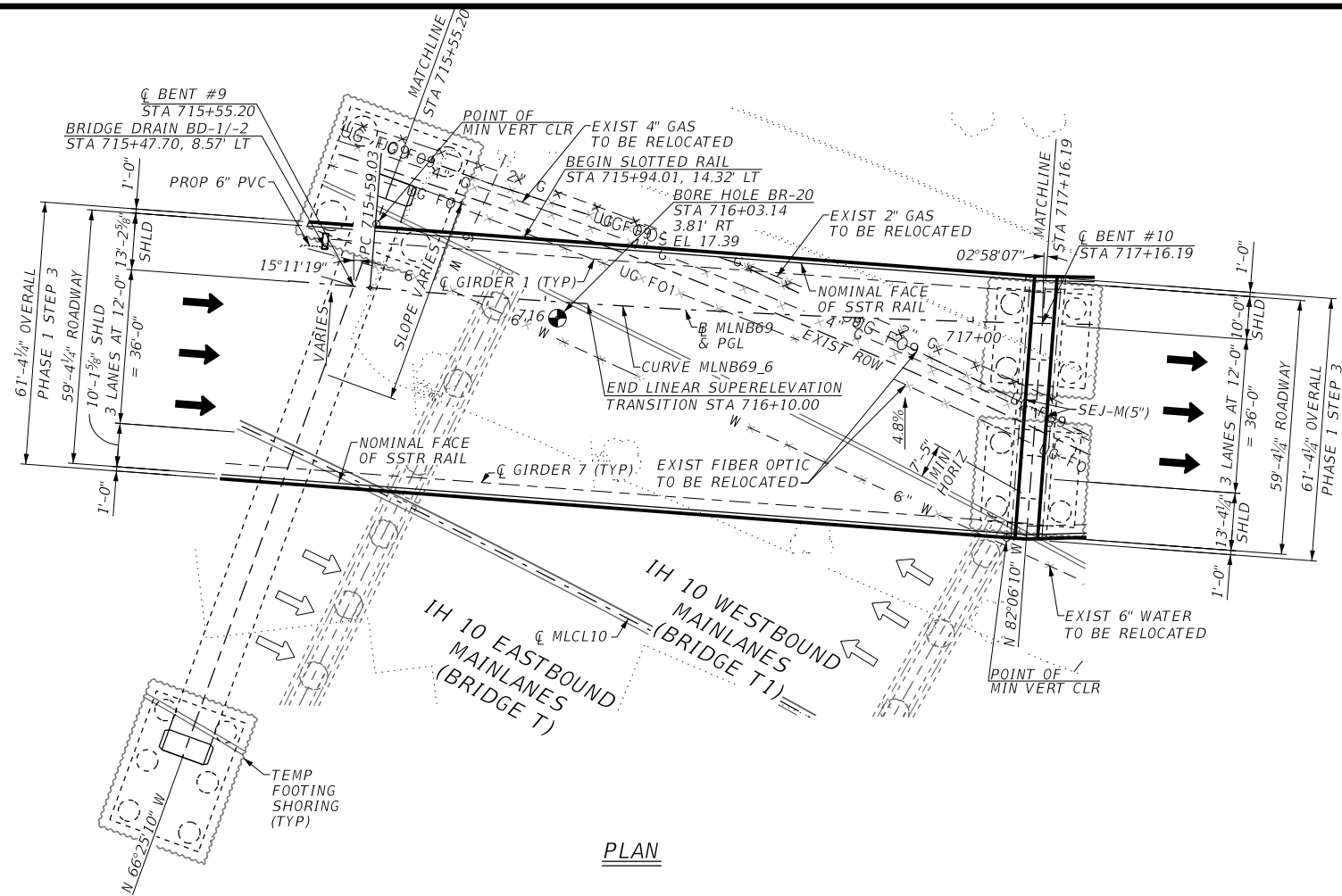
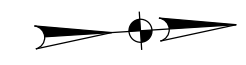
SHEET 3 OF 12

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CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1482		

DATE: 20-FEB-2024 22:46
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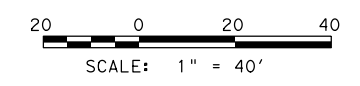
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NOTES:
 SEE SHEET 1 OF 12 FOR GENERAL NOTES.

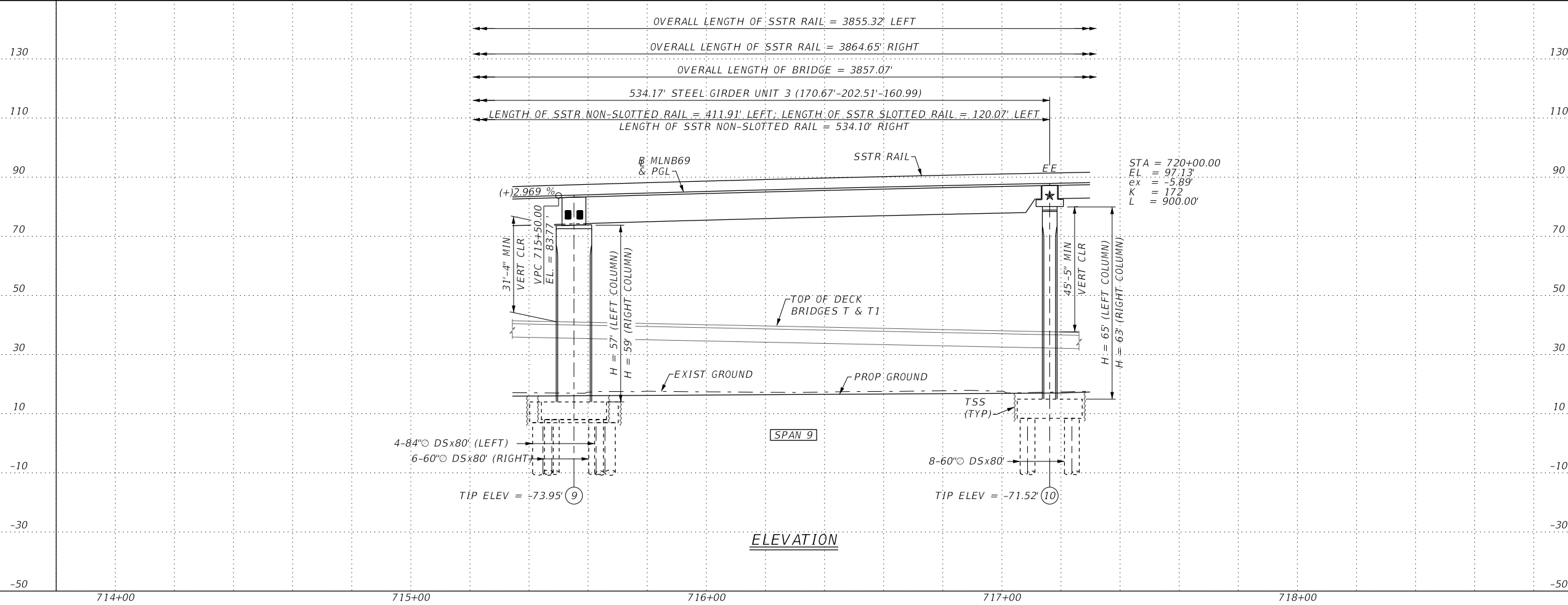


HORIZONTAL CURVE DATA @ MLNB69_6

PI STATION	= 721+77.27
DELTA	= 26° 45' 04.49" (LT)
DEGREE OF CURVE	= 2° 12' 13.26"
TANGENT	= 618.24
LENGTH	= 1,213.93
RADIUS	= 2,600.00
PC STATION	= 715+59.03
PT STATION	= 727+72.96



PLAN



ELEVATION

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.09/1.41

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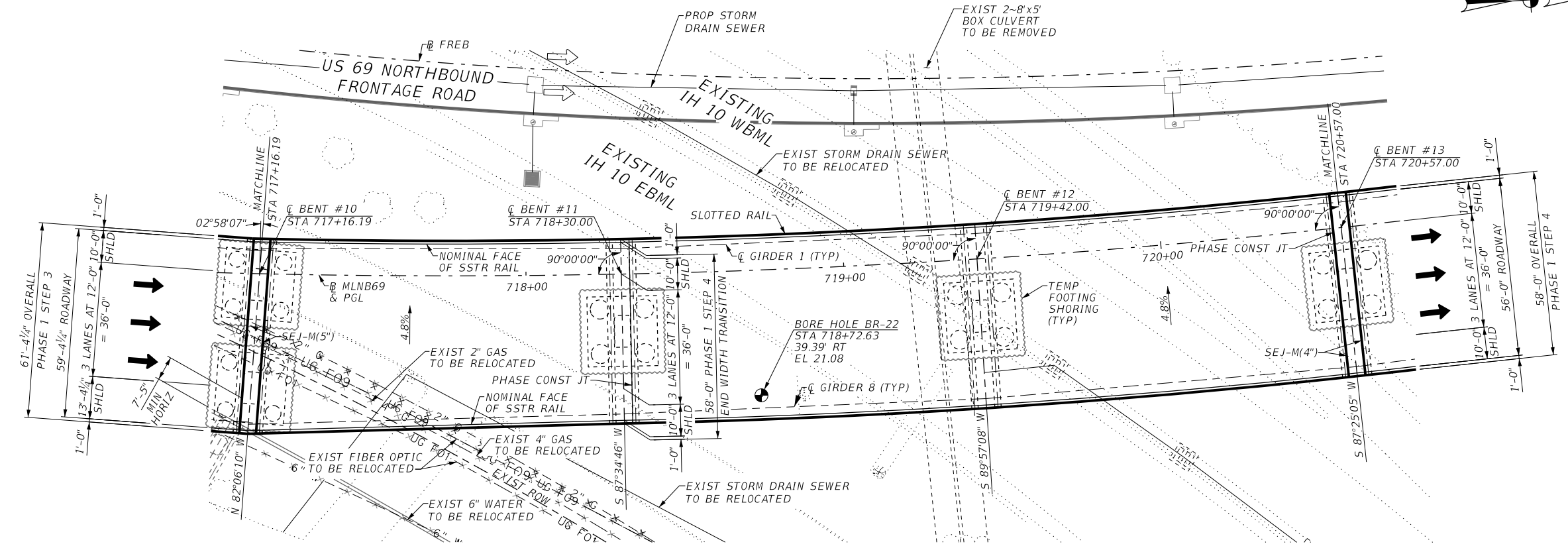
**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML TO US 69 NB DC
 NBI: 20-124-0-0028-13-537
 BRIDGE R**

SHEET 4 OF 12

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0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1483			

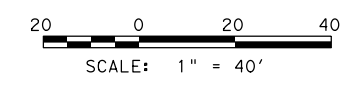
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NOTES:
 SEE SHEET 1 OF 12 FOR GENERAL NOTES.

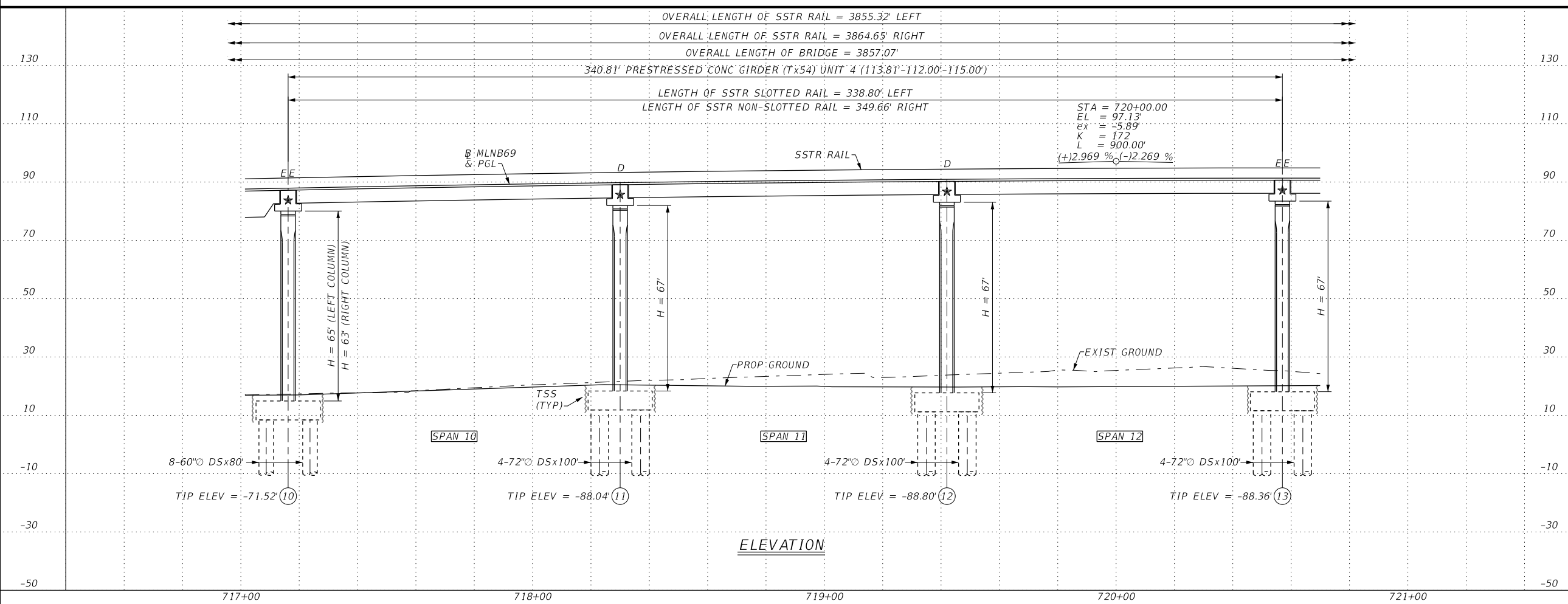


HORIZONTAL CURVE DATA
 @ MLNB69_6

PI STATION	= 721+77.27
DELTA	= 26° 45' 04.49" (LT)
DEGREE OF CURVE	= 2° 12' 13.26"
TANGENT	= 618.24
LENGTH	= 1,213.93
RADIUS	= 2,600.00
PC STATION	= 715+59.03
PT STATION	= 727+72.96



PLAN



ELEVATION

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 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

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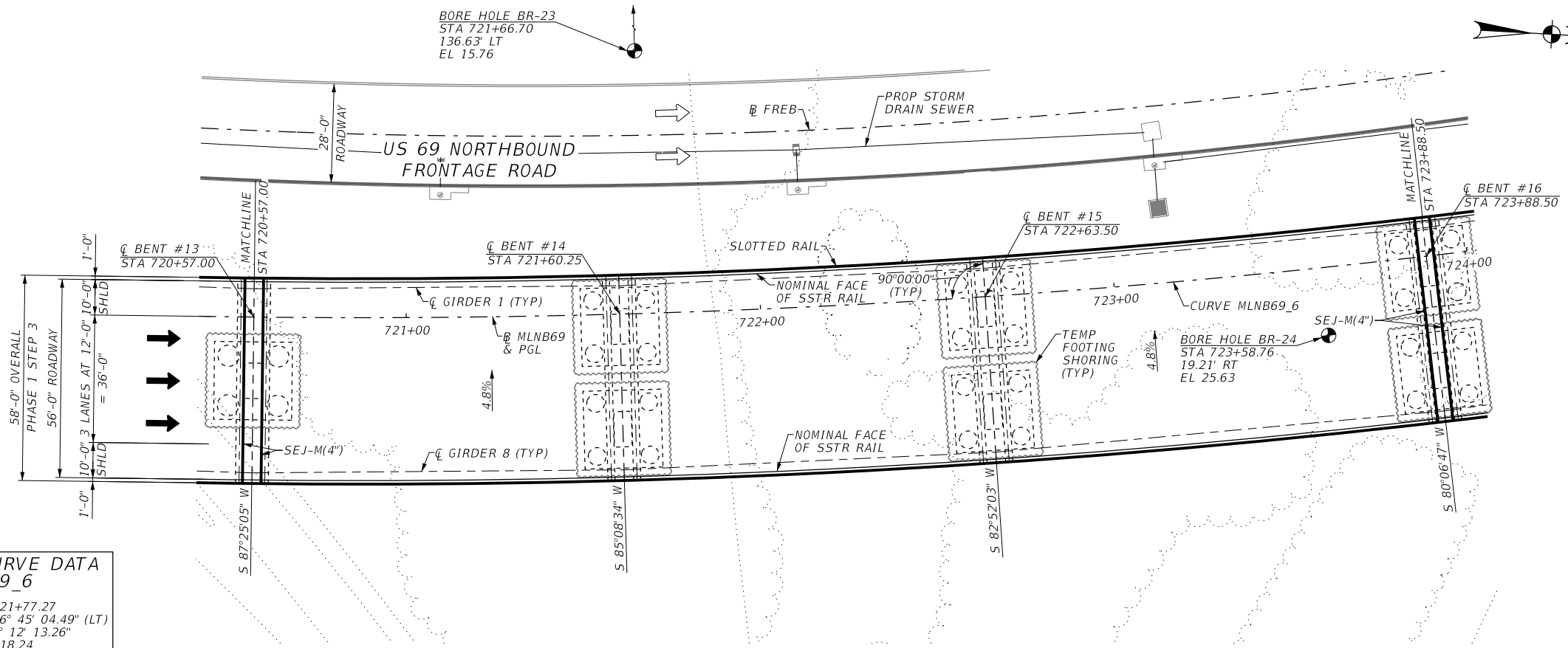
Texas Department of Transportation

**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML TO US 69 NB DC
 NBI: 20-124-0-0028-13-537
 BRIDGE R**

SHEET 5 OF 12

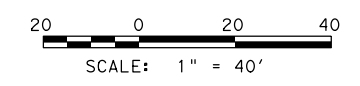
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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1484		

NOTES:
SEE SHEET 1 OF 12 FOR GENERAL NOTES.

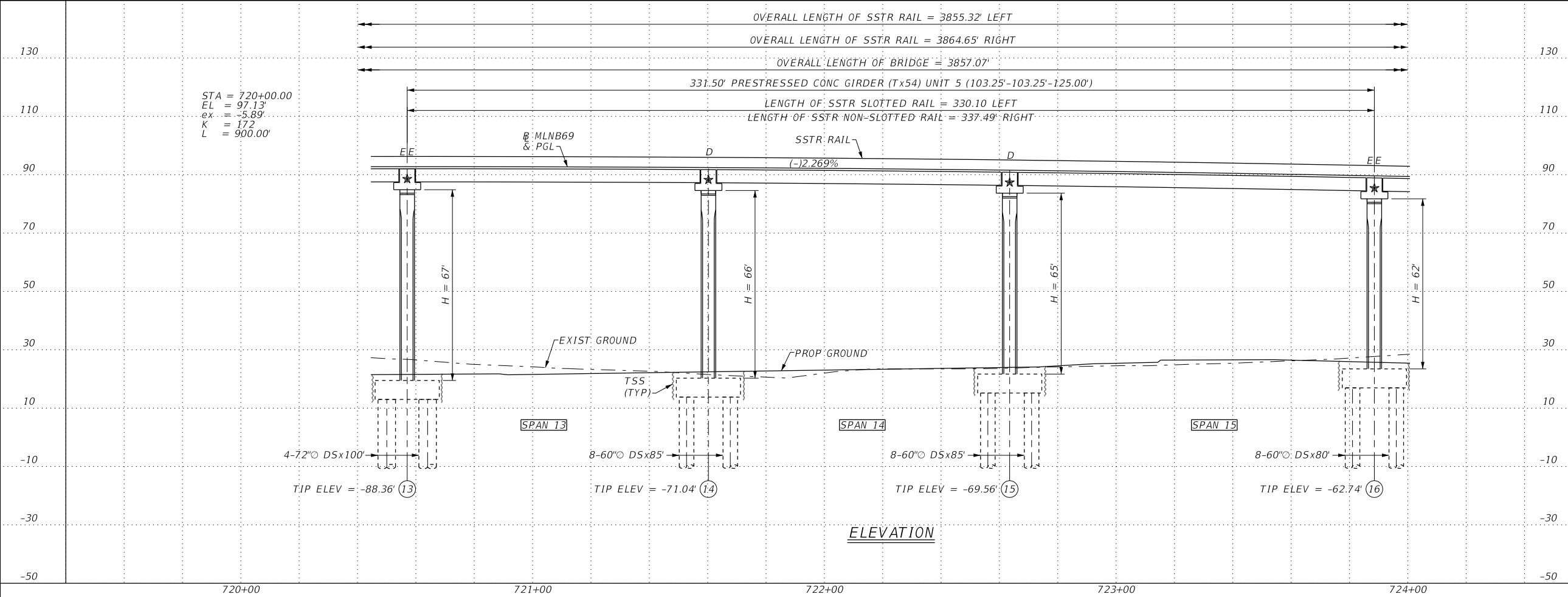


HORIZONTAL CURVE DATA
@ MLNB69_6

PI STATION	= 721+77.27
DELTA	= 26° 45' 04.49" (LT)
DEGREE OF CURVE	= 2° 12' 13.26"
TANGENT	= 618.24
LENGTH	= 1,213.93
RADIUS	= 2,600.00
PC STATION	= 715+59.03
PT STATION	= 727+72.96



PLAN



ELEVATION

STATE OF TEXAS
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2-20-24

HL93 LOADING
SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

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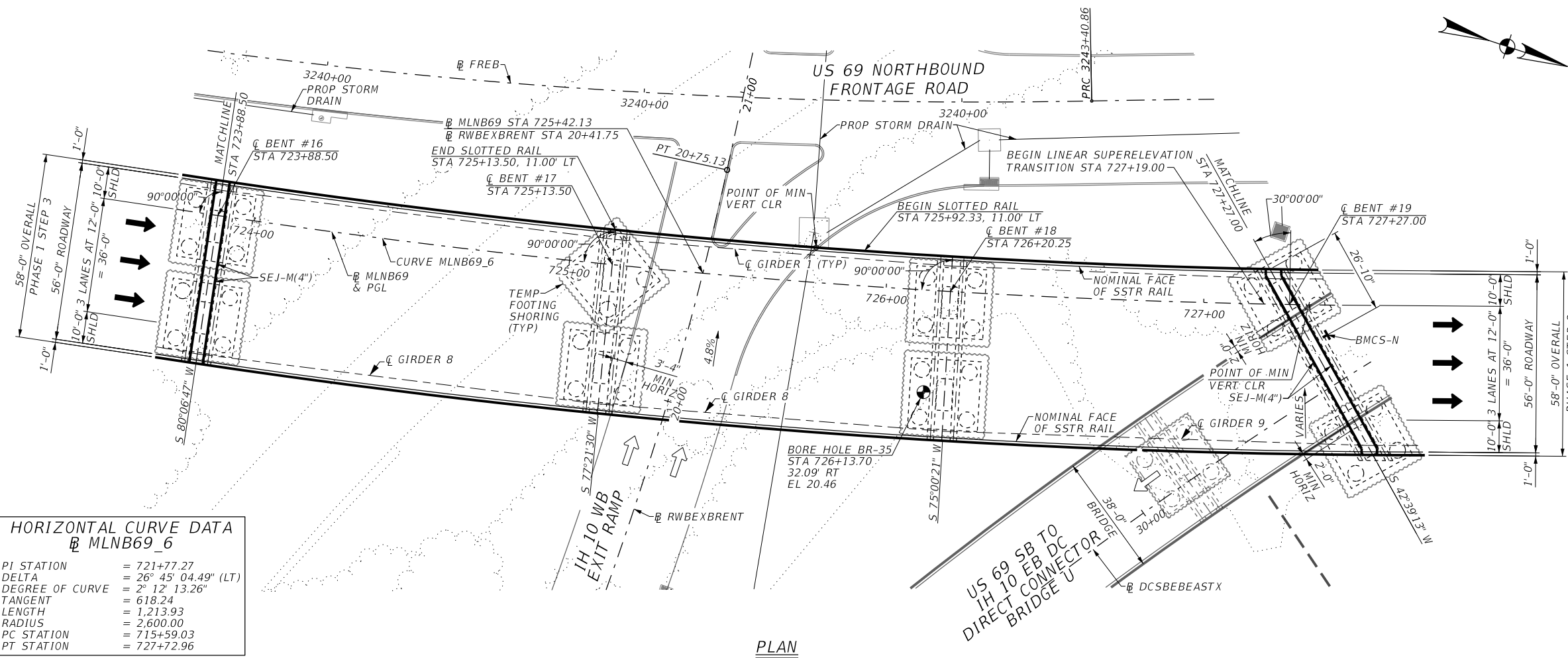
IH 10 AT US 69
BRIDGE LAYOUT
IH 10 EBML TO US 69 NB DC
NBI: 20-124-0-0028-13-537
BRIDGE R
SHEET 6 OF 12

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:		COUNTY:		SHEET NO.:			
	BMT		JEFFERSON				1485

DATE: 20-FEB-2024 22:46
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DATE: 20-FEB-2024 22:48
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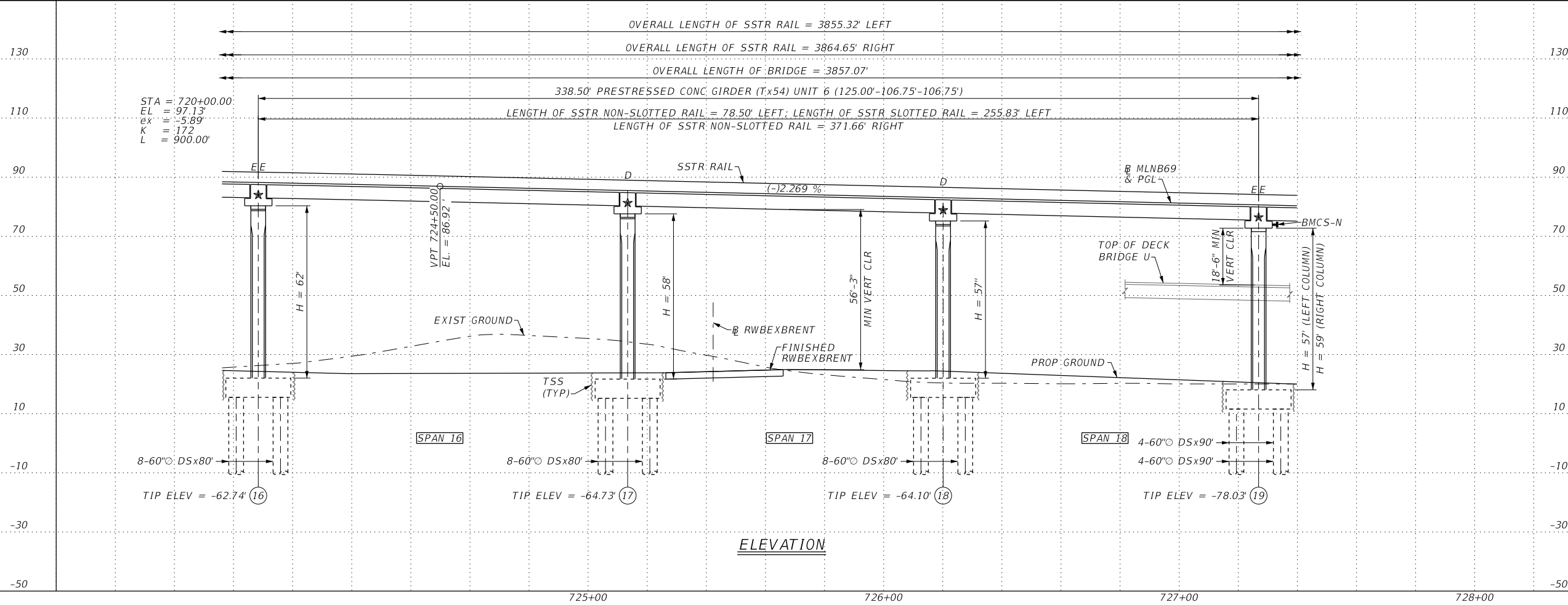
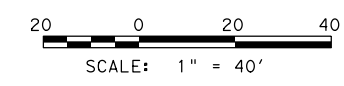
NOTES:
 SEE SHEET 1 OF 12 FOR GENERAL NOTES.



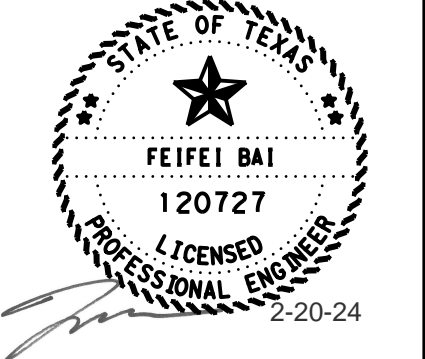
**HORIZONTAL CURVE DATA
 @ MLNB69_6**

PI STATION	= 721+77.27
DELTA	= 26° 45' 04.49" (LT)
DEGREE OF CURVE	= 2° 12' 13.26"
TANGENT	= 618.24
LENGTH	= 1,213.93
RADIUS	= 2,600.00
PC STATION	= 715+59.03
PT STATION	= 727+72.96

PLAN



ELEVATION



HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

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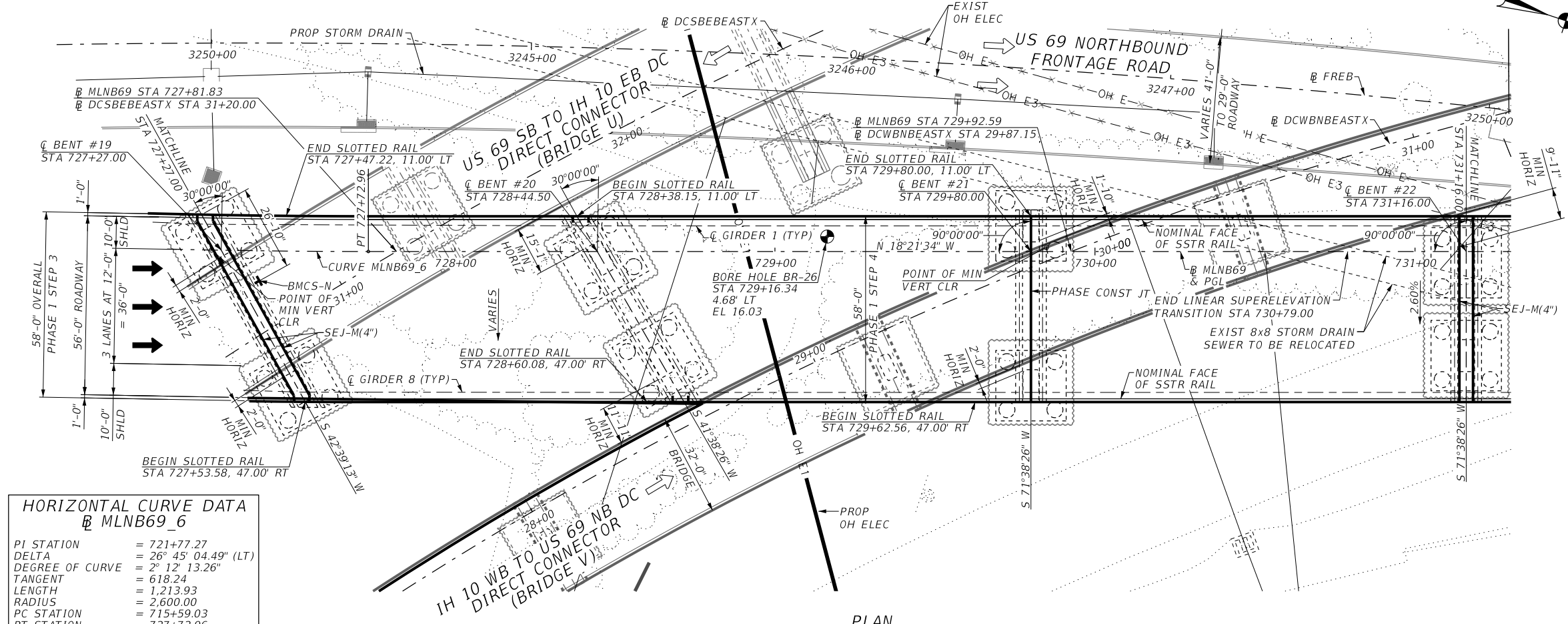


**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML TO US 69 NB DC
 NBI: 20-124-0-0028-13-537
 BRIDGE R**

SHEET 7 OF 12

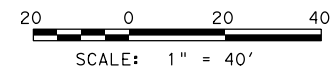
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DIST BMT	COUNTY JEFFERSON	SHEET NO. 1486	

NOTES:
SEE SHEET 1 OF 12 FOR GENERAL NOTES.

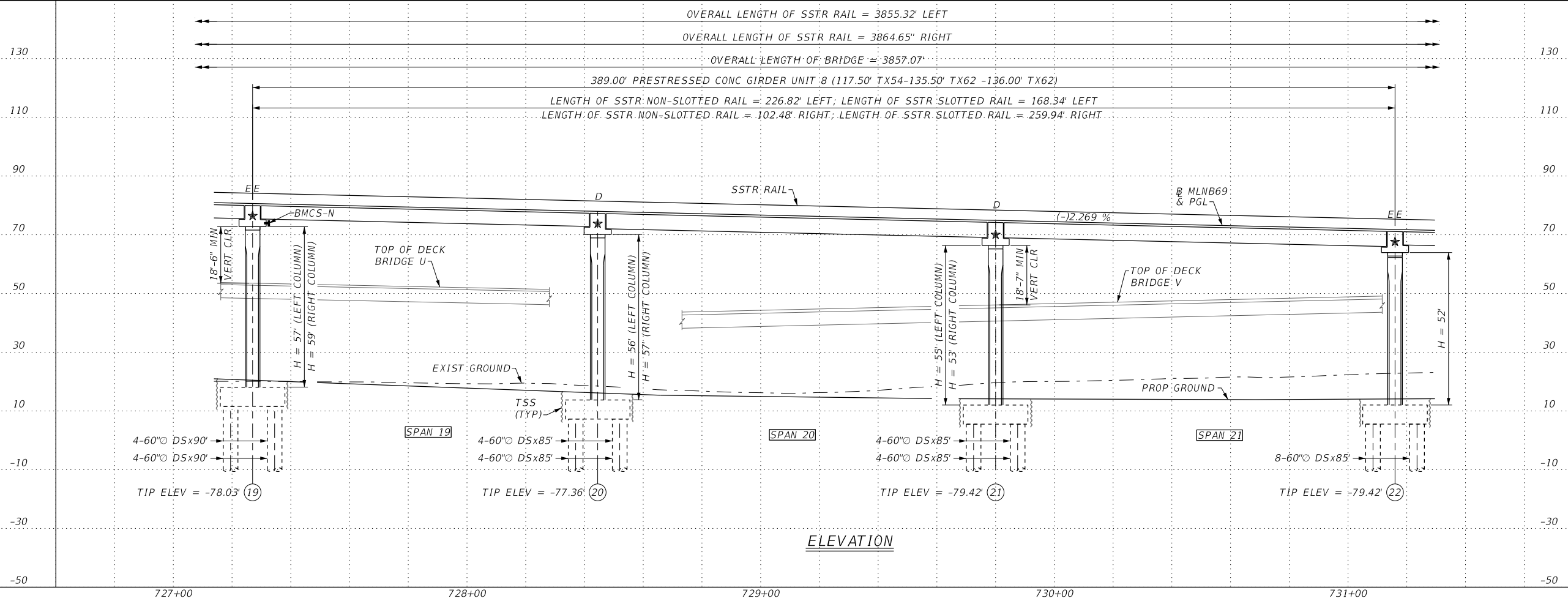


HORIZONTAL CURVE DATA
@ MLNB69_6

PI STATION	= 721+77.27
DELTA	= 26° 45' 04.49" (LT)
DEGREE OF CURVE	= 2° 12' 13.26"
TANGENT	= 618.24
LENGTH	= 1,213.93
RADIUS	= 2,600.00
PC STATION	= 715+59.03
PT STATION	= 727+72.96



PLAN



ELEVATION

HL93 LOADING
SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

VOLKERT

F-12679
Texas Department of Transportation

**IH 10 AT US 69
BRIDGE LAYOUT
IH 10 EBML TO US 69 NB DC
NBI: 20-124-0-0028-13-537
BRIDGE R**

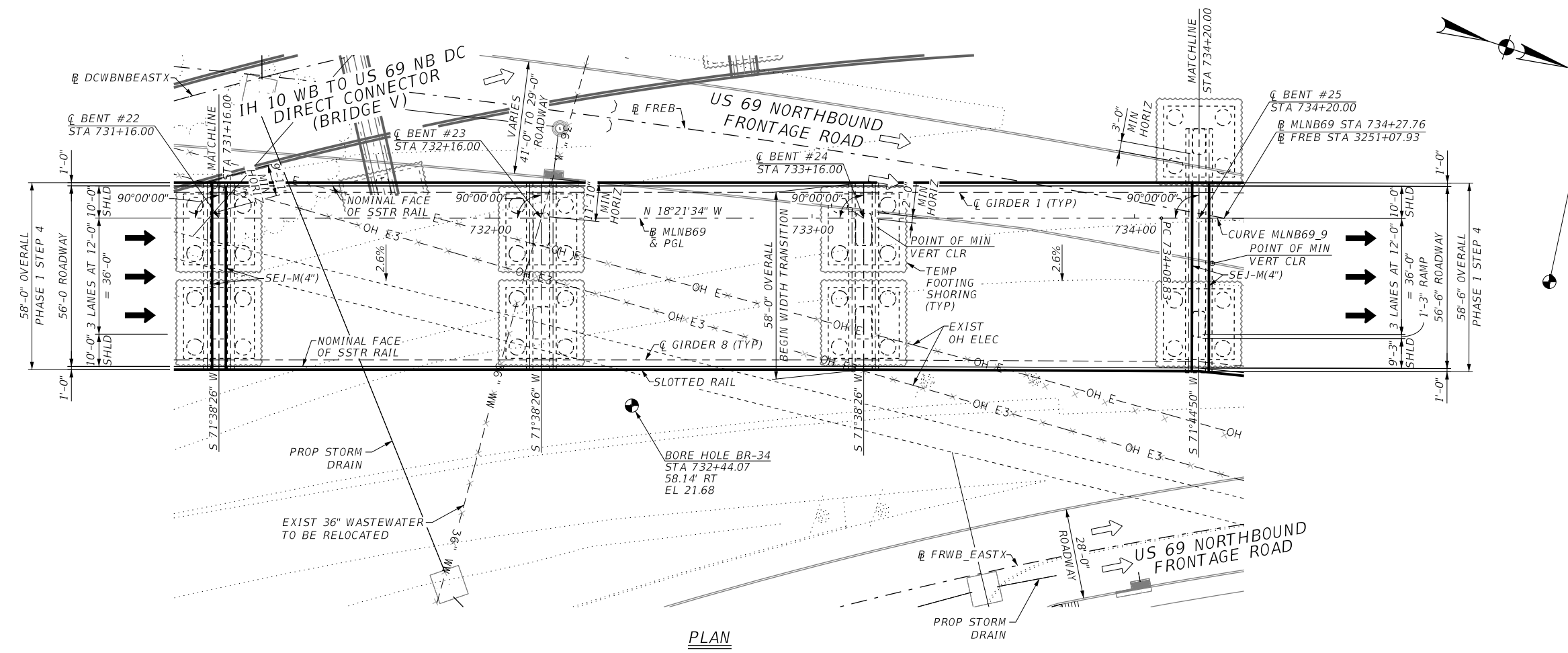
SHEET 8 OF 12

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1487		

DATE: 21-FEB-2024 02:05
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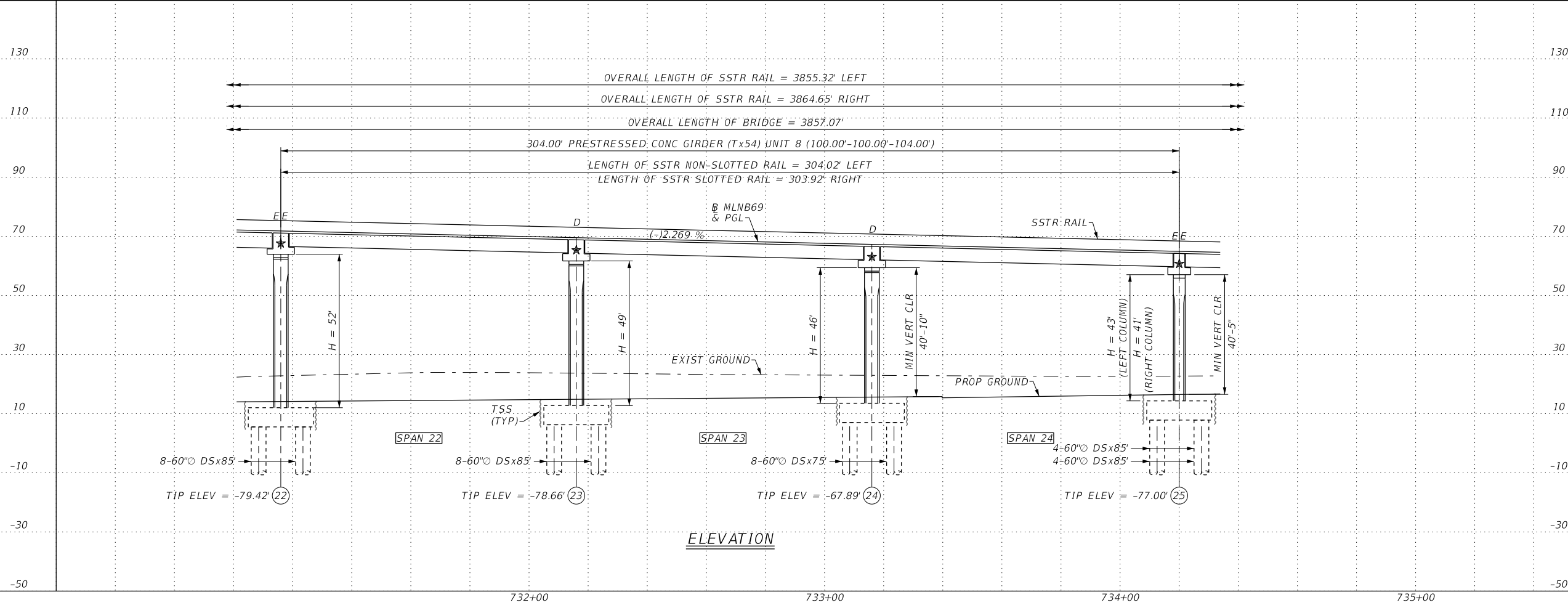
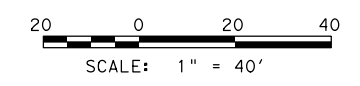
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NOTES:
 SEE SHEET 1 OF 12 FOR GENERAL NOTES.



**HORIZONTAL CURVE DATA
 @ MLNB69_9**

PI STATION	= 742+20.29
DELTA	= 15° 24' 16.22" (RT)
DEGREE OF CURVE	= 0° 57' 17.75"
TANGENT	= 811.47
LENGTH	= 1,613.16
RADIUS	= 6,000.00
PC STATION	= 734+08.83
PT STATION	= 750+21.98



FEIFEI BAI
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 2-20-24

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

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**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML TO US 69 NB DC
 NBI: 20-124-0-0028-13-537
 BRIDGE R**

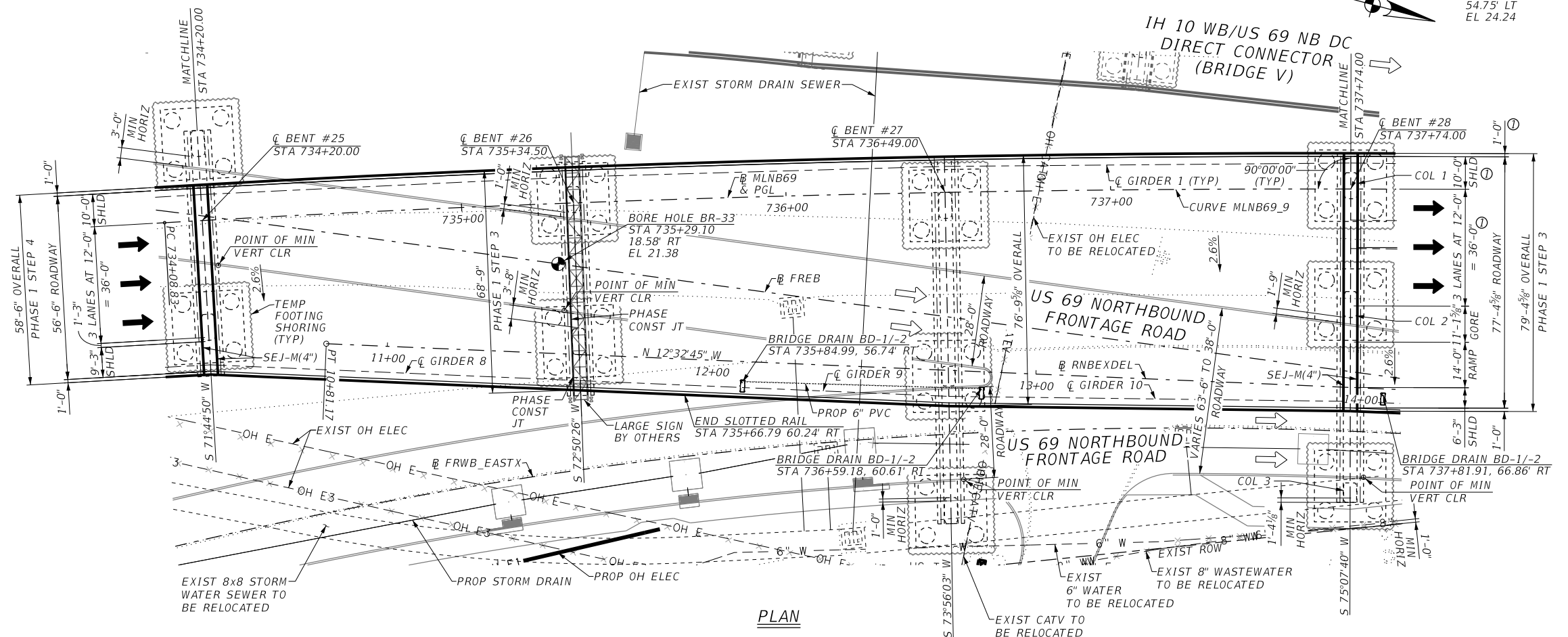
SHEET 9 OF 12

DN: FB	CK: JMV	DW: RF	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1488	

DATE: 7-MAR-2024 15:00
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7 - Bridge\Plan_Sett\10E-69N_LAYOUT_10.dgn

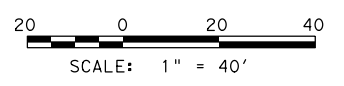
BORE HOLE BR-30
 STA 738+63.68
 54.75' LT
 EL 24.24

NOTES:
 SEE SHEET 1 OF 12 FOR GENERAL NOTES.
 ① MEASURED PERPENDICULAR TO @ MLNB69

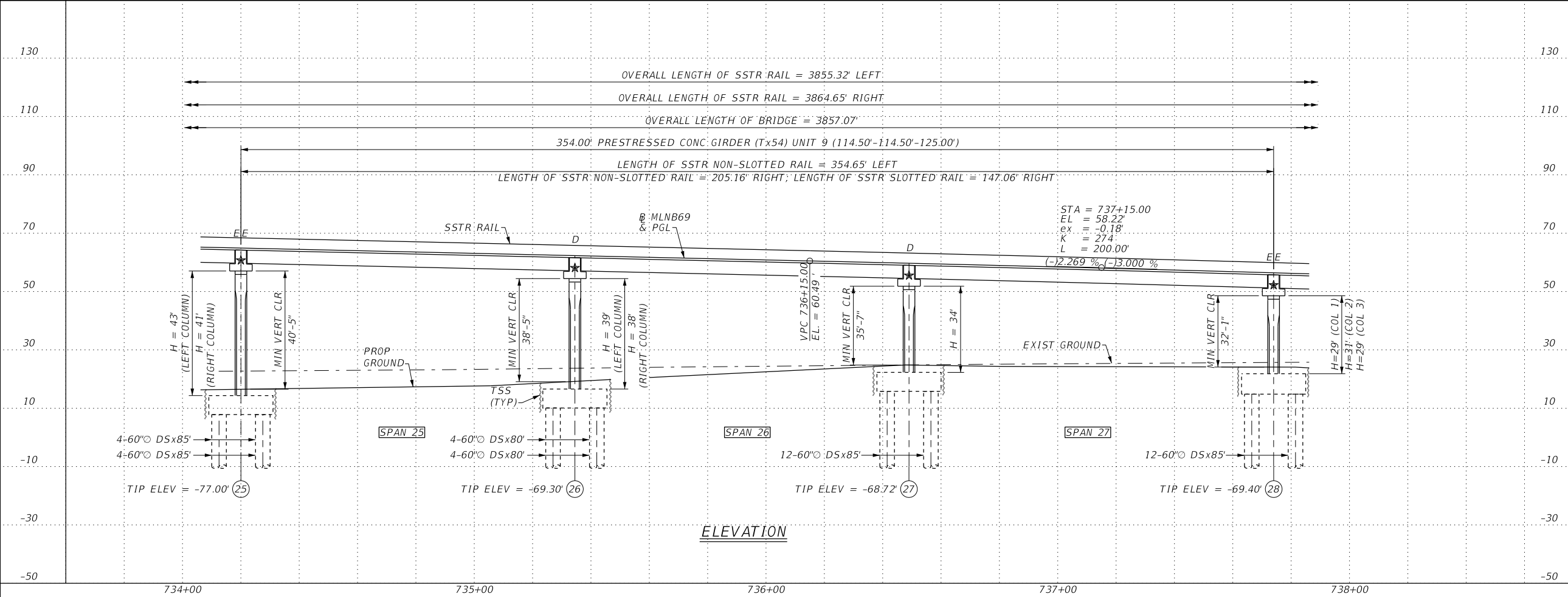


HORIZONTAL CURVE DATA @ MLNB69_9

PI STATION	= 742+20.29
DELTA	= 15° 24' 16.22" (RT)
DEGREE OF CURVE	= 0° 57' 17.75"
TANGENT	= 811.47
LENGTH	= 1,613.16
RADIUS	= 6,000.00
PC STATION	= 734+08.83
PT STATION	= 750+21.98



PLAN



ELEVATION

STATE OF TEXAS
 FEIFEI BAI
 120727
 LICENSED PROFESSIONAL ENGINEER
 3-7-2024

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

VOLKERT
 F-12679

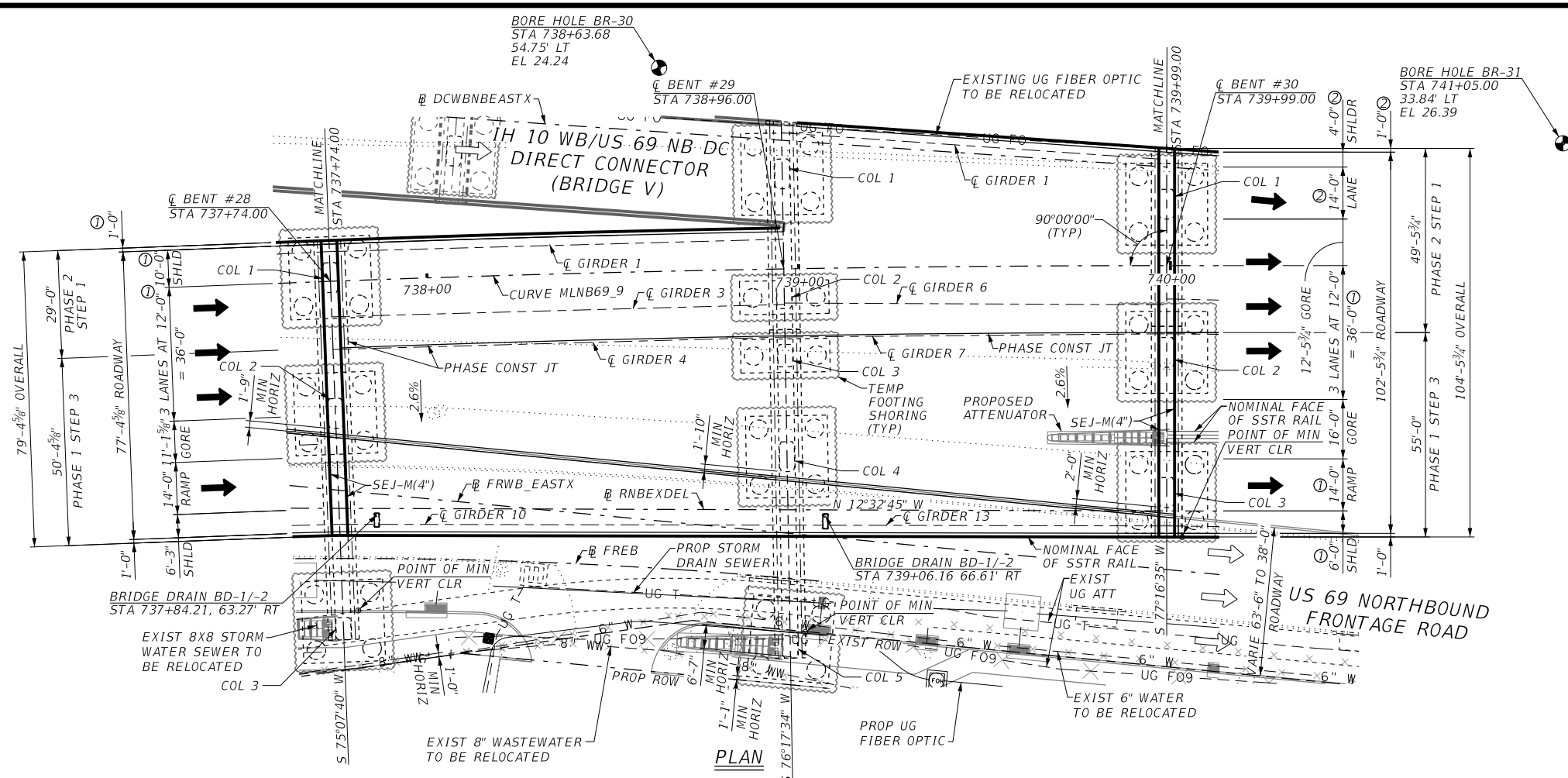
Texas Department of Transportation

**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML TO US 69 NB DC
 NBI: 20-124-0-0028-13-537
 BRIDGE R**

SHEET 10 OF 12

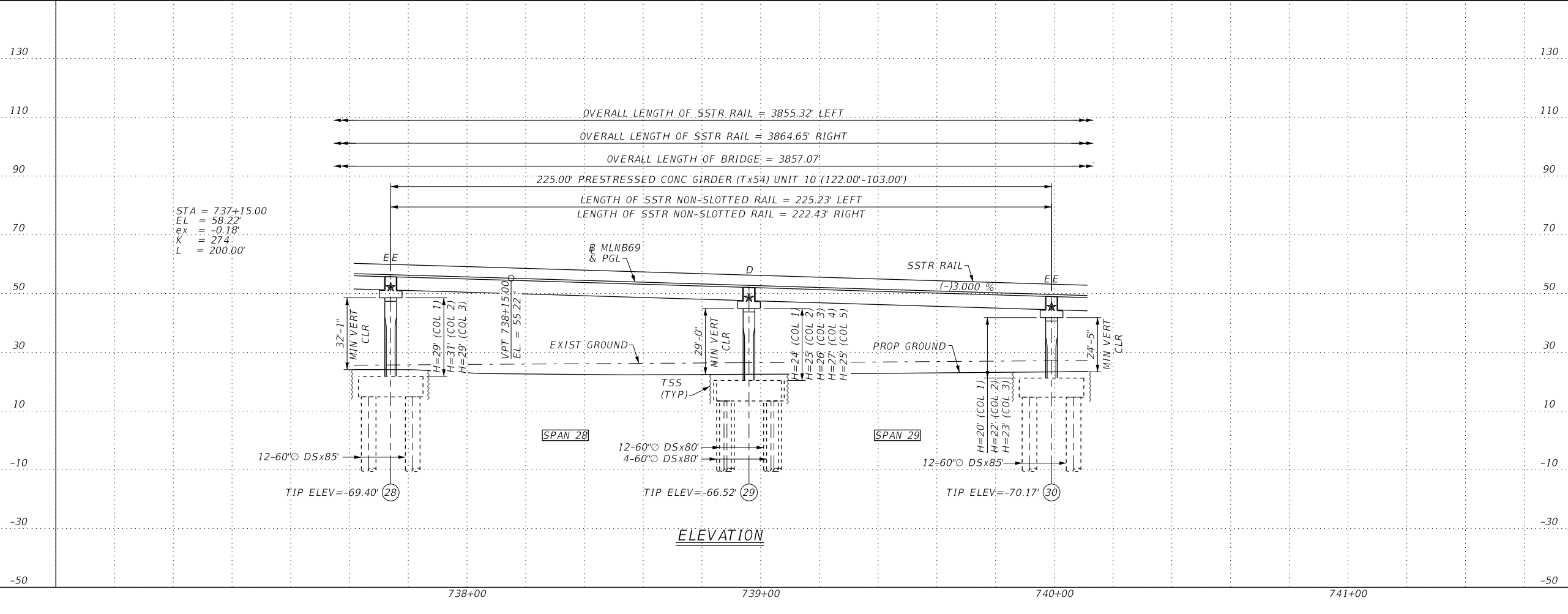
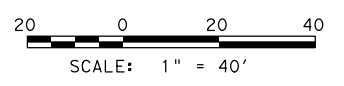
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CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1489		

DATE: 7-MAR-2024 15:00
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Plan_Set\7. Bridge\10E-69N_LAYOUT_11.dgn



NOTES:
SEE SHEET 1 OF 12 FOR GENERAL NOTES.
① MEASURED PERPENDICULAR TO MLNB69
② MEASURED PERPENDICULAR TO DCWBNBEASTX

PI STATION	= 742+20.29
DELTA	= 15° 24' 16.22" (RT)
DEGREE OF CURVE	= 0° 57' 17.75"
TANGENT	= 811.47
LENGTH	= 1,613.16
RADIUS	= 6,000.00
PC STATION	= 734+08.83
PT STATION	= 750+21.98



FEIFEI BAI
120727
LICENSED PROFESSIONAL ENGINEER
3-7-2024

HL93 LOADING
SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

VOLKERT

F-12679

IH 10 AT US 69
BRIDGE LAYOUT
IH 10 EBML TO US 69 NB DC
NBI: 20-124-0-0028-13-537
BRIDGE R

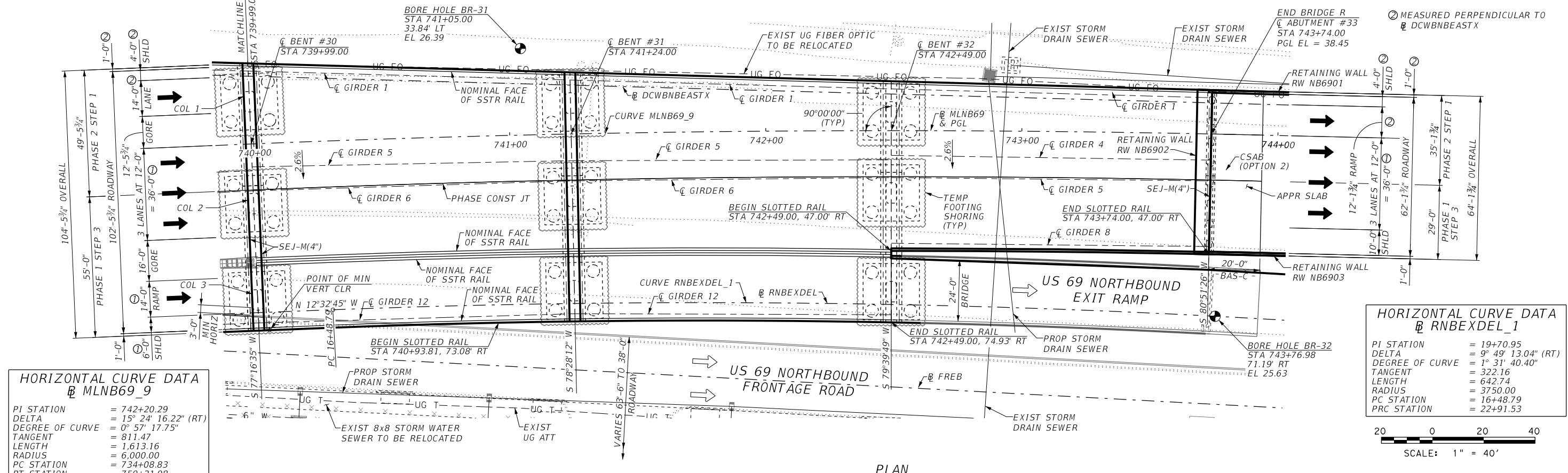
SHEET 11 OF 12

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1490		

DATE: 20-FEB-2024 22:47
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7 - Bridge\10 69 NB DC\1491_10ML_10E-69N_LAYOUT_12.dgn

NOTES:
 SEE SHEET 1 OF 12 FOR GENERAL NOTES.

- ① MEASURED PERPENDICULAR TO MLNB69
- ② MEASURED PERPENDICULAR TO DCWBNBEASTX

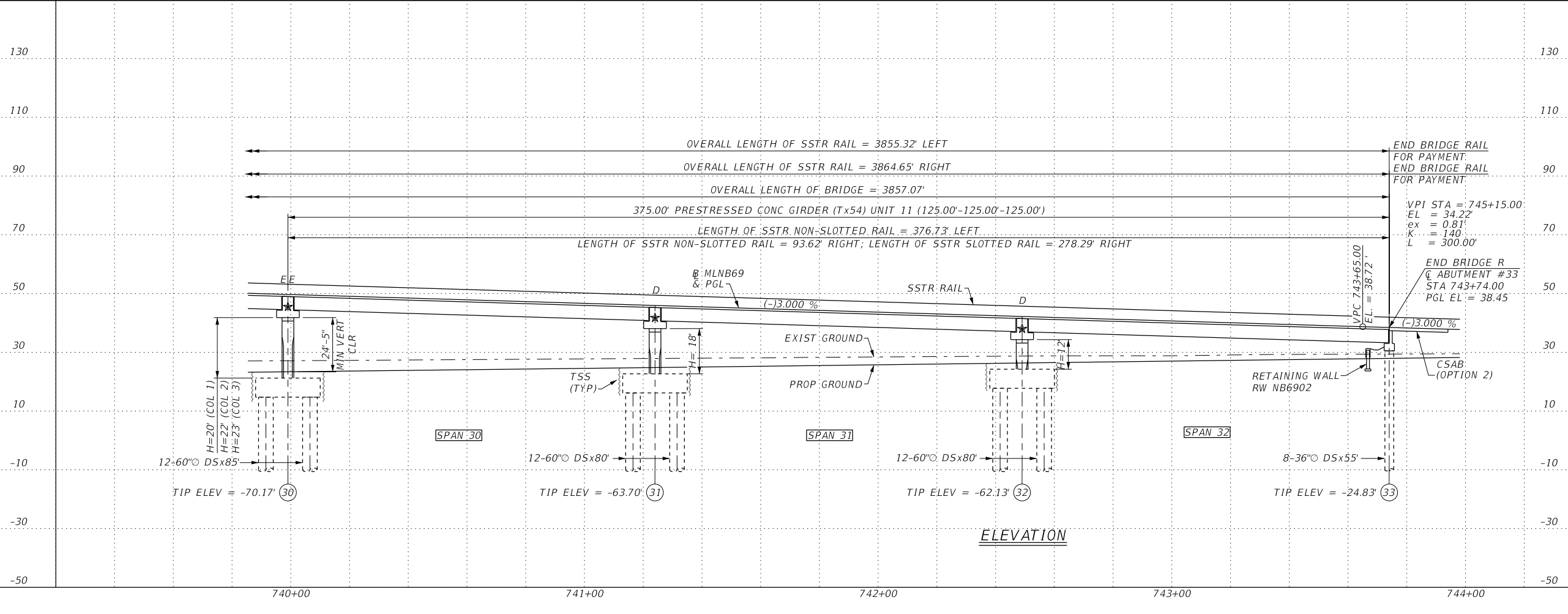
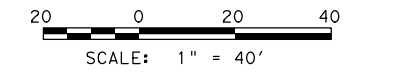


**HORIZONTAL CURVE DATA
 @ MLNB69_9**

PI STATION	= 742+20.29
DELTA	= 15° 24' 16.22" (RT)
DEGREE OF CURVE	= 0° 57' 17.75"
TANGENT	= 811.47
LENGTH	= 1,613.16
RADIUS	= 6,000.00
PC STATION	= 734+08.83
PT STATION	= 750+21.98

**HORIZONTAL CURVE DATA
 @ RNBEXDEL_1**

PI STATION	= 19+70.95
DELTA	= 9° 49' 13.04" (RT)
DEGREE OF CURVE	= 1° 31' 40.40"
TANGENT	= 322.16
LENGTH	= 642.74
RADIUS	= 3750.00
PC STATION	= 16+48.79
PRC STATION	= 22+91.53



FEIFEI BAI
 120727
 LICENSED PROFESSIONAL ENGINEER
 2-20-24

HL93 LOADING
 SUPERSTRUCTURE INV/OPR RATINGS: 1.02/1.75

VOLKERT
 F-12679

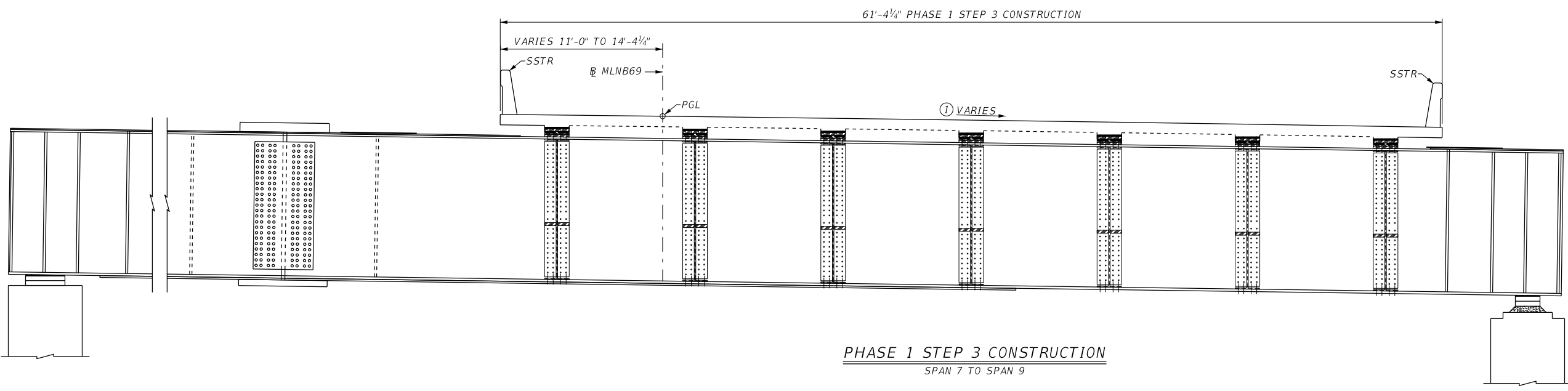
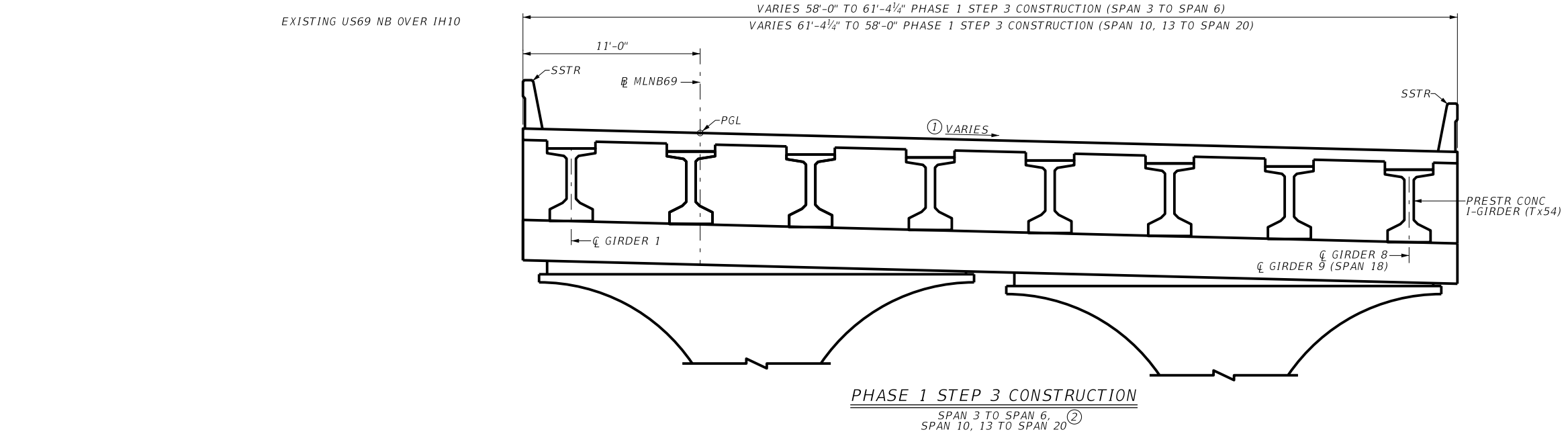
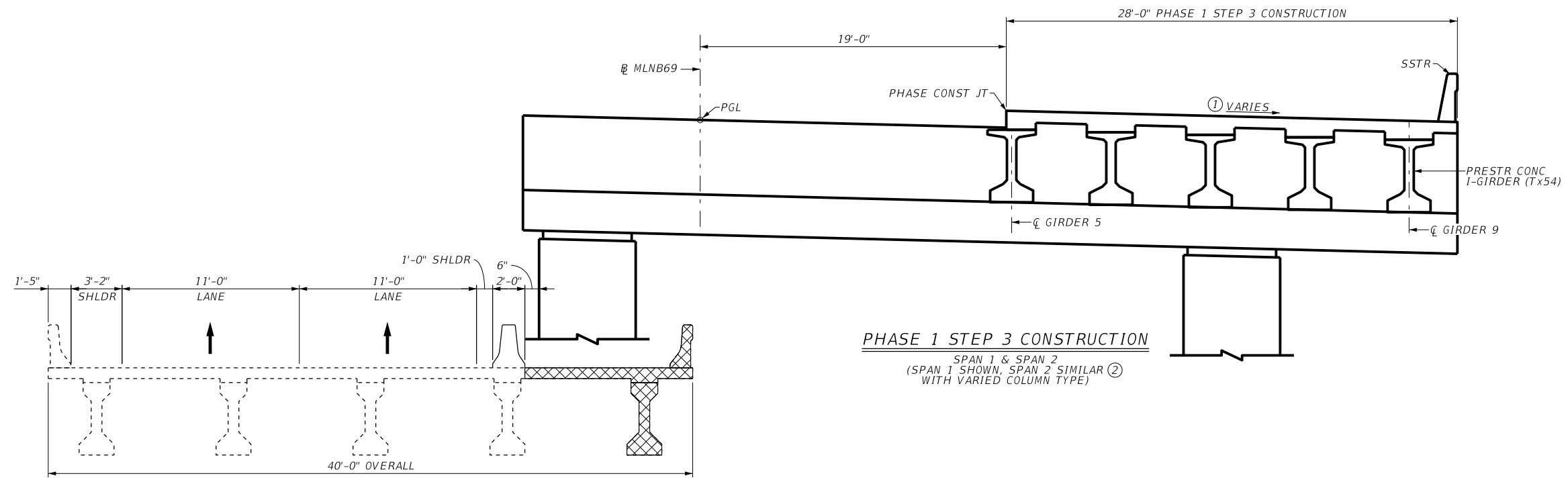
Texas Department of Transportation

**IH 10 AT US 69
 BRIDGE LAYOUT
 IH 10 EBML TO US 69 NB DC
 NBI: 20-124-0-0028-13-537
 BRIDGE R**

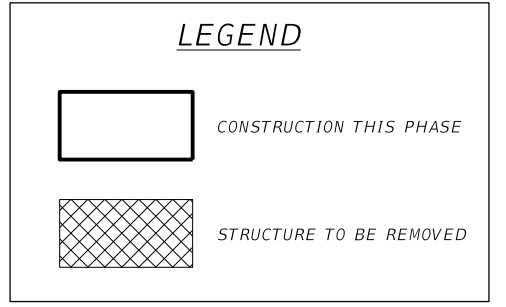
SHEET 12 OF 12

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1491		

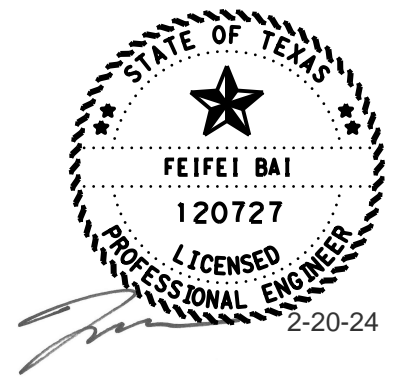
DATE: 20-FEB-2024 22:58
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1492_10ML_10E-69N_CONPH_01.dgn



- GENERAL NOTES:**
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING BRIDGE DIMENSIONS AND ELEVATIONS PRIOR TO ANY FABRICATION AND CONSTRUCTION.
 - CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
 - SEE TRAFFIC CONTROL PLAN SHEETS FOR ADDITIONAL STEPS, CTB RAIL LOCATIONS, LENGTHS & QUANTITIES WITHIN LIMITS OF BENT 1 TO ABUTMENT 33, AND INFORMATION NOT SHOWN HERE.



- DIRECTION OF CROSS SLOPE SHOWN IS SCHEMATIC AND NOT ALWAYS IN THE DIRECTION DEPICTED. SEE BRIDGE LAYOUT SHEETS AND ROADWAY PLANS FOR ACTUAL DIRECTION OF CROSS SLOPE.
- COLUMNS SHOWN ARE FOR GRAPHIC PURPOSE, SEE BENT SHEETS FOR COLUMN TYPE AND SIZE.



HL93 LOADING

VOLKERT

F-12679

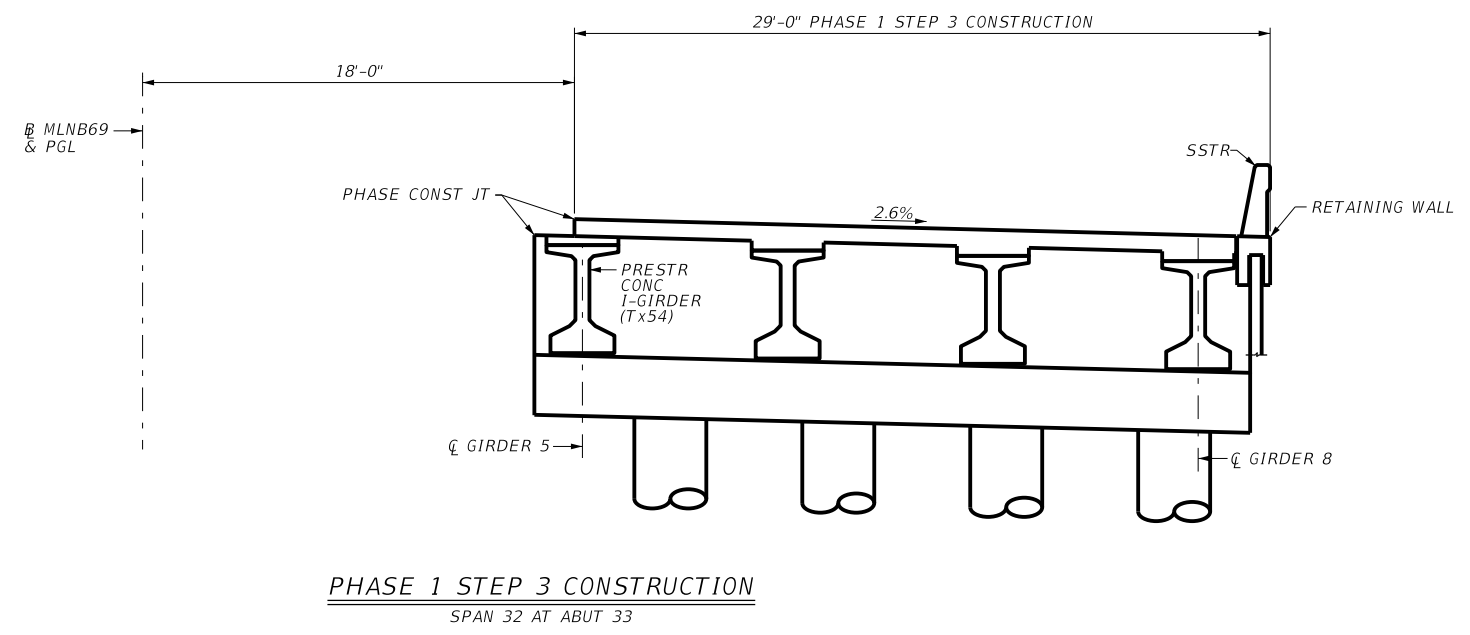
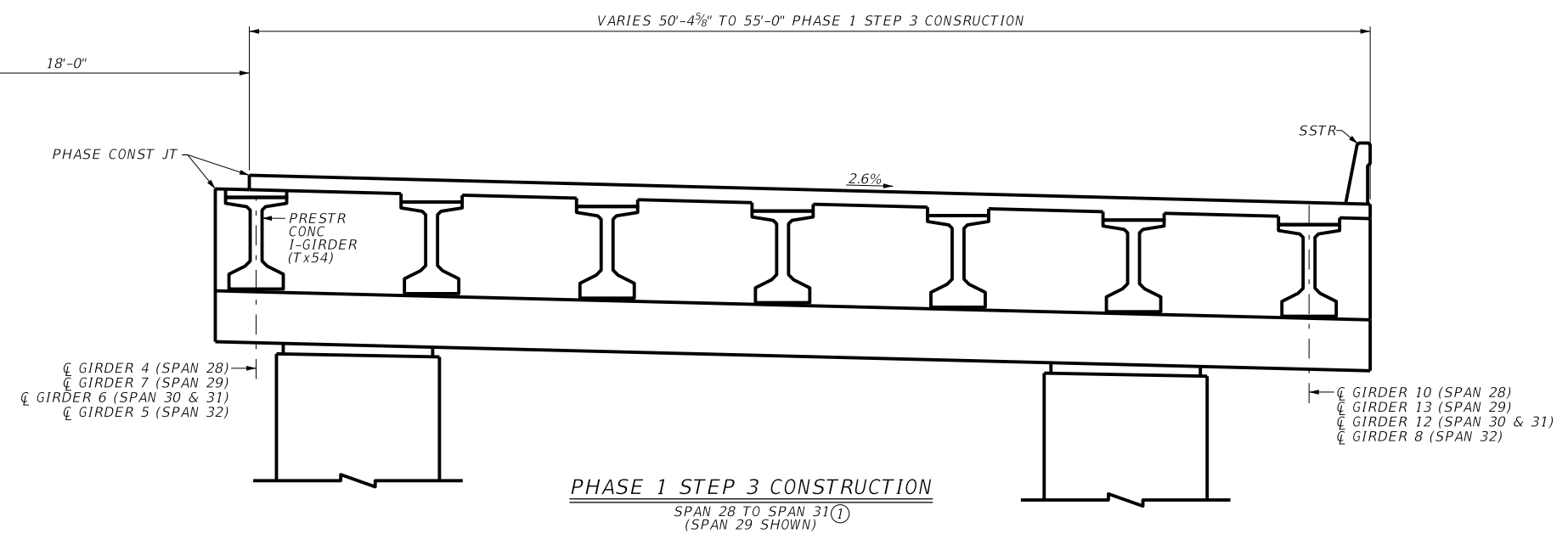
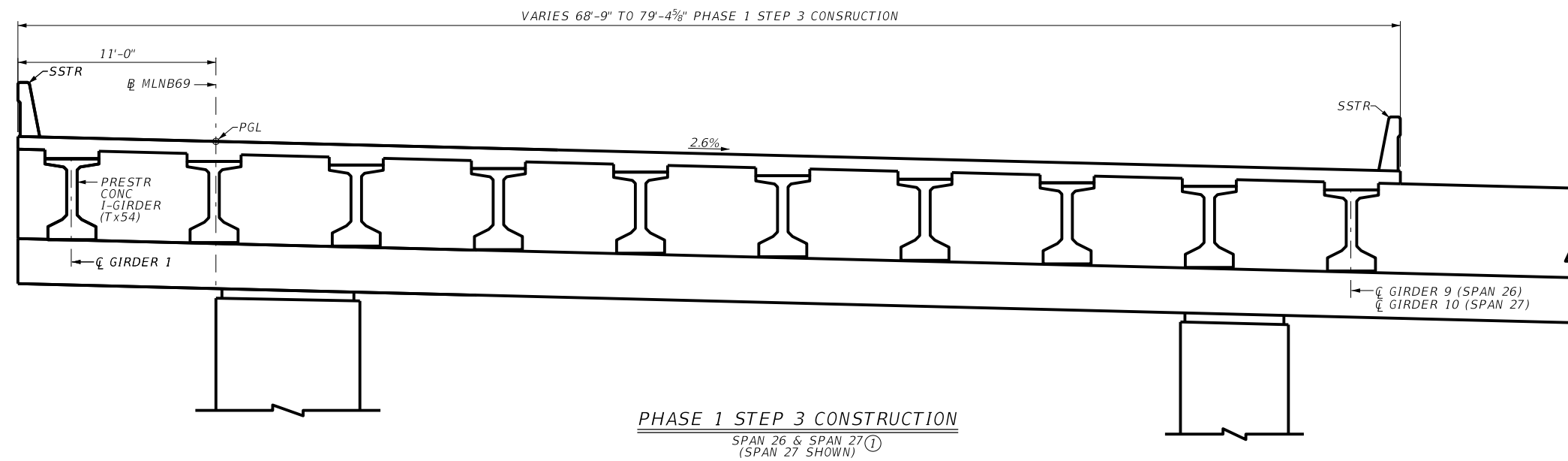
Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EBML
 TO US 69 NB DC**

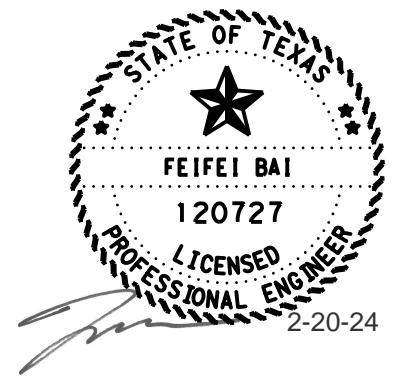
SHEET 1 OF 4

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1492				

DATE: 20-FEB-2024 22:48
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1493_10ML_10E-69N_CONPH_02.dgn



NOTES:
 1. SEE CONSTRUCTION PHASING SHEET 1 OF 4 FOR GENERAL NOTES.
 ① COLUMNS SHOWN ARE FOR GRAPHIC PURPOSE, SEE BENT SHEETS FOR COLUMN TYPE AND SIZE.



HL93 LOADING

VOLKERT
 F-12679

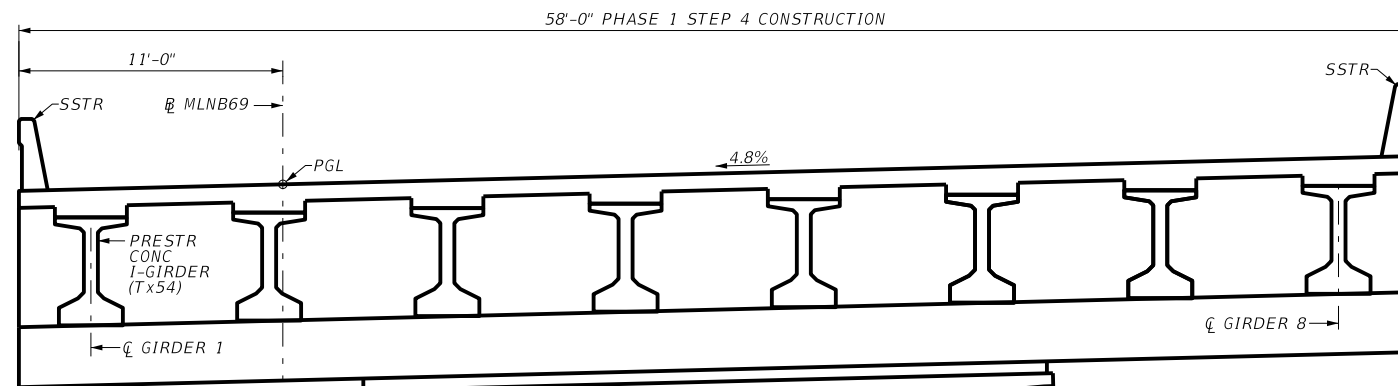
Texas Department of Transportation

**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EBML
 TO US 69 NB DC**

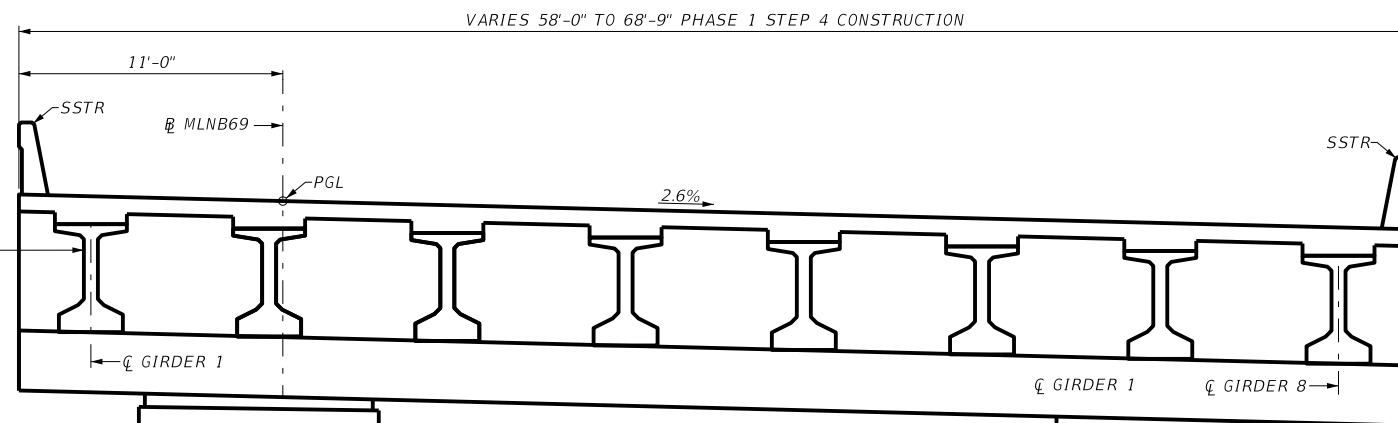
SHEET 2 OF 4

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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1493				

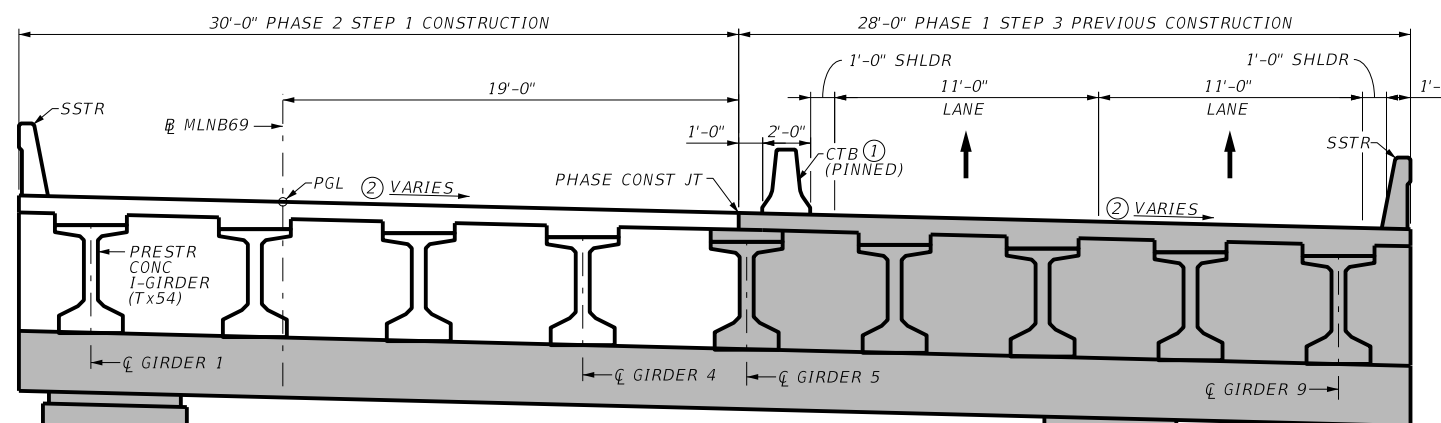
DATE: 21-FEB-2024 01:54
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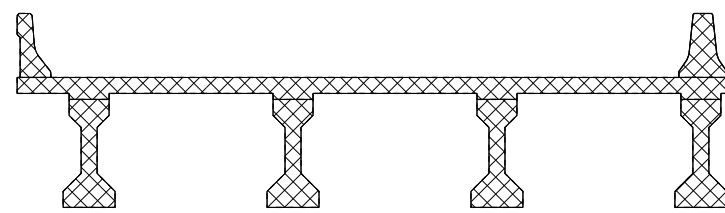
PHASE 1 STEP 4 CONSTRUCTION
 SPAN 11 & SPAN 12



PHASE 1 STEP 4 CONSTRUCTION
 SPAN 20 TO SPAN 25^③



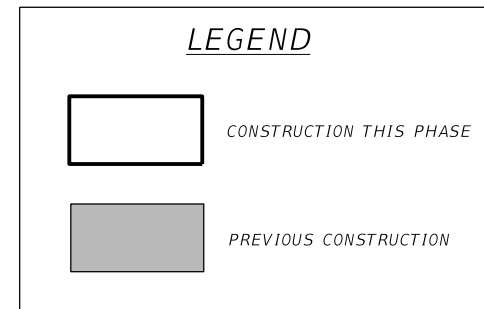
PHASE 2 STEP 1 CONSTRUCTION
 SPAN 1 TO SPAN 2
 (SPAN 1 SHOWN, SPAN 2 SIMILAR^③
 WITH VARIED COLUMN TYPE)



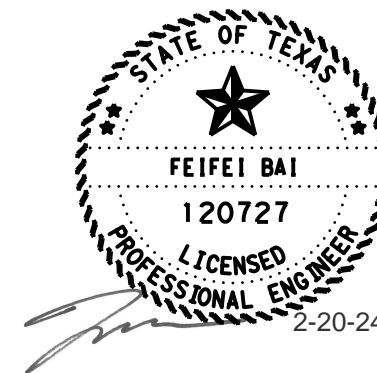
EXISTING US69 NB OVER IH10

NOTES:

1. SEE CONSTRUCTION PHASING SHEET 1 OF 4 FOR GENERAL NOTES.



- ① TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CTB.
- ② DIRECTION OF CROSS SLOPE SHOWN IS SCHEMATIC AND NOT ALWAYS IN THE DIRECTION DEPICTED. SEE BRIDGE LAYOUT SHEETS AND ROADWAY PLANS FOR ACTUAL DIRECTION OF CROSS SLOPE.
- ③ COLUMNS SHOWN ARE FOR GRAPHIC PURPOSE, SEE BENT SHEETS FOR COLUMN TYPE AND SIZE.



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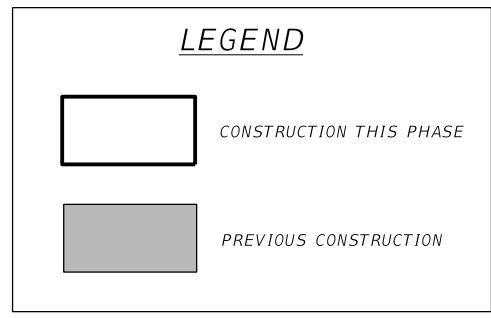


**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EBML
 TO US 69 NB DC**

SHEET 3 OF 4

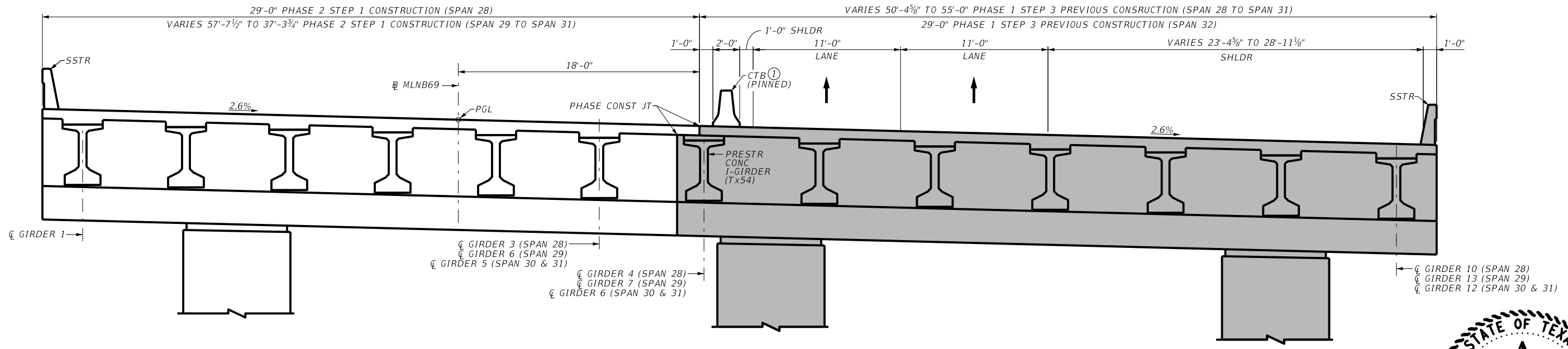
DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1494			

DATE: 21-FEB-2024 03:13
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1495_10ML_10E-69N_CONPH_04.dgn

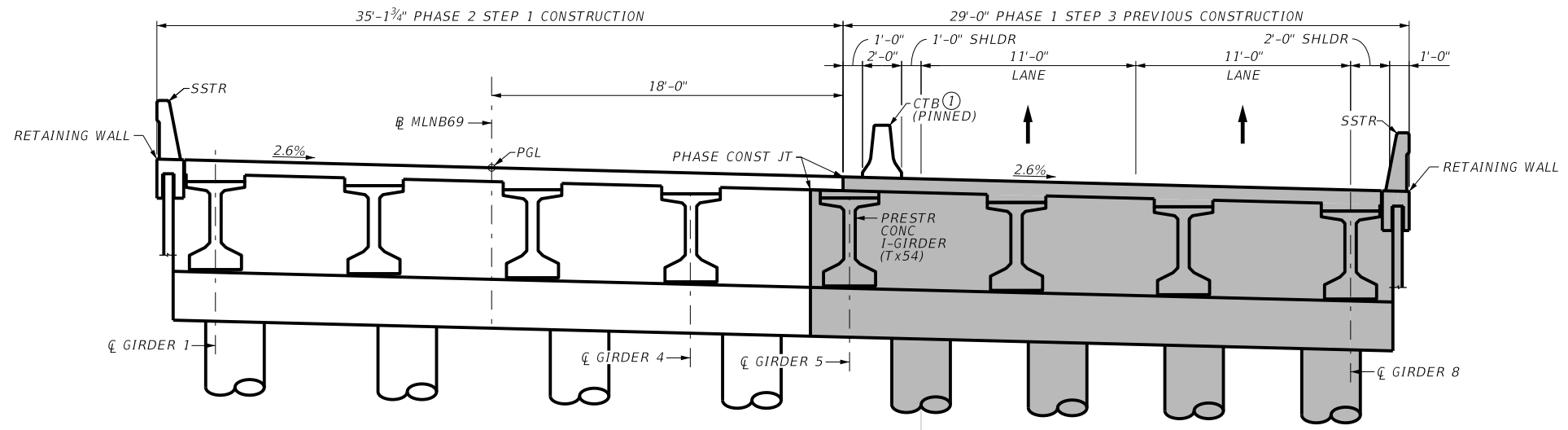


NOTES:

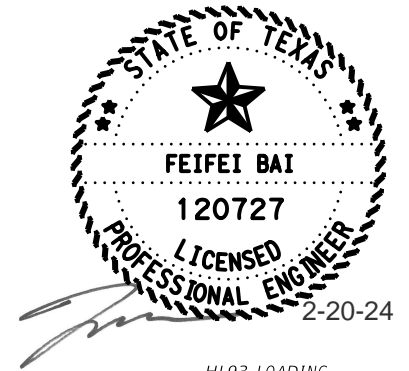
- SEE CONSTRUCTION PHASING SHEET 1 OF 4 FOR GENERAL NOTES.
- TEMPORARY BARRIER SHALL BE PINNED PER SSCB(5)-10 OR CSB(7)-10 PATCH HOLES IN PERMANENT DECK IN ACCORDANCE WITH SPECIFICATION ITEM 429. COST OF PINS AND DECK HOLE PATCHING ARE INCIDENTAL TO THE COST OF SSCB OR CTB.
- COLUMNS SHOWN ARE FOR GRAPHIC PURPOSE, SEE BENT SHEETS FOR COLUMN TYPE AND SIZE



PHASE 2 STEP 1 CONSTRUCTION
 SPAN 28 TO SPAN 31
 (SPAN 29 SHOWN)



PHASE 2 STEP 1 CONSTRUCTION
 SPAN 32 AT ABUT 33

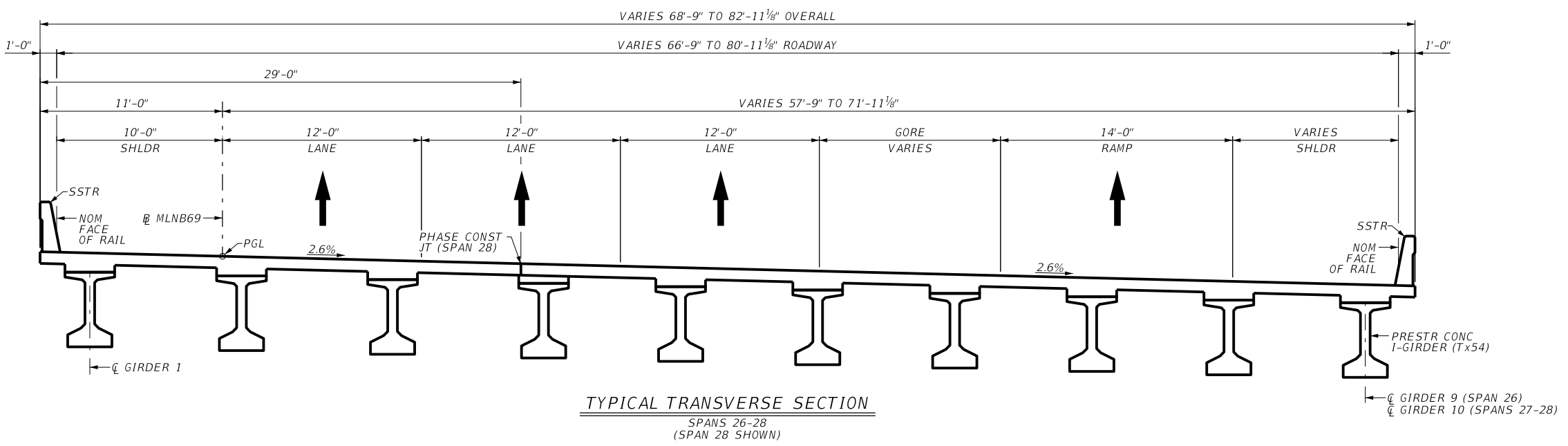
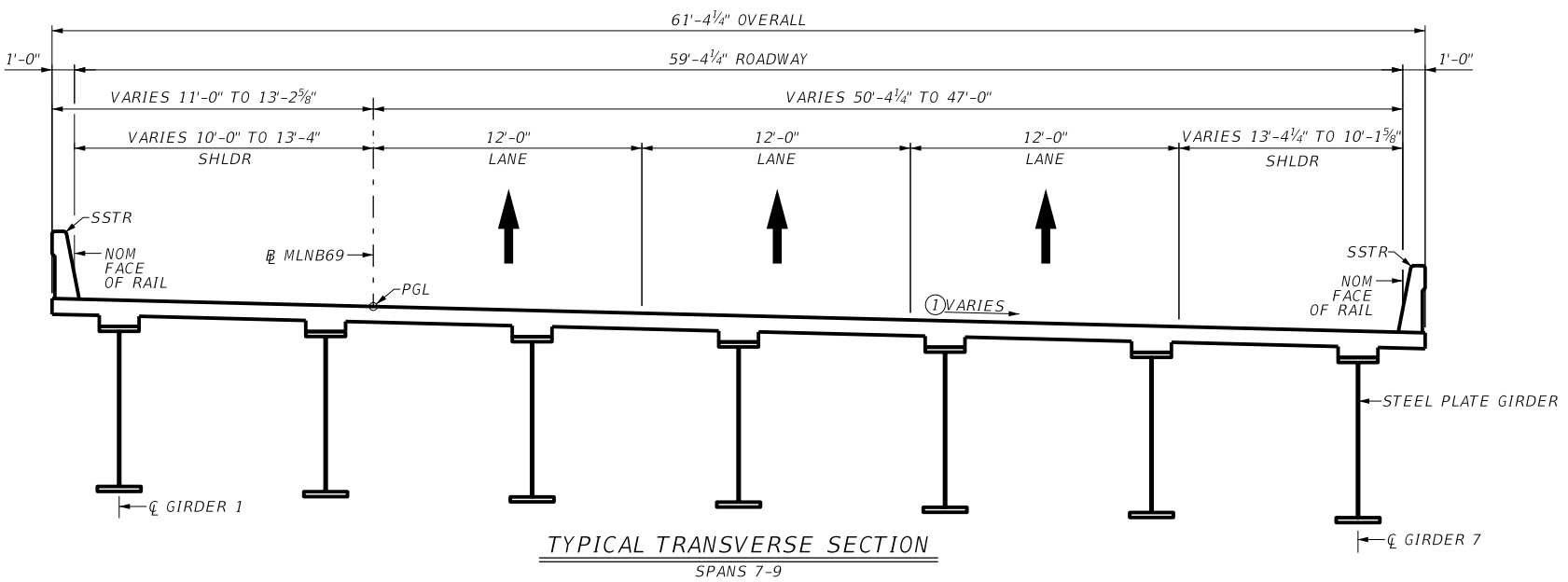
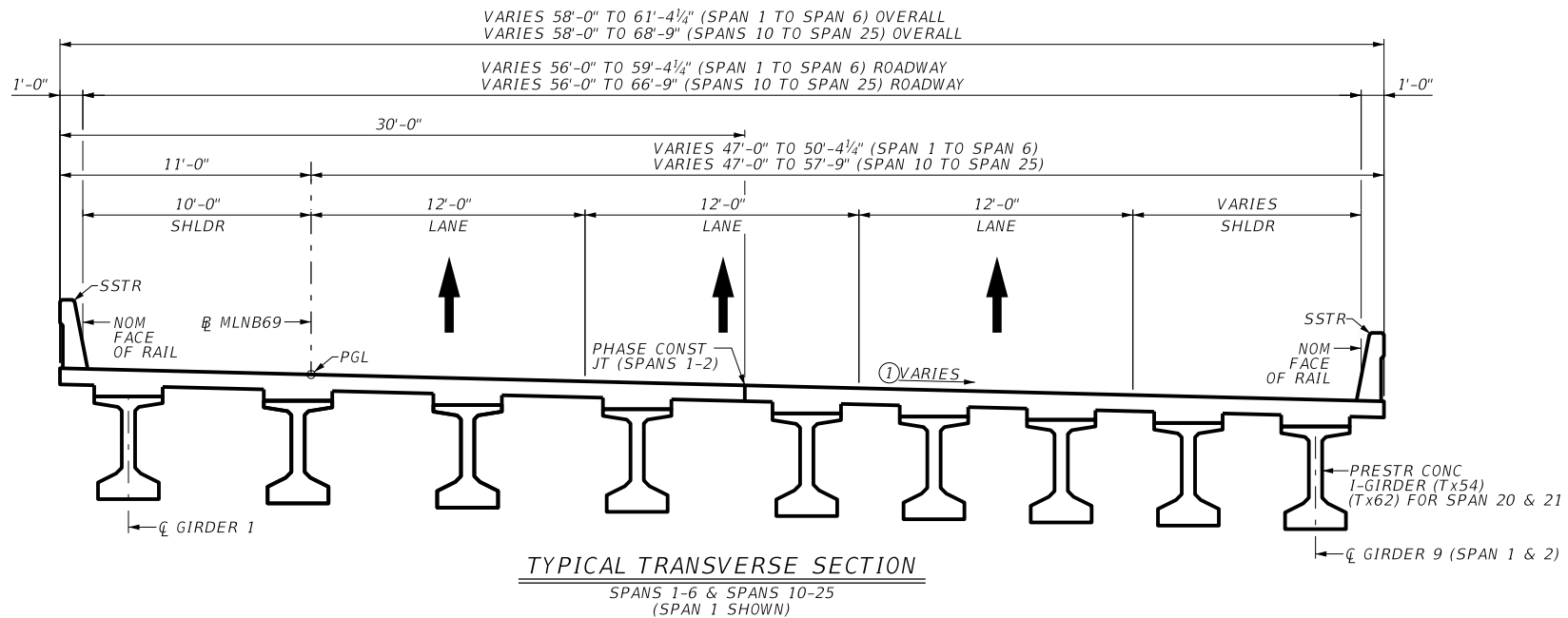


**IH 10 AT US 69
 CONSTRUCTION PHASING
 IH 10 EBML
 TO US 69 NB DC**

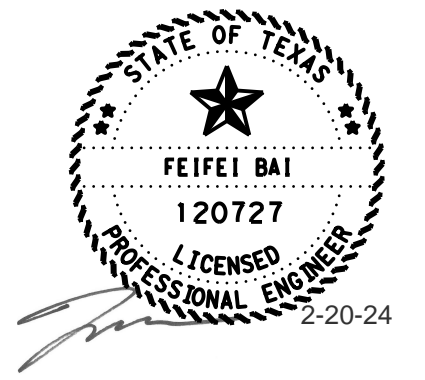
SHEET 4 OF 4

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DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1495				

DATE: 21-FEB-2024 01:53
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① DIRECTION OF CROSS SLOPE SHOWN IS SCHEMATIC AND NOT ALWAYS IN THE DIRECTION DEPICTED. SEE BRIDGE LAYOUT SHEETS FOR ACTUAL DIRECTION OF CROSS SLOPE.



