INDEX OF SHEETS

SHEET NO.	DESCRIPTION
SEE SHEET 2 FOR INDEX OF SHEETS	

CAUTION!!

CONTRACTOR TO FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES & REPORT ANY DISCREPANCIES OR CONFLICTS TO ENGINEER PRIOR TO ANY INSTALLATIONS. HUITT-ZOLLARS IS NOT RESPONSIBLE FOR KNOWING EXACT LOCATIONS (HORIZONTALLY AND VERTICALLY) OF ALL UNDERGROUND BURIED UTILITIES IN THE PROJECT AREA.

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

DESIGN SPEED = 30 MPH
AREA OF DISTURBED SOIL = VARIES
ADT: = N/A

FED.RD. DIV.NO.	FEDERAL AID PROJECT		SHEET NO.
5	F 2022(720)		1
STATE	STATE DIST.	COUNTY	
TEXAS	HOU	HARRIS	
CONT.	SECT.	JOB	HIGHWAY NO.
0912	72	390	VARIOUS

PLANS OF PROPOSED
STATE HIGHWAY IMPROVEMENT
PROJECT NO. F 2022(720)
CSJ 0912-72-390
DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

PROJECT LENGTH = 7115 LF = 1.347 MI
BRIDGE = 0 MI

HARRIS COUNTY

LIMITS: AT VARIOUS LOCATIONS IN SOUTHEAST DOWNTOWN HOUSTON

FOR CONSTRUCTION OF SIDEWALKS, ADA RAMPS
CONSISTING OF GRADING BASE, PAVEMENT AND LANDSCAPE

"TDLR INSPECTION REQUIRED"
"TDLR NO. EABPRJA_____"

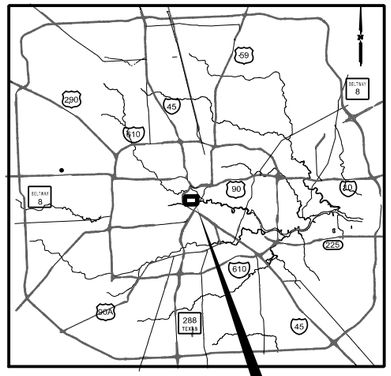
FINAL PLANS

CONTRACTOR:_____
DATE CONTRACTOR BEGAN WORK:_____
DATE WORK WAS COMPLETED:_____
DATE WORK WAS ACCEPTED:_____
TOTAL DAYS CHARGED:_____
ORGINAL CONTRACT AMOUNT:_____
AMOUNT OF CONTRACT AMENDMENTS:_____
FINAL CONTRACT COST:_____
LETTING DATE:_____

_____ 20 _____

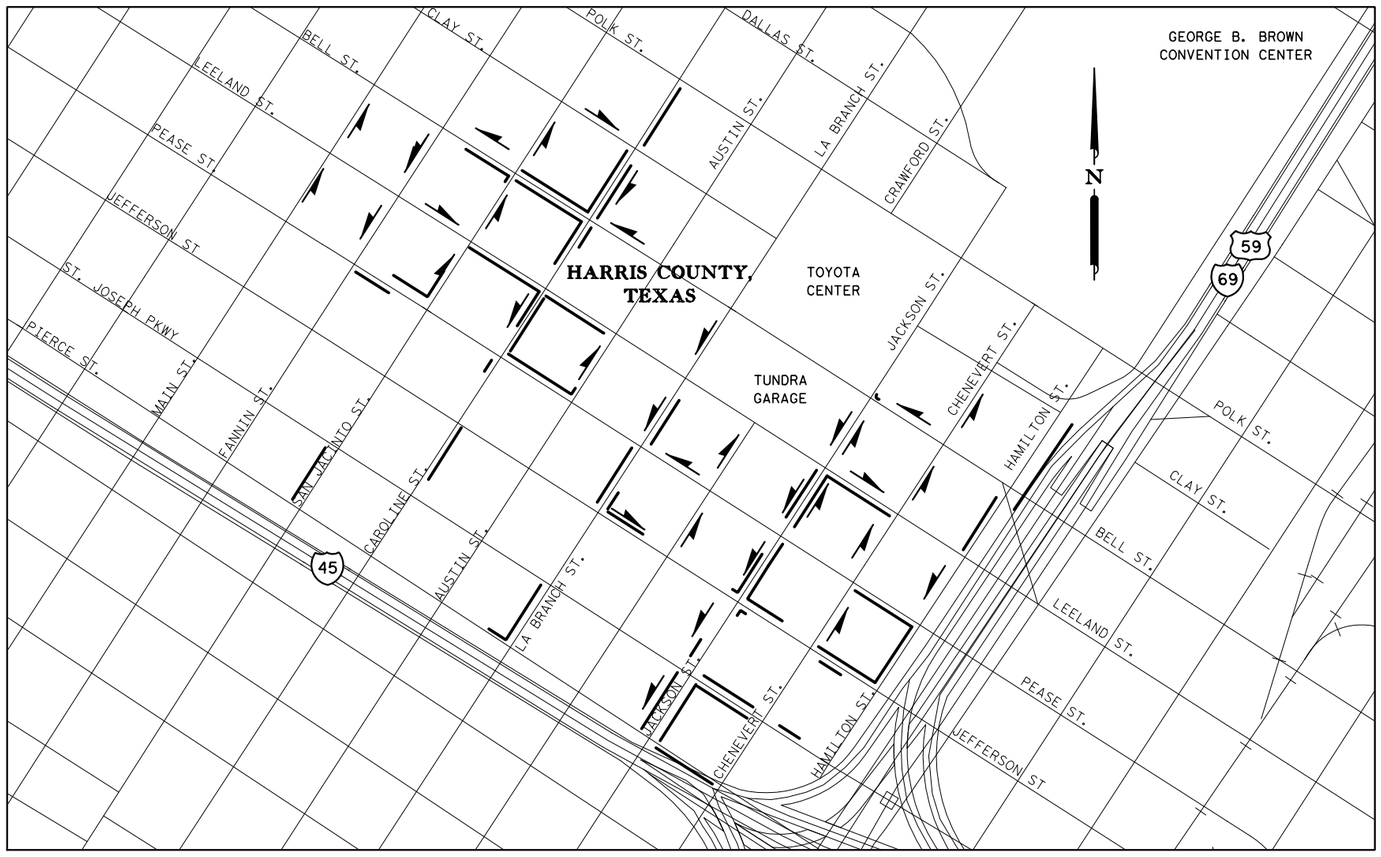
_____
AREA ENGINEER

downtown district
1221 MCKINNEY ST, SUITE 4250
HOUSTON, TX 77010
PHONE 713.650.3022
DOWNTOWNDISTRICT.ORG



VICINITY MAP

PROJECT LOCATION



LOCATION MAP
SCALE: NTS

EXCEPTIONS: NONE
EQUATIONS: NONE
RR X-ING'S: NONE

THE CONTRACTOR SHALL PROVIDE AMD ERRECT BARRICADES AND CONSTRUCTION SIGNS IN ACCORDANCE WITH BC(1-12)21 AND THE "TEXAS MANUAL ON UNIFORRM TRAFFIC CONTROL DEVICES AT POINTS AS SHOWN ON THE PLAN SHEETS AND AS DIRECTED BY THE ENGINEER.

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 ALL FEDERAL-AID CONSTRUCTION CONTRACTS (FORM FHWA 1273, JULY, 2022).

SURVEY NOTES:

ALL COORDINATES SHOWN ARE BASED ON THE TEXAS STATE PLAIN COORDINATE SYSTEM, SOUTH GENERAL ZONE AND WERE OBSERVED UTILITY THE TXDOT/VRS NETWORK.

ALL COORDINATE SHOWN (NAD83) ARE SURFACE COORDINATES AND CAN BE CONVERTED TO GRID BY APPLYING A SCALE FACTOR OF 1.00013.

ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

ALL DISTANCE ARE IN U.S SURVEY FEET AND DISPLAYED WITH SURFACE VALUES.

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042
Phone (281) 496-0066 Fax (281) 496-0220

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

SUBMITTED FOR LETTING 3/2/2023
Xiaofang Huang
PROJECT MANAGER

APPROVED FOR LETTING 3/2/2023
Docusigned by: Larry W. Blackburn P.E.
B992A69E03E42E...
FOR DISTRICT ENGINEER

I:\R300342.01-SE SIDEWALKS\V4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*COV01.dgn
3/1/2023 $USER$
FILE LOCATION AND NAME

LEVELS DISPLAYED
1

COUNTY HARRIS PROJ. NO. F 2022(720)
HWY. NO. VAR. LETTING DATE 5/4/23
DATE ACCEPTED

INDEX OF SHEETS

SHEET NO. GENERAL INFORMATION

SHEET NO. TRAFFIC CONTROL DETAILS

SHEET NO. TRAFFIC CONTROL STANDARDS

SHEET NO. REMOVAL SHEETS

SHEET NO. SIDEWALK PLANS

SHEET NO. MISCELLANEOUS DETAILS

SHEET NO. STANDARD DETAILS

SHEET NO. ENVIRONMENTAL ISSUES

SHEET NO. STANDARDS FOR ENVIRONMENTAL ISSUES

THE STANDARD DRAWINGS HAVE BEEN ISSUED BY ME AND ARE APPLICABLE TO THIS PROJECT.

MOHAMMED AFROZ SHAIKH P.E.

DATE 3/28/2023

1) * DENOTES TXDOT REGIONAL DISTRICT STANDARDS
2) ** DENOTES TXDOT STATEWIDE STANDARD.

3/28/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

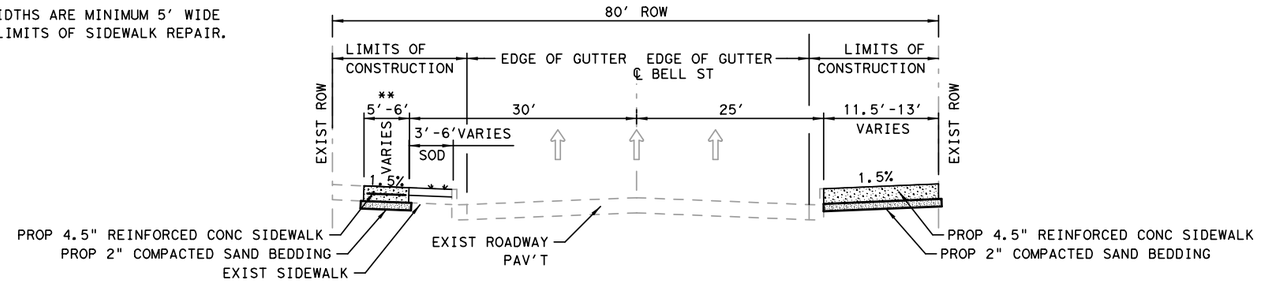
DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

INDEX OF SHEETS

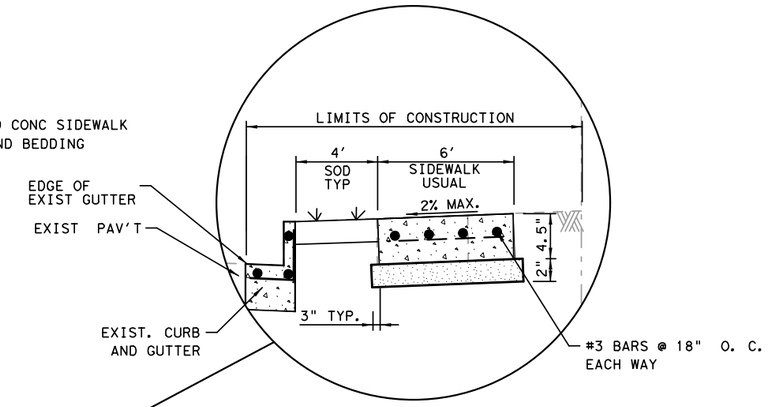
SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	2

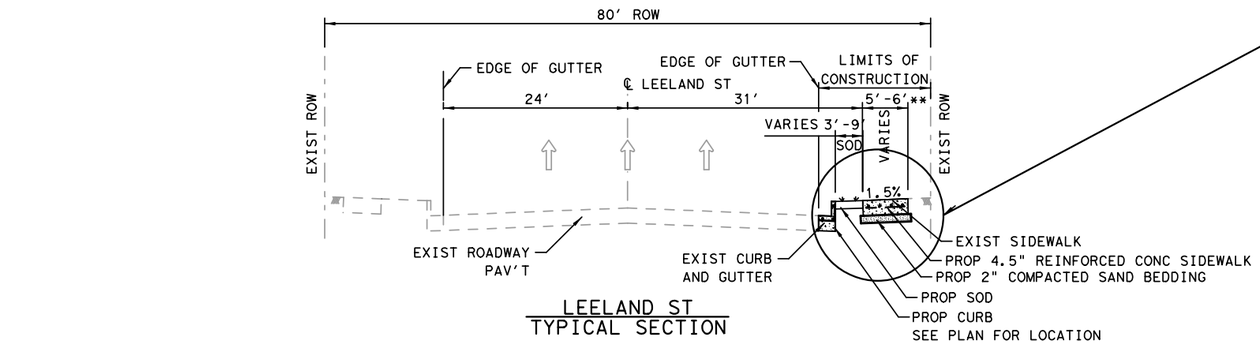
** ALL SIDEWALK WIDTHS ARE MINIMUM 5' WIDE
REGARDLESS OF LIMITS OF SIDEWALK REPAIR.



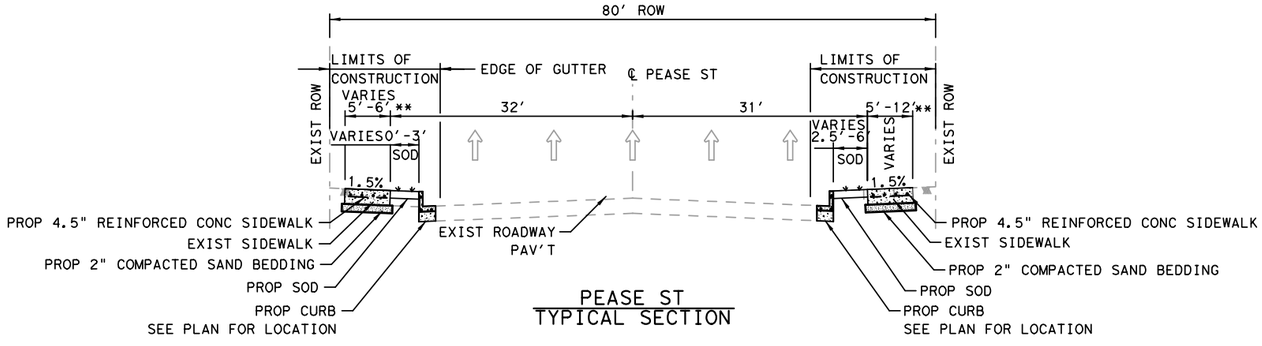
BELL ST
TYPICAL SECTION



SIDEWALK WITH OFFSET
DETAIL



LEELAND ST
TYPICAL SECTION



PEASE ST
TYPICAL SECTION

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

TYPICAL SECTIONS
SHEET 1 OF 4

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	3

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*TYP01.dgn
3/1/2023
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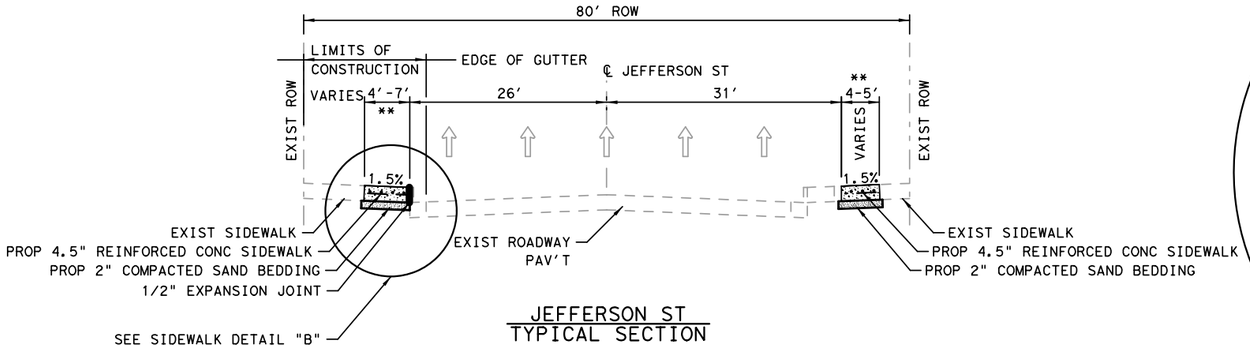
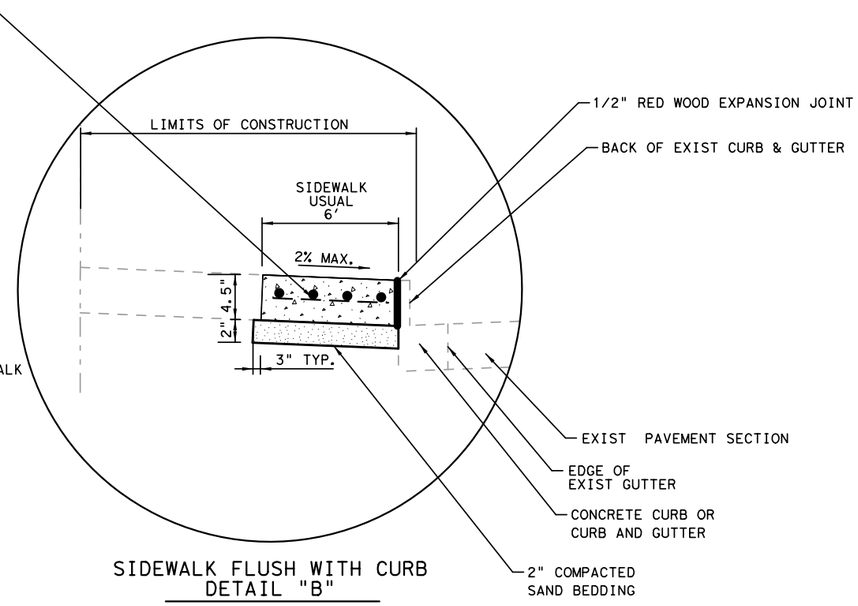
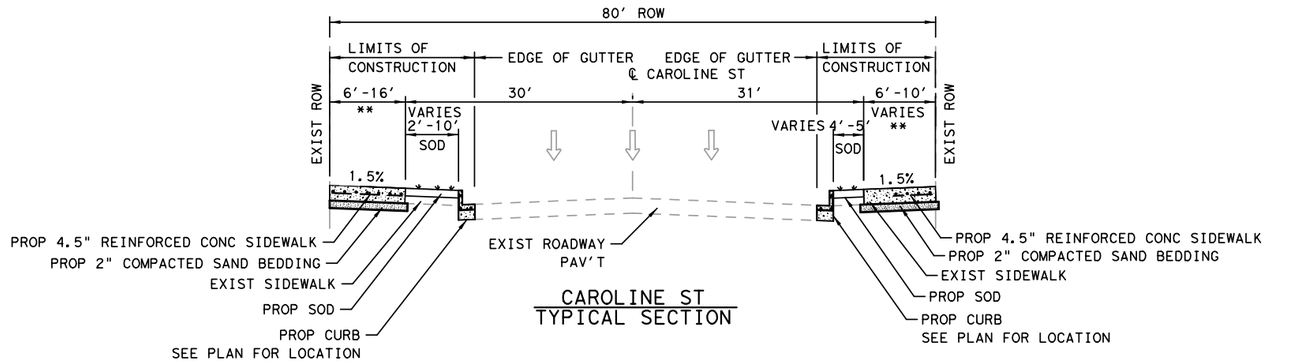
** ALL SIDEWALK WIDTHS ARE MINIMUM 5' WIDE
REGARDLESS OF LIMITS OF SIDEWALK REPAIR.



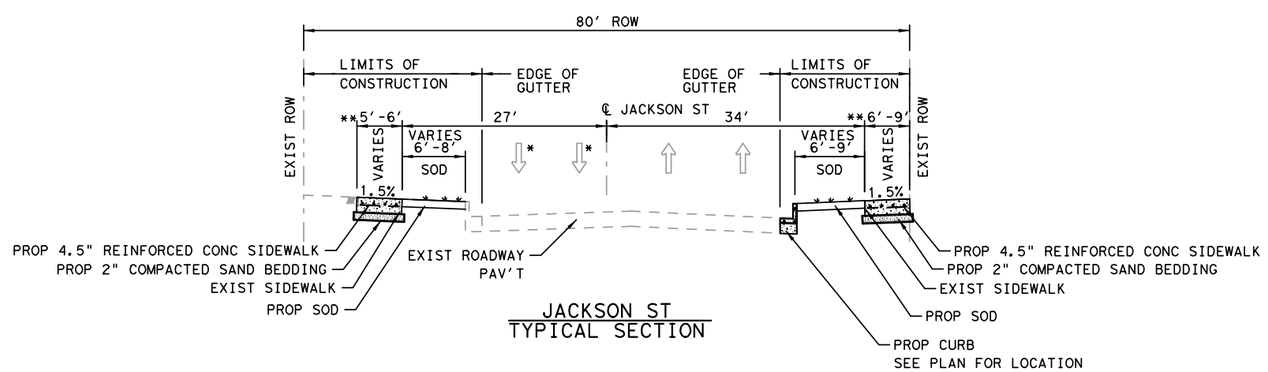
JEFFERSON ST
TYPICAL SECTION



SIDEWALK FLUSH WITH CURB
DETAIL "B"



CAROLINE ST
TYPICAL SECTION



JACKSON ST
TYPICAL SECTION

* JACKSON ST IS TWO WAY STREET FROM POLK ST TO PEASE ST (NORTH OF PEASE ST)
JACKSON ST IS ONE WAY STREET FROM PEASE ST TO PIERCE ST (SOUTH OF PEASE ST)

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

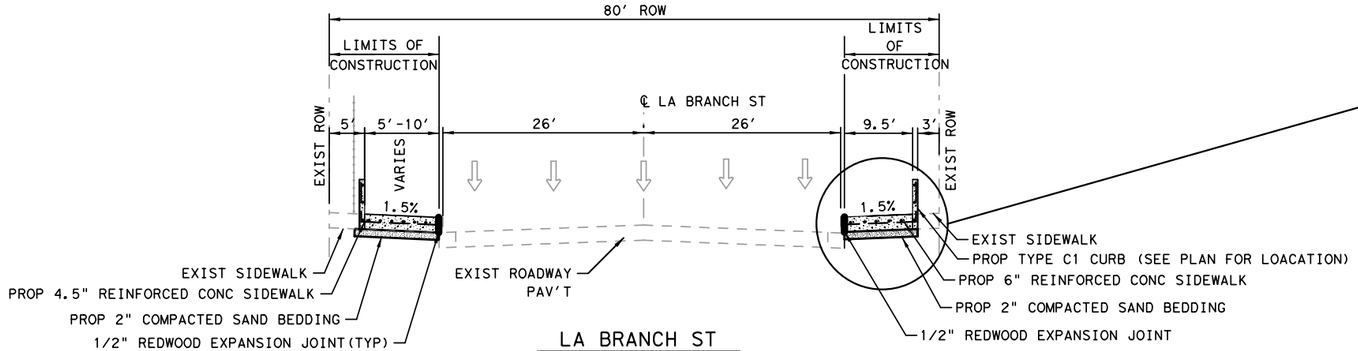
Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

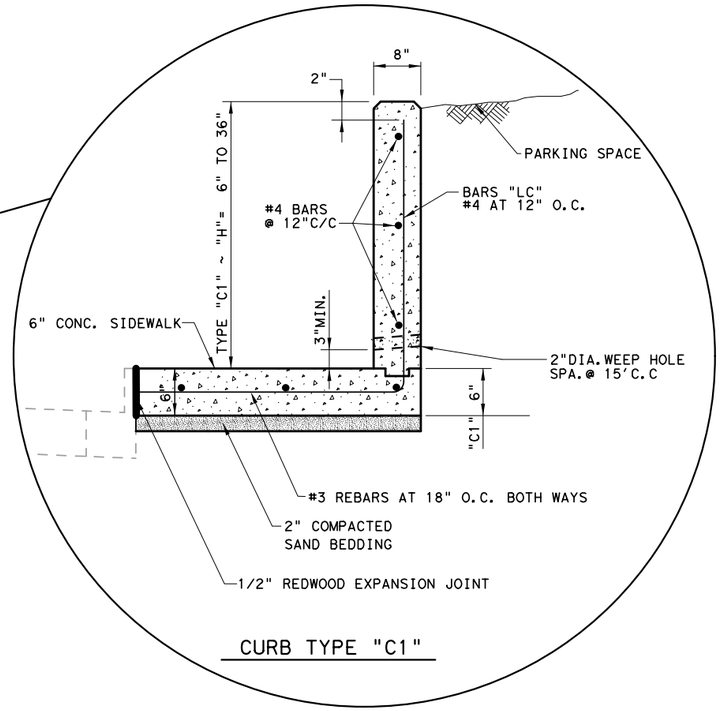
TYPICAL SECTIONS
SHEET 2 OF 4

SCALE: NTS

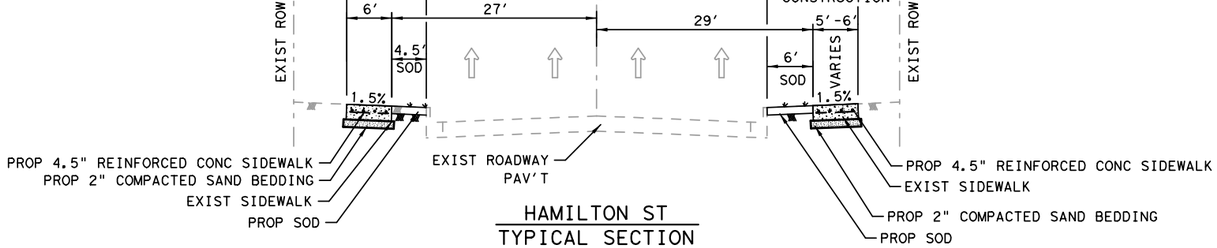
DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	4



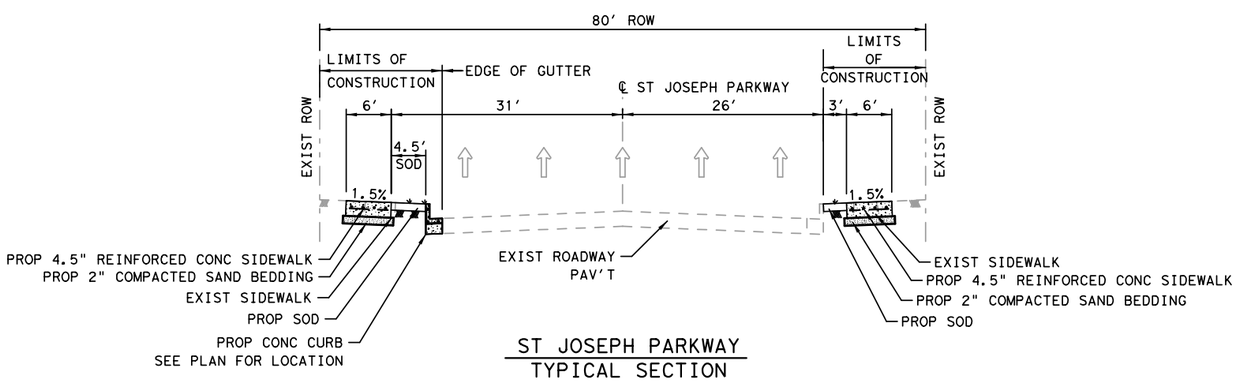
LA BRANCH ST
TYPICAL SECTION



CURB TYPE "C1"



HAMILTON ST
TYPICAL SECTION



ST JOSEPH PARKWAY
TYPICAL SECTION

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

TYPICAL SECTIONS
SHEET 3 OF 4

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	5

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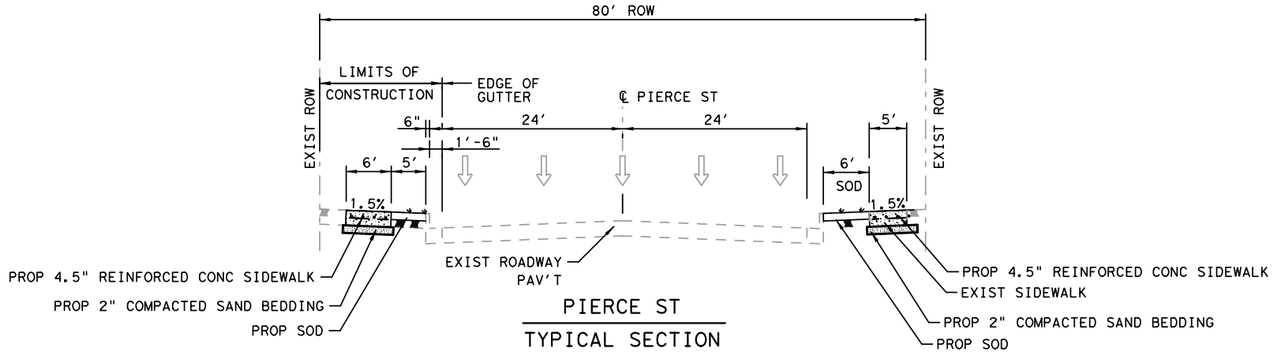
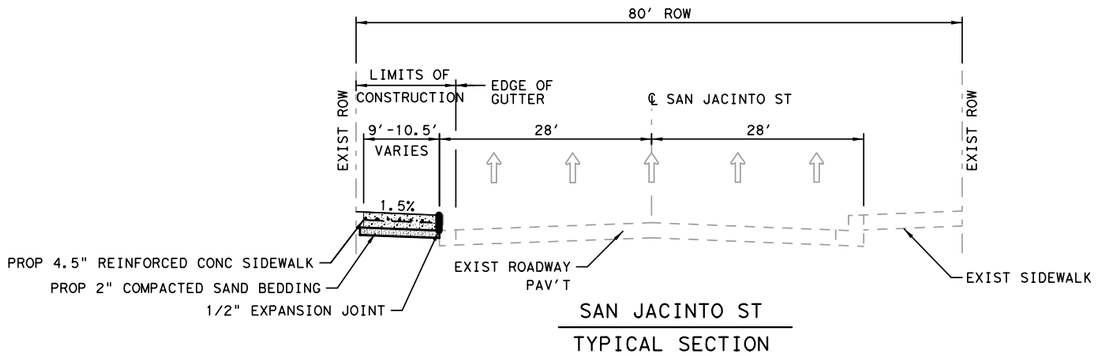


PIERCE ST

TYPICAL SECTION



SAN JACINTO ST

TYPICAL SECTION

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

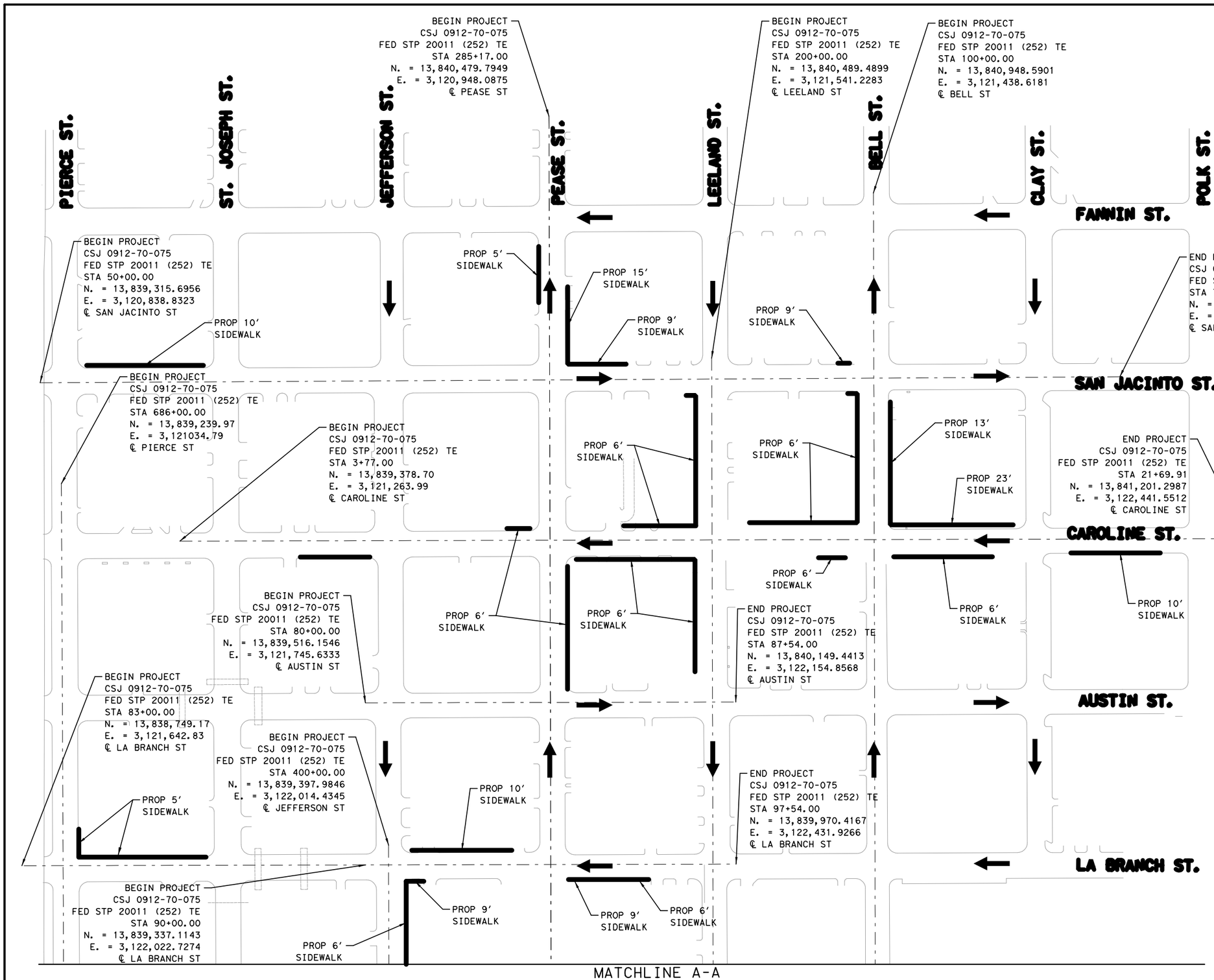
Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

TYPICAL SECTIONS
SHEET 4 OF 4

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	6



3/3/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS PROJECT LAYOUT (SHEET 1 OF 2)

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	7

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*PRJ01.dgn
3/3/2023
8:56:23 AM

PIERCE ST.

ST. JOSEPH ST.

JEFFERSON ST.

PEASE ST.

LEELAND ST.

BELL ST.

CLAY ST.

POLK ST.

0 100 200
HORIZ: SCALE IN FEET

MATCHLINE A-A

BEGIN PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 494+00.00
N. = 13,838,583.2649
E. = 3,122,667.2914
℄ ST JOSEPH ST

CRAWFORD ST.

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 17+00.10
N. = 13,839,606.0562
E. = 3,122,982.6182
℄ JACKSON ST

BEGIN PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 600+00
N. = 13,840,141.6486
E. = 3,123,300.9132
℄ CLAY ST

JACKSON ST.

PROP 9′ SIDEWALK

PROP 6′ SIDEWALK

PROP CURB

PROP 5′ SIDEWALK

PROP CURB RAMP

BEGIN PROJECT
CSJ 0912-70-075
FED STP 20011 (252)TE
STA 2+99.00
N. = 13,838,429.2021
E. = 3,122,222.2839
℄ JACKSON ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 40+70.24
N. = 13,839,426.9177
E. = 3,123,259.9476
℄ CHENEVERT ST

CHENEVERT ST.

BEGIN PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 30+00.00
N. = 13,838,527.9630
E. = 3,122,679.1854
℄ CHENEVERT ST

PROP 5′ SIDEWALK

HAMILTON ST.

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 704+43.48
N. = 13,838,243.0516
E. = 3,122,585.4618
℄ PIERCE ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 504+35.72
N. = 13,838,346.8492
E. = 3,123,033.2949
℄ ST JOSEPH ST

BEGIN PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 40+00.00
N. = 13,838,592.6246
E. = 3,123,113.7991
℄ HAMILTON ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 414+26.18
N. = 13,838,624.1595
E. = 3,123,212.4203
℄ JEFFERSON ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 314+25.88
N. = 13,838,901.4708
E. = 3,123,391.5464
℄ PEASE ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 224+15.91
N. = 13,839,178.6453
E. = 3,123,570.5847
℄ LEELAND ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 127+51.20
N. = 13,839,455.8227
Y. = 3,123,749.6242
℄ BELL ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 607+17.30
N. = 13,839,753.7468
E. = 3,123,904.2847
℄ CLAY ST

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 58+26.32
N. = 13,840,126.8476
E. = 3,124,104.5582
℄ HAMILTON ST

LEGEND

PROJECT LOCATION

RIGHT OF WAY LINE

DIRECTION OF TRAFFIC

3/3/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
PROJECT LAYOUT
(SHEET 2 OF 2)

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	7A

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*PRJ02.dgn
3/3/2023
8:56:24 AM

County: Harris **Control:** 0912-72-390

Highway: Various Southeast Downtown Houston Streets

General Notes:

General:

Contractor questions on this project are to be addressed to the following individual(s):

Muhammad J. Elahi, P.E.
Area Engineer Southeast Harris Area Engineer
702 FM 1959, HOUSTON, TX 77034
Jamal.Elahi@txdot.gov
Phone no. 281-464-5500

David D. Lazaro, P.E.
Assistant Area Engineer Southeast Harris Area Engineer
702 FM 1959, HOUSTON, TX 77034
David.Lazaro@txdot.gov
Phone no. 281-464-5500

Contractor questions will be accepted through email, phone, and in person by the above individuals. Contractor questions will be reviewed by the Area Engineer or Assistant Area Engineer. Once a response is developed, it will be posted to TxDOT's Public FTP at the following address:

https://tableau.txdot.gov/views/ProjectInformationDashboard/NoticetoContractors

Questions submitted that generate a response will be posted through this site. The site is organized by District, Project Type (Construction or Maintenance), Letting Date, and CCSJ/Project Name.

If fixed features require, the governing slopes shown may vary between the limits shown and to the extent determined by the Engineer.

Notify the Engineer immediately if discrepancies are discovered in the horizontal control or the benchmark data.

The following standard detail sheets are modified:

Modified Standards

N/A

References to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality,

County: Harris **Control:** 0912-72-390

Highway: Various Southeast Downtown Houston Streets
comply with the specifications for this project, and are approved, except for roadway illumination, electrical, and traffic signal items.

The cost for materials, labor, and incidentals to provide for traffic across the roadway and for ingress and egress to private property in accordance with Section 7.2.4 of the standard specifications is subsidiary to the various bid items. Restore access roadways to their original condition upon completing construction.

Grade proposed sidewalks and curb ramps for surface drainage.

If a foundation is to be placed where a riprap surface or an asphalt concrete surface presently exists, use caution in breaking out the existing surface for placement. Break out no greater area than is required to place the foundation. After placing the foundation, wrap the periphery with 0.5 in. pre-molded mastic expansion joint. Then replace the remaining portion of the broken out surface with Class A or Class C concrete or cold mix asphalt concrete to the exact slope, pattern, and thickness of the existing riprap or asphalt. Payment for breaking out the existing surface, wrapping the foundation, and replacing the surface is subsidiary to the various bid items.

The lengths of the posts for ground mounted signs and the tower legs for the overhead sign supports are approximate. Verify the lengths before ordering these materials to meet the existing field conditions and to conform to the minimum sign mounting heights shown in the plans.

Furnish aluminum Type A signs instead of plywood signs for signs shown on the Summary of Small Signs sheet.

Clearly mark or highlight on the shop drawings, the items being furnished for this project. Submit required shop drawings in accordance with the shop drawing distribution list shown in the note for Item 5 for review and distribution.

Right of way parcels or utility adjustments shown to be unclear on the plans but not listed on the special provisions will have no effect on construction.

Unless otherwise shown on the plans or otherwise directed, commence work after the morning rush hour which ends at 9 am. Ensure construction equipment is off the road before the evening rush hour which starts at 4 pm onwards.

Tolls incurred by the Contractor are incidental to the various bid items.

Procure permits and licenses, which are to be issued by the City, County, or Municipal Utility District.

General: Site Management

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All the existing drainage systems (inlets, etc.) shall remain fully functional during the construction unless otherwise shown on the plans.

All the pavement marking and signings shall remain in place during the construction unless otherwise shown on the plans.

Mow the grass and weeds within the project limits a maximum of 3 times a year as directed. This work is subsidiary to the various bid items.

Mark stations every 100 ft. and maintain the markings for the project duration. Remove the station markings at the completion of the project. This work is subsidiary to the various bid items.

Personal vehicles of employees are not permitted to park within the right of way, including sections closed to public traffic. Employees may park on the right of way at the Contractor's office, equipment, and materials storage yard sites.

Assume ownership of debris and dispose of at an approved location. Do not dispose of debris on private property unless approved in writing by the District Engineer.

Control the dust caused by construction operations. For sweeping the base material in preparation for laying asphalt and for sweeping the finished concrete pavement, use one of the following types of sweepers or approved equal:

Tricycle Type	**Truck Type - 4 Wheel**
Wayne Series 900	M-B Cruiser II
Elgin White Wing Wayne Model 945	Mobile TE-4
Elgin Pelican Mobile TE-3	Murphy 4042

General: Traffic Control and Construction

If fences cross construction easements shown on the plans and work is required beyond the fences, remove and replace the fences as directed. This work and the materials are subsidiary to the various bid items.

When design details are not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

General: Utilities

Consider the locations of underground utilities depicted in the plans as approximate and employ responsible care to avoid damaging utility facilities. Depending upon scope and magnitude of planned construction activities, advanced field confirmation by the utility owner or operator may

be prudent. Where possible, protect and preserve permanent signs, markers, and designations of underground facilities.

If the Contractor damages or causes damage (breaks, leaks, nicks, dents, gouges, etc.) to the utility, contact the utility facility owner or operator immediately.

At least 72 hours before starting work, make arrangements for locating existing Department-owned above ground and underground fiber optic, communications, power, illumination, and traffic signal cabling and conduit. Do this by calling the Department's Houston District Traffic Signal Operations Office at 713-802-5662, or by e-mailing the Department's Houston District Traffic Signal Operations Office at HOU-LocateRequest@txdot.gov, to schedule marking of underground lines on the ground. Use caution if working in these areas to avoid damaging or interfering with existing facilities.

Notify the Engineer at least 48 hours before constructing junction boxes at storm drain and utility intersections.

If overhead or underground power lines need to be de-energized, contact the electrical service provider to perform this work. Costs associated with de-energizing the power lines or other protective measures required are at no expense to the Department.

If working near power lines, comply with the appropriate sections of Texas State Law and Federal Regulations relating to the type of work involved.

Perform electrical work in conformance with the National Electrical Code (NEC) and Department's standard sheets.

Before beginning any underground work, notify the City of Houston's Chief Inspector, Houston Public Works, to establish the locations of any existing electrical systems for lighting facilities within the limits of this project.

The contractor is required to coordinate with the CenterPoint Energy, at least 72 hours prior to the construction. Contact details:

Carlton Porter - Service Area Manager - Power Delivery Solutions
333 Ward Road
Baytown, TX 77520
Phone: (281) 425-7334
Email: Carlton.Porter@centerpointenergy.com

Item 5: Control of Work

Submit shop drawings electronically for the fabrication of items as documented in Table 2 below. Information and requirements for electronic submittals can be viewed in the "Guide to Electronic Shop Drawing Submittal" which can be accessed through the following web link,

ftp://ftp.dot.state.tx.us/pub/txdot-info/library/pubs/bus/bridge/e_submit_guide.pdf. References to 11 in. x 17 in. sheets in individual specifications for structural items imply electronic CAD sheets.

Table 2
2014 Construction Specification Required Shop/Working Drawing Submittals - Consultant Generated Plans

Spec Item No.'s	Product	Submittal Required	Approval Required (Y/N)	Contractor/ Fabricator P.E. Seal Required	Reviewing Party	Shop or Working Drawing (Note 1)
7.16.1&.2	Construction Load Analyses	Y	Y	Y	D	WD
400	Excavation and Backfill for Structures (cofferdams)	Y	N	Y	D	WD
403	Temporary Special Shoring	Y	N	Y	D	WD
420	Formwork/Falsework	Y	N	Y	D	WD
423	Retaining Walls, (calcs req'd.)	Y	Y	Y	D	SD
425	Optional Design Calculations (Prstrs Bms)	Y	Y	Y	D	SD
425	Prestr Concr Sheet Piling	Y	Y	N	D	SD
425	Prestr Concr Beams	Y	Y	N	D	SD
425	Prestr Concr Bent	Y	Y	N	D	SD
426	Post Tension Details	Y	Y	N	D	SD
434	Elastomeric Bearing Pads (All)	Y	Y	N	D	SD
441	Bridge Protective Assembly	Y	Y	N	D	SD
441	Misc Steel (various steel assemblies)	Y	Y	N	D	SD
441	Steel Pedestals (bridge raising)	Y	Y	N	D	SD
441	Steel Bearings	Y	Y	N	D	SD
441	Steel Bent	Y	Y	N	D	SD
441	Steel Diaphragms	Y	Y	N	D	SD
441	Steel Finger Joint	Y	Y	N	D	SD
441	Steel Plate Girder	Y	Y	N	D	SD
441	Steel Tub-Girders	Y	Y	N	D	SD
441	Erection Plans, including Falsework	Y	N	Y	D	WD
449	Sign Structure Anchor Bolts	Y	Y	N	D	SD
450	Railing	Y	Y	N	D	SD
462	Concrete Box Culvert	Y	Y	N	D	SD
462	Concrete Box Culvert (Alternate Designs Only,calcs reqd.)	Y	Y	Y	D	SD
464	Reinforced Concrete Pipe (Jack and Bore only; ONLY when requested)	Y	Y	Y	D	SD
465	Pre-cast Junction Boxes, Grates, and Inlets	Y	Y	N	D	SD
465	Pre-cast Junction Boxes, Grates, and Inlets (Alternate Designs Only, calcs req'd.)	Y	Y	Y	D	SD
466	Pre-cast Headwalls and Wingwalls	Y	Y	N	D	SD
467	Pre-cast Safety End Treatments	Y	Y	N	D	SD
495	Raising Existing Structure (calcs reqd.)	Y	Y	Y	D	SD
610	Roadway Illumination Supports (Non-Standard only, calcs reqd.)	Y	Y	Y	D	SD
613	High Mast Illumination Poles (Non-standard only, calcs reqd.)	Y	Y	Y	D	SD
627	Treated Timber Poles	Y	Y	N	D	SD
644	Special Non-Standard Supports (Bridge Mounts, Barrier Mounts, Etc.)	Y	Y	Y	D	SD
647	Large Roadside Sign Supports	Y	Y	Y	D	SD
650	Cantilever Sign Structure Supports - Alternate Design Calcs.	Y	Y	Y	D	SD
650	Sign Structures	Y	Y	N	D	SD
680	Installation of Highway Traffic Signals	Y	Y	N	D	SD
682	Vehicle and Pedestrian Signal Heads	Y	Y	N	D	SD
684	Traffic Signal Cables	Y	Y	N	D	SD
685	Roadside Flashing Beacon Assemblies	Y	Y	N	D	SD
686	Traffic Signal Pole Assemblies (Steel) (Non-Standard only)	Y	Y	Y	D	SD
687	Pedestal Pole Assemblies	Y	Y	N	D	SD
688	Detectors	Y	Y	N	D	SD
784	Repairing Steel Bridge Members	Y	Y	Y	D	WD
SS	Prestr Concr Crown Span	Y	Y	N	D	SD
SS	Sound Barrier Walls	Y	Y	Y	D	SD
SS	Camera Poles	Y	Y	Y	TMS	SD
SS	Pedestrian Bridge (Calcs req'd.)	Y	Y	Y	D	SD
SS	Screw-In Type Anchor Foundations	Y	Y	N	D	SD
SS	Fiber Optic/Communication Cable	Y	Y	N	TMS	SD
SS	Spread Spectrum Radios for Signals	Y	Y	N	D	SD
SS	VIVDS System for Signals	Y	Y	N	D	SD
SS	CTMS Equipment	Y	Y	N	TMS	SD

Notes:
1. Document flow for Working Drawings differs from Shop Drawings in that Working Drawings must be submitted to the Engineer rather than the Engineer of Record and they are for the information of the Engineer only; an approval stamp and distribution to all project offices is not required.

Key to Reviewing Party

D – Consultant: Submit to Engineer of Record at mshaik@huitt-zollars.com
TMS – Traffic Management System
Computerized Traffic Management Systems (CTMS) — HOU-CTMSShpDrwgs@txdot.gov

Item 6: Control of Materials

To comply with the latest provisions of the Build America, Buy America Act (BABA Act) of the Bipartisan Infrastructure Law, the contractor must submit a notarized original of the TxDOT Construction Material Buy America Certification Form for all items classified as construction materials. This form is not required for materials classified as a manufactured product.

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Refer to the Buy America Material Classification Sheet for clarification on material categorization.

The Buy America Material Classification Sheet is located at the below link.

https://www.txdot.gov/business/resources/materials/buy-america-material-classification-sheet.html for clarification on material categorization.

Item 7: Legal Relations and Responsibilities

Do not initiate activities in a Project Specific Location (PSL), associated with a U.S. Army Corps of Engineers (USACE) permit area, that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include those pertaining to, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Associated defined here means materials are delivered to or from the PSL. The permit area includes the waters of the U.S. or associated wetlands affected by activities associated with this project. Special restrictions may be required for such work. Assume responsibility for consultations with the USACE regarding activities, including PSLs that have not been previously evaluated by the USACE. Provide the Department with a copy of consultations or approvals from the USACE before initiating activities.

The Contractor may proceed with activities in PSLs that do not affect a USACE permit area if a self-determination has been made that the PSL is non-jurisdictional or if proper USACE clearances have been obtained in jurisdictional areas or have been previously evaluated by the USACE as part of the permit review of this project. The Contractor is solely responsible for documenting any determinations that their activities do not affect a USACE permit area. Maintain copies of their determinations for review by the Department or any regulatory agency.

Document and coordinate with the USACE, if required, before hauling any excavation from or hauling any embankment to a USACE permit area by either 1 or 2 below:

1. **Restricted Use of Materials for the Previously Evaluated Permit Areas.** Document both the Project Specific Locations (PSL) and their authorization. Maintain copies for review by the Department or any regulatory agency. When an area within the project limits has been evaluated by the USACE as part of the permit process for this project:
   a. Suitable excavation of required material in the areas shown on the plans and cross sections as specified in the Item, "Excavation" is used for permanent or temporary fill (under the Item, "Embankment") within a USACE permit area.
   b. Suitable embankment (under the Item, "Embankment") from within the USACE permit area is used as fill within a USACE evaluated area.
   c. Unsuitable excavation or excess excavation, "Waste" (under the Item, "Excavation"), that is disposed of at a location approved within a USACE evaluated area.

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2. **Contractor Materials from Areas Other than Previously Evaluated Areas.** Provide the Department with a copy of USACE coordination or approvals before initiating any activities for an area within the project limits that has not been evaluated by the USACE or for any off right of way locations used for the following, but not limited to, haul roads, equipment staging areas, borrow and disposal sites:
   a. The Item, "Embankment" used for temporary or permanent fill within a USACE permit area.
   b. Unsuitable excavation or excess excavation, "Waste" (under the Item, "Excavation"), that is disposed of outside a USACE evaluated area.

The total area disturbed for this project is 1.6 acres. The disturbed area in this project, the project locations in the Contract, and Contractor project specific locations (PSLs) within 1 mile of the project limits for the Contract, will further establish the authorization requirements for storm water discharges. The Department will obtain an authorization to discharge storm water from the Texas Commission on Environmental Quality (TCEQ) for the construction activities shown on the plans. The Contractor is to obtain required authorization from the TCEQ for Contractor PSLs for construction support activities on or off the ROW. When the total area disturbed in the Contract and PSLs within 1 mile of the project limits exceeds 5 acres, provide a copy of the Contractor NOI for PSLs on the ROW to the Engineer (to the appropriate MS4 operator when on an off-state system route) and to the local government that operates a separate storm drain system.

Maintain the roadway slope stability. Maintaining slope stability is subsidiary to the various bid items.

The nesting / breeding season for migratory birds is February 15 through September 30.

Conduct any tree removal outside of the migratory bird nesting season. If this is not possible due to scheduling, then exercise caution to remove only those trees with no active nests. Do not destroy nests on structures or in trees within the project limits during the nesting / breeding season.

Take measures to prevent the building of nests on any structures or trees within the project limits throughout the duration of the construction if work / removal will be performed during the nesting / breeding season. This can be accomplished by application of bird repellent gel, netting by hand every 3 to 4 days, or any other non-threatening method approved by the Houston District Environmental Section. Obtain this approval well in advance of the planned use. Contact the Houston District Environmental Section at 713-802-5244. The cost of this work is subsidiary to the various bid items.

No significant traffic generator events have been identified.

Item 8: Prosecution and Progress

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The Department will not adjust the number of days for the project and milestones, if any, due to differences in opinion regarding any assumptions made in the preparation of the schedule or for errors, omissions, or discrepancies found in the time determination schedule.

Working days will be computed and charged based on a standard Five-Day workweek in accordance with Section 8.3.1.1.

The maximum number of days the time charges on this contract may be suspended due to contractor mobilization, and material fabrication/accumulation or processing delays is 30 calendar days. The Engineer and the Contractor may mutually agree, in writing, to decrease this maximum number of days.

The Lane Closure Assessment Fee is $ 128.17 per lane per block per week during off peak traffic hours. This fee applies to the Contractor for closures or obstructions that overlap into restricted hour traffic for each hour or portion thereof, per lane, regardless of the length of lane closure or obstruction. For Restricted Hours subject to Lane Assessment Fee refer to the Item, "Barricades, Signs, and Traffic Handling." The time increment for the Lane Closure Assessment fee for this project is one hour.

Item 104: Removing Concrete

Removing concrete curb is paid as a separate bid item if the existing pavement on which it rests is not removed at the same time.

Item 110: Excavation

If manipulating the excavated material requires moving the same material more than once to accomplish the desired results, the excavation is measured and paid for only once regardless of the manipulation required.

Transition the ditch grades and channel bottom widths at structure locations. Use only approved channel excavation in the embankment.

The total excavation quantity shown on the plans includes the quantity for excavating to 2 ft. behind the back of the proposed curb.

Item 161: Compost
Item 162: Sodding for Erosion Control
Item 164: Seeding for Erosion Control
Item 166: Fertilizer
Item 168: Vegetative Watering

Refer to the "Fertilizer, Seed, Sod, Straw, Compost, and Water" plan sheet for material specifications, application rates, and for watering requirements.

Item 204: Sprinkling

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Perform subsidiary sprinkling as required under various other items in accordance with the Item, "Sprinkling."

Sprinkling for dust control is subsidiary to the various bid items.

Item 210: Rolling

Use a medium pneumatic roller meeting the requirements of Item 210 as directed. This work is subsidiary to the various bid items. On every asphalt shot, use a minimum of 3 pneumatic rollers or as directed. Use approved rolling patterns. Successive asphalt shots will not be allowed until acceptable rolling has been accomplished on the preceding asphalt shot.

Item 247: Flexible Base

Place the flexible base in courses a maximum of 8 in. thick (loose measurement). Mix flexible base that requires 2 or more mixtures of material, in an approved stationary pugmill type mixer. Material passing the No. 40 sieve is known as soil binder.

Tolerances relating to a specified gradation and to a plasticity index under this specification are permitted.

Furnish one type of the base material unless otherwise authorized.

Compact the courses to a minimum density of 95 percent of the maximum density as determined using test method TEX-113-E.

Sandstone aggregate is not permitted.

Item 260: Lime Treatment (Road-Mixed)

For slurry placing, before discharging through the distributors, sufficiently agitate or mix the lime and water to place the lime in suspension and to obtain a uniform mixture.

The Engineer will observe the lime treatment that the Contractor elects to open to construction traffic immediately after compaction. If the construction traffic damages the subgrade, route the traffic off the damaged section in accordance with the standard specification. If the construction traffic does not damage the subgrade, cure the subgrade until other courses of material cover it. Apply these courses within 14 days with a maximum curing period of 7 days.

Place the hydrated and the commercial lime as a water suspension or slurry according to the slurry placing method shown in Section 260.4.3.2, "Slurry Placement."

Use the type of lime at particular locations as directed.

Place the quicklime dry or as a slurry.

For the dry quicklime, a spreader box is not required if the lime material is evenly distributed.

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In limited areas, the Contractor may construct the lime slurry subgrade under a sequence of work in which the application, mixing, and compaction are completed in the same working day, if approved by the Engineer.

Provide documentation from certified public scales showing gross, tare, and net weights. Provide producer's delivery tickets also showing gross, tare, and net weights. Completely empty the lime trailers at the project site. The Engineer may direct the Contractor to reweigh any shipment of lime on certified scales. The cost of this operation is subsidiary to the Item, "Lime Treatment (Road-Mixed)."

The percentage of lime shown on the plans is estimated on the basis of engineering tests. If soil tests made during construction indicate properties different than those originally anticipated, the Engineer may vary the percentage of the lime to provide soil characteristics similar to those of the preliminary tests.

Mix the lime with the new base material in an approved pug mill type stationary mixer.

Item 263: Lime Treatment (Plant-Mixed)

Use the asphalt material (PCE) to cure the entire finished lime treatment.

Item 276: Cement Treatment (Plant-Mixed)

Before placing the new base, wet and coat the vertical construction joints between the new base and the previously placed base with dry cement.

If the total thickness of the cement treatment is greater than 8 in., compact it in multiple lifts in accordance with Section 276.4.3, "Compaction." Place the courses in the same working day unless otherwise approved.

Use Class N Cement Treatment containing 4.5 percent cement based on the dry weight of the aggregate. There is no minimum compressive strength requirement for this Item.

The requirement for core drilling to determine the thickness of cement treatment is waived if using less than 500 sq. yd. at one location.

For widening the existing pavement, the Engineer may waive the requirements for preparing the subgrade by scarifying and compacting if the as-cut subgrade can be maintained to the density of the natural ground and to a uniform consistency when placing the base course. Keep the subgrade wet.

Compact in accordance with the standard specifications and complete the finishing operations within a period of 5 hours after adding the cement to the base material.

Cure the final course of cement treatment using an asphalt distributor that distributes the approved curing material and water mixture material at a rate of 0.25 gallons per square-yard evenly and smoothly or as recommended by the manufacturer at the recommended dilution rate,

under a pressure necessary for proper distribution. Provide a curing material meeting the requirements of the Item, "Asphalts, Oils, and Emulsions" for curing the cement treatment. Use the following materials for curing the courses of cement treatment:

Curing Material	Application
Water	All courses, except final course
PCE	Final course

Continue curing until placing another course or opening the finished section to traffic.

Spread the material so that the layers of base are uniform in depth and in loose density before compacting.

Type E material consists of Type A material, crushed concrete (except under flexible pavement), or Reclaimed Asphalt Pavement (RAP) meeting the requirements of the Item, "Flexible Base." If approved, the 50 percent maximum RAP limitation may be waived.

Unless otherwise directed, place the next pavement layer within 7 working days of placing the base.

If using crushed stone for the Type E material under this Item, ensure it meets the requirements for the Item, "Flexible Base," Type A, Grade 1-2. Texas Test Method TEX-117-E is not required for this Item.

If using Recycled Type E cement treatment under proposed flexible pavement, produce it using the existing base salvaged from within this project or from other approved Department projects and salvaged asphalt concrete pavement. Do not use crushed concrete under flexible pavement.

If using Recycled Type E cement treatment under proposed concrete pavement, produce it using the existing base salvaged from within this project or from other approved Department projects, salvaged asphalt concrete pavement, or crushed concrete. If using crushed concrete as an aggregate, meet the requirements of Grade 3.

If using salvaged existing base and asphalt concrete pavement as described above, size it so that all the material, except the existing individual aggregate, passes the 2-in. sieve and is of a gradation that allows satisfactory compaction. Provide salvaged material that does not contain deleterious material such as clay or organic material. Provide material passing the No. 40 sieve, defined as soil binder, with a maximum Plasticity Index of 10 and a maximum Liquid Limit of 35 when tested in accordance with test method TEX-106-E.

Meet the following additional requirements if the base and ACP are salvaged from other Department projects:

1. Obtain written approval before using the material.
2. Salvage and stockpile by approved methods.
3. Stockpile the material for exclusive use by the Department.

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Item 292: Asphalt Treatment (Plant-Mixed)
Item 3076: Dense-Graded Hot Mix Asphalt

Unless otherwise shown on the plans, RAP generated by this project will become the property of the Contractor for use in the current construction project or in future projects.

Item 292: Asphalt Treatment (Plant-Mixed)

If using the iron ore topsoil as the primary aggregate, meaning 80 percent or more by weight of the total mixture, the requirements for the water susceptibility test are waived.

Mixtures containing the iron ore topsoil are exempted from test methods TEX-217-F (Part I, separation of deleterious material and Part II, decantation test for coarse aggregate) and TEX-203-F (Sand Equivalent Test).

Assume responsibility for proportioning the materials entering the asphalt mixture, regardless of the type of plant used.

Furnish the mix designs for approval.**Item 360: Concrete Pavement**

Where the pavement curb is left off for a later tie, provide the dowels or the tie bars as indicated on the paving detail sheets. The dowel bars and tie bars are subsidiary to the various bid items.

Repair portions of the concrete pavement surfaces that are damaged while in a plastic state before that area receives permanent pavement markings and opens to traffic. Perform repairs that are structurally equivalent to and cosmetically uniform with the adjacent undamaged areas. Do not repair by grouting onto the surface.

On pavement widening, hand finishing in place of the longitudinal float will be permitted.

Where existing pavement is widened with new pavement, place the new pavement a minimum of 2 ft. wide.

Equip the batching plants to proportion by weight, aggregates and bulk cement, using approved proportioning devices and approved automatic scales.

For mono curb, the curb height transitions will be paid at the contract unit price of the larger curb height in the transition. The 2.5-in. laydown curbs for driveways will be paid at the unit price bid for the Item, “Conc Curb (Mono) (Ty II).”

High-early strength cement may be used for frontage road and city street intersection construction.

Do not use limestone dust of fracture as fine aggregate.

If the concrete design requires greater than 5.5 sacks of cementitious material per cubic yard, obtain written approval. If placing concrete pavement mixes from April 1 to October 31, inclusive, use Mix Design Option 1 as specified in Section 421.4.2.6.1.

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Perform saw cutting as shown on the plans in accordance with Section 360.4.10, “Sawing Joints.” This saw cutting is subsidiary to this bid Item.

Unless otherwise directed in writing, provide Class HES concrete with a minimum average flexural strength of 425 psi or a minimum average compressive strength of 3,000 psi in 16 hours.

When directed in writing, open the pavement to traffic before the minimum requirements have been attained.

When needed, place and remove forms in accordance with Section 360.4.5, except do not remove forms until at least 6 hours after concrete has been placed. The time for the form removal may be extended with the direction of the Engineer if weather or other conditions make it advisable.

Sprinkling and rolling, required for the compaction of the rough subgrade in advance of fine-grading are subsidiary to this Item. Maintenance of a moist condition of the subgrade in advance of fine-grading and concrete is subsidiary work, as provided above.

Items 360, 420, and 421: All Concrete Items

For the Department’s concrete cylinder split samples, transport the test cylinders to the Houston District Laboratory located at 7600 Washington Avenue in Houston, or to the appropriate Area Laboratory, when applicable. Transporting the test cylinders is subsidiary to the various bid items.

Item 420: Concrete Substructures

Unless otherwise noted, use Class C concrete with an ordinary surface finish for signal, lighting, or sign structure foundations.

Item 427: Surface Finishes for Concrete

Provide a Surface Area I finish for structures. Use concrete paint for the surface finish.

Item 432: Riprap

Item 449: Anchor Bolts

Pipe joint compound, as used in this Item, is an electrically conducting protective thread lubricant compound to be used on the foundation anchor bolts for illuminations poles (Crouse-Hinds TL-2, 0z/Gedney Stl, or Thomas & Betts Kopr-Shield).

Items 496: Removing Structures

Item 502: Barricades, Signs, and Traffic Handling

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Use a traffic control plan for handling traffic through the various phases of construction. Follow the phasing sequence unless otherwise agreed upon by the Area Engineer and the Project Manager. Ensure this plan conforms to the latest "Texas Manual on Uniform Traffic Control Devices" and the latest Barricade and Construction (BC) Standard Sheets. The latest versions of Work Zone Standard Sheets WZ (BTS-1) and WZ (BTS-2) are the traffic control plan for the signal installations.

Submit changes to the traffic control plan to the Area Engineer. Provide a layout showing the construction phasing, signs, striping, and signalizations for changes to the original traffic control plan.

Furnish and maintain the barricades and warning signs, including the necessary temporary and portable traffic control devices, during the various phases of construction. Place and construct these barricades and warning signs in accordance with the latest "Texas Manual on Uniform Traffic Control Devices" for typical construction layouts.

Cover work zone signs when work related to the signs is not in progress, or when any hazard related to the signs no longer exists.

Keep the delineation devices, signs, and pavement markings clean. This work is subsidiary to the Item, "Barricades, Signs, and Traffic Handling."

If a section is not complete before the end of the workday, pull back the base material to the existing pavement edge on a 6H: 1V slope. Edge drop-offs during the hours of darkness are not permitted.

Before detouring traffic onto the main lane shoulders, remove dirt, debris, vegetation, and other deleterious material from the surface of the shoulders. Appropriately sign the detour in an approved manner. This work is subsidiary to the various bid items.

Coordinate and schedule the work with the appropriate Metro representative if requiring access to the High Occupancy Vehicle lanes.

Cover or remove the permanent signs and construction signs that are incorrect or that do not apply to the current situation for a particular phase.

Replace the overhead signs, informational signs, and exit signs to be removed, with temporary signs providing the correct information to the traveling public. Size the replacement signs and include them in the traffic control plan.

Do not mount signs on drums or barricades, except those listed in the latest Barricades and Construction standard sheets.

Use traffic cones for daytime work only. Replace the cones with plastic drums during nighttime hours.

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Place positive barriers to protect drop-off conditions greater than 2 ft. within the clear zone that remain overnight.

Do not reduce the existing number of lanes open to traffic except as shown on the following time schedule:

One Lane Closure

Day	Daytime Closure Hours	Nighttime Closure Hours	Restricted Hours Subject to Lane Assessment Fee
Monday	9:00 AM - 4:00 AM	N/A	6:00 AM - 9:00 AM 4:00 PM – 7:00 PM
Tuesday	9:00 AM - 4:00 AM	N/A	6:00 AM - 9:00 AM 4:00 PM – 7:00 PM
Wednesday	9:00 AM - 4:00 AM	N/A	6:00 AM - 9:00 AM 4:00 PM – 7:00 PM
Thursday	9:00 AM - 4:00 AM	N/A	6:00 AM - 9:00 AM 4:00 PM – 7:00 PM
Friday	9:00 AM - 4:00 AM	N/A	6:00 AM - 9:00 AM 4:00 PM – 7:00 PM
Saturday	N/A	N/A	N/A
Sunday	N/A	N/A	N/A

The above times are approved for the traffic control conditions listed. The Area Engineer may approve other closure times if traffic counts warrant. The Area Engineer may reduce the above times for special events.

Before closing any City of Houston sidewalk, one or more city street lanes, or entire city streets during construction, obtain a permit to do so from the City. Obtain the required permit in person at the City of Houston Permit Office, or apply online at https://geohub.houstontx.gov/

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

Item 504: Field Office and Laboratory

Piped in water to the Engineer's building will not be required, but furnish water for curing concrete test specimens.

The above requirements are subsidiary to the various bid items.

Assume ownership of temporary chain link security fences.

Equip each field office with a first aid kit and at least a 20 lb. ABC type fire extinguisher.

County: Harris **Control:** 0912-72-390

Highway: Various Southeast Downtown Houston Streets

Item 506: Temporary Erosion, Sedimentation and Environmental Controls

Use appropriate measures to prevent, minimize, and control the spill of hazardous materials in the construction staging area. Remove and dispose of materials in compliance with State and Federal laws.

Before starting construction, review with the Engineer the SWP3 used for temporary erosion control as outlined on the plans. Before construction, place the temporary erosion and sedimentation control features as shown on the SWP3.

Schedule the seeding or sodding work as soon as possible. The project schedule provides for a vegetation management plan.

After completing earthwork operations, restore and reseed the disturbed areas in accordance with the Department's specifications for permanent or temporary erosion control.

Implement temporary and permanent erosion control measures to comply with the National Pollution Discharge Elimination System (NPDES) general permit under the Clean Water Act.

Before starting grading operations and during the project duration, place the temporary or permanent erosion control measures to prevent sediment from leaving the right of way.

Item 529: Concrete Curb, Gutter, and Combined Curb and Gutter
Item 530: Intersections, Driveways, and Turnouts
Item 531: Sidewalks

An air-entraining admixture is not required.

For concrete curbs, use Grade 7 aggregate conforming to Section 421.2.6 of the Item, "Hydraulic Cement Concrete."

For driveways and turnouts, coarse aggregate Grade No. 3 through No. 8 conforming to the gradation requirements specified in the Item, "Hydraulic Cement Concrete" will be permitted.

For reinforcing steel in sidewalks and pedestrian ramps, use No. 4 bars at a maximum 18 in. spacing center-to-center in both directions. **Item 624: Ground Boxes**

The ground box locations are approximate. Alternate ground box locations may be used as directed, to avoid placing in sidewalks or driveways.

Ground metal ground box covers. Bond the ground box cover and ground conductors to a ground rod located in the ground box and to the system ground.

Ground the existing metal ground box covers as shown on the latest standard sheet ED (4)-14.

During construction and until project completion, provide personnel and equipment necessary to remove ground box lids for inspection. Provide this assistance within 24 hours of notification.

County: Harris **Control:** 0912-72-390

Highway: Various Southeast Downtown Houston Streets

Construct concrete aprons in accordance with the latest standard sheet ED (4)-14. Make the depth of the concrete apron the same as the depth of the ground box, except for Type 1 and Type 2 ground boxes. For Type 1 or Type 2 ground boxes, construct the concrete apron in accordance with details shown on the "Ground Box Details Installations" standard.

Item 636: Signs

For design details not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

Item 644: Small Roadside Sign Assemblies

Sign locations shown on the plans are approximate. Before placing them, obtain approval of and then stake the exact locations for these signs.

Use the Texas Universal Triangular Slip Base with the concrete foundation for small ground mounted signs, unless otherwise shown in the plans.

Remove existing street name signs from existing stop signs and re-install them above the new stop signs. Removing and re-installing existing street name signs is subsidiary to the Item, "Small Roadside Sign Assemblies."

When design details are not shown on the plans, provide signs and arrows conforming to the latest "Standard Highway Sign Designs for Texas" manual.

Use Type E Super High Specific Intensity (Fluorescent Prismatic) yellow green reflective sheeting background to fabricate school signs (S1-1, S3-1, S4-3, S5-1, W16-2, SW16-9p, and SW16-7pL(R)).

Assume ownership of the removed existing signs.

Locations of the relocated signs are approximate. Before placing them, obtain approval of and then stake the exact locations for these signs.

Replace existing signs that become damaged during relocation at no expense to the Department.

Item 3076: Dense-Graded Hot Mix Asphalt

Taper the asphalt concrete pavement at the beginning and ending points.

Use a maximum 6H:1V slope for the asphalt concrete pavement edge.

Where the 6H:1V ACP edge taper extends over onto the unsurfaced shoulders, blade off the loose existing shoulder material to provide a solid base for the outside taper edge. After placing the ACP overlay, blade this material back against the edge taper. This work is subsidiary to the various bid items.

County: Harris **Control:** 0912-72-390

Highway: Various Southeast Downtown Houston Streets

The stockpile will be the point of sampling of coarse aggregate for test method TEX-217-F (Part II, decantation).

Place the asphalt concrete pavement in courses as shown on the typical sections.

Do not use petroleum-based solvents in the beds of hot mix asphalt delivery vehicles.

Dilution of tack coat is not allowed.

Do not use Surface Aggregate Classification (SAC) C for this project.

For determining the Asphalt Content, only ignition ovens will be allowed.

The tack coat rate shown on the "Basis of Estimate" is an average rate for calculating tack coat quantities. Vary the rate based on the pavement conditions and other factors such as manufacturer's recommendations and weather.

Item 7049: Water Mains

Construct water mains with Class A concrete in accordance with the Item, "Hydraulic Cement Concrete." This work is subsidiary to this bid Item.

Assume ownership of removed fire hydrants, valves, and boxes.

Cutting and plugging tees, if called for on the plans, are subsidiary to the Item, "Remove Existing Fire Hydrant."

Install only new fire hydrants, valves, and boxes conforming to the requirements of this specification. Install fire hydrants, valves, and boxes in accordance with the requirements of Section 3.13 of this specification.

For projects involving City of Houston waterlines, use a shockwave-based pipe location system manufactured by Radiodetection Corporation, or equal, for non-metallic pipe detection in accordance with this specification.

Provide valves that open in a *counter*clockwise direction only.

County: Harris **Control:** 0912-72-390

Highway: Various Southeast Downtown Houston Streets

Basis of Estimate

Item	Description	Limit and Rate	Unit
3076	Dense-Graded Hot Mix Asphalt	110 Lb. / Sq. Yd.-In.	TON
	• Asphalt	6 % by weight	
	• Aggregate	94 % by weight	
	Tack Coat		GAL
	• Applied on new HMA	0.06 Gal. / Sq. Yd.	
	• Applied on Existing HMA	0.09 Gal. / Sq. Yd.	
	• Applied on Milled HMA	0.11 Gal. / Sq. Yd.	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0912-72-390 **DISTRICT** Houston **COUNTY** Harris
HIGHWAY Various

			CONTROL SECTION JOB		**0912-72-390**	TOTAL EST.	TOTAL FINAL
			PROJECT ID		**A00123438**		
			COUNTY		**Harris**		
			HIGHWAY		**Various**		
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	104-6017	REMOVING CONC (DRIVEWAYS)	SY	1,177.000		1,177.000	
	104-6022	REMOVING CONC (CURB AND GUTTER)	LF	1,862.000		1,862.000	
	104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	523.000		523.000	
	161-6009	EROSION CONTROL COMPOST	CY	190.000		190.000	
	162-6002	BLOCK SODDING	SY	3,158.000		3,158.000	
	166-6001	FERTILIZER	AC	0.700		0.700	
	168-6001	VEGETATIVE WATERING	MG	90.000		90.000	
	192-6015	LANDSCAPE EDGE	LF	1,701.000		1,701.000	
	340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	1.700		1.700	
	479-6001	ADJUSTING MANHOLES	EA	3.000		3.000	
	479-6005	ADJUSTING MANHOLES (WATER VALVE BOX)	EA	9.000		9.000	
	479-6008	ADJUSTING MANHOLES (WATER METER)	EA	13.000		13.000	
	481-6001	PIPE (PVC) (SDR - 35) (4 IN)	LF	11.000		11.000	
	500-6001	MOBILIZATION	LS	1.000		1.000	
	502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	8.000		8.000	
	506-6038	TEMP SEDMT CONT FENCE (INSTALL)	LF	7,686.000		7,686.000	
	506-6039	TEMP SEDMT CONT FENCE (REMOVE)	LF	7,686.000		7,686.000	
	506-6040	BIODEG EROSN CONT LOGS (INSTL) (8")	LF	240.000		240.000	
	506-6043	BIODEG EROSN CONT LOGS (REMOVE)	LF	240.000		240.000	
	529-6008	CONC CURB & GUTTER (TY II)	LF	2,595.000		2,595.000	
	529-6015	CONC CURB (TY C1)	LF	1,024.000		1,024.000	
	530-6004	DRIVEWAYS (CONC)	SY	1,321.000		1,321.000	
	531-6001	CONC SIDEWALKS (4")	SY	4,886.000		4,886.000	
	531-6005	CURB RAMPS (TY 2)	EA	1.000		1.000	
	531-6008	CURB RAMPS (TY 5)	EA	1.000		1.000	
	531-6009	CURB RAMPS (TY 6)	EA	14.000		14.000	
	531-6010	CURB RAMPS (TY 7)	EA	2.000		2.000	
	531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	384.000		384.000	
	624-6007	GROUND BOX TY C (162911)	EA	53.000		53.000	
	644-6068	RELOCATE SM RD SN SUP&AM TY 10BWG	EA	17.000		17.000	
	752-6014	STUMP REMOVAL	EA	1.000		1.000	
	752-6023	TREE TRIMMING	EA	50.000		50.000	
	1004-6001	TREE PROTECTION	EA	82.000		82.000	
	5033-6005	REMOVE BOLLARD	EA	2.000		2.000	
	5096-6001	TREE GRATE (CAST IRON)(42" X 42")	EA	9.000		9.000	
	18	SAFETY CONTINGENCY: CONTRACTOR FORCE ACCOUNT WORK (PARTICIPATING)	LS	1.000		1.000	

Estimate & Quantity Sheet

CONTROLLING PROJECT ID 0912-72-390 **DISTRICT** Houston **COUNTY** Harris
HIGHWAY Various

		CONTROL SECTION JOB		**0912-72-390**		TOTAL EST.	TOTAL FINAL
		PROJECT ID		**A00123438**			
		COUNTY		**Harris**			
		HIGHWAY		**Various**			
ALT	**BID CODE**	**DESCRIPTION**	**UNIT**	EST.	FINAL		
	18	EROSION CONTROL MAINTENANCE: CONTRACTOR FORCE ACCOUNT WORK (PART)	LS	1.000		1.000	

SUMMARY OF REMOVAL QUANTITIES

SUMMARY OF QUANTITIES			0104-6017	0104-6022	0104-6036	5033-6005
		INCIDENTAL SIDEWALK REMOVAL	REMOVING CONC (DRIVEWAYS)	REMOVING CONC (CURB AND GUTTER)	REMOVING CONC (SIDEWALK OR	REMOVE BOLLARD
SHEET NO.	STREET NAME		SY	LF	SY	EA
29	BELL STREET DEMOLITION PLAN (SHEET 1 OF 1)	401	161	147	94	0
30	LEELAND STREET DEMOLITION PLAN (SHEET 1 OF 2)	231	93	0	0	0
31	LEELAND STREET DEMOLITION PLAN (SHEET 2 OF 2)	187	17	145	177	0
32	PEASE STREET DEMOLITION PLAN (SHEET 1 OF 2)	543	105	0	28	0
33	PEASE STREET DEMOLITION PLAN (SHEET 2 OF 2)	90	17	0	0	0
34	JEFFERSON STREET DEMOLITION PLAN (SHEET 1 OF 2)	57	55	104	13	0
35	JEFFERSON STREET DEMOLITION PLAN (SHEET 2 OF 2)	172	91	0	2	0
36	ST. JOSEPH STREET DEMOLITION PLAN (SHEET 1 OF 1)	239	26	54	4	0
37	PIERCE STREET DEMOLITION PLAN (SHEET 1 OF 1)	15	0	0	0	0
38	SAN JACINTO STREET DEMOLITION PLAN (SHEET 1 OF 2)	213	0	0	0	0
39	SAN JACINTO STREET DEMOLITION PLAN (SHEET 2 OF 2)	106	0	0	0	0
40	CAROLINE STREET DEMOLITION PLAN (SHEET 1 OF 3)	75	0	0	0	0
41	CAROLINE STREET DEMOLITION PLAN (SHEET 2 OF 3)	297	280	124	146	0
42	CAROLINE STREET DEMOLITION PLAN (SHEET 3 OF 3)	885	87	231	0	0
43	LA BRANCH STREET DEMOLITION PLAN (SHEET 1 OF 2)	138	0	0	0	0
46	LA BRANCH STREET DEMOLITION PLAN (SHEET 2 OF 2)	264	74	172	0	2
44	JACKSON STREET DEMOLITION PLAN (SHEET 1 OF 2)	231	80	279	5	0
45	JACKSON STREET DEMOLITION PLAN (SHEET 2 OF 2)	319	74	606	17	0
47	HAMILTON STREET DEMOLITION PLAN (SHEET 1 OF 1)	183	17	0	37	0
	TOTAL	4646	1177	1862	523	2

SUMMARY OF GENERAL QUANTITIES

ITEM	DESCRIPTION	UNIT	QTY
0500-6001	MOBILIZATION	LS	1
0502-6001	BARRICADES, SIGNS AND TRAFFIC HANDLING	MO	6

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SUMMARY OF QUANTITIES

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	10

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SUMMARY OF QUANTITIES		0161-6009	0162-6002	0166-6001	0168-6001	0192-6015	0340-6034	5096-6001	0479-6001	0479-6005	0479-2008	0481-6001	0506-6038	0506-6039	0506-6040	0506-6043
		EROSION CONTROL COMPOST	BLOCK SODDING	FERTILIZER	VEGETATIVE WATERING	LANDSCAPE EDGE	D-GR HMA(SQ) TY-C PG64-22	TREE GRATE	ADJ MANHS	ADJ MANHS (WATER VALVE BOX) *	ADJ MANHS (WATER METER) *	PIPE (PVC) (SDR-35) (4 IN)	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	BIODEGRADBLE EROSION CONTROL LOGS REMOV
SHEET NO.	ST NAME	CY	SY	AC	MG	LF	TON	EA	EA	EA	EA	LF	LF	LF	LF	LF
	BELL ST SIDEWALK PLAN															
56	BELL ST - FROM SAN JACINTO ST TO CAROLINE ST	16	130.00	0.0	4	96.00	0	2	0	0	2	0	480	480	0	0
57	BELL ST - FROM JACKSON ST TO CHENEVERT ST	0	38.00	0.0	1	0.00	0	0	0	0	0	0	60	60	0	0
	LEELAND ST SIDEWALK PLAN															
58	LEELAND ST - FROM SAN JACINTO ST TO CAROLINE ST	12.0	158.00	0.0	5	132.00	0	2	0	0	0	0	239	239	0	0
59	LEELAND ST - FROM CAROLINE ST TO AUSTIN ST	8	87.00	0.0	3	72.00	0	0	0	0	0	0	248	248	0	0
60	LEELAND ST JACKSON ST TO CHENEVERT ST	4	131.00	0.0	3	48.00	0	0	0	0	0	0	270	270	0	0
	PEASE ST SIDEWALK PLAN															
61	PEASE ST - FROM FANNIN ST TO SAN JACINTO ST	8	47.00	0.0	2	96.00	0	0	0	1	2	0	384	384	10	10
62	PEASE ST - FROM CAROLINE ST TO AUSTIN ST	8	175.00	0.0	5	96.00	0	0	0	1	0	0	245	245	10	10
63	PEASE ST - FROM CHENEVERT ST TO HAMILTON ST	10	141.00	0.0	4	160.00	0	0	0	0	0	0	220	220	0	0
	JEFFERSON ST SIDEWALK PLAN															
64	JEFFERSON ST - FROM LA BRANCH ST TO CRAWFORD ST	0	27.00	0.0	1	0.00	0	0	0	0	0	0	150	150	10	10
65	JEFFERSON ST - FROM JACKSON ST TO CHENEVERT ST	0	53.00	0.0	1	0.00	0	0	0	0	0	0	160	160	0	0
66	JEFFERSON ST - FROM CHENEVERT ST TO HAMILTON ST	6	126.00	0.0	3	72.00	0	3	0	0	0	0	315	315	0	0
	ST JOSEPH ST SIDEWALK PLAN															
67	ST. JOSEPH ST JACKSON ST TO CHENEVERT ST	10	177.00	0.0	5	0.00	0	0	0	0	0	0	350	350	0	0
68	ST. JOSEPH ST - FROM CHENEVERT ST TO HAMILTON ST	0	107.00	0.0	3	0.00	0	0	0	1	0	0	240	240	0	0
	PIERCE ST SIDEWALK PLAN															
69	PIERCE ST - FROM AUSTIN ST TO LA BRANCH ST	0	22.00	0.0	1	0.00	0	0	0	0	1	0	50	50	0	0
70	PIERCE ST - FROM JACKSON ST TO CHENEVERT ST	0	257.00	0.1	6	0.00	0	0	0	0	1	0	310	310	0	0
	SAN JACINTO ST SIDEWALK PLAN															
71	SAN JACINTO ST - FROM PIERCE ST TO ST. JOSEPH ST	12	0.00	0.0	1	180.00	0	0	0	0	0	0	260	260	10	10
72	SAN JACINTO ST - FROM PEASE ST TO LEELAND ST	8	0.00	0.0	0	0.00	0	0	0	1	1	0	171	171	20	20
73	SAN JACINTO ST - FROM LEELAND ST TO BELL ST	0	0.00	0.0	0	0.00	0	0	0	0	0	0	47	47	20	20
	CAROLINE ST SIDEWALK PLAN															
74	CAROLINE ST - FROM ST JOSEPH ST TO JEFFERSON ST	0	32.00	0.0	1	0.00	0	0	1	0	0	0	130	130	0	0
75	CAROLINE ST - FROM JEFFERSON ST TO PEASE ST	0	0.00	0.0	0	0.00	0	0	0	0	0	0	50	50	0	0
76	CAROLINE ST - FROM PEASE ST TO LEELAND ST	0	118.00	0.0	3	0.00	0	0	0	3	3	0	320	320	10	10
77	CAROLINE ST - FROM LEELAND ST TO BELL ST	10	174.00	0.0	5	107.00	0	0	1	0	1	0	347	347	20	20
78	CAROLINE ST - FROM BELL ST TO CLAY ST	30	35.00	0.0	3	408.00	0	0	0	0	0	11	106	106	10	10
79	CAROLINE ST - FROM CLAY ST TO POLK ST	12	0.00	0.0	1	126.00	0	0	1	0	1	0	233	233	10	10
	LA BRANCH ST SIDEWALK PLAN															
80	LA BRANCH ST - FROM PIERCE ST TO ST. JOSEPH ST	14	120.00	0.0	4	0.00	0	0	0	0	0	0	260	260	10	10
81	LA BRANCH ST - FROM JEFFERSON ST TO PEASE ST	0	0.00	0.0	0	0.00	0	0	0	0	0	0	210	210	20	20
82	LA BRANCH ST PEASE ST TO LEELAND ST	2	36.00	0.0	1	0.00	0	0	0	0	0	0	60	60	10	10
	JACKSON ST SIDEWALK PLAN															
83	JACKSON ST PIERCE ST TO ST. JOSEPH ST	6	198.00	0.0	5	0.00	0	0	0	2	1	0	192	192	10	10
84	JACKSON ST ST. JOSEPH ST TO JEFFERSON ST	0	0.00	0.0	0	0.00	0	0	0	0	0	0	40	40	0	0
85	JACKSON ST JEFFERSON ST TO PEASE ST	6	192.00	0.0	5	60.00	0	0	0	0	0	0	475	475	20	20
86	JACKSON ST PEASE ST TO LEELAND ST	0	250.00	0.1	6	0.00	0	0	0	0	0	0	250	250	20	20
	HAMILTON ST SIDEWALK PLAN															
87	HAMILTON ST JEFFERSON ST TO BELL ST	0	86.00	0.0	2	0.00	0	0	0	0	0	0	156	156	10	10
88	HAMILTON ST LEELAND ST TO BELL ST	8	113.00	0.0	3	48.00	0	2	0	0	0	0	356	356	0	0
89	HAMILTON ST BELL ST TO CLAY ST	0	128.00	0.0	3	0.00	0	0	0	0	0	0	302	302	10	10
	TOTAL	190	3158.00	0.7	90	1701.00	1.727	9	3	9	13	11	7686	7686	240	240

NOTES:

1. SEE SHEET 10 FOR REMOVAL QUANTITIES (PAY ITEM 104).

2. TREE GRATE SIZE FOR PAY ITEM 5096-6001 SHOULD BE AS SHOWN IN THE PLANS.

* FOR CONTRACTOR'S INFORMATION ONLY

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV.	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SUMMARY OF QUANTITIES

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	11

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SUMMARY OF QUANTITIES		0529-6008	0529-6015	0530-6004	0531-6001	0531-6005	0531-6008	0531-6009	0531-6010	0531-6033	0624-6007	0644-6068	0752-6014	0752-6023	1004-6001
		CONC CURB & GUTTER (TY II)	CONC CURB (TY C1)	DRIVEWAYS (CONC)	CONC SIDEWALKS (4")	CURB RAMPS (TY 2)	CURB RAMPS (TY 5)	CURB RAMPS (TY 6)	CURB RAMPS (TY 7)	CONC SIDEWALKS (SPECIAL) (TYPE B)	GROUND BOX TY C (162911)	RELOCATE SM RD SN SUP & AM TY 10BWG	STUMP REMOVAL	TREE TRIMMING	TREE PROTECTION
SHEET NO.	ST NAME	LF	LF	SY	SY	EA	EA	EA	EA	SY	EA	EA	EA	EA	EA
	BELL ST SIDEWALK PLAN														
56	BELL ST - FROM SAN JACINTO ST TO CAROLINE ST	230	0	101	358	0	0	4	1	0	14	3	1	5	8
57	BELL ST - FROM JACKSON ST TO CHENEVERT ST	10	0	0	16	0	0	2	0	0	0	0	0	0	0
	LEELAND ST SIDEWALK PLAN														
58	LEELAND ST - FROM SAN JACINTO ST TO CAROLINE ST	135	23	35	128	0	0	2	0	0	1	0	0	3	4
59	LEELAND ST - FROM CAROLINE ST TO AUSTIN ST	70	144	0	147	0	0	0	0	0	0	0	0	4	4
60	LEELAND ST JACKSON ST TO CHENEVERT ST	0	0	222	87	0	0	2	0	0	1	0	0	0	2
	PEASE ST SIDEWALK PLAN														
61	PEASE ST - FROM FANNIN ST TO SAN JACINTO ST	111	0	114	115	0	0	1	0	92	4	0	0	4	4
62	PEASE ST - FROM CAROLINE ST TO AUSTIN ST	35	36	62	137	0	0	2	0	0	1	0	0	2	4
63	PEASE ST - FROM CHENEVERT ST TO HAMILTON ST	0	164	17	131	0	0	0	0	0	0	0	0	4	4
	JEFFERSON ST SIDEWALK PLAN														
64	JEFFERSON ST - FROM LA BRANCH ST TO CRAWFORD ST	109	87	28	83	0	0	0	0	0	1	1	0	0	0
65	JEFFERSON ST - FROM JACKSON ST TO CHENEVERT ST	8	0	52	72	0	1	0	0	0	1	0	0	0	0
66	JEFFERSON ST - FROM CHENEVERT ST TO HAMILTON ST	0	5	44	151	0	0	0	0	0	0	0	0	3	3
	ST JOSEPH ST SIDEWALK PLAN														
67	ST. JOSEPH ST JACKSON ST TO CHENEVERT ST	28	0	25	234	0	0	0	0	0	0	1	0	0	0
68	ST. JOSEPH ST - FROM CHENEVERT ST TO HAMILTON ST	25	20	0	129	0	0	0	0	0	0	0	0	0	0
	PIERCE ST SIDEWALK PLAN														
69	PIERCE ST - FROM AUSTIN ST TO LA BRANCH ST	0	0	0	18	0	0	0	0	0	0	0	0	0	0
70	PIERCE ST - FROM JACKSON ST TO CHENEVERT ST	120	0	0	214	0	0	0	0	0	1	0	0	0	0
	SAN JACINTO ST SIDEWALK PLAN														
71	SAN JACINTO ST - FROM PIERCE ST TO ST. JOSEPH ST	0	0	0	0	0	0	0	0	201	3	3	0	1	6
72	SAN JACINTO ST - FROM PEASE ST TO LEELAND ST	0	0	0	6	0	0	0	0	74	1	1	0	0	0
73	SAN JACINTO ST - FROM LEELAND ST TO BELL ST	4	0	0	0	0	0	0	0	17	0	0	0	0	0
	CAROLINE ST SIDEWALK PLAN														
74	CAROLINE ST - FROM ST JOSEPH ST TO JEFFERSON ST	0	0	0	86	0	0	0	0	0	3	0	0	0	0
75	CAROLINE ST - FROM JEFFERSON ST TO PEASE ST	0	0	0	14	0	0	0	0	0	0	0	0	0	0
76	CAROLINE ST - FROM PEASE ST TO LEELAND ST	139	0	216	162	0	0	0	0	0	7	1	0	0	0
77	CAROLINE ST - FROM LEELAND ST TO BELL ST	52	122	33	192	0	0	0	0	0	4	1	0	1	5
78	CAROLINE ST - FROM BELL ST TO CLAY ST	92	76	54	707	0	0	0	0	0	6	0	0	3	17
79	CAROLINE ST - FROM CLAY ST TO POLK ST	213	0	0	220	0	0	0	0	0	1	1	0	3	6
	LA BRANCH ST SIDEWALK PLAN														
80	LA BRANCH ST - FROM PIERCE ST TO ST. JOSEPH ST	0	0	0	120	0	0	0	0	0	0	0	0	7	7
81	LA BRANCH ST - FROM JEFFERSON ST TO PEASE ST	169	190	63	212	0	0	0	0	0	0	3	0	0	0
82	LA BRANCH ST PEASE ST TO LEELAND ST	38	0	0	107	0	0	0	0	0	1	0	0	1	0
	JACKSON ST SIDEWALK PLAN														
83	JACKSON ST PIERCE ST TO ST. JOSEPH ST	380	0	79	157	0	0	0	0	0	2	0	0	2	2
84	JACKSON ST ST. JOSEPH ST TO JEFFERSON ST	0	20	0	22	0	0	0	0	0	1	1	0	0	0
85	JACKSON ST JEFFERSON ST TO PEASE ST	228	137	42	258	1	0	0	0	0	0	0	0	3	3
86	JACKSON ST PEASE ST TO LEELAND ST	399	0	35	156	0	0	0	0	0	0	0	0	1	0
	HAMILTON ST SIDEWALK PLAN														
87	HAMILTON ST JEFFERSON ST TO BELL ST	0	0	79	71	0	0	0	0	0	0	0	0	0	0
88	HAMILTON ST LEELAND ST TO BELL ST	0	0	20	185	0	0	1	1	0	0	0	0	3	3
89	HAMILTON ST BELL ST TO CLAY ST	0	0	0	191	0	0	0	0	0	0	1	0	0	0
	TOTAL	2595	1024	1321	4886	1	1	14	2	384	53	17	1	50	82

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SUMMARY OF QUANTITIES

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	12

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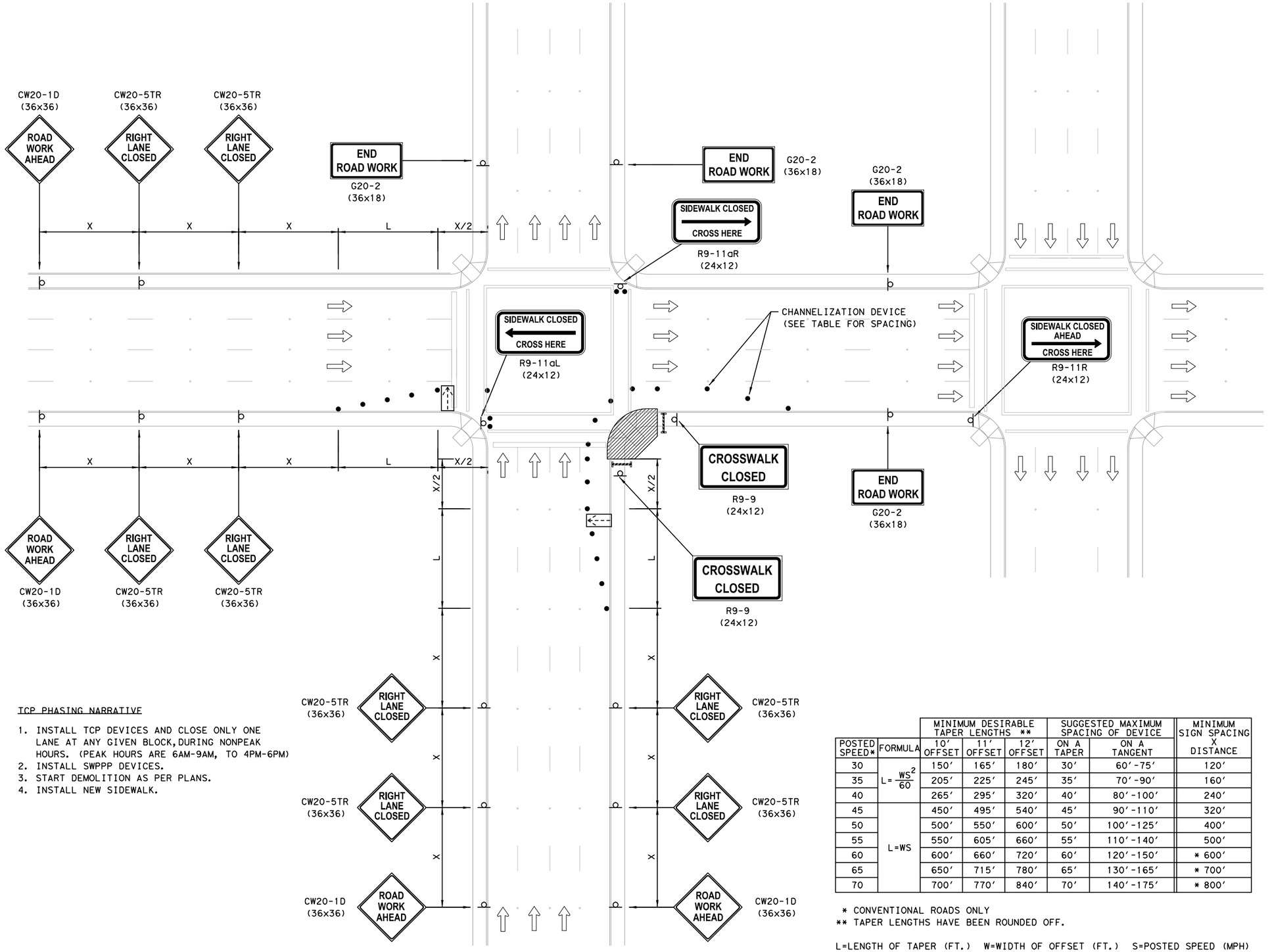

LEGEND:

- SIGN POST
- CHANNELIZING DEVICE WITH REFLECTORS
- TYPE 3 BARRICADE
- WORK ZONE
- TRAFFIC FLOW
- FLASHING ARROW SIGN BOARD

TCP PHASING NARRATIVE

1. INSTALL TCP DEVICES AND CLOSE ONLY ONE LANE AT ANY GIVEN BLOCK, DURING NONPEAK HOURS. (PEAK HOURS ARE 6AM-9AM, TO 4PM-6PM)
2. INSTALL SWPPP DEVICES.
3. START DEMOLITION AS PER PLANS.
4. INSTALL NEW SIDEWALK.