HL93 LOADING

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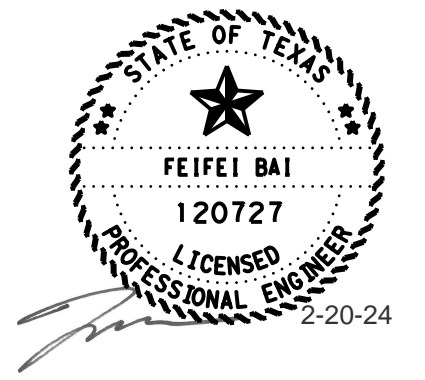
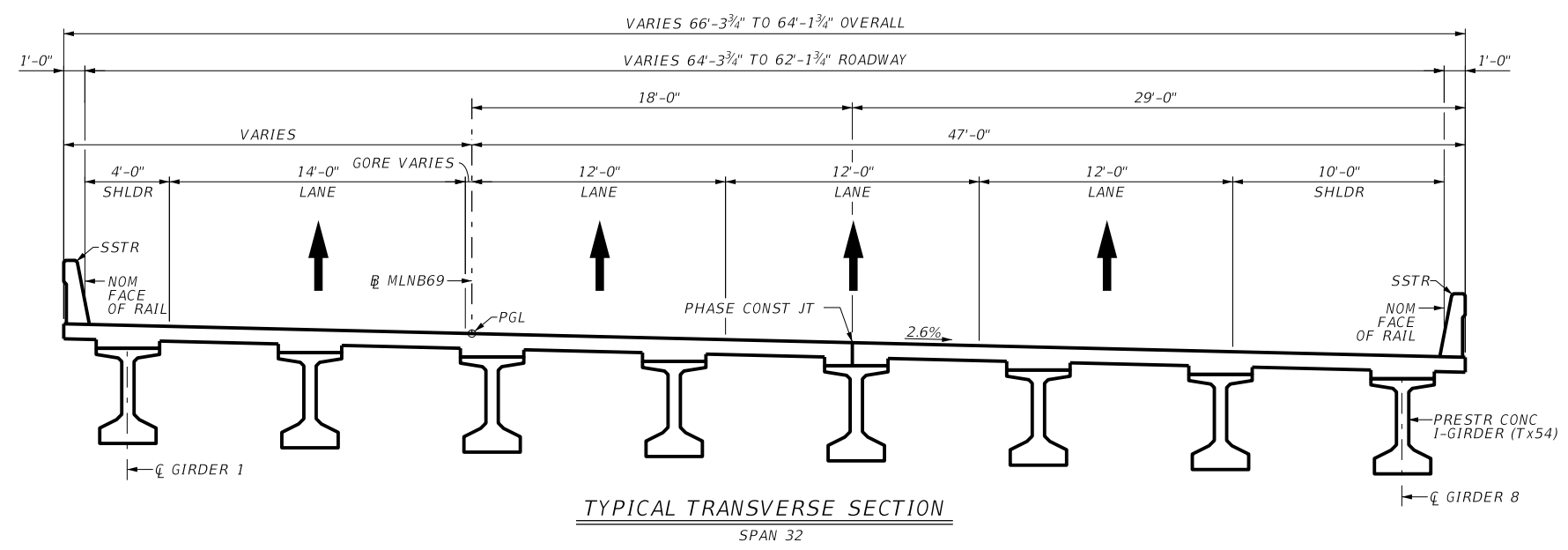
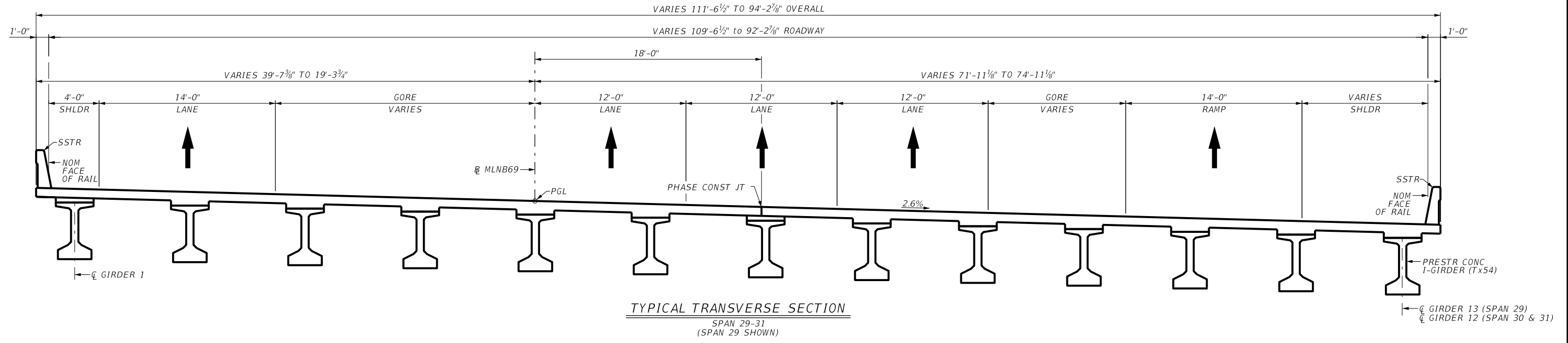
Texas Department of Transportation

**IH 10 AT US 69
 TYPICAL SECTIONS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 2

DN:	FB	CK:	BB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1496				

DATE: 21-FEB-2024 01:53
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1497_10ML_10E-69N_TYP_02.dgn



HL93 LOADING

VOLKERT

F-12679

Texas Department of Transportation

**IH 10 AT US 69
 TYPICAL SECTIONS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 2 OF 2

DN:	FB	CK:	BB	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
BMT	JERRFERSON		1497				

SUMMARY OF BRIDGE QUANTITIES-PHASE 1 STEP 3

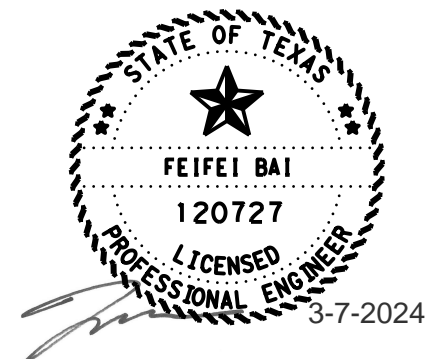
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	6005	6001	6004	6008	6010	6012	6013	6029	6031	6082	6084	6090	6092	6100	6001	6015
DESCRIPTION	CEM STABIL BKFILL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	DRILL SHAFT (60 IN)	DRILL SHAFT (72 IN)	DRILL SHAFT (84 IN)	CL C CONC (ABUT)	CL C CONC (CAP)	CL C CONC (CAP) (MASS)	CL F CONC (CAP)	CL F CONC (CAP) (MASS)	CL F CONC (COLUMN)	CL F CONC (COLUMN) (MASS)	CL F CONC (FOOTING) (MASS)	REINF CONC SLAB	APPROACH SLAB
BRIDGE ELEMENT	CY	SF	LF	LF	LF	LF	CY	CY	CY	CY	CY	CY	CY	CY	SF	CY
IH 10 EBML TO US 69 NB DC																
1-ABUTMENT	33		220				15.1									22.4
32-INTERIOR BENTS		43,090		15,680	800	640		364.2	851.5	938.3	505.2	1,018.4	3,213.1	6,192.1		
1-332.07' PRESTR CONC I-GIRDER UNIT																12,498
1-333.02' PRESTR CONC I-GIRDER UNIT																19,513
1-534.17' CONT STL PLT GIRDER UNIT																32,775
1-340.81' PRESTR CONC I-GIRDER UNIT																6,852
1-331.50' PRESTR CONC I-GIRDER UNIT																19,361
1-338.50' PRESTR CONC I-GIRDER UNIT																20,369
1-389.00' PRESTR CONC I-GIRDER UNIT																14,084
1-304.00' PRESTR CONC I-GIRDER UNIT																
1-354.00' PRESTR CONC I-GIRDER UNIT																18,060
1-225.00' PRESTR CONC I-GIRDER UNIT																11,923
1-375.00' PRESTR CONC I-GIRDER UNIT																17,375
TOTAL	33	43,090	220	15,680	800	640	15.1	364.2	851.5	938.3	505.2	1,018.4	3,213.1	6,192.1	172,810	22.4

SUMMARY OF BRIDGE QUANTITIES-PHASE 1 STEP 3

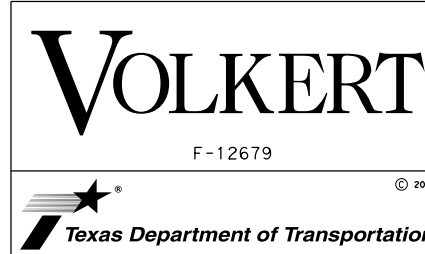
ITEM DESCRIPTION CODE	425		434	442				450	450	454		471	4021
	6039	6040	6007	6001	6008	6009	6010	6023	6054	6018	6019	6007	6001
DESCRIPTION	PRESTR CONC GIRDER (TX54)	PRESTR CONC GIRDER (TX62)	ELASTOMERIC BEARING (EE5)	STR STEEL (PLATE GIRDER)	STR STEEL (MISCELLANEOUS BRIDGE)	STR STEEL (DIAPHRAGM & STIFFENER)	STR STEEL (SHEAR CONNECTOR)	RAIL (TY SSTR)	RAIL (TYP SSTR) W/DRAIN SLOTS	SEALED EXPANSION JT (4 IN) (SEJ-M)	SEALED EXPANSION JT (5 IN) (SEJ-M)	GRATE AND FRAME (BRIDGE DRAIN)	TIP TESTING (DRILL SHAFT)
BRIDGE ELEMENT	LF	LF	EA	LB	LB	LB	LB	LF	LF	LF	LF	EA	EA
IH 10 EBML TO US 69 NB DC													
1-ABUTMENT													
32-INTERIOR BENTS			14										28
1-332.07' PRESTR CONC I-GIRDER UNIT	1,885.64							113.2	325.4	84			
1-333.02' PRESTR CONC I-GIRDER UNIT	2,660.77							413.6	252.8		117		
1-534.17' CONT STL PLT GIRDER UNIT				1,904,617	233,328	374,669	15,483	946.2	122.2	121		5	
1-340.81' PRESTR CONC I-GIRDER UNIT	883.35							118.9	112.8	60			
1-331.50' PRESTR CONC I-GIRDER UNIT	2,552.28							337.5	330.1	114			
1-338.50' PRESTR CONC I-GIRDER UNIT	2,805.55							450.1	252.3	123			
1-389.00' PRESTR CONC I-GIRDER UNIT	899.17	951.59						193.3	292.7	66			
1-304.00' PRESTR CONC I-GIRDER UNIT								0.0	0.0				
1-354.00' PRESTR CONC I-GIRDER UNIT	2,181.72							445.1	32.1	79		2	
1-225.00' PRESTR CONC I-GIRDER UNIT	1,497.94							222.4	0.0	105		2	
1-375.00' PRESTR CONC I-GIRDER UNIT	2,149.90							93.7	273.2	83			
TOTAL	17,516.33	951.59	14	1,904,617	233,328	374,669	15,483	3334.0	1993.6	836	117	9	28

SUMMARY OF BRIDGE QUANTITIES-PHASE 1 STEP 4

ITEM DESCRIPTION CODE	403	416		420						422
	6001	6008	6010	6029	6031	6082	6090	6092	6100	6001
DESCRIPTION	TEMPORARY SPL SHORING	DRILL SHAFT (60 IN)	DRILL SHAFT (72 IN)	CL C CONC (CAP)	CL C CONC (CAP)(MASS)	CL F CONC (CAP)	CL F CONC (COLUMN)	CL F CONC (COLUMN) (MASS)	CL F CONC (FOOTING) (MASS)	REINF CONC SLAB
BRIDGE ELEMENT	SF	LF	LF	CY	CY	CY	CY	CY	CY	SF
IH 10 EBML TO US 69 NB DC										
1-ABUTMENT										
32-INTERIOR BENTS	7,344	2,640	400	208.4	224.2	115.4	97.0	736.6	1,048.7	
1-332.07' PRESTR CONC I-GIRDER UNIT										
1-333.02' PRESTR CONC I-GIRDER UNIT										
1-534.17' CONT STL PLT GIRDER UNIT										
1-340.81' PRESTR CONC I-GIRDER UNIT										13,257
1-331.50' PRESTR CONC I-GIRDER UNIT										
1-338.50' PRESTR CONC I-GIRDER UNIT										7,888
1-389.00' PRESTR CONC I-GIRDER UNIT										17,657
1-304.00' PRESTR CONC I-GIRDER UNIT										7,280
1-354.00' PRESTR CONC I-GIRDER UNIT										
1-225.00' PRESTR CONC I-GIRDER UNIT										
1-375.00' PRESTR CONC I-GIRDER UNIT										
TOTAL	7,344	2,640	400	208.4	224.2	115.4	97.0	736.6	1,048.7	46,082



HL93 LOADING



IH 10 AT US 69
ESTIMATED QUANTITIES &
BEARING SEAT ELEVATIONS
IH 10 EBML
TO US 69 NB DC
SHEET 1 OF 3

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1498	

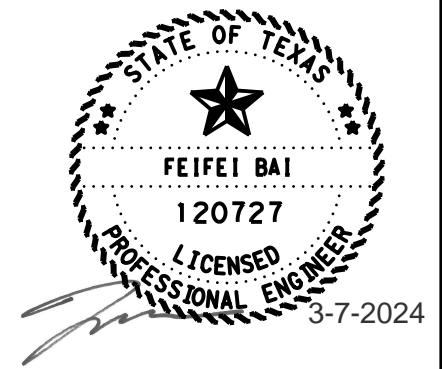
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DATE: 7-MAR-2024 15:00
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg R (IH 10 EB to US 69 NB DC)\10E-69N_EST_QTY_02.dgn

SUMMARY OF BRIDGE QUANTITIES-PHASE 1 STEP 4						
ITEM	425		450	450	454	4021
DESCRIPTION CODE	6039	6040	6023	6054	6018	6001
DESCRIPTION	PRESTR CONC GIRDER (TX54)	PRESTR CONC GIRDER (TX62)	RAIL (TY SSTR)	RAIL (TYP SSTR) W/DRAIN SLOTS	SEALED EXPANSION JT (4 IN) (SEJ-M)	TIP TESTING (DRILL SHAFT)
BRIDGE ELEMENT	LF	LF	LF	LF	LF	EA
IH 10 EBML TO US 69 NB DC						
1-ABUTMENT						
32-INTERIOR BENTS						5
1-332.07' PRESTR CONC I-GIRDER UNIT						
1-333.02' PRESTR CONC I-GIRDER UNIT						
1-534.17' CONT STL PLT GIRDER UNIT						
1-340.81' PRESTR CONC I-GIRDER UNIT	1,736.46		231.1	226.1	57	
1-331.50' PRESTR CONC I-GIRDER UNIT						
1-338.50' PRESTR CONC I-GIRDER UNIT						
1-389.00' PRESTR CONC I-GIRDER UNIT		1,042.34	136.0	136.0	57	
1-304.00' PRESTR CONC I-GIRDER UNIT	2,298.32		304.1	303.9	114	
1-354.00' PRESTR CONC I-GIRDER UNIT	876.34		114.8	114.0	58	
1-225.00.00' PRESTR CONC I-GIRDER UNIT						
1-375.00' PRESTR CONC I-GIRDER UNIT						
TOTAL	4,911.12	1,042.34	786.0	780.0	286	5

SUMMARY OF BRIDGE QUANTITIES-PHASE 2 STEP 1								
ITEM	400	403	416		420			
DESCRIPTION CODE	6005	6001	6004	6008	6013	6082	6092	6100
DESCRIPTION	CEM STABIL BKFILL	TEMPORARY SPL SHORING	DRILL SHAFT (36 IN)	DRILL SHAFT (60 IN)	CL C CONC (ABUT)	CL F CONC (CAP)	CL F CONC (COLUMN)	CL F CONC (FOOTING) (MASS)
BRIDGE ELEMENT	CY	SF	LF	LF	CY	CY	CY	CY
IH 10 EBML TO US 69 NB DC								
1-ABUTMENT	50		220		16.6			
32-INTERIOR BENTS		4,794		1,460		274.3	116.0	647.6
1-332.07' PRESTR CONC I-GIRDER UNIT								
1-333.02' PRESTR CONC I-GIRDER UNIT								
1-534.17' CONT STL PLT GIRDER UNIT								
1-340.81' PRESTR CONC I-GIRDER UNIT								
1-331.50' PRESTR CONC I-GIRDER UNIT								
1-338.50' PRESTR CONC I-GIRDER UNIT								
1-389.00' PRESTR CONC I-GIRDER UNIT								
1-304.00' PRESTR CONC I-GIRDER UNIT								
1-354.00' PRESTR CONC I-GIRDER UNIT								
1-225.00.00' PRESTR CONC I-GIRDER UNIT								
1-375.00' PRESTR CONC I-GIRDER UNIT								
TOTAL	50	4,794	220	1,460	16.6	274.3	116.0	647.6

SUMMARY OF BRIDGE QUANTITIES-PHASE 2 STEP 1					
ITEM	422		425	450	454
DESCRIPTION CODE	6001	6015	6039	6023	6018
DESCRIPTION	REINF CONC SLAB	APPROACH SLAB	PRESTR CONC GIRDER (TX54)	RAIL (TY SSTR)	SEALED EXPANSION JT (4 IN) (SEJ-M)
BRIDGE ELEMENT	SF	CY	LF	LF	LF
IH 10 EBML TO US 69 NB DC					
1-ABUTMENT		27.3			
32-INTERIOR BENTS					
1-332.07' PRESTR CONC I-GIRDER UNIT	6,615		845.00	222.6	30
1-333.02' PRESTR CONC I-GIRDER UNIT					
1-534.17' CONT STL PLT GIRDER UNIT					
1-340.81' PRESTR CONC I-GIRDER UNIT					
1-331.50' PRESTR CONC I-GIRDER UNIT					
1-338.50' PRESTR CONC I-GIRDER UNIT					
1-389.00' PRESTR CONC I-GIRDER UNIT					
1-304.00' PRESTR CONC I-GIRDER UNIT					
1-354.00' PRESTR CONC I-GIRDER UNIT					
1-225.00.00' PRESTR CONC I-GIRDER UNIT	9,048		943.56	224.0	53
1-375.00' PRESTR CONC I-GIRDER UNIT	15,153		1,686.36	376.7	84
TOTAL	30,816	27.3	3,474.92	823.3	167



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Texas Department of Transportation

**IH 10 AT US 69
ESTIMATED QUANTITIES &
BEARING SEAT ELEVATIONS
IH 10 EBML
TO US 69 NB DC**

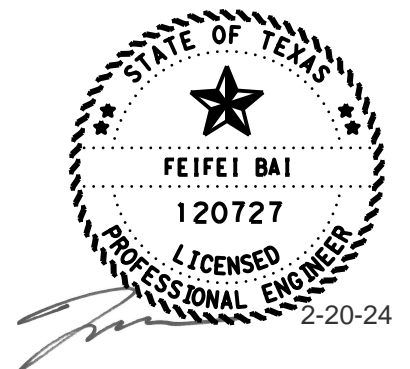
SHEET 2 OF 3

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1499	

DATE: 20-FEB-2024 22:45
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1500_10ML_10E-69N_EST_QTY_03.dgn

BEARING SEAT ELEVATIONS

		GIRDER 1	GIRDER 2	GIRDER 3	GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9						
BENT 1 (FWD)		51.206	50.801	50.398	49.997	49.619	49.303	48.946	48.592	48.239						
BENT 2 (BK)		51.714	51.432	51.149	50.866	50.604	50.391	50.136	49.881	49.625						
BENT 2 (FWD)		51.813	51.560	51.285	51.010	50.736	50.550	50.302	50.055	49.807						
BENT 3 (BK)		53.939	53.789	53.618	53.447	53.276	53.184	53.030	52.875	52.721						
BENT 3 (FWD)		54.265	54.079	53.894	53.708	53.522	53.337	53.151	52.965							
BENT 4 (BK)		57.375	57.190	57.004	56.818	56.632	56.447	56.261	56.075							
BENT 4 (FWD)		57.561	57.375	57.190	57.004	56.818	56.632	56.447	56.261							
BENT 5 (BK)	Phase 1 Step 3	60.671	60.486	60.300	60.114	59.928	59.743	59.557	59.371							
BENT 5 (FWD)		60.836	60.650	60.465	60.279	60.093	59.907	59.722	59.536							
BENT 6 (BK)		63.946	63.761	63.575	63.389	63.204	63.018	62.832	62.646							
BENT 6 (FWD)		64.153	63.967	63.781	63.595	63.409	63.223	63.037	62.850							
BENT 7 (BK)		67.247	67.052	66.856	66.661	66.466	66.270	66.075	65.880							
BENT 7 (FWD)		67.019	66.797	66.574	66.351	66.129	65.906	65.655								
BENT 10 (BK)		81.368	81.790	82.213	82.560	83.059	83.480	83.902								
BENT 10 (FWD)		81.888	82.259	82.629	83.001	83.372	83.743	84.114	84.485							
BENT 11 (BK)		83.659	84.017	84.374	84.732	85.089	85.446	85.804	86.161							
BENT 11 (FWD)		83.757	84.113	84.470	84.826	85.183	85.539	85.896	86.252							
BENT 12 (BK)	Phase 1 Step 4	84.819	85.175	85.532	85.889	86.245	86.602	86.958	87.315							
BENT 12 (FWD)		84.869	85.225	85.582	85.938	86.295	86.651	87.008	87.364							
BENT 13 (BK)		85.249	85.606	85.962	86.319	86.675	87.032	87.389	87.745							
BENT 13 (FWD)		85.271	85.628	85.985	86.341	86.698	87.054	87.411	87.768							
BENT 14 (BK)		85.001	85.357	85.714	86.070	86.427	86.783	87.140	87.496							
BENT 14 (FWD)		84.958	85.315	85.671	86.028	86.385	86.741	87.098	87.455							
BENT 15 (BK)		84.110	84.467	84.823	85.180	85.536	85.893	86.249	86.606							
BENT 15 (FWD)		83.982	84.338	84.695	85.052	85.408	85.765	86.122	86.479							
BENT 16 (BK)		82.160	82.516	82.873	83.229	83.585	83.942	84.298	84.655							
BENT 16 (FWD)		81.979	82.335	82.692	83.049	83.406	83.763	84.119	84.476							
BENT 17 (BK)	Phase 1 Step 3	79.405	79.761	80.117	80.474	80.830	81.186	81.543	81.899							
BENT 17 (FWD)		79.240	79.597	79.954	80.310	80.667	81.024	81.381	81.738							
BENT 18 (BK)		76.983	77.339	77.695	78.052	78.408	78.764	79.121	79.477							
BENT 18 (FWD)		76.880	77.192	77.504	77.816	78.129	78.441	78.753	79.065	79.377						
BENT 19 (BK)		74.742	74.968	75.186	75.396	75.596	75.786	75.968	76.141	76.304						
BENT 19 (FWD)		74.606	74.854	75.069	75.293	75.505	75.704	75.892	76.069							
BENT 20 (BK)		72.311	72.392	72.440	72.495	72.537	72.566	72.582	72.585							
BENT 20 (FWD)		71.385	71.453	71.509	71.551	71.580	71.597	71.600	71.589							
BENT 21 (BK)		68.600	68.563	68.527	68.490	68.453	68.417	68.380	68.343							
BENT 21 (FWD)		68.551	68.504	68.414	68.346	68.257	68.167	68.078	67.989							
BENT 22 (BK)		65.787	65.593	65.358	65.144	64.909	64.674	64.439	64.204							
BENT 22 (FWD)		66.226	66.033	65.840	65.647	65.454	65.261	65.067	64.874							
BENT 23 (BK)	Phase 1 Step 4	64.122	63.928	63.735	63.542	63.349	63.156	62.963	62.770							
BENT 23 (FWD)		63.957	63.764	63.571	63.378	63.185	62.991	62.798	62.605							
BENT 24 (BK)		61.852	61.659	61.466	61.273	61.080	60.887	60.694	60.500							
BENT 24 (FWD)		61.688	61.495	61.301	61.108	60.915	60.722	60.529	60.335							
BENT 25 (BK)		59.481	59.286	59.091	58.896	58.702	58.507	58.312	58.117							
BENT 25 (FWD)		59.339	59.143	58.946	58.750	58.554	58.358	58.162	57.966							
BENT 26 (BK)	Phase 1 Step 3	56.882	56.650	56.418	56.186	55.954	55.722	55.490	55.259							
BENT 26 (FWD)		56.720	56.515	56.310	56.105	55.901	55.696	55.491	55.286	55.081						
BENT 27 (BK)		54.246	54.016	53.787	53.558	53.328	53.099	52.870	52.640	52.411						
BENT 27 (FWD)		54.179	53.974	53.769	53.565	53.360	53.155	52.950	52.745	52.540	52.335					
BENT 28 (BK)		51.065	50.854	50.642	50.430	50.219	50.007	49.795	49.584	49.372	49.160					
BENT 28 (FWD)		50.804	50.575	50.347	50.119	49.914	49.710	49.505	49.301	49.096	48.892					
BENT 29 (BK)		47.357	47.129	46.901					GIRDER 4	GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	
BENT 29 (FWD)		47.908	47.671	47.434	47.196	46.959	46.722		46.673	46.454	46.235	46.017	45.798	45.579	45.361	
BENT 30 (BK)		44.807	44.603	44.399	44.195	43.991	43.787		GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	GIRDER 11	GIRDER 12	GIRDER 13	
BENT 30 (FWD)		44.546	44.303	44.061	43.818	43.575			43.583	43.359	43.136	42.912	42.688	42.465	42.241	
BENT 31 (BK)	Phase 2 Step 1	40.800	40.594	40.388	40.182	39.976			Phase 1 Step 3	GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	GIRDER 11	GIRDER 12
BENT 31 (FWD)		40.647	40.442	40.238	40.033	39.828				39.770	39.587	39.362	39.137	38.913	38.688	38.463
BENT 32 (BK)		36.965	36.785	36.604	36.423	36.243			GIRDER 6	GIRDER 7	GIRDER 8	GIRDER 9	GIRDER 10	GIRDER 11	GIRDER 12	
BENT 32 (FWD)		36.732	36.507	36.282	36.057				36.020	35.830	35.598	35.366	35.134	34.902	34.670	
ABUT 33 (BK)		33.117	32.906	32.694	32.483				GIRDER 5	GIRDER 6	GIRDER 7	GIRDER 8				
									32.272	32.049	31.827	31.605				



HL93 LOADING

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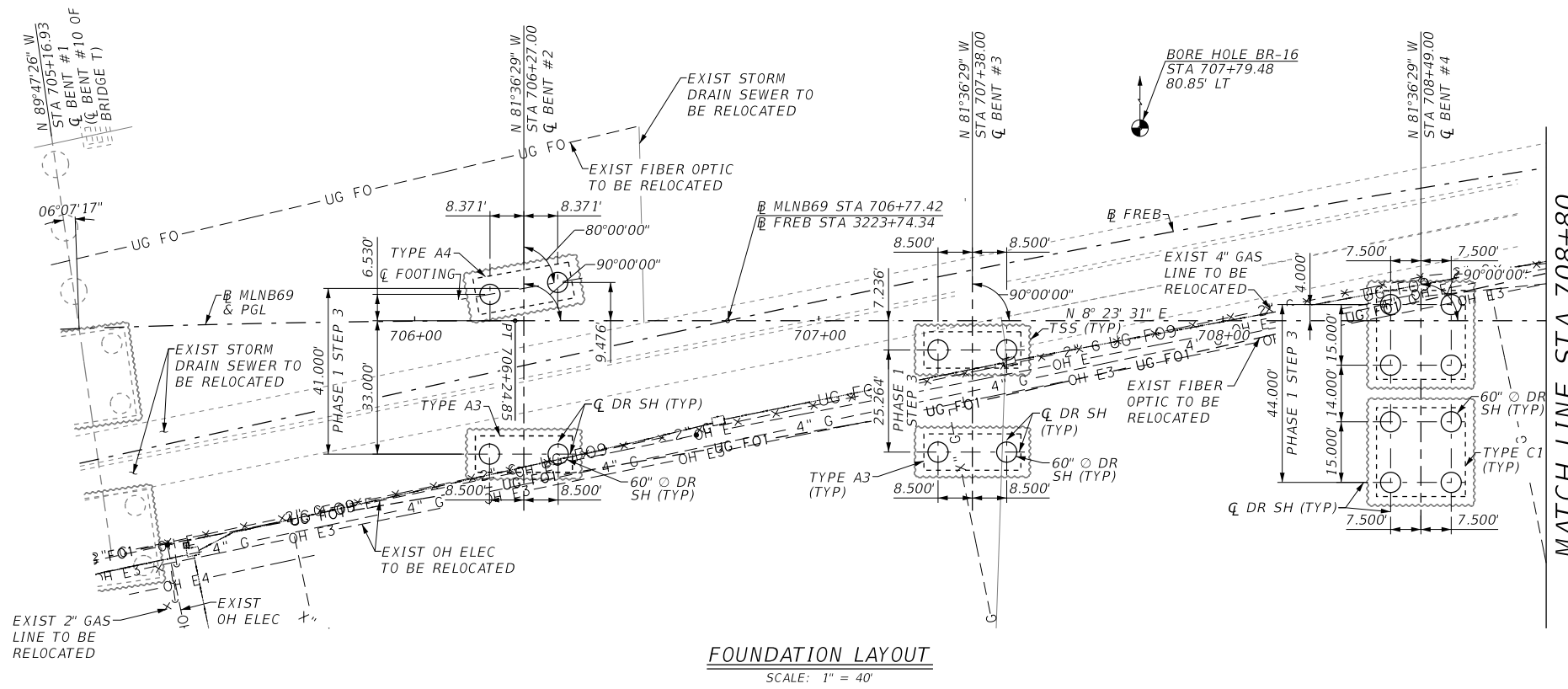
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Texas Department of Transportation

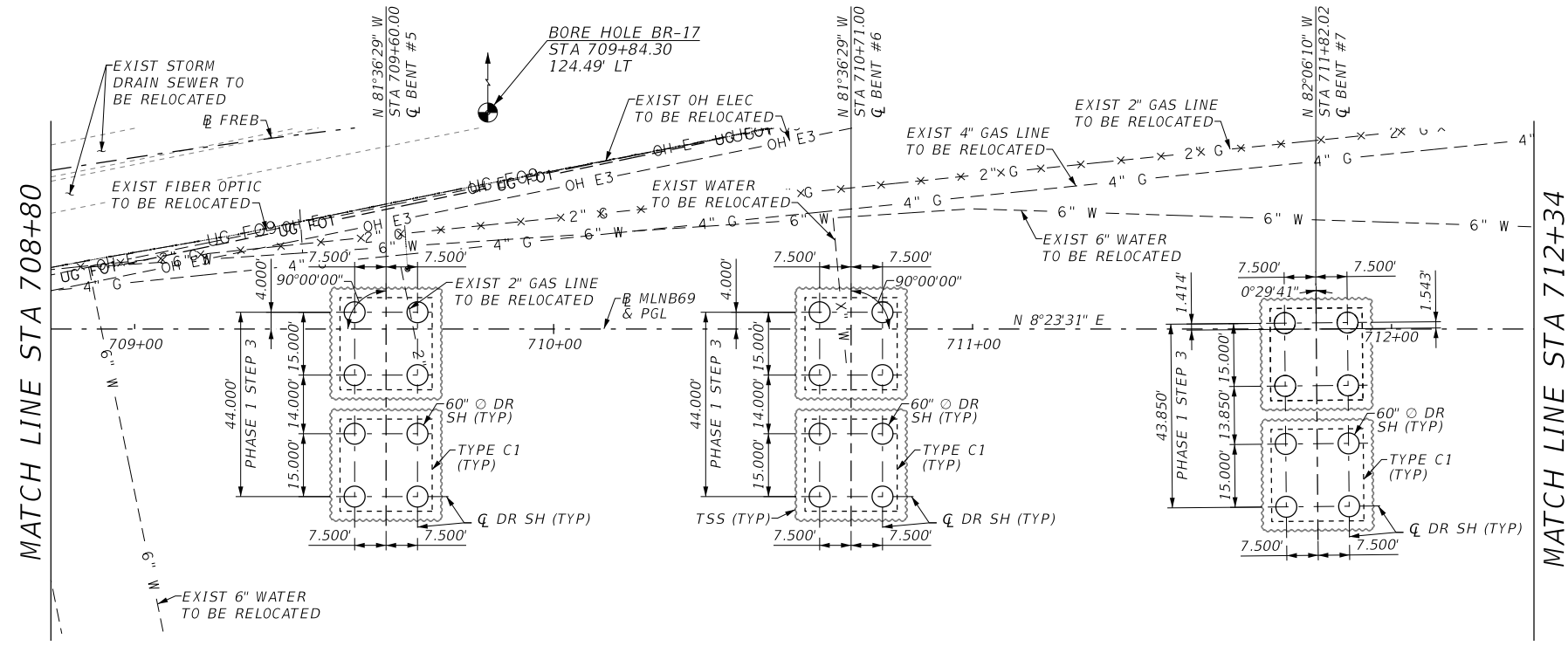
IH 10 AT US 69 ESTIMATED QUANTITIES & BEARING SEAT ELEVATIONS IH 10 EBML TO US 69 NB DC

SHEET 3 OF 3

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
	DIST		COUNTY				SHEET NO.
	BMT		JEFFERSON				1500



FOUNDATION LAYOUT
 SCALE: 1" = 40'



FOUNDATION LAYOUT
 SCALE: 1" = 40'

GENERAL NOTES:

DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

● DENOTES SOIL BORING LOCATION. FOR BORING LOG INFORMATION, SEE BORING LOGS SHEETS.

UTILITIES SHOWN ARE IN APPROXIMATE LOCATIONS. CONTRACTOR SHALL VERIFY LOCATION PRIOR TO CONSTRUCTION.

SEE BRIDGE LAYOUT FOR DRILLED SHAFT LENGTHS.

SEE FOUNDATION DETAILS FD(MOD) SHEET AND FOUNDATION DETAILS SHEETS AS PART OF THE COMMON SHEETS FOR FOUNDATION DETAILS AND NOTES NOT SHOWN.

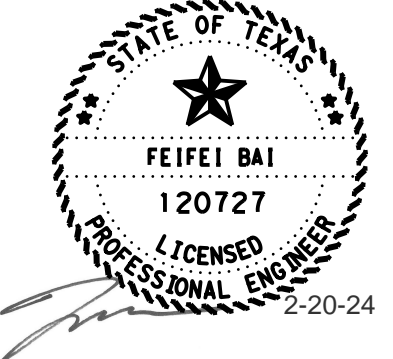
DRILLED SHAFTS SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATIONS ITEM 416. CONTRACTOR SHALL SUBMIT DRILLED SHAFT INSTALLATION PLAN THOROUGHLY OUTLINING THE PROPOSED PROCEDURE FOR SHAFT INSTALLATION PRIOR TO COMMENCEMENT.

FOUNDATIONS HAVE BEEN DESIGNED FOR SIDE FRICTION ONLY (NO TIP BEARING.) REFERENCE FORESIGHT GEOTECHNICAL REPORT FOR DISREGARD DEPTH OF SOIL TO ACCOUNT FOR SOIL DISTURBANCE DURING INSTALLATION.

SEE BORE LOG SHEETS FOR ESTIMATED GROUNDWATER ELEVATIONS. IF GROUNDWATER IS ENCOUNTERED DURING DRILLING AND CASING IS REQUIRED, THE CASING SHALL REMAIN BELOW THE LEVEL OF CONCRETE DURING PLACEMENT. ENGINEER OF RECORD SHALL BE INFORMED IF CASING WILL BE LEFT IN PLACE SO THAT REVISED SHAFT TIP ELEVATIONS AND CAPACITIES CAN BE PROVIDED.

TIP TESTING NOTES:

- ONE SHAFT AT EACH ABUTMENT AND EACH BENT SHALL BE TESTED PER TXDOT SPECIAL SPECIFICATION 554021, "THERMAL INTEGRITY PROFILER (TIP) TESTING OF DRILLED SHAFTS." TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. THE ENGINEER WILL CHOOSE THE INDIVIDUAL DRILLED SHAFTS TO BE TESTED.
- THE ENGINEER SHALL EVALUATE THE RESULTS OF TIP TESTING AND DETERMINE ACCEPTANCE. SHOULD DEFECTS OR QUESTIONABLE RESULTS BE FOUND, THE ENGINEER MAY REQUIRE REMEDIATION USING HYDROBLASTING AND PRESSURE GROUTING. IF THE ENGINEER DETERMINES THAT FURTHER EVALUATION IS NECESSARY, HIGH-STRAIN DYNAMIC LOAD TESTING (ASTM D4945) PER ITEM 405, "FOUNDATION LOAD TEST," SHALL BE CONSIDERED. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A MITIGATION PLAN TO MITIGATE IDENTIFIED DEFECTS. LOAD TESTING SHALL BE COORDINATED WITH THE ENGINEER A MINIMUM OF ONE WEEK PRIOR TO THE DESIRED TESTING DATE. TXDOT PERSONNEL, OR THEIR DESIGNATED REPRESENTATIVE, SHALL BE PRESENT DURING TESTING.



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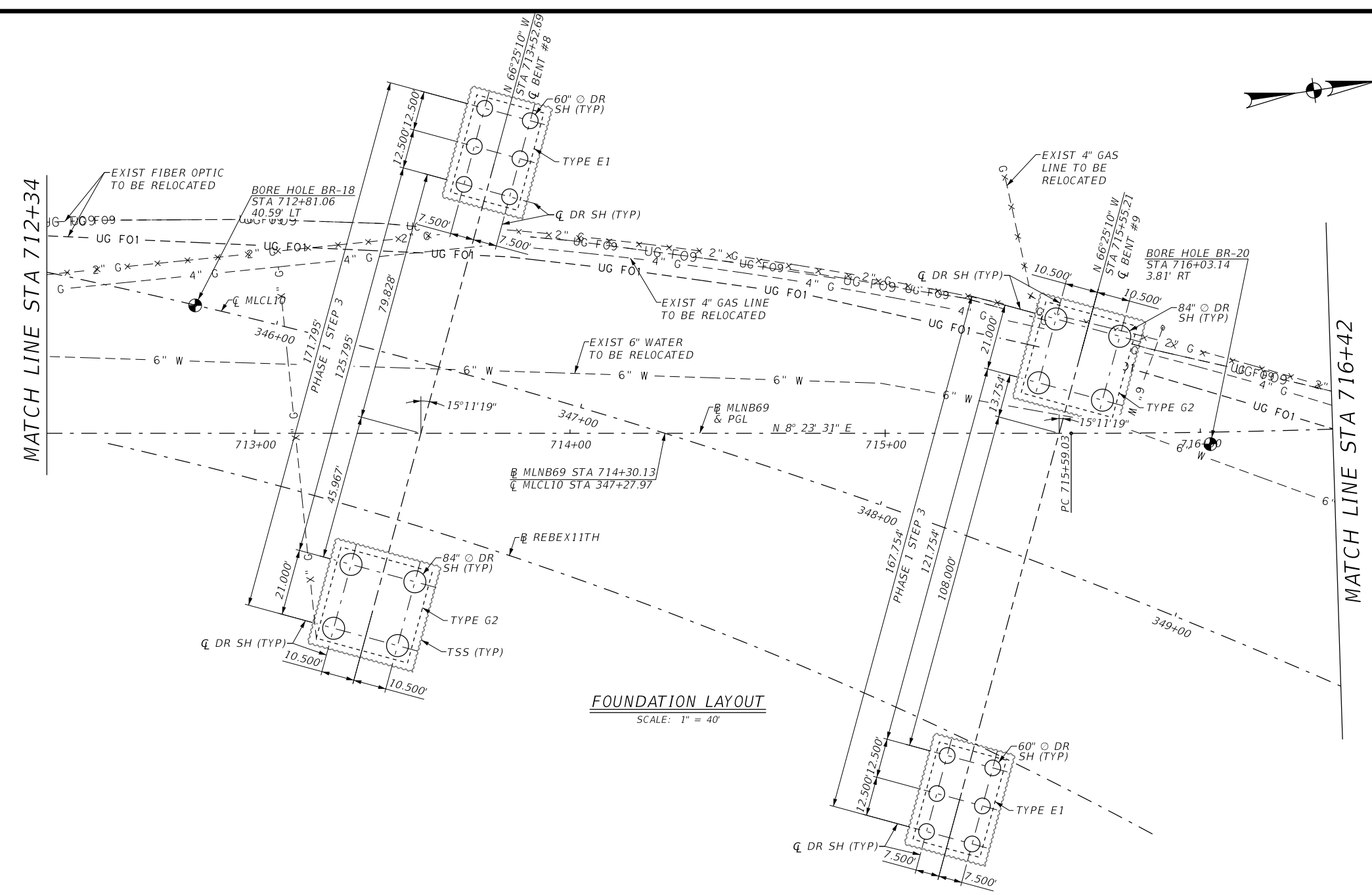
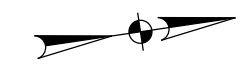
Texas Department of Transportation

**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EBML
 TO US 69 NB DC**

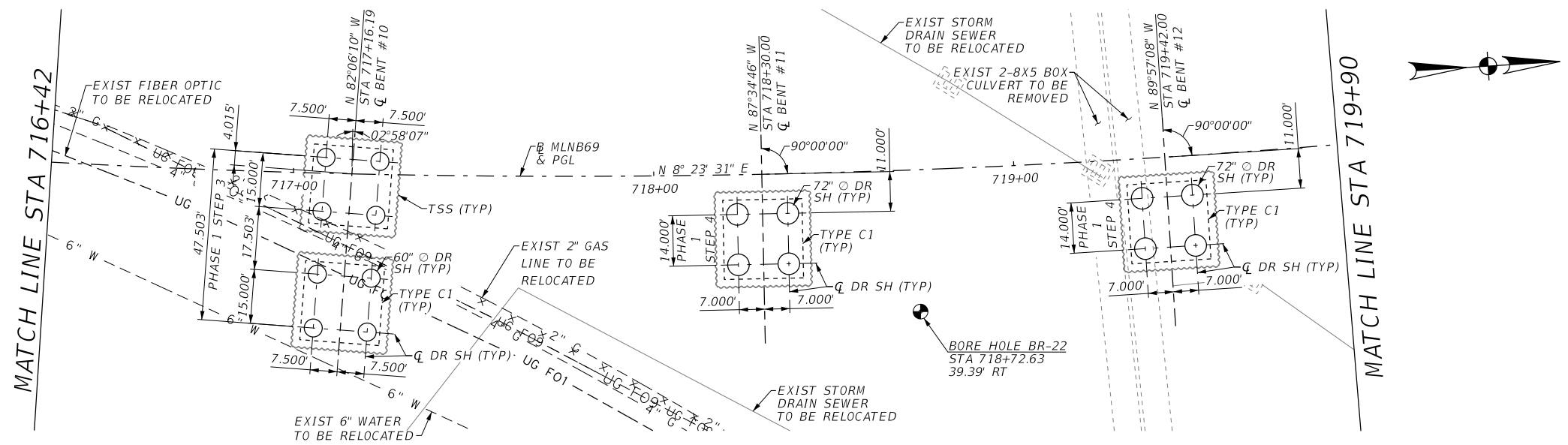
SHEET 1 OF 6

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY			SHEET NO.			
	BMT			JEFFERSON			1501

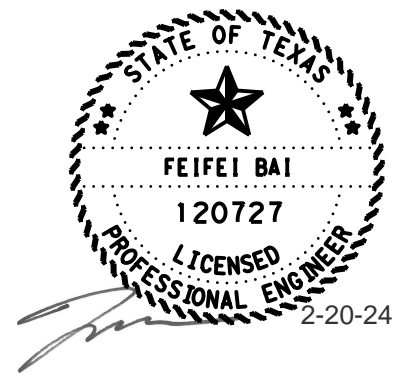
NOTES:
SEE SHEET 1 OF 6 FOR GENERAL NOTES.



FOUNDATION LAYOUT
SCALE: 1" = 40'



FOUNDATION LAYOUT
SCALE: 1" = 40'



HL93 LOADING

VOLKERT
F-12679



**IH 10 AT US 69
FOUNDATION LAYOUT
IH 10 EBML
TO US 69 NB DC**

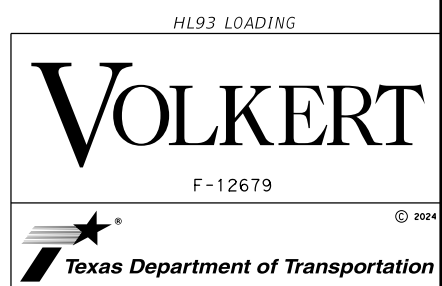
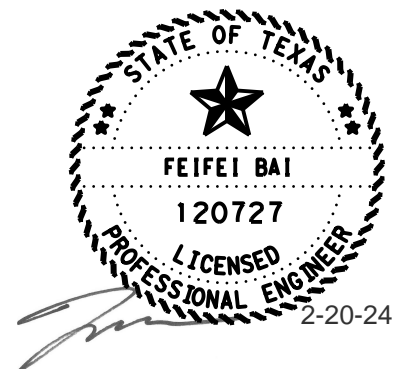
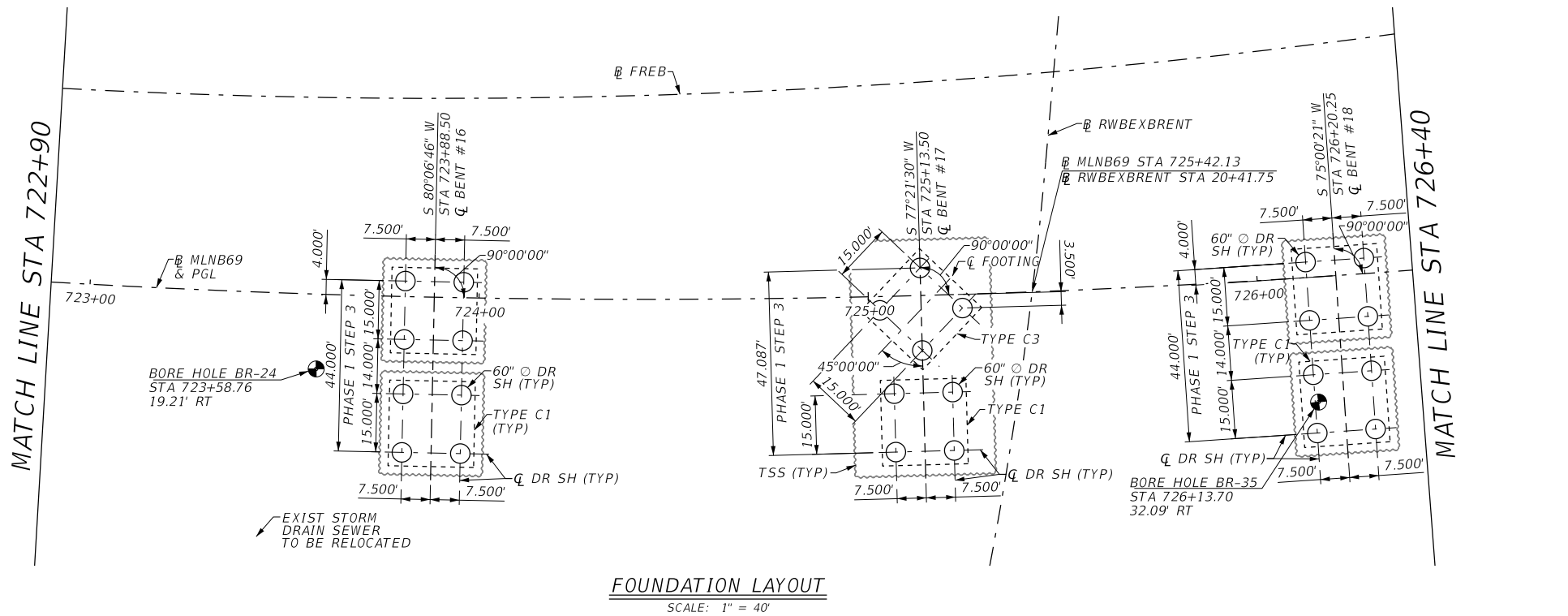
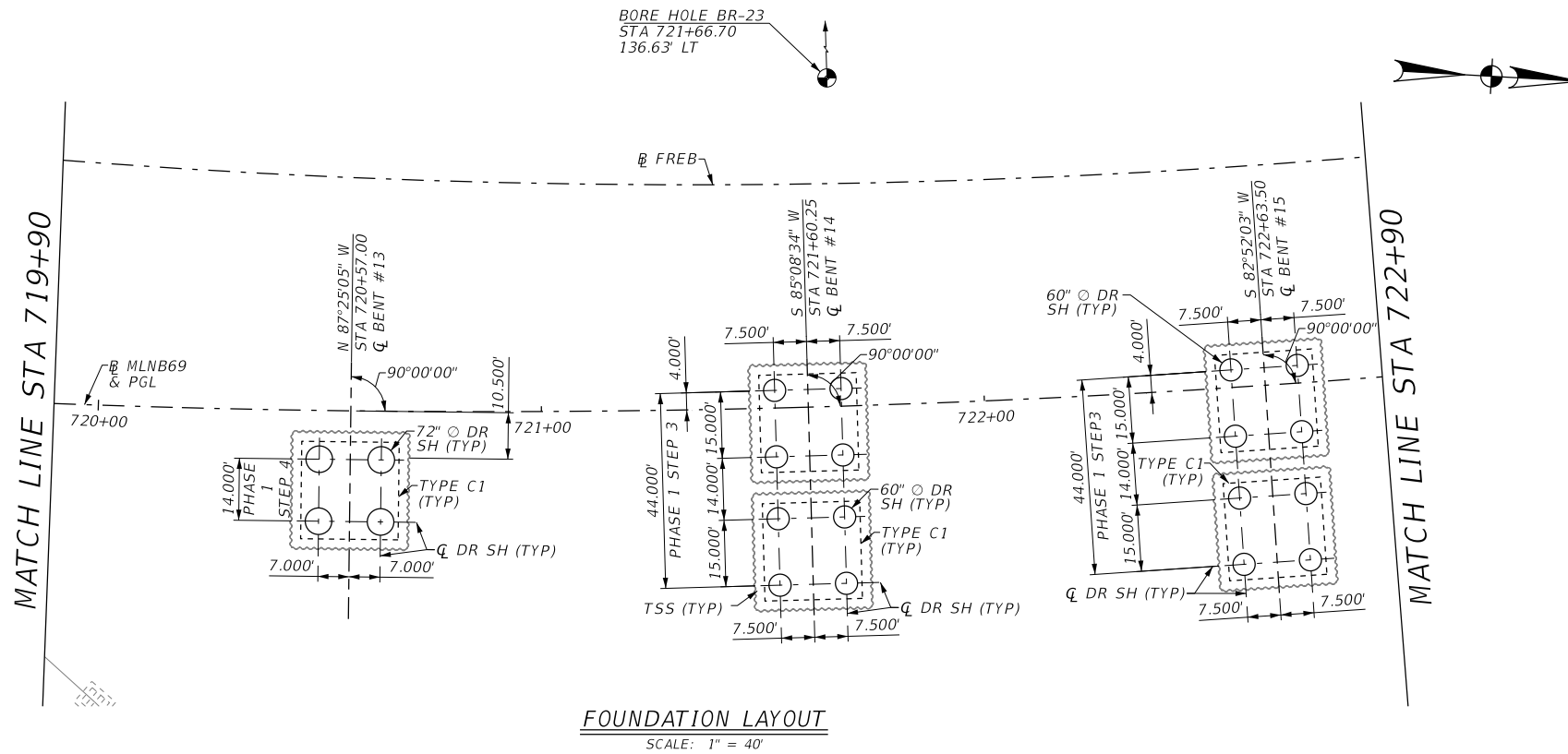
SHEET 2 OF 6

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		CK:	FB
0028		13		135		IH 10	
DIST		COUNTY				SHEET NO.	
BMT		JEFFERSON				1502	

DATE: 21-FEB-2024 01:55
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Plan Set\10E-69N_FDNLAY_02.dgn

DATE: 20-FEB-2024 22:53
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Plan_Set\10ML_10E-69N_FDNLAY_03.dgn

NOTES:
 SEE SHEET 1 OF 6 FOR GENERAL NOTES.



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 F-12679

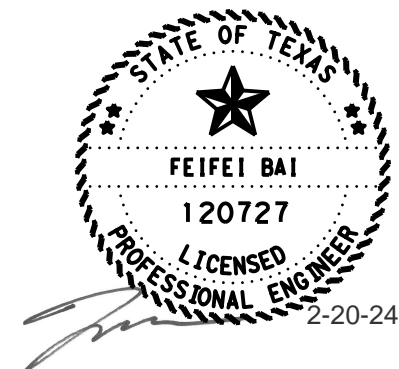
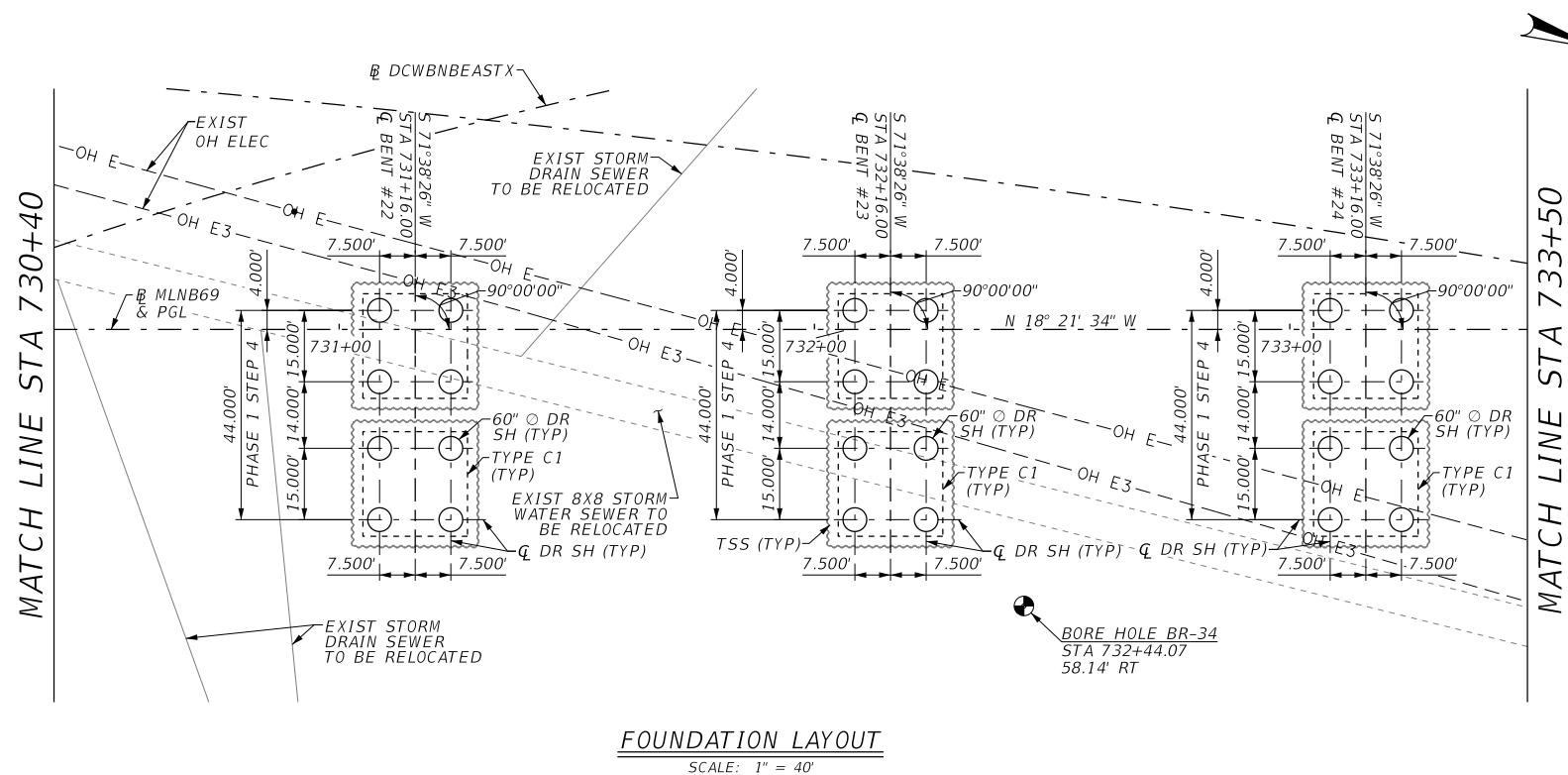
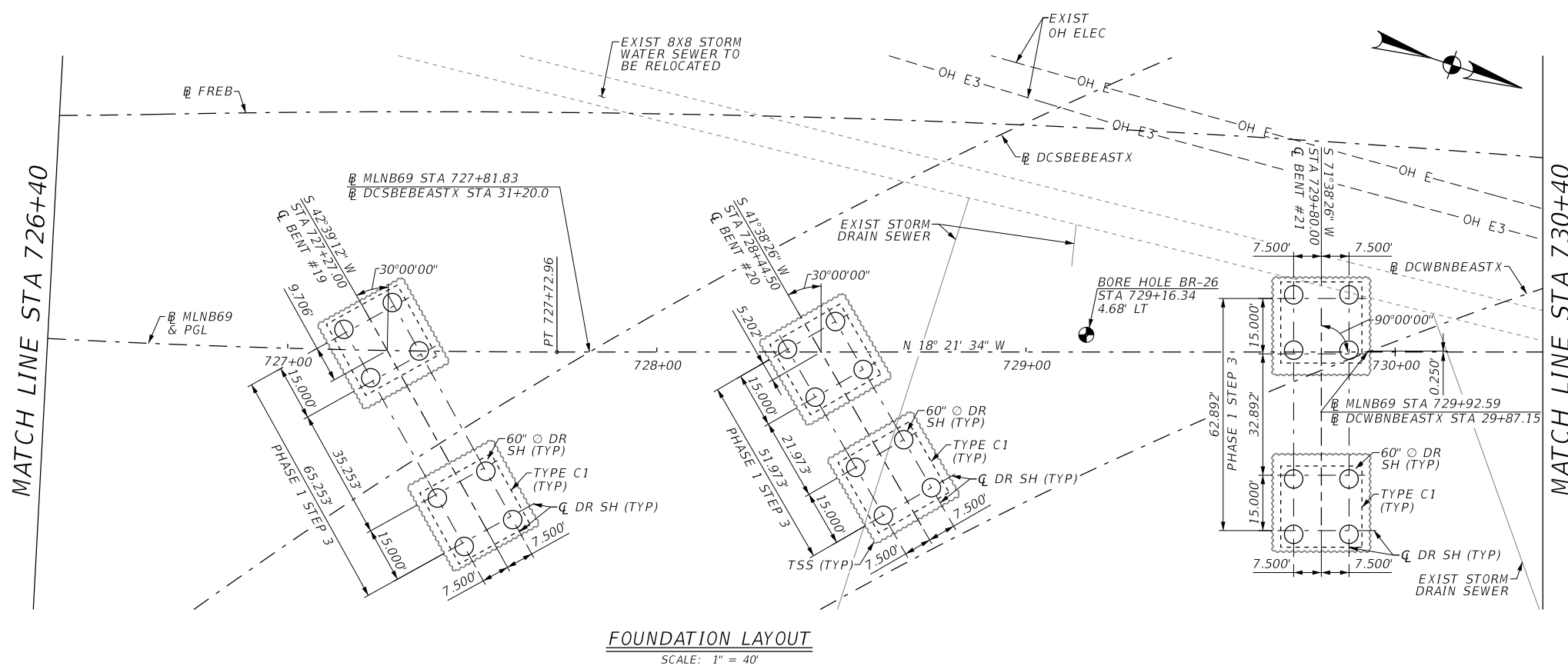
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**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EBML
 TO US 69 NB DC**

SHEET 3 OF 6

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		CK:	FB
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1503				

NOTES:
SEE SHEET 1 OF 6 FOR GENERAL NOTES.



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**IH 10 AT US 69
FOUNDATION LAYOUT
IH 10 EBML
TO US 69 NB DC**

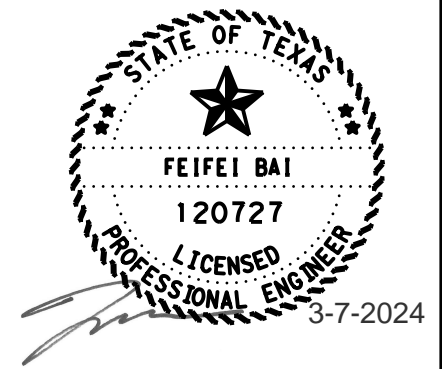
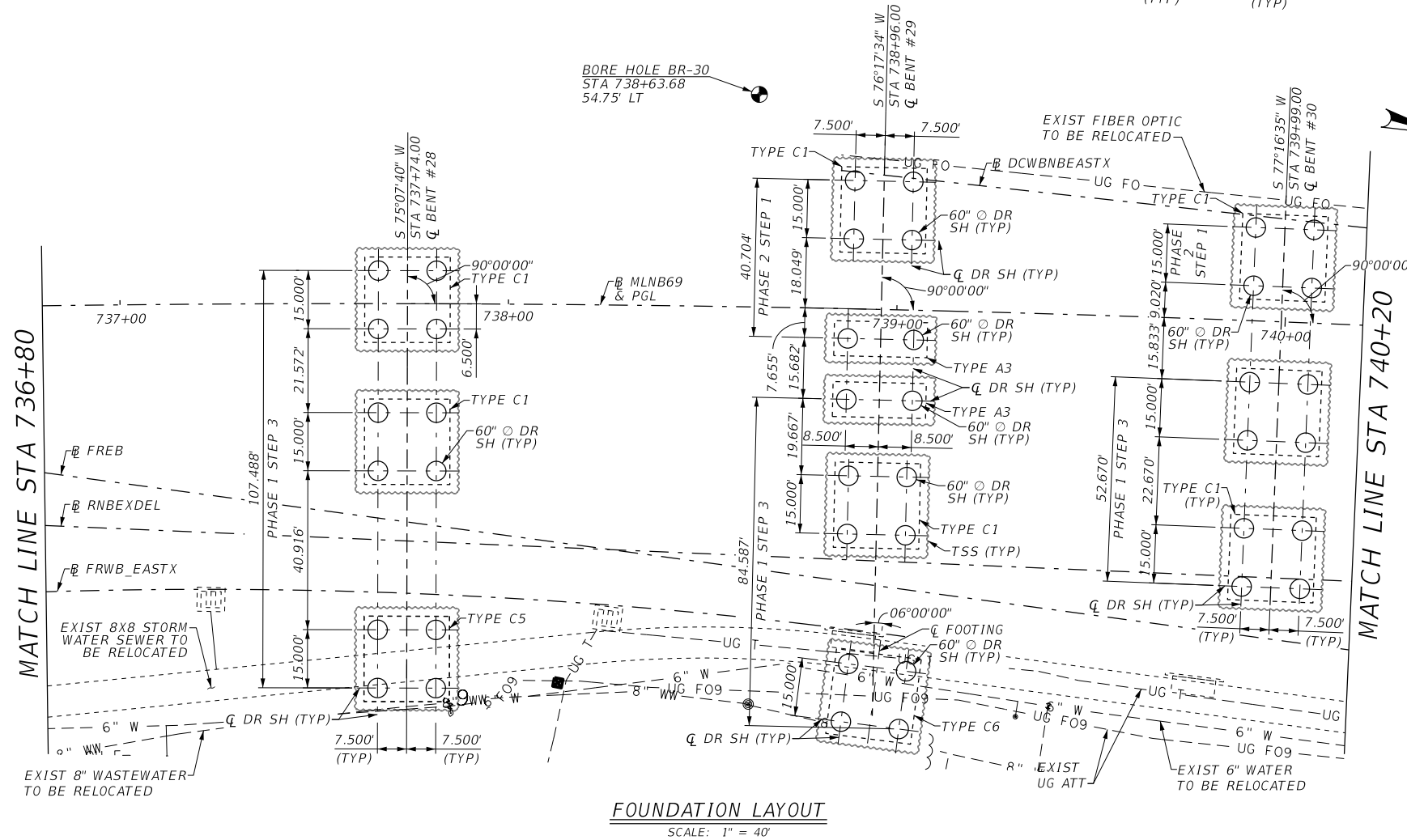
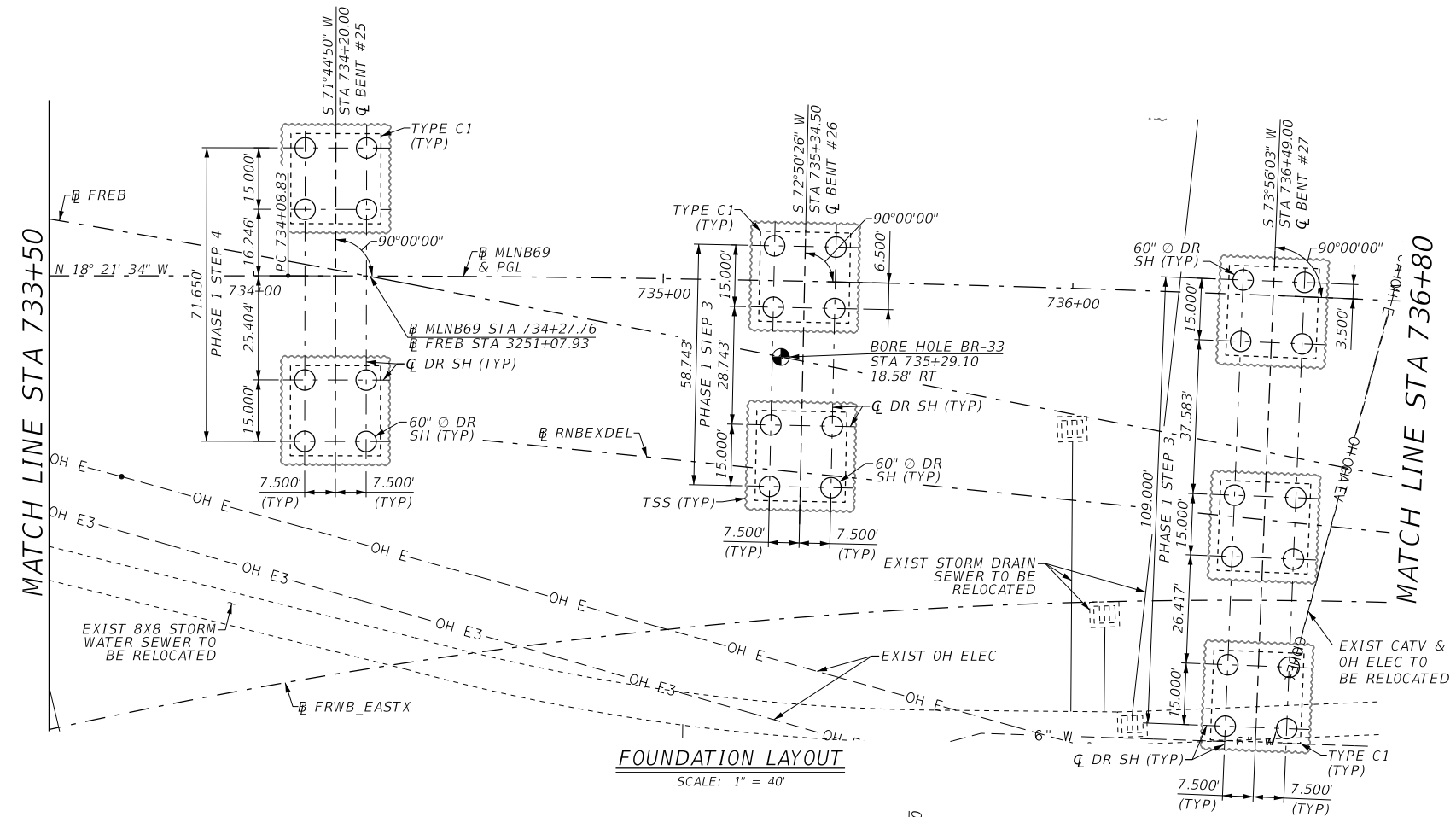
SHEET 4 OF 6

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1504		

DATE: 21-FEB-2024 01:54
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Plan_Set\7. Bridge\10E-69N_FDNLAY_04.dgn

DATE: 7-MAR-2024 19:52
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1074500_10E-69N_FDNLAY_05.dgn

NOTES:
 SEE SHEET 1 OF 6 FOR GENERAL NOTES.



HL93 LOADING

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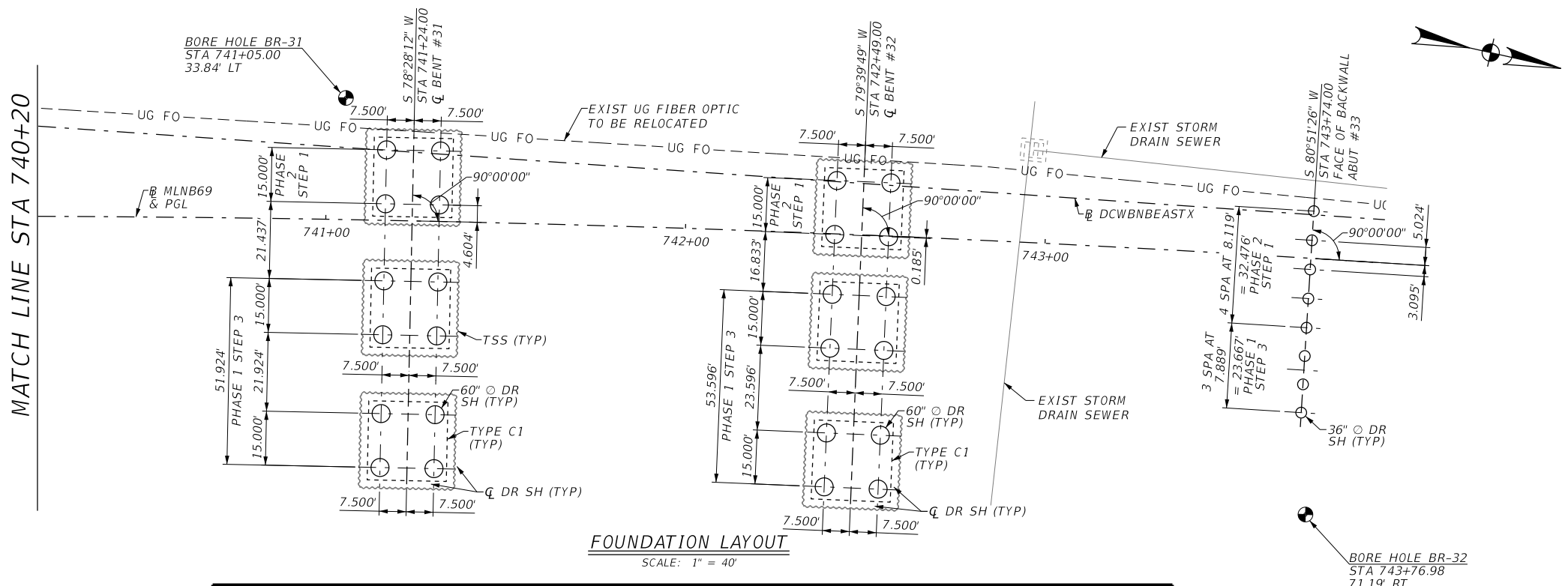
Texas Department of Transportation

**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EBML
 TO US 69 NB DC**

SHEET 5 OF 6

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	CK:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1505		

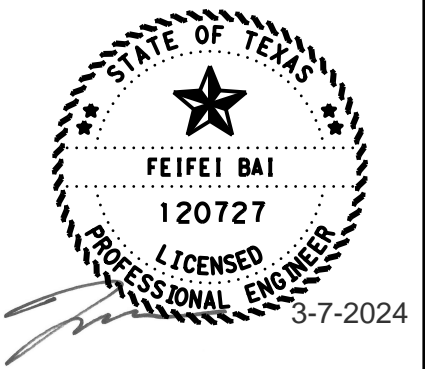
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NOTES:
 SEE SHEET 1 OF 6 FOR GENERAL NOTES.

FOUNDATION SUMMARY

BENT NO.	COLUMN	COLUMN TYPE	FOUNDATION TYPE	DRILLED SHAFT DIAMETER (IN)	FOUNDATION LOAD/SHAFT (TONS)	NUMBER OF DRILLED SHAFTS
2	ALL	G (LEFT)	TYPE A4	60	553	2
		G (RIGHT)	TYPE A3	60	553	2
3	ALL	C	TYPE A3	60	551	4
4	ALL	D	TYPE C1	60	297	8
5	ALL	D	TYPE C1	60	308	8
6	ALL	D	TYPE C1	60	308	8
7	ALL	J	TYPE C1	60	358	8
8	ALL	I (LEFT)	TYPE E1	60	269	6
		I (RIGHT)	TYPE G2	84	524	4
9	ALL	I (LEFT)	TYPE G2	84	513	4
		I (RIGHT)	TYPE E1	60	291	6
10	ALL	E	TYPE C1	60	379	8
11	ALL	E	TYPE C1	72	658	4
12	ALL	E	TYPE C1	72	658	4
13	ALL	E	TYPE C1	72	658	4
14	ALL	E	TYPE C1	60	353	8
15	ALL	E	TYPE C1	60	353	8
16	ALL	E	TYPE C1	60	353	8
17	ALL	E (LEFT)	TYPE C3	60	353	4
		E (RIGHT)	TYPE C1	60	353	4
18	ALL	E	TYPE C1	60	353	8
19	ALL	J	TYPE C1	60	395	8
20	ALL	J	TYPE C1	60	352	8
21	ALL	J	TYPE C1	60	426	8
22	ALL	E	TYPE C1	60	345	8
23	ALL	E	TYPE C1	60	353	8
24	ALL	E	TYPE C1	60	353	8
25	ALL	H	TYPE C1	60	386	8
26	ALL	H	TYPE C1	60	366	8
27	ALL	G (MID)	TYPE C1	60	381	4
27	ALL	H (LEFT & RIGHT)	TYPE C1	60	381	8
28	1	H	TYPE C1	60	415	4
	2	H	TYPE C1	60	415	4
	3	G	TYPE C5	60	237	4
29	1	H	TYPE C1	60	342	4
	2	G	TYPE A3	60	342	2
	3	G	TYPE A3	60	342	2
	4	H	TYPE C1	60	342	4
	5	G	TYPE C6	60	181	4
30	1	H	TYPE C1	60	308	4
	2	H	TYPE C1	60	308	4
	3	H	TYPE C1	60	308	4
31	ALL	H	TYPE C1	60	322	12
32	ALL	H	TYPE C1	60	322	12
33	ALL	-	-	36	90	8



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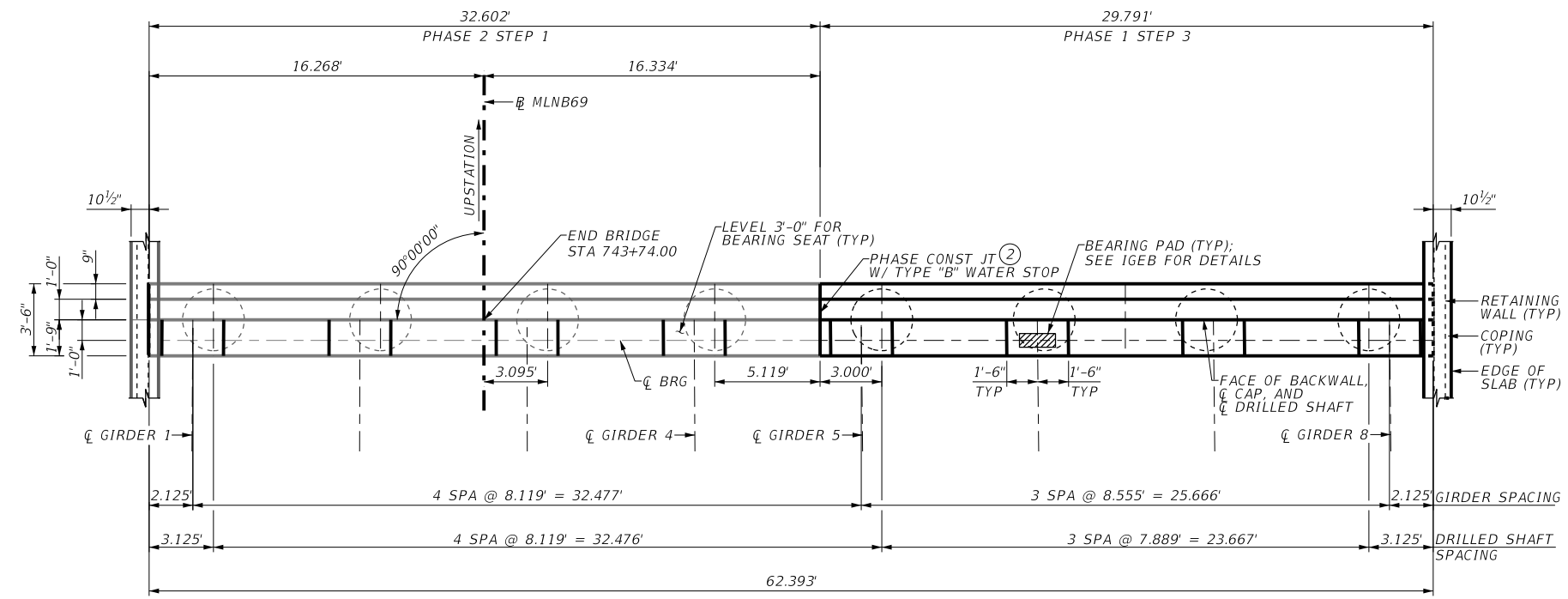
**IH 10 AT US 69
 FOUNDATION LAYOUT
 IH 10 EB ML
 TO US 69 NB DC**

SHEET 6 OF 6

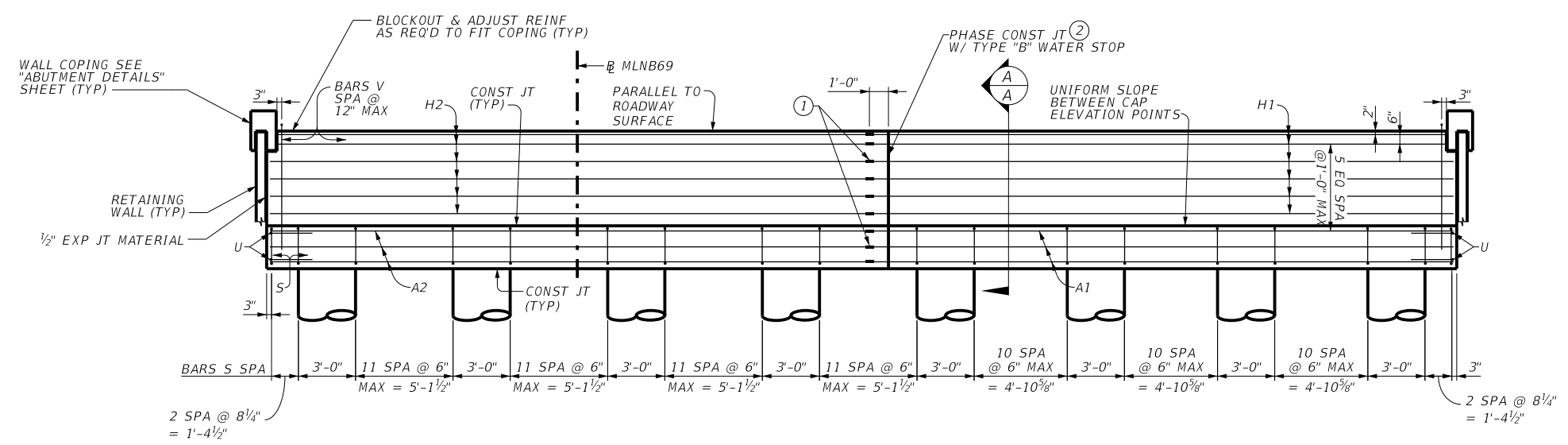
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DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1506			

DATE: 21-FEB-2024 02:23
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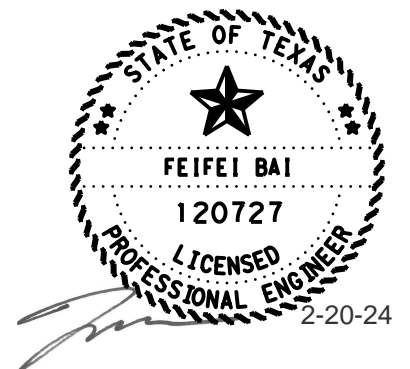
- ① USE MECHANICAL COUPLERS FOR A & H BARS IN ACCORDANCE WITH ITEM 440, "REINFORCEMENT FOR CONCRETE".
- ② SEE PHASE JOINT DETAIL FOR TYPE "B" WATERSTOP DETAILS.



PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"



HL93 LOADING

VOLKERT

F-12679

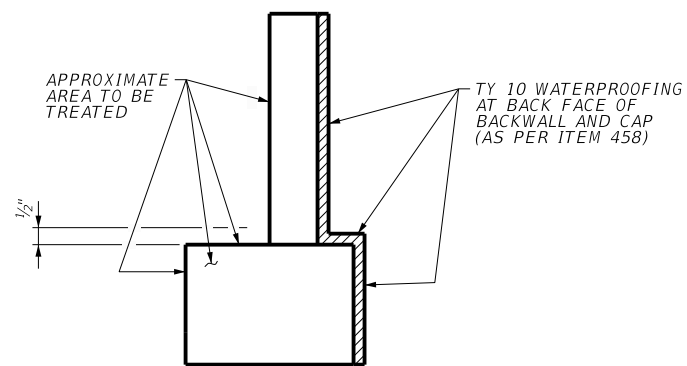
Texas Department of Transportation

IH 10 AT US 69
 ABUTMENT 33
 IH 10 EBML
 TO US 69 NB DC

SHEET 1 OF 1

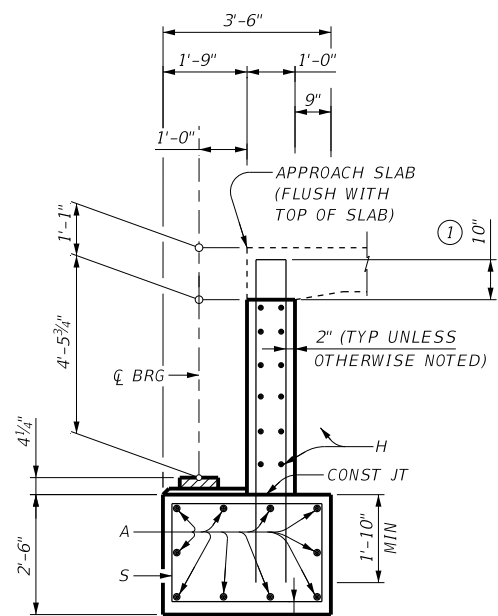
DN: FB	CK: JMV	DW: RF	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1507	

DATE: 20-FEB-2024 22:50 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Abut\10E-69N_ABUT_DT.dgn



WATERPROOFING DETAIL

(TREAT THE FACE OF BACKWALL AND TOP, FRONT, AND ENDS OF CAP AS SHOWN, EXCEPT BEARING SEATS, WITH SILICONE RESIN PAINT FINISH AS PER ITEM 427. INCLUDE COMPATIBLE PRIMER AS SPECIFIED BY THE PAINT MANUFACTURER. SEE SPECIFICATIONS AND GENERAL NOTES FOR COLOR REQUIREMENTS. TYPE 10 WATERPROOFING MEMBRANE (ITEM 458) IS CONSIDERED SUBSIDIARY TO CLASS "C" CONC (ABUT).



SECTION A-A

TABLE OF ESTIMATED QUANTITIES ABUTMENT 33 PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	10	#11	30' - 3"	1,607
H1	12	#6	30' - 7"	551
S	40	#5	11' - 6"	480
U	2	#6	8' - 0"	24
V	31	#5	15' - 8"	507
REINFORCING STEEL			LB	3,169
CLASS "C" CONCRETE (CAP)			CY	15.1

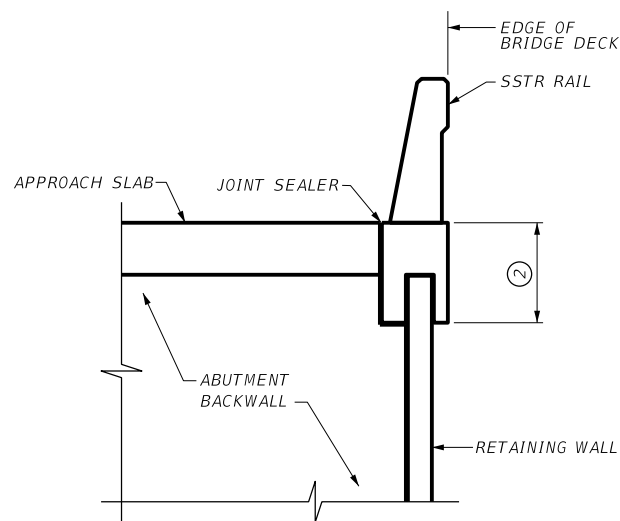
TABLE OF ESTIMATED QUANTITIES ABUTMENT 33 PHASE 2 STEP 1				
BAR	NO.	SIZE	LENGTH	WEIGHT
A2	10	#11	31' - 1"	1,651
H2	12	#6	31' - 5"	566
S	47	#5	11' - 6"	564
U	2	#6	8' - 0"	24
V	33	#5	15' - 8"	539
REINFORCING STEEL			LB	3,345
CLASS "C" CONCRETE (CAP)			CY	16.5

- GENERAL NOTES:
- DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).
 - SEE FOUNDATION DETAIL STANDARD SHEETS, "FD (MOD)", FOR ALL FOUNDATION DETAILS AND NOTES.
 - CALCULATED FOUNDATION LOAD ABUTMENT 33 = 90 TONS/DR SHAFT

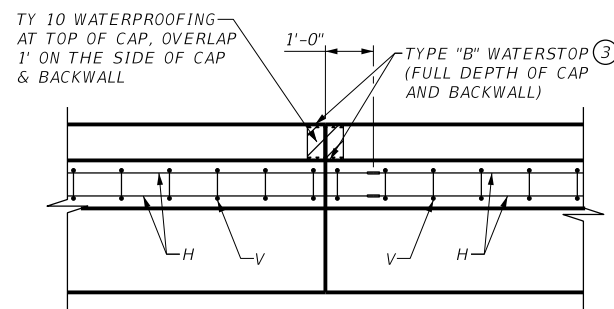
- MATERIAL NOTES:
- PROVIDE GRADE 60 REINFORCING STEEL
 - PROVIDE CLASS C CONCRETE (f'c = 3,600 PSI)

COVER DIMENSIONS ARE CLEAR DIMENSIONS UNLESS NOTED OTHERWISE.
REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BARS

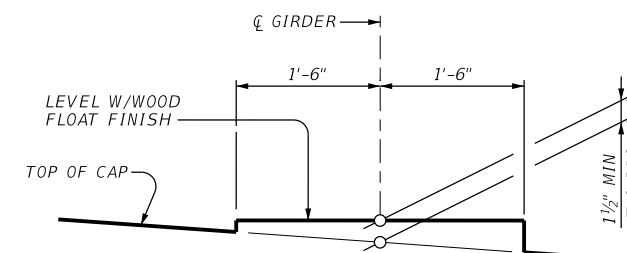
- INCREASE AS REQUIRED TO MAINTAIN 3" FROM FINISHED GRADE.
- REFERENCE "TXDOT RETAINING WALL TRAFFIC RAILING FOUNDATIONS RW(TRF)" FOR COPING REINFORCEMENT & ADDITIONAL DETAILS
- REFERENCE "TXDOT SPREAD FOOTING RETAINING WALL MISCELLANEOUS DETAILS RW" (SF) FOR WATERSTOP TYPE "B" DETAILS, TO BE PLACED THE FULL HEIGHT OF THE ABUTMENT.



COPING DETAIL

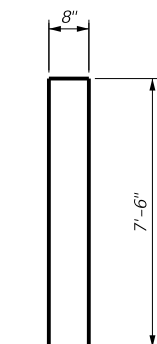


PHASE JOINT DETAIL

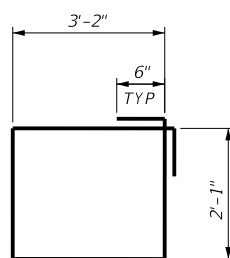


BEARING SEAT DETAIL

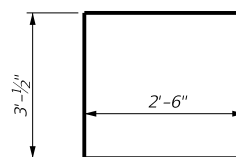
(BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD.)



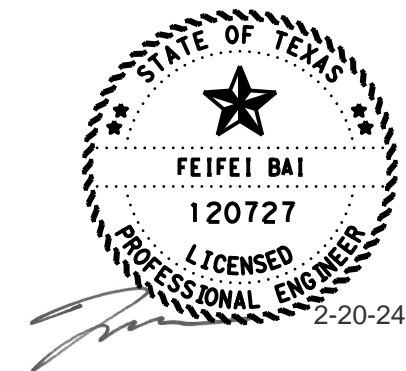
BARS V



BARS S



BARS U



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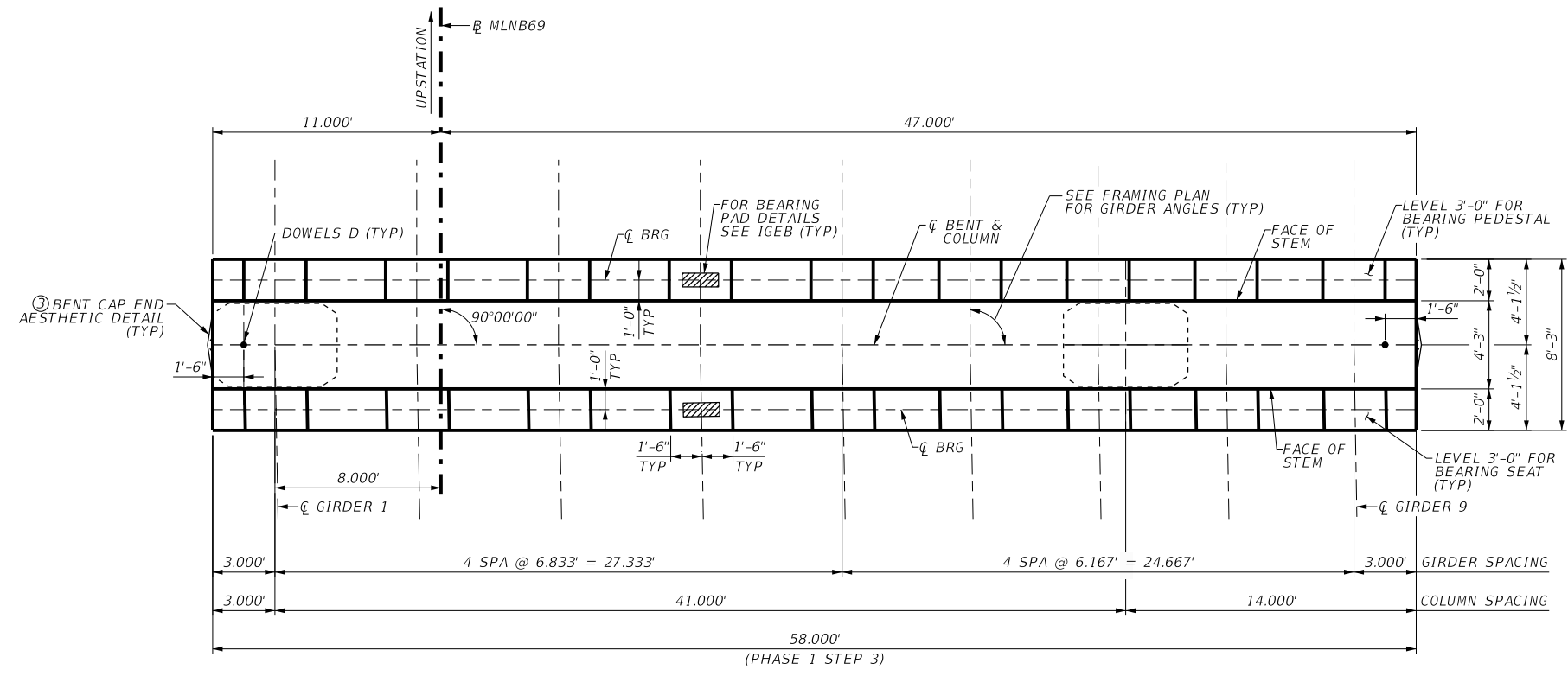


**IH 10 AT US 69
ABUTMENT 33 DETAILS
IH 10 EBML
TO US 69 NB DC**

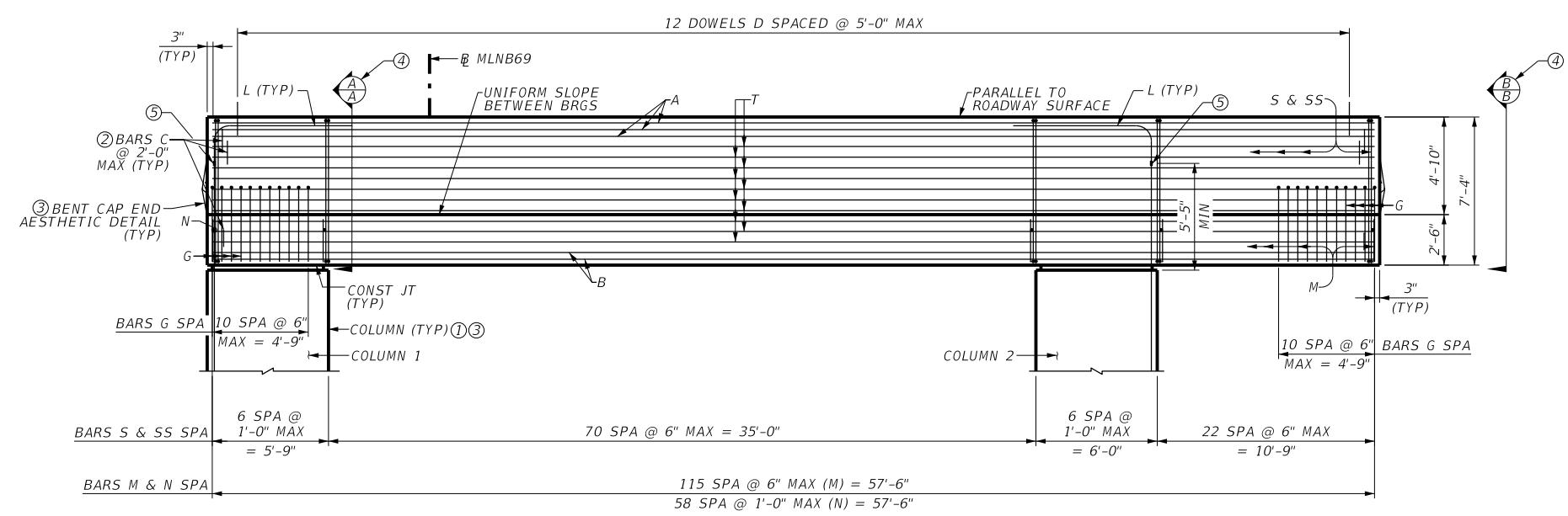
SHEET 1 OF 1

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0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1508			

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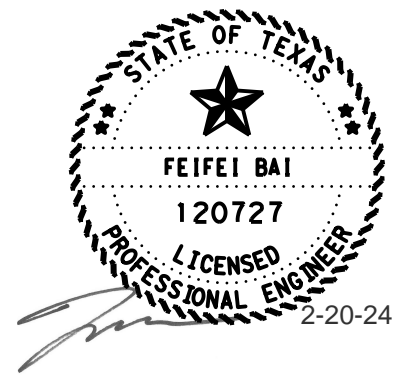


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE COLUMN TYPE G DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BARS S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 1 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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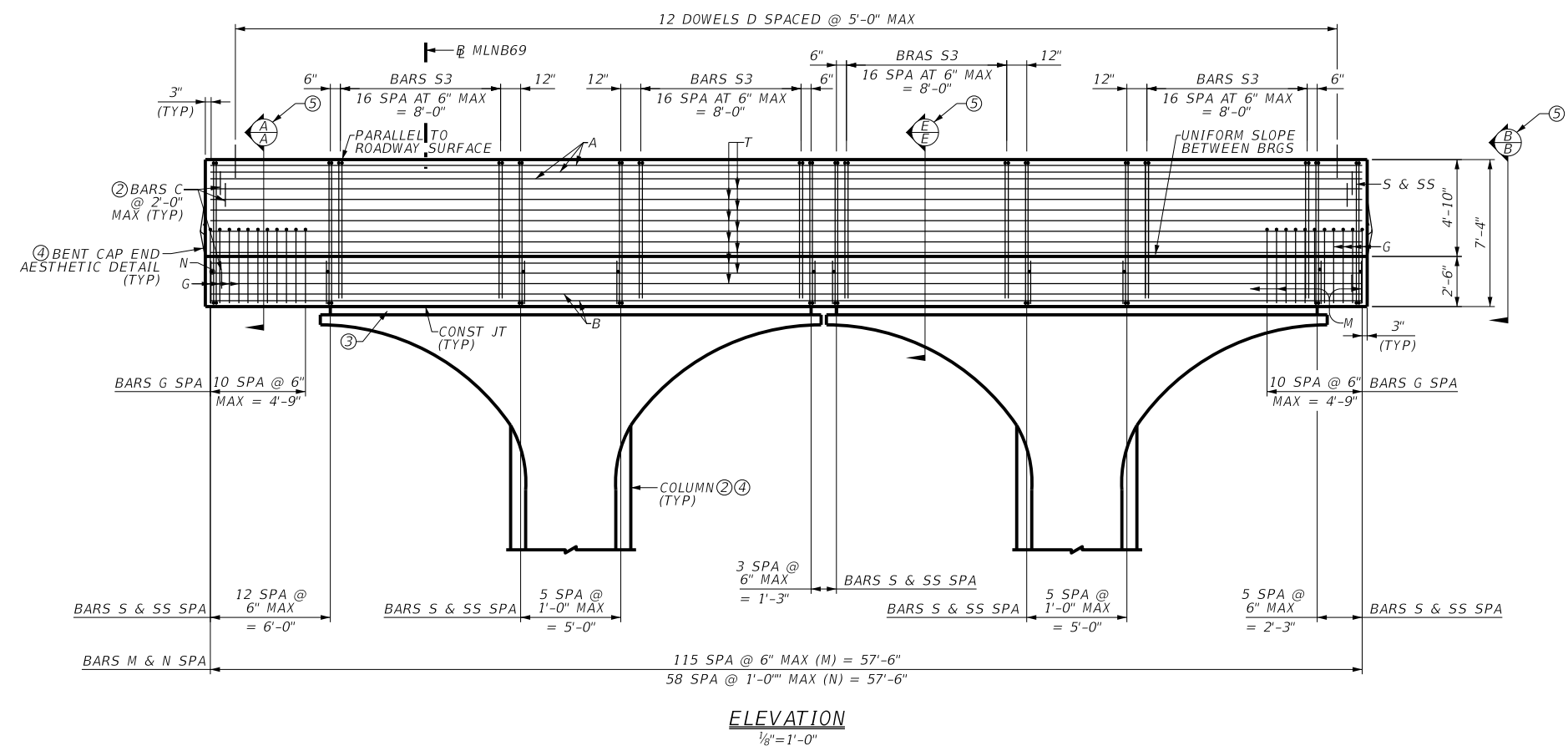
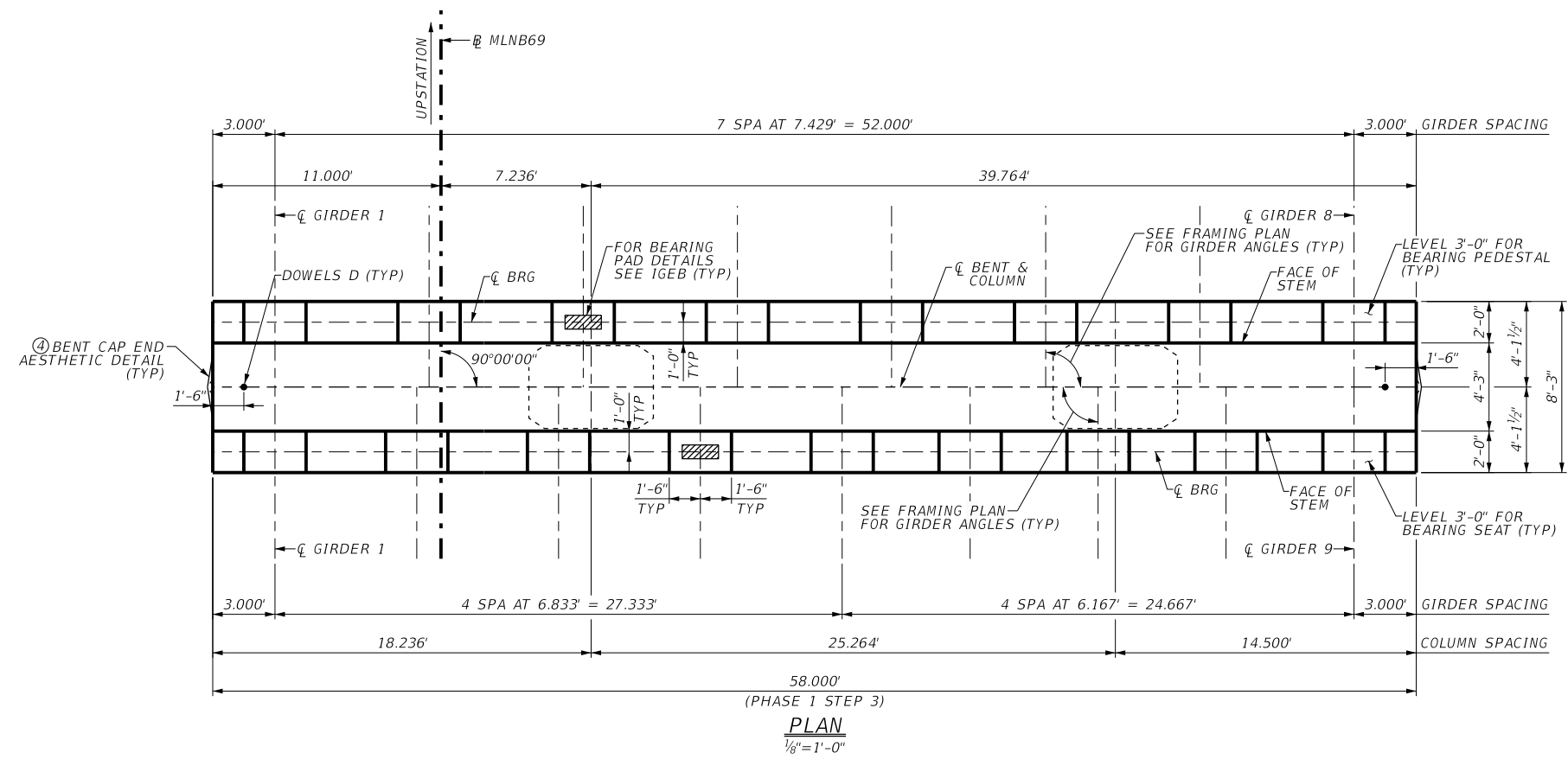
Texas Department of Transportation

**IH 10 AT US 69
 BENT 2
 IH 10 EBML
 TO US 69 NB DC**

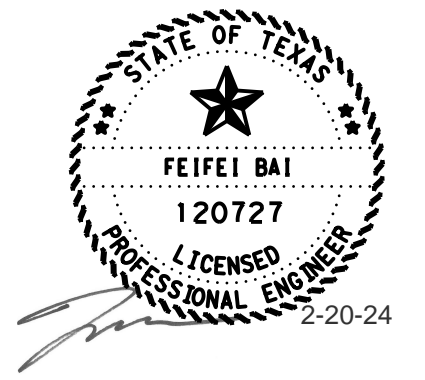
SHEET 1 OF 1

DN: FB	CK: JMV	DW: RF	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1509	

DATE: 21-FEB-2024 02:21
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1510_10E-69N_BENTPE_03.dgn



- ① PLACE FIRST CAP BAR C AT SECOND BARS S FROM END OF CAP.
- ② SEE COLUMN DIMENSIONS TYPE C SHEET FOR COLUMN AND CAPITAL DIMENSIONS.
- ③ PLINTH REINFORCEMENT SHOWN IN COLUMN DETAILS SHEETS.
- ④ SEE "FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ⑤ SEE "BENT DETAILS" SHEET 2 OF 18.



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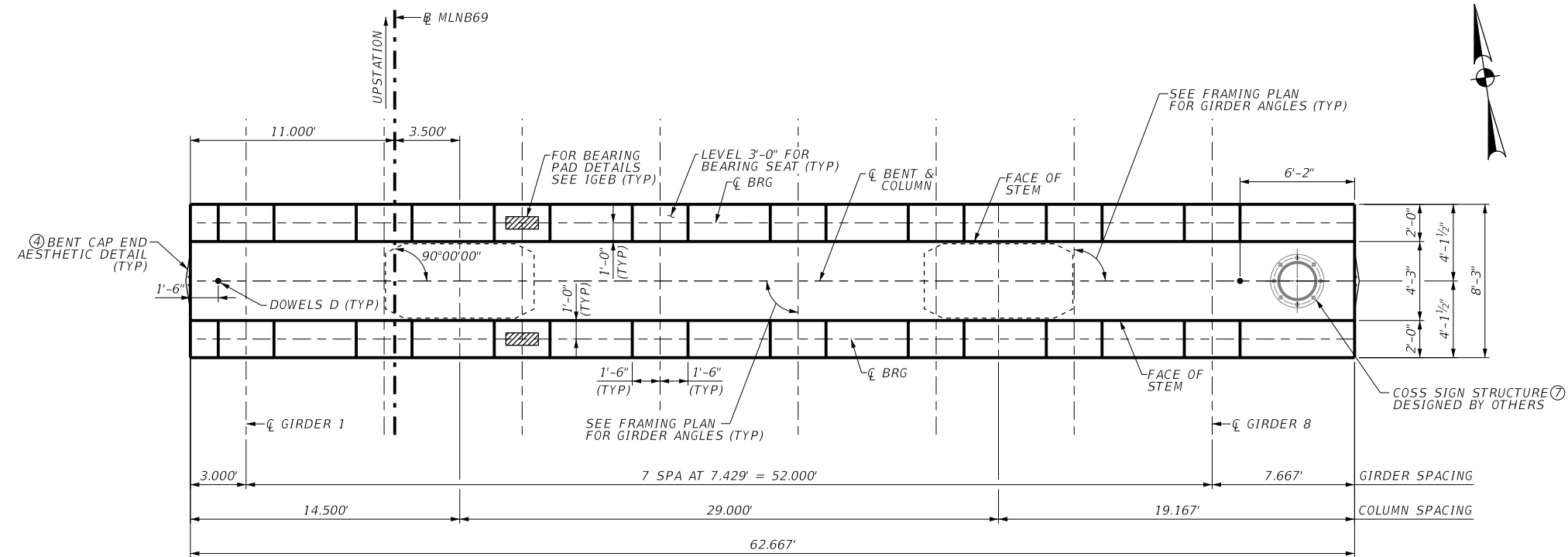
Texas Department of Transportation

**IH 10 AT US 69
 BENT 3
 IH 10 EBML
 TO US 69 NB DC**

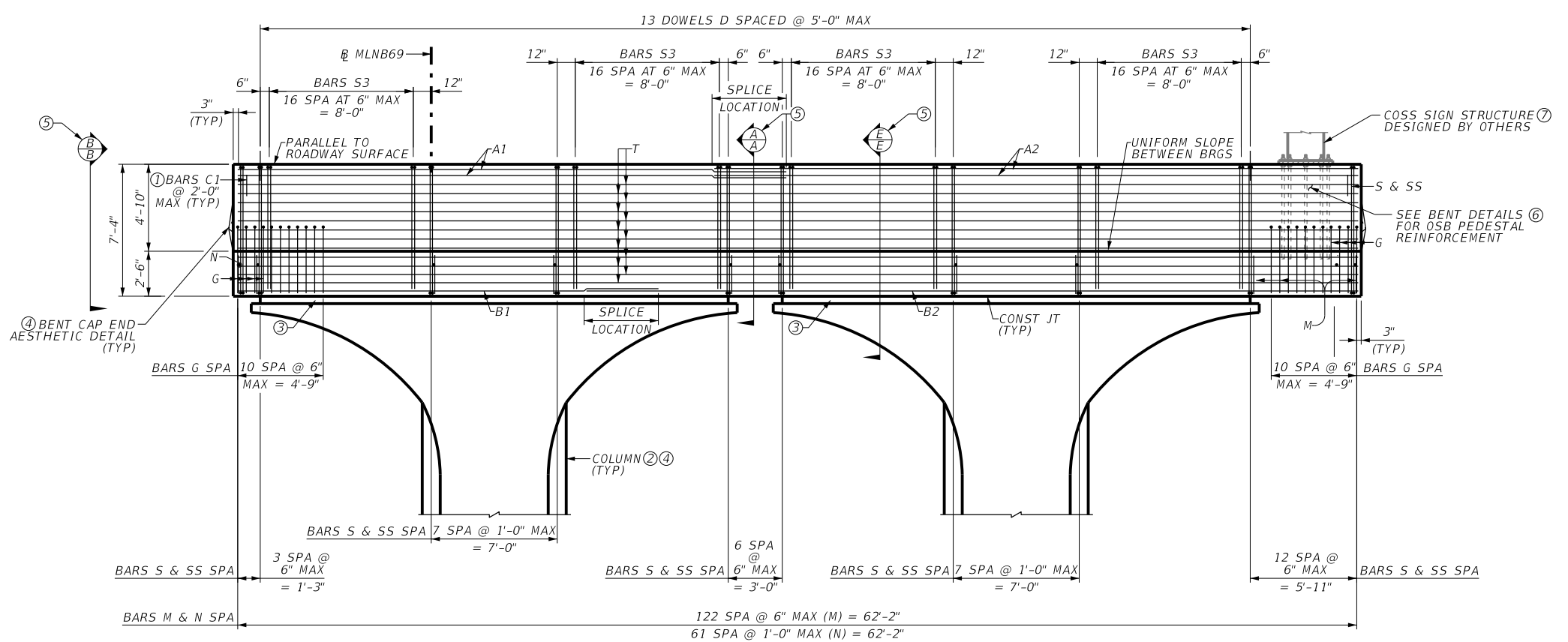
SHEET 1 OF 1

DW:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1510			

DATE: 20-FEB-2024 22:45
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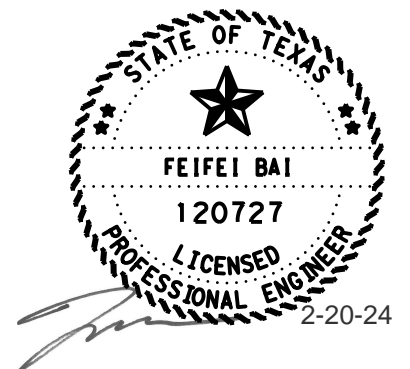


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① PLACE FIRST CAP BAR C1 AT SECOND BARS S FROM END OF CAP.
- ② SEE COLUMN DIMENSIONS TYPE D SHEET FOR COLUMN AND CAPITAL DIMENSIONS.
- ③ PLINTH REINFORCEMENT SHOWN IN COLUMN DETAILS SHEETS.
- ④ SEE "FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ⑤ SEE "BENT DETAILS" SHEET 3 OF 18.
- ⑥ SEE "BENT DETAILS" SHEET 12 OF 18.
- ⑦ CONTRACTOR MAY ADJUST BARS A AS NEEDED FOR PLACEMENT OF ANCHOR BOLTS FOR CANTILEVER OVERHEAD SIGN SUPPORT FOUNDATION.



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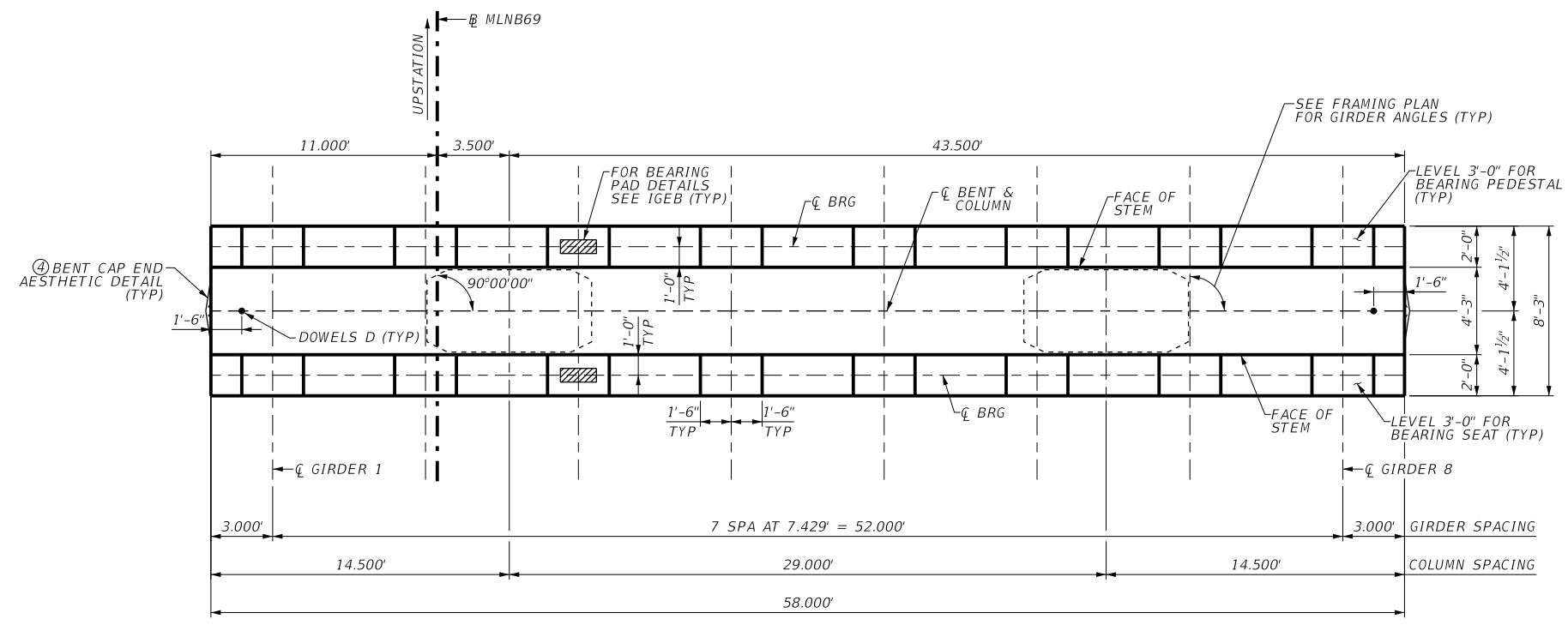
**IH 10 AT US 69
 BENT 4
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 1

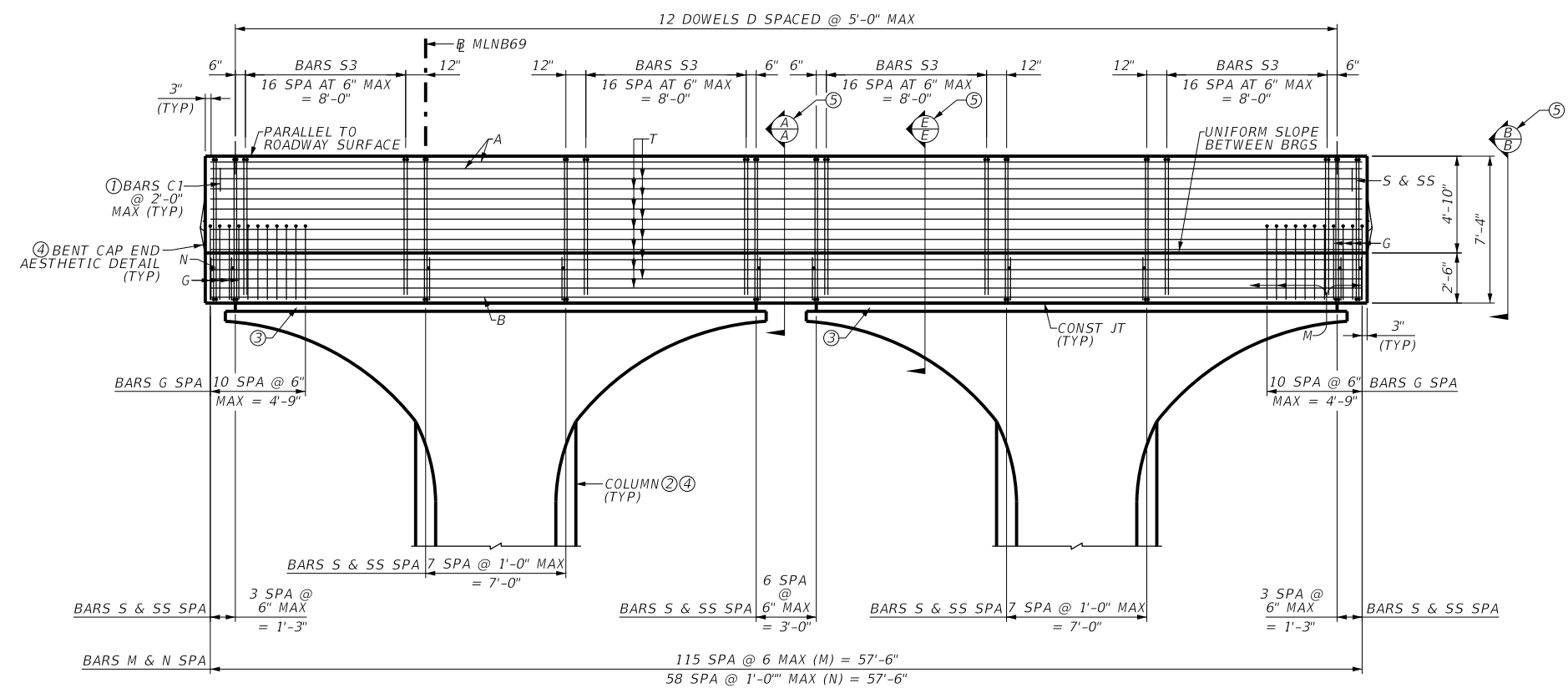
DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1511	

DATE: 21-FEB-2024 02:18
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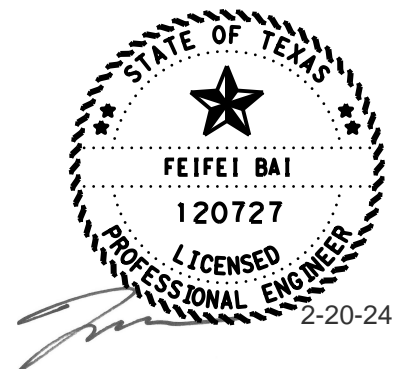
- ① PLACE FIRST CAP BAR C1 AT SECOND BARS S FROM END OF CAP.
- ② SEE COLUMN DIMENSIONS TYPE D SHEET FOR COLUMN AND CAPITAL DIMENSIONS.
- ③ PLINTH REINFORCEMENT SHOWN IN COLUMN DETAILS SHEETS.
- ④ SEE "FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ⑤ SEE "BENT DETAILS" SHEET 3 OF 18.



PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"



HL93 LOADING

VOLKERT
 F-12679

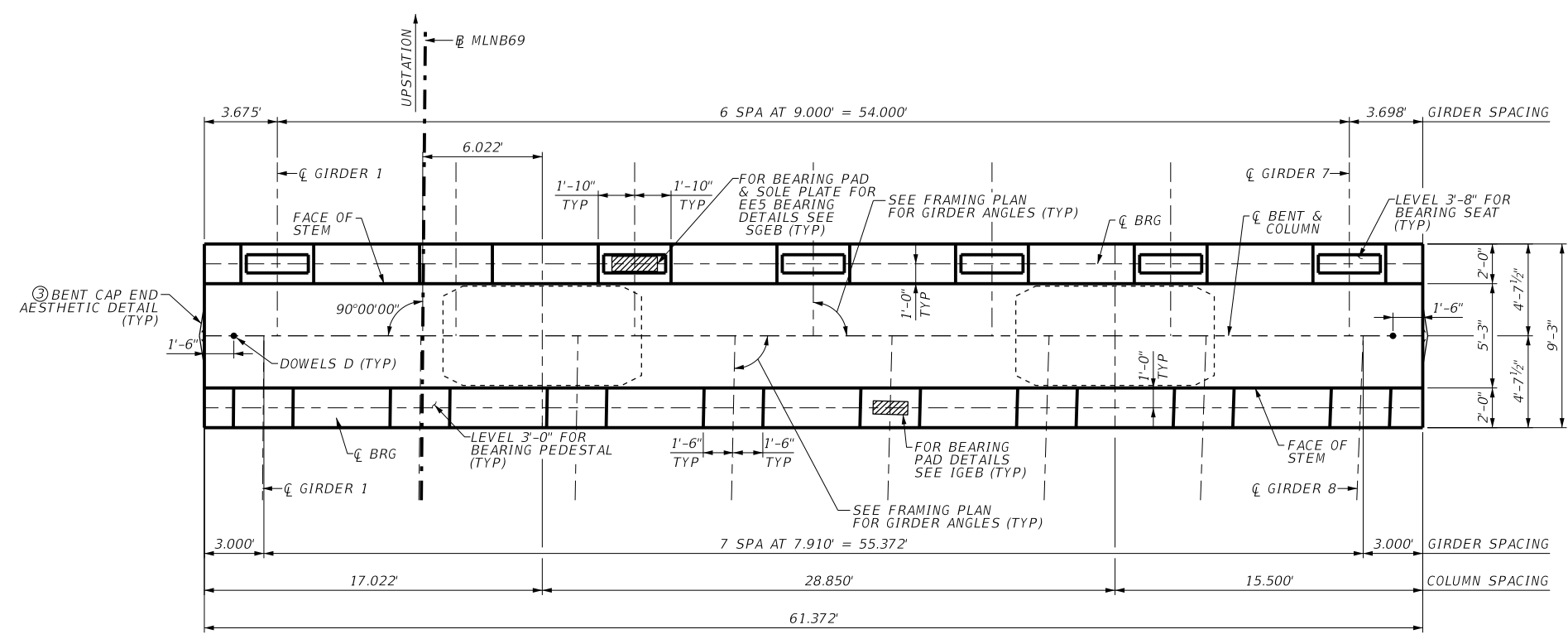


**IH 10 AT US 69
 BENTS 5 & 6
 IH 10 EBML
 TO US 69 NB DC**

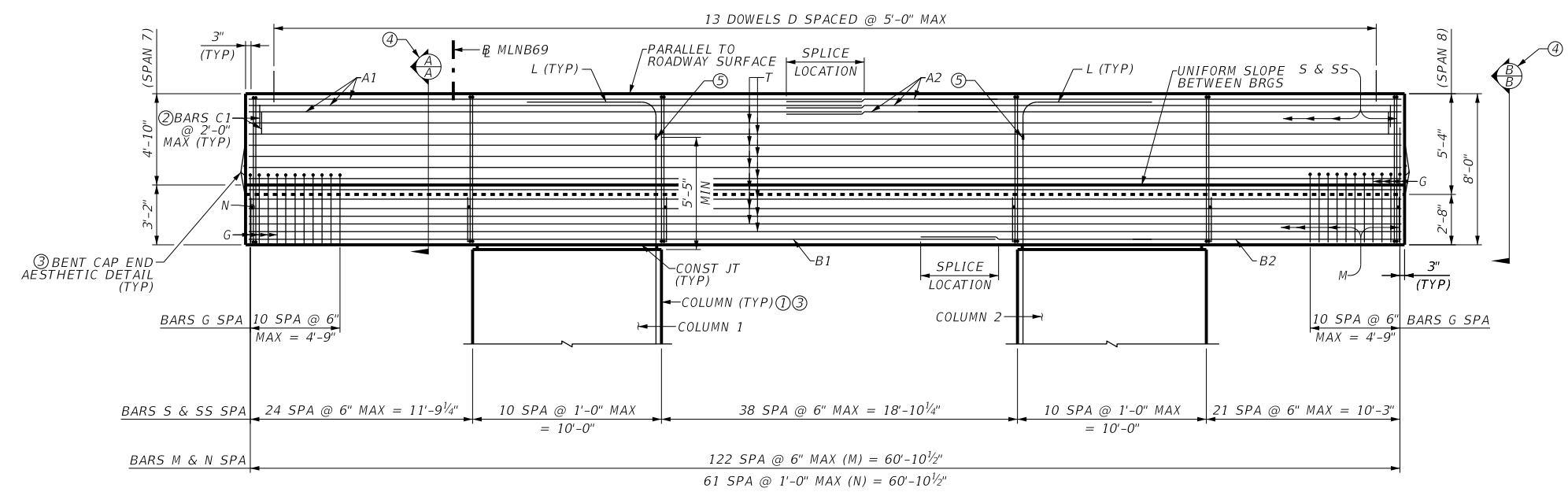
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
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0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1512				

DATE: 21-FEB-2024 02:18
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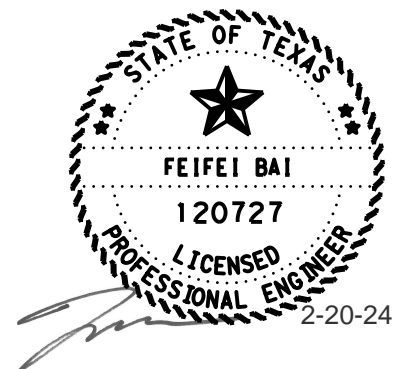


PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

- ① SEE COLUMN TYPE J DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BARS S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 4 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



HL93 LOADING

VOLKERT

F-12679

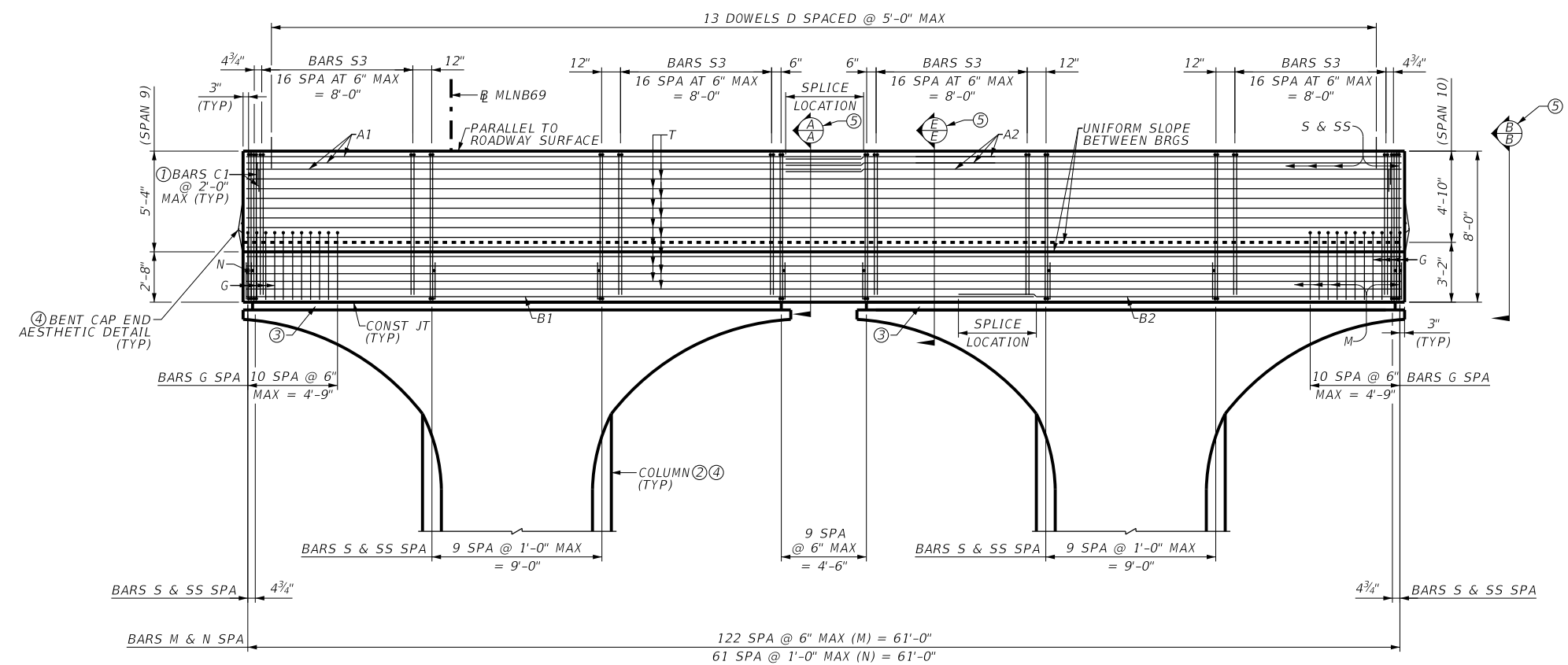
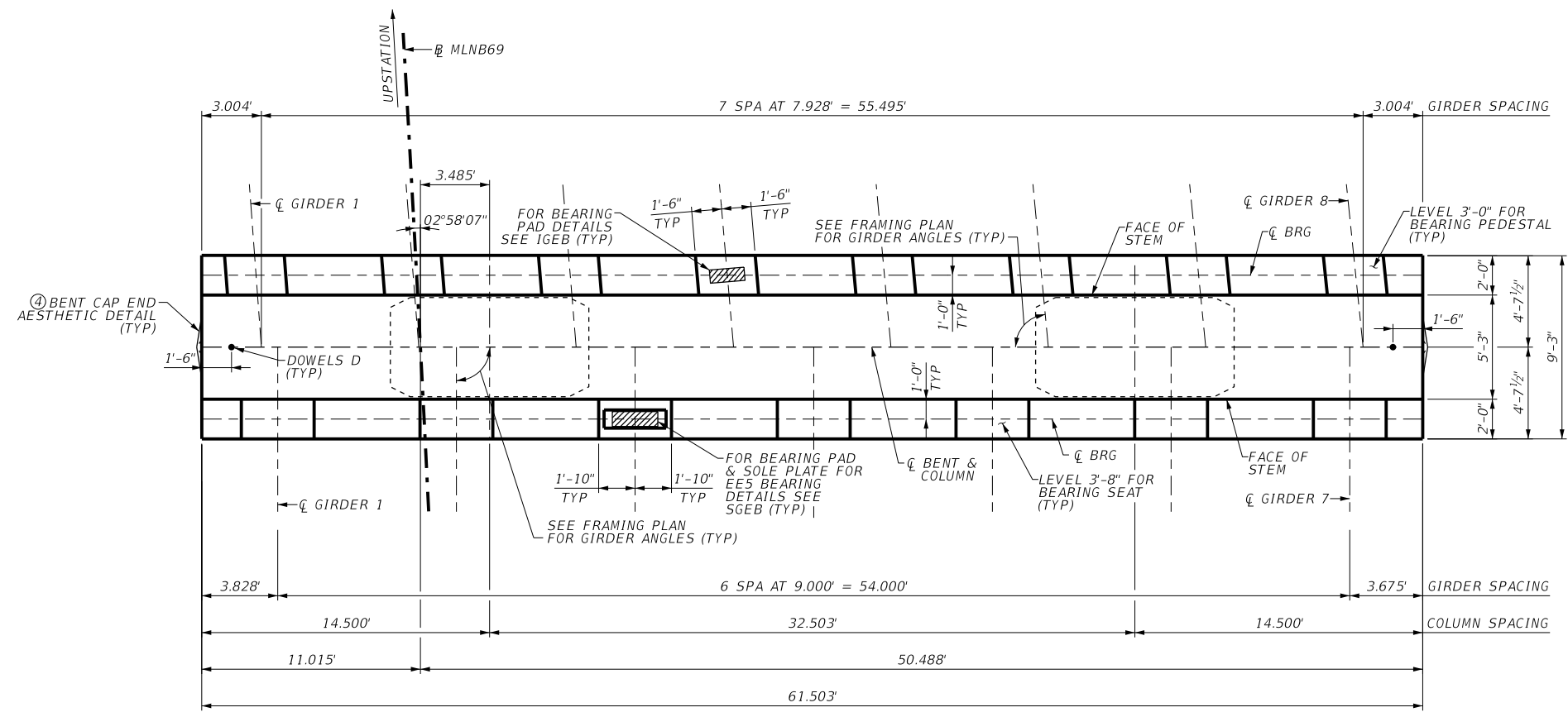
Texas Department of Transportation

**IH 10 AT US 69
 BENT 7
 IH 10 EBML
 TO US 69 NB DC**

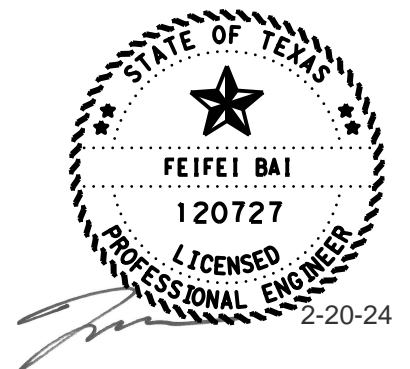
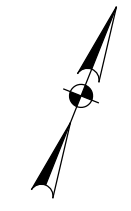
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:	COUNTY:		SHEET NO.:				
	BMT		JEFFERSON		1513		

DATE: 21-FEB-2024 02:20
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1514_10ML_10E-69N_BENTPE_10.dgn



- ① PLACE FIRST CAP BAR C1 AT SECOND BARS S FROM END OF CAP.
- ② SEE COLUMN DIMENSIONS TYPE E SHEET FOR COLUMN AND CAPITAL DIMENSIONS.
- ③ PLINTH REINFORCEMENT SHOWN IN COLUMN DETAILS SHEETS.
- ④ SEE "FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ⑤ SEE "BENT DETAILS" SHEET 5 OF 18.