POSTED SPEED*	FORMULA	MINIMUM DESIRABLE TAPER LENGTHS ** 10' OFFSET	11' OFFSET	12' OFFSET	SUGGESTED MAXIMUM SPACING OF DEVICE ON A TAPER	ON A TANGENT	MINIMUM SIGN SPACING X DISTANCE
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'-75'	120'
35		205'	225'	245'	35'	70'-90'	160'
40		265'	295'	320'	40'	80'-100'	240'
45	L=WS	450'	495'	540'	45'	90'-110'	320'
50		500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	* 600'
65		650'	715'	780'	65'	130'-165'	* 700'
70		700'	770'	840'	70'	140'-175'	* 800'

* CONVENTIONAL ROADS ONLY
** TAPER LENGTHS HAVE BEEN ROUNDED OFF.

L=LENGTH OF TAPER (FT.) W=WIDTH OF OFFSET (FT.) S=POSTED SPEED (MPH)

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

TRAFFIC CONTROL PLAN SIDEWALK WORK ZONE

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	13

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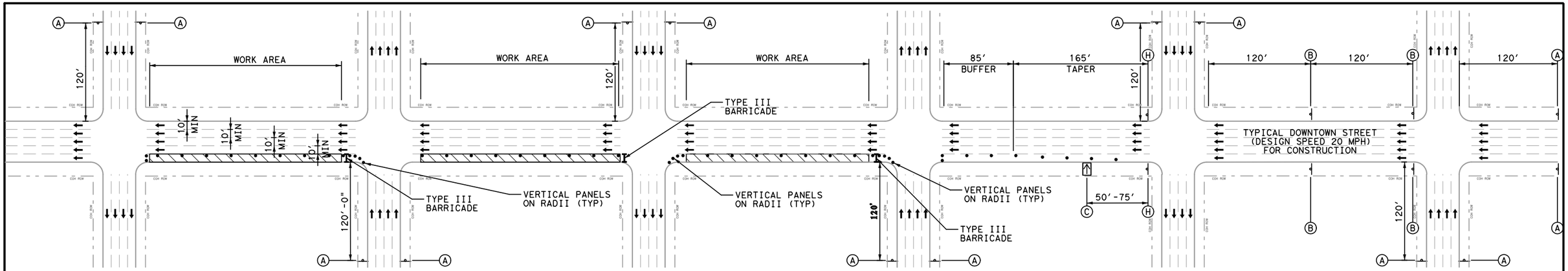
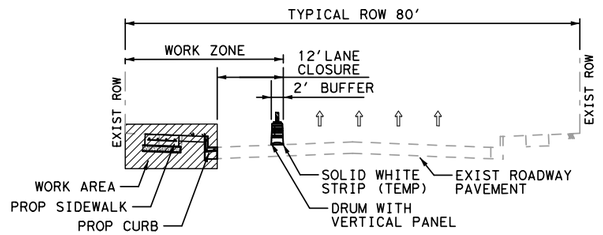


TYPICAL LEFT ONE LANE CLOSURE OF DOWNTOWN MULTIPLE ONE-WAY LANES

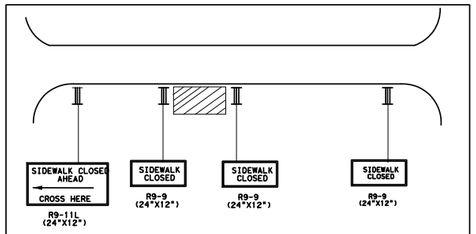


TYPICAL TRAFFIC CONTROL SECTION (LLC)

NTS

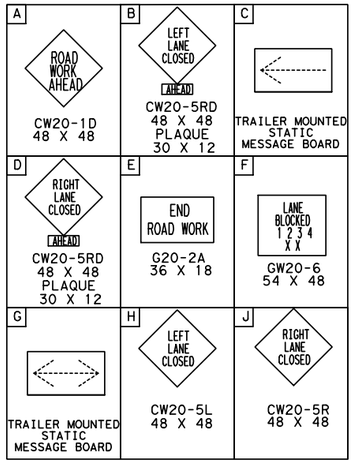
TCP NOTES:

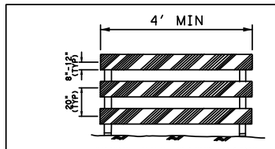
1. SEE SHEETS 56 TO 89 FOR BEGIN AND END STATION FOR WORKZONE AND CUT AREA.
2. CONTRACTOR TO USE 2′ BUFFER BETWEEN THE TRAFFIC LANE AND THE WORK ZONE.



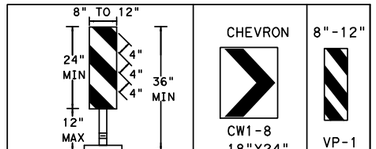
SIDEWALK CLOSURE DETAIL

N.T.S.





NOTE: STRIPES SHOULD SLOPE DOWNWARDS IN THE DIRECTION TOWARDS WHICH TRAFFIC IS DIRECTED



NOTE:

1. MAINTAIN AT LEAST ONE DRIVEWAY TO PROPERTIES THAT HAVE MULTIPLE ACCESS DRIVEWAYS.
2. MALL DIRVEWAYS TO BE CLOSED ONLY ONE AT A TIME.
3. TRAFFIC CONTROL SEGMENTS MAY BE CONCURRENT PROVIDED CONTRACTOR MAINTAINS A MINIMUM OF 2000 FEET BETWEEN SEGMENTS.

Ⓐ SIMILAR LETTER REPRESENTS SAME PROPERTY ACCESS.

LENGTH FOR BUFFERS	
POSTED SPEED (mph)	LENGTH IN FEET (B)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485
70	585

TYPICAL SIGN SPACING, TAPER LENGTHS, AND SUGGESTED SPACING OF CHANNELIZATION DEVICES.

POSTED SPEED*	FORMULA	MINIMUM DESIRABLE TAPER LENGTHS * * 10′ OFFSET	11′ OFFSET	12′ OFFSET	SUGGESTED MAXIMUM SPACING OF DEVICE ON A TAPER	ON A TANGENT	MINIMUM SIGN SPACING DISTANCE
20		67′	74′	80′	20′	40′-52′	80′
30	L= $\frac{WS^2}{60}$	150′	165′	180′	30′	60′-75′	120′
35		205′	225′	245′	35′	70′-90′	160′
40		265′	295′	320′	40′	80′-100′	240′
45		450′	495′	540′	45′	90′-110′	320′
50	L= WS	500′	550′	600′	50′	100′-125′	400′
55		550′	605′	660′	55′	110′-140′	500′
60		600′	660′	720′	60′	120′-150′	* 600′
65		650′	715′	780′	65′	130′-165′	* 700′
70		700′	770′	840′	70′	140′-175′	* 800′

* CONVENTIONAL ROADS ONLY
** TAPER LENGTHS HAVE BEEN ROUNDED OFF.
L=LENGTH OF TAPER (FT.)
W=WIDTH OF OFFSET (FT.)
S=POSTED SPEED (MPH)

SPACING FOR CHANNELIZING DEVICES

1. PLASTIC VERTICAL PANEL ON MERGING TAPER @ 20′ C-C WITH CHEVRON SIGN @ 40′ C-C AND TYPE ′C′ WARNING LIGHT (FOR OVERNIGHT CLOSURE)
2. PLASTIC VERTICAL PANEL ON DOWNSTREAM TAPER @ 30′ C-C
3. PLASTIC VERTICAL PANEL ON RADII @ 5′ C-C
4. PLASTIC VERTICAL PANEL ON TANGENT @ 30′ C-C WITH TYPE ′C′ WARNING LIGHT @ 60′ C-C (FOR OVERNIGHT CLOSURE)
5. PLASTIC VERTICAL PANEL IN FRONT OF CONSTRUCTION ZONE @ 20′ C-C WITH TYPE ′A′ WARNING LIGHT @ 40′ C-C (FOR OVERNIGHT CLOSURE)
6. CONCRETE TRAFFIC BARRIER (CTB) OR LOW PROFILE CONCRETE TRAFFIC (LPCTB) WITH REFLECTORS @ 10′ C-C IF PAVEMENT DROP IS MORE THAN TWELVE INCHES (12")
   NOTE: SPACING SHOWN ON TRAFFIC CONTROL PLANS SHALL SUPERSEDE THE ABOVE SPACINGS. SPACING MAY BE ADJUSTED TO PROVIDE DRIVEWAYS, INTERSECTIONS AND/OR MEDIAN OPENINGS.
7. 28" TUBULAR MARKERS
   A. 4 LANES TO 2 LANES UNDIVIDED ROADWAY SECTIONS @ 20′ C-C
   B. 4 LANES DIVIDED ROADWAY TO ONE SIDE TWO WAY ROAD @ 20′ C-C
   C. LEFT LANE AND RIGHT LANE STORAGE BAYS @ 15′ C-C
8. PLASTIC DRUM W/GUARD RAIL MOUNTED
   NOTE: SPACINGS SHOWN ON TRAFFIC CONTROL PLANS SHALL SUPERSEDE THE ABOVE SPACINGS. SPACINGS MAY BE ADJUSTED TO PROVIDE DRIVEWAYS, INTERSECTIONS AND/OR MEDIAN OPENINGS.

NOTE:

1. MAINTAIN AT LEAST ONE DRIVEWAY TO PROPERTIES THAT HAVE MULTIPLE ACCESS DRIVEWAYS.
2. MALL DRIVEWAY TO BE CLOSED ONLY ONE AT A TIME.
3. TRAFFIC CONTROL SEGMENTS MAY BE CONCURRENT PROVIDED CONTRACTOR MAINTAINS A MINIMUM OF 2000 FEET BETWEEN SEGMENTS.

Ⓐ SIMILAR LETTER REPRESENTS SAME PROPERTY ACCESS.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
TRAFFIC CONTROL PLAN
TYPICAL LEFT LANE CLOSURE

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	14

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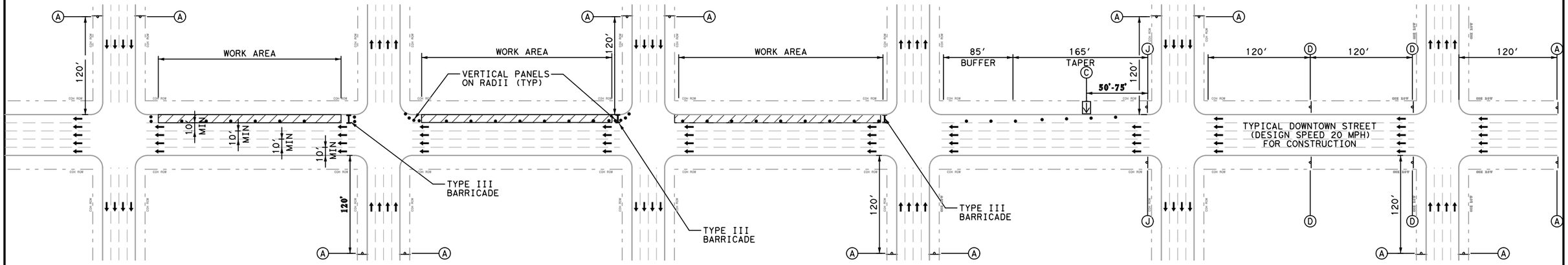
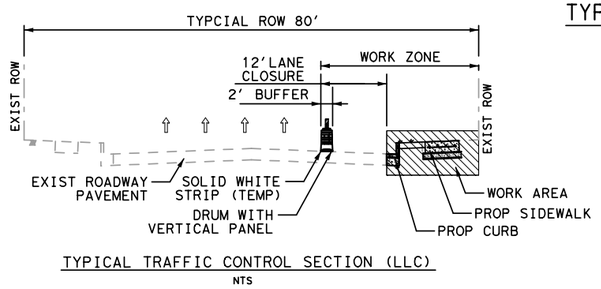




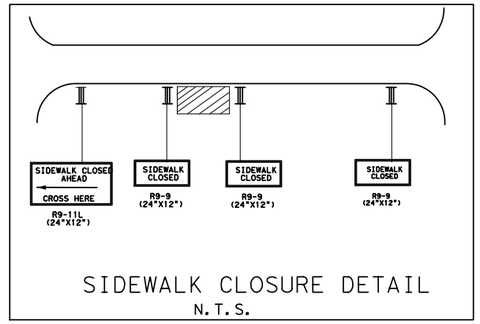
TYPICAL TRAFFIC CONTROL SECTION (LLC)

NTS

TYPICAL RIGHT ONE LANE CLOSURE OF DOWNTOWN MULTIPLE ONE-WAY LANES

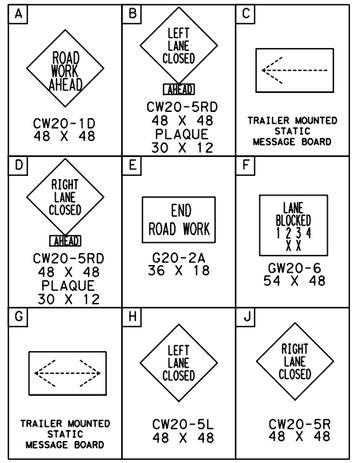
TCP NOTES:

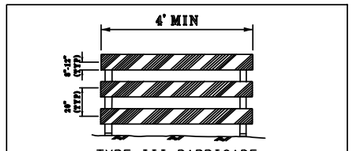
1. SEE SHEETS 56 TO 89 FOR BEGIN AND END STATION FOR WORKZONE AND CUT AREA.
2. CONTRACTOR TO USE 2' BUFFER BETWEEN THE TRAFFIC LANE AND THE WORK ZONE.



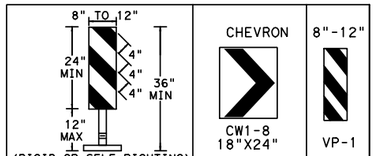
SIDEWALK CLOSURE DETAIL

N.T.S.





NOTE: STRIPES SHOULD SLOPE DOWNWARDS IN THE DIRECTION TOWARDS WHICH TRAFFIC IS DIRECTED



NOTE:
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2. MALL DIRVEWAYS TO BE CLOSED ONLY ONE AT A TIME.
3. TRAFFIC CONTROL SEGMENTS MAY BE CONCURRENT PROVIDED CONTRACTOR MAINTAINS A MINIMUM OF 2000 FEET BETWEEN SEGMENTS.

(A) SIMILAR LETTER REPRESENTS SAME PROPERTY ACCESS.

SPACING FOR CHANNELIZING DEVICES

1. PLASTIC VERTICAL PANEL ON MERGING TAPER @ 20' C-C WITH CHEVRON SIGN @ 40' C-C AND TYPE 'C' WARNING LIGHT (FOR OVERNIGHT CLOSURE)
2. PLASTIC VERTICAL PANEL ON DOWNSTREAM TAPER @ 30' C-C
3. PLASTIC VERTICAL PANEL ON RADII @ 5' C-C
4. PLASTIC VERTICAL PANEL ON TANGENT @ 30' C-C WITH TYPE 'C' WARNING LIGHT @ 60' C-C (FOR OVERNIGHT CLOSURE)
5. PLASTIC VERTICAL PANEL IN FRONT OF CONSTRUCTION ZONE @ 20' C-C WITH TYPE 'A' WARNING LIGHT @ 40' C-C (FOR OVERNIGHT CLOSURE)
6. CONCRETE TRAFFIC BARRIER (CTB) OR LOW PROFILE CONCRETE TRAFFIC (LPCTB) WITH REFLECTORS @ 10' C-C IF PAVEMENT DROP IS MORE THAN TWELVE INCHES (12")
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7. 28" TUBULAR MARKERS
   A. 4 LANES TO 2 LANES UNDIVIDED ROADWAY SECTIONS @ 20' C-C
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8. PLASTIC DRUM W/GUARD RAIL MOUNTED
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LENGTH FOR BUFFERS	
POSTED SPEED (mph)	LENGTH IN FEET (B)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
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70	585

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50	L= WS	500'	550'	600'	50'	100'-125'	400'
55		550'	605'	660'	55'	110'-140'	500'
60		600'	660'	720'	60'	120'-150'	* 600'
65		650'	715'	780'	65'	130'-165'	* 700'
70		700'	770'	840'	70'	140'-175'	* 800'

* CONVENTIONAL ROADS ONLY
** TAPER LENGTHS HAVE BEEN ROUNDED OFF.
L=LENGTH OF TAPER (FT.)
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NOTE:
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(A) SIMILAR LETTER REPRESENTS SAME PROPERTY ACCESS.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

TRAFFIC CONTROL PLAN TYPICAL RIGHT LANE CLOSURE

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	15

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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).

2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.

3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.

4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.

5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.

6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.

7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.

8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.

9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.

10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.

11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.

12. The Engineer has the final decision on the location of all traffic control devices.

13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.

2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.

2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS	0912	72	390	VARIES
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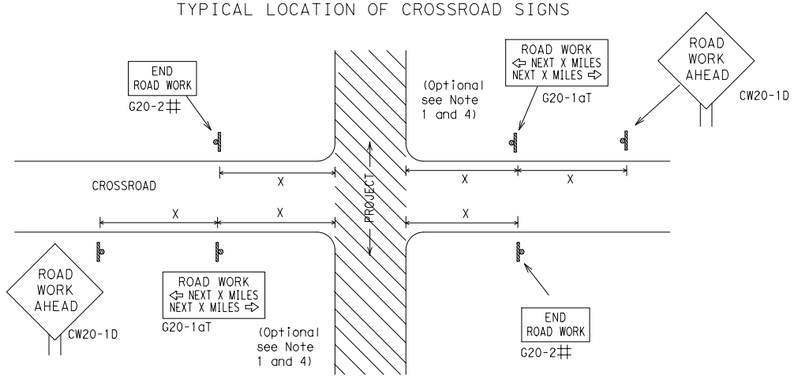
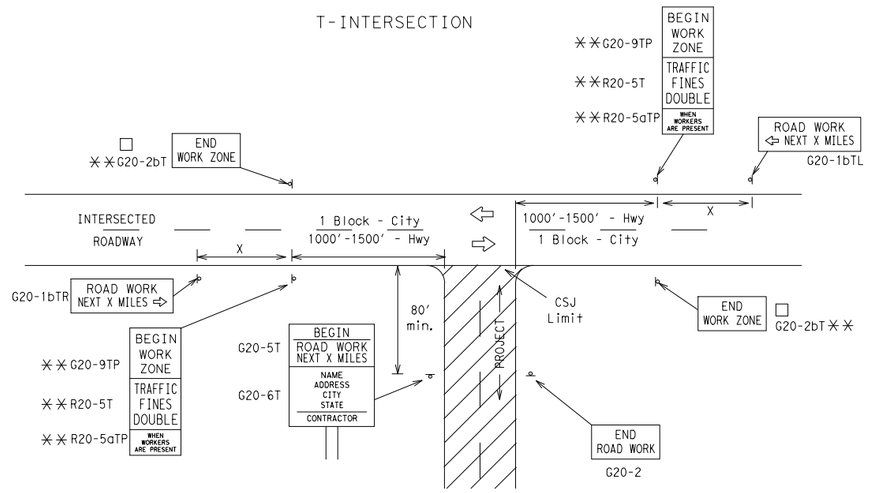
TYPICAL LOCATION OF CROSSROAD SIGNS



May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume as per TMUTCD Part 5. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection, the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING[1,5,6]

Sign Number or Series	SIZE Conventional Road	SIZE Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

Posted Speed	SPACING Sign △ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
72	800[2]
75	900[2]
80	1000[2]
✳	✳[3]

✳ For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

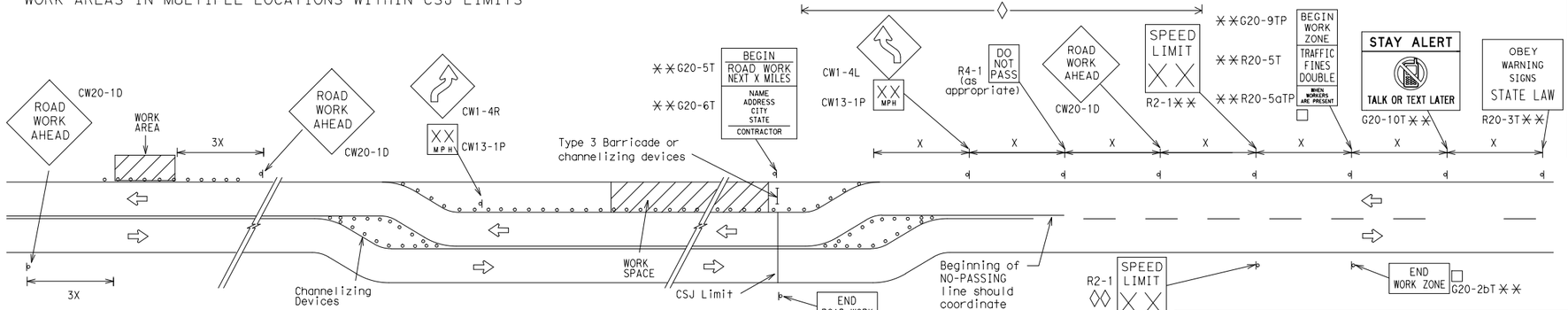
△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer as per TMUTCD Part 5. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

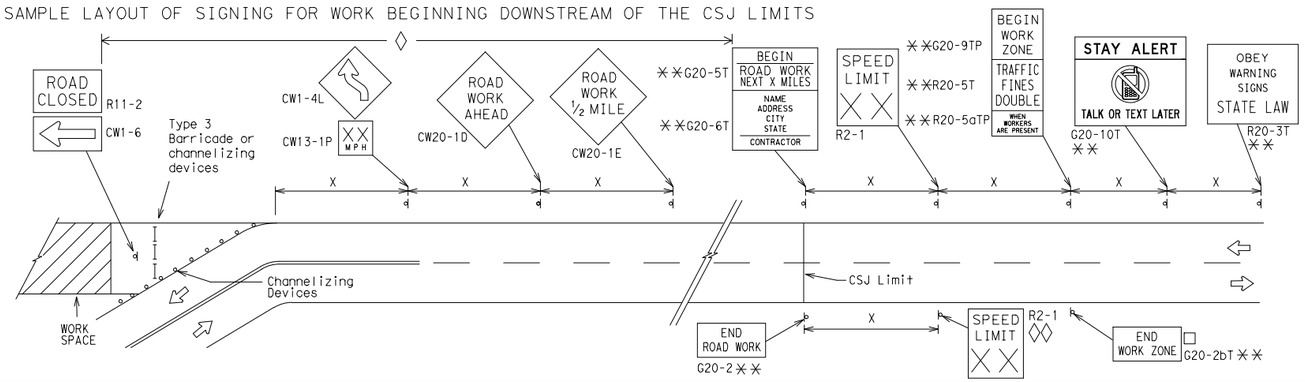
WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS



When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

□ The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

✳✳ CSJ limit signing is required for highway construction and maintenance work, with the exception of mobile operations.

◊ Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

◊◊ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND	
⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▬	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-21

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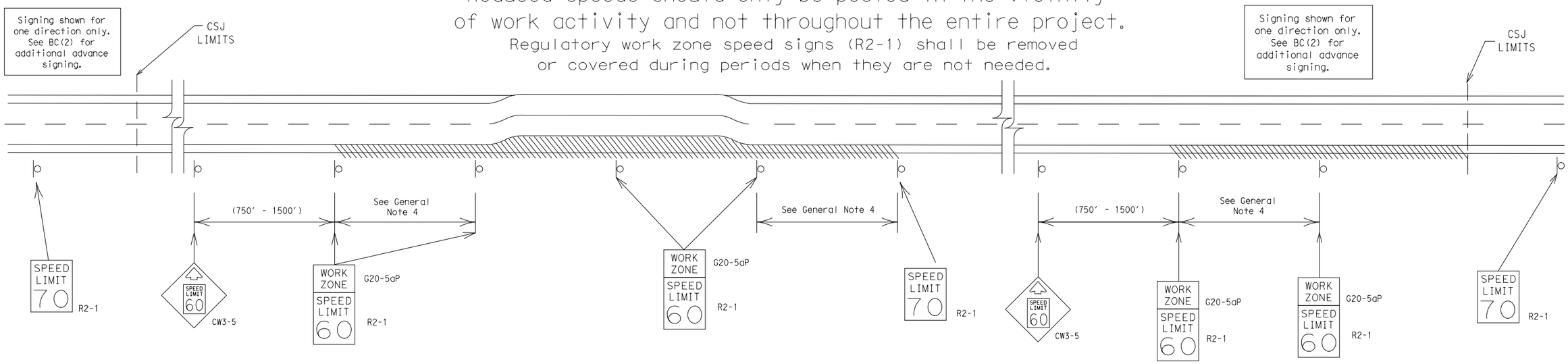
TYPICAL APPLICATION OF WORK ZONE SPEED LIMIT SIGNS

Work zone speed limits shall be regulatory, established in accordance with the "Procedures for Establishing Speed Zones," and approved by the Texas Transportation Commission, or by City Ordinance when within Incorporated City Limits.

Reduced speeds should only be posted in the vicinity of work activity and not throughout the entire project.

Regulatory work zone speed signs (R2-1) shall be removed or covered during periods when they are not needed.



GUIDANCE FOR USE:

LONG/INTERMEDIATE TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit should be included on the design of the traffic control plans when restricted geometrics with a lower design speed are present in the work zone and modification of the geometrics to a higher design speed is not feasible.

Long/Intermediate Term Work Zone Speed Limit signs, when approved as described above, should be posted and visible to the motorist when work activity is present. Work activity may also be defined as a change in the roadway that requires a reduced speed for motorists to safely negotiate the work area, including:

a) rough road or damaged pavement surface
b) substantial alteration of roadway geometrics (diversions)
c) construction detours
d) grade
e) width
f) other conditions readily apparent to the driver

As long as any of these conditions exist, the work zone speed limit signs should remain in place.

SHORT TERM WORK ZONE SPEED LIMITS

This type of work zone speed limit may be included on the design of the traffic control plans when workers or equipment are not behind concrete barrier, when work activity is within 10 feet of the traveled way or actually in the traveled way.

Short Term Work Zone Speed Limit signs should be posted and visible to the motorists only when work activity is present. When work activity is not present, signs shall be removed or covered.
(See Removing or Covering on BC(4)).

GENERAL NOTES

1. Regulatory work zone speed limits should be used only for sections of construction projects where speed control is of major importance.
2. Regulatory work zone speed limit signs shall be placed on supports at a 7 foot minimum mounting height.
3. Speed zone signs are illustrated for one direction of travel and are normally posted for each direction of travel.
4. Frequency of work zone speed limit signs should be:
   40 mph and greater 0.2 to 2 miles
   35 mph and less 0.2 to 1 mile
5. Regulatory speed limit signs shall have black legend and border on a white reflective background (See "Reflective Sheeting" on BC(4)).
6. Fabrication, erection and maintenance of the"ADVANCE SPEED LIMIT"(CW3-5)sign, "WORK ZONE"(G20-5aP) plaque and the "SPEED LIMIT"(R2-1)signs shall not be paid for directly, but shall be considered subsidiary to Item 502.
7. Turning signs from view, laying signs over or down will not be allowed, unless as otherwise noted under "REMOVING OR COVERING" on BC(4).
8. Techniques that may help reduce traffic speeds include but are not limited to:
   A. Law enforcement.
   B. Flagger stationed next to sign.
   C. Portable changeable message sign (PCMS).
   D. Low-power (drone) radar transmitter.
   E. Speed monitor trailers or signs.
9. Speeds shown on details above are for illustration only. Work Zone Speed Limits should only be posted as approved for each project.
10. For more specific guidance concerning the type of work, work zone conditions and factors impacting allowable regulatory construction speed zone reduction see TxDOT form #1204 in the TxDOT e-form system.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC(3)-21

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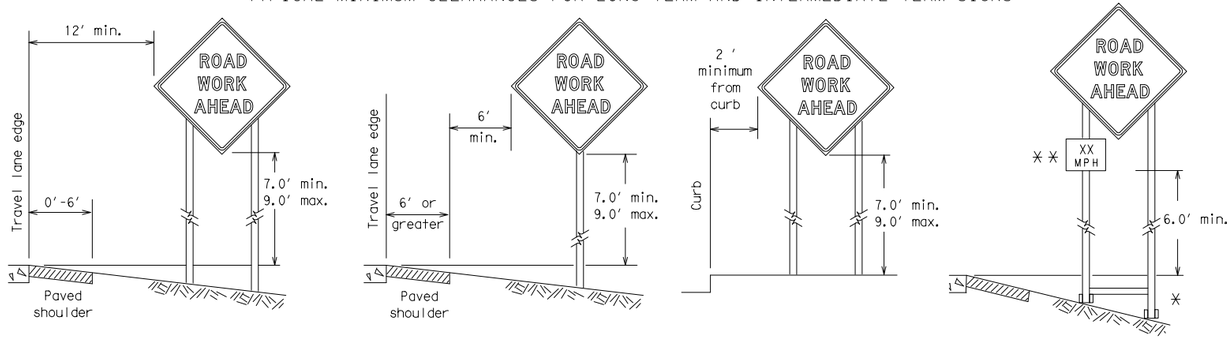
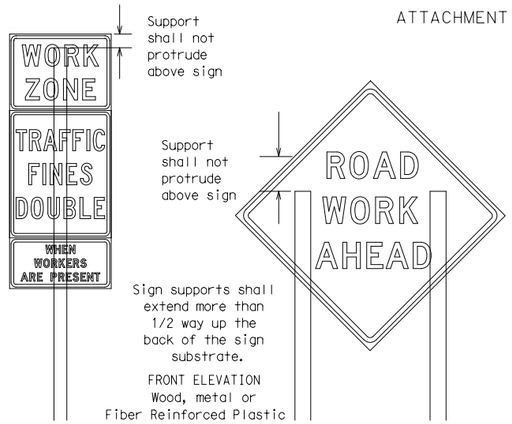
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

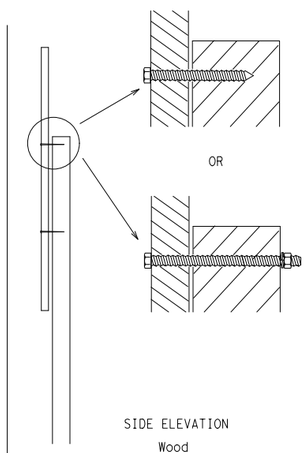


⚹ When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

⚹⚹ When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS





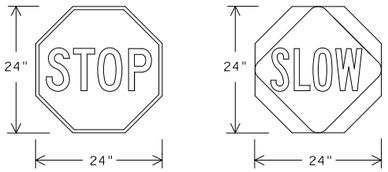
Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
2. STOP/SLOW paddles shall be retroreflectorized when used at night.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6′ to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets.The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height,the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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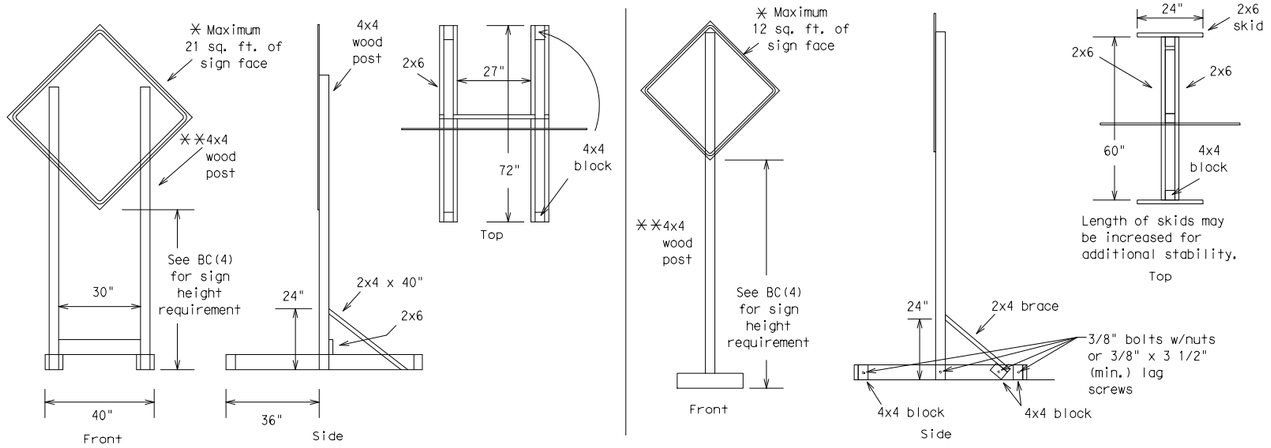
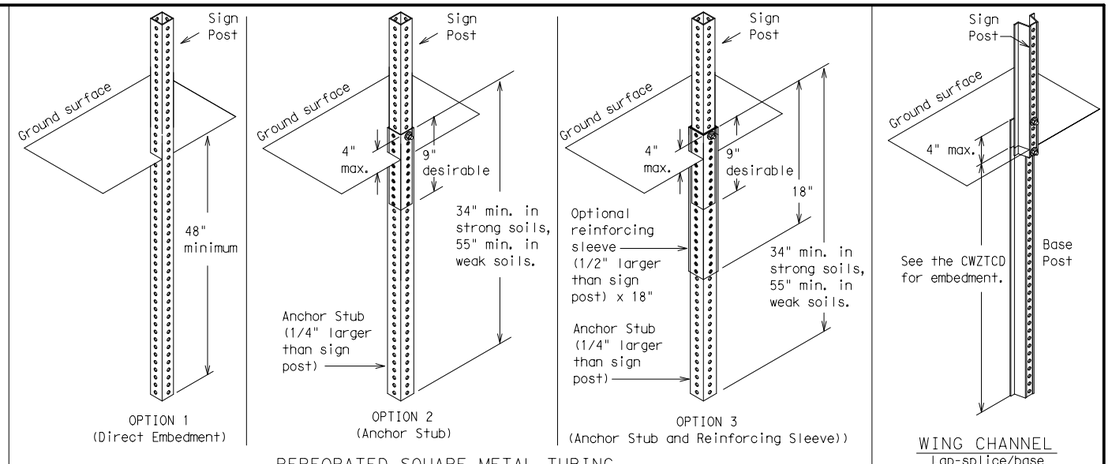


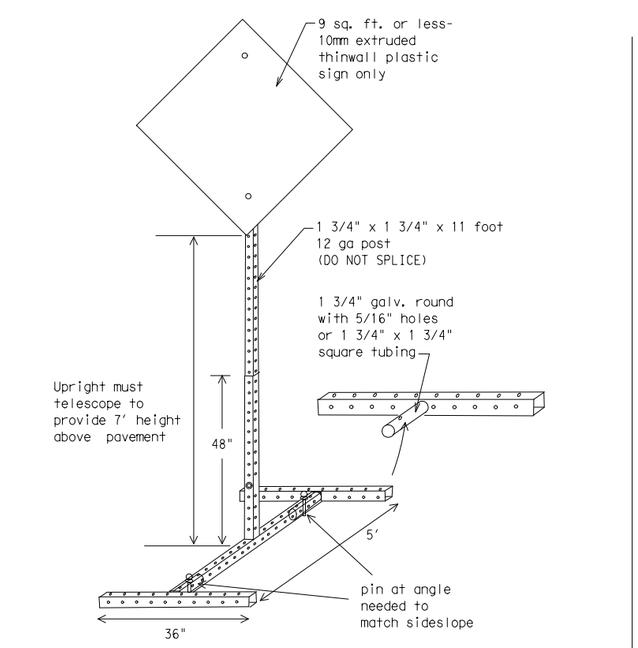
SKID MOUNTED WOOD SIGN SUPPORTS

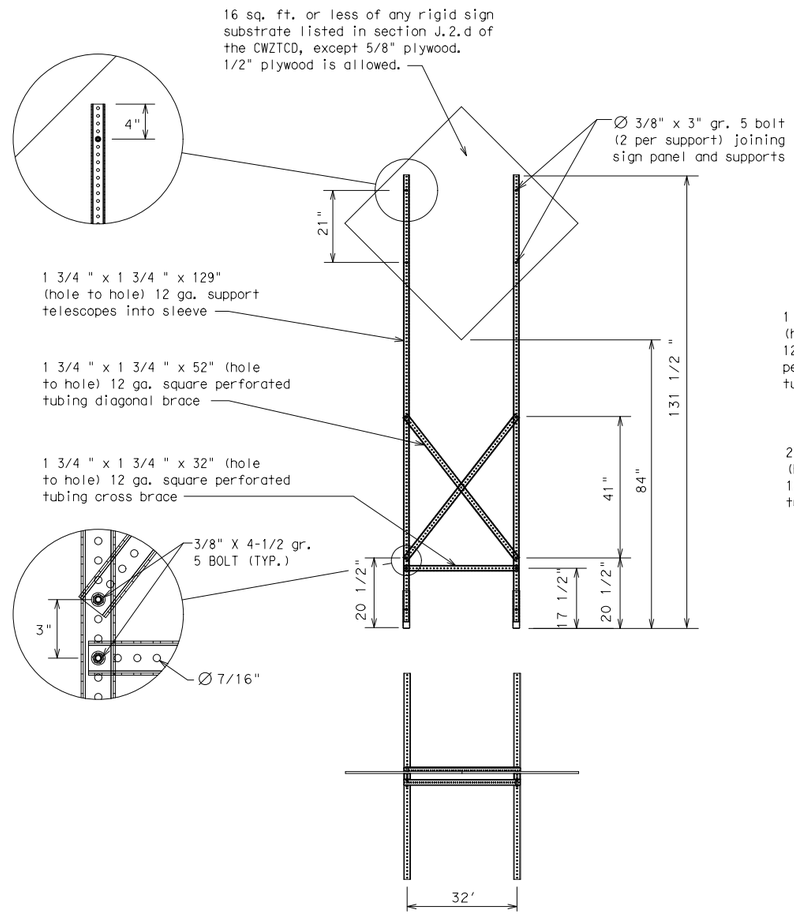
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

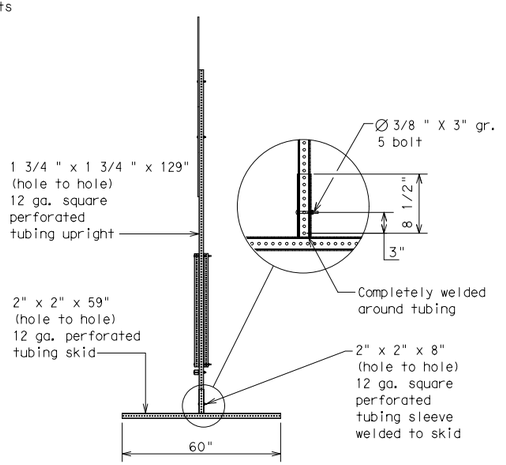


GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.







SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

* See BC(4) for definition of "Work Duration."

** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

□ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0912	72	390	VARIES
9-07 8-14	DIST	COUNTY		SHEET NO.
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DATE:
FILE:

WHEN NOT IN USE, REMOVE THE PCMS FROM THE RIGHT-OF-WAY OR PLACE THE PCMS BEHIND BARRIER OR GUARDRAIL WITH SIGN PANEL TURNED PARALLEL TO TRAFFIC

PORTABLE CHANGEABLE MESSAGE SIGNS

1. The Engineer/Inspector shall approve all messages used on portable changeable message signs (PCMS).
2. Messages on PCMS should contain no more than 8 words (about four to eight characters per word), not including simple words such as "TO," "FOR," "AT," etc.
3. Messages should consist of a single phase, or two phases that alternate. Three-phase messages are not allowed. Each phase of the message should convey a single thought, and must be understood by itself.
4. Use the word "EXIT" to refer to an exit ramp on a freeway; i.e., "EXIT CLOSED." Do not use the term "RAMP."
5. Always use the route or interstate designation (IH, US, SH, FM) along with the number when referring to a roadway.
6. When in use, the bottom of a stationary PCMS message panel should be a minimum 7 feet above the roadway, where possible.
7. The message term "WEEKEND" should be used only if the work is to start on Saturday morning and end by Sunday evening at midnight. Actual days and hours of work should be displayed on the PCMS if work is to begin on Friday evening and/or continue into Monday morning.
8. The Engineer/Inspector may select one of two options which are available for displaying a two-phase message on a PCMS. Each phase may be displayed for either four seconds each or for three seconds each.
9. Do not "flash" messages or words included in a message. The message should be steady burn or continuous while displayed.
10. Do not present redundant information on a two-phase message; i.e., keeping two lines of the message the same and changing the third line.
11. Do not use the word "Danger" in message.
12. Do not display the message "LANES SHIFT LEFT" or "LANES SHIFT RIGHT" on a PCMS. Drivers do not understand the message.
13. Do not display messages that scroll horizontally or vertically across the face of the sign.
14. The following table lists abbreviated words and two-word phrases that are acceptable for use on a PCMS. Both words in a phrase must be displayed together. Words or phrases not on this list should not be abbreviated, unless shown in the TMUTCD.
15. PCMS character height should be at least 18 inches for trailer mounted units. They should be visible from at least 1/2 (.5) mile and the text should be legible from at least 600 feet at night and 800 feet in daylight. Truck mounted units must have a character height of 10 inches and must be legible from at least 400 feet.
16. Each line of text should be centered on the message board rather than left or right justified.
17. If disabled, the PCMS should default to an illegible display that will not alarm motorists and will only be used to alert workers that the PCMS has malfunctioned. A pattern such as a series of horizontal solid bars is appropriate.

WORD OR PHRASE	ABBREVIATION
Access Road	ACCS RD
Alternate	ALT
Avenue	AVE
Best Route	BEST RTE
Boulevard	BLVD
Bridge	BRDG
Cannot	CANT
Center	CTR
Construction Ahead	CONST AHD
CROSSING	XING
Detour Route	DETOUR RTE
Do Not	DONT
East	E
Eastbound	(route) E
Emergency	EMER
Emergency Vehicle	EMER VEH
Entrance, Enter	ENT
Express Lane	EXP LN
Expressway	EXPWY
XXXX Feet	XXXX FT
Fog Ahead	FOG AHD
Freeway	FRWY, FWY
Freeway Blocked	FWY BLKD
Friday	FRI
Hazardous Driving	HAZ DRIVING
Hazardous Material	HAZMAT
High-Occupancy	HOV
Vehicle Highway	HWY
Hour(s)	HR, HRS
Information	INFO
It Is	ITS
Junction	JCT
Left	LFT
Left Lane	LFT LN
Lane Closed	LN CLOSED
Lower Level	LWR LEVEL
Maintenance	MAINT

WORD OR PHRASE	ABBREVIATION
Major	MAJ
Miles	MI
Miles Per Hour	MPH
Minor	MNR
Monday	MON
Normal	NORM
North	N
Northbound	(route) N
Parking	PKING
Road	RD
Right Lane	RT LN
Saturday	SAT
Service Road	SERV RD
Shoulder	SHLDR
Slippery	SLIP
South	S
Southbound	(route) S
Speed	SPD
Street	ST
Sunday	SUN
Telephone	PHONE
Temporary	TEMP
Thursday	THURS
To Downtown	TO DWNTN
Traffic	TRAF
Travelers	TRVLRS
Tuesday	TUES
Time Minutes	TIME MIN
Upper Level	UPR LEVEL
Vehicles (s)	VEH, VEHS
Warning	WARN
Wednesday	WED
Weight Limit	WT LIMIT
West	W
Westbound	(route) W
Wet Pavement	WET PVMT
Will Not	WONT

Roadway designation # IH-number, US-number, SH-number, FM-number

RECOMMENDED PHASES AND FORMATS FOR PCMS MESSAGES DURING ROADWORK ACTIVITIES

(The Engineer may approve other messages not specifically covered here.)

Phase 1: Condition Lists

Road/Lane/Ramp Closure List

FREEWAY CLOSED X MILE	FRONTAGE ROAD CLOSED
ROAD CLOSED AT SH XXX	SHOULDER CLOSED XXX FT
ROAD CLSD AT FM XXXX	RIGHT LN CLOSED XXX FT
RIGHT X LANES CLOSED	RIGHT X LANES OPEN
CENTER LANE CLOSED	DAYTIME LANE CLOSURES
NIGHT LANE CLOSURES	I-XX SOUTH EXIT CLOSED
VARIOUS LANES CLOSED	EXIT XXX CLOSED X MILE
EXIT CLOSED	RIGHT LN TO BE CLOSED
MALL DRIVEWAY CLOSED	X LANES CLOSED TUE - FRI
XXXXXXXX BLVD CLOSED	

Other Condition List

ROADWORK XXX FT	ROAD REPAIRS XXXX FT
FLAGGER XXXX FT	LANE NARROWS XXXX FT
RIGHT LN NARROWS XXXX FT	TWO-WAY TRAFFIC XX MILE
MERGING TRAFFIC XXXX FT	CONST TRAFFIC XXX FT
LOOSE GRAVEL XXXX FT	UNEVEN LANES XXXX FT
DETOUR X MILE	ROUGH ROAD XXXX FT
ROADWORK PAST SH XXXX	ROADWORK NEXT FRI-SUN
BUMP XXXX FT	US XXX EXIT X MILES
TRAFFIC SIGNAL XXXX FT	LANES SHIFT *

Phase 2: Possible Component Lists

Action to Take/Effect on Travel List

MERGE RIGHT	FORM X LINES RIGHT
DETOUR NEXT X EXITS	USE XXXXX RD EXIT
USE EXIT XXX	USE EXIT I-XX NORTH
STAY ON US XXX SOUTH	USE I-XX E TO I-XX N
TRUCKS USE US XXX N	WATCH FOR TRUCKS
WATCH FOR TRUCKS	EXPECT DELAYS
EXPECT DELAYS	PREPARE TO STOP
REDUCE SPEED XXX FT	END SHOULDER USE
USE OTHER ROUTES	WATCH FOR WORKERS
STAY IN LANE *	

Location List

AT FM XXXX
BEFORE RAILROAD CROSSING
NEXT X MILES
PAST US XXX EXIT
XXXXXXX TO XXXXXXX
US XXX TO FM XXXX

Warning List

SPEED LIMIT XX MPH
MAXIMUM SPEED XX MPH
MINIMUM SPEED XX MPH
ADVISORY SPEED XX MPH
RIGHT LANE EXIT
USE CAUTION
DRIVE SAFELY
DRIVE WITH CARE

** Advance Notice List

TUE-FRI XX AM- X PM
APR XX-XX X PM-X AM
BEGINS MONDAY
BEGINS MAY XX
MAY X-X XX PM - XX AM
NEXT FRI-SUN
XX AM TO XX PM
NEXT TUE AUG XX
TONIGHT XX PM- XX AM

* LANES SHIFT in Phase 1 must be used with STAY IN LANE in Phase 2.

** See Application Guidelines Note 6.

APPLICATION GUIDELINES

1. Only 1 or 2 phases are to be used on a PCMS.
2. The 1st phase (or both) should be selected from the "Road/Lane/Ramp Closure List" and the "Other Condition List".
3. A 2nd phase can be selected from the "Action to Take/Effect on Travel, Location, General Warning, or Advance Notice Phase Lists".
4. A Location Phase is necessary only if a distance or location is not included in the first phase selected.
5. If two PCMS are used in sequence, they must be separated by a minimum of 1000 ft. Each PCMS shall be limited to two phases, and should be understandable by themselves.
6. For advance notice, when the current date is within seven days of the actual work date, calendar days should be replaced with days of the week. Advance notification should typically be for no more than one week prior to the work.

WORDING ALTERNATIVES

1. The words RIGHT, LEFT and ALL can be interchanged as appropriate.
2. Roadway designations IH, US, SH, FM and LP can be interchanged as appropriate.
3. EAST, WEST, NORTH and SOUTH (or abbreviations E, W, N and S) can be interchanged as appropriate.
4. Highway names and numbers replaced as appropriate.
5. ROAD, HIGHWAY and FREEWAY can be interchanged as needed.
6. AHEAD may be used instead of distances if necessary.
7. FT and MI, MILE and MILES interchanged as appropriate.
8. AT, BEFORE and PAST interchanged as needed.
9. Distances or AHEAD can be eliminated from the message if a location phase is used.

PCMS SIGNS WITHIN THE R.O.W. SHALL BE BEHIND GUARDRAIL OR CONCRETE BARRIER OR SHALL HAVE A MINIMUM OF FOUR (4) PLASTIC DRUMS PLACED PERPENDICULAR TO TRAFFIC ON THE UPSTREAM SIDE OF THE PCMS, WHEN EXPOSED TO ONE DIRECTION OF TRAFFIC. WHEN EXPOSED TO TWO WAY TRAFFIC, THE FOUR DRUMS SHOULD BE PLACED WITH ONE DRUM AT EACH OF THE FOUR CORNERS OF THE UNIT.

FULL MATRIX PCMS SIGNS

1. When Full Matrix PCMS signs are used, the character height and legibility/visibility requirements shall be maintained as listed in Note 15 under "PORTABLE CHANGEABLE MESSAGE SIGNS" above.
2. When symbol signs, such as the "Flagger Symbol"(CW20-7) are represented graphically on the Full Matrix PCMS sign and, with the approval of the Engineer, it shall maintain the legibility/visibility requirement listed above.
3. When symbol signs are represented graphically on the Full Matrix PCMS, they shall only supplement the use of the static sign represented, and shall not substitute for, or replace that sign.
4. A full matrix PCMS may be used to simulate a flashing arrow board provided it meets the visibility, flash rate and dimming requirements on BC(7), for the same size arrow.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC(6)-21

FILE:	bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS		0912	72	390	VARIES
9-07 8-14		DIST	COUNTY		SHEET NO.
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DATE:
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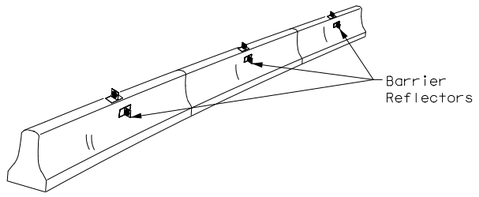
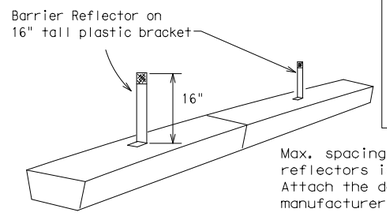
1. Barrier Reflectors shall be pre-qualified, and conform to the color and reflectivity requirements of DMS-8600. A list of prequalified Barrier Reflectors can be found at the Material Producer List web address shown on BC(1).
2. Color of Barrier Reflectors shall be as specified in the TMUTCD. The cost of the reflectors shall be considered subsidiary to Item 512.



CONCRETE TRAFFIC BARRIER (CTB)

3. Where traffic is on one side of the CTB, two (2) Barrier Reflectors shall be mounted in approximately the midsection of each section of CTB. An alternate mounting location is uniformly spaced at one end of each CTB. This will allow for attachment of a barrier grapple without damaging the reflector. The Barrier Reflector mounted on the side of the CTB shall be located directly below the reflector mounted on top of the barrier, as shown in the detail above.
4. Where CTB separates two-way traffic, three barrier reflectors shall be mounted on each section of CTB. The reflector unit on top shall have two yellow reflective faces (Bi-Directional)while the reflectors on each side of the barrier shall have one yellow reflective face, as shown in the detail above.
5. When CTB separates traffic traveling in the same direction, no barrier reflectors will be required on top of the CTB.
6. Barrier Reflector units shall be yellow or white in color to match the edgeline being supplemented.
7. Maximum spacing of Barrier Reflectors is forty (40) feet.
8. Pavement markers or temporary flexible-reflective roadway marker tabs shall NOT be used as CTB delineation.
9. Attachment of Barrier Reflectors to CTB shall be per manufacturer's recommendations.
10. Missing or damaged Barrier Reflectors shall be replaced as directed by the Engineer.
11. Single slope barriers shall be delineated as shown on the above detail.

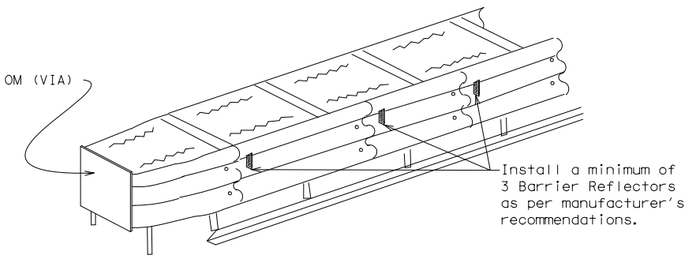


Max. spacing of barrier reflectors is 20 feet. Attach the delineators as per manufacturer's recommendations.

LOW PROFILE CONCRETE BARRIER (LPCB)

LOW PROFILE CONCRETE BARRIER (LPCB) USED IN WORK ZONES

LPCB is approved for use in work zone locations, where the posted speed is 45mph, or less. See Roadway Standard Sheet LPCB.

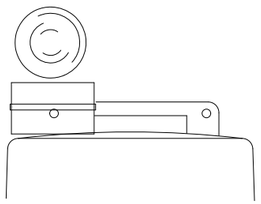


DELINEATION OF END TREATMENTS

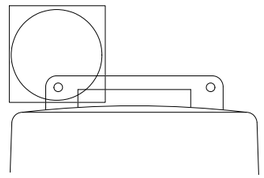
END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet the apppropriate crashworthy standards as defined in the Manual for Assessing Safety Hardware (MASH). Refer to the CWZTCD List for approved end treatments and manufacturers.

BARRIER REFLECTORS FOR CONCRETE TRAFFIC BARRIER AND ATTENUATORS



Type C Warning Light or approved substitute mounted on a drum adjacent to the travel way.



Warning reflector may be round or square.Must have a yellow reflective surface area of at least 30 square inches

WARNING LIGHTS

1. Warning lights shall meet the requirements of the TMUTCD.
2. Warning lights shall NOT be installed on barricades.
3. Type A-Low Intensity Flashing Warning Lights are commonly used with drums. They are intended to warn of or mark a potentially hazardous area. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "FL". The Type A Warning Lights shall not be used with signs manufactured with Type B_{FL} or C_{FL} Sheeting meeting the requirements of Departmental Material Specification DMS-8300.
4. Type-C and Type D 360 degree Steady Burn Lights are intended to be used in a series for delineation to supplement other traffic control devices. Their use shall be as indicated on this sheet and/or other sheets of the plans by the designation "SB".
5. The Engineer/Inspector or the plans shall specify the location and type of warning lights to be installed on the traffic control devices.
6. When required by the Engineer, the Contractor shall furnish a copy of the warning lights certification. The warning light manufacturer will certify the warning lights meet the requirements of the latest ITE Purchase Specifications for Flashing and Steady-Burn Warning Lights.
7. When used to delineate curves, Type-C and Type D Steady Burn Lights should only be placed on the outside of the curve, not the inside.
8. The location of warning lights and warning reflectors on drums shall be as shown elsewhere in the plans.

WARNING LIGHTS MOUNTED ON PLASTIC DRUMS

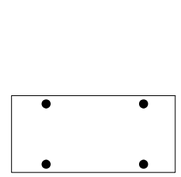
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing devices to form a merging taper may be used for delineation. If used, the successive flashing of the sequential warning lights should occur from the beginning of the taper to the end of the merging taper in order to identify the desired vehicle path. The rate of flashing for each light shall be 65 flashes per minute, plus or minus 10 flashes.
4. Type C and D steady-burn warning lights are intended to be used in a series to delineate the edge of the travel lane on detours, on lane changes, on lane closures, and on other similar conditions.
5. Type A, Type C and Type D warning lights shall be installed at locations as detailed on other sheets in the plans.
6. Warning lights shall not be installed on a drum that has a sign, chevron or vertical panel.
7. The maximum spacing for warning lights on drums should be identical to the channelizing device spacing.

WARNING REFLECTORS MOUNTED ON PLASTIC DRUMS AS A SUBSTITUTE FOR TYPE C (STEADY BURN) WARNING LIGHTS

1. A warning reflector or approved substitute may be mounted on a plastic drum as a substitute for a Type C, steady burn warning light at the discretion of the Contractor unless otherwise noted in the plans.
2. The warning reflector shall be yellow in color and shall be manufactured using a sign substrate approved for use with plastic drums listed on the CWZTCD.
3. The warning reflector shall have a minimum retroreflective surface area (one-side) of 30 square inches.
4. Round reflectors shall be fully reflectorized, including the area where attached to the drum.
5. Square substrates must have a minimum of 30 square inches of reflectorized sheeting. They do not have to be reflectorized where it attaches to the drum.
6. The side of the warning reflector facing approaching traffic shall have sheeting meeting the color and retroreflectivity requirements for DMS 8300-Type B or Type C.
7. When used near two-way traffic, both sides of the warning reflector shall be reflectorized.
8. The warning reflector should be mounted on the side of the handle nearest approaching traffic.
9. The maximum spacing for warning reflectors should be identical to the channelizing device spacing requirements.

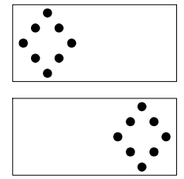
Arrow Boards may be located behind channelizing devices in place for a shoulder taper or merging taper, otherwise they shall be delineated with four (4) channelizing devices placed perpendicular to traffic on the upstream side of traffic.

1. The Flashing Arrow Board should be used for all lane closures on multi-lane roadways, or slow moving maintenance or construction activities on the travel lanes.
2. Flashing Arrow Boards should not be used on two-lane, two-way roadways, detours, diversions or work on shoulders unless the "CAUTION" display (see detail below) is used.
3. The Engineer/Inspector shall choose all appropriate signs, barricades and/or other traffic control devices that should be used in conjunction with the Flashing Arrow Board.
4. The Flashing Arrow Board should be able to display the following symbols:

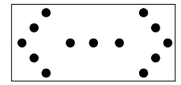


4 CORNER CAUTION

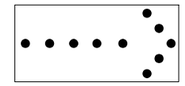
OR



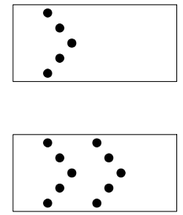
ALTERNATING DIAMOND CAUTION



DOUBLE ARROW



RIGHT/LEFT ARROW
(right arrow shown; left is similar)



RIGHT/LEFT SEQUENTIAL CHEVRON
(right chevron shown; left is similar)

5. The "CAUTION" display consists of four corner lamps flashing simultaneously, or the Alternating Diamond Caution mode as shown.
6. The straight line caution display is NOT ALLOWED.
7. The Flashing Arrow Board shall be capable of minimum 50 percent dimming from rated lamp voltage. The flashing rate of the lamps shall not be less than 25 nor more than 40 flashes per minute.
8. Minimum lamp "on time" shall be approximately 50 percent for the flashing arrow and equal intervals of 25 percent for each sequential phase of the flashing chevron.
9. The sequential arrow display is NOT ALLOWED.
10. The flashing arrow display is the TxDOT standard; however, the sequential chevron display may be used during daylight operations.
11. The Flashing Arrow Board shall be mounted on a vehicle, trailer or other suitable support.
12. A Flashing Arrow Board SHALL NOT BE USED to laterally shift traffic.
13. A full matrix PCMS may be used to simulate a Flashing Arrow Board provided it meets visibility, flash rate and dimming requirements on this sheet for the same size arrow.
14. Minimum mounting height of trailer mounted Arrow Boards should be 7 feet from roadway to bottom of panel.

REQUIREMENTS			
TYPE	MINIMUM SIZE	MINIMUM NUMBER OF PANEL LAMPS	MINIMUM VISIBILITY DISTANCE
B	30 x 60	13	3/4 mile
C	48 x 96	15	1 mile

ATTENTION
Flashing Arrow Boards shall be equipped with automatic dimming devices.

WHEN NOT IN USE, REMOVE THE ARROW BOARD FROM THE RIGHT-OF-WAY OR PLACE THE ARROW BOARD BEHIND CONCRETE TRAFFIC BARRIER OR GUARDRAIL.

FLASHING ARROW BOARDS

TRUCK-MOUNTED ATTENUATORS

1. Truck-mounted attenuators (TMA) used on TxDOT facilities must meet the requirements outlined in the Manual for Assessing Safety Hardware (MASH).
2. Refer to the CWZTCD for the requirements of Level 2 or Level 3 TMAs.
3. Refer to the CWZTCD for a list of approved TMAs.
4. TMAs are required on freeways unless otherwise noted in the plans.
5. A TMA should be used anytime that it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the work performance.
6. The only reason a TMA should not be required is when a work area is spread down the roadway and the work crew is an extended distance from the TMA.

Texas Department of Transportation

Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION ARROW PANEL, REFLECTORS, WARNING LIGHTS & ATTENUATOR

BC(7)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0912	72	390	VARIES
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13 5-21	HOU	HARRIS		22

101

DATE:
FILE:

GENERAL NOTES

1. For long term stationary work zones on freeways, drums shall be used as the primary channelizing device.
2. For intermediate term stationary work zones on freeways, drums should be used as the primary channelizing device but may be replaced in tangent sections by vertical panels, or 42" two-piece cones. In tangent sections, one-piece cones may be used with the approval of the Engineer but only if personnel are present on the project at all times to maintain the cones in proper position and location.
3. For short term stationary work zones on freeways, drums are the preferred channelizing device but may be replaced in tapers, transitions and tangent sections by vertical panels, two-piece cones or one-piece cones as approved by the Engineer.
4. Drums and all related items shall comply with the requirements of the current version of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
5. Drums, bases, and related materials shall exhibit good workmanship and shall be free from objectionable marks or defects that would adversely affect their appearance or serviceability.
6. The Contractor shall have a maximum of 24 hours to replace any plastic drums identified for replacement by the Engineer/Inspector. The replacement device must be an approved device.

GENERAL DESIGN REQUIREMENTS

Pre-qualified plastic drums shall meet the following requirements:

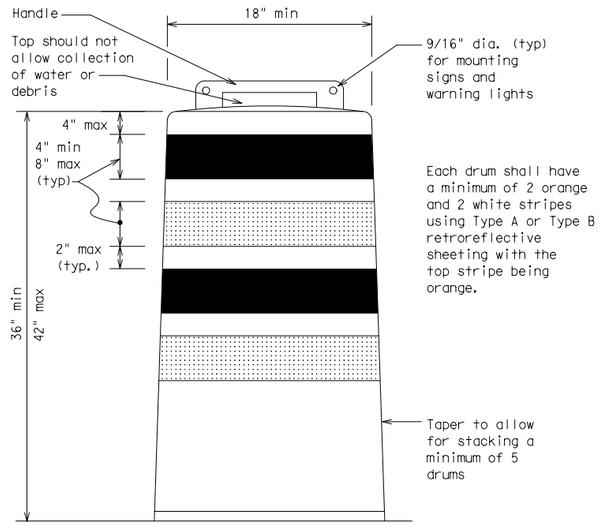
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents accidental separation due to normal handling and/or air turbulence created by passing vehicles.
3. Plastic drums shall be constructed of lightweight flexible, and deformable materials. The Contractor shall NOT use metal drums or single piece plastic drums as channelization devices or sign supports.
4. Drums shall present a profile that is a minimum of 18 inches in width at the 36 inch height when viewed from any direction. The height of drum unit (body installed on base) shall be a minimum of 36 inches and a maximum of 42 inches.
5. The top of the drum shall have a built-in handle for easy pickup and shall be designed to drain water and not collect debris. The handle shall have a minimum of two widely spaced 9/16 inch diameter holes to allow attachment of a warning light, warning reflector unit or approved compliant sign.
6. The exterior of the drum body shall have a minimum of four alternating orange and white retroreflective circumferential stripes not less than 4 inches nor greater than 8 inches in width. Any non-reflectorized space between any two adjacent stripes shall not exceed 2 inches in width.
7. Bases shall have a maximum width of 36 inches, a maximum height of 4 inches, and a minimum of two footholds of sufficient size to allow base to be held down while separating the drum body from the base.
8. Plastic drums shall be constructed of ultra-violet stabilized, orange, high-density polyethylene (HDPE) or other approved material.
9. Drum body shall have a maximum unballasted weight of 11 lbs.
10. Drum and base shall be marked with manufacturer's name and model number.

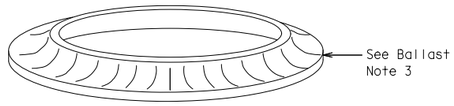
RETROREFLECTIVE SHEETING

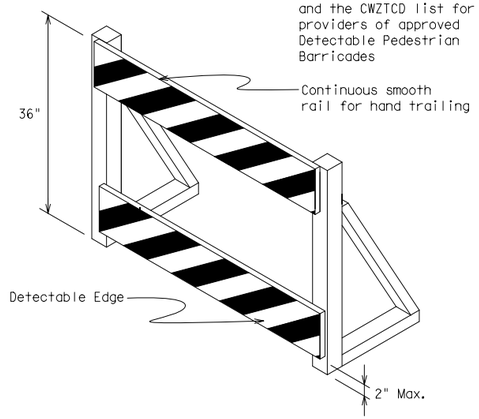
1. The stripes used on drums shall be constructed of sheeting meeting the color and retroreflectivity requirements of Departmental Materials Specification DMS-8300, "Sign Face Materials." Type A or Type B reflective sheeting shall be supplied unless otherwise specified in the plans.
2. The sheeting shall be suitable for use on and shall adhere to the drum surface such that, upon vehicular impact, the sheeting shall remain adhered in-place and exhibit no delaminating, cracking, or loss of retroreflectivity other than that loss due to abrasion of the sheeting surface.

BALLAST

1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other ballasting devices as approved by the Engineer. Stacking of sandbags will be allowed, however height of sandbags above pavement surface may not exceed 12 inches.
2. Bases with built-in ballast shall weigh between 40 lbs. and 50 lbs. Built-in ballast can be constructed of an integral crumb rubber base or a solid rubber base.
3. Recycled truck tire sidewalls may be used for ballast on drums approved for this type of ballast on the CWZTCD list.
4. The ballast shall not be heavy objects, water, or any material that would become hazardous to motorists, pedestrians, or workers when the drum is struck by a vehicle.
5. When used in regions susceptible to freezing, drums shall have drainage holes in the bottoms so that water will not collect and freeze becoming a hazard when struck by a vehicle.
6. Ballast shall not be placed on top of drums.
7. Adhesives may be used to secure base of drums to pavement.

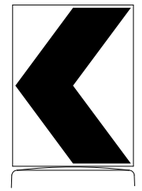




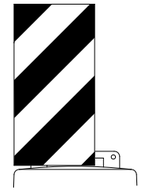


DETECTABLE PEDESTRIAN BARRICADES

1. When existing pedestrian facilities are disrupted, closed, or relocated in a TTC zone, the temporary facilities shall be detectable and include accessibility features consistent with the features present in the existing pedestrian facility. Refer to WZ(BTS-2) for Pedestrian Control requirements for Sidewalk Diversions, Sidewalk Detours and Crosswalk Closures.
2. Where pedestrians with visual disabilities normally use the closed sidewalk, a Detectable Pedestrian Barricade shall be placed across the full width of the closed sidewalk instead of a Type 3 Barricade.
3. Detectable pedestrian barricades similar to the one pictured above, longitudinal channelizing devices, some concrete barriers, and wood or chain link fencing with a continuous detectable edging can satisfactorily delineate a pedestrian path.
4. Tape, rope, or plastic chain strung between devices are not detectable, do not comply with the design standards in the "Americans with Disabilities Act Accessibility Guidelines (ADAAG)" and should not be used as a control for pedestrian movements.
5. Warning lights shall not be attached to detectable pedestrian barricades.
6. Detectable pedestrian barricades should use 8" nominal barricade rails as shown on BC(10) provided that the top rail provides a smooth continuous rail suitable for hand trailing with no splinters, burrs, or sharp edges.



18" x 24" Sign
(Maximum Sign Dimension)
Chevron CW1-8, Opposing Traffic Lane Divider, Driveway sign D70a, Keep Right R4 series or other signs as approved by Engineer



12" x 24"
Vertical Panel
mount with diagonals sloping down towards travel way

Plywood, Aluminum or Metal sign substrates shall NOT be used on plastic drums

SIGNS, CHEVRONS, AND VERTICAL PANELS MOUNTED ON PLASTIC DRUMS

1. Signs used on plastic drums shall be manufactured using substrates listed on the CWZTCD.
2. Chevrons and other work zone signs with an orange background shall be manufactured with Type B_{FL} or Type C_{FL} Orange sheeting meeting the color and retroreflectivity requirements of DMS-8300, "Sign Face Material," unless otherwise specified in the plans.
3. Vertical Panels shall be manufactured with orange and white sheeting meeting the requirements of DMS-8300 Type A or Type B. Diagonal stripes on Vertical Panels shall slope down toward the intended traveled lane.
4. Other sign messages (text or symbolic) may be used as approved by the Engineer. Sign dimensions shall not exceed 18 inches in width or 24 inches in height, except for the R9 series signs discussed in note 8 below.
5. Signs shall be installed using a 1/2 inch bolt (nominal) and nut, two washers, and one locking washer for each connection.
6. Mounting bolts and nuts shall be fully engaged and adequately torqued. Bolts should not extend more than 1/2 inch beyond nuts.
7. Chevrons may be placed on drums on the outside of curves, on merging tapers or on shifting tapers. When used in these locations, they may be placed on every drum or spaced not more than on every third drum. A minimum of three (3) should be used at each location called for in the plans.
8. R9-9, R9-10, R9-11 and R9-11a Sidewalk Closed signs which are 24 inches wide may be mounted on plastic drums, with approval of the Engineer.

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BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

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4-03 8-14	DIST	COUNTY		SHEET NO.
9-07 5-21	HOU	HARRIS		23
7-13				

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DATE:
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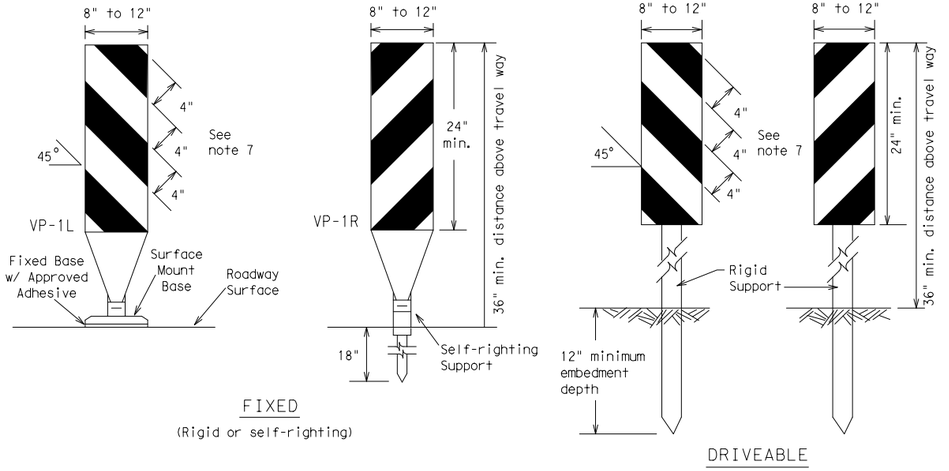
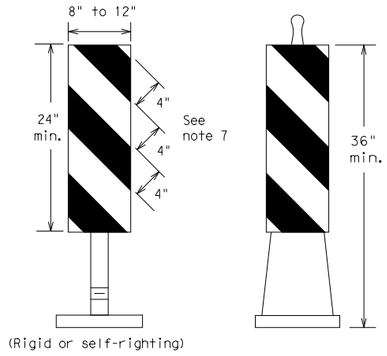


FIXED

(Rigid or self-righting)

DRIVEABLE

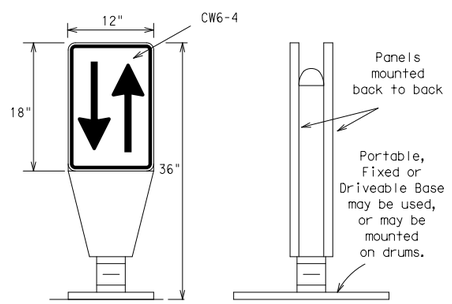


(Rigid or self-righting)

PORTABLE

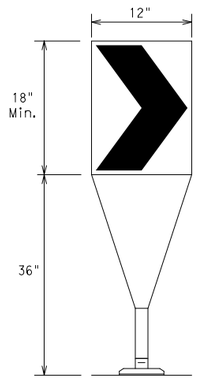
VERTICAL PANELS (VPs)

1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual for additional requirements on the use VP's for drop-offs.
3. VP's should be mounted back to back if used at the edge of cuts adjacent to two-way two lane roadways. Stripes are to be reflective orange and reflective white and should always slope downward toward the travel lane.
4. VP's used on expressways and freeways or other high speed roadways, may have more than 270 square inches of retroreflective area facing traffic.
5. Self-righting supports are available with portable base. See "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
6. Sheeting for the VP's shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300, unless noted otherwise.
7. Where the height of reflective material on the vertical panel is 36 inches or greater, a panel stripe of 6 inches shall be used.



OPPOSING TRAFFIC LANE DIVIDERS (OTLD)

1. Opposing Traffic Lane Dividers (OTLD) are delineation devices designed to convert a normal one-way roadway section to two-way operation. OTLD's are used on temporary centerlines. The upward and downward arrows on the sign's face indicate the direction of traffic on either side of the divider. The base is secured to the pavement with an adhesive or rubber weight to minimize movement caused by a vehicle impact or wind gust.
2. The OTLD may be used in combination with 42" cones or VPs.
3. Spacing between the OTLD shall not exceed 500 feet. 42" cones or VPs placed between the OTLD's should not exceed 100 foot spacing.
4. The OTLD shall be orange with a black non-reflective legend. Sheeting for the OTLD shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.



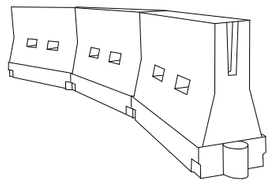
Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

1. The chevron shall be a vertical rectangle with a minimum size of 12 by 18 inches.
2. Chevrons are intended to give notice of a sharp change of alignment with the direction of travel and provide additional emphasis and guidance for vehicle operators with regard to changes in horizontal alignment of the roadway.
3. Chevrons, when used, shall be erected on the outside of a sharp curve or turn, or on the far side of an intersection. They shall be in line with and at right angles to approaching traffic. Spacing should be such that the motorist always has three in view, until the change in alignment eliminates its need.
4. To be effective, the chevron should be visible for at least 500 feet.
5. Chevrons shall be orange with a black nonreflective legend. Sheeting for the chevron shall be retroreflective Type B_{FL} or Type C_{FL} conforming to Departmental Material Specification DMS-8300, unless noted otherwise. The legend shall meet the requirements of DMS-8300.
6. For Long Term Stationary use on tapers or transitions on freeways and divided highways, self-righting chevrons may be used to supplement plastic drums but not to replace plastic drums.

CHEVRONS

GENERAL NOTES

1. Work Zone channelizing devices illustrated on this sheet may be installed in close proximity to traffic and are suitable for use on high or low speed roadways. The Engineer/Inspector shall ensure that spacing and placement is uniform and in accordance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. Channelizing devices shown on this sheet may have a driveable, fixed or portable base. The requirement for self-righting channelizing devices must be specified in the General Notes or other plan sheets.
3. Channelizing devices on self-righting supports should be used in work zone areas where channelizing devices are frequently impacted by errant vehicles or vehicle related wind gusts making alignment of the channelizing devices difficult to maintain. Locations of these devices shall be detailed elsewhere in the plans. These devices shall conform to the TMUTCD and the "Compliant Work Zone Traffic Control Devices List" (CWZTCD).
4. The Contractor shall maintain devices in a clean condition and replace damaged, nonreflective, faded, or broken devices and bases as required by the Engineer/Inspector. The Contractor shall be required to maintain proper device spacing and alignment.
5. Portable bases shall be fabricated from virgin and/or recycled rubber. The portable bases shall weigh a minimum of 30 lbs.
6. Pavement surfaces shall be prepared in a manner that ensures proper bonding between the adhesives, the fixed mount bases and the pavement surface. Adhesives shall be prepared and applied according to the manufacturer's recommendations.
7. The installation and removal of channelizing devices shall not cause detrimental effects to the final pavement surfaces, including pavement surface discoloration or surface integrity. Driveable bases shall not be permitted on final pavement surfaces. The Engineer/Inspector shall approve all application and removal procedures of fixed bases.



LONGITUDINAL CHANNELIZING DEVICES (LCD)

1. LCDs are crashworthy, lightweight, deformable devices that are highly visible, have good target value and can be connected together. They are not designed to contain or redirect a vehicle on impact.
2. LCDs may be used instead of a line of cones or drums.
3. LCDs shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. LCDs should not be used to provide positive protection for obstacles, pedestrians or workers.
5. LCDs shall be supplemented with retroreflective delineation as required for temporary barriers on BC(7) when placed roughly parallel to the travel lanes.
6. LCDs used as barricades placed perpendicular to traffic should have at least one row of reflective sheeting meeting the requirements for barricade rails as shown on BC(10). Place reflective sheeting near the top of the LCD along the full length of the device.

WATER BALLASTED SYSTEMS USED AS BARRIERS

1. Water ballasted systems used as barriers shall not be used solely to channelize road users, but also to protect the work space per the appropriate Manual for Assessing Safety Hardware (MASH) crashworthiness requirements based on roadway speed and barrier application.
2. Water ballasted systems used to channelize vehicular traffic shall be supplemented with retroreflective delineation or channelizing devices to improve daytime/nighttime visibility. They may also be supplemented with pavement markings.
3. Water ballasted systems used as barriers shall be placed in accordance to application and installation requirements specific to the device, and used only when shown on the CWZTCD list.
4. Water ballasted systems used as barriers should not be used for a merging taper except in low speed (less than 45 MPH) urban areas. When used on a taper in a low speed urban area, the taper shall be delineated and the taper length should be designed to optimize road user operations considering the available geometric conditions.
5. When water ballasted systems used as barriers have blunt ends exposed to traffic, they should be attenuated as per manufacturer recommendations or flared to a point outside the clear zone.

If used to channelize pedestrians, longitudinal channelizing devices or water ballasted systems must have a continuous detectable bottom for users of long canes and the top of the unit shall not be less than 32 inches in height.

HOLLOW OR WATER BALLASTED SYSTEMS USED AS LONGITUDINAL CHANNELIZING DEVICES OR BARRIERS

Posted Speed	Formula	Minimum Desirable Taper Lengths ✳✳			Suggested Maximum Spacing of Channelizing Devices	
		10′ Offset	11′ Offset	12′ Offset	On a Taper	On a Tangent
30	$L=\frac{WS^2}{60}$	150′	165′	180′	30′	60′
35		205′	225′	245′	35′	70′
40		265′	295′	320′	40′	80′
45	L = WS	450′	495′	540′	45′	90′
50		500′	550′	600′	50′	100′
55		550′	605′	660′	55′	110′
60		600′	660′	720′	60′	120′
65		650′	715′	780′	65′	130′
70		700′	770′	840′	70′	140′
75		750′	825′	900′	75′	150′
80		800′	880′	960′	80′	160′

✳✳Taper lengths have been rounded off.
L=Length of Taper (FT.) W=Width of Offset (FT.)
S=Posted Speed (MPH)

SUGGESTED MAXIMUM SPACING OF CHANNELIZING DEVICES AND MINIMUM DESIRABLE TAPER LENGTHS

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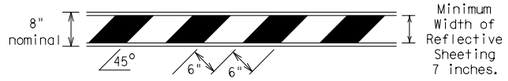
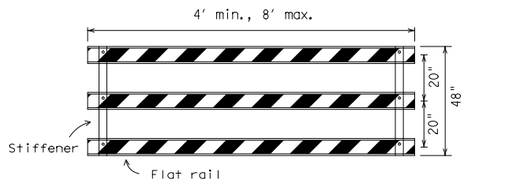
TYPE 3 BARRICADES

1. Refer to the Compliant Work Zone Traffic Control Devices List (CWZTCD) for details of the Type 3 Barricades and a list of all materials used in the construction of Type 3 Barricades.
2. Type 3 Barricades shall be used at each end of construction projects closed to all traffic.
3. Barricades extending across a roadway should have stripes that slope downward in the direction toward which traffic must turn in detouring. When both right and left turns are provided, the chevron striping may slope downward in both directions from the center of the barricade. Where no turns are provided at a closed road, striping should slope downward in both directions toward the center of roadway.
4. Striping of rails, for the right side of the roadway, should slope downward to the left. For the left side of the roadway, striping should slope downward to the right.
5. Identification markings may be shown only on the back of the barricade rails. The maximum height of letters and/or company logos used for identification shall be 1".
6. Barricades shall not be placed parallel to traffic unless an adequate clear zone is provided.
7. Warning lights shall NOT be installed on barricades.
8. Where barricades require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand is recommended. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight. Sand bags shall not be stacked in a manner that covers any portion of a barricade rails reflective sheeting. Rock, concrete, iron, steel or other solid objects will NOT be permitted. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall not be used for sandbags. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.
9. Sheeting for barricades shall be retroreflective Type A or Type B conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



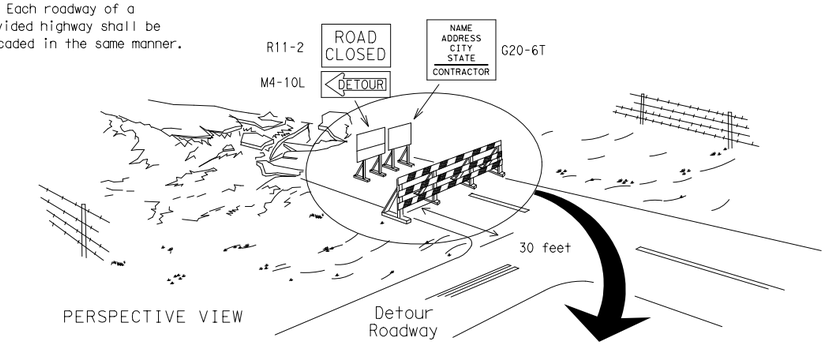
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



Stiffener may be inside or outside of support, but no more than 2 stiffeners shall be allowed on one barricade.

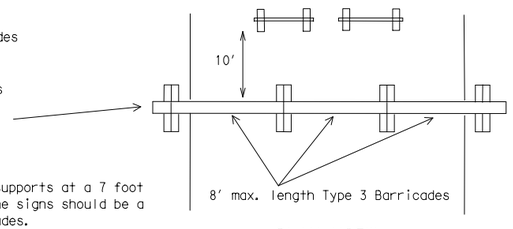
TYPICAL PANEL DETAIL
FOR SKID OR POST TYPE BARRICADES

Each roadway of a divided highway shall be barricaded in the same manner.