HL93 LOADING

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 F-12679

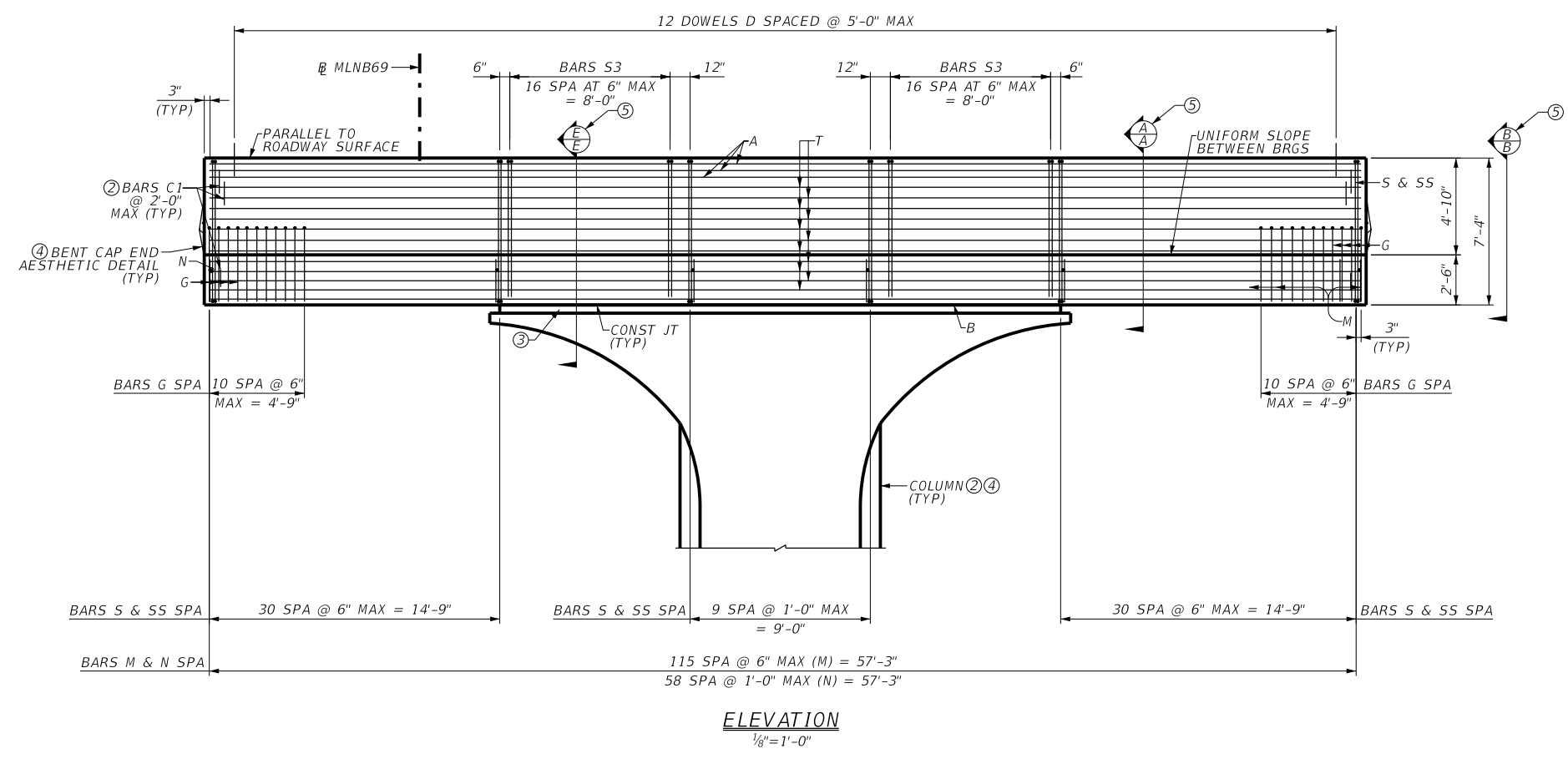
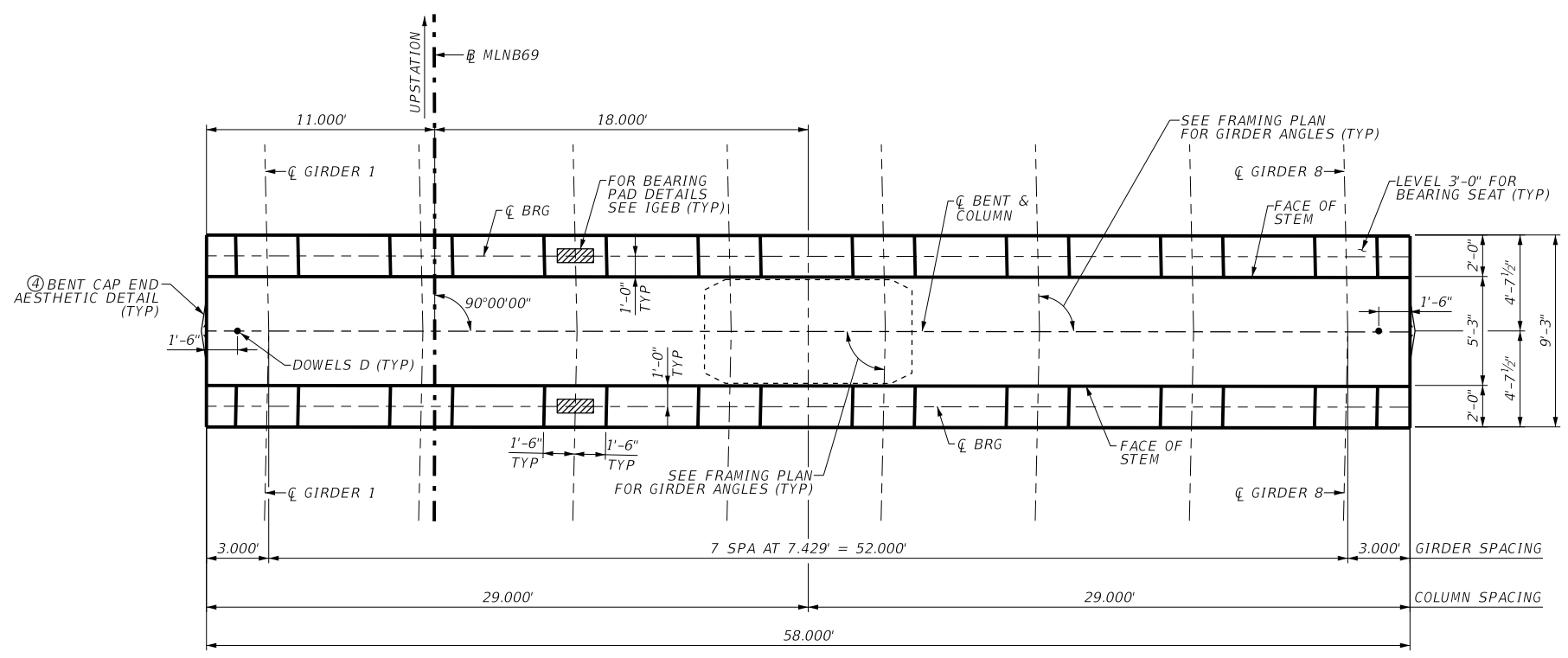
Texas Department of Transportation

**IH 10 AT US 69
 BENT 10
 IH 10 EBML
 TO US 69 NB DC**

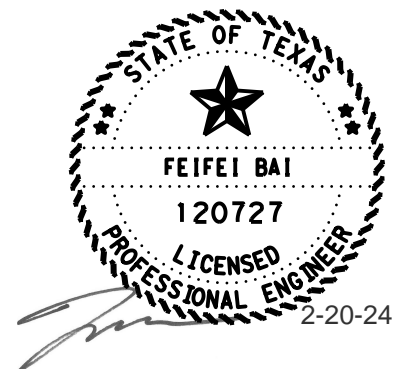
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1514				

DATE: 21-FEB-2024 02:20
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Plan_Sett\10E-69N_BENTPE_11-13.dgn



- ① PLACE FIRST CAP BAR C1 AT SECOND BARS S FROM END OF CAP.
- ② SEE COLUMN DIMENSIONS TYPE E SHEET FOR COLUMN AND CAPITAL DIMENSIONS.
- ③ PLINTH REINFORCEMENT SHOWN IN COLUMN DETAILS SHEETS.
- ④ SEE "FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ⑤ SEE "BENT DETAILS" SHEET 6 OF 18.



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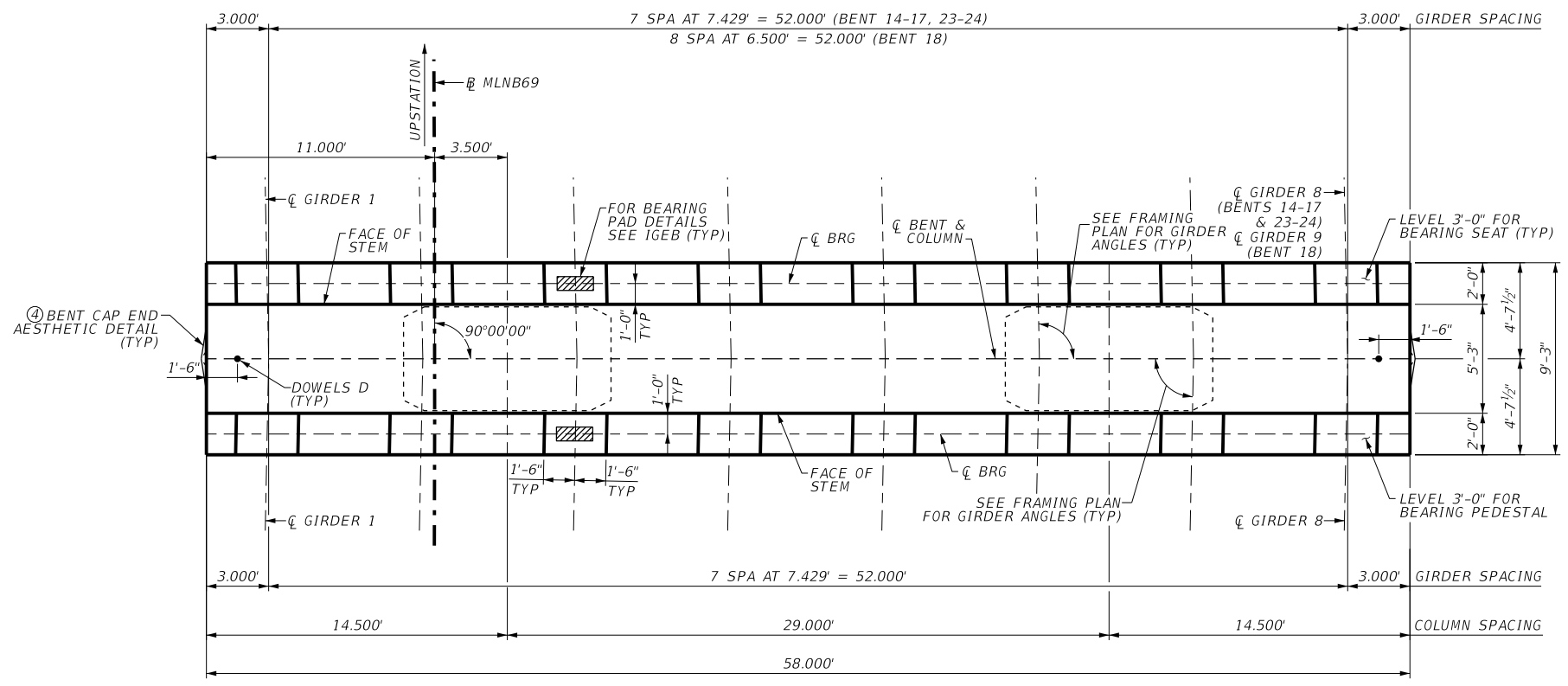
Texas Department of Transportation

**IH 10 AT US 69
 BENTS 11-13
 IH 10 EBML
 TO US 69 NB DC**

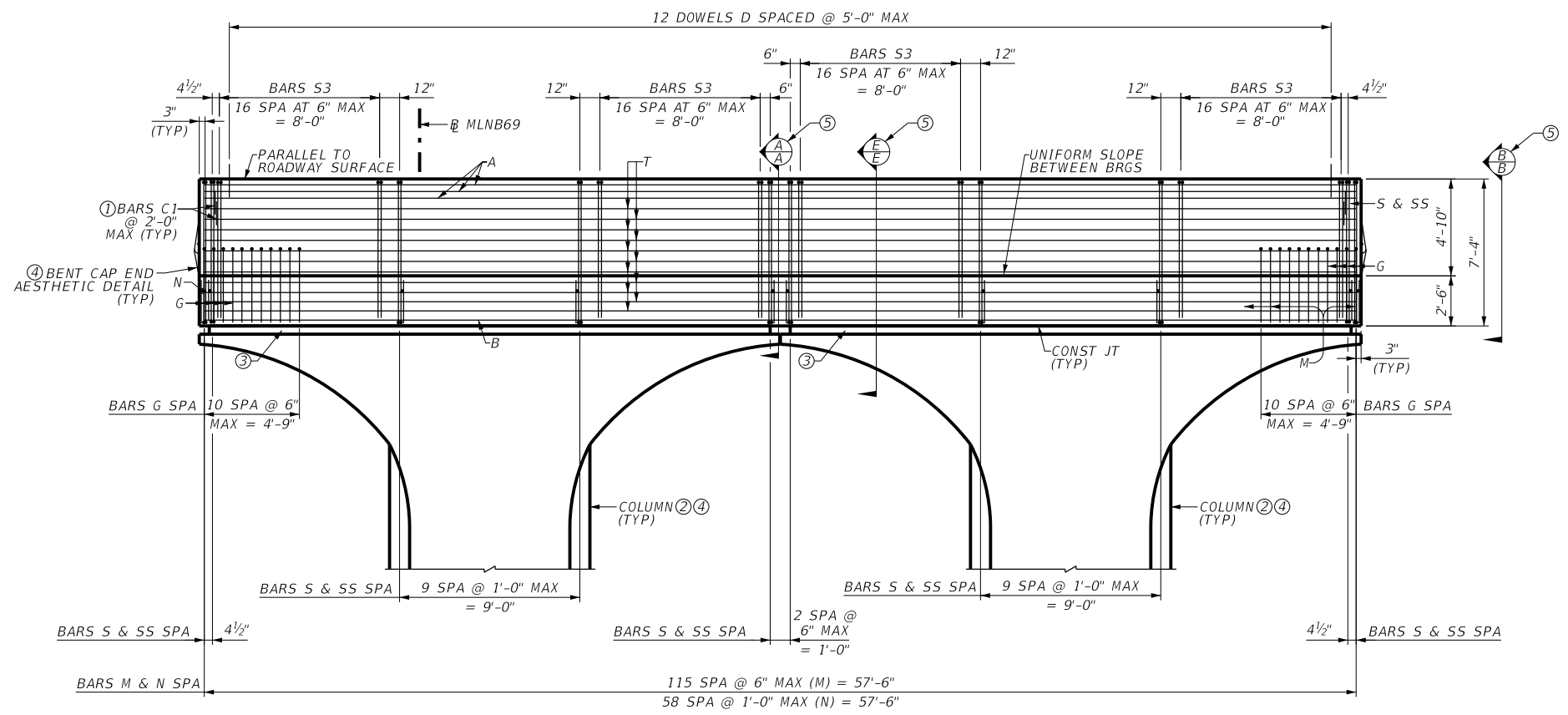
SHEET 1 OF 1

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1515	

DATE: 20-FEB-2024 22:53
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1516_10ML_10E-69N_BENTPE_14-18_23-24.dgn

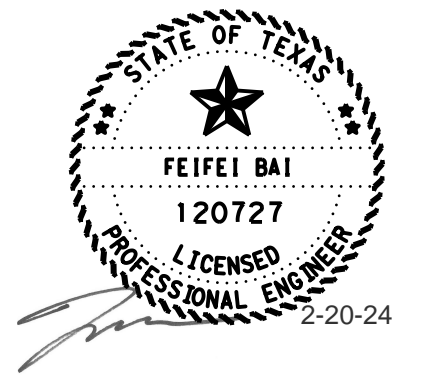


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① PLACE FIRST CAP BAR C1 AT SECOND BARS S FROM END OF CAP.
- ② SEE COLUMN DIMENSIONS TYPE E SHEET FOR COLUMN AND CAPITAL DIMENSIONS.
- ③ PLINTH REINFORCEMENT SHOWN IN COLUMN DETAILS SHEETS.
- ④ SEE "FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ⑤ SEE "BENT DETAILS" SHEET 6 OF 18.



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F-12679

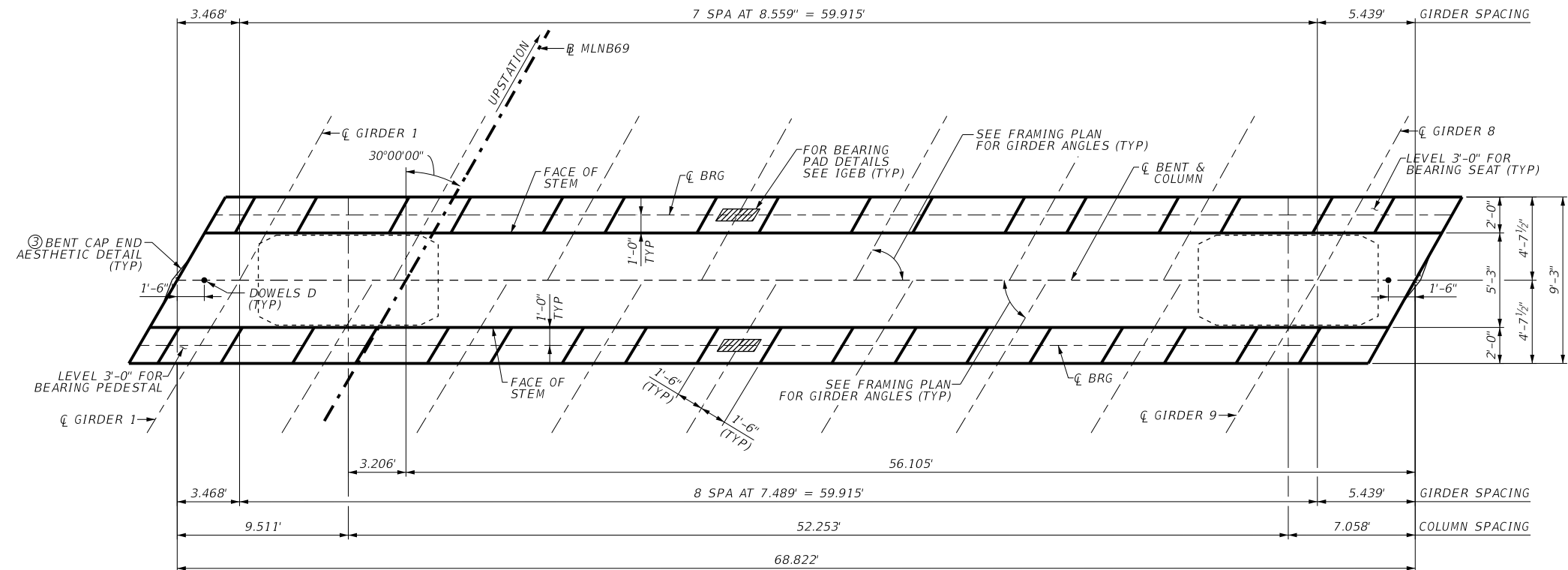
Texas Department of Transportation

**IH 10 AT US 69
 BENTS 14-18, 23-24
 IH 10 EBML
 TO US 69 NB DC**

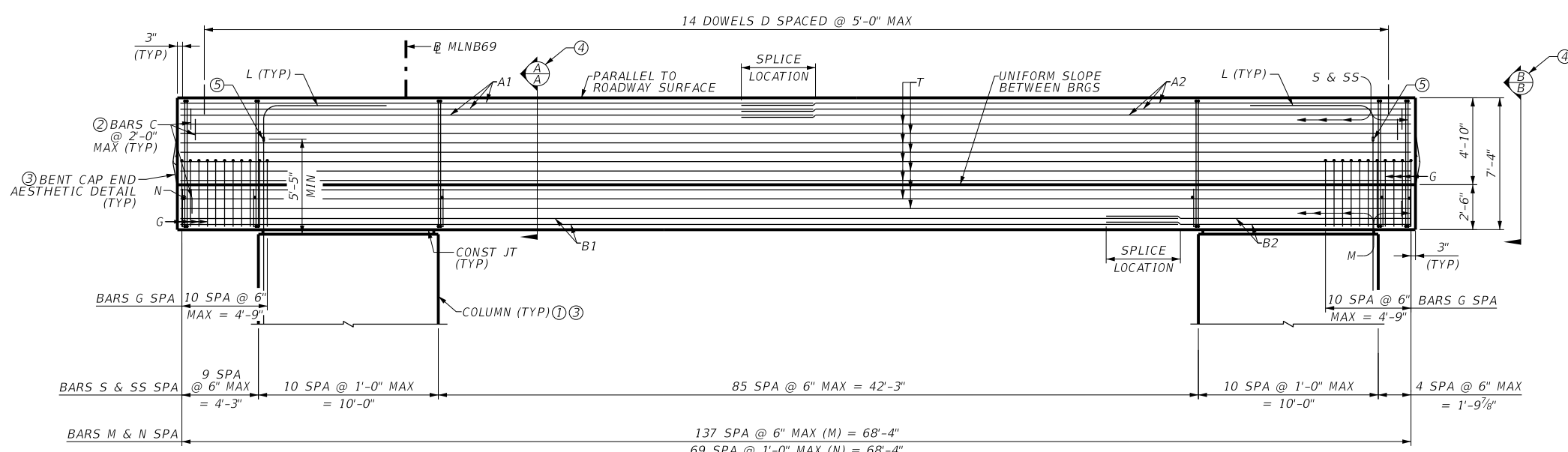
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		CK:	FB
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1516			

DATE: 20-FEB-2024 23:13
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1517_10E-69N_BENTPE_19.dgn

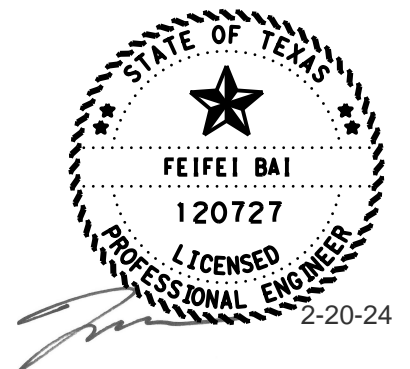
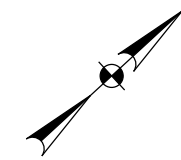


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE COLUMN TYPE J DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BARS S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 7 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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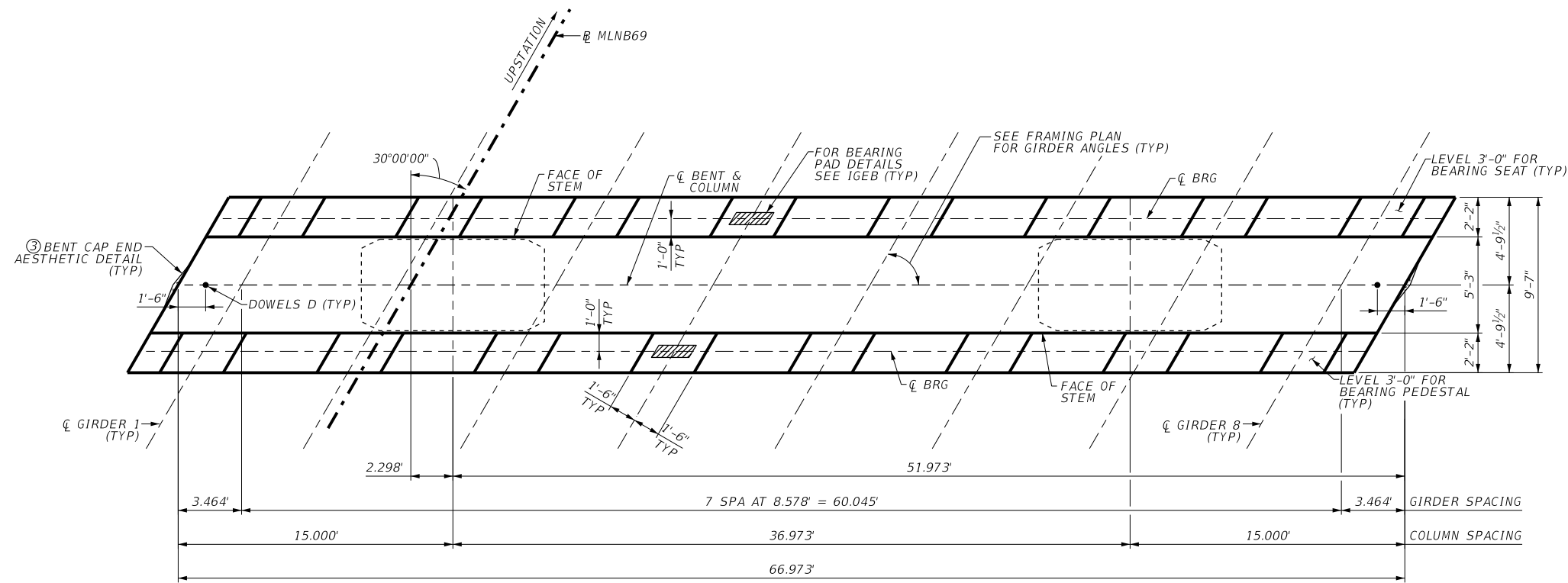
Texas Department of Transportation

**IH 10 AT US 69
 BENT 19
 IH 10 EBML
 TO US 69 NB DC**

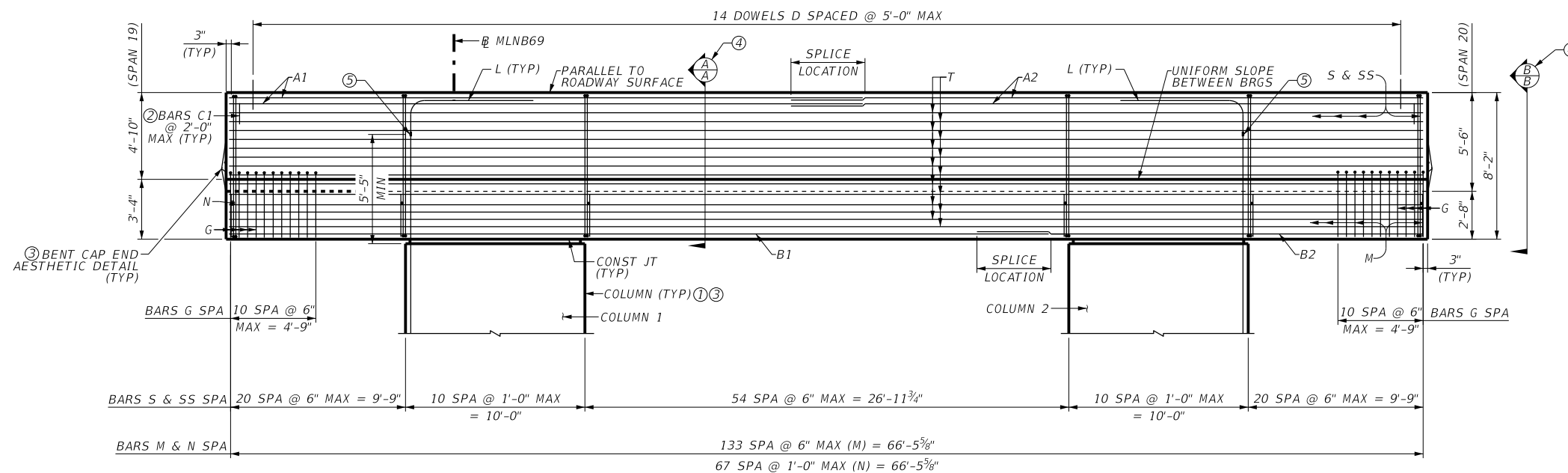
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1517				

DATE: 20-FEB-2024 22:48
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10E-69N_BENTPE_20.dgn

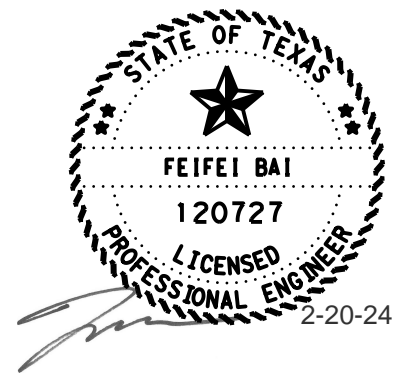
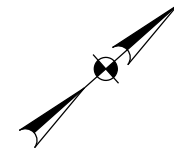


PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"

- ① SEE COLUMN TYPE J DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BARS S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 8 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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F-12679

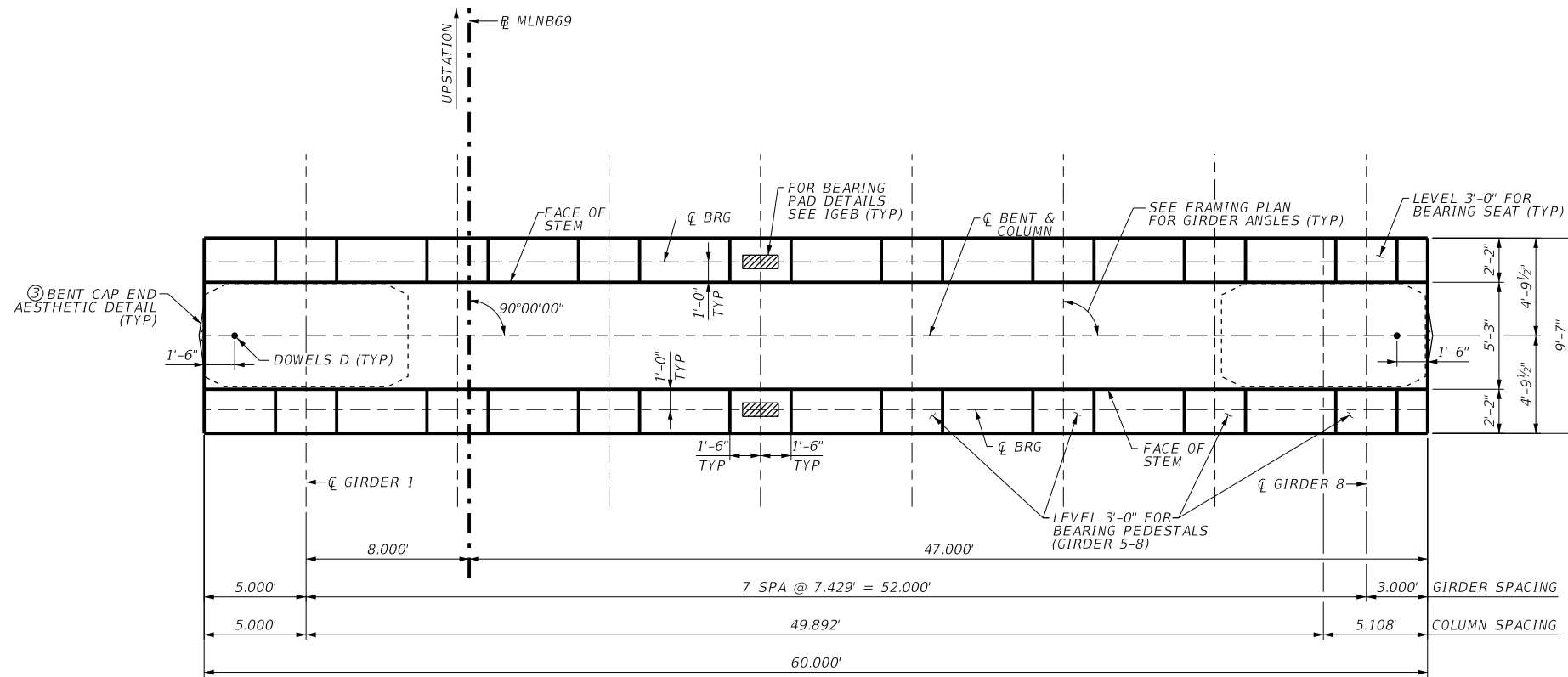


**IH 10 AT US 69
 BENT 20
 IH 10 EBML
 TO US 69 NB DC**

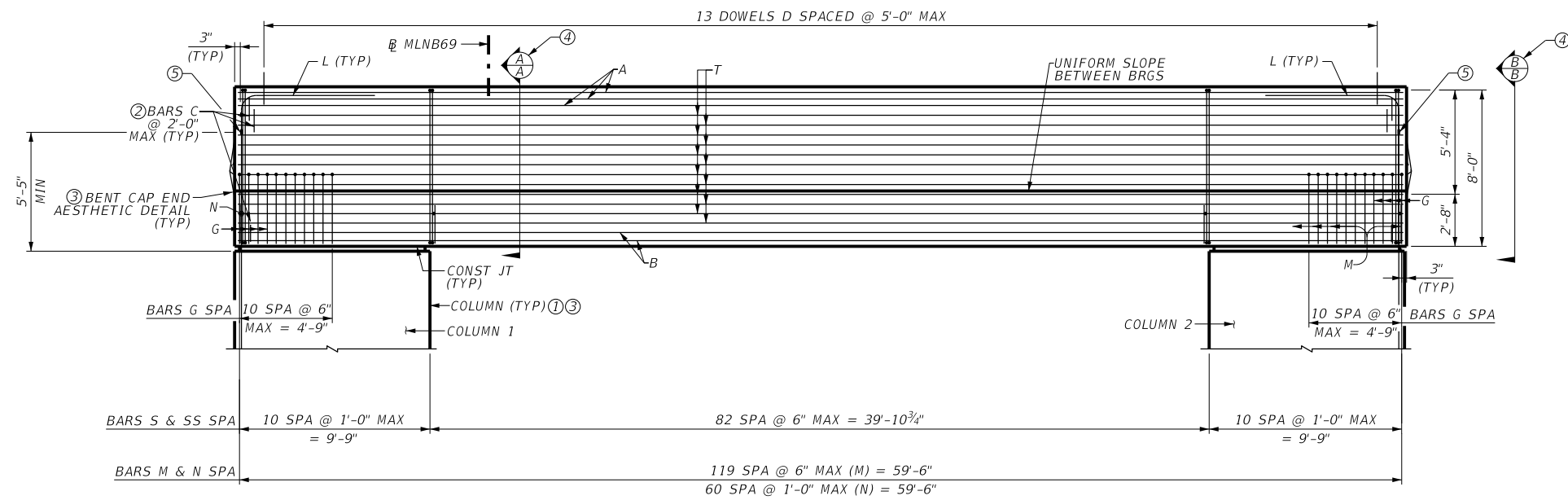
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1518				

DATE: 20-FEB-2024 22:48
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1519_10ML_10E-69N_BENTPE_21.dgn

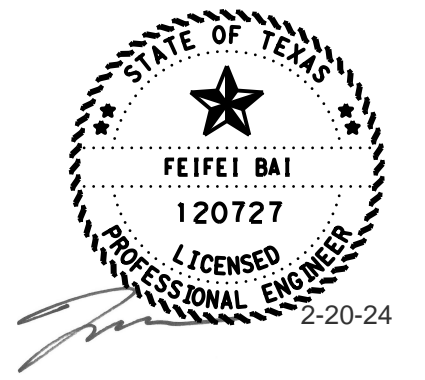
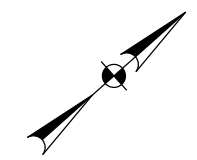


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE COLUMN TYPE J DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BARS S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 9 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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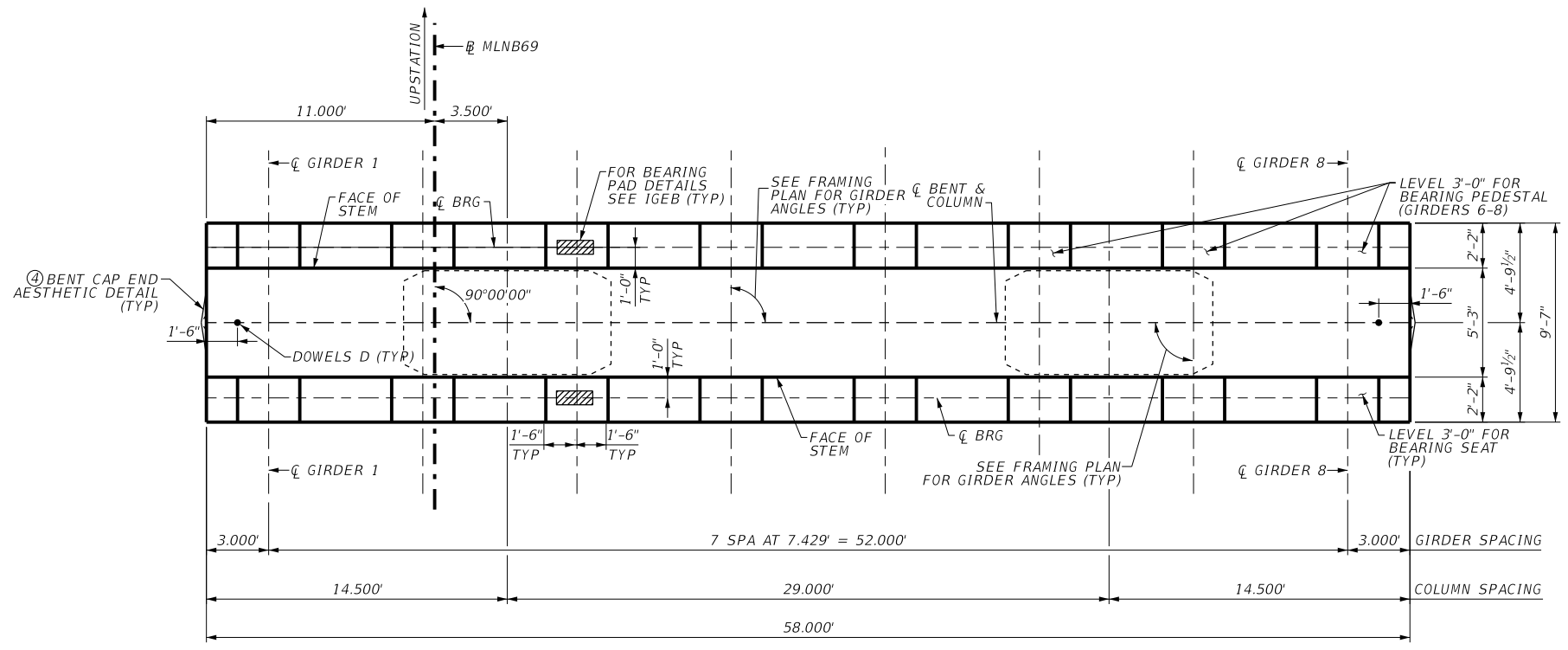
Texas Department of Transportation

**IH 10 AT US 69
 BENT 21
 IH 10 EBML
 TO US 69 NB DC**

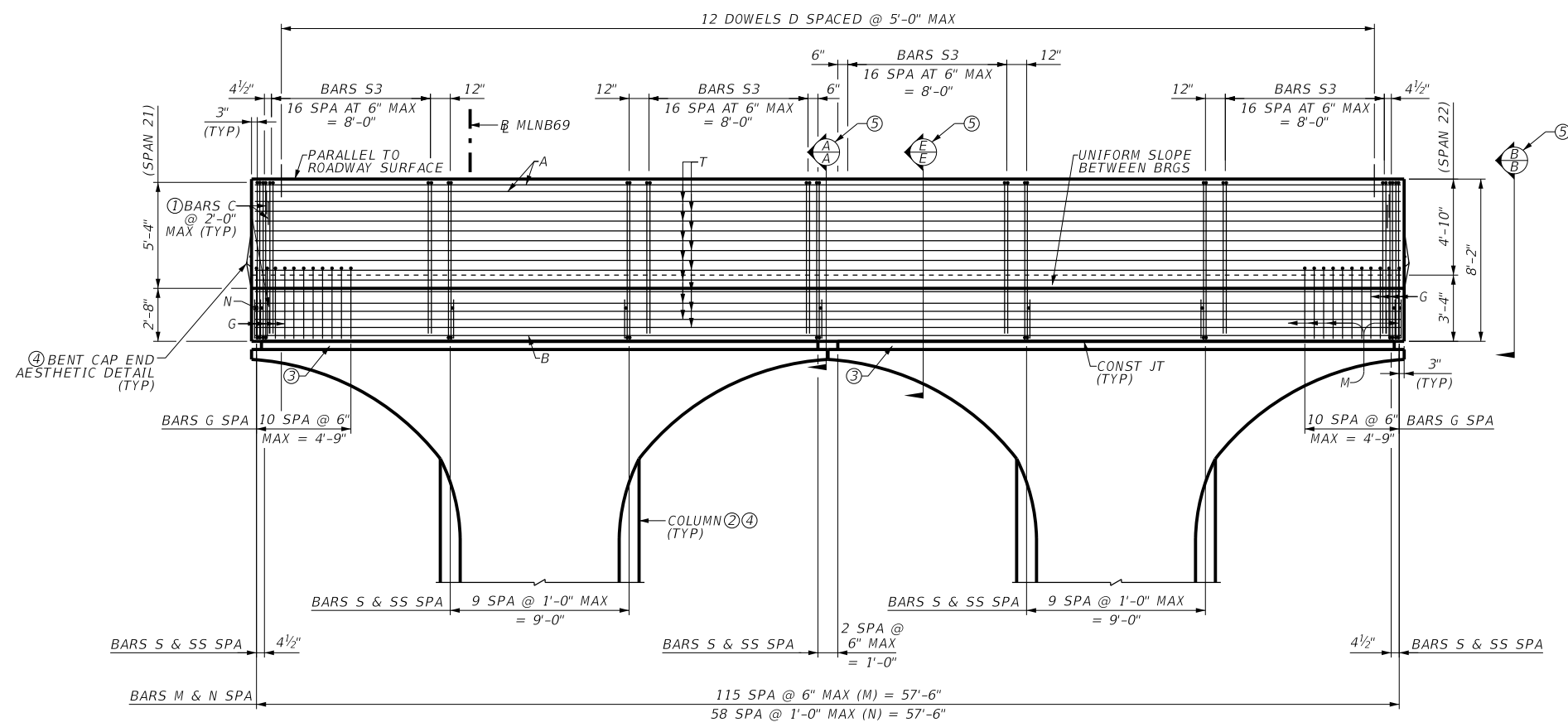
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1519				

DATE: 21-FEB-2024 02:14
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1520_10ML_10E-69N_BENTPE_22.dgn

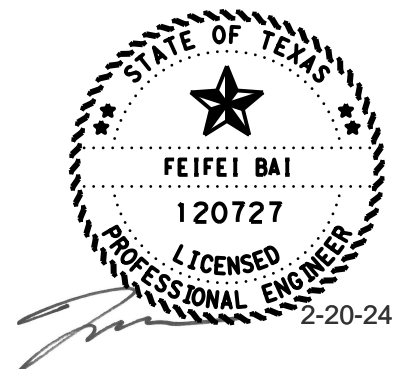
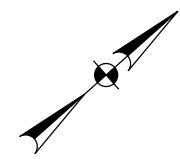


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① PLACE FIRST CAP BAR C AT SECOND BARS S FROM END OF CAP.
- ② SEE COLUMN DIMENSIONS TYPE E SHEET FOR COLUMN AND CAPITAL DIMENSIONS.
- ③ PLINTH REINFORCEMENT SHOWN IN COLUMN DETAILS SHEETS.
- ④ SEE "FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ⑤ SEE "BENT DETAILS" SHEET 10 OF 18.



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Texas Department of Transportation

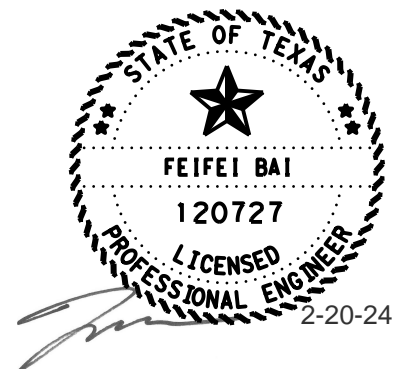
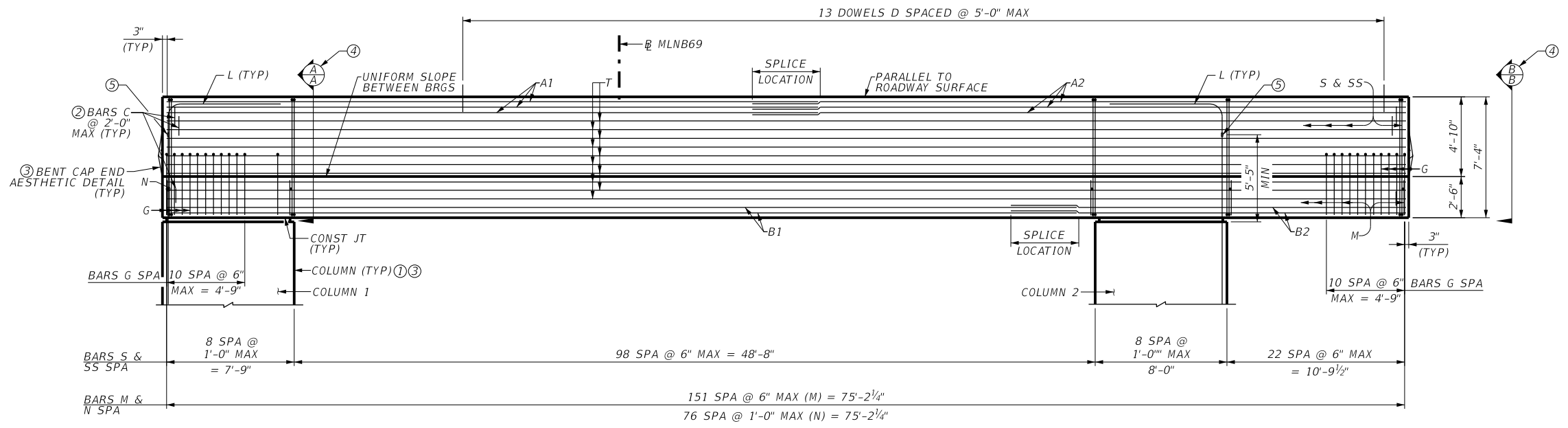
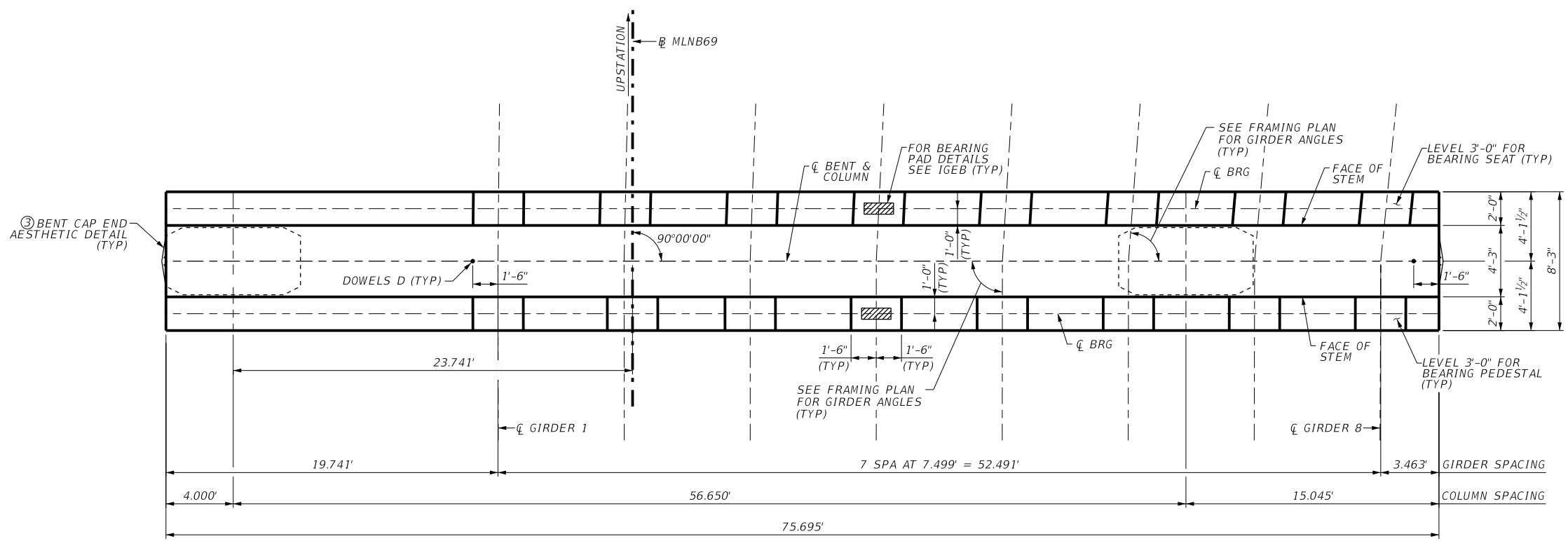
**IH 10 AT US 69
 BENT 22
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 1

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1520	

DATE: 21-FEB-2024 02:14
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1521_10ML_10E-69N_BENTPE_25.dgn

- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BARS S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 1 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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Texas Department of Transportation

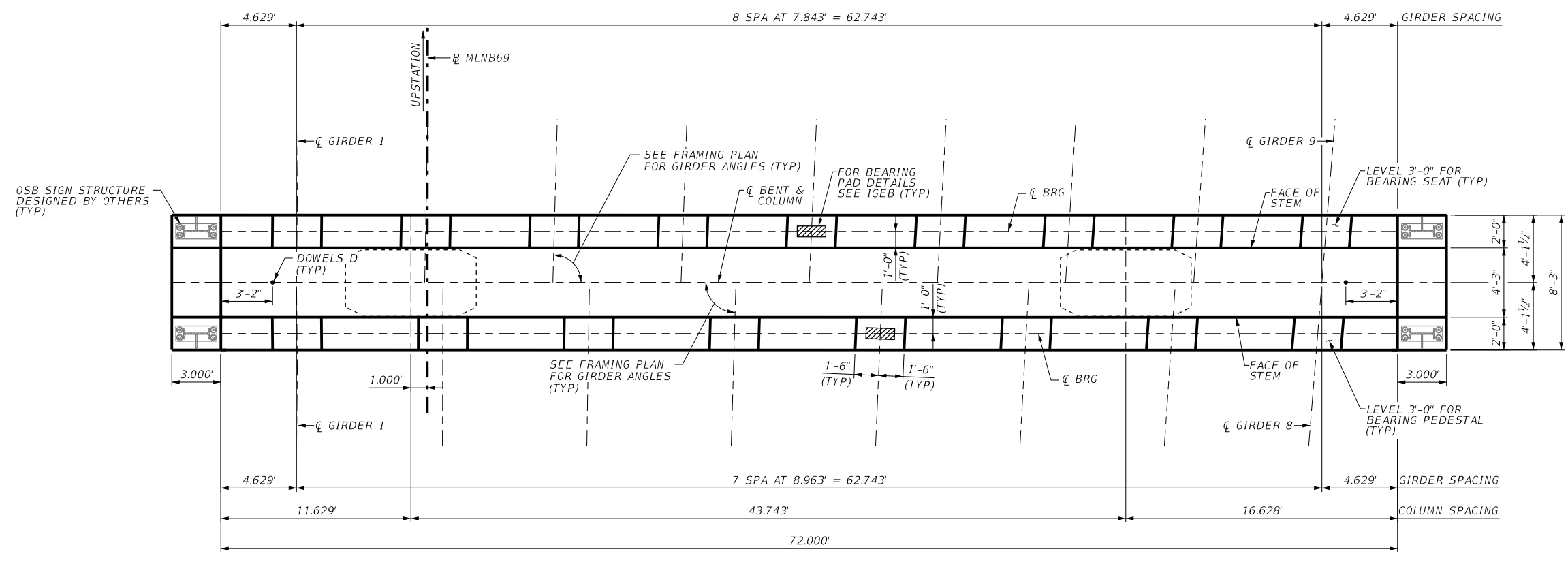
**IH 10 AT US 69
 BENT 25
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 1

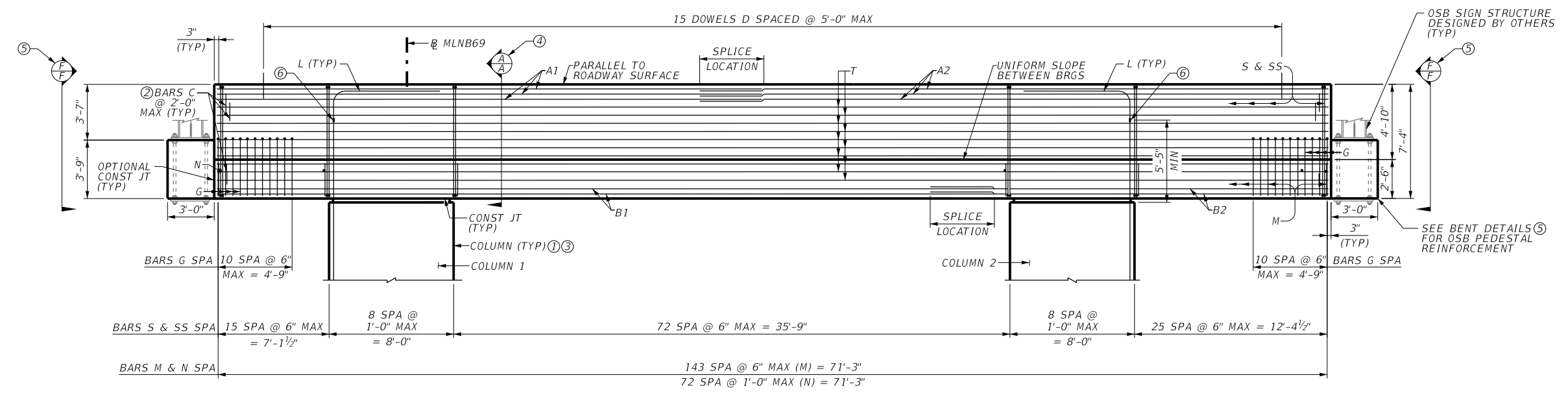
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CONT:		SECT:		JOB:		CK:	FB
	0028		13		135		IH 10
DIST:	COUNTY:		SHEET NO.:				
	BMT		JEFFERSON		1521		

DATE: 20-FEB-2024 22:58
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1522_10ML_10E-69N_BENTPE_26.dgn

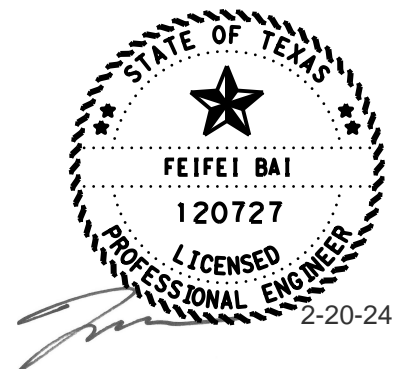
- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BARS S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 1 OF 18.
- ⑤ SEE "BENT DETAILS" SHEET 12 OF 18.
- ⑥ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



PLAN
 1/8"=1'-0"



ELEVATION
 1/8"=1'-0"



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 F-12679

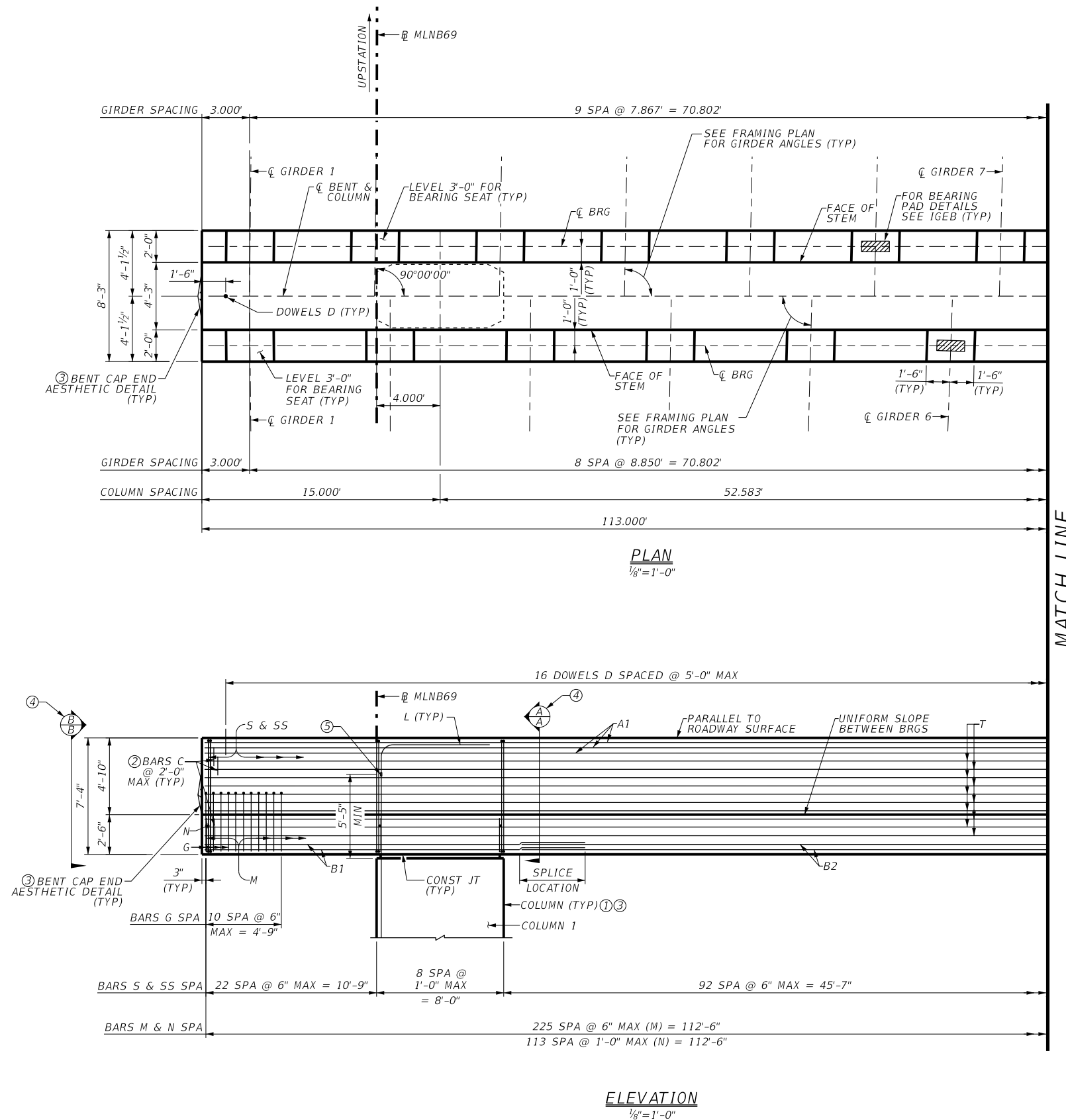
Texas Department of Transportation

**IH 10 AT US 69
 BENT 26
 IH 10 EBML
 TO US 69 NB DC**

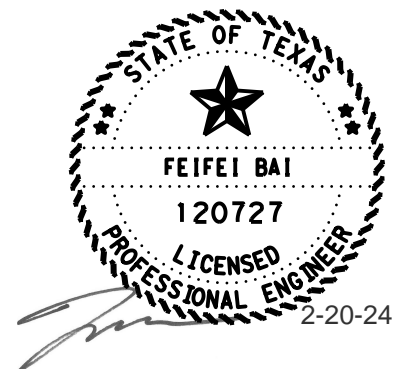
SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1522				

DATE: 20-FEB-2024 22:50
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Plan Set\10E-69N_BENTPE_27_1.dgn



- ① SEE COLUMN TYPE G & H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 1 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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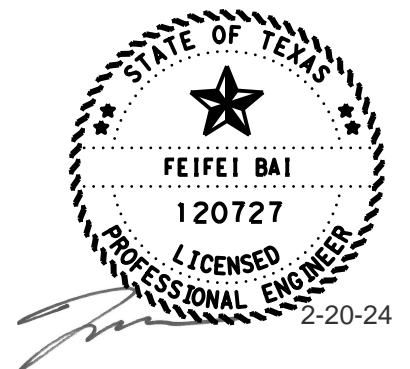
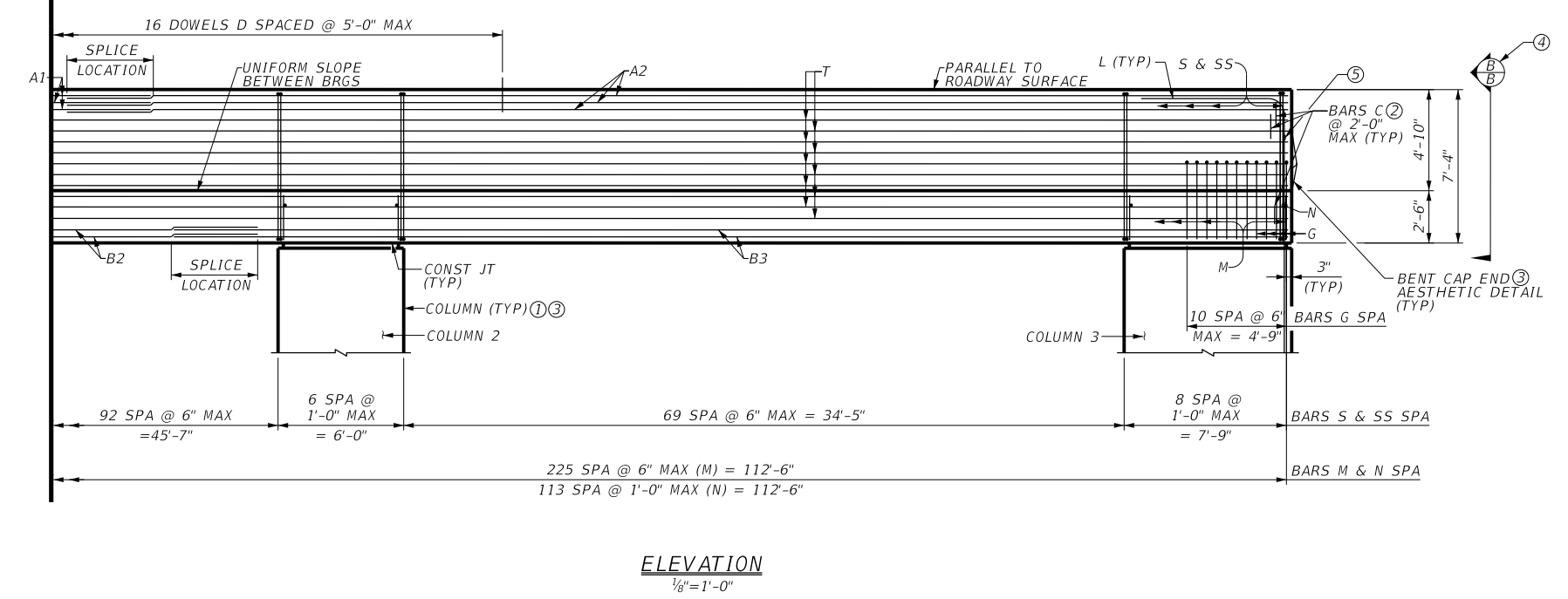
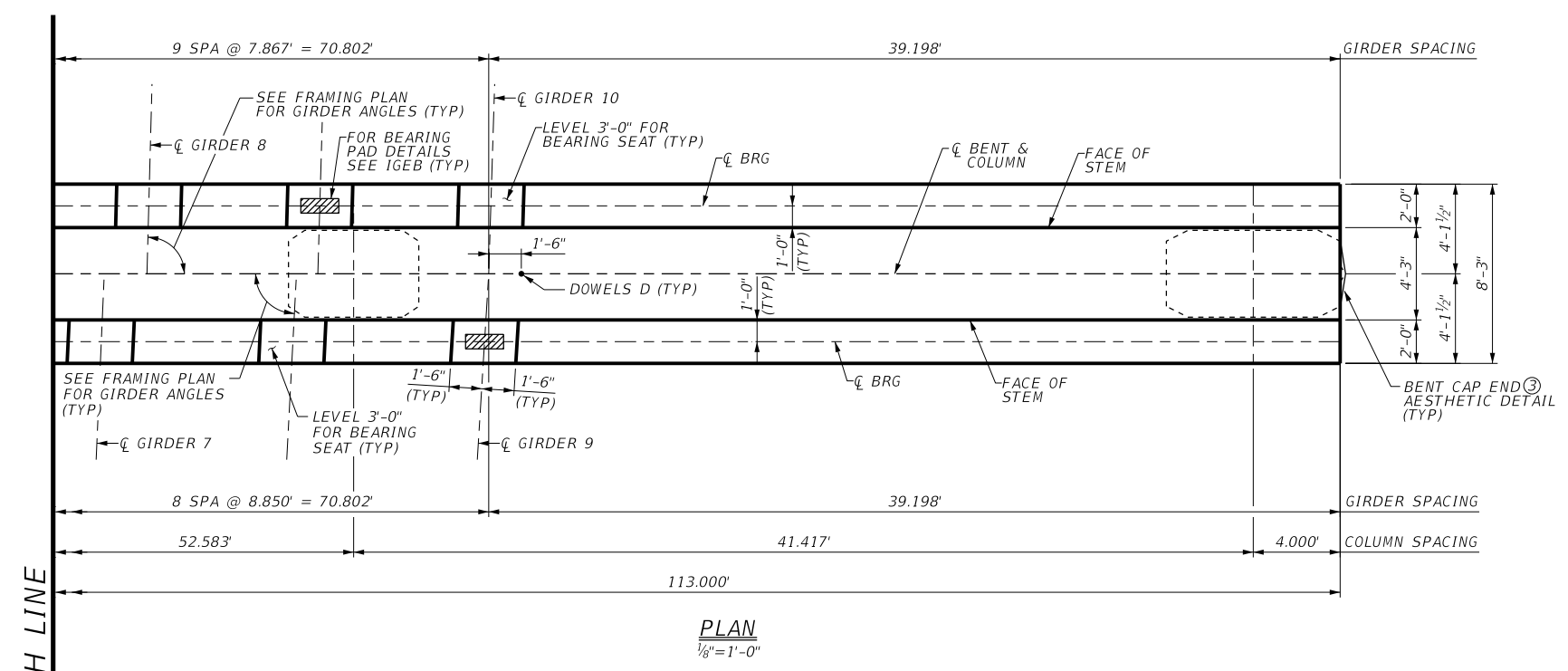
**IH 10 AT US 69
 BENT 27
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 2

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1523				

DATE: 20-FEB-2024 22:51
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\10E-69N_BENTPE_27_2.dgn

- ① SEE COLUMN TYPE G & H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 1 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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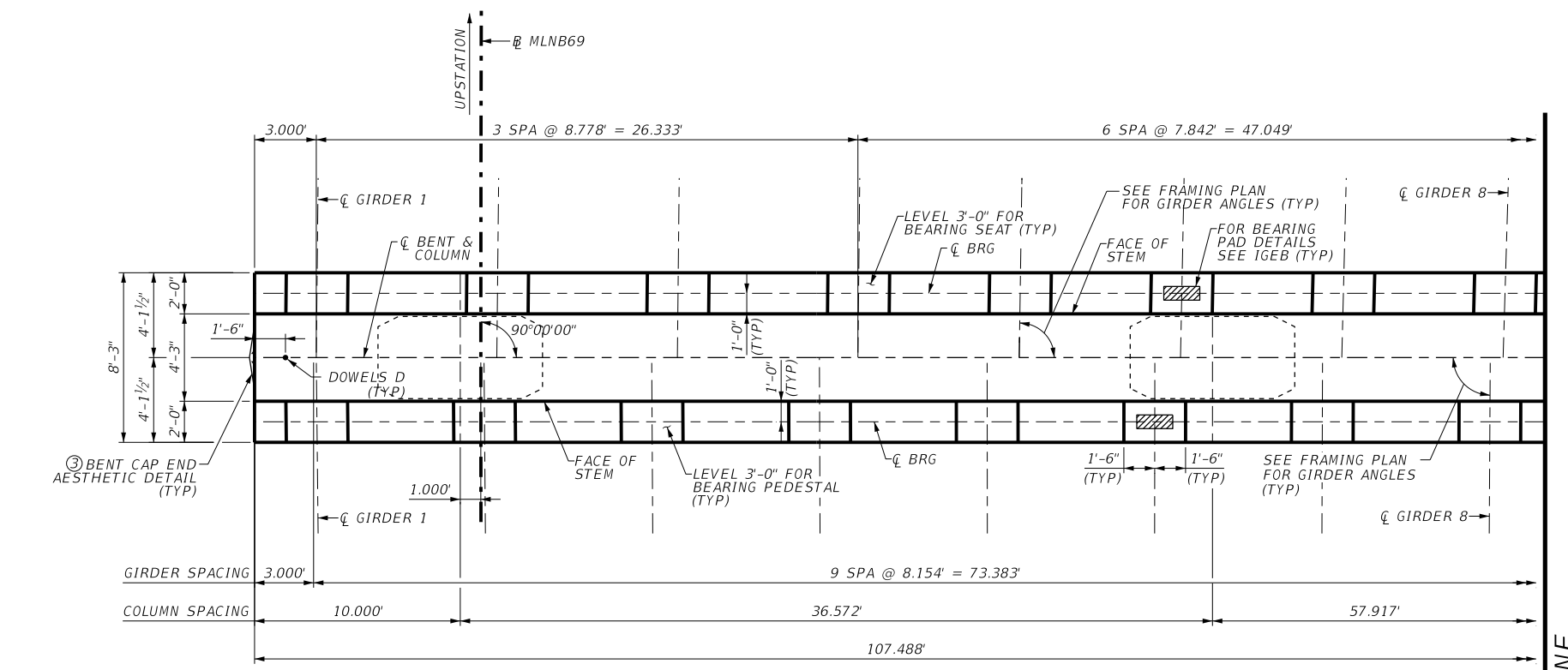
Texas Department of Transportation

**IH 10 AT US 69
BENT 27
IH 10 EBML
TO US 69 NB DC**

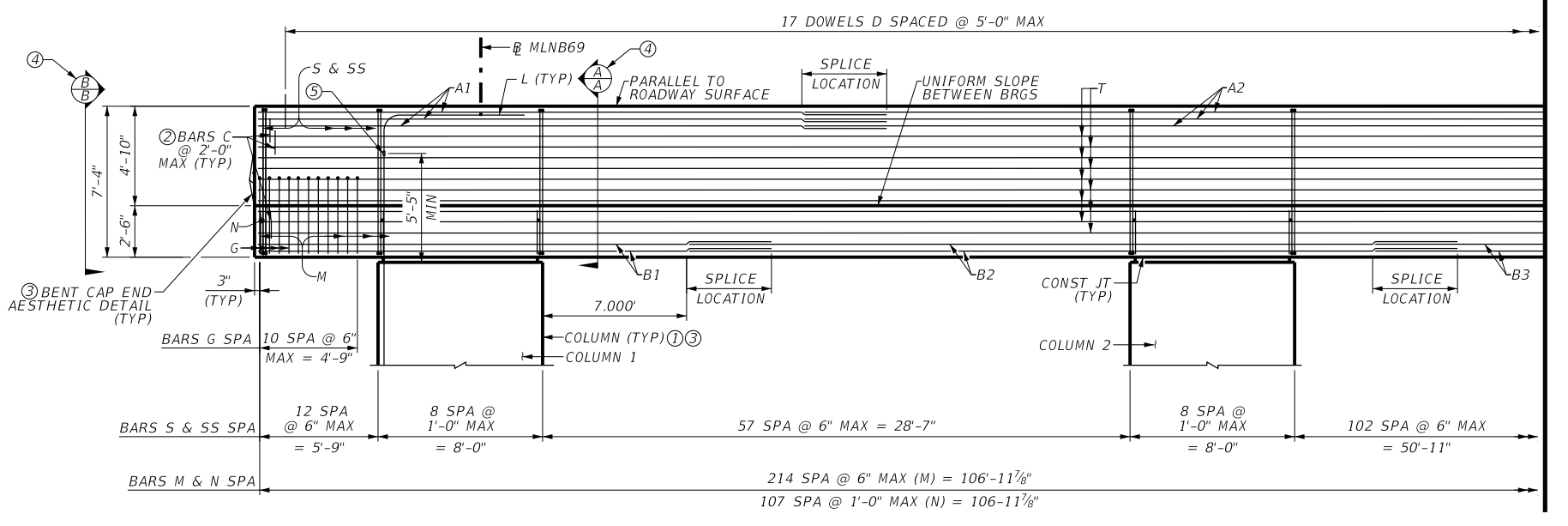
SHEET 2 OF 2

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1524				

DATE: 7-MAR-2024 14:59
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1525_10ML_10E-69N_BENTPE_28_1.dgn

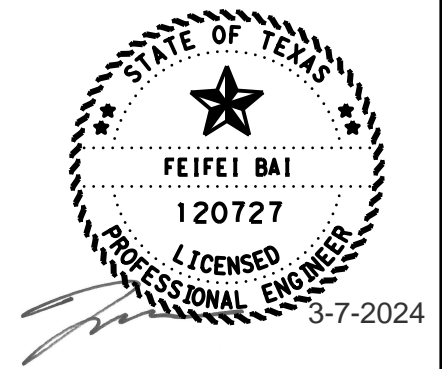


PLAN
 1/8" = 1'-0"



ELEVATION
 1/8" = 1'-0"

- ① SEE COLUMN TYPE G & H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 1 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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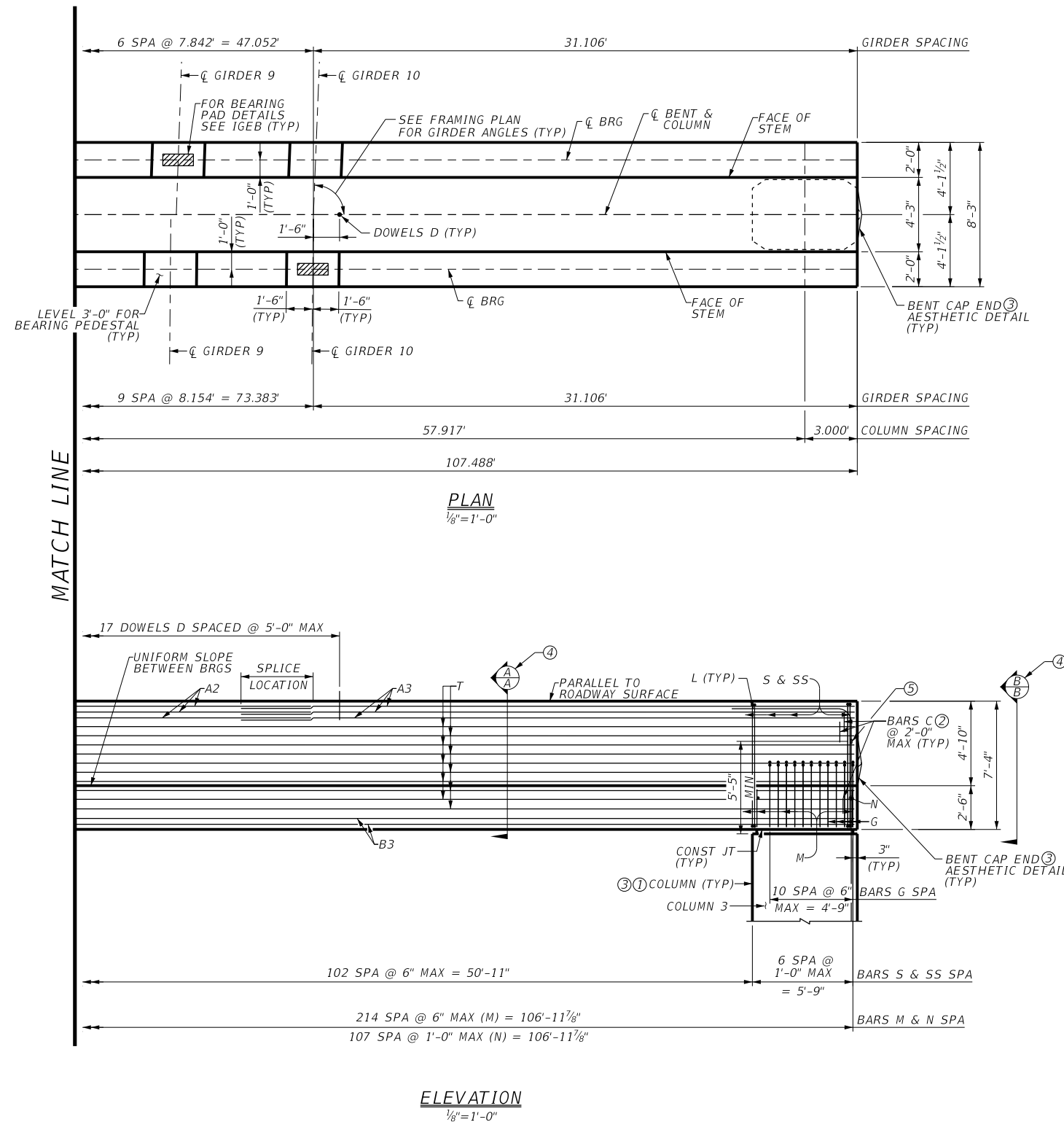
Texas Department of Transportation

**IH 10 AT US 69
 BENT 28
 IH 10 EBML
 TO US 69 NB DC**

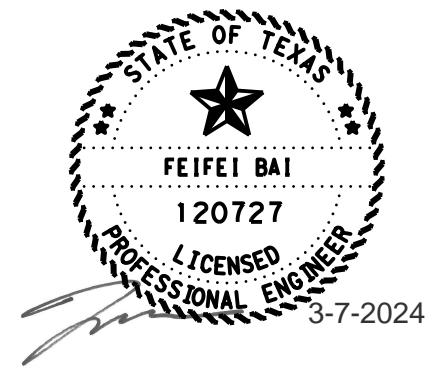
SHEET 1 OF 2

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1525				

DATE: 7-MAR-2024 15:00
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1526_10ML_10E-69N_BENTPE_28_2.dgn



- ① SEE COLUMN TYPE G & H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 1 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



HL93 LOADING

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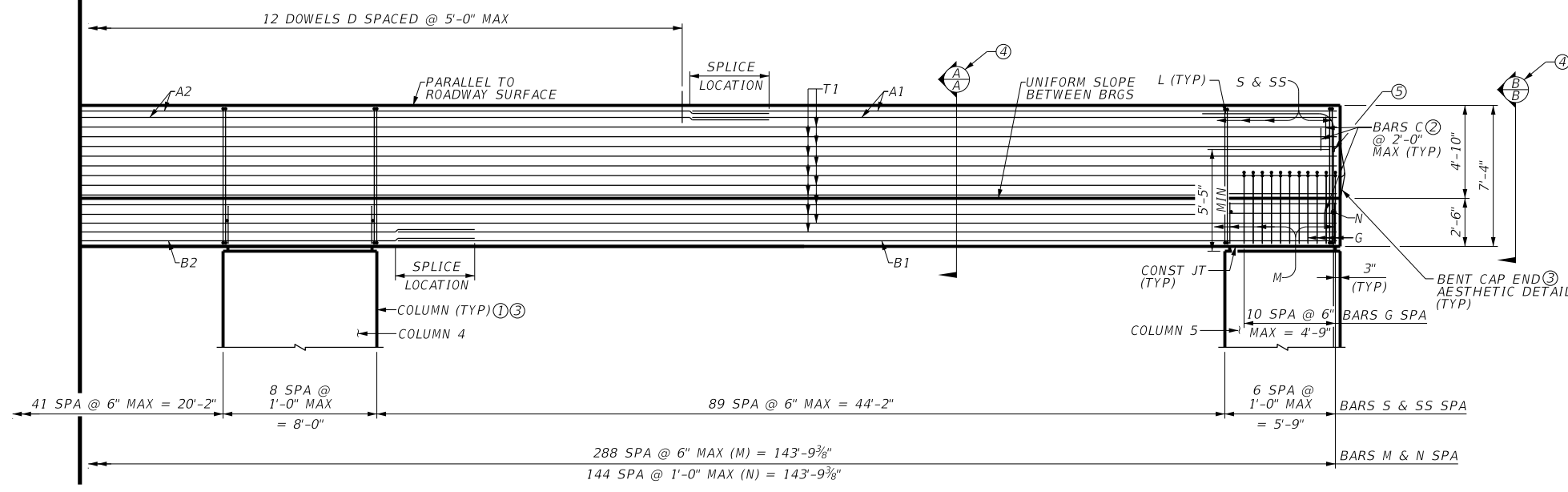
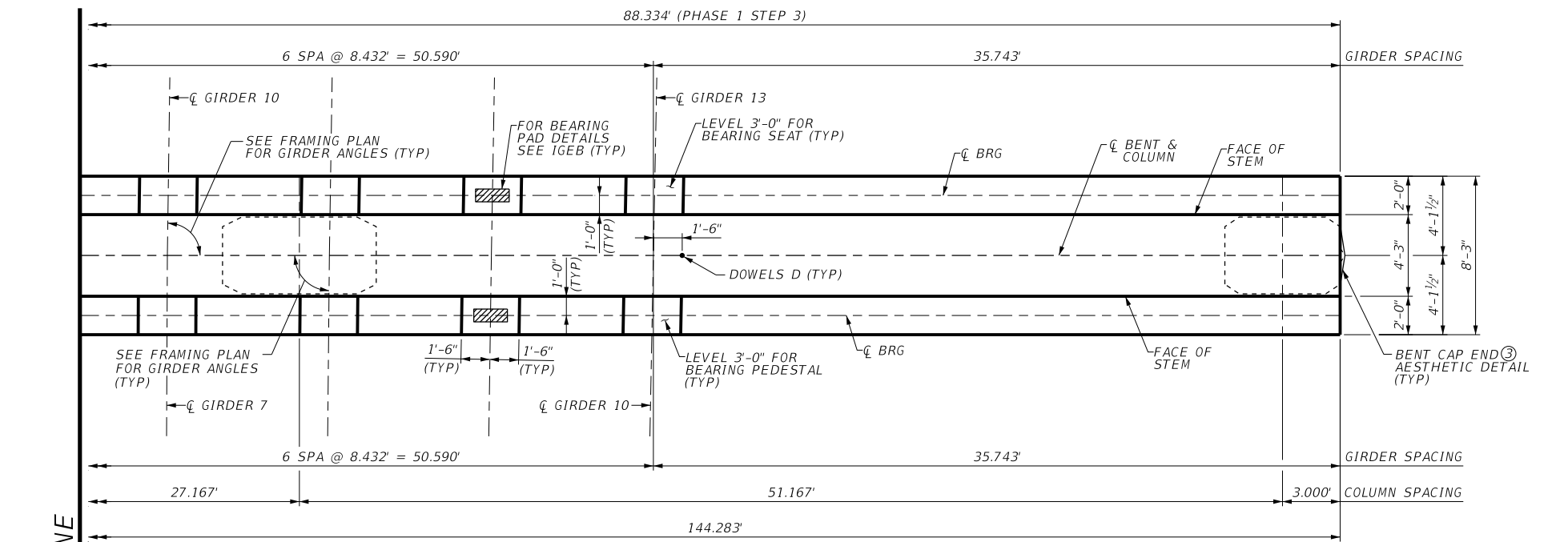


**IH 10 AT US 69
 BENT 28
 IH 10 EBML
 TO US 69 NB DC**

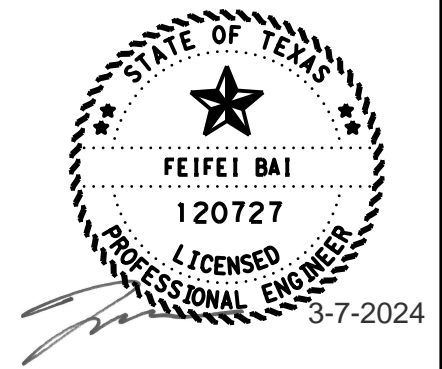
SHEET 2 OF 2

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1526				

DATE: 7-MAR-2024 15:00
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1528_10ML_10E-69N_BENTPE_29_2.dgn



- ① SEE COLUMN TYPE G & H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 11 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



HL93 LOADING

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 F-12679

Texas Department of Transportation

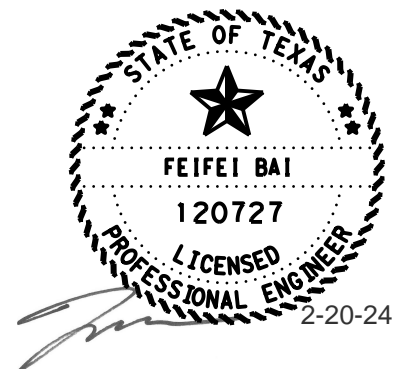
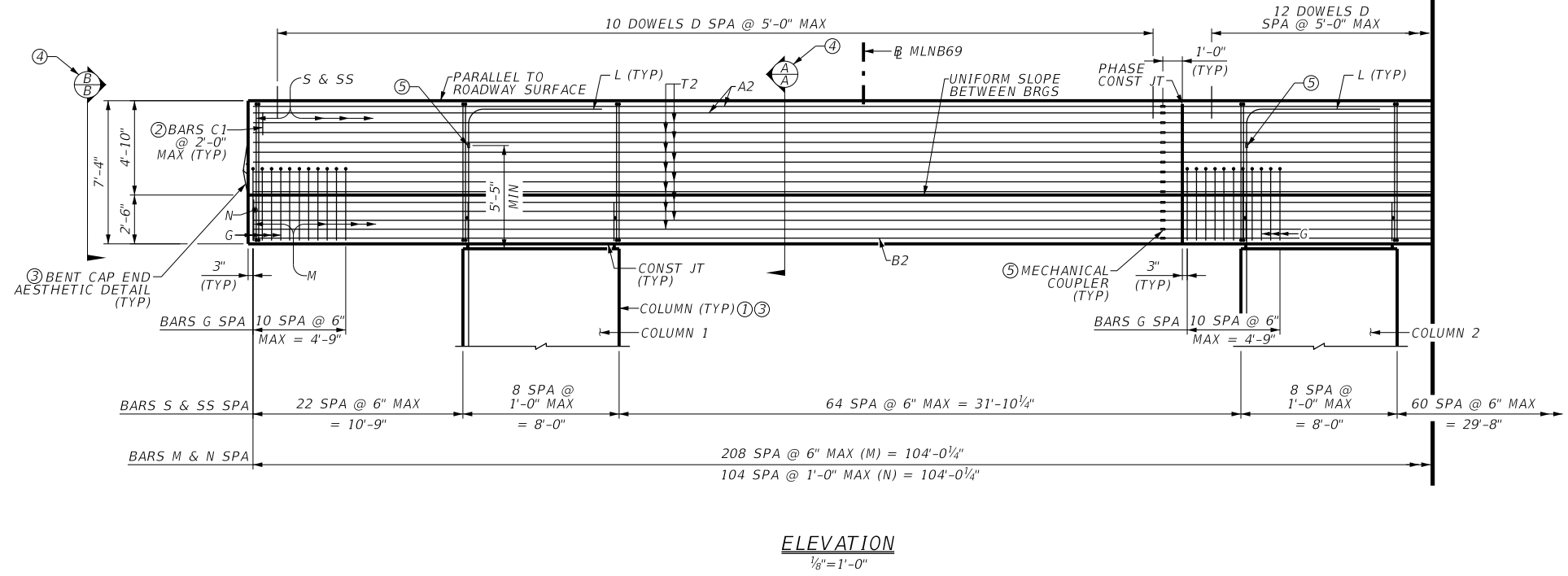
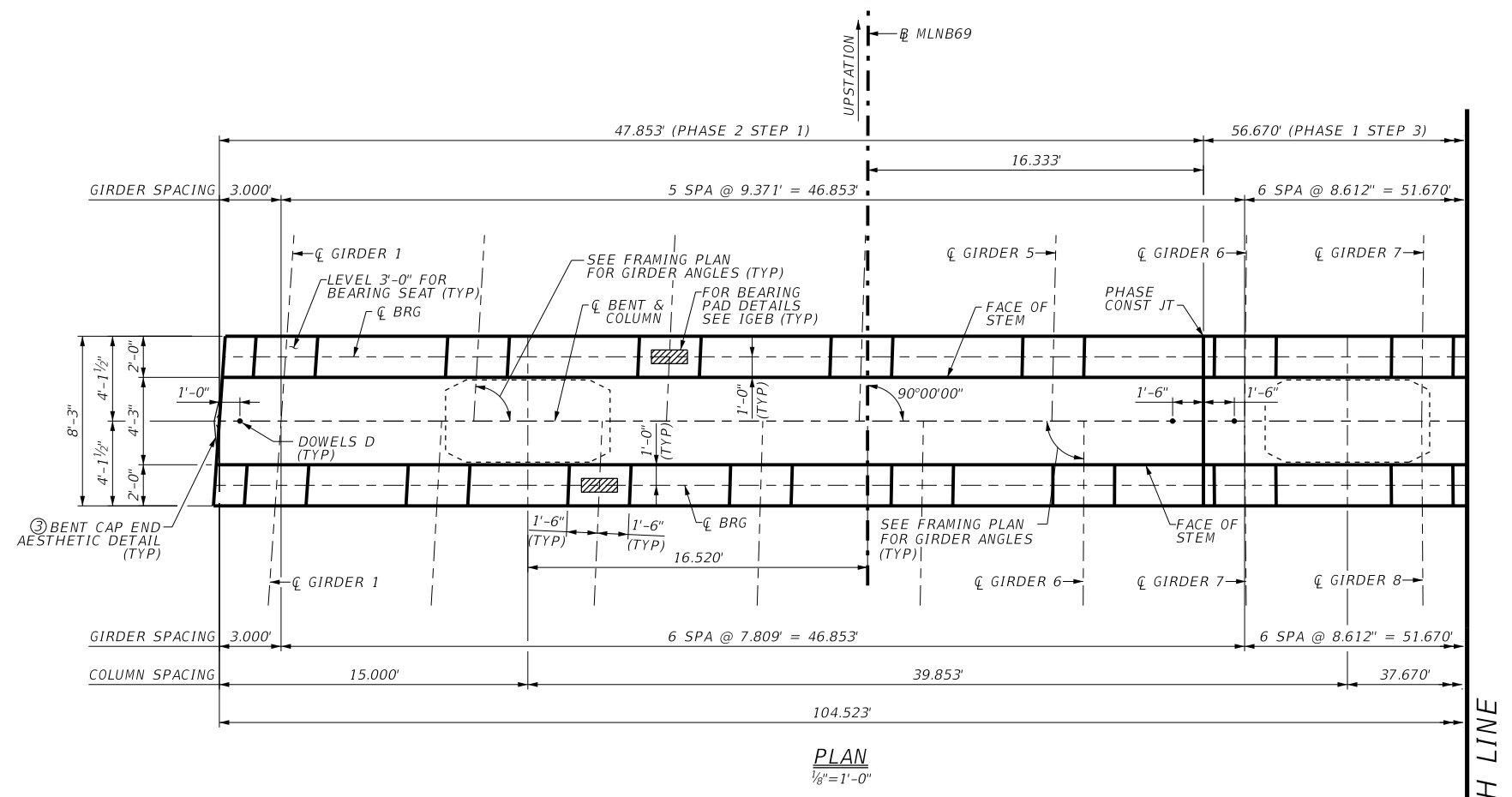
**IH 10 AT US 69
 BENT 29
 IH 10 EBML
 TO US 69 NB DC**

SHEET 2 OF 2

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1528				

DATE: 20-FEB-2024 22:43
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1529_10ML_10E-69N_BENTPE_30_1.dgn

- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 11 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR A, B, L & T BARS IN ACCORDANCE WITH ITEM 440, REINFORCEMENT FOR CONCRETE.



HL93 LOADING

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Texas Department of Transportation

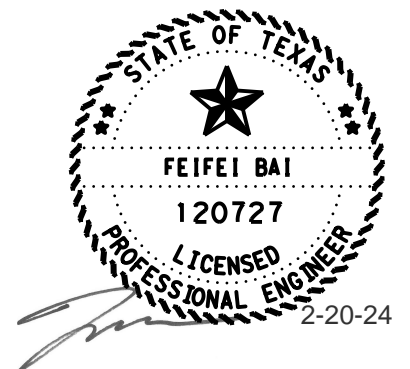
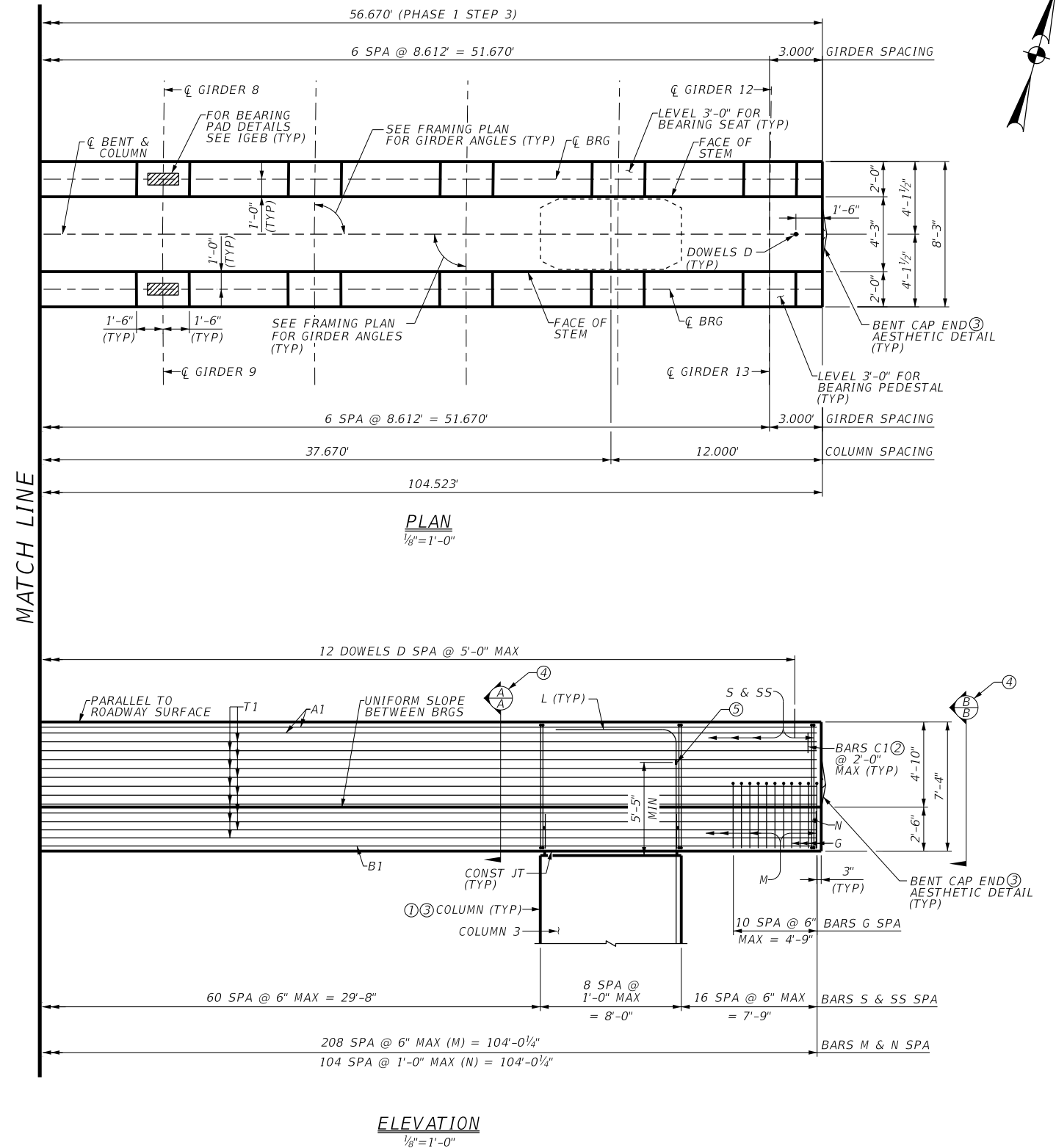
**IH 10 AT US 69
BENT 30
IH 10 EBML
TO US 69 NB DC**

SHEET 1 OF 2

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1529				

DATE: 21-FEB-2024 02:30
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1530_10ML_10E-69N_BENTPE_30_2.dgn

- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 11 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



HL93 LOADING

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 F-12679

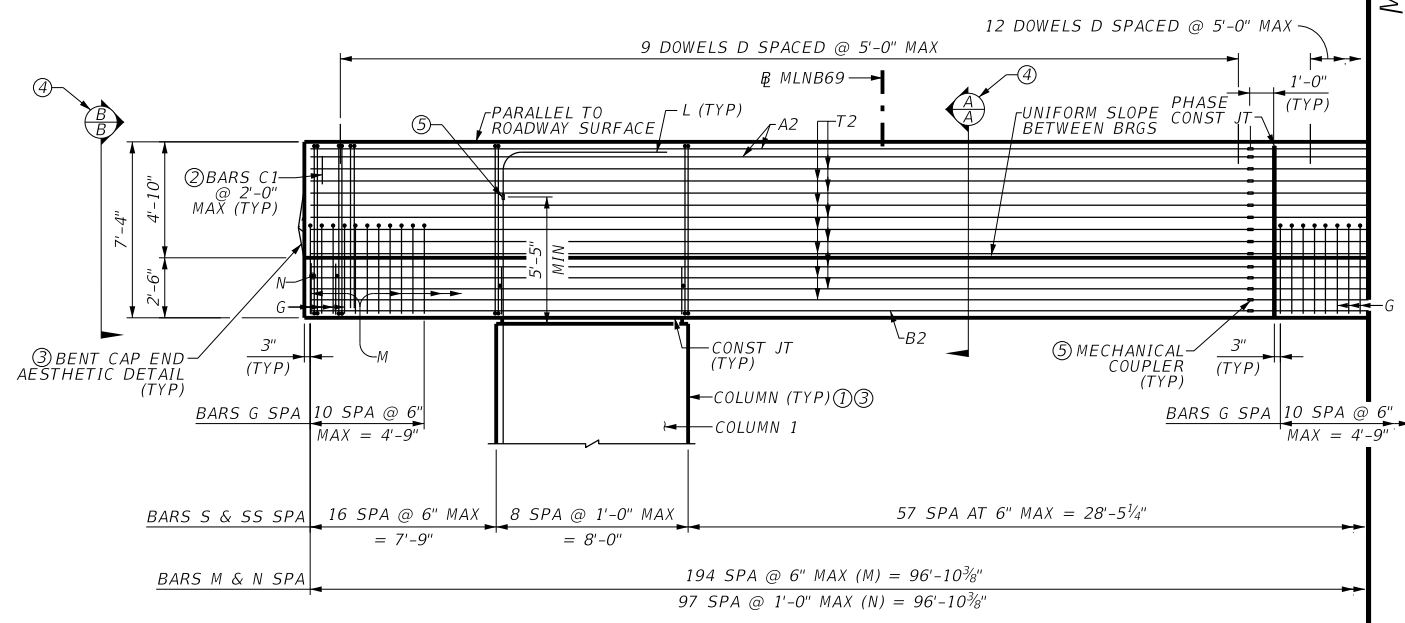
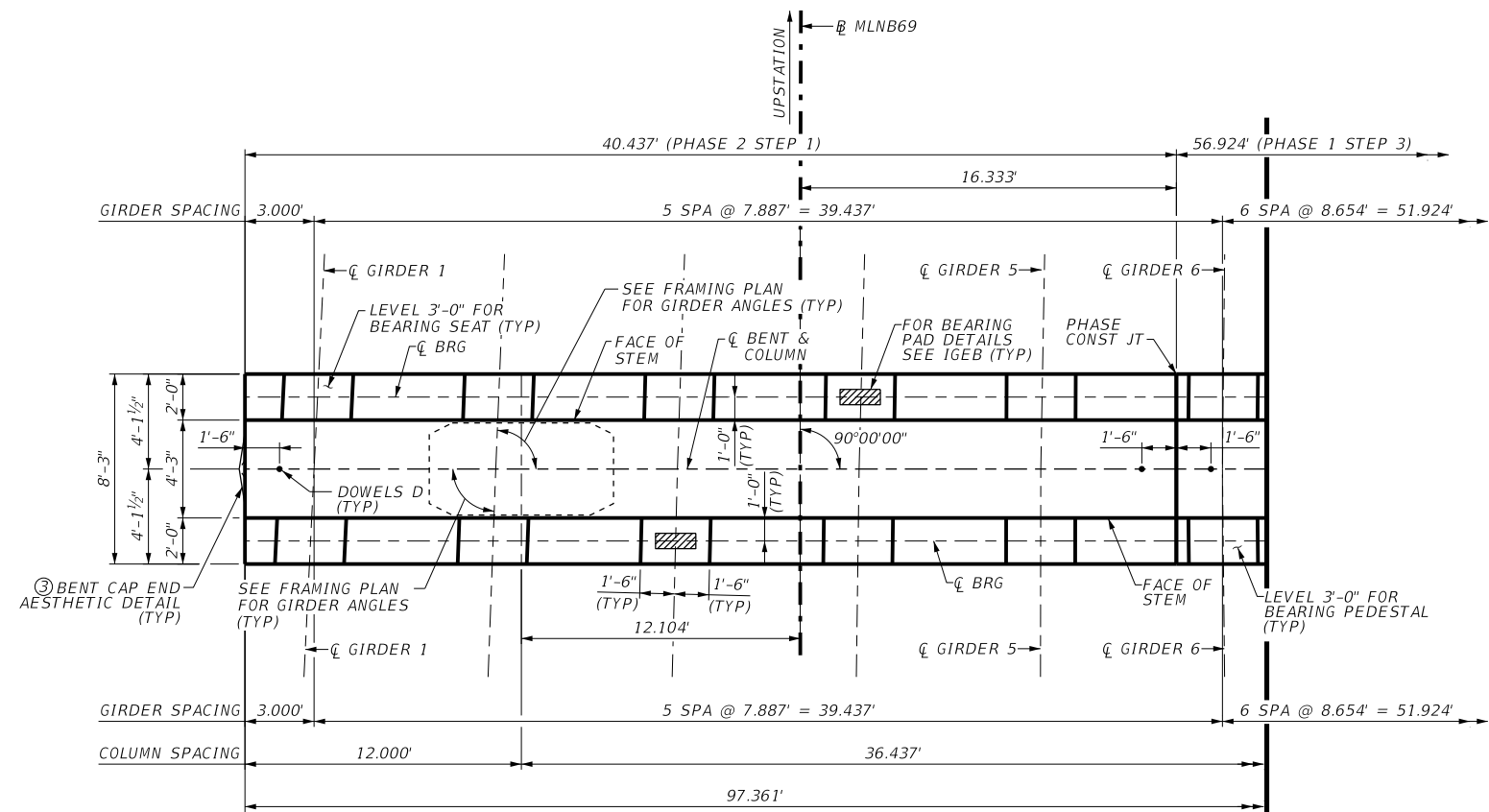
Texas Department of Transportation

IH 10 AT US 69
 BENT 30
 IH 10 EBML
 TO US 69 NB DC

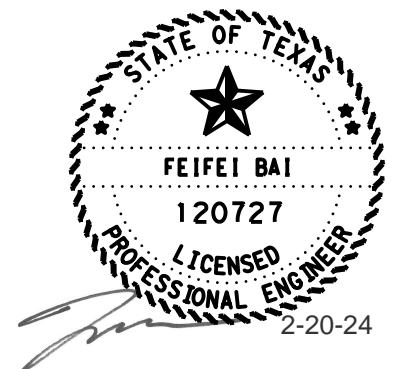
SHEET 2 OF 2

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1530			

DATE: 20-FEB-2024 22:49
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1531_10ML_10E-69N_BENTPE_31_1.dgn



- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 11 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR A, B, L & T BARS IN ACCORDANCE WITH ITEM 440, REINFORCEMENT FOR CONCRETE.



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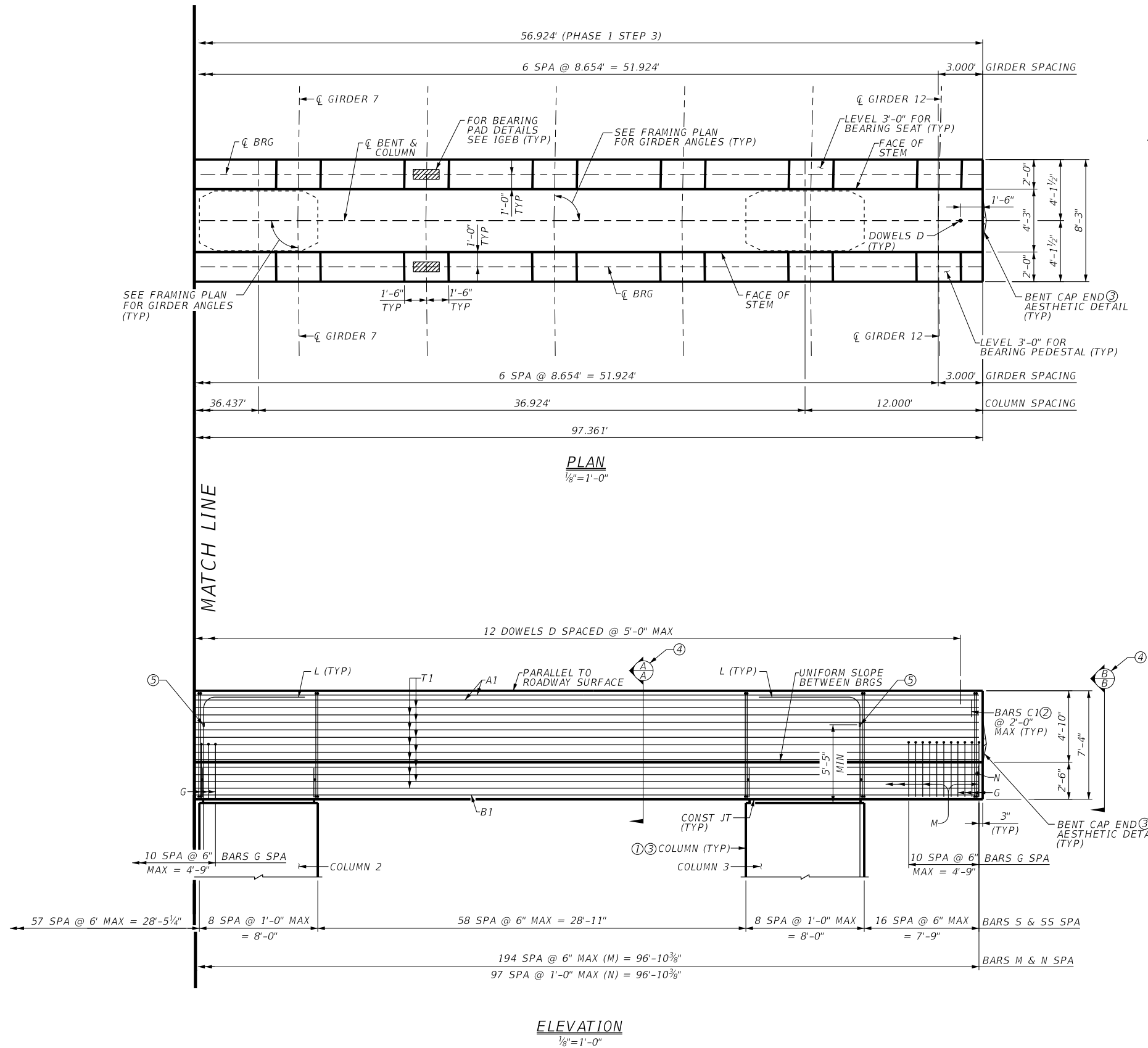
Texas Department of Transportation

**IH 10 AT US 69
 BENT 31
 IH 10 EBML
 TO US 69 NB DC**

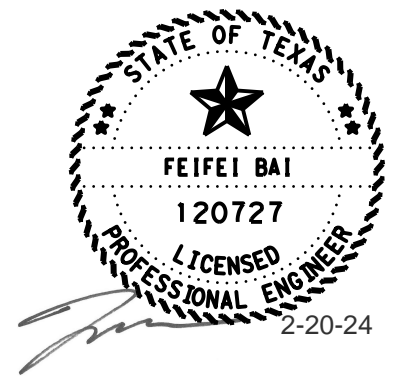
SHEET 1 OF 2

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1531	

DATE: 20-FEB-2024 22:44
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1532_10ML_10E-69N_BENTPE_31_2.dgn



- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 11 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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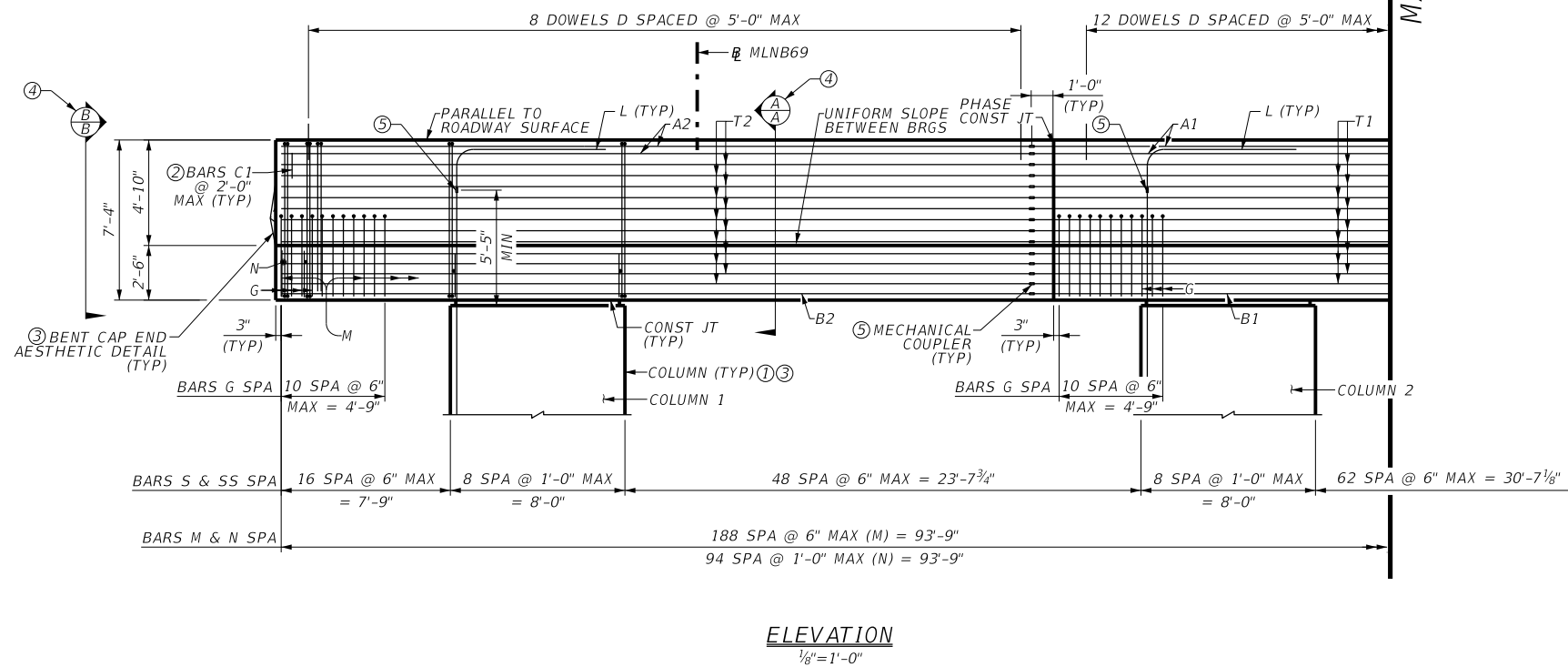
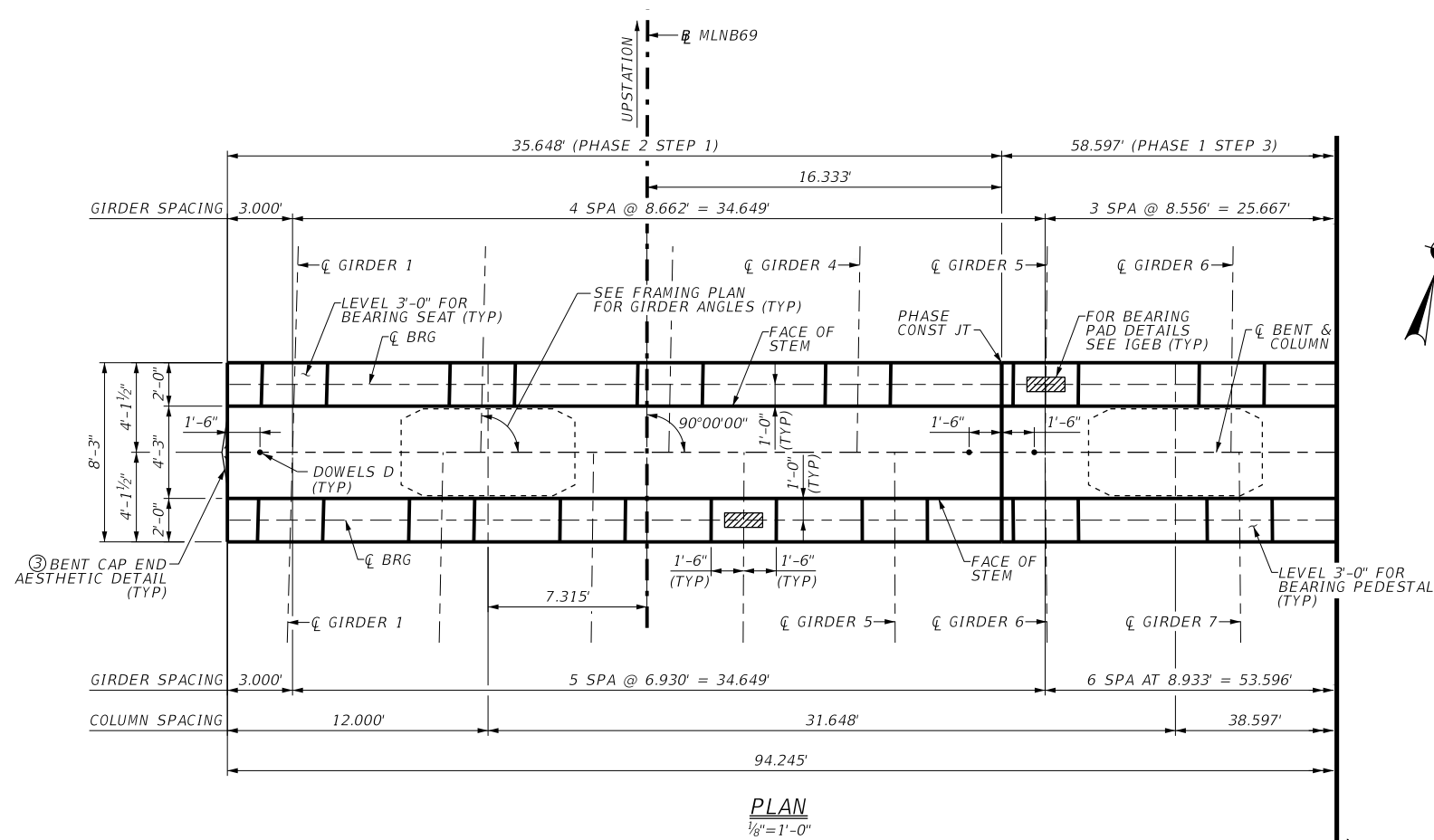


**IH 10 AT US 69
 BENT 31
 IH 10 EBML
 TO US 69 NB DC**

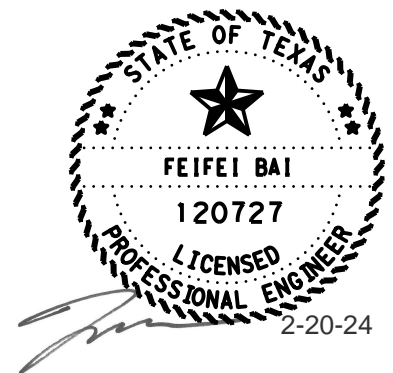
SHEET 2 OF 2

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1532				

DATE: 20-FEB-2024 22:49
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1533_10ML_10E-69N_BENTPE_32_1.dgn



- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BAR 5 FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 11 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR A, B, L & T BARS IN ACCORDANCE WITH ITEM 440, REINFORCEMENT FOR CONCRETE.



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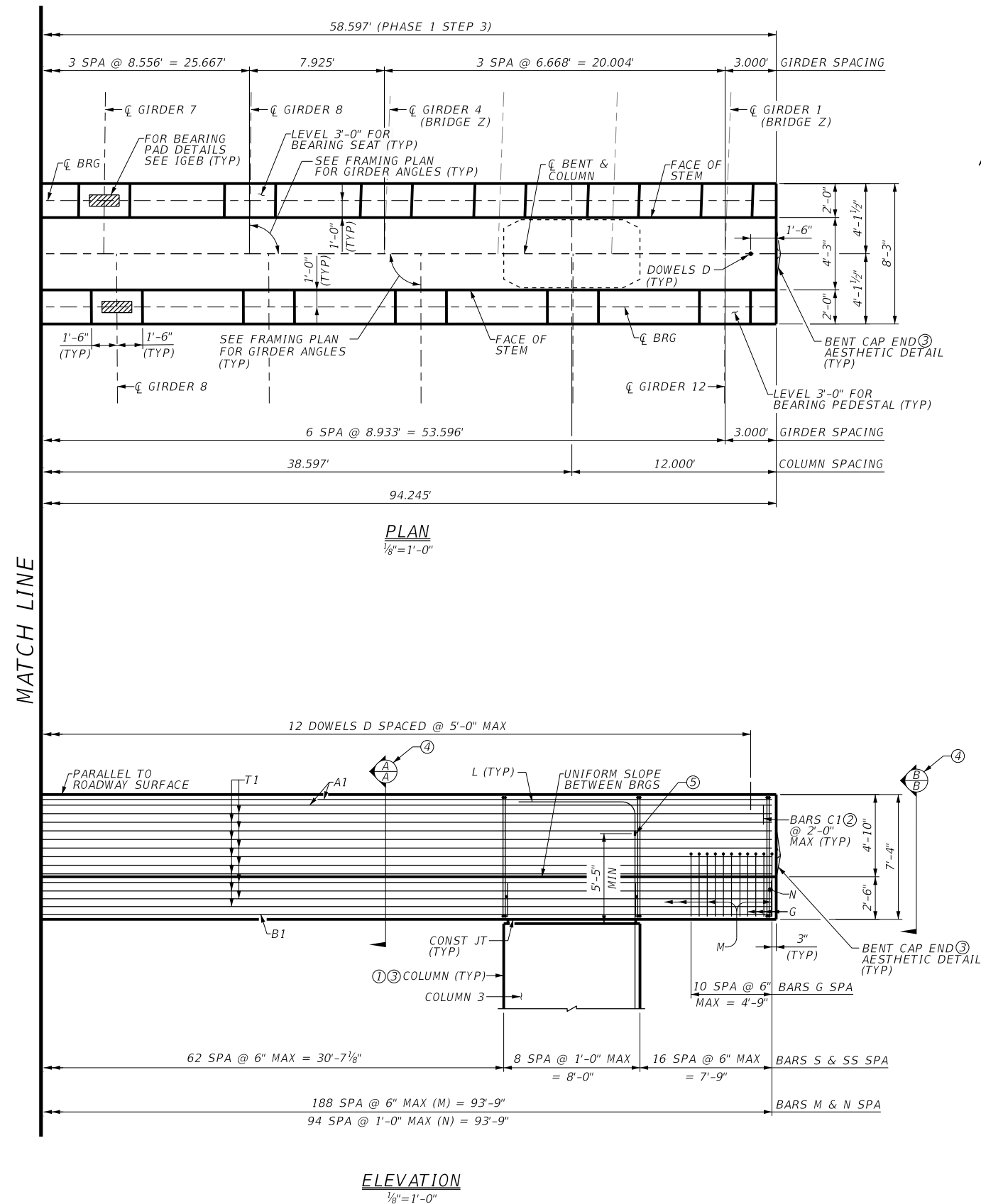


**IH 10 AT US 69
 BENT 32
 IH 10 EBML
 TO US 69 NB DC**

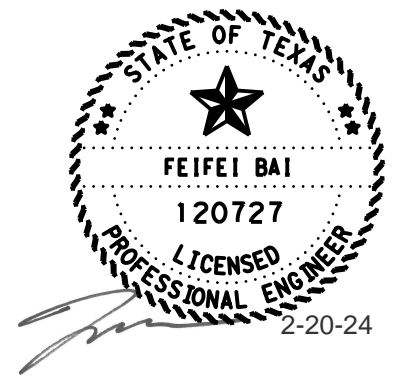
SHEET 1 OF 2

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST	COUNTY		SHEET NO.				
	BMT		JEFFERSON		1533		

DATE: 21-FEB-2024 01:52
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- ① SEE COLUMN TYPE H DETAILS SHEET FOR DETAILS NOT SHOWN.
- ② PLACE FIRST CAP BAR C1 AT SECOND BAR S FROM END OF CAP.
- ③ SEE "NON-FLARED COLUMN AESTHETIC DETAILS" SHEETS.
- ④ SEE "BENT DETAILS" SHEET 11 OF 18.
- ⑤ UTILIZE MECHANICAL COUPLERS FOR L BARS TO COUPLE WITH COLUMN V BARS IN ACCORDANCE WITH ITEM 440, "REINFORCING STEEL".



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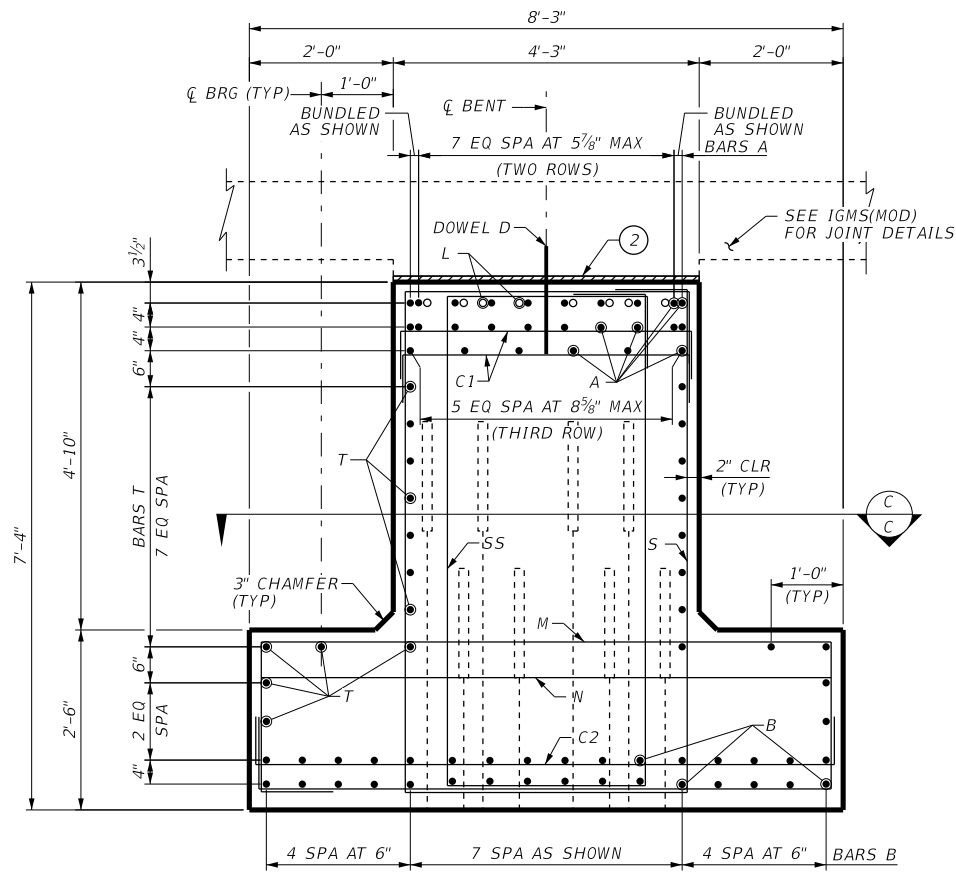
Texas Department of Transportation

**IH 10 AT US 69
 BENT 32
 IH 10 EBML
 TO US 69 NB DC**

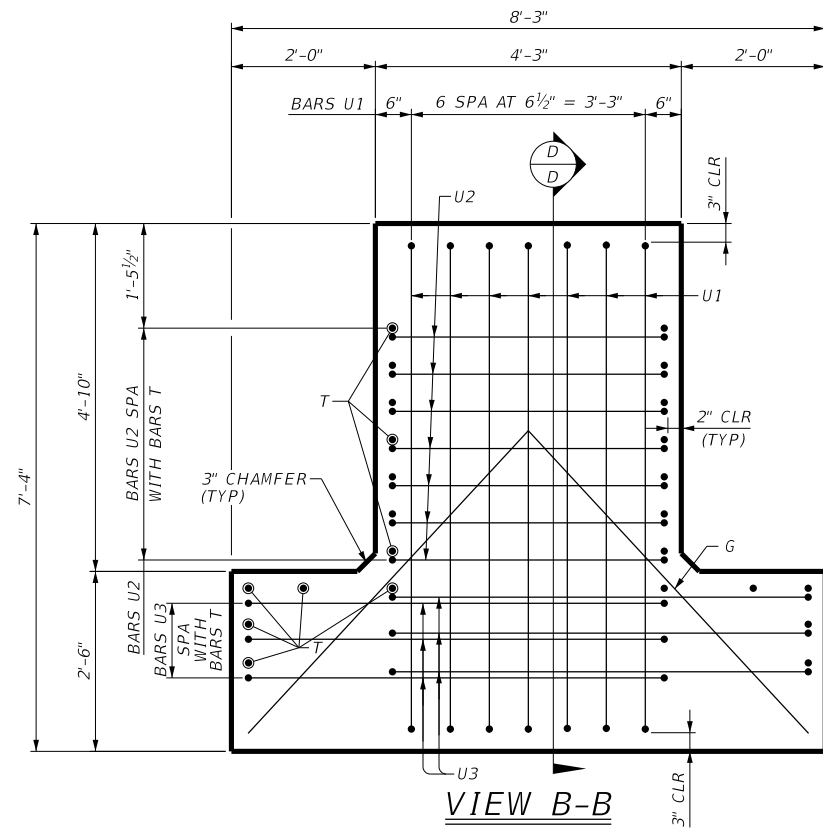
SHEET 2 OF 2

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1534		

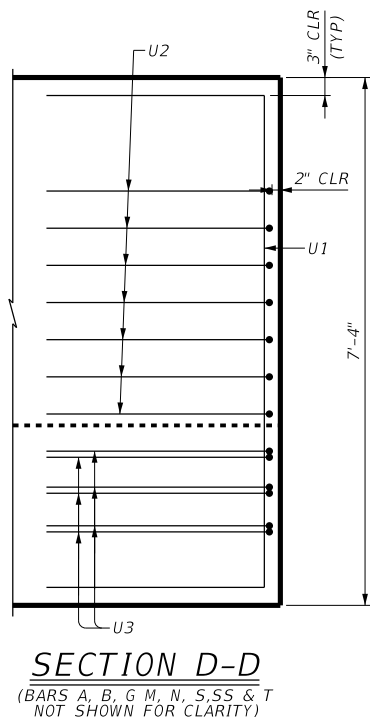
DATE: 20-FEB-2024 22:44
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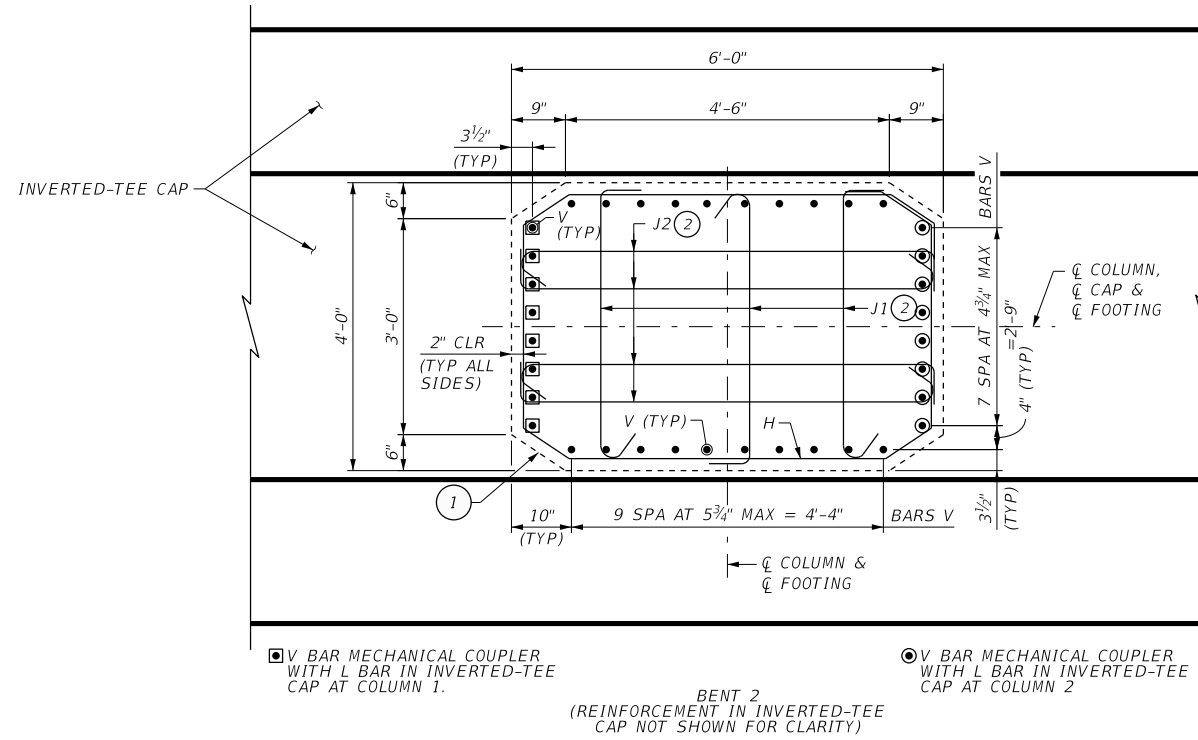
SECTION A-A



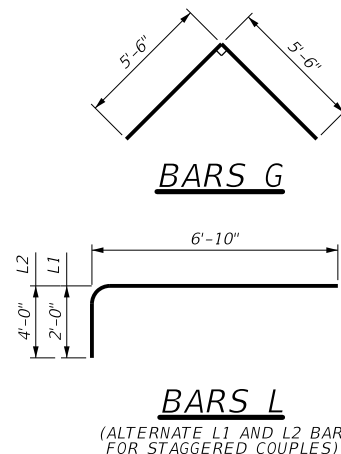
VIEW B-B



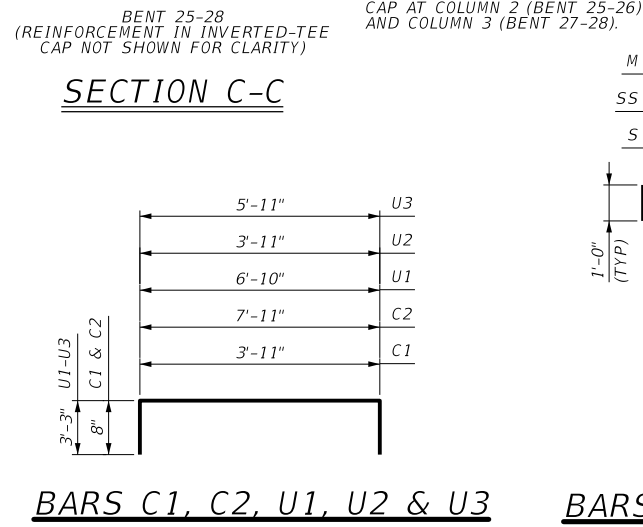
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



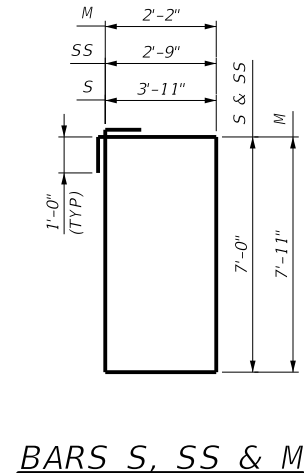
SECTION C-C



BARS L
 (ALTERNATE L1 AND L2 BAR FOR STAGGERED COUPLES)



BARS C1, C2, U1, U2 & U3



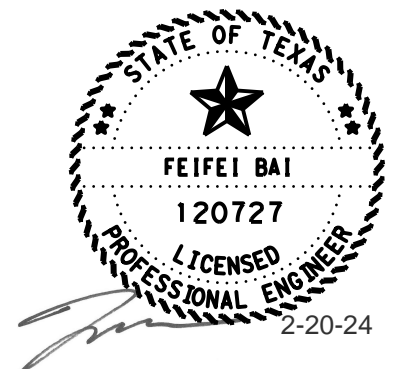
BARS S, SS & M

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE MANUAL (JAN 2023)
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE STRADDLE BENT COLUMN DETAILS SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.
 THIS DETAIL SHEET IS ONLY FOR BENTS 2 & 25-28.
 SEE BENT DETAILS SHEET OSB LEDGE FOR END VIEW F-F OF BENT 26.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.
 1 SEE STRADDLE BENT COLUMN DETAILS SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 2 SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN AND CAPITAL CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI. CAPITAL SHALL BE EXTERNALLY SUPPORTED DURING CASTING OF CAP UNTIL CAP CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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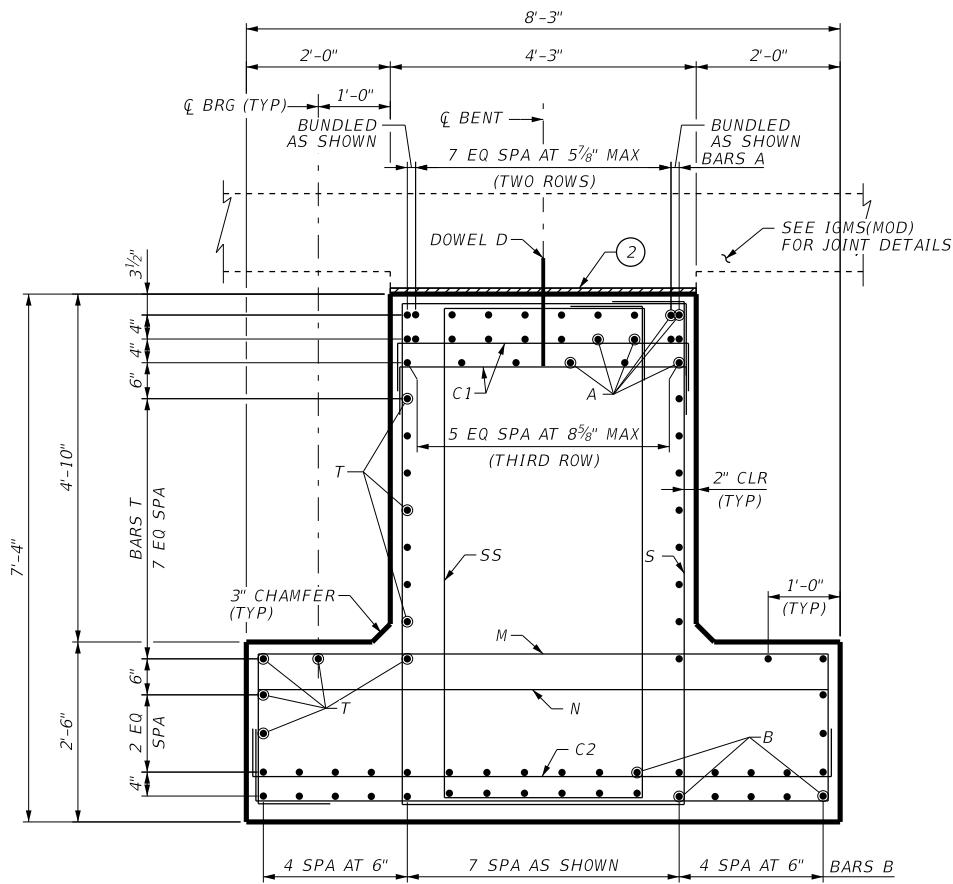
Texas Department of Transportation

IH 10 AT US 69 BENT DETAILS (2, 25-28) IH 10 EBML TO US 69 NB DC

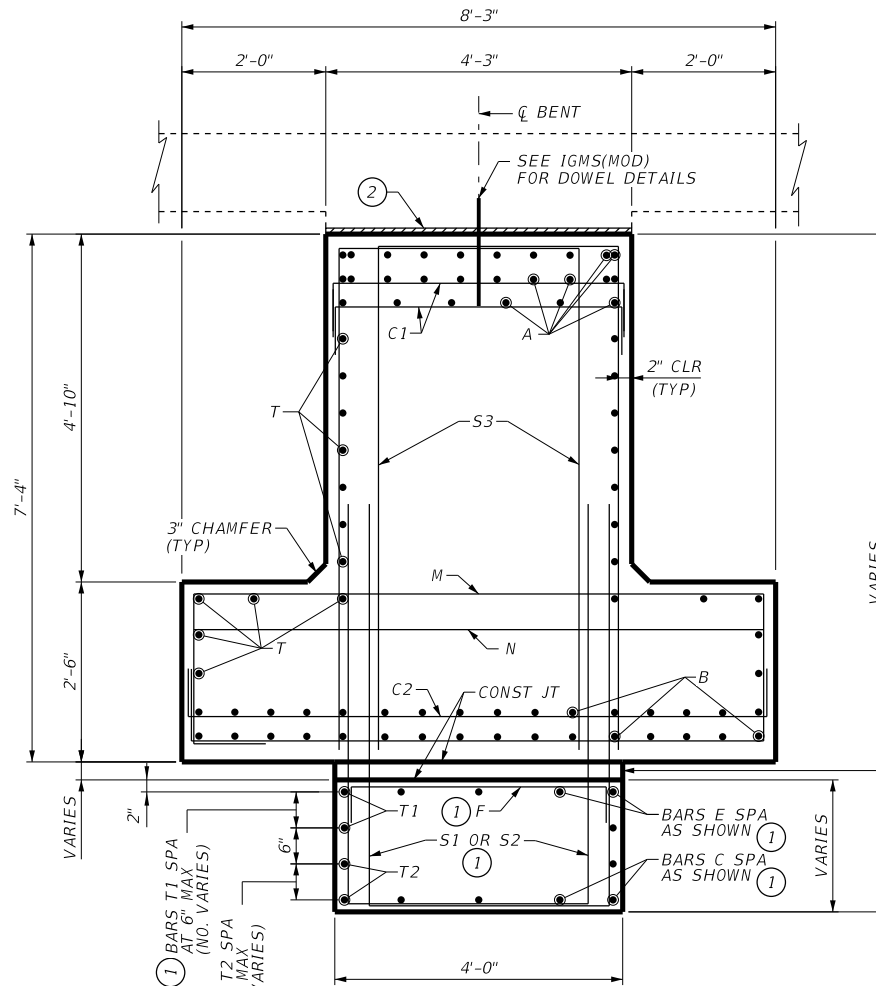
SHEET 1 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1535	

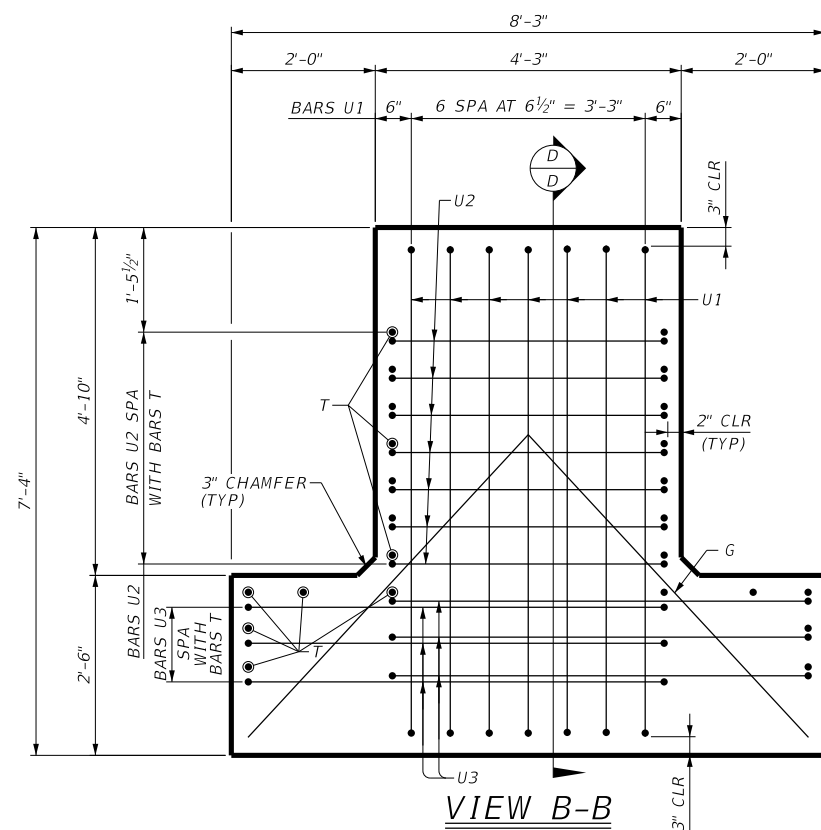
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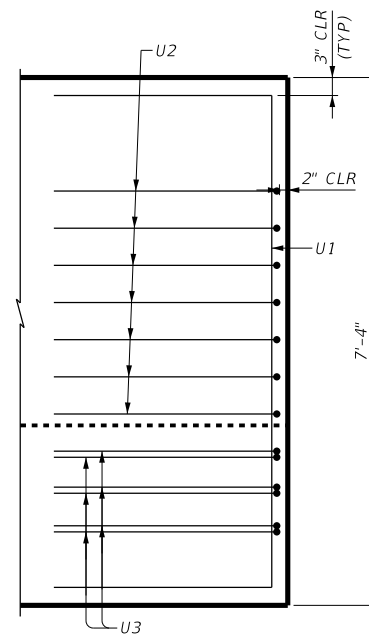
SECTION A-A



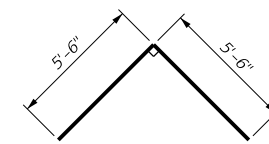
SECTION E-E



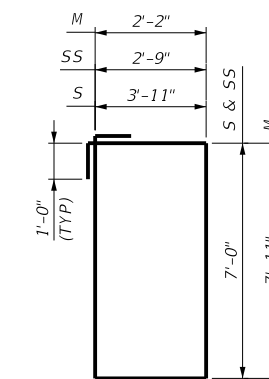
VIEW B-B



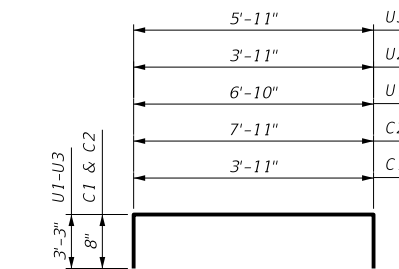
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



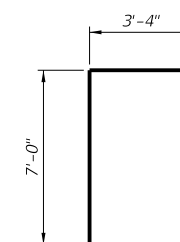
BARS G



BARS S, SS & M



BARS C1, C2, U1, U2 & U3



BARS S3

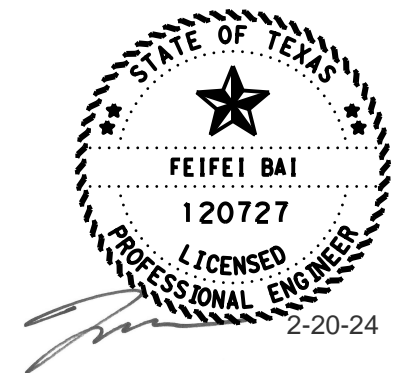
GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE MANUAL (JAN 2023)
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE COLUMN DETAILS SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.

MATERIAL NOTES:
 PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

- ① SEE COLUMN DETAILS TYPE C SHEETS FOR CAPITAL REINFORCEMENT DETAILS.
- ② SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN AND CAPITAL CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI. CAPITAL SHALL BE EXTERNALLY SUPPORTED DURING CASTING OF CAP UNTIL CAP CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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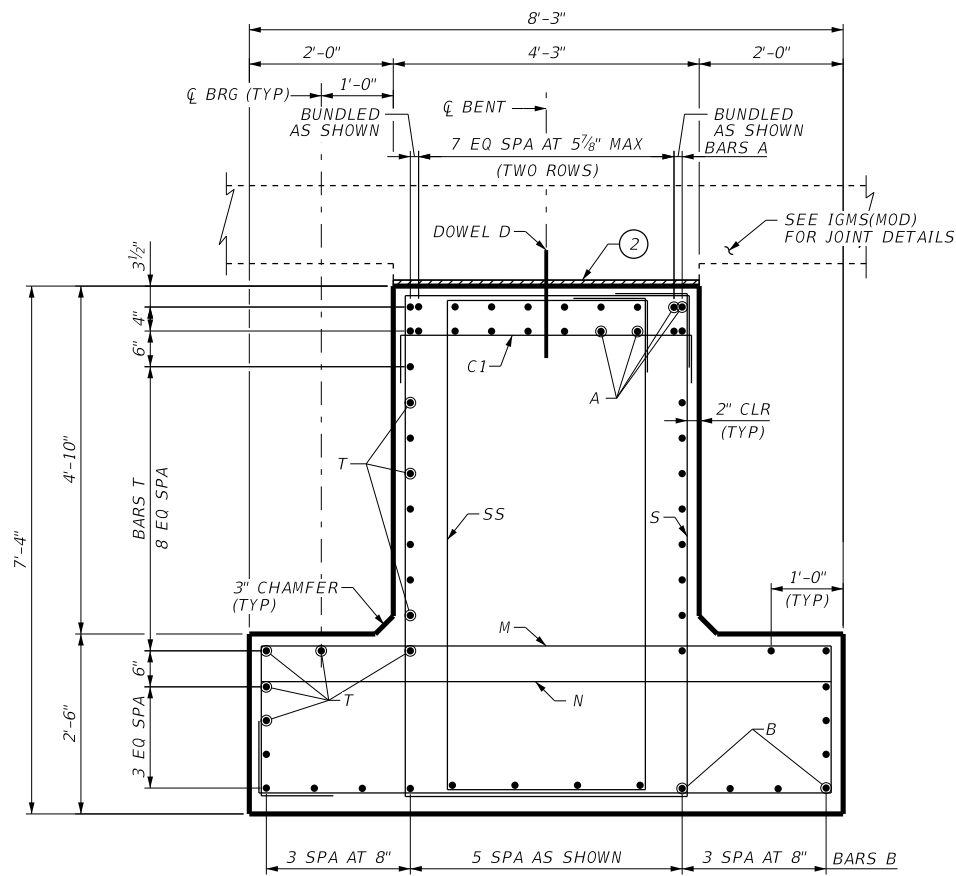


IH 10 AT US 69
 BENT 3 DETAILS
 IH 10 EBML
 TO US 69 NB DC

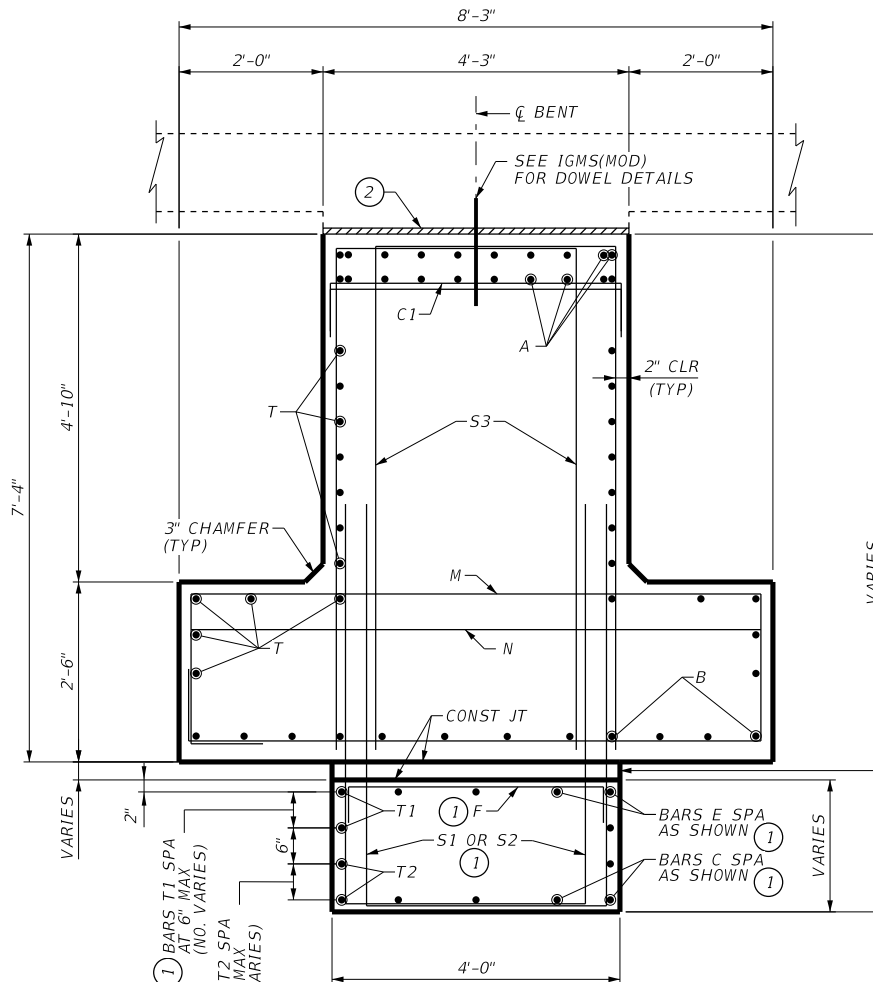
SHEET 2 OF 18

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1536		

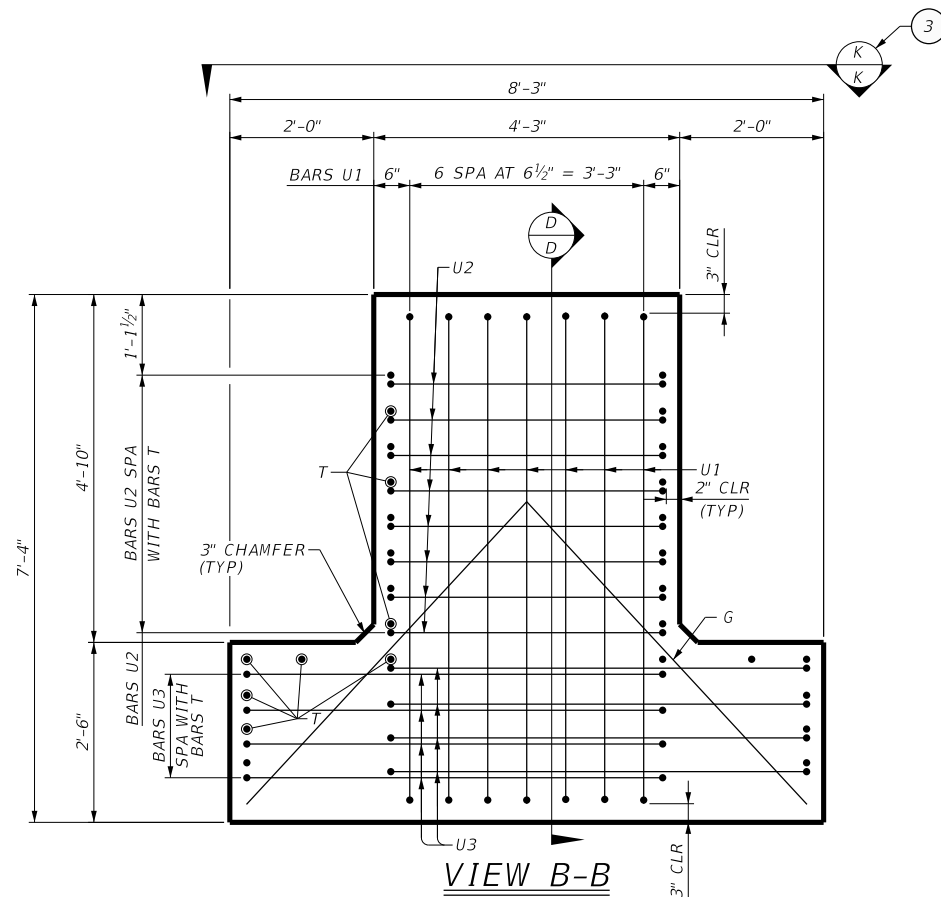
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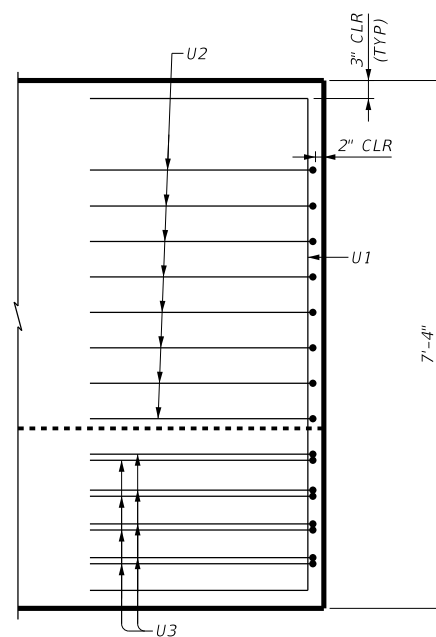
SECTION A-A



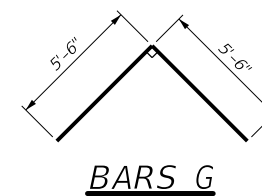
SECTION E-E



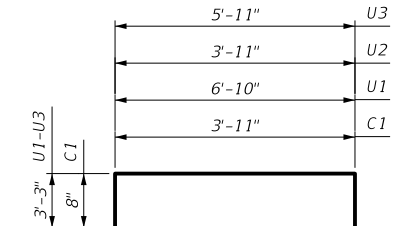
VIEW B-B



SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



BARS S, SS & M



BARS S3

GENERAL NOTES:

DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE MANUAL (JAN 2023)

SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.

SEE COLUMN DETAILS SHEETS FOR ALL COLUMN DETAILS AND NOTES.

SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.

SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.

MATERIAL NOTES:

PROVIDE CLASS C CONCRETE ($f'_c = 3,600$ PSI).

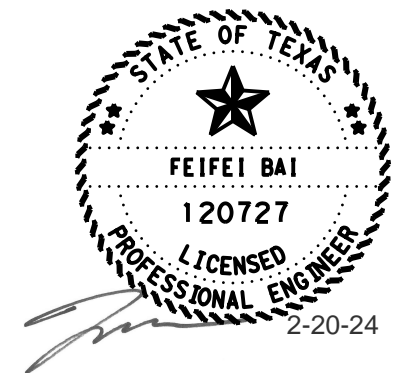
PROVIDE GRADE 60 REINFORCING STEEL.

- ① SEE COLUMN DETAILS TYPE D SHEETS FOR CAPITAL REINFORCEMENT DETAILS.
- ② SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.
- ③ SEE BENT DETAILS OSB LEDGE FOR VIEW K-K AND OVERHEAD SIGN SUPPORT ANCHORAGE DETAILS.

CONTRACTOR NOTE:

INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN AND CAPITAL CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI. CAPITAL SHALL BE EXTERNALLY SUPPORTED DURING CASTING OF CAP UNTIL CAP CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE. REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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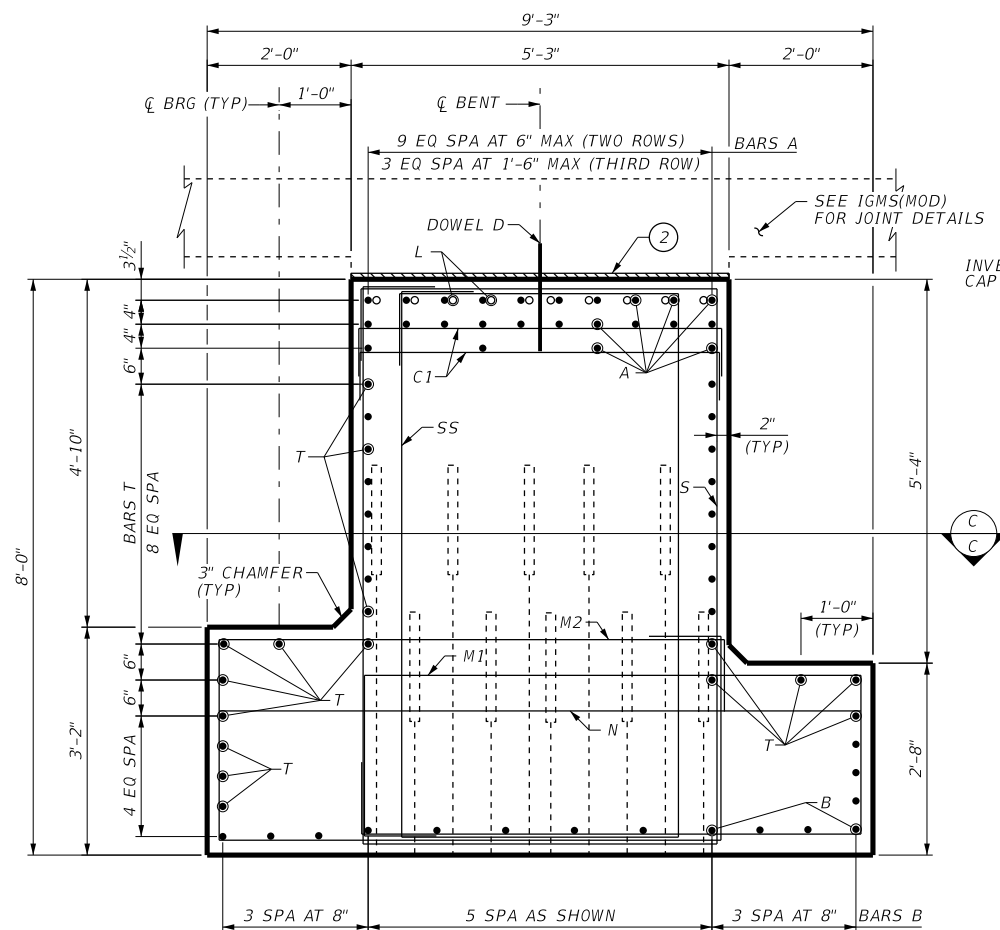


**IH 10 AT US 69
 BENT DETAILS
 (4-6)
 IH 10 EBML
 TO US 69 NB DC**

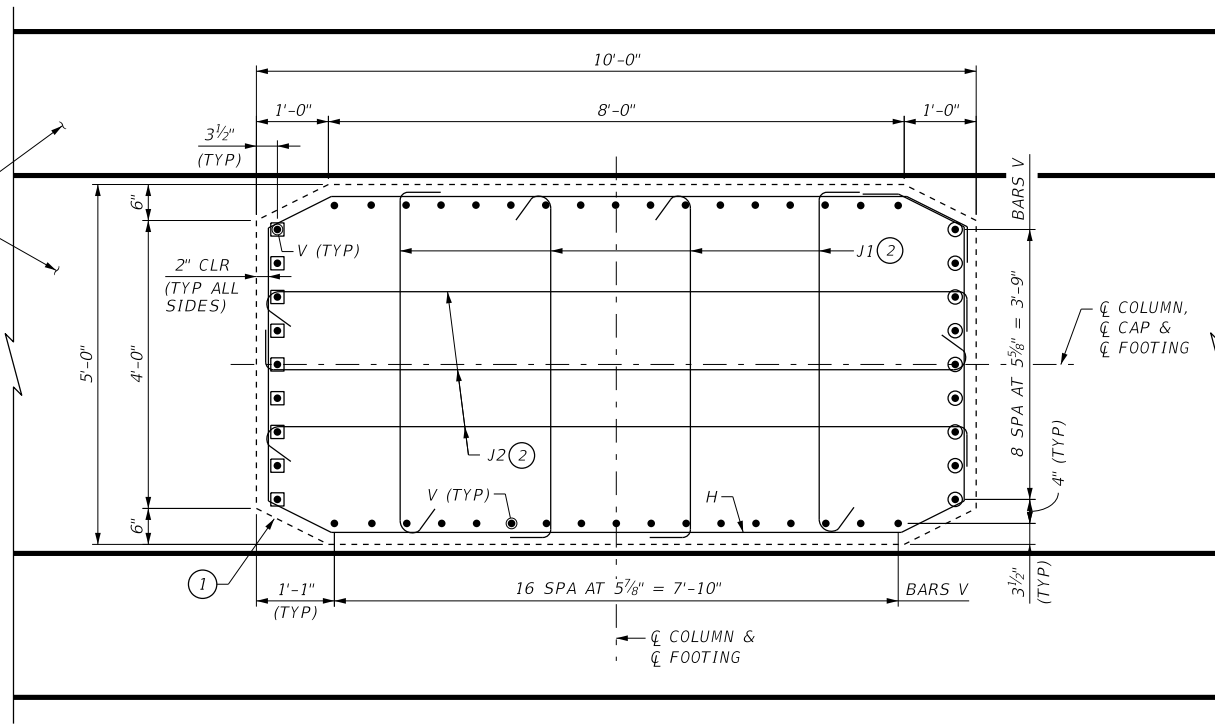
SHEET 3 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1537	

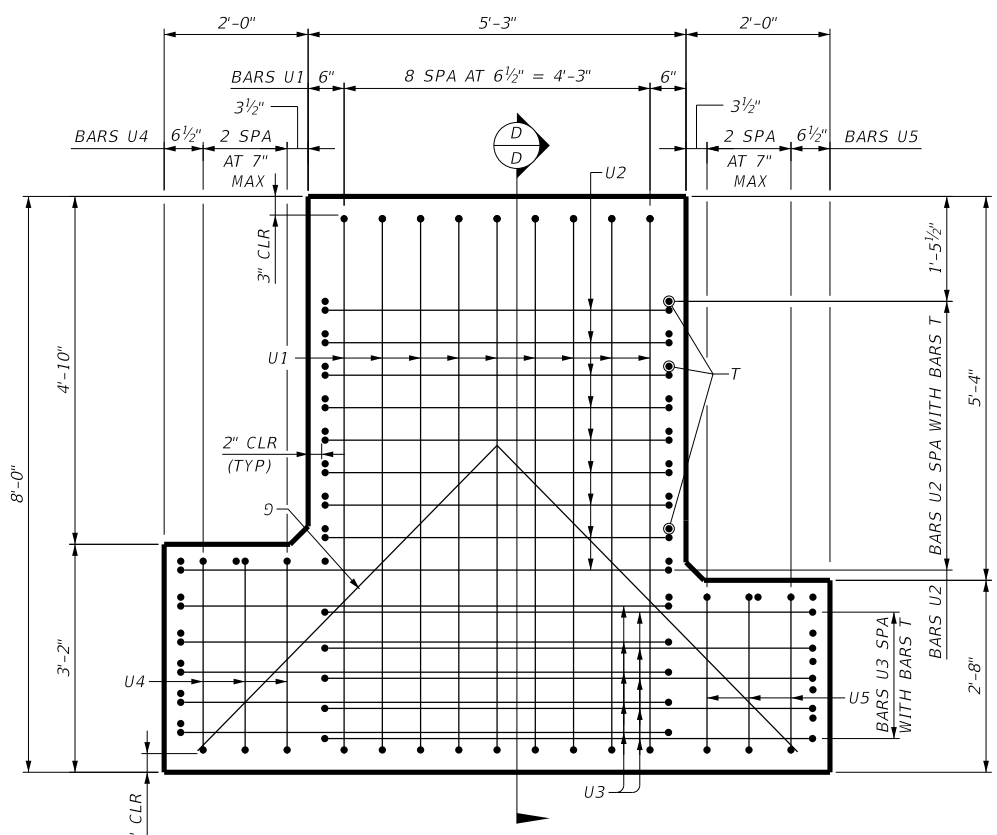
DATE: 20-FEB-2024 22:45
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10E-69N_BENT_DET_04.dgn



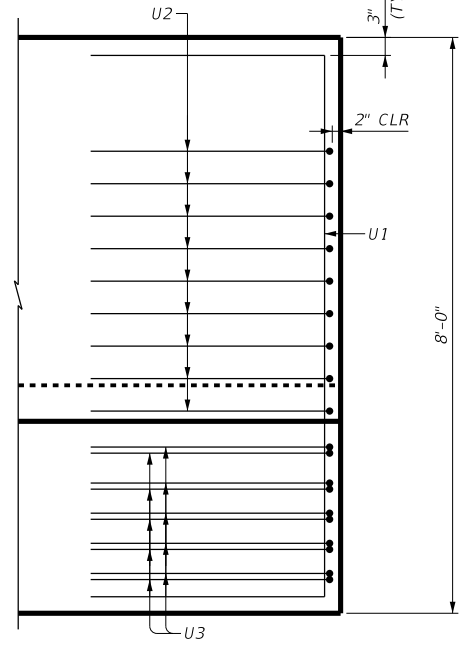
SECTION A-A



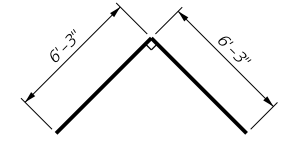
SECTION C-C
 (REINFORCEMENT IN INVERTED-TEE CAP NOT SHOWN FOR CLARITY)



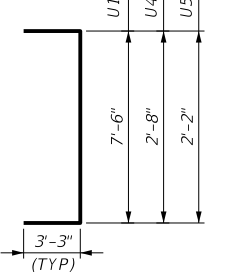
VIEW B-B



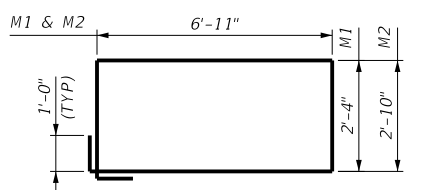
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



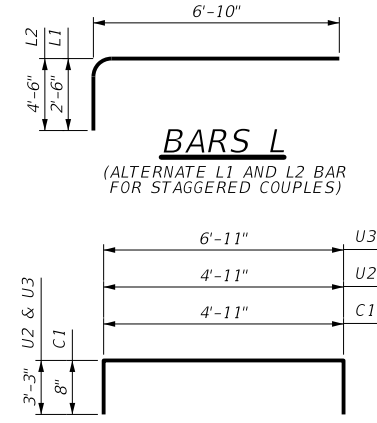
BARS G



BARS U1, U4 & U5

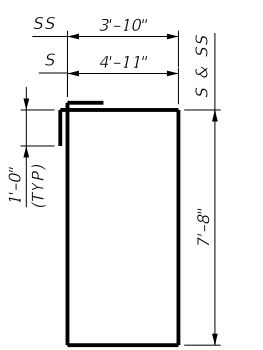


BARS M1 & M2



BARS L

BARS C1, U2 & U3



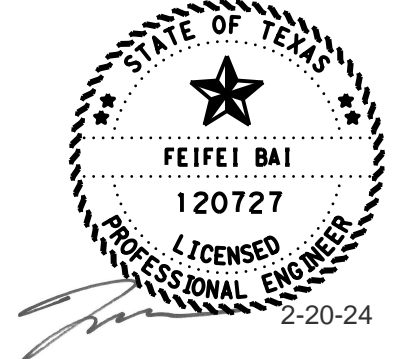
BARS S & SS

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE MANUAL (JAN 2023)
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE STRADDLE BENT COLUMN DETAILS SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.
 ① SEE COLUMN DETAILS TYPE J SHEETS FOR ALL COLUMN DETAILS AND NOTES.
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CONTRACTOR NOTE:
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COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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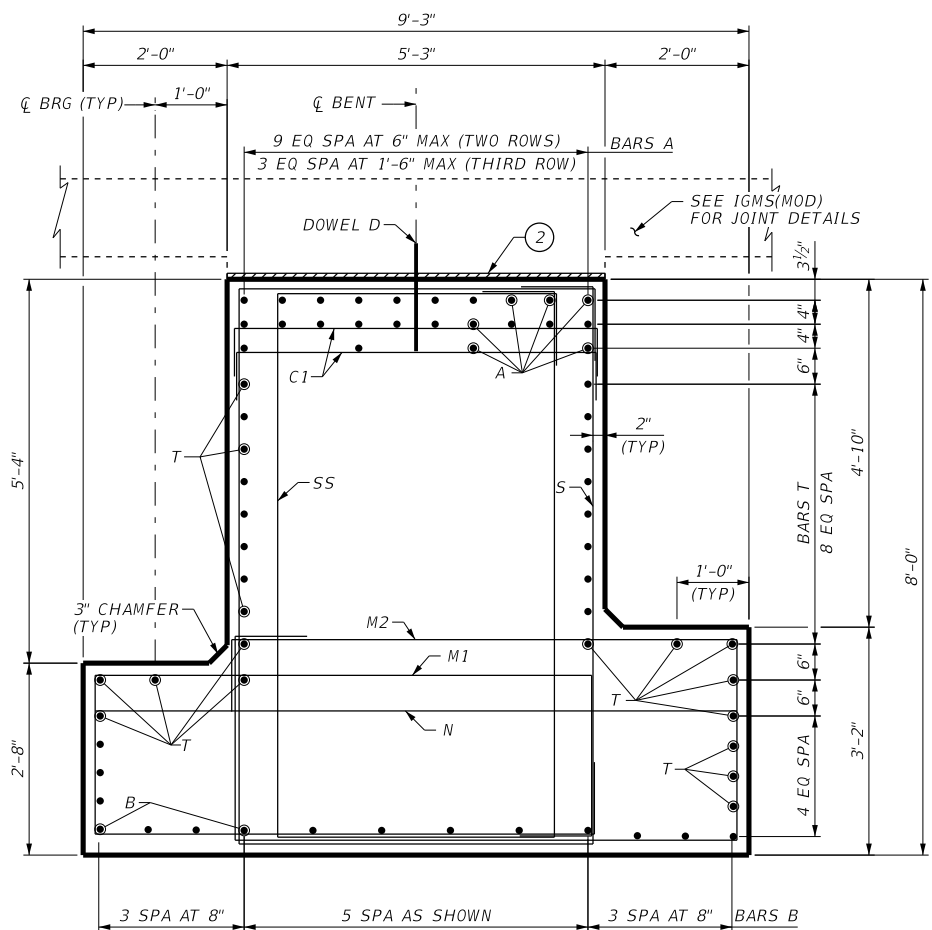
Texas Department of Transportation

**IH 10 AT US 69 BENT 7 DETAILS
 IH 10 EBML TO US 69 NB DC**

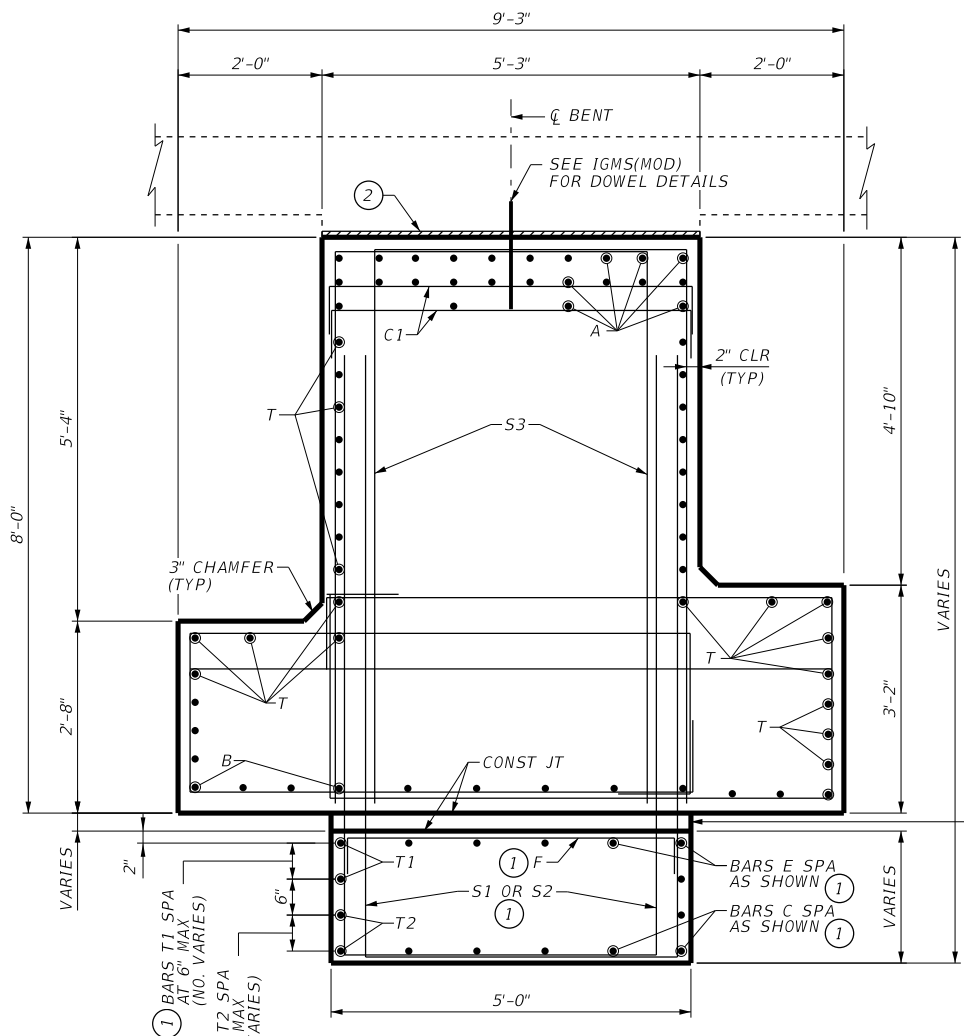
SHEET 4 OF 18

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT:		SECT:		JOB:		HIGHWAY:	
	0028		13		135		IH 10
DIST:		COUNTY:		SHEET NO.:			
	BMT		JEFFERSON				1538

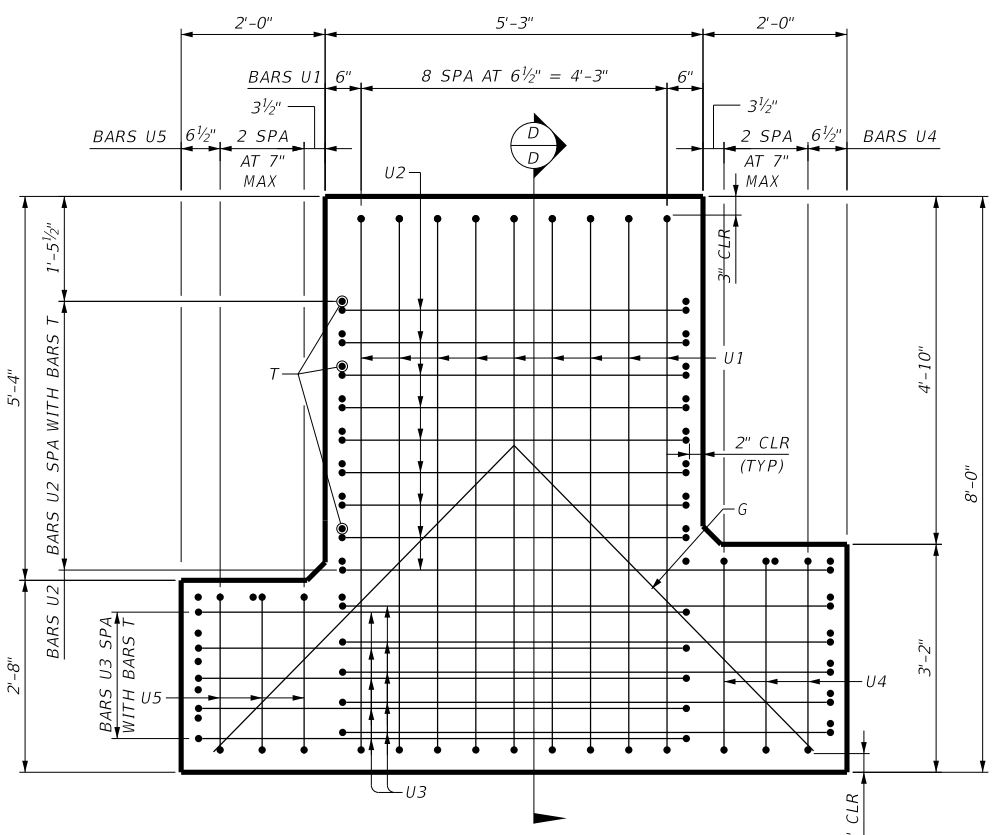
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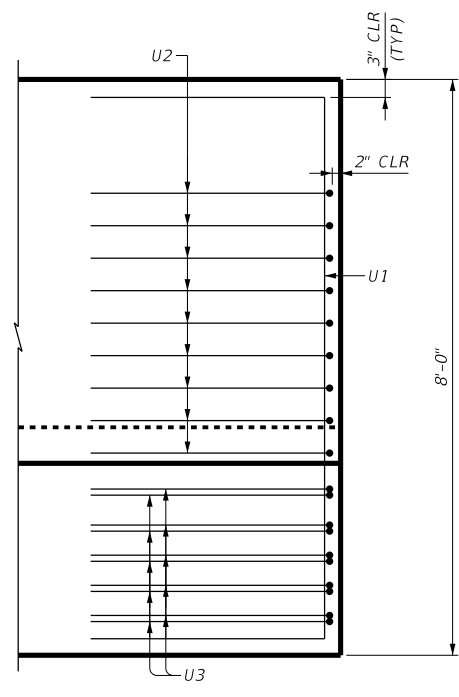
SECTION A-A



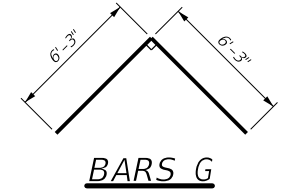
SECTION E-E



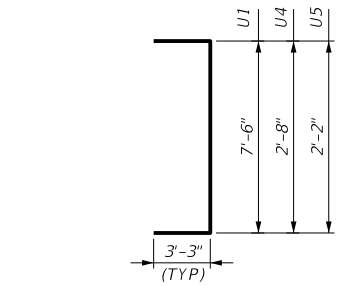
VIEW B-B



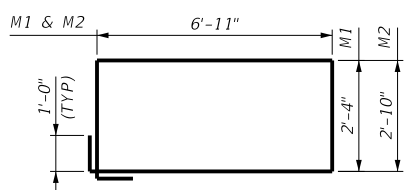
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



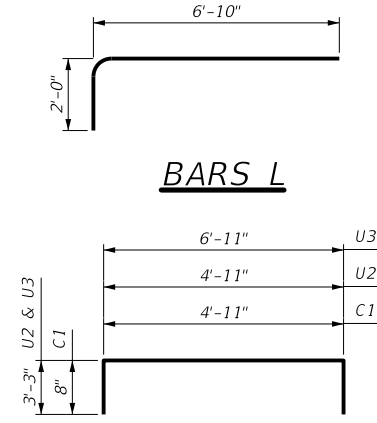
BARS G



BARS U1, U4 & U5

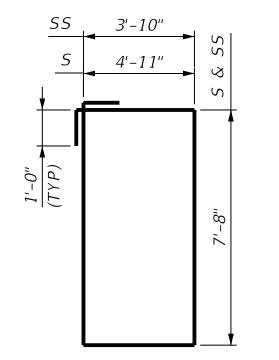


BARS M1 & M2



BARS L

BARS C1, U2 & U3



BARS S, SS & M

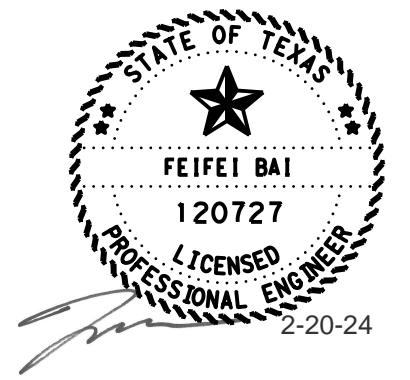
GENERAL NOTES:
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 SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.

MATERIAL NOTES:
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 PROVIDE GRADE 60 REINFORCING STEEL.
 ① SEE COLUMN DETAILS TYPE J SHEETS FOR ALL COLUMN DETAILS AND NOTES.
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PLINTH REINFORCEMENT NOT SHOWN FOR CLARITY



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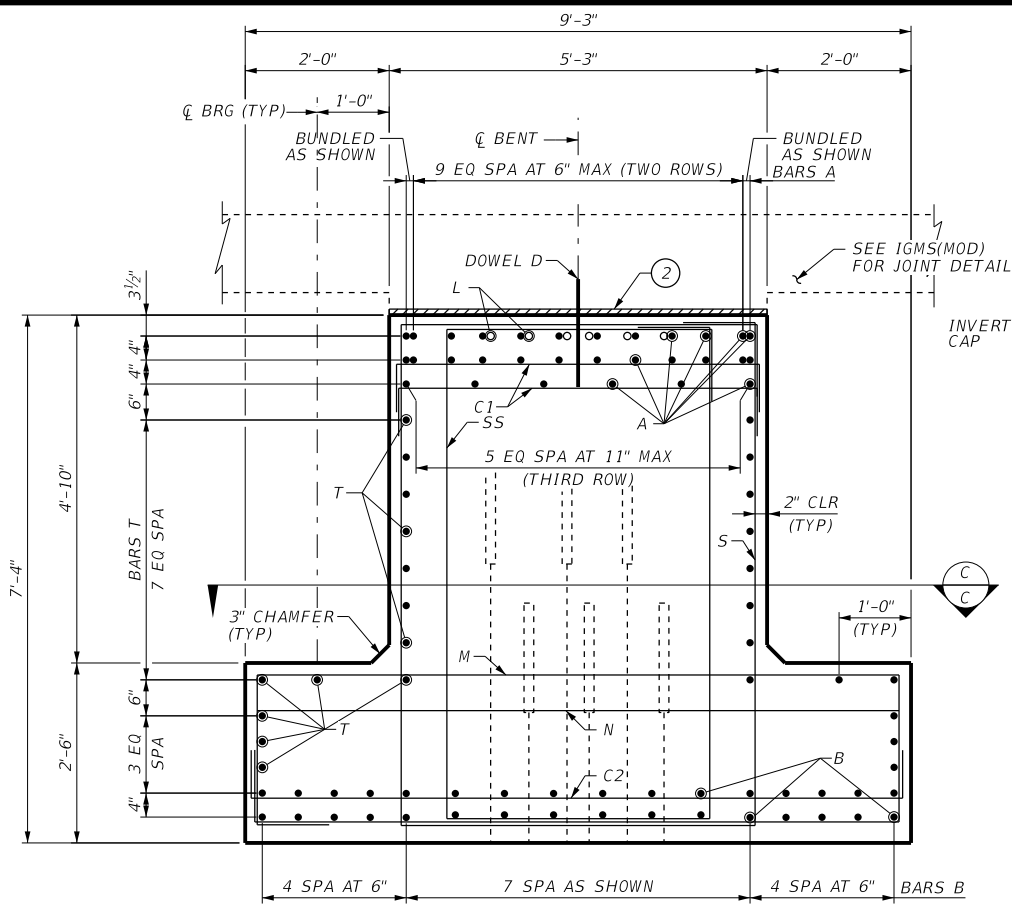
Texas Department of Transportation

IH 10 AT US 69 BENT 10 DETAILS TO US 69 NB DC

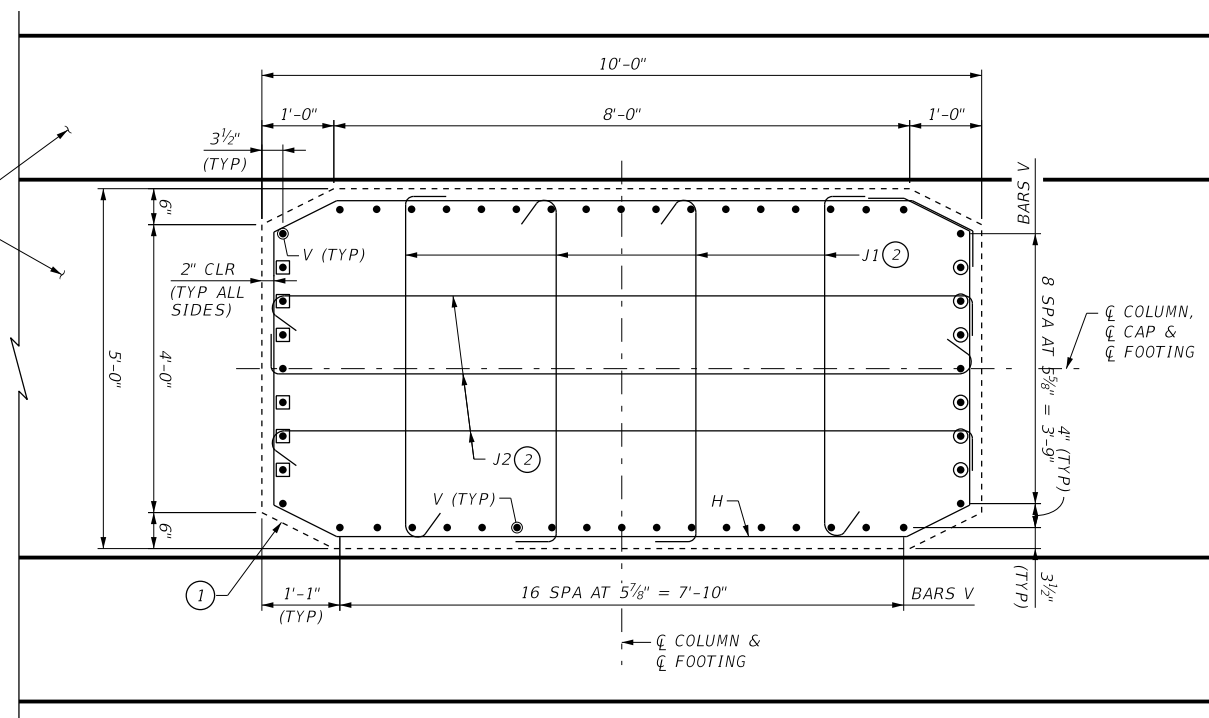
SHEET 5 OF 18

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1539

DATE: 20-FEB-2024 22:45
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1541_10ML_10E-69N_BENT_DET_07.dgn

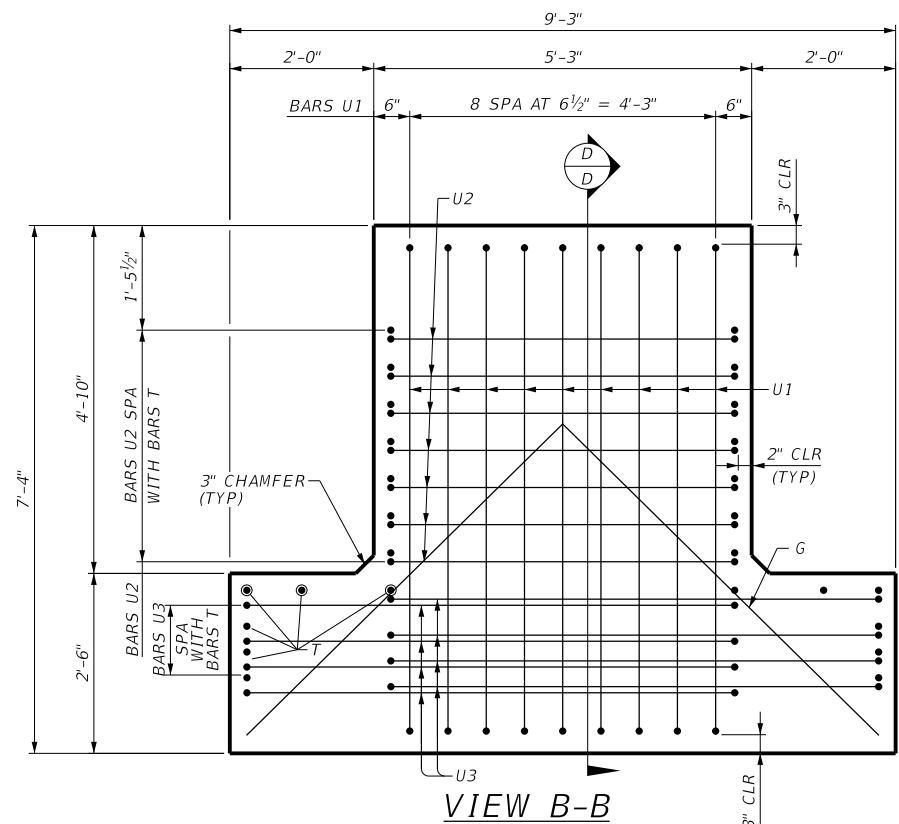


SECTION A-A

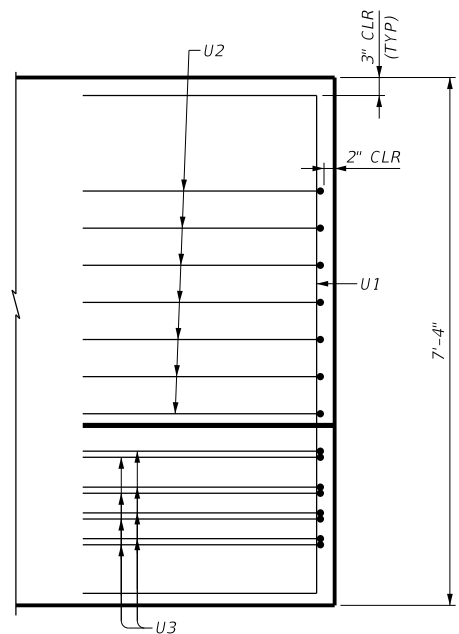


SECTION C-C

(REINFORCEMENT IN INVERTED-TEE CAP NOT SHOWN FOR CLARITY)

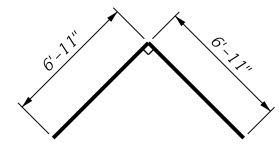


VIEW B-B

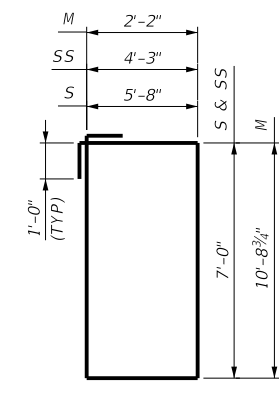


SECTION D-D

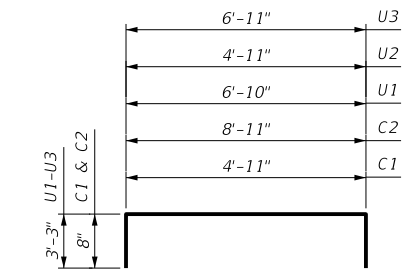
(BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



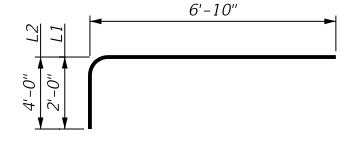
BARS G



BARS S, SS & M



BARS C1, C2, U1, U2 & U3



BARS L

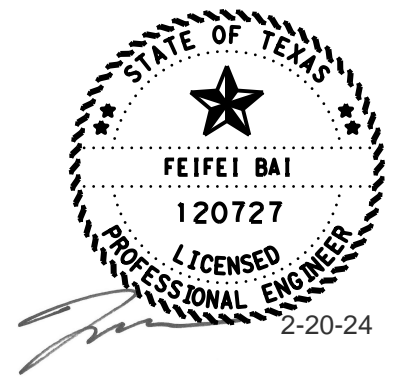
(ALTERNATE L1 AND L2 BAR FOR STAGGERED COUPLES)

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE MANUAL (JAN 2023)
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 SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.
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 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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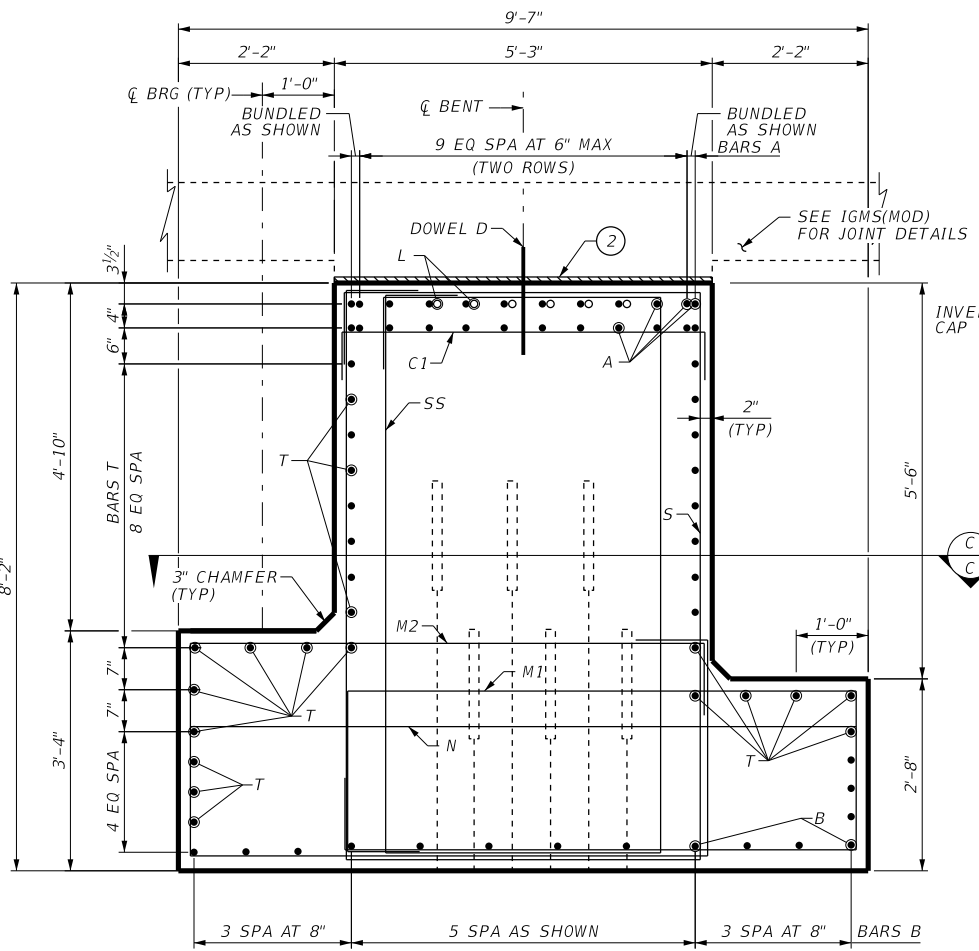
Texas Department of Transportation

**IH 10 AT US 69
 BENT 19 DETAILS
 IH 10 EBML
 TO US 69 NB DC**

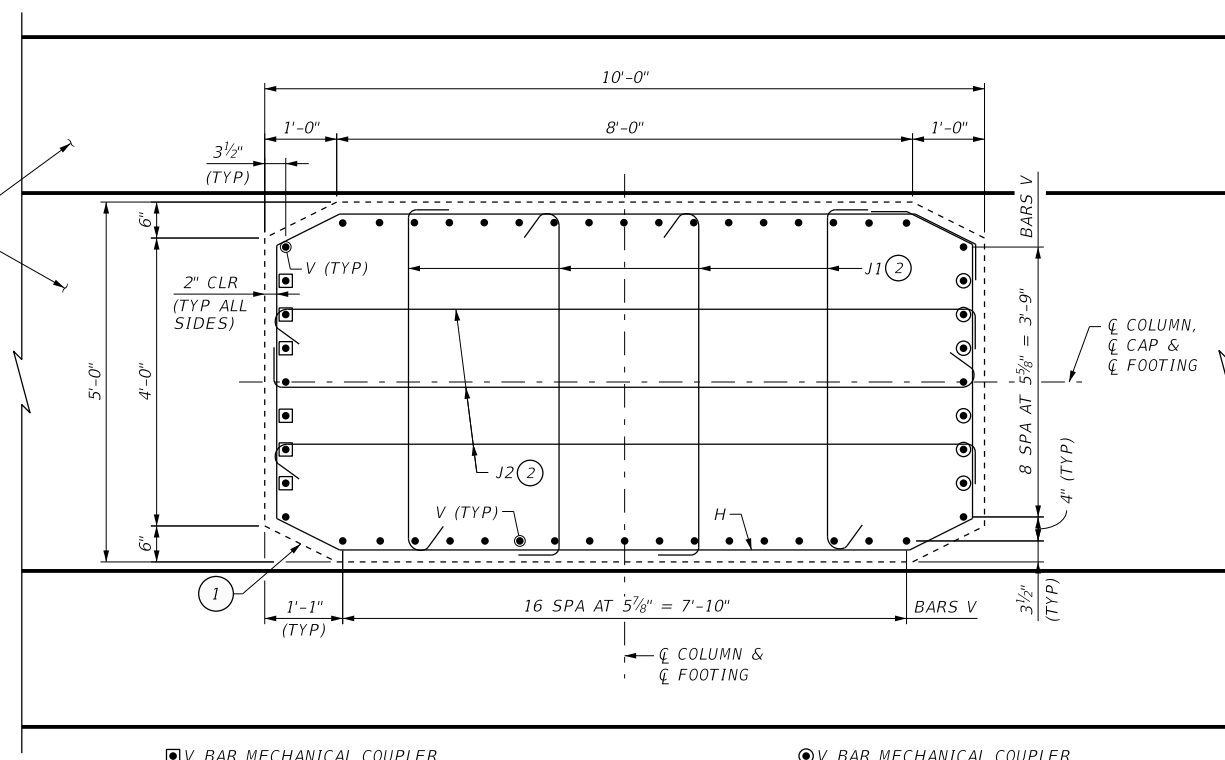
SHEET 7 OF 18

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1541		

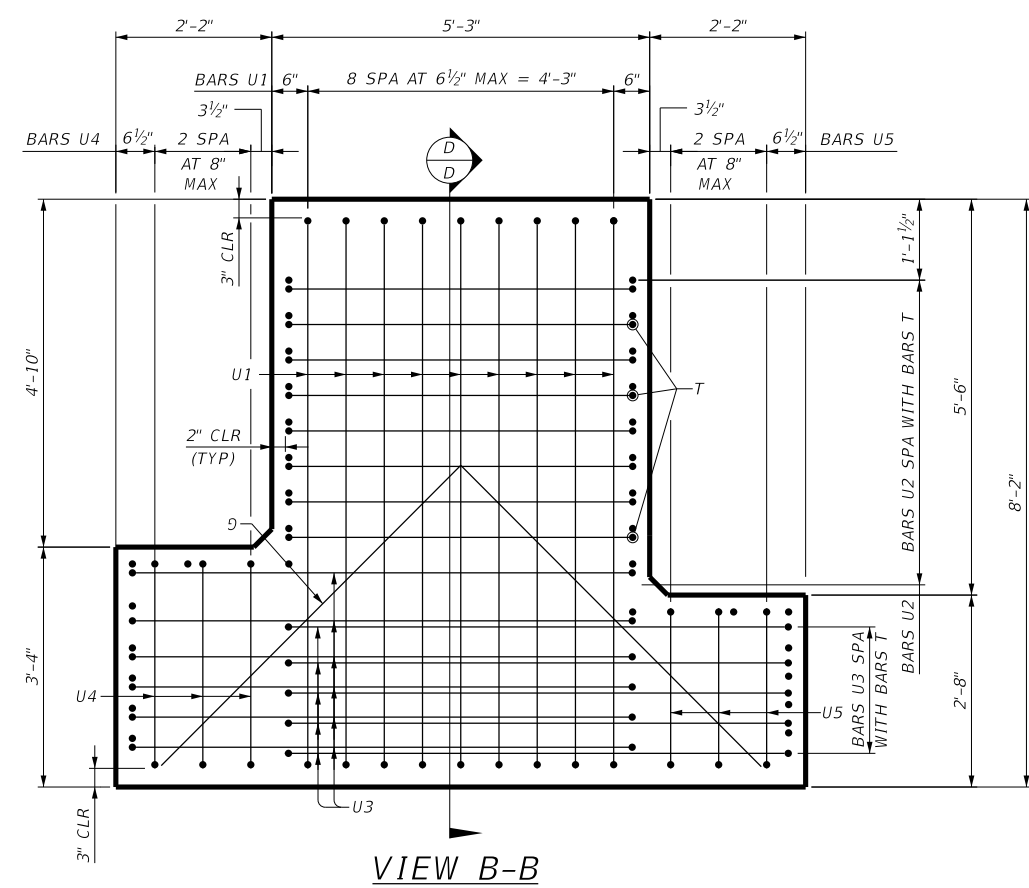
DATE: 20-FEB-2024 22:44
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bent\10E-69N_BENT_DET_08.dgn



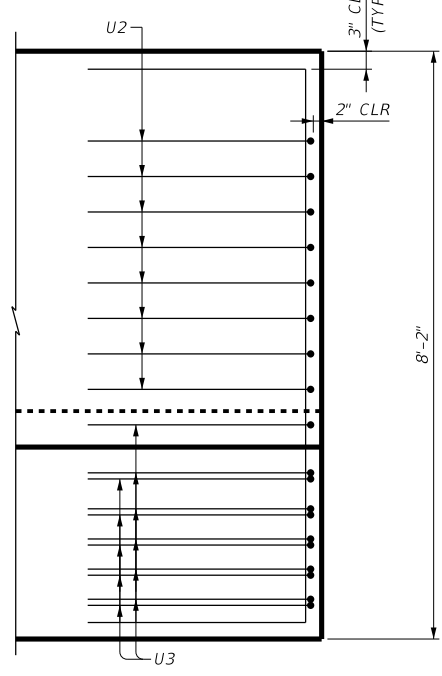
SECTION A-A



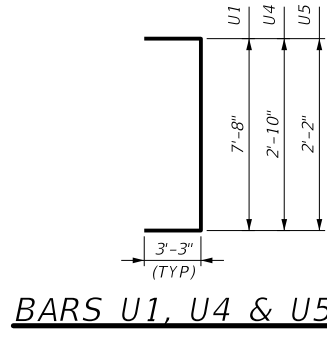
SECTION C-C
 (REINFORCEMENT IN INVERTED-TEE CAP NOT SHOWN FOR CLARITY)



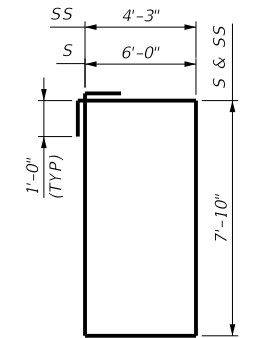
VIEW B-B



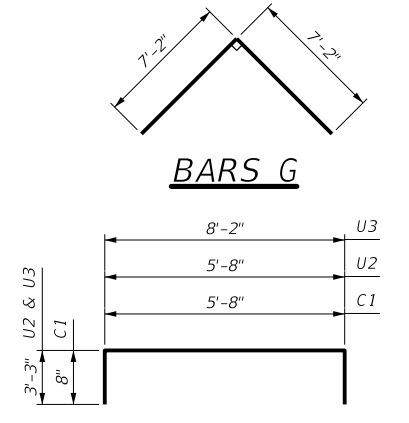
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



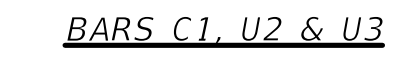
BARS U1, U4 & U5



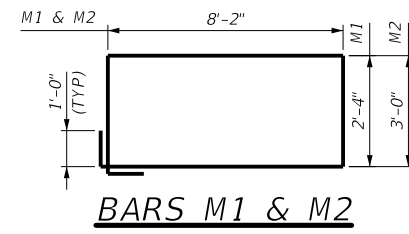
BARS S & SS



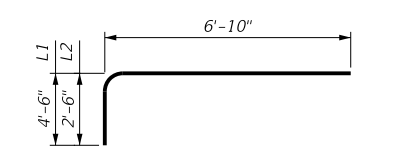
BARS G



BARS C1, U2 & U3



BARS M1 & M2



BARS L
 (ALTERNATE L1 AND L2 BAR FOR STAGGERED COUPLERS)

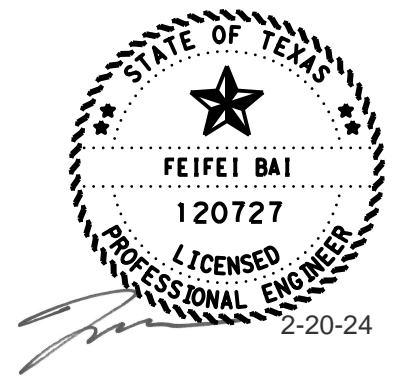
GENERAL NOTES:
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MATERIAL NOTES:
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 PROVIDE GRADE 60 REINFORCING STEEL.

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HL93 LOADING

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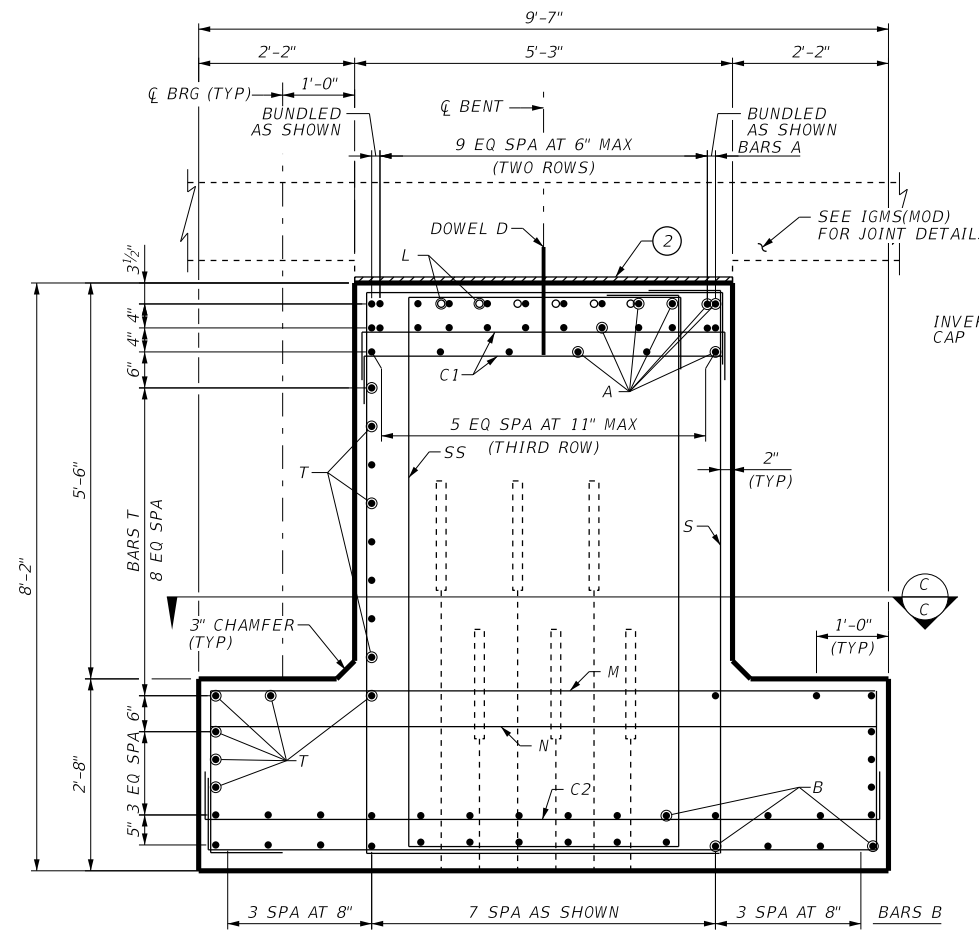
Texas Department of Transportation

**IH 10 AT US 69
 BENT 20 DETAILS
 IH 10 EBML
 TO US 69 NB DC**

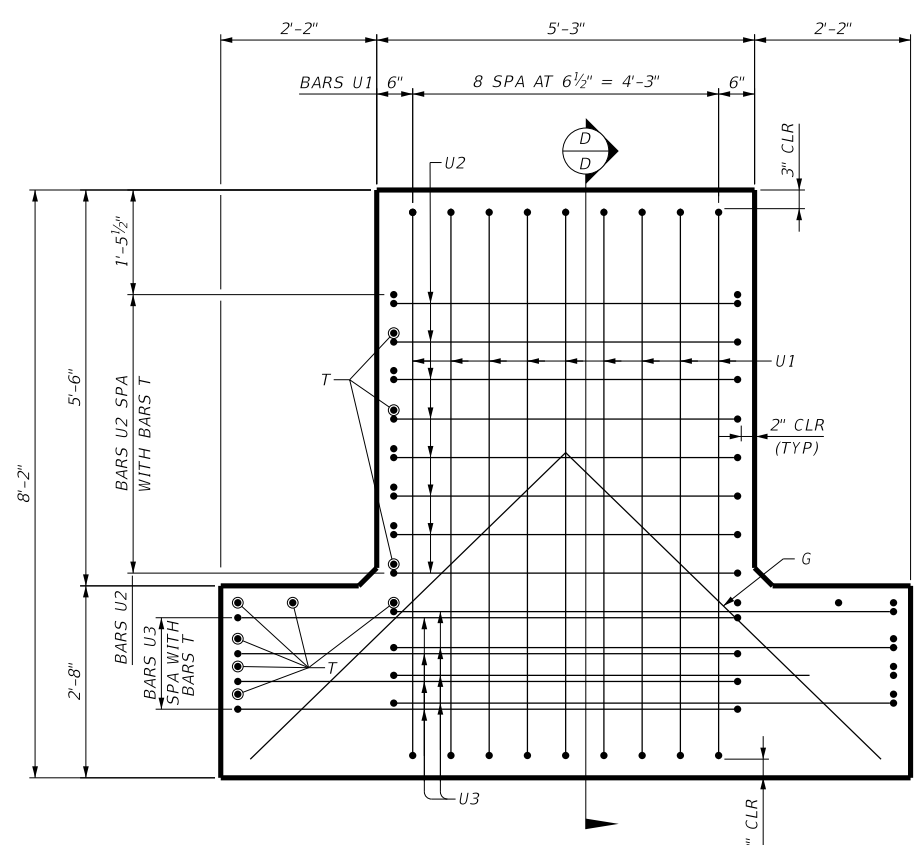
SHEET 8 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1542	

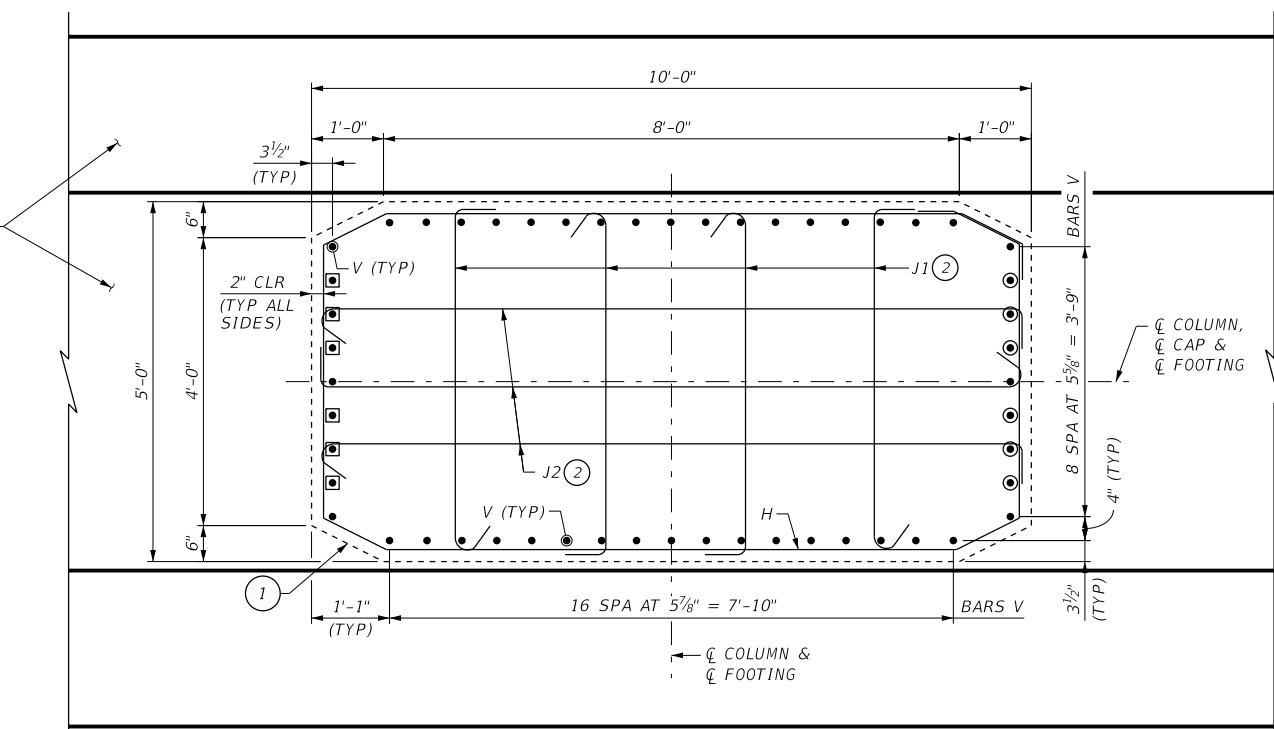
DATE: 20-FEB-2024 22:45
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SECTION A-A

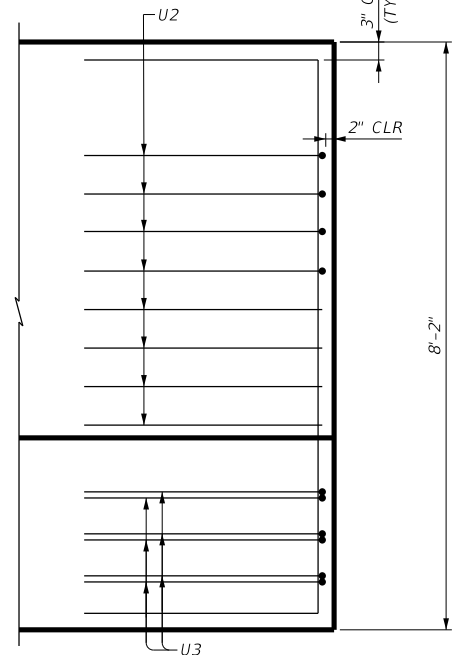


VIEW B-B

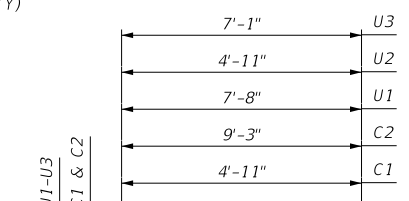


□ V BAR MECHANICAL COUPLER WITH L BAR IN INVERTED-TEE CAP AT COLUMN 1.
 ○ V BAR MECHANICAL COUPLER WITH L BAR IN INVERTED-TEE CAP AT COLUMN 2.

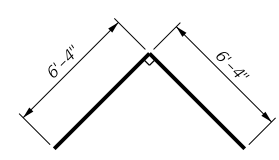
SECTION C-C
 (REINFORCEMENT IN INVERTED-TEE CAP NOT SHOWN FOR CLARITY)



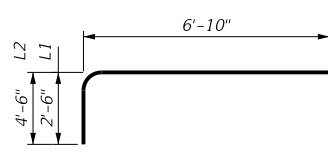
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



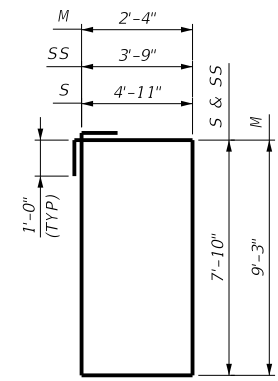
BARS C1, C2, U1, U2 & U3



BARS G



BARS L
 (ALTERNATE L1 AND L2 BAR FOR STAGGERED COUPLERS)



BARS S, SS & M

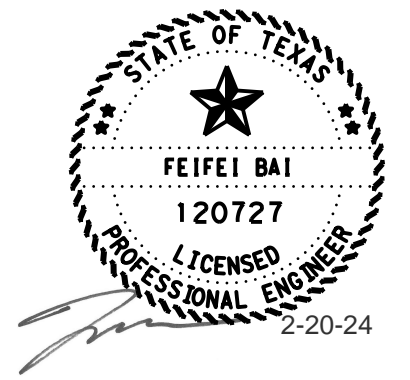
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HL93 LOADING

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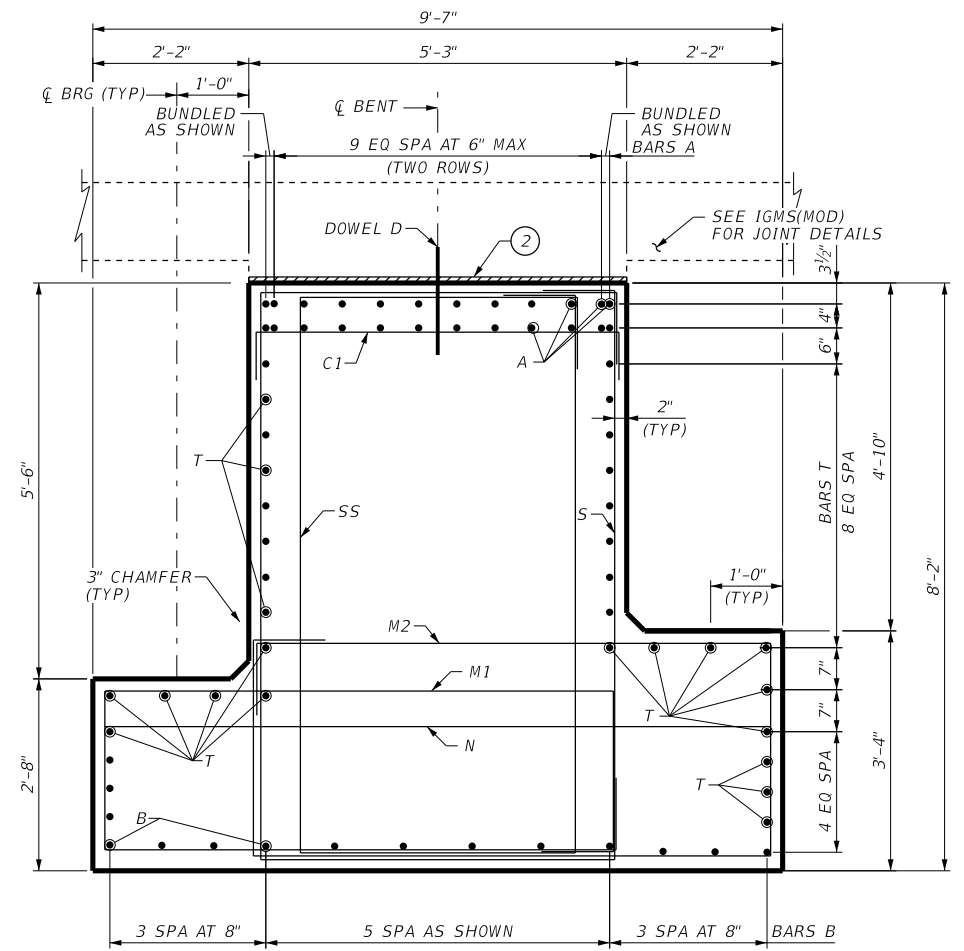
Texas Department of Transportation

**IH 10 AT US 69
 BENT DETAILS
 BENT 21
 IH 10 EBML
 TO US 69 NB DC**

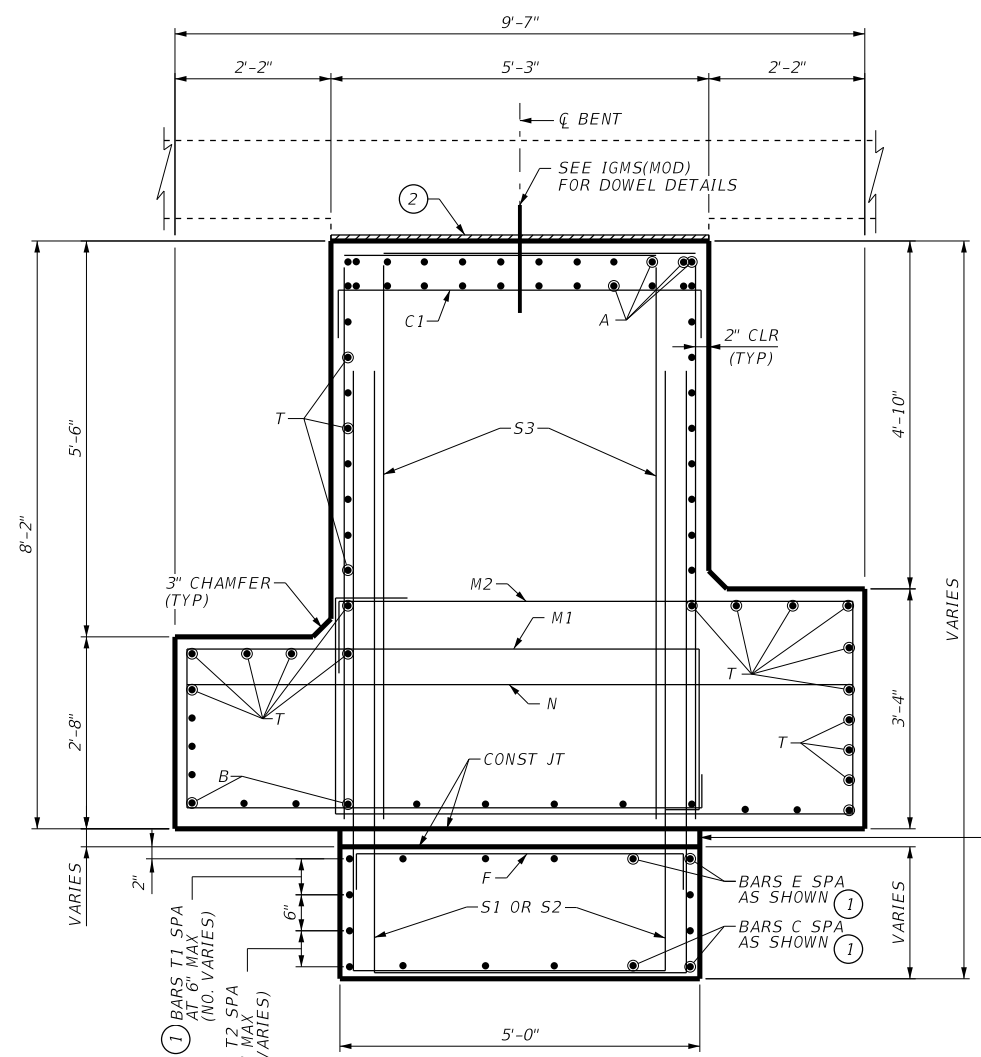
SHEET 9 OF 18

DW: FB	CK: JMV	DW: KAH	CK: FB
CONT: 0028	SECT: 13	JOB: 135	HIGHWAY: IH 10
DIST: BMT	COUNTY: JEFFERSON	SHEET NO.: 1543	

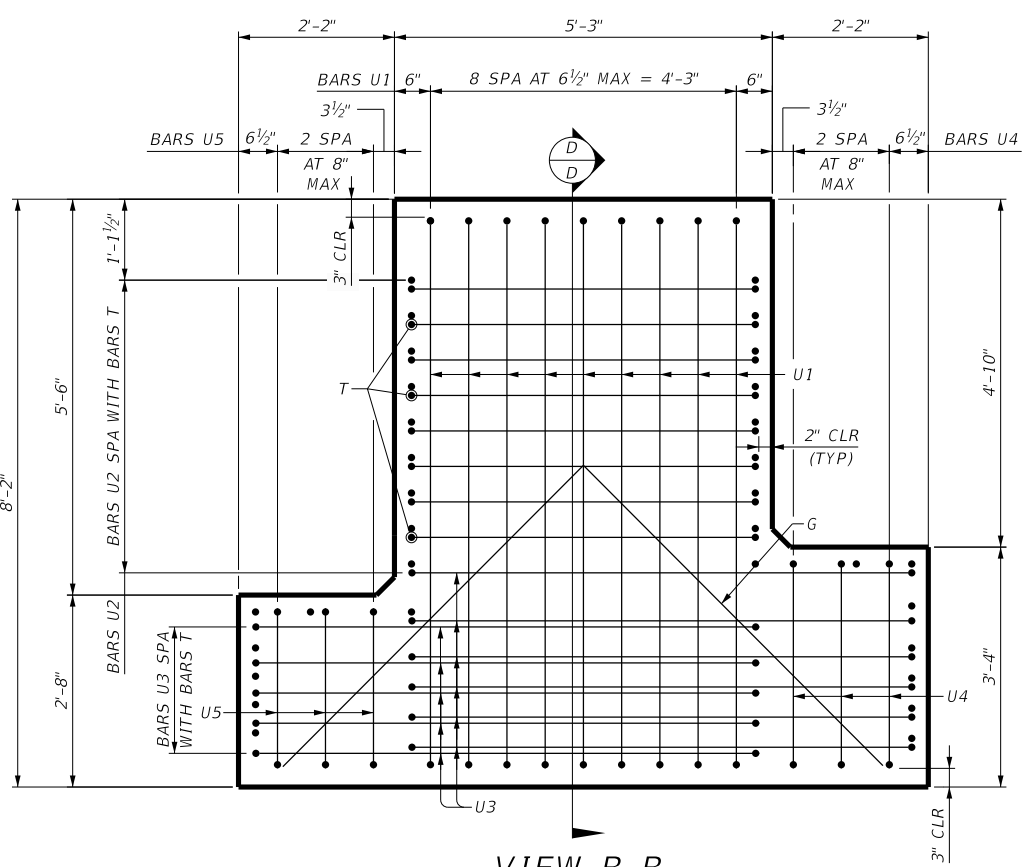
DATE: 21-FEB-2024 01:50
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\1074500_10E-69N_BENT_DET_10.dgn



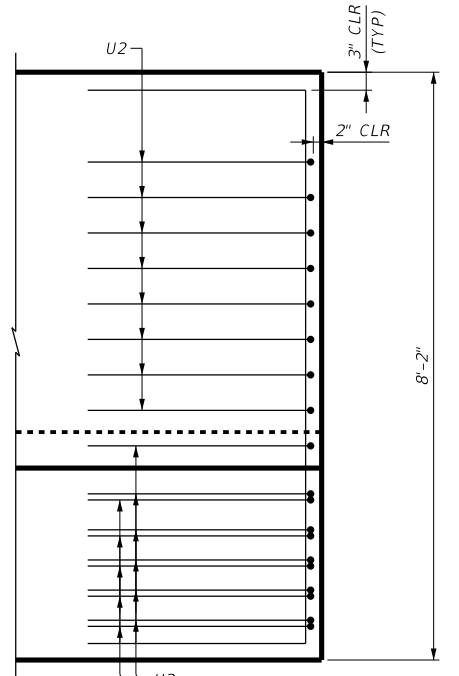
SECTION A-A



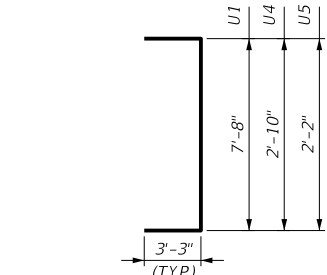
SECTION E-E
 (BENT 22 SHOWN, BENT 20 MIRROR)



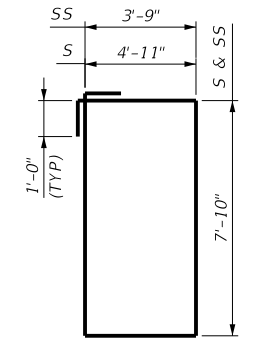
VIEW B-B



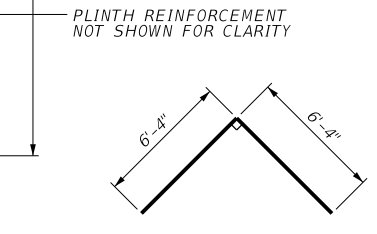
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



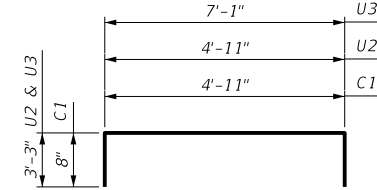
BARS U1, U4 & U5



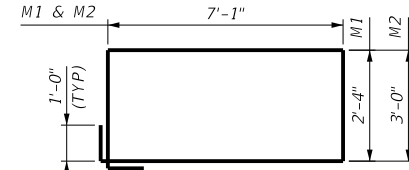
BARS S & SS



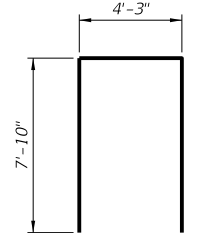
BARS G



BARS C1, U2 & U3



BARS M1 & M2



BARS S3

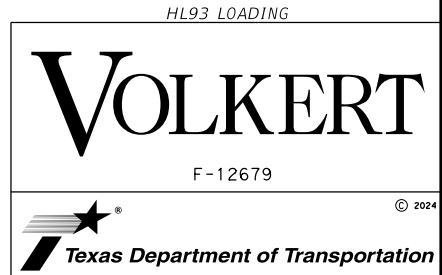
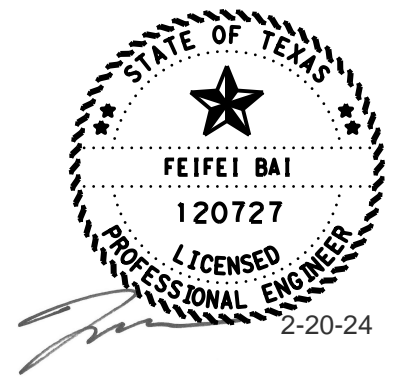
GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE MANUAL (JAN 2023)
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.