PERSPECTIVE VIEW

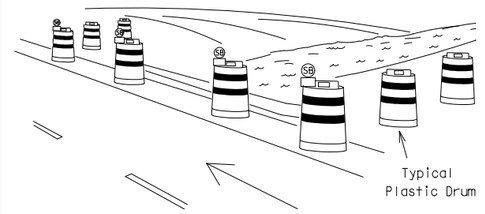
The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

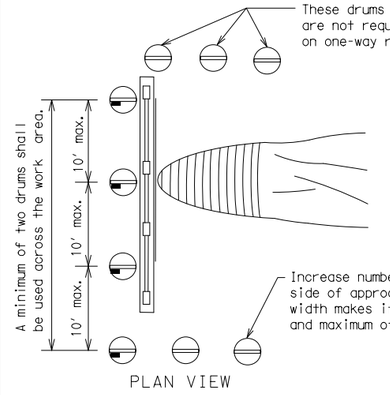
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

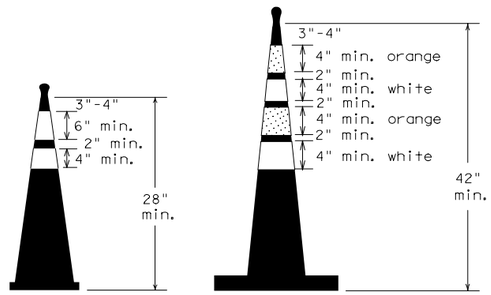
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder width is greater than 12 feet, steady-burn lights may be omitted if drums are used.
5. Drums must extend the length of the culvert widening.



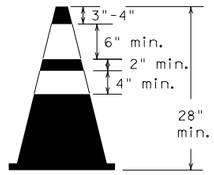
PLAN VIEW

LEGEND	
	Plastic drum
	Plastic drum with steady burn light or yellow warning reflector
SB	Steady burn warning light or yellow warning reflector

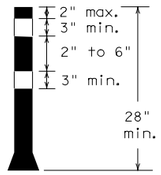
CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



Two-Piece cones



One-Piece cones

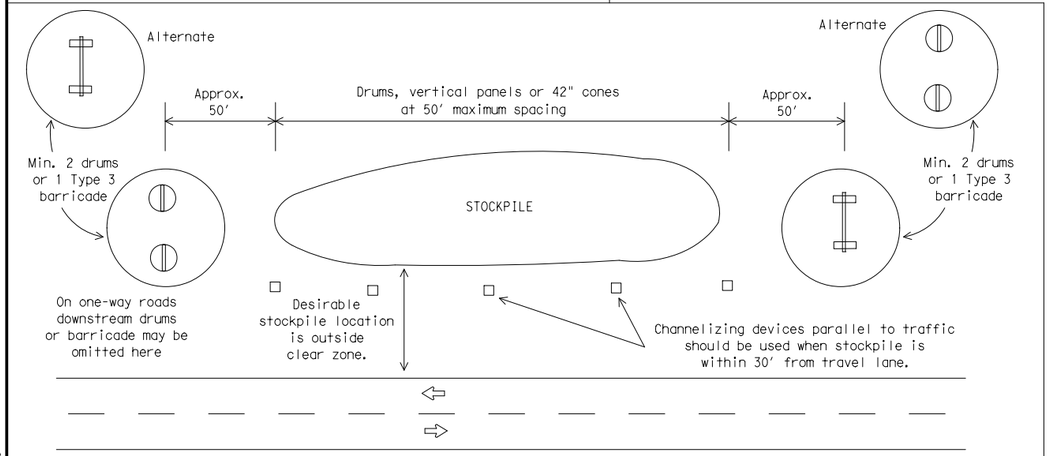


Tubular Marker

28" Cones shall have a minimum weight of 9 1/2 lbs.

42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

1. Traffic cones and tubular markers shall be predominantly orange, and meet the height and weight requirements shown above.
2. One-piece cones have the body and base of the cone molded in one consolidated unit. Two-piece cones have a cone shaped body and a separate rubber base, or ballast, that is added to keep the device upright and in place.
3. Two-piece cones may have a handle or loop extending up to 8" above the minimum height shown, in order to aid in retrieving the device.
4. Cones or tubular markers shall have white or white and orange reflective bands as shown above. The reflective bands shall have a smooth, sealed outer surface and meet the requirements of Departmental Material Specification DMS-8300 Type A or Type B.
5. 28" cones and tubular markers are generally suitable for short duration and short-term stationary work as defined on BC(4). These should not be used for intermediate-term or long-term stationary work unless personnel is on-site to maintain them in their proper upright position.
6. 42" two-piece cones, vertical panels or drums are suitable for all work zone durations.
7. Cones or tubular markers used on each project should be of the same size and shape.



TRAFFIC CONTROL FOR MATERIAL STOCKPILES

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WORK ZONE PAVEMENT MARKINGS

GENERAL

1. The Contractor shall be responsible for maintaining work zone and existing pavement markings, in accordance with the standard specifications and special provisions, on all roadways open to traffic within the CSJ limits unless otherwise stated in the plans.
2. Color, patterns and dimensions shall be in conformance with the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
3. Additional supplemental pavement marking details may be found in the plans or specifications.
4. Pavement markings shall be installed in accordance with the TMUTCD and as shown on the plans.
5. When short term markings are required on the plans, short term markings shall conform with the TMUTCD, the plans and details as shown on the Standard Plan Sheet WZ(STPM).
6. When standard pavement markings are not in place and the roadway is opened to traffic, DO NOT PASS signs shall be erected to mark the beginning of the sections where passing is prohibited and PASS WITH CARE signs at the beginning of sections where passing is permitted.
7. All work zone pavement markings shall be installed in accordance with Item 662, "Work Zone Pavement Markings."

RAISED PAVEMENT MARKERS

1. Raised pavement markers are to be placed according to the patterns on BC(12).
2. All raised pavement markers used for work zone markings shall meet the requirements of Item 672, "RAISED PAVEMENT MARKERS" and Departmental Material Specification DMS-4200 or DMS-4300.

PREFABRICATED PAVEMENT MARKINGS

1. Removable prefabricated pavement markings shall meet the requirements of DMS-8241.
2. Non-removable prefabricated pavement markings (foil back) shall meet the requirements of DMS-8240.

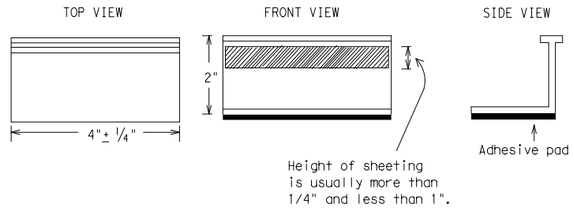
MAINTAINING WORK ZONE PAVEMENT MARKINGS

1. The Contractor will be responsible for maintaining work zone pavement markings within the work limits.
2. Work zone pavement markings shall be inspected in accordance with the frequency and reporting requirements of work zone traffic control device inspections as required by Form 599.
3. The markings should provide a visible reference for a minimum distance of 300 feet during normal daylight hours and 160 feet when illuminated by automobile low-beam headlights at night, unless sight distance is restricted by roadway geometrics.
4. Markings failing to meet this criteria within the first 30 days after placement shall be replaced at the expense of the Contractor as per Specification Item 662.

REMOVAL OF PAVEMENT MARKINGS

1. Pavement markings that are no longer applicable, could create confusion or direct a motorist toward or into the closed portion of the roadway shall be removed or obliterated before the roadway is opened to traffic.
2. The above shall not apply to detours in place for less than three days, where flaggers and/or sufficient channelizing devices are used in lieu of markings to outline the detour route.
3. Pavement markings shall be removed to the fullest extent possible, so as not to leave a discernable marking. This shall be by any method approved by TxDOT Specification Item 677 for "Eliminating Existing Pavement Markings and Markers".
4. The removal of pavement markings may require resurfacing or seal coating portions of the roadway as described in Item 677.
5. Subject to the approval of the Engineer, any method that proves to be successful on a particular type pavement may be used.
6. Blast cleaning may be used but will not be required unless specifically shown in the plans.
7. Over-painting of the markings SHALL NOT BE permitted.
8. Removal of raised pavement markers shall be as directed by the Engineer.
9. Removal of existing pavement markings and markers will be paid for directly in accordance with Item 677, "ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS," unless otherwise stated in the plans.
10. Black-out marking tape may be used to cover conflicting existing markings for periods less than two weeks when approved by the Engineer.

Temporary Flexible-Reflective Roadway Marker Tabs



STAPLES OR NAILS SHALL NOT BE USED TO SECURE TEMPORARY FLEXIBLE-REFLECTIVE ROADWAY MARKER TABS TO THE PAVEMENT SURFACE

1. Temporary flexible-reflective roadway marker tabs used as guidemarks shall meet the requirements of DMS-8242.
2. Tabs detailed on this sheet are to be inspected and accepted by the Engineer or designated representative. Sampling and testing is not normally required, however at the option of the Engineer, either "A" or "B" below may be imposed to assure quality before placement on the roadway.
   A. Select five (5) or more tabs at random from each lot or shipment and submit to the Construction Division, Materials and Pavement Section to determine specification compliance.
   B. Select five (5) tabs and perform the following test. Affix five (5) tabs at 24 inch intervals on an asphaltic pavement in a straight line. Using a medium size passenger vehicle or pickup, run over the markers with the front and rear tires at a speed of 35 to 40 miles per hour, four (4) times in each direction. No more than one (1) out of the five (5) reflective surfaces shall be lost or displaced as a result of this test.
3. Small design variances may be noted between tab manufacturers.
4. See Standard Sheet WZ(STPM) for tab placement on new pavements. See Standard Sheet TCP(7-1) for tab placement on seal coat work.

RAISED PAVEMENT MARKERS USED AS GUIDEMARKS

1. Raised pavement markers used as guidemarks shall be from the approved product list, and meet the requirements of DMS-4200.
2. All temporary construction raised pavement markers provided on a project shall be of the same manufacturer.
3. Adhesive for guidemarks shall be bituminous material hot applied or butyl rubber pad for all surfaces, or thermoplastic for concrete surfaces.

Guidemarks shall be designated as:
YELLOW - (two amber reflective surfaces with yellow body).
WHITE - (one silver reflective surface with white body).

DEPARTMENTAL MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
TRAFFIC BUTTONS	DMS-4300
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240
TEMPORARY REMOVABLE, PREFABRICATED PAVEMENT MARKINGS	DMS-8241
TEMPORARY FLEXIBLE, REFLECTIVE ROADWAY MARKER TABS	DMS-8242

A list of prequalified reflective raised pavement markers, non-reflective traffic buttons, roadway marker tabs and other pavement markings can be found at the Material Producer List web address shown on BC(1).

Texas Department of Transportation

Traffic Safety Division Standard

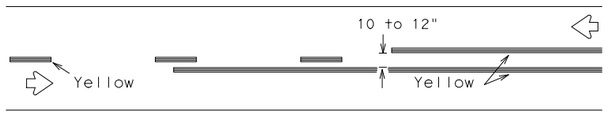
BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-21

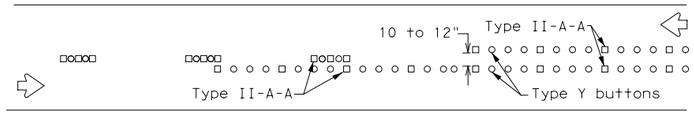
FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-98 9-07 5-21	0912	72	390	VARIES
1-02 7-13	DIST	COUNTY		SHEET NO.
11-02 8-14	HOU	HARRIS		26

DATE:
FILE:

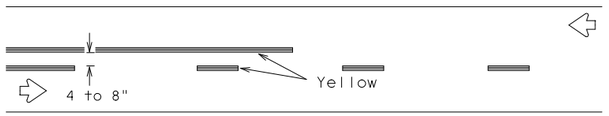
PAVEMENT MARKING PATTERNS



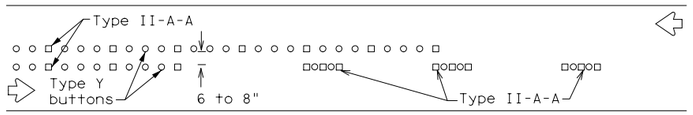
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



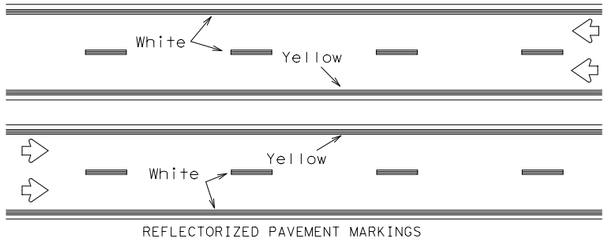
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



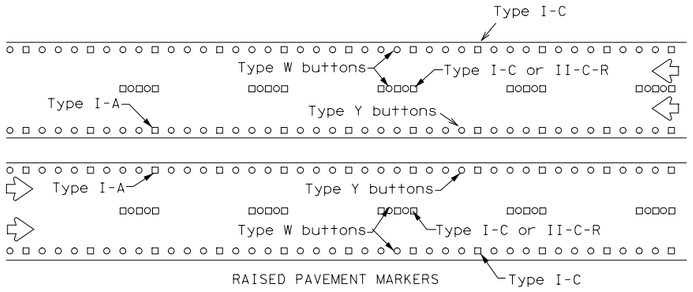
RAISED PAVEMENT MARKERS - PATTERN B

Pattern A is the TXDOT Standard, however Pattern B may be used if approved by the Engineer.
Prefabricated markings may be substituted for reflectorized pavement markings.

CENTER LINE & NO-PASSING ZONE BARRIER LINES FOR TWO-LANE, TWO-WAY HIGHWAYS



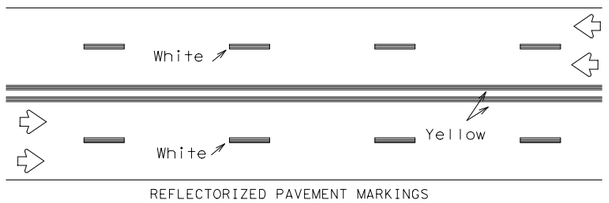
REFLECTORIZED PAVEMENT MARKINGS



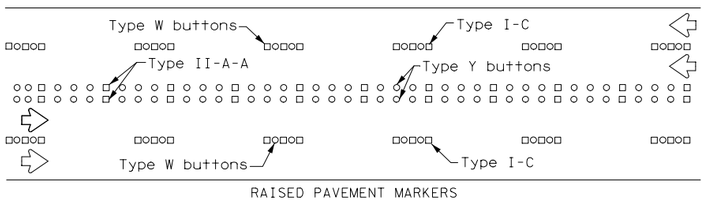
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



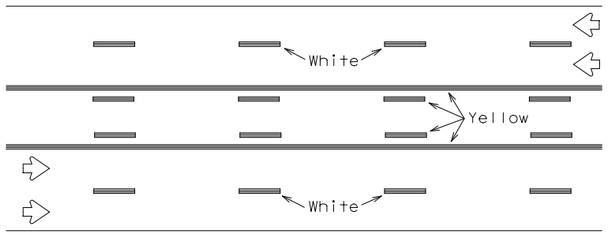
REFLECTORIZED PAVEMENT MARKINGS



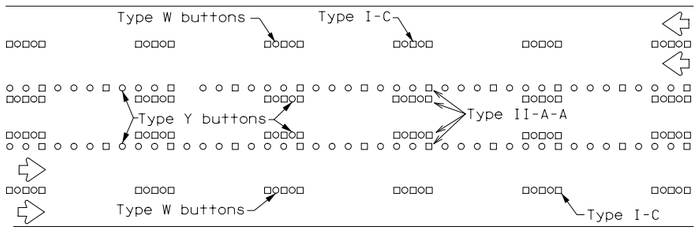
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS

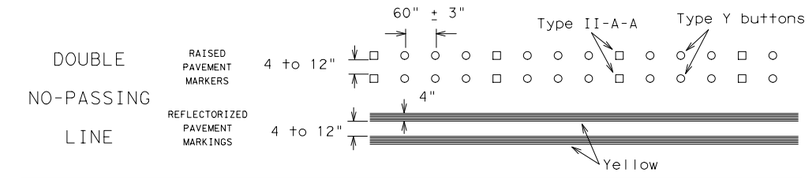
Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

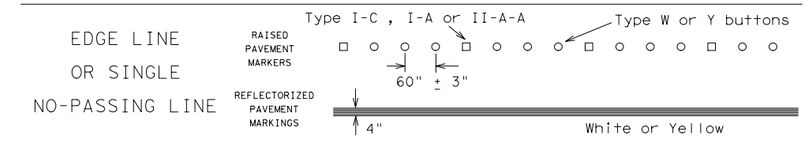
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

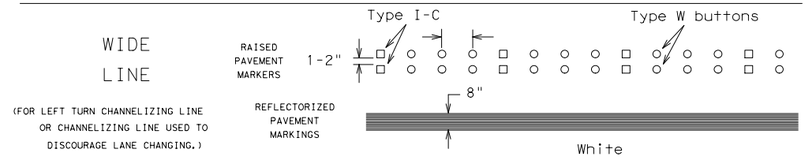


EDGE LINE OR SINGLE NO-PASSING LINE



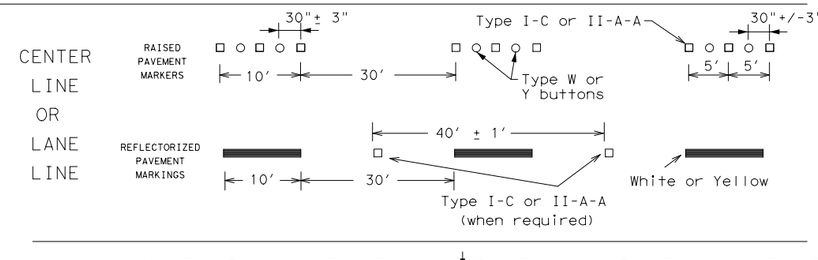
WIDE LINE

(FOR LEFT TURN CHANNELIZING LINE OR CHANNELIZING LINE USED TO DISCOURAGE LANE CHANGING.)

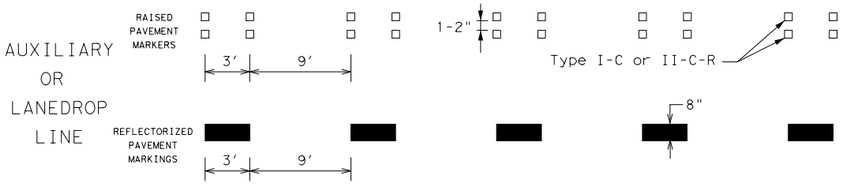


BROKEN LINES

CENTER LINE OR LANE LINE

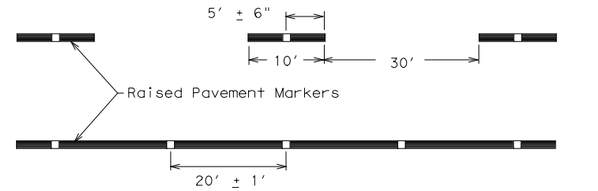


AUXILIARY OR LANEDROP LINE



REMOVABLE MARKINGS WITH RAISED PAVEMENT MARKERS

If raised pavement markers are used to supplement REMOVABLE markings, the markers shall be applied to the top of the tape at the approximate mid length of tape used for broken lines or at 20 foot spacing for solid lines. This allows an easier removal of raised pavement markers and tape.



Centerline only - not to be used on edge lines

Raised pavement markers used as standard pavement markings shall be from the approved products list and meet the requirements of Item 672 "RAISED PAVEMENT MARKERS."

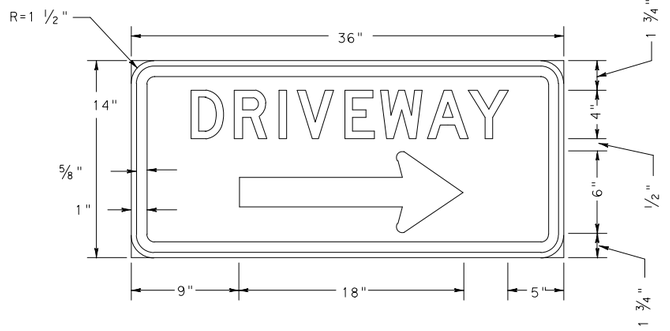
Texas Department of Transportation

Traffic Safety Division Standard

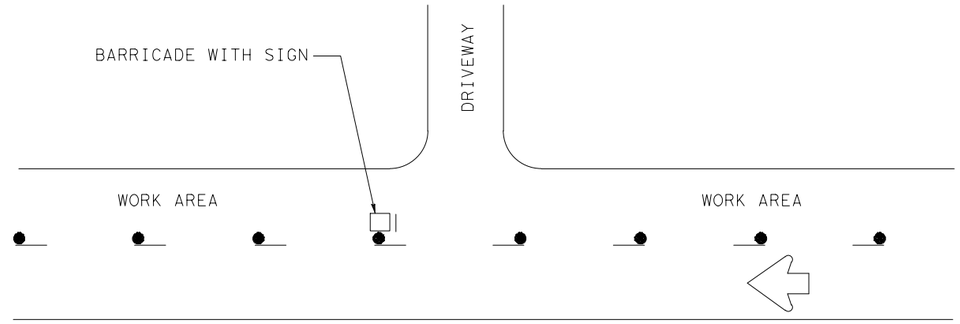
BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

BC(12)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS 1-97 9-07 5-21 2-98 7-13 11-02 8-14	0912	72	390	VARIES
	DIST	COUNTY		SHEET NO.
	HOU	HARRIS		27



LETTERS: WHITE
BORDER: WHITE
BACKGROUND: BLUE



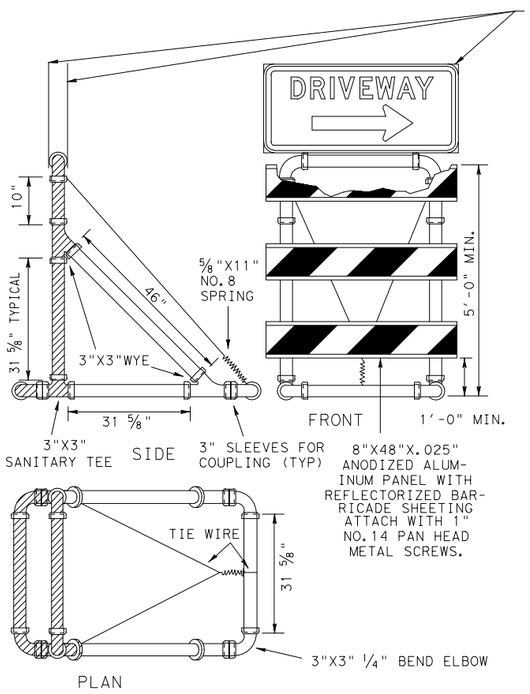
TYPICAL LOCATION OF DRIVEWAY SIGN

TYPE III PVC BARRICADES TYPICAL DESIGN DETAILS

MAY BE USED AT THE OPTION OF THE CONTRACTOR.

NOTES:

1. ALL PIPE SHALL BE POLYVINYL CHLORIDE (PVC) PRESSURE RATED PIPE SDR 21 OR SDR 26 ASTM D2241.
2. JOINT FITTINGS MAY BE PVC-ASTM D2665 OR ACRYLONITRILE BUTADLENE STYRENE (ABS) ASTM D2661 (DRAINAGE WASTE AND VENT).
3. ALL PIPE AND FITTINGS SHALL BE WHITE.
4. ALL JOINTS SHALL BE FREE TO SEPARATE UPON VEHICLE IMPACT.
5. CROSS HATCHED CONDUIT TO BE TIED TOGETHER WITH ROPE THREADED INTO PIPE INTERIOR. USE ⅜" NO. 6 SOLID BRAIDED NYLON OR EQUIVALENT.
6. A FIXED FRANGIBLE PAVEMENT CONNECTION IS PREFERRED. SAND BAGS MAY BE SUBSTITUTED.



CONSTRUCTION SIGN NOTES

MATERIALS

CONSTRUCTION SIGNS SHALL BE MADE FROM APPROVED FIBERGLASS OR HIGH IMPACT PLASTIC AS PRIMARY MATERIALS.

SIGN SHEETING

REFLECTORIZED SIGN SHALL BE CONSTRUCTED OF RETRO REFLECTIVE SHEETING MEETING THE COLOR AND REFLECTIVITY REQUIREMENTS OF MATERIAL SPECIFICATIONS, DMS-8300.

TYPE C SHEETING SHALL BE USED FOR THIS APPLICATION.

SIGN LETTERS

ALL SIGNS LETTERING SHALL BE CLEAR, OPEN ROUNDED TYPE CAPITAL LETTERS AS APPROVED BY AND AS PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION. SIGNS AND LETTERING SHALL BE OF FIRST CLASS WORKMANSHIP EQUIVALENT TO THAT OF THE DEPARTMENT'S STANDARD SIGNS.

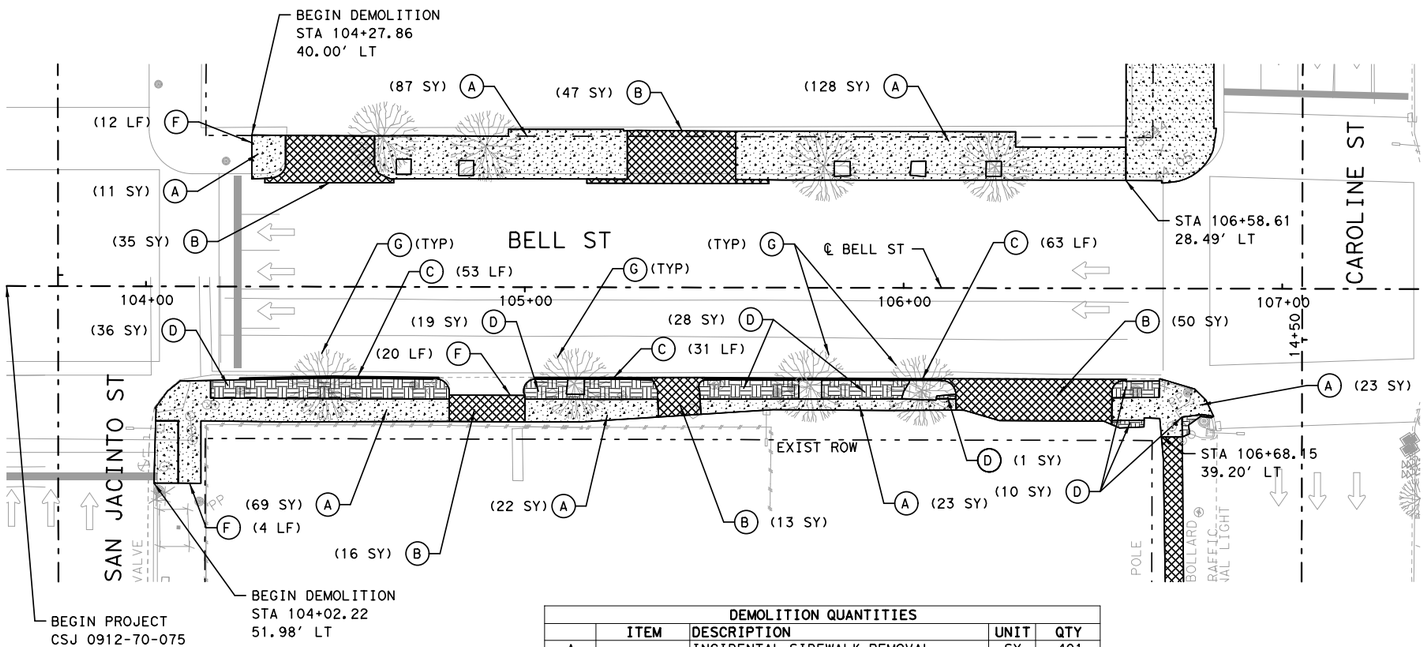
Texas Department of Transportation
Houston District

DRIVEWAY SIGNING

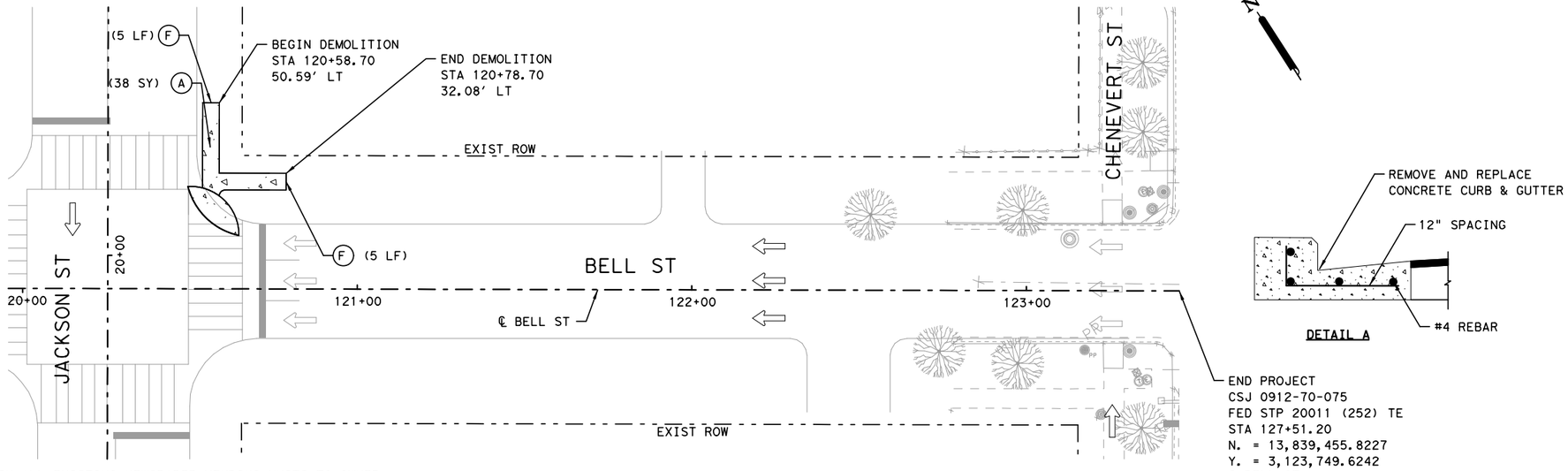
DS TC8020-04

FILE:	DN:	CK:	DW:	CK:	
©TxDOT 2004 REVISIONS	DIST	FED REG	PROJECT NO.		SHEET
	HOU	5	F 2022(720)		28
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	HARRIS		0912	72	390	VARIES

STD H-30



DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	401
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	161
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	147
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	94
E	5033-6005	REMOVE BOLLARD	EA	0



DETAIL A

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
(B) REMOVE EXIST DRIVEWAY
(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
(D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
(E) REMOVE BOLLARS
(F) FULL DEPTH SAW-CUT
(G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

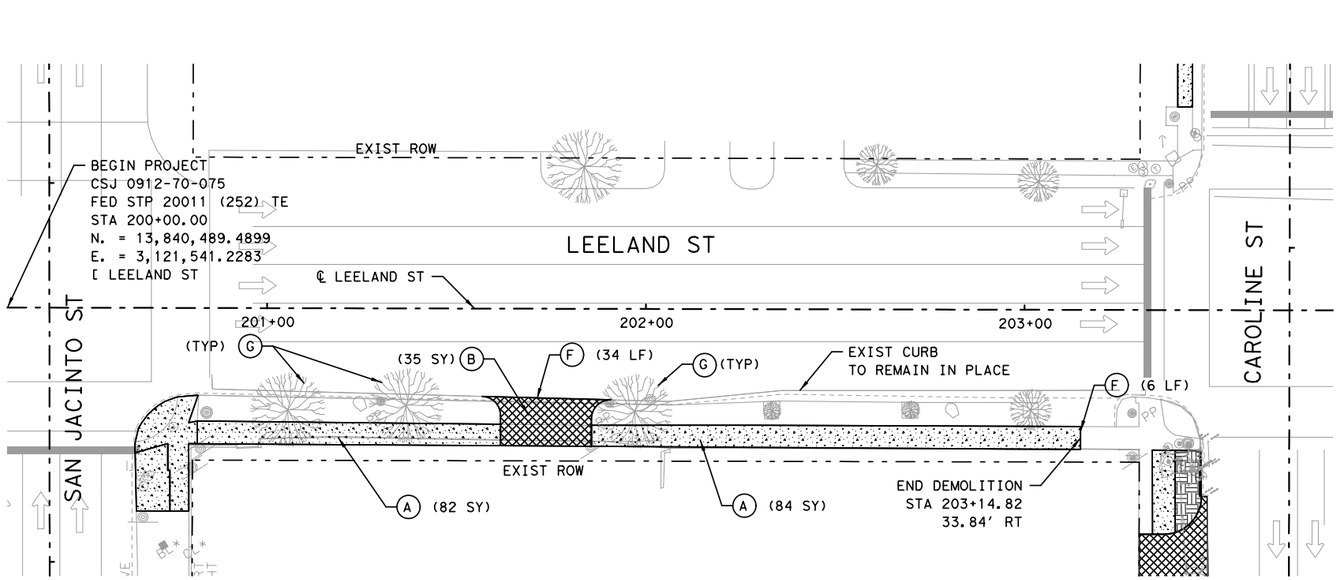
DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

DEMOLITION PLAN BELL ST

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	29

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*DPP*BEL*01.dgn
3/1/2023
10:32:52 PM



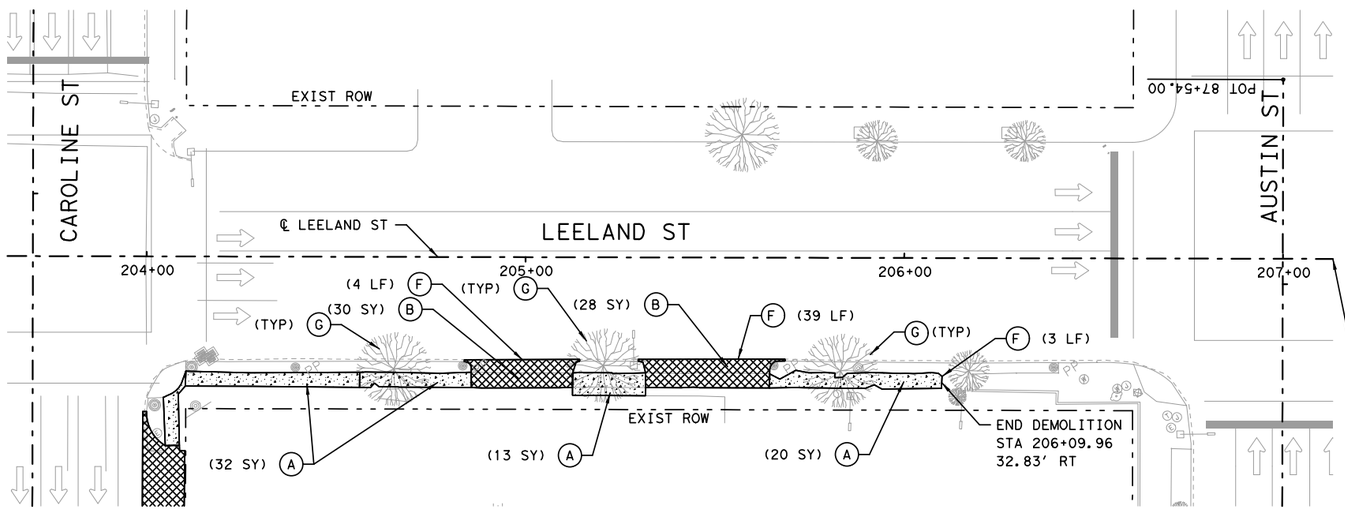
LEGEND

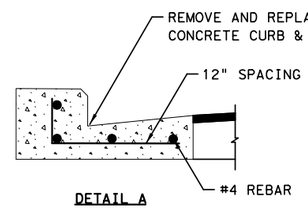
- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	231
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	93
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	0





DETAIL A

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 224+15.91
N. = 13,839,178.6453
E. = 3,123,570.5847
℄ LEELAND ST

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN LEELAND ST (SHEET 1 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	30

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*DPP*LEE*01.dgn
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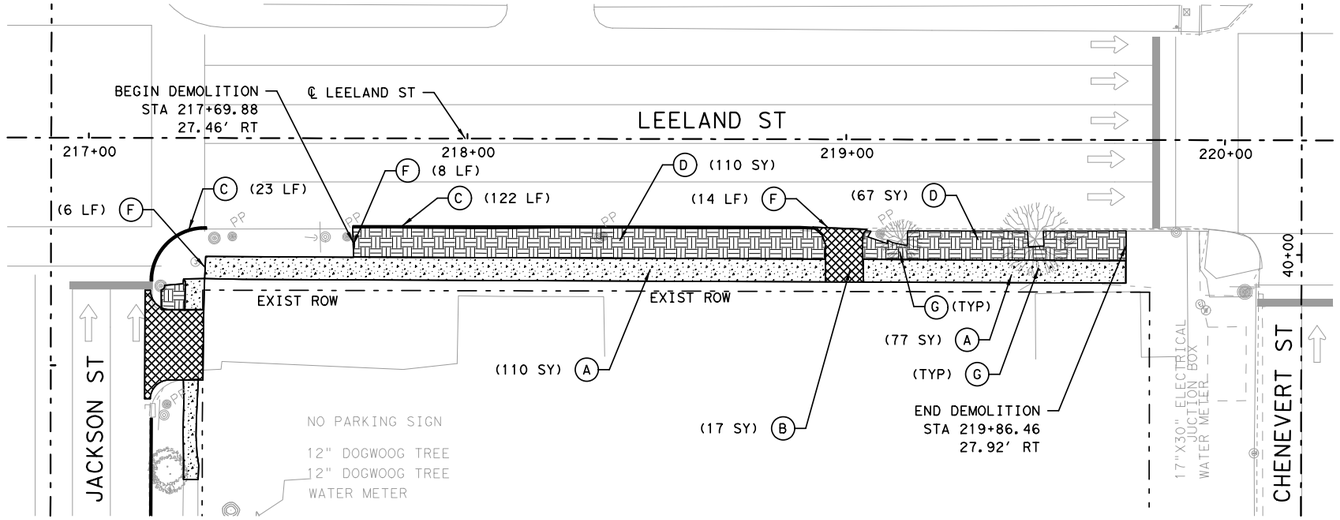


LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL

(B) REMOVE EXIST DRIVEWAY

(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)

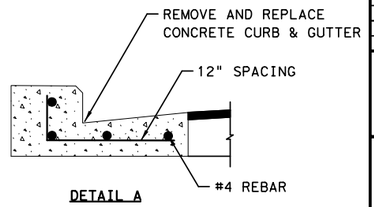
(D) REMOVE EXIST CONC (SIDEWALK OR RAMP)

(E) REMOVE BOLLARS

(F) FULL DEPTH SAW-CUT

(G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	187
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	17
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	145
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	177
E	5033-6005	REMOVE BOLLARD	EA	0



DETAIL A

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

DEMOLITION PLAN
LEELAND ST (SHEET 2 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	31

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*DPP*LEE*02.dgn
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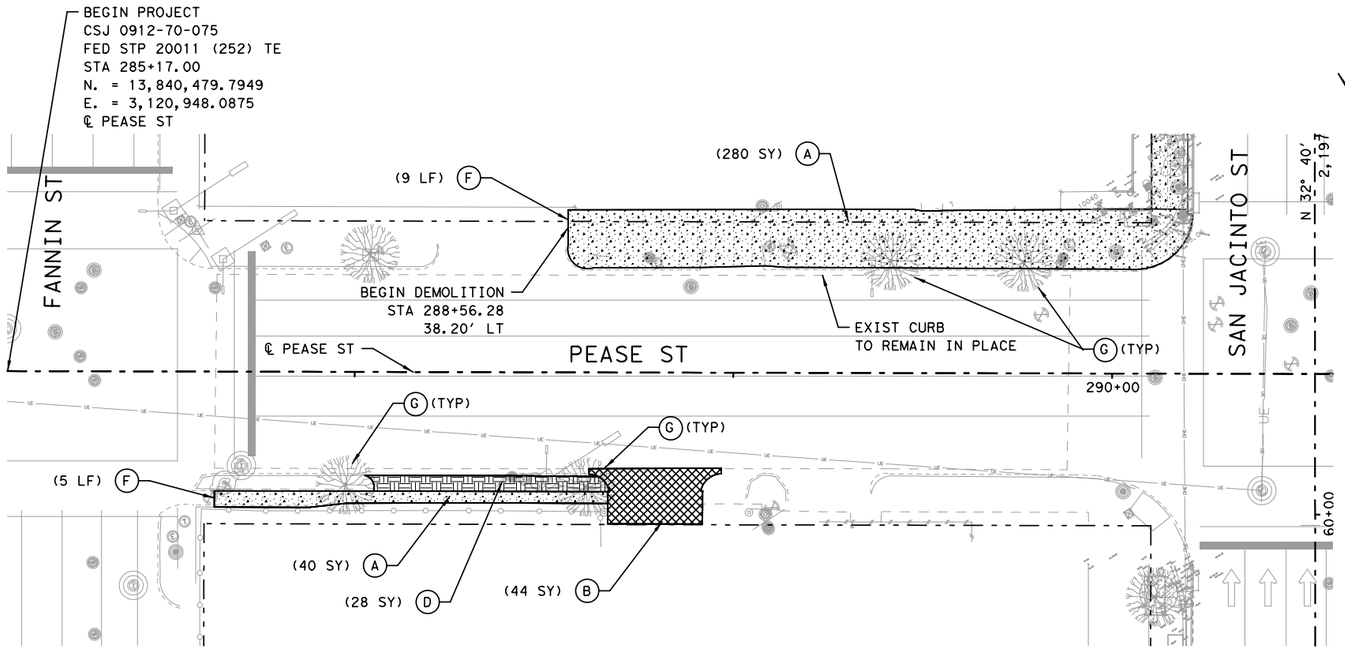


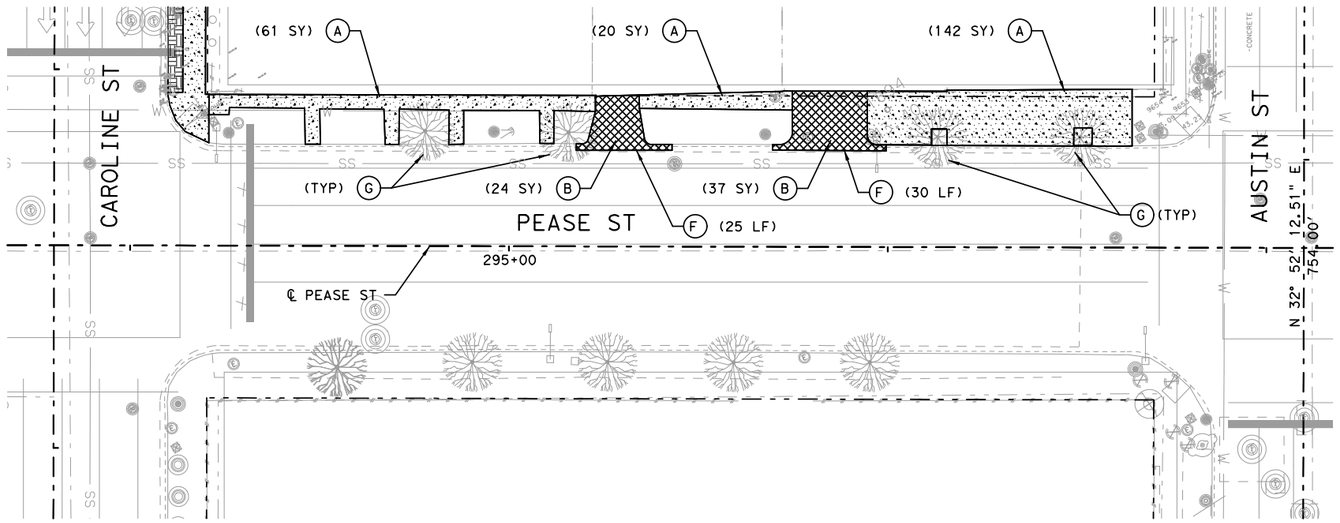
LEGEND

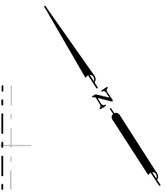
- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

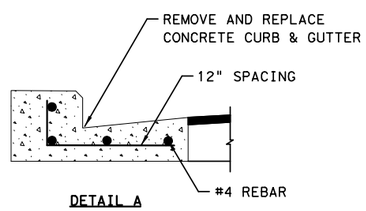
- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	543
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	105
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	28
E	5033-6005	REMOVE BOLLARD	EA	0

0 20 40
HORIZ: SCALE IN FEET







DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

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4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN PEASE ST (SHEET 1 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	32

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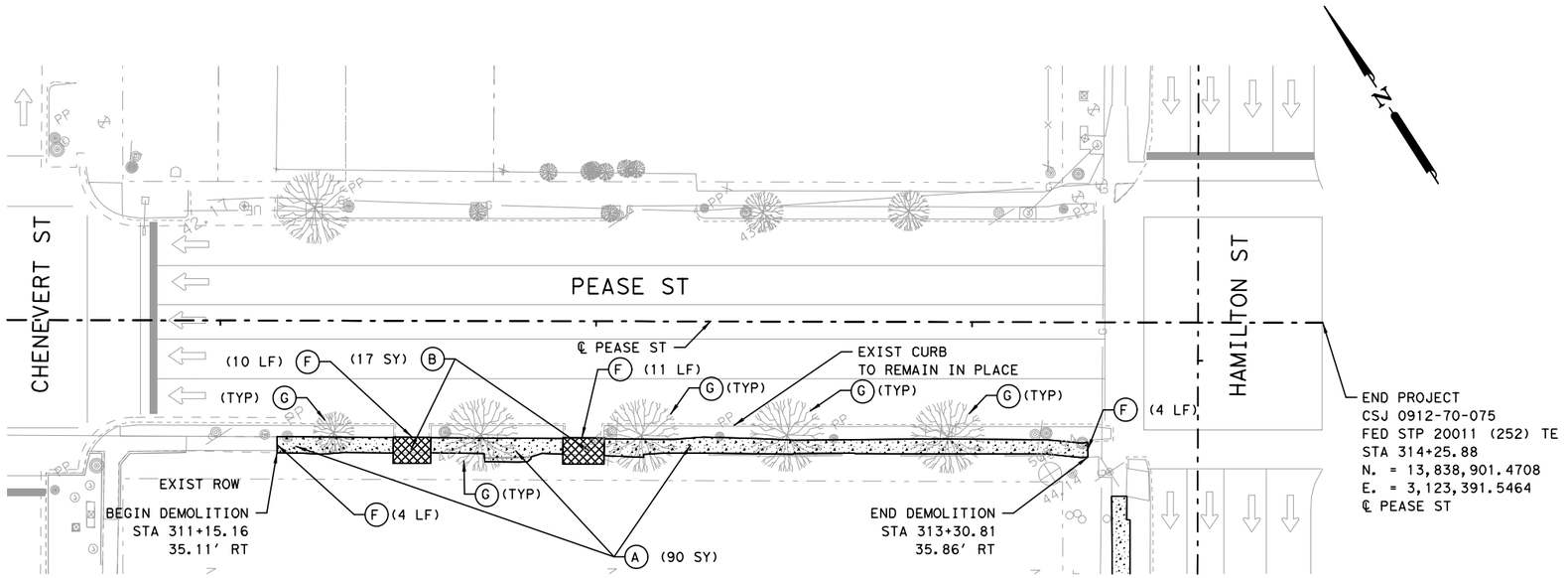


LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL

(B) REMOVE EXIST DRIVEWAY

(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)

(D) REMOVE EXIST CONC (SIDEWALK OR RAMP)

(E) REMOVE BOLLARS

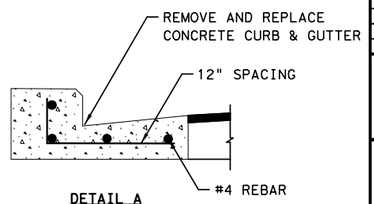
(F) FULL DEPTH SAW-CUT

(G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

DEMOLITION QUANTITIES

	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	90
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	17
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	0



DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

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8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
DEMOLITION PLAN
PEASE ST (SHEET 2 OF 2)

SCALE: 1"=20′

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	33

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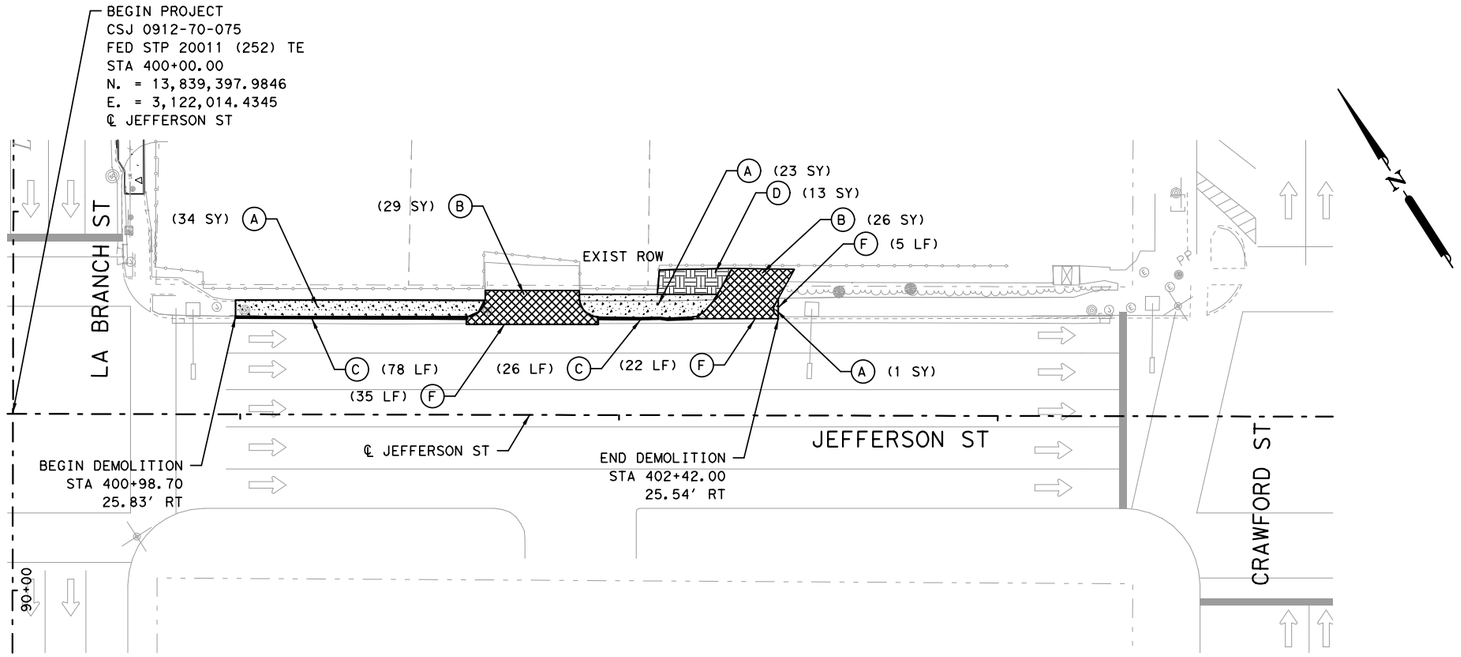


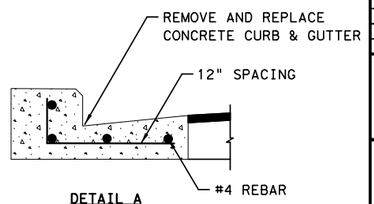
LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	57
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	55
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	104
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	13
E	5033-6005	REMOVE BOLLARD	EA	0



DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

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Huitt-Zollars, Inc. TBPE REG. NO. F-761
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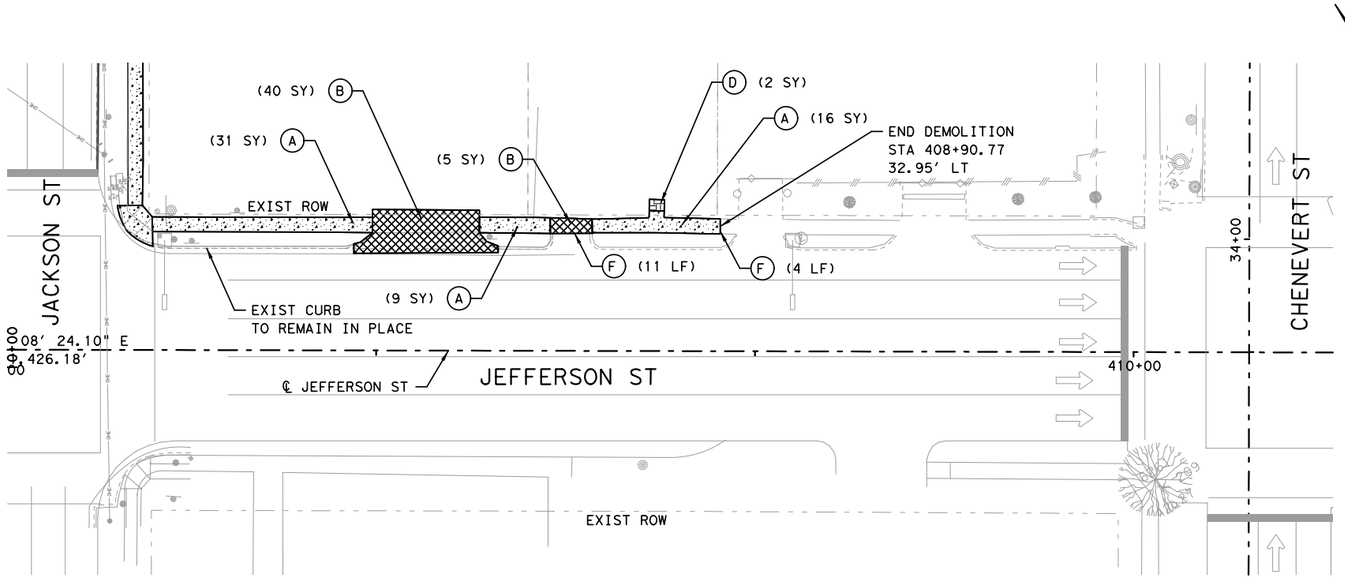
Houston, Texas 77042

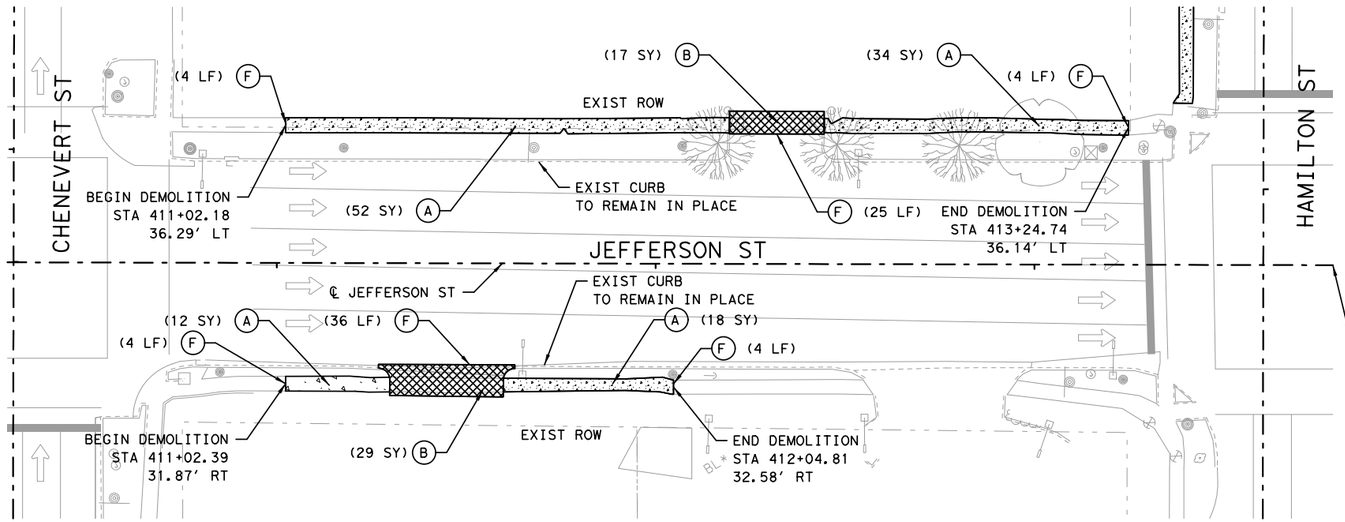
Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
DEMOLITION PLAN
JEFFERSON ST (SHEET 1 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	34





DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	172
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	91
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	2
E	5033-6005	REMOVE BOLLARD	EA	0

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
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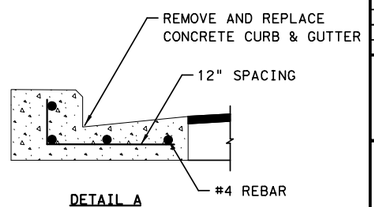
0 20 40
HORIZ: SCALE IN FEET



DETAIL A

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 414+26.18
N. = 13,838,624.1595
E. = 3,123,212.4203
℄ JEFFERSON ST

NOTES:

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4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

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Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN JEFFERSON ST (SHEET 2 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	35

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*DPP*JEF*02.dgn
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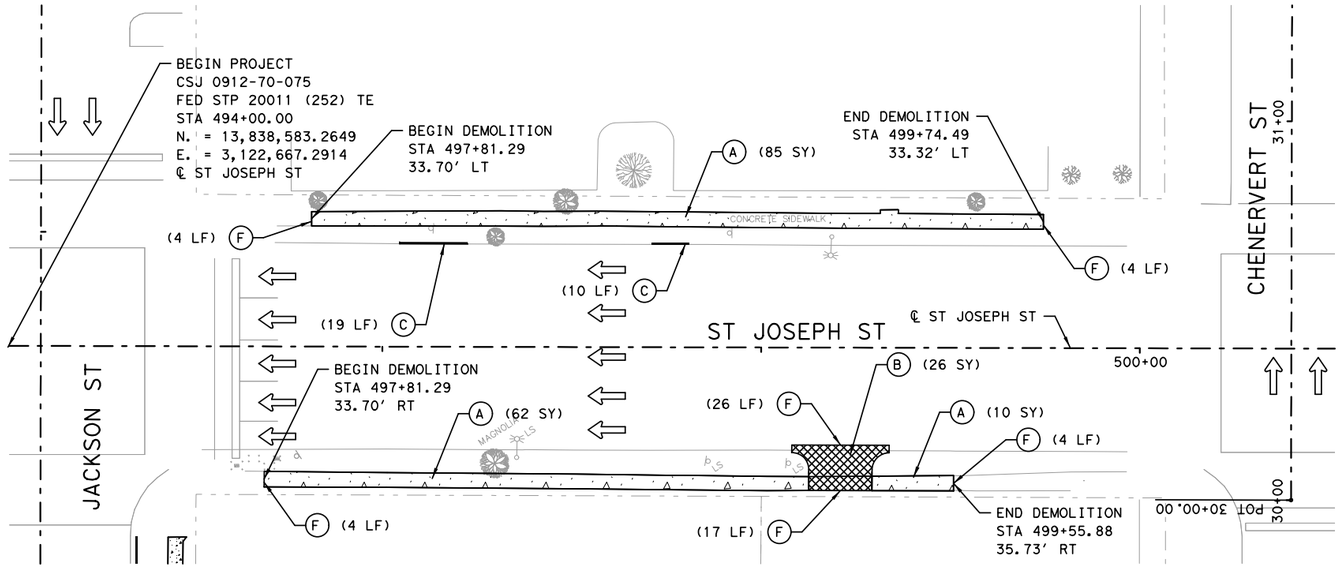
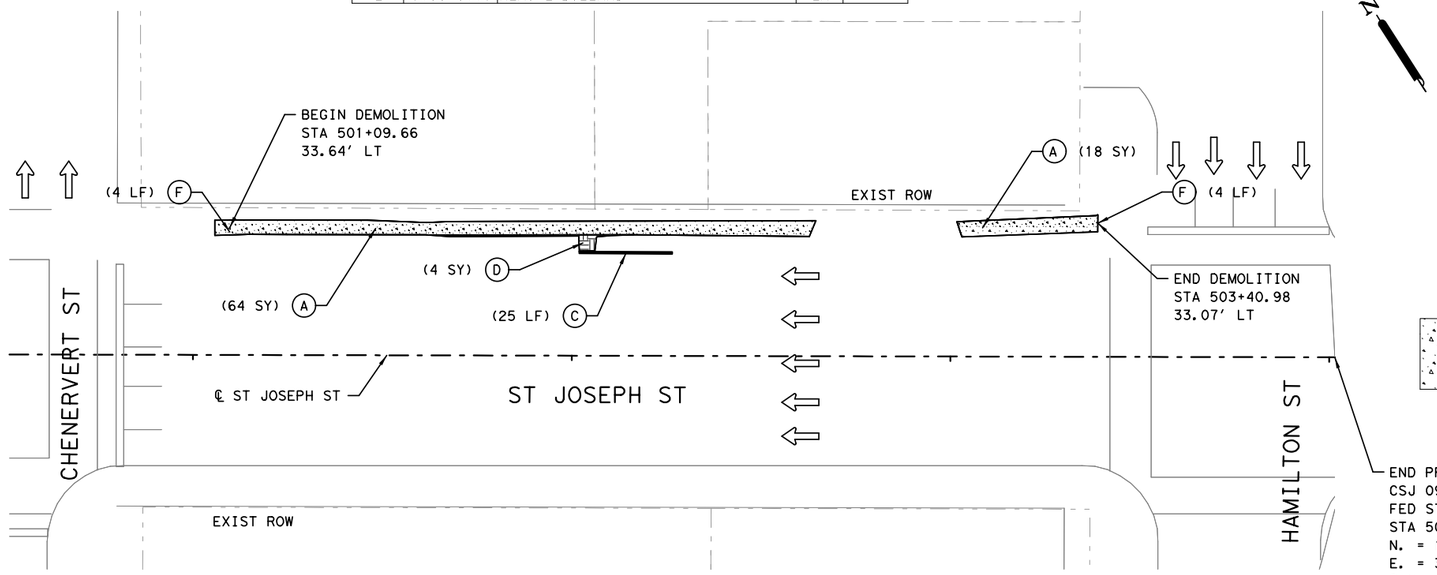
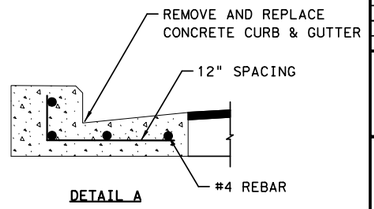


DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	239
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	26
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	54
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	4
E	5033-6005	REMOVE BOLLARD	EA	





DETAIL A

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
(B) REMOVE EXIST DRIVEWAY
(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
(D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
(E) REMOVE BOLLARS
(F) FULL DEPTH SAW-CUT
(G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
DEMOLITION PLAN
ST JOSEPH ST

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	36

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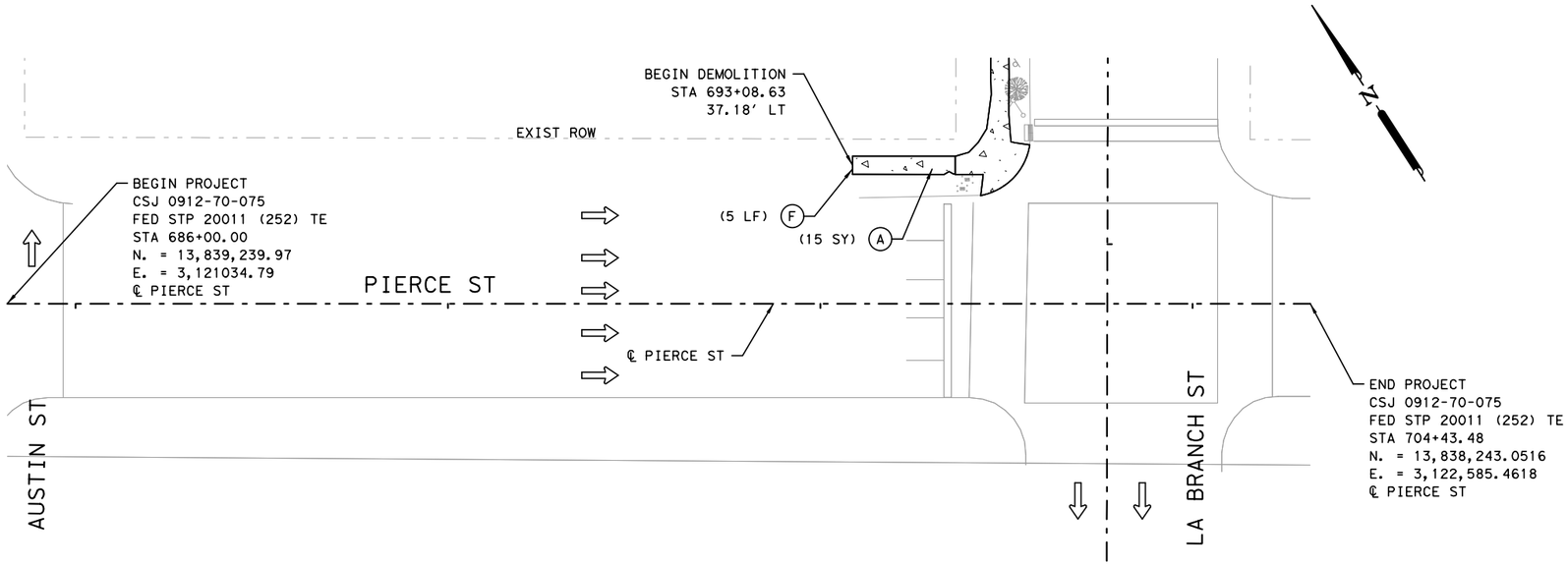


LEGEND

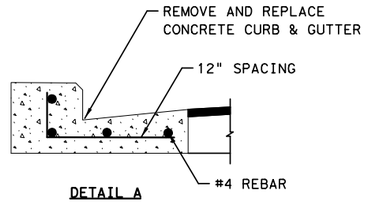
- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

DEMOLITION QUANTITIES

	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	15
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	0
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	



DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN PIERCE ST

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	37

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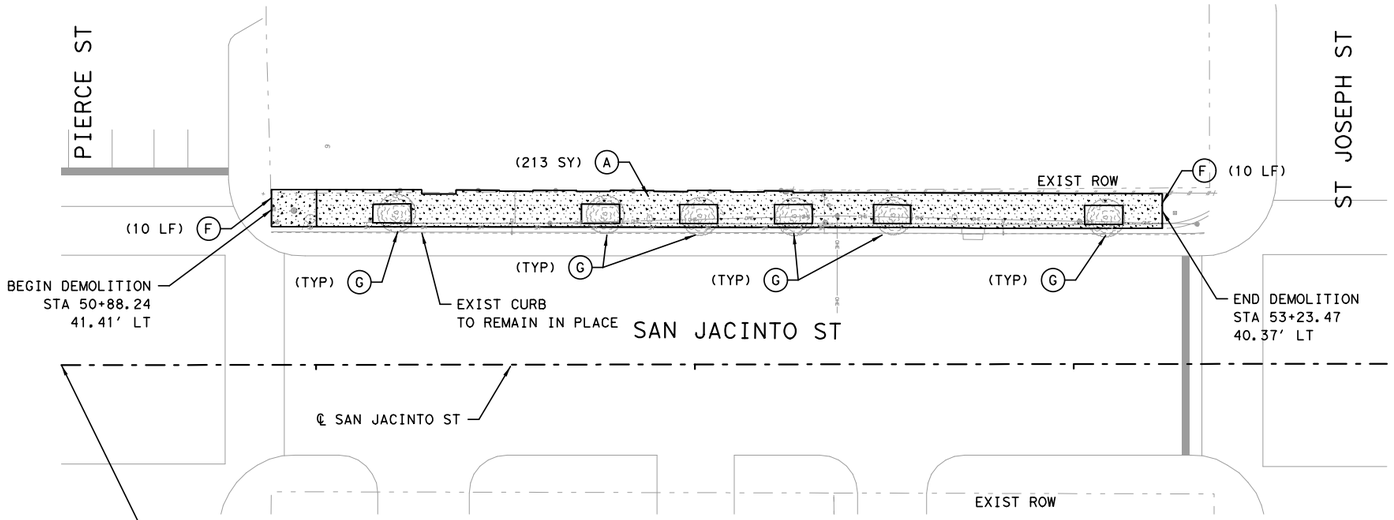

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FED STP 20011 (252) TE
STA 50+00.00
N. = 13,839,315.6956
E. = 3,120,838.8323
℄ SAN JACINTO ST

DEMOLITION QUANTITIES

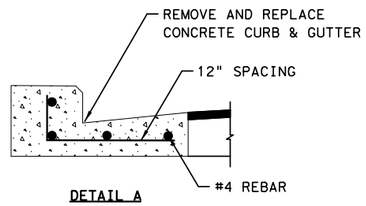
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	213
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	0
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	0

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
(B) REMOVE EXIST DRIVEWAY
(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
(D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
(E) REMOVE BOLLARS
(F) FULL DEPTH SAW-CUT
(G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET



DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
DEMOLITION PLAN
SAN JACINTO ST (SHEET 1 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	38

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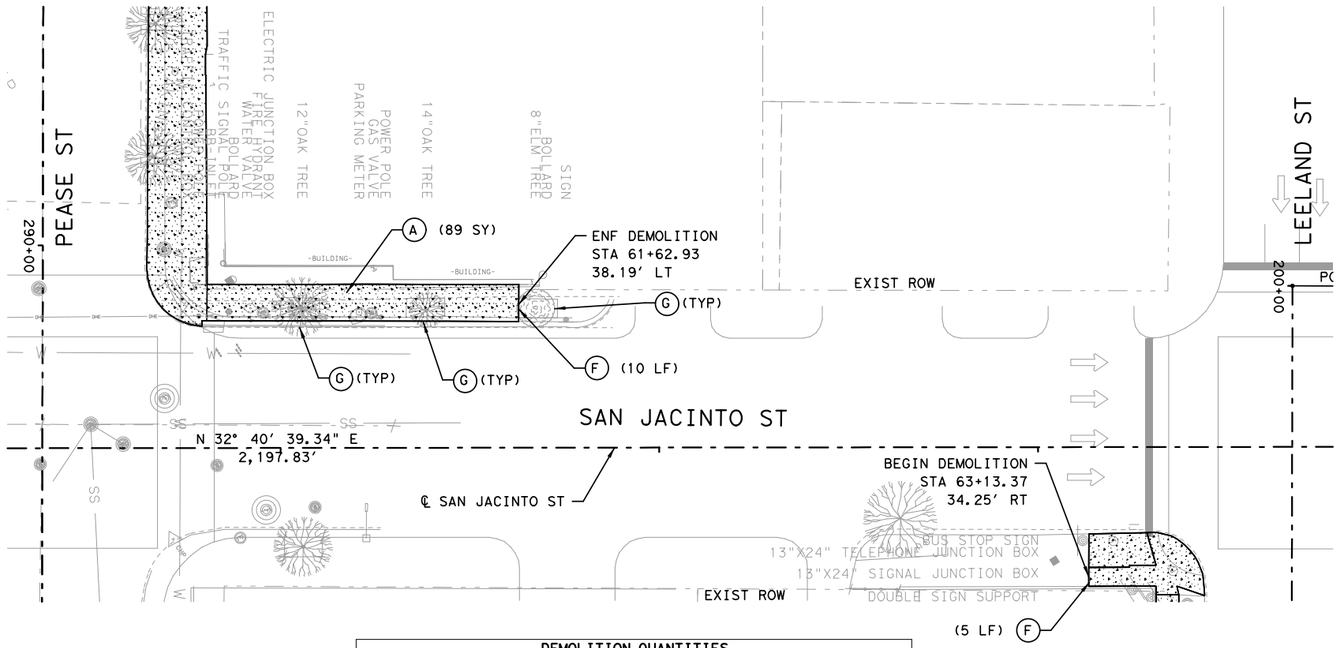
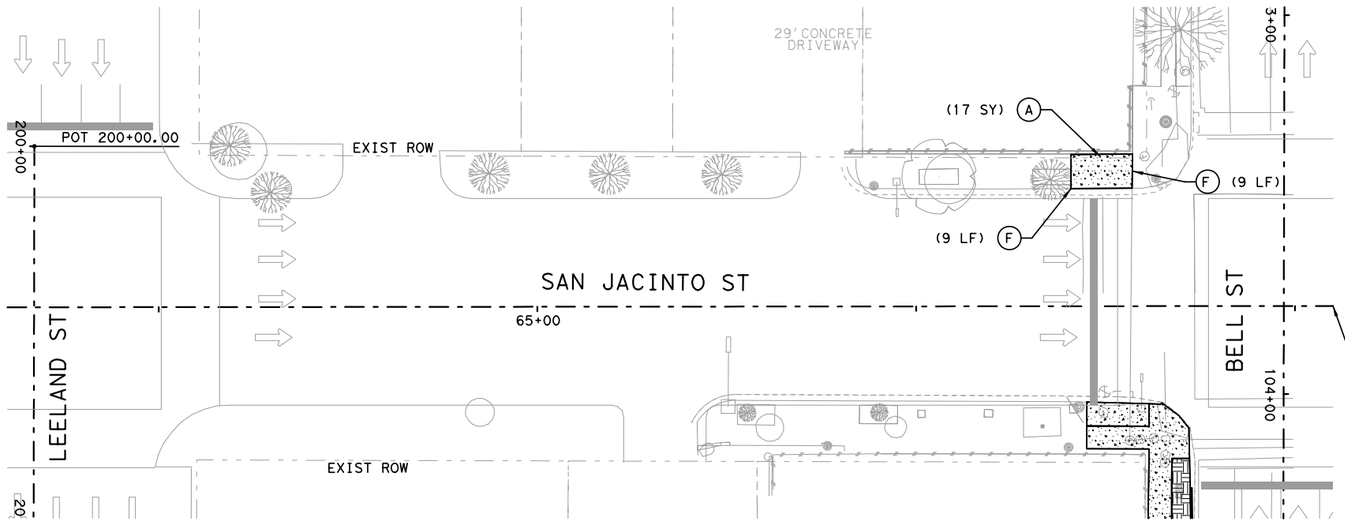
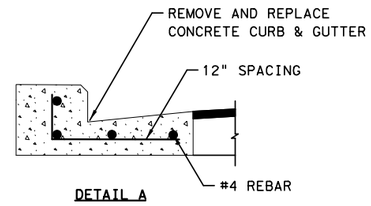


DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	106
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	0
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	0





DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
DEMOLITION PLAN
SAN JACINTO ST (SHEET 2 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	39

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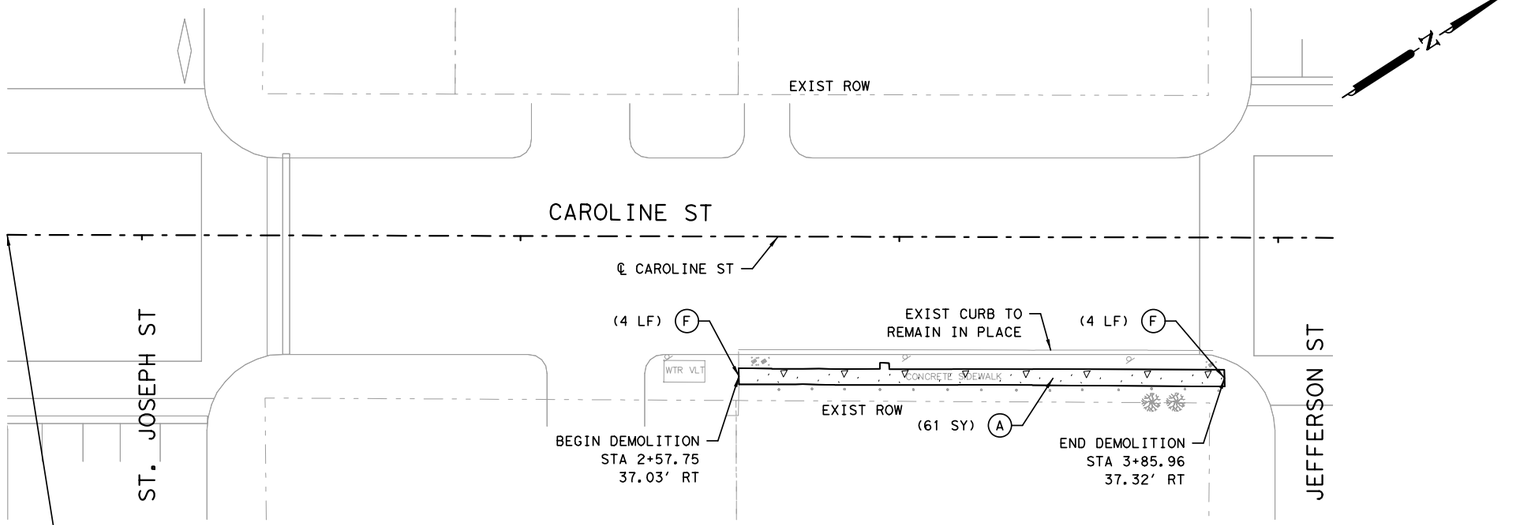
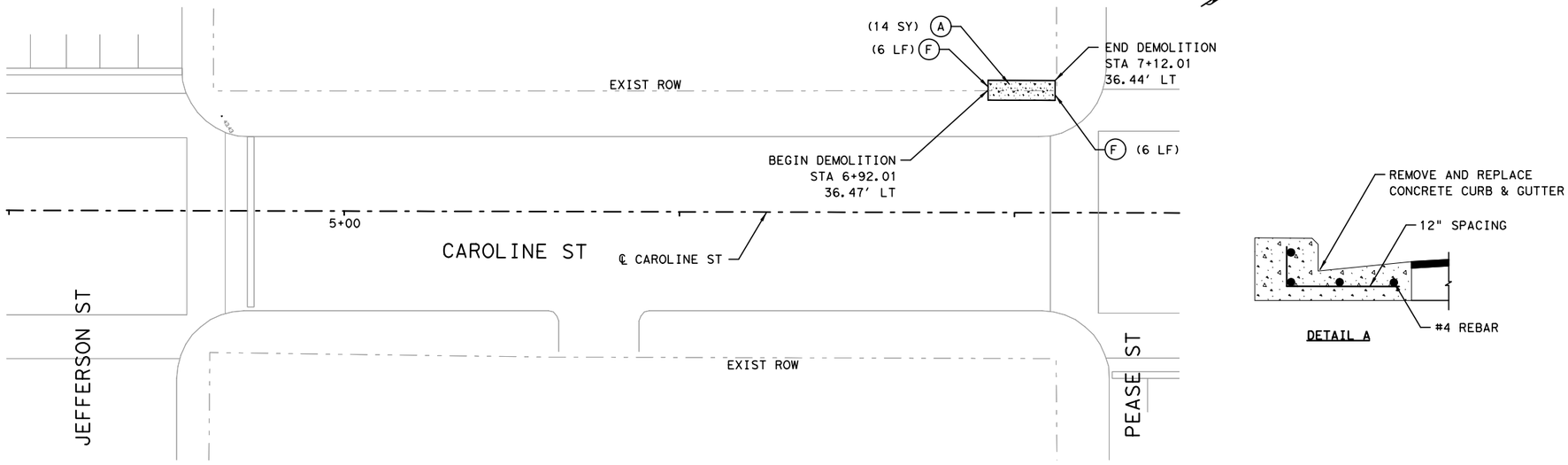


DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	75
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	0
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	0



DETAIL A

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
(B) REMOVE EXIST DRIVEWAY
(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
(D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
(E) REMOVE BOLLARS
(F) FULL DEPTH SAW-CUT
(G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

DEMOLITION PLAN
CAROLINE ST (SHEET 1 OF 3)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	40

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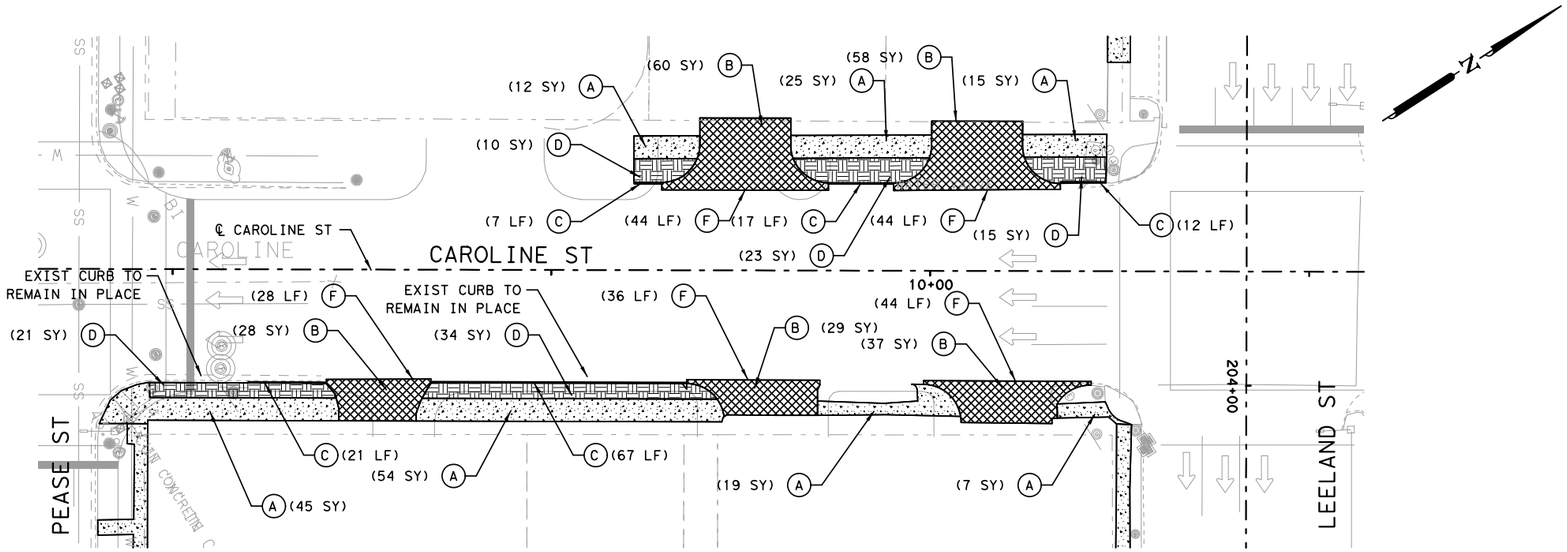


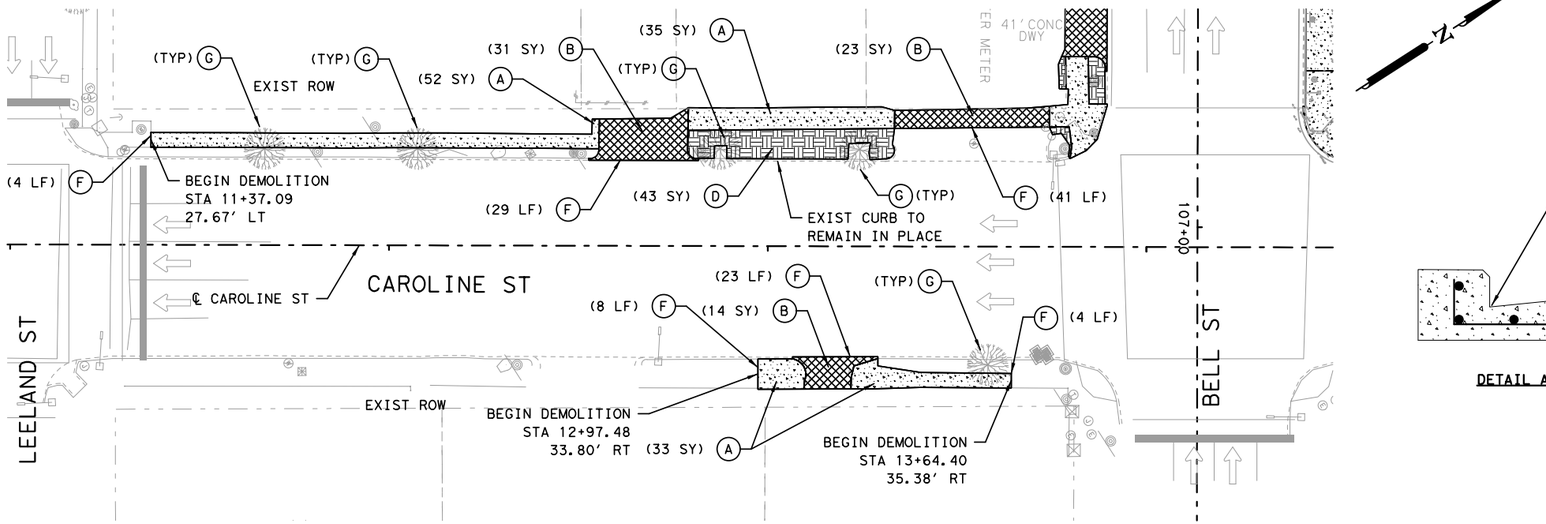
DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	297
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	280
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	124
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	146
E	5033-6005	REMOVE BOLLARD	EA	0

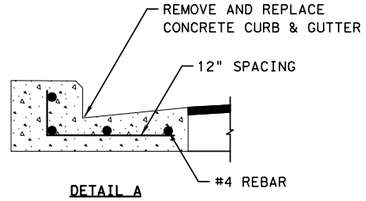
LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET





DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN CAROLINE ST (SHEET 2 OF 3)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	41

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*DPP*CAR*02.dgn
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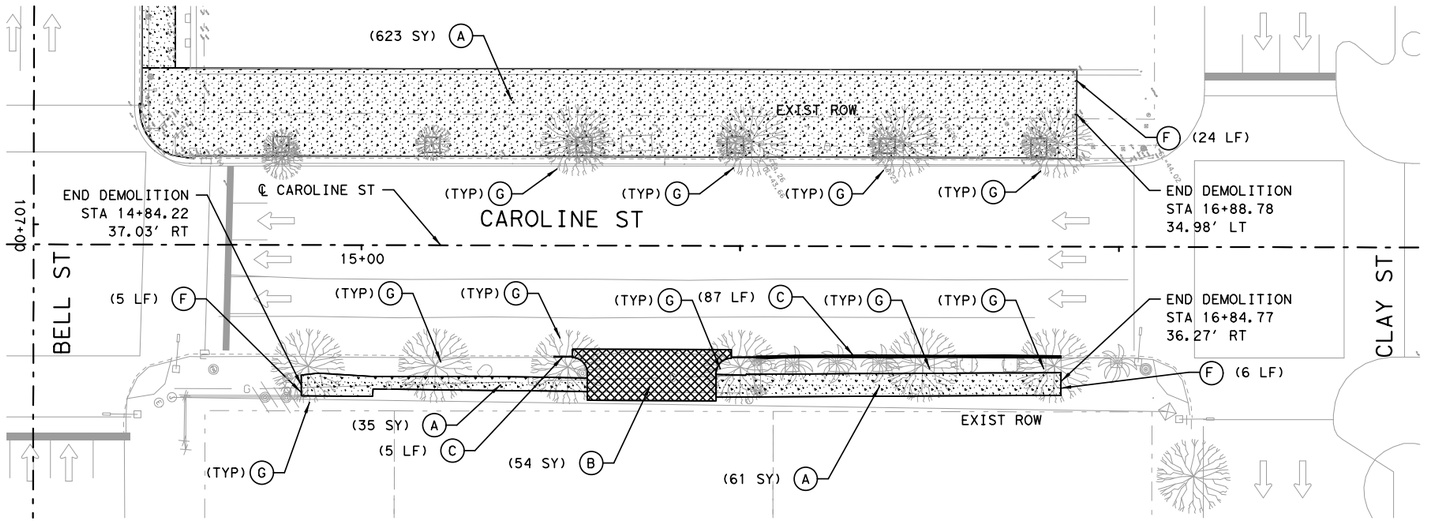


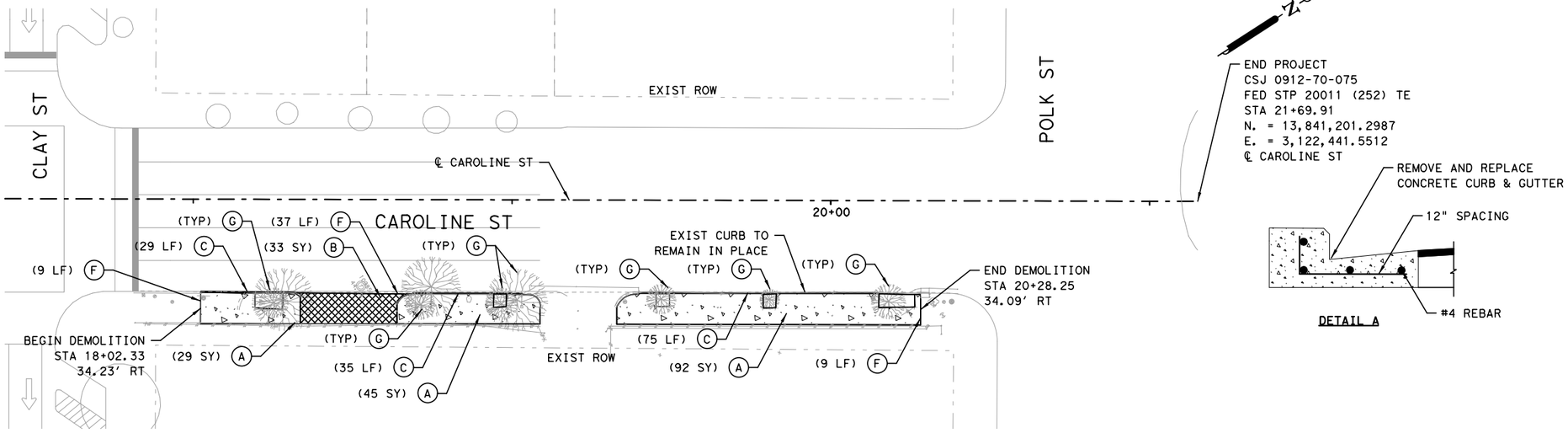
LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	885
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	87
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	231
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	0



NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

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4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN CAROLINE ST (SHEET 3 OF 3)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	42

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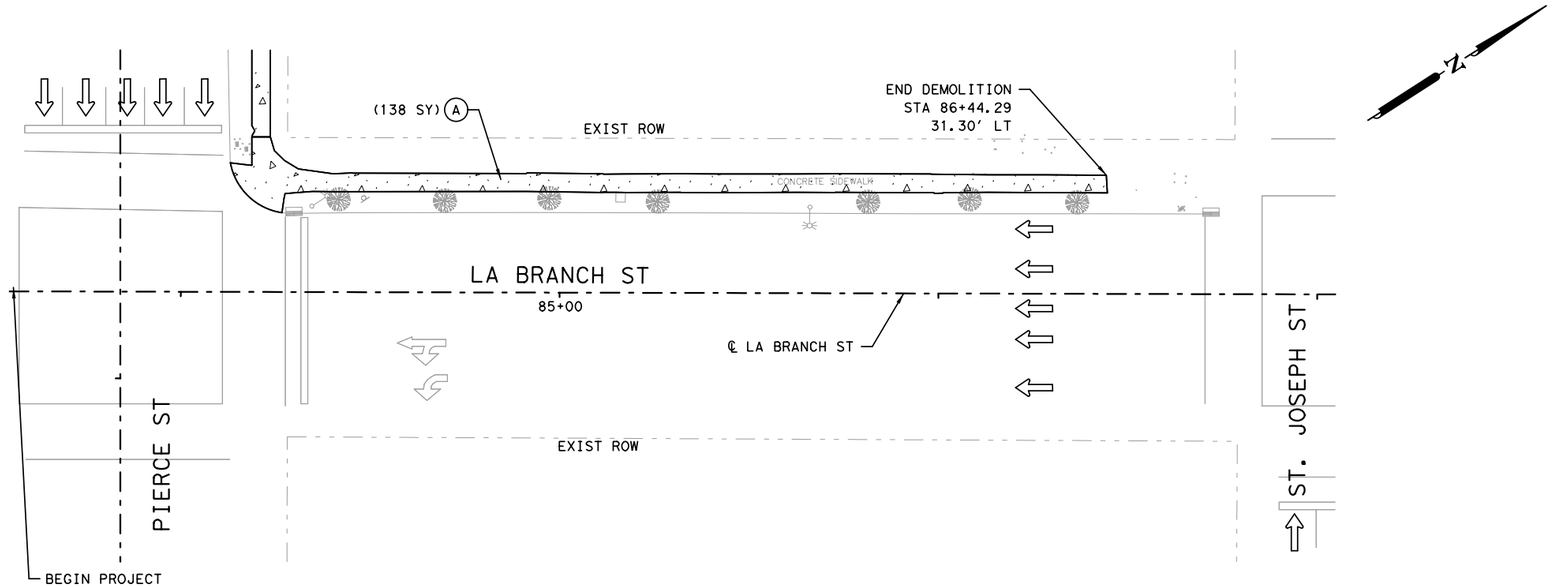


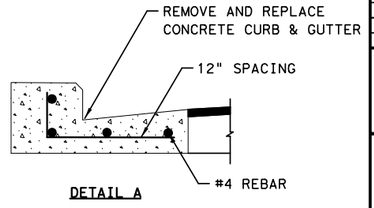
LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

0 20 40
HORIZ: SCALE IN FEET

DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	138
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	0
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	0



DETAIL A

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

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6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

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10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
DEMOLITION PLAN
LA BRANCH ST (SHEET 1 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	43

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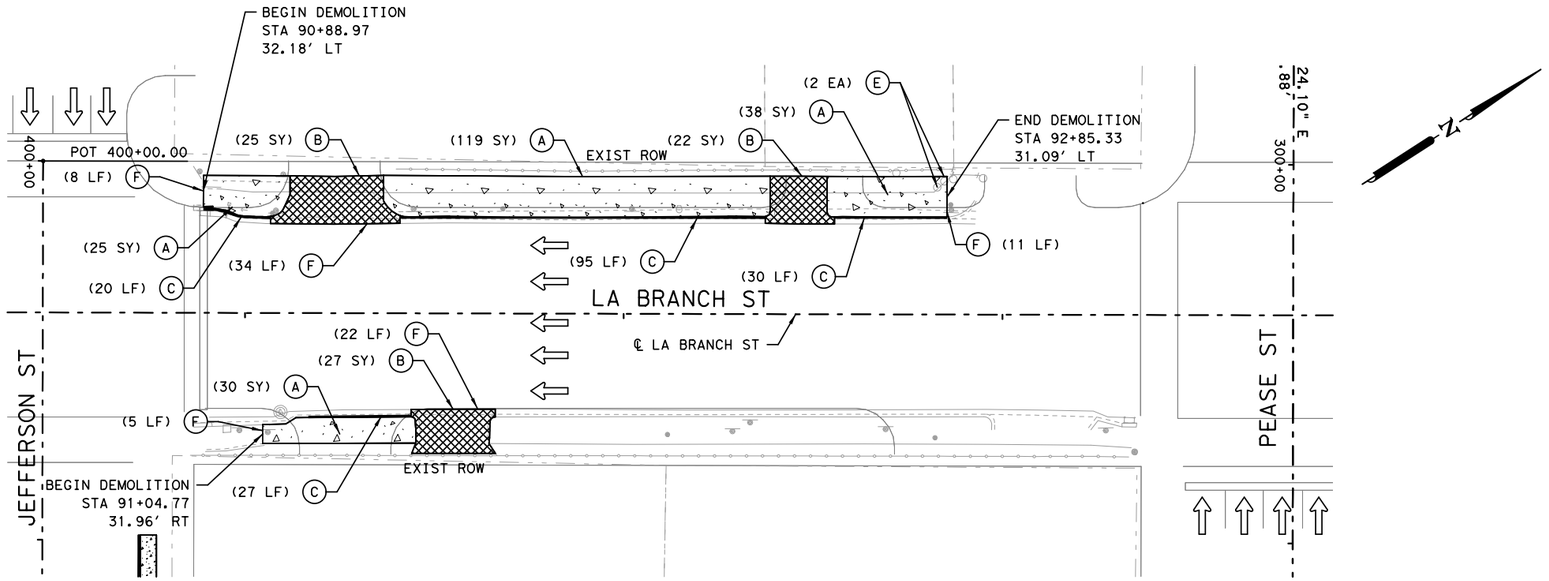


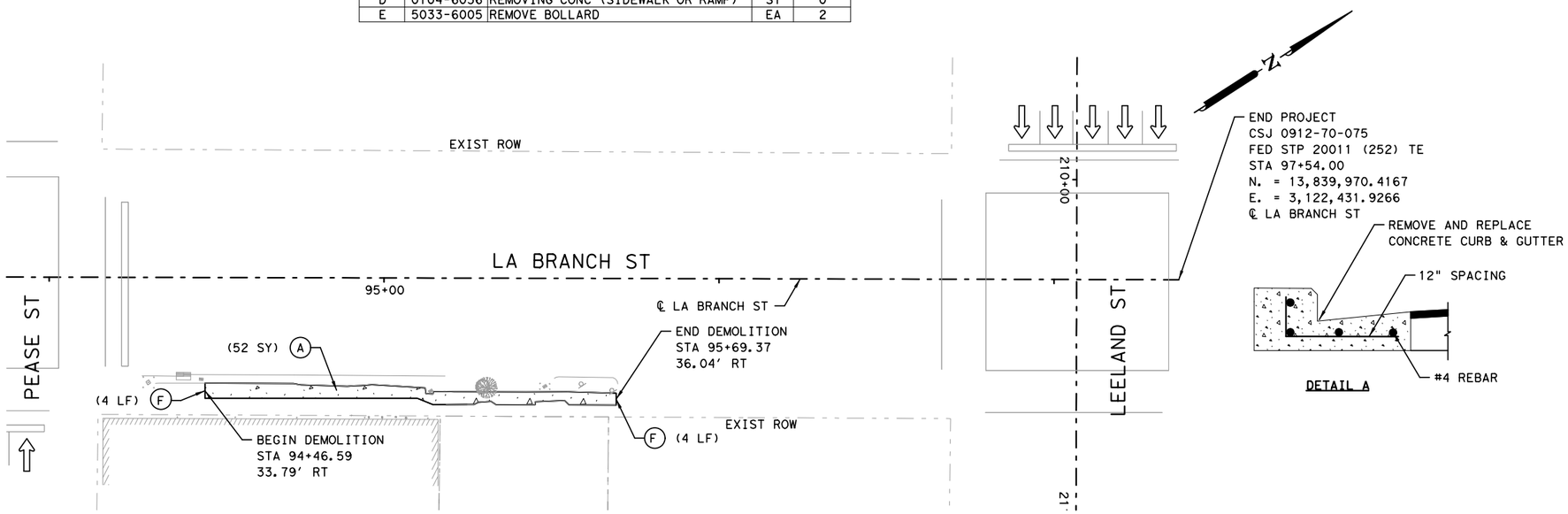
LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
(B) REMOVE EXIST DRIVEWAY
(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
(D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
(E) REMOVE BOLLARS
(F) FULL DEPTH SAW-CUT
(G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

DEMOLITION QUANTITIES				
	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	264
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	74
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	172
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	0
E	5033-6005	REMOVE BOLLARD	EA	2

0 20 40
HORIZ: SCALE IN FEET



NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

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6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

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9. EXISTING POWER POLES TO REMAIN.