MATERIAL NOTES:
 PROVIDE CLASS C CONCRETE ($f'c = 3,600$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

- ① SEE COLUMN DETAILS TYPE J SHEETS FOR ALL COLUMN DETAILS AND NOTES.
- ② SEE IGMS (MOD) SHEETS FOR 1/2" PREFORMED BITUMINOUS FIBER MATERIAL.

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN AND CAPITAL CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI. CAPITAL SHALL BE EXTERNALLY SUPPORTED DURING CASTING OF CAP UNTIL CAP CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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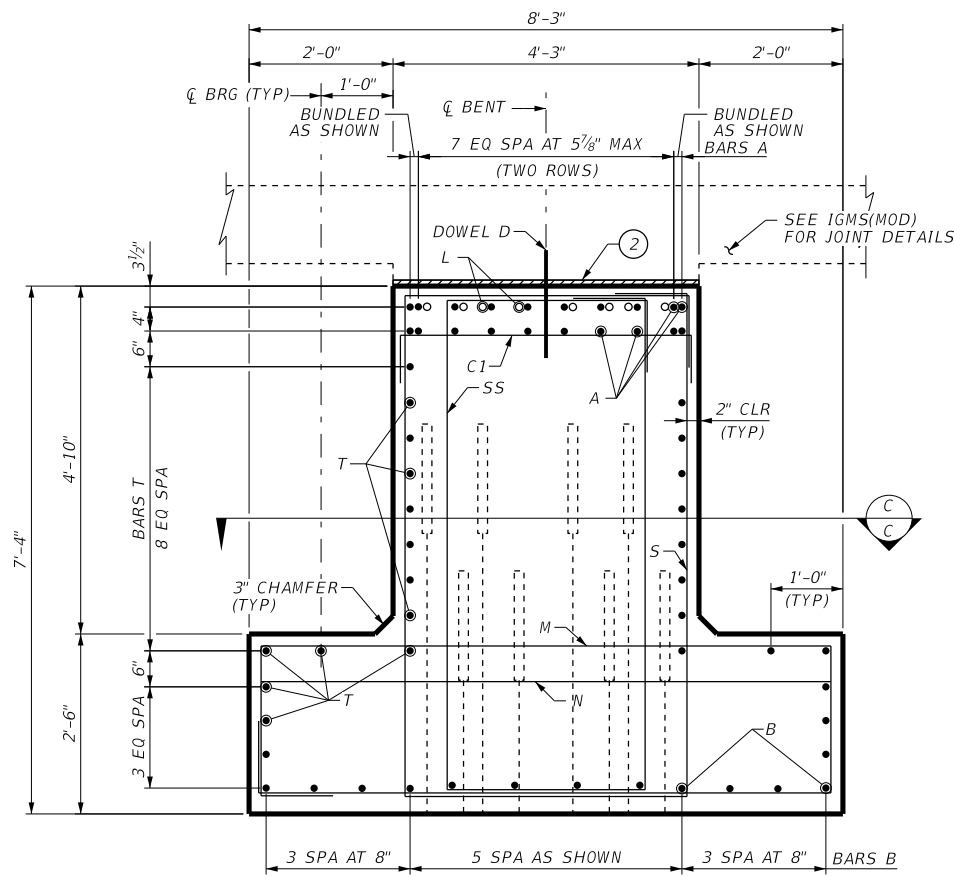
VOLKERT
 F-12679

**IH 10 AT US 69
 BENT 22 DETAILS
 IH 10 EBML
 TO US 69 NB DC**

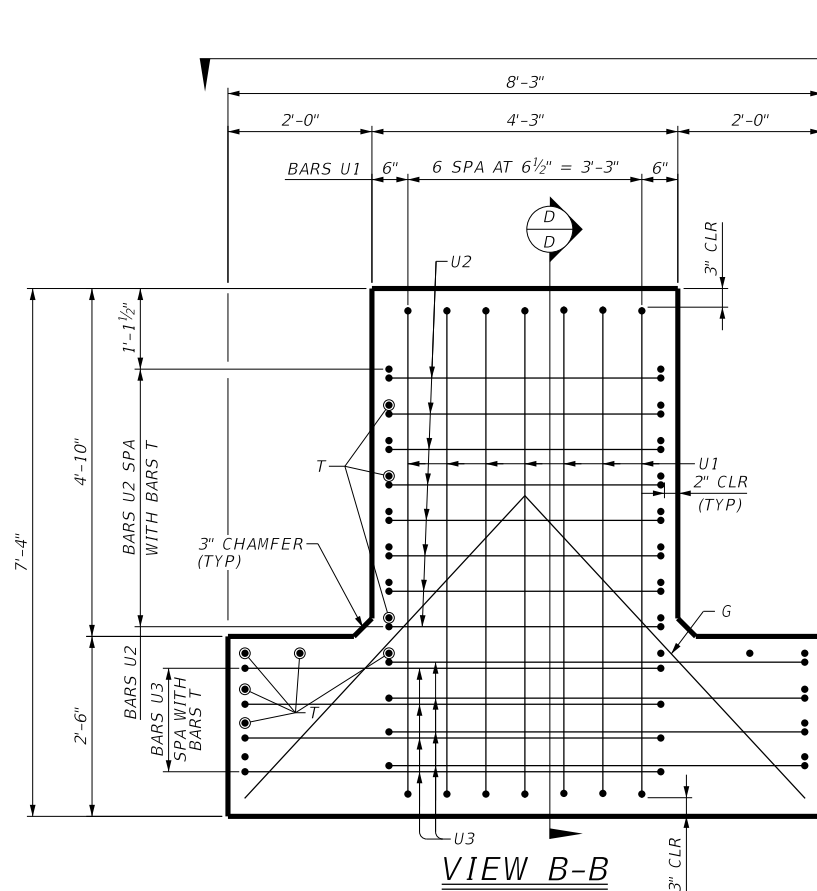
SHEET 10 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1544	

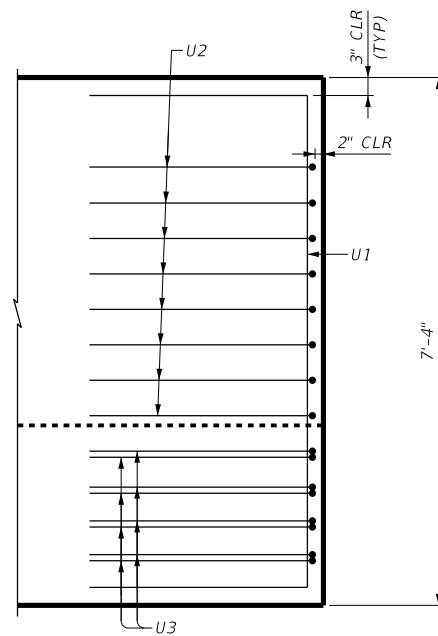
DATE: 20-FEB-2024 22:47
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1545_10ML_10E-69N_BENT_DET_11.dgn



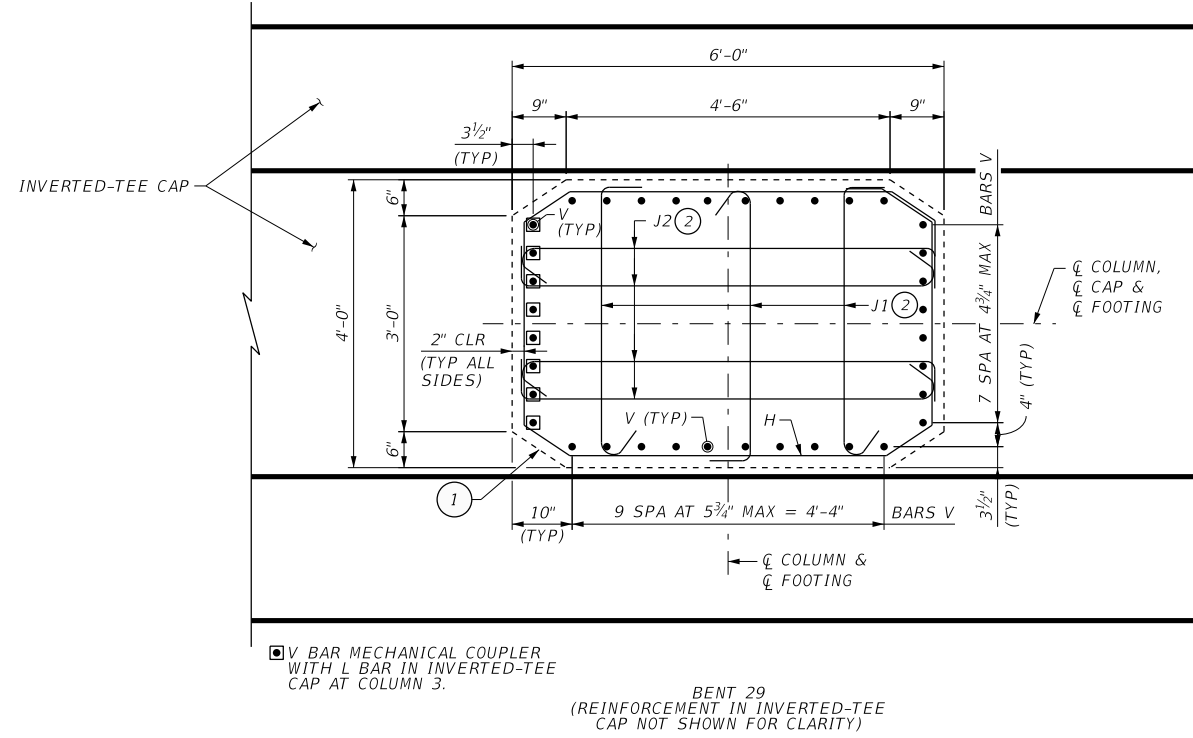
SECTION A-A



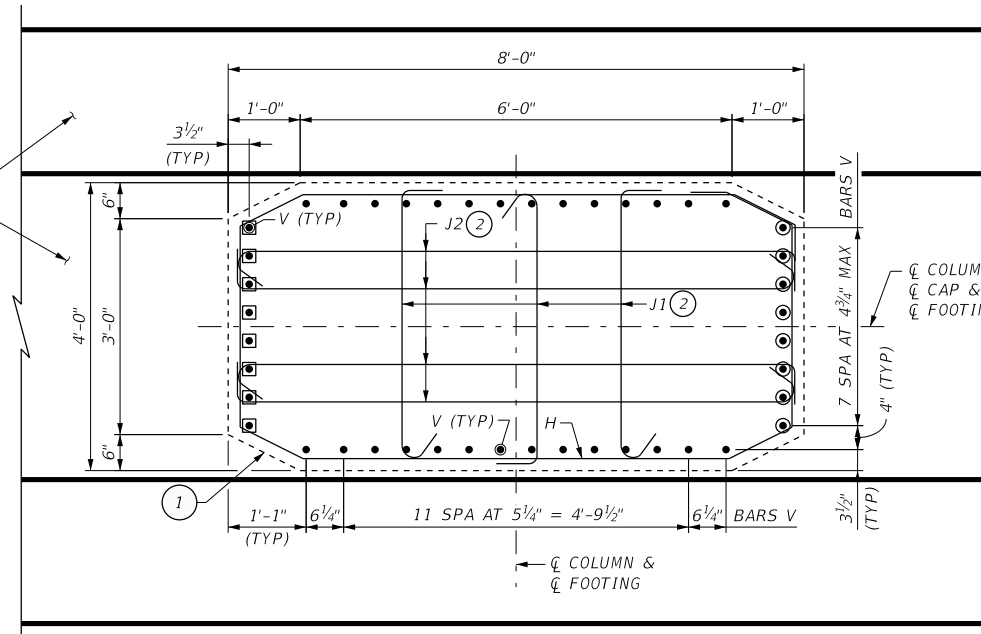
VIEW B-B



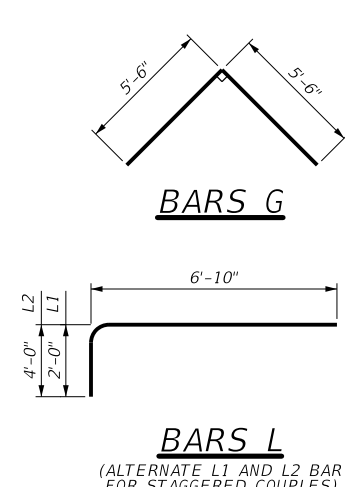
SECTION D-D
 (BARS A, B, G, M, N, S, SS & T NOT SHOWN FOR CLARITY)



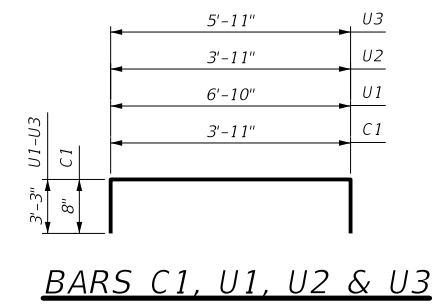
BENT 29
 (REINFORCEMENT IN INVERTED-TEE CAP NOT SHOWN FOR CLARITY)



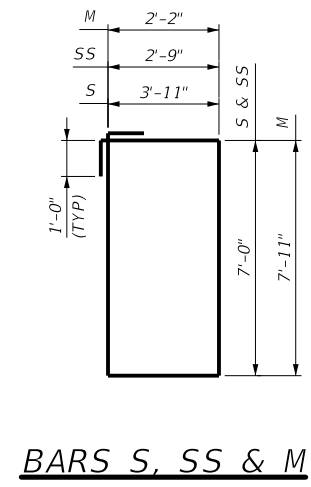
BENT 29-32
 (REINFORCEMENT IN INVERTED-TEE CAP NOT SHOWN FOR CLARITY)



BARS L
 (ALTERNATE L1 AND L2 BAR FOR STAGGERED COUPLERS)



BARS C1, U1, U2 & U3



BARS S, SS & M

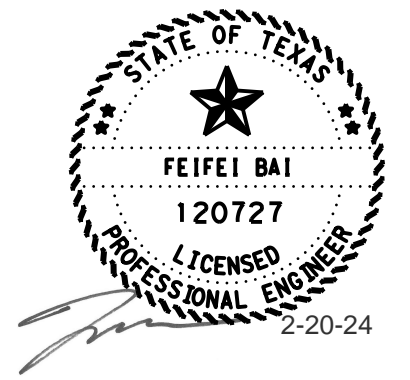
GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE MANUAL (JAN 2023)
 SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND LENGTH.
 SEE COLUMN DETAILS SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 SEE FOOTING DETAILS SHEETS FOR ALL FOUNDATION DETAILS AND NOTES.
 SEE FOUNDATION SUMMARY TABLE ON FOUNDATION LAYOUT SHEET FOR CALCULATED FOUNDATION LOADS FOR EACH BENT.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ PSI).
 PROVIDE GRADE 60 REINFORCING STEEL.

① SEE STRADDLE BENT COLUMN DETAILS SHEETS FOR ALL COLUMN DETAILS AND NOTES.
 ② SEE IGMS (MOD) SHEETS FOR 1/2\"/>

CONTRACTOR NOTE:
 INVERTED-TEE CAP SHALL NOT BE CAST UNTIL COLUMN AND CAPITAL CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI. CAPITAL SHALL BE EXTERNALLY SUPPORTED DURING CASTING OF CAP UNTIL CAP CONCRETE REACHES A MINIMUM STRENGTH OF 2500 PSI.

COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE. REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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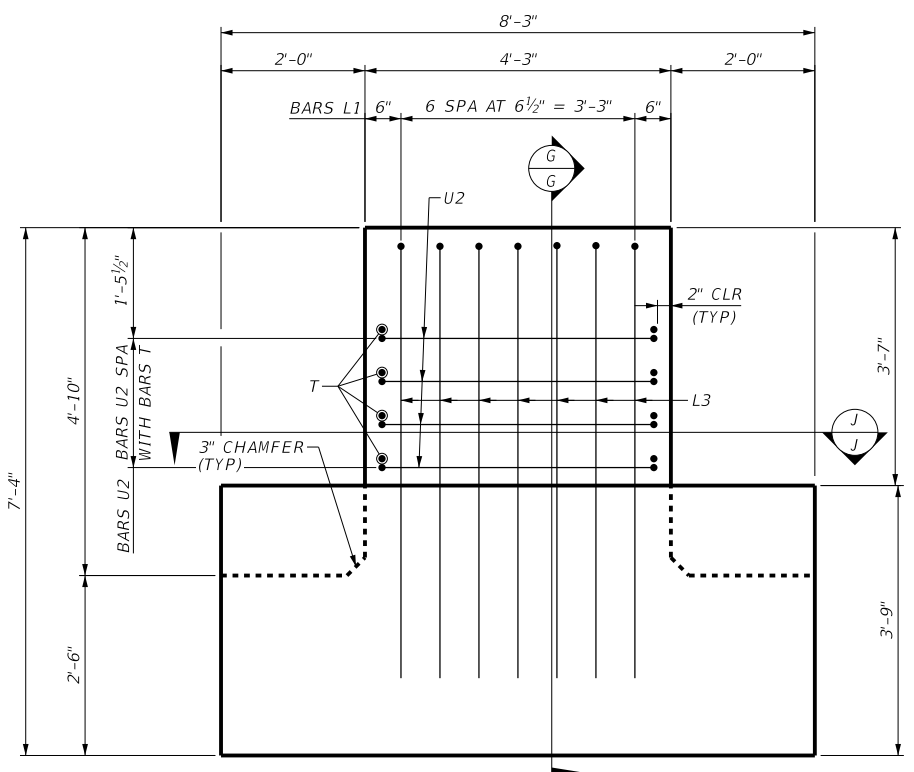
IH 10 AT US 69 BENT DETAILS (29-32) IH 10 EBML TO US 69 NB DC

SHEET 11 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1545	

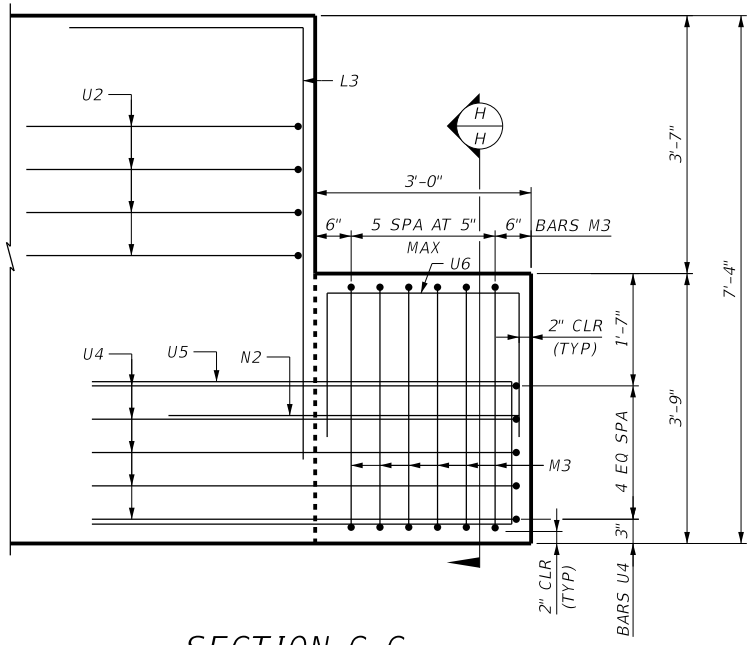
DATE: 20-FEB-2024 22:45
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10E-69N_BENT_DET_12.dgn

NOTES:
 THIS DETAIL SHEET IS ONLY FOR BENTS 4 AND 26 TO SHOW LEDGE EXTENSIONS AND OVERHEAD TRUSS BEARINGS.
 SEE INDIVIDUAL BENT DETAILS SHEET FOR GENERAL NOTES.



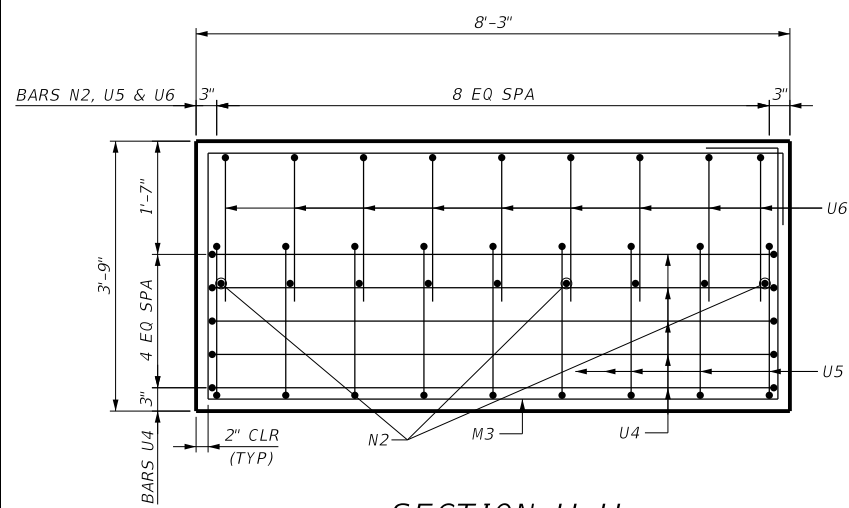
VIEW F-F

(BENT 26)
 (SHOWING END OF STEM REINFORCEMENT ONLY)
 (BARS A, B, C, M, N, S, SS & T NOT SHOWN FOR CLARITY)



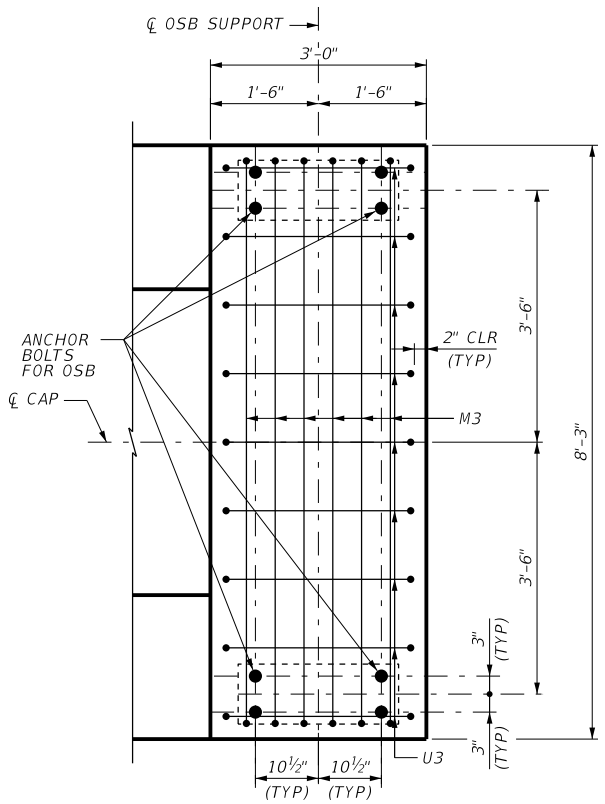
SECTION G-G

(BENT 26)



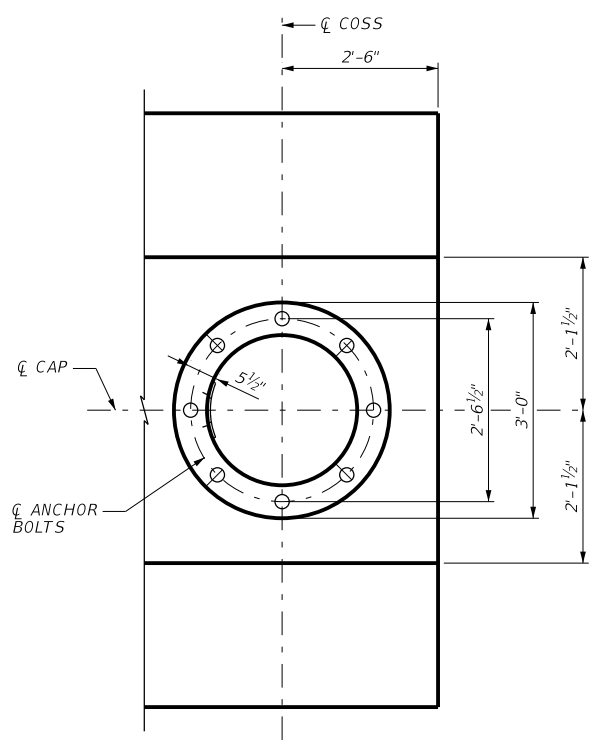
SECTION H-H

(BENT 26)



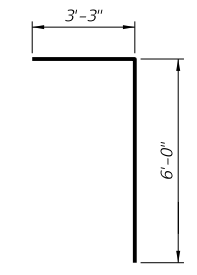
VIEW J-J

(OSB SUPPORT DETAIL)

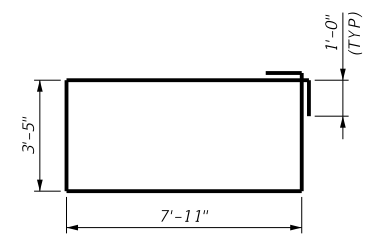


VIEW K-K

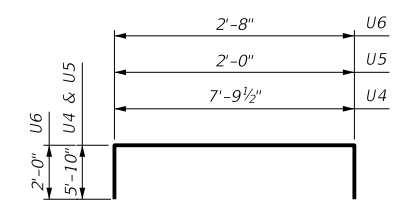
(COSS ANCHOR DETAIL)



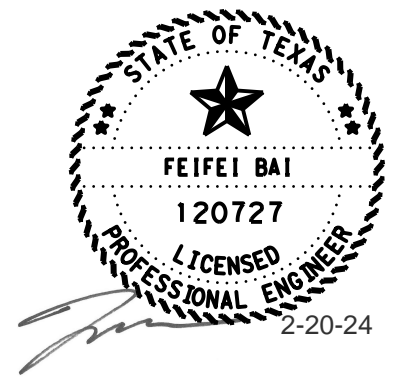
BARS L3



BARS M3



BARS U4, U5, & U6



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Texas Department of Transportation

**IH 10 AT US 69
 BENT DETAILS
 OSB LEDGE
 IH 10 EBML
 TO US 69 NB DC**

SHEET 12 OF 18

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1546		

DATE: 21-FEB-2024 01:50
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1547_10ML_10E-69N_BENT_DET_13.dgn

NOTES:
 SEE BENT DETAILS SHEETS FOR GENERAL NOTES.

① M1 AND M2 BARS ONLY APPLY TO BENT 20. FOR BENT 19 THERE WILL BE A SINGLE BAR M.

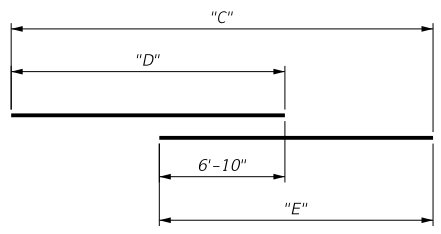


SEE BENT ELEVATION FOR BAR SPACINGS

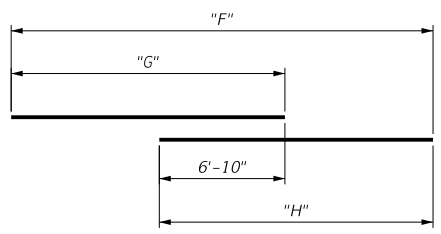
STIRRUP DETAIL - PLAN
 (BENTS 19 & 20)
 (BENT 20 SHOWN)

- NOTES:
- ALL BARS S, SS, G, M & N ARE SKEWED TO CAP SKEW SHOWN ON BENT PLAN.
 - ADJUST BARS S, SS, M & N TO CLEAR COLUMN REINFORCING AS NEEDED.
 - BARS A, B, C, D, G & T NOT SHOWN FOR CLARITY, REFER TO SECTION A-A.
 - SEE BENT PLAN AND ELEVATION FOR COLUMN LOCATION.

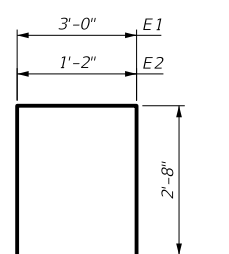
BENT ID	BAR SPLICE LENGTHS											
	BARS A1-A2			BARS A2-A3			BARS B1-B2			BARS B2-B3		
	C	D	E	C	D	E	F	G	H	F	G	H
4 - PHASE 1 STEP 3	62' - 4"	32' - 3"	36' - 11"	-	-	-	62' - 4"	19' - 4"	49' - 10"	-	-	-
7 - PHASE 1 STEP 3	61' - 0"	34' - 8"	33' - 2"	-	-	-	61' - 0"	39' - 8"	28' - 2"	-	-	-
10 - PHASE 1 STEP 3	61' - 2"	34' - 0"	34' - 0"	-	-	-	61' - 2"	40' - 10"	27' - 4"	-	-	-
19 - PHASE 1 STEP 3	68' - 6"	38' - 11"	36' - 5"	-	-	-	68' - 6"	55' - 7"	19' - 9"	-	-	-
20 - PHASE 1 STEP 3	66' - 8"	36' - 9"	36' - 9"	-	-	-	66' - 8"	45' - 10"	27' - 8"	-	-	-
25 - PHASE 1 STEP 4	75' - 4"	35' - 7"	46' - 7"	-	-	-	75' - 4"	55' - 6"	26' - 9"	-	-	-
26 - PHASE 1 STEP 3	71' - 8"	36' - 9"	41' - 9"	-	-	-	71' - 8"	50' - 2"	28' - 4"	-	-	-
27 - PHASE 1 STEP 3	112' - 8"	59' - 9"	59' - 9"	-	-	-	63' - 5"	26' - 8"	43' - 7"	92' - 10"	43' - 7"	56' - 1"
28 - PHASE 1 STEP 3	81' - 3"	31' - 6"	56' - 7"	88' - 6"	56' - 7"	38' - 9"	57' - 1"	26' - 1"	37' - 10"	91' - 0"	37' - 10"	60' - 0"
29 - PHASE 1 STEP 3	95' - 0"	41' - 10"	60' - 0"	-	-	-	95' - 0"	54' - 10"	47' - 0"	-	-	-



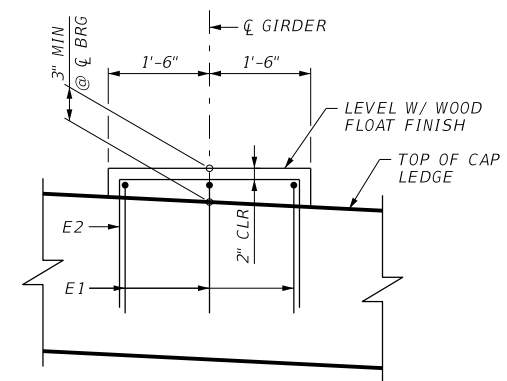
BARS A



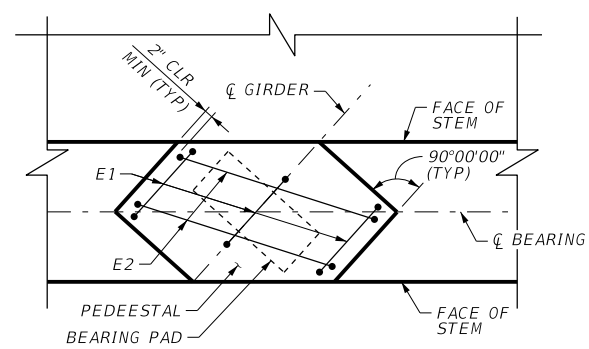
BARS B



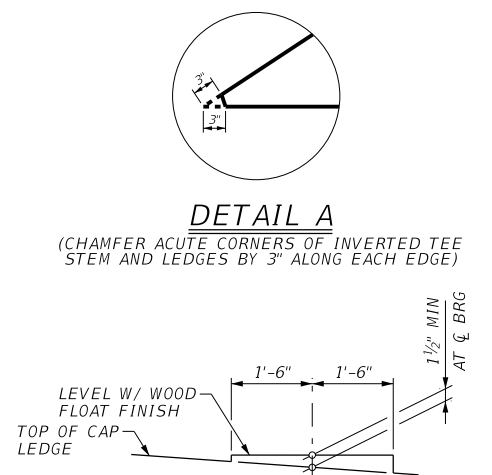
BARS E1 & E2



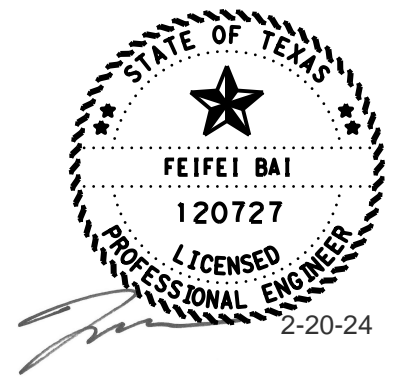
BEARING PEDESTAL SECTION
 (REMOVE ALL LOOSE MATERIAL AND CLEAN BEARING SURFACE BEFORE PLACING BEARING PAD)



BEARING PEDESTAL PLAN VIEW
 (APPLIES WHERE BEARING SEAT HEIGHT IS 3" OR GREATER)



BEARING DETAIL SEAT
 (BEARING SURFACE MUST BE CLEAN AND FREE OF ALL LOOSE MATERIAL BEFORE PLACING BEARING PAD)



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Texas Department of Transportation

**IH 10 AT US 69
 BENT DETAILS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 13 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1547	

DATE: 20-FEB-2024 22:45
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1548_10M_10E-69N_BENT_DET_14.dgn

TABLE OF ESTIMATED QUANTITIES BENT 2 (H = 33') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	26	#11	57' - 8"	7,966
B	32	#11	57' - 8"	9,804
C1	30	#4	5' - 3"	105
C2	30	#4	9' - 3"	185
D	12	#11	1' - 6"	96
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	11' - 0"	495
U1	14	#6	13' - 4"	280
U2	20	#6	10' - 5"	313
U3	12	#6	12' - 5"	224
L1	8	#11	8' - 10"	375
L2	8	#11	10' - 10"	460
M	116	#6	22' - 2"	3,862
N	59	#6	7' - 11"	702
S	105	#6	23' - 10"	3,759
SS	105	#6	21' - 6"	3,391
T	24	#5	57' - 8"	1,444
REINFORCING STEEL				LB 33,778
CLASS "F" CONCRETE (CAP)				CY 88.4

TABLE OF ESTIMATED QUANTITIES BENT 3 (H = 36') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	26	#11	57' - 8"	7,966
B	32	#11	57' - 8"	9,804
C1	30	#4	5' - 3"	105
C2	30	#4	9' - 3"	185
D	12	#11	1' - 6"	96
E1	21	#5	8' - 4"	183
E2	14	#5	6' - 6"	95
G	22	#7	11' - 0"	495
U1	14	#6	13' - 4"	280
U2	20	#6	10' - 5"	313
U3	12	#6	12' - 5"	224
M	116	#6	22' - 2"	3,862
N	59	#6	7' - 11"	702
S	35	#6	23' - 10"	1,253
SS	35	#6	21' - 6"	1,130
S3	68	#6	17' - 4"	1,770
T	24	#5	57' - 8"	1,444
REINFORCING STEEL				LB 29,906
CLASS "C" CONCRETE (CAP)				CY 88.4

TABLE OF ESTIMATED QUANTITIES BENT 4 (H = 40') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	20	#11	32' - 3"	3,427
A2	20	#11	36' - 11"	3,923
B1	12	#11	19' - 4"	1,233
B2	12	#11	49' - 10"	3,177
C1	32	#4	5' - 3"	112
D	12	#11	1' - 6"	96
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	11' - 0"	495
U1	14	#6	13' - 4"	280
U2	20	#6	10' - 5"	313
U3	12	#6	12' - 5"	224
M	123	#6	22' - 2"	4,095
N	62	#6	7' - 11"	737
S	40	#6	23' - 10"	1,432
SS	40	#6	21' - 6"	1,292
S3	68	#6	17' - 4"	1,770
T	26	#5	64' - 2"	1,740
REINFORCING STEEL				LB 24,663
CLASS "C" CONCRETE (CAP)				CY 95.6

TABLE OF ESTIMATED QUANTITIES BENT 5 (H = 44') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	20	#11	57' - 8"	6,128
B	12	#11	57' - 8"	3,677
C1	30	#4	5' - 3"	105
D	12	#11	1' - 6"	96
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	11' - 0"	495
U1	14	#6	13' - 4"	280
U2	24	#6	10' - 5"	376
U3	16	#6	12' - 5"	298
M	116	#6	22' - 2"	3,862
N	59	#6	7' - 11"	702
S	31	#6	23' - 10"	1,110
SS	31	#6	21' - 6"	1,001
S3	68	#6	17' - 4"	1,770
T	26	#5	57' - 8"	1,564
REINFORCING STEEL				LB 21,780
CLASS "C" CONCRETE (CAP)				CY 88.4

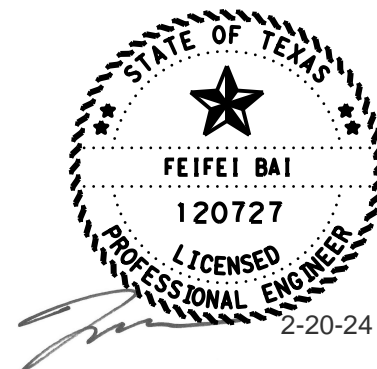
TABLE OF ESTIMATED QUANTITIES BENT 6 (H = 48') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	20	#11	57' - 8"	6,128
B	12	#11	57' - 8"	3,677
C1	30	#4	5' - 3"	105
D	12	#11	1' - 6"	96
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	11' - 0"	495
U1	14	#6	13' - 4"	280
U2	24	#6	10' - 5"	376
U3	16	#6	12' - 5"	298
M	116	#6	22' - 2"	3,862
N	59	#6	7' - 11"	702
S	31	#6	23' - 10"	1,110
SS	31	#6	21' - 6"	1,001
S3	68	#6	17' - 4"	1,770
T	26	#5	57' - 8"	1,564
REINFORCING STEEL				LB 21,780
CLASS "C" CONCRETE (CAP)				CY 88.4

TABLE OF ESTIMATED QUANTITIES BENT 7 (H = 51') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	24	#11	34' - 8"	4,424
A2	24	#11	33' - 2"	4,230
B1	12	#11	39' - 8"	2,531
B2	12	#11	28' - 2"	1,796
C1	31	#4	6' - 3"	129
D	13	#11	1' - 6"	104
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	12' - 6"	562
U1	18	#6	14' - 0"	379
U2	18	#6	11' - 5"	309
U3	20	#6	13' - 5"	403
U4	6	#6	9' - 2"	83
U5	6	#6	8' - 8"	78
L1	9	#11	9' - 4"	446
L2	9	#11	11' - 4"	542
M1	123	#6	20' - 6"	3,787
M2	123	#6	21' - 6"	3,972
N	62	#6	8' - 11"	830
S	104	#6	27' - 2"	4,244
SS	104	#6	25' - 0"	3,905
T	32	#5	61' - 0"	2,037
REINFORCING STEEL				LB 35,109
CLASS "F" CONCRETE (CAP)				CY 122.0

TABLE OF ESTIMATED QUANTITIES BENT 10 (H = 66') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	24	#11	34' - 0"	4,336
A2	24	#11	34' - 0"	4,336
B1	12	#11	40' - 10"	2,603
B2	12	#11	27' - 4"	1,743
C1	32	#4	6' - 3"	134
D	13	#11	1' - 6"	104
E1	21	#5	8' - 4"	183
E2	14	#5	6' - 6"	95
G	22	#7	12' - 6"	562
U1	18	#6	14' - 0"	379
U2	18	#6	11' - 5"	309
U3	20	#6	13' - 5"	403
U4	6	#6	9' - 2"	83
U5	6	#6	8' - 8"	78
M1	123	#6	20' - 6"	3,787
M2	123	#6	21' - 6"	3,972
N	62	#6	8' - 11"	830
S	30	#6	27' - 2"	1,224
SS	30	#6	25' - 0"	1,127
S3	68	#6	19' - 7"	2,000
T	32	#5	61' - 2"	2,042
REINFORCING STEEL				LB 30,327
CLASS "C" CONCRETE (CAP)				CY 122.3

TABLE OF ESTIMATED QUANTITIES BENT 11 (H = 67') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	24	#11	57' - 8"	7,353
B	12	#11	57' - 8"	3,677
C1	30	#4	6' - 3"	125
D	12	#11	1' - 6"	96
E1	0	#5	8' - 4"	0
E2	0	#5	6' - 6"	0
G	22	#7	12' - 8"	570
U1	18	#6	13' - 4"	360
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 5"	322
M	116	#6	24' - 2"	4,211
N	59	#6	8' - 11"	790
S	72	#6	25' - 10"	2,794
SS	72	#6	23' - 8"	2,559
S3	34	#6	18' - 3"	932
T	28	#5	57' - 8"	1,684
REINFORCING STEEL				LB 25,782
CLASS "C" CONCRETE (CAP)				CY 104.2

TABLE OF ESTIMATED QUANTITIES BENT 13 (H = 67') PHASE 1 STEP 3				
BAR	NO.	SIZE	LENGTH	WEIGHT
A	24	#11	57' - 8"	7,353
B	12	#11	57' - 8"	3,677
C1	30	#4	6' - 3"	125
D	12	#11	1' - 6"	96
E1	0	#5	8' - 4"	0
E2	0	#5	6' - 6"	0
G	22	#7	12' - 8"	570
U1	18	#6	13' - 4"	360
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 5"	322
M	116	#6	24' - 2"	4,211
N	59	#6	8' - 11"	790
S	72	#6	25' - 10"	2,794
SS	72	#6	23' - 8"	2,559
S3	34	#6	18' - 3"	932
T	28	#5	57' - 8"	1,684
REINFORCING STEEL				LB 25,782
CLASS "C" CONCRETE (CAP)				CY 104.2



HL93 LOADING

VOLKERT

F-12679



**IH 10 AT US 69
 BENT DETAILS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 14 OF 18

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT		SECT		JOB		HIGHWAY	
	0028		13		135		IH 10
DIST		COUNTY		SHEET NO.			
	BMT		JEFFERSON				1548

DATE: 20-FEB-2024 22:45
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1549_10M_10E-69N_BENT_DET_15.dgn

TABLE OF ESTIMATED QUANTITIES
BENT 14 (H = 66') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A	24	#11	57' - 8"	7,353
B	12	#11	57' - 8"	3,677
C1	30	#4	6' - 3"	125
D	12	#11	1' - 6"	96
E1	0	#5	8' - 4"	0
E2	0	#5	6' - 6"	0
G	22	#7	12' - 8"	570
U1	18	#6	13' - 4"	360
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 5"	322
M	116	#6	24' - 2"	4,211
N	59	#6	8' - 11"	790
S	27	#6	25' - 10"	1,048
SS	27	#6	23' - 8"	960
S3	68	#6	18' - 3"	1,864
T	28	#5	57' - 8"	1,684
REINFORCING STEEL				LB 23,368
CLASS "C" CONCRETE (CAP)				CY 104.2

TABLE OF ESTIMATED QUANTITIES
BENT 15 (H = 65') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A	24	#11	57' - 8"	7,353
B	12	#11	57' - 8"	3,677
C1	30	#4	6' - 3"	125
D	12	#11	1' - 6"	96
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	12' - 8"	570
U1	18	#6	13' - 4"	360
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 5"	322
M	116	#6	24' - 2"	4,211
N	59	#6	8' - 11"	790
S	27	#6	25' - 10"	1,048
SS	27	#6	23' - 8"	960
S3	68	#6	18' - 3"	1,864
T	28	#5	57' - 8"	1,684
REINFORCING STEEL				LB 23,685
CLASS "C" CONCRETE (CAP)				CY 104.2

TABLE OF ESTIMATED QUANTITIES
BENT 16 (H = 62') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A	24	#11	57' - 8"	7,353
B	12	#11	57' - 8"	3,677
C1	30	#4	6' - 3"	125
D	12	#11	1' - 6"	96
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	12' - 8"	570
U1	18	#6	13' - 4"	360
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 5"	322
M	116	#6	24' - 2"	4,211
N	59	#6	8' - 11"	790
S	27	#6	25' - 10"	1,048
SS	27	#6	23' - 8"	960
S3	68	#6	18' - 3"	1,864
T	28	#5	57' - 8"	1,684
REINFORCING STEEL				LB 23,685
CLASS "C" CONCRETE (CAP)				CY 104.2

TABLE OF ESTIMATED QUANTITIES
BENT 17 (H = 58') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A	24	#11	57' - 8"	7,353
B	12	#11	57' - 8"	3,677
C1	30	#4	6' - 3"	125
D	12	#11	1' - 6"	96
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	12' - 8"	570
U1	18	#6	13' - 4"	360
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 5"	322
M	116	#6	24' - 2"	4,211
N	59	#6	8' - 11"	790
S	27	#6	25' - 10"	1,048
SS	27	#6	23' - 8"	960
S3	68	#6	18' - 3"	1,864
T	28	#5	57' - 8"	1,684
REINFORCING STEEL				LB 23,685
CLASS "C" CONCRETE (CAP)				CY 104.2

TABLE OF ESTIMATED QUANTITIES
BENT 18 (H = 57') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A	24	#11	57' - 8"	7,353
B	12	#11	57' - 8"	3,677
C1	30	#4	6' - 3"	125
D	12	#11	1' - 6"	96
E1	21	#5	8' - 4"	183
E2	14	#5	6' - 6"	95
G	22	#7	12' - 8"	570
U1	18	#6	13' - 4"	360
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 5"	322
M	116	#6	24' - 2"	4,211
N	59	#6	8' - 11"	790
S	27	#6	25' - 10"	1,048
SS	27	#6	23' - 8"	960
S3	68	#6	18' - 3"	1,864
T	28	#5	57' - 8"	1,684
REINFORCING STEEL				LB 23,646
CLASS "C" CONCRETE (CAP)				CY 104.2

TABLE OF ESTIMATED QUANTITIES
BENT 19 (H = 58') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	30	#11	38' - 11"	6,198
A2	30	#11	36' - 5"	5,807
B1	32	#11	55' - 7"	9,452
B2	32	#11	19' - 9"	3,354
C1	35	#4	6' - 3"	146
C2	35	#4	10' - 3"	240
D	14	#11	1' - 6"	112
E1	6	#5	8' - 4"	52
E2	4	#5	6' - 6"	27
G	22	#7	13' - 10"	622
U1	18	#6	13' - 4"	360
U2	14	#6	11' - 5"	240
U3	12	#6	13' - 5"	242
L1	6	#11	8' - 10"	282
L2	6	#11	10' - 10"	345
M	138	#6	27' - 9"	5,761
N	70	#6	8' - 11"	937
S	115	#6	27' - 4"	4,721
SS	115	#6	24' - 6"	4,232
T	26	#5	70' - 4"	1,907
REINFORCING STEEL				LB 45,038
CLASS "F" CONCRETE (CAP)				CY 123.6

TABLE OF ESTIMATED QUANTITIES
BENT 20 (H = 56') PHASE 1 STEP 3

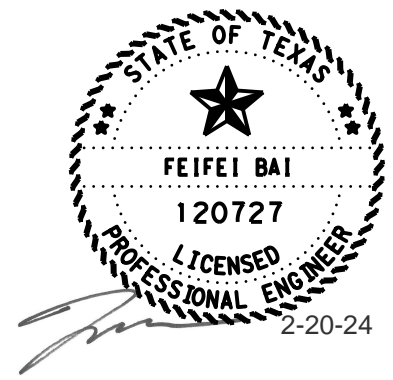
BAR	NO.	SIZE	LENGTH	WEIGHT
A1	24	#11	36' - 9"	4,684
A2	24	#11	36' - 9"	4,684
B1	12	#11	45' - 10"	2,920
B2	12	#11	27' - 8"	1,764
C1	34	#4	7' - 0"	159
D	14	#11	1' - 6"	112
E1	24	#5	8' - 4"	209
E2	16	#5	6' - 6"	108
G	22	#7	14' - 4"	645
U1	18	#6	14' - 2"	383
U2	18	#6	12' - 2"	329
U3	20	#6	14' - 8"	441
U4	6	#6	9' - 4"	84
U5	6	#6	8' - 8"	78
L1	6	#11	9' - 4"	297
L2	6	#11	11' - 4"	361
M1	134	#6	23' - 0"	4,629
M2	134	#6	24' - 4"	4,898
N	68	#6	9' - 3"	945
S	115	#6	29' - 8"	5,124
SS	115	#6	26' - 2"	4,520
T	34	#5	68' - 6"	2,428
REINFORCING STEEL				LB 39,802
CLASS "F" CONCRETE (CAP)				CY 138.6

TABLE OF ESTIMATED QUANTITIES
BENT 21 (H = 54') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A	30	#11	59' - 8"	9,510
B	28	#11	59' - 8"	8,876
C1	31	#4	6' - 3"	129
C2	31	#4	10' - 7"	219
D	13	#11	1' - 6"	104
E1	15	#5	8' - 4"	130
E2	10	#5	6' - 6"	68
G	22	#7	12' - 8"	570
U1	18	#6	14' - 2"	383
U2	18	#6	11' - 5"	309
U3	16	#6	13' - 7"	326
L1	6	#11	9' - 4"	297
L2	6	#11	11' - 4"	361
M	120	#6	25' - 2"	4,536
N	61	#6	9' - 3"	848
S	103	#6	27' - 6"	4,254
SS	103	#6	25' - 2"	3,893
T	28	#5	59' - 8"	1,743
REINFORCING STEEL				LB 36,557
CLASS "F" CONCRETE (CAP)				CY 121.0

TABLE OF ESTIMATED QUANTITIES
BENT 26 (H = 39') PHASE 1 STEP 3

BAR	NO.	SIZE	LENGTH	WEIGHT
A1	26	#11	36' - 9"	5,077
A2	26	#11	41' - 9"	5,767
B1	32	#11	50' - 2"	8,536
B2	32	#11	28' - 4"	4,811
C1	37	#4	5' - 3"	130
C2	37	#4	9' - 3"	229
D	15	#11	1' - 6"	120
E1	9	#5	8' - 4"	78
E2	6	#5	6' - 6"	41
G	22	#7	11' - 0"	495
U1	14	#6	13' - 4"	280
U2	20	#6	10' - 5"	313
U3	12	#6	12' - 5"	224
U4	10	#6	19' - 5"	292
U5	18	#6	13' - 8"	369
U6	18	#6	6' - 8"	180
L1	8	#11	8' - 10"	375
L2	8	#11	10' - 10"	460
L3	14	#11	9' - 3"	688
M	144	#6	22' - 2"	4,794
M3	12	#6	24' - 8"	445
N	73	#6	7' - 11"	868
N2	18	#6	5' - 4"	144
S	129	#6	23' - 10"	4,618
SS	129	#6	21' - 6"	4,166
T	24	#5	73' - 6"	1,840
REINFORCING STEEL				LB 45,339
CLASS "F" CONCRETE (CAP)				CY 109.8



HL93 LOADING

VOLKERT
F-12679

Texas Department of Transportation

**IH 10 AT US 69
BENT DETAILS
IH 10 EBML
TO US 69 NB DC**

SHEET 15 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1549	

DATE: 7-MAR-2024 15:00
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1550_10M_10E-69N_BENT_DET_16.dgn

TABLE OF ESTIMATED QUANTITIES BENT 27 (H = 34') PHASE 1 STEP 3					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	26	#11	59' - 9"	8,254	
A2	26	#11	59' - 9"	8,254	
B1	32	#11	26' - 8"	4,534	
B2	32	#11	43' - 7"	7,410	
B3	32	#11	56' - 1"	9,535	
C1	57	#4	5' - 3"	200	
C2	57	#4	9' - 3"	352	
D	16	#11	1' - 6"	128	
E1	3	#5	8' - 4"	26	
E2	2	#5	6' - 6"	14	
G	22	#7	11' - 0"	495	
U1	14	#6	13' - 4"	280	
U2	20	#6	10' - 5"	313	
U3	12	#6	12' - 5"	224	
L1	8	#11	8' - 10"	375	
L2	8	#11	10' - 10"	460	
M	226	#6	22' - 2"	7,525	
N	114	#6	7' - 11"	1,356	
S	206	#6	23' - 10"	7,374	
SS	206	#6	21' - 6"	6,652	
T	24	#5	114' - 6"	2,866	
REINFORCING STEEL				LB	66,626
CLASS "F" CONCRETE (CAP)				CY	172.3

TABLE OF ESTIMATED QUANTITIES BENT 28 (H = 31') PHASE 1 STEP 3					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	26	#11	31' - 6"	4,356	
A2	26	#11	56' - 7"	7,821	
A3	26	#11	38' - 9"	5,353	
B1	32	#11	26' - 1"	4,435	
B2	32	#11	37' - 10"	6,430	
B3	32	#11	60' - 0"	10,201	
C1	57	#4	5' - 3"	200	
C2	57	#4	9' - 3"	352	
D	17	#11	1' - 6"	135	
E1	30	#5	8' - 4"	261	
E2	20	#5	6' - 6"	136	
G	22	#7	11' - 0"	495	
U1	14	#6	13' - 4"	280	
U2	20	#6	10' - 5"	313	
U3	12	#6	12' - 5"	224	
L1	8	#11	8' - 10"	375	
L2	8	#11	10' - 10"	460	
M	215	#6	22' - 2"	7,158	
N	108	#6	7' - 11"	1,284	
S	194	#6	23' - 10"	6,945	
SS	194	#6	21' - 6"	6,265	
T	24	#5	115' - 1"	2,881	
REINFORCING STEEL				LB	66,360
CLASS "F" CONCRETE (CAP)				CY	163.9

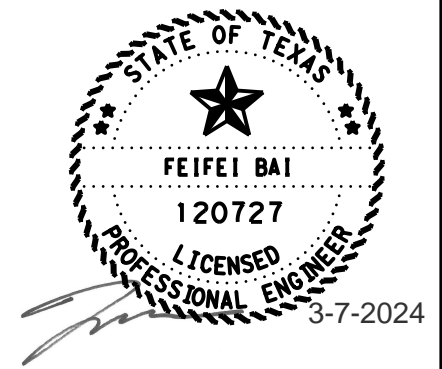
TABLE OF ESTIMATED QUANTITIES BENT 29 (H = 28') PHASE 1 STEP 3					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	20	#11	41' - 10"	4,445	
A2	20	#11	60' - 0"	6,376	
B1	12	#11	54' - 10"	3,496	
B2	12	#11	47' - 0"	2,997	
C1	48	#4	5' - 3"	168	
D	12	#11	1' - 6"	96	
E1	21	#5	8' - 4"	183	
E2	14	#5	6' - 6"	95	
G	22	#7	11' - 0"	495	
U1	7	#6	13' - 4"	140	
U2	8	#6	10' - 5"	125	
U3	8	#6	12' - 5"	149	
L1	8	#11	8' - 10"	375	
L2	8	#11	10' - 10"	460	
M	156	#6	22' - 2"	5,194	
N	78	#6	7' - 11"	927	
S	159	#6	23' - 10"	5,692	
SS	159	#6	21' - 6"	5,135	
T	28	#5	95' - 8"	2,794	
REINFORCING STEEL				LB	39,342
CLASS "F" CONCRETE (CAP)				CY	134.7

TABLE OF ESTIMATED QUANTITIES BENT 29 (H = 28') PHASE 2 STEP 1					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A3	20	#11	54' - 9"	5,821	
B3	12	#11	54' - 9"	3,493	
C1	28	#4	5' - 3"	98	
D	12	#11	1' - 6"	96	
E1	18	#5	8' - 4"	156	
E2	12	#5	6' - 6"	81	
G	11	#7	11' - 0"	247	
U1	7	#6	13' - 4"	140	
U2	8	#6	10' - 5"	125	
U3	8	#6	12' - 5"	149	
L1	4	#11	8' - 10"	188	
L2	4	#11	10' - 10"	230	
M	133	#6	22' - 2"	4,428	
N	67	#6	7' - 11"	797	
S	99	#6	23' - 10"	3,544	
SS	99	#6	21' - 6"	3,197	
T2	28	#5	54' - 9"	1,600	
REINFORCING STEEL				LB	24,391
CLASS "F" CONCRETE (CAP)				CY	85.3

TABLE OF ESTIMATED QUANTITIES BENT 30 (H = 24') PHASE 1 STEP 3					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	20	#11	57' - 6"	6,110	
B1	12	#11	57' - 6"	3,666	
C1	29	#4	5' - 3"	102	
D	12	#11	1' - 6"	96	
E1	21	#5	8' - 4"	183	
E2	14	#5	6' - 6"	95	
G	22	#7	11' - 0"	495	
U1	7	#6	13' - 4"	140	
U2	8	#6	10' - 5"	125	
U3	8	#6	12' - 5"	149	
L1	8	#11	8' - 10"	375	
L2	8	#11	10' - 10"	460	
M	114	#6	22' - 2"	3,796	
N	57	#6	7' - 11"	678	
S	99	#6	23' - 10"	3,544	
SS	99	#6	21' - 6"	3,197	
T	28	#5	57' - 6"	1,679	
REINFORCING STEEL				LB	24,890
CLASS "F" CONCRETE (CAP)				CY	86.4

TABLE OF ESTIMATED QUANTITIES BENT 31 (H = 18') PHASE 1 STEP 3					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	20	#11	57' - 9"	6,137	
B1	12	#11	57' - 9"	3,682	
C1	29	#4	5' - 3"	102	
D	12	#11	1' - 6"	96	
E1	21	#5	8' - 4"	183	
E2	14	#5	6' - 6"	95	
G	22	#7	11' - 0"	495	
U1	7	#6	13' - 4"	140	
U2	8	#6	10' - 5"	125	
U3	8	#6	12' - 5"	149	
L1	8	#11	8' - 10"	375	
L2	8	#11	10' - 10"	460	
M	114	#6	22' - 2"	3,796	
N	57	#6	7' - 11"	678	
S	99	#6	23' - 10"	3,544	
SS	99	#6	21' - 6"	3,197	
T	28	#5	57' - 9"	1,687	
REINFORCING STEEL				LB	24,941
CLASS "F" CONCRETE (CAP)				CY	86.8

TABLE OF ESTIMATED QUANTITIES BENT 32 (H = 12') PHASE 1 STEP 3					
BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	20	#11	59' - 5"	6,315	
B1	12	#11	59' - 5"	3,789	
C1	30	#4	5' - 3"	105	
D	12	#11	1' - 6"	96	
E1	21	#5	8' - 4"	183	
E2	14	#5	6' - 6"	95	
G	22	#7	11' - 0"	495	
U1	7	#6	13' - 4"	140	
U2	8	#6	10' - 5"	125	
U3	8	#6	12' - 5"	149	
L1	8	#11	8' - 10"	375	
L2	8	#11	10' - 10"	460	
M	118	#6	22' - 2"	3,929	
N	59	#6	7' - 11"	702	
S	103	#6	23' - 10"	3,687	
SS	103	#6	21' - 6"	3,326	
T	28	#5	59' - 5"	1,736	
REINFORCING STEEL				LB	25,707
CLASS "F" CONCRETE (CAP)				CY	89.3



HL93 LOADING

VOLKERT

F-12679

Texas Department of Transportation

IH 10 AT US 69 BENT DETAILS IH 10 EBML TO US 69 NB DC

SHEET 16 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1550	

DATE: 20-FEB-2024 22:45
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\151_10M_10E-69N_BENT_DET_17.dgn

TABLE OF ESTIMATED QUANTITIES
 BENT 12 (H = 67') PHASE 1 STEP 4

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	24	#11	57' - 8"	7,353	
B	12	#11	57' - 8"	3,677	
C1	30	#4	6' - 3"	125	
D	12	#11	1' - 6"	96	
E1	0	#5	8' - 4"	0	
E2	0	#5	6' - 6"	0	
G	22	#7	12' - 8"	570	
U1	18	#6	13' - 4"	360	
U2	18	#6	11' - 5"	309	
U3	16	#6	13' - 5"	322	
M	116	#6	24' - 2"	4,211	
N	59	#6	8' - 11"	790	
S	72	#6	25' - 10"	2,794	
SS	72	#6	23' - 8"	2,559	
S3	34	#6	18' - 3"	932	
T	28	#5	57' - 8"	1,684	
REINFORCING STEEL				LB	25,782
CLASS "C" CONCRETE (CAP)				CY	104.2

TABLE OF ESTIMATED QUANTITIES
 BENT 22 (H = 52') PHASE 1 STEP 4

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	24	#11	57' - 8"	7,353	
B	12	#11	57' - 8"	3,677	
C1	30	#4	6' - 3"	125	
D	12	#11	1' - 6"	96	
E1	24	#5	8' - 4"	209	
E2	16	#5	6' - 6"	108	
G	22	#7	12' - 8"	570	
U1	18	#6	14' - 2"	383	
U2	18	#6	11' - 5"	309	
U3	20	#6	13' - 7"	408	
U4	6	#6	9' - 4"	84	
U5	6	#6	8' - 8"	78	
M1	116	#6	20' - 10"	3,630	
M2	116	#6	22' - 2"	3,862	
N	59	#6	9' - 3"	820	
S	27	#6	27' - 6"	1,115	
SS	27	#6	25' - 2"	1,021	
S3	68	#6	19' - 11"	2,034	
T	34	#5	57' - 8"	2,045	
REINFORCING STEEL				LB	27,926
CLASS "C" CONCRETE (CAP)				CY	120.0

TABLE OF ESTIMATED QUANTITIES
 BENT 23 (H = 49') PHASE 1 STEP 4

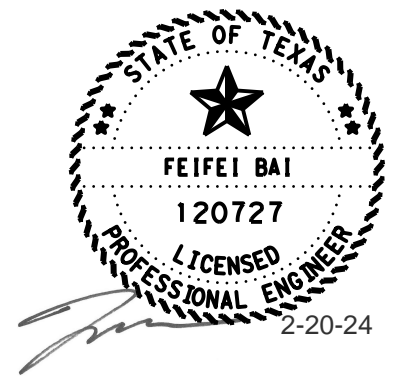
BAR	NO.	SIZE	LENGTH	WEIGHT	
A	24	#11	57' - 8"	7,353	
B	12	#11	57' - 8"	3,677	
C1	30	#4	6' - 3"	125	
D	12	#11	1' - 6"	96	
E1	24	#5	8' - 4"	209	
E2	16	#5	6' - 6"	108	
G	22	#7	12' - 8"	570	
U1	18	#6	13' - 4"	360	
U2	18	#6	11' - 5"	309	
U3	16	#6	13' - 5"	322	
M	116	#6	24' - 2"	4,211	
N	59	#6	8' - 11"	790	
S	27	#6	25' - 10"	1,048	
SS	27	#6	23' - 8"	960	
S3	68	#6	18' - 3"	1,864	
T	28	#5	57' - 8"	1,684	
REINFORCING STEEL				LB	23,685
CLASS "C" CONCRETE (CAP)				CY	88.4

TABLE OF ESTIMATED QUANTITIES
 BENT 24 (H = 46') PHASE 1 STEP 4

BAR	NO.	SIZE	LENGTH	WEIGHT	
A	24	#11	57' - 8"	7,353	
B	12	#11	57' - 8"	3,677	
C1	30	#4	6' - 3"	125	
D	12	#11	1' - 6"	96	
E1	24	#5	8' - 4"	209	
E2	16	#5	6' - 6"	108	
G	22	#7	12' - 8"	570	
U1	18	#6	13' - 4"	360	
U2	18	#6	11' - 5"	309	
U3	16	#6	13' - 5"	322	
M	116	#6	24' - 2"	4,211	
N	59	#6	8' - 11"	790	
S	27	#6	25' - 10"	1,048	
SS	27	#6	23' - 8"	960	
S3	68	#6	18' - 3"	1,864	
T	28	#5	57' - 8"	1,684	
REINFORCING STEEL				LB	23,685
CLASS "C" CONCRETE (CAP)				CY	88.4

TABLE OF ESTIMATED QUANTITIES
 BENT 25 (H = 43') PHASE 1 STEP 4

BAR	NO.	SIZE	LENGTH	WEIGHT	
A1	26	#11	35' - 7"	4,914	
A2	26	#11	46' - 7"	6,440	
B1	32	#11	55' - 6"	9,433	
B2	32	#11	26' - 9"	4,541	
C1	39	#4	5' - 3"	137	
C2	39	#4	9' - 3"	241	
D	13	#11	1' - 6"	104	
E1	24	#5	8' - 4"	209	
E2	16	#5	6' - 6"	108	
G	22	#7	11' - 0"	495	
U1	14	#6	13' - 4"	280	
U2	20	#6	10' - 5"	313	
U3	12	#6	12' - 5"	224	
L1	8	#11	8' - 10"	375	
L2	8	#11	10' - 10"	460	
M	152	#6	22' - 2"	5,061	
N	77	#6	7' - 11"	916	
S	137	#6	23' - 10"	4,904	
SS	137	#6	21' - 6"	4,424	
T	24	#5	77' - 2"	1,932	
REINFORCING STEEL				LB	45,512
CLASS "F" CONCRETE (CAP)				CY	115.4



HL93 LOADING

VOLKERT

F-12679



**IH 10 AT US 69
 BENT DETAILS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 17 OF 18

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1551		

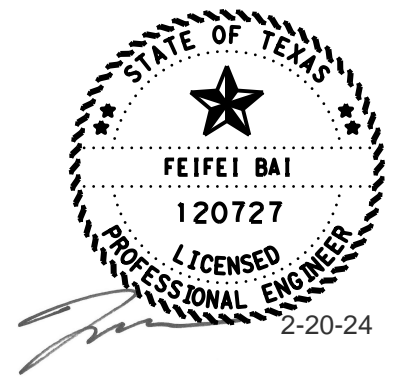
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TABLE OF ESTIMATED QUANTITIES BENT 29 (H = 28') PHASE 2 STEP 1				
BAR	NO.	SIZE	LENGTH	WEIGHT
A3	20	#11	54' - 9"	5,821
B3	12	#11	54' - 9"	3,493
C1	28	#4	5' - 3"	98
D	12	#11	1' - 6"	96
E1	18	#5	8' - 4"	156
E2	12	#5	6' - 6"	81
G	11	#7	11' - 0"	247
U1	7	#6	13' - 4"	140
U2	8	#6	10' - 5"	125
U3	8	#6	12' - 5"	149
L1	4	#11	8' - 10"	188
L2	4	#11	10' - 10"	230
M	133	#6	22' - 2"	4,428
N	67	#6	7' - 11"	797
S	99	#6	23' - 10"	3,544
SS	99	#6	21' - 6"	3,197
T2	28	#5	54' - 9"	1,600
REINFORCING STEEL			LB	24,391
CLASS "F" CONCRETE (CAP)			CY	85.3

TABLE OF ESTIMATED QUANTITIES BENT 30 (H = 24') PHASE 2 STEP 1				
BAR	NO.	SIZE	LENGTH	WEIGHT
A2	20	#11	46' - 8"	4,961
B2	12	#11	46' - 8"	2,977
C1	24	#4	5' - 3"	84
D	10	#11	1' - 6"	80
E1	18	#5	8' - 4"	156
E2	12	#5	6' - 6"	81
G	11	#7	11' - 0"	247
U1	7	#6	13' - 4"	140
U2	8	#6	10' - 5"	125
U3	8	#6	12' - 5"	149
L1	4	#11	8' - 10"	188
L2	4	#11	10' - 10"	230
M	96	#6	22' - 2"	3,196
N	48	#6	7' - 11"	571
S	89	#6	23' - 10"	3,186
SS	89	#6	21' - 6"	2,874
T2	28	#5	46' - 8"	1,363
REINFORCING STEEL			LB	20,609
CLASS "F" CONCRETE (CAP)			CY	73.0

TABLE OF ESTIMATED QUANTITIES BENT 31 (H = 18') PHASE 2 STEP 1				
BAR	NO.	SIZE	LENGTH	WEIGHT
A2	20	#11	39' - 3"	4,173
B2	12	#11	39' - 3"	2,504
C1	20	#4	5' - 3"	70
D	9	#11	1' - 6"	72
E1	15	#5	8' - 4"	130
E2	10	#5	6' - 6"	68
G	11	#7	11' - 0"	247
U1	7	#6	13' - 4"	140
U2	8	#6	10' - 5"	125
U3	8	#6	12' - 5"	149
L1	4	#11	8' - 10"	188
L2	4	#11	10' - 10"	230
M	81	#6	22' - 2"	2,697
N	41	#6	7' - 11"	488
S	74	#6	23' - 10"	2,649
SS	74	#6	21' - 6"	2,390
T2	28	#5	39' - 3"	1,147
REINFORCING STEEL			LB	17,466
CLASS "F" CONCRETE (CAP)			CY	61.7

TABLE OF ESTIMATED QUANTITIES BENT 32 (H = 12') PHASE 2 STEP 1				
BAR	NO.	SIZE	LENGTH	WEIGHT
A2	20	#11	34' - 6"	3,664
B2	12	#11	34' - 6"	2,198
C1	18	#4	5' - 3"	63
D	8	#11	1' - 6"	64
E1	12	#5	8' - 4"	104
E2	8	#5	6' - 6"	54
G	11	#7	11' - 0"	247
U1	7	#6	13' - 4"	140
U2	8	#6	10' - 5"	125
U3	8	#6	12' - 5"	149
L1	4	#11	8' - 10"	188
L2	4	#11	10' - 10"	230
M	72	#6	22' - 2"	2,397
N	36	#6	7' - 11"	428
S	64	#6	23' - 10"	2,291
SS	64	#6	21' - 6"	2,067
T2	28	#5	34' - 6"	1,007
REINFORCING STEEL			LB	15,418
CLASS "F" CONCRETE (CAP)			CY	54.4



HL93 LOADING

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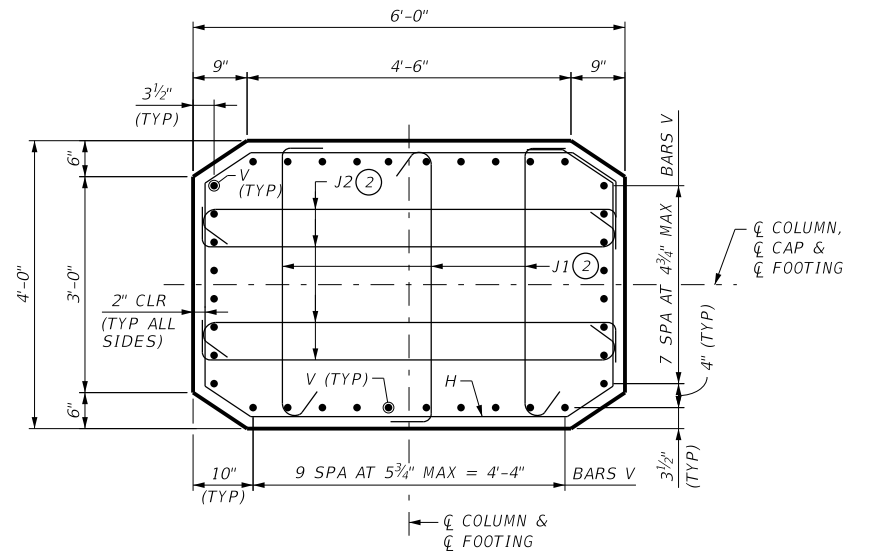
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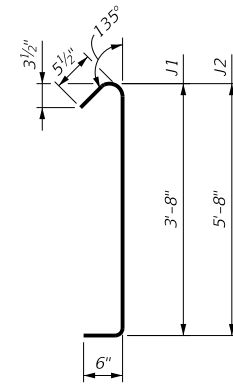
**IH 10 AT US 69
BENT DETAILS
IH 10 EBML
TO US 69 NB DC**

SHEET 18 OF 18

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1552	



STRADDLE BENT COLUMN TYPE G SECTION

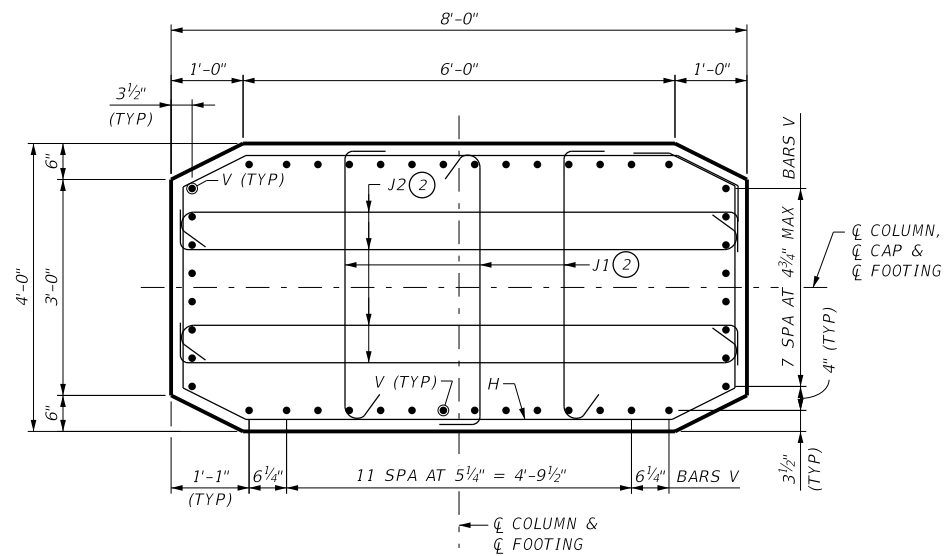


BARS J1 & J2
(COLUMN TYPE G)

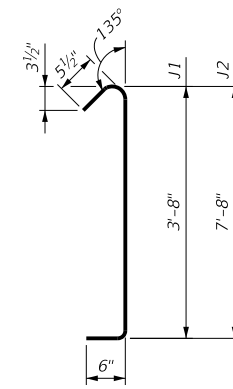
(STRADDLE BENT COLUMN TYPE G)

TABLE OF ESTIMATED COLUMN QUANTITIES (H=33') ①④				
BAR	NO.	SIZE	LENGTH	WEIGHT
E	5	#5	5'-8"	30
E1	6	#5	3'-3"	20
F	6	#5	5'-0"	31
F1	6	#5	5'-2"	27
H	64	#5	19'-3"	1,285
J1	192	#5	4'-8"	935
J2	256	#5	6'-8"	1,780
U	10	#4	5'-0"	33
U1	10	#5	7'-3"	15
V	36	#11	38'-5"	7,348
REINFORCING STEEL			LB	11,504
CLASS "F" CONCRETE (COL)			CY	28.5

- QUANTITIES SHOWN ARE FOR ONE COLUMN WITH A H=33'-0". SEE BRIDGE LAYOUT SHEETS FOR H VALUES. SEE BENT SHEETS FOR CAP QUANTITIES.
- ALTERNATE TIE ENDS WITH 90 DEGREE HOOKS (VERTICALLY AND HORIZONTALLY).
- SEE FOUNDATIONS DETAIL SHEETS FOR FD BAR DETAILS.
- FOR EACH LINEAR FOOT OF VARIATION IN "H" VALUE, MAKE THE FOLLOWING ADJUSTMENTS:
 BARS V LENGTH = 1'-0"
 NO. OF H BARS = 2
 NO. OF J1 BARS = 6
 NO. OF J2 BARS = 8
 REINFORCING STEEL = 317 LBS
 CLASS "F" CONCRETE (COL) = 0.86 CY



STRADDLE BENT COLUMN TYPE H SECTION



BARS J1 & J2
(COLUMN TYPE H)

(STRADDLE BENT COLUMN TYPE H)

TABLE OF ESTIMATED COLUMN QUANTITIES (H=35') ①④				
BAR	NO.	SIZE	LENGTH	WEIGHT
E	5	#5	7'-8"	40
E1	8	#5	3'-3"	27
F	9	#5	5'-0"	47
F1	5	#5	7'-2"	38
H	69	#5	23'-6"	1,692
J1	207	#5	4'-8"	1,008
J2	276	#5	8'-8"	2,495
U	10	#4	5'-0"	33
U1	2	#5	7'-3"	15
V	44	#11	40'-5"	9,450
REINFORCING STEEL			LB	14,845
CLASS "F" CONCRETE (COL)			CY	74.6

- QUANTITIES SHOWN ARE FOR ONE COLUMN WITH A H=35'-0". SEE BRIDGE LAYOUT SHEETS FOR H VALUES. SEE BENT SHEETS FOR CAP QUANTITIES.
- ALTERNATE TIE ENDS WITH 90 DEGREE HOOKS (VERTICALLY AND HORIZONTALLY).
- SEE FOUNDATIONS DETAIL SHEETS FOR FD BAR DETAILS.
- FOR EACH LINEAR FOOT OF VARIATION IN "H" VALUE, MAKE THE FOLLOWING ADJUSTMENTS:
 BARS V LENGTH = 1'-0"
 NO. OF H BARS = 2
 NO. OF J1 BARS = 6
 NO. OF J2 BARS = 8
 REINFORCING STEEL = 384 LBS
 CLASS "F" CONCRETE (COL) = 1.15 CY

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION (2020) AND TXDOT BRIDGE DESIGN MANUAL (JAN 2023).

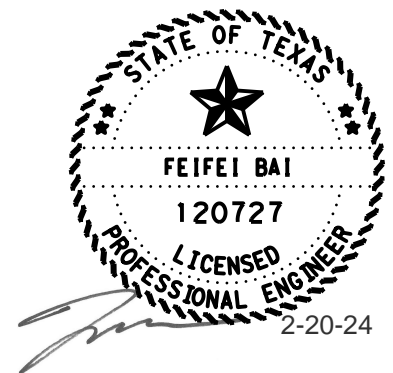
SEE BRIDGE LAYOUT AND FOUNDATION LAYOUT SHEETS FOR FOUNDATION TYPE, SIZE AND D.S. LENGTH.

SEE FOUNDATION DETAILS SHEET FOR FOUNDATION DETAILS AND NOTES.

MATERIAL NOTES:
 PROVIDE CLASS F CONCRETE ($f'_c = 5,000$ psi).
 PROVIDE GRADE 60 REINFORCING STEEL.

NOTE: CONTRACTOR TO UTILIZE THIS SHEET WITH COLUMN TYPE G & H DETAILS SHEETS FOR ALL OTHER INFORMATION NOT SHOWN.

REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.



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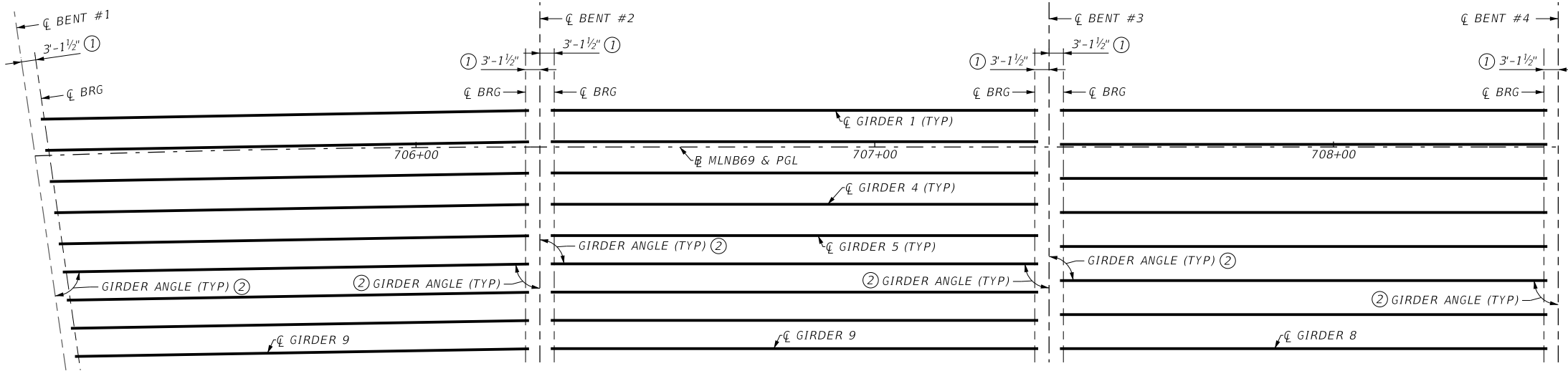


**IH 10 AT US 69
 STRADDLE BENT
 COLUMN DETAILS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 1

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1553	

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SPAN 1
(Tx54 GIRDERS)

SPAN 2
(Tx54 GIRDERS)

SPAN 3
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

BENT REPORT

BENT NO. 1 (N 89° 47' 27" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.042 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 1 GIRDER 1	0.000	82	50	17
GIRDER 2	6.873	82	49	53
GIRDER 3	6.873	82	49	28
GIRDER 4	6.873	82	49	3
GIRDER 5	6.873	82	48	38
GIRDER 6	6.203	82	48	16
GIRDER 7	6.203	82	47	53
GIRDER 8	6.203	82	47	30
GIRDER 9	6.203	82	47	7
TOTAL	52.302			

BENT NO. 2 (N 81° 36' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 1 GIRDER 1	0.000	88	58	46
GIRDER 2	6.833	88	59	10
GIRDER 3	6.833	88	59	34
GIRDER 4	6.833	88	59	59
GIRDER 5	6.833	89	0	25
GIRDER 6	6.167	89	0	47
GIRDER 7	6.167	89	1	10
GIRDER 8	6.167	89	1	33
GIRDER 9	6.167	89	1	56
TOTAL	52.000			

BENT NO. 3 (N 81° 36' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 2 GIRDER 1	0.000	90	0	0
GIRDER 2	6.833	90	0	0
GIRDER 3	6.833	90	0	0
GIRDER 4	6.833	90	0	0
GIRDER 5	6.833	90	0	0
GIRDER 6	6.167	90	0	0
GIRDER 7	6.167	90	0	0
GIRDER 8	6.167	90	0	0
GIRDER 9	6.167	90	0	0
TOTAL	52.000			

BENT NO. 4 (N 81° 36' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 3 GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

SPAN 2 GIRDER 1

	BEAM SPAC.	D	M	S
GIRDER 1	0.000	90	0	0
GIRDER 2	6.833	90	0	0
GIRDER 3	6.833	90	0	0
GIRDER 4	6.833	90	0	0
GIRDER 5	6.833	90	0	0
GIRDER 6	6.167	90	0	0
GIRDER 7	6.167	90	0	0
GIRDER 8	6.167	90	0	0
GIRDER 9	6.167	90	0	0
TOTAL	52.000			

SPAN 3 GIRDER 1

	BEAM SPAC.	D	M	S
GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

GIRDER REPORT

GIRDER REPORT, SPAN 1

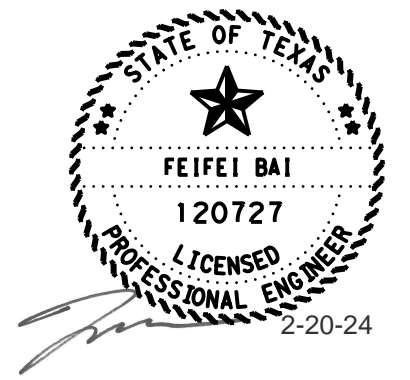
	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
GIRDER 1	111.209	104.934	106.441	0.0048
GIRDER 2	110.230	103.955	105.463	0.0061
GIRDER 3	109.252	102.977	104.486	0.0073
GIRDER 4	108.273	101.998	103.508	0.0085
PHASE 1 STEP 3				
GIRDER 5	107.295	101.02	102.530	0.0098
GIRDER 6	106.412	100.136	101.648	0.0109
GIRDER 7	105.528	99.253	100.766	0.0120
GIRDER 8	104.645	98.370	99.885	0.0131
GIRDER 9	103.762	97.487	98.993	0.0142

GIRDER REPORT, SPAN 2

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
GIRDER 1	111.000	104.750	106.272	0.0203
GIRDER 2	111.000	104.750	106.274	0.0213
GIRDER 3	111.000	104.750	106.276	0.0223
GIRDER 4	111.000	104.750	106.279	0.0233
GIRDER 5	111.000	104.750	106.281	0.0242
GIRDER 6	111.000	104.750	106.284	0.0251
GIRDER 7	111.000	104.750	106.286	0.0260
GIRDER 8	111.000	104.750	106.289	0.0269
GIRDER 9	111.000	104.750	106.291	0.0278

GIRDER REPORT, SPAN 3

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
GIRDER 1	111.000	104.750	106.297	0.0297
GIRDER 2	111.000	104.750	106.297	0.0297
GIRDER 3	111.000	104.750	106.297	0.0297
GIRDER 4	111.000	104.750	106.297	0.0297
GIRDER 5	111.000	104.750	106.297	0.0297
GIRDER 6	111.000	104.750	106.297	0.0297
GIRDER 7	111.000	104.750	106.297	0.0297
GIRDER 8	111.000	104.750	106.297	0.0297



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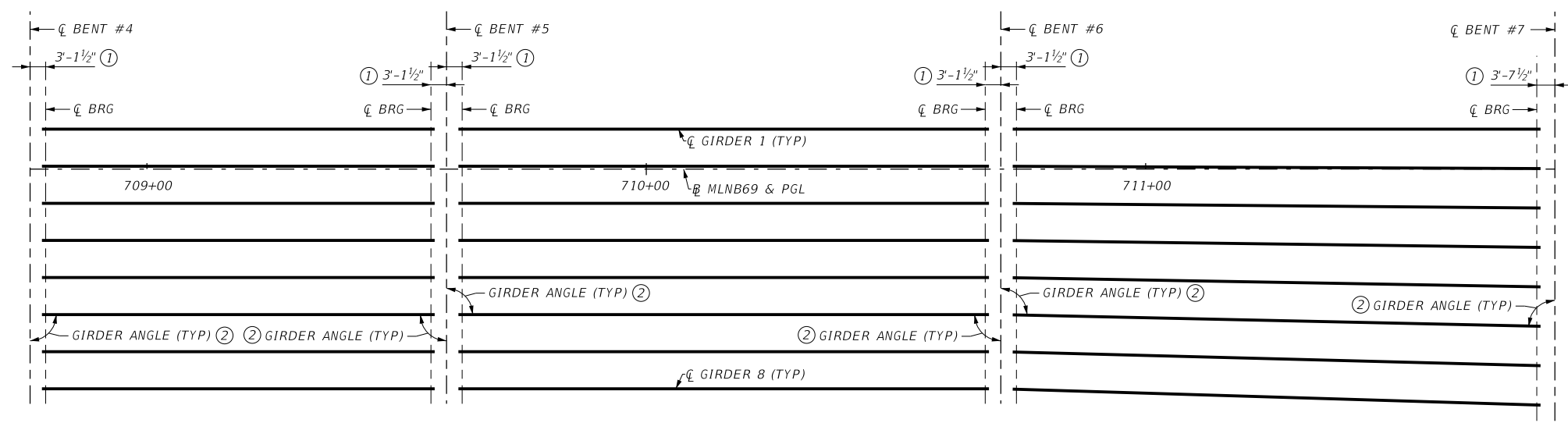
Texas Department of Transportation

**IH 10 AT US 69
FRAMING PLAN
(SPANS 1-3)
IH 10 EBML
TO US 69 NB DC**

SHEET 1 OF 11

DN: FB	CK: BB	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1554	

DATE: 21-FEB-2024 02:29
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1555_10M_10E-69N_GRDLAY_02.dgn



SPAN 4
(Tx54 GIRDERS)

SPAN 5
(Tx54 GIRDERS)

SPAN 6
(Tx54 GIRDERS)

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

BENT REPORT

BENT NO. 4 (N 81° 36' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 4 GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

BENT NO. 5 (N 81° 36' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 4 GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

BENT NO. 6 (N 81° 36' 29" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 5 GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

BENT NO. 7 (N 82° 06' 10" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 6 GIRDER 1	0.000	89	30	19
GIRDER 2	7.910	89	15	26
GIRDER 3	7.910	89	0	34
GIRDER 4	7.910	88	45	43
GIRDER 5	7.910	88	30	53
GIRDER 6	7.910	88	16	5
GIRDER 7	7.910	88	1	18
GIRDER 8	7.910	87	46	32
TOTAL	55.373			

SPAN 5 GIRDER 1

	BEAM SPAC.	D	M	S
GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

SPAN 6 GIRDER 1

	BEAM SPAC.	D	M	S
GIRDER 1	0.000	89	59	59
GIRDER 2	7.429	89	45	6
GIRDER 3	7.429	89	30	14
GIRDER 4	7.429	89	15	24
GIRDER 5	7.429	89	0	34
GIRDER 6	7.429	88	45	46
GIRDER 7	7.429	88	30	58
GIRDER 8	7.429	88	16	13
TOTAL	52.000			

GIRDER REPORT

GIRDER REPORT, SPAN 4

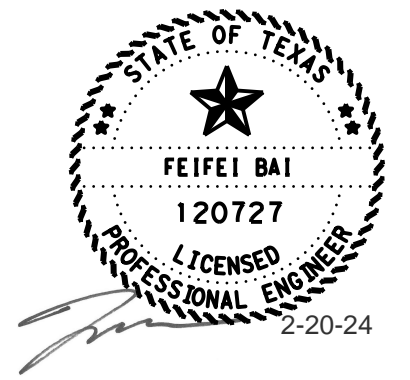
	HORIZONTAL DISTANCE		GRDR	SLOPE
	C-C BENT	C-C BRG.		
GIRDER 1	111.000	104.75	106.297	0.0297
GIRDER 2	111.000	104.75	106.297	0.0297
GIRDER 3	111.000	104.75	106.297	0.0297
PHASE 1 STEP 3 GIRDER 4	111.000	104.75	106.297	0.0297
GIRDER 5	111.000	104.75	106.297	0.0297
GIRDER 6	111.000	104.75	106.297	0.0297
GIRDER 7	111.000	104.75	106.297	0.0297
GIRDER 8	111.000	104.75	106.297	0.0297

GIRDER REPORT, SPAN 5

	HORIZONTAL DISTANCE		GRDR	SLOPE
	C-C BENT	C-C BRG.		
GIRDER 1	111.000	104.750	106.297	0.0297
GIRDER 2	111.000	104.750	106.297	0.0297
GIRDER 3	111.000	104.750	106.297	0.0297
GIRDER 4	111.000	104.750	106.297	0.0297
GIRDER 5	111.000	104.750	106.297	0.0297
GIRDER 6	111.000	104.750	106.297	0.0297
GIRDER 7	111.000	104.750	106.297	0.0297
GIRDER 8	111.000	104.750	106.297	0.0297

GIRDER REPORT, SPAN 6

	HORIZONTAL DISTANCE		GRDR	SLOPE
	C-C BENT	C-C BRG.		
GIRDER 1	110.951	104.201	105.747	0.0297
GIRDER 2	111.020	104.270	105.816	0.0296
GIRDER 3	111.092	104.341	105.887	0.0295
GIRDER 4	111.165	104.414	105.960	0.0294
GIRDER 5	111.241	104.489	106.035	0.0293
GIRDER 6	111.318	104.566	106.111	0.0291
GIRDER 7	111.398	104.645	106.190	0.0290
GIRDER 8	111.480	104.726	106.271	0.0289



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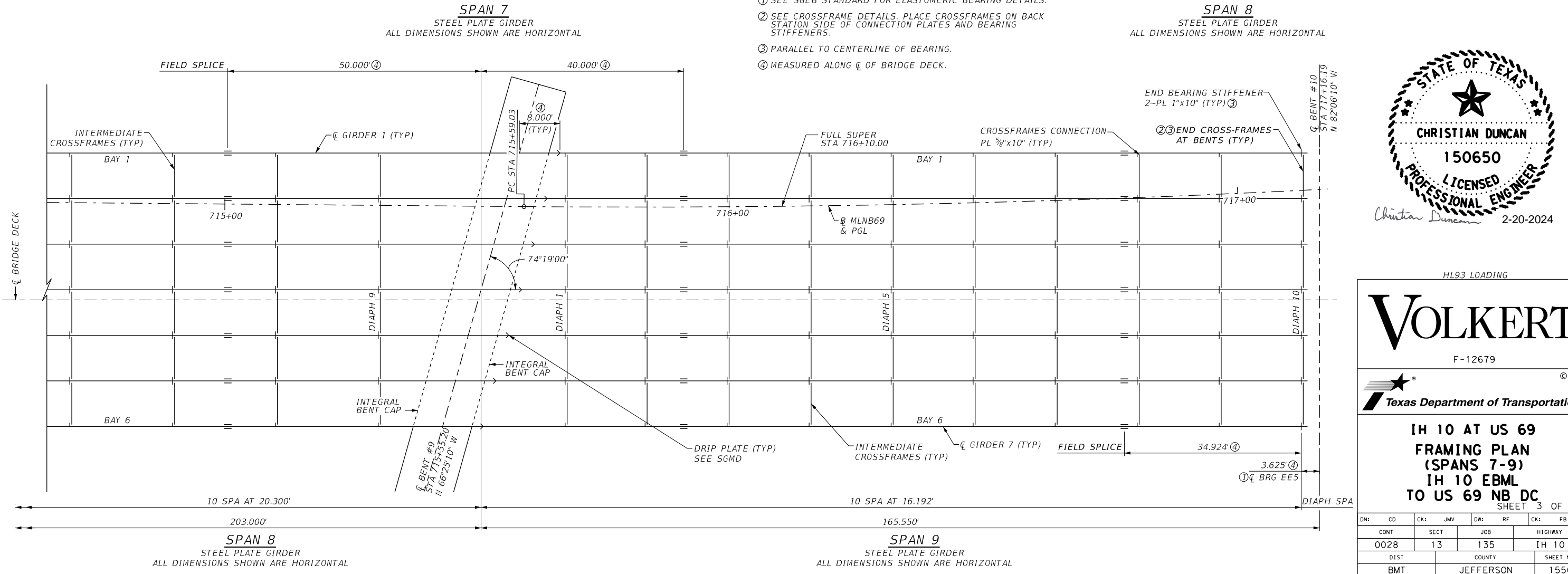
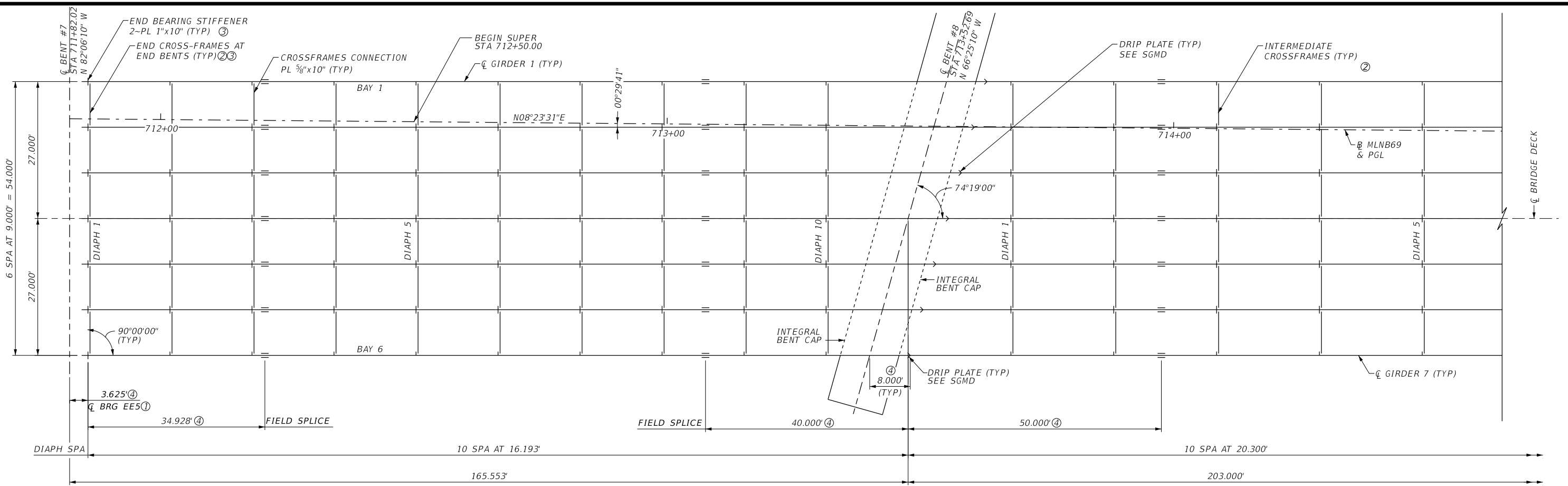


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 4-6)
 IH 10 EBML
 TO US 69 NB DC**

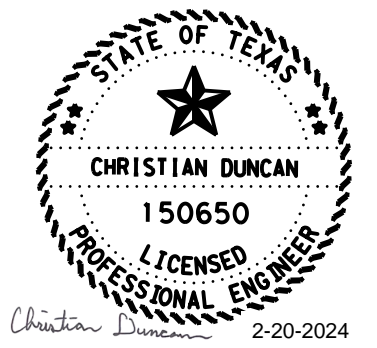
SHEET 2 OF 11

DN:	FB	CK:	BB	DW:	KAH	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1555			

DATE: 20-FEB-2024 22:10
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- ① SEE SGB STANDARD FOR ELASTOMERIC BEARING DETAILS.
- ② SEE CROSSFRAME DETAILS. PLACE CROSSFRAMES ON BACK STATION SIDE OF CONNECTION PLATES AND BEARING STIFFENERS.
- ③ PARALLEL TO CENTERLINE OF BEARING.
- ④ MEASURED ALONG ϕ OF BRIDGE DECK.



HL93 LOADING

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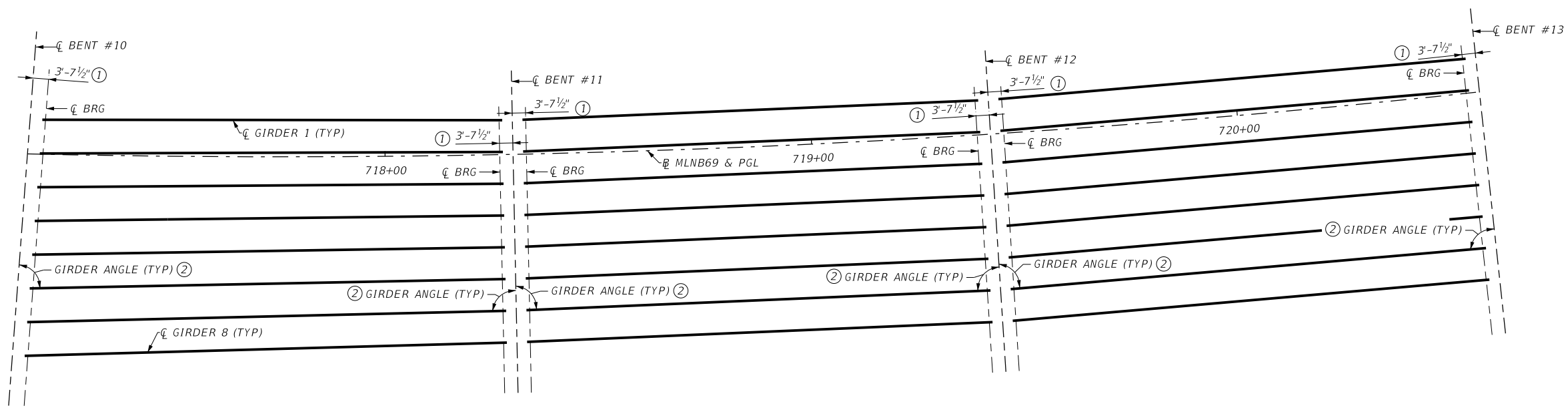
Texas Department of Transportation

**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 7-9)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 3 OF 11

DN:	CD	CK:	JMV	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1556			

DATE: 20-FEB-2024 22:53
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1557_10ML_10E-69N_GRDLAY_04.dgn



- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

SPAN 10
(Tx54 GIRDERS)

SPAN 11
(Tx54 GIRDERS)

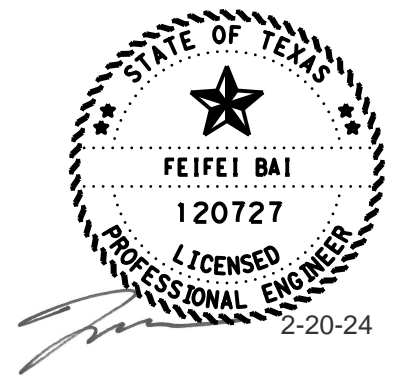
SPAN 12
(Tx54 GIRDERS)

BENT REPORT

BENT NO. 10 (N 82° 06' 10" W)					BENT NO. 11 (N 87° 34' 46" W)					BENT NO. 12 (S 89° 57' 08" W)					BENT NO. 13 (S 87° 25' 05" W)								
DISTANCE BETWEEN STATION LINE AND GRDR 1 8.011 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L								
SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE			SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE			SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE			SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
			D	M	S				D	M	S				D	M	S				D	M	S
SPAN 10	GIRDER 1	0.000	85	46	22	SPAN 10	GIRDER 1	0.000	88	45	2	SPAN 11	GIRDER 1	0.000	88	45	57	SPAN 12	GIRDER 1	0.000	88	43	58
	GIRDER 2	7.928	85	31	53		GIRDER 2	7.429	88	59	31		GIRDER 2	7.429	88	45	57		GIRDER 2	7.429	88	43	58
	GIRDER 3	7.928	85	17	35		GIRDER 3	7.429	89	13	49		GIRDER 3	7.429	88	45	57		GIRDER 3	7.429	88	43	58
	GIRDER 4	7.928	85	3	28		GIRDER 4	7.429	89	27	56		GIRDER 4	7.429	88	45	57		GIRDER 4	7.429	88	43	58
	GIRDER 5	7.928	84	49	32		GIRDER 5	7.429	89	41	52		GIRDER 5	7.429	88	45	57		GIRDER 5	7.429	88	43	58
	GIRDER 6	7.928	84	35	47		GIRDER 6	7.429	89	55	37		GIRDER 6	7.429	88	45	57		GIRDER 6	7.429	88	43	58
	GIRDER 7	7.928	84	22	12		GIRDER 7	7.429	90	9	12		GIRDER 7	7.429	88	45	57		GIRDER 7	7.429	88	43	58
	GIRDER 8	7.928	84	9	12		GIRDER 8	7.429	90	22	36		GIRDER 8	7.429	88	45	57		GIRDER 8	7.429	88	43	58
	TOTAL	55.496					TOTAL	52.000					TOTAL	52.000					TOTAL	52.000			
						SPAN 11	GIRDER 1	0.000	88	45	57	SPAN 12	GIRDER 1	0.000	88	43	58						
							GIRDER 2	7.429	88	45	57		GIRDER 2	7.429	88	43	58						
							GIRDER 3	7.429	88	45	57		GIRDER 3	7.429	88	43	58						
							GIRDER 4	7.429	88	45	57		GIRDER 4	7.429	88	43	58						
							GIRDER 5	7.429	88	45	57		GIRDER 5	7.429	88	43	58						
							GIRDER 6	7.429	88	45	57		GIRDER 6	7.429	88	43	58						
							GIRDER 7	7.429	88	45	57		GIRDER 7	7.429	88	43	58						
							GIRDER 8	7.429	88	45	57		GIRDER 8	7.429	88	43	58						
							TOTAL	52.000					TOTAL	52.000									

GIRDER REPORT

GIRDER REPORT, SPAN 10					GIRDER REPORT, SPAN 11					GIRDER REPORT, SPAN 12				
GIRDER	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE	GIRDER	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE	GIRDER	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
GIRDER 2	113.783	106.522	108.039	0.0165	GIRDER 2	111.967	104.715	106.221	0.0101	GIRDER 2	114.965	107.714	109.215	0.0035
GIRDER 3	114.533	107.270	108.787	0.0163	GIRDER 3	112.287	105.035	106.541	0.0101	GIRDER 3	115.294	108.042	109.543	0.0035
PHASE 1 STEP 3 GIRDER 4	115.284	108.020	109.537	0.0160	PHASE 1 STEP 4 GIRDER 4	112.607	105.355	106.861	0.0101	GIRDER 4	115.622	108.371	109.872	0.0035
GIRDER 5	116.037	108.772	110.289	0.0158	GIRDER 5	112.927	105.675	107.181	0.0101	GIRDER 5	115.951	108.699	110.200	0.0035
GIRDER 6	116.792	109.526	111.043	0.0156	GIRDER 6	113.247	105.995	107.501	0.0100	GIRDER 6	116.280	109.028	110.529	0.0035
GIRDER 7	117.549	110.282	111.799	0.0153	GIRDER 7	113.567	106.315	107.821	0.0100	GIRDER 7	116.608	109.356	110.857	0.0035
GIRDER 8	118.308	111.039	112.556	0.0151	GIRDER 8	113.887	106.635	108.141	0.0100	GIRDER 8	116.937	109.685	111.186	0.0035



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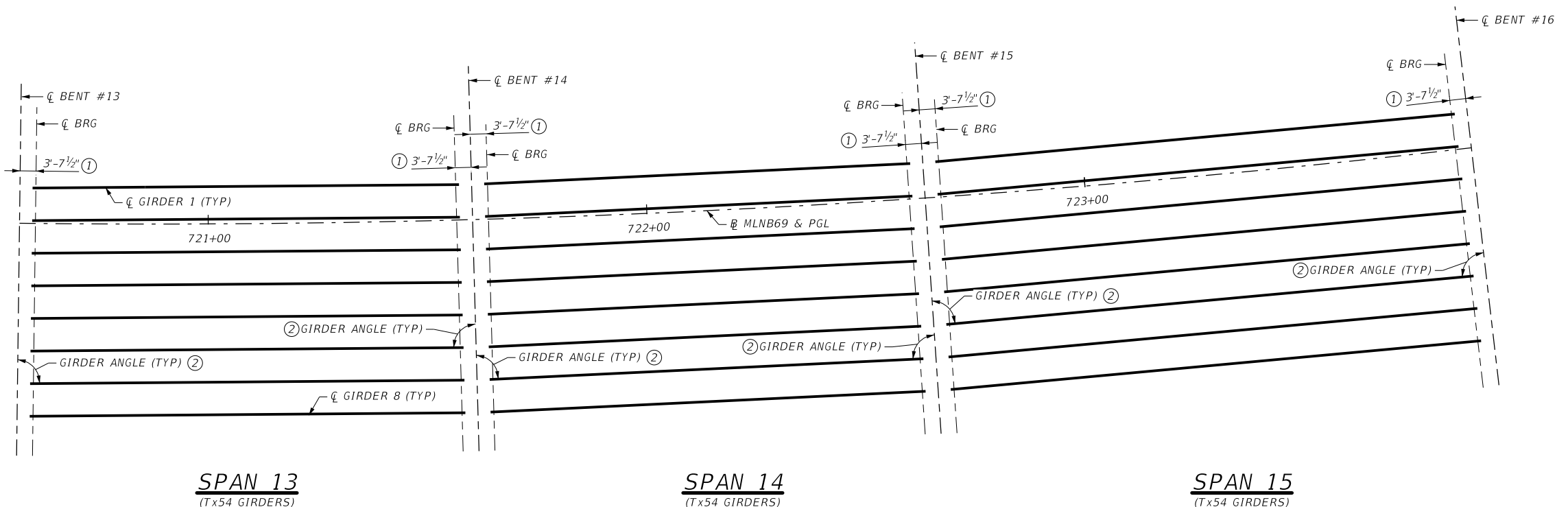
Texas Department of Transportation

**IH 10 AT US 69
FRAMING PLAN
(SPANS 10-12)
IH 10 EBML
TO US 69 NB DC**

SHEET 4 OF 11

DW:	FB	CK:	BB	DW:	KAH	CK:	FB
CONT	13	JOB	135	HIGHWAY	IH 10		
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1557				

DATE: 21-FEB-2024 01:53
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- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

BENT NO. 13 (S 87° 25' 05" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 13 GIRDER 1	0.000	88	51	44
GIRDER 2	7.429	88	51	44
GIRDER 3	7.429	88	51	44
GIRDER 4	7.429	88	51	44
GIRDER 5	7.429	88	51	44
GIRDER 6	7.429	88	51	44
GIRDER 7	7.429	88	51	44
GIRDER 8	7.429	88	51	44
TOTAL	52.000			

BENT NO. 14 (S 85° 08' 34" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 13 GIRDER 1	0.000	88	51	44
GIRDER 2	7.429	88	51	44
GIRDER 3	7.429	88	51	44
GIRDER 4	7.429	88	51	44
GIRDER 5	7.429	88	51	44
GIRDER 6	7.429	88	51	44
GIRDER 7	7.429	88	51	44
GIRDER 8	7.429	88	51	44
TOTAL	52.000			

BENT NO. 15 (S 82° 52' 03" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 14 GIRDER 1	0.000	88	51	44
GIRDER 2	7.429	88	51	44
GIRDER 3	7.429	88	51	44
GIRDER 4	7.429	88	51	44
GIRDER 5	7.429	88	51	44
GIRDER 6	7.429	88	51	44
GIRDER 7	7.429	88	51	44
GIRDER 8	7.429	88	51	44
TOTAL	52.000			

BENT NO. 16 (S 80° 06' 47" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 15 GIRDER 1	0.000	88	37	22
GIRDER 2	7.429	88	37	22
GIRDER 3	7.429	88	37	22
GIRDER 4	7.429	88	37	22
GIRDER 5	7.429	88	37	22
GIRDER 6	7.429	88	37	22
GIRDER 7	7.429	88	37	22
GIRDER 8	7.429	88	37	22
TOTAL	52.000			

BENT REPORT

GIRDER REPORT, SPAN 13

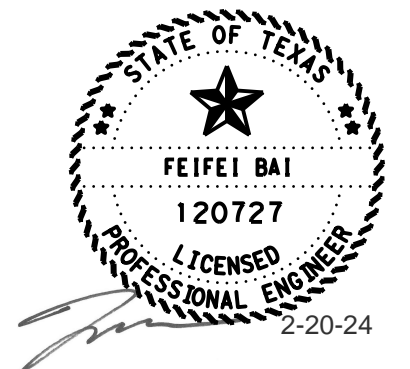
	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.			
GIRDER 1	102.926	95.674	97.175		-0.0028
GIRDER 2	103.221	95.969	97.470		-0.0028
GIRDER 3	103.516	96.264	97.765		-0.0028
PHASE 1 GIRDER 4	103.811	96.559	98.060		-0.0028
STEP 3 GIRDER 5	104.106	96.854	98.355		-0.0028
GIRDER 6	104.401	97.149	98.650		-0.0028
GIRDER 7	104.696	97.444	98.945		-0.0028
GIRDER 8	104.991	97.739	99.240		-0.0028

GIRDER REPORT, SPAN 14

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.			
GIRDER 1	102.926	95.674	97.178		-0.0089
GIRDER 2	103.221	95.969	97.473		-0.0088
GIRDER 3	103.516	96.264	97.768		-0.0088
GIRDER 4	103.811	96.559	98.063		-0.0088
GIRDER 5	104.106	96.854	98.358		-0.0088
GIRDER 6	104.401	97.149	98.653		-0.0087
GIRDER 7	104.696	97.444	98.948		-0.0087
GIRDER 8	104.991	97.739	99.243		-0.0087

GIRDER REPORT, SPAN 15

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.			
GIRDER 1	124.603	117.351	118.866		-0.0155
GIRDER 2	124.961	117.708	119.223		-0.0155
GIRDER 3	125.318	118.066	119.580		-0.0154
GIRDER 4	125.675	118.423	119.937		-0.0154
GIRDER 5	126.032	118.780	120.294		-0.0153
GIRDER 6	126.389	119.137	120.651		-0.0153
GIRDER 7	126.746	119.494	121.009		-0.0153
GIRDER 8	127.103	119.851	121.366		-0.0152



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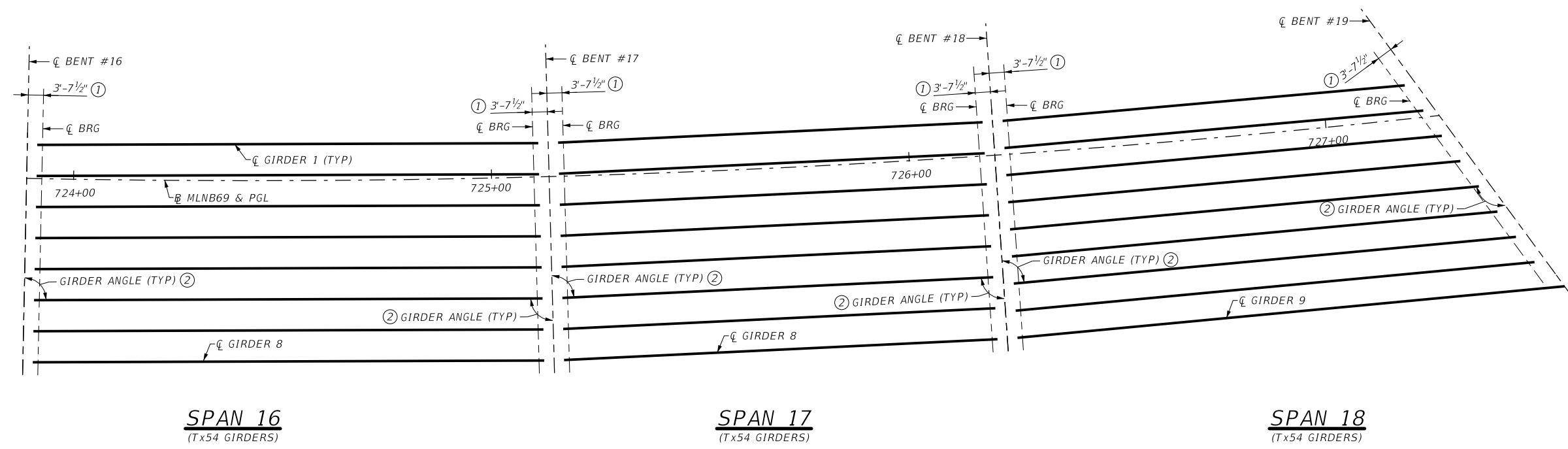
Texas Department of Transportation

**IH 10 AT US 69
FRAMING PLAN
(SPANS 13-15)
IH 10 EBML
TO US 69 NB DC**

SHEET 5 OF 11

DN: FB	CK: BB	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1558	

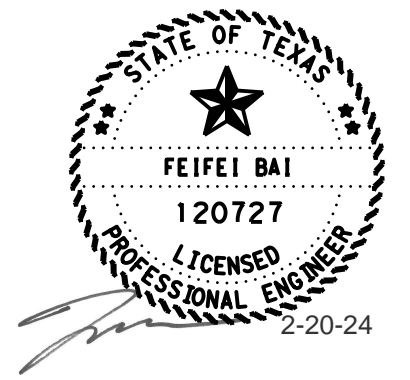
DATE: 21-FEB-2024 02:15
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1559_10ML_10E-69N_GRDLAY_06.dgn



- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

BENT NO. 16 (S 80° 06' 47" W)					BENT NO. 17 (S 77° 21' 30" W)					BENT NO. 18 (S 75° 00' 21" W)					BENT NO. 19 (S 42° 39' 13" W)								
DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 9.243 L								
SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		SPAN	GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE					
			D	M				D	M				D	M				D	M	D	M	D	M
SPAN 16	GIRDER 1	0.000	88	37	22	SPAN 16	GIRDER 1	0.000	88	37	22	SPAN 17	GIRDER 1	0.000	88	49	26	SPAN 18	GIRDER 1	0.000	58	46	21
	GIRDER 2	7.429	88	37	22		GIRDER 2	7.429	88	37	22		GIRDER 2	7.429	88	49	26		GIRDER 2	7.489	58	49	27
	GIRDER 3	7.429	88	37	22		GIRDER 3	7.429	88	37	22		GIRDER 3	7.429	88	49	26		GIRDER 3	7.489	58	52	18
	GIRDER 4	7.429	88	37	22		GIRDER 4	7.429	88	37	22		GIRDER 4	7.429	88	49	26		GIRDER 4	7.489	58	54	58
	GIRDER 5	7.429	88	37	22		GIRDER 5	7.429	88	37	22		GIRDER 5	7.429	88	49	26		GIRDER 5	7.489	58	57	27
	GIRDER 6	7.429	88	37	22		GIRDER 6	7.429	88	37	22		GIRDER 6	7.429	88	49	26		GIRDER 6	7.489	58	59	46
	GIRDER 7	7.429	88	37	22		GIRDER 7	7.429	88	37	22		GIRDER 7	7.429	88	49	26		GIRDER 7	7.489	59	1	56
	GIRDER 8	7.429	88	37	22		GIRDER 8	7.429	88	37	22		GIRDER 8	7.429	88	49	26		GIRDER 8	7.489	59	3	58
	TOTAL	52.000					TOTAL	52.000					TOTAL	52.000					TOTAL	59.909			
						SPAN 17	GIRDER 1	0.000	88	49	26	SPAN 18	GIRDER 1	0.000	88	52	30						
							GIRDER 2	7.429	88	49	26		GIRDER 2	6.500	88	49	25						
							GIRDER 3	7.429	88	49	26		GIRDER 3	6.500	88	46	33						
							GIRDER 4	7.429	88	49	26		GIRDER 4	6.500	88	43	53						
							GIRDER 5	7.429	88	49	26		GIRDER 5	6.500	88	41	24						
							GIRDER 6	7.429	88	49	26		GIRDER 6	6.500	88	39	5						
							GIRDER 7	7.429	88	49	26		GIRDER 7	6.500	88	36	55						
							GIRDER 8	7.429	88	49	26		GIRDER 8	6.500	88	34	53						
							TOTAL	52.000					TOTAL	52.000									

PHASE 1 STEP 3	GIRDER REPORT, SPAN 16					GIRDER REPORT, SPAN 17					GIRDER REPORT, SPAN 18				
	GIRDER	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE	GIRDER	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE	GIRDER	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
	GIRDER 1	124.603	117.351	118.880	-0.0219	GIRDER 1	106.414	99.163	100.689	-0.0228	GIRDER 1	101.794	93.929	95.581	-0.0228
	GIRDER 2	124.961	117.708	119.237	-0.0219	GIRDER 2	106.719	99.468	100.994	-0.0227	GIRDER 2	105.804	97.941	99.594	-0.0227
	GIRDER 3	125.318	118.066	119.594	-0.0218	GIRDER 3	107.024	99.772	101.299	-0.0226	GIRDER 3	109.814	101.954	103.607	-0.0227
	GIRDER 4	125.675	118.423	119.951	-0.0217	GIRDER 4	107.329	100.077	101.604	-0.0226	GIRDER 4	113.824	105.966	107.620	-0.0228
	GIRDER 5	126.032	118.780	120.309	-0.0217	GIRDER 5	107.634	100.382	101.909	-0.0225	GIRDER 5	117.835	109.978	111.633	-0.0230
	GIRDER 6	126.389	119.137	120.666	-0.0216	GIRDER 6	107.939	100.687	102.213	-0.0224	GIRDER 6	121.845	113.990	115.646	-0.0233
	GIRDER 7	126.746	119.494	121.023	-0.0216	GIRDER 7	108.244	100.992	102.518	-0.0224	GIRDER 7	125.855	118.002	119.660	-0.0236
	GIRDER 8	127.103	119.851	121.380	-0.0215	GIRDER 8	108.549	101.297	102.823	-0.0223	GIRDER 8	129.866	122.013	123.674	-0.0240
											GIRDER 9	133.876	126.025	127.688	-0.0244



HL93 LOADING

VOLKERT

F-12679

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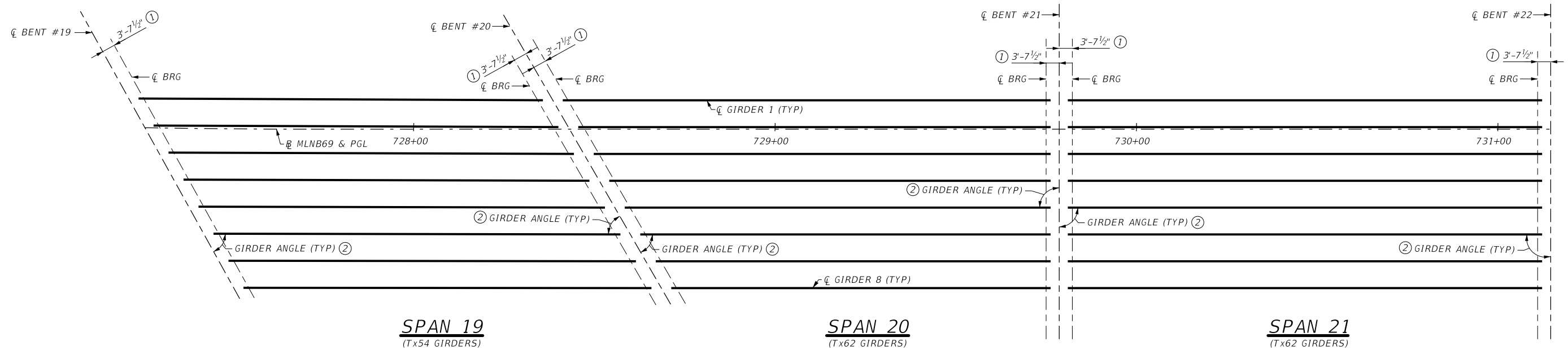
Texas Department of Transportation

IH 10 AT US 69 FRAMING PLAN (SPANS 16-18) IH 10 EBML TO US 69 NB DC

SHEET 6 OF 11

DN: FB	CK: BB	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1559	

DATE: 20-FEB-2024 22:51
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1560_10ML_10E-69N_GRDLAY_07.dgn



- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PG5UPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

BENT REPORT

BENT NO. 19 (S 42° 39' 13" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 9.243 L

SPAN 19 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	60	46	23
GIRDER 2	8.578	60	48	35
GIRDER 3	8.578	60	50	47
GIRDER 4	8.578	60	52	59
GIRDER 5	8.578	60	55	10
GIRDER 6	8.578	60	57	21
GIRDER 7	8.578	60	59	31
GIRDER 8	8.578	61	1	41
TOTAL	60.044			

BENT NO. 20 (S 41° 38' 26" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 9.238 L

SPAN 19 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	59	45	37
GIRDER 2	8.578	59	47	49
GIRDER 3	8.578	59	50	1
GIRDER 4	8.578	59	52	12
GIRDER 5	8.578	59	54	23
GIRDER 6	8.578	59	56	34
GIRDER 7	8.578	59	58	45
GIRDER 8	8.578	60	0	55
TOTAL	60.045			

BENT NO. 21 (S 71° 38' 26" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

SPAN 20 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	89	59	46
GIRDER 2	7.429	89	59	47
GIRDER 3	7.429	89	59	47
GIRDER 4	7.429	89	59	47
GIRDER 5	7.429	89	59	47
GIRDER 6	7.429	89	59	48
GIRDER 7	7.429	89	59	48
GIRDER 8	7.429	89	59	48
TOTAL	52.000			

BENT NO. 22 (S 71° 38' 26" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

SPAN 21 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

SPAN 20 GIRDER

GIRDER	BEAM SPAC.	D	M	S
GIRDER 1	0.000	60	0	14
GIRDER 2	8.578	60	0	13
GIRDER 3	8.578	60	0	13
GIRDER 4	8.578	60	0	13
GIRDER 5	8.578	60	0	13
GIRDER 6	8.578	60	0	12
GIRDER 7	8.578	60	0	12
GIRDER 8	8.578	60	0	12
TOTAL	60.045			

SPAN 21 GIRDER

GIRDER	BEAM SPAC.	D	M	S
GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

GIRDER REPORT

GIRDER REPORT, SPAN 19

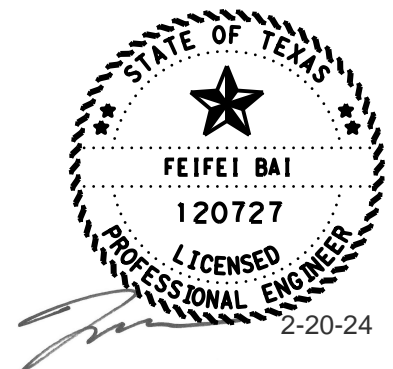
GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR C-C BRG.	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.				
GIRDER 1	117.359	109.009	110.761			-0.0211
GIRDER 2	117.491	109.144	110.899			-0.0226
GIRDER 3	117.622	109.279	111.037			-0.0241
PHASE 1 STEP 3 GIRDER 4	117.754	109.413	111.175			-0.0256
GIRDER 5	117.886	109.548	111.314			-0.0271
GIRDER 6	118.018	109.683	111.453			-0.0286
GIRDER 7	118.150	109.818	111.593			-0.0301
GIRDER 8	118.282	109.953	111.732			-0.0317

GIRDER REPORT, SPAN 20

GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR C-C BRG.	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.				
GIRDER 1	140.114	132.303	133.949			-0.0210
GIRDER 2	135.825	128.014	129.663			-0.0226
GIRDER 3	131.536	123.725	125.377			-0.0241
GIRDER 4	127.247	119.436	121.092			-0.0256
GIRDER 5	122.958	115.147	116.806			-0.0272
GIRDER 6	118.669	110.858	112.521			-0.0287
GIRDER 7	114.380	106.570	108.235			-0.0302
GIRDER 8	110.091	102.281	103.949			-0.0317

GIRDER REPORT, SPAN 21

GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR C-C BRG.	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.				
GIRDER 1	136.000	128.750	130.280			-0.0215
GIRDER 2	136.000	128.750	130.283			-0.0226
GIRDER 3	136.000	128.750	130.287			-0.0237
PHASE 1 STEP 4 GIRDER 4	136.000	128.750	130.290			-0.0249
GIRDER 5	136.000	128.750	130.294			-0.0260
GIRDER 6	136.000	128.750	130.298			-0.0271
GIRDER 7	136.000	128.750	130.302			-0.0283
GIRDER 8	136.000	128.750	130.306			-0.0294



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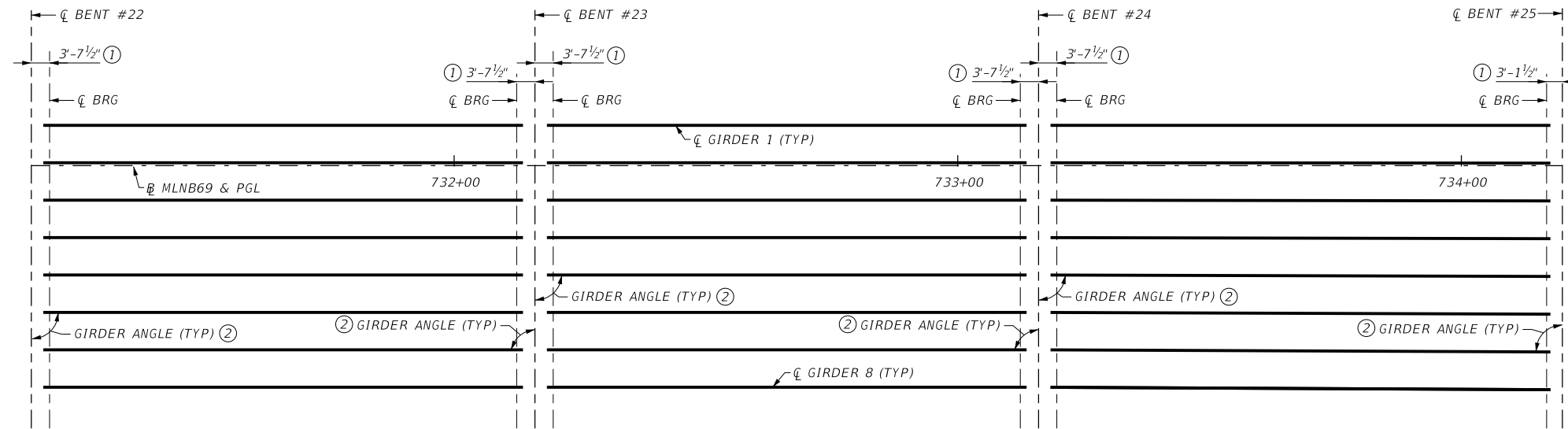
Texas Department of Transportation

**IH 10 AT US 69
FRAMING PLAN
(SPANS 19-21)
IH 10 EBML
TO US 69 NB DC**

SHEET 7 OF 11

DN: FB	CK: BB	DW: KAH	CK: FB
CONT 0028	SECT 13	JOB 135	HIGHWAY IH 10
DIST BMT	COUNTY JEFFERSON	SHEET NO. 1560	

DATE: 21-FEB-2024 01:52
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Bridge R (Ih 10 EB to US 69 NB DC)\1561_10ML_10E-69N_GRDLAY_08.dgn



- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

SPAN 22
(Tx54 GIRDERS)

SPAN 23
(Tx54 GIRDERS)

SPAN 24
(Tx54 GIRDERS)

BENT REPORT

BENT NO. 22 (S 7° 38' 26" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 22 GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

BENT NO. 23 (S 7° 38' 26" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 22 GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

BENT NO. 24 (S 7° 38' 26" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 23 GIRDER 1	0.000	90	0	0
GIRDER 2	7.429	90	0	0
GIRDER 3	7.429	90	0	0
GIRDER 4	7.429	90	0	0
GIRDER 5	7.429	90	0	0
GIRDER 6	7.429	90	0	0
GIRDER 7	7.429	90	0	0
GIRDER 8	7.429	90	0	0
TOTAL	52.000			

BENT NO. 25 (S 7° 44' 50" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 24 GIRDER 1	0.000	89	53	57
GIRDER 2	7.499	89	56	15
GIRDER 3	7.499	89	58	33
GIRDER 4	7.499	89	59	8
GIRDER 5	7.499	89	56	50
GIRDER 6	7.499	89	54	32
GIRDER 7	7.499	89	52	13
GIRDER 8	7.499	89	49	55
TOTAL	52.491			

SPAN 23 GIRDER 1 0.000 90 0 0
 GIRDER 2 7.429 90 0 0
 GIRDER 3 7.429 90 0 0
 GIRDER 4 7.429 90 0 0
 GIRDER 5 7.429 90 0 0
 GIRDER 6 7.429 90 0 0
 GIRDER 7 7.429 90 0 0
 GIRDER 8 7.429 90 0 0
 TOTAL 52.000

SPAN 24 GIRDER 1 0.000 89 59 39
 GIRDER 2 7.429 89 57 21
 GIRDER 3 7.429 89 55 3
 GIRDER 4 7.429 89 52 44
 GIRDER 5 7.429 89 50 26
 GIRDER 6 7.429 89 48 8
 GIRDER 7 7.429 89 45 49
 GIRDER 8 7.429 89 43 31
 TOTAL 52.000

GIRDER REPORT

GIRDER REPORT, SPAN 22

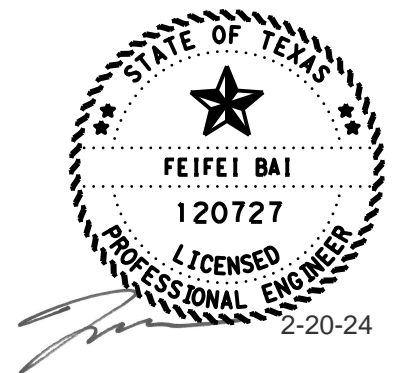
	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
GIRDER 2	100.000	92.75	94.274	-0.0227
GIRDER 3	100.000	92.75	94.274	-0.0227
GIRDER 4	100.000	92.75	94.274	-0.0227
GIRDER 5	100.000	92.75	94.274	-0.0227
GIRDER 6	100.000	92.75	94.274	-0.0227
GIRDER 7	100.000	92.75	94.274	-0.0227
GIRDER 8	100.000	92.75	94.274	-0.0227

GIRDER REPORT, SPAN 23

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
GIRDER 2	100.000	92.750	94.274	-0.0227
GIRDER 3	100.000	92.750	94.274	-0.0227
GIRDER 4	100.000	92.750	94.274	-0.0227
GIRDER 5	100.000	92.750	94.274	-0.0227
GIRDER 6	100.000	92.750	94.274	-0.0227
GIRDER 7	100.000	92.750	94.274	-0.0227
GIRDER 8	100.000	92.750	94.274	-0.0227

GIRDER REPORT, SPAN 24

	HORIZONTAL DISTANCE C-C BENT	TRUE DISTANCE C-C BRG.	GRDR BOT. GRDR FLG. ③	SLOPE
GIRDER 2	104.001	97.251	98.776	-0.0227
GIRDER 3	103.987	97.237	98.763	-0.0227
GIRDER 4	103.973	97.223	98.749	-0.0227
GIRDER 5	103.959	97.209	98.735	-0.0228
GIRDER 6	103.946	97.196	98.721	-0.0228
GIRDER 7	103.932	97.182	98.708	-0.0228
GIRDER 8	103.918	97.168	98.694	-0.0228



HL93 LOADING

VOLKERT

F-12679

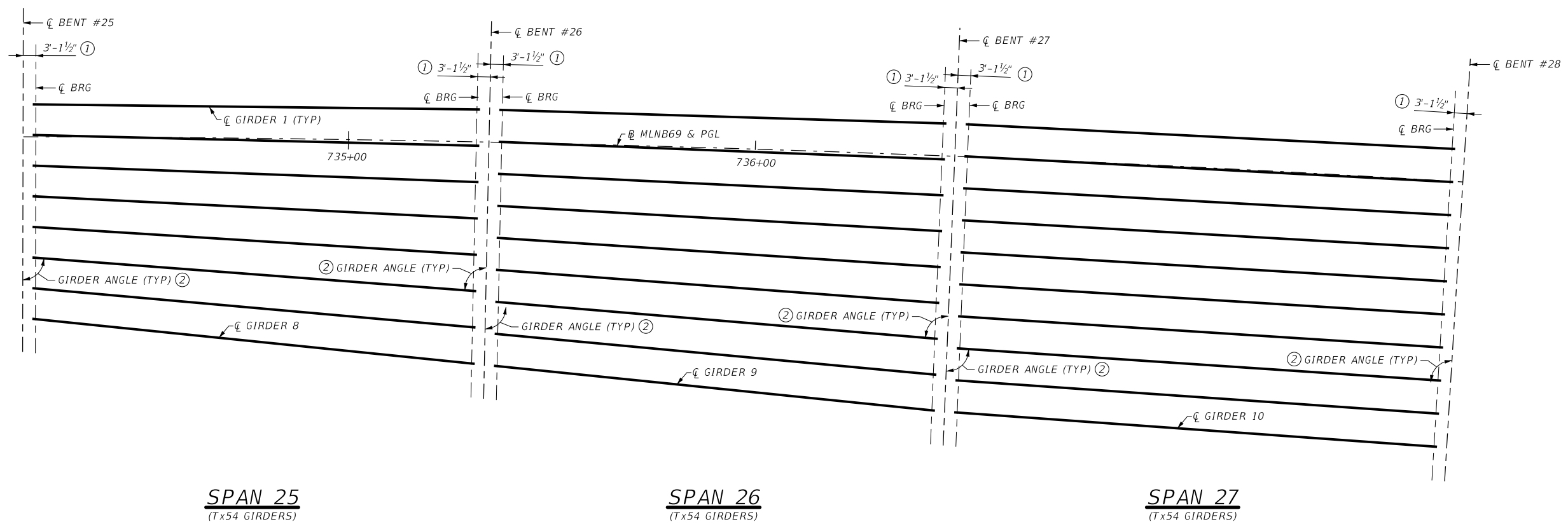


**IH 10 AT US 69
 FRAMING PLAN
 (SPANS 22-24)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 8 OF 11

DN: FB	CK: BB	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1561	

DATE: 20-FEB-2024 22:54
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sett\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1562_10E-69N_GRDLAY_09.dgn



- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

BENT NO. 25 (S 7° 44' 50" W)					BENT NO. 26 (S 7° 50' 26" W)					BENT NO. 27 (S 7° 56' 03" W)					BENT NO. 28 (S 7° 07' 40" W)				
DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L					DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L				
BEAM	SPAC.	GRDR ANGLE			BEAM	SPAC.	GRDR ANGLE			BEAM	SPAC.	GRDR ANGLE			BEAM	SPAC.	GRDR ANGLE		
		D	M	S			D	M	S			D	M	S			D	M	S
SPAN 25 GIRDER 1	0.000	89	27	12	SPAN 25 GIRDER 1	0.000	89	27	12	SPAN 26 GIRDER 1	0.000	89	27	12	SPAN 27 GIRDER 1	0.000	89	24	11
GIRDER 2	7.499	88	43	14	GIRDER 2	8.963	89	48	50	GIRDER 2	8.850	89	57	26	GIRDER 2	8.154	89	32	4
GIRDER 3	7.499	87	59	9	GIRDER 3	8.963	89	4	45	GIRDER 3	8.850	89	32	15	GIRDER 3	8.154	89	39	59
GIRDER 4	7.499	87	14	59	GIRDER 4	8.963	88	20	35	GIRDER 4	8.850	89	1	51	GIRDER 4	8.154	89	47	54
GIRDER 5	7.499	86	30	44	GIRDER 5	8.963	87	36	20	GIRDER 5	8.850	88	31	24	GIRDER 5	8.154	89	55	51
GIRDER 6	7.499	85	46	26	GIRDER 6	8.963	86	52	2	GIRDER 6	8.850	88	0	52	GIRDER 6	8.154	89	56	11
GIRDER 7	7.499	85	2	4	GIRDER 7	8.963	86	7	40	GIRDER 7	8.850	87	30	16	GIRDER 7	8.154	89	48	11
GIRDER 8	7.499	84	17	41	GIRDER 8	8.963	85	23	17	GIRDER 8	8.850	86	59	38	GIRDER 8	8.154	89	40	11
TOTAL	52.491				TOTAL	62.743				GIRDER 9	8.850	86	28	56	GIRDER 9	8.154	89	32	9
										TOTAL	70.802				GIRDER 10	8.154	89	24	6
					SPAN 26 GIRDER 1	0.000	89	27	12						TOTAL	73.383			
					GIRDER 2	7.843	88	56	58	SPAN 27 GIRDER 1	0.000	89	24	11					
					GIRDER 3	7.843	88	26	39	GIRDER 2	7.867	89	16	18					
					GIRDER 4	7.843	87	56	15	GIRDER 3	7.867	89	8	24					
					GIRDER 5	7.843	87	25	47	GIRDER 4	7.867	89	0	28					
					GIRDER 6	7.843	86	55	16	GIRDER 5	7.867	88	52	32					
					GIRDER 7	7.843	86	24	40	GIRDER 6	7.867	88	44	33					
					GIRDER 8	7.843	85	54	1	GIRDER 7	7.867	88	36	34					
					GIRDER 9	7.843	85	23	20	GIRDER 8	7.867	88	28	33					
					TOTAL	62.743				GIRDER 9	7.867	88	20	32					
										GIRDER 10	7.867	88	12	28					
										TOTAL	70.802								

GIRDER REPORT, SPAN 25

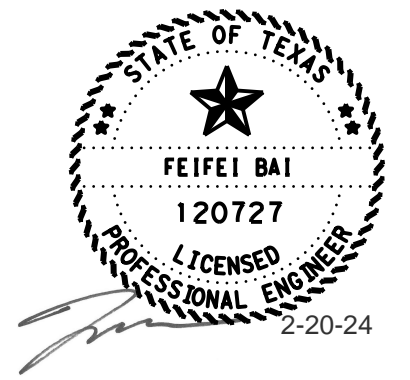
GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.			
GIRDER 1	114.651	108.401	109.929		-0.0227
GIRDER 2	114.503	108.252	109.782		-0.0230
GIRDER 3	114.374	108.122	109.653		-0.0234
GIRDER 4	114.264	108.009	109.542		-0.0237
GIRDER 5	114.173	107.914	109.450		-0.0241
GIRDER 6	114.101	107.838	109.377		-0.0244
GIRDER 7	114.047	107.779	109.322		-0.0248
GIRDER 8	114.013	107.738	109.286		-0.0251

GIRDER REPORT, SPAN 26

GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.			
GIRDER 1	114.651	108.401	109.930		-0.0228
GIRDER 2	114.496	108.246	109.775		-0.0231
GIRDER 3	114.350	108.099	109.630		-0.0233
GIRDER 4	114.213	107.961	109.494		-0.0236
GIRDER 5	114.085	107.831	109.366		-0.0239
GIRDER 6	113.966	107.709	109.248		-0.0241
GIRDER 7	113.856	107.597	109.138		-0.0244
GIRDER 8	113.755	107.492	109.038		-0.0246
GIRDER 9	113.663	107.397	108.946		-0.0249

GIRDER REPORT, SPAN 27

GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG.③	SLOPE
	C-C BENT	C-C BRG.			
GIRDER 1	125.164	118.914	120.456		-0.0262
GIRDER 2	124.998	118.747	120.289		-0.0263
GIRDER 3	124.832	118.582	120.124		-0.0264
GIRDER 4	124.667	118.416	119.959		-0.0265
GIRDER 5	124.502	118.252	119.794		-0.0266
GIRDER 6	124.338	118.088	119.631		-0.0267
GIRDER 7	124.175	117.924	119.468		-0.0268
GIRDER 8	124.013	117.761	119.305		-0.0268
GIRDER 9	123.851	117.599	119.144		-0.0269
GIRDER 10	123.689	117.438	118.983		-0.0270



HL93 LOADING

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F-12679

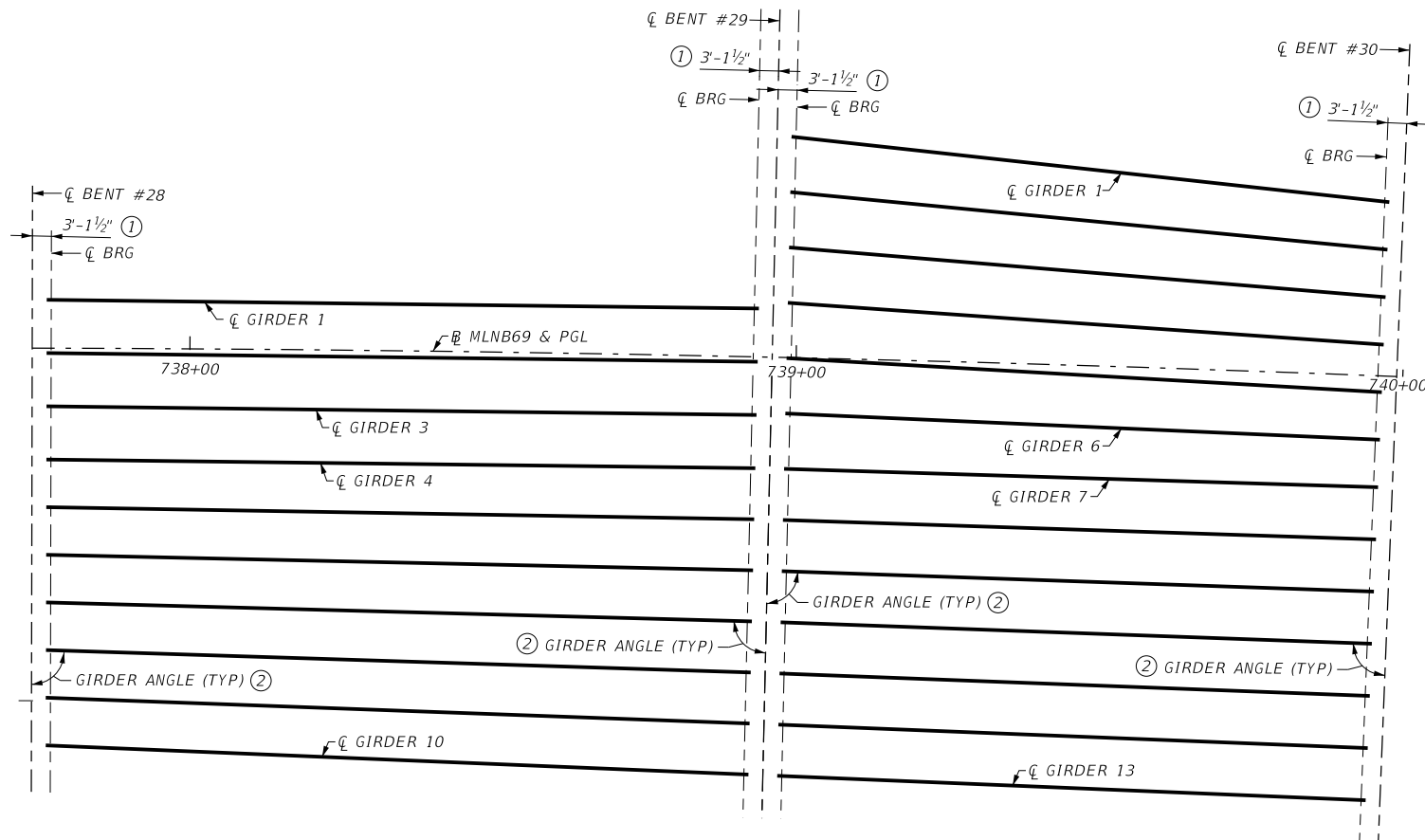
Texas Department of Transportation

IH 10 AT US 69 FRAMING PLAN (SPANS 25-27) IH 10 EBML TO US 69 NB DC

SHEET 9 OF 11

DN: FB	CK: BB	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1562	

DATE: 21-FEB-2024 02:29
FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10E-69N_GRDLAY_10.dgn



- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.

SPAN 28
(Tx54 GIRDERS)

SPAN 29
(Tx54 GIRDERS)

BENT REPORT

BENT NO. 28 (S 75° 07' 40" W)
DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 28 GIRDER 1	0.000	89	25	3
GIRDER 2	8.778	89	25	3
GIRDER 3	8.778	89	25	3
GIRDER 4	8.778	89	25	3
GIRDER 5	7.842	89	8	22
GIRDER 6	7.842	88	51	38
GIRDER 7	7.842	88	34	51
GIRDER 8	7.842	88	18	1
GIRDER 9	7.842	88	1	10
GIRDER 10	7.842	87	44	15
TOTAL	73.383			

BENT NO. 29 (S 76° 17' 34" W)
DISTANCE BETWEEN STATION LINE AND GRDR 1 8.000 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 28 GIRDER 1	0.000	89	25	3
GIRDER 2	8.778	89	25	3
GIRDER 3	8.778	89	25	3
GIRDER 4	8.778	89	25	3
GIRDER 5	8.432	89	41	44
GIRDER 6	8.432	89	58	28
GIRDER 7	8.432	89	44	45
GIRDER 8	8.432	89	27	56
GIRDER 9	8.432	89	11	4
GIRDER 10	8.432	88	54	10
TOTAL	76.924			

BENT NO. 30 (S 77° 16' 35" W)
DISTANCE BETWEEN STATION LINE AND GRDR 1 28.520 L

	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
SPAN 29 GIRDER 1	0.000	86	1	16
GIRDER 2	7.809	86	45	31
GIRDER 3	7.809	87	29	58
GIRDER 4	7.809	88	14	35
GIRDER 5	7.809	88	59	23
GIRDER 6	7.809	89	44	21
GIRDER 7	7.809	89	30	34
GIRDER 8	8.612	89	36	35
GIRDER 9	8.612	89	42	38
GIRDER 10	8.612	89	48	42
GIRDER 11	8.612	89	54	47
GIRDER 12	8.612	89	59	7
GIRDER 13	8.612	89	53	0
TOTAL	98.523			

DISTANCE BETWEEN STATION LINE AND GRDR 1 36.617 L

SPAN 29 GIRDER 1	0.000	85	2	16
GIRDER 2	9.158	85	46	30
GIRDER 3	9.158	86	30	57
GIRDER 4	9.158	87	15	35
GIRDER 5	9.158	88	0	23
GIRDER 6	9.158	88	45	20
GIRDER 7	9.158	89	30	26
GIRDER 8	8.432	89	24	24
GIRDER 9	8.432	89	18	21
GIRDER 10	8.432	89	12	17
GIRDER 11	8.432	89	6	12
GIRDER 12	8.432	89	0	6
GIRDER 13	8.432	88	53	59
TOTAL	105.540			

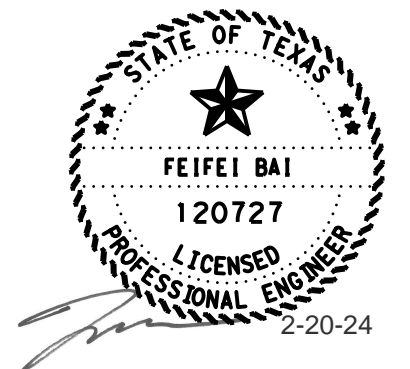
GIRDER REPORT

GIRDER REPORT, SPAN 28

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.		
GIRDER 1	122.161	115.91	117.462	-0.0297
PHASE 2 STEP 1 GIRDER 2	121.982	115.732	117.284	-0.0298
PHASE 2 STEP 1 GIRDER 3	121.804	115.553	117.105	-0.0298
GIRDER 4	121.625	115.375	116.927	-0.0299
GIRDER 5	121.461	115.211	116.763	-0.0300
GIRDER 6	121.300	115.049	116.603	-0.0302
PHASE 1 STEP 3 GIRDER 7	121.142	114.891	116.445	-0.0304
GIRDER 8	120.986	114.735	116.289	-0.0305
GIRDER 9	120.834	114.582	116.137	-0.0307
GIRDER 10	120.684	114.431	115.987	-0.0309

GIRDER REPORT, SPAN 29

	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR
	C-C BENT	C-C BRG.		
GIRDER 1	103.874	97.605	99.159	-0.0318
GIRDER 2	103.632	97.369	98.921	-0.0315
PHASE 2 STEP 1 GIRDER 3	103.408	97.149	98.699	-0.0312
PHASE 2 STEP 1 GIRDER 4	103.200	96.945	98.494	-0.0310
GIRDER 5	103.011	96.758	98.305	-0.0307
GIRDER 6	102.839	96.588	98.133	-0.0304
GIRDER 7	102.684	96.434	97.978	-0.0301
GIRDER 8	102.538	96.288	97.832	-0.0302
GIRDER 9	102.392	96.142	97.687	-0.0303
PHASE 1 STEP 3 GIRDER 10	102.247	95.996	97.541	-0.0304
GIRDER 11	102.102	95.851	97.396	-0.0304
GIRDER 12	101.957	95.706	97.252	-0.0305
GIRDER 13	101.812	95.562	97.107	-0.0306



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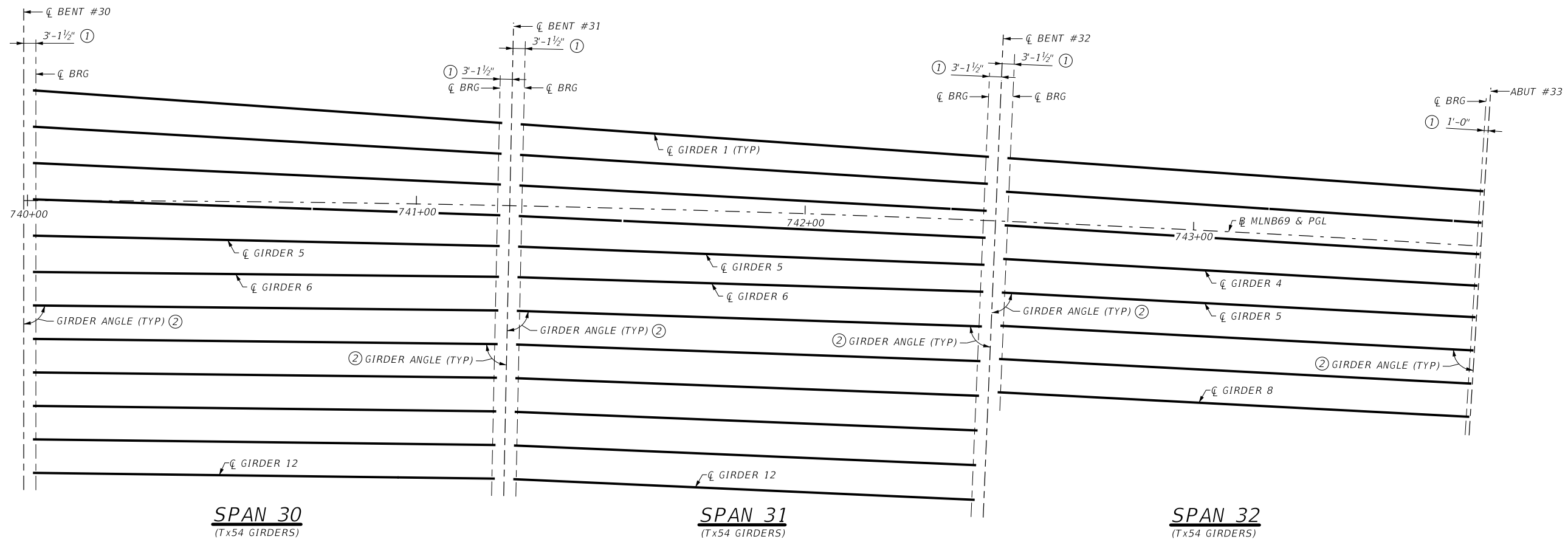


**IH 10 AT US 69
FRAMING PLAN
(SPANS 28 & 29)
IH 10 EBML
TO US 69 NB DC**

SHEET 10 OF 11

DN: FB	CK: BB	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1563	

DATE: 20-FEB-2024 22:51
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1564_10ML_10E-69N_GRDLAY_11.dgn



SPAN 30
(Tx54 GIRDERS)

SPAN 31
(Tx54 GIRDERS)

SPAN 32
(Tx54 GIRDERS)

BENT REPORT

BENT NO. 30 (S 77° 16' 35" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 28.520 L

SPAN 30 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	86	1	14
GIRDER 2	9.371	86	41	30
GIRDER 3	9.371	87	21	56
GIRDER 4	9.371	88	2	31
GIRDER 5	9.371	88	43	14
GIRDER 6	9.371	89	24	6
GIRDER 7	8.612	89	22	56
GIRDER 8	8.612	89	21	46
GIRDER 9	8.612	89	20	35
GIRDER 10	8.612	89	19	24
GIRDER 11	8.612	89	18	13
GIRDER 12	8.612	89	17	1
TOTAL	98.523			

BENT NO. 31 (S 78° 28' 12" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 21.104 L

SPAN 30 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	87	12	51
GIRDER 2	7.887	87	53	8
GIRDER 3	7.887	88	33	33
GIRDER 4	7.887	89	14	8
GIRDER 5	7.887	89	54	51
GIRDER 6	7.887	89	24	16
GIRDER 7	8.654	89	25	27
GIRDER 8	8.654	89	26	37
GIRDER 9	8.654	89	27	48
GIRDER 10	8.654	89	28	59
GIRDER 11	8.654	89	30	10
GIRDER 12	8.654	89	31	21
TOTAL	91.361			

BENT NO. 32 (S 79° 39' 49" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 16.316 L

SPAN 31 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	88	24	40
GIRDER 2	6.930	88	50	45
GIRDER 3	6.930	89	16	55
GIRDER 4	6.930	89	43	10
GIRDER 5	6.930	89	50	31
GIRDER 6	6.930	89	24	9
GIRDER 7	8.933	89	31	50
GIRDER 8	8.933	89	39	34
GIRDER 9	8.933	89	47	18
GIRDER 10	8.933	89	55	4
GIRDER 11	8.933	89	57	8
GIRDER 12	8.933	89	49	19
TOTAL	88.246			

ABUTMENT NO. 33 (S 80° 51' 26" W)
 DISTANCE BETWEEN STATION LINE AND GRDR 1 14.143 L

SPAN 32 GIRDER	BEAM SPAC. (C.L. BENT)	GRDR ANGLE		
		D	M	S
GIRDER 1	0.000	89	36	12
GIRDER 2	8.119	89	51	2
GIRDER 3	8.119	89	54	5
GIRDER 4	8.119	89	39	11
GIRDER 5	8.119	89	24	13
GIRDER 6	8.556	89	24	13
GIRDER 7	8.556	89	24	13
GIRDER 8	8.556	89	24	13
TOTAL	58.143			

SPAN 31 GIRDER

GIRDER	BEAM SPAC.	D	M	S
GIRDER 1	0.000	87	13	3
GIRDER 2	7.887	87	39	8
GIRDER 3	7.887	88	5	18
GIRDER 4	7.887	88	31	33
GIRDER 5	7.887	88	57	51
GIRDER 6	7.887	89	24	14
GIRDER 7	8.654	89	16	32
GIRDER 8	8.654	89	8	49
GIRDER 9	8.654	89	1	4
GIRDER 10	8.654	88	53	18
GIRDER 11	8.654	88	45	31
GIRDER 12	8.654	88	37	42
TOTAL	91.361			

SPAN 32 GIRDER

GIRDER	BEAM SPAC.	D	M	S
GIRDER 1	0.000	88	24	35
GIRDER 2	8.662	88	39	25
GIRDER 3	8.662	88	54	17
GIRDER 4	8.662	89	9	12
GIRDER 5	8.662	89	24	10
GIRDER 6	8.556	89	24	10
GIRDER 7	8.556	89	24	10
GIRDER 8	8.556	89	24	10
TOTAL	60.315			

GIRDER REPORT

GIRDER REPORT, SPAN 30

GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG. SLOPE
	C-C BENT	C-C BRG.		
GIRDER 1	125.734	119.472	121.035	-0.0314
GIRDER 2	125.475	119.218	120.778	-0.0311
GIRDER 3	125.234	118.98	120.538	-0.0309
GIRDER 4	125.011	118.758	120.315	-0.0306
GIRDER 5	124.804	118.554	120.109	-0.0304
GIRDER 6	124.616	118.365	119.92	-0.0301
GIRDER 7	124.436	118.186	119.74	-0.0301
GIRDER 8	124.256	118.006	119.56	-0.0302
GIRDER 9	124.076	117.826	119.381	-0.0303
GIRDER 10	123.896	117.646	119.201	-0.0303
GIRDER 11	123.717	117.466	119.021	-0.0304
GIRDER 12	123.537	117.287	118.842	-0.0304

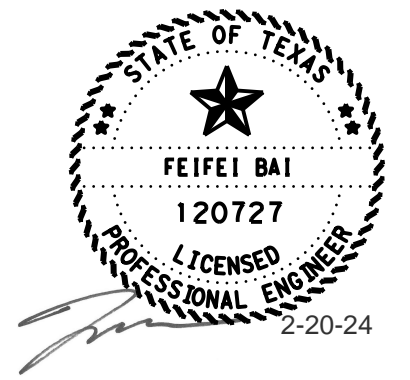
GIRDER REPORT, SPAN 31

GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG. SLOPE
	C-C BENT	C-C BRG.		
GIRDER 1	125.479	119.224	120.783	-0.0309
GIRDER 2	125.292	119.038	120.596	-0.0307
GIRDER 3	125.112	118.860	120.416	-0.0306
GIRDER 4	124.939	118.688	120.244	-0.0304
GIRDER 5	124.774	118.523	120.078	-0.0303
GIRDER 6	124.616	118.365	119.920	-0.0301
GIRDER 7	124.433	118.183	119.737	-0.0302
GIRDER 8	124.251	118.000	119.555	-0.0303
GIRDER 9	124.069	117.819	119.374	-0.0304
GIRDER 10	123.888	117.637	119.193	-0.0305
GIRDER 11	123.708	117.457	119.013	-0.0306
GIRDER 12	123.528	117.277	118.833	-0.0307

GIRDER REPORT, SPAN 32

GIRDER	HORIZONTAL DISTANCE		TRUE DISTANCE	GRDR BOT. GRDR FLG. SLOPE
	C-C BENT	C-C BRG.		
GIRDER 1	125.334	119.083	120.638	-0.0304
GIRDER 2	125.151	118.900	120.455	-0.0303
GIRDER 3	124.970	118.720	120.275	-0.0302
GIRDER 4	124.792	118.541	120.096	-0.0302
GIRDER 5	124.616	118.365	119.920	-0.0301
GIRDER 6	124.438	118.187	119.742	-0.0301
GIRDER 7	124.259	118.009	119.563	-0.0302
GIRDER 8	124.081	117.831	119.385	-0.0302

- ① SEE "ELASTOMERIC BEARING & GIRDER END DETAILS" (IGEB) STANDARD SHEET FOR ORIENTATION OF DIMENSIONS.
- ② GIRDER ANGLES SHOWN IN "BENT REPORT" WERE GENERATED USING PGSUPER.
- ③ GIRDER LENGTHS SHOWN ARE BOTTOM GIRDER FLANGE LENGTHS WITH ADJUSTMENTS MADE FOR GIRDER SLOPE.



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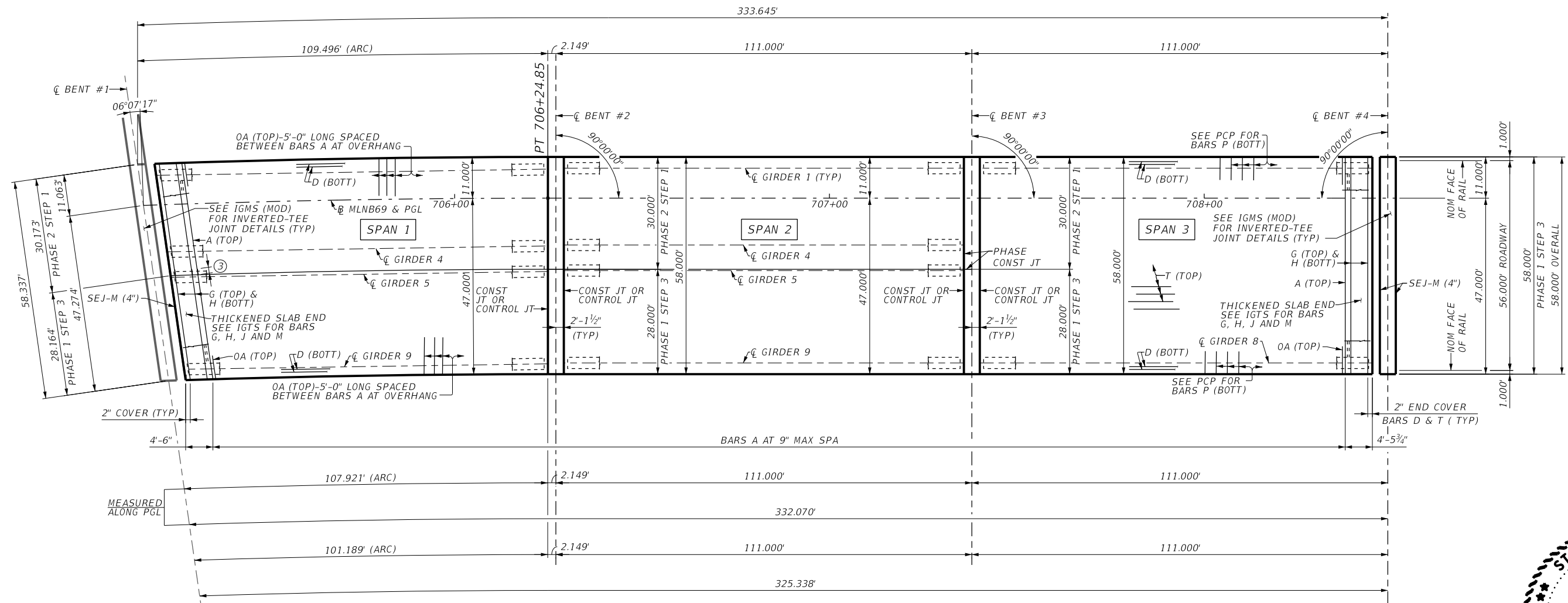
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**IH 10 AT US 69
FRAMING PLAN
(SPANS 30-32)
IH 10 EBML
TO US 69 NB DC**

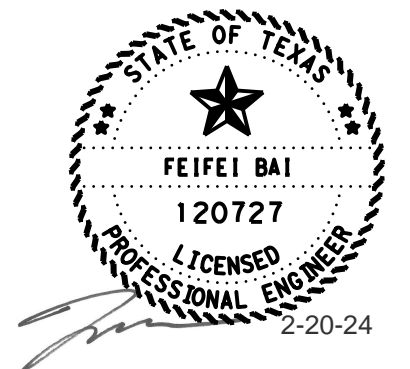
SHEET 11 OF 11

DIST	COUNTY	SHEET NO.
BMT	JEFFERSON	1564

DATE: 20-FEB-2024 22:53
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PLAN



SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY Tx54)	TOTAL REINF STEEL
		SF	LF	LB
1	PHASE 1 STEP 3	2950	503.83	6784
	PHASE 2 STEP 1	3285	419.90	7555
2	PHASE 1 STEP 3	3108	531.43	7148
	PHASE 2 STEP 1	3330	425.10	7659
3	PHASE 1 STEP 3	6438	850.38	14807
BRIDGE TOTAL		19111	2730.64	43954(2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 2 STEP 1 CONSTRUCTION.

HL93 LOADING

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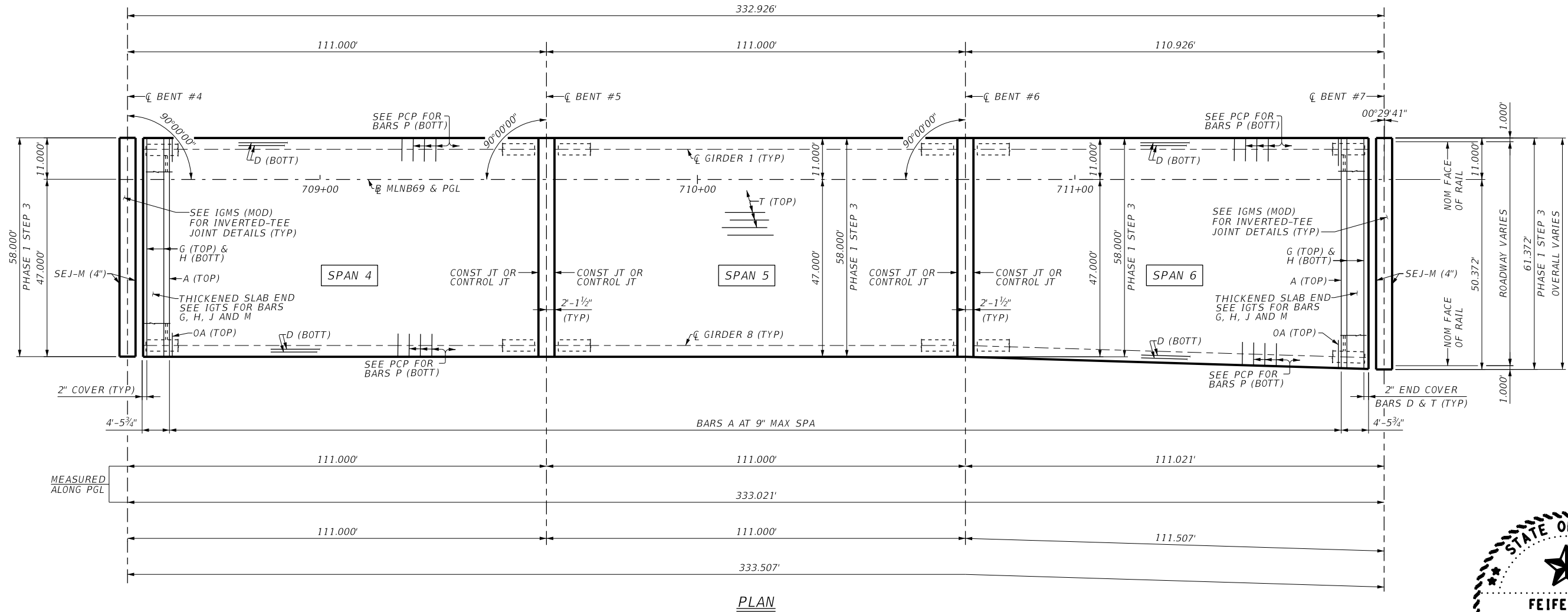
Texas Department of Transportation

**IH 10 AT US 69
 332.07' PRESTR CONC
 GIRDER UNIT (SPANS 1-3)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1565	

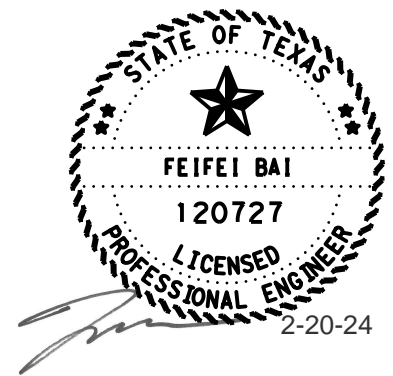
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PLAN

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF	PRESTR CONCRETE	TOTAL REINF
		CONCRETE	GIRDER (TY T x 54)	
		SF	LF	LB
4	PHASE 1 STEP 3	6438	850.38	14807
5	PHASE 1 STEP 3	6438	850.38	14807
6	PHASE 1 STEP 3	6636	848.02	15263
BRIDGE TOTAL		19512	2548.77	44878 (2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.



HL93 LOADING

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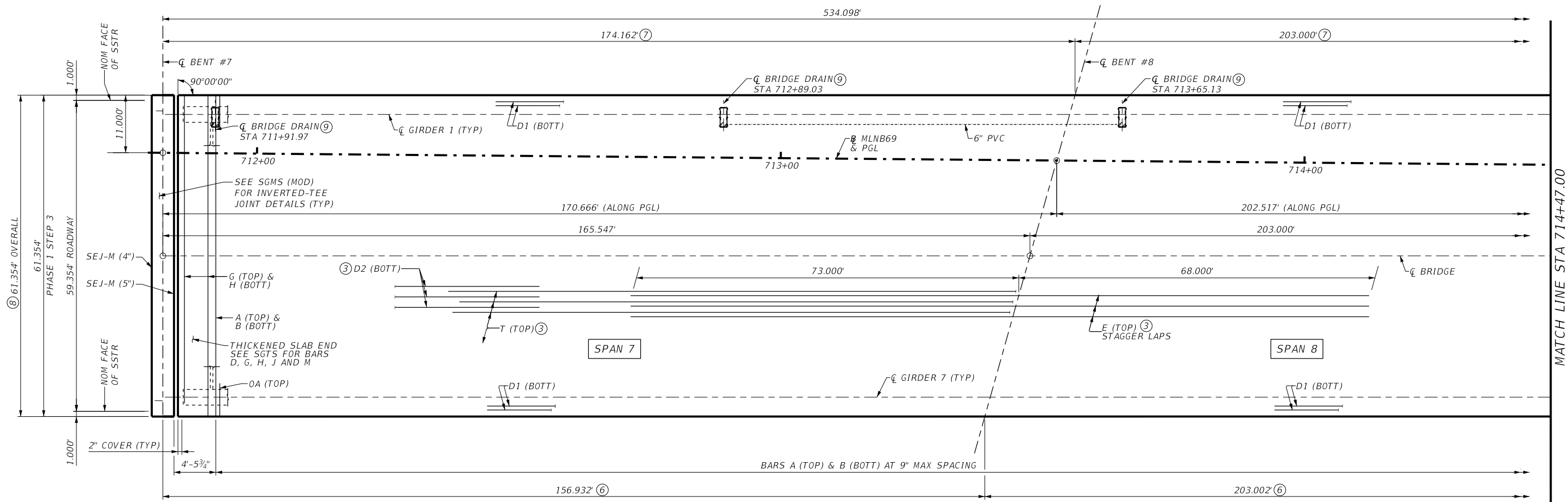


**IH 10 AT US 69
 333.02' PRESTR CONC
 GIRDER UNIT (SPANS 4-6)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 2 OF 12

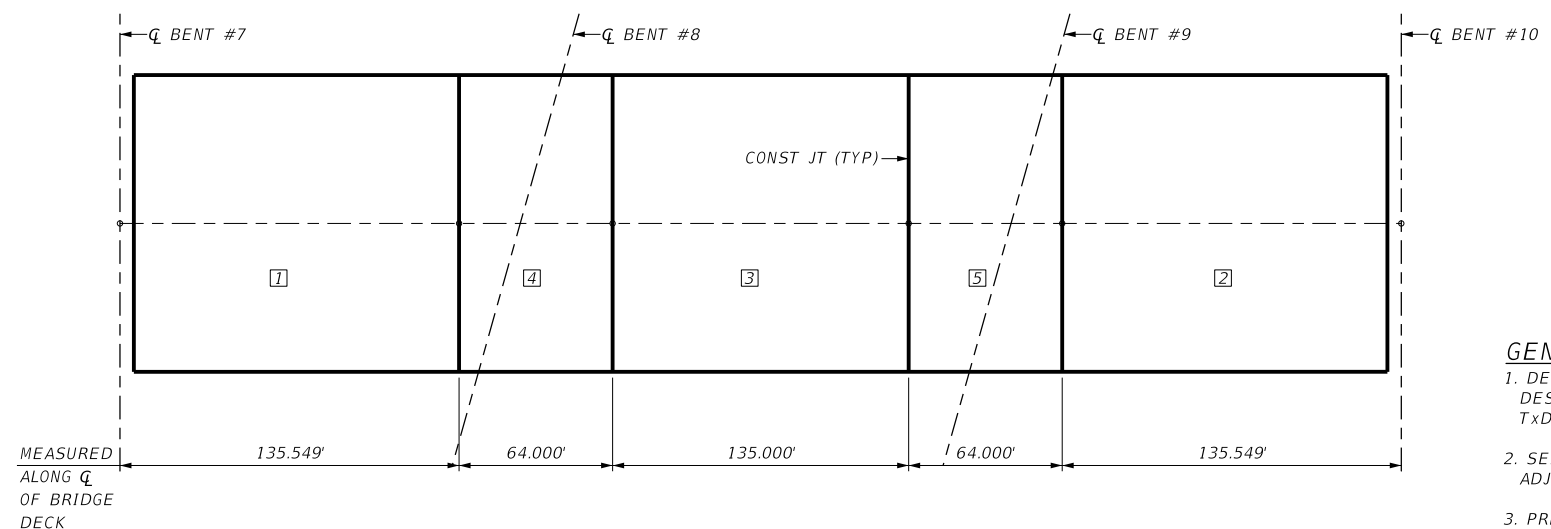
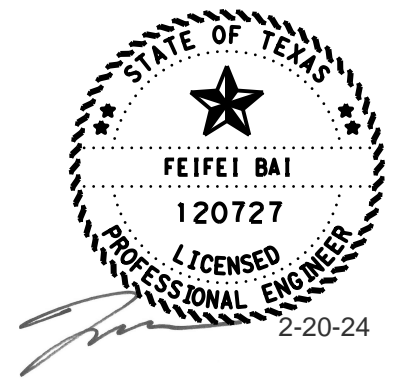
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CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1566	

DATE: 21-FEB-2024 18:36
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Plan Set\10E-69N_GROUND_03A.dgn



PLAN

- ① FOR CONTRACTOR'S INFORMATION ONLY.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 6.4 LBS/SF.
- ③ TOP & BOTTOM MATS SHALL BE CONTINUOUS THROUGH THE INTERMEDIATE BENTS. DO NOT LAP OVER CENTERLINE OF BENTS.
- ④ DECK POURS WITH THE SAME NUMBER MAY BE PLACED SIMULTANEOUSLY OR SEPERATELY. ALL POURS MUST BE PLACED IN THE SEQUENCE AS SHOWN AND NO SUBSEQUENT POUR SHALL BE PLACED BEFORE A PREVIOUSLY PLACED POUR REACHES A MINIMUM OF 72 HOURS CURING AND HAS ACHIEVED 80% OF IT'S 28 DAY COMPRESSIVE STRENGTH. CONTINUOUS PLACEMENT SHALL NOT BE PERMITTED.
- ⑤ QUANTITY INCLUDES STR STEEL (PLATE GIRDER ONLY).
- ⑥ MEASURED ALONG RIGHT EDGE OF SLAB.
- ⑦ MEASURED ALONG LEFT EDGE OF SLAB.
- ⑧ CONCRETE DECK REMAINS SQUARE FOR CONTINUOUS PLATE GIRDER UNIT.
- ⑨ SEE BRIDGE DRAIN DETAILS SHEET AND SGMS (MOD) FOR DETAILS NOT SHOWN.



CONCRETE PLACEMENT SEQUENCE (4)
 (CONTINUOUS PLACEMENT WILL NOT BE PERMITTED)

GENERAL NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020 AND TxDOT BRIDGE DESIGN MANUAL (JAN 2023).
2. SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS.
3. PRECAST CONCRETE PANELS SHALL NOT BE PERMITTED.
4. SEE SGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.
5. SEE SGMS (MOD) STANDARD FOR MISCELLANEOUS SLAB DETAILS NOT SHOWN.
6. SEE SSTR STANDARD FOR RAIL ANCHORAGE IN SLAB.

COVER DIMENSION ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.

MATERIAL NOTES:

1. PROVIDE CLASS 5 CONCRETE (f'c = 4,000 PSI).
2. PROVIDE GRADE 60 REINFORCING STEEL.
3. PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 #4 = 1'-11"
 #5 = 2'-4"
 #6 = 2'-10"
4. DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, B, D OR T UNLESS NOTED OTHERWISE. PROVIDED THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.

HL93 LOADING

VOLKERT

F-12679

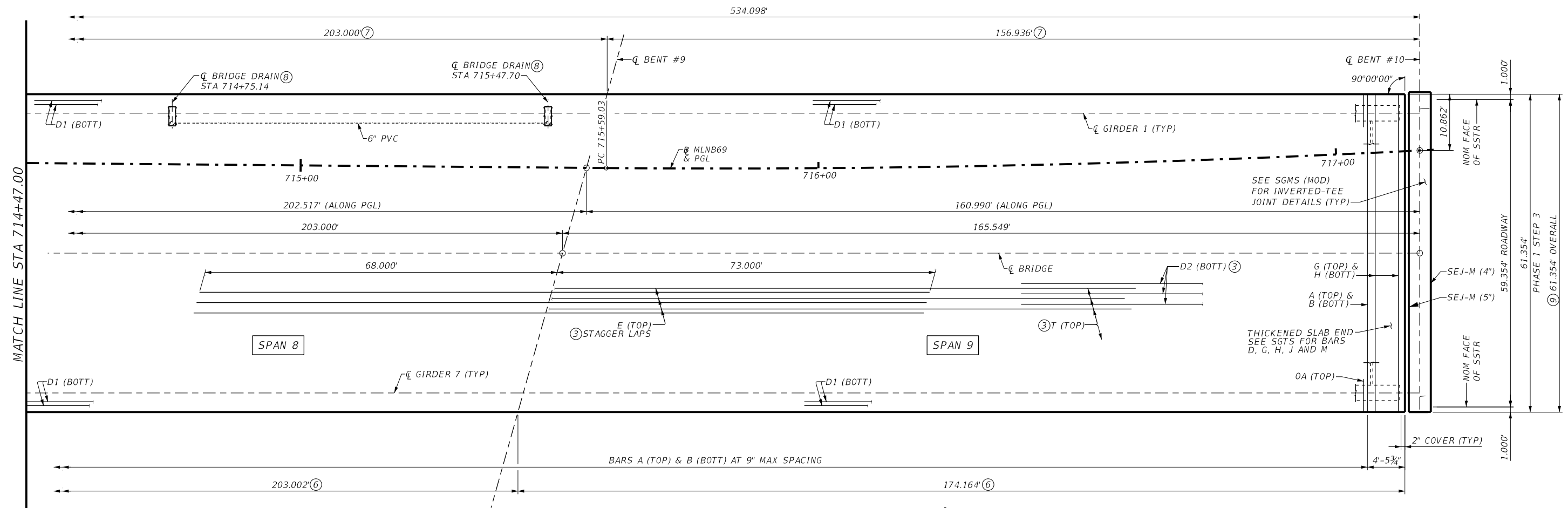


IH 10 AT US 69
534.17' CONTINUOUS
PLATE GIRDER UNIT
SPANS (7-9)
IH 10 EBML TO US 69 NB DC

SHEET 3 OF 12

DN:	CD	CK:	JMV	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1567		

DATE: 21-FEB-2024 18:36
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PLAN

BAR TABLE	
BAR	SIZE
A	#5
B	#5
D1	#5
D2	#5
E	#6
G	#5
H	#5
J	#5
M	#5
OA	#5
T	#4

TABLE OF ESTIMATED QUANTITIES			
SPAN	REINF CONC SLAB	REINFORCING STEEL ^①	STRUCTURAL STEEL (PLATE GIRDER) ^⑤
	SF	LB	LB
-	10,161	65,031	334,330
7	12,460	79,744	506,284
8	10,161	65,031	334,329
TOTAL	32,782	209,807	1,174,943

- ① FOR CONTRACTOR'S INFORMATION ONLY.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 6.4 LBS/SF.
- ③ TOP & BOTTOM MATS SHALL BE CONTINUOUS THROUGH THE INTERMEDIATE BENTS. DO NOT LAP OVER CENTERLINE OF BENTS.
- ④ DECK POURS WITH THE SAME NUMBER MAY BE PLACED SIMULTANEOUSLY OR SEPERATELY. ALL POURS MUST BE PLACED IN THE SEQUENCE AS SHOWN AND NO SUBSEQUENT POUR SHALL BE PLACED BEFORE A PREVIOUSLY PLACED POUR REACHES A MINIMUM OF 72 HOURS CURING AND HAS ACHIEVED 80% OF IT'S 28 DAY COMPRESSIVE STRENGTH. CONTINUOUS PLACEMENT SHALL NOT BE PERMITTED.
- ⑤ QUANTITY INCLUDES STR STEEL (PLATE GIRDER ONLY).
- ⑥ MEASURED ALONG RIGHT EDGE OF SLAB.
- ⑦ MEASURED ALONG LEFT EDGE OF SLAB.
- ⑧ SEE BRIDGE DRAIN DETAILS SHEET AND SGMS (MOD) FOR DETAILS NOT SHOWN.
- ⑨ CONCRETE BRIDGE DECK REMAINS SQUARE FOR CONTINUOUS PLATE GIRDER UNIT.

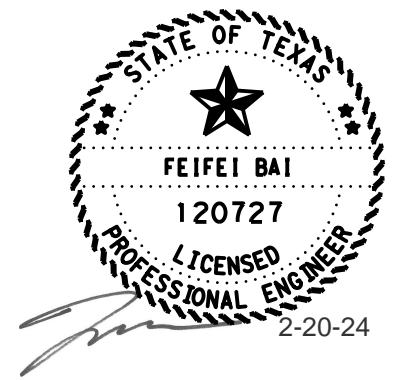
GENERAL NOTES:

- DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020 AND TxDOT BRIDGE DESIGN MANUAL (JAN 2023).
- SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS.
- PRECAST CONCRETE PANELS SHALL NOT BE PERMITTED.
- SEE SGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.
- SEE SGMS (MOD) STANDARD FOR MISCELLANEOUS SLAB DETAILS NOT SHOWN.
- SEE SSTR STANDARD FOR RAIL ANCHORAGE IN SLAB.

COVER DIMENSION ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.
 REINFORCING BAR DIMENSIONS SHOWN ARE OUT-TO-OUT OF BAR.

MATERIAL NOTES:

- PROVIDE CLASS 5 CONCRETE ($f'_c = 4,000$ PSI).
- PROVIDE GRADE 60 REINFORCING STEEL.
- PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 #4 = 1'-11"
 #5 = 2'-4"
 #6 = 2'-10"
- DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, B, D OR T UNLESS NOTED OTHERWISE. PROVIDED THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.



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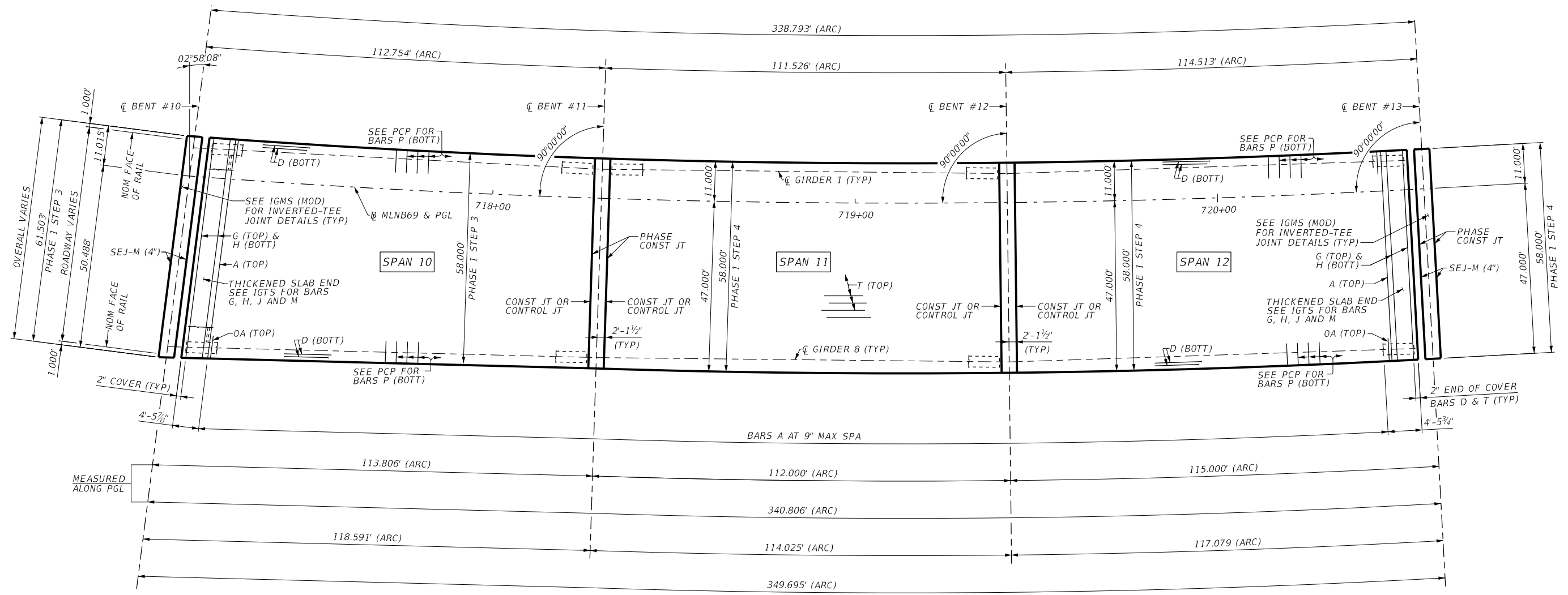
Texas Department of Transportation

**IH 10 AT US 69
 534.17' CONTINUOUS
 PLATE GIRDER UNIT
 SPANS (7-9)
 IH 10 EBML TO US 69 NB DC**

SHEET 4 OF 12

DN:	CD	CK:	JMV	DW:	RF	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1568		

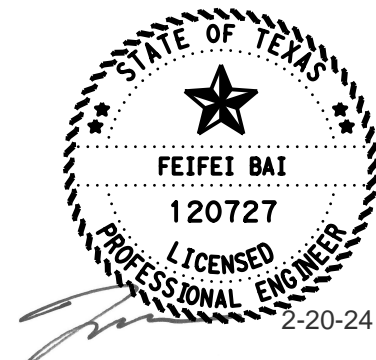
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PLAN

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	TOTAL REINF STEEL
		SF	LF	LB
10	PHASE 1 STEP 3	6852	879.34	15760
11	PHASE 1 STEP 4	6541	856.17	15044
12	PHASE 1 STEP 4	6716	880.29	15447
BRIDGE TOTAL		20109	2615.80	46251 (2)

- QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.



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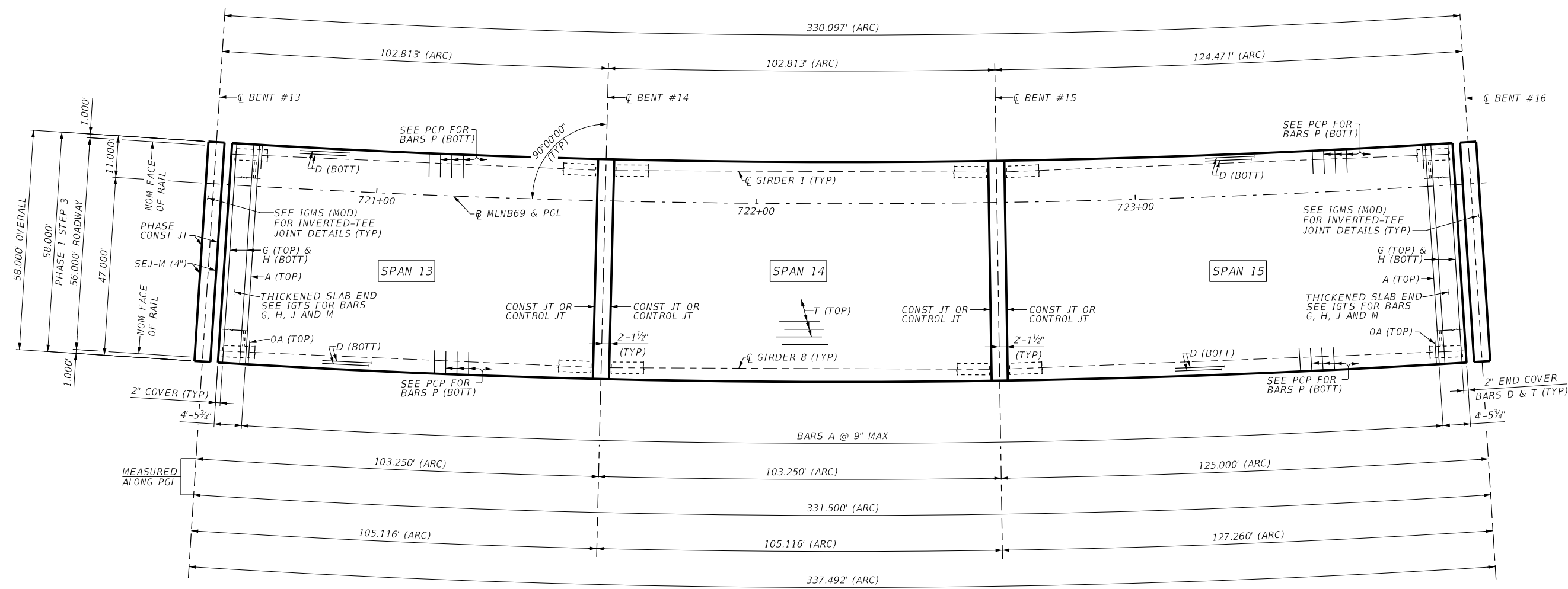
Texas Department of Transportation

**IH 10 AT US 69
 340.81' PRESTR CONC
 GRDR UNIT (SPANS 10-12)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 5 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1569	

DATE: 20-FEB-2024 22:55
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PLAN

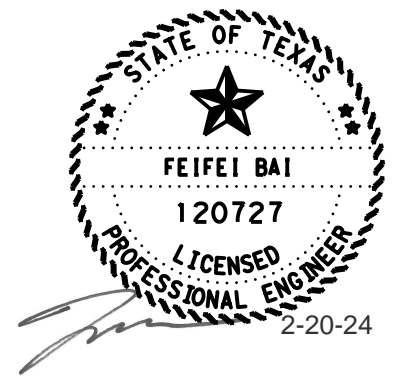


TABLE OF ESTIMATED QUANTITIES

SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	TOTAL REINF STEEL
		SF	LF	LB
13	PHASE 1 STEP 3	6029	785.66	13867
14	PHASE 1 STEP 3	6029	785.68	13867
15	PHASE 1 STEP 3	7302	960.93	16795
BRIDGE TOTAL		19360	2532.27	44528 (2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.

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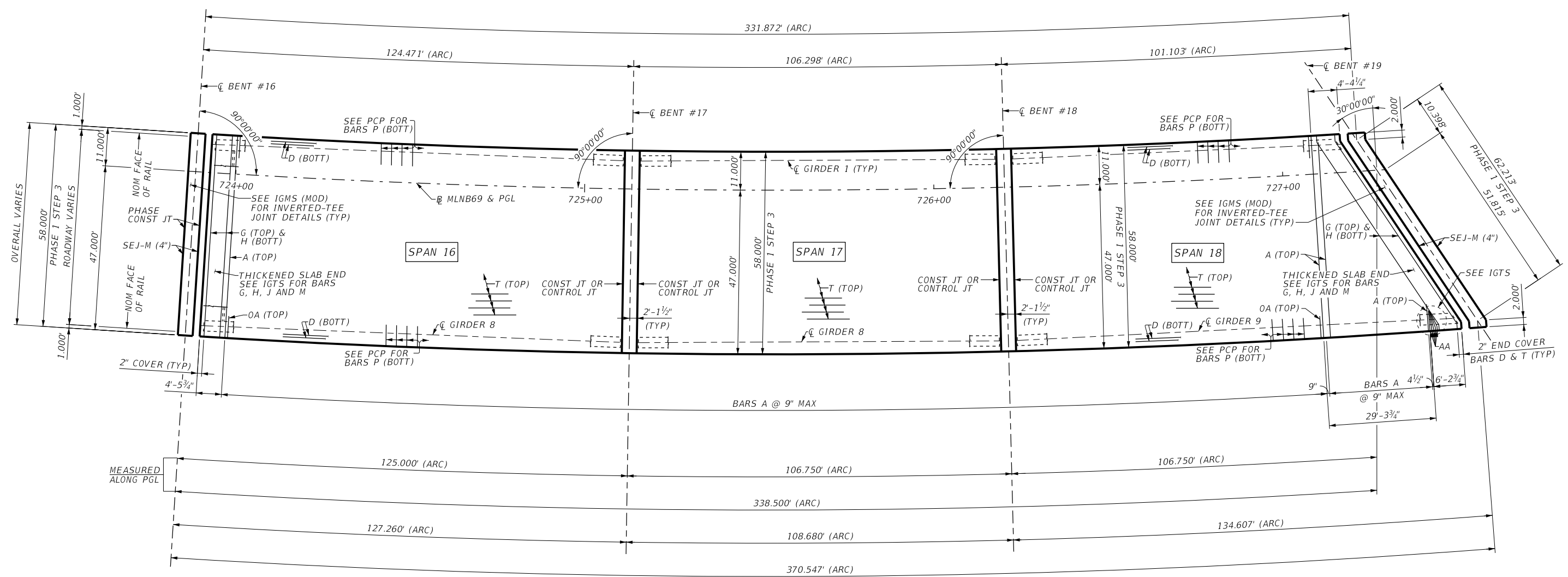
Texas Department of Transportation

**IH 10 AT US 69
 331.50' PRESTR CONC
 GRDR UNIT (SPANS 13-15)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 6 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
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DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1570	

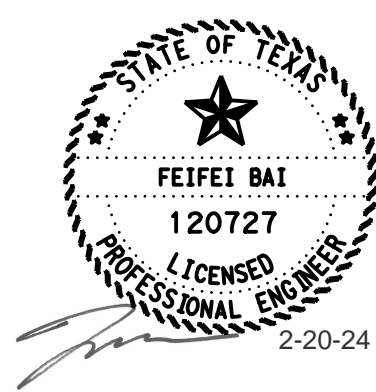
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PLAN

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL
		SF	LF	LB
16	PHASE 1 STEP 3	7299	961.04	16788
17	PHASE 1 STEP 3	6234	814.05	14339
18	PHASE 1 STEP 3	6836	1004.70	15722
BRIDGE TOTAL		20369	2779.79	46849(2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.



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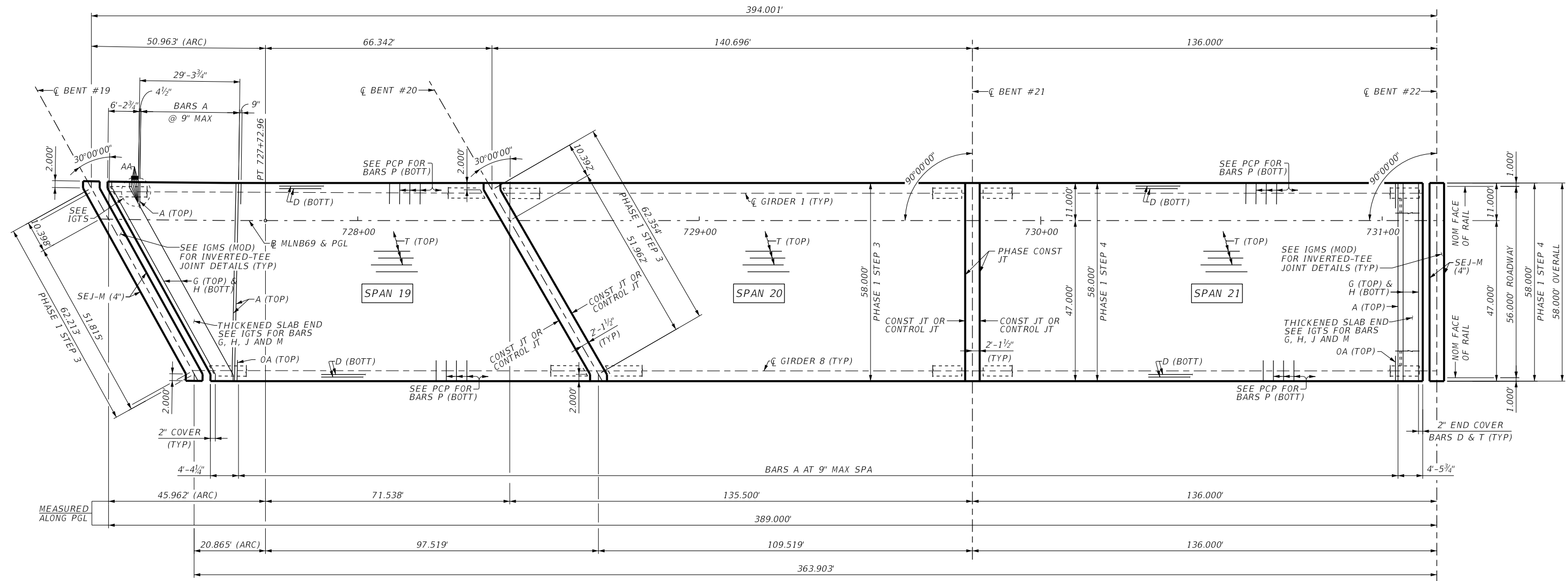


**IH 10 AT US 69
 338.50' PRESTR CONC
 GRDR UNIT (SPANS 16-18)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 7 OF 12

DN:	FB	CK:	JMV	DW:	KAH	CK:	FB
CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST	COUNTY			SHEET NO.			
BMT	JEFFERSON			1571			

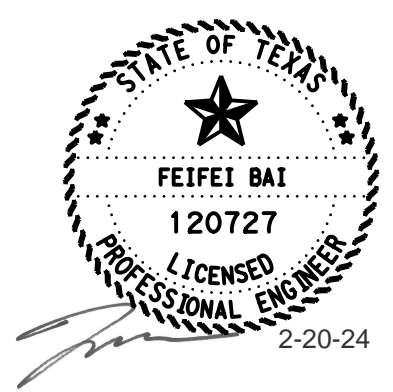
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PLAN

TABLE OF ESTIMATED QUANTITIES					
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	PRESTR CONCRETE GIRDER (TY T x 62)	TOTAL REINF STEEL
		SF	LF	LF	LB
19	PHASE 1 STEP 3	6827	889.96		15702
20	PHASE 1 STEP 3	7257		951.59	16691
21	PHASE 1 STEP 4	7888		1042.34	18142
BRIDGE TOTAL		21972	889.96	1993.93	50536 ②

① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
 ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.



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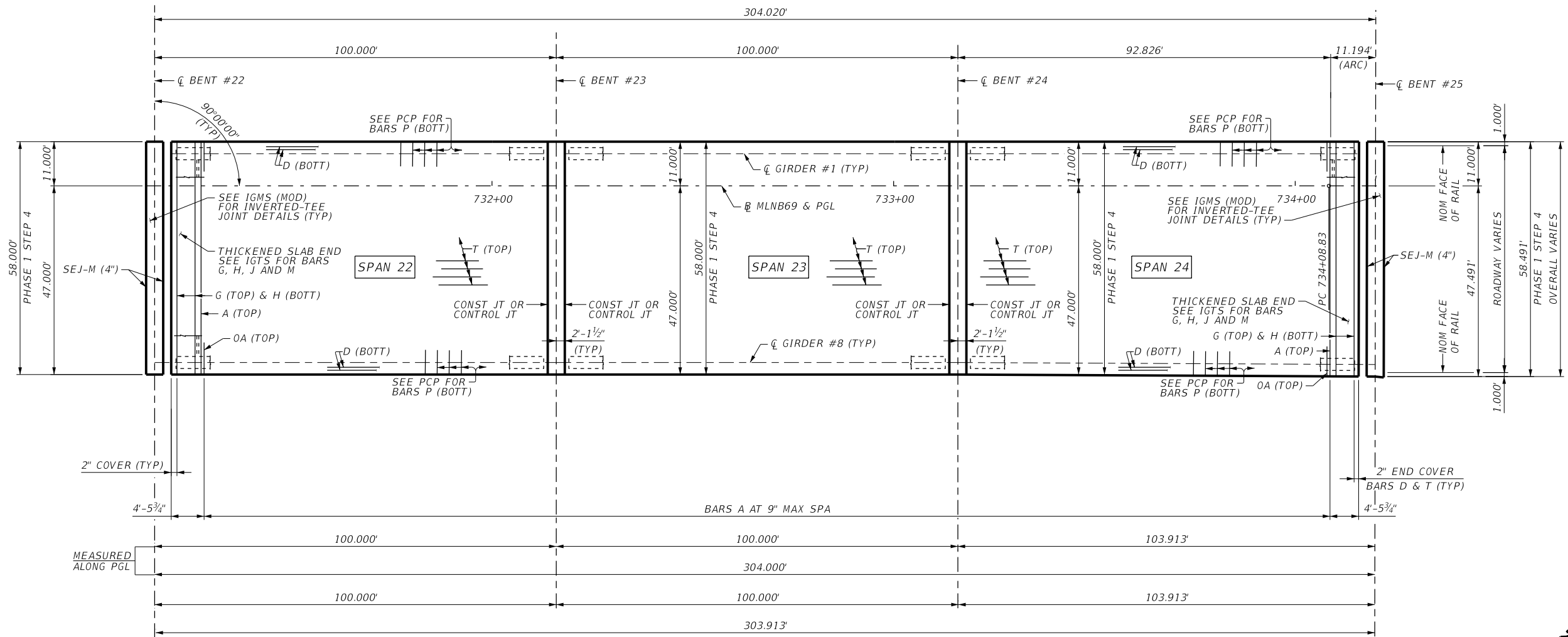
Texas Department of Transportation

**IH 10 AT US 69
 389.00' PRESTR CONC
 GRDR UNIT (SPANS 19-21)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 8 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1572	

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PLAN

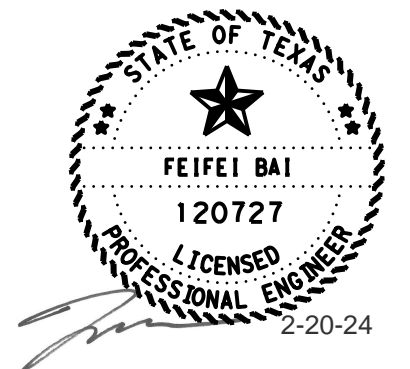


TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY T x 54)	TOTAL REINF STEEL
		SF	LF	LB
22	PHASE 1 STEP 4	5800	754.19	13340
23	PHASE 1 STEP 4	5800	754.19	13340
24	PHASE 1 STEP 4	6057	789.94	13931
BRIDGE TOTAL		17657	2298.32	40611(2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.

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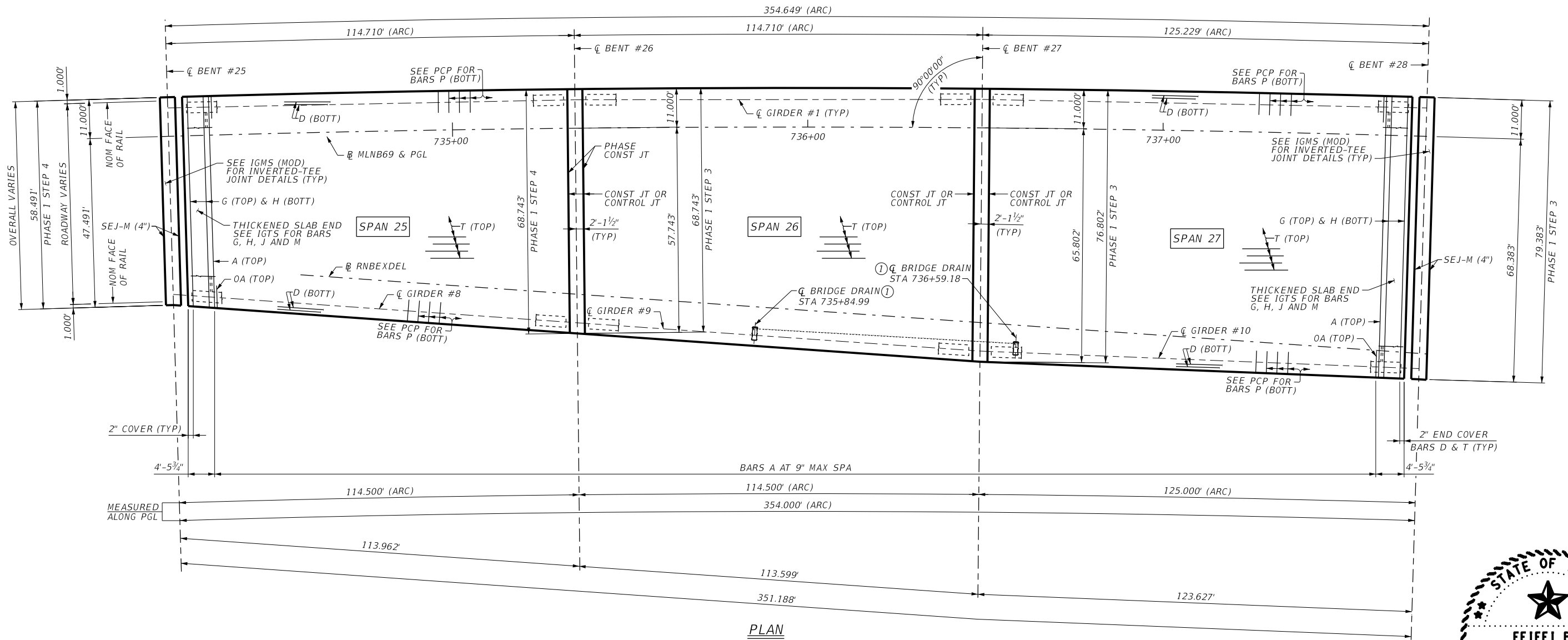
Texas Department of Transportation

**IH 10 AT US 69
 304.00' PRESTR CONC
 GRDR UNIT (SPANS 22-24)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 9 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1573	

DATE: 20-FEB-2024 22:51
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PLAN

① SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.

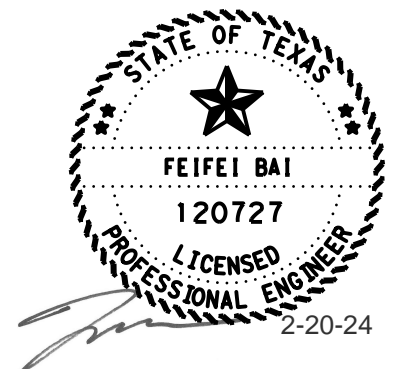


TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL
		SF	LF	LB
25	PHASE 1 STEP 4	7280	876.34	16744
26	PHASE 1 STEP 3	8318	984.57	19131
27	PHASE 1 STEP 3	9742	1197.15	22406
BRIDGE TOTAL		25340	3058.06	58281(2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.

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F-12679

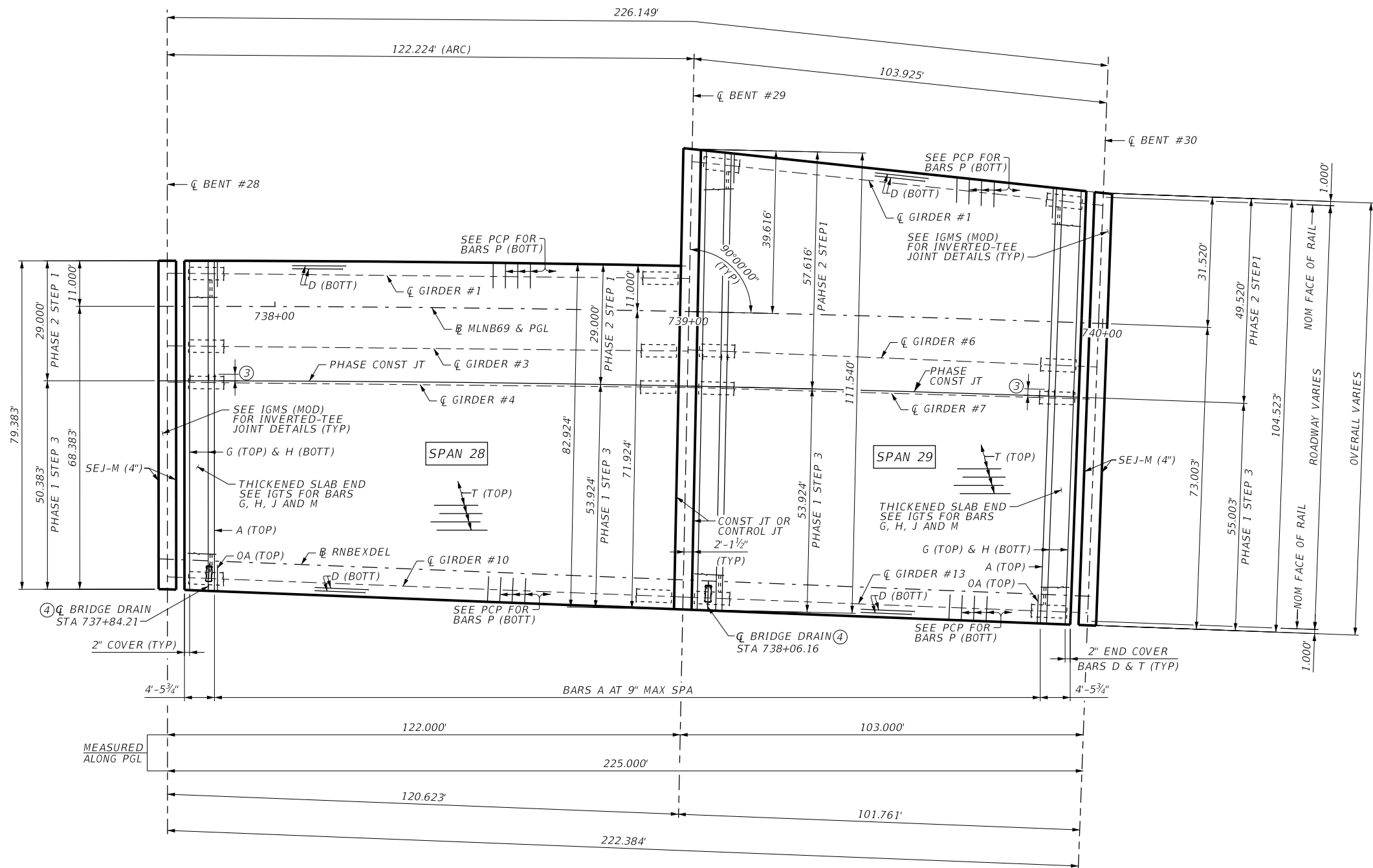
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**IH 10 AT US 69
 354.00' PRESTR CONC
 GRDR UNIT (SPANS 25-27)
 IH 10 EBML
 TO US 69 NB DC**

SHEET 10 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1574	

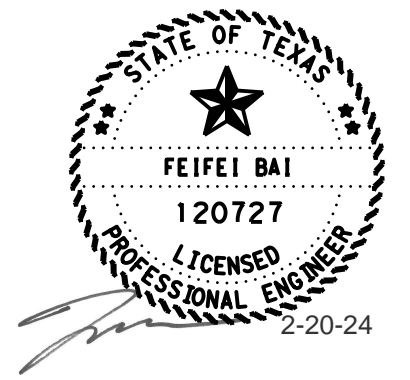
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PLAN

TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL
		SF	LF	LB
28	PHASE 1 STEP 3	6341	815.15	14583
	PHASE 2 STEP 2	3536	351.85	8132
29	PHASE 1 STEP 3	5582	682.79	12839
	PHASE 2 STEP 1	5512	591.71	12678
BRIDGE TOTAL		20971	2441.51	48232 (2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 2 STEP 1 CONSTRUCTION.
- ④ SEE BRIDGE DRAIN DETAILS SHEET FOR DETAILS NOT SHOWN.



HL93 LOADING

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F-12679

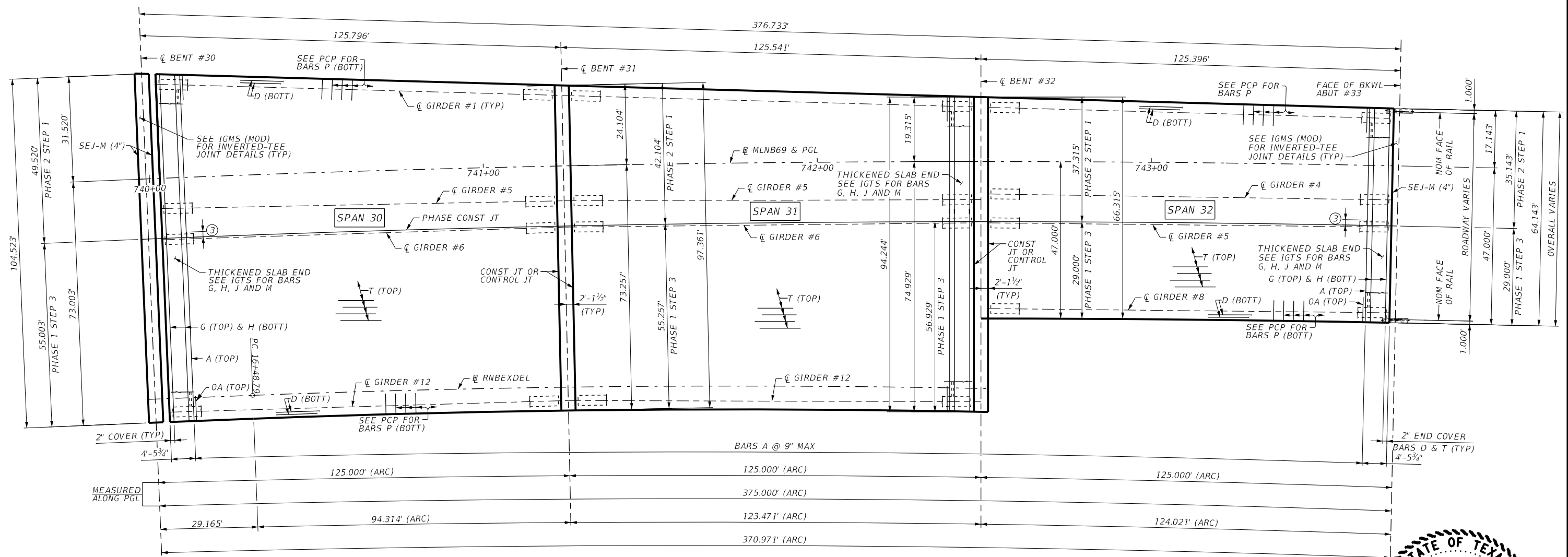
Texas Department of Transportation

IH 10 AT US 69
225.00' PRESTR CONC
GRDR UNIT (SPANS 28-29)
IH 10 EBML
TO US 69 NB DC

SHEET 11 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1575	

DATE: 20-FEB-2024 22:50
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PLAN

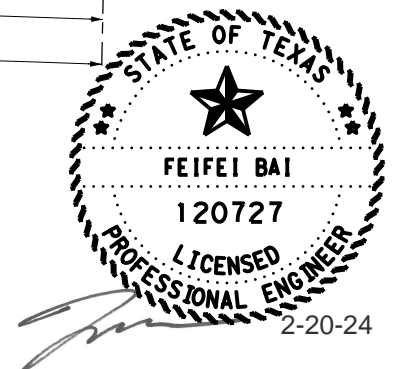


TABLE OF ESTIMATED QUANTITIES				
SPAN	PHASE	REINF CONCRETE SLAB	PRESTR CONCRETE GIRDER (TY TX54)	TOTAL REINF STEEL
		SF	LF	LB
30	PHASE 1 STEP 3	6828	835.67	15704
	PHASE 2 STEP 1	5708	602.78	13128
31	PHASE 1 STEP 3	6942	835.63	15968
	PHASE 2 STEP 1	4941	602.12	11364
32	PHASE 1 STEP 3	3605	478.61	8292
	PHASE 2 STEP 1	4504	481.46	10359
BRIDGE TOTAL		32529	3836.26	74816(2)

- ① QUANTITIES SHOWN ARE BOTTOM GIRDER FLANGE LENGTH WITH ADJUSTMENT MADE FOR GIRDER SLOPE. SEE FRAMING PLAN SHEETS FOR GIRDER LENGTHS.
- ② REINFORCING STEEL WEIGHT IS CALCULATED USING AN APPROXIMATE FACTOR OF 2.3 LBS/SF. FOR CONTRACTOR INFORMATION ONLY.
- ③ EXTEND PHASE 1 STEP 3 BARS A, G & H 1'-7" INTO PHASE 2 STEP 1 CONSTRUCTION.

HL93 LOADING

VOLKERT

F-12679

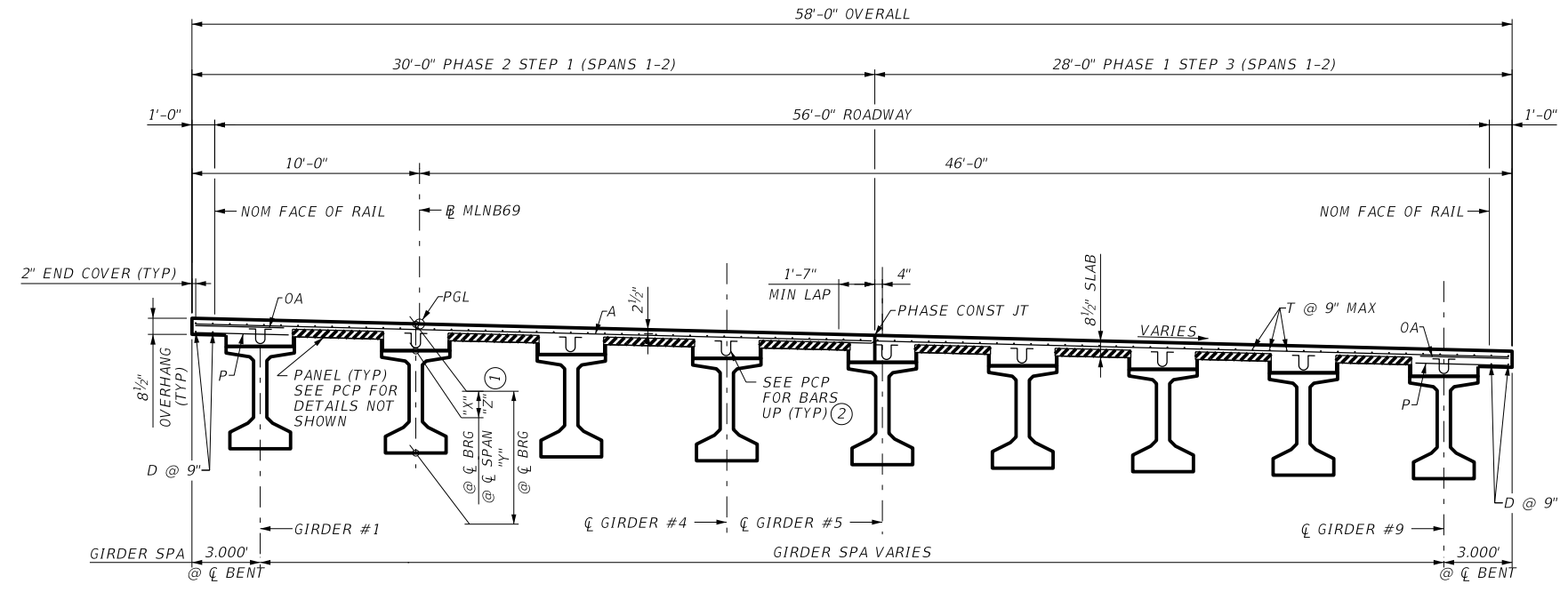
Texas Department of Transportation

IH 10 AT US 69
375.00' PRESTR CONC
GRDR UNIT (SPANS 30-32)
IH 10 EBML
TO US 69 NB DC

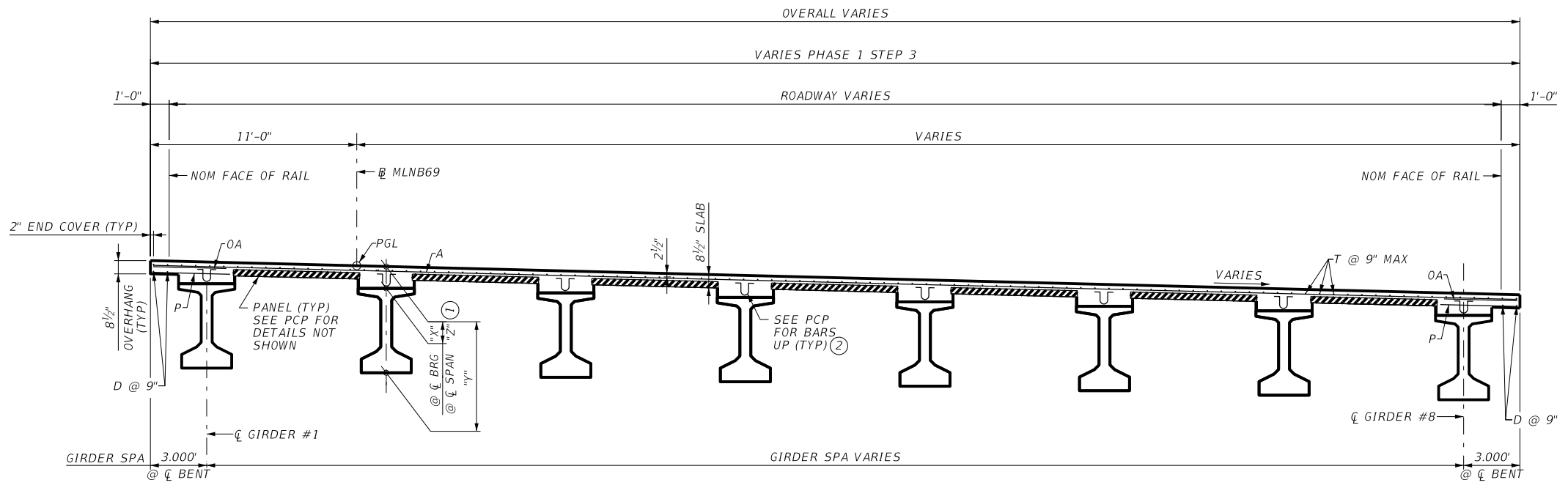
SHEET 12 OF 12

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1576	

DATE: 20-FEB-2024 22:51
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TYPICAL TRANSVERSE SECTION SPAN (1-2)



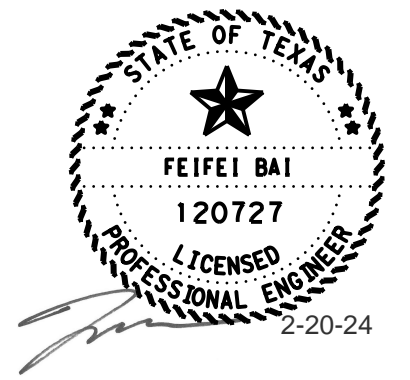
TYPICAL TRANSVERSE SECTION SPAN (3-6, 10-17, 19-25)
 (SPAN 21-22 TX62 NOT SHOWN)

GENERAL NOTES:
 DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, (2020) AND TxDOT BRIDGE DESIGN MANUAL (JAN 2023).
 SEE IGTS STANDARD FOR THICKENED SLAB END DETAILS AND QUANTITY ADJUSTMENTS.
 SEE PCP AND PCP-FAB FOR PANEL DETAILS NOT SHOWN.
 SEE IGMS (MOD) STANDARD FOR MISCELLANEOUS DETAILS.
 SEE APPLICABLE RAIL DETAILS FOR RAIL ANCHORAGE IN SLAB.
 SEE PMDF STANDARD FOR DETAILS AND QUANTITY ADJUSTMENTS IF THIS OPTION IS USED.
 COVER DIMENSIONS ARE CLEAR DIMENSIONS, UNLESS NOTED OTHERWISE.

[REDACTED]

PROVIDE CLASS 5 CONCRETE (F'c = 4,000 PSI).
MATERIAL NOTES
 PROVIDE GRADE 60 REINFORCING STEEL.
 PROVIDE BAR LAPS, WHERE REQUIRED, AS FOLLOWS:
 UNCOATED ~ #4 = 1'-7"
 DEFORMED WELDED WIRE REINFORCEMENT (WWR) (ASTM A1064) OF EQUAL SIZE AND SPACING MAY BE SUBSTITUTED FOR BARS A, D, OA, P OR T, UNLESS NOTED OTHERWISE.
 PROVIDE THE SAME LAPS AS REQUIRED FOR REINFORCING BARS.

- ① THEORETICAL DIMENSION.
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



HL93 LOADING

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F-12679

Texas Department of Transportation

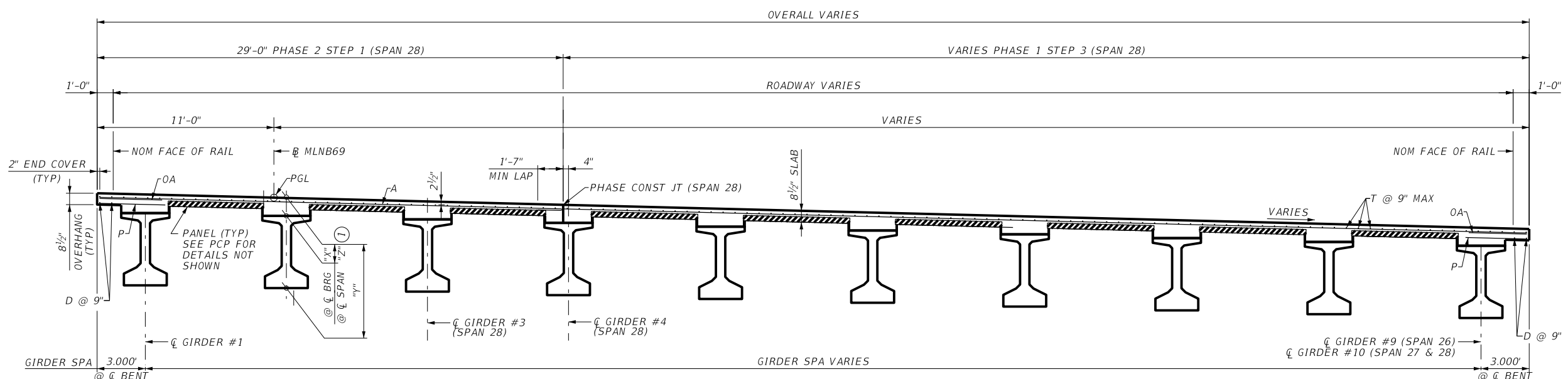
**IH 10 AT US 69
 PRESTR CONC
 GIRDER UNIT DETAILS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 1 OF 5

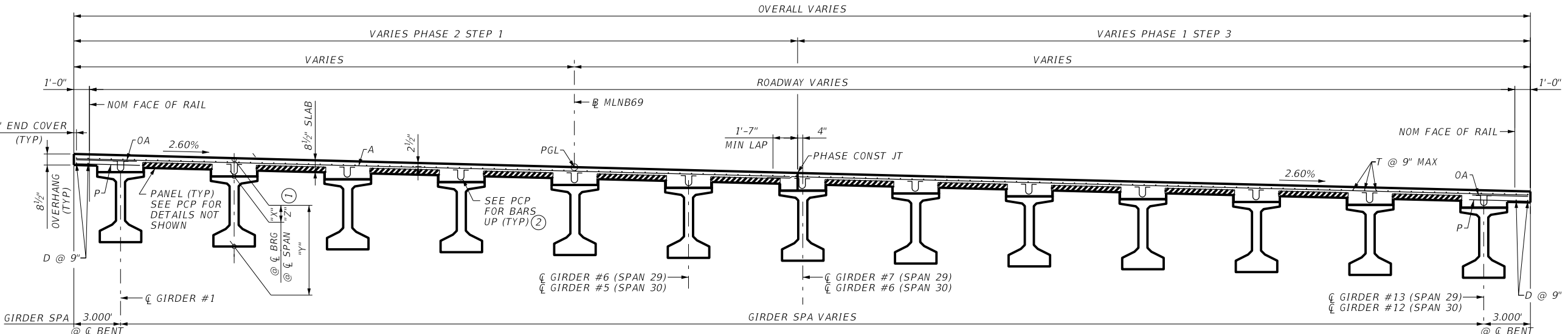
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CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1577	

DATE: 21-FEB-2024 01:42
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1578_10M_10E-69N_GROUND.DT_02.dgn

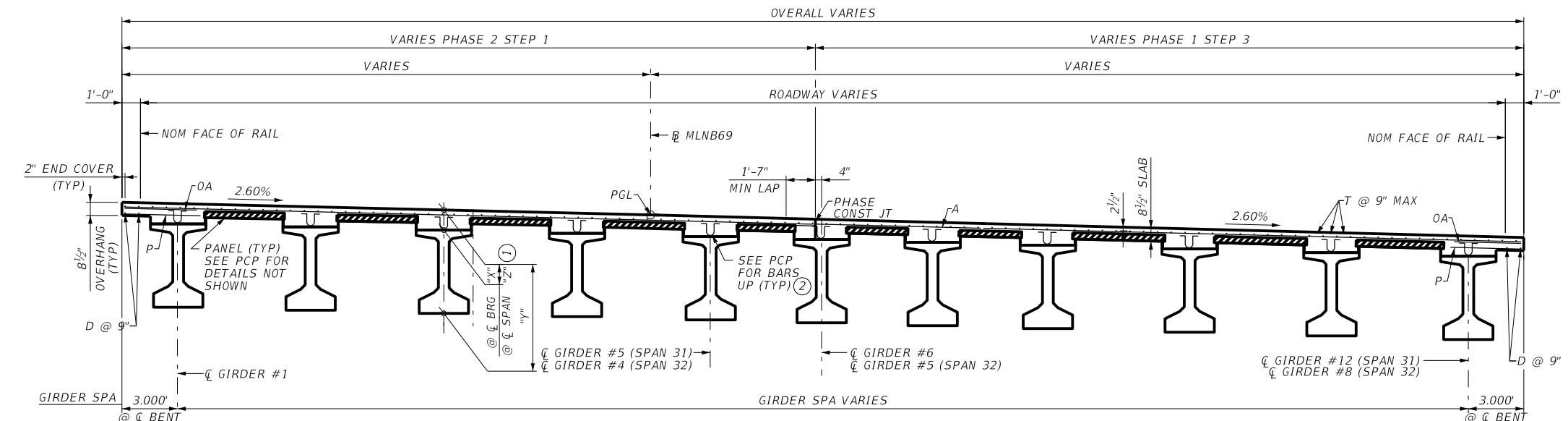
- ① THEORETICAL DIMENSION.
- ② SPACE BARS UP WITH GIRDER BARS R IN ALL AREAS WHERE MEASURED HAUNCH EXCEEDS 3 1/2". SEE PCP STANDARD FOR DETAILS.