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3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN LA BRANCH ST (SHEET 2 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	44

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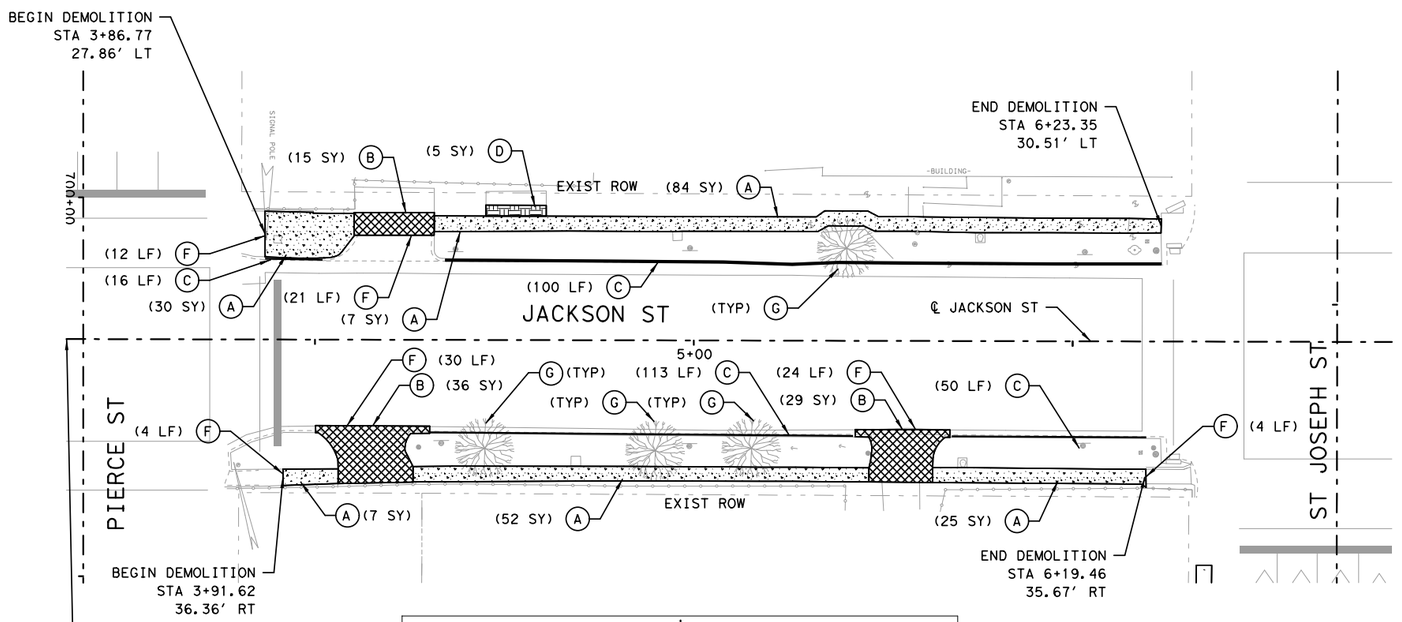
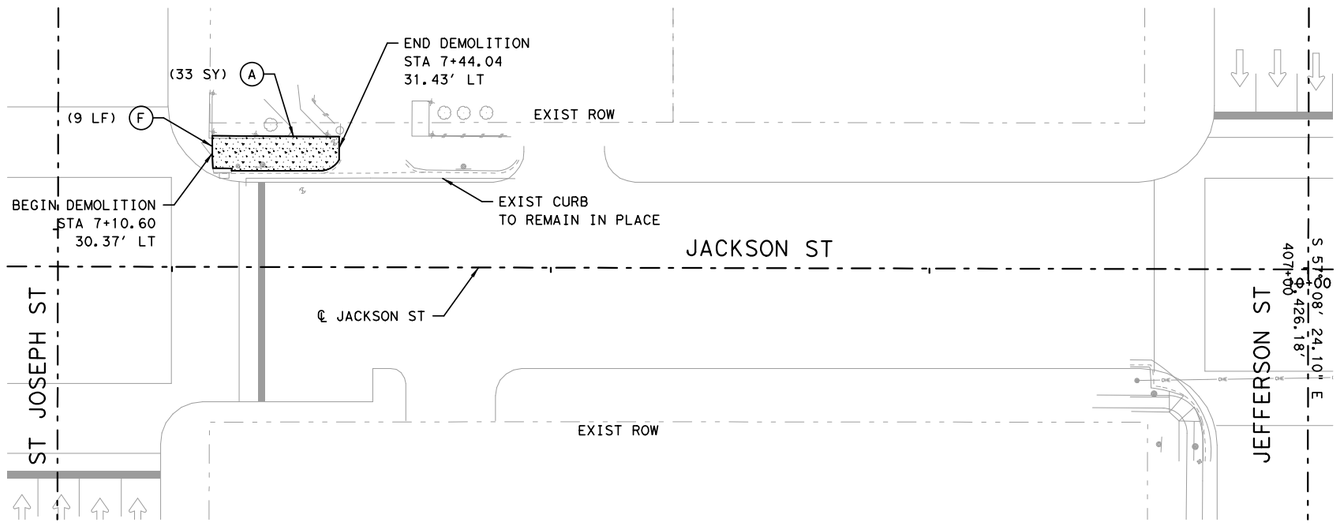
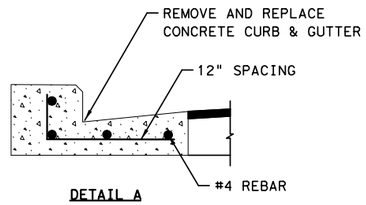


	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	231
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	80
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	279
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	5
E	5033-6005	REMOVE BOLLARD	EA	0





DETAIL A

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
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0 20 40
HORIZ: SCALE IN FEET

NOTES:

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3/1/2023

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LICENSED PROFESSIONAL ENGINEER

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REV	DATE	DESCRIPTION	BY

downtown district

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Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN JACKSON ST (SHEET 1 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	45

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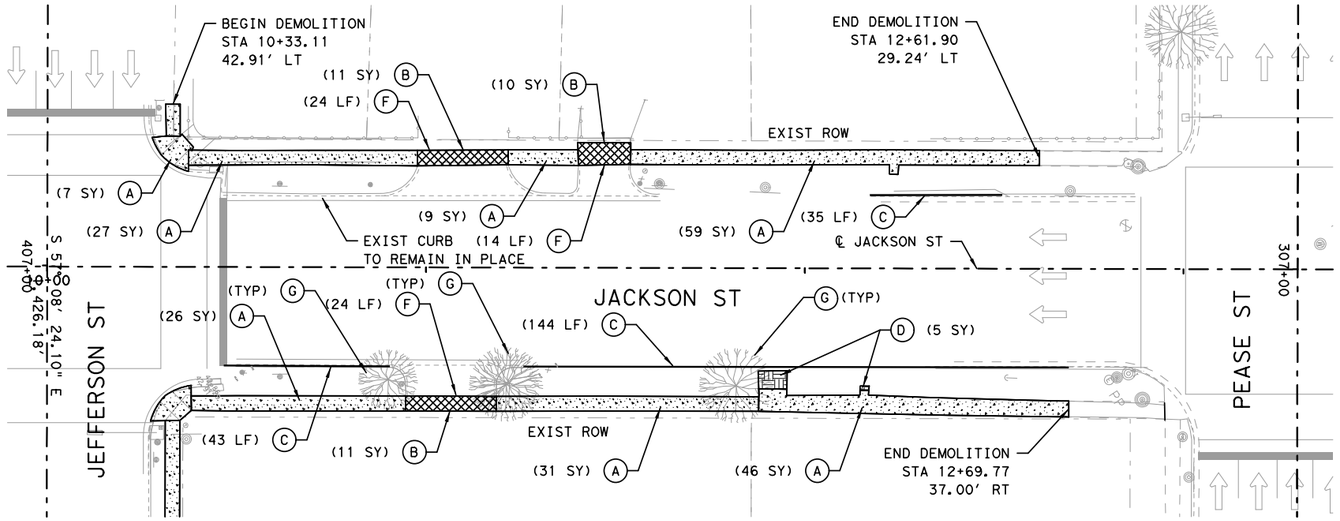

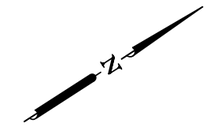

LEGEND

- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

(A) INCIDENTAL SIDEWALK REMOVAL
(B) REMOVE EXIST DRIVEWAY
(C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
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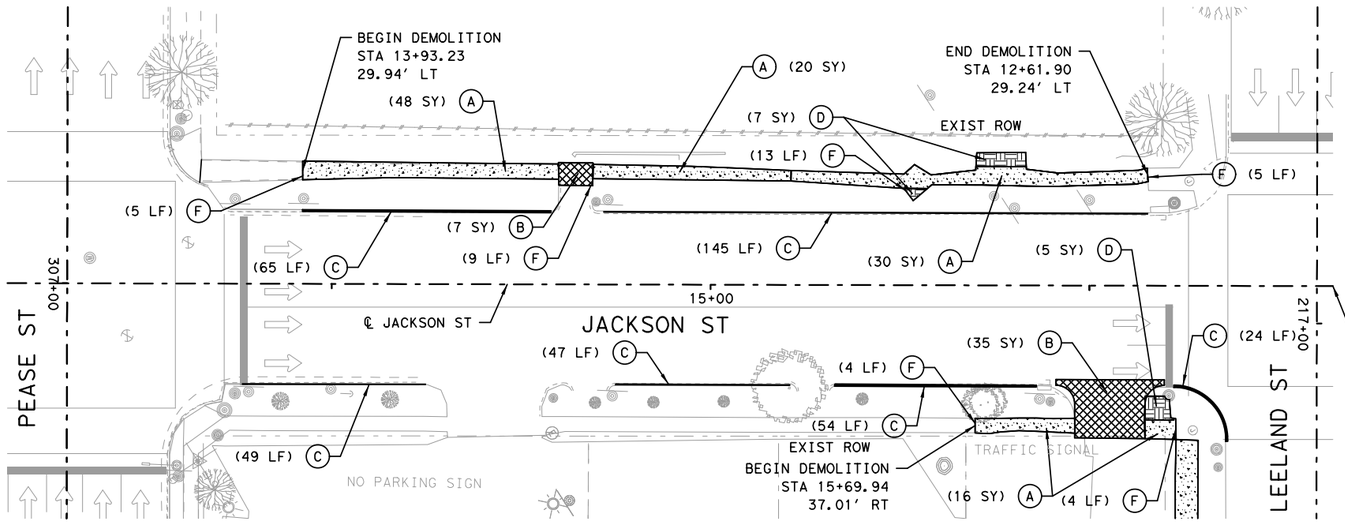
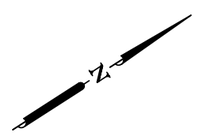
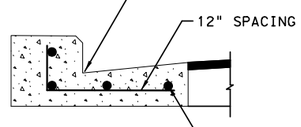
0 20 40
HORIZ: SCALE IN FEET

DEMOLITION QUANTITIES

	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	319
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	74
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	606
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	17
E	5033-6005	REMOVE BOLLARD	EA	







DETAIL A

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 17+00.10
N. = 13,839,606.0562
E. = 3,122,982.6182
℄ JACKSON ST

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

5. WHERE AN EXISTING BUILDING FOUNDATION WALL EXISTS AT OR NEAR THE ROW LINE, IT IS TO BE CLEANED AND PATCHED WHERE NECESSARY (UNO).

6. MAINTAIN ACCESS TO BUILDING ENTRANCES AND DRIVEWAYS DURING THE RESPECTIVE BUSINESS OPERATING HOURS.

7. PROTECT HL&P VAULT VENTILATION GRILLES FROM DAMAGE AND ADJUST TO NEW SIDEWALK ELEVATION.

8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN JACKSON ST (SHEET 2 OF 2)

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	46

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*DPP*JAC*02.dgn
3/1/2023
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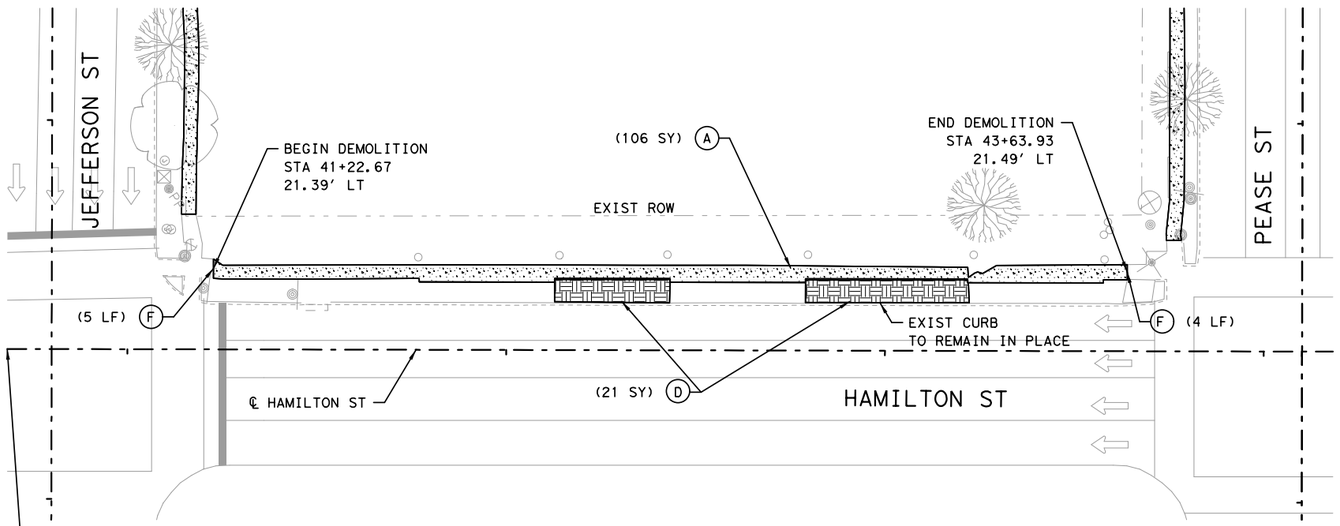


LEGEND

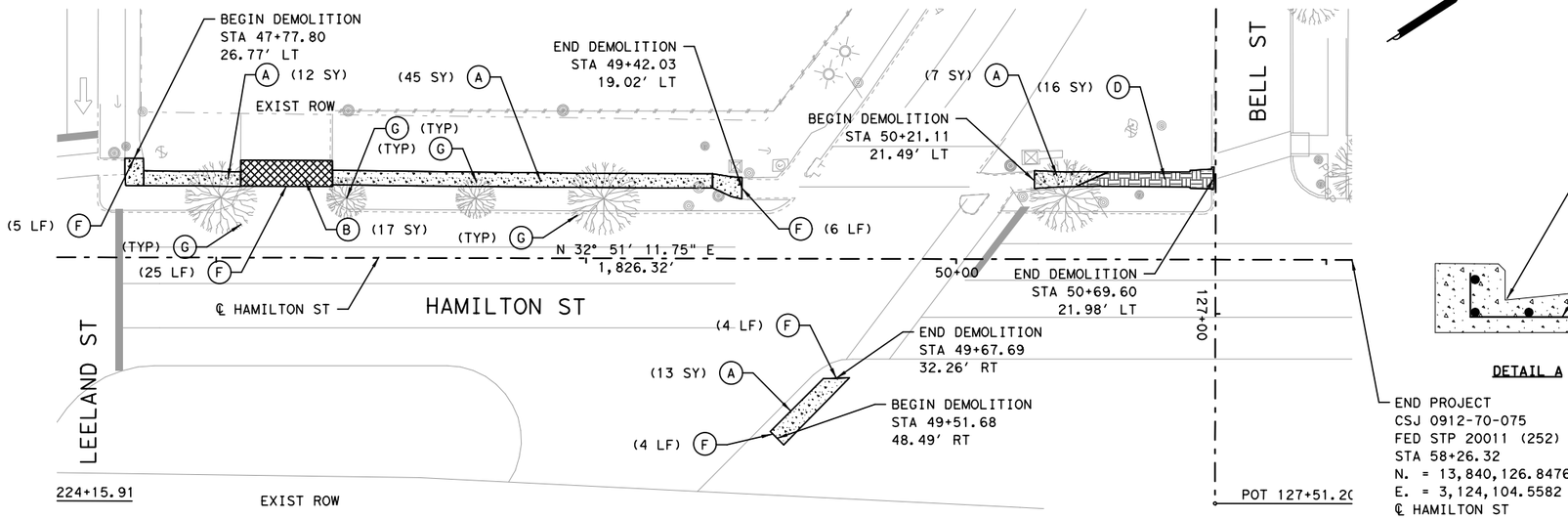
- INCIDENTAL SIDEWALK REMOVAL
- REMOVE EXIST CONCRETE
- REMOVE EXIST CURB
- REMOVE EXIST DRIVEWAY

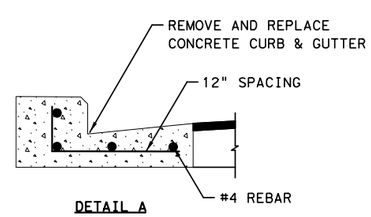
- (A) INCIDENTAL SIDEWALK REMOVAL
- (B) REMOVE EXIST DRIVEWAY
- (C) REMOVE EXIST CONCRETE CURB AND GUTTER (SEE DETAIL A)
- (D) REMOVE EXIST CONC (SIDEWALK OR RAMP)
- (E) REMOVE BOLLARS
- (F) FULL DEPTH SAW-CUT
- (G) PROTECT ALL EXIST TREES (UNLESS NOTED OTHERWISE)

HORIZ: SCALE IN FEET

DEMOLITION QUANTITIES

	ITEM	DESCRIPTION	UNIT	QTY
A		INCIDENTAL SIDEWALK REMOVAL	SY	183
B	0104-6017	REMOVING CONC (DRIVEWAYS)	SY	17
C	0104-6022	REMOVING CONC (CURB AND GUTTER)	LF	0
D	0104-6036	REMOVING CONC (SIDEWALK OR RAMP)	SY	37
E	5033-6005	REMOVE BOLLARD	EA	0





DETAIL A

END PROJECT
CSJ 0912-70-075
FED STP 20011 (252) TE
STA 58+26.32
N. = 13,840,126.8476
E. = 3,124,104.5582
℄ HAMILTON ST

NOTES:

1. REMOVE AND RETURN ALL EXISTING NEWSPAPER VENDING UNITS TO OWNER.

2. SCOPE OF DEMOLITION SHALL BE FROM FACE OF CURB TO BUILDING FACE OR RIGHT OF WAY (ROW) UNLESS NOTED OTHERWISE (UNO).

3. EXISTING UTILITY STRUCTURES (METER AND VALVE VAULTS, JUNCTION BOXES, MANHOLES, PULL BOXES AND CLEAN OUTS, ETC.) IN USE IN AREA OF DEMOLITION ARE TO BE PROTECTED AND REMAIN OPERATIONAL DURING DEMOLITION, UNO. ELEVATION OF COVER OF UTILITY ELEMENT IS TO BE LEVEL WITH NEW PAVING.

4. CONTRACTOR TO COORDINATE OF ALL PARKING METER HEADS WITH CITY OF HOUSTON DURING CONSTRUCTION.

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8. EXISTING TREES TO REMAIN AND BE PROTECTED DURING DEMOLITION.

9. EXISTING POWER POLES TO REMAIN.

10. REMOVE UNUSED OR ABANDONED DRAINPIPE.

11. FIRE HYDRANTS TO REMAIN AND BE PROTECTED DURING DEMOLITION AND NEW CONSTRUCTION, UNO.

13. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES TO THE EXISTING PUBLIC OR PRIVATE UTILITY LINES, INCLUDING BUT NOT LIMITED TO WATERLINES, WASTEWATER COLLECTION SYSTEMS AND STORM SEWERS, DURING CONSTRUCTION. ALL DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH TXDOT STANDARD. NO SEPARATE PAY.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS DEMOLITION PLAN HAMILTON ST

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	47

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*DPP*HAM*01.dgn
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GUY GUY ANCHOR
SW SIDEWALK
EC EDGE OF CONCRETE
PS PAINT STRIPE SOLID
BEN BENCH / BUS STOP
BFN BRICK FENCE
BLD BUILDING CORNER
BOC BACK OF CURB
CBFN CINDER BLOCK FENCE
CFN CHAIN LINK FENCE
CI CURB INLET
CR CENTER OF ROAD/CROWN
CTB CONCRETE BARRIER
DI DROP INLET
PLT PLANTER
EP EDGE OF PAVEMENT
FN FENCE GENERIC
GAT GATE
GI GUTTER INLET
GL GAS LINE
GUT GUTTER
HCR HANDICAP RAMP
HDG HEDGE LINE
MCVR METAL COVER
VLT VAULT (GENERIC)
MIS MISCELLANEOUS
RR RAILROAD TRACKS(SPOT SH
PSD PAINT STRIPE DASHED
ROOF ROOF SHOT FOR DTM OB
RR1 RAILROAD TRACKS(SPOT SH
STP STEPS
TBX TRAFFIC CONTROL BOX
UE UNDERGROUND ELECTRIC LI
UT UNDERGROUND TELEPHONE
WFN WIRE FENCE
ALC ALUMINUM CAP
ASPH ASPHALT SHOT
BC BRASS CAP
BOL BOLLARD

CHP CHISELED PLUS (SCRIBE)
CNDE CONDUIT (ELECTRIC)
CO CLEANOUT
COHBBI TYPE "BB" CURB INLET W/SOLID COV
COHBI TYPE "B" CURB INLET
COHE3 TYPE "E" INLET
COL COLUMN
CP CONTROL POINT
CPV CONCRETE PAVEMENT
DRV DRIVEWAY
EM ELECTRIC METER
EPED ELECTRICAL PEDESTAL
FC FILLER CAP
FH FIRE HYDRANT
FLDL FLOOD LIGHT
FOC FIBER OPTIC CABLE MARKER
FP FLAG POLE
GM GAS METER
GV GAS VALVE
HDW HEAD WALL
HM HORIZONTAL MONUMENT
IP IRON PIPE
IRF IRON ROD FOUND
IRFC IRON ROD FOUND W/CAP
ISP IRRIGATION STAND PIPE
JB JUNCTION BOX
JBE JUNCTION BOX ELECTRIC
JBT JUNCTION BOX TELEPHONE
LP LIGHT POLE SMALL
LS LUMINARE STANDARD
MB MAILBOX
MH MANHOLE (GENERIC)
MHE MANHOLE (ELECTRIC)
MHS MANHOLE (STORM SEWER)
MHT MANHOLE (TELEPHONE)
MHW MANHOLE (WASTEWATER)

MW MONITOR WELL
NG NATURAL GROUND
OAK OAK TREE
OE OVERHEAD POWER LINE
PALM PALM TREE
PCP PIPELINE CATHODIC PROTE
PK PK NAIL
PKL PARKING LOT (SPOT SHOT)
PMT PARKING METER
POLE POLE
PP POWER POLE
PST POST (GENERIC)
RW RETAINING WALL (POINT)
SE SPOT ELEVATION
SGN SIGN AND POLE (SINGLE)
SPED SIGNAL PEDESTAL
SPK SPRINKLER HEAD
SPKV SPRIKLER VALVE
SPLE SERVICE POLE ELECTRIC
SPL SPLILLWAY
SPOL SIGNAL POLE TRAFFIC LIGHT
TP TELEPHONE POLE
TREE TREE LARGER THAN TRE
TSLP TRAFFIC SIGNAL LIGHT
WIT WITNESS CORNER
WM WATER METER
WP WOODEN POST
WV WATER VALVE

NOTES:

1. ALL BEARINGS AND COORDINATES ARE BASED ON THE TEXAS COORDINATE SYSTEM; SOUTH CENTRAL ZONE; NORTH AMERICAN DATUM OF 1983; 1993 ADJUSTMENT. ALL DISTANCES AND COORDINATES SHOWN ARE SURFACE AND MAY BE CONVERTED TO GRID BY DIVIDING BY A COMBINED ADJUSTMENT FACTOR OF 1.00013.

2. VERTICAL CONTROL WAS ESTABLISHED USING THREE WIRE DIGITAL DIFFERENTIAL LEVEL LOOPS. VERTICAL CONTROL IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). VERTICAL CONTROL WAS BASED ON NATIONAL GEODETIC SURVEY BENCHMARK ****** ELEVATION = **.**'.

3. HORIZONTAL CONTROL WAS ESTABLISHED USING REDUNDANT TxDOT GPS RTN OBSERVATIONS METHODS AND ADJUSTED TO THE EXISTING VALUES OF *-** AND *-**. HORIZONTAL CONTROL IS RELATIVE TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83)1993 ADJUSTMENT.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SURVEY LEGEND

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	48

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SURVEY SHEETS\CTLLR001 .dgn
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PIERCE ST.
ST. JOSEPH ST.
JEFFERSON ST.
PEASE ST.
LEELAND ST.
BELL ST.
CLAY ST.
POLK ST.
FANIN ST.
SAN JACINTO ST.
CAROLINE ST.
AUSTIN ST.
LA BRANCH ST.

BEGIN PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 50+00.00
N. = 13,839,315.70
E. = 3,120,838.83

BEGIN PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 285+17.00
N. = 13,840,479.79
E. = 3,120,948.09

BEGIN PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 100+00.00
N. = 13,840,948.59
E. = 3,121,438.62

END PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 71+97.83
N. = 13,841,165.66
E. = 3,122,025.47

END PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 21+69.91
N. = 13,841,201.30
E. = 3,122,441.55

BEGIN PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 52+82.58
N. = 13,839,378.70
E. = 3,121,263.99

BEGIN PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 80+00.00
N. = 13,839,516.15
E. = 3,121,745.63

END PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 87+54.00
N. = 13,840,149.44
E. = 3,122,154.86

BEGIN PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 83+00.00
N. = 13,838,749.17
E. = 3,121,642.83

BEGIN PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 400+00.00
N. = 13,839,397.9846
E. = 3,122,014.4345

END PROJECT
CSJ 0912-72-390
FED STP 20011 (252) TE
STA 97+54.00
N. = 13,839,970.42
E. = 3,122,431.93

S 29°11'01" W, 1,040.65'
N 62°52'58" W, 653.36'
N 32°30'21" E, 731.96'
N 56°45'50" W, 662.72'
N 29°06'58" E, 914.59'

205
716
218
202
200
217
216

ALL COORDINATES SHOWN ARE BASED ON THE TEXAS STATE PLAIN COORDINATE SYSTEM, SOUTH CENTRAL ZONE 4204 AND WERE OBSERVED UTILIZING THE TXDOT RTN/VRS NETWORK.

ALL COORDINATES SHOWN (NAD83) ARE SURFACE COORDINATES AND CAN BE CONVERTED TO GRID BY APPLYING A SCALE FACTOR OF 1.00013.

ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

ALL DISTANCES ARE IN U.S. SURVEY FEET AND DISPLAYED WITH SURFACE VALUES.

N

0 100 200
HORIZ: SCALE IN FEET

STATE OF TEXAS
REGISTERED
RICARDO A. VAZQUEZ
4902
PROFESSIONAL
LAND SURVEYOR
4/27/23

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPELS FIRM NO. 10025601
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SURVEY CONTROL INDEX SHEET

DGN: JR	FED. RD. DIV. NO.	STATE	CITY			HIGHWAY NO.
CHK DGN: CG	6	TEXAS	HOUSTON			VAR
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	49

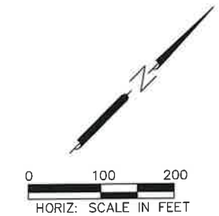
$FILE$
$DATE$
$TIME$

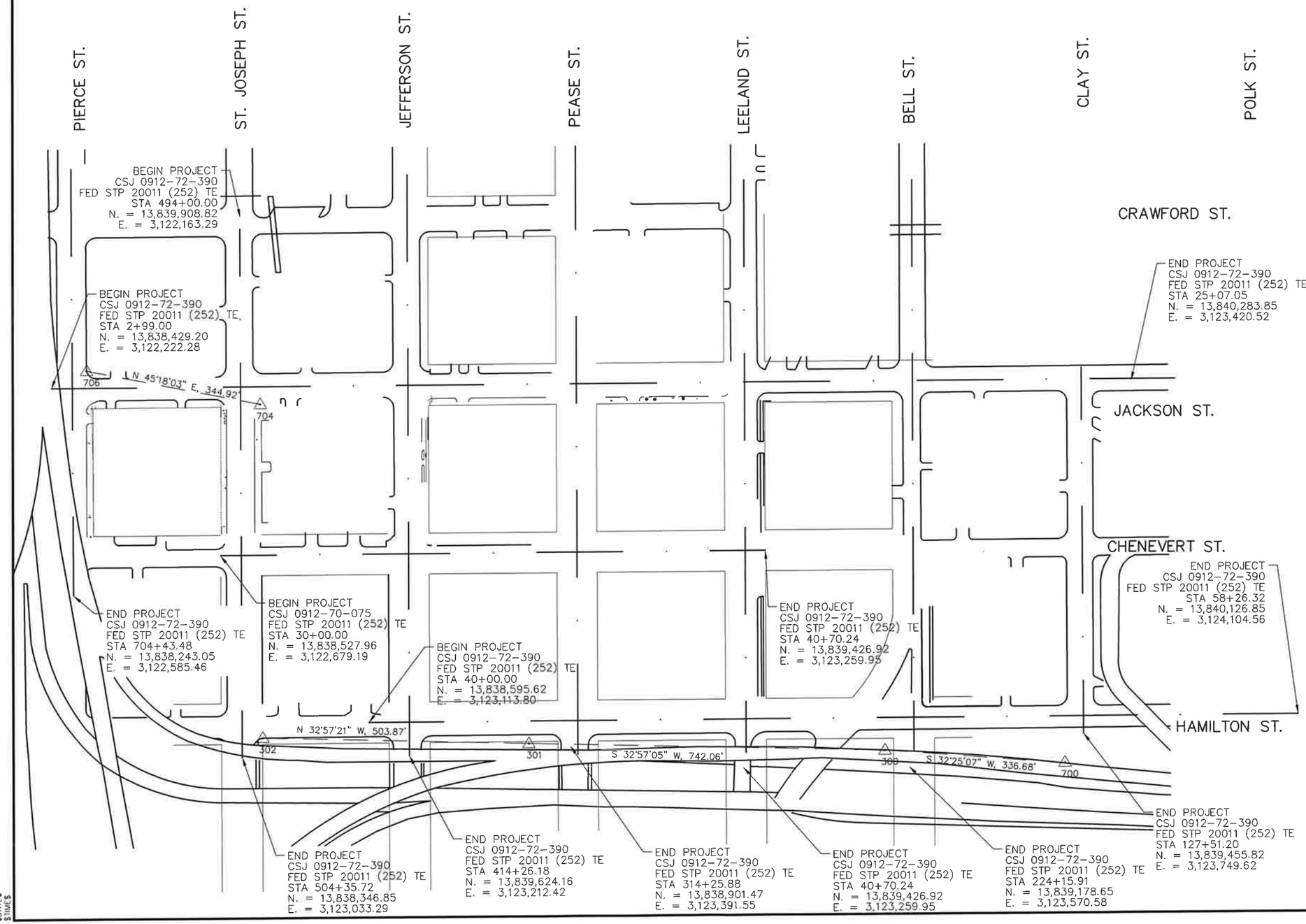
ALL COORDINATES SHOWN ARE BASED ON THE TEXAS STATE PLAIN COORDINATE SYSTEM, SOUTH CENTRAL ZONE 4204 AND WERE OBSERVED UTILIZING THE TXDOT RTN/VRS NETWORK.

ALL COORDINATES SHOWN (NAD83) ARE SURFACE COORDINATES AND CAN BE CONVERTED TO GRID BY APPLYING A SCALE FACTOR OF 1.00013.

ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

ALL DISTANCES ARE IN U.S. SURVEY FEET AND DISPLAYED WITH SURFACE VALUES.





STATE OF TEXAS
REGISTERED
RICARDO A. VAZQUEZ
4902
PROFESSIONAL
LAND SURVEYOR

2/27/23

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPELS FIRM NO. 10025601
10350 Richmond Ave, Suite 300
Houston, Texas 77042

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SURVEY CONTROL INDEX SHEET

DGN: JR	FED. RD. DIV. NO.	STATE	CITY			HIGHWAY NO.
CHK DGN: CG	6	TEXAS	HOUSTON			VAR
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	50

$FILE$
$DATE$
$TIME$

HORIZONTAL AND VERTICAL CONTROL INFORMATION

POINT	MONUMENT TYPE	GRID COORDINATES		SURFACE COORDINATES		ELEVATION
		NORTHING (FT)	EASTTHING (FT)	NORTHING (FT)	EASTTHING (FT)	FT
200	CHISELED "X" IN CONCRETE	13,838,359.07	3,121,699.74	13,840,158.57	3,122,105.69	43.45
202	CHISELED "X" IN CONCRETE	13,838,818.63	3,121,613.68	13,840,617.22	3,122,019.76	44.02
205	CHISELED "X" IN CONCRETE	13,838,657.36	3,121,118.38	13,840,456.39	3,121,524.13	44.27
216	CHISELED "X" IN CONCRETE	13,837,837.78	3,121,774.89	13,839,636.70	3,122,180.72	42.05
217	CHISELED "X" IN CONCRETE	13,837,038.86	3,121,329.93	13,838,837.68	3,121,735.70	43.13
218	CHISELED "X" IN CONCRETE	13,838,200.96	3,121,220.66	13,839,999.93	3,121,626.42	44.01
300	5/8" IRON ROD W/TXDOT ALUMINUM CAP	13,837,649.08	3,123,302.64	13,839,447.97	3,123,708.67	43.73
301	5/8" IRON ROD W/TXDOT ALUMINUM CAP	13,837,026.44	3,122,899.12	13,838,825.31	3,123,305.02	44.39
302	5/8" IRON ROD W/TXDOT ALUMINUM CAP	13,836,603.70	3,122,625.10	13,838,402.45	3,123,031.04	43.88
700	5/8" IRON ROD W/CAP "HUITT-ZOLLARS"	13,837,930.39	3,123,485.79	13,839,729.32	3,123,891.85	43.08
704	CHISELED "X" IN CONCRETE	13,836,891.17	3,122,026.57	13,838,689.97	3,122,432.43	42.47
706	CHISELED "X" IN CONCRETE	13,836,717.26	3,121,818.79	13,838,516.03	3,122,224.62	43.73
716	CHISELED "X" IN CONCRETE	13,837,824.49	3,120,578.99	13,839,623.40	3,120,984.67	43.66

ALL COORDINATES SHOWN ARE BASED ON THE TEXAS STATE PLAIN COORDINATE SYSTEM, SOUTH CENTRAL ZONE 4204 AND WERE OBSERVED UTILIZING THE TXDOT RTN/VRS NETWORK.

ALL COORDINATES SHOWN (NAD83) ARE SURFACE COORDINATES AND CAN BE CONVERTED TO GRID BY APPLYING A SCALE FACTOR OF 1.00013.

ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

ALL DISTANCES ARE IN U.S. SURVEY FEET AND DISPLAYED WITH SURFACE VALUES.

STATE OF TEXAS
REGISTERED
RICARDO A. VAZQUEZ
4902
PROFESSIONAL
LAND SURVEYOR

THE CONTROL POINTS SHOWN HEREIN WERE DETERMINED BY A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION.

2/27/23

RICARDO A. VAZQUEZ
R.P.L.S. No. 4902

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPELS FIRM NO. 10025601
10350 Richmond Ave, Suite 300
Houston, Texas 77042

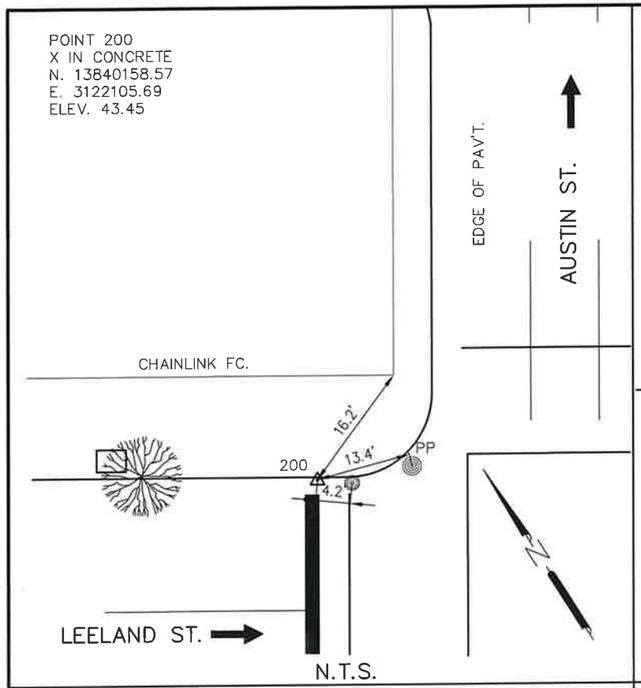
Texas Department of Transportation

SOUTHEAST DOWNTOWN SIDEWALKS

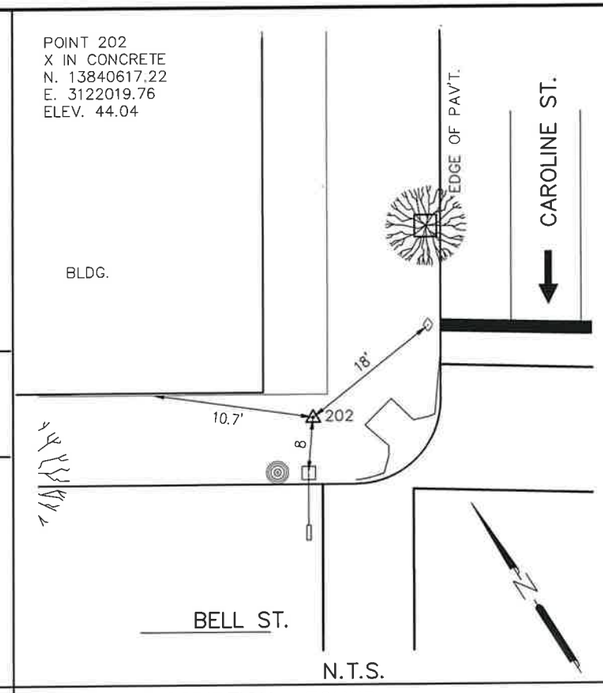
BOUNDED BY POLK, PIERCE, SAN JACINTO, AND HAMILTON STREETS

SURVEY CONTROL INDEX SHEET

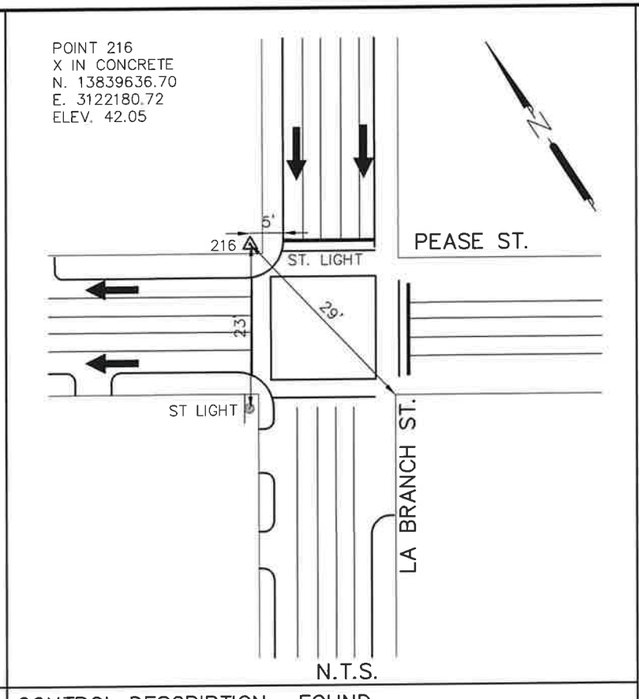
DGN: AA	FED. RD. DIV. NO.	STATE	CITY			HIGHWAY NO.
CHK DGN: CG	6	TEXAS	HOUSTON			VAR
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	51



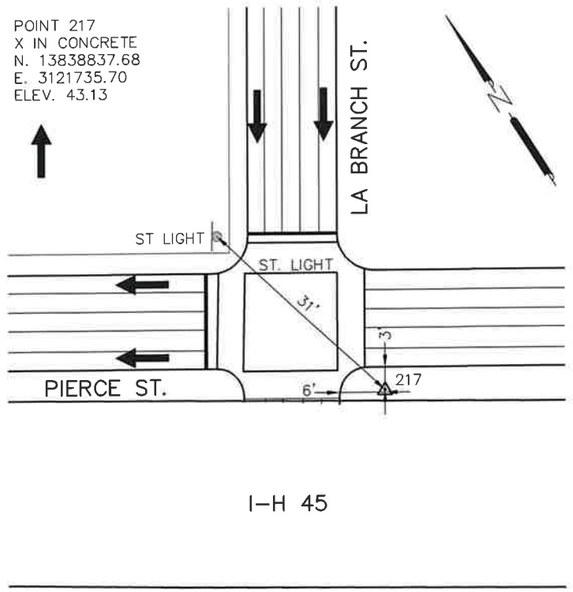
CONTROL DESCRIPTION– FOUND
54' + NORTHWEST OF THE INTERSECTION OF LEELAND STREET AND AUSTIN STREET (AS SHOWN).



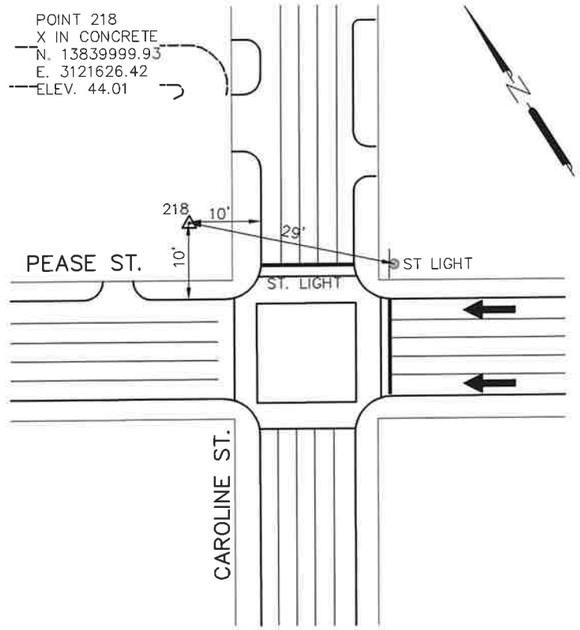
CONTROL DESCRIPTION– FOUND
52' + NORTHWEST OF THE INTERSECTION OF BELL STREET AND CAROLINE STREET (AS SHOWN).



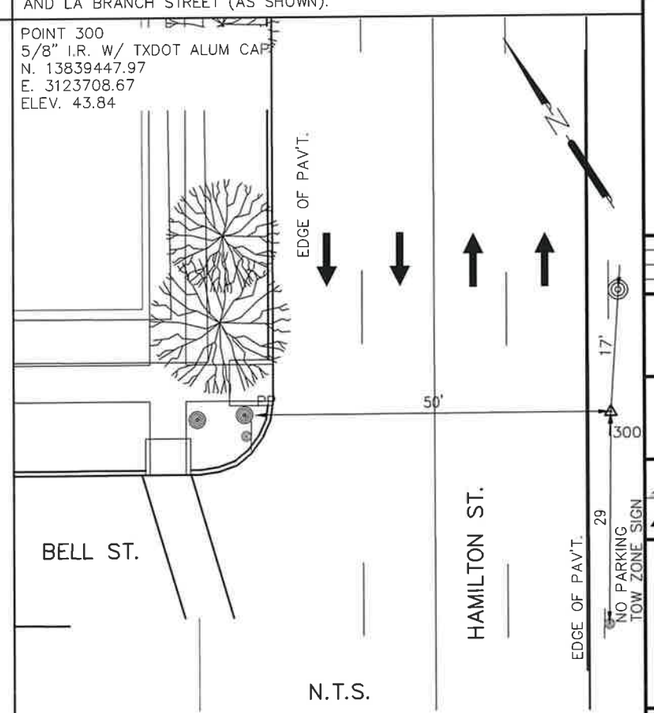
CONTROL DESCRIPTION– FOUND
41' + NORTHEAST OF THE INTERSECTION OF PEASE STREET AND LA BRANCH STREET (AS SHOWN).



CONTROL DESCRIPTION– FOUND
28.5' + NORTHEAST OF THE INTERSECTION OF PIERCE STREET AND LA BRANCH STREET (AS SHOWN).



CONTROL DESCRIPTION– FOUND
23.5' + SOUTHWEST OF THE INTERSECTION OF CAROLINE STREET AND PEASE STREET (AS SHOWN).



CONTROL DESCRIPTION– FOUND
77.0' + NORTHEAST OF THE INTERSECTION OF HAMILTON STREET AND BELL STREET (AS SHOWN).

ALL COORDINATES SHOWN ARE BASED ON THE TEXAS STATE PLAIN COORDINATE SYSTEM, SOUTH CENTRAL ZONE 4204 AND WERE OBSERVED UTILIZING THE TXDOT RTN/VRS NETWORK.

ALL COORDINATES SHOWN (NAD83) ARE SURFACE COORDINATES AND CAN BE CONVERTED TO GRID BY APPLYING A SCALE FACTOR OF 1.00013.

ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

ALL DISTANCES ARE IN U.S. SURVEY FEET AND DISPLAYED WITH SURFACE VALUES.

STATE OF TEXAS
REGISTERED
RICARDO A. VAZQUEZ
4902
PROFESSIONAL
LAND SURVEYOR

THE CONTROL POINTS SHOWN HEREIN WERE DETERMINED BY A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION.

2/27/23

RICARDO A. VAZQUEZ
R.P.L.S. No. 4902

REV	DATE	DESCRIPTION	BY

downtown district

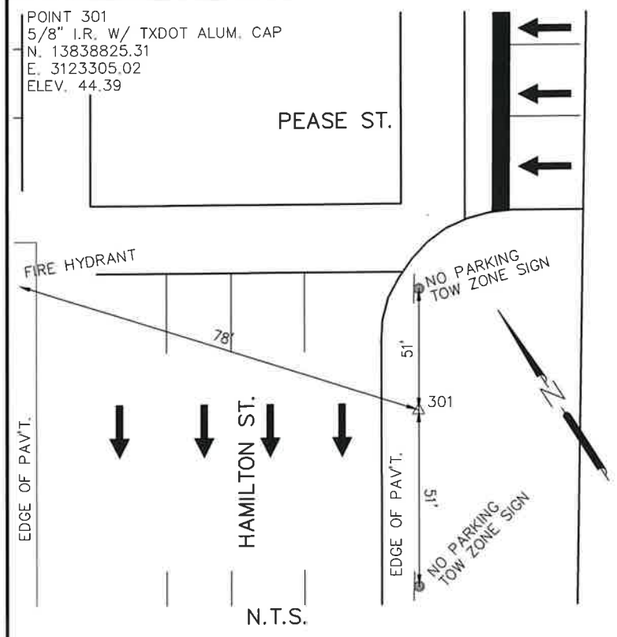
HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

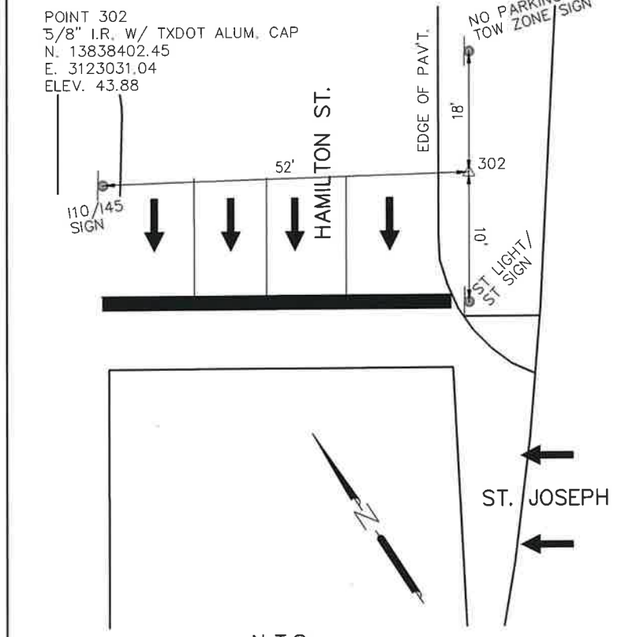
SOUTHEAST DOWNTOWN SIDEWALKS
BOUNDED BY POLK, PIERCE, SAN JACINTO, AND HAMILTON STREETS

HORIZONTAL & VERTICAL CONTROL

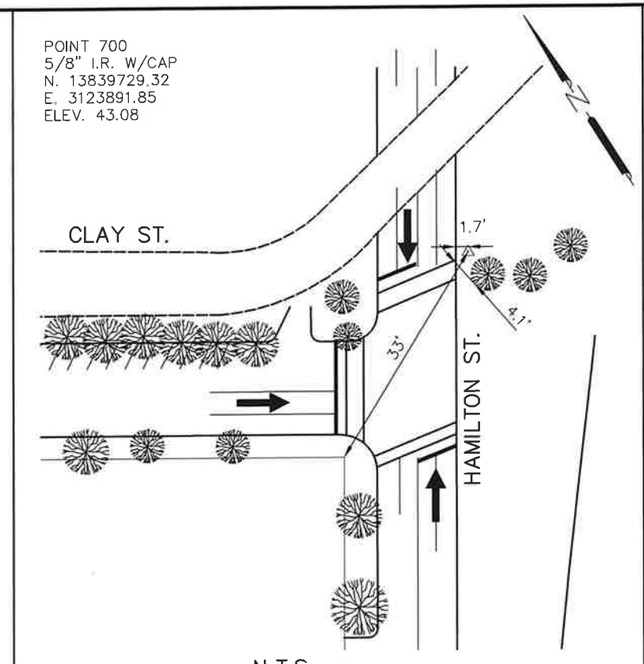
DGN: AA	FED. RD. DIV. NO.	STATE	CITY			HIGHWAY NO.
CHK DGN: CG	6	TEXAS	HOUSTON			VAR
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	52



CONTROL DESCRIPTION– FOUND
112' + SOUTHEAST OF THE INTERSECTION OF HAMILTON STREET AND PEASE STREET (AS SHOWN).



CONTROL DESCRIPTION– FOUND
56.5' + NORTHEAST OF THE INTERSECTION OF HAMILTON STREET AND ST. JOSEPH S (AS SHOWN).



CONTROL DESCRIPTION– FOUND
52.5' + NORTHWEST OF THE INTERSECTION OF CLAY STREET AND HAMILTON STREET (AS SHOWN).

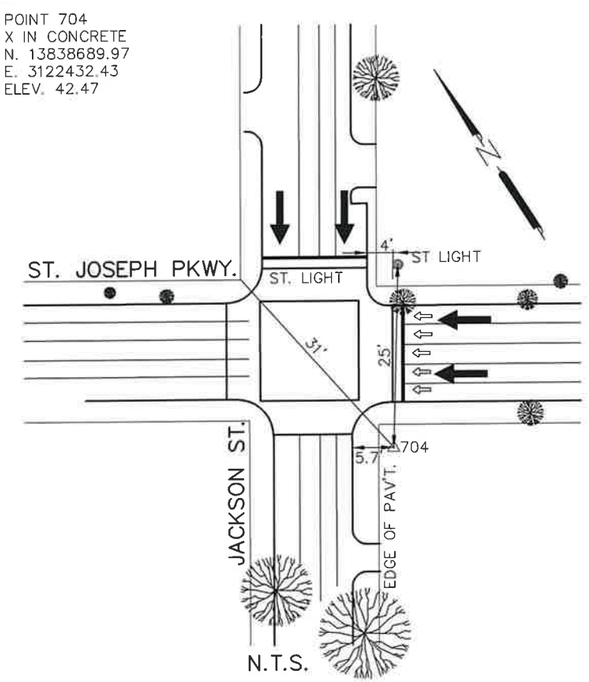
ALL COORDINATES SHOWN ARE BASED ON THE TEXAS STATE PLAIN COORDINATE SYSTEM, SOUTH CENTRAL ZONE 4204 AND WERE OBSERVED UTILIZING THE TXDOT RTN/VRS NETWORK.

ALL COORDINATES SHOWN (NAD83) ARE SURFACE COORDINATES AND CAN BE CONVERTED TO GRID BY APPLYING A SCALE FACTOR OF 1.00013.

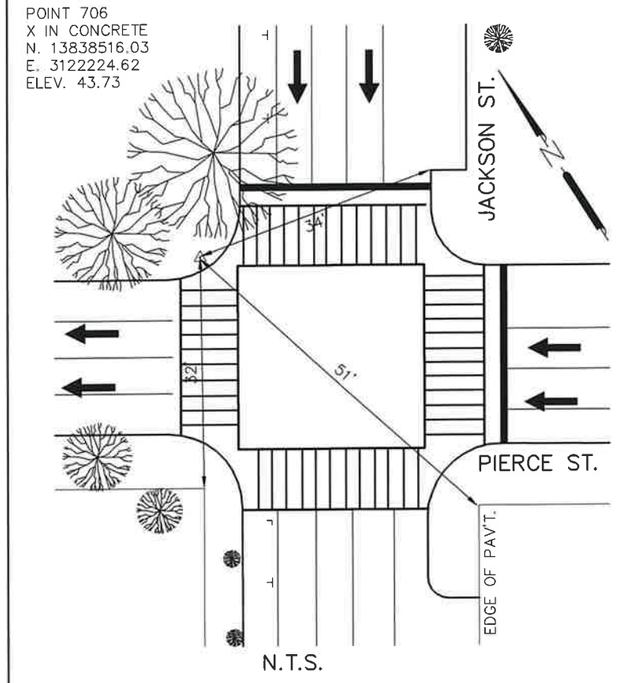
ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

ALL DISTANCES ARE IN U.S. SURVEY FEET AND DISPLAYED WITH SURFACE VALUES.

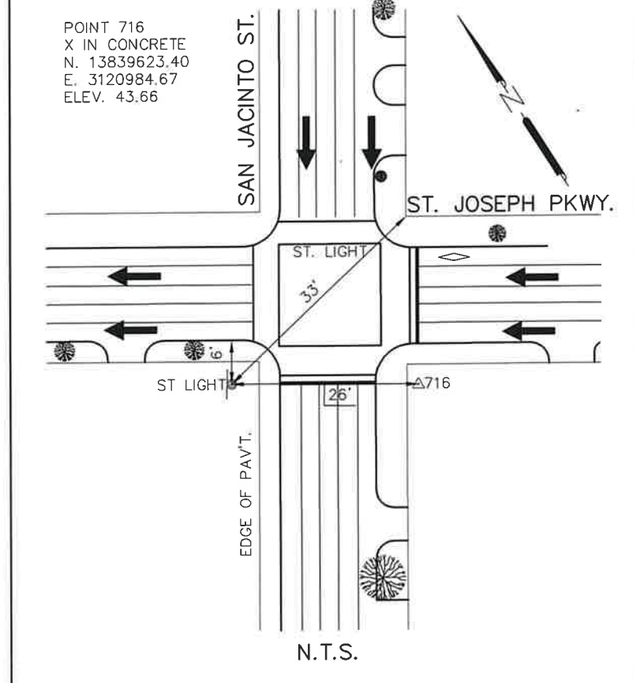
STATE OF TEXAS
REGISTERED
RICARDO A. VAZQUEZ
4902
PROFESSIONAL
LAND SURVEYOR



CONTROL DESCRIPTION– FOUND
51.5' + NORTHEAST OF THE INTERSECTION OF ST.JOSEPH PKWY. AND JACKSON STREET (AS SHOWN).



CONTROL DESCRIPTION– FOUND
88.5' + NORTHWEST OF THE INTERSECTION OF JACKSON STREET AND PIERCE STREET (AS SHOWN).



CONTROL DESCRIPTION– FOUND
77.0' + SOUTHWEST OF THE INTERSECTION OF ST.JOSEPH PKWY. AND SAN JACINTO STREET (AS SHOWN).

THE CONTROL POINTS SHOWN HEREIN WERE DETERMINED BY A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION.

2/27/23

RICARDO A. VAZQUEZ
R.P.L.S. No. 4902

REV	DATE	DESCRIPTION	BY

downtown district

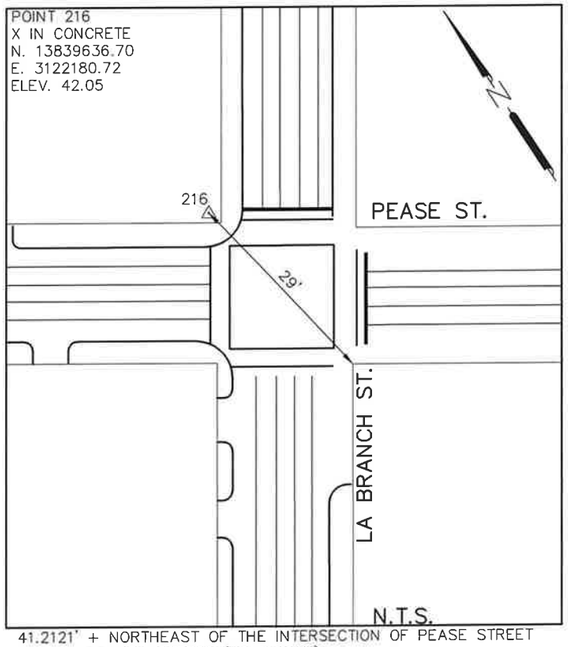
HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

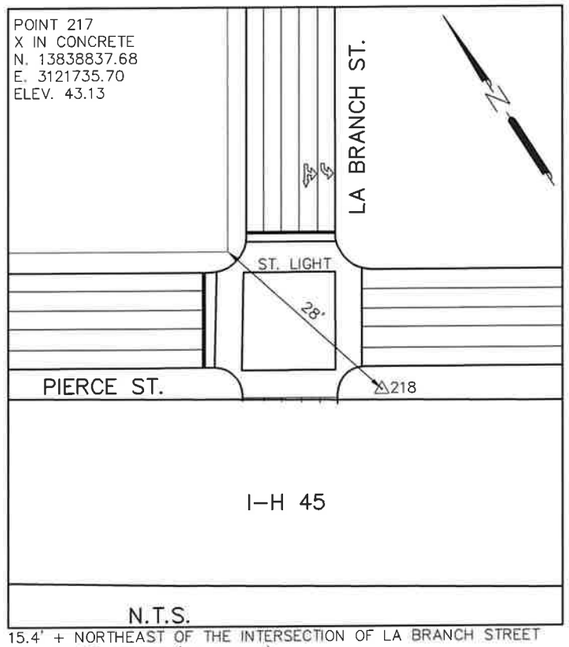
SOUTHEAST DOWNTOWN SIDEWALKS
BOUNDED BY POLK, PIERCE, SAN JACINTO, AND HAMILTON STREETS

HORIZONTAL & VERTICAL CONTROL

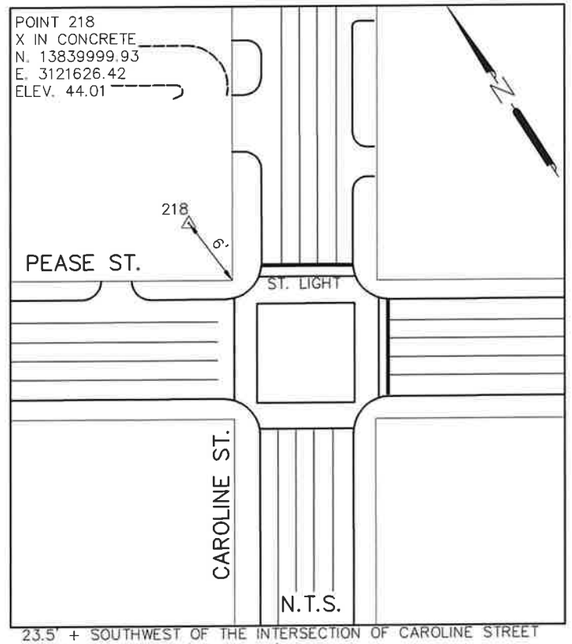
DGN: AA	FED. RD. DIV. NO.	STATE	CITY			HIGHWAY NO.
CHK DGN: CG	6	TEXAS	HOUSTON			VAR
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	53



41.2121' + NORTHEAST OF THE INTERSECTION OF PEASE STREET AND LA BRANCH STREET (AS SHOWN).



15.4' + NORTHEAST OF THE INTERSECTION OF LA BRANCH STREET AND PIERCE STREET (AS SHOWN).



23.5' + SOUTHWEST OF THE INTERSECTION OF CAROLINE STREET AND PEASE STREET (AS SHOWN).

ALL COORDINATES SHOWN ARE BASED ON THE TEXAS STATE PLAIN COORDINATE SYSTEM, SOUTH CENTRAL ZONE 4204 AND WERE OBSERVED UTILIZING THE TXDOT RTN/VRS NETWORK.

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ALL ELEVATIONS SHOWN ARE BASED ON NAVD88.

ALL DISTANCES ARE IN U.S. SURVEY FEET AND DISPLAYED WITH SURFACE VALUES.

STATE OF TEXAS
REGISTERED
RICARDO A. VAZQUEZ
4902
PROFESSIONAL
LAND SURVEYOR

THE CONTROL POINTS SHOWN HEREIN WERE DETERMINED BY A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION.

2/27/23

RICARDO A. VAZQUEZ
R.P.L.S. NO. 4902

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPELS FIRM NO. 10025601
10350 Richmond Ave, Suite 300
Houston, Texas 77042

SOUTHEAST DOWNTOWN SIDEWALKS

HORIZONTAL & VERTICAL CONTROL

DGN: AA	FED. RD. DIV. NO.	STATE	CITY			HIGHWAY NO.
CHK DGN: CG	6	TEXAS	HOUSTON			VAR
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	54

AUSTIN ST

Beginning chain AUSTIN description

Point A11	N 13,839,516.1546 E	3,121,745.6333 Sta	80+00.00
Course from A11 to A12 N 32° 52′ 13" E Dist 754.0000			
Point A12	N 13,840,149.4413 E	3,122,154.8568 Sta	87+54.00

Ending chain AUSTIN description

BELL ST

Beginning chain BELL description

Point B115	N 13,840,948.5901 E	3,121,438.6181 Sta	100+00.00
Course from B115 to B116 S 57° 08′ 24.12" E Dist 2,751.2004			
Point B116	N 13,839,455.8227 E	3,123,749.6242 Sta	127+51.20

Ending chain BELL description

CAROLINE ST

Beginning chain CAROLINE description

Point CA01	N 13,839,378.70 E	3,121,263.99 Sta	0+00.00
Course from CA01 to CA02 N 32° 51′ 58" E Dist 2,169.91			
Point CA02	N 13,841,201.30 E	3,122,441.55 Sta	21+69.91

Ending chain CAROLINE description

CHENEVERT ST

Beginning chain CHENEVERT description

Point C37	N 13,838,527.9630 E	3,122,679.1854 Sta	30+00.00
Course from C37 to C38 N 32° 51′ 51" E Dist 1,150.0357			
Point C38	N 13,839,493.9465 E	3,123,303.2510 Sta	41+50.04

Ending chain CHENEVERT description

CLAY ST

Beginning chain CLAY description

Point CL01	N 13,840,141.6486 E	3,123,300.9132 Sta	600+00.00
Course from CL01 to CL02 S 57° 15′ 48" E Dist 717.3040			
Point CL02	N 13,839,753.7468 E	3,123,904.2847 Sta	607+17.30

Ending chain CLAY description

HAMILTON ST

Beginning chain HAMILTON description

Point HA17	N 13,838,592.6246 E	3,123,113.7991 Sta	40+00.00
Course from HA17 to HA18 N 32° 51′ 12" E Dist 1,826.3197			
Point HA18	N 13,840,126.8476 E	3,124,104.5582 Sta	58+26.32

Ending chain HAMILTON description

JACKSON ST

Beginning chain JACKSON description

Point JA20	N 13,838,429.20 E	3,122,222.28 Sta	2+99.00
Course from JA20 to JA21 N 32° 51′ 56" E Dist 2,208.05			
Point JA21	N 13,840,283.85 E	3,123,420.52 Sta	25+07.05

Ending chain JACKSON description

JEFFERSON ST

Beginning chain JEFFERSON description

Point J125	N 13,839,397.9846 E	3,122,014.4345 Sta	400+00.00
Course from J125 to J126 S 57° 08′ 24.10" E Dist 1,426.1750			
Point J126	N 13,838,624.1595 E	3,123,212.4203 Sta	414+26.18

Ending chain JEFFERSON description

LA BRANCH ST

Beginning chain LA_BRANCH description

Point LA024	N 13,838,749.17 E	3,121,642.83 Sta	83+00.00
Course from LA024 to LA025 N 32° 52′ 05" E Dist 1,454.00			
Point LA025	N 13,839,970.42 E	3,122,431.93 Sta	97+54.00

Ending chain LA_BRANCH description

LEELAND ST

Beginning chain LEELAND description

Point L115	N 13,840,489.4899 E	3,121,541.2283 Sta	200+00.00
Course from L115 to L116 S 57° 08′ 23.73" E Dist 2,415.9058			
Point L116	N 13,839,178.6453 E	3,123,570.5847 Sta	224+15.91

Ending chain LEELAND description

PEASE ST

Beginning chain PEASE description

Point PE03	N 13,840,479.7949 E	3,120,948.0875 Sta	285+17.00
Course from PE03 to PE04 S 57° 08′ 24" E Dist 2,908.8826			
Point PE04	N 13,838,901.4708 E	3,123,391.5464 Sta	314+25.88

Ending chain PEASE description

PIERCE ST

Beginning chain PIERCE description

Point PI09	N 13,839,239.97 E	3,121,034.79 Sta	686+00.00
Course from PI09 to PI10 S 57° 15′ 48" E Dist 1,843.48			
Point PI10	N 13,838,243.05 E	3,122,585.46 Sta	704+43.48

Ending chain PIERCE description

SAN JACINTO

Beginning chain SAN_JACINTO description

Point SJ1	N 13,839,315.6956 E	3,120,838.8323 Sta	50+00.00
Course from SJ1 to SJ2 N 32° 40′ 39" E Dist 2,197.8304			
Point SJ2	N 13,841,165.6578 E	3,122,025.4655 Sta	71+97.83

Ending chain SAN_JACINTO description

ST JOSEPH ST

Beginning chain ST_JOSEPH description

Point S130	N 13,838,908.82 E	3,122,163.29 Sta	494+00.00
Course from S130 to S131 S 57° 08′ 24" E Dist 1,035.72			
Point S131	N 13,838,346.85 E	3,123,033.29 Sta	504+35.72

Ending chain ST_JOSEPH description

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

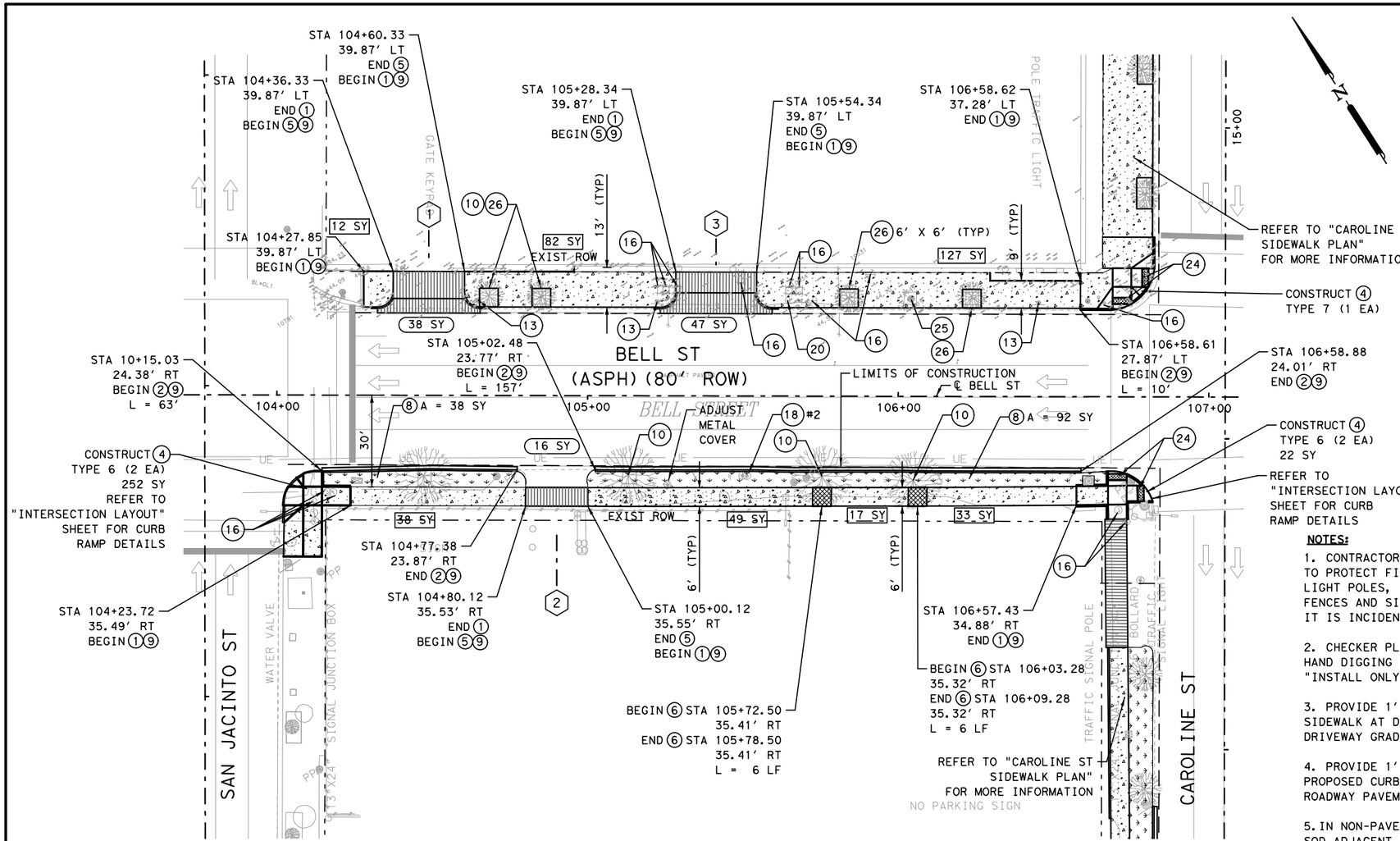
HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS HORIZONTAL ALIGNMENT DATA

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	55



ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	16
0162-6002	BLOCK SODDING	SY	130
0166-6001	FERTILIZER	AC	0.03
0168-6001	VEGETATIVE WATERING	MG	4.18
0192-6015	LANDSCAPE EDGE	LF	96
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.0
5096-6001	TREE GRATE	EA	8
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	2
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	480
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	480
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	230
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	101
0531-6001	CONC SIDEWALKS (4")	SY	358
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	4
0531-6008	CURB RAMPS (TY 7)	EA	1
0624-6007	GROUND BOX TY C (162911)	EA	14
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	3
0752-6014	STUMP REMOVAL	EA	1
0752-6023	TREE TRIMMING	EA	5
1004-6001	TREE PROTECTION	EA	8

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⟨21⟩ DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
[XX SY] PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
BELL STREET SIDEWALK PLAN FROM SAN JACINTO TO CAROLINE

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	56

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*BEL*01.dgn
3/1/2023
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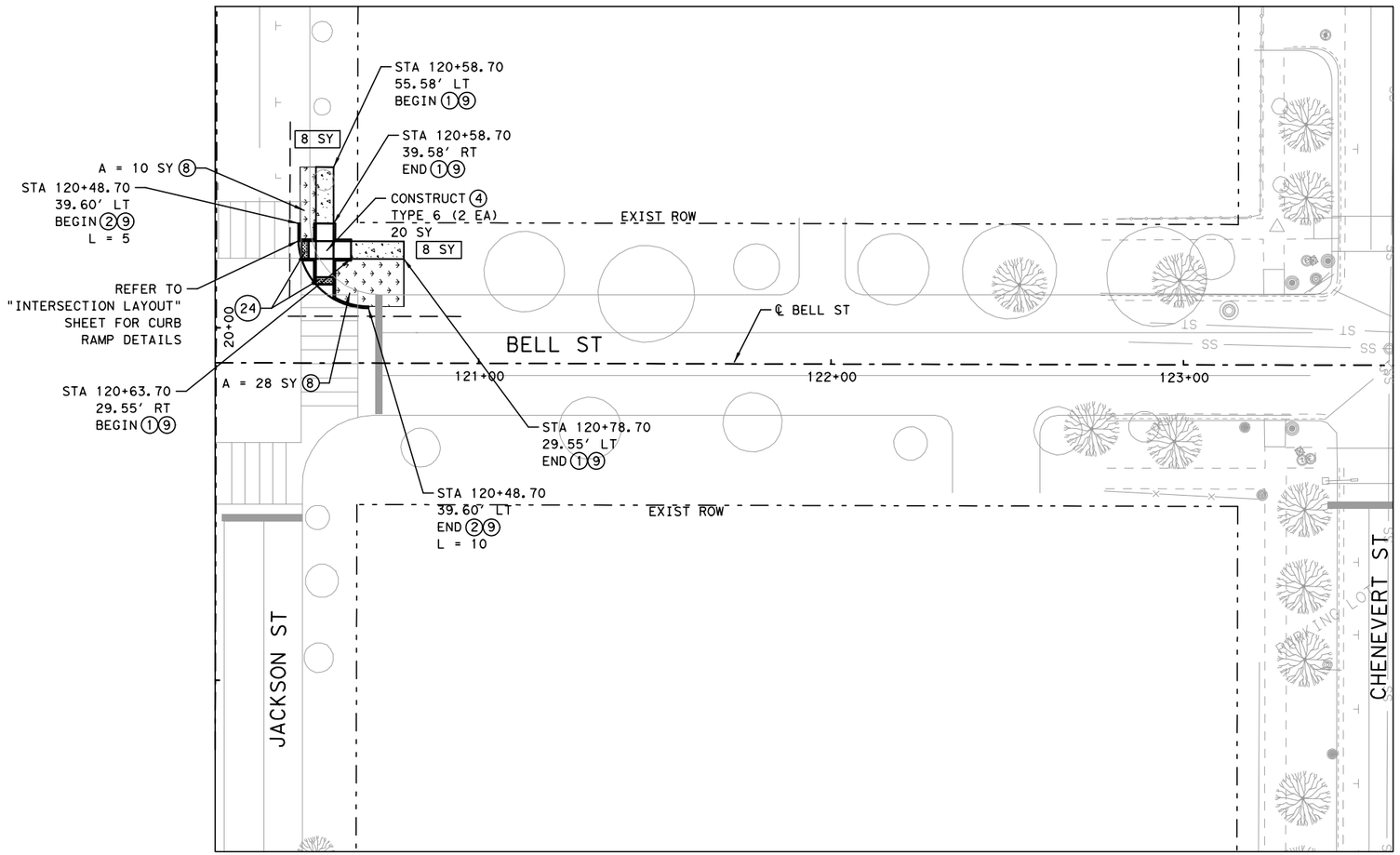

BELL BETWEEN JACKSON & CHENEVERT (SHEET 2 OF 2)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	38
0166-6001	FERTILIZER	AC	0.01
0168-6001	VEGETATIVE WATERING	MG	0.94
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.0
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	60
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	60
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	10
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	16
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	2
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⟨21⟩ DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
[XX SY] PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
BELL STREET SIDEWALK PLAN FROM JACKSON TO CHENEVERT

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	57

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*BEL*02.dgn
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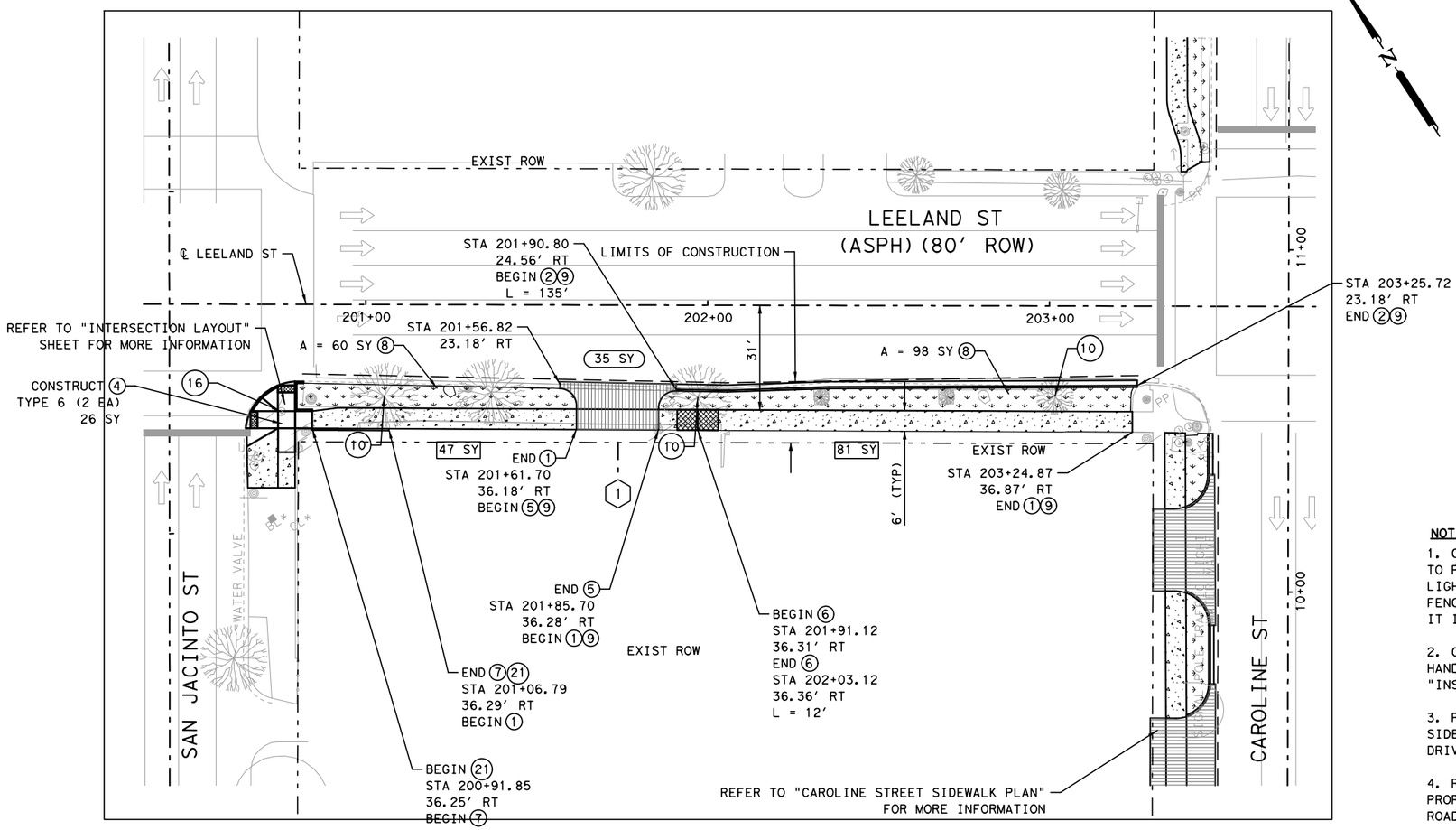


LEELAND BETWEEN SANJACINTO & CAROLINE (SHEET 1 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	12
0162-6002	BLOCK SODDING	SY	158
0166-6001	FERTILIZER	AC	0.03
0168-6001	VEGETATIVE WATERING	MG	4.64
0192-6015	LANDSCAPE EDGE	LF	132
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.1
0461-XXXX	CHECKER PLATE	SY	4
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	239
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	239
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	135
0529-6015	CONC CURB (TY C1)	LF	23
0530-6004	DRIVEWAYS (CONC)	SY	35
0531-6001	CONC SIDEWALKS (4")	SY	128
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	2
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	3
1004-6001	TREE PROTECTION	EA	4

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⟨21⟩ DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
[XX SY] PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

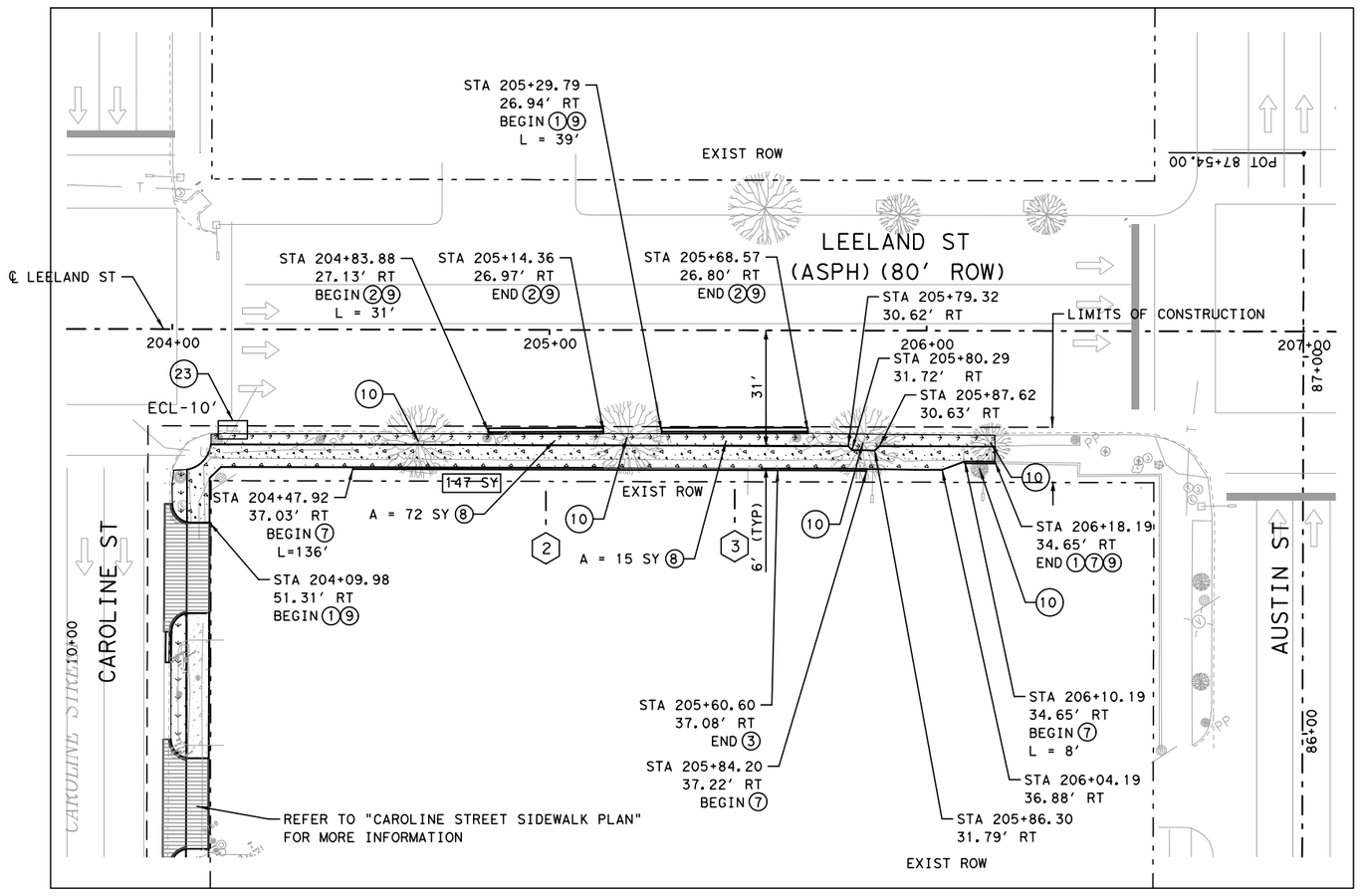
HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
LEELAND STREET SIDEWALK PLAN FROM SAN JACINTO TO CAROLINE