TYPICAL TRANSVERSE SECTION SPAN (26-28)
 (SPAN 28 SHOWN)

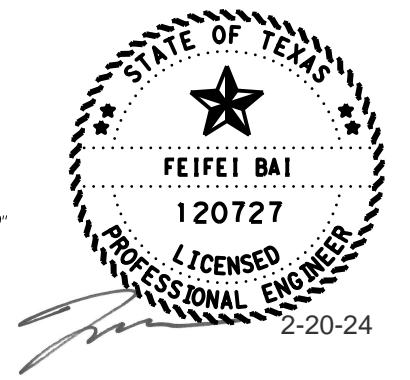


TYPICAL TRANSVERSE SECTION SPAN (29-30)
 (SPAN 29 SHOWN)



TYPICAL TRANSVERSE SECTION SPAN (31-32)
 (SPAN 31 SHOWN)

BAR TABLE	
BAR	SIZE
AA	#5
A	#4
B	#4
D1	#4
D2	#4
G	#4
H	#4
J	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4



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IH 10 AT US 69 PRESTR CONC GIRDER UNIT DETAILS IH 10 EBML TO US 69 NB DC

SHEET 2 OF 5

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1578	

DATE: 20-FEB-2024 22:43
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Plan_Sets\1074500_10E-69N_GROUND_DT_03.dgn

PHASE 1 - STEP 3 SECTION DEPTHS

SPAN NO	GIRDER ID	"X"	"Y"	"Z" ①
		(in)	(ft - in)	(in)
1	5	13 1/4"	5' - 7 1/4"	10 1/8"
	6	12 3/4"	5' - 6 3/4"	10"
	7	12 3/4"	5' - 6 3/4"	10 1/8"
	8 - 9	12 3/4"	5' - 6 3/4"	10 1/4"
2	5	13"	5' - 7"	9 7/8"
	6	12 1/4"	5' - 6 1/4"	9 5/8"
	7	12 1/4"	5' - 6 1/4"	9 7/8"
	8	12 1/4"	5' - 6 1/4"	10"
	9	12 1/4"	5' - 6 1/4"	10 1/8"
3	1	11 1/2"	5' - 5 1/2"	9 3/4"
	2 - 7	11 1/2"	5' - 5 1/2"	9 7/8"
	8	11 1/2"	5' - 5 1/2"	9 3/4"
4	1	11 1/2"	5' - 5 1/2"	9 3/4"
	2 - 7	11 1/2"	5' - 5 1/2"	9 7/8"
	8	11 1/2"	5' - 5 1/2"	9 3/4"
5	1	11 3/4"	5' - 5 3/4"	10"
	2 - 7	11 3/4"	5' - 5 3/4"	10 1/8"
	8	11 3/4"	5' - 5 3/4"	10"
6	1	11 1/2"	5' - 5 1/2"	9 3/4"
	2 - 7	11 1/2"	5' - 5 1/2"	9 7/8"
	8	11 1/2"	5' - 5 1/2"	9 3/4"
10	1	11 3/4"	5' - 5 3/4"	9 7/8"
	2 - 5	11 3/4"	5' - 5 3/4"	10 1/4"
	6 - 7	11 3/4"	5' - 5 3/4"	10 3/8"
	8	11 3/4"	5' - 5 3/4"	10 1/4"
13	1	11 1/2"	5' - 5 1/2"	10 1/8"
	2 - 8	11 1/2"	5' - 5 1/2"	10 1/4"
14	1	11 1/2"	5' - 5 1/2"	10 1/8"
	2 - 8	11 1/2"	5' - 5 1/2"	10 1/4"
15	1	12"	5' - 6"	10 1/8"
	2 - 3	12"	5' - 6"	10 1/2"
	4 - 8	12"	5' - 6"	10 5/8"
16	1	12 1/2"	5' - 6 1/2"	10"
	2 - 3	12 1/2"	5' - 6 1/2"	10 3/8"
	4 - 8	12 1/2"	5' - 6 1/2"	10 1/2"
17	1	12 1/2"	5' - 6 1/2"	10 1/8"
	2 - 8	12 1/2"	5' - 6 1/2"	10 3/8"
18	1	11 3/4"	5' - 5 3/4"	10 3/8"
	2 - 3	11 3/4"	5' - 5 3/4"	10 1/4"
	4	11 3/4"	5' - 5 3/4"	10 3/8"
	5 - 6	11 3/4"	5' - 5 3/4"	10 5/8"
	7	11 3/4"	5' - 5 3/4"	10 1/2"
	8	11 3/4"	5' - 5 3/4"	10 7/8"
9	11 3/4"	5' - 5 3/4"	10 3/8"	

PHASE 1 - STEP 3 SECTION DEPTHS

SPAN NO	GIRDER ID	"X"	"Y"	"Z" ①
		(in)	(ft - in)	(in)
19	1 - 2	11 1/4"	5' - 5 1/4"	9 3/4"
	3 - 4	11 1/2"	5' - 5 1/2"	10"
	5 - 7	11 1/2"	5' - 5 1/2"	10 1/8"
	8	11 1/2"	5' - 5 1/2"	10"
20	1 - 2	12 1/4"	6' - 2 1/4"	9 3/4"
	3	12 1/4"	6' - 2 1/4"	9 1/2"
	4 - 5	12 1/4"	6' - 2 1/4"	9 3/8"
	6 - 8	12 1/4"	6' - 2 1/4"	9 1/4"
26	1	12"	5' - 6"	10"
	2 - 6	12"	5' - 6"	10 1/4"
	7 - 8	12"	5' - 6"	10 1/8"
	9	12"	5' - 6"	10"
27	1	11"	5' - 5"	9 3/4"
	2 - 7	11"	5' - 5"	10"
	8 - 9	11"	5' - 5"	9 7/8"
	10	11"	5' - 5"	9 3/4"
28	4	12"	5' - 6"	9 5/8"
	5 - 9	12"	5' - 6"	10 1/2"
	10	12"	5' - 6"	10 1/4"
29	7	12"	5' - 6"	9 3/4"
	8 - 12	12"	5' - 6"	10 1/4"
	13	12"	5' - 6"	10 1/8"
30	6	12 3/4"	5' - 6 3/4"	9 5/8"
	7	12 1/4"	5' - 6 1/4"	10 1/8"
	8 - 12	12 1/4"	5' - 6 1/4"	9 3/4"
31	6	12 3/4"	5' - 6 3/4"	9 5/8"
	7	12 1/4"	5' - 6 1/4"	10 1/8"
	8 - 10	12 1/4"	5' - 6 1/4"	9 7/8"
	11	12 1/4"	5' - 6 1/4"	10 1/8"
	12	12 1/4"	5' - 6 1/4"	9 3/4"
32	5	12 3/4"	5' - 6 3/4"	9 3/4"
	6 - 7	12 3/4"	5' - 6 3/4"	10 5/8"
	8	12 3/4"	5' - 6 3/4"	10 1/4"

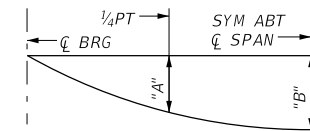
PHASE 1 - STEP 4 SECTION DEPTHS

SPAN NO	GIRDER ID	"X"	"Y"	"Z" ①
		(in)	(ft - in)	(in)
11	1	11 3/4"	5' - 5 3/4"	10"
	2 - 6	11 3/4"	5' - 5 3/4"	10 1/4"
	7	11 3/4"	5' - 5 3/4"	10 3/8"
	8	11 3/4"	5' - 5 3/4"	10 1/4"
12	1	11 3/4"	5' - 5 3/4"	10 1/8"
	2 - 3	11 3/4"	5' - 5 3/4"	10 3/8"
	4 - 8	11 3/4"	5' - 5 3/4"	10 1/2"
	9	11"	6' - 1"	9 5/8"
21	2	11"	6' - 1"	9 1/2"
	3	11 1/2"	6' - 1 1/2"	9 3/4"
	4	11 3/4"	6' - 1 3/4"	9 5/8"
	5	12 1/4"	6' - 2 1/4"	9 7/8"
	6	12 3/4"	6' - 2 3/4"	10"
	7	13 1/4"	6' - 3 1/4"	10 1/4"
	8	13 3/4"	6' - 3 3/4"	10 1/4"
	22	1	11 3/4"	5' - 5 3/4"
2		11 3/4"	5' - 5 3/4"	9 3/4"
3		11 3/4"	5' - 5 3/4"	9 3/4"
4		11 3/4"	5' - 5 3/4"	9 3/4"
5		11 3/4"	5' - 5 3/4"	9 3/4"
6		11 3/4"	5' - 5 3/4"	9 3/4"
7		11 3/4"	5' - 5 3/4"	9 3/4"
8		11 3/4"	5' - 5 3/4"	9 5/8"
23	1 - 8	11 3/4"	5' - 5 3/4"	9 3/4"
24	1	11 3/4"	5' - 5 3/4"	9 3/4"
	2 - 7	11 3/4"	5' - 5 3/4"	9 7/8"
	8	11 3/4"	5' - 5 3/4"	9 3/4"
25	1	11 3/4"	5' - 5 3/4"	9 3/4"
	2 - 7	11 3/4"	5' - 5 3/4"	9 7/8"
	8	11 3/4"	5' - 5 3/4"	9 5/8"

PHASE 2 - STEP 1 SECTION DEPTHS

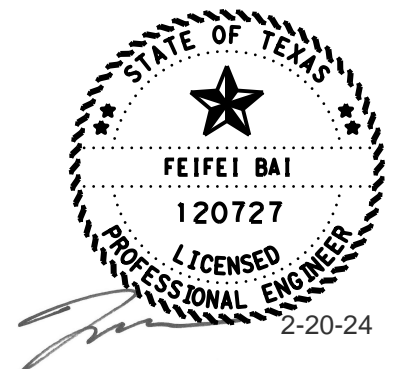
SPAN NO	GIRDER ID	"X"	"Y"	"Z" ①
		(in)	(ft - in)	(in)
1	1	13 1/2"	5' - 7 1/2"	10"
	2	13 1/2"	5' - 7 1/2"	10 1/8"
	3	13 1/2"	5' - 7 1/2"	10 1/4"
	4	13 1/2"	5' - 7 1/2"	10 3/8"
2	1	13 1/4"	5' - 7 1/4"	9 3/4"
	2	13"	5' - 7"	9 3/4"
	3	13"	5' - 7"	10"
	4	13"	5' - 7"	10 1/8"
28	1	12"	5' - 6"	9 5/8"
	2 - 3	12"	5' - 6"	10"
29	1	12"	5' - 6"	10 1/8"
	2 - 6	12"	5' - 6"	10 1/4"
30	1	12 3/4"	5' - 6 3/4"	10 3/8"
	2 - 5	12 3/4"	5' - 6 3/4"	10 3/4"
31	1	12 1/4"	5' - 6 1/4"	9 3/4"
	2 - 5	12 1/4"	5' - 6 1/4"	9 7/8"
32	1	12 3/4"	5' - 6 3/4"	10 3/8"
	2 - 4	12 3/4"	5' - 6 3/4"	10 5/8"

① THEORETICAL DIMENSION.



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY (Ec = 5000 KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.



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F-12679

Texas Department of Transportation

**IH 10 AT US 69
PREST CONC
GIRDER UNIT DETAILS
IH 10 EBML
US 69 NB DC**
SHEET 3 OF 5

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1579	

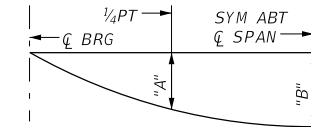
DATE: 21-FEB-2024 01:42
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PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A"	"B"
		(ft)	(ft)
1	5	-0.038	-0.054
	6	-0.059	-0.084
	7	-0.057	-0.081
	8	-0.055	-0.078
	9	-0.049	-0.070
2	5	-0.039	-0.056
	6	-0.071	-0.101
	7	-0.071	-0.101
	8	-0.071	-0.101
3	1	-0.085	-0.121
	2 - 7	-0.094	-0.134
	8	-0.085	-0.121
4	1	-0.085	-0.121
	2 - 7	-0.094	-0.134
	8	-0.085	-0.121
5	1	-0.085	-0.121
	2 - 7	-0.094	-0.134
	8	-0.085	-0.121
6	1	-0.085	-0.121
	2	-0.095	-0.136
	3	-0.096	-0.136
	4	-0.096	-0.137
	5	-0.096	-0.137
	6	-0.097	-0.137
	7	-0.097	-0.138
	8	-0.087	-0.123
10	1	-0.079	-0.112
	2	-0.099	-0.140
	3	-0.102	-0.144
	4	-0.105	-0.148
	5	-0.107	-0.153
	6	-0.110	-0.157
	7	-0.114	-0.161
	8	-0.104	-0.147
13	1	-0.057	-0.082
	2	-0.069	-0.098
	3	-0.070	-0.099
	4	-0.070	-0.100
	5	-0.071	-0.101
	6	-0.072	-0.102
	7	-0.073	-0.104
	8	-0.071	-0.101

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A"	"B"
		(ft)	(ft)
14	1	-0.057	-0.082
	2	-0.069	-0.098
	3	-0.070	-0.099
	4	-0.070	-0.100
	5	-0.071	-0.101
	6	-0.072	-0.102
	7	-0.073	-0.104
	8	-0.071	-0.101
15	1	-0.114	-0.162
	2	-0.141	-0.200
	3	-0.143	-0.203
	4	-0.145	-0.205
	5	-0.146	-0.208
	6	-0.148	-0.210
	7	-0.150	-0.213
	8	-0.150	-0.213
16	1	-0.114	-0.162
	2	-0.141	-0.200
	3	-0.143	-0.203
	4	-0.145	-0.205
	5	-0.146	-0.208
	6	-0.148	-0.210
	7	-0.150	-0.213
	8	-0.150	-0.213
17	1	-0.066	-0.094
	2	-0.079	-0.113
	3	-0.080	-0.114
	4	-0.081	-0.115
	5	-0.082	-0.117
	6	-0.083	-0.118
	7	-0.084	-0.120
	8	-0.082	-0.117
18	1	-0.049	-0.070
	2	-0.065	-0.092
	3	-0.076	-0.108
	4	-0.089	-0.126
	5	-0.102	-0.145
	6	-0.115	-0.164
	7	-0.129	-0.183
	8	-0.142	-0.202
	9	-0.165	-0.235

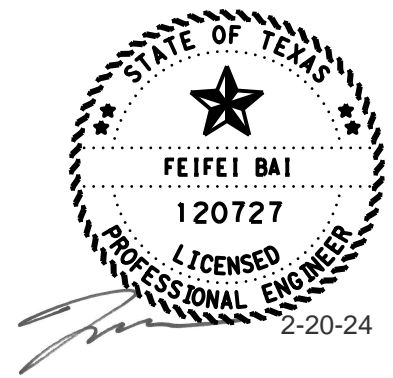
PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A"	"B"
		(ft)	(ft)
19	1	-0.084	-0.120
	2	-0.097	-0.137
	3	-0.097	-0.138
	4	-0.098	-0.139
	5	-0.098	-0.140
	6	-0.099	-0.140
	7	-0.099	-0.141
	8	-0.090	-0.128
20	1	-0.131	-0.186
	2	-0.127	-0.181
	3	-0.111	-0.158
	4	-0.096	-0.137
	5	-0.083	-0.118
	6	-0.072	-0.102
	7	-0.061	-0.087
	8	-0.047	-0.067
26	1	-0.106	-0.150
	2	-0.118	-0.169
	3	-0.118	-0.168
	4	-0.117	-0.167
	5	-0.116	-0.166
	6	-0.116	-0.165
	7	-0.115	-0.164
	8	-0.115	-0.164
	9	-0.099	-0.140
27	1	-0.139	-0.198
	2	-0.155	-0.221
	3	-0.154	-0.219
	4	-0.153	-0.218
	5	-0.152	-0.217
	6	-0.152	-0.216
	7	-0.151	-0.215
	8	-0.150	-0.213
	9	-0.149	-0.212
	10	-0.133	-0.189
28	4	-0.076	-0.108
	5	-0.139	-0.198
	6	-0.139	-0.197
	7	-0.138	-0.196
	8	-0.137	-0.195
	9	-0.136	-0.194
29	10	-0.118	-0.168
	10	-0.118	-0.168

PHASE 1 - STEP 3 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A"	"B"
		(ft)	(ft)
29	7	-0.041	-0.059
	8	-0.076	-0.108
	9	-0.075	-0.107
	10	-0.075	-0.107
	11	-0.075	-0.106
	12	-0.074	-0.105
30	13	-0.063	-0.089
	6	-0.083	-0.119
	7	-0.154	-0.219
	8	-0.153	-0.218
	9	-0.152	-0.216
	10	-0.151	-0.215
31	11	-0.150	-0.214
	12	-0.127	-0.180
	6	-0.085	-0.121
	7	-0.157	-0.223
	8	-0.156	-0.221
	9	-0.155	-0.220
32	10	-0.154	-0.219
	11	-0.153	-0.217
	12	-0.128	-0.182
	5	-0.093	-0.133
32	6	-0.163	-0.231
	7	-0.162	-0.230
	8	-0.132	-0.187



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY ($E_c = 5000$ KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.



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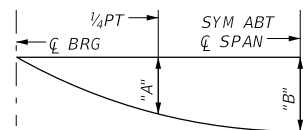
IH 10 AT US 69
 PREST CONC
 GIRDER UNIT DETAILS
 IH 10 EBML
 US 69 NB DC
 SHEET 4 OF 5

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1580	

DATE: 20-FEB-2024 22:44
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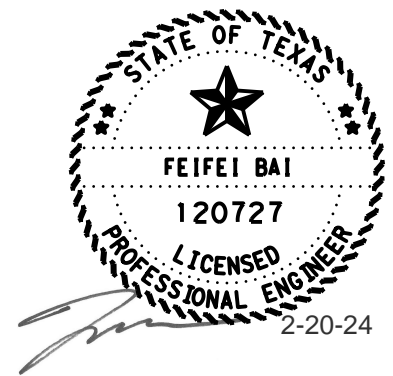
PHASE 1 - STEP 4 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
11	1	-0.076	-0.108
	2	-0.092	-0.131
	3	-0.093	-0.133
	4	-0.094	-0.134
	5	-0.096	-0.136
	6	-0.097	-0.137
	7	-0.098	-0.139
	8	-0.096	-0.137
12	1	-0.085	-0.121
	2	-0.103	-0.147
	3	-0.104	-0.148
	4	-0.106	-0.150
	5	-0.107	-0.152
	6	-0.108	-0.154
	7	-0.110	-0.156
	8	-0.108	-0.154
21	1	-0.111	-0.158
	2 - 7	-0.123	-0.175
	8	-0.111	-0.158
22	1	-0.053	-0.075
	2 - 7	-0.058	-0.083
	8	-0.053	-0.075
23	1	-0.052	-0.073
	2 - 7	-0.057	-0.081
	8	-0.052	-0.073
24	1	-0.063	-0.089
	2 - 7	-0.069	-0.098
	8	-0.062	-0.088
25	1	-0.104	-0.148
	2	-0.115	-0.164
	3	-0.115	-0.163
	4	-0.114	-0.163
	5	-0.114	-0.162
	6	-0.113	-0.161
	7	-0.113	-0.161
	8	-0.098	-0.139

PHASE 2 - STEP 1 DEAD LOAD DEFLECTIONS			
SPAN NO	GIRDER ID	"A" (ft)	"B" (ft)
1	1	-0.079	-0.112
	2	-0.076	-0.108
	3	-0.073	-0.104
	4	-0.070	-0.100
2	1	-0.074	-0.105
	2 - 4	-0.078	-0.111
28	1	-0.130	-0.185
	2	-0.154	-0.218
	3	-0.153	-0.217
29	1	-0.068	-0.097
	2	-0.079	-0.113
	3	-0.079	-0.112
	4	-0.078	-0.111
	5	-0.078	-0.110
	6	-0.077	-0.109
30	1	-0.145	-0.206
	2	-0.170	-0.241
	3	-0.169	-0.239
	4	-0.168	-0.237
	5	-0.167	-0.236
31	1	-0.124	-0.176
	2	-0.137	-0.194
	3	-0.136	-0.193
	4	-0.135	-0.192
32	1	-0.141	-0.201
	2	-0.164	-0.233
	3	-0.163	-0.231
	4	-0.162	-0.230



DEAD LOAD DEFLECTION DIAGRAM

CALCULATED DEFLECTIONS SHOWN ARE DUE TO THE CONCRETE SLAB ON INTERIOR GIRDERS ONLY ($E_c = 5000$ KSI). ADJUST VALUES AS REQUIRED FOR EXTERIOR GIRDERS AND IF OPTIONAL SLAB FORMING IS USED. THESE VALUES MAY REQUIRE FIELD VERIFICATION.



HL93 LOADING

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F-12679

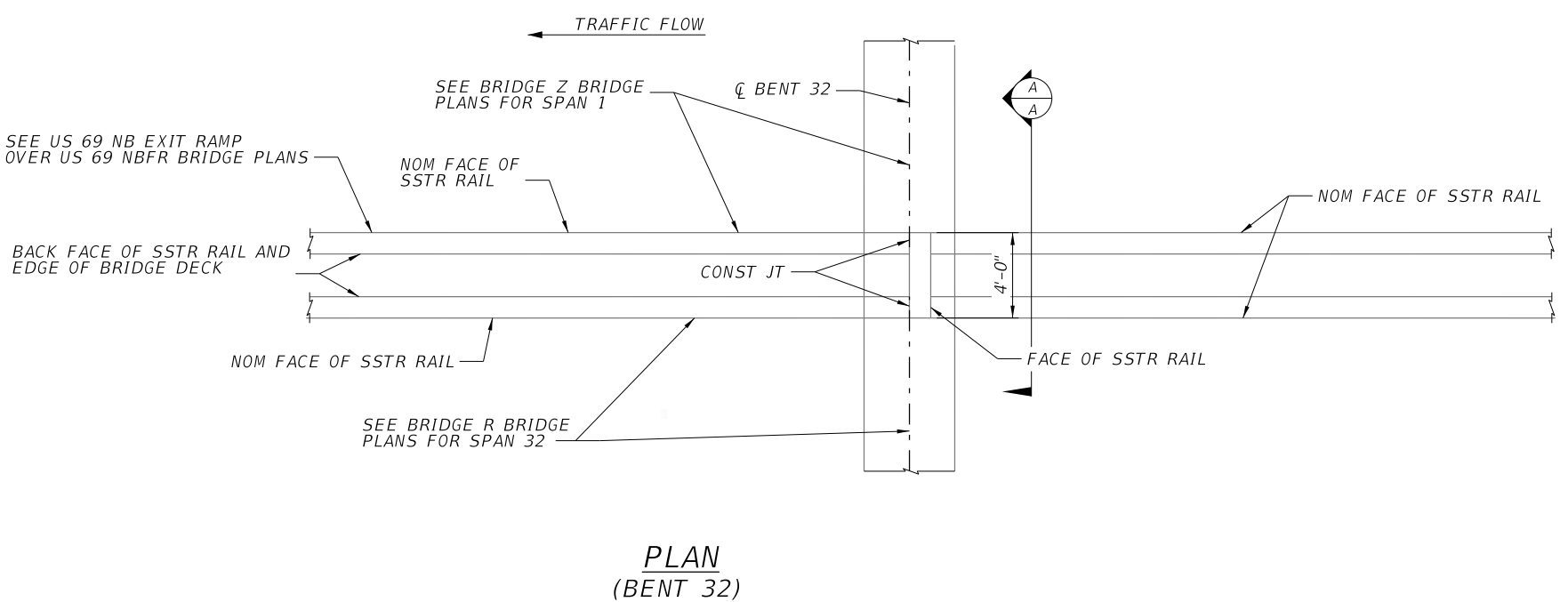
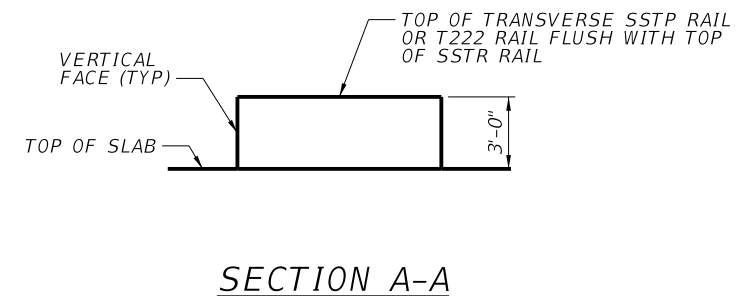
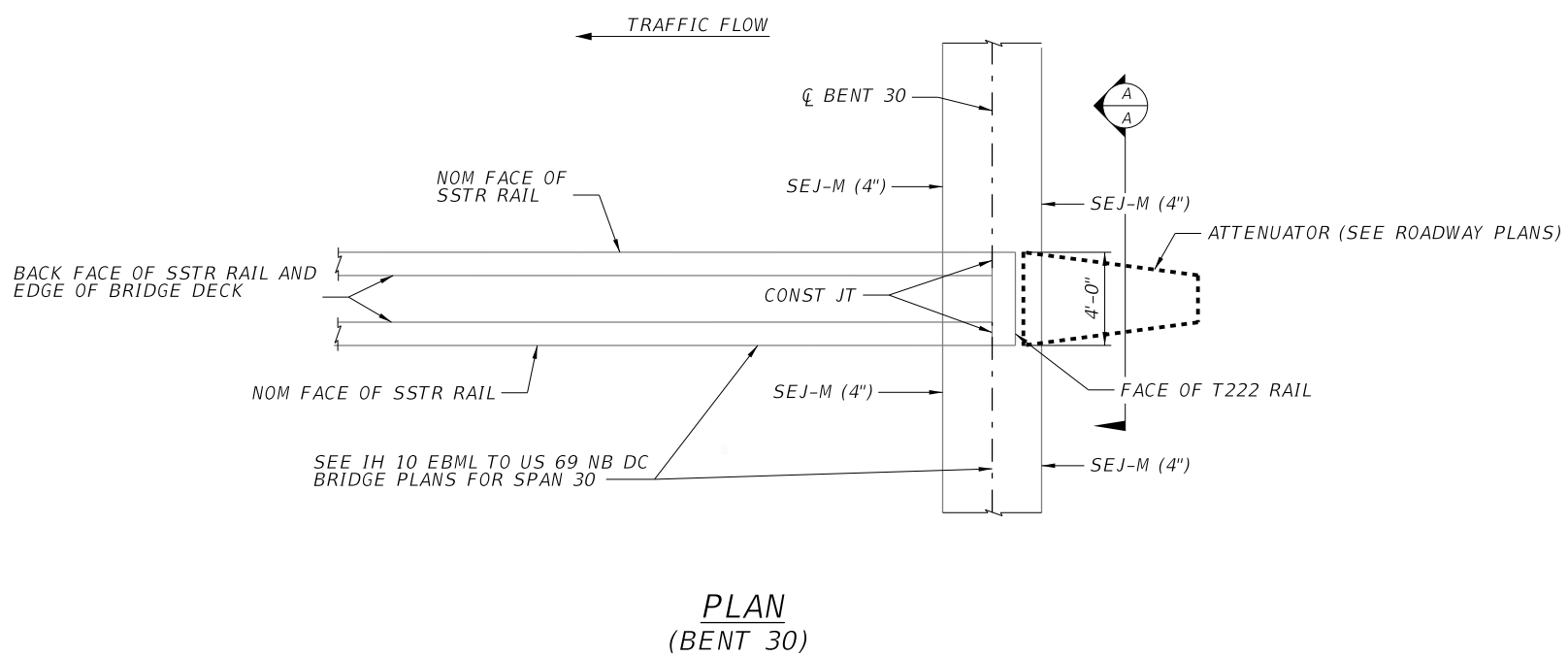


**IH 10 AT US 69
 PREST CONC
 GIRDER UNIT DETAILS
 IH 10 EBML
 US 69 NB DC**

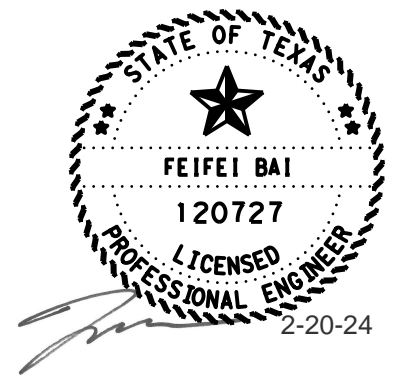
SHEET 5 OF 5

DN: FB	CK: JMV	DW: KAH	CK: FB
CONT	SECT	JOB	HIGHWAY
0028	13	135	IH 10
DIST	COUNTY	SHEET NO.	
BMT	JEFFERSON	1581	

DATE: 20-FEB-2024 22:44
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan_Sets\7. Bridge\Bridges R (Ih 10 EB to US 69 NB DC)\1582_10M_10E-69N_GORED1_01.dgn



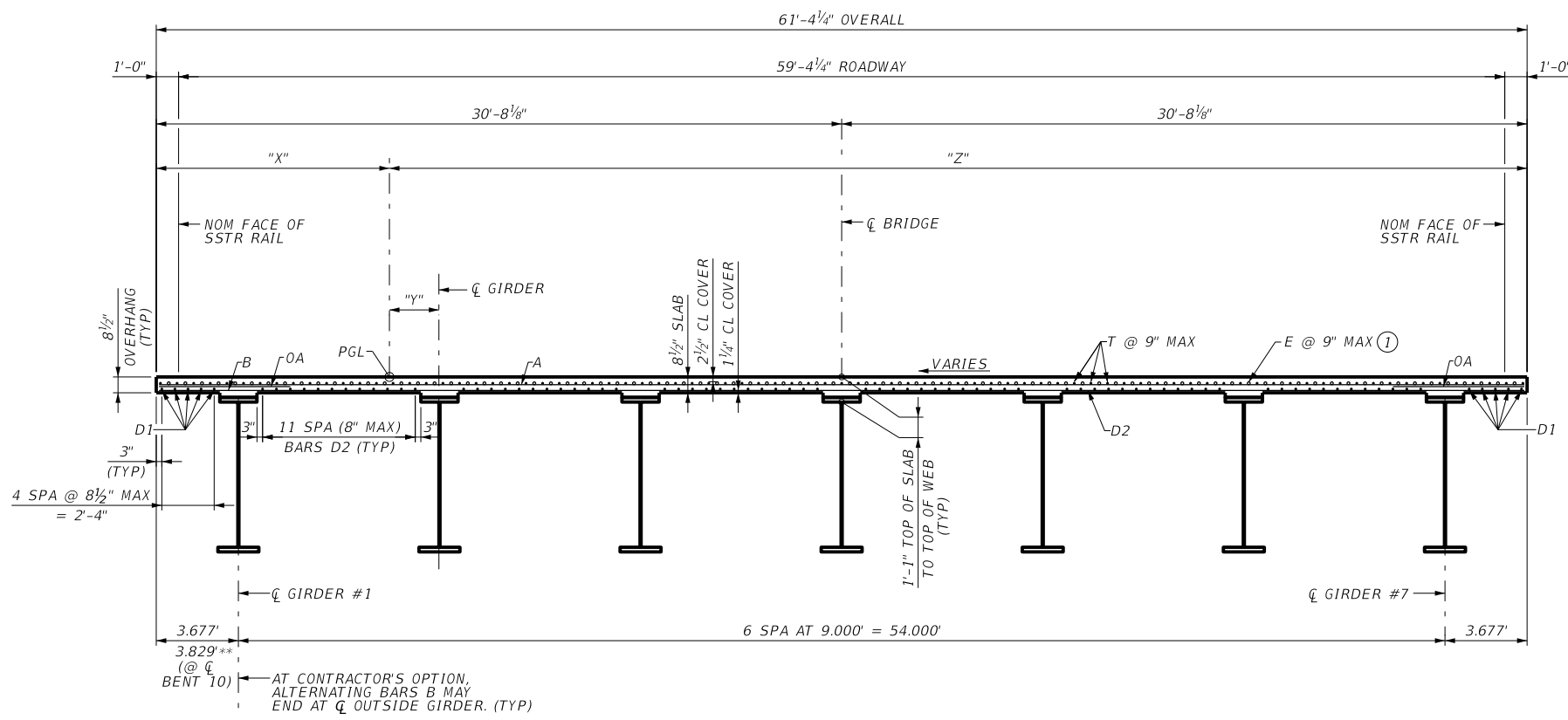
- NOTES:**
1. SEE RAILING STANDARDS FOR REINFORCING.
 2. PRESTRESSED CONCRETE PANELS ARE NOT ALLOWED IN AREA OF GORE ENDWALL. SSTR AND T222 RAILING TO BE ANCHORED IN FULL DEPTH CAST IN PLACE SLAB.



**IH 10 AT US 69
 GORE AREA
 ENDWALL DETAILS
 IH 10 EBML
 TO US 69 NB DC**
 SHEET 1 OF 1

DN:	FB	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST	COUNTY		SHEET NO.				
BMT	JEFFERSON		1582				

DATE: 20-FEB-2024 18:18
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NOTE:
 1. SEE CONTINUOUS PLATE GIRDER UNIT (SPANS 7-9) SHEET FOR GENERAL AND MATERIAL NOTES.

① PLACE BARS E BETWEEN BARS T OVER INTERIOR BENT (SEE PLAN FOR PLACEMENT).

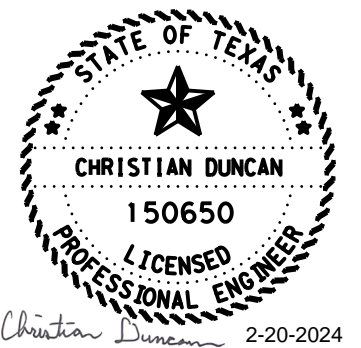
BAR TABLE	
BAR	SIZE
A	#4
B	#4
D1	#4
D2	#4
E	#6
G	#4
H	#4
J	#4
M	#4
OA	#5
P	#4
T	#4
UP	#4

TYPICAL TRANSVERSE SECTION

(SPANS 7-9)
 (NORMAL TO Q OF BRIDGE)

PGL STATION	LOCATION	"X"	"Y"	"Z"
711+82.020	CL BENT 7	11.000'	1.677'	48.677'
711+85.145	BEARING	11.027'	1.650'	48.677'
712+15.574	FIELD SPLICE	11.289'	1.388'	48.677'
712+50.000	BEGIN SUPER	11.587'	1.090'	48.677'
713+02.577	FIELD SPLICE	12.040'	0.637'	48.677'
713+52.690	CL BENT 8	12.473'	0.204'	48.677'
714+11.674	FIELD SPLICE	12.677'	0.305'	48.372'
714+96.226	FIELD SPLICE	12.677'	1.036'	47.641'
715+55.210	CL BENT 9	12.677'	1.545'	47
715+59.030	PC	12.677'	1.578'	132'
715+95.590	FIELD SPLICE	12.677'	1.636'	47.099'
716+10.000	FULL SUPER	12.677'	1.518'	47.159'
716+82.616	FIELD SPLICE	12.385'	0.292'	48.677'
717+13.061	BEARING	11.023'	1.654'	48.677'
717+16.190	CL BENT 10	11.015**	1.814**	48.677**

** ADDS TO MORE THAN 61.354' DUE TO CURVE.



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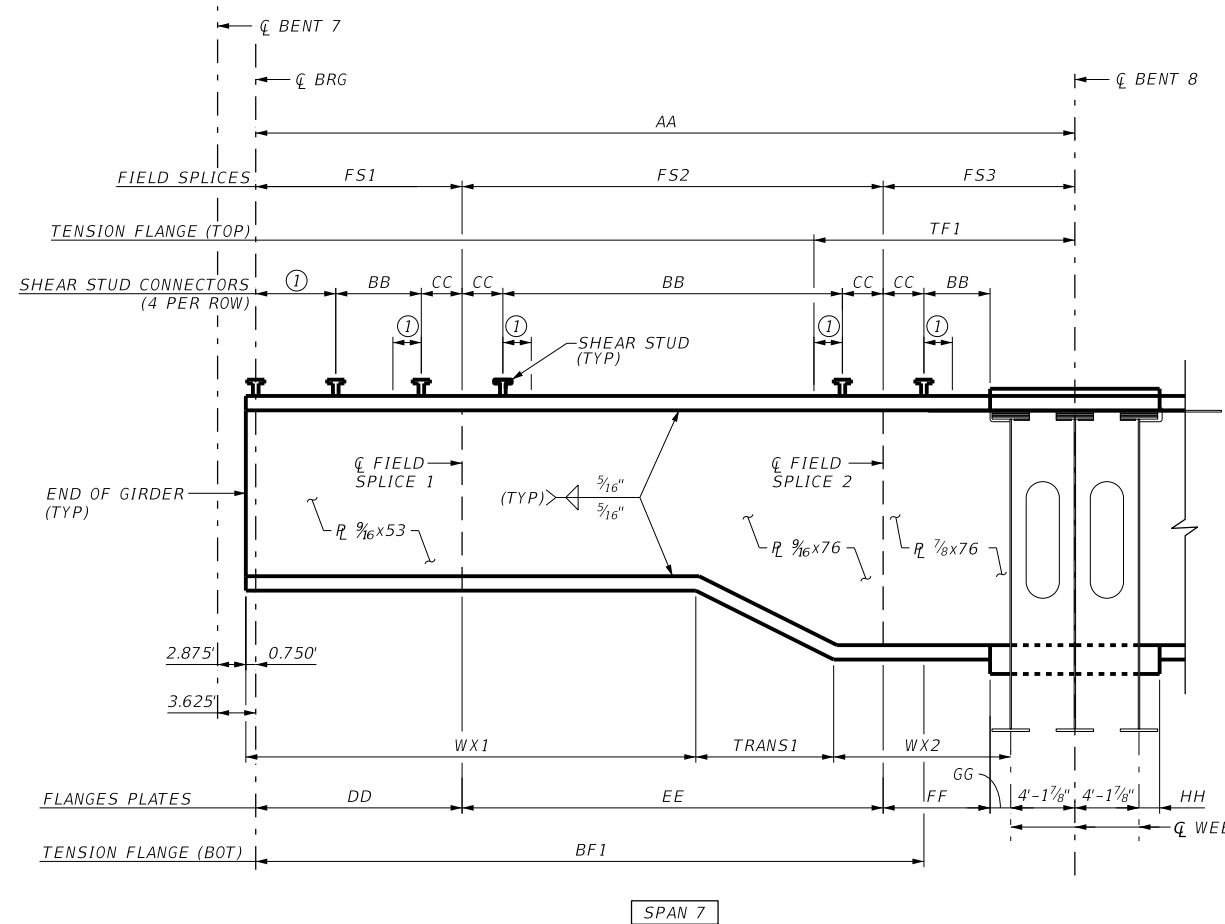
Texas Department of Transportation

**IH 10 AT US 69
 534.17' CONTINUOUS PLATE GIRDER UNIT DETAILS
 IH 10 EB ML
 TO US 69 NB DC**

SHEET 1 OF 1

DN:	CD	CK:	JMV	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1583		

DATE: 20-FEB-2024 20:50
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GIRDER ELEVATION

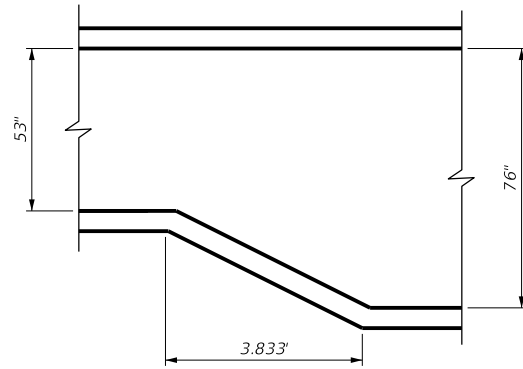
- ① 4 SPACES AT 6" = 2'-0" AT GIRDERS 1-7
- ② SHALL CONFORM TO THE REQUIREMENTS OF A709 GRADE HPS 70W.

GIRDER DIMENSIONS SPAN 7 (UNIT 3)								
GIRDER	AA	BB	CC	FS1	FS2	FS3	TF1	BF1
1	169.508	1'-0"	2'-0"	34.928	87.000	47.580	79.848	111.500
2	166.981	1'-0"	2'-0"	34.928	87.000	45.053	72.601	112.640
3	164.454	1'-0"	2'-0"	34.928	87.000	42.526	66.774	113.040
4	161.928	1'-0"	2'-0"	34.928	87.000	40.000	61.387	115.370
5	159.401	1'-0"	2'-0"	34.928	87.000	37.473	57.160	117.310
6	156.874	1'-0"	2'-0"	34.928	87.000	34.946	54.238	119.050
7	154.347	1'-0"	2'-0"	34.928	87.000	32.419	51.726	122.900

GIRDER WEB LENGTH DIMENSIONS SPAN 7 (UNIT 3)			
GIRDER	WX1	TRANS1	WX2
1	116.677	3.833	45.594
2	116.677	3.833	43.067
3	116.677	3.833	40.540
4	116.677	3.833	38.014
5	116.677	3.833	35.487
6	116.677	3.833	32.960
7	116.677	3.833	30.433

DEPTH IS SHOWN ON DETAIL.

GIRDER	DD			EE			FF			GG(2)		
	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH
1	1" X 22"	1" X 22"	34.928	1" X 22"	1" X 22"	87.000	1 1/8" X 22"	1 1/8" X 22"	21.426	2 1/2" X 22"	2 1/2" X 22"	22.000
2	1" X 22"	1" X 22"	34.928	1" X 22"	1" X 22"	87.000	1 1/8" X 22"	1 1/8" X 22"	18.899	2 1/2" X 22"	2 1/2" X 22"	22.000
3	1" X 22"	1" X 22"	34.928	1" X 22"	1" X 22"	87.000	1 1/8" X 22"	1 1/8" X 22"	16.372	2 1/2" X 22"	2 1/2" X 22"	22.000
4	1" X 22"	1" X 22"	34.928	1" X 22"	1" X 22"	87.000	1 1/8" X 22"	1 1/8" X 22"	13.845	2 1/2" X 22"	2 1/2" X 22"	22.000
5	1" X 22"	1" X 22"	34.928	1" X 22"	1" X 22"	87.000	1 1/8" X 22"	1 1/8" X 22"	11.318	2 1/2" X 22"	2 1/2" X 22"	22.000
6	1" X 22"	1" X 22"	34.928	1" X 22"	1" X 22"	87.000	1 1/8" X 22"	1 1/8" X 22"	8.791	2 1/2" X 22"	2 1/2" X 22"	22.000
7	1" X 22"	1" X 22"	34.928	1" X 22"	1" X 22"	87.000	1 1/8" X 22"	1 1/8" X 22"	6.264	2 1/2" X 22"	2 1/2" X 22"	22.000



DAPPED GIRDER DETAIL
 SEE TYPE 1 DAPPED GIRDER DETAIL IN SGMD (MOD) STANDARD FOR INFORMATION NOT SHOWN.

- PLATE GIRDER FABRICATION NOTES:**
- DESIGN IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9TH EDITION, 2020 FOR HL 93 LOADING.
 - ALL STRUCTURAL STEEL FOR STIFFENERS AND CROSSFRAMES SHALL CONFORM TO THE REQUIREMENTS OF A709 GRADE 50W AND SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL STEEL (PLATE GIRDER)".
 - ALL STRUCTURAL STEEL FOR PLATE GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF A709 GRADE 50W OR A709 GRADE HPS 70W AS NOTED BELOW AND SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STRUCTURAL STEEL (PLATE GIRDERS)".
 - PROVIDE BOLTS, NUTS, AND WASHERS FOR THE PLATE GIRDERS BORNE OF DOMESTIC STEEL.
 - GIRDER TENSION FLANGES AND WEBS ARE CLASSIFIED AS TENSION COMPONENTS AND SHALL CONFORM TO ITEM 442.2.1.2.2
 - ALL DIMENSIONS SHOWN IN GIRDER ELEVATION ARE MEASURED HORIZONTALLY ALONG THE GIRDER CENTERLINES.
 - EXCEPT AT CHANGES IN SECTION, SHOP OR FIELD FLANGE AND WEB SPLICES IN PLATE GIRDERS MAY BE LOCATED AS DESIRABLE TO OPTIMIZE PLATE LENGTHS AND ERECTION PROCEDURES, EXCEPT THAT SPLICES WILL NOT BE ALLOWED WHERE A 40 FEET OR LESS UNSPLICED LENGTH WOULD SUFFICE; NEITHER WILL TENSION FLANGE SPLICES BE ALLOWED WITHIN 0.05S EITHER SIDE OF INTERIOR BEARINGS, NOR WITHIN THE RANGE BETWEEN 0.30S AND 0.50S FROM THE END BEARINGS FOR THE END SPANS AND 0.40S AND 0.60S FROM INTERIOR BEARINGS FOR THE INTERIOR SPANS (S = LENGTH C.C. BEARING OF SPAN IN WHICH THE SPLICE IS MADE).
 - SHOP FLANGE AND WEB SPLICES SHALL BE MADE BY FULL PENETRATION GROOVE WELDS IN ACCORDANCE WITH ITEM 441, "STEEL STRUCTURES".
 - FIELD SPLICES SHALL BE BOLTED. SEE BOLTED FIELD SPLICE DETAILS.
 - PROVIDE CLASS "A" SURFACE CONDITION FOR THE FAYING SURFACES OF BOLTED CONNECTIONS.
 - PLATE GIRDERS AND ALL CROSSFRAMES SHALL BE DETAILED SO THAT THE GIRDER WEBS ARE PLUMB AT THE STEEL DEAD LOAD FIT CONDITION.
 - DECK OVERHANG BRACKETS SHALL BE DETAILED SUCH THAT THE BRACKET DIAGONAL MEMBER IS LOCATED AS CLOSE TO THE BOTTOM FLANGE AS PRACTICAL. HOLES IN THE GIRDER WEBS AND FLANGES ARE NOT PERMITTED FOR THE DECK OVERHANG BRACKET DETAIL.
 - SEE SGMD (MOD) STANDARD FOR MISCELLANEOUS STEEL DETAILS NOT SHOWN.
 - SEE SGBE STANDARD FOR ELASTOMERIC BEARING DETAILS.
 - THE CONTRACTOR SHALL SUBMIT AN ERECTION PLAN IN ACCORDANCE WITH ITEM 441.3.1.6.
 - NO SLAB CONCRETE SHALL BE PLACED UNTIL ALL CROSSFRAMES ARE COMPLETELY INSTALLED.
 - DO NOT PAINT STRUCTURAL STEEL.



HL93 LOADING

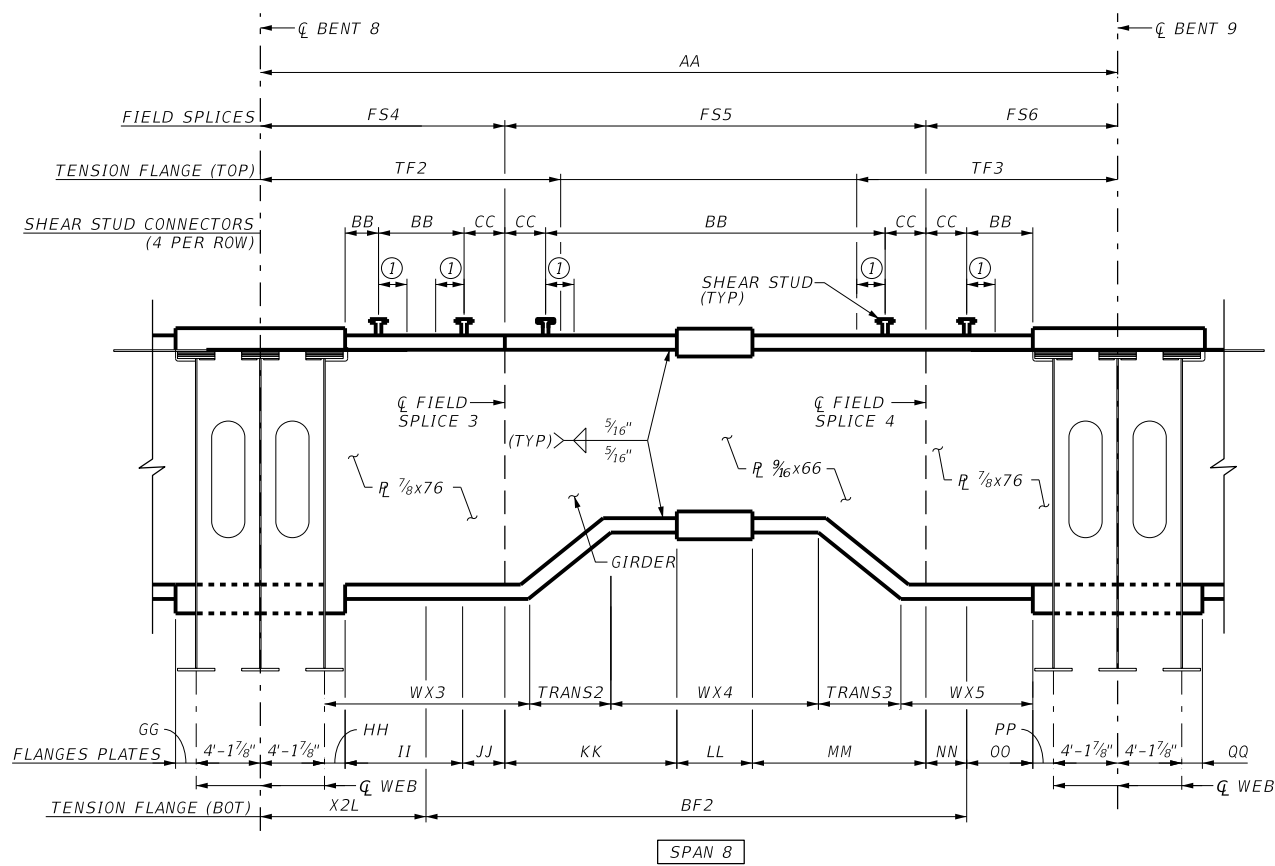


**IH 10 AT US 69
 GIRDER ELEVATION
 SPAN 7
 IH 10 EBML TO US 69 NB DC**

SHEET 1 OF 1

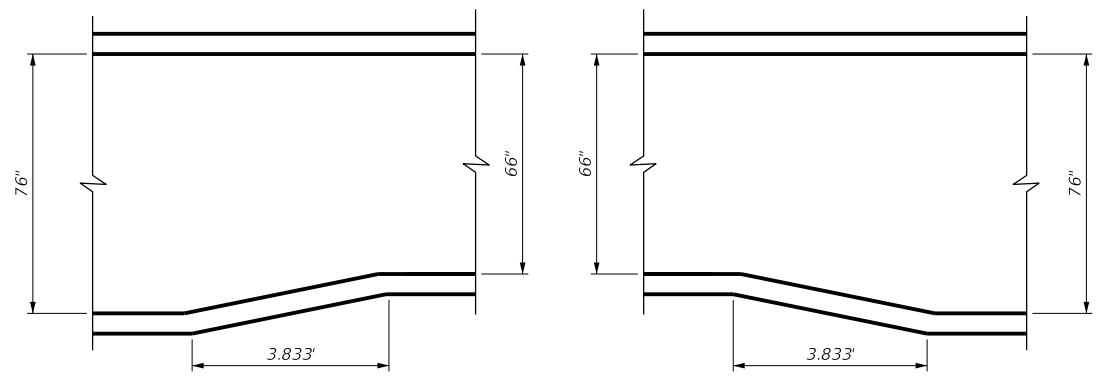
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CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1584			

DATE: 20-FEB-2024 18:19
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GIRDER ELEVATION

PLATE GIRDER FABRICATION NOTES:
 FOR NOTES SEE SHEET GIRDER ELEVATION SPAN 7



DAPPED GIRDER DETAIL
 SEE TYPE 1 DAPPED GIRDER DETAIL IN
 SGMD (MOD) STANDARD FOR INFORMATION NOT SHOWN.

- ① 4 SPACES AT 6" = 2'-0" AT GIRDERS 1-7
- ② SHALL CONFORM TO THE REQUIREMENTS OF A709 GRADE HPS 70W.

GIRDER DIMENSIONS SPAN 8 (UNIT 3)										
GIRDER	AA	BB	CC	FS4	FS5	FS6	TF2	TF3	BF2	X2L
1	203.000	1'-0"	2'-0"	42.419	103.000	57.581	48.792	78.281	127.630	22.382
2	203.000	1'-0"	2'-0"	44.946	103.000	55.054	50.629	69.714	125.020	28.589
3	203.000	1'-0"	2'-0"	47.473	103.000	52.527	54.636	63.657	122.690	34.826
4	203.000	1'-0"	2'-0"	50.000	103.000	50.000	58.313	58.280	122.250	40.043
5	203.000	1'-0"	2'-0"	52.527	103.000	47.473	63.200	52.943	122.140	44.890
6	203.000	1'-0"	2'-0"	55.054	103.000	44.946	69.387	50.636	124.880	48.227
7	203.000	1'-0"	2'-0"	57.581	103.000	42.419	77.524	48.779	127.290	52.094

GIRDER WEB LENGTH DIMENSIONS SPAN 8 (UNIT 3)					
GIRDER	WX3	TRANS2	WX4	TRANS3	WX5
1	40.432	3.833	91.000	3.833	55.594
2	42.959	3.833	91.000	3.833	53.067
3	45.486	3.833	91.000	3.833	50.540
4	48.013	3.833	91.000	3.833	48.013
5	50.540	3.833	91.000	3.833	45.486
6	53.067	3.833	91.000	3.833	42.959
7	55.594	3.833	91.000	3.833	40.432

GIRDER	HH(2)			II			JJ			KK			LL(2)		
	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH
1	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/4" X 22"	1 1/2" X 22"	10.000	1" X 22"	1" X 22"	6.265	1" X 22"	1" X 22"	26.500	1 1/2" X 22"	1 1/2" X 22"	50.000
2	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/4" X 22"	1 1/2" X 22"	10.000	1" X 22"	1" X 22"	8.792	1" X 22"	1" X 22"	26.500	1 1/2" X 22"	1 1/2" X 22"	50.000
3	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/4" X 22"	1 1/2" X 22"	10.000	1" X 22"	1" X 22"	11.319	1" X 22"	1" X 22"	26.500	1 1/2" X 22"	1 1/2" X 22"	50.000
4	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/4" X 22"	1 1/2" X 22"	10.000	1" X 22"	1" X 22"	13.846	1" X 22"	1" X 22"	26.500	1 1/2" X 22"	1 1/2" X 22"	50.000
5	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/4" X 22"	1 1/2" X 22"	10.000	1" X 22"	1" X 22"	16.373	1" X 22"	1" X 22"	26.500	1 1/2" X 22"	1 1/2" X 22"	50.000
6	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/4" X 22"	1 1/2" X 22"	10.000	1" X 22"	1" X 22"	18.900	1" X 22"	1" X 22"	26.500	1 1/2" X 22"	1 1/2" X 22"	50.000
7	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/4" X 22"	1 1/2" X 22"	10.000	1" X 22"	1" X 22"	21.427	1" X 22"	1" X 22"	26.500	1 1/2" X 22"	1 1/2" X 22"	50.000

GIRDER	MM			NN			OO			PP(2)		
	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH
1	1" X 22"	1" X 22"	26.497	1" X 22"	1" X 22"	21.427	1 1/4" X 22"	1 1/2" X 22"	10.000	2 1/2" X 22"	2 1/2" X 22"	22.000
2	1" X 22"	1" X 22"	26.497	1" X 22"	1" X 22"	18.900	1 1/4" X 22"	1 1/2" X 22"	10.000	2 1/2" X 22"	2 1/2" X 22"	22.000
3	1" X 22"	1" X 22"	26.497	1" X 22"	1" X 22"	16.373	1 1/4" X 22"	1 1/2" X 22"	10.000	2 1/2" X 22"	2 1/2" X 22"	22.000
4	1" X 22"	1" X 22"	26.497	1" X 22"	1" X 22"	13.846	1 1/4" X 22"	1 1/2" X 22"	10.000	2 1/2" X 22"	2 1/2" X 22"	22.000
5	1" X 22"	1" X 22"	26.497	1" X 22"	1" X 22"	11.319	1 1/4" X 22"	1 1/2" X 22"	10.000	2 1/2" X 22"	2 1/2" X 22"	22.000
6	1" X 22"	1" X 22"	26.497	1" X 22"	1" X 22"	8.792	1 1/4" X 22"	1 1/2" X 22"	10.000	2 1/2" X 22"	2 1/2" X 22"	22.000
7	1" X 22"	1" X 22"	26.497	1" X 22"	1" X 22"	6.265	1 1/4" X 22"	1 1/2" X 22"	10.000	2 1/2" X 22"	2 1/2" X 22"	22.000



HL93 LOADING

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F-12679



**IH 10 AT US 69
 GIRDER ELEVATION
 SPAN 8
 IH 10 EBML TO US 69 NB DC**

SHEET 1 OF 1

DN:	CD	CK:	JMV	DW:	RF	CK:	FB
CONT		SECT		JOB		HIGHWAY	
0028		13		135		IH 10	
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1585			

DATE: 20-FEB-2024 20:57
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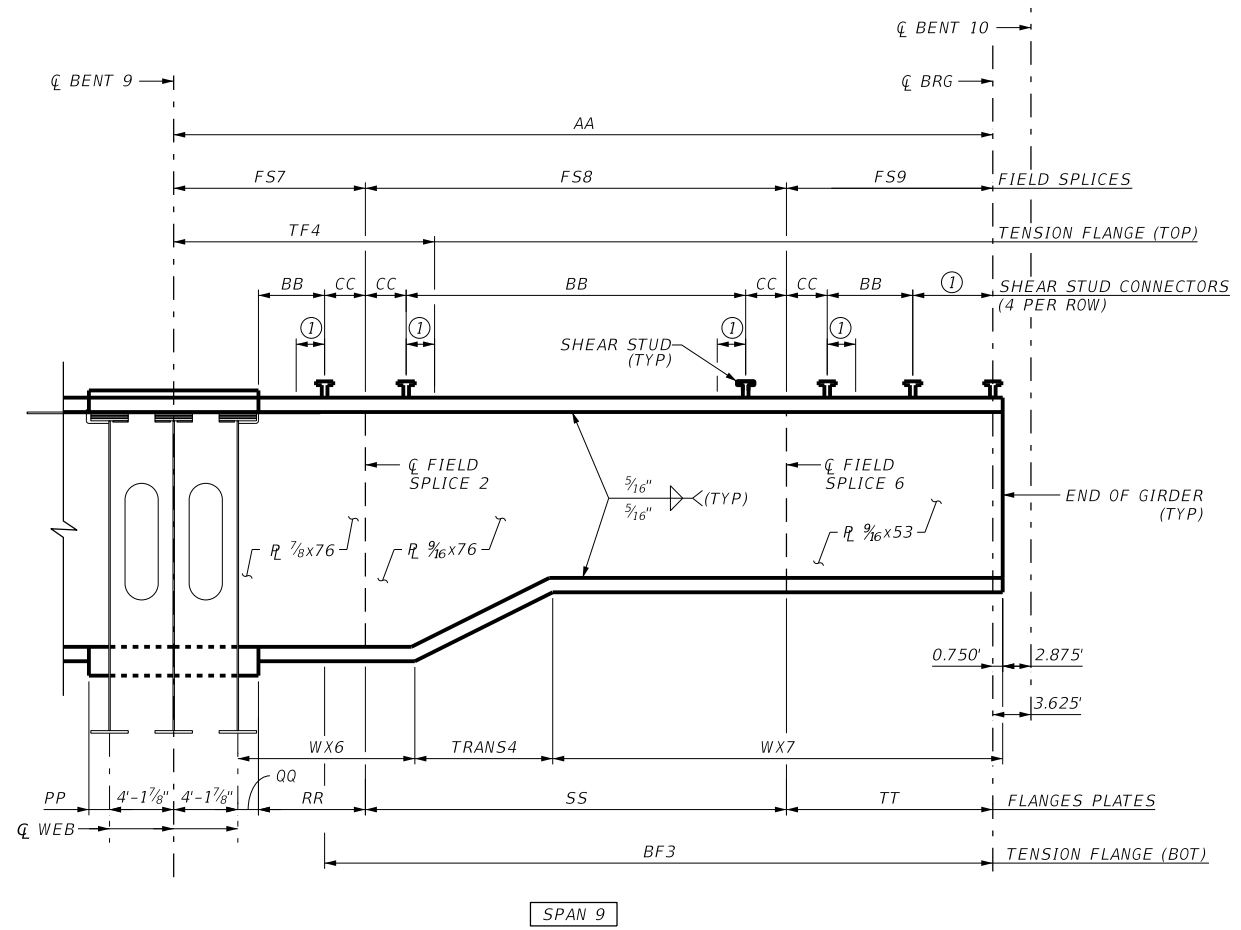


PLATE GIRDER FABRICATION NOTES:
 FOR NOTES SEE SHEET GIRDER ELEVATION SPAN 7

GIRDER ELEVATION

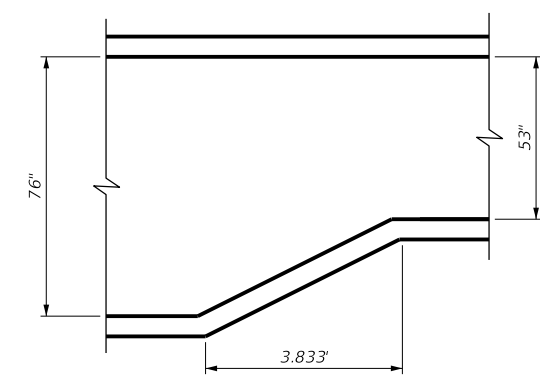
- ① 4 SPACES AT 6" = 2'-0" AT GIRDERS 1-7
- ② SHALL CONFORM TO THE REQUIREMENTS OF A709 GRADE HPS 70W.

GIRDER DIMENSIONS SPAN 9 (UNIT 3)								
GIRDER	AA	BB	CC	FS7	FS8	FS9	TF4	BF3
1	154.344	1'-0"	2'-0"	32.420	87.000	34.924	52.179	124.340
2	156.871	1'-0"	2'-0"	34.947	87.000	34.924	54.466	120.030
3	159.378	1'-0"	2'-0"	37.474	87.000	34.924	57.503	117.760
4	161.924	1'-0"	2'-0"	40.000	87.000	34.924	61.290	115.740
5	164.451	1'-0"	2'-0"	42.527	87.000	34.924	66.237	114.240
6	166.978	1'-0"	2'-0"	45.054	87.000	34.924	72.374	114.780
7	169.505	1'-0"	2'-0"	47.581	87.000	34.924	79.571	112.730

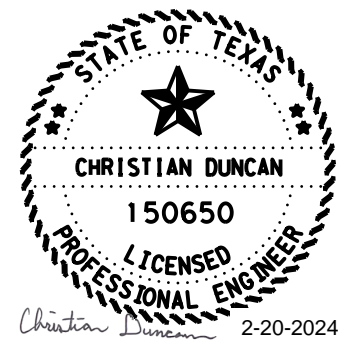
GIRDER WEB LENGTH DIMENSIONS SPAN 9 (UNIT 3)			
GIRDER	WX6	TRANS4	WX7
1	30.430	3.833	116.677
2	32.957	3.833	116.677
3	35.484	3.833	116.677
4	38.010	3.833	116.677
5	40.537	3.833	116.677
6	43.064	3.833	116.677
7	45.591	3.833	116.677

DEPTH IS SHOWN ON DETAIL.

GIRDER	QQ (2)			RR			SS			TT		
	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH	TOP	BOTTOM	LENGTH
1	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/8" X 22"	1 1/8" X 22"	6.264	1" X 22"	1" X 22"	87.000	1" X 22"	1" X 22"	34.926
2	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/8" X 22"	1 1/8" X 22"	8.791	1" X 22"	1" X 22"	87.000	1" X 22"	1" X 22"	34.926
3	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/8" X 22"	1 1/8" X 22"	11.318	1" X 22"	1" X 22"	87.000	1" X 22"	1" X 22"	34.926
4	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/8" X 22"	1 1/8" X 22"	13.846	1" X 22"	1" X 22"	87.000	1" X 22"	1" X 22"	34.926
5	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/8" X 22"	1 1/8" X 22"	16.373	1" X 22"	1" X 22"	87.000	1" X 22"	1" X 22"	34.926
6	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/8" X 22"	1 1/8" X 22"	18.900	1" X 22"	1" X 22"	87.000	1" X 22"	1" X 22"	34.926
7	2 1/2" X 22"	2 1/2" X 22"	22.000	1 1/8" X 22"	1 1/8" X 22"	21.427	1" X 22"	1" X 22"	87.000	1" X 22"	1" X 22"	34.926



DAPPED GIRDER DETAIL
 SEE TYPE 1 DAPPED GIRDER DETAIL IN SGMD (MOD) STANDARD FOR INFORMATION NOT SHOWN.



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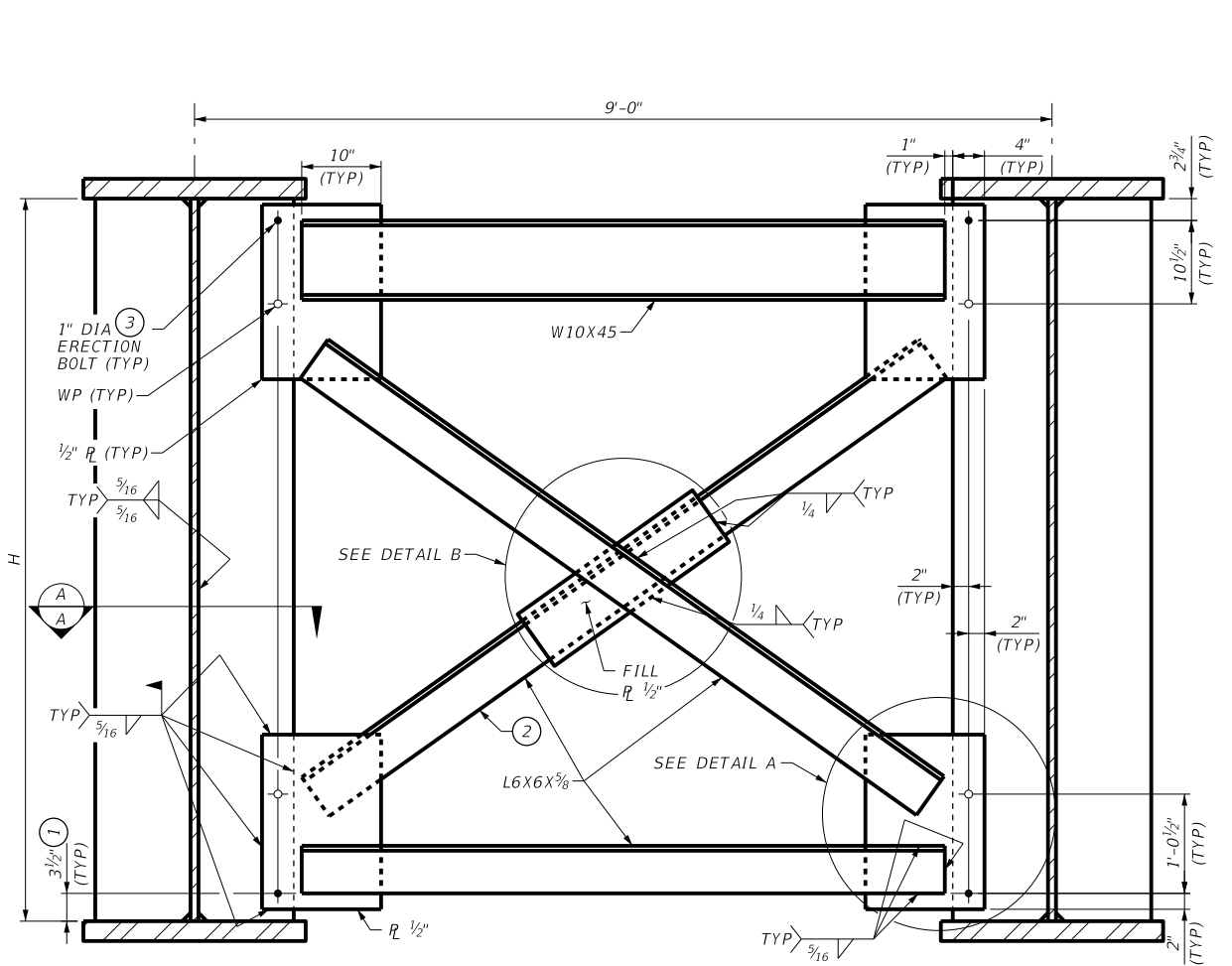
Texas Department of Transportation

**IH 10 AT US 69
 GIRDER ELEVATION
 SPAN 9
 IH 10 EBML TO US 69 NB DC**

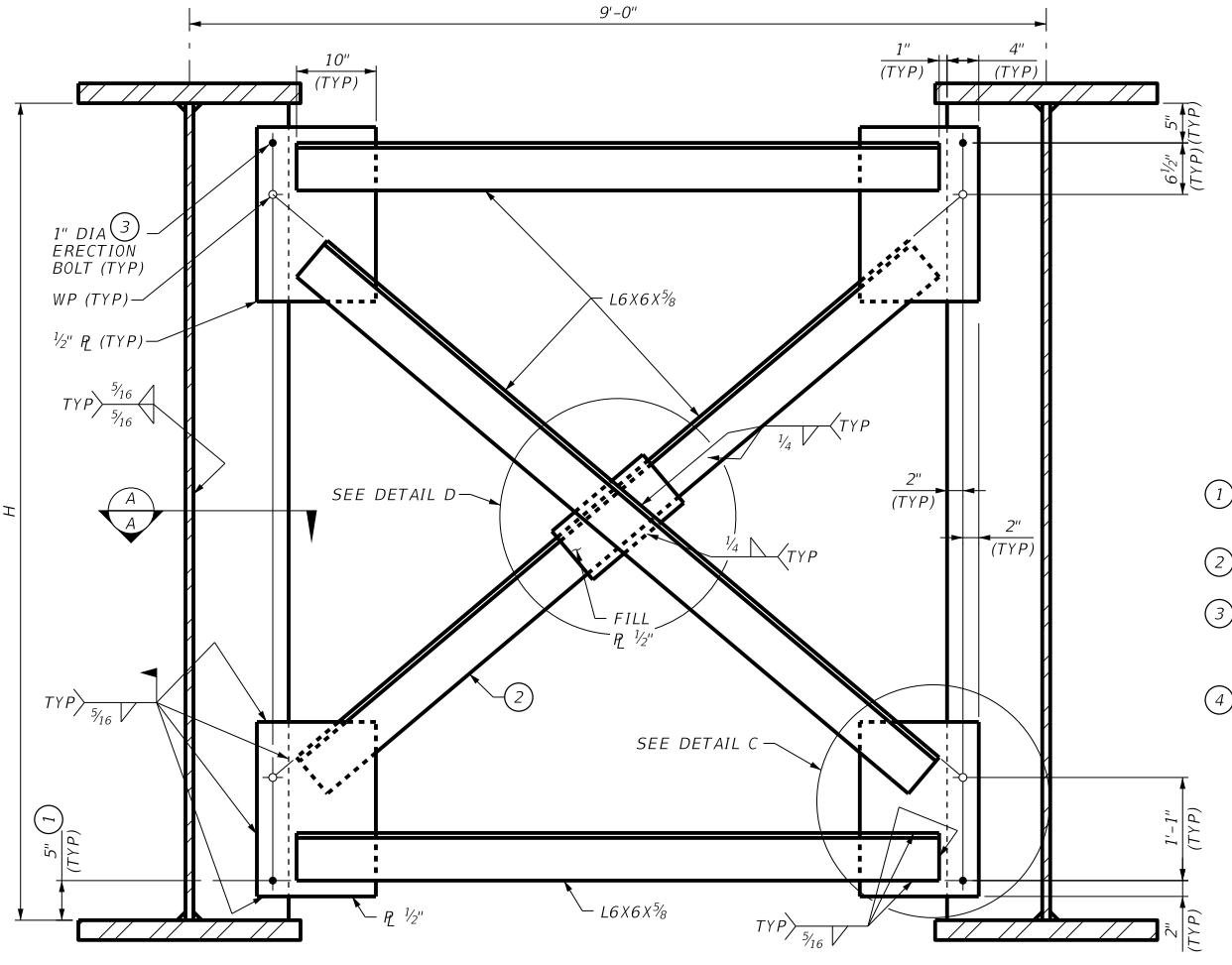
SHEET 1 OF 1

DN:	CD	CK:	JMV	DW:	RF	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1586			

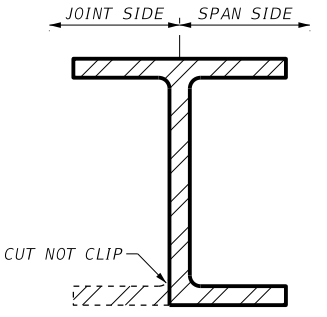
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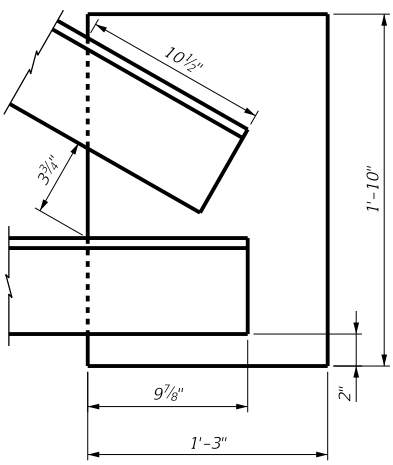
END CROSS-FRAME (4)
 (LOOKING UPSTATION)



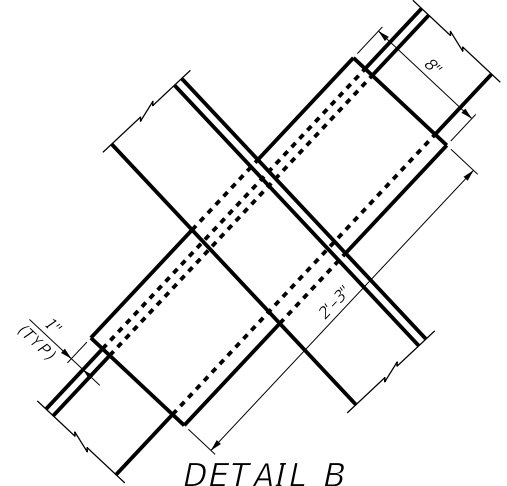
INTERMEDIATE CROSS-FRAME (4)
 (LOOKING UPSTATION)



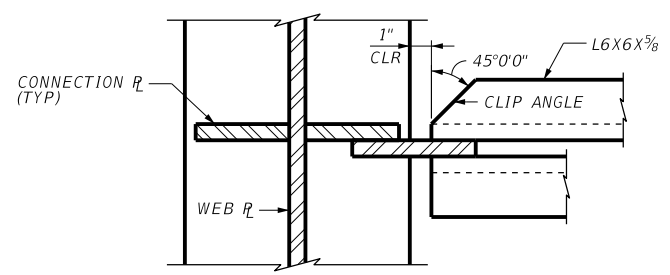
BEAM CUT DETAIL
 AT END DIAPHRAGMS AND END CROSS-FRAMES, TREAT WIDE FLANGE SECTIONS AS SHOWN BETWEEN GUSSET PLATES.



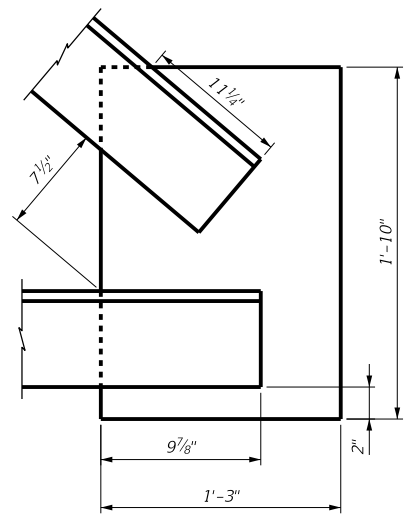
DETAIL A



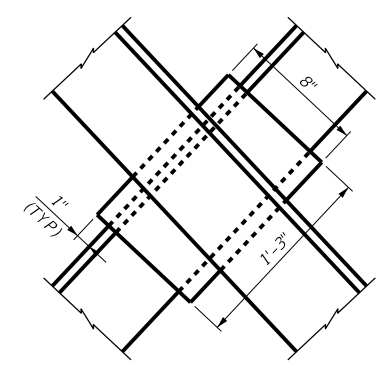
DETAIL B



SECTION A-A
 CONNECTION PLATES NOT REQUIRED ON OUTSIDE FACE OF EXTERIOR GIRDERS.



DETAIL C



DETAIL D

GENERAL NOTES:
 DESIGNED ACCORDING TO AASHTO LRFD BRIDGE DIVISION SPECIFICATIONS.
 SEE SPAN DETAILS FOR LOCATION OF TENSION FLANGES; DIAPHRAGM LOCATIONS AND TYPE; CROSS-FRAME LOCATION AND TYPE; STIFFENER LOCATION, TYPE AND SIZE; AND STUD CONNECTOR SPACING.

MATERIAL NOTES:
 FOR UNPAINTED WEATHERING STEEL BRIDGES, PROVIDE ASTM A709 GRADE 50W STEEL FOR DIAPHRAGMS, CROSS-FRAMES, PLATE STIFFENERS OR GUSSET PLATES UNLESS NOTED OTHERWISE ON THE SPAN DETAILS. PROVIDE ASTM F3125 GR A325 ERECTION BOLTS WITH TWO ASTM F436 HARDENED WASHERS AND ONE ASTM A563 GR C3 OR DH3 HEAVY HEX NUT EACH.

CONSTRUCTION/FABRICATION NOTES:
 PROVIDE COMPLETE JOINT PENETRATION WELDS FOR ALL SHOP FLANGE, WEB AND BEAM SPLICES.
 ERECTION BOLT HOLES MAY BE STANDARD OR OVERSIZE, AT THE CONTRACTOR'S OPTION. ERECTION BOLTS DO NOT NEED TO BE TIGHTENED BEYOND SNUG TIGHT. LEAVE ERECTION BOLTS IN THE FINISHED STRUCTURE.

- 1 AT BEARINGS, INCREASE DIMENSION (UP TO 1") IF NECESSARY, TO ALLOW FOR BEARING ANCHOR BOLT NUT INSTALLATION.
- 2 CLIP OUTSTANDING LEG OF INDICATED CROSS-FRAME ANGLES AT 45°; TYPICAL EACH END.
- 3 FULLY TIGHTEN TOP ERECTION BOLTS IN ACCORDANCE WITH ITEM 447, "STRUCTURAL BOLTING" OR SEAL TOP EDGE OF GUSSET PLATE TO STIFFENER TO PREVENT MOISTURE BETWEEN GUSSET AND PLATE STIFFENER.
- 4 THIS CROSS FRAME DETAIL SHEET SUPERSEDES SGMD TYPE XF1 THRU XF3 AND EF CROSS-FRAME DETAILS.



Christian Duncan 2-20-2024

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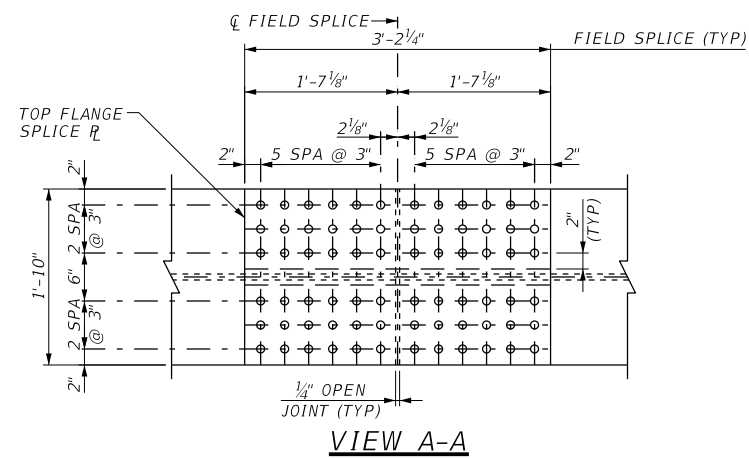
Texas Department of Transportation

**IH 10 AT US 69
 CROSS FRAME DETAILS
 IH 10 EBML TO
 US 69 NB DC**

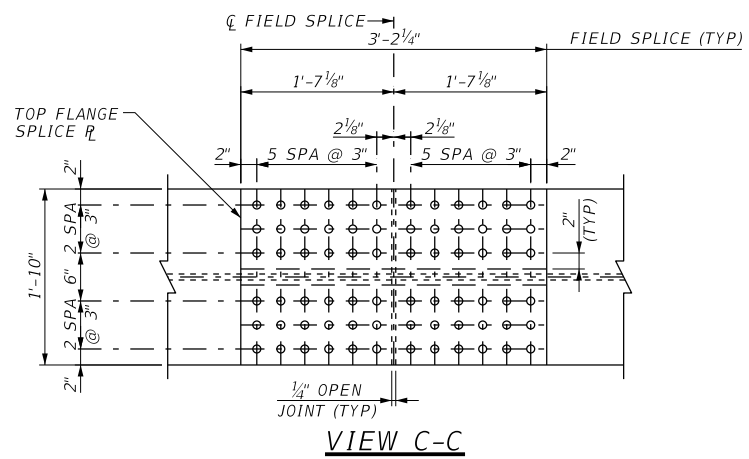
SHEET 1 OF 2

DN:	CD	CK:	JMV	DW:	KAH	CK:	FB
CONT	SECT	JOB	HIGHWAY				
0028	13	135	IH 10				
DIST	COUNTY	SHEET NO.					
BMT	JEFFERSON	1587					

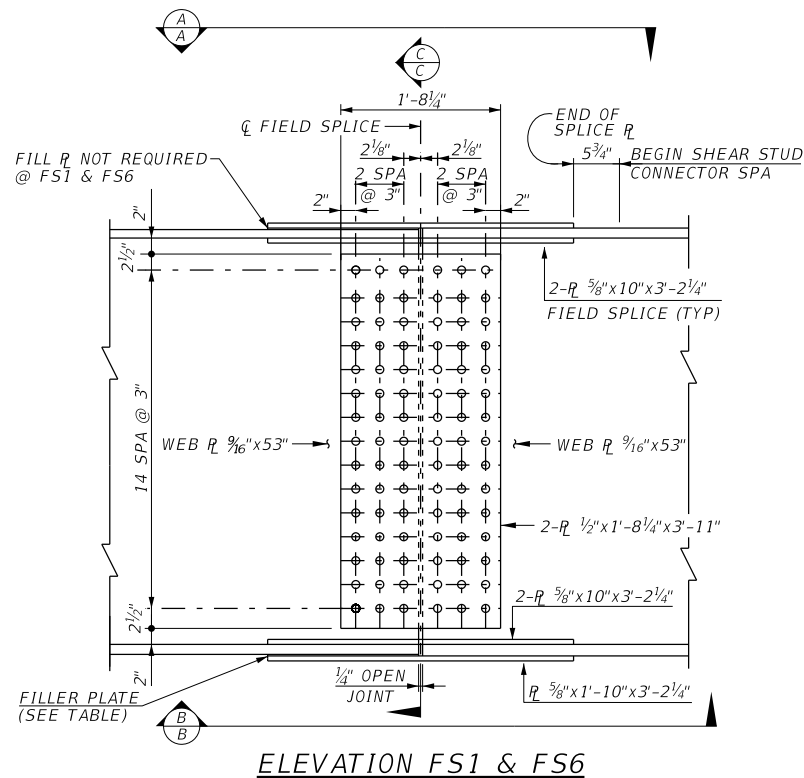
DATE: 20-FEB-2024 18:17
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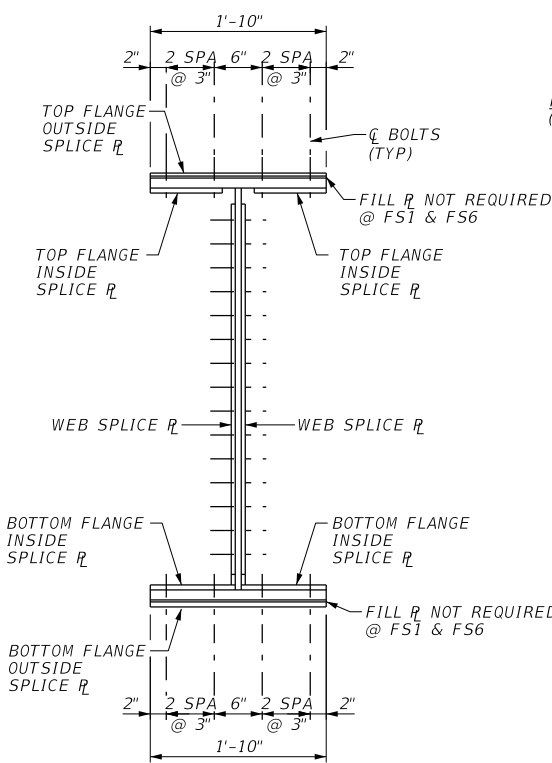
VIEW A-A



VIEW C-C



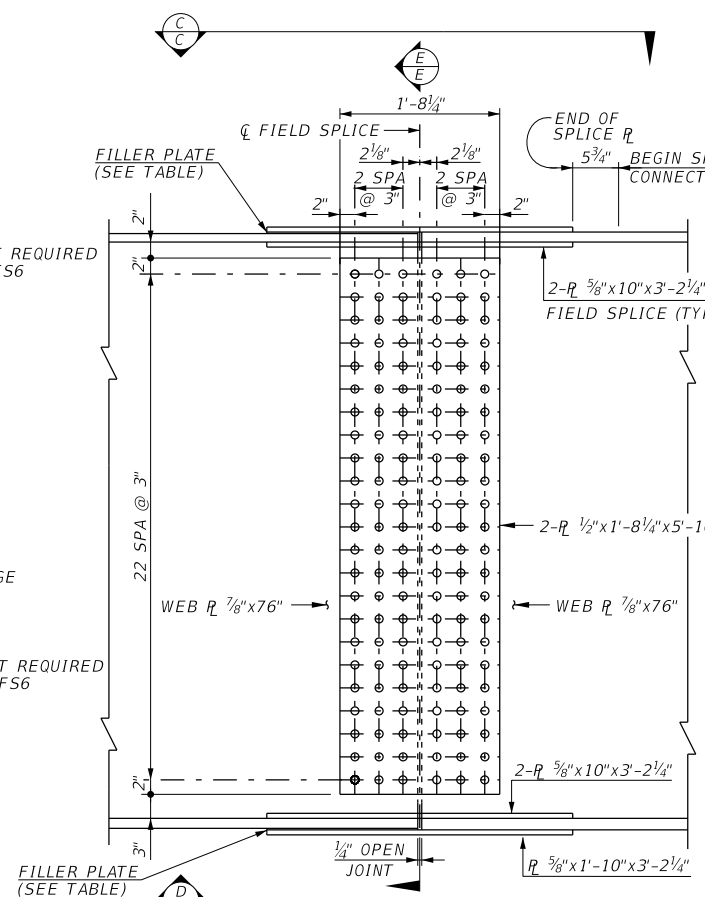
ELEVATION FS1 & FS6



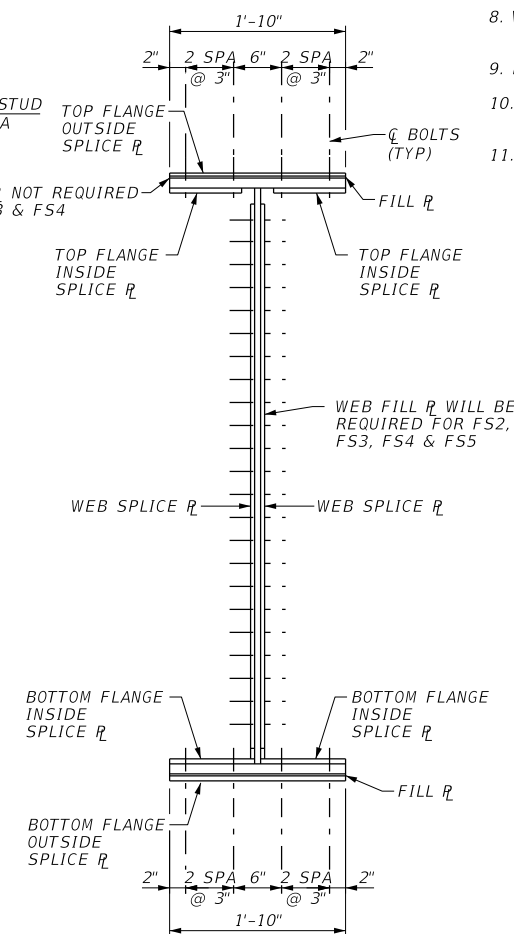
SECTION C-C
 SCALE: 1"=1'-0"

BOLTED FIELD SPLICE 1 & 6 DETAILS

GIRDERS 1 - 7



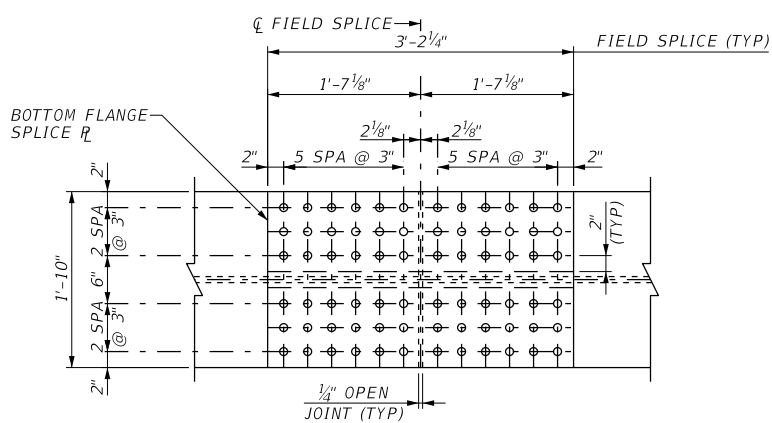
ELEVATION FS2, FS3, FS4 & FS5



SECTION E-E
 SCALE: 1"=1'-0"

BOLTED FIELD SPLICE 2 - 5 DETAILS

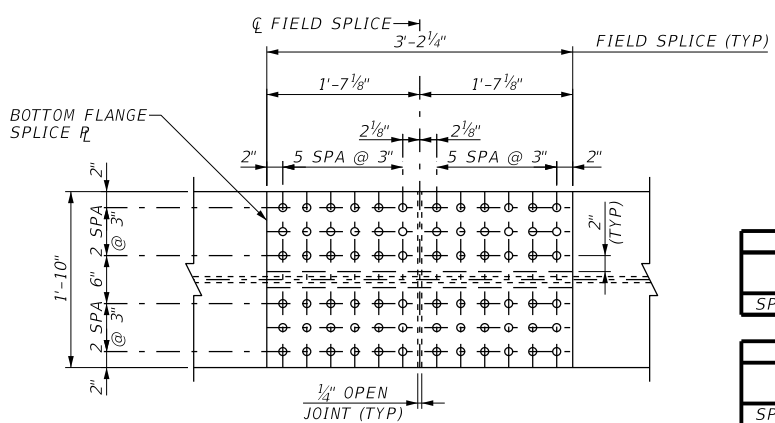
GIRDERS 1 - 7



VIEW B-B

FIELD SPLICE DETAILS

SCALE: 1"=1'-0"



VIEW D-D

FIELD SPLICE DETAILS

SCALE: 1"=1'-0"

FILL PLATE TABLE		
SPLICE	TOP FLANGE FILL PLATE	BOTTOM FLANGE FILL PLATE
SPLICE 2 & 5	1/8" x 1'-10" x 1'-7 1/8"	1/8" x 1'-10" x 1'-7 1/8"

FILL PLATE TABLE	
SPLICE	WEB FILL PLATE
SPLICE 2 - 5	3/16" x 5'-10" x 10 1/2"

- BOLTED FIELD SPLICE NOTES:**
- ALL BOLTS SHALL BE TYPE 3, 7/8" DIA ASTM F3125 GRADE A 325 WITH ONE HARDENED WASHER EACH AND SHALL BE TIGHTENED IN ACCORDANCE WITH ITEM 447, "STRUCTURAL BOLTING". ALL HOLES SHALL BE 1 3/16" DIA.
 - BOLT HOLES SHALL BE DRILLED FULL SIZE OR SUBPUNCHED AND REAMED TO SIZE. BOLT HOLES SHALL NOT BE PUNCHED FULL SIZE.
 - BOLT THREADS SHALL BE EXCLUDED FROM ALL SHEAR PLANES.
 - ALL SPLICE PLATES AND FILL PLATES SHALL CONFORM TO A709 GRADE 50W.
 - ALL SPLICE PLATES (NOT FILL PLATES) ARE CLASSIFIED AS TENSION COMPONENTS AND SHALL CONFORM TO ITEM 442.2.1.2.2
 - WEB SPLICE BOLTS SHALL BE INSTALLED WITH HEADS ON FASCIA SIDE OF OUTSIDE GIRDER WEBS.
 - BOTTOM FLANGE SPLICE BOLTS SHALL BE INSTALLED WITH HEADS FACING DOWN.
 - WEIGHT OF FIELD SPLICES IS INCLUDED IN STRUCTURAL STEEL PAY WEIGHT.
 - FOR FIELD SPLICE LOCATIONS, SEE FRAMING PLAN.
 - SHEAR STUDS SHALL NOT BE WELDED TO SPLICE PLATES.
 - DESIGN ASSUMES CLASS A SURFACE CONDITIONS.



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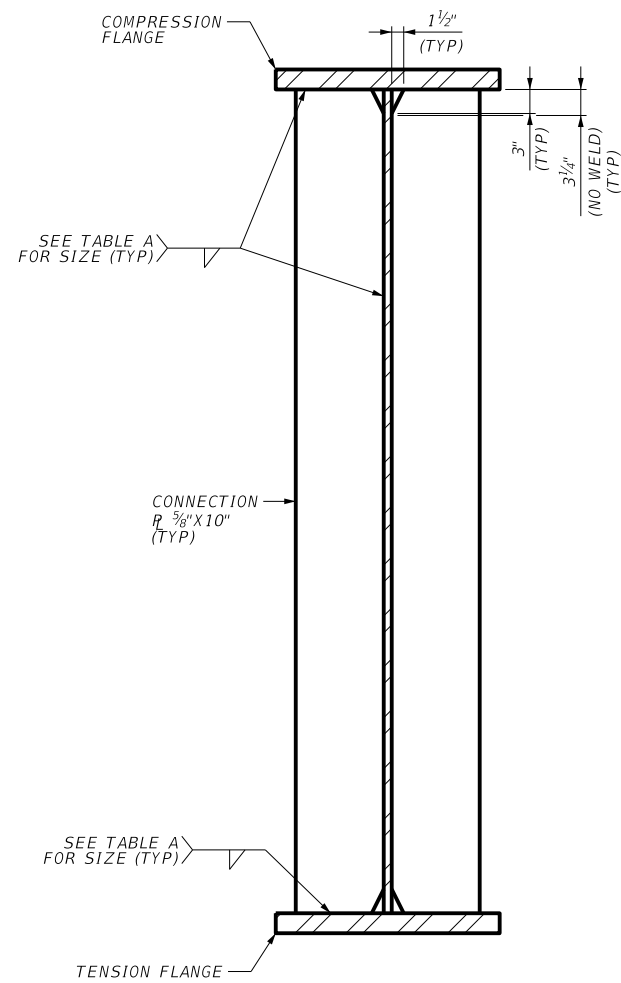
F-12679



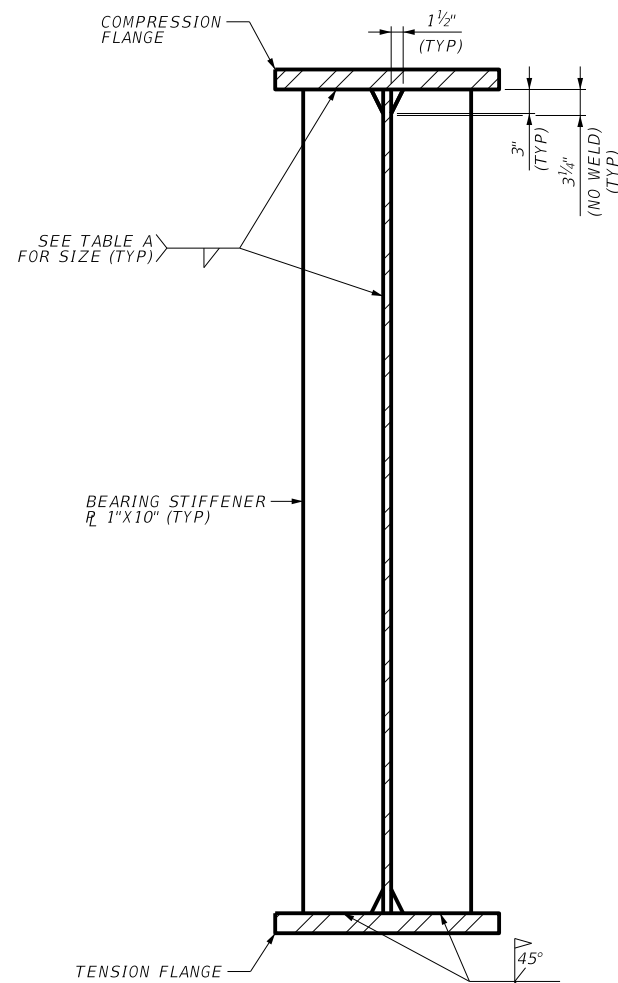
**IH 10 AT US 69
 BOLTED FIELD SPLICE DETAILS
 SPANS 7-9
 IH 10 EBML TO US 69 NB DC**
 SHEET 1 OF 1

DN:	CD	CK:	JMV	DW:	RF	CK:	FB
0028		13		135			IH 10
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1588			

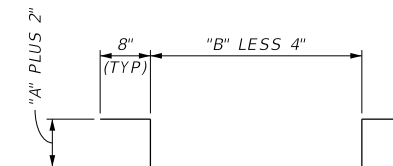
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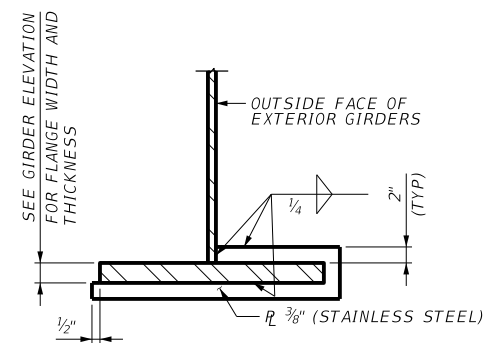
**DIAPHRAGM CONNECTION
 PLATE DETAIL**



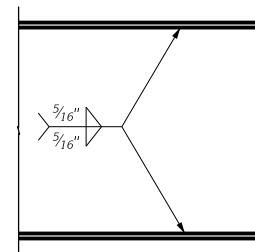
**BEARING
 STIFFENER DETAIL**
 (END DIAPHRAGM CONNECTION PLATE SIMILAR)



BARS U

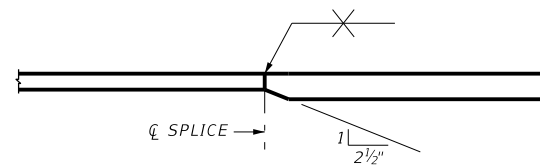


DRIP PLATE DETAIL
 (TYP AT EACH BENT)
 LOCATED 4'-0" FROM
 BEARING AT HIGH SIDE



FLANGE TO WEB WELDING

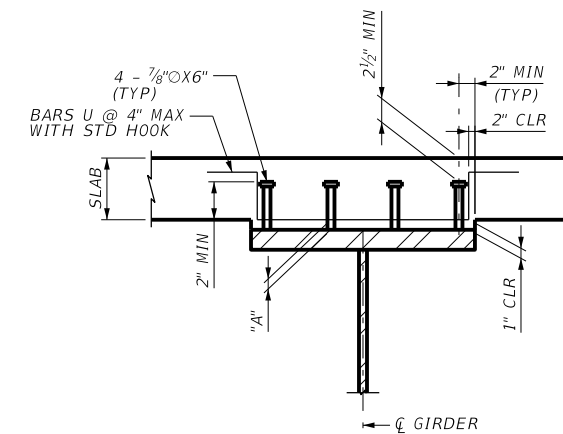
IF SUBMERGED ARC PROCESS IS USED,
 EITHER THE FILLET WELDS SHOWN OR
 FULL PENETRATION GROOVE WELDS MAY
 BE USED BETWEEN FLANGE AND WEB
 AT THE FABRICATOR'S OPTION



FLANGE TRANSITION DETAIL

TABLE A	
PLATE THICKNESS	WELD SIZE
TO 3/4" INCLUSIVE	1/4"
OVER 3/4" TO 1 1/2"	5/16"
OVER 1 1/2" TO 2 1/4"	3/8"
OVER 2 1/4" TO 6"	1/2"
OVER 6"	5/8"

WELD SIZE DETERMINED BY THE
 THICKER OF THE TWO PARTS
 JOINED EXCEPT THAT THE WELD
 SIZE NEED NOT EXCEED THE
 THICKNESS OF THE THINNER PART.



STUD CONNECTOR DETAIL

SHEAR CONNECTORS SHALL BE ELECTRIC ARC
 END-WELDED TO THE FLANGES WITH COMPLETE
 FUSION IN ACCORDANCE WITH AWS D1.5.
 SEE GIRDER ELEVATION FOR SPACING.

NOTES:

PROVIDE BARS U ONLY WHEN "A" IS 3 1/2" OR GREATER.

"A" = HAUNCH ALONG CENTERLINE OF GIRDER (BOTTOM OF
 SLAB MINUS TOP OF TOP FLANGE).

"B" = GIRDER TOP FLANGE WIDTH.



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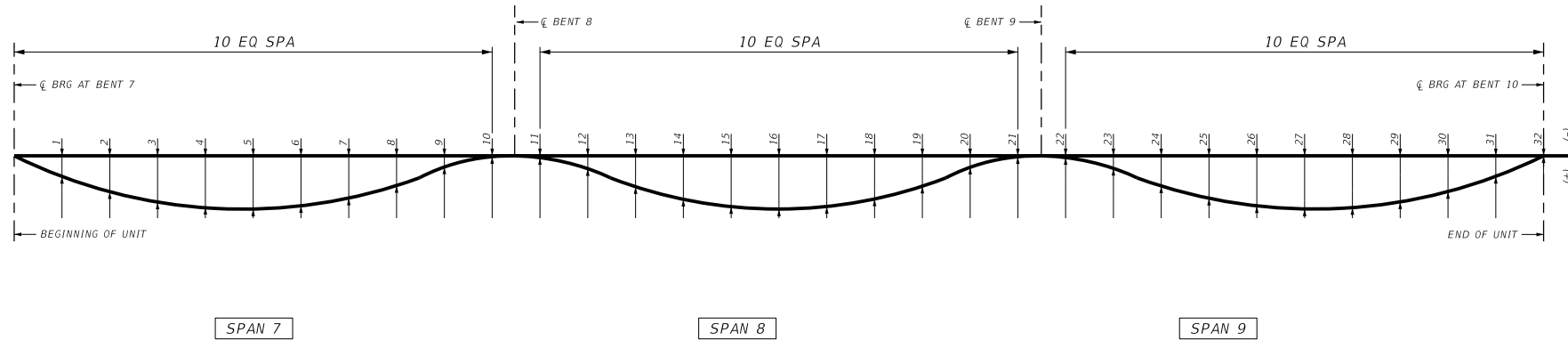
F-12679



**IH 10 AT US 69
 MISC STEEL DETAILS
 IH 10 EBML TO
 US 69 NB DC**

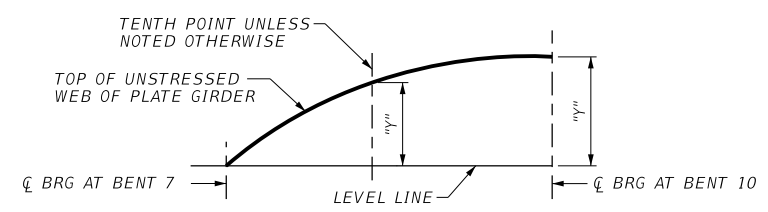
SHEET 1 OF 1

DN:	CD	CK:	JMV	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY		SHEET NO.			
BMT		JEFFERSON		1589			



DEAD LOAD DEFLECTION DIAGRAM

- GENERAL NOTES:**
- DEFLECTIONS AND CAMBERS ARE PROVIDED ALONG THE CENTERLINE OF THE PLATE GIRDERS.
 - DEFLECTIONS AND CAMBERS PROVIDED IN THE TABLES IN DECIMAL FEET.
 - CAMBER DATUMS CONNECT WEB BOTTOMS OVER BEARINGS CENTERLINES. DATUMS ARE PARALLEL TO GIRDERS IN THE PLAN VIEW AND VERTICALLY ADJUSTED TO ACCOUNT FOR SUPERELEVATION AT EACH GIRDER.



WEB CAMBER DIAGRAM

WEBS MAY BE CUT ON STRAIGHT LINES BETWEEN ORDINATES SHOWN OR TO A SMOOTH CURVE AT THE FABRICATOR'S OPTION. ORDINATES SHOWN INCLUDE TOTAL DEAD LOAD DEFLECTION AND VERTICAL CURVE CORRECTIONS.

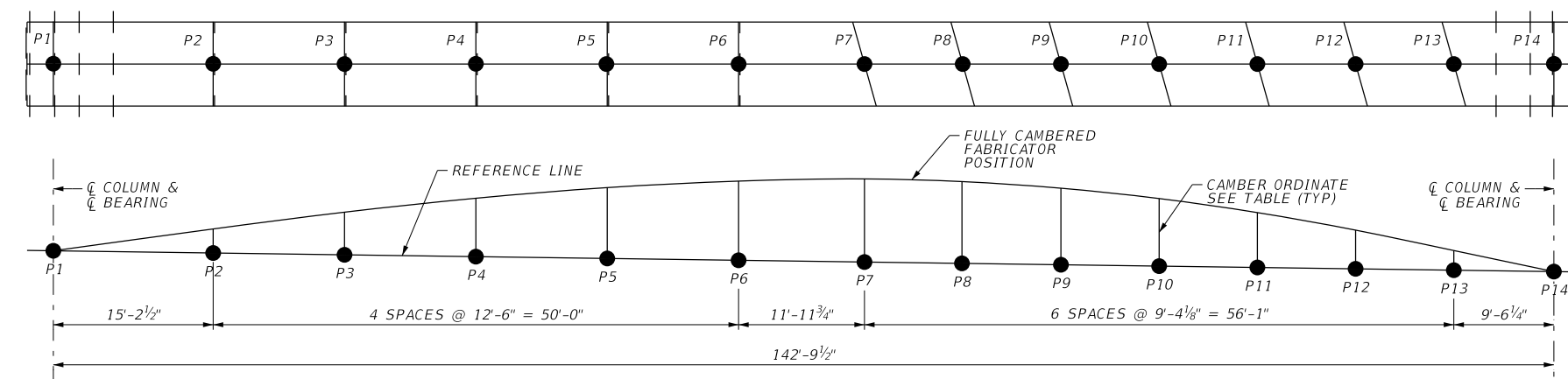
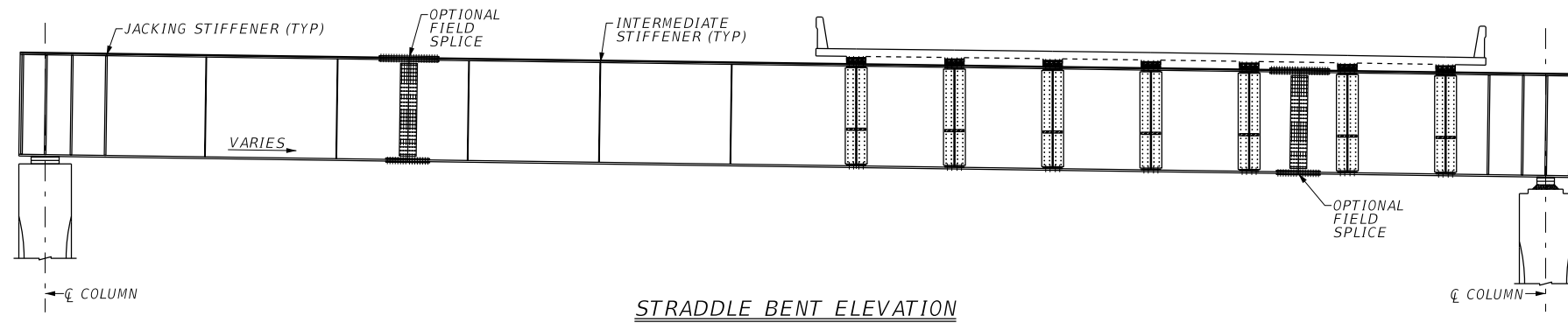
TABLE FOR DEAD LOAD DEFLECTIONS DUE TO STEEL SELF-WEIGHT ONLY (FT)							
Location	G1	G2	G3	G4	G5	G6	G7
0	0	0	0	0	0	0	0
1	0.058	0.053	0.048	0.043	0.038	0.033	0.028
2	0.107	0.098	0.088	0.079	0.070	0.060	0.052
FS1	0.112	0.098	0.089	0.085	0.076	0.064	0.058
3	0.142	0.129	0.090	0.104	0.091	0.067	0.066
4	0.160	0.145	0.116	0.115	0.100	0.078	0.070
5	0.161	0.145	0.130	0.113	0.096	0.085	0.064
6	0.156	0.131	0.129	0.100	0.084	0.080	0.051
7	0.123	0.110	0.116	0.083	0.067	0.067	0.034
FS2	0.113	0.110	0.097	0.070	0.054	0.051	0.020
8	0.101	0.089	0.085	0.066	0.052	0.036	0.019
9	0.090	0.073	0.079	0.056	0.043	0.036	0.014
10	0.064	0.061	0.066	0.050	0.039	0.029	0.012
11	0.060	0.060	0.058	0.049	0.039	0.026	0.013
12	0.059	0.060	0.056	0.053	0.045	0.027	0.024
FS3	0.065	0.068	0.058	0.064	0.058	0.035	0.044
13	0.069	0.070	0.058	0.069	0.067	0.038	0.060
14	0.084	0.083	0.067	0.079	0.076	0.052	0.066
15	0.097	0.095	0.070	0.092	0.089	0.064	0.083
16	0.102	0.100	0.081	0.097	0.095	0.071	0.091
17	0.099	0.096	0.094	0.094	0.093	0.086	0.089
18	0.085	0.082	0.099	0.084	0.083	0.093	0.079
FS4	0.077	0.075	0.095	0.074	0.072	0.091	0.065
19	0.062	0.063	0.084	0.069	0.069	0.081	0.066
20	0.038	0.042	0.075	0.058	0.060	0.069	0.057
21	0.021	0.032	0.067	0.052	0.057	0.068	0.056
22	0.017	0.030	0.052	0.052	0.058	0.059	0.057
23	0.016	0.031	0.044	0.057	0.065	0.058	0.071
FS5	0.017	0.036	0.043	0.065	0.077	0.060	0.093
24	0.019	0.036	0.045	0.069	0.083	0.070	0.108
25	0.025	0.048	0.051	0.080	0.094	0.086	0.118
26	0.041	0.064	0.053	0.097	0.113	0.096	0.142
27	0.058	0.077	0.064	0.111	0.127	0.106	0.159
28	0.067	0.083	0.081	0.114	0.130	0.128	0.161
29	0.067	0.079	0.094	0.105	0.119	0.143	0.146
FS6	0.062	0.068	0.099	0.088	0.098	0.145	0.118
30	0.054	0.063	0.092	0.083	0.093	0.132	0.113
31	0.044	0.038	0.079	0.049	0.054	0.108	0.066
32	0.000	0.000	0.073	0.000	0.000	0.103	0.000

TABLE FOR DEAD LOAD DEFLECTIONS DUE TO CAST IN PLACE CONCRETE DECK ONLY AT THE END OF STAGE 5 (FT)							
Location	G1	G2	G3	G4	G5	G6	G7
0	0	0	0	0	0	0	0
1	0.254	0.238	0.223	0.207	0.191	0.175	0.160
2	0.473	0.443	0.413	0.384	0.354	0.325	0.296
FS1	0.494	0.446	0.418	0.416	0.389	0.342	0.333
3	0.626	0.591	0.423	0.511	0.471	0.361	0.392
4	0.712	0.670	0.551	0.577	0.531	0.431	0.439
5	0.723	0.675	0.623	0.580	0.532	0.484	0.435
6	0.701	0.615	0.628	0.527	0.481	0.483	0.385
7	0.540	0.506	0.572	0.433	0.392	0.433	0.302
FS2	0.487	0.503	0.471	0.353	0.303	0.348	0.207
8	0.417	0.379	0.400	0.323	0.288	0.250	0.196
9	0.349	0.257	0.353	0.220	0.192	0.248	0.123
10	0.150	0.131	0.243	0.132	0.118	0.158	0.061
11	0.106	0.095	0.136	0.093	0.084	0.093	0.047
12	0.039	0.032	0.097	0.022	0.008	0.068	-0.026
FS3	-0.003	-0.013	0.030	-0.018	-0.026	-0.008	-0.052
13	-0.015	-0.015	0.023	-0.024	-0.031	-0.017	-0.048
14	-0.027	-0.026	-0.013	-0.027	-0.031	-0.037	-0.045
15	-0.024	-0.023	-0.017	-0.022	-0.023	-0.039	-0.029
16	-0.024	-0.023	-0.025	-0.019	-0.018	-0.037	-0.019
17	-0.032	-0.031	-0.022	-0.023	-0.021	-0.026	-0.019
18	-0.048	-0.042	-0.020	-0.029	-0.027	-0.018	-0.024
FS4	-0.053	-0.044	-0.026	-0.027	-0.022	-0.020	-0.023
19	-0.056	-0.041	-0.035	-0.021	-0.017	-0.025	-0.018
20	-0.039	-0.003	-0.034	0.017	0.023	-0.019	0.020
21	0.025	0.068	-0.029	0.087	0.088	-0.017	0.079
22	0.059	0.098	0.005	0.126	0.125	0.024	0.100
23	0.126	0.162	0.080	0.215	0.230	0.085	0.223
FS5	0.174	0.259	0.117	0.320	0.343	0.116	0.372
24	0.222	0.260	0.191	0.351	0.391	0.234	0.462
25	0.281	0.364	0.292	0.436	0.466	0.360	0.515
26	0.387	0.457	0.308	0.538	0.575	0.428	0.642
27	0.461	0.513	0.401	0.600	0.640	0.492	0.718
28	0.482	0.520	0.498	0.605	0.645	0.609	0.724
29	0.442	0.471	0.557	0.545	0.580	0.679	0.651
FS6	0.399	0.400	0.563	0.451	0.476	0.684	0.523
30	0.341	0.366	0.508	0.421	0.448	0.616	0.503
31	0.270	0.213	0.426	0.244	0.260	0.499	0.291
32	0.000	0.000	0.393	0.000	0.000	0.476	0.000

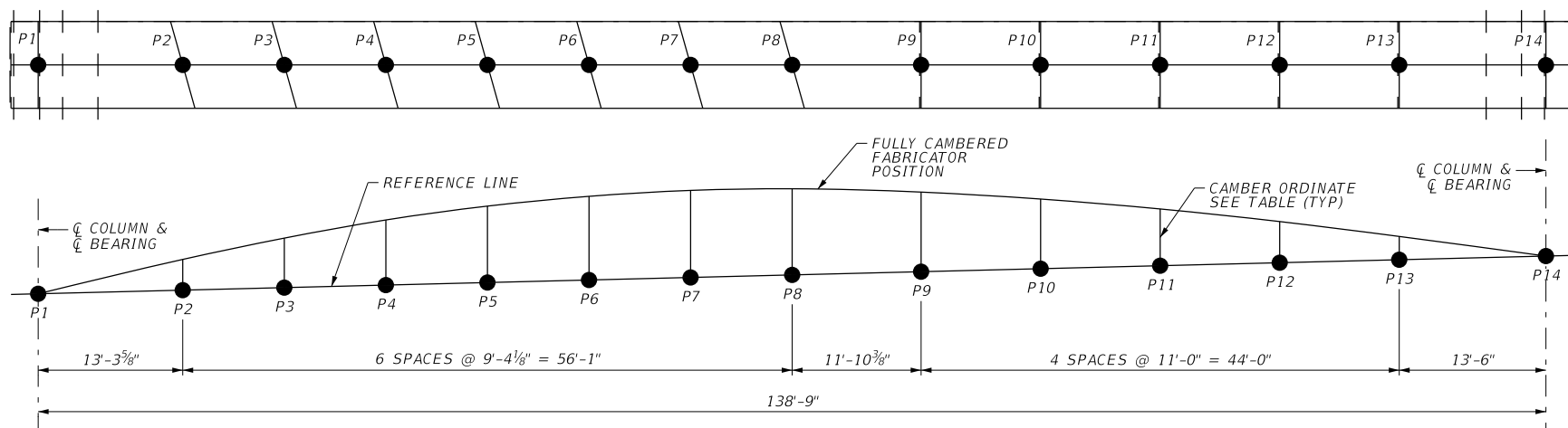
TABLE FOR DEAD LOAD DEFLECTIONS TOTAL DEAD LOAD DEFLECTION INCL STEEL & RAIL (FT)							
Location	G1	G2	G3	G4	G5	G6	G7
0	0	0	0	0	0	0	0
1	0.326	0.303	0.280	0.258	0.237	0.216	0.197
2	0.606	0.563	0.520	0.479	0.439	0.400	0.362
FS1	0.633	0.566	0.526	0.519	0.482	0.421	0.407
3	0.802	0.750	0.532	0.636	0.582	0.444	0.477
4	0.910	0.847	0.692	0.716	0.652	0.528	0.529
5	0.922	0.852	0.781	0.716	0.649	0.589	0.518
6	0.894	0.775	0.784	0.648	0.583	0.583	0.452
7	0.690	0.640	0.712	0.532	0.473	0.517	0.347
FS2	0.625	0.636	0.588	0.437	0.367	0.411	0.234
8	0.539	0.486	0.502	0.402	0.350	0.295	0.221
9	0.457	0.343	0.447	0.285	0.242	0.293	0.140
10	0.223	0.201	0.320	0.189	0.163	0.193	0.076
11	0.174	0.162	0.201	0.149	0.128	0.123	0.062
12	0.105	0.099	0.160	0.080	0.058	0.098	0.000
FS3	0.070	0.063	0.094	0.052	0.039	0.031	-0.001
13	0.063	0.063	0.087	0.052	0.043	0.025	0.022
14	0.069	0.067	0.060	0.060	0.053	0.021	0.031
15	0.087	0.085	0.060	0.080	0.076	0.032	0.067
16	0.092	0.090	0.064	0.089	0.088	0.043	0.087
17	0.081	0.077	0.082	0.081	0.082	0.072	0.085
18	0.049	0.050	0.090	0.063	0.065	0.088	0.067
FS4	0.036	0.040	0.080	0.055	0.058	0.083	0.050
19	0.014	0.029	0.058	0.055	0.059	0.066	0.057
20	0.004	0.044	0.049	0.080	0.089	0.058	0.085
21	0.048	0.103	0.045	0.145	0.152	0.059	0.142
22	0.079	0.132	0.062	0.185	0.191	0.090	0.165
23	0.145	0.198	0.129	0.281	0.305	0.151	0.306
FS5	0.196	0.303	0.166	0.398	0.434	0.184	0.485
24	0.247	0.305	0.242	0.433	0.490	0.316	0.594
25	0.315	0.424	0.353	0.531	0.579	0.463	0.659
26	0.442	0.537	0.372	0.655	0.711	0.543	0.817
27	0.537	0.610	0.479	0.733	0.794	0.621	0.913
28	0.571	0.624	0.596	0.743	0.802	0.764	0.922
29	0.529	0.569	0.672	0.672	0.724	0.853	0.832
FS6	0.479	0.485	0.683	0.558	0.594	0.862	0.668
30	0.411	0.444	0.620	0.521	0.561	0.777	0.643
31	0.327	0.259	0.521	0.303	0.326	0.631	0.373
32	0.000	0.000	0.482	0.000	0.000	0.601	0.000

CAMBER DIAGRAM TABLE "Y" VALUES (FT)							
Location	G1	G2	G3	G4	G5	G6	G7
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1	0.611	0.588	0.565	0.543	0.522	0.501	0.481
2	0.638	0.604	0.571	0.540	0.510	0.482	0.455
FS1	0.886	0.809	0.760	0.743	0.695	0.623	0.599
3	1.087	1.034	0.817	0.921	0.866	0.729	0.762
4	1.195	1.132	0.977	1.000	0.937	0.813	0.814
5	1.207	1.137	1.066	1.001	0.934	0.874	0.803
6	1.179	1.060	1.069	0.933	0.868	0.868	0.737
7	0.797	0.779	0.885	0.740	0.716	0.799	0.666
FS2	0.803	0.782	0.700	0.514	0.409	0.414	0.201
8	0.824	0.770	0.787	0.687	0.635	0.580	0.506
9	0.741	0.628	0.732	0.570	0.527	0.578	0.425
10	0.223	0.201	0.320	0.189	0.163	0.193	0.076
11	0.174	0.162	0.201	0.149	0.128	0.123	0.062
12	0.627	0.638	0.700	0.620	0.598	0.638	0.540
FS3	0.089	0.115	0.215	0.244	0.301	0.363	0.401
13	0.603	0.551	0.506	0.400	0.321	0.233	0.160
14	0.609	0.607	0.600	0.600	0.593	0.561	0.571
15	0.627						

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BENT 8 CAMBER ORDINATES (FT)														
	CL COL/BRG (P1)	15'-2.5" (P2)	27'-8.5" (P3)	40'-2.5" (P4)	52'-8.5" (P5)	65'-2.5" (P6)	77'-2.3" (P7)	86'-6.4" (P8)	95'-10.6" (P9)	105'-2.8" (P10)	114'-6.9" (P11)	123'-11.1" (P12)	133'-3.3" (P13)	CL COL/BRG (P14)
STRUCTURAL STEEL DEFLECTION	0.000	0.035	0.061	0.082	0.097	0.107	0.109	0.106	0.098	0.086	0.070	0.050	0.027	0.000
ADDITIONAL DEAD LOAD DEFLECTION	0.000	0.050	0.087	0.119	0.144	0.161	0.167	0.164	0.153	0.136	0.111	0.080	0.043	0.000
COMPOSITE DEAD LOD DEFLECTION	0.000	0.004	0.007	0.009	0.010	0.011	0.011	0.011	0.010	0.009	0.007	0.005	0.003	0.000
TOTAL DEAD LOAD CAMBER	0.000	0.088	0.154	0.210	0.252	0.279	0.287	0.280	0.261	0.230	0.188	0.135	0.073	0.000
EXTRA CAMBER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL CAMBER	0.000	0.088	0.154	0.210	0.252	0.279	0.287	0.280	0.261	0.230	0.188	0.135	0.073	0.000



BENT 9 CAMBER ORDINATES (FT)														
	CL COL/BRG (P1)	13'-3.625" (P2)	22'-7.792" (P3)	31'-11.958" (P4)	41'-4.125" (P5)	50'-8.292" (P6)	60'-0.458" (P7)	69'-4.625" (P8)	81'-3" (P9)	92'-3" (P10)	103'-3" (P11)	114'-3" (P12)	125'-3" (P13)	CL COL/BRG (P14)
STRUCTURAL STEEL DEFLECTION	0.000	0.035	0.056	0.074	0.088	0.097	0.102	0.102	0.096	0.086	0.071	0.052	0.030	0.000
ADDITIONAL DEAD LOAD DEFLECTION	0.000	0.060	0.096	0.125	0.147	0.161	0.168	0.167	0.156	0.137	0.112	0.083	0.047	0.000
COMPOSITE DEAD LOD DEFLECTION	0.000	0.004	0.006	0.008	0.009	0.010	0.011	0.011	0.011	0.010	0.008	0.006	0.003	0.000
TOTAL DEAD LOAD CAMBER	0.000	0.099	0.158	0.207	0.244	0.268	0.280	0.280	0.263	0.233	0.192	0.141	0.080	0.000
EXTRA CAMBER	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL CAMBER	0.000	0.099	0.158	0.207	0.244	0.268	0.280	0.280	0.263	0.233	0.192	0.141	0.080	0.000

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO AASHTO M270, GRADE 50W FOR WEBS, HPS 70W FOR FLANGES AND FLANGE SPLICE PLATES.
- WELDING DETAILS, PROCEDURES AND TESTING METHODS SHALL CONFORM TO THE ANSI, AASHTO, AWS D1.5-(2015) - BRIDGE WELDING CODE, UNLESS OTHERWISE NOTED ON THE PLANS.
- PROVIDE CLASS B SLIP COEFFICIENT FOR THE FAYING SURFACE OF BOLTED PARTS.
- ALL WEB TO FLANGE, WEB TO BEARING STIFFENER AND BEARING STIFFENER TO FLANGE FILLET WELDS SHALL BE INSPECTED BY THE MAGNETIC PARTICLE METHOD.
- MULTIPLE PASS WELDS, INSPECTED BY THE MAGNETIC PARTICLE METHOD SHALL HAVE EACH PASS OR LAYER INSPECTED AND ACCEPTED BEFORE PROCEEDING TO THE NEXT PASS OR LAYER, AS DETERMINED BY THE ENGINEER.
- SHOP FLANGE SPLICES SHALL BE LOCATED A MINIMUM OF 6" FROM THE WEB SPLICE.
- BEARING STIFFENERS, JACKING STIFFENERS AND ENDS OF BEAMS SHALL BE VERTICAL AFTER THE APPLICATION OF FULL DEAD LOADS.
- THE STRUCTURAL STEEL FABRICATOR SHALL BE CERTIFIED UNDER THE AISC QUALITY CONTROL PROGRAM AS NOTED BELOW. CATEGORY ABR - ADVANCED BRIDGE FABRICATOR
- THE CONTRACTOR SHALL TAKE ALL PROPER PRECAUTIONS TO ENSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS UNTIL THE TOTAL STRUCTURE IS IN BEING.
- ALL LENGTHS SHOWN ON THE PLANS ARE HORIZONTAL.
- NO ATTACHMENTS, EXCEPT AS SHOWN ON THE PLANS, SHALL BE FILLET WELDED, PLUG WELDED OR TACK WELDED TO THE BOTTOM FLANGES.