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	58



LEELAND BETWEEN CAROLINE & AUSTIN (SHEET 2 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	8
0162-6002	BLOCK SODDING	SY	87
0166-6001	FERTILIZER	AC	0.02
0168-6001	VEGETATIVE WATERING	MG	2.64
0192-6015	LANDSCAPE EDGE	LF	72
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.1
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	248
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	248
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	70
0529-6015	CONC CURB (TY C1)	LF	144
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	147
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	4
1004-6001	TREE PROTECTION	EA	4

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
LEELAND STREET SIDEWALK PLAN FROM CAROLINE TO AUSTIN

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	59

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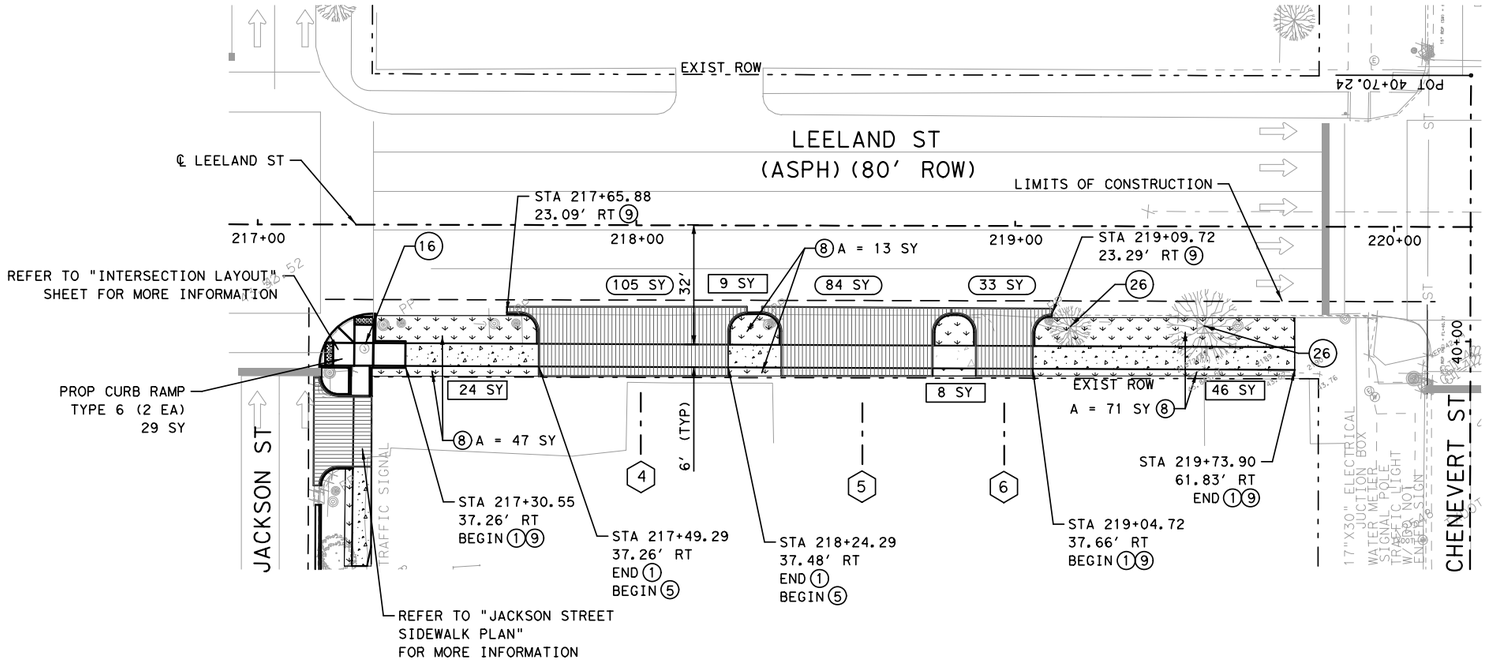

LEELAND BETWEEN JACKSON & CHENEVERT (SHEET 3 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	4
0162-6002	BLOCK SODDING	SY	131
0166-6001	FERTILIZER	AC	0.03
0168-6001	VEGETATIVE WATERING	MG	3.49
0192-6015	LANDSCAPE EDGE	LF	48
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.0
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	270
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	270
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	222
0531-6001	CONC SIDEWALKS (4")	SY	87
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	2
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	2

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
LEELAND STREET SIDEWALK PLAN FROM JACKSON TO CHENEVERT

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	60

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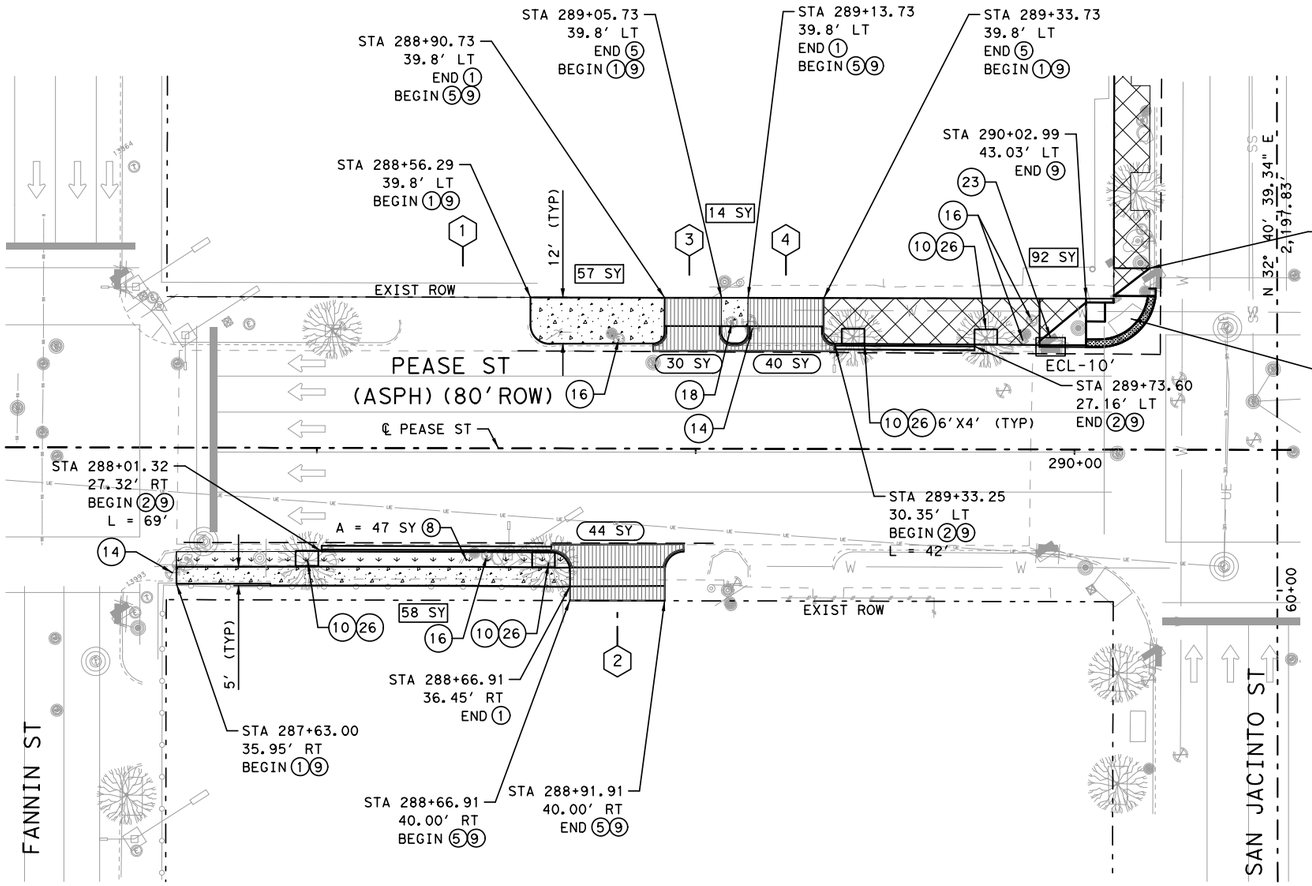

PEASE BETWEEN FANNIN AND SAN JACINTO (SHEET 1 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	8
0162-6002	BLOCK SODDING	SY	47
0166-6001	FERTILIZER	AC	0.01
0168-6001	VEGETATIVE WATERING	MG	1.65
0192-6015	LANDSCAPE EDGE	LF	96
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.1
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	1
0479-2008	ADJ MANHS (WATER METER) *	EA	2
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	384
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	384
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	111
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	114
0531-6001	CONC SIDEWALKS (4")	SY	115
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	92
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	1
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	4
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	4
1004-6001	TREE PROTECTION	EA	4

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
PEASE STREET SIDEWALK PLAN FROM FANNIN TO SAN JACINTO

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	61

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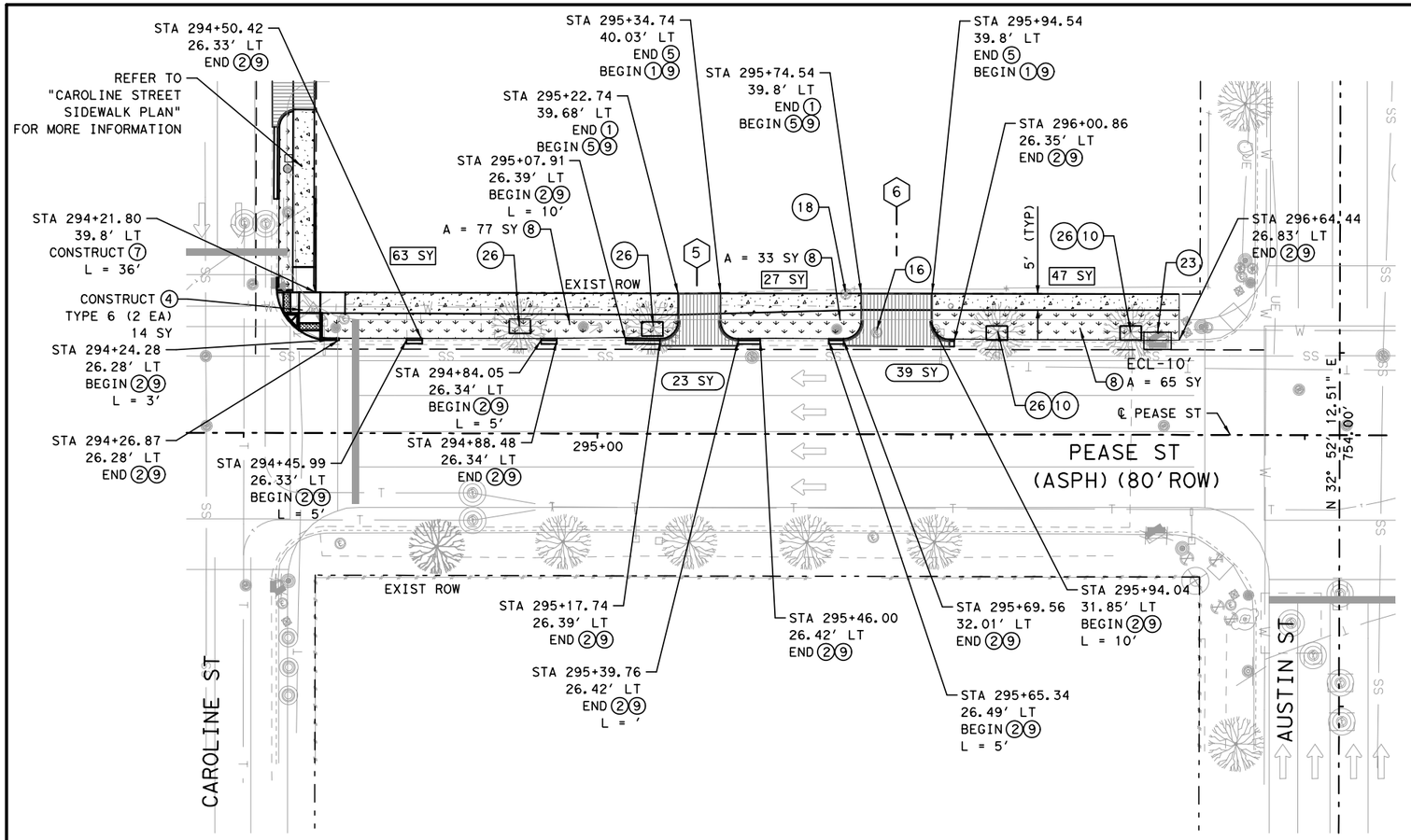

PEASE BETWEEN CAROLINE AND AUSTIN (SHEET 2 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	8
0162-6002	BLOCK SODDING	SY	175
0166-6001	FERTILIZER	AC	0.04
0168-6001	VEGETATIVE WATERING	MG	4.82
0192-6015	LANDSCAPE EDGE	LF	96
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.0
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	1
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	245
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	245
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	35
0529-6015	CONC CURB (TY C1)	LF	36
0530-6004	DRIVEWAYS (CONC)	SY	62
0531-6001	CONC SIDEWALKS (4")	SY	137
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	2
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	2
1004-6001	TREE PROTECTION	EA	4

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

PEASE STREET SIDEWALK PLAN FROM CAROLINE TO AUSTIN

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	62

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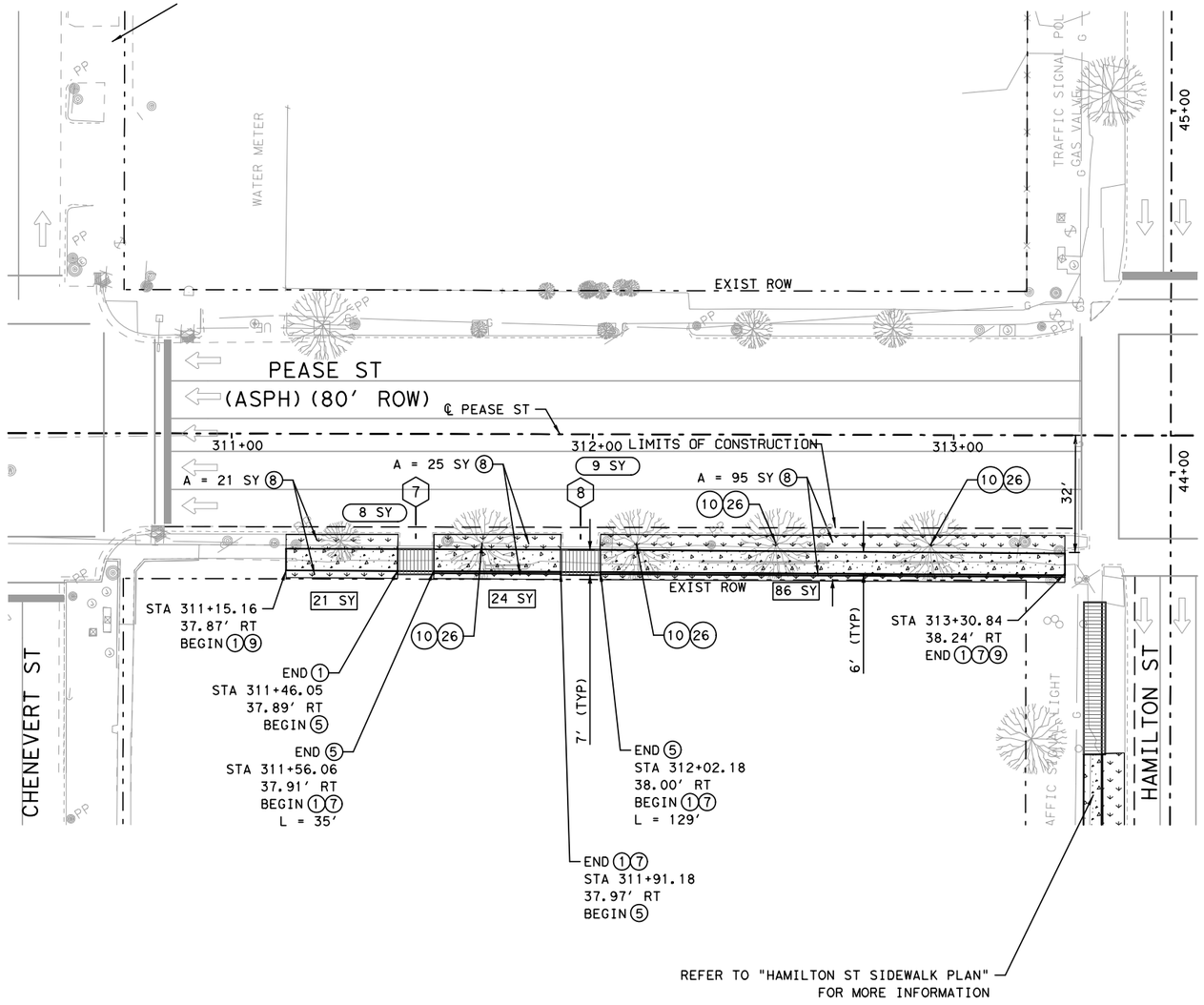

PEASE BETWEEN CHENEVERT & HAMILTON (SHEET 3 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	10
0162-6002	BLOCK SODDING	SY	141
0166-6001	FERTILIZER	AC	0.03
0168-6001	VEGETATIVE WATERING	MG	4.10
0192-6015	LANDSCAPE EDGE	LF	160
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.0
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	220
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	220
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	164
0530-6004	DRIVEWAYS (CONC)	SY	17
0531-6001	CONC SIDEWALKS (4")	SY	131
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	4
1004-6001	TREE PROTECTION	EA	4

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- XX SY PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

PEASE STREET SIDEWALK PLAN FROM CHENEVERT TO HAMILTON

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	63

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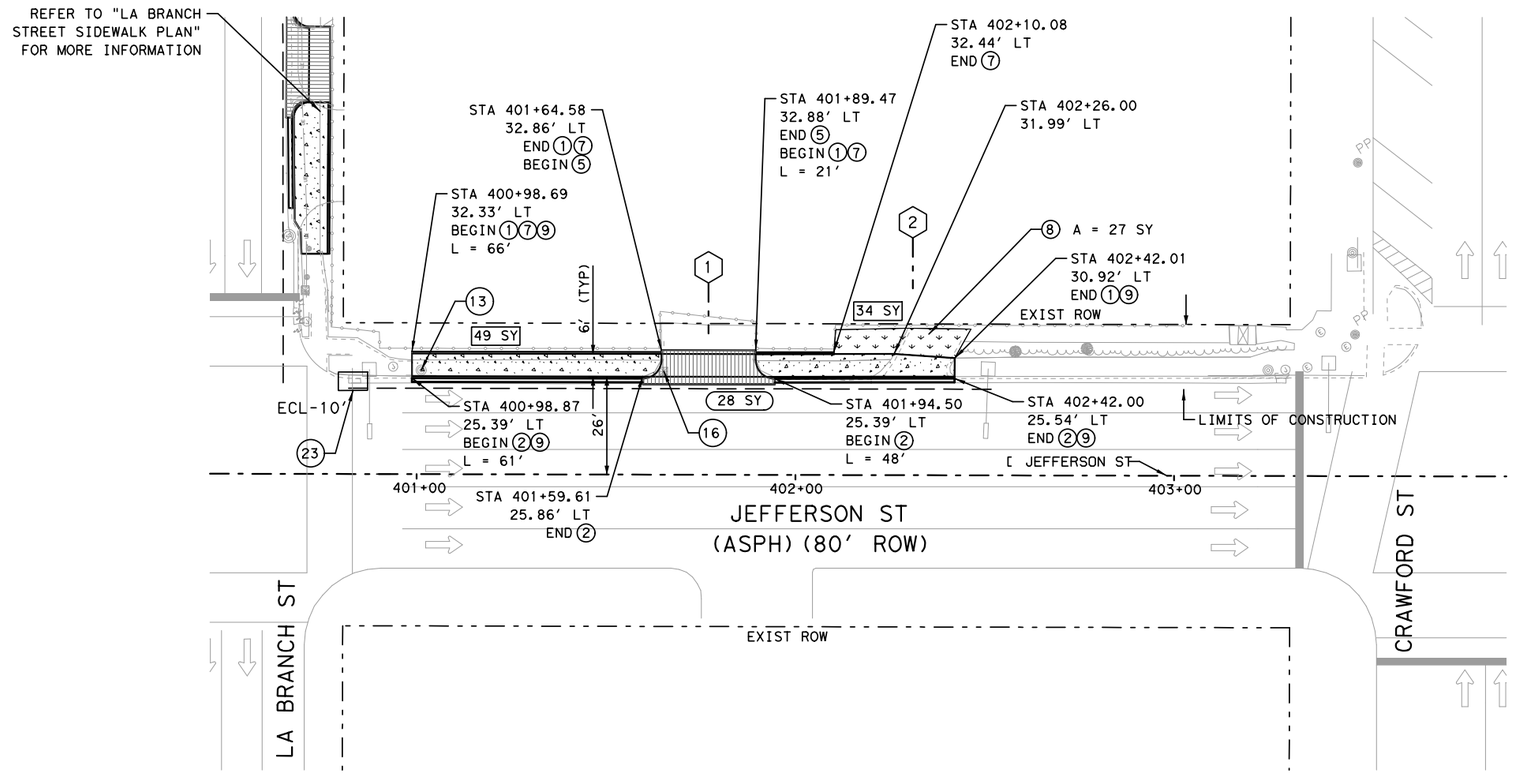

JEFFERSON BETWEEN LA BRANCH & CRAWFORD (SHEET 1 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	27
0166-6001	FERTILIZER	AC	0.01
0168-6001	VEGETATIVE WATERING	MG	0.67
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.1
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	150
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	150
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	109
0529-6015	CONC CURB (TY C1)	LF	87
0530-6004	DRIVEWAYS (CONC)	SY	28
0531-6001	CONC SIDEWALKS (4")	SY	83
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	1
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

JEFFERSON STREET SIDEWALK PLAN FROM LA BRANCH TO CRAWFORD

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	64

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*JEF*01.dgn
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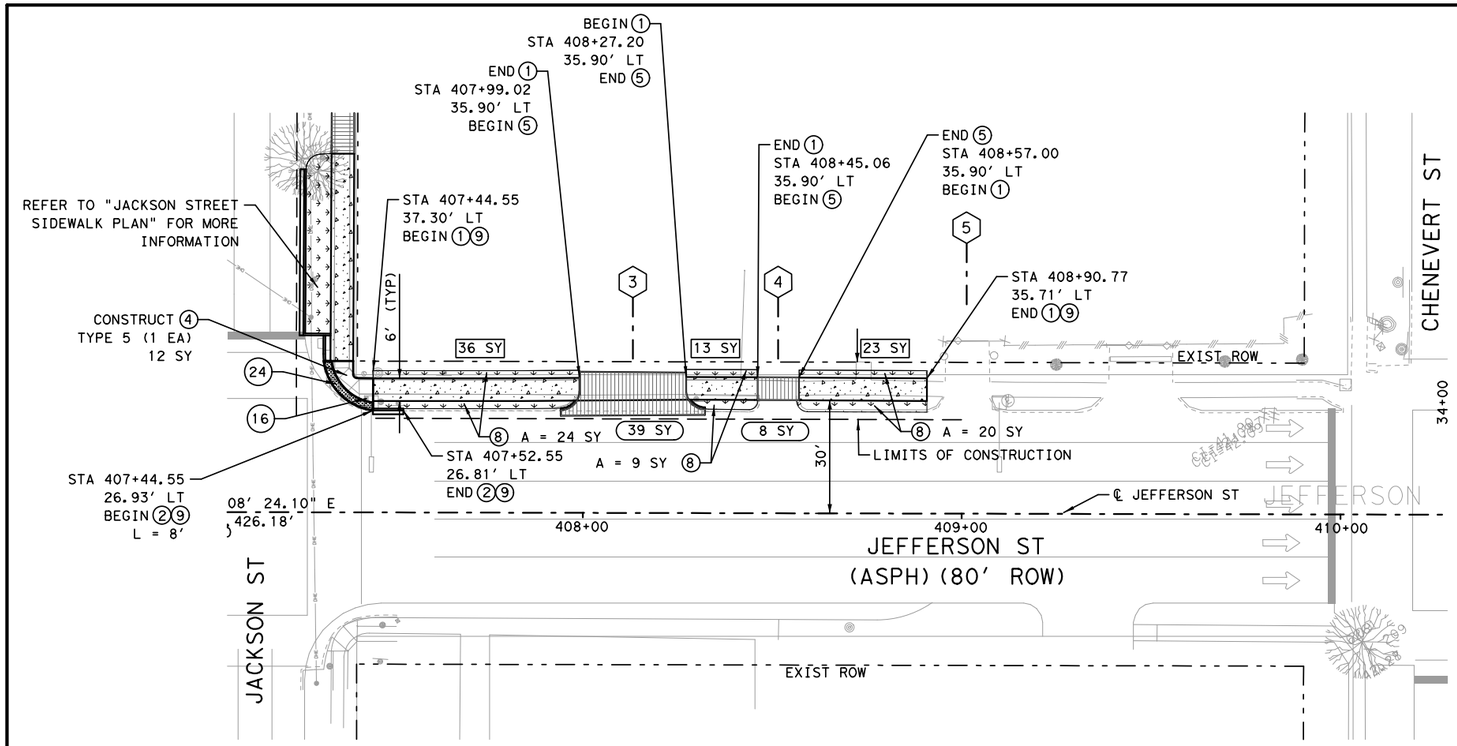

JEFFERSON BETWEEN JACKSON & CHENEVERT (SHEET 2 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	53
0166-6001	FERTILIZER	AC	0.01
0168-6001	VEGETATIVE WATERING	MG	1.31
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.01
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	160
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	160
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	8
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	52
0531-6001	CONC SIDEWALKS (4")	SY	72
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	1
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
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23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
(21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
XX SY PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

JEFFERSON STREET SIDEWALK PLAN FROM JACKSON TO CHENEVERT

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	65

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*JEF*02.dgn
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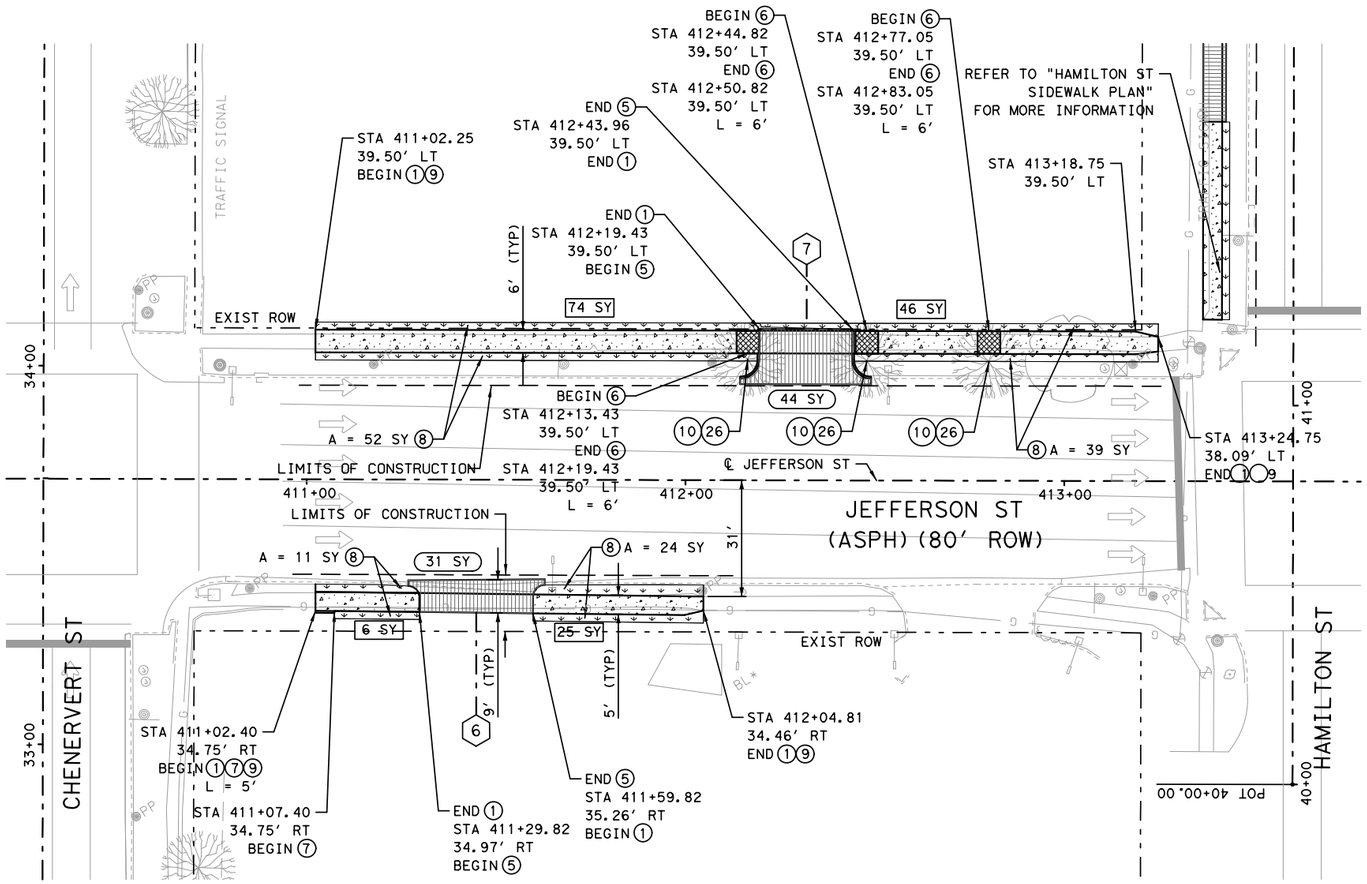


ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	6
0162-6002	BLOCK SODDING	SY	126
0166-6001	FERTILIZER	AC	0.03
0168-6001	VEGETATIVE WATERING	MG	3.48
0192-6015	LANDSCAPE EDGE	LF	72
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	12
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	315
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	315
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	5
0530-6004	DRIVEWAYS (CONC)	SY	44
0531-6001	CONC SIDEWALKS (4")	SY	151
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	3
1004-6001	TREE PROTECTION	EA	3

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⟨21⟩ DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
XX SY PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

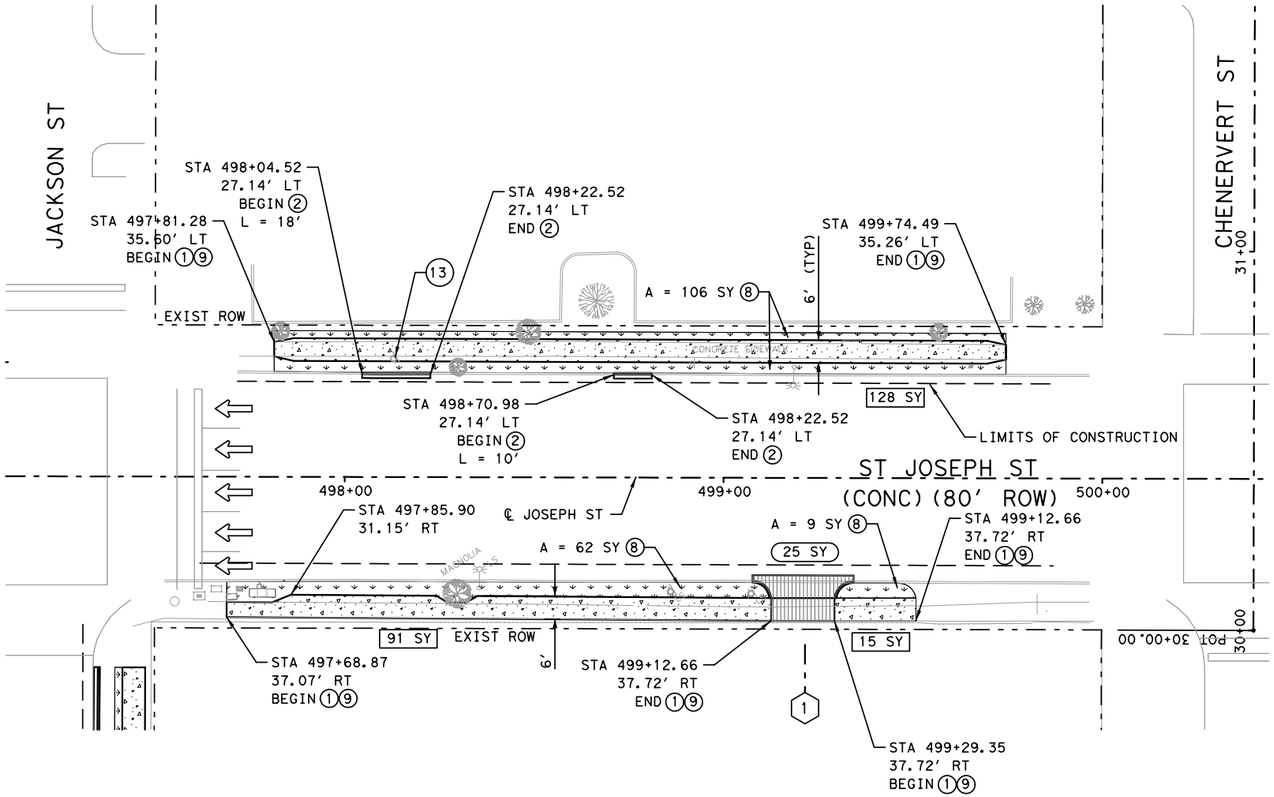
Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

JEFFERSON STREET SIDEWALK PLAN FROM CHENEVERT TO HAMILTON

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	66



ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	10
0162-6002	BLOCK SODDING	SY	177
0166-6001	FERTILIZER	AC	0.04
0168-6001	VEGETATIVE WATERING	MG	4.99
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.02
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	350
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	350
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	28
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	25
0531-6001	CONC SIDEWALKS (4")	SY	234
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	1
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
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5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
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26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
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LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
ST. JOSEPH STREET
SIDEWALK PLAN
FROM JACKSON TO CHENEVERT

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	67

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*SJO*01.dgn
3/1/2023
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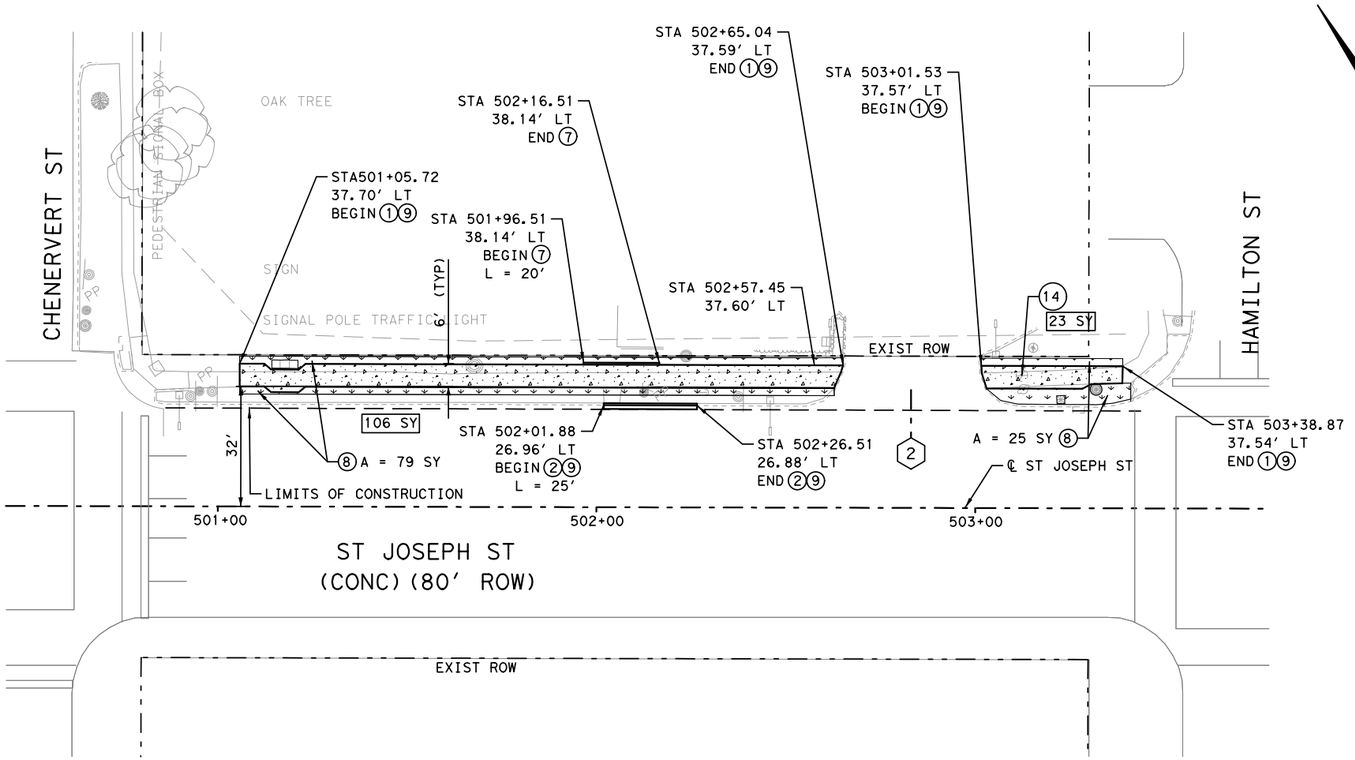

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	107
0166-6001	FERTILIZER	AC	0.02
0168-6001	VEGETATIVE WATERING	MG	2.65
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.02
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	1
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	240
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	240
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	25
0529-6015	CONC CURB (TY C1)	LF	20
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	129
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
ST. JOSEPH STREET SIDEWALK PLAN
FROM CHENEVERT TO HAMILTON

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	68

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*SJO*02.dgn
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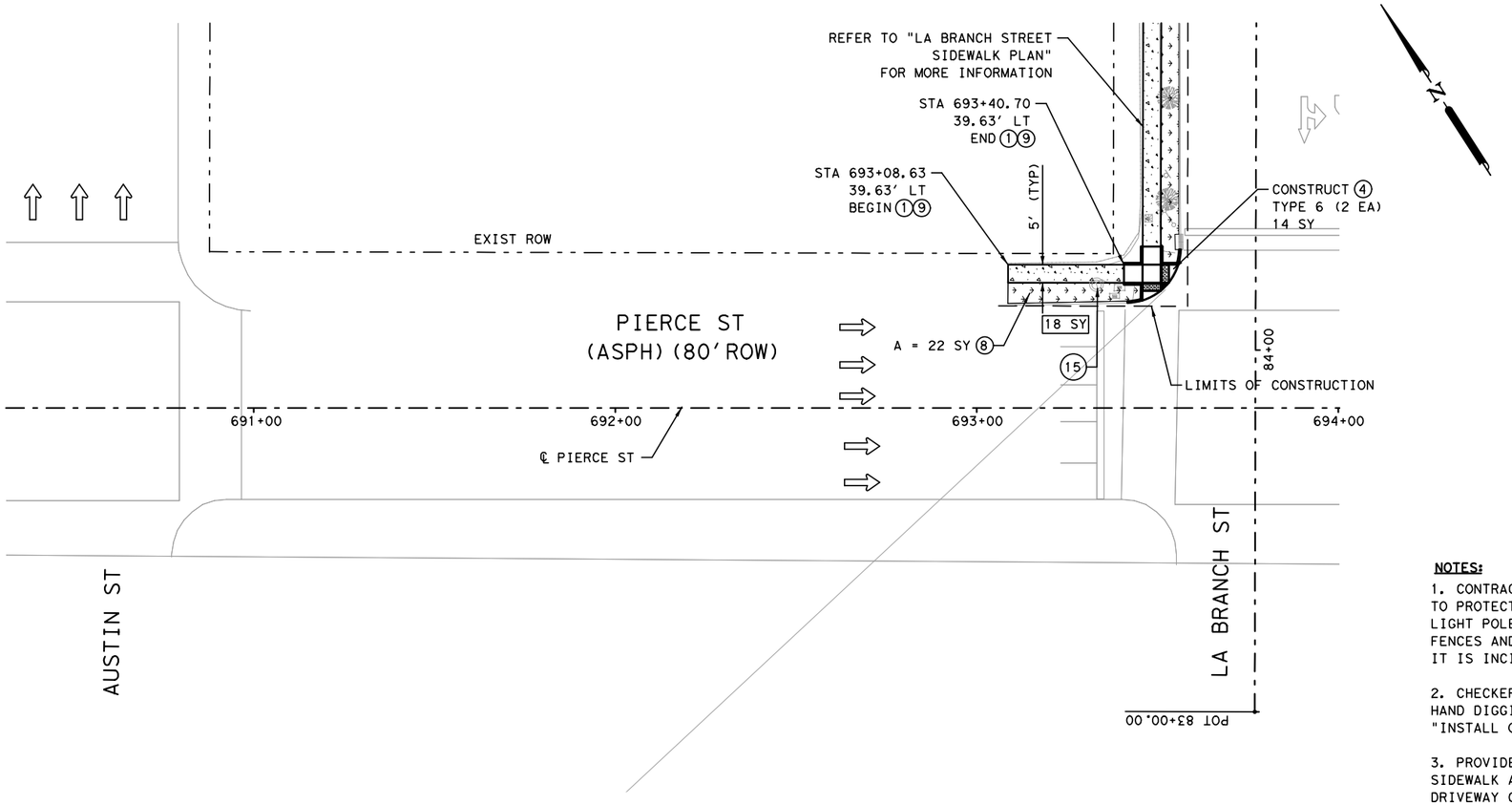

PIERCE BETWEEN AUSTIN & LA BRANCH (SHEET 1 OF 2)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	22
0166-6001	FERTILIZER	AC	0.00
0168-6001	VEGETATIVE WATERING	MG	0.55
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	1
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	50
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	50
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	18
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
(21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
XX SY PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
PIERCE STREET SIDEWALK PLAN FROM AUSTIN TO LA BRANCH

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	69

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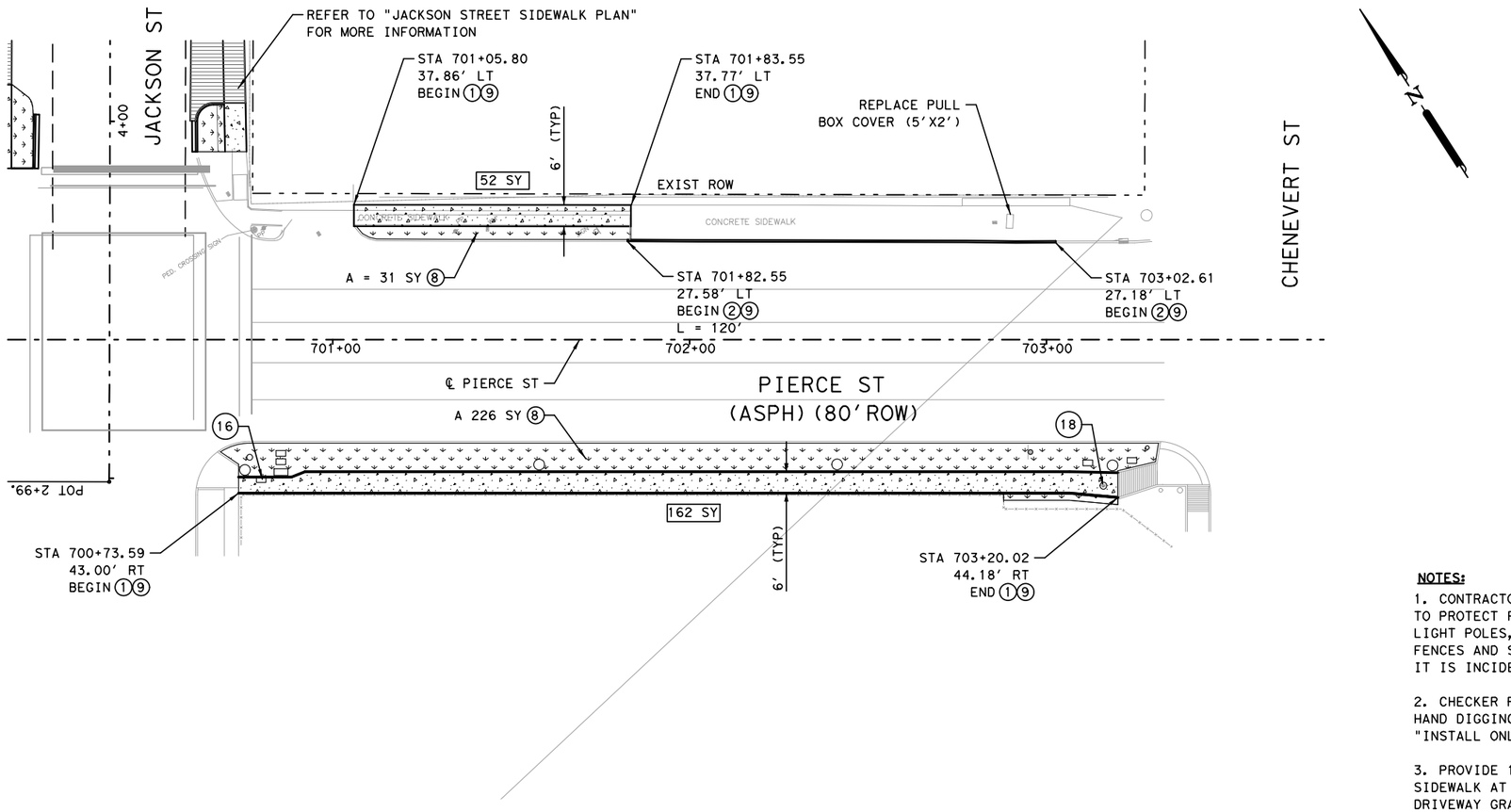

PIERCE BETWEEN JACKSON & LCHENEVERT (SHEET 2 OF 2)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	257
0166-6001	FERTILIZER	AC	0.05
0168-6001	VEGETATIVE WATERING	MG	6.37
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.09
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	1
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	310
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	310
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	120
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	214
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

PIERCE STREET SIDEWALK PLAN FROM JACKSON TO CHENEVERT

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	70

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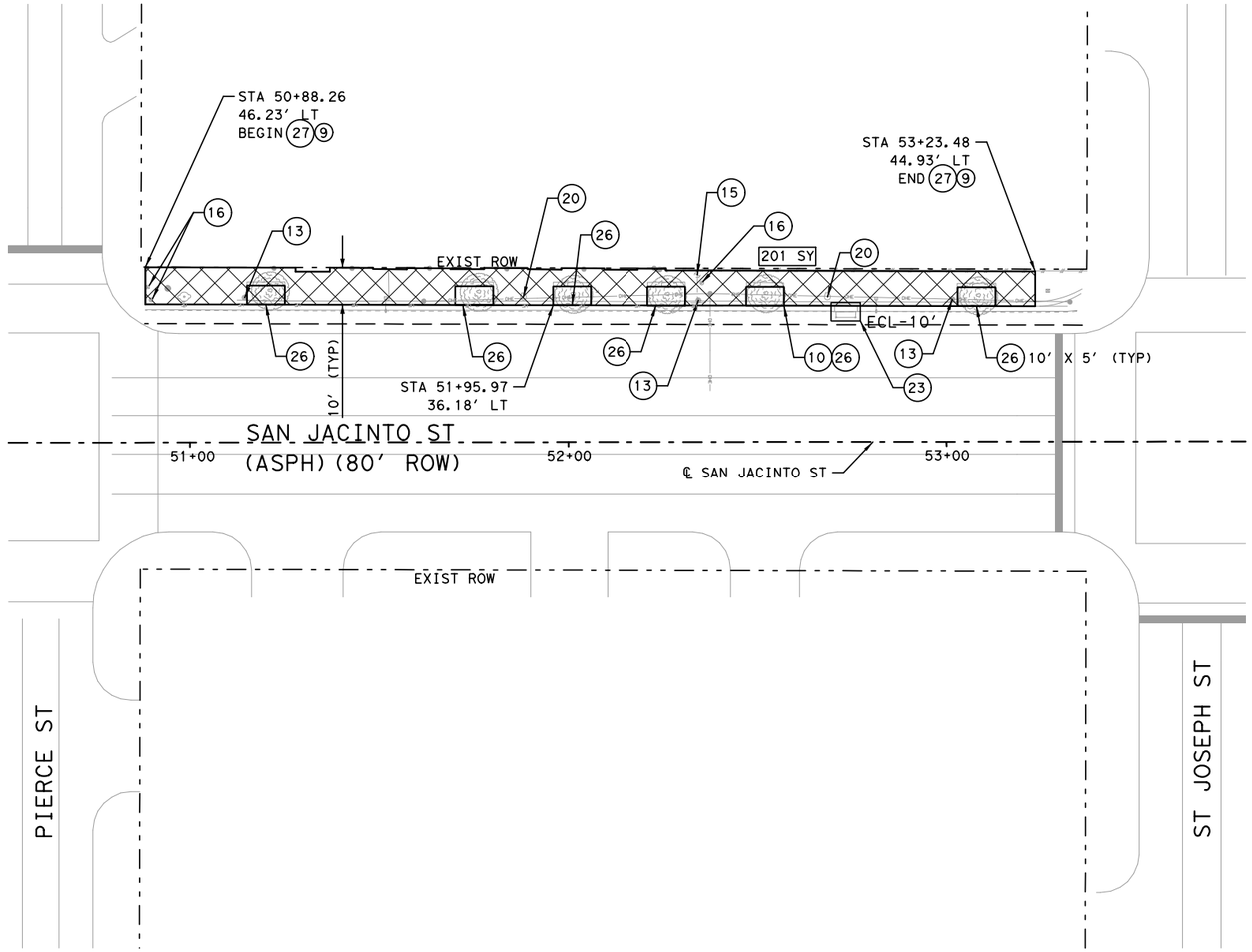

SAN JACINTO BETWEEN PIERCE AND ST JOSEPH (SHEET 1 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	12
0162-6002	BLOCK SODDING	SY	0
0166-6001	FERTILIZER	AC	0.00
0168-6001	VEGETATIVE WATERING	MG	0.72
0192-6015	LANDSCAPE EDGE	LF	180
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	260
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	260
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	0
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	201
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	3
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	3
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	1
1004-6001	TREE PROTECTION	EA	6

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- ⬡21 DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
SAN JACINTO STREET SIDEWALK PLAN
FROM PIERCE TO ST JOSEPH

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	71

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*SANJAC*01.dgn
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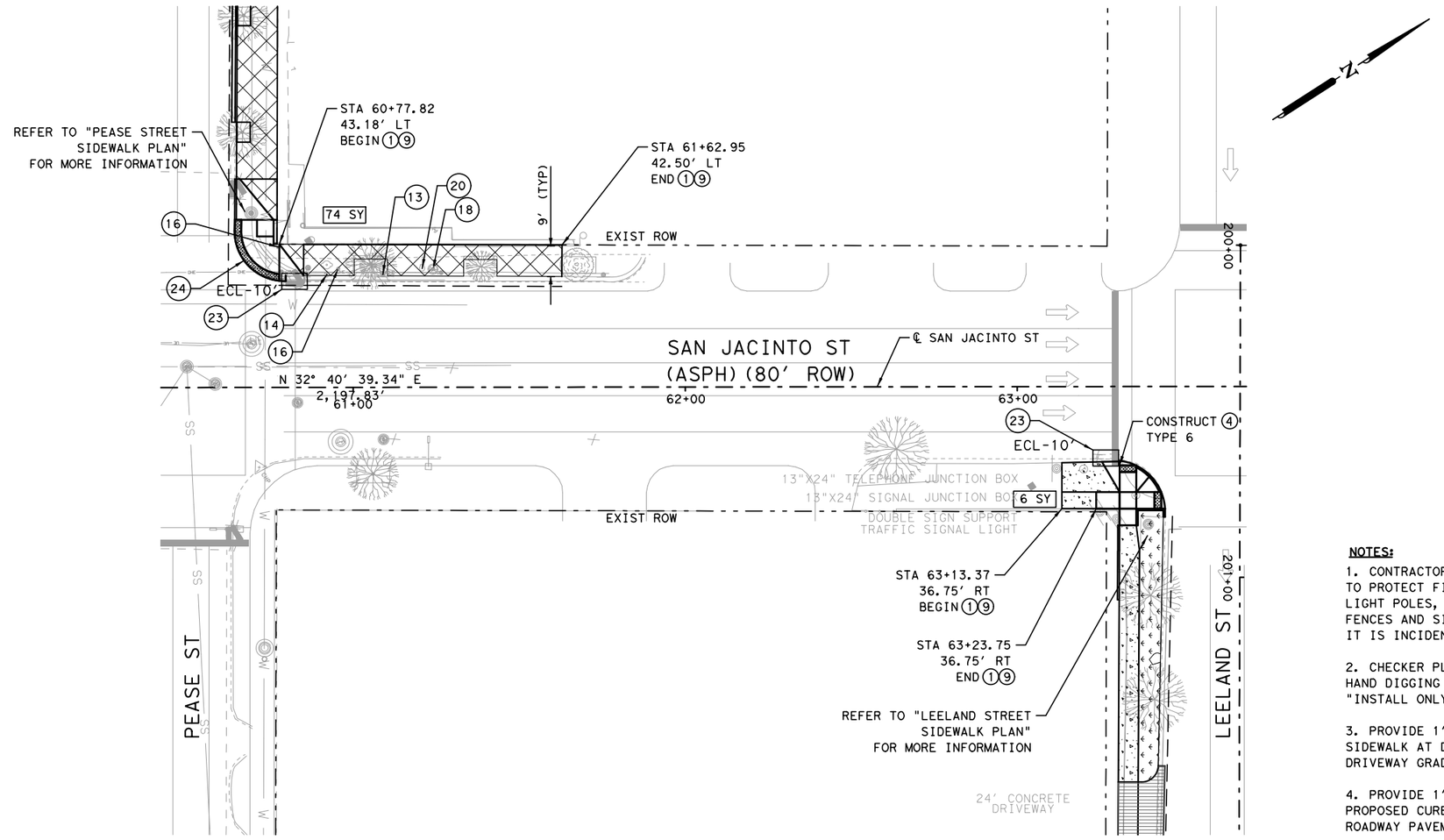

SAN JACINTO BETWEEN PEASE AND LEELAND (SHEET 2 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	8
0162-6002	BLOCK SODDING	SY	0
0166-6001	FERTILIZER	AC	0.00
0168-6001	VEGETATIVE WATERING	MG	0.48
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	1
0479-2008	ADJ MANHS (WATER METER) *	EA	1
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	171
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	171
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	20
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	20
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	6
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	74
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	1
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

CONSTRUCTION NOTES:

(1) CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.

(2) CONSTRUCT CONCRETE CURB & GUTTER.

(3) CONSTRUCT 6" CONCRETE CURB

(4) CONSTRUCT CONCRETE CURB RAMP.

(5) SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.

(6) TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE

(7) CONSTRUCT TYPE C1 CURB.

(8) PROPOSED SODDING.

(9) MATCH EXISTING GRADE.

(10) TRIM & PRUNE EXISTING TREE (S).

(11) PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.

(12) PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.

(13) RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.

(14) ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.

(15) ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.

(16) ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).

(17) RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.

(18) RELOCATE EXISTING WATER METER.

(19) RELOCATE EXISTING FENCE.

(20) EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED

(21) CONSTRUCT 6" CONCRETE SIDEWALK

(22) PROPOSED REINFORCED FILTER FABRIC BARRIER.

(23) PROPOSED INLET PROTECTION BARRIER.

(24) PROPOSED DETECTABLE WARNING SURFACE.

(25) REMOVE TREES OR STUMP

(26) PROPOSED TREE WELL

(27) CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.

(21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.

A AREA = 21 SY

L LENGTH = 21'

XX SY PROP CONC SIDEWALK

(XX SY) PROP CONC DRIVEWAY

PROPOSED CONCRETE SIDEWALK

PROPOSED CONCRETE DRIVEWAY

PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.

PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)

PROPOSED SODDING

EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
SAN JACINTO STREET SIDEWALK PLAN FROM PEASE TO LEELAND

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	72

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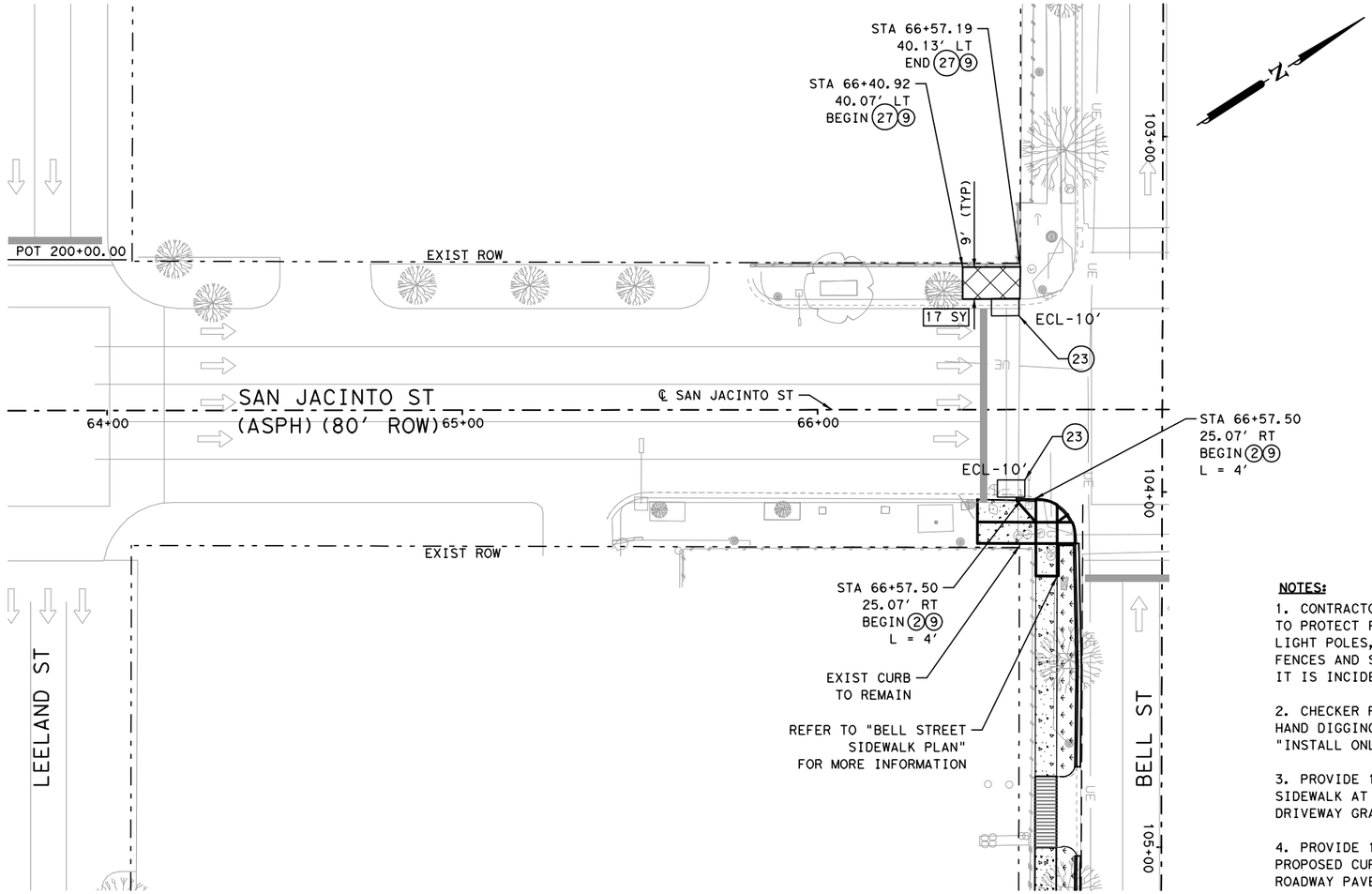

SAN JACINTO BETWEEN LEELAND AND BELL (SHEET 3 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	0
0166-6001	FERTILIZER	AC	0.00
0168-6001	VEGETATIVE WATERING	MG	0.00
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	47
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	47
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	20
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	20
0529-6008	CONC CURB & GUTTER (TY II)	LF	4
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	0
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	17
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⟨21⟩ DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
[XX SY] PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
SAN JACINTO STREET SIDEWALK PLAN FROM LEELAND TO BELL

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	73

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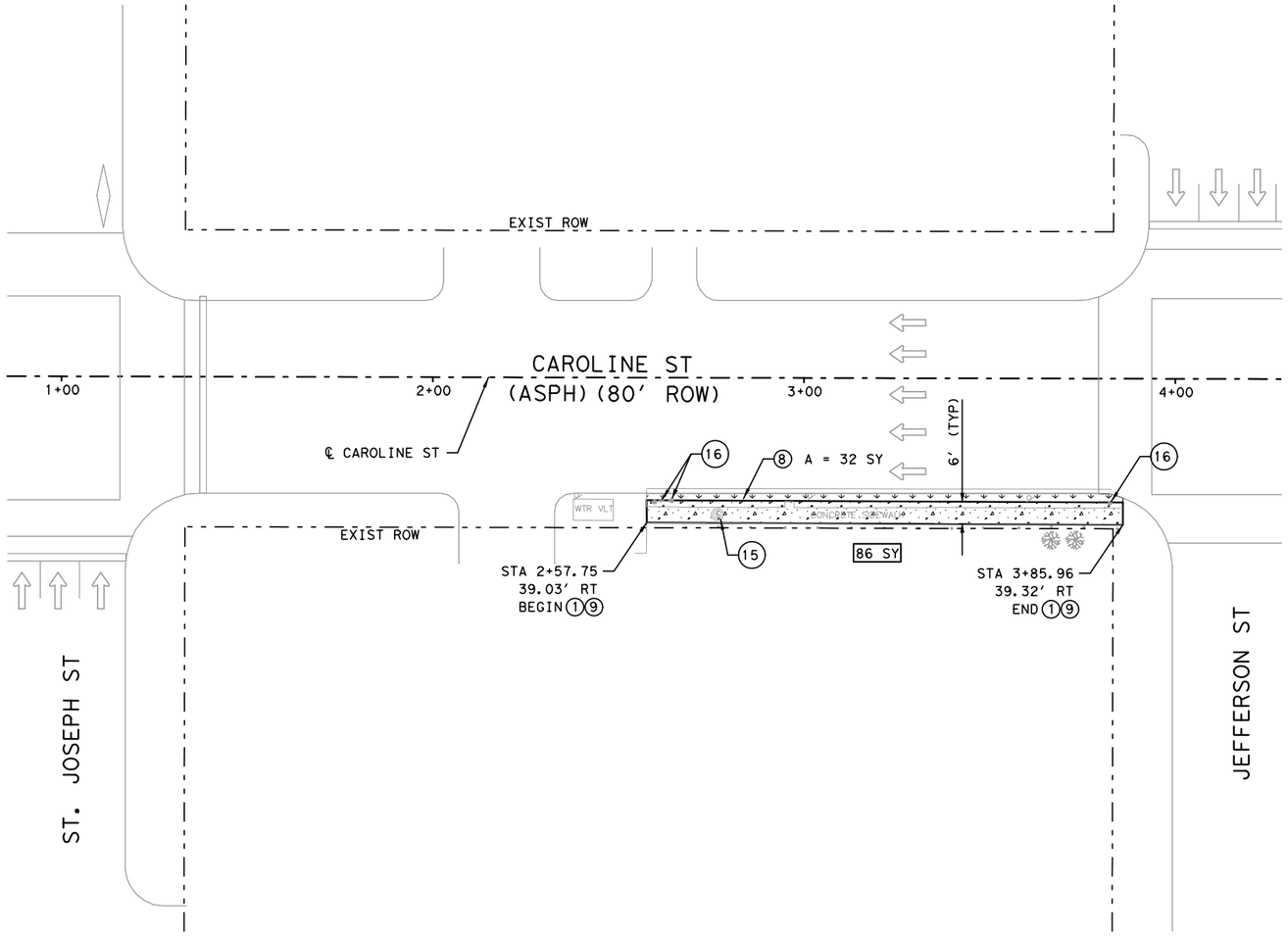


CAROLINE BETWEEN JOSEPH & JEFFERSON (SHEET 1 OF 6)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	32
0166-6001	FERTILIZER	AC	0.01
0168-6001	VEGETATIVE WATERING	MG	0.79
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	1
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	130
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	130
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	86
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	3
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

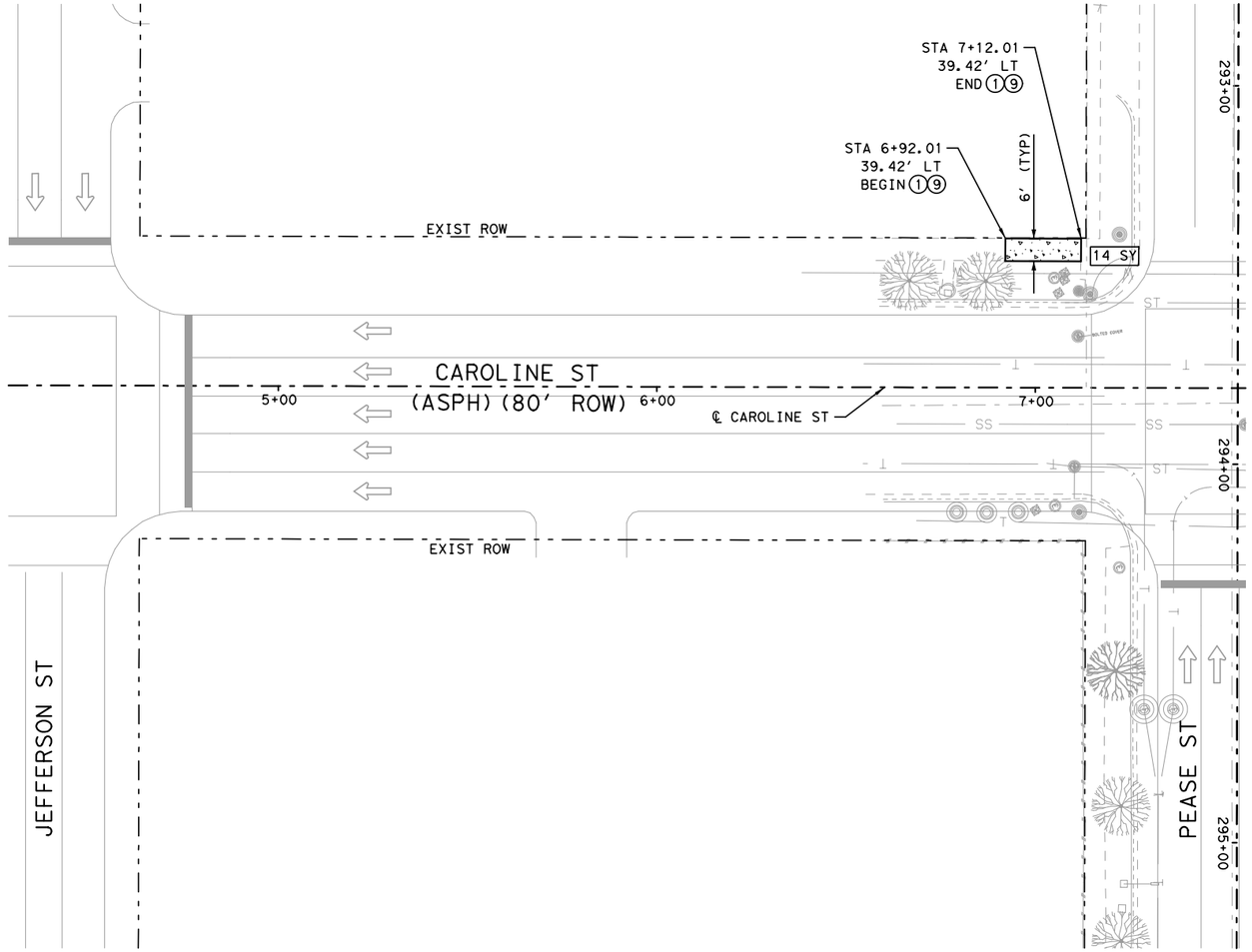
HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
CAROLINE STREET SIDEWALK PLAN FROM ST. JOSEPH TO JEFFERSON

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	74



ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	0
0166-6001	FERTILIZER	AC	0.00
0168-6001	VEGETATIVE WATERING	MG	0.00
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	50
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	50
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	14
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

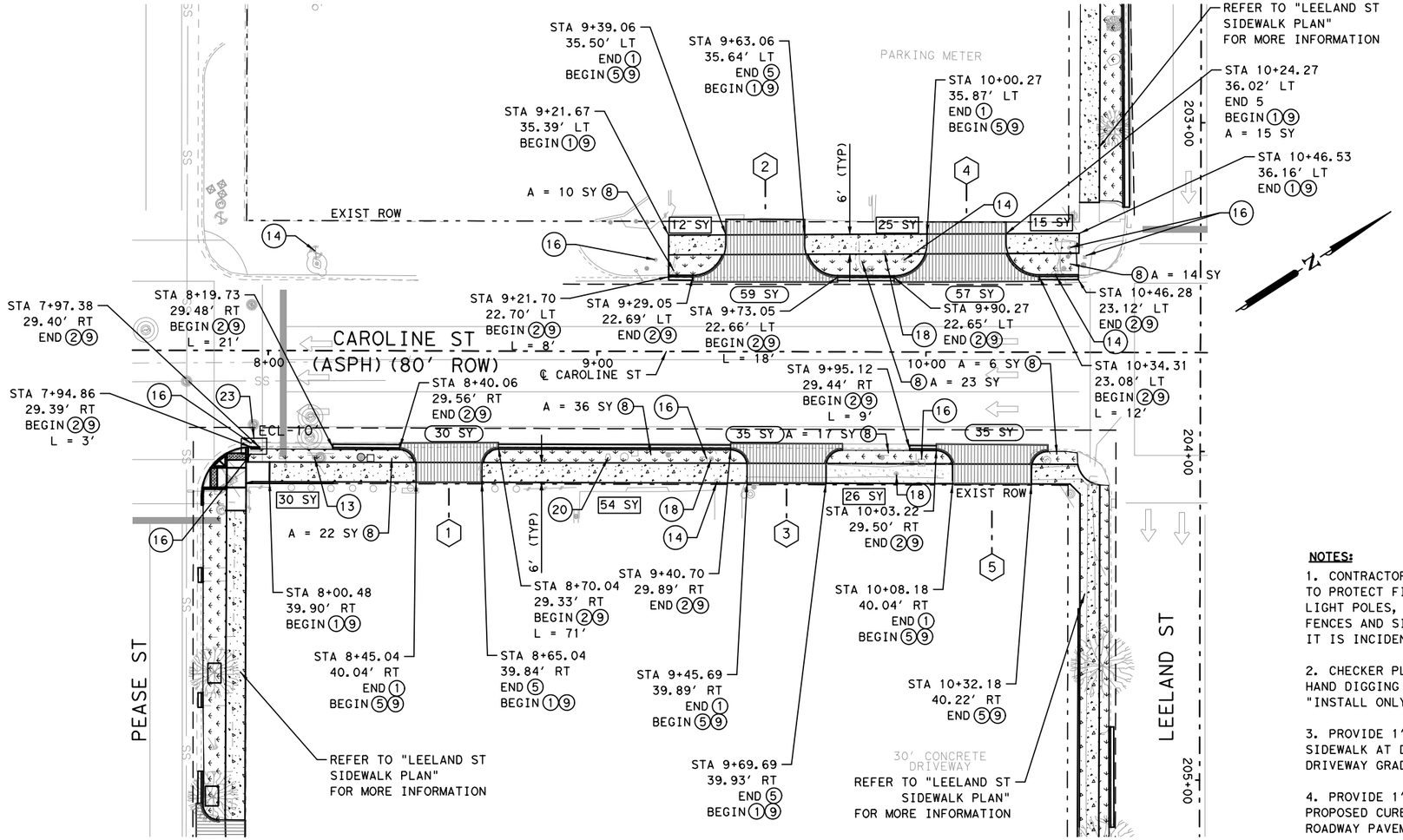
Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

CAROLINE STREET SIDEWALK PLAN FROM JEFFERSON TO PEASE

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	75



CAROLINE BETWEEN PEASE AND LEELAND (SHEET 3 OF 6)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	118
0166-6001	FERTILIZER	AC	0.02
0168-6001	VEGETATIVE WATERING	MG	2.93
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.10
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	3
0479-2008	ADJ MANHS (WATER METER) *	EA	3
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	320
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	320
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	139
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	216
0531-6001	CONC SIDEWALKS (4")	SY	162
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	7
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	1
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.
2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".
3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.
4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.
5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.
6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.
7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
(21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
XX SY PROP CONC SIDEWALK
XX SY PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
CAROLINE STREET SIDEWALK PLAN FROM PEASE TO LEELAND

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	76

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*CAR*03.dgn
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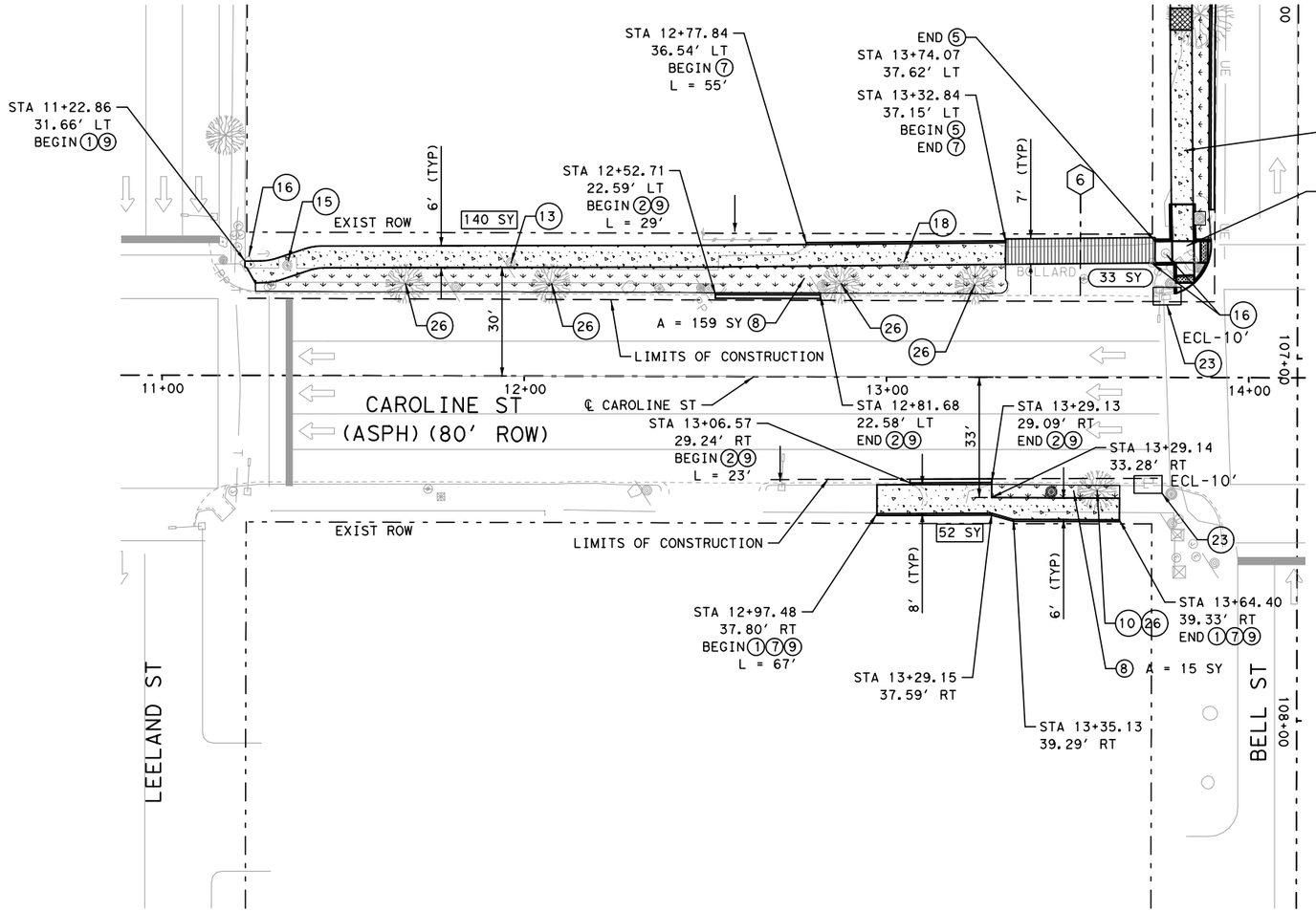

CAROLINE BETWEEN LEELAND & BELL (SHEET 4 OF 6)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	10
0162-6002	BLOCK SODDING	SY	174
0166-6001	FERTILIZER	AC	0.04
0168-6001	VEGETATIVE WATERING	MG	4.91
0192-6015	LANDSCAPE EDGE	LF	107
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.04
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	1
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	1
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	347
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	347
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	20
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	20
0529-6008	CONC CURB & GUTTER (TY II)	LF	52
0529-6015	CONC CURB (TY C1)	LF	122
0530-6004	DRIVEWAYS (CONC)	SY	33
0531-6001	CONC SIDEWALKS (4")	SY	192
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	4
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	1
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	1
1004-6001	TREE PROTECTION	EA	5

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⬡21 DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
XX SY PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
CAROLINE STREET SIDEWALK PLAN FROM LEELAND TO BELL

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	77

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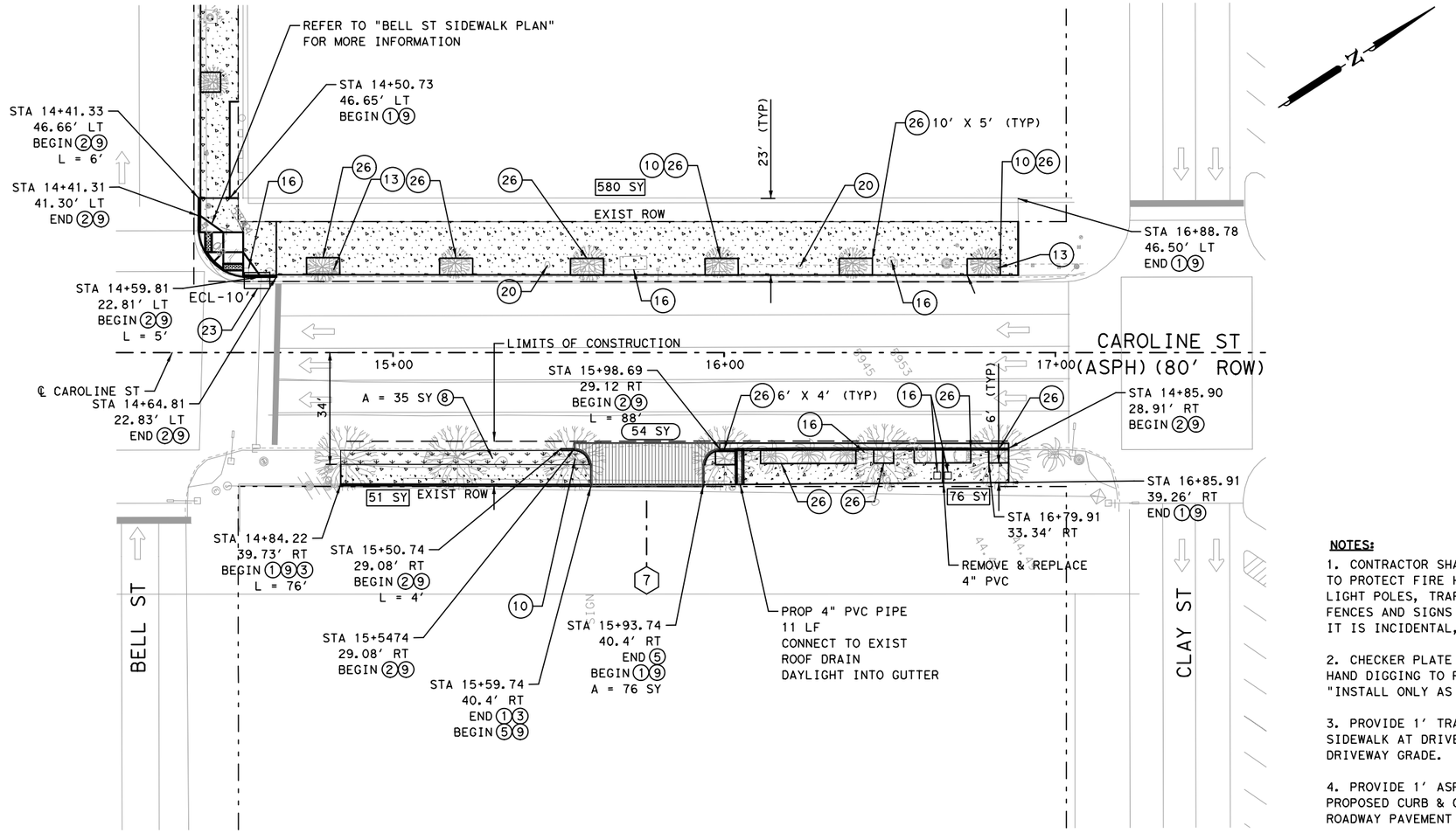

CAROLINE BETWEEN BELL & CLAY (SHEET 5 OF 6)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	30
0162-6002	BLOCK SODDING	SY	35
0166-6001	FERTILIZER	AC	0.01
0168-6001	VEGETATIVE WATERING	MG	2.67
0192-6015	LANDSCAPE EDGE	LF	408
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.07
5096-6001	TREE GRATE	EA	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	11
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	106
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	106
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	92
0529-6015	CONC CURB (TY C1)	LF	76
0530-6004	DRIVEWAYS (CONC)	SY	54
0531-6001	CONC SIDEWALKS (4")	SY	707
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	6
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	3
1004-6001	TREE PROTECTION	EA	17

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
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14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
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24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
CAROLINE STREET SIDEWALK PLAN FROM BELL TO CLAY

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	78

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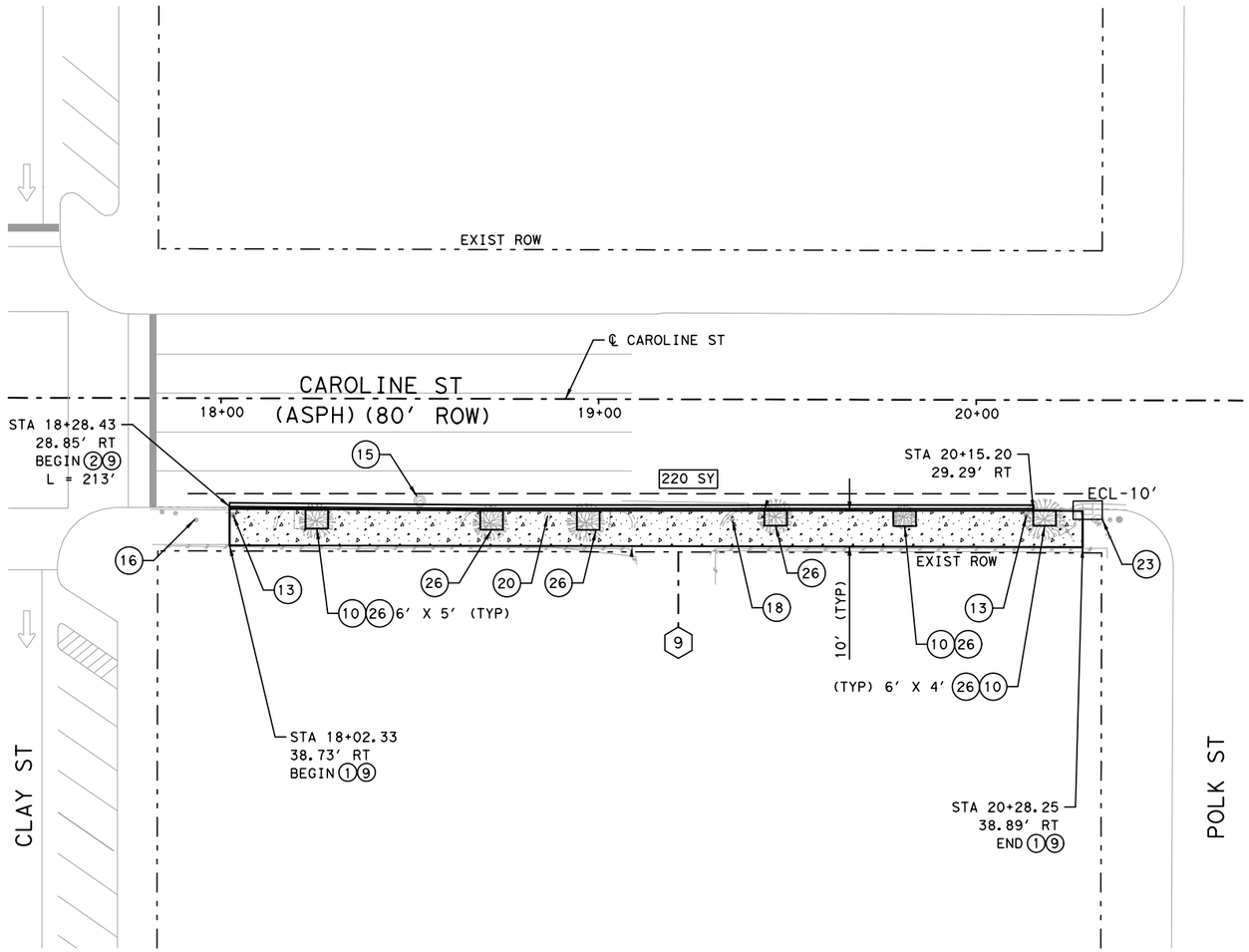

CAROLINE BETWEEN CLAY AND POLK (SHEET 6 OF 6)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	12
0162-6002	BLOCK SODDING	SY	0
0166-6001	FERTILIZER	AC	0.00
0168-6001	VEGETATIVE WATERING	MG	0.72
0192-6015	LANDSCAPE EDGE	LF	126
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.16
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	1
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	1
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	233
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	233
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	213
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	220
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	1
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	3
1004-6001	TREE PROTECTION	EA	6

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
CAROLINE STREET SIDEWALK PLAN FROM CLAY TO POLK

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	79

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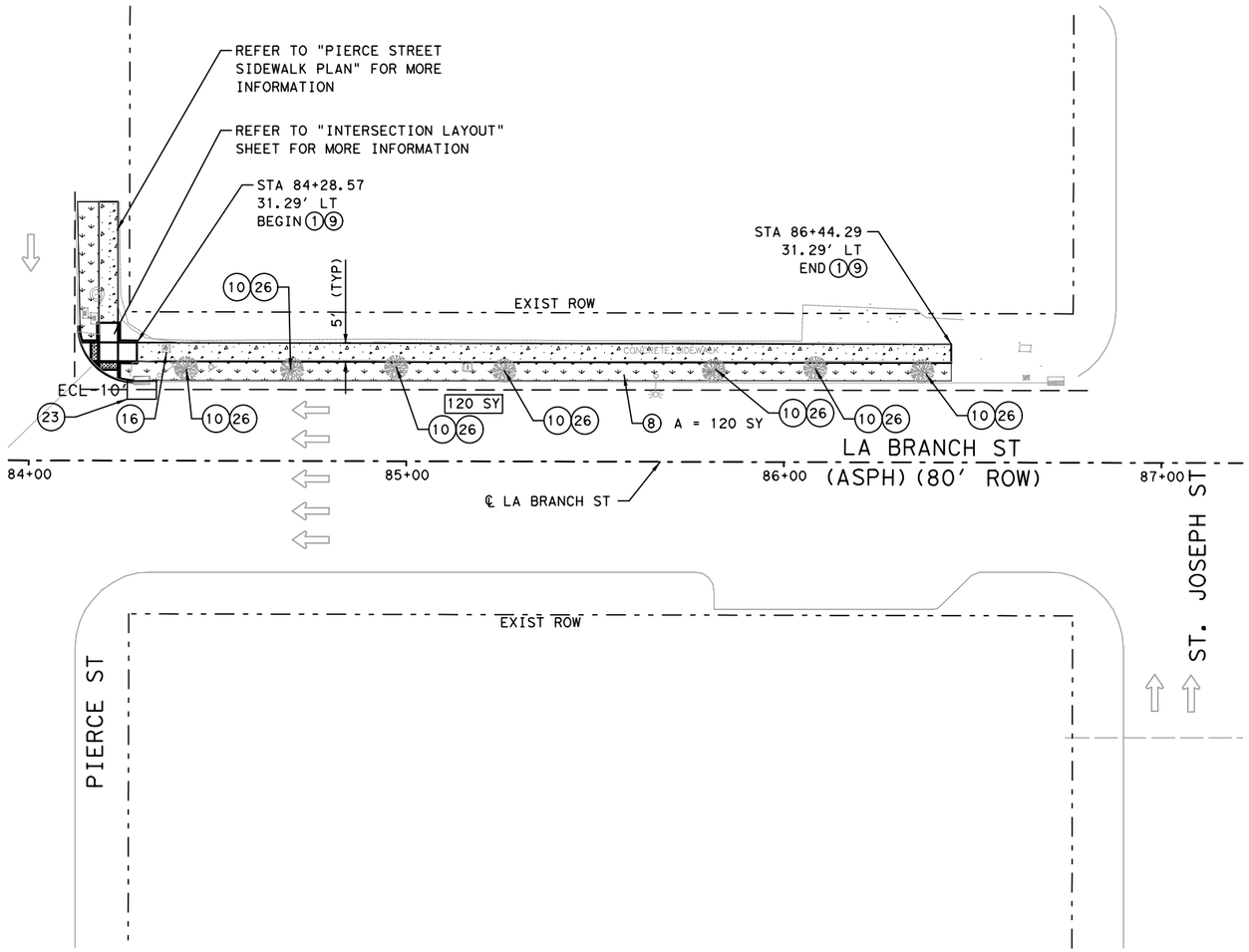