FUTURE JACKING NOTES:

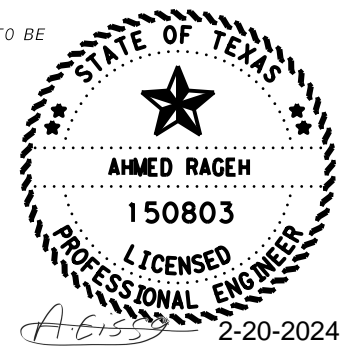
- FUTURE JACKING FOR BEARING REPLACEMENT SHALL BE PERFORMED UNDER LIVE TRAFFIC. THE CONTRACTOR SHALL DESIGN THE JACKING ASSEMBLY FOR 150% OF THE SPECIFIED BEAM END REACTIONS GIVEN IN THE BEARING TABLES. BEARINGS SHALL BE REPLACED AT ONLY ONE SUBSTRUCTURE UNIT AT GIVEN TIME.
- BEVELED JACKING PLATES WILL BE REQUIRED FOR FUTURE JACKING OF THE GIRDERS. LOCATION OF THE PLATES SHALL COINCIDE WITH JACKING STIFFENERS. PLATES SHALL BE SIZED ACCORDING TO PARTIES PERFORMING JACKING OPERATIONS.

CAMBER NOTES:

- REFERENCE LINE IS A STRAIGHTLINE FROM BEARING TO BEARING.
- VERTICAL CURVE ORDINATE IS MEASURED FROM THE REFERENCE LINE TO THE PROPOSED FINISHED GRADE.

SPLICE NOTES:

- ALL BOLTS SHALL BE 7/8" DIA A325 WITH ONE HARDENED WASHER EACH AND SHALL BE TIGHTENED IN ACCORDANCE WITH ITEM 447. ALL HOLES SHALL BE 1 1/16" DIAMETER.
- FLANGE SPLICE PLATES SHALL CONFORM TO GRADE HPS 70W. WEB SPLICE PLATES SHALL CONFORM TO A709 GRADE 50W.
- BOLTS SHALL BE INSTALLED WITH HEADS ON FASCIASIDE OF OUTSIDE GIRDER WEBS. BOTTOM FLANGE SPLICE BOLTS SHALL BE INSTALLED WITH HEADS FACING DOWN.
- PRECLUDE BOLT THREADS FROM THE SHEAR PLANES.
- PROVIDE CLASS B SLIP COEFFICIENT FOR THE FAYING SURFACE OF BOLTED PARTS.
- - INDICATED PLATES SHALL BE ASTM A709, GRADE HPS70W. ALL OTHER STEEL TO BE ASTM A709, GRADE 50W.



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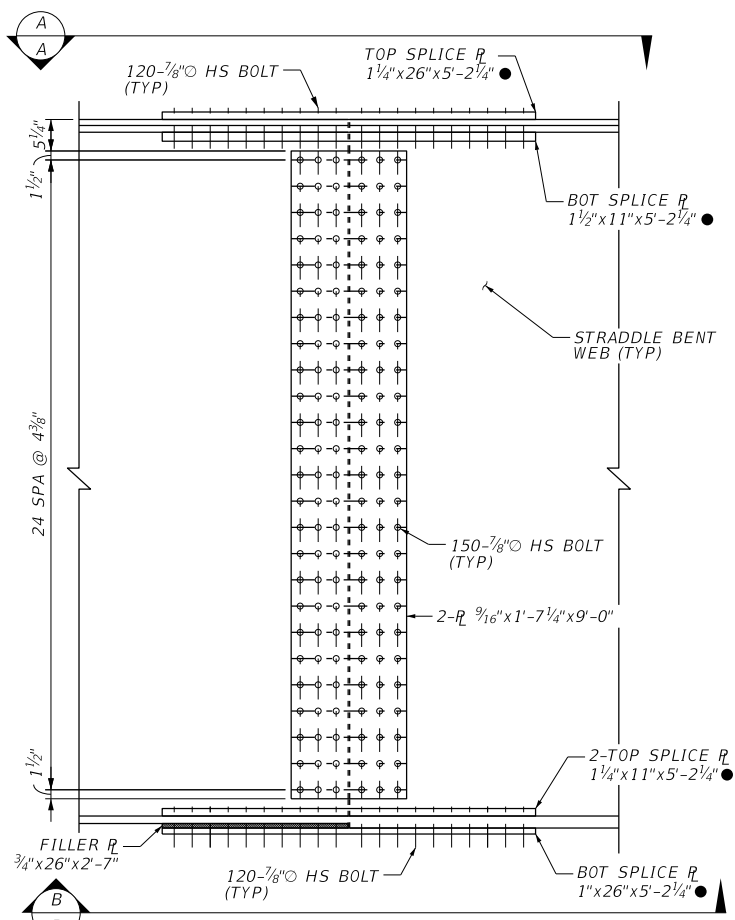
Texas Department of Transportation

**IH 10 AT US 69
 STRUCT STEEL GEN NOTES
 & CAMBER
 IH 10 EB ML
 TO US 69 NB DC**

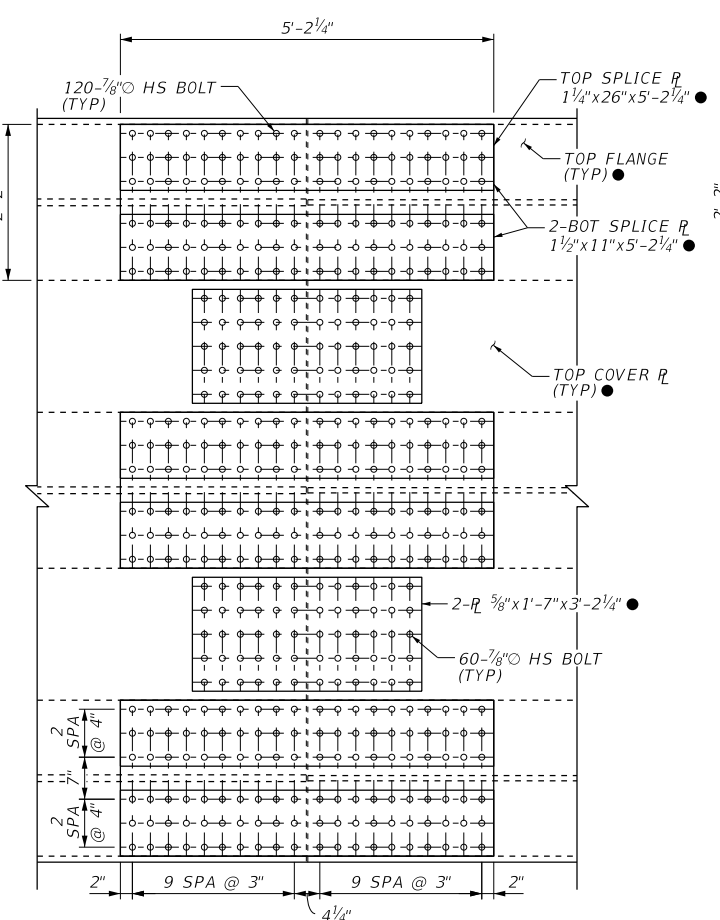
SHEET 1 OF 1

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CONT	SECT		JOB		HIGHWAY		
0028	13		135		IH 10		
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1591		

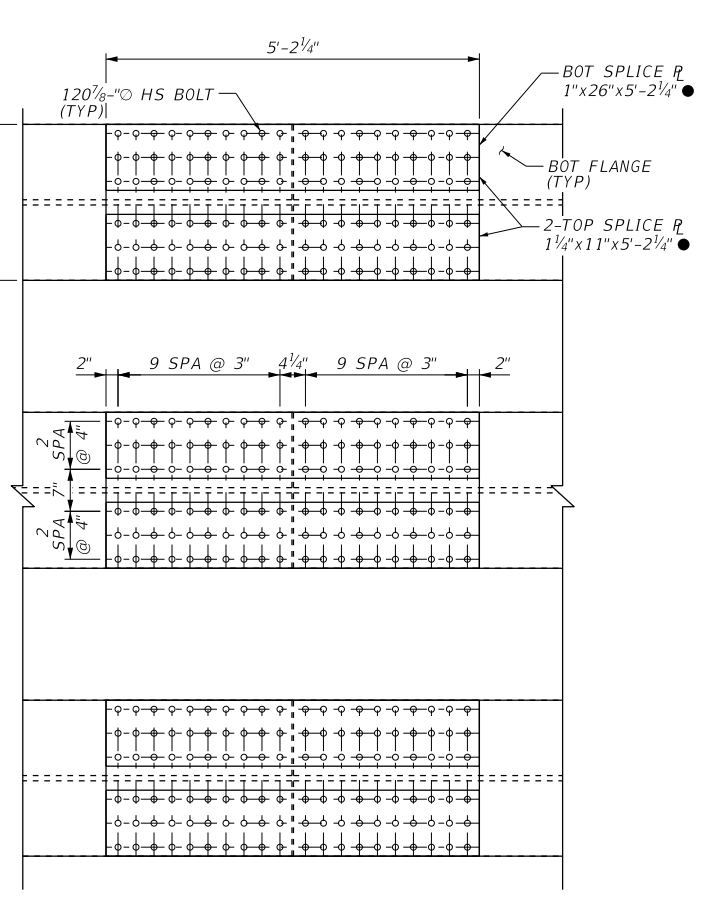
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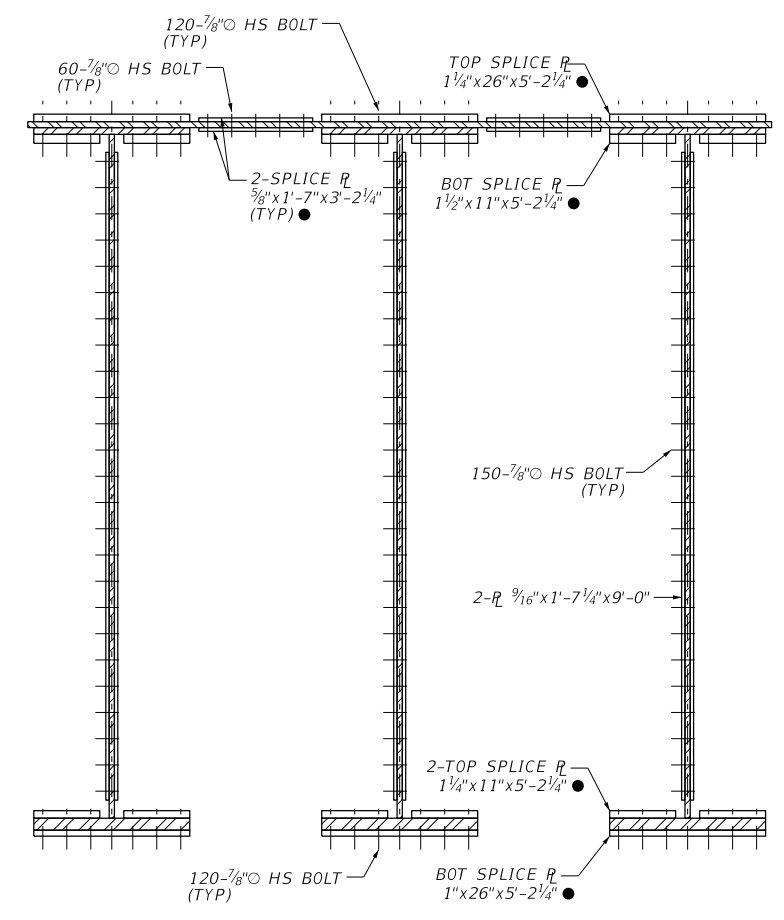
ELEVATION (FIELD SPLICE 1)



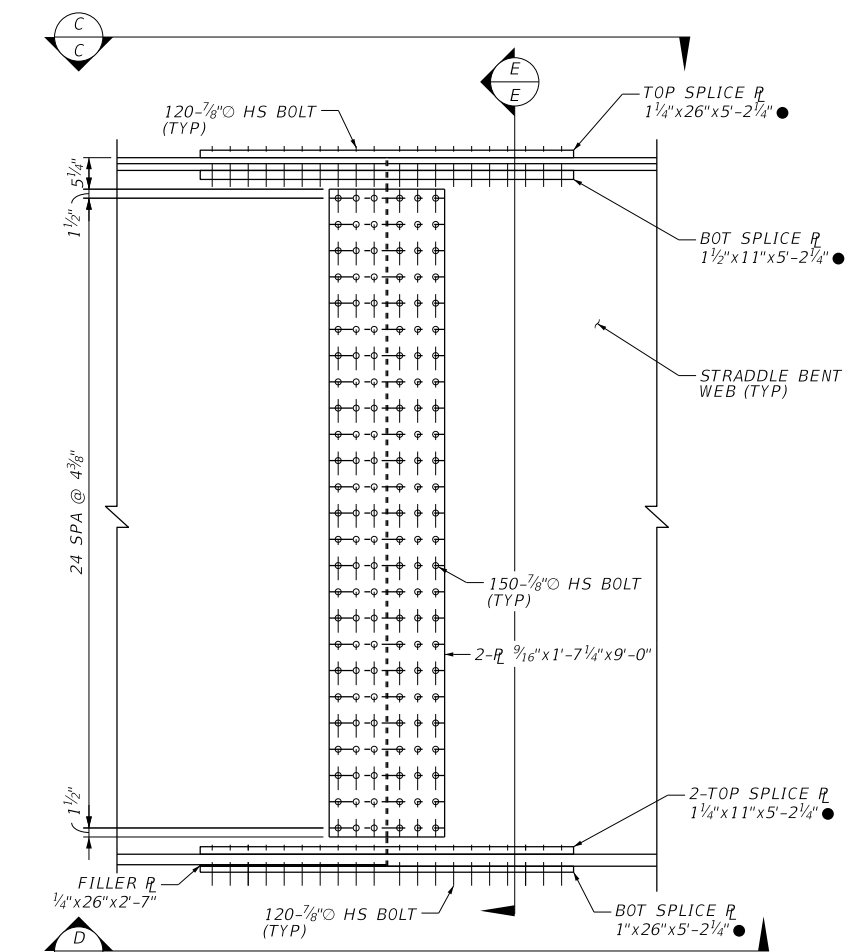
VIEW A-A (FIELD SPLICE 1)



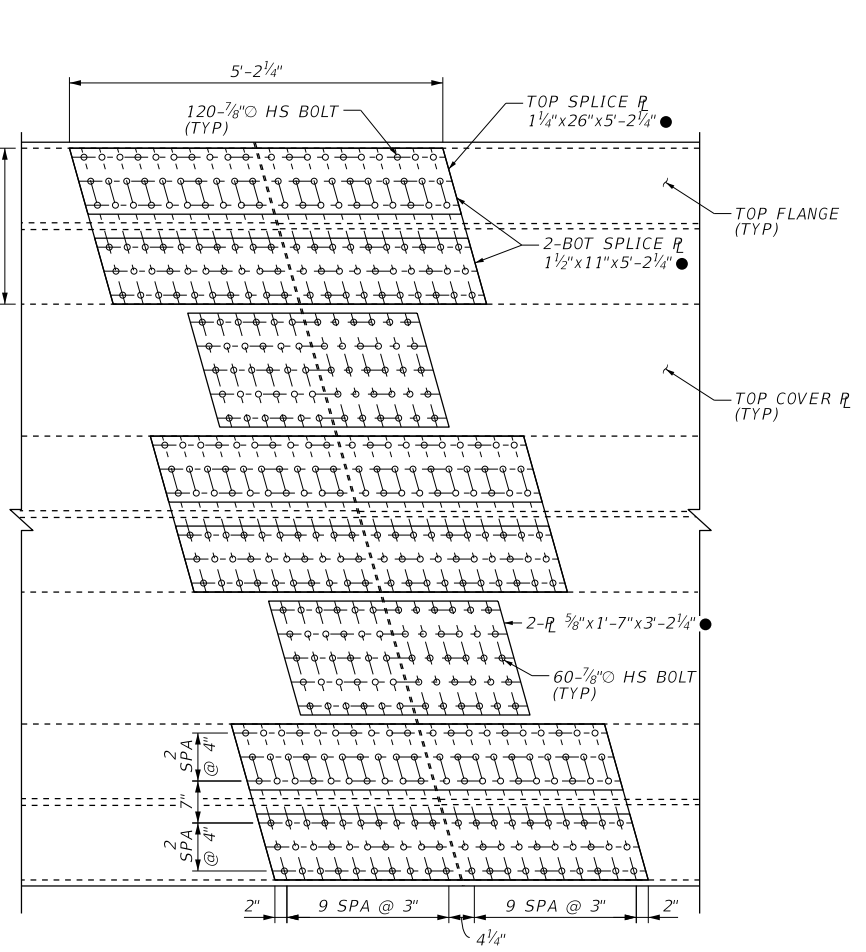
VIEW B-B (FIELD SPLICE 1)



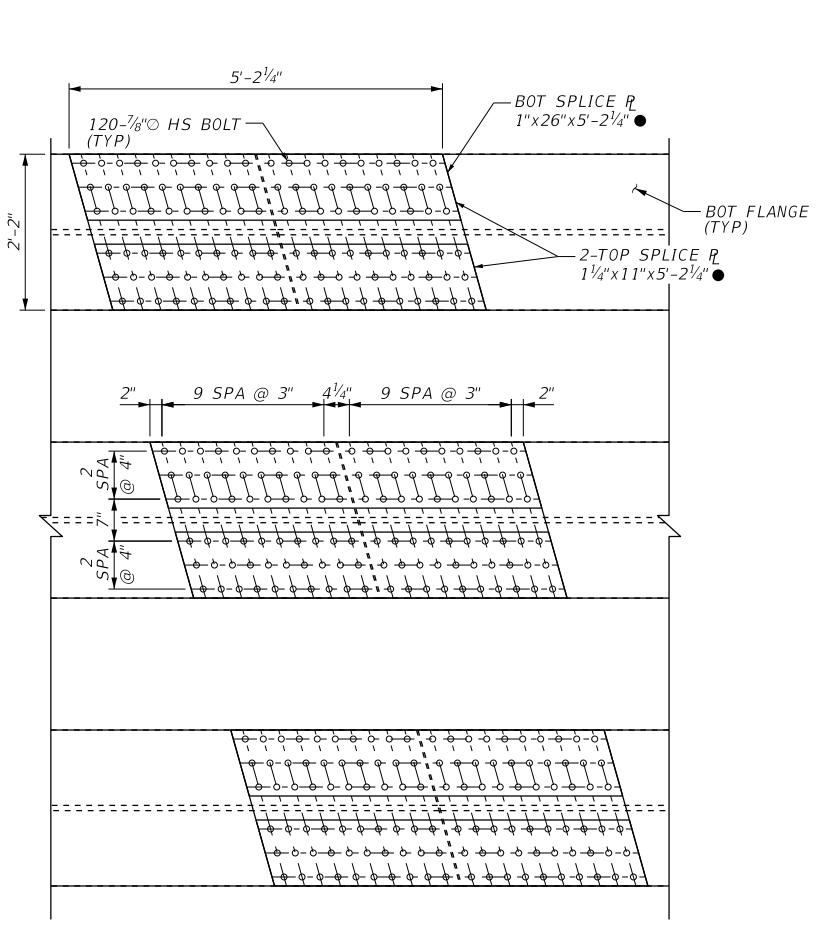
SECTION E-E



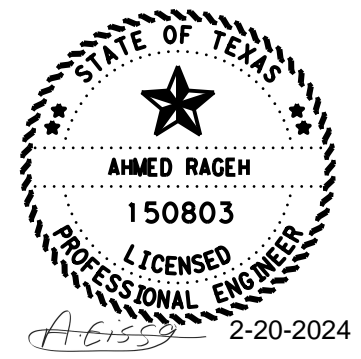
ELEVATION (FIELD SPLICE 2)



VIEW C-C (FIELD SPLICE 2)



VIEW D-D (FIELD SPLICE 2)



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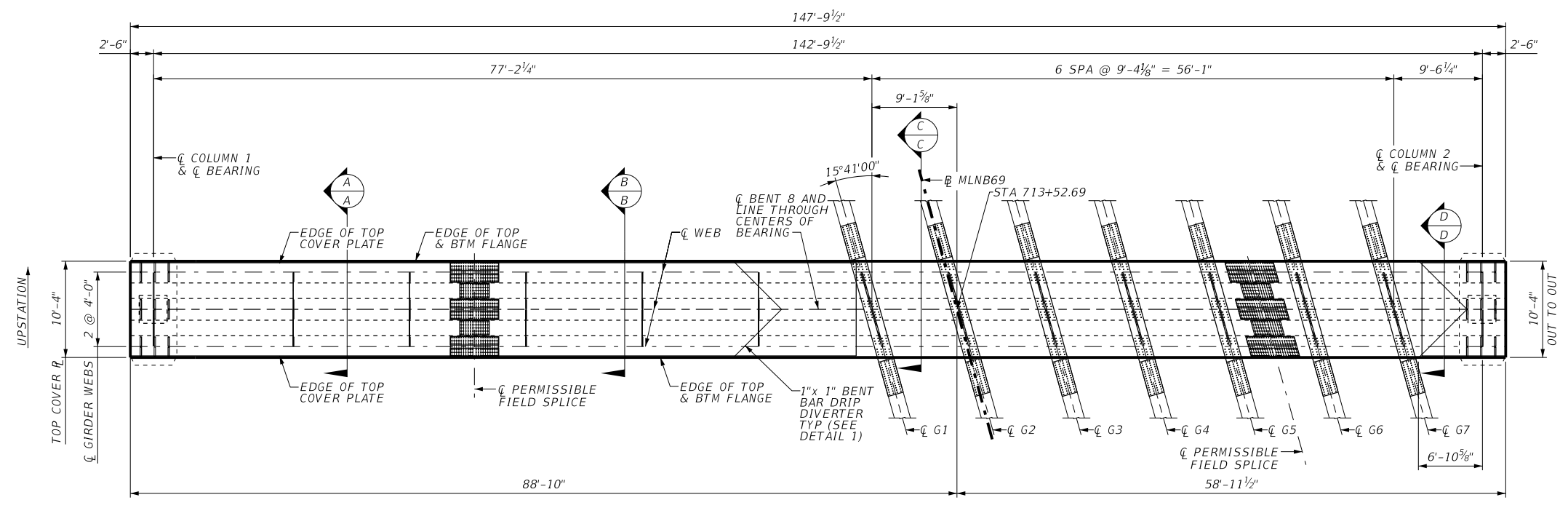
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**IH 10 AT US 69
 BOLTED FIELD
 SPLICE BENT DETAILS
 SPANS 7-9
 IH 10 EBML TO US 69 NB DC**

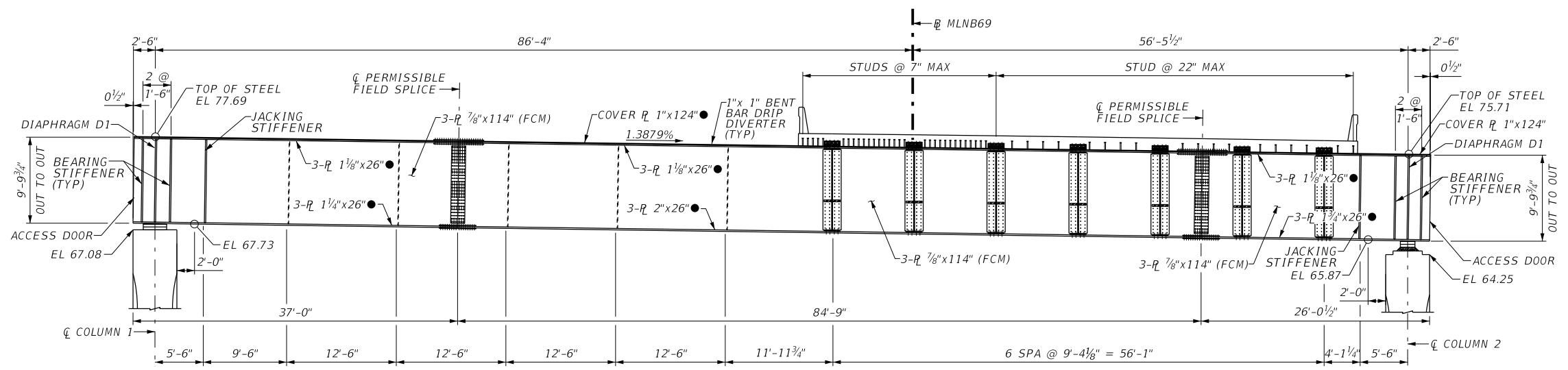
SHEET 1 OF 1

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DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1592		

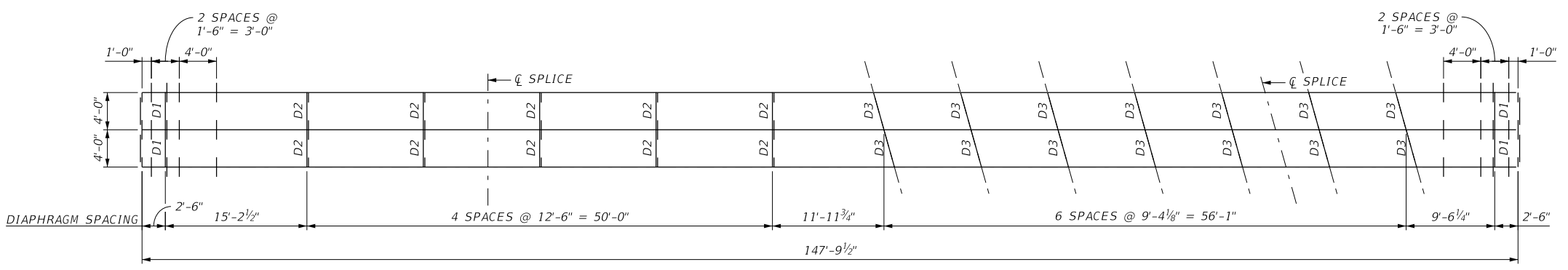
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PLAN

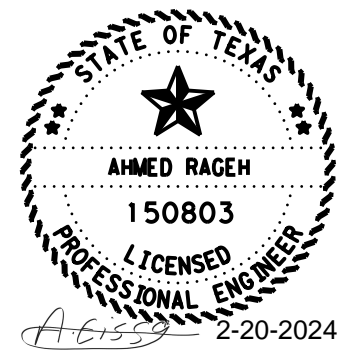


ELEVATION
(LOOKING UPSTATION)



FRAMING PLAN

- NOTES:**
1. FOR STEEL CAP NOTES SEE "STRUCTURAL STEEL GENERAL NOTES & SEQUENCE OF CONSTRUCTION".
 2. ● - INDICATED PLATES SHALL BE ASTM A709, GRADE HPS70W. ALL OTHER STEEL TO BE ASTM A709, GRADE 50W.
 3. CONCRETE COLUMNS TOP ELEVATIONS ARE ESTIMATED BASED ON HLMR BEARINGS PREDIMENSIONING. THE FINAL ELEVATION SHALL BE DETERMINED BY THE CONTRACTOR AFTER THE HLMR BEARINGS FINAL DESIGN. FINAL TOP ELEVATIONS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.



HL93 LOADING

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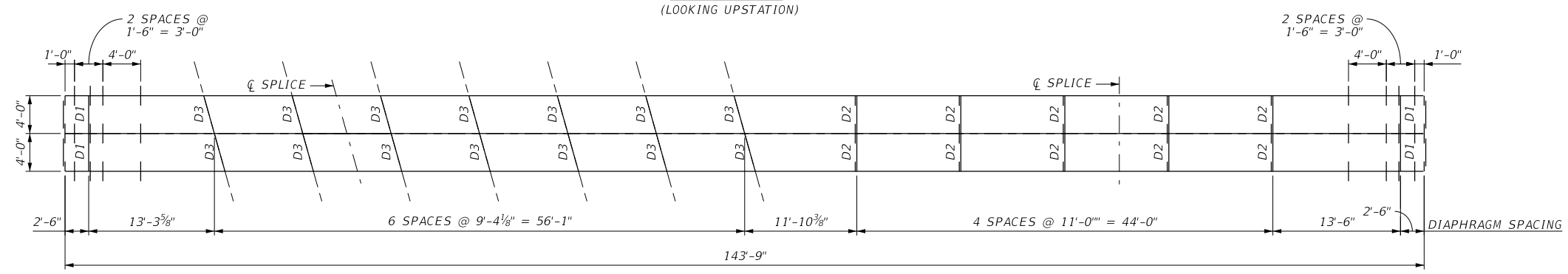
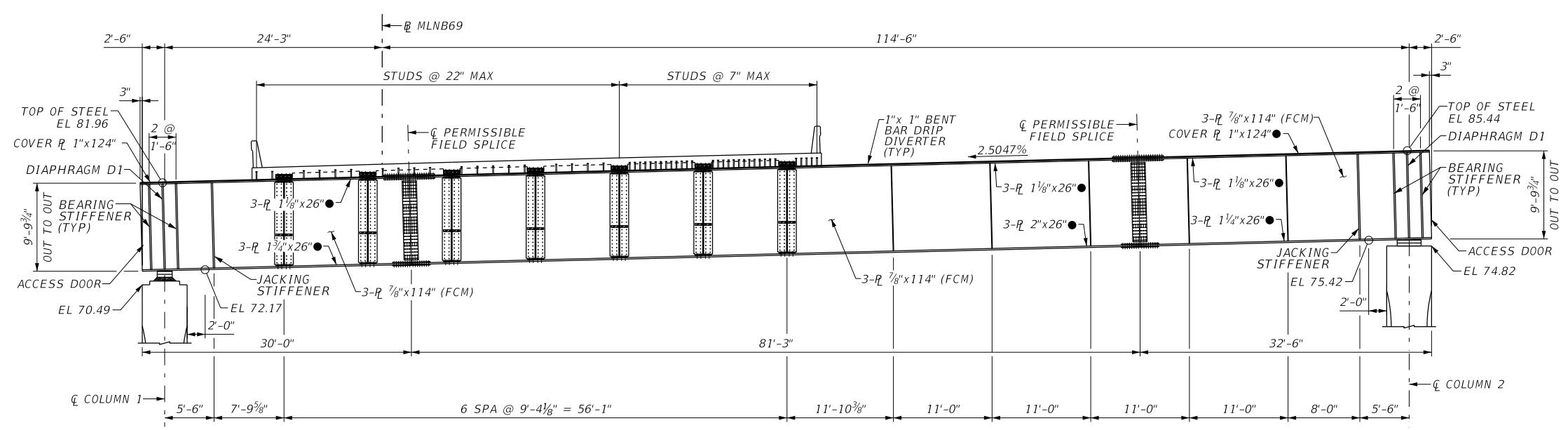
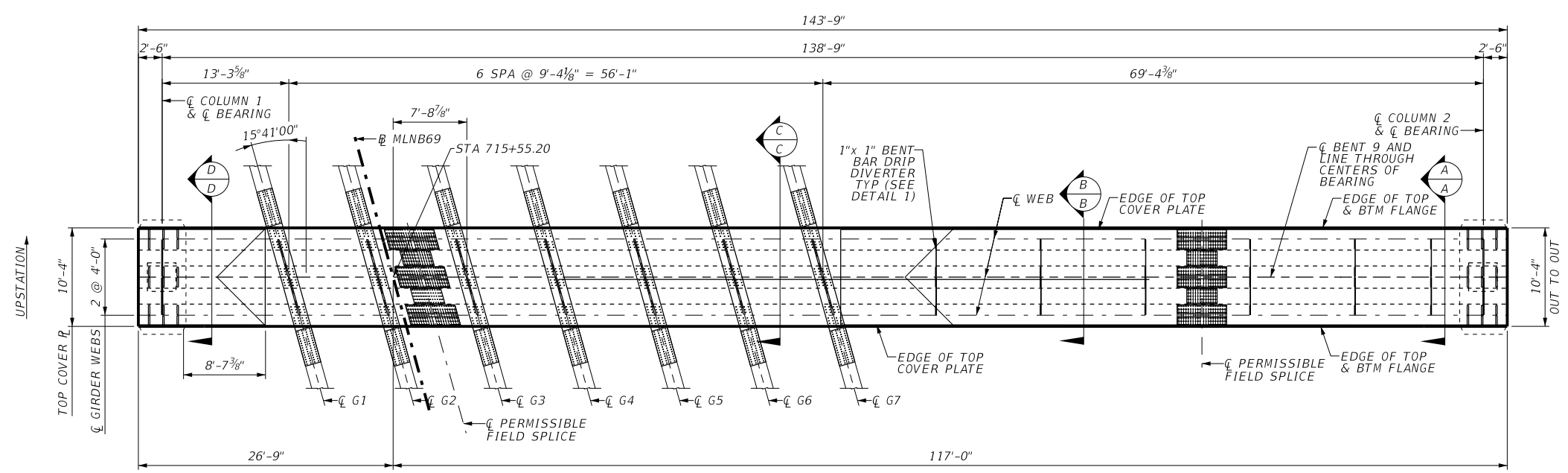
Texas Department of Transportation

**IH 10 AT US 69
 STRADDLE BENT 8 CAP
 PLAN & ELEVATION
 IH 10 EB ML
 TO US 69 NB DC**

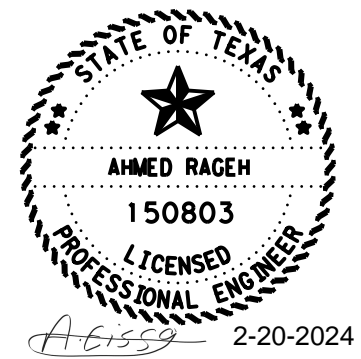
SHEET 1 OF 1

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- NOTES:**
- FOR STEEL CAP NOTES SEE "STRUCTURAL STEEL GENERAL NOTES & SEQUENCE OF CONSTRUCTION".
 - - INDICATED PLATES SHALL BE ASTM A709, GRADE HPS70W. ALL OTHER STEEL TO BE ASTM A709, GRADE 50W.
 - CONCRETE COLUMNS TOP ELEVATIONS ARE ESTIMATED BASED ON HLMR BEARINGS PREDIMENSIONING. THE FINAL ELEVATION SHALL BE DETERMINED BY THE CONTRACTOR AFTER THE HLMR BEARINGS FINAL DESIGN. FINAL TOP ELEVATIONS SHALL BE SUBMITTED TO THE DESIGN ENGINEER FOR APPROVAL.



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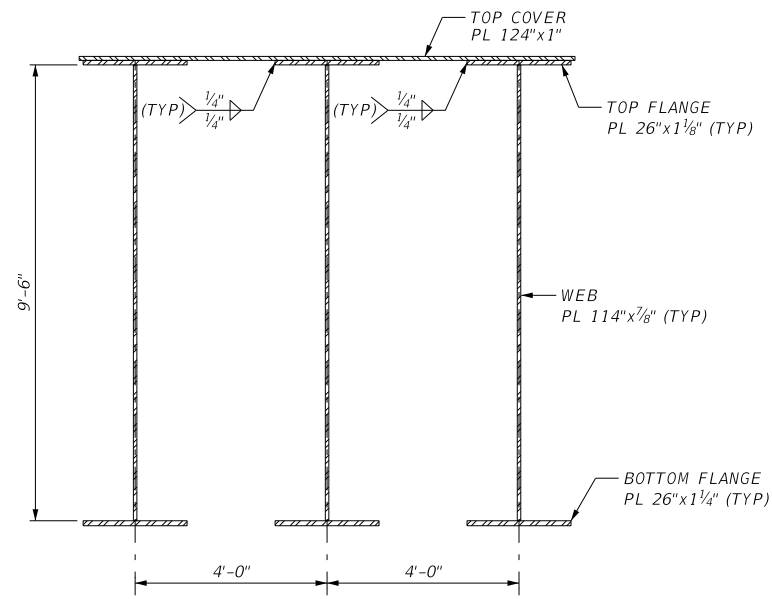
Texas Department of Transportation

**IH 10 AT US 69
 STRADDLE BENT 9 CAP
 PLAN & ELEVATION
 IH 10 EB ML
 TO US 69 NB DC**

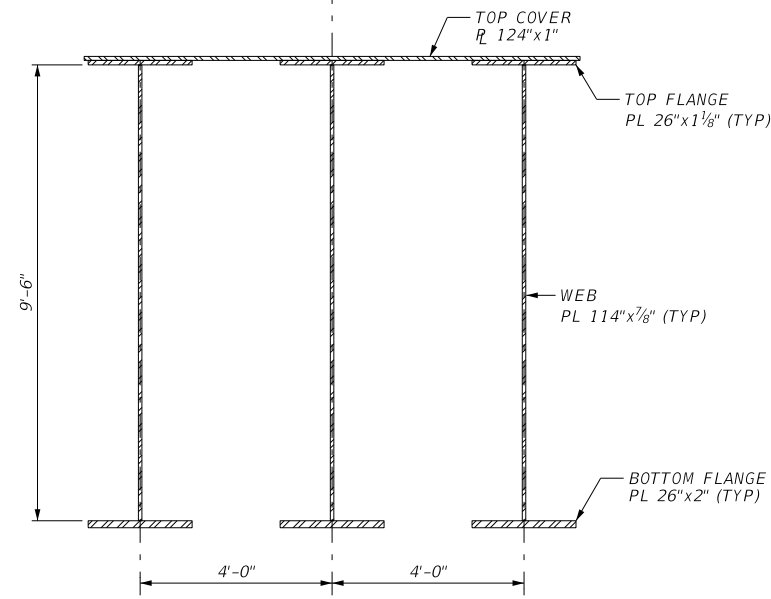
SHEET 1 OF 1

DW:	AR	CK:	JMV	DW:	KAH	CK:	FB
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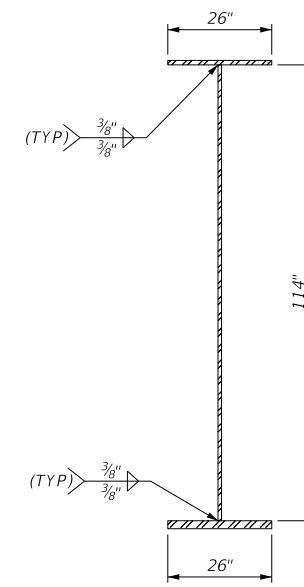
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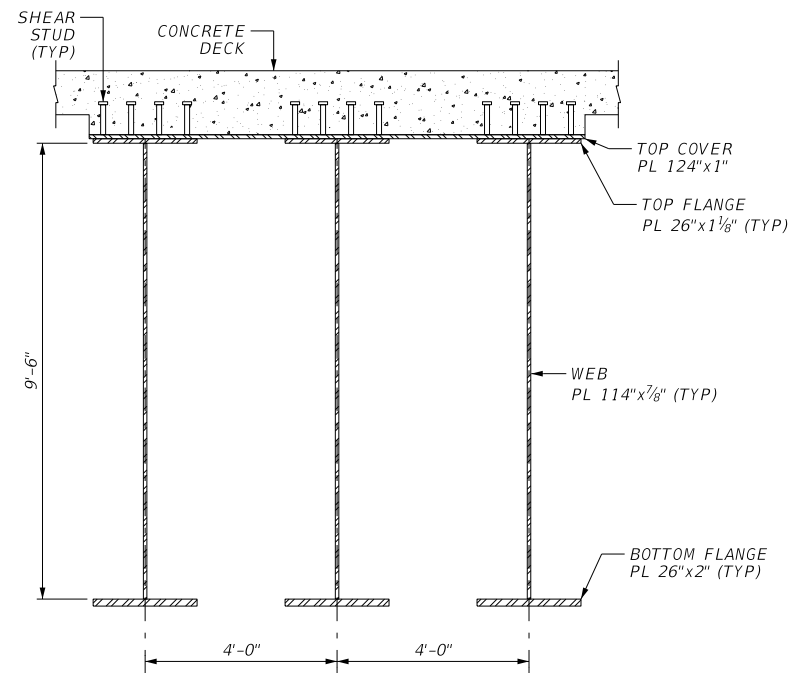
SECTION A-A



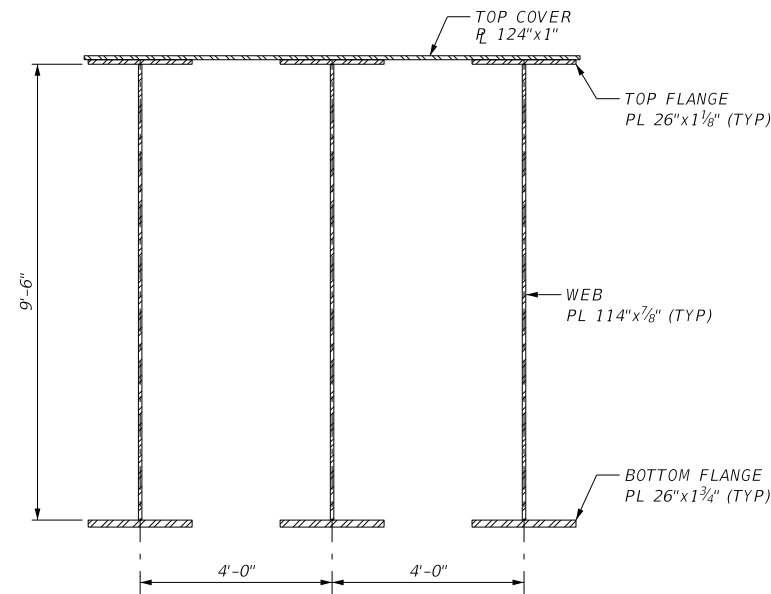
SECTION B-B



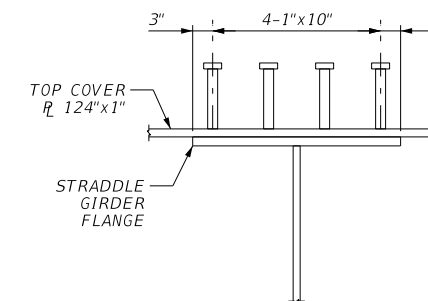
TYPICAL GIRDER



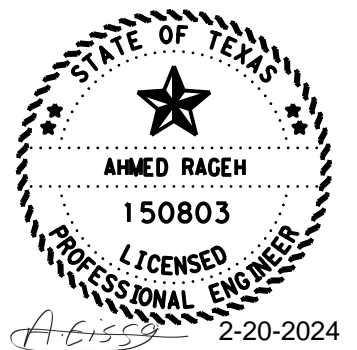
SECTION C-C



SECTION D-D



STUD DETAILS



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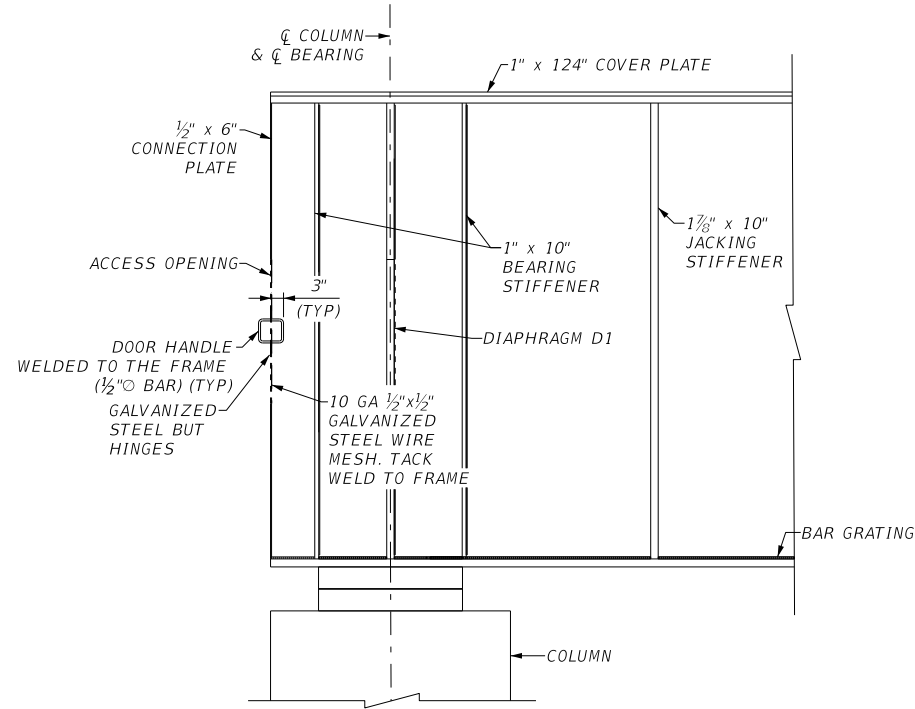


**IH 10 AT US 69
 STRADDLE BENTS 8 & 9
 CAP SECTIONS & DETAILS
 IH 10 EBML
 TO US 69 NB DC**

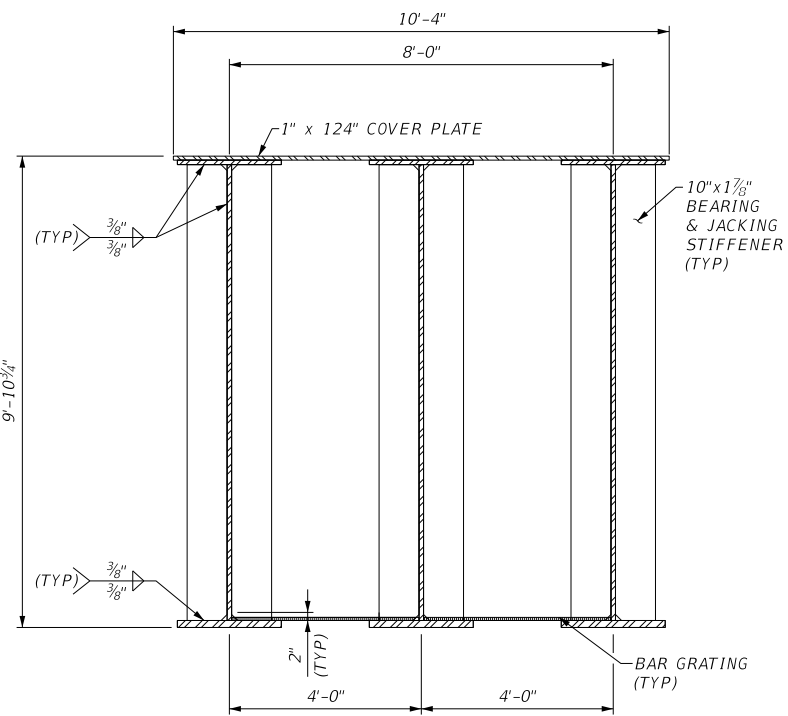
SHEET 1 OF 3

DN:	AR	CK:	JMV	DW:	KAH	CK:	FB
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0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1595		

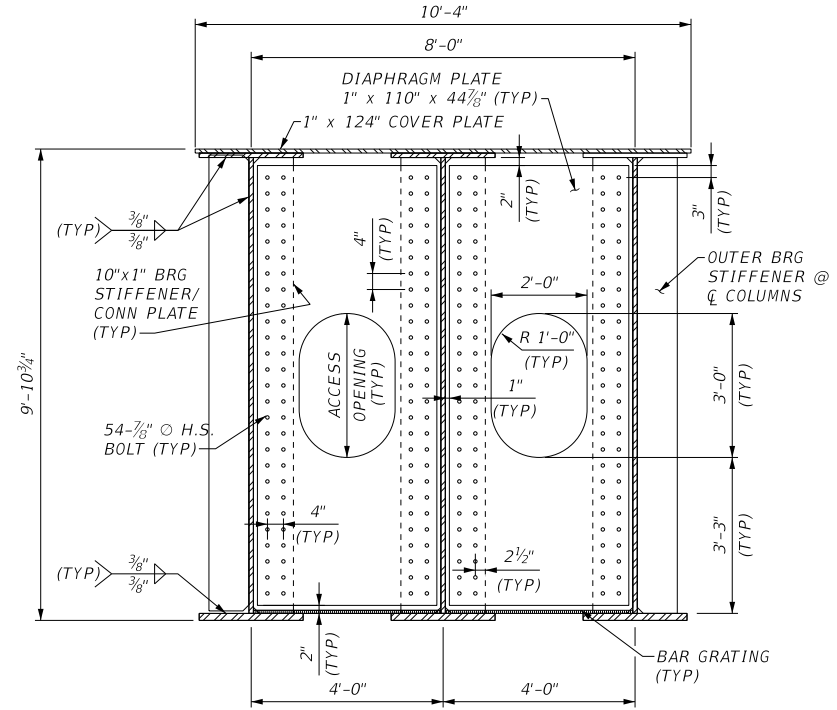
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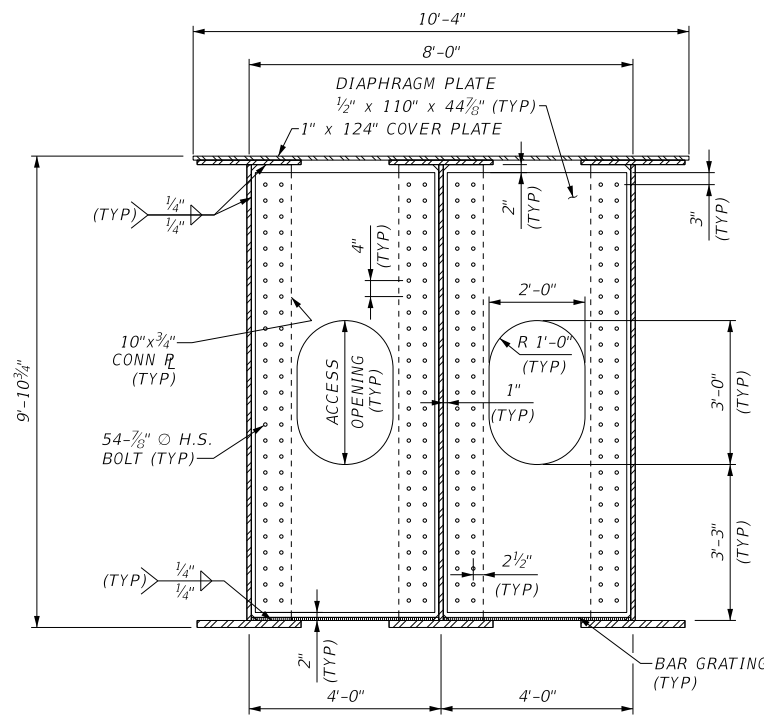
**BEARING ZONE DETAIL
 STRADDLE BENTS 8 & 9**
 SCALE: 1/4" = 1'-0"



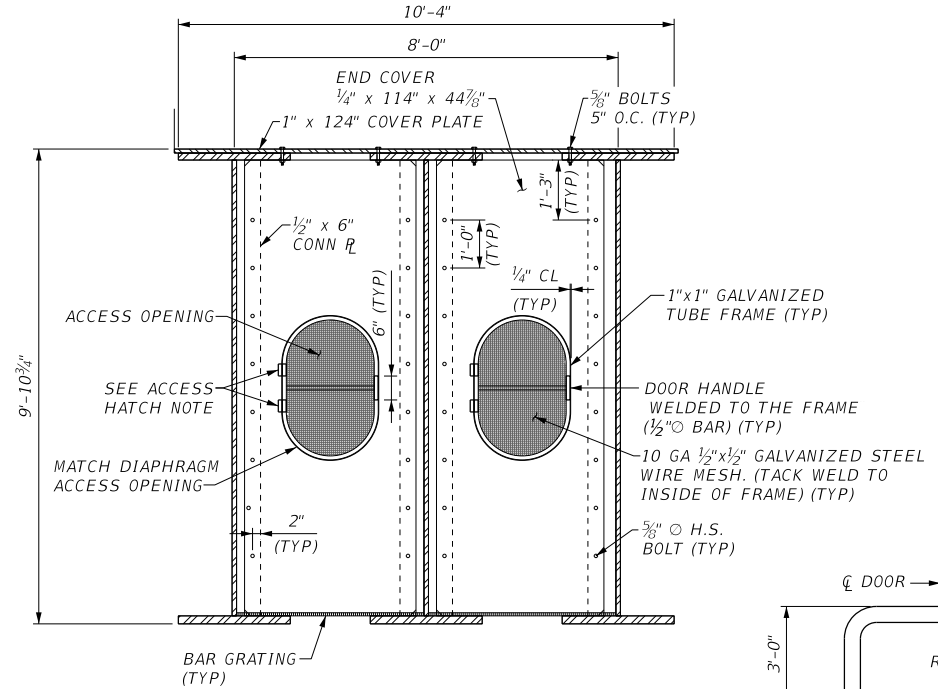
JACKING STIFFENERS DETAIL
 SCALE: 1/4" = 1'-0"



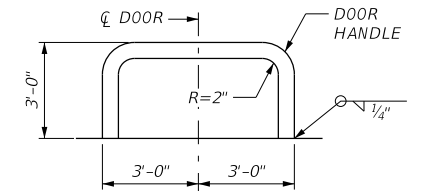
DIAPHRAGM D1 DETAIL
 SCALE: 1/4" = 1'-0"



DIAPHRAGM D2 DETAIL
 SCALE: 1/4" = 1'-0"

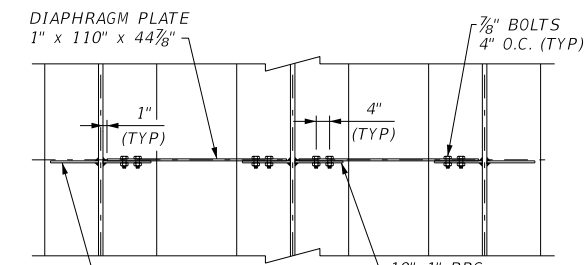


**END ACCESS HATCH
 STRADDLE BENTS 8 & 9**
 SCALE: 1/4" = 1'-0"

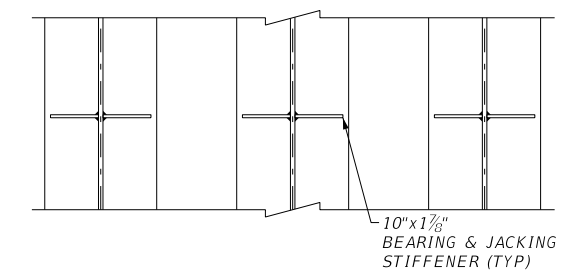


DOOR HANDLE DETAIL

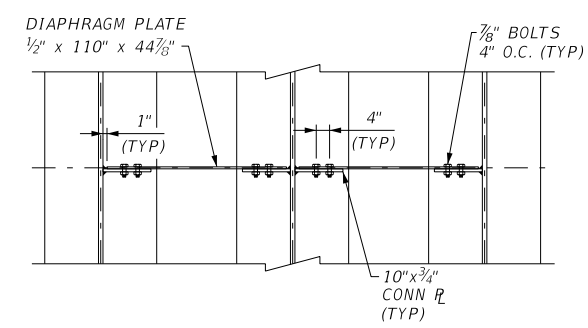
ACCESS HATCH NOTE:
 STEEL BUTT HINGES WELDED TO BOTH THE
 CLOSURE PLATE AND FRAME OF THE WIRE
 MESH DOOR. THE HINGES SHALL BE SPRING
 LOADED TO KEEP THE DOOR CLOSED AT ALL
 TIMES DOOR CAN BE OPENED FROM BOTH
 SIDES.



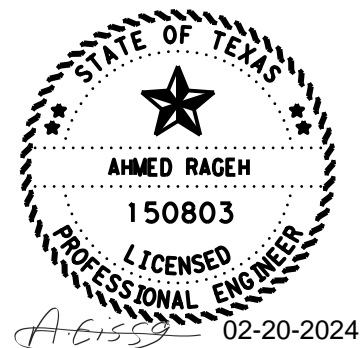
LAYOUT AT DIAPHRAGM D1
 SCALE: 1/4" = 1'-0"



LAYOUT AT JACKING STIFFENER
 SCALE: 1/4" = 1'-0"



LAYOUT AT DIAPHRAGM D2
 SCALE: 1/4" = 1'-0"



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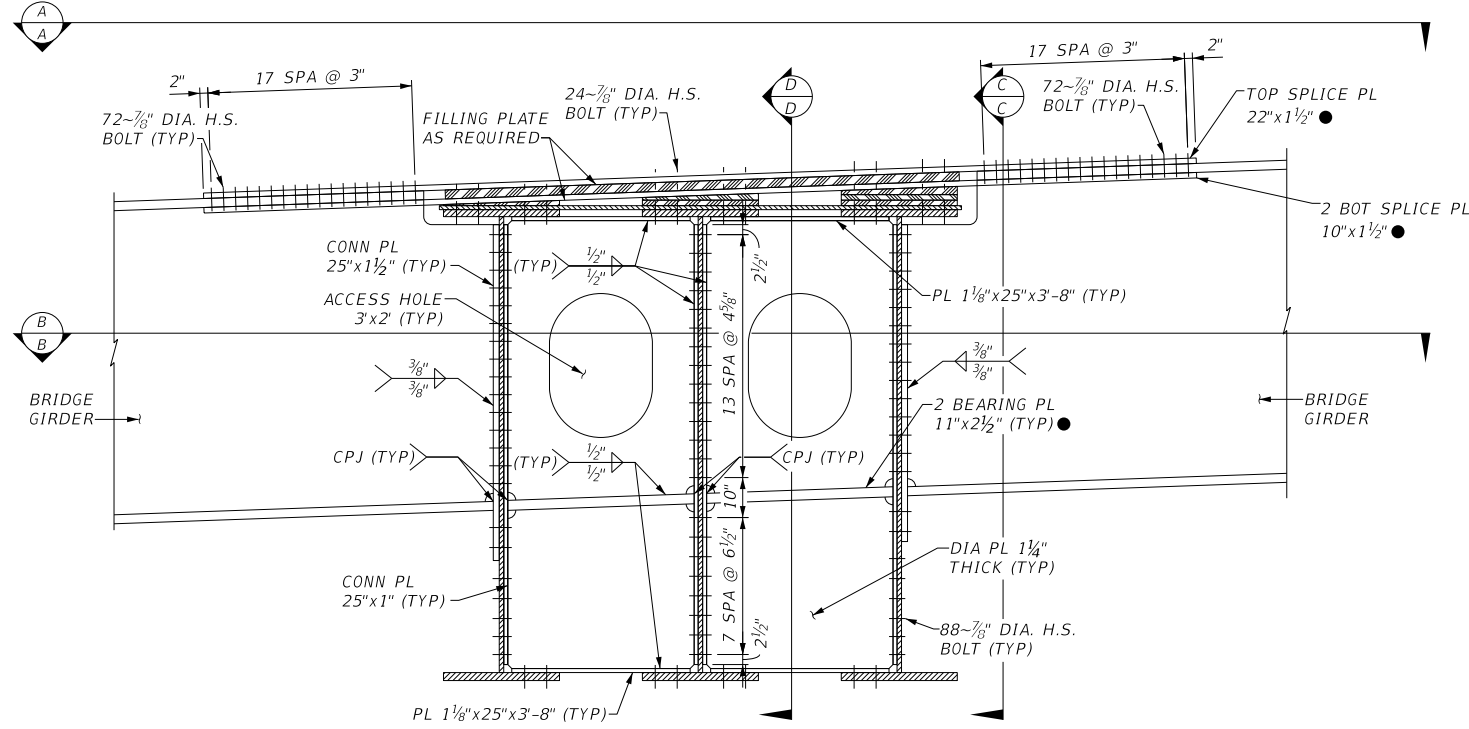
Texas Department of Transportation

**IH 10 AT US 69
 STRADDLE BENTS 8 & 9
 CAP SECTIONS & DETAILS
 IH 10 EBML
 TO US 69 NB DC**

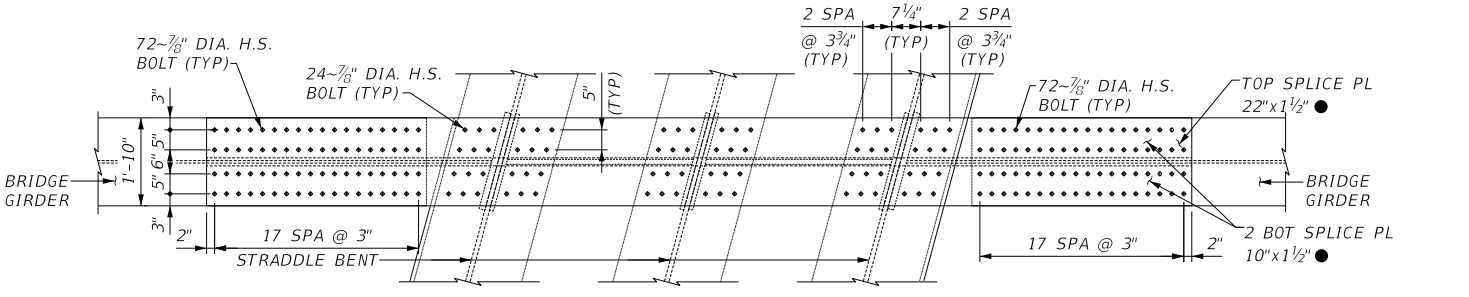
SHEET 2 OF 3

DN:	AR	CK:	JMV	DW:	KAH	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1596		

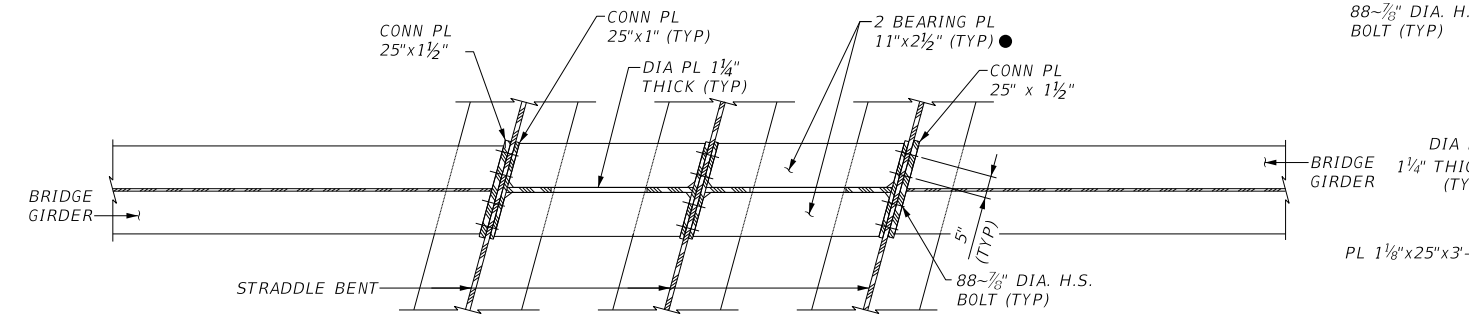
DATE: 20-FEB-2024 16:25
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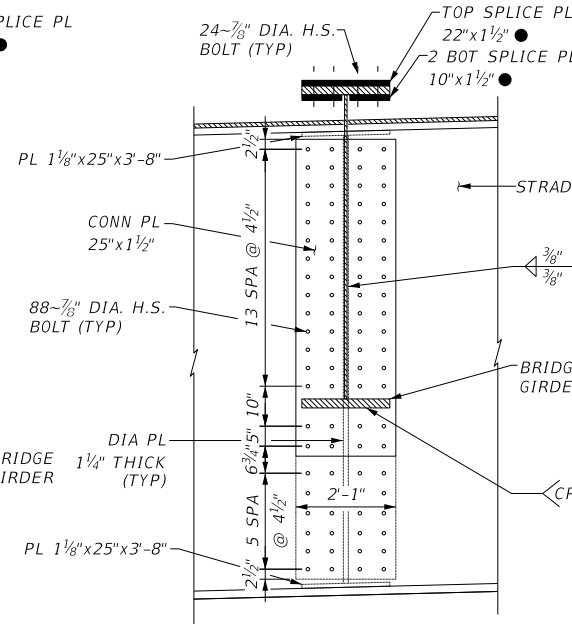
SUPERSTRUCTURE GIRDER AND STRADDLE CONNECTION



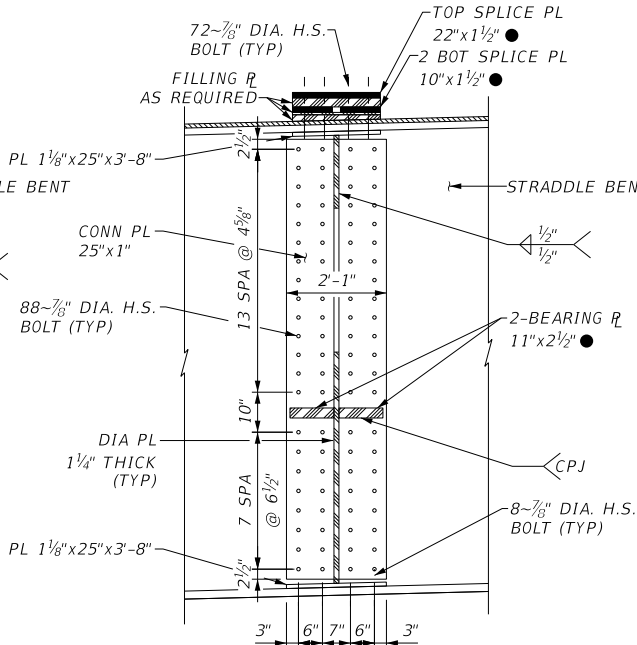
VIEW (A-A)



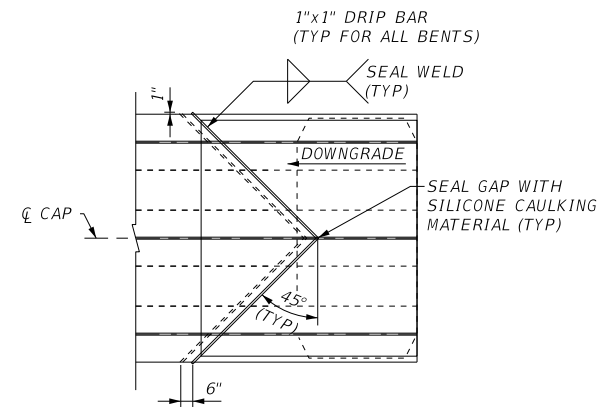
SECTION B-B



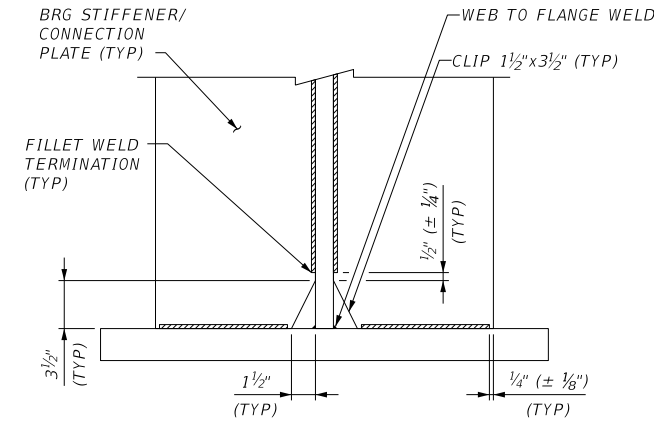
SECTION C-C



SECTION D-D



**DRIP BAR DETAIL
 SCALE: 1/8\"/>**



**WELD TERMINATION DETAIL
 SCALE: 1\"/>**

NOTE:
 DETAILS SHOWN FOR BOTTOM
 FLANGE, TOP FLANGE SIMILAR.

NOTES:
 ALL BOLTS SHALL BE 7/8\"/>

ALL SPLICE, BEARING AND CONNECTION PLATES SHALL CONFORM TO GRADE HPS 70W. FILL PLATES AND DIAPHRAGM SHALL CONFORM TO A709 GRADE 50W.

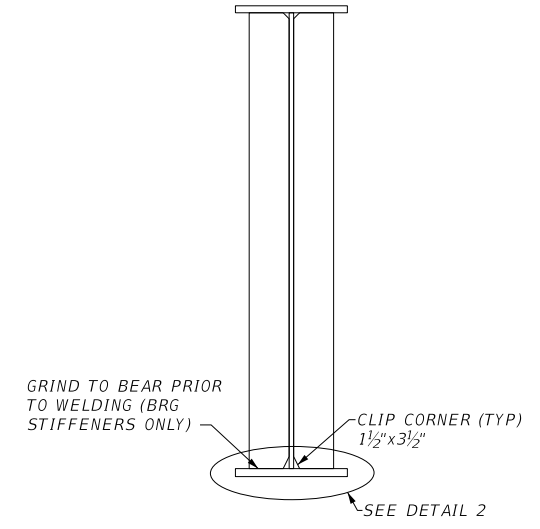
ALL SPLICE PLATES (NOT FILL PLATES) ARE CLASSIFIED AS TENSION COMPONENTS AND SHALL CONFORM TO ITEM 442, \"METAL FOR STRUCTURES\".

BOLTS SHALL BE INSTALLED WITH HEADS ON FASCIA SIDE OF OUTSIDE GIRDER WEBS. BOTTOM FLANGE SPLICE BOLTS SHALL BE INSTALLED WITH HEADS FACING DOWN.

PRECLUDE BOLT THREADS FROM THE SHEAR PLANES.

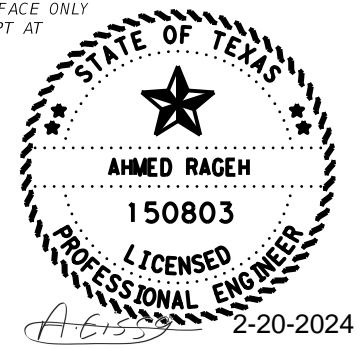
PROVIDE CLASS B SLIP COEFFICIENT FOR THE FAYING SURFACE OF BOLTED PARTS.

● - INDICATED PLATES SHALL BE ASTM A709, GRADE HPS70W. ALL OTHER STEEL TO BE ASTM A709, GRADE 50W.



JACKING STIFFENER

NOTE:
 CONNECTION PLATES SHALL BE
 PLACED ON BOTH SIDES OF INTERIOR
 GIRDERS AND ON INSIDE FACE ONLY
 OF FASCIA GIRDER (EXCEPT AT
 BEARING LOCATIONS).



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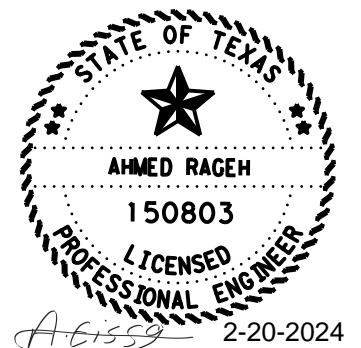
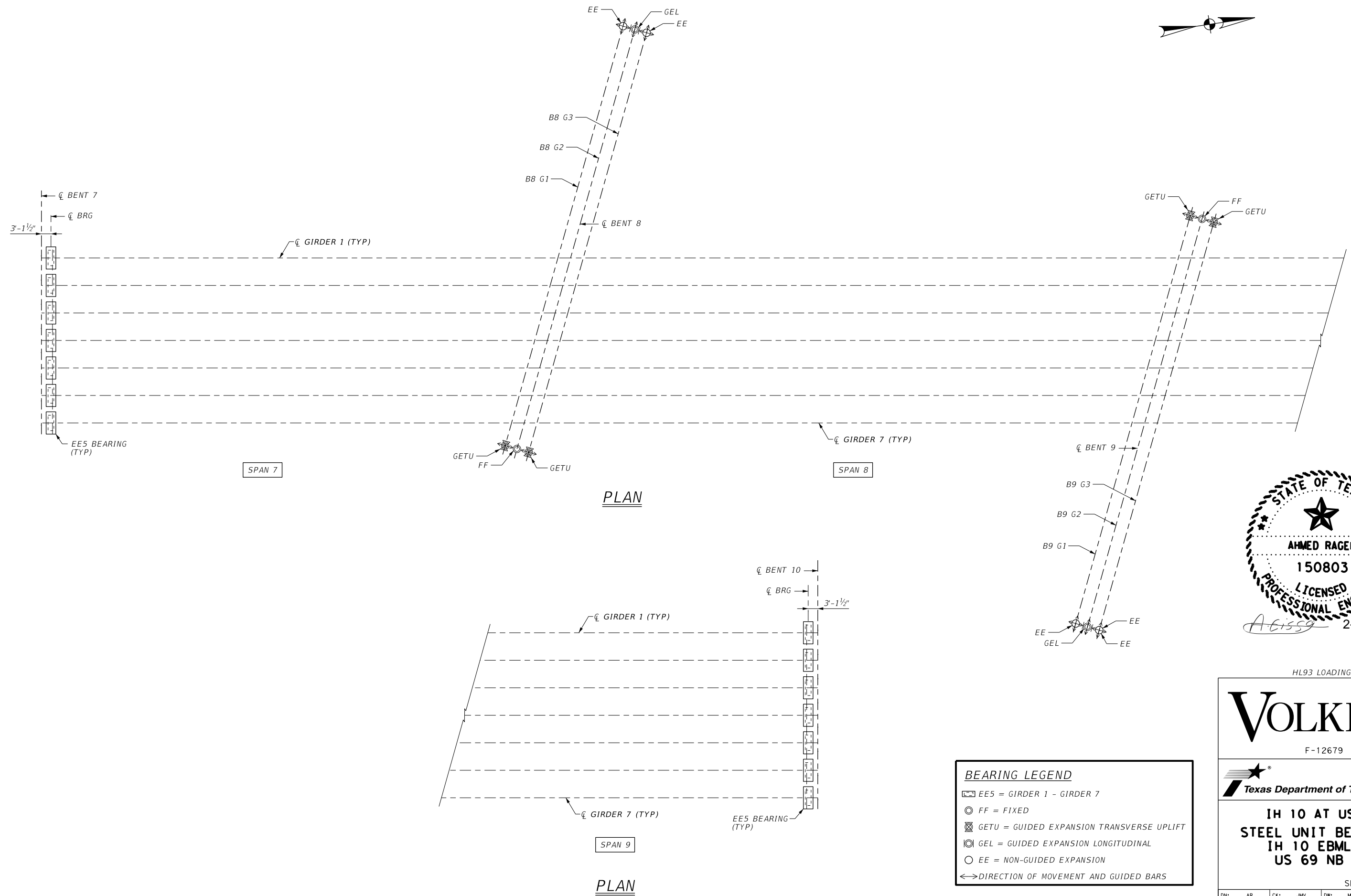
Texas Department of Transportation

**IH 10 AT US 69
 STRADDLE BENTS 8 & 9
 CAP SECTIONS AND DETAILS
 IH 10 EBML
 TO US 69 NB DC**

SHEET 3 OF 3

DW:	AR	CK:	JMV	DW:	KAH	CK:	FB
CONT:	0028	SECT:	13	JOB:	135	HIGHWAY:	IH 10
DIST:	BMT	COUNTY:	JEFFERSON	SHEET NO.:	1597		

DATE: 20-FEB-2024 16:19
 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design Eastex\4 - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1598_10ML_10E-69N_STL_UNIT_BRGS_01.dgn



BEARING LEGEND

- ☐ EE5 = GIRDER 1 - GIRDER 7
- ⊙ FF = FIXED
- ⊗ GETU = GUIDED EXPANSION TRANSVERSE UPLIFT
- ⊙ GEL = GUIDED EXPANSION LONGITUDINAL
- EE = NON-GUIDED EXPANSION
- ↔ DIRECTION OF MOVEMENT AND GUIDED BARS

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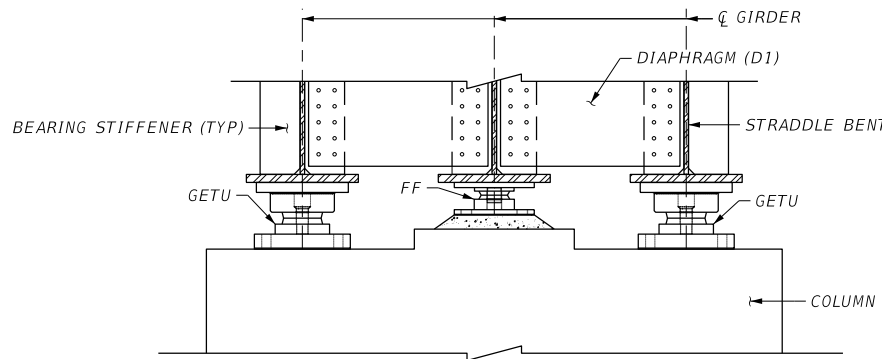
Texas Department of Transportation

IH 10 AT US 69 STEEL UNIT BEARINGS IH 10 EBML TO US 69 NB DC

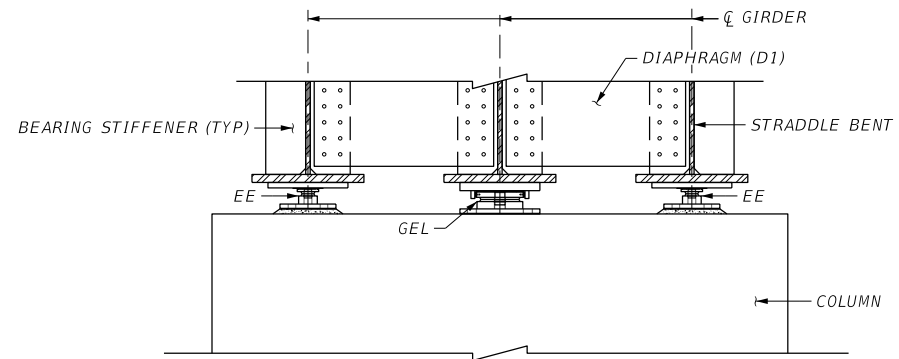
SHEET 1 OF 1

DN:	AR	CK:	JMV	DW:	MTM	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1598		

DATE: 20-FEB-2024 12:40
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STRADDLE BENT 8 EAST SIDE BEARINGS & STRADDLE BENT 9 WEST SIDE BEARINGS



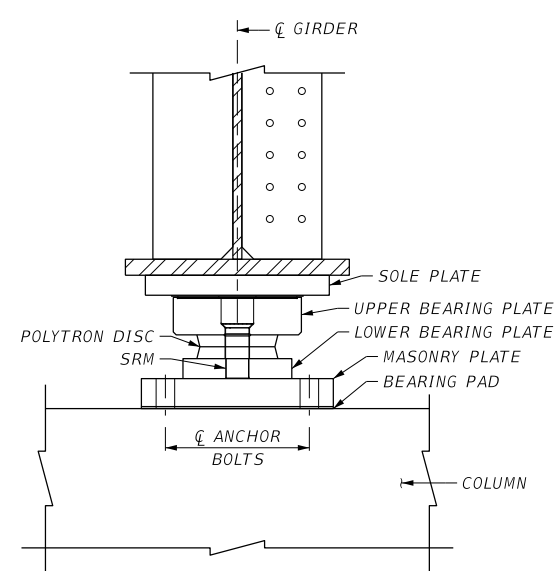
STRADDLE BENT 8 WEST SIDE BEARINGS & STRADDLE BENT 9 EAST SIDE BEARINGS

BEARING NOTES:

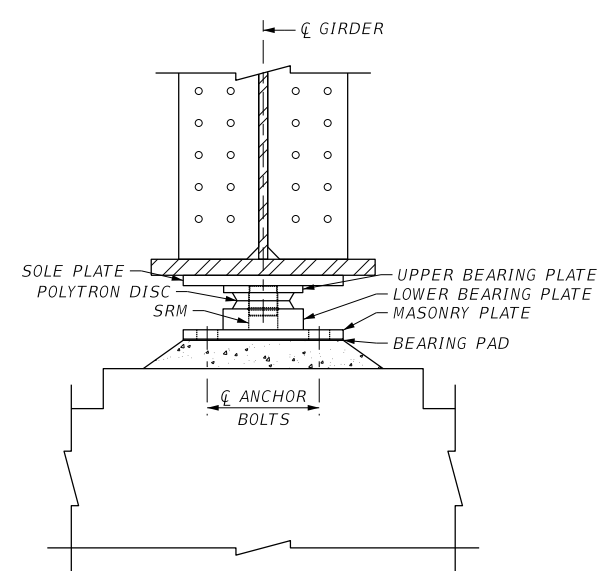
- THE CONTRACTOR SHALL SUPPLY HIGH LOAD MULTI-ROTATIONAL BEARINGS CONFORMING TO THE REQUIREMENTS OF THE SPECIFICATIONS AND SUBJECT TO THE FOLLOWING CONDITIONS:
1. BEARINGS SHALL BE SUPPLIED BY ONLY ONE MANUFACTURER AND SHALL BE CAPABLE OF TRANSMITTING THE LOADS AND MOVEMENTS SHOWN ON THESE PLANS.
 2. THE BEARING DESIGN SHALL CONFORM TO THE PROVISIONS OF THE LATEST EDITION OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
 3. ALL STEEL FOR THE BEARINGS, SOLE PLATES, BEARING PLATES AND MASONRY PLATES SHALL BE AASHTO M27, GRADE 50. AFTER FABRICATION, THE BEARING ASSEMBLY SHALL BE METALIZED, SEALED AND COVERED WITH A TOP COAT. SEE SPECIAL PROVISIONS.
 4. THE MASONRY PLATES, SOLE PLATES, SHIM PLATES AND BEARING PLATES SHALL BE FURNISHED BY THE BEARING MANUFACTURER. THE COST OF THESE PLATES SHALL BE INCLUDED IN THE COST OF THE BEARING.
 5. THE MASONRY PLATE SHALL BEAR DIRECTLY ON A PLAIN ELASTOMERIC PREFORMED PAD THAT RESTS DIRECTLY ON THE SUBSTRUCTURE. THE PAD SHALL MATCH THE SHAPE OF THE MASONRY PLATE AND SHALL BE INCLUDED IN THE COST OF THE BEARING.
 6. THE GROUT PAD BELOW THE MASONRY PLATE AT BENT NOS. 8 AND 9 SHALL BE NON-SHRINK GROUT. COST OF GROUT PAD TO BE INCLUDED IN THE COST OF THE BEARING.
 7. THE BEARING DIMENSIONS PROVIDED IN THE TABLE ARE THE MAXIMUM ALLOWABLE BEARING DIMENSIONS. THE GEOMETRY, BEARING SEAT ELEVATIONS, MASONRY PLATES AND SOLE PLATES SHOWN ON THESE PLANS ARE BASED ON THESE DIMENSIONS.
 8. ALL NECESSARY BEARING PAD ELEVATION ADJUSTMENTS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE SOLE PLATE AND MASONRY PLATE IF ANY ADJUSTMENTS ARE MADE TO THE BEARING DIMENSIONS AND THE DESIGN MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
 9. BEARING SHALL BE MARKED PRIOR TO SHIPPING. THE MARKS SHALL INCLUDE THE BEARING LOCATION ON THE BRIDGE AND A DIRECTION ARROW THAT POINTS UP-STATION. ALL MARKS SHALL BE PERMANENT AND BE VISIBLE AFTER THE BEARING IS INSTALLED.
 10. LOADS AND ROTATIONS SHOWN ARE FOR THE SERVICE LIMIT STATE.
 11. ROTATIONS SHOWN ARE FOR LIVE LOAD AND UNCERTAINTIES. DEAD LOAD ROTATIONS ARE ACCOMODATED BY GIRDER CAMBER. ROTATIONS DUE TO GRADE ARE ACCOMODATED BY BEVELED SOLE PLATES. AN ADDITIONAL 0.005 RADIAN FOR CONSTRUCTION TOLERANCES SHALL BE INCLUDED IN THE DESIGN OF THE BEARINGS.
 12. HORIZONTAL FORCES ARE FOR LOADS APPLIED TO EACH SPAN. THE BEARINGS SHALL BE DESIGNED FOR THE GREATER OF THE HORIZONTAL FORCES OR 25% OF THE DESIGN VERTICAL LOAD AT THE SERVICE LIMIT STATE.
 13. ATTACHMENT OF THE SOLE PLATE TO BOTTOM FLANGE, SOLE PLATE TO BEARING AND BEARING TO MASONRY OR BEARING PLATE SHALL BE PER MANUFACTURES DESIGN.

ANCHOR ROD NOTES:

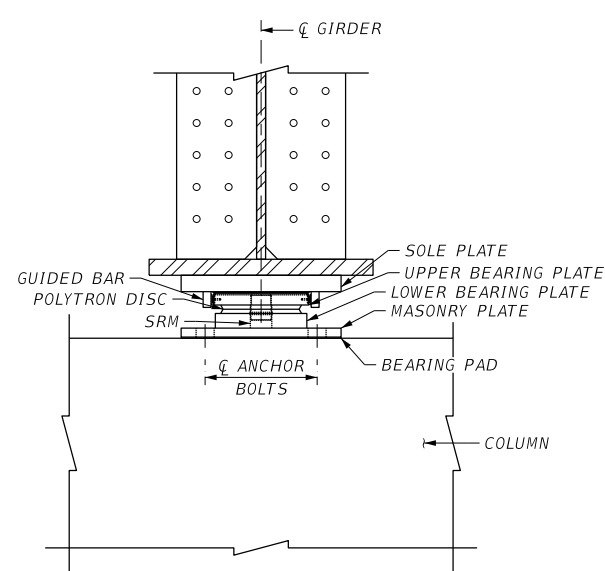
1. ANCHOR RODS SHALL EITHER BE CAST MONOLITHIC WITH THE SUBSTRUCTURE USING TEMPLATES OR ANCHOR ROD FORMS SHALL BE USED. DRILLING HOLES FOR ANCHOR RODS WILL NOT BE PERMITTED. SEE "ANCHOR ROD FORM" DETAIL.
2. ANCHOR RODS SHALL BE ASTM F1554 GRADE 105, SWEDGED OR THREADED. ANCHOR RODS, NUTS AND WASHERS SHALL BE MECHANICALLY GALVANIZED.
3. THE COST OF FINISHING AND INSTALLING ANCHOR ROD FORMS SHALL BE INCLUDED IN THE COST OF CONCRETE AT APPLICABLE SUBSTRUCTURE LOCATION.



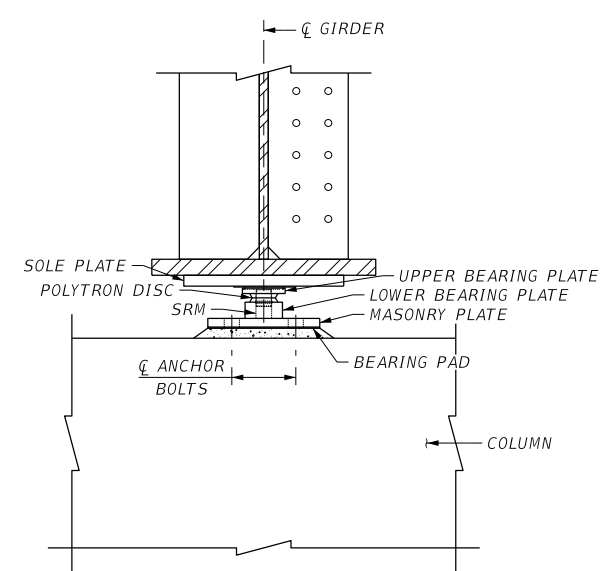
GUIDED EXPANSION TRANSVERSE & UPLIFT (GETU)



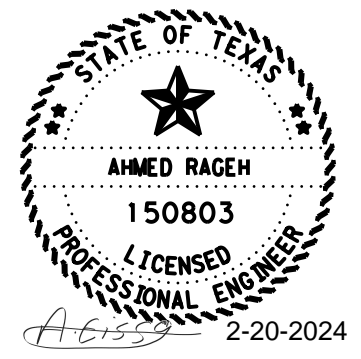
FIXED BEARING (FF)



GUIDED EXPANSION LONGITUDINAL (GEL)



NON-GUIDED EXPANSION (EE)



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IH 10 AT US 69 STRADDLE BENTS 8 & 9 BEARING DETAILS IH 10 EBML TO US 69 NB DC

SHEET 1 OF 2

DN:	AR	CK:	JMV	DW:	KAH	CK:	FB
CONT	0028	SECT	13	JOB	135	HIGHWAY	IH 10
DIST	BMT	COUNTY	JEFFERSON	SHEET NO.	1599		

DATE: 20-FEB-2024 21:51 FILE: Projects\1074500 - BMT 10 69 Interchanges\4C - Design\Plan Set\7. Bridge\Bridg R (Ih 10 EB to US 69 NB DC)\1600_10M_10E-69N_STL_UNIT_BRGS_03.dgn

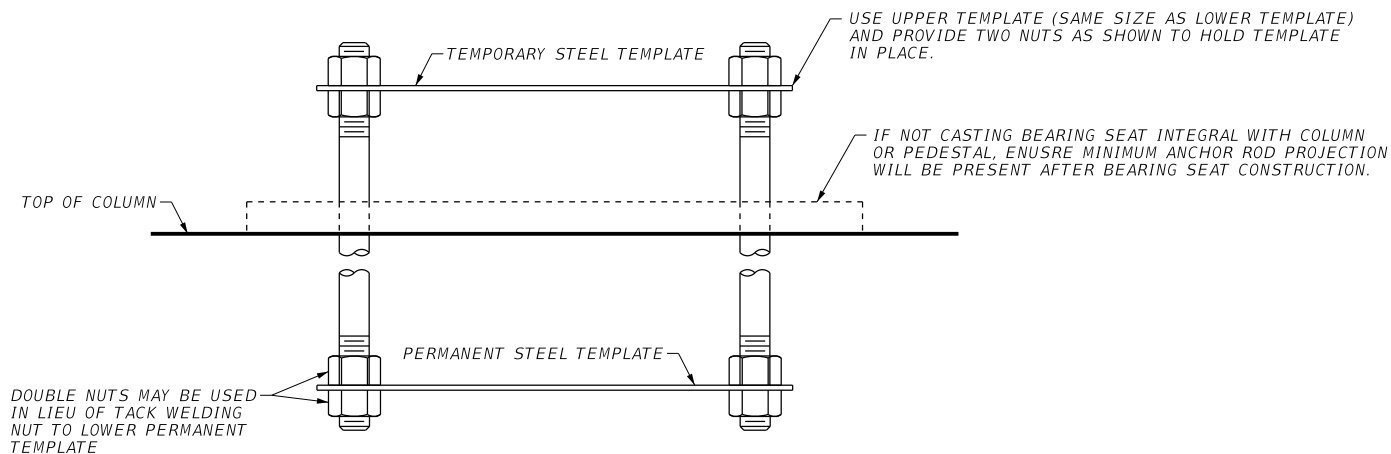
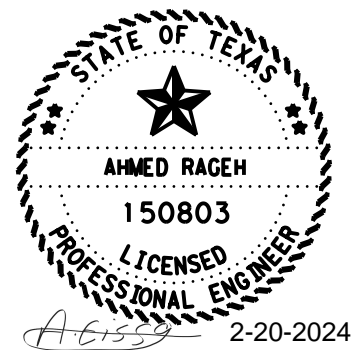
HIGH LOAD MULTI-ROTATIONAL (HLMR) DISC BEARING DESIGN DATA

BENT #	GIRDER	LOCATION	SERVICE LOAD (KIPS)			SERVICE ROTATIONS ABOUT AXIS (RADIAN)		STRENGTH LOAD (KIPS)			STRENGTH ROTATIONS ABOUT AXIS (RADIAN)		BEARING TYPE	SERVICE LONGITUDINAL MOVEMENT		STRENGTH LONGITUDINAL MOVEMENT	
			VERTICAL LOADS	LONGITUDINAL LOAD F _x	TRANSVERSE LOAD F _z	θ _z	θ _x	VERTICAL LOADS	LONGITUDINAL LOAD F _x	TRANSVERSE LOAD F _z	θ _z	θ _x		MAXIMUM MOVEMENT (IN)	PER 10°	MAXIMUM MOVEMENT (IN)	PER 10°
BENT 8	B8 G1	EAST	1498	53	0	0.00118	0.00385	1913	76	0	0.01500	0.00458	GETU	0.00	0.00	0.00	0.00
		WEST	389	0	0	0.01025	0.00865	494	0	0	0.01300	0.01117	EE	1.89	1.55	2.31	1.97
	B8 G2	EAST	915	54	193	0.01136	0.00121	1163	85	297	0.01440	0.00149	FF	0.00	0.00	0.00	0.00
		WEST	382	0	2	0.00993	0.00013	486	0	8	0.01262	0.00019	GEL	1.82	1.49	2.23	1.89
	B8 G3	EAST	1180	48	0	0.01100	0.00331	1509	99	0	0.01395	0.00476	GETU	0.00	0.00	0.00	0.00
		WEST	383	0	0	0.00993	0.00802	488	0	0	0.01261	0.01197	EE	1.79	1.46	2.18	1.85
BENT 9	B9 G1	EAST	423	0	0	0.01006	0.01230	539	0	0	0.01277	0.01397	EE	1.67	1.42	2.30	2.05
		WEST	1030	48	0	0.01086	0.00701	1312	65	0	0.01377	0.00970	GETU	0.00	0.00	0.00	0.00
	B9 G2	EAST	421	0	3	0.01005	0.00014	536	0	8	0.01275	0.00018	GEL	1.71	1.46	2.33	2.09
		WEST	876	46	165	0.01125	0.00117	1113	62	198	0.01424	0.00153	FF	0.00	0.00	0.00	0.00
	B9 G3	EAST	430	0	0	0.01039	0.01121	547	0	0	0.01318	0.01515	EE	1.79	1.54	2.41	2.17
		WEST	1314	38	0	0.01170	0.00780	1671	73	0	0.01482	0.01072	GETU	0.00	0.00	0.00	0.00

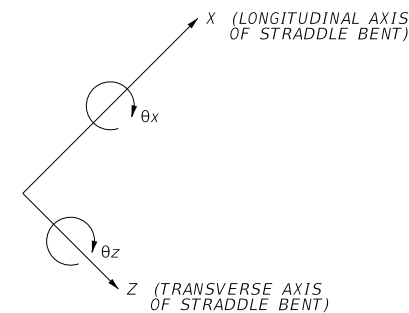
- ① ASSUMES A MINIMUM TEMPERATURE OF 0°F AND A MAXIMUM TEMPERATURE OF 120°F AND 30 YEARS OF CREEP EFFECTS. STRUCTURAL ANALYSIS COMPLETED UNDER +50°F AND -70°F WITH AN ASSUMED AVERAGE TEMPERATURE OF +70°F.
- ② LOADS, ROTATIONS AND MOVEMENTS OBTAINED UNDER LOAD COMBINATIONS SERVICE II, STRENGTH I, STRENGTH III AND STRENGTH V.
- ③ LONGITUDINAL MOVEMENTS AT 10°F OBTAINED UNDER SERVICE AND STRENGTH LOAD COMBINATIONS WITH +10°F AND -10°F APPLIED TO SUPERSTRUCTURE AND SUBSTRUCTURE.

GENERAL NOTES:

1. COLUMN PLATES, DISC BEARINGS, TEMPLATE, BEVELED SOLE PLATE AND ARCH PLATE SHALL MEET THE REQUIREMENTS OF ASTM A709 GRADE 50.
2. DIMENSIONS SHOWN ARE BASED ON RJ WATSON DISKTRON SYSTEM. EQUIVALENT DISC BEARING SYSTEMS ARE ALLOWED WITH APPROVAL BY THE ENGINEER. ALTERNATE DESIGN SHOULD PERMIT REPAIR AND REPLACEMENT WITH MINIMUM OF JACKING.
3. THE ENTIRE BEARING ASSEMBLY, INCLUDING FABRIC PAD, COLUMN PLATE, ANCHOR RODS, ANCHOR ROD RESTRAINERS AND ANCHOR ROD TEMPLATE SHALL BE SUPPLIED BY THE BEARING FABRICATOR. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO COLUMN CONSTRUCTION.
4. ALL ITEMS REQUIRED FOR COMPLETE INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO THE ITEM "HIGH LOAD MULTIROTATIONAL (HLMR) BEARINGS". THESE INCIDENTALS INCLUDE FURNISHING AND INSTALLING DISC BEARINGS, COLUMN PLATES, BEVELED SOLE PLATES, ANCHOR RODS, ANCHOR ROD TEMPLATES, ANCHOR ROD RESTRAINERS, FABRIC PADS, PROTECTION SYSTEM III PAINT FOR ALL PLATES, BEARINGS, ETC.
5. CARE SHALL BE TAKEN DURING WELDING OF THE BEARING ASSEMBLY TO PREVENT DAMAGE TO THE PTFE. SUBSEQUENT WELD PROCESS SHALL BE MADE ONLY AFTER ALL SIDES HAVE RECEIVED A WELD PASS.
6. SEE BENT DETAILS FOR ADDITIONAL DETAILS AND NOTES.



ANCHOR ROD SETTING DETAIL
(VERIFY AND CORRECT, IF NECESSARY, ANCHOR ROD LOCATION IMMEDIATELY AFTER CONCRETE PLACEMENT, BEFORE INITIAL SET.)



KEY FOR BEARING DESIGN DATA

HL93 LOADING

VOLKERT

F-12679

Texas Department of Transportation

**IH 10 AT US 69
STRADDLE BENTS 8 & 9
BEARING DETAILS
IH 10 EBML TO
US 69 NB DC**

SHEET 2 OF 2

DN:	AR	CK:	JMV	DW:	KAH	CK:	FB
CONT	SECT	JOB		HIGHWAY			
0028	13	135		IH 10			
DIST		COUNTY			SHEET NO.		
BMT		JEFFERSON			1600		

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IH 10 AT US 69
 IH 10 EBML
 TO US 69 NB DC
 (SPANS 1-32)

STRUCTURE	PHASING	DESIGNED GIRDERS								DEPRESSED STRAND PATTERN		CONCRETE		OPTIONAL DESIGN				LOAD RATING FACTORS			
		SPAN NO.	GIRDER NO.	GIRDER TYPE	PRESTRESSING STRANDS					NO.	TO END (in)	RELEASE STRGTH (ksi)	MINIMUM 28 DAY COMP STRGTH (ksi)	DESIGN LOAD COMP STRESS (TOP ζ) (SERVICE I) fct(ksi)	DESIGN LOAD TENSILE STRESS (BOTTL ζ) (SERVICE III) fcb(ksi)	REQUIRED MINIMUM ULTIMATE MOMENT CAPACITY (STRENGTH I) (kip-ft)	LIVE LOAD DISTRIBUTION FACTOR		STRENGTH I		SERVICE III
					NON-STD STRAND PATTERN	TOTAL NO.	SIZE (in)	STRGTH fpu (ksi)	"e" ζ (in)								"e" END (in)	Moment	Shear	Inv	Opr
	Phase 2 Step 1	1	1-4	Tx54	28	0.6	270	20.01	13.44	4	50.5	6.000	7.500	3.403	-3.272	6470	0.636	0.731	1.36	1.76	1.10
	Phase 1 Step 3	1	5-9	Tx54	24	0.6	270	20.17	18.17	4	16.5	6.000	7.500	3.023	-2.835	5499	0.571	0.707	1.41	1.83	1.24
	Phase 2 Step 1	2	1-4	Tx54	28	0.6	270	20.01	14.29	4	44.5	6.000	7.500	3.346	-3.182	6182	0.586	0.731	1.48	1.92	1.20
	Phase 1 Step 3	2	5-9	Tx54	28	0.6	270	20.01	14.29	4	44.5	6.000	7.500	3.262	-3.078	5919	0.566	0.707	1.58	2.05	1.34
		3	1-8	Tx54	34	0.6	270	19.48	11.71	6	50.5	4.500	5.500	3.354	-3.257	6408	0.615	0.774	1.85	2.40	1.31
		4	1-8	Tx54	34	0.6	270	19.48	11.71	6	50.5	4.500	5.500	3.354	-3.257	6408	0.615	0.774	1.85	2.40	1.31
		5	1-8	Tx54	34	0.6	270	19.48	11.71	6	50.5	4.500	5.500	3.369	-3.269	6424	0.615	0.774	1.85	2.39	1.30
		6	1-8	Tx54	34	0.6	270	19.48	11.71	6	50.5	4.500	5.500	3.384	-3.300	6512	0.630	0.792	1.42	1.88	1.26
		10	1-8	Tx54	40	0.6	270	19.11	13.71	6	42.5	5.800	6.500	3.825	-3.677	7149	0.631	0.794	1.45	1.92	1.43
	Phase 1 Step 4	11	1-8	Tx54	38	0.6	270	19.22	12.27	6	50.5	5.000	5.900	3.511	-3.387	6618	0.617	0.774	2.02	2.64	1.49
		12	1-8	Tx54	38	0.6	270	19.22	12.27	6	50.5	5.000	5.900	3.706	-3.562	6922	0.613	0.774	1.91	2.48	1.32
	Phase 1 Step 3	13	1-8	Tx54	32	0.6	270	19.63	11.38	6	50.5	4.100	5.000	2.937	-2.883	5740	0.629	0.774	1.99	2.58	1.51
		14	1-8	Tx54	32	0.6	270	19.63	11.38	6	50.5	4.100	5.000	2.937	-2.883	5740	0.629	0.774	1.99	2.58	1.51
		15	1-8	Tx54	46	0.6	270	18.66	11.36	8	50.5	5.800	6.700	4.504	-4.370	8645	0.699	0.774	1.70	2.20	1.10
		16	1-8	Tx54	46	0.6	270	18.66	11.36	8	50.5	5.800	6.700	4.503	-4.369	8644	0.699	0.774	1.70	2.20	1.10
		17	1-8	Tx54	34	0.6	270	19.48	11.71	6	50.5	4.400	5.000	3.161	-3.084	6089	0.623	0.774	1.99	2.57	1.45
		18	1	Tx54	22	0.6	270	20.28	18.46	4	14.5	4.000	5.000	2.589	-2.490	4937	0.572	0.734	1.44	1.87	1.21
		18	2	Tx54	24	0.6	270	20.17	18.17	4	16.5	4.000	5.000	2.838	-2.732	5359	0.566	0.735	1.47	1.91	1.11
		18	3	Tx54	26	0.6	270	20.08	16.39	4	28.5	4.000	5.000	3.063	-2.934	5711	0.560	0.704	1.51	1.95	1.06
		18	4	Tx54	28	0.6	270	20.01	14.29	4	44.5	4.000	5.000	3.255	-3.034	5858	0.555	0.704	1.60	2.08	1.11
		18	5	Tx54	30	0.6	270	19.81	13.01	6	40.5	4.100	5.100	3.504	-3.248	6222	0.550	0.704	1.61	2.09	1.04
	18	6	Tx54	34	0.6	270	19.48	11.71	6	50.5	4.400	5.500	3.775	-3.476	6608	0.546	0.704	1.74	2.26	1.12	
	18	7	Tx54	38	0.6	270	19.22	12.27	6	50.5	5.000	6.000	4.104	-3.841	7263	0.543	0.704	1.77	2.30	1.11	
	18	8	Tx54	40	0.6	270	19.11	12.51	6	50.5	5.300	6.600	4.415	-4.104	7700	0.540	0.704	1.74	2.26	1.05	
	18	9	Tx54	50	0.6	270	18.37	12.61	8	44.5	6.600	7.700	4.961	-4.690	9105	0.667	0.704	1.69	2.19	1.14	
	19	1	Tx54	30	0.6	270	19.81	17.81	6	16.5	6.000	8.500	3.576	-3.382	6584	0.597	0.848	1.47	1.90	1.18	
	19	2-8	Tx54	32	0.6	270	19.63	17.38	6	18.5	6.000	8.500	3.762	-3.568	6879	0.597	0.849	1.54	2.00	1.15	
	20	1-8	Tx62	48	0.6	270	23.28	15.28	8	56.5	5.900	6.800	4.031	-4.042	9574	0.641	0.805	1.30	1.75	1.40	
	Phase 1 Step 4	21	1-8	Tx62	40	0.6	270	23.88	16.08	6	58.5	6.000	8.000	3.984	-3.996	9432	0.606	0.774	1.64	2.12	1.11
		22	1-8	Tx54	34	0.6	270	19.48	12.77	6	44.5	4.600	5.400	2.676	-2.641	5797	0.635	0.774	1.70	2.25	2.01
		23	1-8	Tx54	34	0.6	270	19.48	12.77	6	44.5	5.000	5.800	2.686	-2.645	5917	0.637	0.774	2.36	3.06	2.08
		24	1-8	Tx54	34	0.6	270	19.48	12.77	6	44.5	5.000	5.800	2.941	-2.880	5884	0.631	0.777	2.15	2.78	1.79
Phase 1 Step 3	25	1-8	Tx54	38	0.6	270	19.22	13.22	6	44.5	5.500	6.000	3.730	-3.640	7174	0.659	0.831	1.82	2.37	1.29	
	26	1-9	Tx54	38	0.6	270	19.22	12.27	6	50.5	5.000	5.800	3.768	-3.682	7254	0.665	0.839	1.77	2.34	1.18	
	27	1-10	Tx54	42	0.6	270	19.01	12.72	6	50.5	6.000	7.000	4.424	-4.238	8186	0.634	0.815	1.69	2.23	1.09	
Phase 2 Step 1	28	1-3	Tx54	46	0.6	270	18.66	11.36	8	50.5	5.800	7.000	4.405	-4.270	8330	0.679	0.868	1.63	2.20	1.19	
Phase 1 Step 3	28	4-10	Tx54	40	0.6	270	19.11	12.51	6	50.5	6.000	7.000	4.248	-4.099	7957	0.662	0.846	1.66	2.17	1.09	
Phase 2 Step 1	29	1-6	Tx54	34	0.6	270	19.48	11.71	6	50.5	5.000	5.800	3.101	-3.084	6210	0.692	0.848	1.93	2.50	1.52	
Phase 1 Step 3	29	7-13	Tx54	34	0.6	270	19.48	11.71	6	50.5	5.000	5.800	3.045	-3.045	6147	0.696	0.851	1.93	2.51	1.57	
Phase 2 Step 1	30	1-5	Tx54	46	0.6	270	18.66	11.36	8	50.5	5.800	7.100	4.685	-4.504	8701	0.667	0.858	1.56	2.11	1.02	
Phase 1 Step 3	30	6-7	Tx54	46	0.6	270	18.66	11.36	8	50.5	6.000	8.500	4.610	-4.440	8606	0.671	0.859	1.68	2.26	1.13	
	30	8-11	Tx54	48	0.6	270	18.51	11.51	8	50.5	6.000	8.500	4.662	-4.653	9040	0.672	0.859	1.61	2.17	1.05	
Phase 2 Step 1	30	12	Tx54	46	0.6	270	18.66	11.36	8	50.5	6.000	8.500	4.337	-4.156	8156	0.673	0.859	1.74	2.35	1.33	
Phase 1 Step 3	31	1-5	Tx54	46	0.6	270	18.66	11.36	8	50.5	6.000	8.500	4.376	-4.131	7907	0.601	0.773	1.92	2.58	1.40	
	31	6-7	Tx54	46	0.6	270	18.66	11.36	8	50.5	6.000	8.500	4.642	-4.480	8698	0.680	0.870	1.65	2.22	1.09	
	31	8-10	Tx54	48	0.6	270	18.51	11.51	8	50.5	6.000	8.500	4.692	-4.692	9130	0.681	0.870	1.58	2.13	1.02	
Phase 2 Step 1	31	11-12	Tx54	46	0.6	270	18.66	11.36	8	50.5	6.000	8.500	4.580	-4.409	8567	0.682	0.870	1.67	2.25	1.14	
Phase 2 Step 1	32	1-4	Tx54	46	0.6	270	18.66	11.36	8	50.5	5.800	7.000	4.606	-4.417	8520	0.682	0.870	1.61	2.17	1.09	
Phase 1 Step 3	32	5-8	Tx54	46	0.6	270	18.66	11.36	8	50.5	5.800	7.000	4.617	-4.497	8704	0.664	0.853	1.57	2.11	1.02	

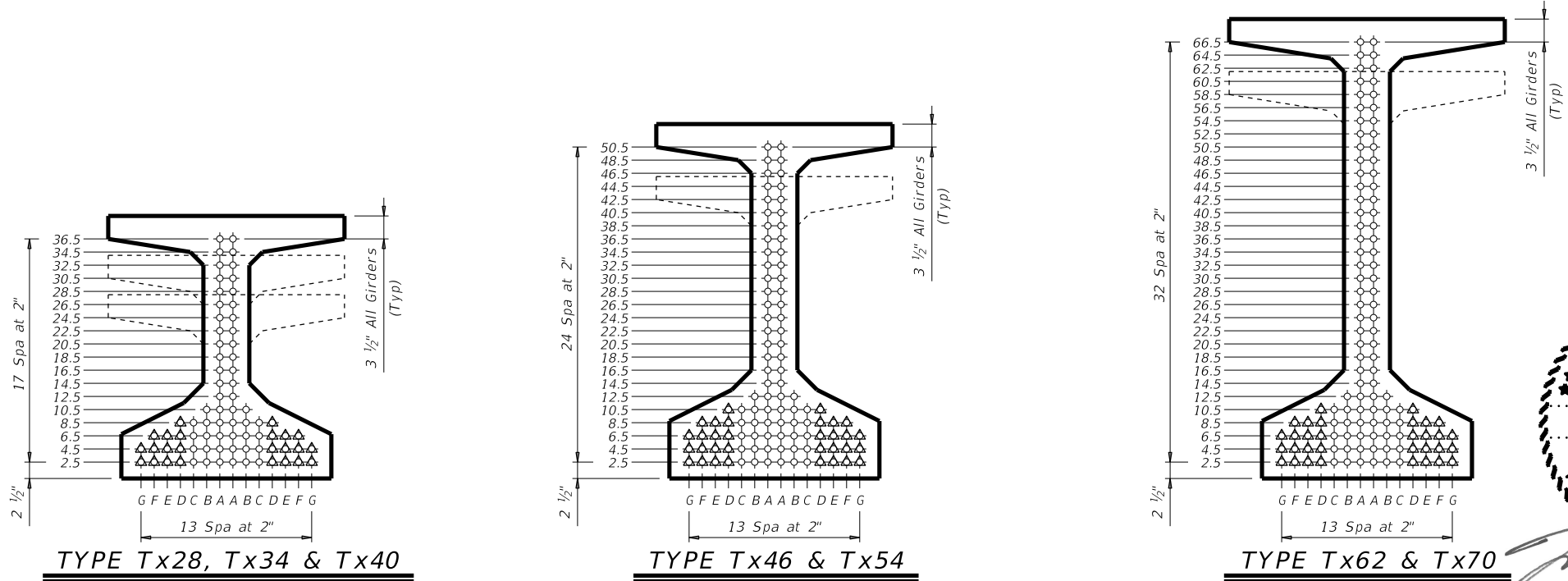
- ① Based on the following allowable stresses (ksi):
 Compression = 0.65 f'ci
 Tension = 0.24 $\sqrt{f'ci}$
 Optional designs must likewise conform.
- ② Portion of full HL93.

DESIGN NOTES:
 Designed according to AASHTO LRFD Bridge Design Specifications. Optional designs for girders 120 feet or longer must have a calculated residual camber equal to or greater than that of the designed girder. Prestress losses for the designed girders have been calculated for a relative humidity of 60 percent. Optional designs must likewise conform.

FABRICATION NOTES:
 Provide Class H concrete. Provide Grade 60 reinforcing steel bars. Use low relaxation strands, each pretensioned to 75 percent of fpu. Strand debonding must comply with Item 424.4.2.2.4. Full-length debonded strands are only permitted in positions marked Δ . Double wrap full-length debonded strands in outer most position of each row.

When shown on this sheet, the Fabricator has the option of furnishing either the designed girder or an approved optional design. All optional design submittals must be signed, sealed and dated by a Professional Engineer registered in the State of Texas. Seal cracks in girder ends exceeding 0.005" in width as directed by the Engineer. The fabricator is permitted to decrease the spacing of Bars R and S by providing additional bars to help limit crack width provided the decreased spacing results in no less than 1" clear between bars. The fabricator must take an approved corrective action if cracks greater than 0.005" form on a repetitive basis.

DEPRESSED STRAND DESIGNS:
 Locate strands for the designed girder as low as possible on the 2" grid system unless a non-standard strand pattern is indicated. Fill row "2.5", then row "4.5", then row "6.5", etc., beginning each row in the "A" position and working outward until the required number of strands is reached. All strands in the "A" position must be depressed, maintaining the 2" spacing so that, at the girder ends, the upper two strands are in the position shown in the table.



STATE OF TEXAS
 FEIFEI BAI
 120727
 LICENSED PROFESSIONAL ENGINEER
 2-20-24

Texas Department of Transportation
 Bridge Division Standard
PRESTRESSED CONCRETE I-GIRDER DESIGNS (NON-STANDARD SPANS)
 IH 10 EBML TO US 69 NB DC
IGND SHEET 1 OF 1
 FILE: 1601_10ML_10E-69N_IGNDST_01.dgn; ZZ; ck: FB; dw: KAH; ck: ZZ
 ©TxDOT August 2017
 REVISIONS: 0028 13 135 IH 10
 10-19: Modified for depressed strands only.
 DIST: COUNTY SHEET NO.
 BMT JEFFERSON 1601