LA BRANCH BETWEEN PIERCE & JOSEPH (SHEET 1 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	14
0162-6002	BLOCK SODDING	SY	120
0166-6001	FERTILIZER	AC	0.02
0168-6001	VEGETATIVE WATERING	MG	3.82
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	260
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	260
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	120
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	7
1004-6001	TREE PROTECTION	EA	7

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

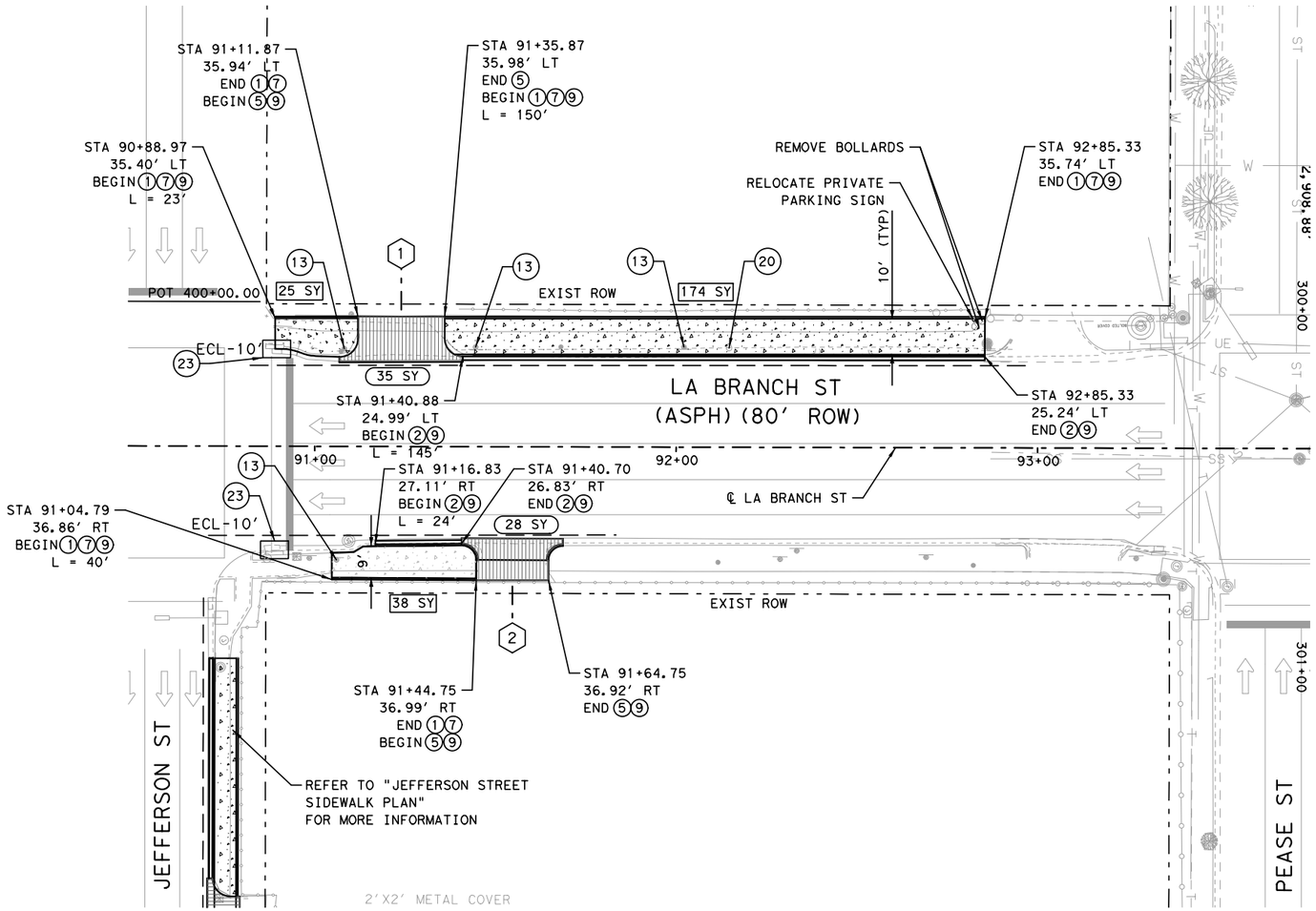
Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
LA BRANCH STREET SIDEWALK PLAN
FROM PIERCE TO ST JOSEPH

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	80

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	0
0166-6001	FERTILIZER	AC	0.000
0168-6001	VEGETATIVE WATERING	MG	0.00
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.12
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	210
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	210
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	20
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	20
0529-6008	CONC CURB & GUTTER (TY II)	LF	169
0529-6015	CONC CURB (TY C1)	LF	190
0530-6004	DRIVEWAYS (CONC)	SY	63
0531-6001	CONC SIDEWALKS (4")	SY	212
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	3
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0



NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⟨21⟩ DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
[XX SY] PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

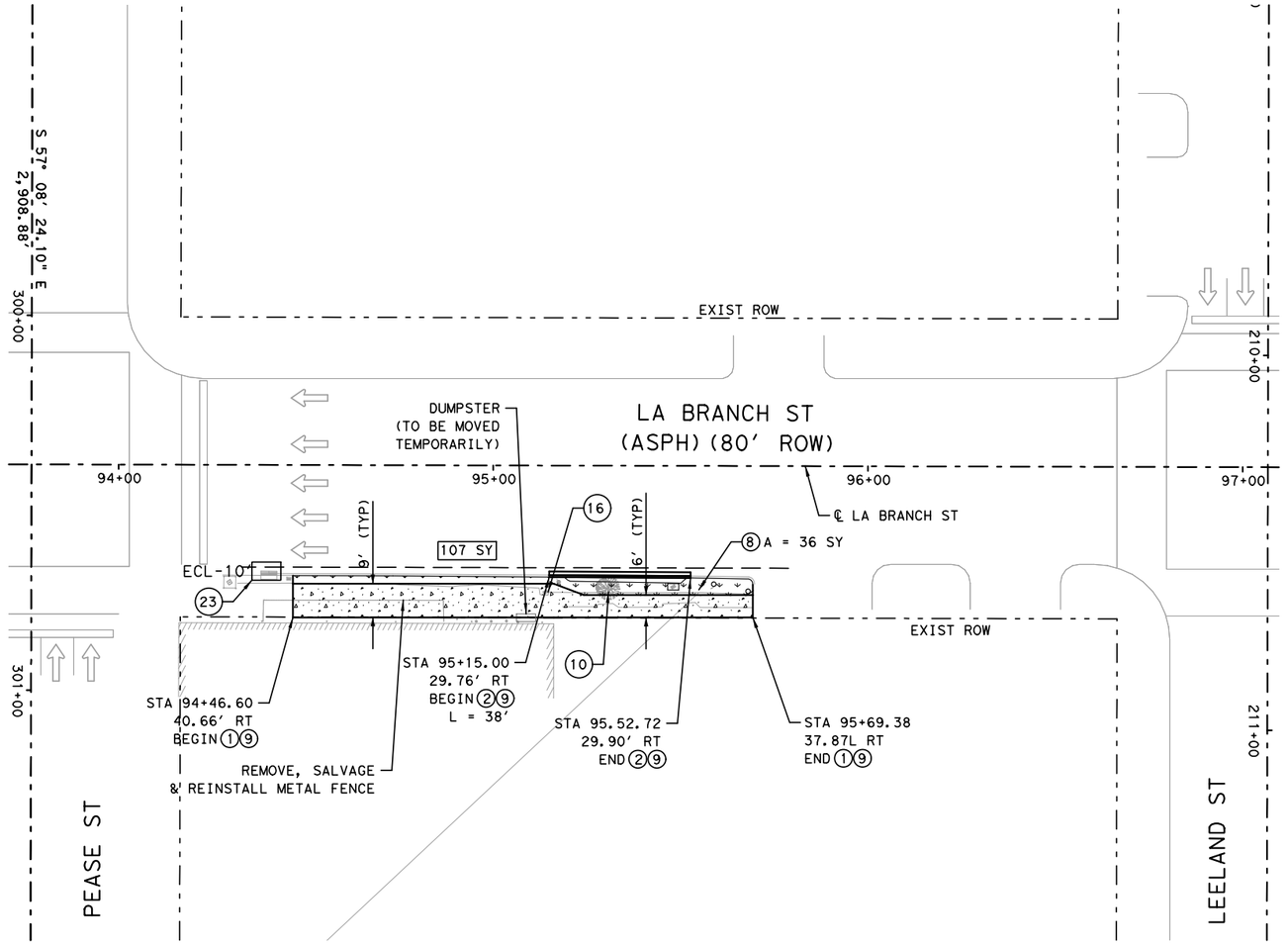
HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
LA BRANCH STREET SIDEWALK PLAN
FROM JEFFERSON TO PEASE

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	81



LA BRANCH BETWEEN PEASE & LEELAND (SHEET 3 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	2
0162-6002	BLOCK SODDING	SY	36
0166-6001	FERTILIZER	AC	0.01
0168-6001	VEGETATIVE WATERING	MG	1.01
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.03
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	60
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	60
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	38
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	107
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	1
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
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DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
LA BRANCH STREET SIDEWALK PLAN
FROM PEASE TO LEELAND

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	82

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*LAB*03.dgn
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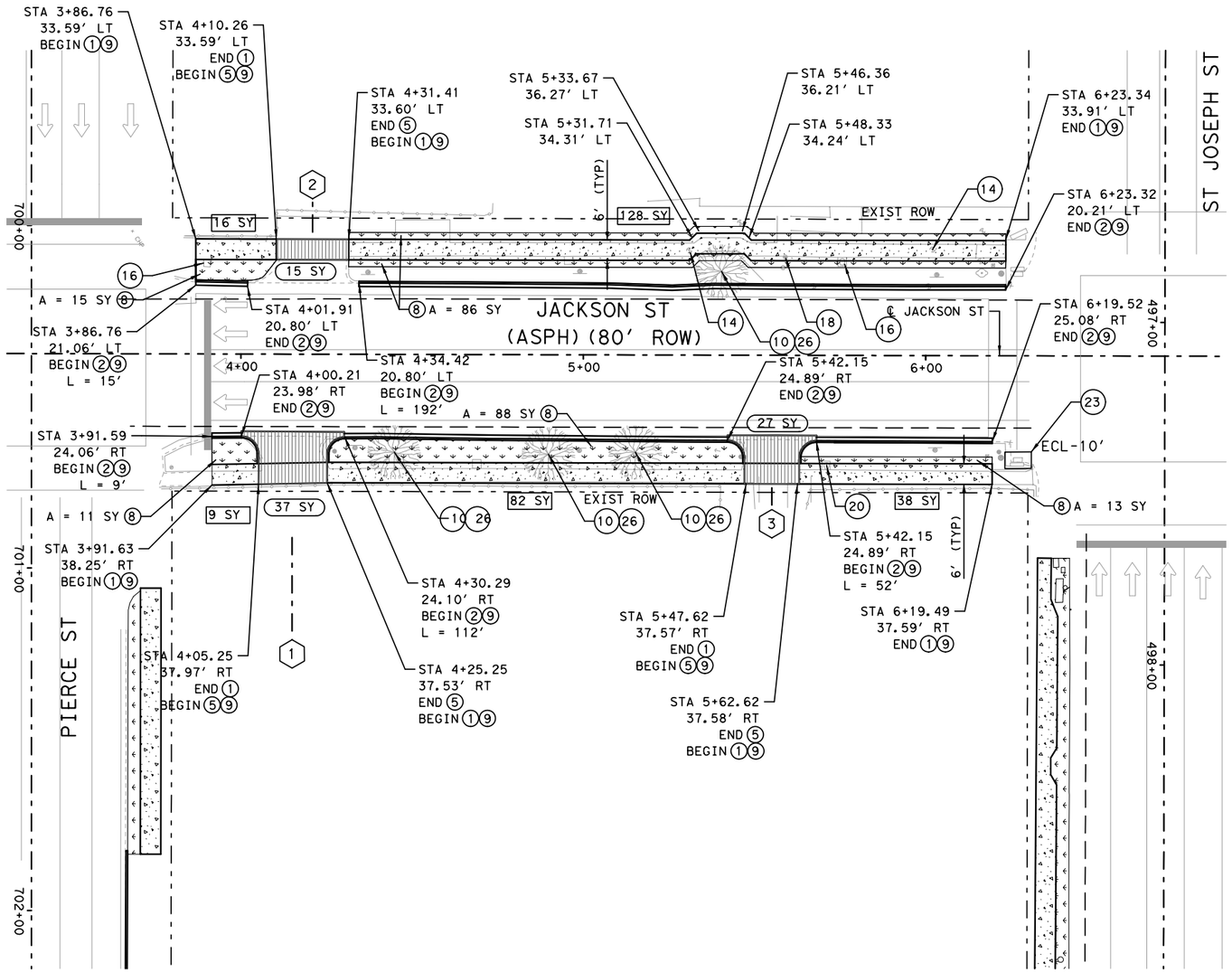

JACKSON BETWEEN PIERCE AND ST JOSEPH (SHEET 1 OF 4)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	6
0162-6002	BLOCK SODDING	SY	198
0166-6001	FERTILIZER	AC	0.04
0168-6001	VEGETATIVE WATERING	MG	5.27
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.28
0461-XXXX	CHECKER PLATE	SY	0
0479-6001	ADJ MANHS	EA	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	2
0479-2008	ADJ MANHS (WATER METER) *	EA	1
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	192
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	192
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	380
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	79
0531-6001	CONC SIDEWALKS (4")	SY	157
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	2
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	2
1004-6001	TREE PROTECTION	EA	2

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
JACKSON STREET SIDEWALK PLAN FROM PIERCE TO ST JOSEPH

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	83

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- XX SY PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

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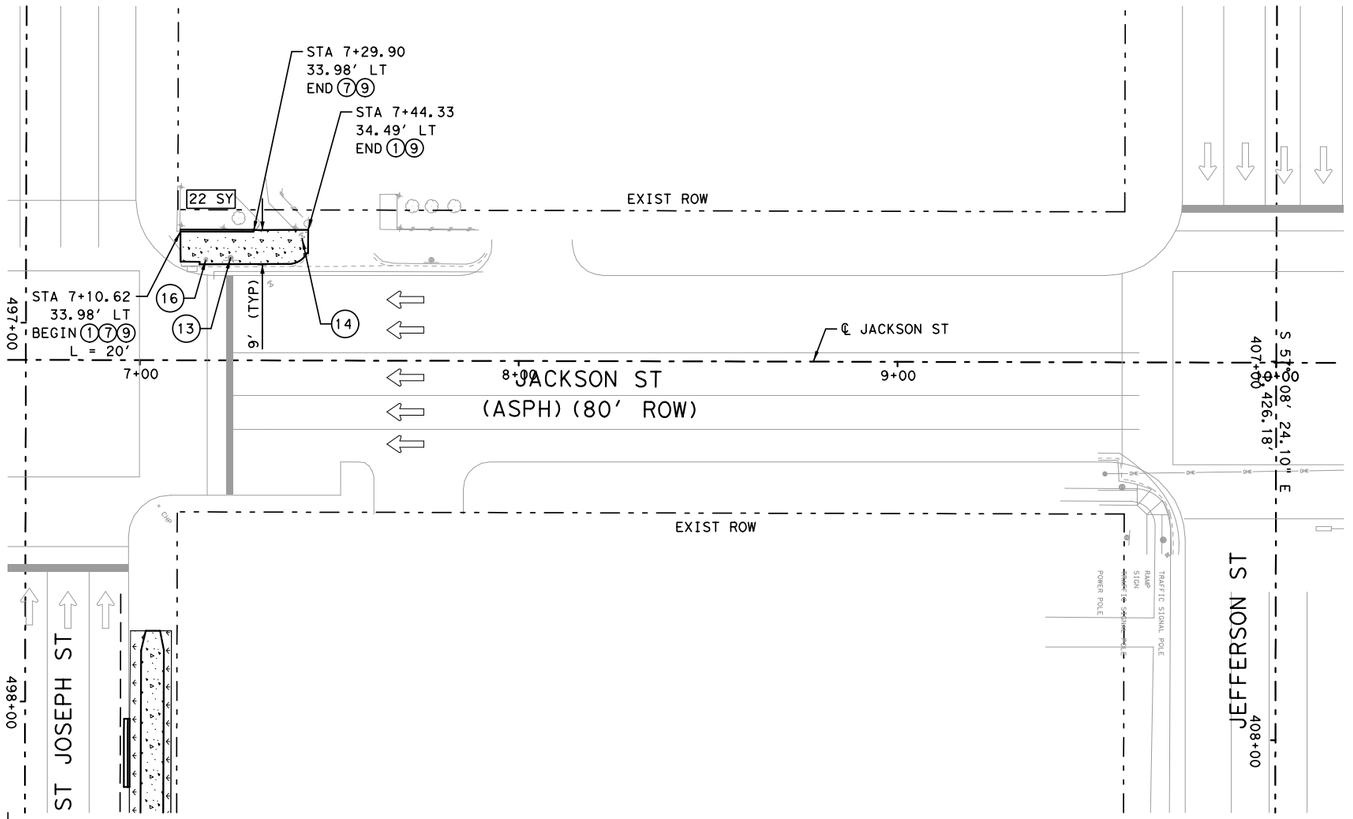


ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	0
0166-6001	FERTILIZER	AC	0.00
0168-6001	VEGETATIVE WATERING	MG	0.00
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	40
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	40
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	20
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	22
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	1
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	1
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
JACKSON STREET SIDEWALK PLAN FROM ST JOSEPH TO JEFFERSON

SCALE: 1"=20'

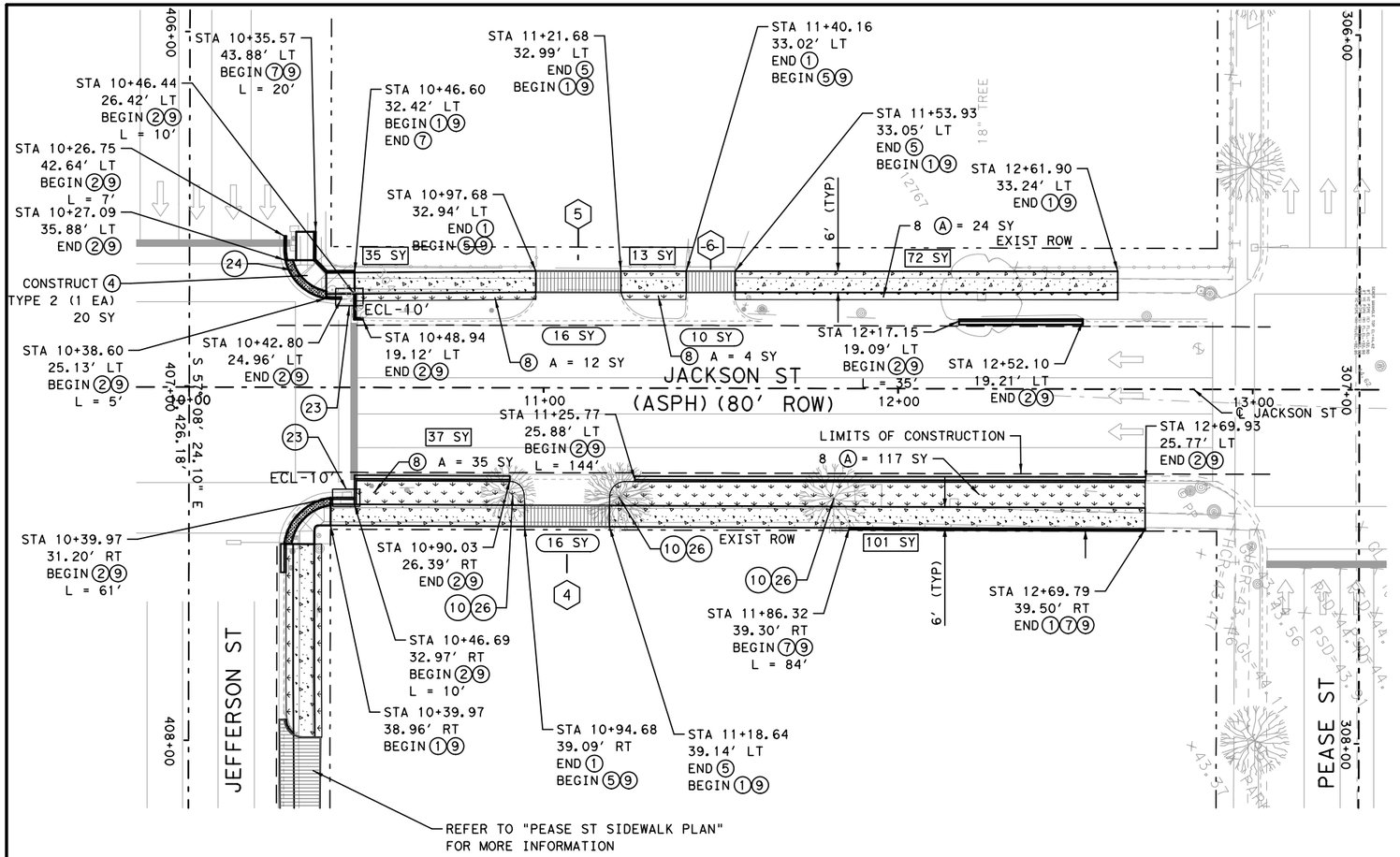
DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	84

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
(21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
XX SY PROP CONC SIDEWALK
XX SY PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG



JACKSON BETWEEN JEFFERSON & PEASE (SHEET 3 OF 4)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	6
0162-6002	BLOCK SODDING	SY	192
0166-6001	FERTILIZER	AC	0.04
0168-6001	VEGETATIVE WATERING	MG	5.12
0192-6015	LANDSCAPE EDGE	LF	60
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.2
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	475
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	475
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	20
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	20
0529-6008	CONC CURB & GUTTER (TY II)	LF	228
0529-6015	CONC CURB (TY C1)	LF	137
0530-6004	DRIVEWAYS (CONC)	SY	42
0531-6001	CONC SIDEWALKS (4")	SY	258
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	1
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	3
1004-6001	TREE PROTECTION	EA	3

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
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13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
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27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
JACKSON STREET SIDEWALK PLAN FROM JEFFERSON TO PEASE

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	85

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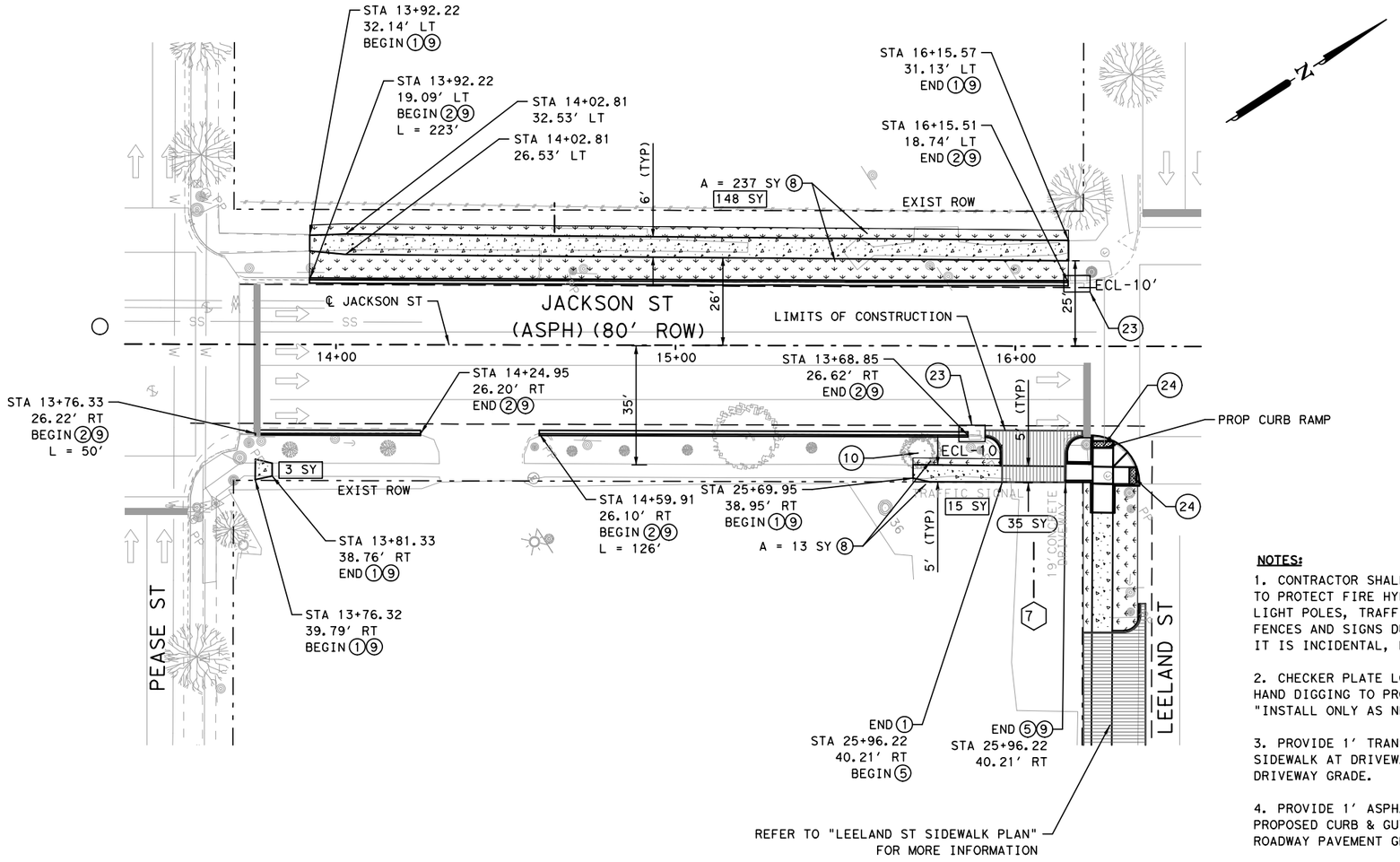

JACKSON BETWEEN PEASE & LEELAND (SHEET 4 OF 4)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	250
0166-6001	FERTILIZER	AC	0.052
0168-6001	VEGETATIVE WATERING	MG	6.20
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.3
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	250
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	250
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	20
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	20
0529-6008	CONC CURB & GUTTER (TY II)	LF	399
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	35
0531-6001	CONC SIDEWALKS (4")	SY	156
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	1
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

(11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
⬡21 DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
A AREA = 21 SY
L LENGTH = 21'
[XX SY] PROP CONC SIDEWALK
(XX SY) PROP CONC DRIVEWAY
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE DRIVEWAY
PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
PROPOSED SODDING
EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
JACKSON STREET SIDEWALK PLAN FROM PEASE TO LEELAND

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	86

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*JAC*04.dgn
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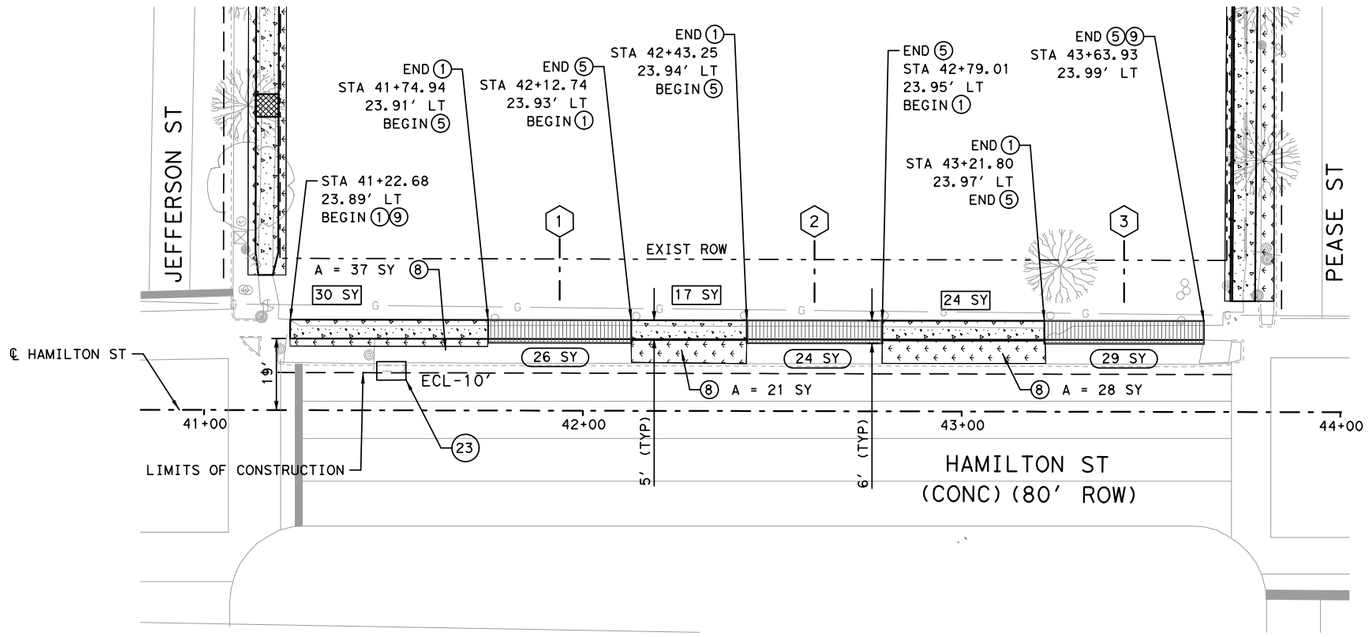

HAMILTON BETWEEN JEFFERSON & PEASE (SHEET 1 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	86
0166-6001	FERTILIZER	AC	0.02
0168-6001	VEGETATIVE WATERING	MG	2.13
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	156
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	156
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	79
0531-6001	CONC SIDEWALKS (4")	SY	71
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- ⬡ 21 DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
HAMILTON STREET SIDEWALK PLAN FROM JEFFERSON TO PEASE

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	87

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\SHEETS\SES*RPP*HAM*01.dgn
3/1/2023
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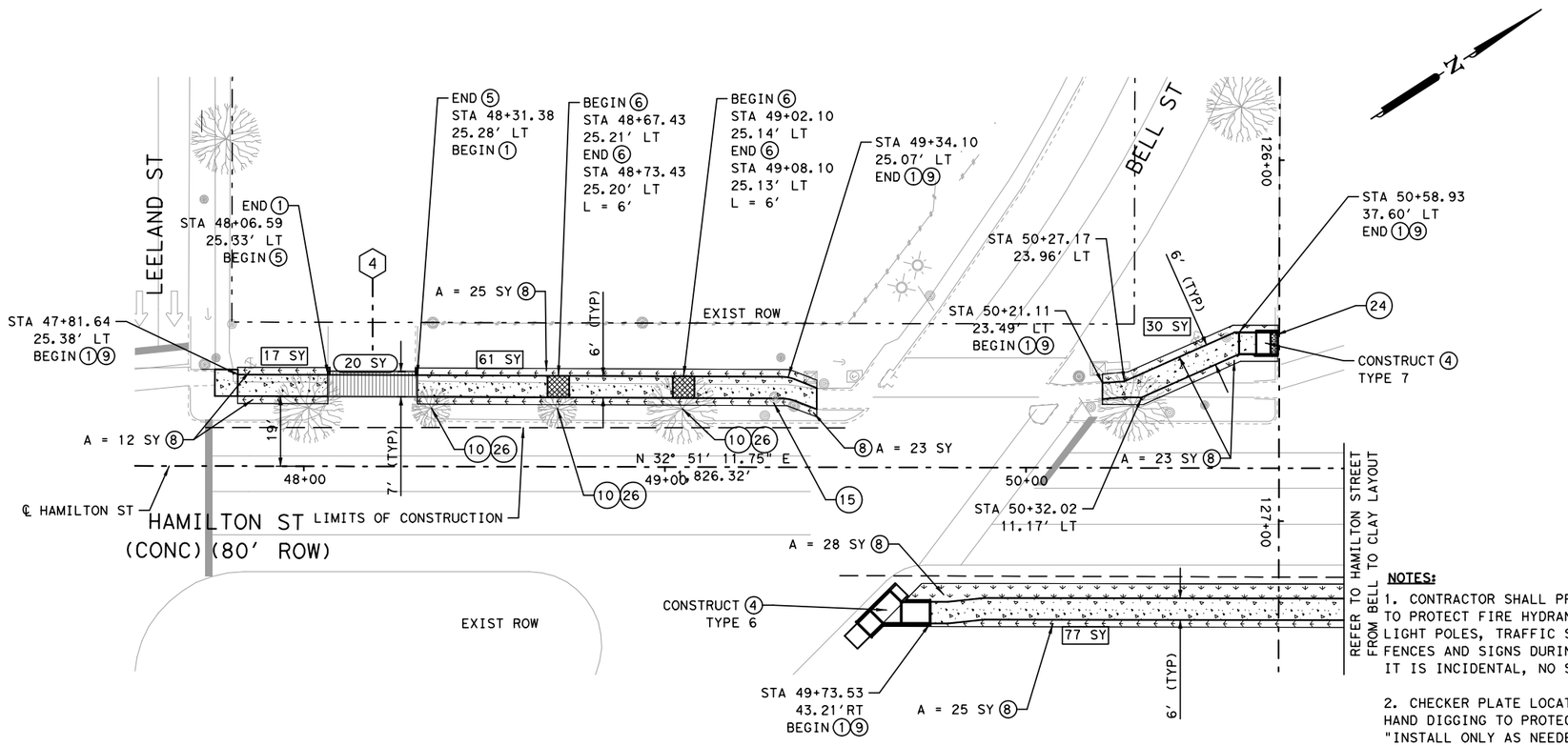
ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	8
0162-6002	BLOCK SODDING	SY	113
0166-6001	FERTILIZER	AC	0.02
0168-6001	VEGETATIVE WATERING	MG	3.28
0192-6015	LANDSCAPE EDGE	LF	48
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	8
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	356
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	356
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	0
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	0
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	20
0531-6001	CONC SIDEWALKS (4")	SY	185
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	1
0531-6008	CURB RAMPS (TY 7)	EA	1
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	0
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	3
1004-6001	TREE PROTECTION	EA	3



NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
13. RELOCATE EXIST TRAFFIC SIGN TO A NEW LOCATION.
14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
15. ADJUST EXIST MANHOLE FRAME AND COVER TO MATCH PROPOSED GRADE.
16. ADJUST OR REPLACE EXIST PULL BOX TO PROPOSED GRADE (INCLUDING MISSING COVER).
17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
18. RELOCATE EXISTING WATER METER.
19. RELOCATE EXISTING FENCE.
20. EXISTING PARKING METER TO REMAIN UNLESS OTHERWISE NOTED
21. CONSTRUCT 6" CONCRETE SIDEWALK
22. PROPOSED REINFORCED FILTER FABRIC BARRIER.
23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- ⬡ 21 DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- (XX SY) PROP CONC DRIVEWAY
- PROPOSED CONCRETE SIDEWALK
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation
© 2023

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
HAMILTON STREET
FROM LEELAND TO BELL

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	88

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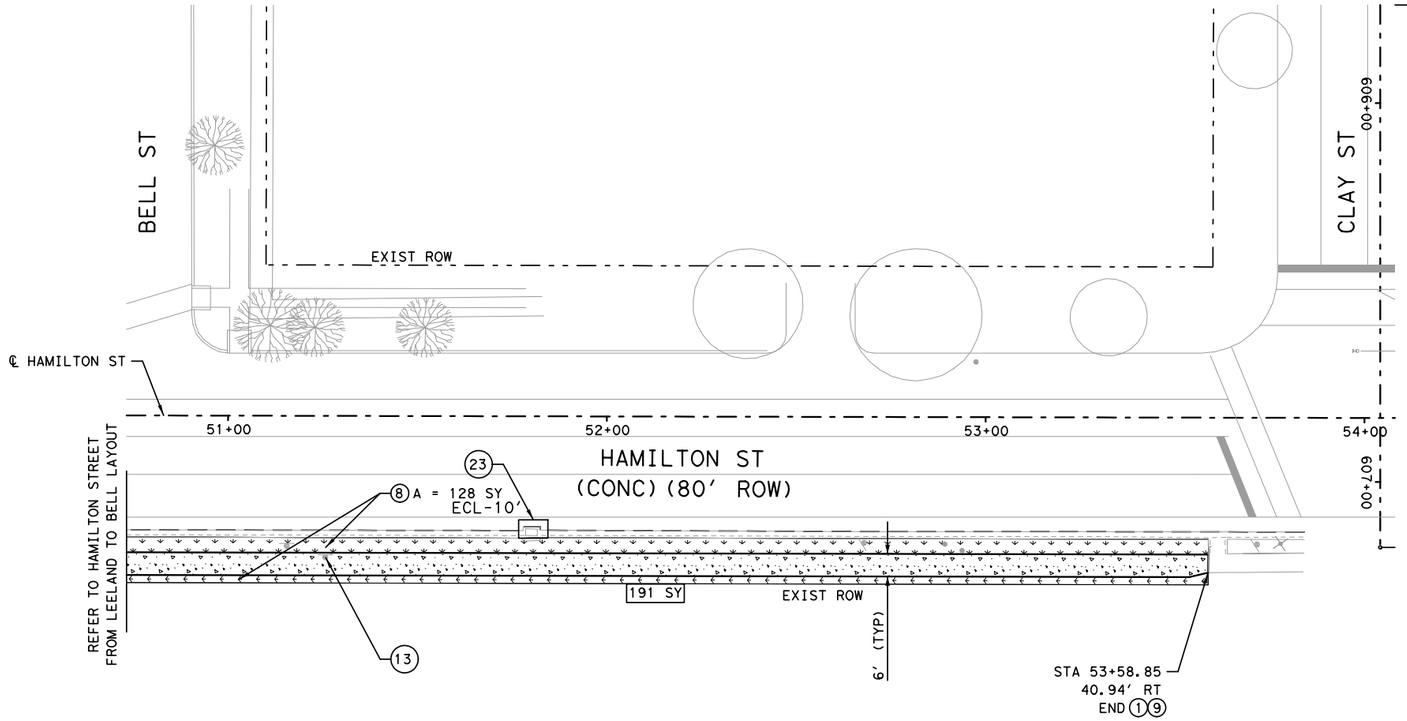

HAMILTON BETWEEN BELL AND CLAY (SHEET 3 OF 3)

ITEM	DESCRIPTION	UNIT	QTY
0161-6009	EROSION CONTROL COMPOST	CY	0
0162-6002	BLOCK SODDING	SY	128
0166-6001	FERTILIZER	AC	0.03
0168-6001	VEGETATIVE WATERING	MG	3.17
0192-6015	LANDSCAPE EDGE	LF	0
0340-6034	D-GR HMA(SQ) TY-C PG64-22	TON	0.00
0461-XXXX	CHECKER PLATE	SY	0
0474-6021	CAST- IN -PLACE TRENCH DRAIN	LF	0
0479-6001	ADJ MANHS	EA	0
0479-6005	ADJ MANHS (WATER VALVE BOX) *	EA	0
0479-2008	ADJ MANHS (WATER METER) *	EA	0
0481-6001	PIPE (PVC) (SDR-35) (4 IN)	LF	0
0506-6038	TEMPORARY SEDIMENT CONTROL FENCE INSTLL	LF	302
0506-6039	TEMPORARY SEDIMENT CONTROL FENCE REMOVE	LF	302
0506-6040	BIOGRD EROSN CONT LOGS (8" DIA) INSTALL	LF	10
0506-6043	BIODEGRADBLE EROSION CONTROL LOGS REMOV	LF	10
0529-6008	CONC CURB & GUTTER (TY II)	LF	0
0529-6015	CONC CURB (TY C1)	LF	0
0530-6004	DRIVEWAYS (CONC)	SY	0
0531-6001	CONC SIDEWALKS (4")	SY	191
0531-6003	CONC SIDEWALKS (6")	SY	0
0531-6033	CONC SIDEWALKS (SPECIAL) (TYPE B)	SY	0
0531-6005	CURB RAMPS (TY 2)	EA	0
0531-6009	CURB RAMPS (TY 5)	EA	0
0531-6010	CURB RAMPS (TY 6)	EA	0
0531-6008	CURB RAMPS (TY 7)	EA	0
0624-6007	GROUND BOX TY C (162911)	EA	0
0644-6068	RELOCATE SM RD SN SUP & AM TY 10BWG	EA	1
0752-6014	STUMP REMOVAL	EA	0
0752-6023	TREE TRIMMING	EA	0
1004-6001	TREE PROTECTION	EA	0

NOTES:

1. CONTRACTOR SHALL PROVIDE PROPER CARE TO PROTECT FIRE HYDRANT, POWER POLES, LIGHT POLES, TRAFFIC SIGNAL POLES, FENCES AND SIGNS DURING CONSTRUCTION. IT IS INCIDENTAL, NO SEPARATE PAY.

2. CHECKER PLATE LOCATIONS REQUIRE HAND DIGGING TO PROTECT TREE ROOTS AND "INSTALL ONLY AS NEEDED".

3. PROVIDE 1' TRANSITION ON PROPOSED SIDEWALK AT DRIVEWAYS TO MATCH EXIST DRIVEWAY GRADE.

4. PROVIDE 1' ASPHALT TRANSITION ON PROPOSED CURB & GUTTER SIDE TO MATCH ROADWAY PAVEMENT GRADE.

5. IN NON-PAVED AREA, PROVIDE 2 FOOT WIDE SOD ADJACENT TO PROPOSED SIDEWALK.

6. NEW CURB TYPE TO MATCH EXISTING CURB TYPE.

7. SEE PAY ITEM 0752-2053 "TREE TRIMMING" TREE ROOTS PRUNING FOR SIDEWALK & DRIVEWAY INSTALLATION TO BE PAID AS PAY ITEM.

0 20 40
HORIZ: SCALE IN FEET

CONSTRUCTION NOTES:

1. CONSTRUCT 4.5" CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN.
2. CONSTRUCT CONCRETE CURB & GUTTER.
3. CONSTRUCT 6" CONCRETE CURB
4. CONSTRUCT CONCRETE CURB RAMP.
5. SAWCUT EXIST CONCRETE 2" IN DEPTH, CHIP & REMOVE EXIST CONCRETE AND LEAVE EXIST REINF. EXPOSED. CONSTRUCT 7" THICK NEW SIDEWALK & DRIVEWAY WITH DOWEL-ON BARS.
6. TREE ROOT SENSITIVE AREA, USE SIDEWALK BRIDGE CHECKER PLATE / TREE GRATE
7. CONSTRUCT TYPE C1 CURB.
8. PROPOSED SODDING.
9. MATCH EXISTING GRADE.
10. TRIM & PRUNE EXISTING TREE (S).
11. PROPOSED 12" WIDE WHITE PAVEMENT STRIPING.
12. PROPOSED 24" WIDE WHITE PAVEMENT STRIPING.
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14. ADJUST EXIST WATER VALVE BOX TO PROPOSED GRADE.
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17. RELOCATE EXISTING FIRE HYDRANT WITH WATER VALVE BOX.
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23. PROPOSED INLET PROTECTION BARRIER.
24. PROPOSED DETECTABLE WARNING SURFACE.
25. REMOVE TREES OR STUMP
26. PROPOSED TREE WELL
27. CONSTRUCT 4.5" SCORED CONCRETE SIDEWALK OF WIDTH SHOWN ON PLAN (MATCH EXISTING PATTERN)

LEGEND:

- (11) DESIGNATE NUMBER OF APPROPRIATE CONSTRUCTION NOTE.
- (21) DRIVEWAY NUMBER. REFER TO SUMMARY OF DRIVEWAYS.
- A AREA = 21 SY
- L LENGTH = 21'
- XX SY PROP CONC SIDEWALK
- XX SY PROP CONC DRIVEWAY
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- PROPOSED CONCRETE DRIVEWAY
- PROPOSED SIDEWALK BRIDGE WITH CHECKER PLATE.
- PROPOSED SCORED CONCRETE SIDEWALK (MATCH EXISTING PATTERN)
- PROPOSED SODDING
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
HAMILTON STREET
FROM BELL TO CLAY

SCALE: 1"=20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	89

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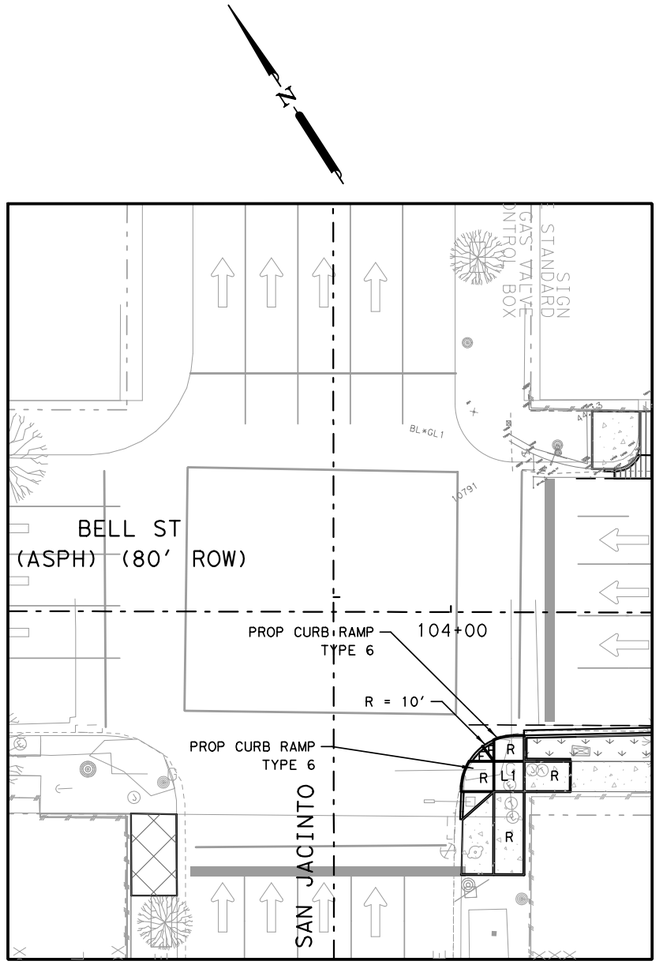
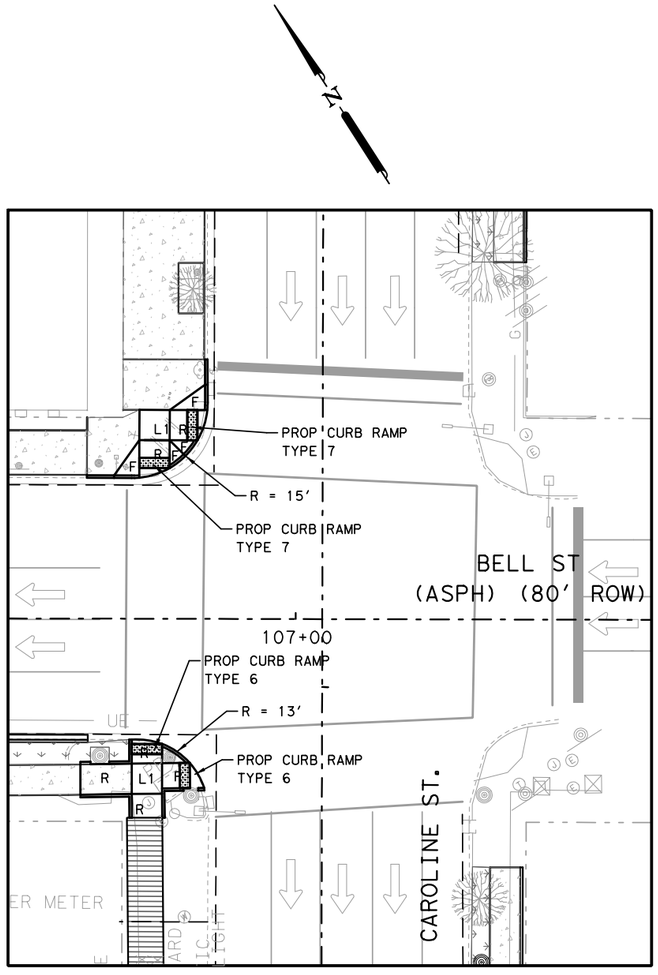


INTERSECTION LAYOUT
BELL ST AT SAN JACINTO ST



INTERSECTION LAYOUT
BELL ST AT CAROLINE ST

LEGEND

R	RAMP
L	LANDING
L1	LANDING COMMON
F	FLARE
T	TRANSITION
⇨	TRAFFIC FLOW

0 15 30
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
INTERSECTION LAYOUT
BELL ST AT SAN JACINTO & BELL ST AT CAROLINE ST

SCALE: 1"=15'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	90

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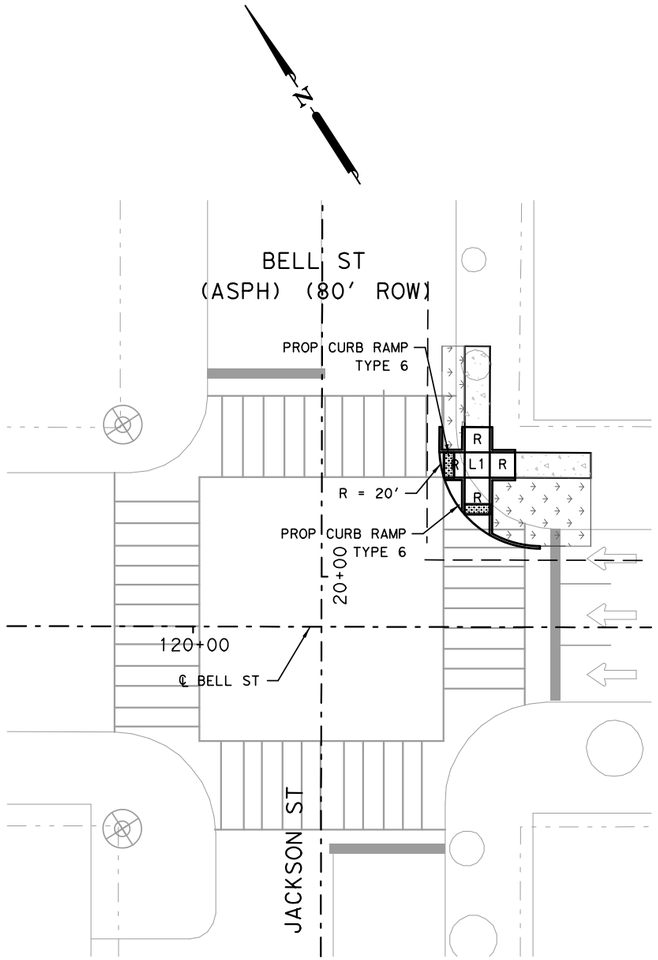

INTERSECTION LAYOUT
BELL ST AT JACKSON ST

LEGEND

R	RAMP
L	LANDING
L1	LANDING COMMON
F	FLARE
T	TRANSITION
⇨	TRAFFIC FLOW

0 15 30
HORIZ: SCALE IN FEET

3/1/2023

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Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

INTERSECTION LAYOUT
BELL ST AT JACKSON ST

SCALE: 1"=15'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	91

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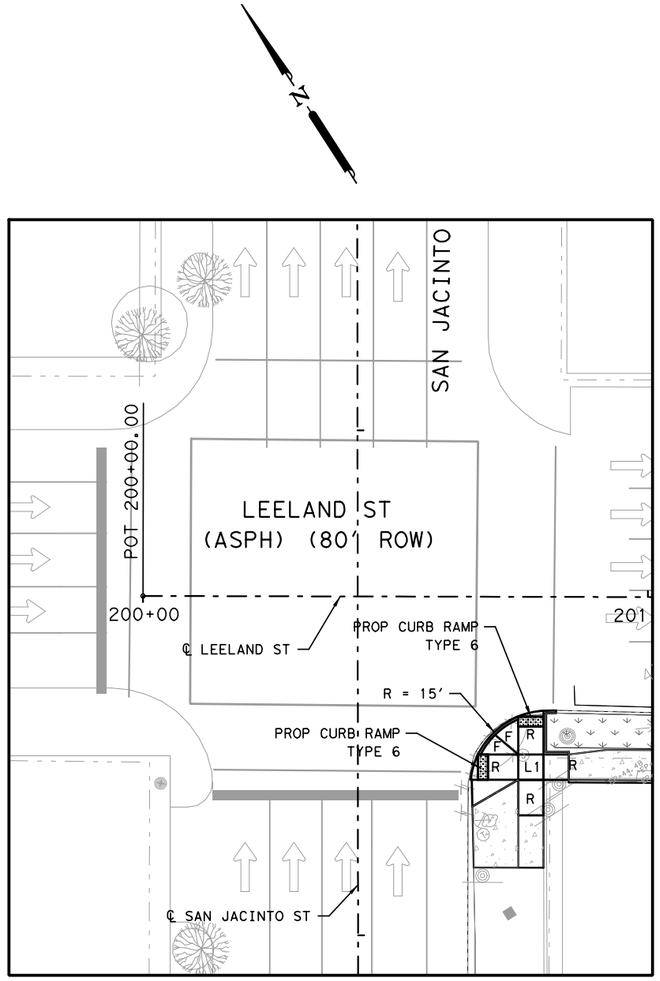
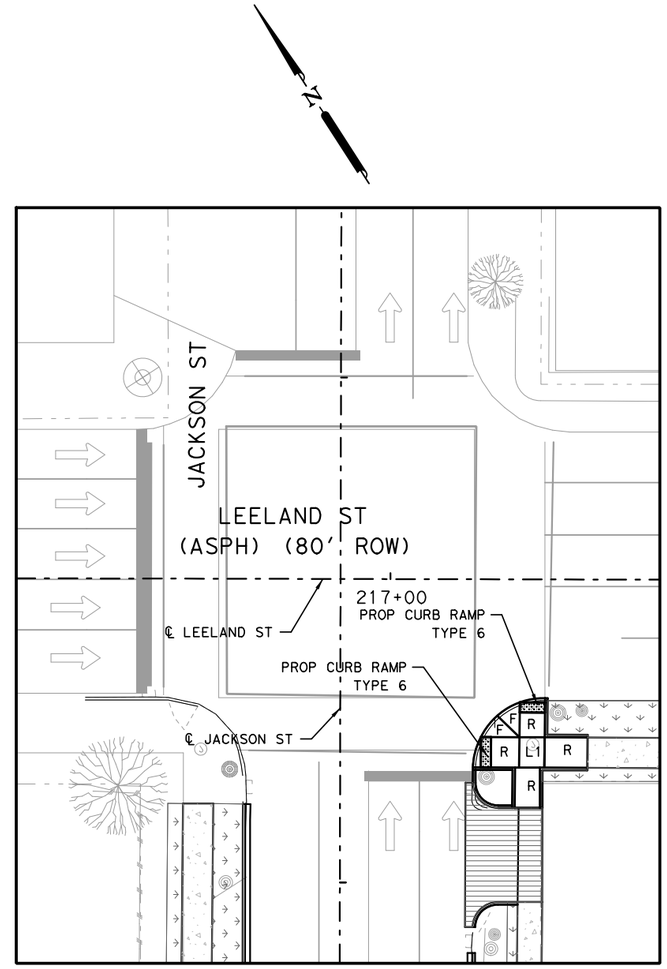


INTERSECTION LAYOUT
LEELAND ST AT SAN JACINTO ST



INTERSECTION LAYOUT
LEELAND ST AT JACKSON ST

LEGEND

R	RAMP
L	LANDING
L1	LANDING COMMON
F	FLARE
T	TRANSITION
⇨	TRAFFIC FLOW

0 15 30
HORIZ: SCALE IN FEET

3/1/2023

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Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

INTERSECTION LAYOUT
LEELAND ST AT SAN JACINTO & LEELAND ST AT JACKSON ST

SCALE: 1"=15'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	92

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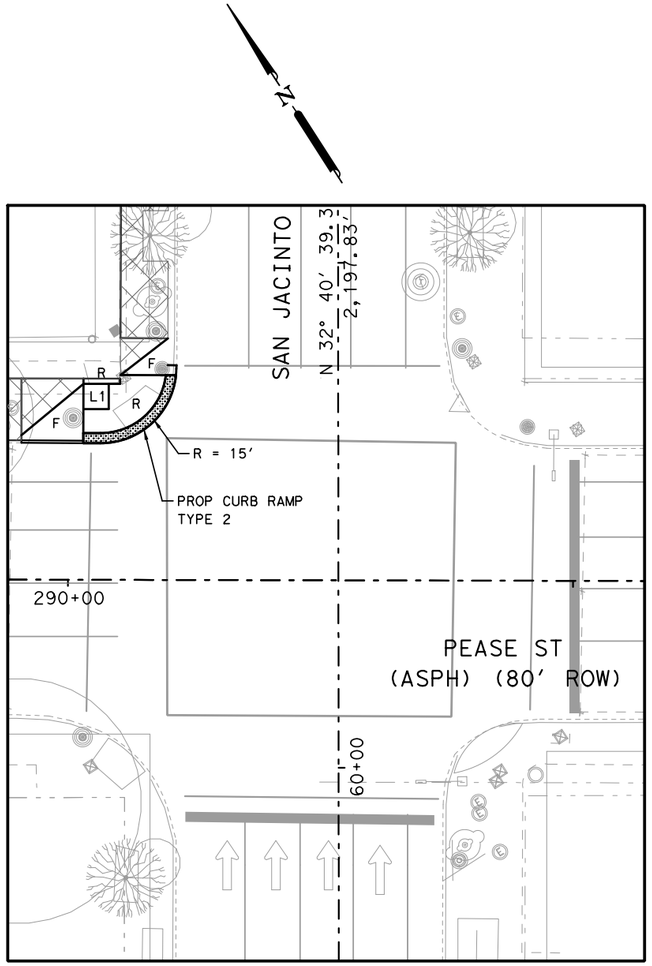
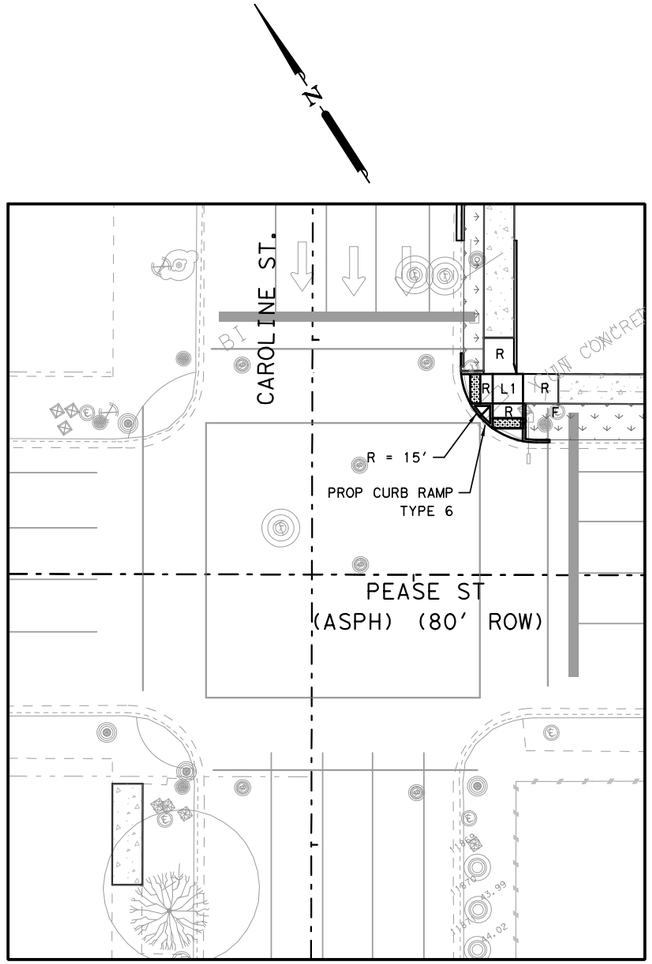


INTERSECTION LAYOUT
PEASE ST AT SAN JACINTO ST



INTERSECTION LAYOUT
PEASE ST AT CAROLINE ST

LEGEND

R	RAMP
L	LANDING
L1	LANDING COMMON
F	FLARE
T	TRANSITION
⇨	TRAFFIC FLOW

0 15 30
HORIZ: SCALE IN FEET

3/1/2023

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Texas Department of Transportation
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DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
INTERSECTION LAYOUT
PEASE ST AT SAN JACINTO & PEASE ST AT CAROLINE ST

SCALE: 1"=15'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	93

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LEGEND

R	RAMP
L	LANDING
L1	LANDING COMMON
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T	TRANSITION
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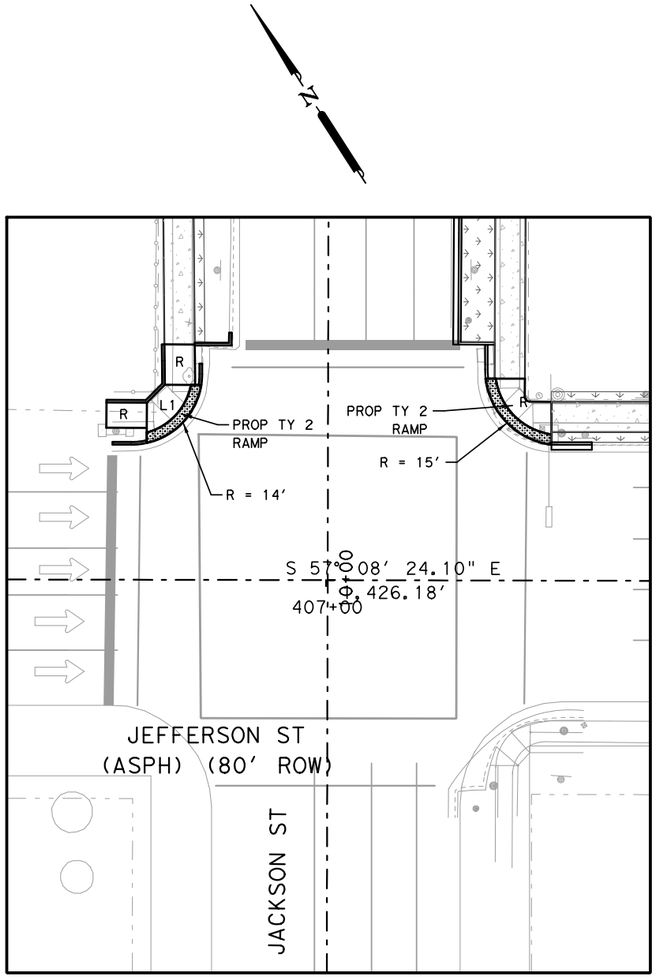

INTERSECTION LAYOUT
JEFFERSON ST AT JACKSON ST

0 15 30
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
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DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
INTERSECTION LAYOUT
JEFFERSON ST AT JACKSON ST

SCALE: 1"=15'

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CHK DWG: N/A	HOU	HARRIS	0912	72	390	94

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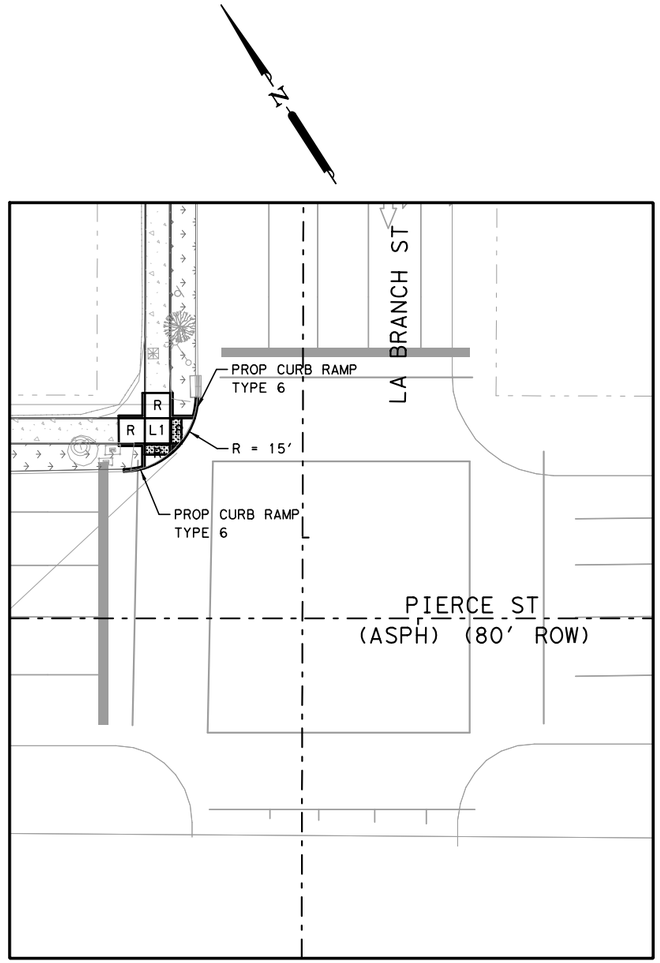

INTERSECTION LAYOUT
PIERCE ST AT LA BRANCH ST

LEGEND

R	RAMP
L	LANDING
L1	LANDING COMMON
F	FLARE
T	TRANSITION
⇨	TRAFFIC FLOW

0 15 30
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DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
INTERSECTION LAYOUT
PIERCE ST AT LA BRANCH ST

SCALE: 1"=15'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	95

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SHEET NO.	DRWY NO.	BASELINE	DRIWAY STATION	OFFSET		CURB RADIUS		WIDTH	GUTTER TO ROW	GUTTER ELEV	ROW ELEV	SIDEWALK ELEV	GUTTER TO SW	DRIVEWAY APRON SLOPE (S1)	SIDEWALK WIDTH (L2)	DRIVEWAY SLOPE (S2)	SIDEWALK TO ROW (L3)	DRIVEWAY SLOPE (S3)	COMMENTS
					LT / RT	LT	RT	FT	FT	FT	FT	FT	FT	%	FT	%	FT	%	
BELL STREET																			
55	1	BELL ST	104+48	27.8	LT	5	5	23	12.0	43.66	44.18	44.10	3.2	13.8%	8.7	0.9%	0.0	0.0%	MODIFY DRIVEWAY
55	2	BELL ST	104+90	23.8	RT			20							6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
55	3	BELL ST	105+41	28.0	LT	5	5	26	13.3	44.02	44.80	44.67	5.2	12.5%	8.2	1.6%	0.0	0.0%	MODIFY DRIVEWAY
LEELAND STREET																			
57	1	LEELAND ST	201+74	22.7	RT	5	5	24	11.9	43.41	44.17	44.16	6.0	12.5%	6.0	0.2%	0.0	0.0%	MODIFY DRIVEWAY
58	2	LEELAND ST	204+99	27.2	RT			27	9.5						6.0	2.0%	6.0	0.0%	REMOVE DRIVEWAY
58	3	LEELAND ST	205+49	26.9	RT			32	10.0						6.0	2.0%	0.0	0.0%	REMOVE DRIVEWAY
59	4	LEELAND ST	217+97	21.5	RT	5	5	50	16.0	43.57	44.00	43.85	8.0	3.5%	6.0	1.8%	2.2	-6.8%	MODIFY DRIVEWAY
59	5	LEELAND ST	215+59	21.6	RT	5	5	40	16.0	43.50	45.06	44.95	8.0	18.1%	6.0	1.3%	2.2	-5.0%	MODIFY DRIVEWAY
59	6	LEELAND ST	218+97	21.7	RT	5	5	15	16.0	43.83	44.06	43.92	7.8	1.2%	6.0	1.7%	2.2	-6.4%	MODIFY DRIVEWAY
PEASE STREET																			
60	1	PEASE ST	288+38	27.0	LT			34							15.0	2.0%			EXIST DRIVEWAY TO REMAIN
60	2	PEASE ST	288+79	25.3	RT	5	5	25	14.7	43.07	44.25	44.11	5.9	17.6%	6.0	1.5%	3.7	-3.8%	MODIFY DRIVEWAY
60	3	PEASE ST	288+99	25.8	LT	3	3	15	17.0	43.36	44.07	43.77	6.8	6.0%	15.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
60	4	PEASE ST	289+23	25.8	LT	3	3	20	17.0	43.60	43.89	43.60	6.8	0.0%	15.0	1.9%	0.0	0.0%	MODIFY DRIVEWAY
61	5	PEASE ST	295+28	24.9	LT	5	5	12	15.0	43.70	44.20	44.08	9.0	4.2%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
61	6	PEASE ST	295+85	25.0	LT	5	5	20	16.0	43.11	43.63	43.31	9.9	2.0%	6.0	5.3%	0.0	0.0%	MODIFY DRIVEWAY
62	7	PEASE ST	311+51	27.4	RT			10							6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
62	8	PEASE ST	311+96	27.2	RT			11							6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
JEFFERSON STREET																			
63	1	JEFFERSON ST	401+77	23.8	LT	5	5	25	7.7	42.97	43.12	43.12	0.5	-1.9%	6.0	1.9%	1.0	0.0%	MODIFY DRIVEWAY
63	2	JEFFERSON ST	402+31	26.0	LT			18							6.0	2.0%			CLOSED DRIVEWAY
64	3	JEFFERSON ST	408+13	25.7	LT	5	5	28	10.3	43.16	43.73	43.58	3.0	14.0%	6.0	2.0%	1.5	-10.0%	MODIFY DRIVEWAY
64	4	JEFFERSON ST	408+51	26.8	LT			11							6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
64	5	JEFFERSON ST	409+00	26.7	LT			12							6.0	2.0%			EXIST DRIVEWAY TO REMAIN
65	6	JEFFERSON ST	411+45	28.7	RT	3	3	30	7.6	42.10	42.17	42.20	2.4	4.2%	6.0	-0.5%	0.0	0.0%	MODIFY DRIVEWAY
65	7	JEFFERSON ST	412+31	26.9	LT	5	5	24.6	13.8	42.81	43.48	43.60	6.6	12.0%	6.0	-2.0%	0.0	0.0%	MODIFY DRIVEWAY
ST. JOSEPH STREET																			
66	1	ST JOSEPH ST	499+20	27.7	RT	5	5	16.7	10.0	43.00	43.85	43.73	4.0	18.2%	6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
67	2	ST JOSEPH ST	502+83	26.8	LT	12	12	36	11.6						6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
CAROLINE STREET																			
75	1	CAROLINE ST	8+55	29.4	RT	5	5	20	10.7	43.20	44.03	43.91	4.7	15.1%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
75	2	CAROLINE ST	9+51	22.7	LT	10	10	24	17.5	43.27	44.38	44.17	7.0	12.9%	6.0	2.0%	4.6	-4.6%	MODIFY DRIVEWAY
75	3	CAROLINE ST	9+58	29.2	RT	5	5	24	10.7	43.27	44.26	44.14	4.7	18.5%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
75	4	CAROLINE ST	10+12	22.5	LT	10	10	24	7.4	43.05	43.83	43.64	9.7	6.1%	6.0	2.0%	3.6	-5.3%	MODIFY DRIVEWAY
75	5	CAROLINE ST	10+20	29.4	RT	5	5	24	12.0	43.13	44.23	44.11	5.9	16.5%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
76	6	CAROLINE ST	13+53	22.6	LT			41	15.8						6.0	0.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
77	7	CAROLINE ST	15+76	28.0	RT	5	5	34	12.8	43.74	43.98	43.86	4.8	2.5%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
LA BRANCH STREET																			
80	1	LA BRANCH ST	91+24	25.5	LT	5	5	24	10.6	42.44	43.62	43.50	4.0	26.5%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
80	2	LA BRANCH ST	91+55	27.0	RT	5	5	20	10.0	42.45	43.62	43.50	4.6	22.8%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
JACKSON STREET																			
82	1	JACKSON ST	4+16	23.9	RT	5	5	20	13.7	43.00	43.67	43.55	8.0	6.9%	6.0		0.0	0.0%	MODIFY DRIVEWAY
82	2	JACKSON ST	4+19	20.8	LT			21	13.0						6.0	2.0%	0.0		EXIST DRIVEWAY TO REMAIN
82	3	JACKSON ST	5+55	24.6	RT	5	5	16	13.0	42.66	43.91	43.79	7	16.1%	6.0	2.0%	0.0	0.0%	MODIFY DRIVEWAY
84	4	JACKSON ST	11+07	25.8	RT	4	4	24							6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
84	5	JACKSON ST	11+10	18.9	LT	10	10	24	14.00	43.36	44.42	44.3	8.0	11.8%	6.0	2.0%	0.0	0.0%	EXIST DRIVEWAY TO REMAIN
84	6	JACKSON ST	11+47	18.9	LT	2	7	14	14.0	42.85	44.43	43.75	6.8	13.2	6.0	2.0%	0.0		EXIST DRIVEWAY TO REMAIN
HAMILTON STREET																			
86	1	HAMILTON ST	41+93	17.9	LT			38	27.9	43.28	44.12	44.16	7.1	12.4	5.0	2.0%	15.8	0.3%	
86	2	HAMILTON ST	42+61	17.9	LT			35	27.9	43.53	44.48	44.50	7.1	13.7	5.0	1.0%	15.8	0.1%	
86	3	HAMILTON ST	43+43	18.0	LT			42	27.9	43.84	44.10	44.27	9.7	4.4	5.0	2.0%	15.8	1.1%	
87	4	HAMILTON ST	48+19	25.3	LT			25	28.9	44.60	44.97	45.19	8.5	6.9	6.0	0.8%	14.4	1.5%	

3/1/2023

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Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

DRIVEWAY SUMMARY

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	96

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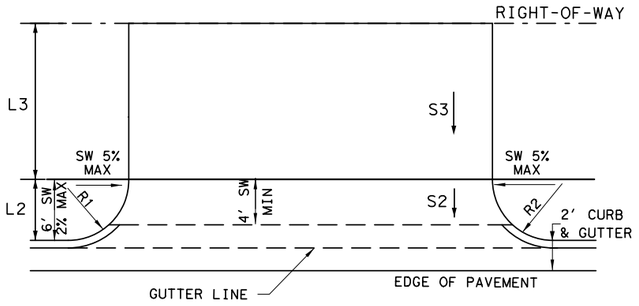
NOTES:

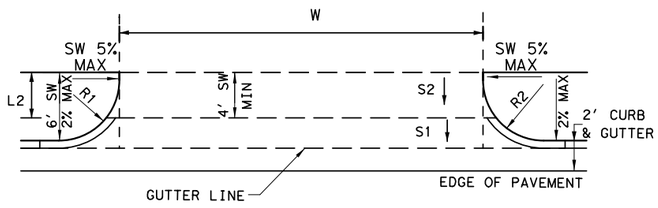
1. ALL BEARINGS AND COORDINATES ARE BASED ON THE TEXAS COORDINATE SYSTEM; SOUTH CENTRAL ZONE; NORTH AMERICAN DATUM OF 1983; 1993 ADJUSTMENT. ALL DISTANCES AND COORDINATES SHOWN ARE SURFACE AND MAY BE CONVERTED TO GRID BY DIVIDING BY A COMBINED ADJUSTMENT FACTOR OF 1.00013.

2. VERTICAL CONTROL WAS ESTABLISHED USING THREE WIRE DIGITAL DIFFERENTIAL LEVEL LOOPS. VERTICAL CONTROL IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). VERTICAL CONTROL WAS BASED ON NATIONAL GEODETIC SURVEY BENCHMARK ****** ELEVATION = **.**'.

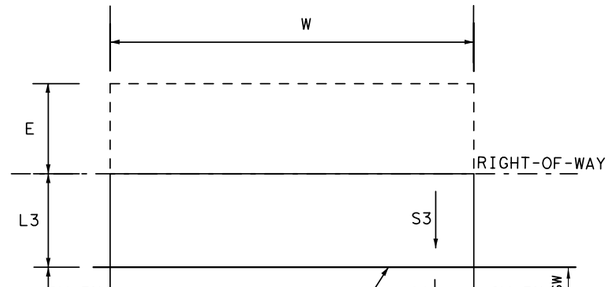
3. HORIZONTAL CONTROL WAS ESTABLISHED USING REDUNDANT TxDOT GPS RTN OBSERVATIONS METHODS AND ADJUSTED TO THE EXISTING VALUES OF *-** AND *-**. HORIZONTAL CONTROL IS RELATIVE TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83)1993 ADJUSTMENT.



PLAN OF PROPOSED DRIVEWAY
NTS



PLAN OF EXISTING DRIVEWAY
NTS



PLAN OF PROPOSED DRIVEWAY
WITH OFFSET SIDEWALK
NTS

0 20 40
HORIZ: SCALE IN FEET

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

DRIVEWAY DETAILS

SCALE: NTS20'

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	97

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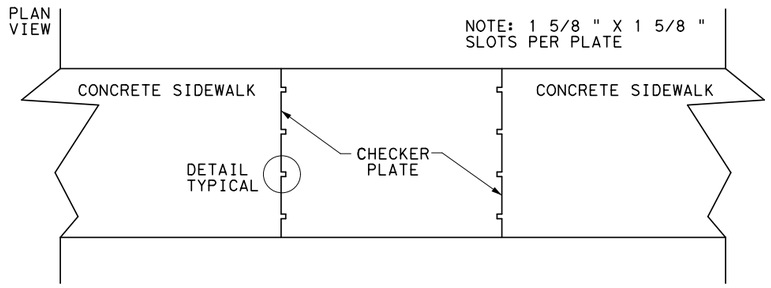
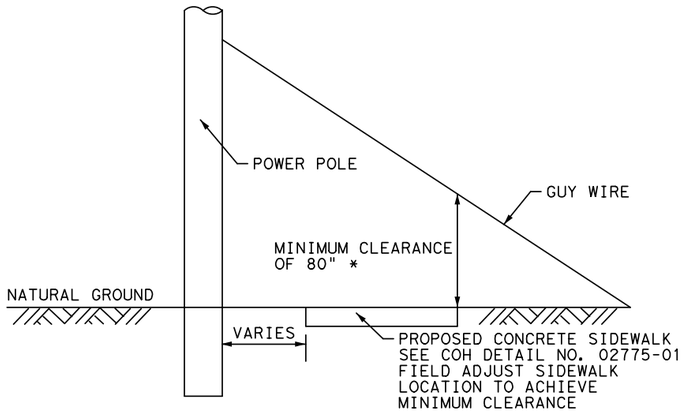
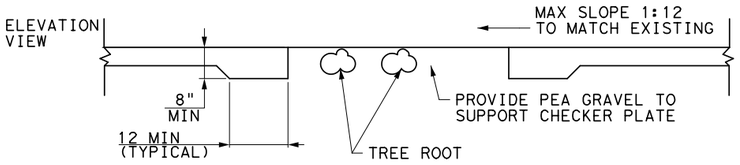
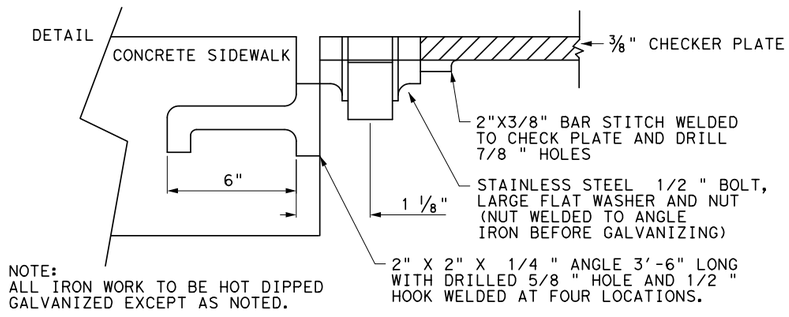


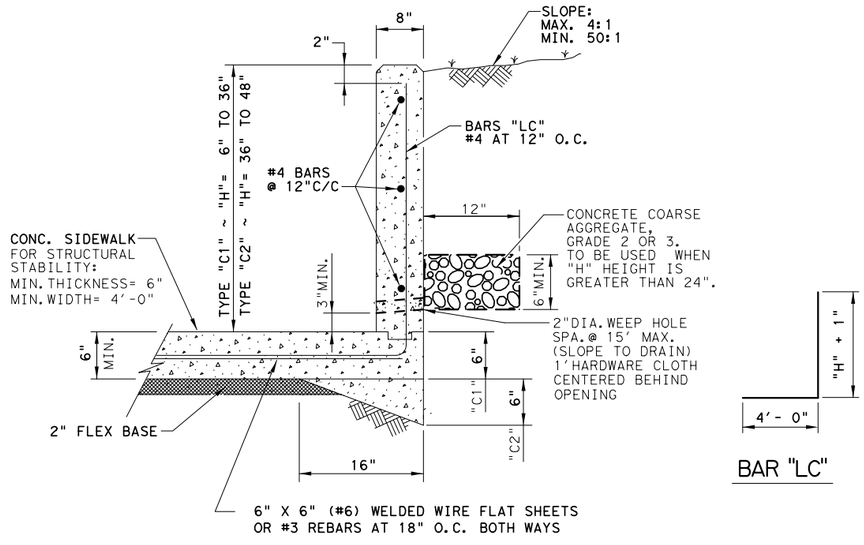


DETAIL NO. 2
N. T. S.
TYPICAL PROPOSED SIDEWALK LOCATION CROSSING UNDER A POWER POLE GUY WIRE





DETAIL NO. 1
N. T. S.
CHECKER PLATE TREE ROOT PROTECTION SIDEWALK



DETAIL NO. 3
N. T. S.
TYPE "C1" & "C2" CURB

BAR "LC"

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
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10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

MISCELLANEOUS CONSTRUCTION DETAILS

SHEET 1 OF 3

DGN: UAR	FED. RD. DIV. RD.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG:	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG:	HOU	HARRIS	0912	72	390	98

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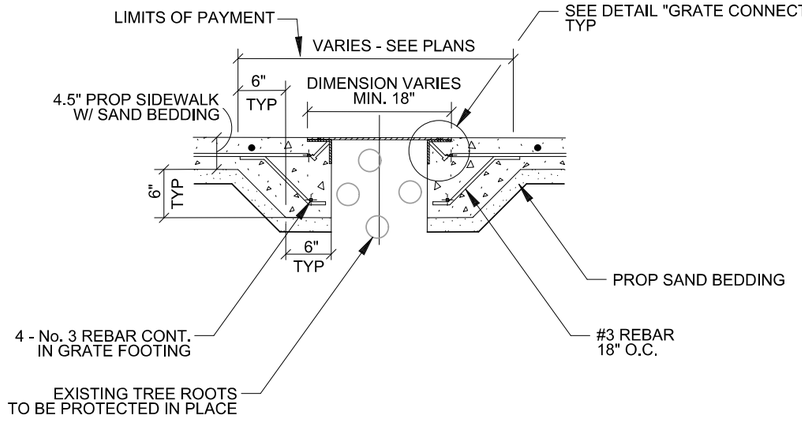
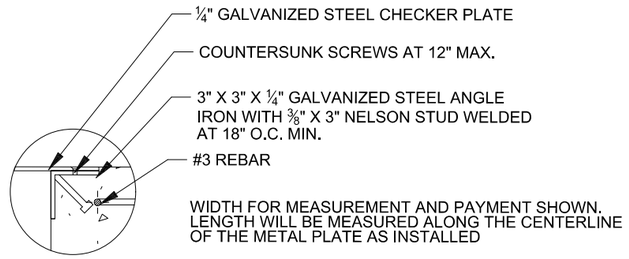


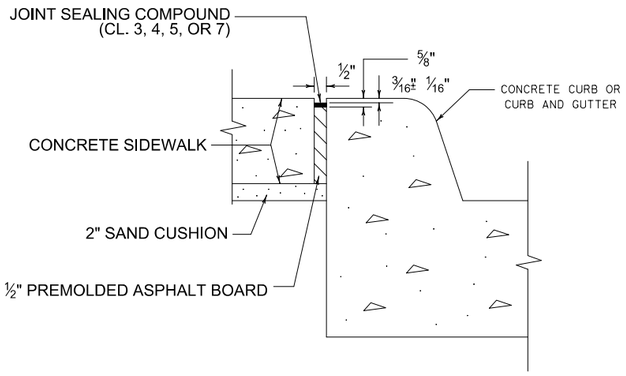
PLATE COVERED TREE ROOT BRIDGE

NTS



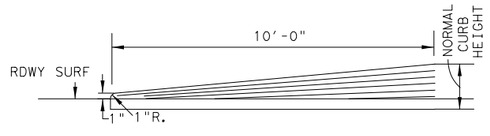
GRATE CONNECTION

NTS

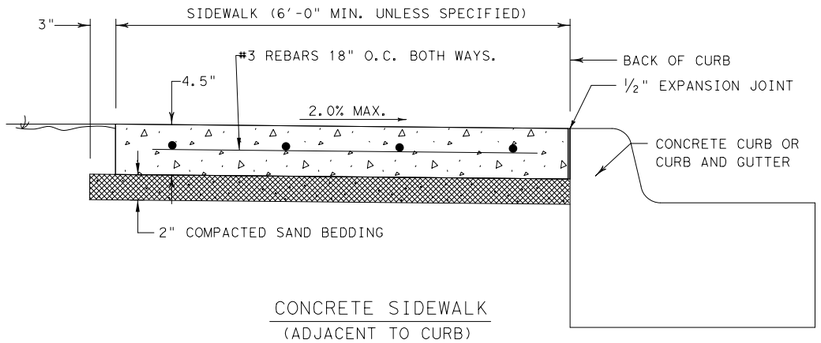


½" EXPANSION JOINT

(SIDEWALK ADJACENT TO CURB) NTS



TRANSITION FOR CONCRETE CURB ENDS

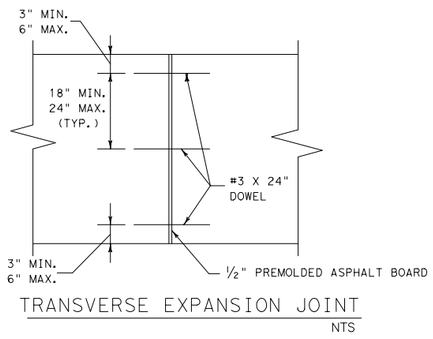


CONCRETE SIDEWALK

(ADJACENT TO CURB)

CONCRETE SIDEWALK DETAIL

NTS



TRANSVERSE EXPANSION JOINT

NTS

SEE PLAN SHEETS FOR LOCATIONS OF SIDEWALKS AND RETAINING WALLS.

LONGITUDINAL SLOPE OF SIDEWALKS SHALL NOT EXCEED 5% EXCEPT IN CASES WHERE THE ADJACENT ROADWAY SLOPE EXCEEDS 5%. IF ROADWAY SLOPE EXCEEDS 5%, LONGITUDINAL SLOPE OF SIDEWALK MAY MATCH THAT OF ROADWAY.

IF SIDEWALK WIDTH IS LESS THAN 5', PROVIDE 5' x 5' PASSING AREAS AT INTERVALS NOT TO EXCEED 200' SPACING.

SURFACE TREATMENT OF RETAINING WALL FACE DETAILED ELSEWHERE IN THE PLANS.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

MISCELLANEOUS CONSTRUCTION DETAILS

SHEET 2 OF 3

DGN: UAR	FED. RD. DIV. RD.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG:	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG:	HOU	HARRIS	0912	72	390	99

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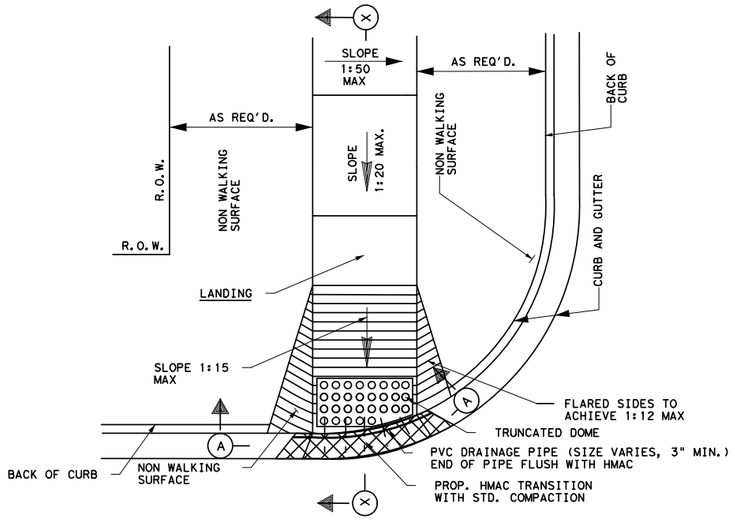
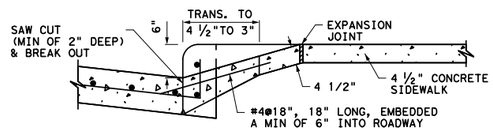


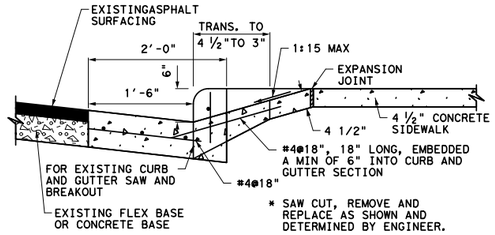
TRANSITION DETAIL
STREETS WITH CURB AND GUTTER
AND EXCESSIVE ASPHALT OVERLAY

TRANSITION DETAIL
STREETS WITH CURB AND GUTTER
AND EXCESSIVE ASPHALT OVERLAY

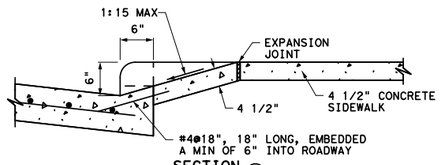
DETAIL NO. 12
N. T. S.



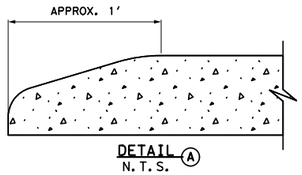
SECTION X
EXISTING CONCRETE PAVEMENT CONSTRUCTION
N. T. S.



SECTION X
NEW & EXISTING CURB & GUTTER CONSTRUCTION
N. T. S.



SECTION X
NEW CONCRETE PAVEMENT CONSTRUCTION
N. T. S.



DETAIL A
N. T. S.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
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REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
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Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

MISCELLANEOUS CONSTRUCTION DETAILS

SHEET 3 OF 3

DGN: SL	FED. RD. DIV. RD.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: MAS	5	TEXAS	F 2022(720)			VARIES
DWG:	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG:	HOU	HARRIS	0912	72	390	100

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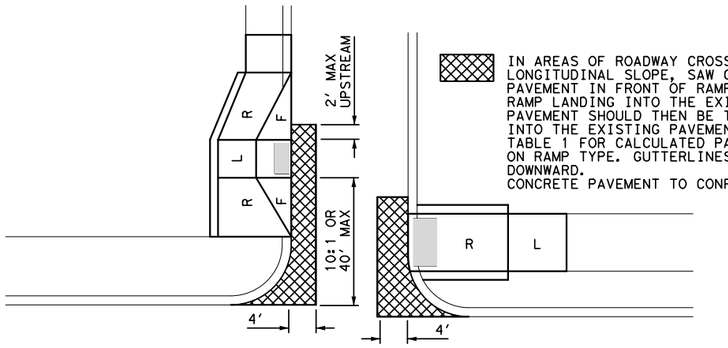
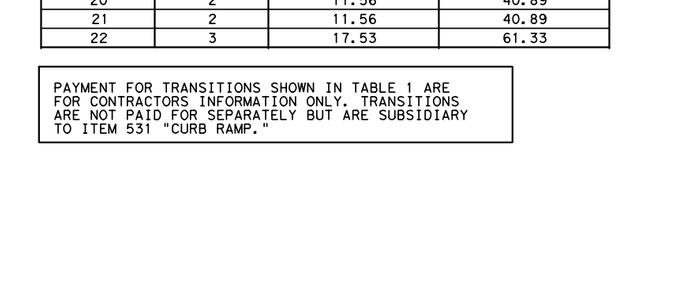
CONCRETE ROADWAY OR CURB AND GUTTER SECTION



IN AREAS OF ROADWAY CROSS SLOPES EXCEEDING 2% LONGITUDINAL SLOPE, SAW CUT AND EXCAVATE 4' OF PAVEMENT IN FRONT OF RAMP AND TRANSITION THE RAMP LANDING INTO THE EXISTING PAVEMENT. THE PAVEMENT SHOULD THEN BE TRANSITIONED HORIZONTALLY INTO THE EXISTING PAVEMENT AT 10:1. PLEASE SEE TABLE 1 FOR CALCULATED PAYMENT QTY'S FOR PAVEMENT BASED ON RAMP TYPE. GUTTERLINES SHOULD NOT BE ADJUSTED DOWNWARD.
CONCRETE PAVEMENT TO CONFORM TO ITEM 360

ASPHALT/SEALCOAT ROADWAY



* SAW CUT (NSPI)

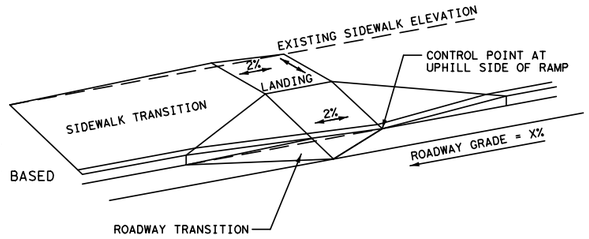
IN AREAS OF ROADWAY CROSS SLOPES EXCEEDING 2% LONGITUDINAL SLOPE, EXCAVATE 4' OF PAVEMENT IN FRONT OF RAMP AND TRANSITION THE RAMP LANDING INTO THE EXISTING PAVEMENT. THE PAVEMENT SHOULD THEN BE TRANSITIONED HORIZONTALLY INTO THE EXISTING PAVEMENT AT 10:1. PLEASE SEE TABLE 1 FOR CALCULATED PAYMENT QTY'S FOR PAVEMENT BASED ON RAMP TYPE. GUTTERLINES SHOULD NOT BE ADJUSTED DOWNWARD.
ASPHALT TO CONFORM TO ITEM 340

DO NOT TAPER TO ZERO MINUMUM 1 1/2" DEPTH @ TIE-IN

TABLE 1			
RAMP TYPE	NUMBER OF RAMPS	ASPHALT TAPER QTY	CONC TAPER QTY
	EA	MAX (SY)	MAX (SY)
1	1	5.78	20.44
2	1	5.78	20.44
3	1	5.78	20.44
4	1	5.78	20.44
5	1	5.78	20.44
6	1	5.78	20.44
7	1	5.78	20.44
8	1	5.78	20.44
9	1	5.78	20.44
10	1	5.78	20.44
11	1	5.78	20.44
20	2	11.56	40.89
21	2	11.56	40.89
22	3	17.53	61.33

PAYMENT FOR TRANSITIONS SHOWN IN TABLE 1 ARE FOR CONTRACTORS INFORMATION ONLY. TRANSITIONS ARE NOT PAID FOR SEPARATELY BUT ARE SUBSIDIARY TO ITEM 531 "CURB RAMP."

ROADWAY TRANSITION



CURB ELEVATION

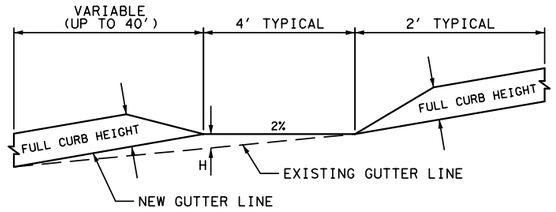
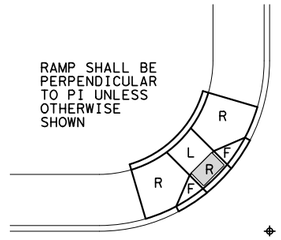
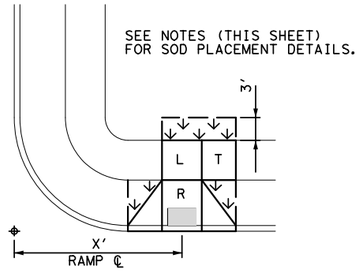
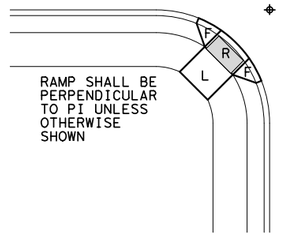


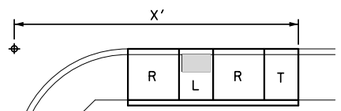
TABLE 2		
DIFFERENTIAL BETWEEN RAMP AND ROADWAY LONGITUDINAL SLOPE	H	
1%	0.04'	0.50"
2%	0.08'	1.00"
3%	0.12'	1.50"
4%	0.16'	2.00"
5%	0.20'	2.40"
6%	0.24'	2.90"

HORIZONTAL RAMP CONTROL









LEGEND

F = FLARE (10:1 OR LESS)

R = RAMP (CROSS SLOPE NOT TO EXCEED 2%; LONGITUDINAL NOT TO EXCEED 8.33% OR 12:1)

L = LANDING (SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION)

L1 = SHARED LANDING (SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION)

LS = LEVEL SIDEWALK (SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION) PAID AS SIDEWALK

T = TRANSITION (PAID FOR UNDER CONC SIDEWALKS)

X' = LENGTH MEASURED FROM PI POINT

℄ = PI POINT MEASURED FROM TANGENTIAL CURBLINE INTERSECTION

↓ = BLOCK SOD; PLACED 2' BEHIND CONSTRUCTION LIMITS NEIGHBORING ROW, PLACED FULL LIMITS BETWEEN BACK OF CURB AND CONSTRUCTION IF DIVORCED; OR AS SHOWN ON THE PLANS

(NSPI) = ITEM IS INCIDENTAL TO CURB RAMP/SIDEWALK CONSTRUCTION (NO SEPERATE PAY ITEM)

NOTES

1. FLARE (F), RAMP (R), AND LANDING (L), DIRECTLY IN CONTACT WITH THE CURB RAMP ARE PAID FOR UNDER ITEM 531 "CURB RAMPS"
2. LEVEL SIDEWALK (LS) AND RAMPS (R) NOT DIRECTLY IN CONTACT WITH THE CURB RAMP ARE PAID FOR UNDER ITEM 531 "SIDEWALK"

3/1/2023

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Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SPECIAL DETAILS

SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	101

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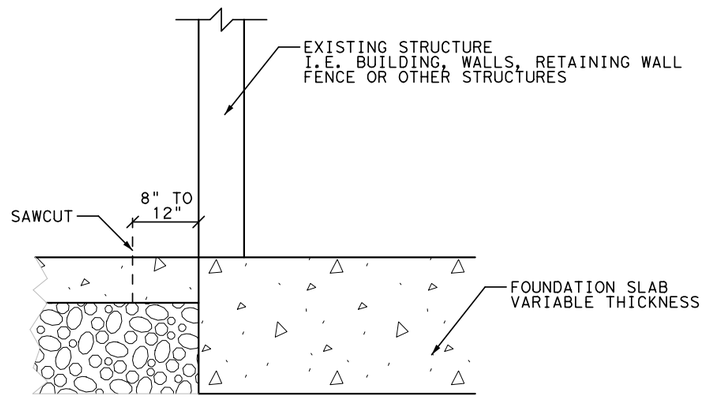
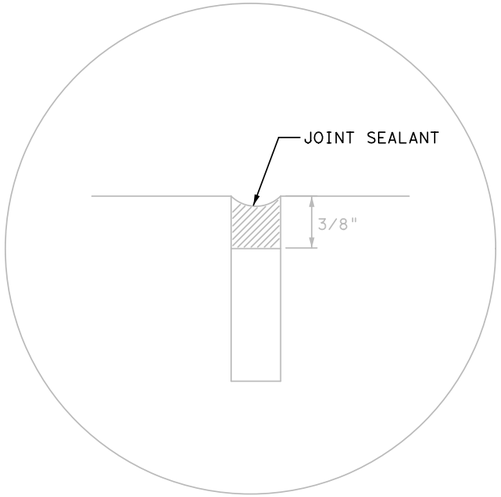
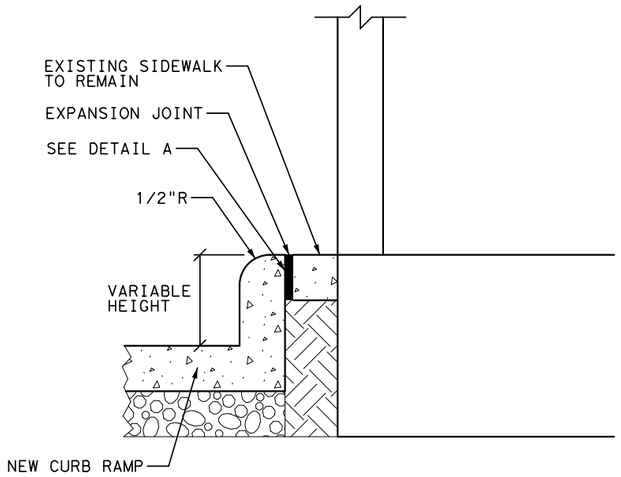


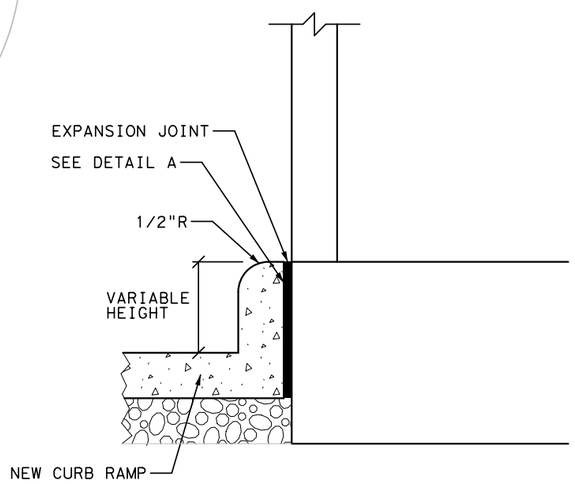
SAWCUT DETAIL
N.T.S.



DETAIL A



ADJACENT SIDEWALK
TO REMAIN DETAIL
N.T.S.



ADJACENT SIDEWALK
REMOVED DETAIL
N.T.S.

GENERAL PROTECTION NOTES FOR BUILDINGS AND HISTORIC STRUCTURES:

1. SAW CUT EXISTING SIDEWALK 8 TO 12 INCHES AWAY FROM PROTECTED BUILDING/STRUCTURE TO MINIMIZE POTENTIAL DAMAGE PRIOR TO DEMOLITION OF WALK.

2. CONSTRUCT NEW SIDEWALK NEXT TO SAW CUT EDGE WITH INSTALLATION OF EXPANSION JOINT IN BETWEEN. IF REMOVING THE EXISTING SIDEWALK ENTIRELY, THEN REMOVE BY HAND THE REMAINING 8 TO 12 INCHES NEXT TO THE EXISTING STRUCTURE AND/OR HISTORIC BUILDING. PLACE EXPANSION JOINT BETWEEN BUILDING AND NEW SIDEWALK.

2. CONTRACTOR IS RESPONSIBLE FOR PREVENTING DAMAGE TO ALL BUILDINGS AND STRUCTURES DURING THE ENTIRE CONSTRUCTION PROJECT. IF DIRECTED BY ENGINEER TO HAND REMOVE EXISTING PAVING ADJACENT TO HISTORIC STRUCTURES, PROTECT FOUNDATION, MATERIALS, ELEVATION AND ENTRYWAYS. DO NOT REMOVE EXISTING MATERIALS IF FACADE (BRICK/ STONE, ETC) UTILIZES THE MATERIALS TO BE REMOVED AS A FOOTING, FOUNDATION OR SUPPORT. IF THIS CONDITION IS OBSERVED, IMMEDIATELY CONTACT ENGINEER AND DO NOT EXCAVATE FURTHER. SEPARATE PAYMENT WILL NOT BE MADE FOR HAND REMOVAL.

3. REPAIR OR REPLACE IN KIND, AT CONTRACTORS EXPENSE, ANY DAMAGE TO HISTORIC OR NON-HISTORIC MATERIAL THAT RESULTS FROM AN ACT OF OMISSION ON THE PART OF OR ON BEHALF OF THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR LOCATING A REPLACEMENT SOURCE FOR HISTORIC AND NON-HISTORIC MATERIALS DAMAGED IN THE PROCESS OF CONSTRUCTION. INFORM TXDOT ENVIRONMENTAL AFFAIRS DIVISION (ENV) OF PROPOSED REPAIRS AND/OR DAMAGED AREAS IN ORDER TO FACILITATE CONSULTATION WITH TEXAS HISTORICAL COMMISSION. MATERIAL AND SOURCE SHALL BE APPROVED BY TXDOT ENV PRIOR TO REPLACEMENT.

4. PROTECT BUILDINGS AND STRUCTURE FROM CONCRETE SPLASH UTILIZING A MATERIAL APPROVED BY THE ENGINEER. ANY CONCRETE SPLASH AS A RESULT OF CONSTRUCTION ACTIVITIES MUST BE REMOVED FROM THE BUILDING OR STRUCTURE AT CONTRACTORS EXPENSE. NO PAYMENT WILL BE MADE FOR BUILDING PROTECTION.

5. REFER TO HISTORIC BUILDING PROTECTION NOTES, EPIC (ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS) SHEET FOR FURTHER DIRECTION INFORMATION.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS BUILDINGS AND STRUCTURES PROTECTION PLAN

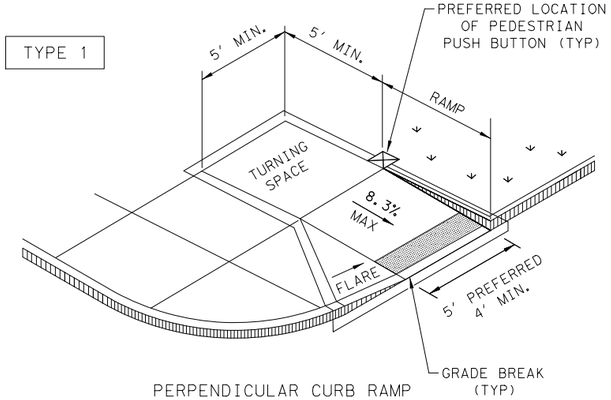
SCALE: NTS

DGN: MAS	FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CG	5	TEXAS	F 2022(720)			VARIES
DWG: N/A	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG: N/A	HOU	HARRIS	0912	72	390	102

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\STANDARDS\BUILDING PROTECTION SHEET.dgn
3/1/2023
10:34:06 PM

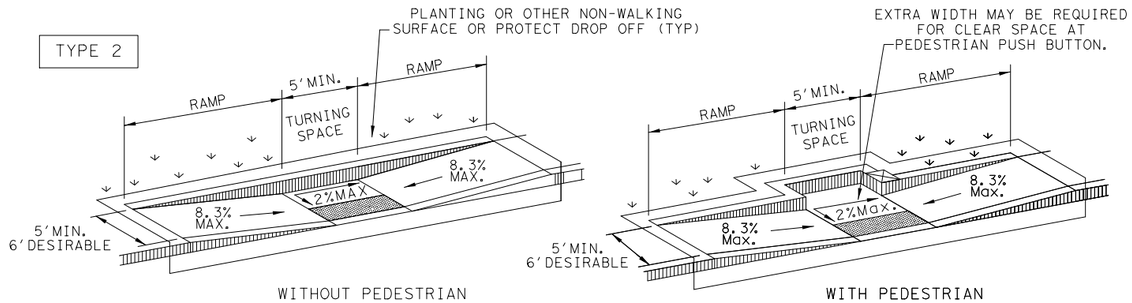
DATE:
FILE:

TYPE 1



PERPENDICULAR CURB RAMP

TYPE 2

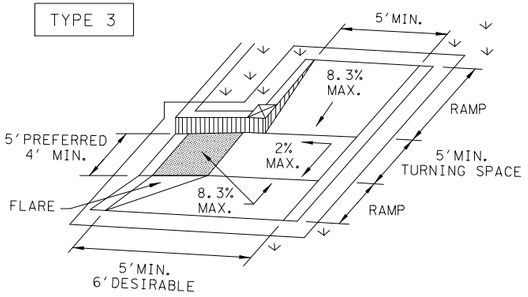


WITHOUT PEDESTRIAN PUSH BUTTON

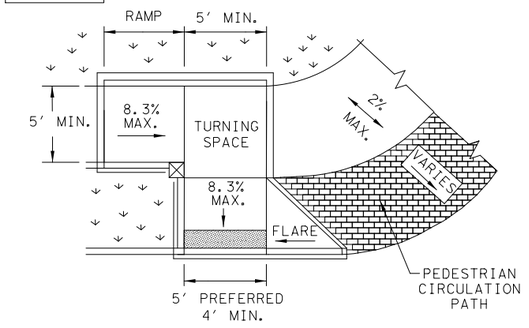
WITH PEDESTRIAN PUSH BUTTON

PARALLEL CURB RAMP

TYPE 3

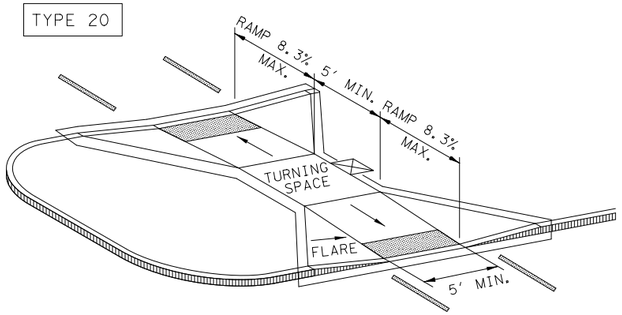


TYPE 6



COMBINATION CURB RAMPS

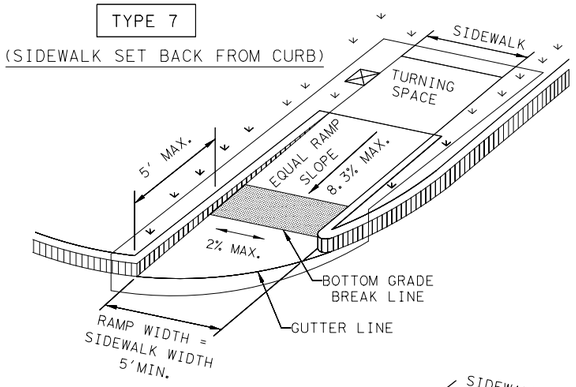
TYPE 20



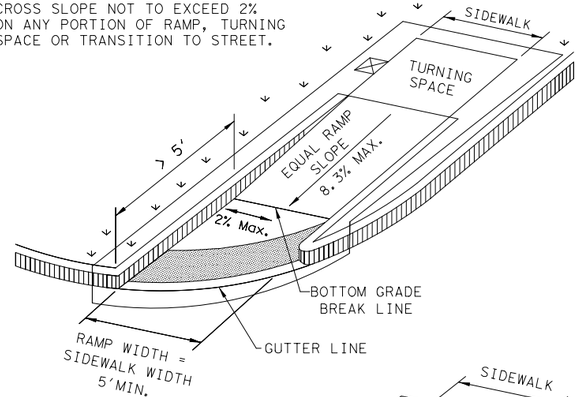
CURB RAMPS AT MEDIAN ISLANDS

TYPE 7

(SIDEWALK SET BACK FROM CURB)

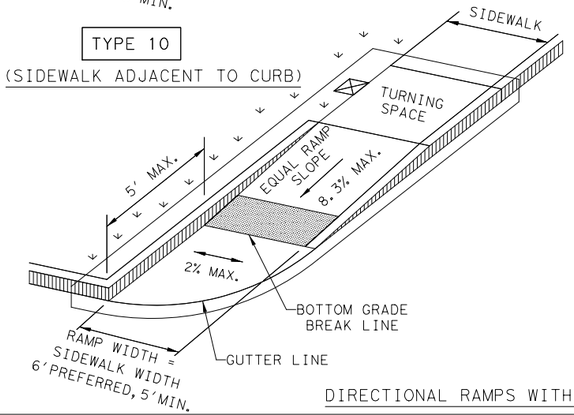


CROSS SLOPE NOT TO EXCEED 2% ON ANY PORTION OF RAMP, TURNING SPACE OR TRANSITION TO STREET.

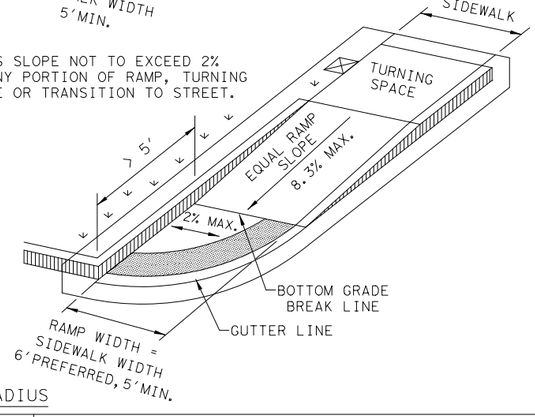


TYPE 10

(SIDEWALK ADJACENT TO CURB)

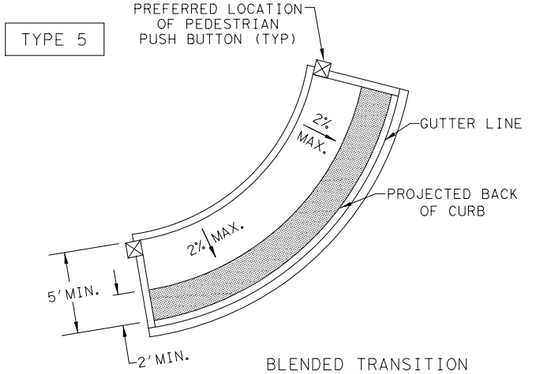


CROSS SLOPE NOT TO EXCEED 2% ON ANY PORTION OF RAMP, TURNING SPACE OR TRANSITION TO STREET.



DIRECTIONAL RAMPS WITHIN RADIUS

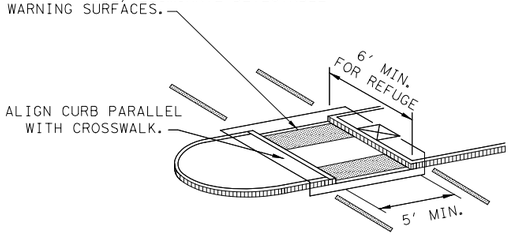
TYPE 5



BLENDED TRANSITION
(FLUSH LANDING)

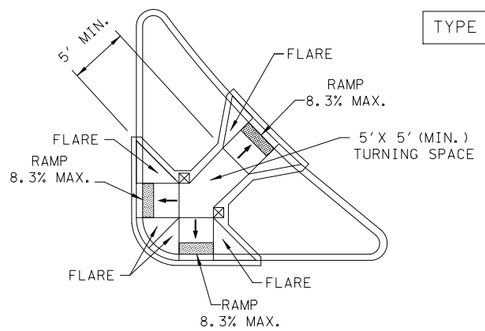
INSTALL DETECTABLE WARNING SURFACE AT EACH END OF THE CUT-THROUGH RAMP WITH A MINIMUM 2' USUAL SIDEWALK SURFACE BETWEEN. IF MEDIAN IS LESS THAN 6' WIDE, ELIMINATE DETECTABLE WARNING SURFACES.

TYPE 21

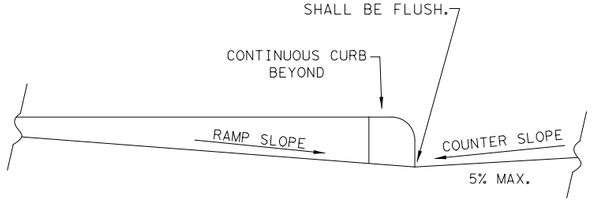


NOTE: CURB DETAILS ARE SHOWN ELSEWHERE IN THE PLANS.

TYPE 22



COMBINATION ISLAND RAMPS



TYPICAL SECTION OF PERPENDICULAR CURB RAMP AT CONNECTION TO ROADWAY

NOTES / LEGEND:

SEE GENERAL NOTES ON SHEET 2 OF 4 FOR MORE INFORMATION.

DENOTES PLANTING OR NON-WALKING SURFACE NOT PART OF PEDESTRIAN CIRCULATION PATH.

DETECTABLE WARNING SURFACE

DENOTES PREFERRED LOCATION OF PEDESTRIAN PUSH BUTTON IF APPLICABLE.

GUTTER LINE

GRADE BREAK

RAMP LIMITS OF PAYMENT

SHEET 1 OF 4

Texas Department of Transportation

Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

PED-18

FILE: ped18	DN: TxDOT		DW: VP	CK: KM	CK: PK & JG
© TxDOT: MARCH, 2002	CONT	SECT	JOB		HIGHWAY
REVISIONS	0912	72	390		VARIES
REVISED 08, 2005 REVISED 06, 2012 REVISED 01, 2018	DIST	COUNTY			SHEET NO.
	HOU	HARRIS			103

DATE:
FILE:

GENERAL NOTES

CURB RAMPS

1. Install a curb ramp or blended transition at each pedestrian street crossing.
2. All slopes shown are maximum allowable. Cross slopes of 1.5% and lesser running should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
3. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
4. The minimum sidewalk width is 5′. Where the sidewalk is adjacent to the back of curb, a 6′ sidewalk width is desirable. Where a 5′ sidewalk cannot be provided due to site constraints, sidewalk width may be reduced to 4′ for short distances. 5′x 5′ passing areas at intervals not to exceed 200′ are required.
5. Turning Spaces shall be 5′x 5′ minimum. Cross slope shall be maximum 2%.
6. Clear space at the bottom of curb ramps shall be a minimum of 4′x 4′ wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
7. Provide flared sides where the pedestrian circulation path crosses the curb ramp. Flared sides shall be sloped at 10% maximum, measured parallel to the curb. Returned curbs may be used only where pedestrians would not normally walk across the ramp, either because the adjacent surface is planted, substantially obstructed, or otherwise protected.
8. Additional information on curb ramp location, design, light reflective value and texture may be found in the latest draft of the Proposed Guidelines for Pedestrian Facilities in the Public Right of Way (PROWAG) as published by the U.S. Architectural and Transportation Barriers Compliance Board (Access Board).
9. To serve as a pedestrian refuge area, the median should be a minimum of 6′ wide, measured from back of curbs. Medians should be designed to provide accessible passage over or through them.
10. Small channelization islands, which do not provide a minimum 5′x 5′ landing at the top of curb ramps, shall be cut through level with the surface of the street.
11. Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, curb ramps shall align with theoretical crosswalks unless otherwise directed.
12. Provide curb ramps to connect the pedestrian access route at each pedestrian street crossing. Handrails are not required on curb ramps.
13. Curb ramps and landings shall be constructed and paid for in accordance with Item 531 "Sidewalks".
14. Place concrete at a minimum depth of 5" for ramps, flares and landings, unless otherwise directed.
15. Furnish and install No. 3 reinforcing steel bars at 18" o.c. both ways, unless otherwise directed.
16. Provide a smooth transition where the curb ramps connect to the street.
17. Curbs shown on sheet 1 within the limits of payment are considered part of the curb ramp for payment, whether it is concrete curb, gutter, or combined curb and gutter.
18. Existing features that comply with applicalble standards may remain in place unless otherwise shown on the plans.

DETECTABLE WARNING MATERIAL

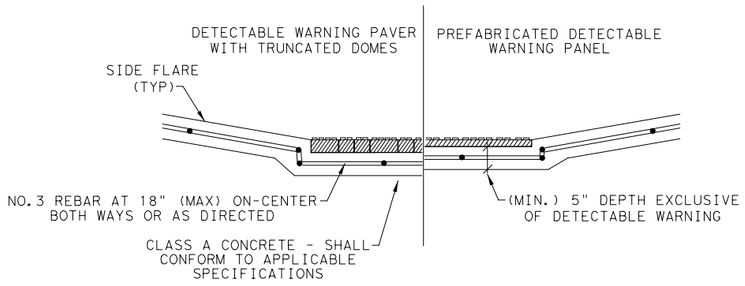
19. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with PROWAG. The surface must contrast visually with adjoining surfaces, including side flares. Furnish and install an approved cast-in-place dark brown or dark red detectable warning surface material adjacent to uncolored concrete, unless specified elsewhere in the plans.
20. Detectable Warning Materials must meet TxDOT Departmental Materials Specification DMS 4350 and be listed on the Material Producer List. Install products in accordance with manufacturer's specifications.
21. Detectable warning surfaces must be firm, stable and slip resistant.
22. Detectable warning surfaces shall be a minimum of 24 inches in depth in the direction of pedestrian travel, and extend the full width of the curb ramp or landing where the pedestrian access route enters the street.
23. Detectable warning surfaces shall be located so that the edge nearest the curb line is at the back of curb and neither end of that edge is greater than 5 feet from the back of curb. Detectable warning surfaces may be curved along the corner radius.
24. Shaded areas on Sheet 1 of 4 indicate the approximate location for the detectable warning surface for each curb ramp type.

DETECTABLE WARNING PAVERS (IF USED)

25. Furnish detectable warning paver units meeting all requirements of ASTM C-936, C-33. Lay in a two by two unit basket weave pattern or as directed.
26. Lay full-size units first followed by closure units consisting of at least 25 percent (25%) of a full unit. Cut detectable warning paver units using a power saw.

SIDEWALKS

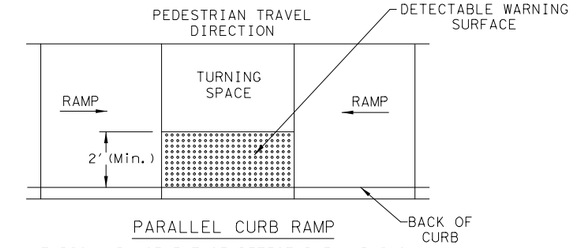
27. Provide clear ground space at operable parts, including pedestrian push buttons. Operable parts shall be placed within unobstructed reach range specified in PROWAG section R406.
28. Place traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items so as not to obstruct the pedestrian access route or clear ground space.
29. Street grades and cross slopes shall be as shown elsewhere in the plans.
30. Changes in level greater than 1/4 inch are not permitted.
31. The least possible grade should be used to maximize accessibility. The running slope of sidewalks and crosswalks within the public right of way may follow the grade of the parallel roadway. Where a continuous grade greater than five percent (5%) must be provided, handrails may be desirable to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions. If provided, handrails shall comply with PROWAG R409.
32. Handrail extensions shall not protrude into the usable landing area or into intersecting pedestrian routes.
33. Driveways and turnouts shall be constructed and paid for in accordance with Item "Intersections, Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".
34. Sidewalk details are shown elsewhere in the plans.



SECTION VIEW DETAIL

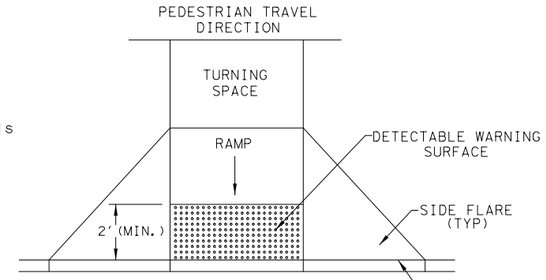
CURB RAMP AT DETECTIBLE WARNINGS

DETECTABLE WARNING SURFACE DETAILS



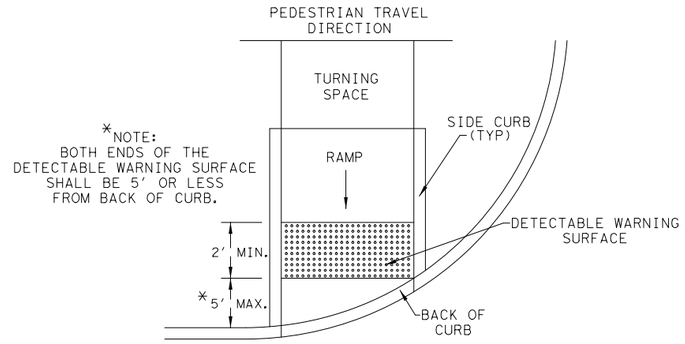
PARALLEL CURB RAMP

TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON LANDING AT STREET EDGE.



PERPENDICULAR CURB RAMP

TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN.



DIRECTIONAL CURB RAMP

TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE ON SLOPING RAMP RUN.

Texas Department of Transportation

Design Division Standard

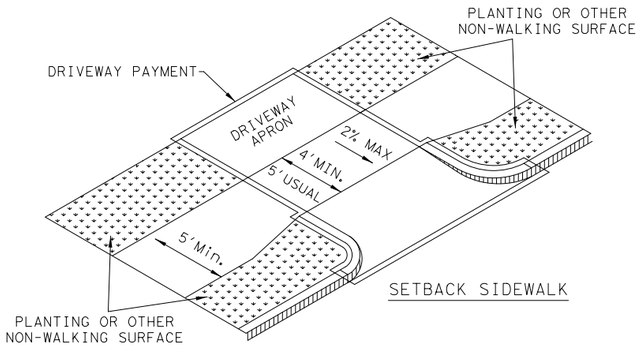
PEDESTRIAN FACILITIES CURB RAMPS

PED-18

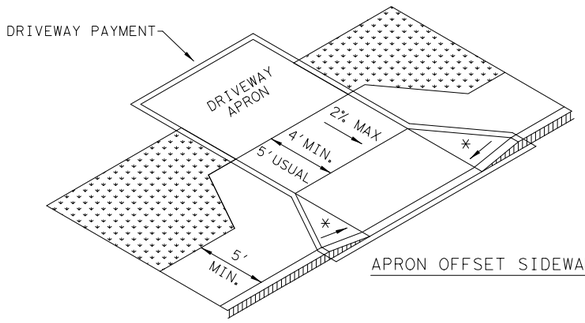
FILE: ped18	DN: TxDOT	DW: VP	CK: KM	CK: PK & JG
© TxDOT: MARCH, 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	0912	72	390	VARIES
REVISED 08,2005 REVISED 06,2012 REVISED 01,2018	DIST	COUNTY		SHEET NO.
	HOU	HARRIS		104

DATE:
FILE:

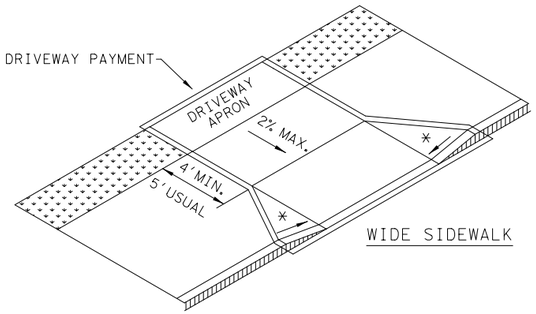
SIDEWALK TREATMENT AT DRIVEWAYS



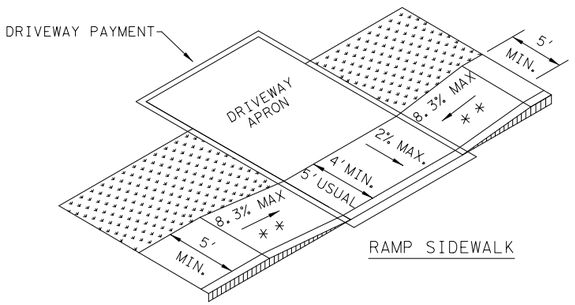
SETBACK SIDEWALK



APRON OFFSET SIDEWALK



WIDE SIDEWALK

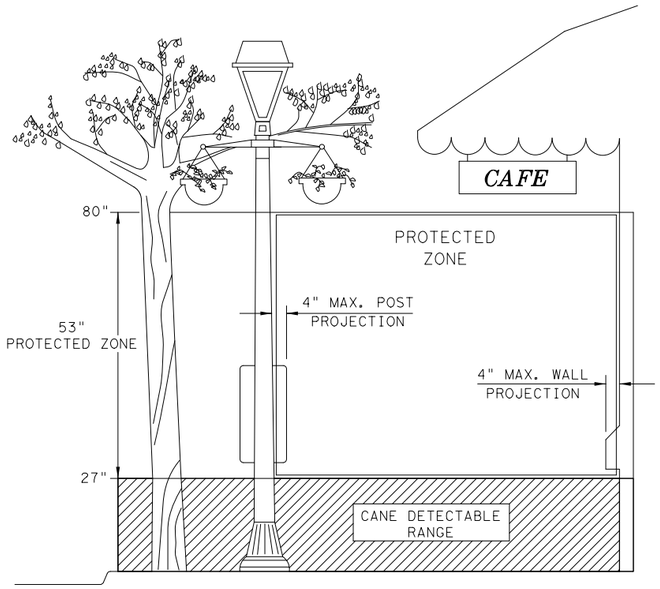


RAMP SIDEWALK

NOTES:

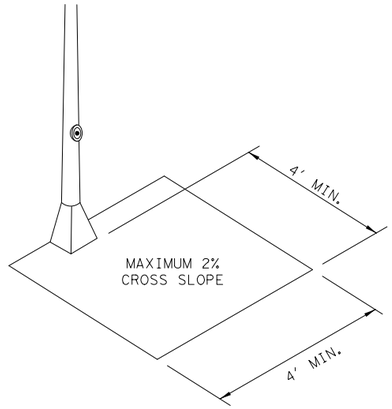
* WHERE DRIVEWAYS CROSS THE PEDESTRIAN ROUTE, SIDES SHALL BE FLARED AT 10% MAX SLOPE.

* * IF CURB HEIGHT IS GREATER THAN 6 INCHES, USE GRADE LESS THAN OR EQUAL TO 5%. HANDRAIL AND DETECTABLE WARNING ARE NOT REQUIRED.

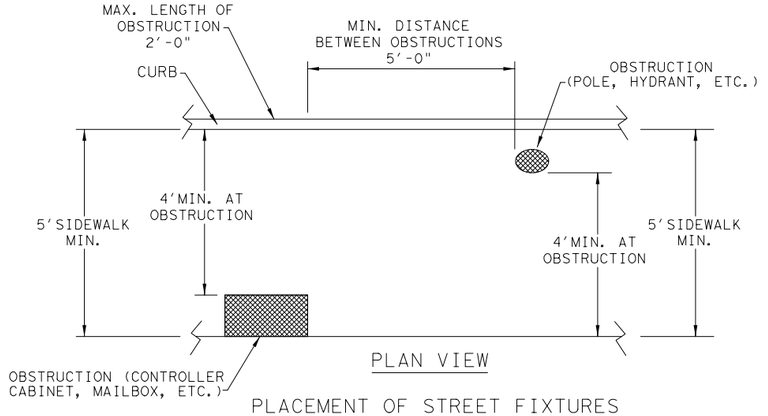


PROTECTED ZONE

NOTE: IN PEDESTRIAN CIRCULATION AREA, MAXIMUM 4" PROJECTION FOR POST OR WALL MOUNTED OBJECTS BETWEEN 27" AND 80" ABOVE THE SURFACE.



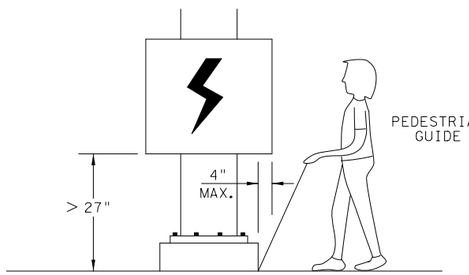
CLEAR SPACE ADJACENT TO PEDESTRIAN PUSH BUTTON



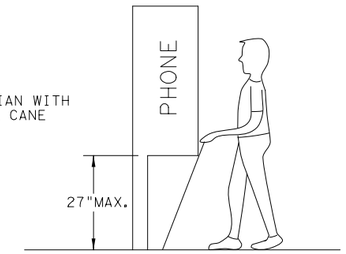
PLAN VIEW

PLACEMENT OF STREET FIXTURES

NOTE: ITEMS NOT INTENDED FOR PUBLIC USE. MINIMUM 4' X 4' CLEAR GROUND SPACE REQUIRED AT PUBLIC USE FIXTURES.



WHEN AN OBSTRUCTION OF A HEIGHT GREATER THAN 27" FROM THE SURFACE WOULD CREATE A PROTRUSION OF MORE THAN 4" INTO THE PEDESTRIAN CIRCULATION AREA, CONSTRUCT ADDITIONAL CURB OR FOUNDATION AT THE BOTTOM TO PROVIDE A MAXIMUM 4" OVERHANG.



PROTRUDING OBJECTS OF A HEIGHT ≤27" ARE DETECTABLE BY CANE AND DO NOT REQUIRE ADDITIONAL TREATMENT.

DETECTION BARRIER FOR VERTICAL CLEARANCE < 80"

Texas Department of Transportation

Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

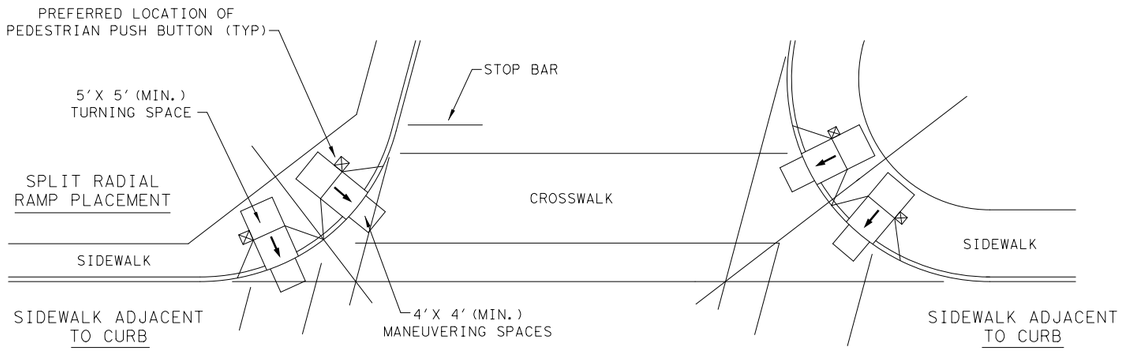
PED-18

FILE: ped18	DN: TxDOT		DW: VP	CK: KM	CK: PK & JG
© TxDOT: MARCH, 2002	CONT	SECT	JOB		HIGHWAY
REVISIONS	0912	72	390		VARIES
REVISED 08, 2005 REVISED 06, 2012 REVISED 01, 2018	DIST	COUNTY			SHEET NO.
	HOU	HARRIS			105

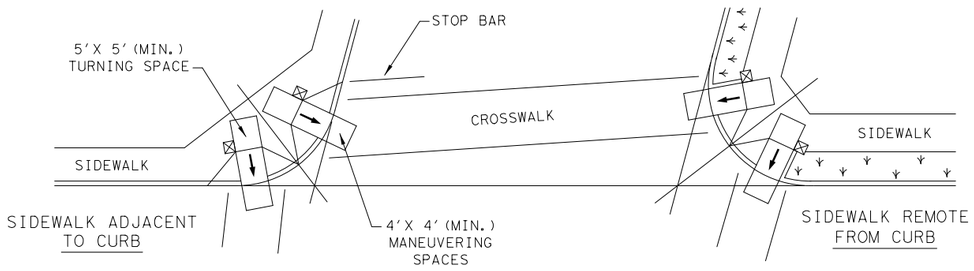
DATE:
FILE:

TYPICAL CROSSING LAYOUTS

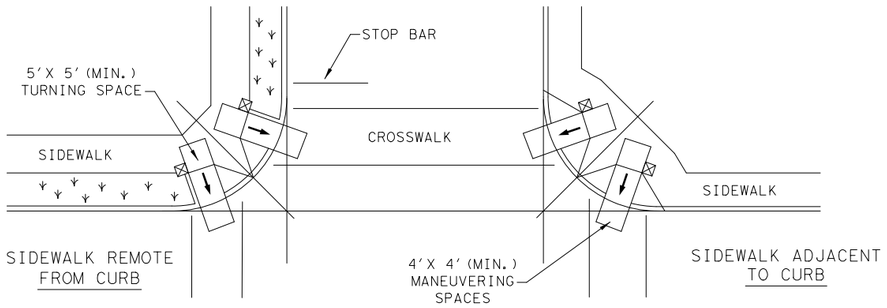
SEE SHEET 1 OF 4 FOR DETAILS AND DIMENSIONS



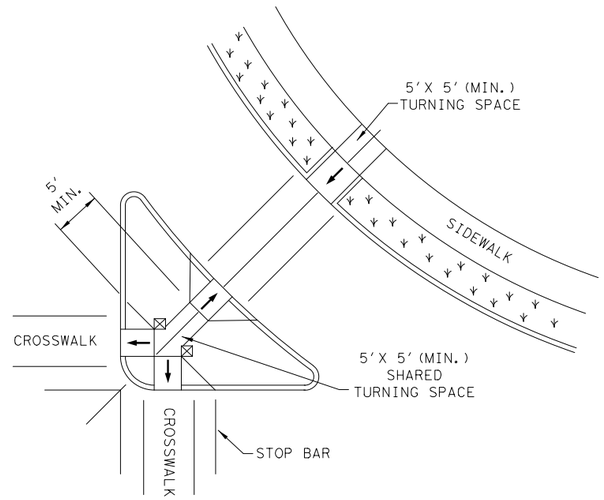
SKEWED INTERSECTION WITH "LARGE" RADIUS



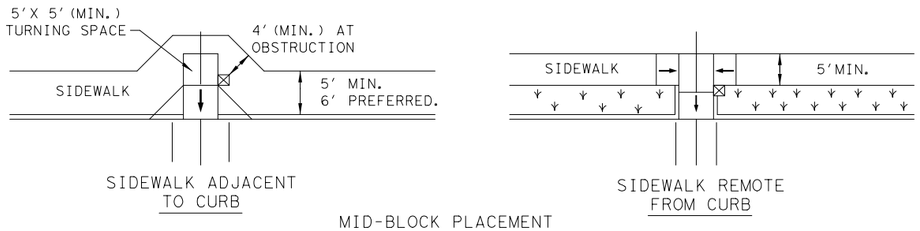
SKEWED INTERSECTION WITH "SMALL" RADIUS



NORMAL INTERSECTION WITH "SMALL" RADIUS



AT INTERSECTION
W/FREE RIGHT TURN & ISLAND



MID-BLOCK PLACEMENT
PERPENDICULAR RAMPS

LEGEND:

SHOWS DOWNWARD SLOPE. →

DENOTES PREFERRED LOCATION OF PEDESTRIAN PUSH BUTTON (IF APPLICABLE). ☒

DENOTES PLANTING OR NON-WALKING SURFACE NOT PART OF PEDESTRIAN CIRCULATION PATH.

SHEET 4 OF 4

Texas Department of Transportation

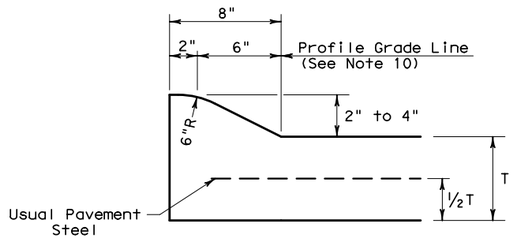
Design Division Standard

PEDESTRIAN FACILITIES CURB RAMPS

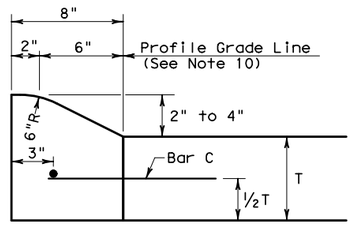
PED-18

FILE: ped18	DN: TxDOT		DW: VP	CK: KM	CK: PK & JG
© TxDOT: MARCH, 2002	CONT	SECT	JOB		HIGHWAY
REVISIONS	0912	72	390		VARIES
REVISED 08, 2005 REVISED 06, 2012 REVISED 01, 2018	DIST	COUNTY			SHEET NO.
	HOU	HARRIS			106

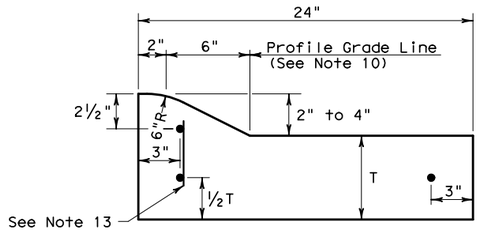
DATE:
FILE:



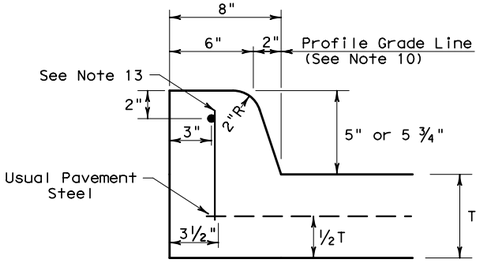
TYPE I CURB (MONOLITHIC)
2" - 4" HEIGHT



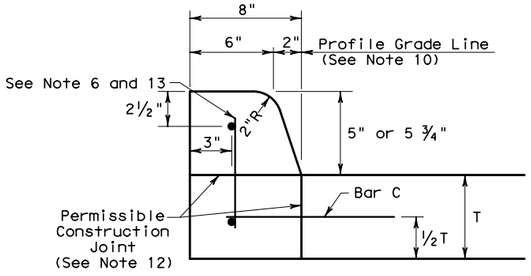
TYPE I CURB
2" - 4" HEIGHT



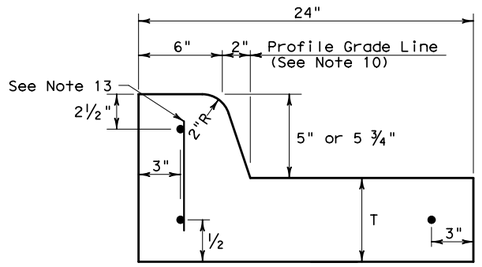
TYPE I CURB AND GUTTER
2" - 4" HEIGHT



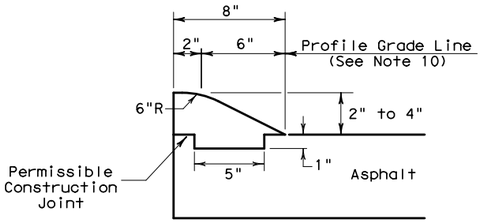
TYPE II CURB (MONOLITHIC)
5" - 5 ¾" HEIGHT



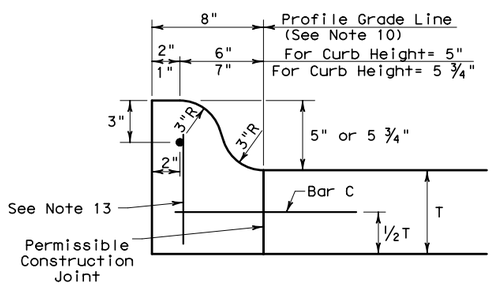
TYPE II CURB
5" - 5 ¾" HEIGHT



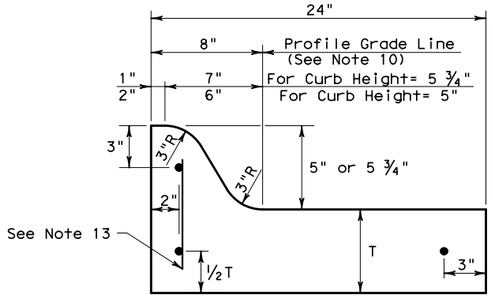
TYPE II CURB AND GUTTER
5" - 5 ¾" HEIGHT



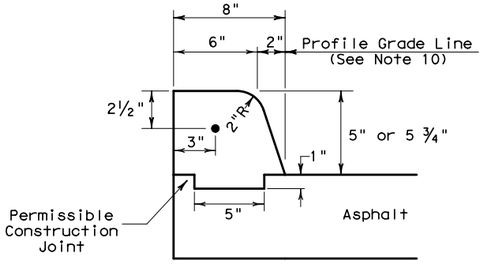
TYPE III CURB (KEYED)
2" - 4" HEIGHT



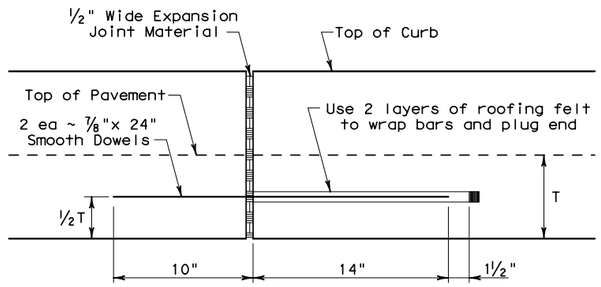
TYPE IIa CURB
5" - 5 ¾" HEIGHT



TYPE IIa CURB AND GUTTER
5" - 5 ¾" HEIGHT

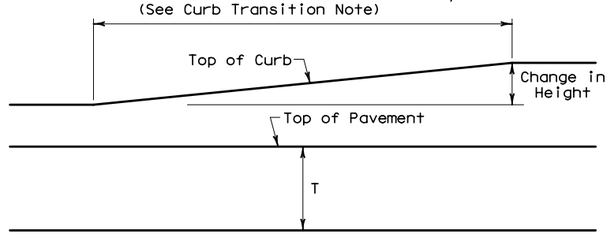


TYPE IV CURB (KEYED)
5" - 5 ¾" HEIGHT



EXPANSION JOINT DETAIL

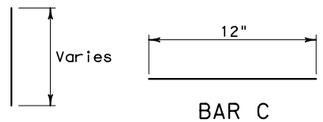
CURB TRANSITION NOTE:
Field conditions may require a longer or shorter transition, and shall be shown elsewhere in the plans, or as directed by the Engineer.



CURB TRANSITION
Note: To be paid for as Highest Curb

GENERAL NOTES

1. All materials and construction shall be in accordance with Item 529, "Concrete Curb, Gutter, and Combined Curb and Gutter."
2. Concrete shall be Class A.
3. When reinforcing bars are used, they shall be No.4 unless otherwise shown. The use of fiber reinforced concrete in lieu of reinforcing steel is acceptable. Use fibers meeting the requirements of DMS 4550, "Fibers for Concrete," and dose fibers in accordance with Material Producers List (MPL) "Fibers for Class A and B Concrete Applications."
4. Round exposed sharp edges with a rounding tool, to a minimum radius of ¼ inch.
5. All existing curbs and driveways to be removed shall be sawed or removed at existing joints.
6. Where concrete curb is to be placed on existing concrete pavement, Bar B may be drilled and grouted in place, or may be inserted into fresh concrete.
7. Expansion and contraction joints shall be constructed to match pavement joints in all curbs and curb and gutter adjacent to jointed concrete pavement. Where placement of curb or curb and gutter is not adjacent to concrete pavement, expansion joints shall be provided at structures, curb returns at streets, and at locations directed by The Engineer.
8. Vertical and horizontal dowel bars and transverse reinforcing bars shall be placed at four feet C~C.
9. Dimension 'T' shown is the thickness of concrete pavement. When curb is installed adjacent to flexible pavement dimension 'T' is 8" maximum.
10. Usual profile grade line. Refer to typical sections and plan-profile sheets for exact locations.
11. One-half inch expansion joint material shall be provided where curb or curb and gutter is adjacent to sidewalk or riprap.
12. When horizontal permissible construction joints are used, the longitudinal pavement steel shall be placed in accordance with pavement details shown elsewhere in the plans. Reinforcing steel for curb section shall then conform to that required for concrete curb.
13. Bar B placement as needed (typically at four ft. C-C) to support curb reinforcing steel during concrete placement.



BAR B

BAR C

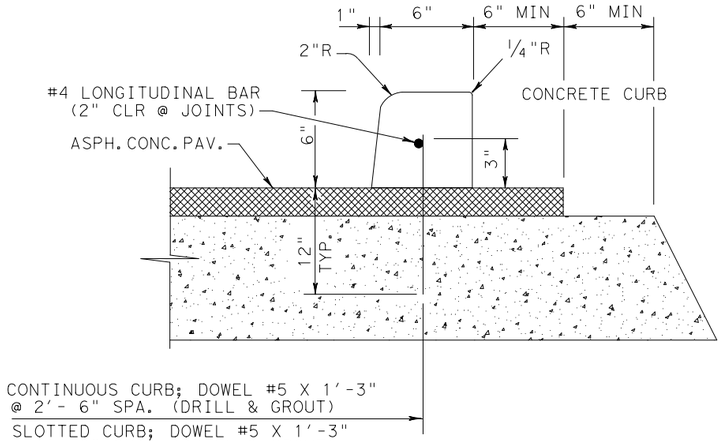
Texas Department of Transportation

Design Division Standard

CONCRETE CURB AND CURB AND GUTTER

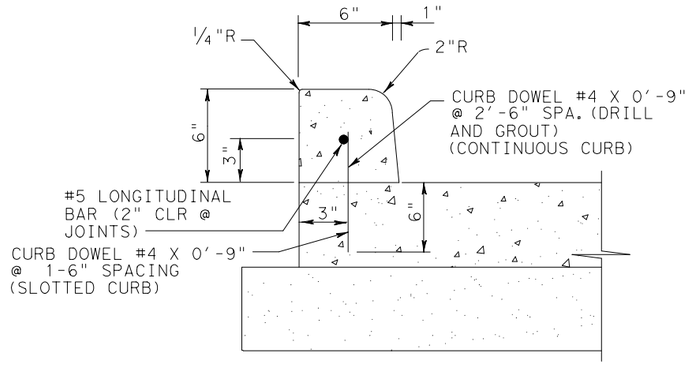
CCCG-22

FILE: cccg21.dgn	DN: TXDOT	CK: AN	DW: CS	CK: KM
© TxDOT: JUNE 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS	0912	72	390	VARIES
	DIST	COUNTY		SHEET NO.
	05	HARRIS		107



SHOWN ON EXISTING OR PROPOSED ACP PAVEMENT

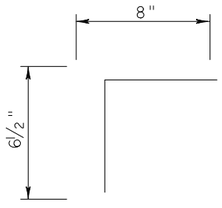
(PAY ITEM 529-6011) - FOR CONTINUOUS



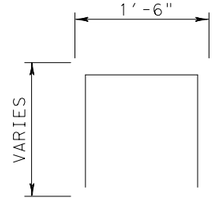
SHOWN ON EXISTING OR PROPOSED CONCRETE PAVEMENT

(PAY ITEM 529-6011) - FOR CONTINUOUS

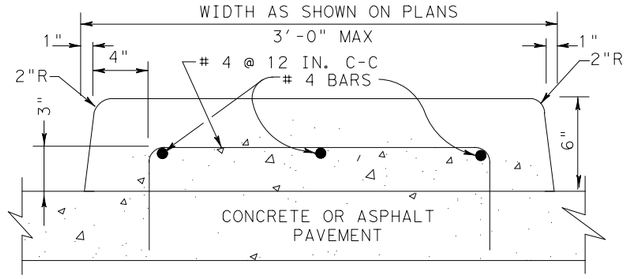
CONCRETE CURB (DOWEL) (6 IN.)



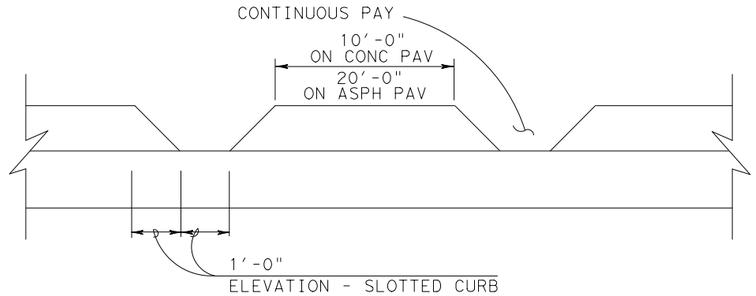
BAR K
#4



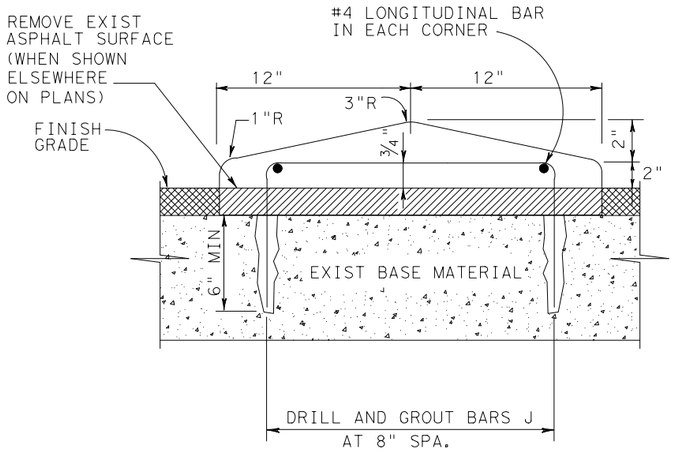
BAR J
#4



ITEM 536-6001 CONCRETE MEDIAN
SEE NOTE 2

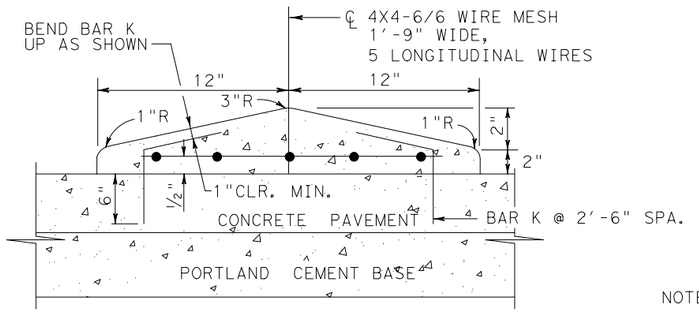


ITEM 529-6012 CONCRETE CURB (SLOTTED) - ON CONC.
ITEM 529-6009 CONC CURB (DOWEL)(SLOTTED) - ON ASPH.



SHOWN ON EXISTING ACP PAVEMENT

SEE NOTE 2 - ITEM 536-6003 CONC DIRECTIONAL ISLAND



SHOWN ON EXISTING OR PROPOSED CONCRETE PAVEMENT

SEE NOTE 2 - ITEM 536-6003 CONC DIRECTIONAL ISLAND

CONCRETE DIRECTIONAL ISLAND

NOTES:

1. DRILL AND GROUT BARS SHOWN AS PER ITEM 420.4.7.10, 6" EMBEDMENT, MINIMUM ON CONC.
2. INSTALL A 2 INCH DRAINAGE OPENING AT 10 FT C-C WHEN CURB/ISLAND IS NOT ON TOP OF CROSS SECTION. (LOCATED ON A 2 OR 3 PERCENT TRANSVERSE GRADE, OR SUPERELEVATION.)

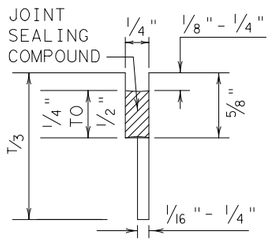
Texas Department of Transportation
Houston District

CONCRETE CURB AND DIRECTIONAL ISLAND DETAILS CC & DID

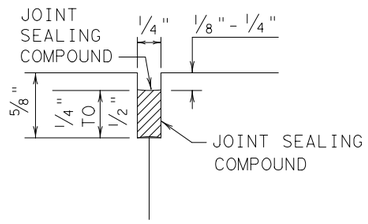
FILE: STDB-9.dgn	DN:	CK:	DW:	CK:	
©TxDOT 2014	DIST	FED REG	PROJECT NO.		SHEET
REVISIONS	HOU	6	F 2022(720)		108
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	HARRIS		0912	72	390	VARIES

DATE:
FILE:

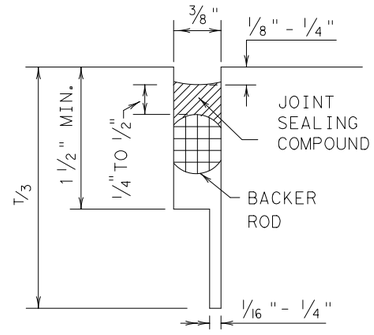
METHOD B: JOINT SEALING COMPOUND



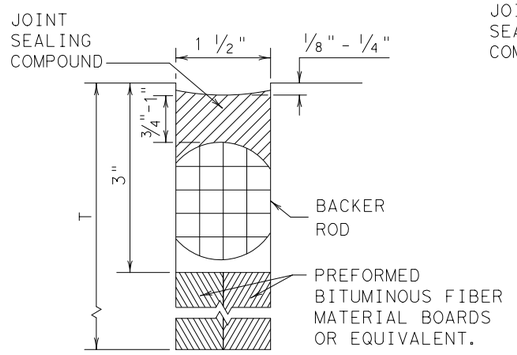
LONGITUDINAL SAWED CONTRACTION JOINT



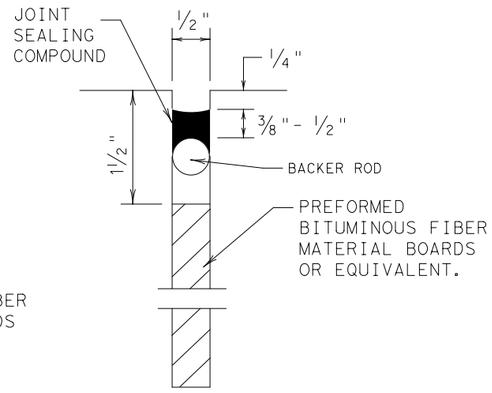
LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT



TRANSVERSE SAWED CONTRACTION JOINT

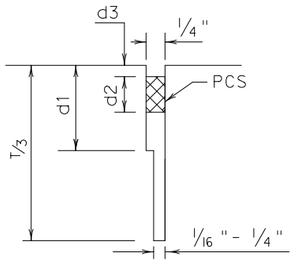


TRANSVERSE FORMED EXPANSION JOINT

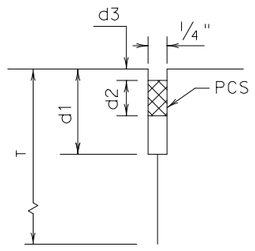


FORMED ISOLATION JOINT

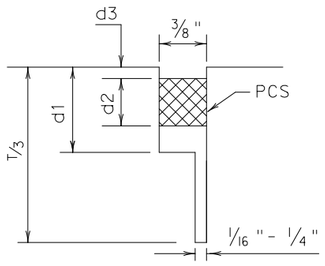
METHOD A: PREFORMED COMPRESSION SEALS (PCS)(DMS-6310 CLASS 6)



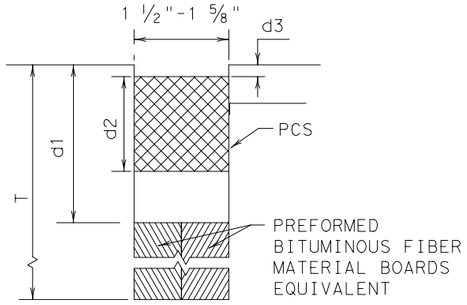
LONGITUDINAL SAWED CONTRACTION JOINT



LONGITUDINAL CONSTRUCTION JOINT



TRANSVERSE SAWED CONTRACTION JOINT



TRANSVERSE FORMED EXPANSION JOINT

GENERAL NOTES

1. UNLESS OTHERWISE SHOWN IN THE PLANS, EITHER METHOD "A" OR METHOD "B" MAY BE USED.
2. THE LOCATION OF JOINTS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS.
3. THE JOINT RESERVOIR FOR SEALANT OR PCS SHALL BE SAWED UNLESS OTHERWISE SHOWN ON THE PLANS FOR THE LONGITUDINAL AND TRANSVERSE CONSTRUCTION JOINTS AND THE SAWED JOINTS.
4. DIMENSIONS d1, d2, AND d3 SHOWN IN METHOD A SHALL BE IN ACCORDANCE WITH THE PREFORMED COMPRESSION SEAL MANUFACTURER'S RECOMMENDATION.
5. REFER TO DMS-6310 "JOINT SEALANTS AND FILLERS" FOR THE CLASSIFICATIONS.
6. FOR SAWED LONGITUDINAL JOINT, LONGITUDINAL OR TRANSVERSE CONSTRUCTION JOINT, USE JOINT SEALANT CLASS 5 OR 8 UNLESS OTHERWISE SHOWN ON THE PLAN OR APPROVED.
7. FOR TRANSVERSE SAWED CONTRACTION, TRANSVERSE FORMED EXPANSION JOINT, AND ISOLATION JOINT USE JOINT SEALANT CLASS 5 OR 8 AT NEW JOINTS. USE JOINT SEALANT CLASS 4,5,7,OR 8 FOR MAINTAINING EXISTING JOINTS.
8. THE JOINTS SHALL BE CLEANED IN ACCORDANCE WITH THE ITEM 438 "CLEANING AND SEALING JOINTS" OR ITEM 713 "CLEANING AND SEALING JOINTS AND CRACKS (CONCRETE PAVEMENT)".
9. ISOLATION JOINTS ACCOMMODATE HORIZONTAL AND VERTICAL MOVEMENTS THAT OCCUR BETWEEN A PAVEMENT AND A STRUCTURE. ISOLATION JOINTS MAY BE USED FOR BRIDGE ABUTMENTS, INTERSECTIONS, CURB AND GUTTER, OLD AND NEW PAVEMENTS, OR AROUND DRAINAGE INLETS, MANHOLES, FOOTINGS AND LIGHTING STRUCTURES.

Texas Department of Transportation

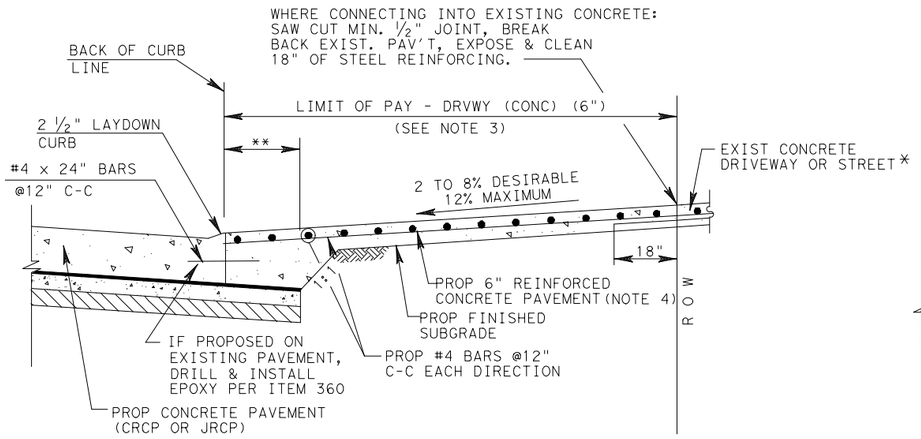
Design Division Standard

CONCRETE PAVING DETAILS

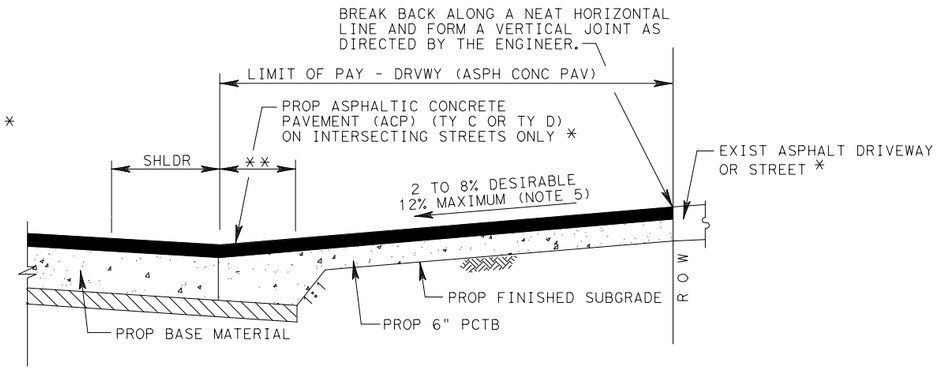
JOINT SEALS

JS-14

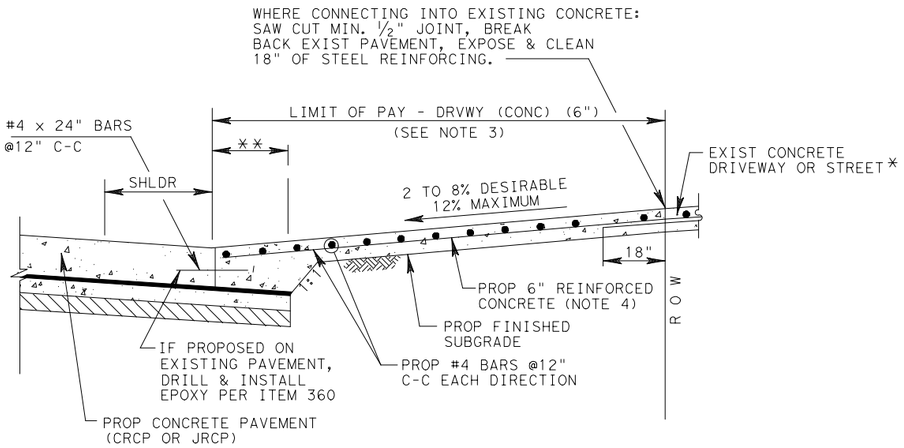
FILE: js14.dgn	DN: TxDOT	DN: HC	DW: HC	CK: AN
©TxDOT: DECEMBER 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0912	72	390	VARIES
	DIST	COUNTY		SHEET NO.
	HOU	HARRIS		109



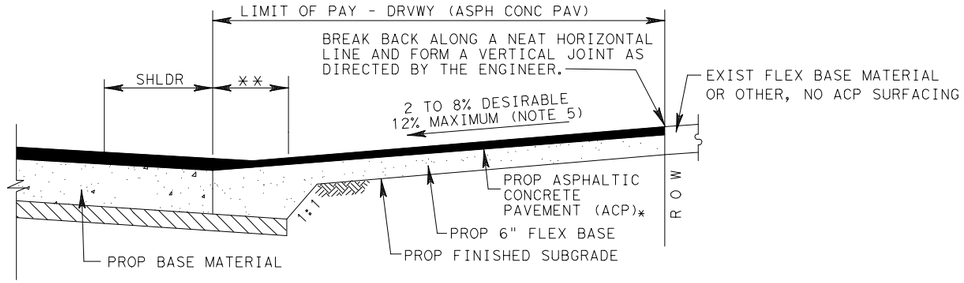
PROPOSED DRIVEWAY DETAIL
REINFORCED CONCRETE AT CONCRETE
CURB AND GUTTER ROADWAY



PROPOSED DRIVEWAY DETAIL
ASPHALT W/ PCTB AT ASPHALT ROADWAY



PROPOSED DRIVEWAY DETAIL
REINFORCED CONCRETE AT CONCRETE ROADWAY



PROPOSED DRIVEWAY DETAIL
ASPHALT W/ FLEX BASE AT ASPHALT ROADWAY

NOTES:

1. ALSO SEE SHEET 2 OF 2 FOR DRIVEWAY SLOPES WITH PROPOSED SIDEWALKS.
2. FOR INTERSECTIONS BUILT WITH CRCP PAVEMENT SEE CRCP DETAIL.
3. FAST TRACK CONCRETE IS PAID AS DRVWY (CONC) (FAST TRACK).
4. THICKNESS OF DRIVEWAY IS 6 INCHES FOR REGULAR AND FAST TRACK CONCRETE.
5. MAXIMUM SLOPE IS: 12% RESIDENTIAL
   8% OTHERS

LEGEND:

PCTB- PORTLAND CEMENT TREATED BASE

JRCP- JOINTED REINFORCED CONCRETE PAVEMENT

CRCP- CONTINUOUSLY REINFORCED CONCRETE PAVEMENT

ACP- ASPHALTIC CONCRETE PAVEMENT

* FOR STREET INTERSECTIONS REFER TO PAVING DETAILS AND INTERSECTION DETAILS FOR REINFORCING STEEL AND SECTION REQUIREMENTS.

** PROPOSED LIMIT OF ROADWAY BASE AND/OR SUBGRADE

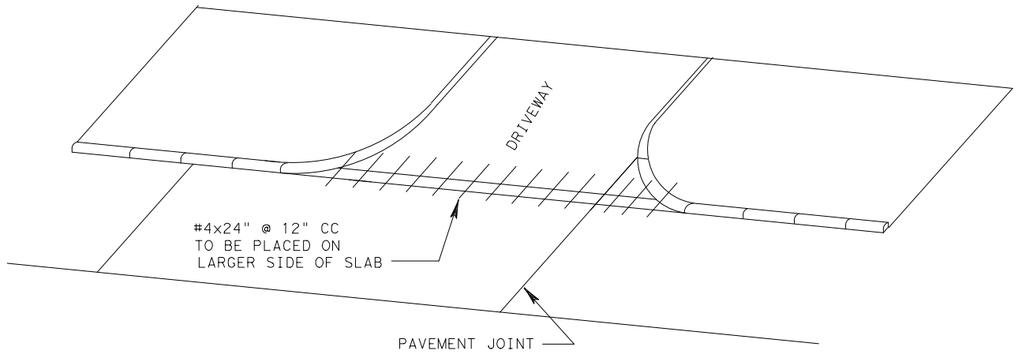
Texas Department of Transportation
Houston District

DRIVEWAY DETAILS

DD

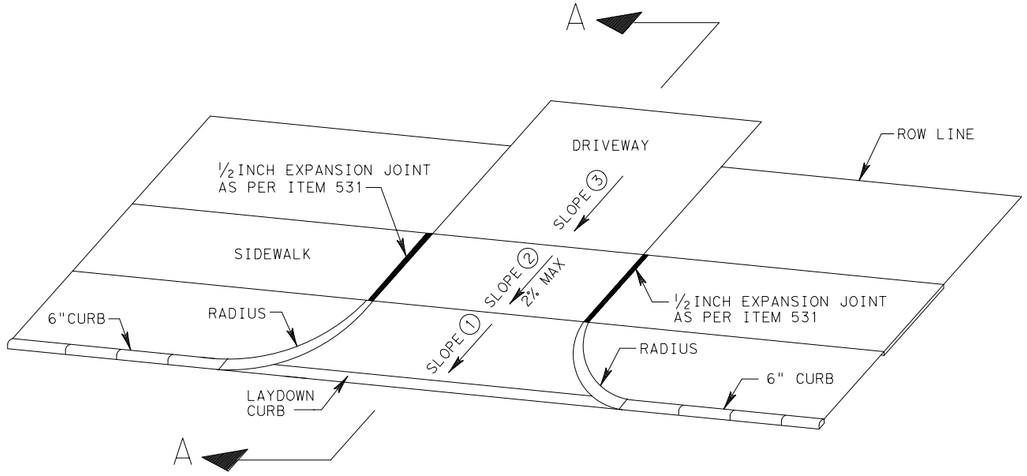
FILE: STDB-8a.dgn	DN:	CK:	DW:	CK:	
© TxDOT SEPT. 2004	DIST	FED REG	PROJECT NO.		SHEET
REVISIONS 11/15 ADDED NOTE FOR PCTB 3/17 MODIFIED PAVEMENT SLOPES	HOU	5	F 2022(720)		110
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	HARRIS		0912	72	390	VARIES

STDB8A

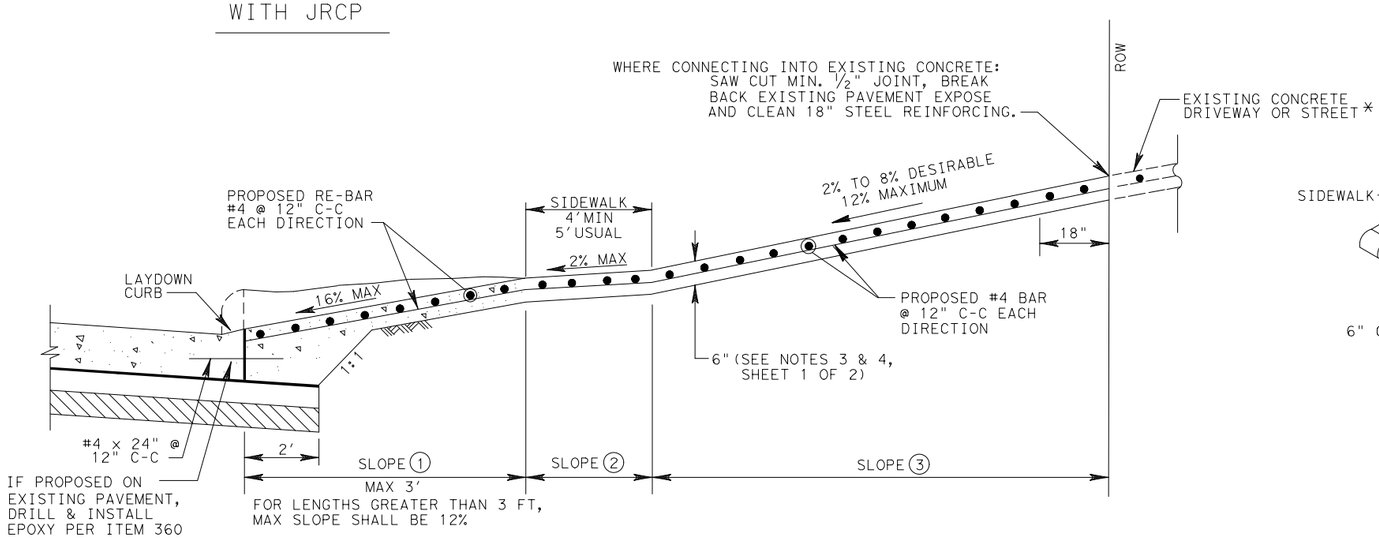


TIE BAR PLACEMENT

WITH JRCP

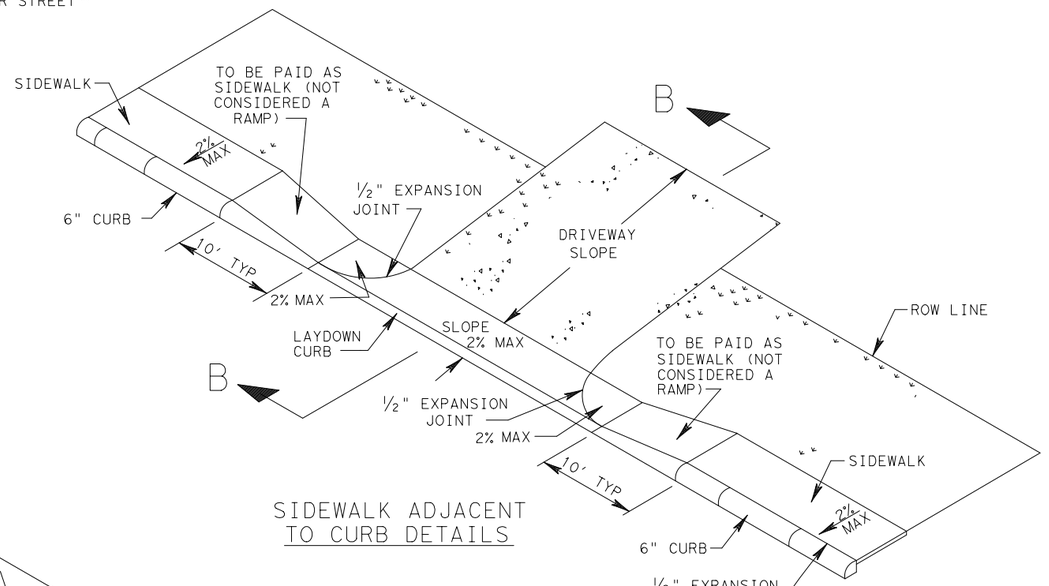


SIDEWALK OFFSET FROM CURB DETAILS

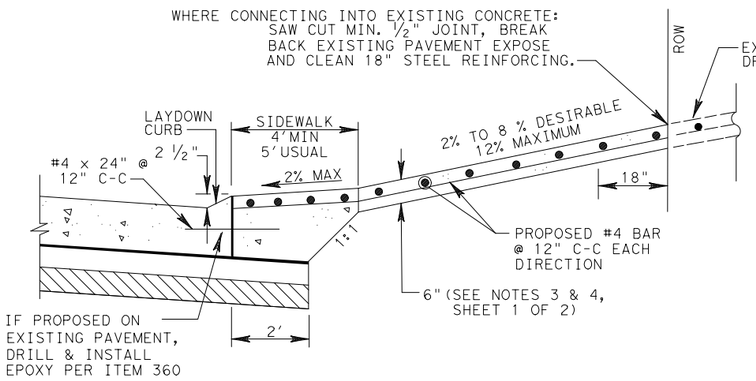


SLOPES W/ SIDEWALKS OFFSET FROM CURB

(SECTION A-A)

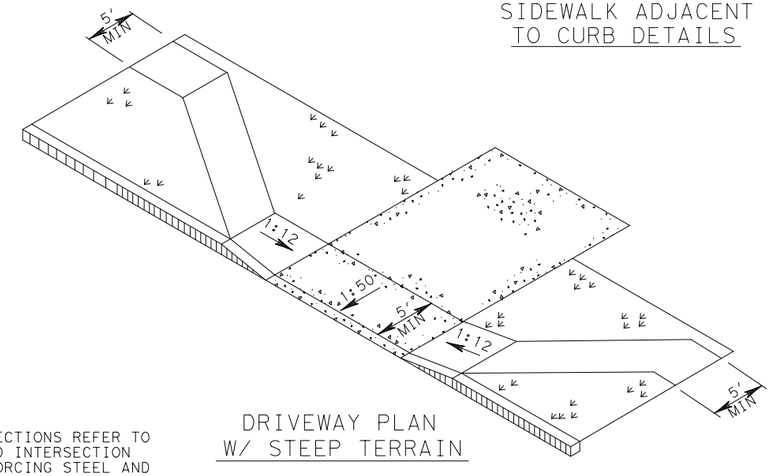


SIDEWALK ADJACENT
TO CURB DETAILS



DRIVEWAY SLOPES W/ SIDEWALKS ADJACENT TO CURB

(SECTION B-B)



DRIVEWAY PLAN
W/ STEEP TERRAIN

* FOR STREET INTERSECTIONS REFER TO PAVING DETAILS AND INTERSECTION DETAILS FOR REINFORCING STEEL AND SECTION REQUIREMENTS.

SHEET 2 OF 3

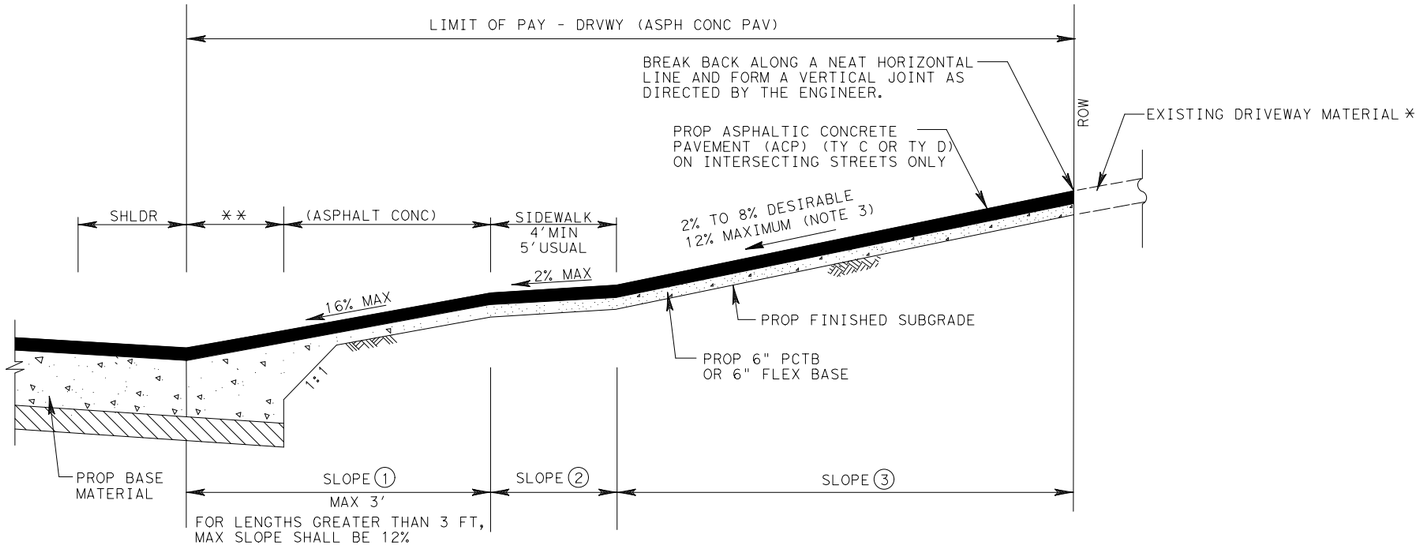
Texas Department of Transportation
Houston District

DRIVEWAY DETAILS

DD

FILE: STDB-8b.dgn	DN:	CK:	DW:	CK:
© TxDOT SEPT. 2004	DIST	FED REG	PROJECT NO.	SHEET
REVISIONS 9/09 ADDED NOTE FOR ITEM 360. 11/15 ADDED NOTE FOR PCTB	HOU	6		111
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	HARRIS	0912	70	075	VAR

STDB8B



PROPOSED DRIVEWAY SLOPES
WITH SIDEWALKS OFFSET

NOTES:

1. ALSO SEE SHEET 2 OF 3 FOR DRIVEWAY SLOPES WITH PROPOSED SIDEWALKS.
2. FOR INTERSECTIONS BUILT WITH CRCP PAVEMENT SEE CRCP DETAIL.
3. MAXIMUM SLOPE IS: 12% RESIDENTIAL 8% OTHERS

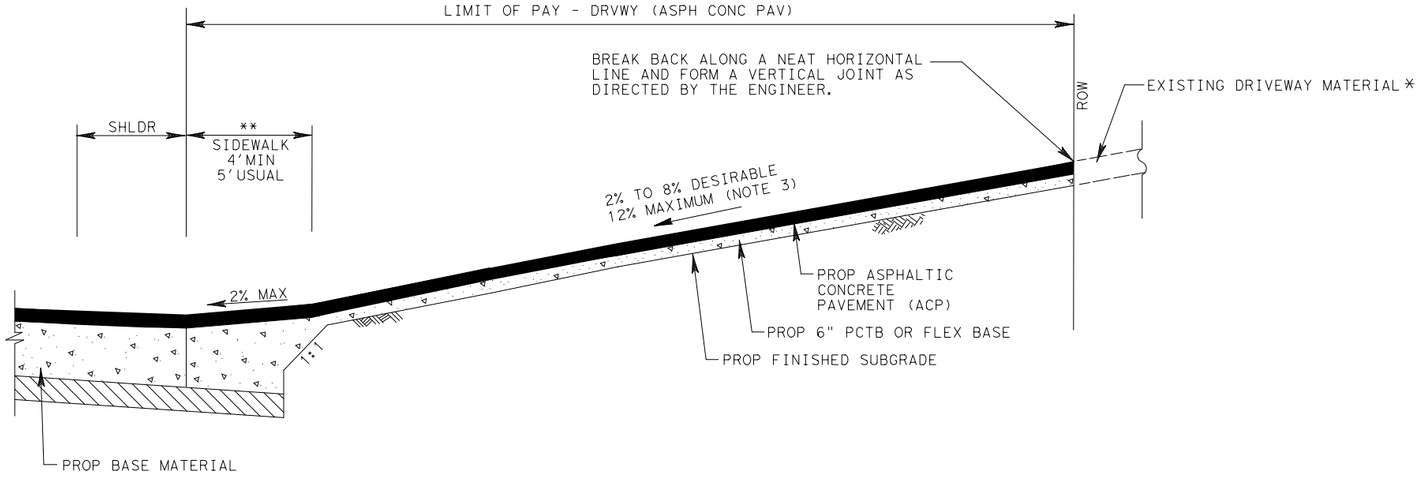
LEGEND:

PCTB- PORTLAND CEMENT TREATED BASE

ACP- ASPHALTIC CONCRETE PAVEMENT

* FOR STREET INTERSECTIONS REFER TO PAVING DETAILS AND INTERSECTION DETAILS.

** PROPOSED LIMIT OF ROADWAY BASE AND/OR SUBGRADE



PROPOSED DRIVEWAY SLOPES
WITH SIDEWALKS ADJACENT

SHEET 3 OF 3

Texas Department of Transportation
Houston District

DRIVEWAY DETAILS

DD

FILE: STDB-8c.dgn	DN:	CK:	DW:	CK:		
© TxDOT SEPT. 2004	DIST	FED REG	PROJECT NO.			SHEET
REVISIONS 11/15 ADDED NOTE FOR PCTB 3/17 MODIFIED PAVEMENT SLOPES	HOU	5	F 2022(720)			112
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	HARRIS		0912	72	390	VARIES

STDB8C

TYPE OF WORK — ITEMS AND REQUIREMENTS FOR EACH TYPE OF WORK

SODDING	PERMANENT SEEDING	TEMPORARY SEEDING	Reference Item 161, 162, 164, 166, 168 of the Texas Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges 2014 for specifications, dimensions, volumes and measurements that are not shown. Use latest Houston District, Special Provisions for those items indicated.		
	✓		161-6017 COMPOST MANUF TOPSOIL (BIP)(4") SY	APPLICATION RATE Item 161.2.1. Compost Manufactured Topsoil (CMT)	Item 161.2. Materials. Submit quality control (QC) documentation to the Engineer. Compost producer's STA certification must be dated to meet STA requirements (certification must be within 30 or 90 days per STA requirements). Lab analysis performed by an STA-certified lab must be dated within 30 days before delivery of the compost.
✓			162-6002 BLOCK SODDING SY	GRASS SPECIES Item 162.2. Materials. Common Bermuda (Cynodon Dactylon)	Item 162.2.1. Block Sod. Use block palletized or roll type sod. **REMOVE PLASTIC BACKING FROM ROLL TYPE SOD.** Place sod within 48 hours of delivery to site. No exceptions. Place sod with joints alternating on each row to prevent continuous joint lines. Peg sod as needed with wood pegs to hold sod in place. Pegging sod is subsidiary to Item 162.
	✓		164-6066 DRILL SEEDING(PERM)(WARM OR COOL) SY Item 164.1. Description Provide and install seeding as shown on District Standard	PLANTING MONTH: March, April, May, June, July, August, September, October SEED MIX: Hulled - Bermudagrass (Cynodon dactylon) - 40.0 lbs PLS/acre Foxtail Millet (Setaria italica) - 34.0 lbs PLS/acre Green Sprangletop (Leptochloa dubia) - 4.0 lbs PLS/acre Sideoats Grama (Bouteloua curtipendula) - 3.2 lbs PLS/acre Little Bluestem (Schizachyrium scoparium) - 1.4 lbs PLS/acre	PLS (Pure Live Seed) Provide documentation of PLS requirements per Item 164.2.1. CONSTRUCTION. Cultivate the area to a depth of 4 inches before placing the seed unless otherwise directed. When performing permanent seeding after an established temporary seeding, cultivate the seedbed to a depth of 4 inches or mow the area before placement of the permanent seed. Plant the seed and place the straw or hay mulch after the area has been completed to lines and grades as shown on the plans. Drill Seeding. Plant seed or seed mixture uniformly over the area shown on the plans at a depth of 1/4 to 1/3 inch using a cultipacker(turfgrass) type seeder. Plant seed along the contour of the slopes. Use broadcast seeding method where site conditions prevent drill seeding method. Broadcast Seeding. Distribute the dry seed or dry seed mixture uniformly over the areas shown on the plans using hand or mechanical distribution on top of soil.
	✓		164-6052 BROADCAST SEED(PERM)(SPECIAL MIX) SY Item 164.1. Description Provide and install seeding as shown on District Standard	PLANTING MONTH: November, December, January, February, SEED MIX: Unhulled - Bermudagrass (Cynodon dactylon) - 40.0 lbs PLS/acre Oats (Avena sativa) - 72.0 lbs PLS/acre Green Sprangletop (Leptochloa dubia) - 4.0 lbs PLS/acre Sideoats Grama (Bouteloua curtipendula) - 3.2 lbs PLS/acre Little Bluestem (Schizachyrium scoparium) - 1.4 lbs PLS/acre	
		✓	164-6051 DRILL SEED(TEMP)(WARM OR COOL) SY Item 164.1. Description Provide and install seeding as shown on District Standard	PLANTING MONTH: March, April, May, June, July, August, September, October SEED MIX: Foxtail Millet (Setaria italica) - 34.0 lbs PLS/acre	
		✓	164-6009 BROADCAST SEED(TEMP)(WARM) SY Item 164.1. Description Provide and install seeding as shown on District Standard	PLANTING MONTH: November, December, January, February, SEED MIX: Oats (Avena sativa - 72.0 lbs PLS/acre	
	✓	✓	162-6003 STRAW OR HAY MULCH SY	APPLICATION RATE Immediately after planting the seed or seed mixture, apply straw or hay mulch uniformly over the seeded area. Apply straw or hay mulch at 2 tons per acre. Use tacking agent with straw or hay mulch as described on this sheet.	Use straw or hay mulch in conformance with Article 162.2.5, "Mulch." Use biodegradable tacking agents only applied at a rate in accordance with manufacturer's recommendations. Use the following products or an approved equal(see note this sheet): Conweb/Contac Guar Gum, Profile Products Corporation, (307) 655-9565, Ramtec/Procol/Viscol Guar Gum, Ramtec Corporation, (800) 366-1180
✓	✓	✓	166-6001 FERTILIZER AC Item 166.2. Materials Use fertilizer as shown on District Standard	APPLICATION RATE Deliver and evenly distribute fertilizer at a rate of 4000 lbs/acre.	Use a **NON-CHEMICAL** fertilizer which meets all the following criteria: (1) BRAND NAME must be registered with the Texas State Chemist as a commercial fertilizer. (2) Meets USEPA guidelines for unrestricted use. (3) Derived from biological sources such as, but not limited to: sewage sludge, manures, vegetation, etc. (4) In granular form and essentially dust free. Submit proof of registration and nutrient source to Engineer. Use the following products or an approved equal(see note this sheet): Sigma, SIGMA AgriScience, 281-851-6749 Sustanite-standard grade, Automation Nation, Inc., 713-675-4999 Milorganite, MMSD, 800-287-9645 Agricultural Organic P/L, Ag Org, INC., 713-523-4396
✓	✓	✓	168-6001 VEGETATIVE WATERING MG	APPLICATION RATE Item 168.3 Construction. 6000 gallons/acre per working day x 20 consecutive working days = 120,000 gallons total/acre	Begin watering immediately after installation of seed or sod. Replace, fertilize, and water any seed or sod in poor condition due to the failure to apply the specified amount of water within the time allowed at no expense to the Department.

SEQUENCE OF WORK

BLOCK SOD	PERMANENT SEEDING	TEMPORARY SEEDING
1. FERTILIZER 2. CULTIVATE SOIL (ITEM 162.3) 3. SOD 4. VEGETATIVE WATERING	1. FERTILIZER 2. COMPOST MANUFACTURED TOPSOIL 3. CULTIVATE SOIL (ITEMS 164.3 AND 161.3.1) 4. PERMANENT SEEDING 5. STRAW OR HAY MULCH 6. VEGETATIVE WATERING	1. FERTILIZER 2. CULTIVATE SOIL (PER ITEM 164.3) 3. TEMPORARY SEEDING 4. STRAW OR HAY MULCH 5. VEGETATIVE WATERING

HOUSTON DISTRICT

FERTILIZER, SEED, SOD, STRAW, COMPOST, AND WATER

SHEET 1 OF 1

REVISIONS	FILE:	FED DIV	STATE	PROJECT NUMBER			SHEET
10/2014 UPDATED TO 2014 SPECS 3/2015 MINOR CORRECTIONS	OCT 2014	6	TEXAS	F 2022(720)			113
	ORIGINAL:	DIST	COUNTY	CONTROL	SECT	JOB	HIGHWAY
		12	HARRIS	0912	72	390	VARIES

STD K-1

GENERAL TREE PROTECTION NOTES:

1. Protect and ensure the continued good health of existing trees identified on the plans or directed by the Engineer. Protective measures include providing, installing, maintaining and removing protective fences, bound wood planking, compost, berm pruning, boring, and watering.
2. Install tree protection before any heavy equipment arrives on the site and remains in place for the duration of the project.

PROTECTIVE FENCE

1. Critical Root Zone (CRZ)= 1 foot radius per 1 caliper inch of trunk diameter.
2. Place protective fence at the edge of the critical root zone of trees to be protected. Use 4 feet high orange plastic mesh or approved equivalent supported on steel T-posts. Use steel T-posts minimum of 6 feet long, spaced at intervals sufficient to keep fence pulled tight. Stretch smooth galvanized wire from post to post across the top of fence and draw tight. Attach plastic mesh to posts and top wire with aluminum tie wire or nylon ties.
3. No excavation, grading, filling, soil compaction, parking, or equipment storage is allowed within the fenced area.
4. When a construction zone overlaps the root zone due to lack of space, place fence within 2 feet of construction zone.
5. Install protective compost filter berm at base of protective fence as shown in detail and described in these notes under "Root Zone Protection". Compost filter berm functions as a protective filter from runoff associated with construction activities such as: concrete wash, erosion, fill, chemicals, cement and lime work and other activities.

VEGETATIVE WATERING FOR TREE PROTECTION

1. Water trees at a rate of 30 gallons per week for every week during construction activities. Watering is paid for separately under Item 168-6001 Vegetative Watering.

TRUNK PROTECTION

1. Where protective fence is located closer than 6 feet from a tree trunk from any direction, protect the tree trunk with bound wood planking. Wood planks may be construction grade lumber a minimum of 1 inch by 6 inch nominal. Band planks together with rope, band, or strap of sufficient gauge and quality to keep protective planking in place around tree trunk for the duration of the project. Install wood planks of sufficient length to protect the trunk to a height of 10 feet, or the height of the lowest major branching, whichever is less. Do not use nails, screws or other damaging attachment methods.

ROOT ZONE PROTECTION

1. Cover entire area of critical root zone with 4" depth of erosion control compost. Erosion control compost is paid for separately under Item 161-6009 Erosion Control Compost. See standard specification for compost requirements.
2. Install protective compost filter berm at base of protective fence along entire edge of critical root zone as shown on detail this sheet. Dimensions of compost filter berm are 1 foot tall, and 2 feet wide at base. Use erosion control compost for berm paid for under Item 161-6009 Erosion Control Compost. Maintain berm throughout project.
3. Vehicular traffic, stockpiling or storage of materials, parking of equipment and refueling equipment is prohibited in protected areas.

BORING, TRENCHING, GRADING, AND PRUNING

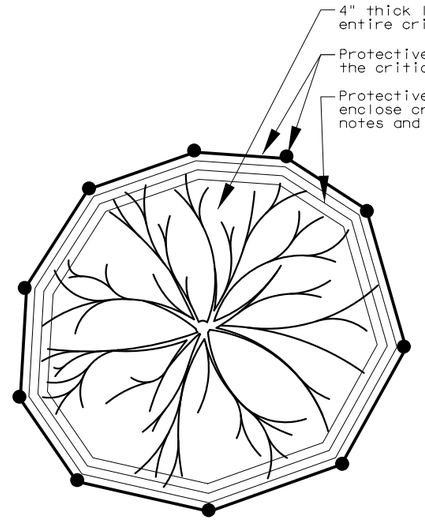
1. Where shown in plans, underground utilities crossing under protected areas will be bored beneath critical root zones. Avoid boring directly beneath root flare. Bore depth is 4 feet below existing grade.
2. No trenching, excavating, filling, or compaction is allowed within the critical root zone except as specifically identified in the plans and approved by the Engineer.
3. When existing grade must be cut within the critical root zone, contact the Engineer prior to beginning work. Before grading or excavation work, saw cut roots to the depth of the proposed disturbance along the edge of the proposed disturbance before excavation is begun.
4. Prune flush with soil any roots exposed by construction. Backfill root areas with good quality topsoil as soon as possible. If exposed root areas are not to be backfilled within two days, then cover with a minimum of six inches of erosion control compost. Erosion compost is paid for separately under Item 161-6009 Erosion Control Compost.
5. When grading within the critical root zone, use hand or small equipment and alter grade no more than two inches. No soil disturbance is allowed on the root flare under any circumstances.
6. Perform any pruning to provide clearance for structures, vehicular traffic, and construction equipment before construction damage might occur. Prune any limb damage within two hours of occurrence and according with ANSI A300-1995 standard.

MAINTENANCE OF TREE PROTECTION MATERIALS

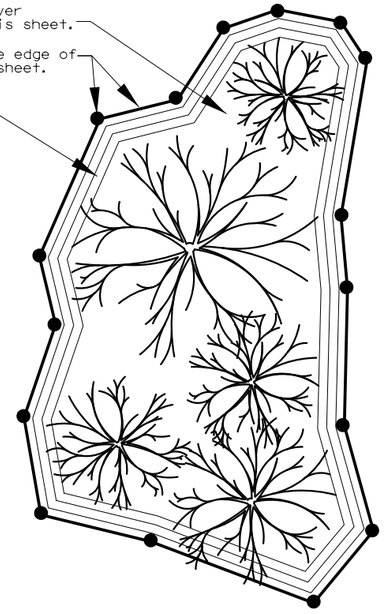
1. Maintain all tree protection materials throughout entire length of project. Repair damaged or affected tree protection materials. Additional erosion control compost may be required during the project and will be paid for separately.

REMOVAL OF TREE PROTECTION MATERIALS

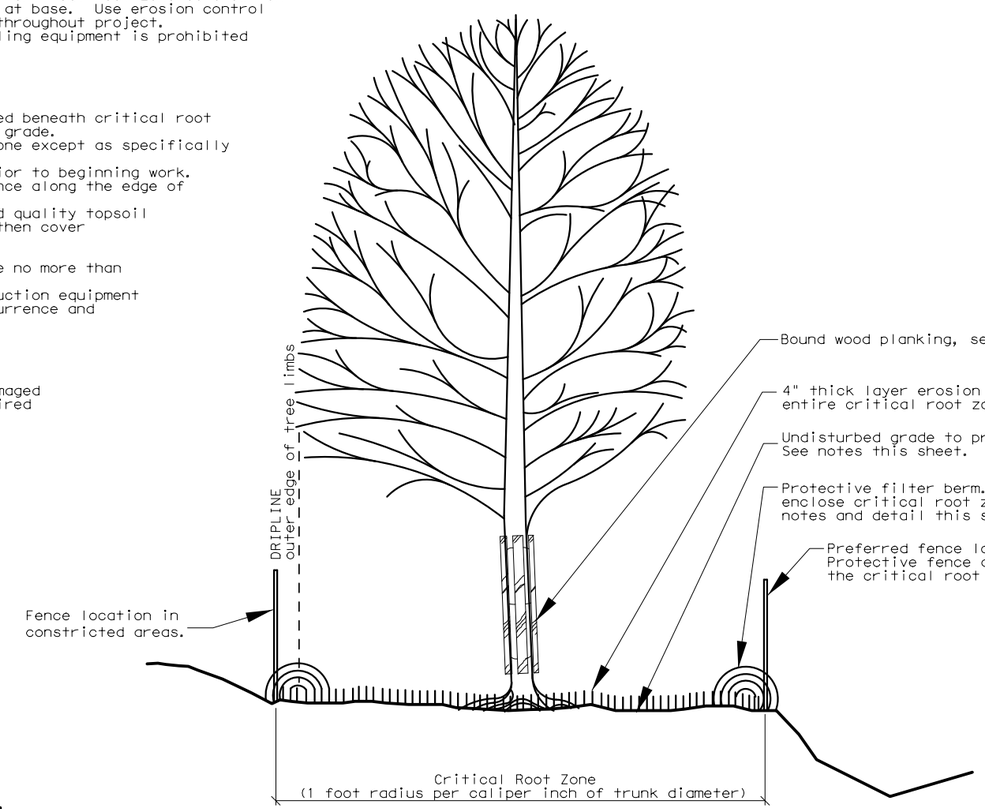
1. Remove and dispose of all protective fencing and trunk protection at end of project.



PLAN VIEW OF INDIVIDUAL TREE AND PROTECTIVE FENCE



PLAN VIEW OF TREE GROUP AND PROTECTIVE FENCE



TYPICAL TREE PROTECTION

REQUIRED ITEMS:

- Item 1004-6001 Tree Protection EA
- Item 1004-6002 Tree Protection AC
- Item 161-6009 Erosion Control Compost CY
- Item 168-6001 Vegetative Watering MG

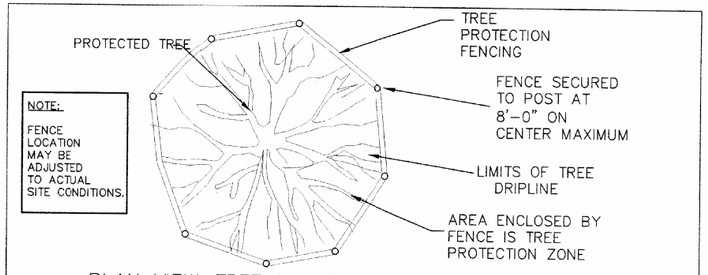
Texas Department of Transportation
HOUSTON DISTRICT

TREE PROTECTION
SHEET 1 OF 1

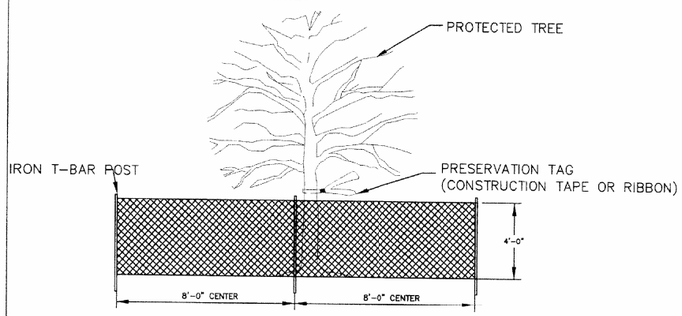
Details not to scale

FILE:	FED DIV	STATE	FEDERAL AID PROJECT			SHEET
	5	TEXAS	F 2022(720)			114
REVISED: FEB 2015 FOR 2014 SPECS	DIST	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	12	HARRIS	0912	72	390	VARIES

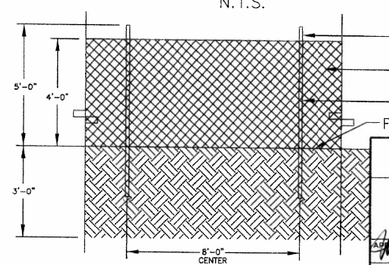
STD K-3



PLAN VIEW–TREE PROTECTION FENCING DETAIL
N.T.S.



FRONT VIEW–TREE PROTECTION FENCING DETAIL
N.T.S.

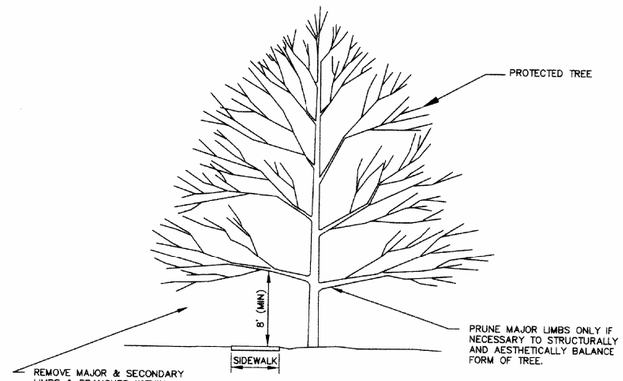


PROTECTIVE PLASTIC MESH FENCE
N.T.S.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

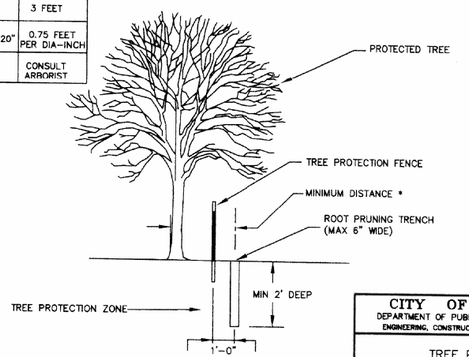
TREE PROTECTION
GENERAL REQUIREMENTS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2009	DWG NO: 01562-01



TREE PRUNING
N.T.S.

TREE TRUNK DIA. (IN)	* MINIMUM DISTANCE
< 6"	3 FEET
6"≤ DIA. ≤ 20"	0.75 FEET PER DIA-INCH
> 20"	CONSULT ARBORIST



ROOT PRUNING DETAIL
N.T.S.

NOTE: APPLICABLE TO ROOT PRUNING ON ONE SIDE OF TREE ONLY.
CONSULT ARBORIST FOR MORE EXTENSION ROOT PRUNING.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

TREE PROTECTION
TREE AND ROOT PRUNING
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2009	DWG NO: 01562-02

TREE PRUNING NOTES:

CONTRACTOR TO COORDINATE WITH TXDOT ARBORIST OR CITY OF HOUSTON ARBORIST AND MUST TRIM TREE LIMBS AND TREE ROOTS AS PER THEIR DIRECTION AT NO EXTRA CHARGE TO TXDOT. THIS ACTIVITY IS INCIDETNAL TO TREE PROTECTION PAY ITEM.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
TREE PROTECTION
GENERAL REQUIRMENTS
TREE AND ROOT PRUNING

SHEET 1 OF 3

DGN: UAR	FED. RD. DIV. RD.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CK	5	TEXAS	F 2022(720)			VARIES
DWG:	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG:	HOU	HARRIS	0912	72	390	115

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\STANDARDS\TREE-DETAILS-1.dgn
3/1/2023
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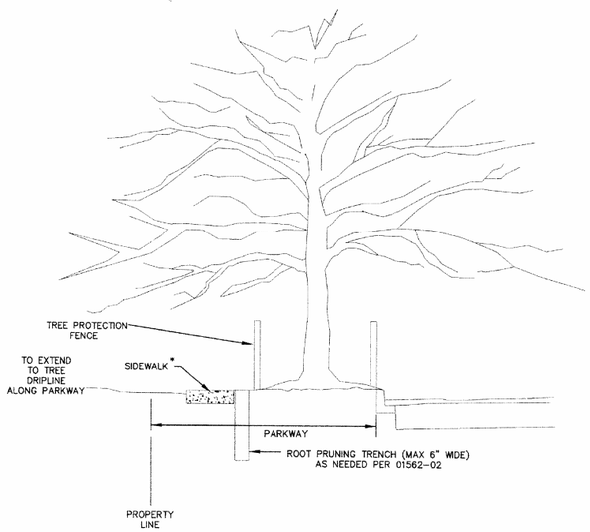
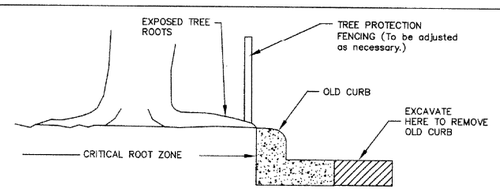
* SIDEWALK SHALL BE CONSTRUCTED OF EITHER CEMENT, CONCRETE, ASPHALT OR OTHER DURABLE MATERIAL AS THE COUNCIL MAY DESIGNATE (CHAPTER 40-91, CODE OF ORDINANCES).



CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

TREE PROTECTION/
IN SIDEWALK REPAIRS
IN PARKWAY AREAS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2009	DWG NO: 01562-03



OLD CURB REMOVAL
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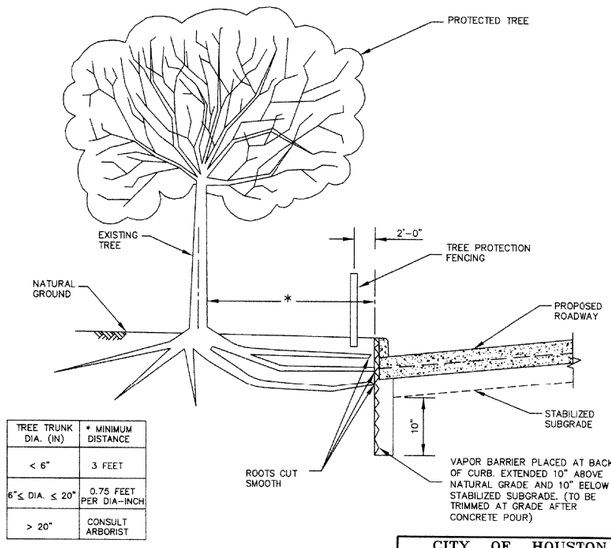

TREE TRUNK DIA. (IN)	* MINIMUM DISTANCE
< 6"	3 FEET
6" ≤ DIA. ≤ 20"	0.75 FEET PER DIA-INCH
> 20"	CONSULT ARBORIST

ZERO CURB CUT DETAIL
N.T.S.

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

TREE PROTECTION
ZERO CURB CUT
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER	APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2009	DWG NO: 01562-04

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS
TREE PROTECTION/ IN SIDEWALK REPAIRS IN PARKWAY AREAS ZERO CURB CUT

SHEET 2 OF 3

DGN: UAR	FED. RD. DIV. RD.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CK	5	TEXAS	F 2022(720)			VARIES
DWG:	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG:	HOU	HARRIS	0912	72	390	116

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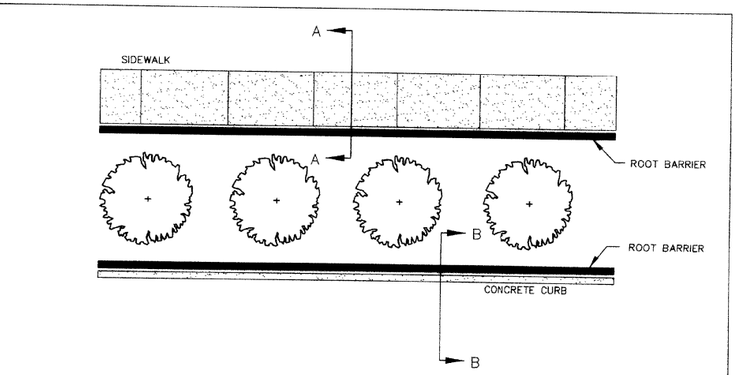
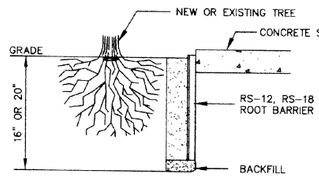
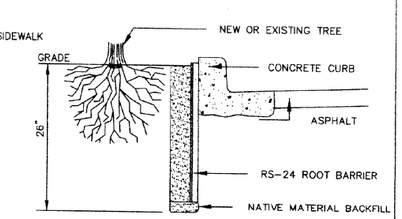




SECTION A-A
SIDEWALK



SECTION B-B
CURB & GUTTER PROTECTIONS

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. THE RAISED ROOT GUIDING RIBS MUST BE FACING TOWARDS THE TREE ROOTS.
3. THE TOP OF THE BARRIER PANELS MUST BE SIGHTLY ABOVE GRADE (NEVER BELOW GRADE).
4. POSITION BARRIER PANELS VERTICALLY WITH TOP AGAINST THE STRUCTURE TO BE PROTECTED.
5. SEE LANDSCAPE SITE PLAN TO DETERMINE TREES THAT REQUIRE BARRIER PANEL.
6. KEEP THE BARRIERTOP EDGE AT LEAST 1/2" ABOVE GRADE.

CITY OF HOUSTON DEPARTMENT OF PUBLIC WORKS AND ENGINEERING	
TREE ROOT BARRIERS (LINEAR) (NOT TO SCALE)	
APPROVED BY (CITY ENGINEER	APPROVED BY DIRECTOR OF PUBLIC WORKS AND ENGINEERING
EFF DATE: JULY-01-2009	DWG NO: 02912-02

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

TREE ROOT BARRIERS

SHEET 3 OF 3

DGN: UAR	FED. RD. DIV. RD.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN: CK	5	TEXAS	F 2022(720)			VARIES
DWG:	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG:	HOU	HARRIS	0912	72	390	117

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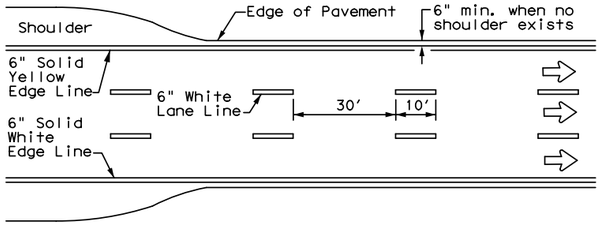
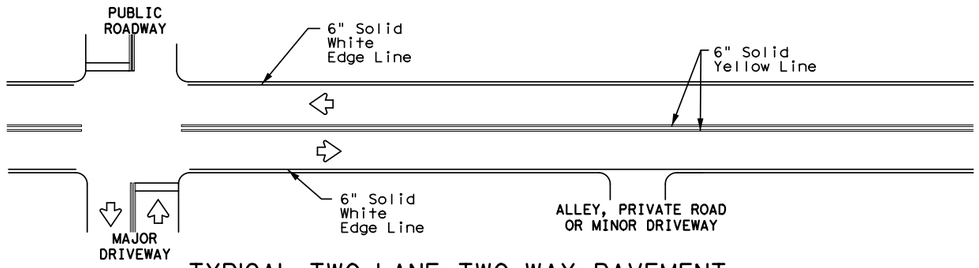
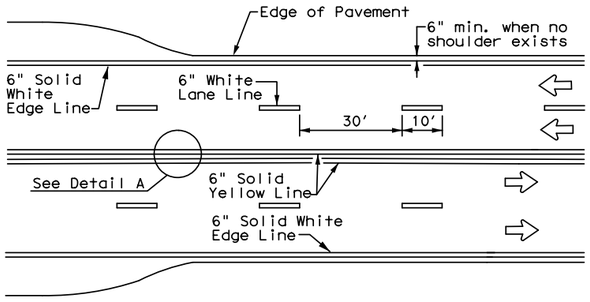
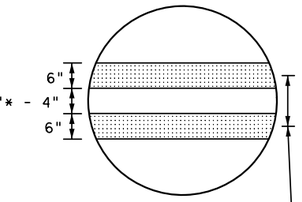


EDGE LINE AND LANE LINES ONE-WAY ROADWAY WITH OR WITHOUT SHOULDERS



TYPICAL TWO-LANE, TWO-WAY PAVEMENT MARKINGS THROUGH INTERSECTIONS





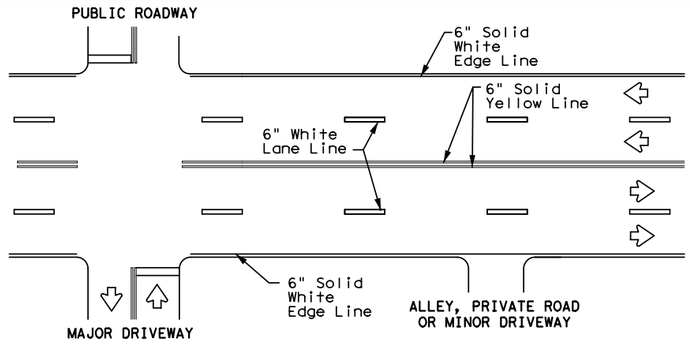
DETAIL "A"

9"** min. - 10" typ.
(18" max. for traveled way greater than 48' only)

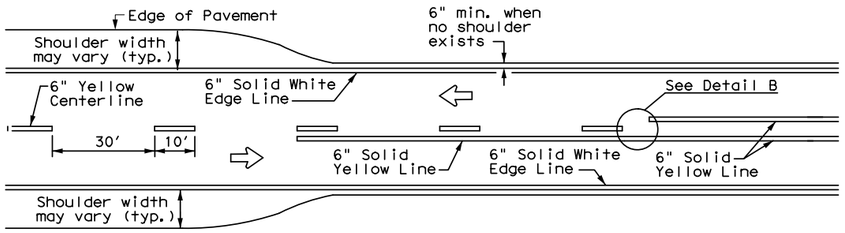
CENTERLINE AND LANE LINES FOUR LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS

* 2" minimum for restripe projects when approved by the Engineer.

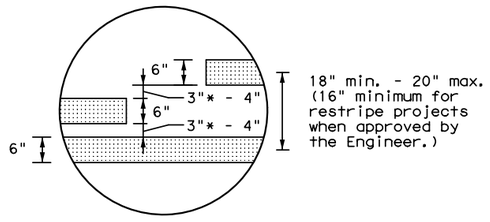
** 8" minimum for restripe projects when approved by the Engineer.



TYPICAL MULTI-LANE, TWO-WAY PAVEMENT MARKINGS THROUGH INTERSECTIONS

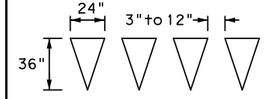


TWO LANE TWO-WAY ROADWAY WITH OR WITHOUT SHOULDERS



DETAIL "B"

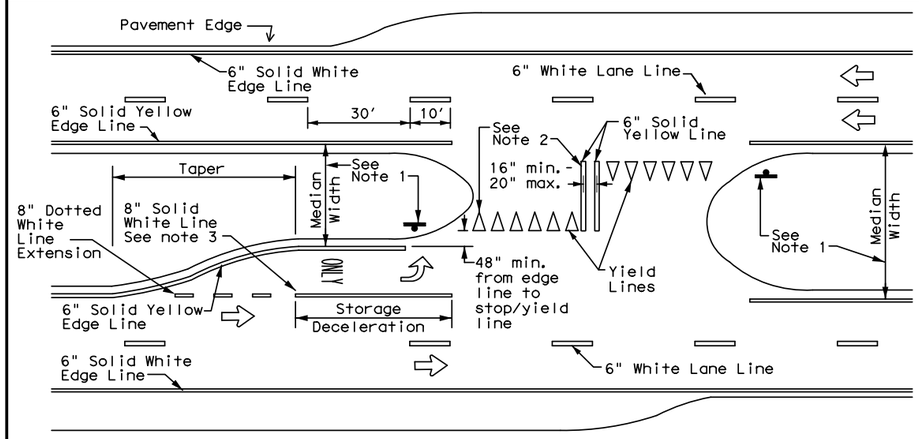
* 2" minimum for restripe projects when approved by the Engineer.



For posted speed on road being marked equal to or greater than 45 MPH.

YIELD LINES

For posted speed on road being marked equal to or less than 40 MPH.



FOUR LANE DIVIDED ROADWAY CROSSOVERS

NOTES

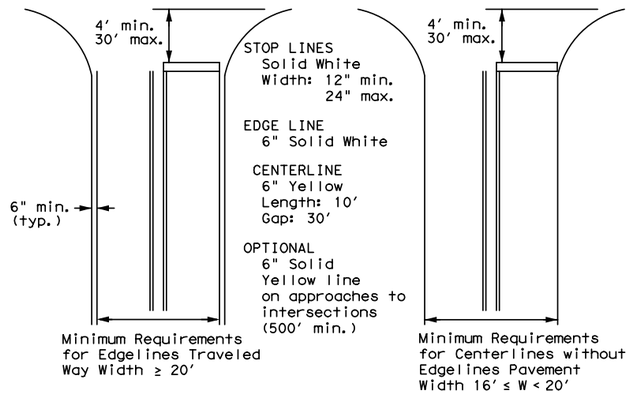
1. Where divided highways are separated by median widths at the median opening itself of 30 feet or more, median openings shall be signed as two separate intersections. Each median opening has two width measurements, with one measurement for each approach. The narrow median width will be the controlling width to determine if signs are required. Yield signs are the typical intersection control. Stop signs and stop bars are optional as determined by the Engineer.
2. Install median striping (double yellow centerlines and stop lines/yield lines) when a 50' or greater median centerline can be placed. Stop lines shall only be used with stop signs. Yield lines shall only be used with yield signs.
3. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer.

GENERAL NOTES

1. Edge line striping shall be as shown in the plans or as directed by the Engineer. The edge line should not be placed less than 6 inches from the edge of pavement. This distance may vary due to pavement raveling or other conditions. Edge lines are not required in curb and gutter sections of roadways.
2. The traveled way includes only that portion of the roadway used for vehicular travel. It does not include the parking lanes, sidewalks, berms and shoulders. The traveled ways shall be measured from the center of edge line to the center of edge line of a two lane roadway.

MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.



NOTE: Traveled way is exclusive of shoulder widths. Refer to General Note 2 for additional details.

GUIDE FOR PLACEMENT OF STOP LINES, EDGE LINE & CENTERLINE

Based on Traveled Way and Pavement Widths for Undivided Roadways

Texas Department of Transportation

Traffic Safety Division Standard

TYPICAL STANDARD PAVEMENT MARKINGS

PM(1)-22

FILE: pm1-22.dgn	DN:	CK:	DW:	CK:
© TxDOT December 2022	CONT	SECT	JOB	HIGHWAY
REVISIONS 11-78 8-00 6-20	0912	72	390	VARIES
8-95 3-03 12-22	DIST	COUNTY		SHEET NO.
5-00 2-12	HOU	HARRIS		118

22A

DATE:
FILE:

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.

SIGN SUPPORT DESCRIPTIVE CODES

(Descriptive Codes correspond to project estimate and quantities sheets)

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

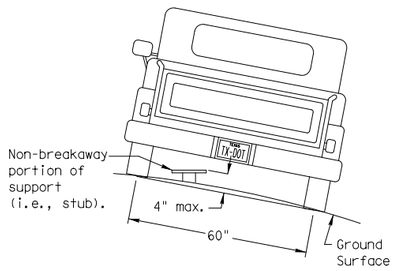
Post Type
- FRP = Fiberglass Reinforced Plastic Pipe (see SMD(FRP))
- TWT = Thin-Walled Tubing (see SMD(TWT))
- 10BWG = 10 BWG Tubing (see SMD(SLIP-1) to (SLIP-3))
- S80 = Schedule 80 Pipe (see SMD(SLIP-1) to (SLIP-3))

Number of Posts (1 or 2)

Anchor Type
- UA = Universal Anchor - Concreted (see SMD(FRP) and (TWT))
- UB = Universal Anchor - Bolted down (see SMD(FRP) and (TWT))
- WS = Wedge Anchor Steel - (see SMD(TWT))
- WP = Wedge Anchor Plastic (see SMD(TWT))
- SA = Slipbase - Concreted (see SMD(SLIP-1) to (SLIP-3))
- SB = Slipbase - Bolted Down (see SMD(SLIP-1) to (SLIP-3))

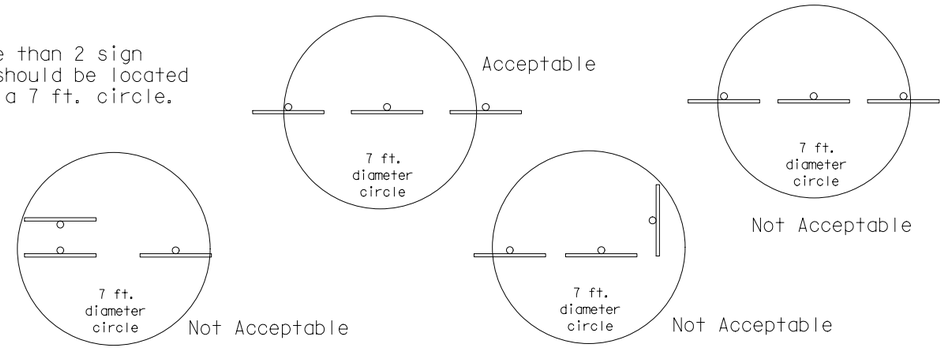
Sign Mounting Designation
- P = Prefab. "Plain" (see SMD(SLIP-1) to (SLIP-3), (TWT), (FRP))
- T = Prefab. "T" (see SMD(SLIP-1) to (SLIP-3), (TWT))
- U = Prefab. "U" (see SMD(SLIP-1) to (SLIP-3))
- IF REQUIRED
- 1EXT or 2EXT = Number of Extensions (see SMD(SLIP-1) to (SLIP-3), (TWT))
- BM = Extruded Wind Beam (see SMD(SLIP-1) to (SLIP-3))
- WC = 1.12 #/ft Wing Channel (see SMD(SLIP-1) to (SLIP-3))
- EXAL = Extruded Aluminum Sign Panels (see SMD(SLIP-1))

REQUIRED CLEARANCE FOR BREAKAWAY SUPPORT



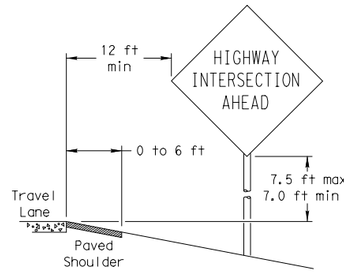
To avoid vehicle undercarriage snagging, any substantial remains of a breakaway support, when it is broken away, should not project more than 4 inches above a 60-inch chord (i.e., typical space between wheel paths).

No more than 2 sign posts should be located within a 7 ft. circle.



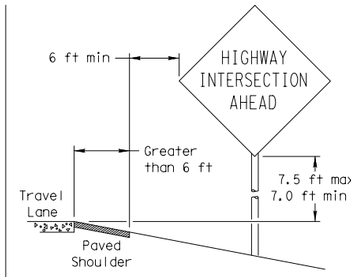
SIGN LOCATION

PAVED SHOULDERS



LESS THAN 6 FT. WIDE

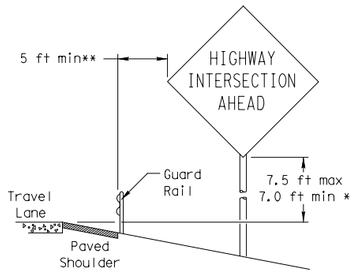
When the shoulder is 6 ft. or less in width, the sign must be placed at least 12 ft. from the edge of the travel lane.



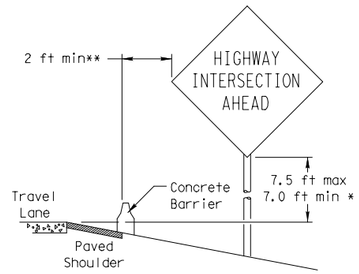
GREATER THAN 6 FT. WIDE

When the shoulder is greater than 6 ft in width, the sign must be placed at least 6 ft. from the edge of the shoulder.

BEHIND BARRIER



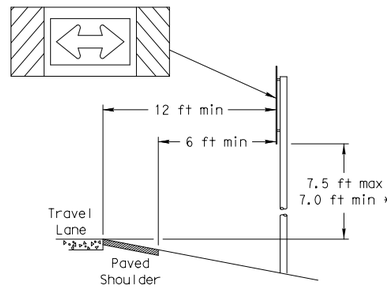
BEHIND GUARDRAIL



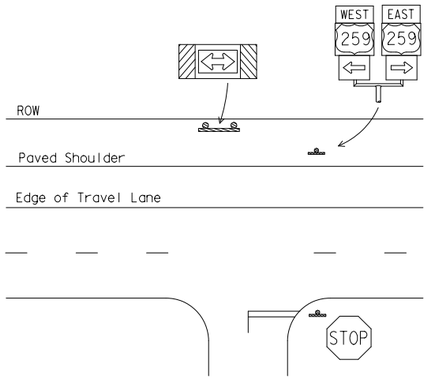
BEHIND CONCRETE BARRIER

**Sign clearance based on distance required for proper guard rail or concrete barrier performance.

T-INTERSECTION



When this sign is needed at the end of a two-lane, two way roadway, the right edge of the sign should be in line with the centerline of the roadway. Place as close to ROW as practical.



* Signs shall be mounted using the following condition that results in the greatest sign elevation:

(1) a minimum of 7 to a maximum of 7.5 feet above the edge of the travel lane or

(2) a minimum of 7 to a maximum of 7.5 feet above the grade at the base of the support when sign is installed on the backslope.

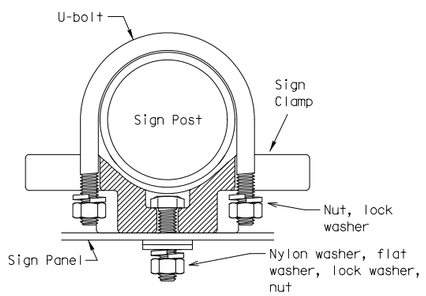
The maximum values may be increased when directed by the Engineer.

See the Traffic Operations Division website for detailed drawings of sign clamps, Triangular Slipbase System components and Wedge Anchor System components.

The website address is:
http://www.txdot.gov/publications/traffic.htm

TYPICAL SIGN ATTACHMENT DETAIL

Single Signs

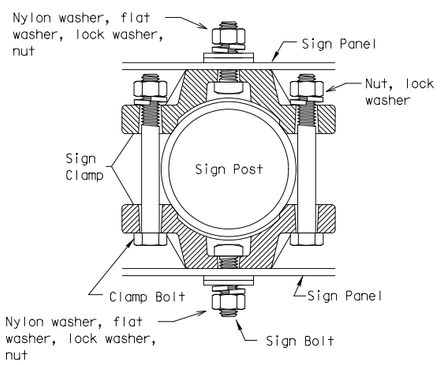


Bolts used to mount sign panels to the clamp are 5/16-18 UNC galvanized square head with nut, nylon washer, flat washer and lock washer. The bolt length is 1 inch for aluminum.

When two sign clamps are used to mount signs back-to-back, use a 5/16-18 UNC galvanized hex head per ASTM A307 with nut and helical-spring lock washer. The approximate bolt lengths for various post sizes and sign clamp types are given in the table at right. The bolt length may need to be adjusted depending upon field conditions.

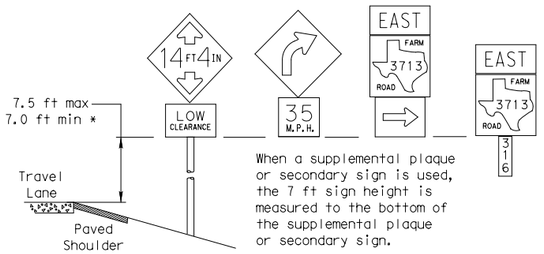
Sign clamps may be either the specific size clamp or the universal clamp.

Back-to-Back Signs



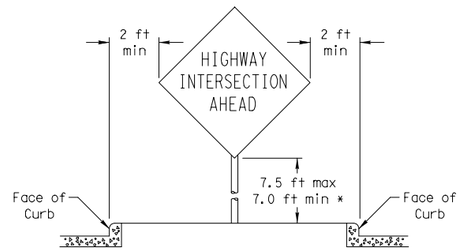
Pipe Diameter	Approximate Bolt Length	
	Specific Clamp	Universal Clamp
2" nominal	3"	3 or 3 1/2"
2 1/2" nominal	3 or 3 1/2"	3 1/2 or 4"
3" nominal	3 1/2 or 4"	4 1/2"

SIGNS WITH PLAQUES



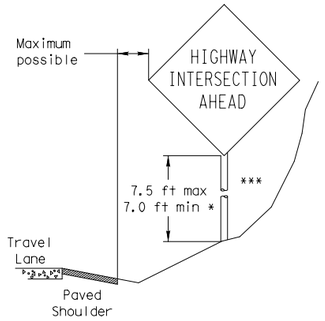
When a supplemental plaque or secondary sign is used, the 7 ft sign height is measured to the bottom of the supplemental plaque or secondary sign.

CURB & GUTTER OR RAISED ISLAND



RESTRICTED RIGHT-OF-WAY

(When 6 ft min. is not possible.)



Right-of-way restrictions may be created by rocks, water, vegetation, forest, buildings, a narrow island, or other factors.

In situations where a lateral restriction prevents the minimum horizontal clearance from the edge of the travel lane, signs should be placed as far from the travel lane as practical.

*** Post may be shorter if protected by guardrail or if Engineer determines the post could not be hit due to extreme slope.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS

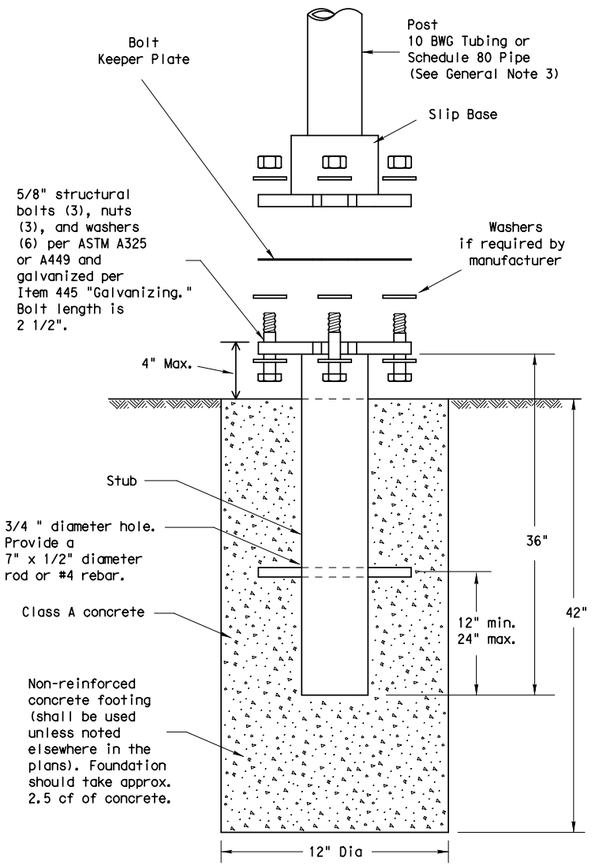
SMD(GEN)-08

©TxDOT July 2002	DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT
9-08 REVISIONS	CONT	SECT	JOB	HIGHWAY
	0912	72	390	VARIES
	DIST	COUNTY		SHEET NO.
	HOU	HARRIS		119

26A

DATE:
FILE:

TRIANGULAR SLIPBASE INSTALLATION GENERAL REQUIREMENTS



SM RD SGN ASSM TY XXXXX(X)SA(X-XXXX)

NOTE

There are various devices approved for the Triangular Slipbase System. Please reference the Material Producer List for approved slip base systems. http://www.txdot.gov/business/producer_list.htm The devices shall be installed per manufacturers' recommendations. Installation procedures shall be provided to the Engineer by Contractor.

GENERAL NOTES:

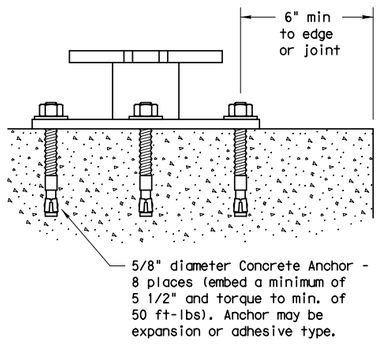
1. Slip base shall be permanently marked to indicate manufacturer. Method, design, and location of marking are subject to approval of the TxDOT Traffic Standards Engineer.
2. Material used as post with this system shall conform to the following specifications:
   10 BWG Tubing (2.875" outside diameter)
   0.134" nominal wall thickness
   Seamless or electric-resistance welded steel tubing or pipe
   Steel shall be HSLAS Gr 55 per ASTM A1011 or ASTM A1008
   Other steels may be used if they meet the following:
   55,000 PSI minimum yield strength
   70,000 PSI minimum tensile strength
   20% minimum elongation in 2"
   Wall thickness (uncoated) shall be within the range of 0.122" to 0.138"
   Outside diameter (uncoated) shall be within the range of 2.867" to 2.883"
   Galvanization per ASTM A123 or ASTM A653 G210. For precoated steel tubing (ASTM A653), recoat tube outside diameter weld seam by metallizing with zinc wire per ASTM B833.
   Schedule 80 Pipe (2.875" outside diameter)
   0.276" nominal wall thickness
   Steel tubing per ASTM A500 Gr C
   Other seamless or electric-resistance welded steel tubing or pipe with equivalent outside diameter and wall thickness may be used if they meet the following:
   46,000 PSI minimum yield strength
   62,000 PSI minimum tensile strength
   21% minimum elongation in 2"
   Wall thickness (uncoated) shall be within the range of 0.248" to 0.304"
   Outside diameter (uncoated) shall be within the range of 2.855" to 2.895"
   Galvanization per ASTM A123
3. See the Traffic Operations Division website for detailed drawings of sign clamps and Texas Universal Triangular Slipbase System components. The website address is: http://www.txdot.gov/publications/traffic.htm
4. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.

ASSEMBLY PROCEDURE

Foundation
1. Prepare 12-inch diameter by 42-inch deep hole. If solid rock is encountered, the depth of the foundation may be reduced such that it is embedded a minimum of 18 inches into the solid rock.
2. The Engineer may permit batches of concrete less than 2 cubic yards to be mixed with a portable, motor-driven concrete mixer. For small placements less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.
3. Push the pipe end of the slip base stub into the center of the concrete. Rotate the stub back and forth while pushing it down into the concrete to assure good contact between the concrete and stub. Continue to work the stub into the concrete until it is between 2 to 4 inches above the ground.
4. Plumb the stub. Allow a minimum of 4 days to set, unless otherwise directed by the Engineer.
5. The triangular slipbase system is multidirectional and is designed to release when struck from any direction.

Support
1. Cut support so that the bottom of the sign will be 7 to 7.5 feet above the edge of the travelway (i.e., edge of the closest lane) when slip plate is below the edge of pavement or 7 to 7.5 feet above slip plate when the slip plate is above the edge of the travelway. The cut shall be plumb and straight.
2. Attach sign to support using connections shown. When multiple signs are installed on the same support, ensure the minimum clearance between each sign is maintained. See SMD(SLIP-2) for clearances based on sign types.

CONCRETE ANCHOR



SM RD SGN ASSM TY XXXXX(X)SB(X-XXXX)

Concrete anchor consists of 5/8" diameter stud bolt with UNC series bolt threads on the upper end. Heavy hex nut per ASTM A563, and hardened washer per ASTM F436. The stud bolt shall have a minimum yield and ultimate tensile strength of 50 and 75 KSI, respectively. Nuts, bolts and washers shall be galvanized per Item 445, "Galvanizing." Adhesive type anchors shall have stud bolts installed with Type III epoxy per DMS-6100, "Epoxies and Adhesives." Adhesive anchors may be loaded after adequate epoxy cure time per the manufacturer's recommendations. Top of bolt shall extend at least flush with top of the nut when installed. The anchor, when installed in 4000 psi normal-weight concrete with a 5 1/2" minimum embedment, shall have a minimum allowable tension and shear of 3900 and 3100 psi, respectively.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-1)-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

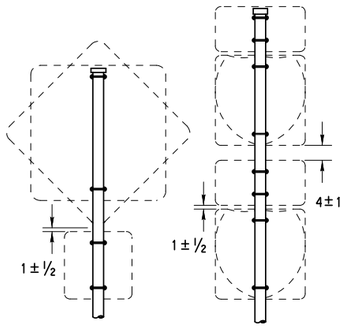
REVISIONS
9-08

CONT	SECT	JOB	HIGHWAY
0912	72	390	VARIES

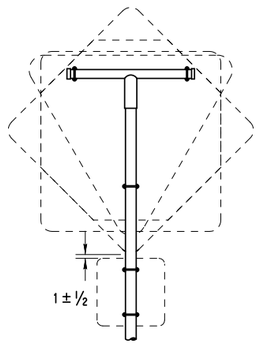
DIST	COUNTY	SHEET NO.
HOU	HARRIS	120

DATE:
FILE:

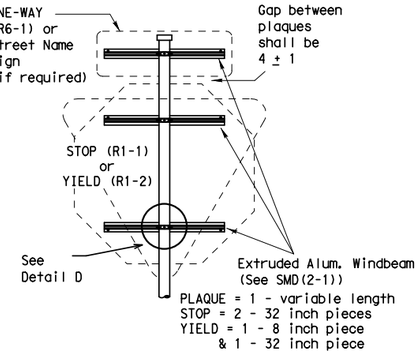
DATE:
FILE:



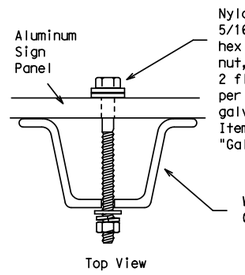
SM RD SGN ASSM TY XXXXX(1)XX(P)



SM RD SGN ASSM TY XXXXX(1)XX(T)

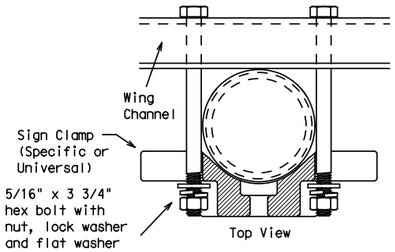


SM RD SGN ASSM TY XXXXX(1)XX(P-BM)



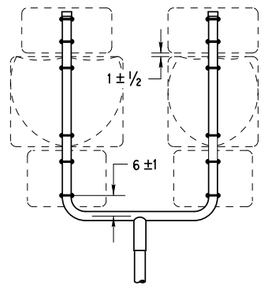
Top View

Detail A

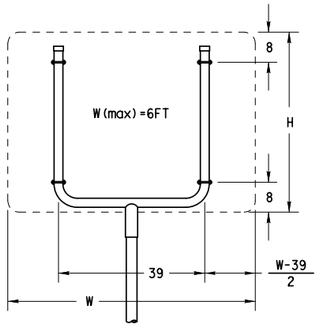


Top View

Detail B



SM RD SGN ASSM TY XXXXX(1)XX(U)



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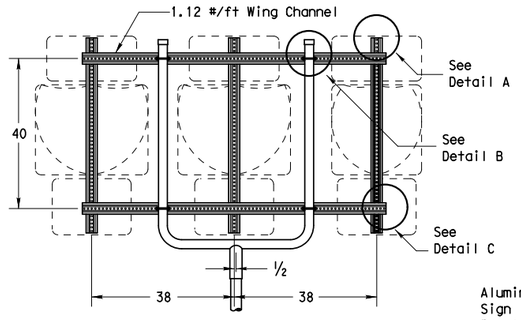
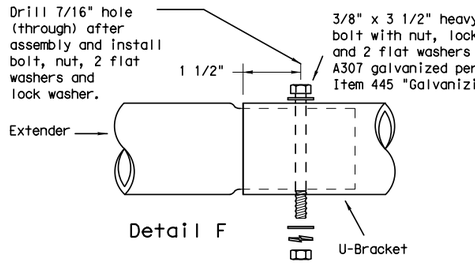
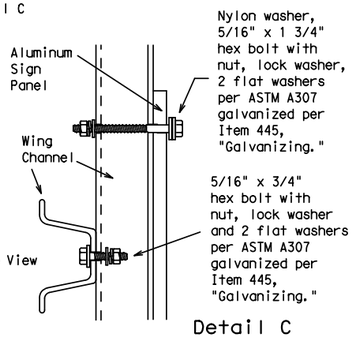


SM RD SGN ASSM TY XXXXX(1)XX(U-WC)
(See Note 11)

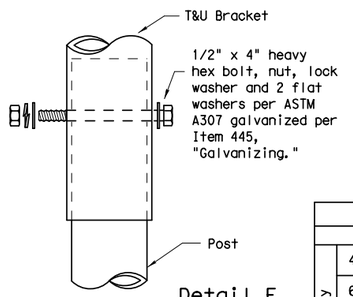


Detail F

Splices shall only be allowed behind the sign substrate.



Detail C



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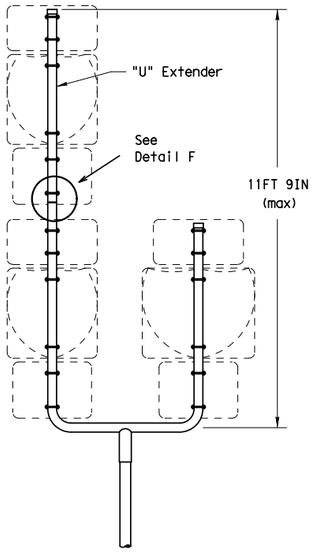
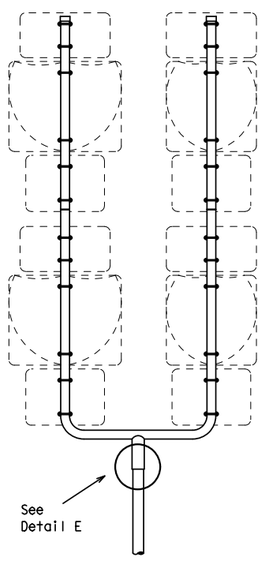


SM RD SGN ASSM TY S80(1)XX(U-1EXT)



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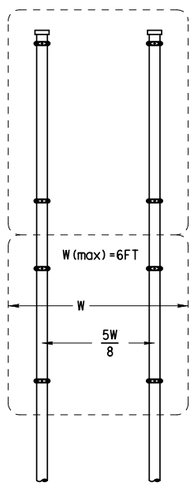
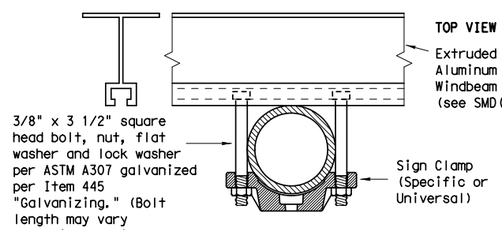
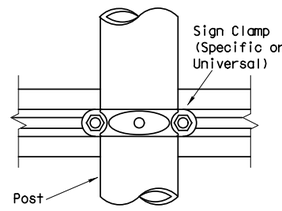


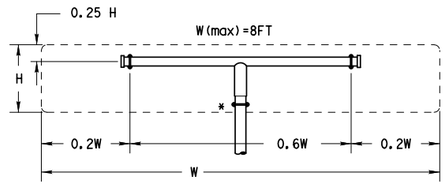
SM RD SGN ASSYM TY XXXXX(2)XX(P)

SIDE VIEW



Detail D

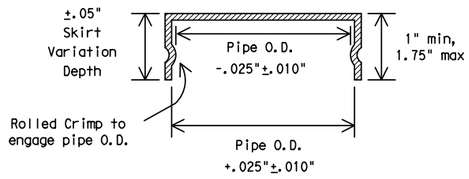




All dimensions are in english unless detailed otherwise.

SM RD SGN ASSM TY XXXXX(1)XX(T)
(* - See Note 12)

FRICTION CAP DETAIL



Friction caps may be manufactured from hot rolled or cold rolled steel sheets. The minimum sheet metal thickness shall be 24 gauge for all cap sizes.

The rim edges shall be reasonably straight and smooth. Caps shall be sized and formed in such a manner as to produce a drive-on friction fit and have no tendency to rock when seated on the pipe. The depth shall be sufficient to give positive protection against entrance of rainwater. They shall be free of sharp creases or indentations and show no evidence of metal fracture.

Caps shall have an electrodeposited coating of zinc in accordance with the requirements of ASTM B633 Class FE/ZN 8.

GENERAL NOTES:

1.

SIGN SUPPORT	# OF POSTS	MAX. SIGN AREA
10 BWG	1	16 SF
10 BWG	2	32 SF
Sch 80	1	32 SF
Sch 80	2	64 SF

2. The Engineer may require that a Schedule 80 post be used in place of a 10 BWG where a sign height is abnormally high due to a fill slope.
3. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.
4. Aluminum sign blanks shall conform to Departmental Material Specifications DMS-7110 and shall have the following minimum thicknesses: 0.080 for signs less than 7.5 sq. ft., 0.100 for signs 7.5 to 15 sq. ft., and 0.125 for signs greater than 15 sq. ft.
5. Signs that require specific supports due to reasons in addition to windloading are indicated on the "REQUIRED SUPPORT" table on this sheet.
6. For horizontal rectangular signs fabricated from flat aluminum, T-brackets are used for signs 24 inches or less in height. U-brackets are used for signs of greater height.
7. When two triangular slipbase supports are used to support a single sign, they shall not be "rigidly" connected to each other except through the sign panel. This will allow each support to act independently when impacted by an errant vehicle.
8. Wing channel shall meet ASTM A 1011 SS Gr 50 and be galvanized per ASTM A 123.
9. Excess pipe, wing channel, or windbeam shall be cut off so that it does not extend beyond the sign panel (i.e., excess support shall not be visible when the sign is viewed from the front.) Repair galvanized coating at cut support ends per Item 445, "Galvanizing."
10. Additional route markers may be added vertically, provided the total sign area does not exceed the maximum allowable amount per Note 1.
11. Additional sign clamp required on the "T-bracket" post for 24 inch height signs. Place the clamp 3 inches above bottom of sign when possible.
12. Post open ends shall be fitted with Friction Caps.
13. Sign blanks shall be the sizes and shapes shown on the plans.

REQUIRED SUPPORT

	SIGN DESCRIPTION	SUPPORT
Regulatory	48-inch STOP sign (R1-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	60-inch YIELD sign (R1-2)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	48x16-inch ONE-WAY sign (R6-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	36x48, 48x36, and 48x48-inch signs	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
Warning	48x48-inch signs (diamond or square)	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
	48-inch Advance School X-ing sign (S1-1)	TY 10BWG(1)XX(T)
	48-inch School X-ing sign (S2-1)	TY 10BWG(1)XX(T)
	Large Arrow sign (W1-6 & W1-7)	TY 10BWG(1)XX(T)

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM

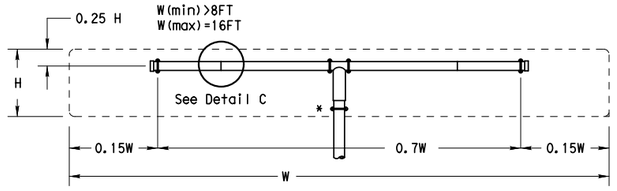
SMD(SLIP-2)-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

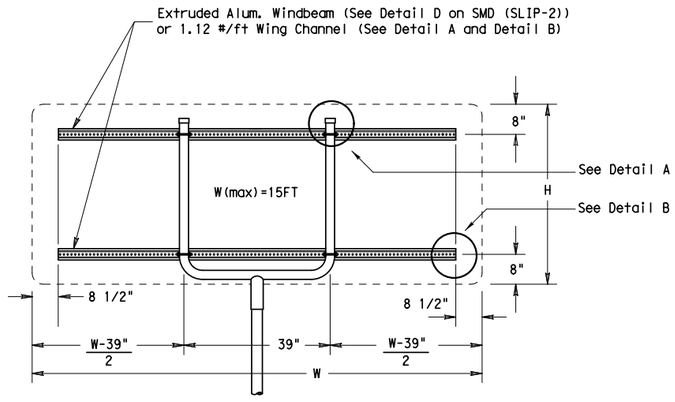
9-08 REVISIONS	CONT	SECT	JOB	HIGHWAY
	0912	72	390	VARIES
	DIST	COUNTY		SHEET NO.
	HOU	HARRIS		121

26C

DATE:
FILE:



SM RD SGN ASSM TY XXXXX(1)XX(T-2EXT)
(* - See Note 12)



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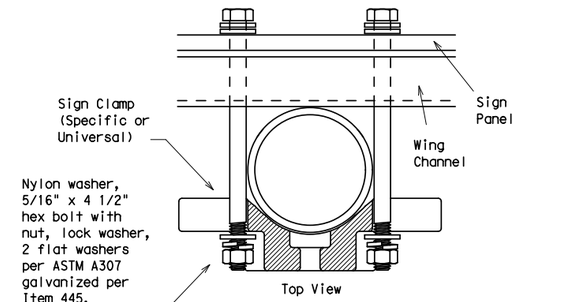
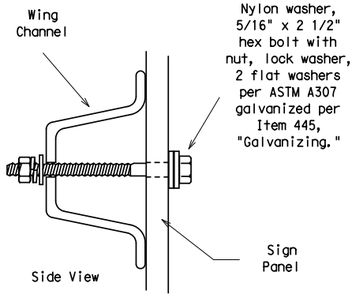


Detail A



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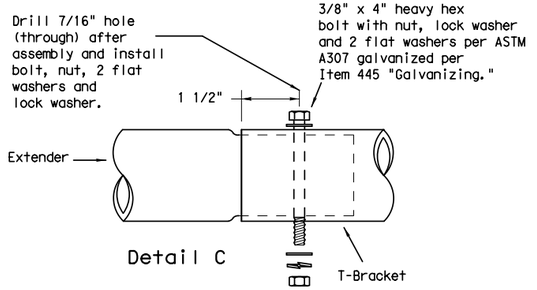
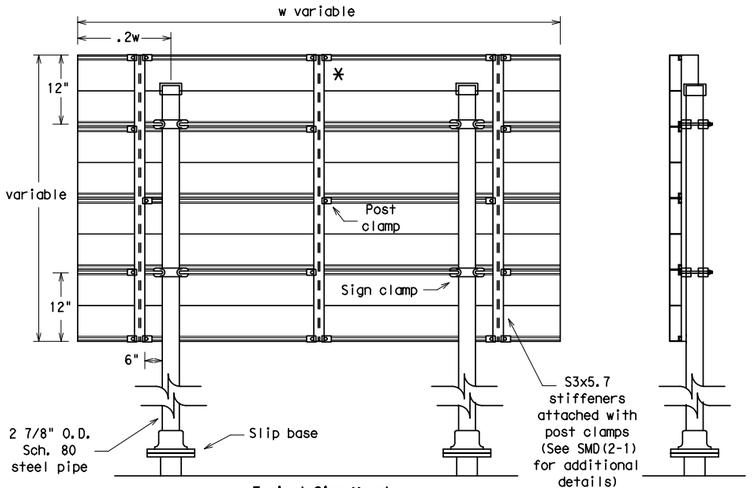


Detail C

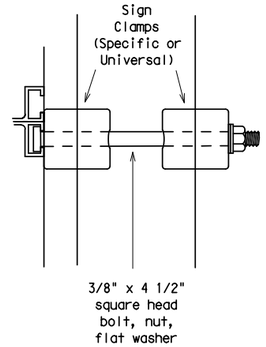
Splices shall only be allowed behind the sign substrate.



Typical Sign Mount

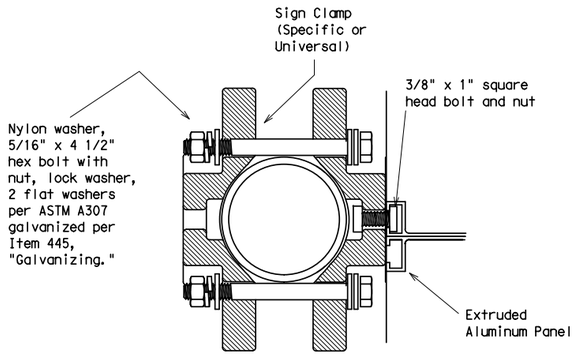
SM RD SGN ASSM TY S80(2)XX(P-EXAL)

* Additional stiffener placed at approximate center of signs when sign width is greater than 10'.

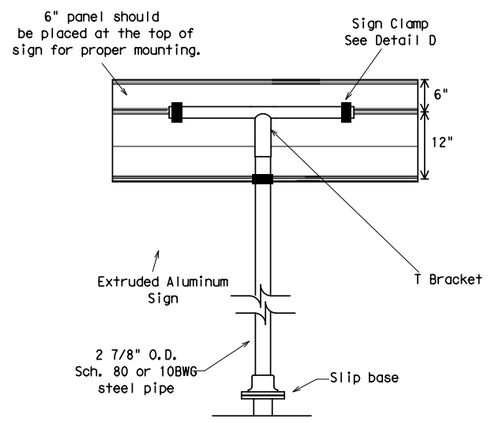


See Detail E
for clamp installation

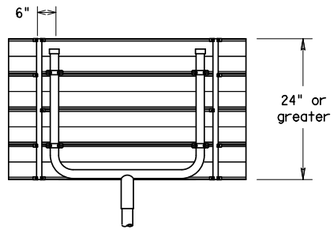
Detail E



Detail D
EXTRUDED ALUMINUM SIGN WITH T BRACKET



Extruded Aluminum Sign
With T Bracket



Use Extruded Alum. Windbeam as stiffeners
See SMD (2-1) for additional details

See Detail E
for clamp installation

GENERAL NOTES:

SIGN SUPPORT	# OF POSTS	MAX. SIGN AREA
10 BWG	1	16 SF
10 BWG	2	32 SF
Sch 80	1	32 SF
Sch 80	2	64 SF

1. The Engineer may require that a Schedule 80 post be used in place of a 10 BWG where a sign height is abnormally high due to a fill slope.
2. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.
3. Aluminum sign blanks shall conform to Departmental Material Specifications DMS-7110 and shall have the following minimum thicknesses: 0.080 for signs less than 7.5 sq. ft., 0.100 for signs 7.5 to 15 sq. ft., and 0.125 for signs greater than 15 sq. ft.
4. Signs that require specific supports due to reasons in addition to windloading are indicated on the "REQUIRED SUPPORT" table on this sheet.
5. For horizontal rectangular signs fabricated from flat aluminum, T-brackets are used for signs 24 inches or less in height. U-brackets are used for signs of greater height.
6. When two triangular slipbase supports are used to support a single sign, they shall not be "rigidly" connected to each other except through the sign panel. This will allow each support to act independently when impacted by an errant vehicle.
7. Wing channel shall meet ASTM A 1011 SS Gr 50 and be galvanized per ASTM A 123.
8. Excess pipe, wing channel, or windbeam shall be cut off so that it does not extend beyond the sign panel (i.e., excess support shall not be visible when the sign is viewed from the front.) Repair galvanized coating at cut support ends per Item 445, "Galvanizing."
9. Sign blanks shall be the sizes and shapes shown on the plans.
10. Additional sign clamp required on the "T-bracket" post for 24 inch high signs. Place the clamp 3 inches above bottom of sign when possible.
11. Post open ends shall be fitted with Friction Caps.

REQUIRED SUPPORT		
	SIGN DESCRIPTION	SUPPORT
Regulatory	48-inch STOP sign (R1-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	60-inch YIELD sign (R1-2)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	48x16-inch ONE-WAY sign (R6-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	36x48, 48x36, and 48x48-inch signs	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
Warning	48x48-inch signs (diamond or square)	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
	48-inch Advance School X-ing sign (S1-1)	TY 10BWG(1)XX(T)
	48-inch School X-ing sign (S2-1)	TY 10BWG(1)XX(T)
	Large Arrow sign (W1-6 & W1-7)	TY 10BWG(1)XX(T)

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-3)-08

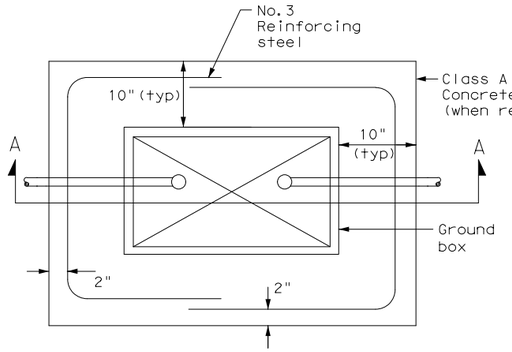
REVISIONS
9-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

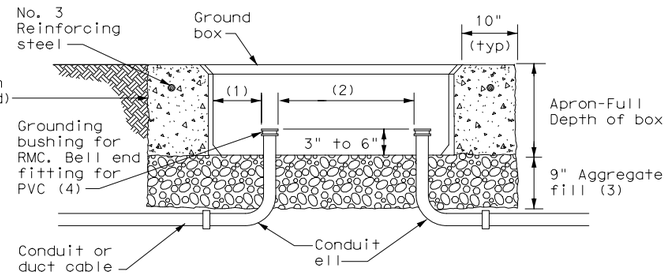
CONT	SECT	JOB	HIGHWAY
0912	72	390	VARIES

DIST	COUNTY	SHEET NO.
HOU	HARRIS	122

DATE:
FILE:



PLAN VIEW



SECTION A - A

APRON FOR GROUND BOX

(1) Uniformly space ends of conduits within the ground box. Position ends of conduits so that ground box walls do not interfere with the installation of grounding bushings or bell end fittings.

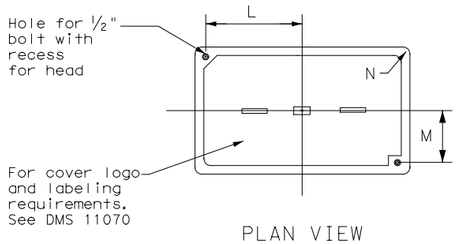
(2) Maintain sufficient space between conduits to allow for proper installation of bushing.

(3) Place aggregate under the box, not in the box. Aggregate should not encroach on the interior volume of the box.

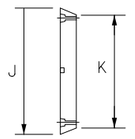
(4) Install a grounding bushing on the upper end of all RMC terminating in a ground box. Ground RMC elbows when any part of the elbow is less than 18 in. below the bottom of the ground box. Install a PVC bushing or bell end fitting on the upper end of all PVC conduits terminating in a ground box.

GROUND BOX DIMENSIONS	
TYPE	OUTSIDE DIMENSIONS (INCHES) (Width x Length X Depth)
A	12 X 23 X 11
B	12 X 23 X 22
C	16 X 29 X 11
D	16 X 29 X 22
E	12 X 23 X 17

GROUND BOX COVER DIMENSIONS								
TYPE	DIMENSIONS (INCHES)							
	H	I	J	K	L	M	N	P
A, B & E	23 1/4	23	13 3/4	13 1/2	9 7/8	5 1/8	1 3/8	2
C & D	30 1/2	30 1/4	17 1/2	17 1/4	13 1/4	6 3/4	1 3/8	2



PLAN VIEW



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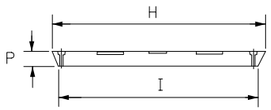


SIDE

GROUND BOX COVER

GROUND BOXES

A. MATERIALS

1. Provide polymer concrete ground boxes measuring 16x30x24 in. (WxLxD) or smaller in accordance with Departmental Material Specification (DMS) 11070 "Ground Boxes" and Item 624 "Ground Boxes."

2. Provide Type A, B, C, D, and E ground boxes as shown in the plans, and as listed on the Material Producers List (MPL) on the Department web site under "Roadway Illumination and Electrical Supplies," Item 624.

3. Ensure ground box cover is correctly labeled in accordance with DMS 11070.

4. Provide larger ground boxes in accordance with Item 624 and as shown in the plans.

B. CONSTRUCTION METHODS

1. Remove all gravel and dirt from conduit. Cap all conduits prior to placing aggregate and setting ground box. Provide Grade 3 or 4 coarse aggregate as shown on Table 2 of Item 302 "Aggregates for Surface Treatments." Ensure aggregate bed is in place and at least 9 inches deep, prior to setting the ground box. Install ground box on top of aggregate.

2. Cast ground box aprons in place. Reinforcing steel may be field bent. Ensure the depth of concrete for the apron extends from finished grade to the top of the aggregate bed under the box. Ground box aprons, including concrete and reinforcing steel, are subsidiary to ground boxes when called for by descriptive code.

3. Keep bolt holes in the box clear of dirt. Bolt covers down when not working in ground boxes.

4. Install all conduits and ells in a neat and workmanlike manner. Uniformly space conduits so grounding bushings and bell end fittings can easily be installed.

5. Temporarily seal all conduits in the ground box until conductors are installed.

6. Permanently seal conduits immediately after the completion of conductor installation and pull tests. Permanently seal the ends of all conduits with duct seal, expandable foam, or other method as approved. Do not use duct tape as a permanent conduit sealant. Do not use silicone caulk as a sealant.

7. When a ground rod is present in a ground box, bond all equipment grounding conductors together and to the ground rod with listed connectors.

8. When a type B or D ground box is stacked to meet volume requirements, it is allowable to cut an appropriately sized hole for conduit entry in the side wall at least 18 inches below grade.

9. If an existing ground box in the contract has a metal cover, bond the cover to the equipment grounding conductor with a 3 ft. long stranded bonding jumper the same size as the grounding conductor. The bonding jumper is subsidiary to various bid items. Verify existing ground boxes with metal covers are shown on the plans, with notes fully describing the work required.

10. If other ground boxes with metal covers are within the project limits but are not part of the contract, the Engineer may direct the Contractor to bond the metal covers, identifying the specific boxes in writing. This work will be paid for separately.

11. Bond metal ground box covers to the grounding conductor with a tank ground type lug.

Texas Department of Transportation

Traffic Operations Division Standard

ELECTRICAL DETAILS
GROUND BOXES

ED(4)-14

FILE: ed4-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT October 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	0912	72	390	VARIES
	DIST	COUNTY		SHEET NO.
	HOU	HARRIS		123

71D

I. STORMWATER POLLUTION PREVENTION

Texas Pollutant Discharge Elimination System (TPDES) TXR 150000: Stormwater Discharge Permit or Construction General Permit is required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506. Refer to Storm Water Pollution Prevention Plan (SWP3) Houston District standard plan.

No Additional Comments

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS

United States Army Corps of Engineers (USACE) Permit is required for filling, dredging, excavating or other work in water bodies, rivers, creeks, streams, wetlands or wet areas. The Contractor must adhere to all of the terms and general conditions associated with the following permit(s). If additional work not represented in the plans is required, contact the Engineer immediately.

☒ No United States Army Corps (USACE) Permit Required

☐ Work is authorized by the United States Army Corps of Engineers (USACE) under a Nationwide Permit (NWP) without a Pre-Construction Notification (PCN). Project specific permit was not issued by USACE, therefore is not in the plan set. The USACE general conditions are in the “General Notes."

☐ Work is authorized by the United States Army Corps of Engineers (USACE) under a Nationwide Permit (NWP) with a Pre-Construction Notification (PCN). The project specific permit issued by the United States Army Corps of Engineers (USACE) is included in the plan set. The USACE general conditions are in the “General Notes."

☐ Work is authorized by the United States Army Corps of Engineers (USACE) under a Individual Permit (IP). The project specific permit issued by the United States Army Corps of Engineers (USACE) is included in the plan set.

☐ Work would be authorized by the United States Army Corps of Engineers (USACE) permit. The project specific permit issued by the USACE will be provided to the contractor.

United States Coast Guard (USCG) Permit is required for projects that involve the construction or modification (including changes to lighting) of a bridge or causeway across a water body determined to be navigable by the United States Coast Guard (USCG) under Section 9 of the Rivers and Harbors Act. If additional work not represented in the plans is required, contact the Engineer immediately.

☒ No United States Coast Guard (USCG) Coordination Required

☐ United States Coast Guard (USCG) Permit

☐ United States Coast Guard (USCG) Exemption

No Additional Comments

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the area and contact the Engineer immediately.

Additional Comments

PROTECTION NOTES FOR THE REMOVAL OF EXISTING PAVEMENT, CURB OR SIDEWALK AND CONSTRUCTION OF NEW PAVEMENT, CURB OR SIDEWALK ADJACENT TO HISTORIC BUILDINGS, MATERIALS, FENCES, AND RETAINING WALLS

Along San Jacinto St between Pierce St and St Joseph Pkwy, avoid damage to historic building wall abutting ROW.

See Section VII for continued notes.

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical. Refer to TxDOT Standard Specifications in order to comply with requirements for invasive species, beneficial landscaping and tree/brush removal.

No Additional Comments

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS

If any of the listed species below are observed, cease work in the area, do not disturb species or habitat and contact the Engineer immediately.

The work may not remove active nests (from bridges, structures, or vegetation adjacent to the roadway, etc.) during nesting season (February 15 to October 1). If removal of structures or vegetation is necessary during the nesting season, the Contractor shall conduct a bird survey no more than 3 days in advance of the clearing/demolish start date. All bird surveys shall be conducted by a Field Biologist and adhere to the guidance document “Avoiding Migratory Birds and Handling Potential Violations” found in the TxDOT Environmental Compliance Toolkits at the time of the survey. (See below for Field Biologist and Ornithologist qualifications)

No Additional Comments

Field Biologist, Ornithologist – a field biologist is defined as an individual qualified to perform field investigations, presence/absence surveys and habitat surveys for protected avian species or species of concern. A mandatory bachelor’s degree in biology or a related science is required. At a minimum, the Field Biologist, Ornithologist, shall have completed and reported a minimum of three presence/absence and habitat surveys for protected avian species in the past five years. A minimum of three projects must have been conducted in Texas. Surveys shall have been performed for documentation of species in accordance with a protocol approved by USFWS or TPWD, or following generally accepted methodologies.

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

Refer to TxDOT Standard Specifications in the event potentially contaminated materials are observed, such as dead or distressed vegetation, trash disposal areas, drums, canisters, barrels, leaching or seepage of substances, unusual smells or odors, or stained soil, cease work in the area and contact the Engineer immediately.

No Additional Comments

VII. OTHER ENVIRONMENTAL ISSUES

Comments:

III CULTURAL RESOURCES Continued:

Where proposed work is in proximity to historic buildings or other structures (building walls) follow the procedures listed below.

To minimize potential damage to historic structures and materials, contractor must saw cut existing sidewalk 8 to 12 inches away from the historic building wall.

1. Contractor must prevent damage to historic building wall during the entire construction project.

2. Contractor must repair or replace in kind, at his own expense, any historic materials damaged in the course of executing the work. Contractor shall locate replacement source for historic materials damaged in the course of the work. TxDOT-Environmental Affairs Division shall be informed of proposed repairs to facilitate consultation with Texas Historical Commission prior to execution of repair.

DATE: Jul 28, 2022
FILE:

Version 2.1

Texas Department of Transportation

TxDOT Houston District

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: EPIC Sheet.dgn	DN:	CK:	DW:	CK:
© TxDOT: March 2017	CONT	SECT	JOB	HIGHWAY
REVISIONS	0912	72	390	VARIES
UPDATED section V. text and added definition (10/17) ADDED USCG and USACE notes in Section VII (04/18)	DIST	COUNTY		SHEET NO.
	HOU	HARRIS		124

VII. OTHER ENVIRONMENTAL ISSUES	VII. OTHER ENVIRONMENTAL ISSUES	VII. OTHER ENVIRONMENTAL ISSUES

DATE:
FILE:

Texas Department of Transportation

TxDOT Houston District

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

EPIC

FILE: EPIC Additional Comment Sheet.dgn	DN:		CK:	DW:	CK:
© TxDOT: March 2017	CONT	SECT	JOB		HIGHWAY
REVISIONS	0912	72	390		VARIES
	DIST	COUNTY			SHEET NO.
	HOU	HARRIS			125

SITE DESCRIPTION

PROJECT LIMITS: At various locations in Southeast Downtown Houston streets: BELL STREET, LEELAND STREET, PEASE STREET, JEFFERSON STREET, ST. JOSEPH STREET, CAROLINE STREET, JACKSON STREET, CHENEVERT STREET, HAMILTON STREET in Houston Downtown

PROJECT DESCRIPTION:

1. Project Latitude 29° 43'40.15"N, Project Longitude 95° 20'12.10"W
2. Location Map: Shown on Title Sheet & Roadway Sheets
3. Drainage Patterns (typical) are shown on 'SWPPP Example Intersection Sheet'. No alteration of overall street/sidewalk drainage is proposed.
4. Approx. Slopes & Soil Disturbance are determined after grading and pavement alteration has occurred at each corner (no elevations taken or proposed).
5. Major controls & locations of stabilization are shown on 'SWPPP Example Intersection Sheet'.
6. Project Specific Locations: Off-site waste, borrow or storage areas are not part of this SW3P.
7. Surface Waters & Discharge Locations: See plan sheets and 'SWPPP Example Intersection Sheet'.
8. Joint-bid utilities covered by this SW3P: N/A, Non-Joint bid utilities are not part of this SW3P.

MAJOR SOIL DISTURBING ACTIVITIES:

Sidewalks including Curb Ramp and driveway aprons installation, to include minor grading & Excavation for sidewalks, curb ramps & driveways.

TOTAL PROJECT AREA: .001 miles, less than 2 acres. See 'Project Location Map' for limits.

TOTAL AREA TO BE DISTURBED: 1.36 acres

WEIGHTED RUNOFF COEFFICIENT:
(AFTER CONSTRUCTION): No Change

EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER:

Approximately 75% of the project areas are currently paved. The remaining project areas are in the developed urban regions. Soils in project ROW are highly compacted or covered with pavement, sod or mixture of native grasses and vary in organic matter.

NAME OF RECEIVING WATERS: Brays Bayou - 1007G
Sims Bayou - 1007D
Carpenters Bayou - 1006

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES:

____ TEMPORARY SEEDING
_X_ PERMANENT PLANTING, SODDING, OR SEEDING
____ MULCHING
____ SOIL RETENTION BLANKET
____ BUFFER ZONES
_X_ PRESERVATION OF NATURAL RESOURCES

OTHER:

STRUCTURAL PRACTICES:

____ SILT FENCES
____ HAY BALES
____ ROCK BERMS
____ DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
____ DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
____ DIVERSION DIKE AND SWALE COMBINATIONS
____ PIPE SLOPE DRAINS
____ PAVED FLUMES
____ ROCK BEDDING AT CONSTRUCTION EXIT
____ TIMBER MATTING AT CONSTRUCTION EXIT
____ CHANNEL LINERS
____ SEDIMENT TRAPS
____ SEDIMENT BASINS
____ STORM INLET SEDIMENT TRAP
____ STONE OUTLET STRUCTURES
_X_ CURBS AND GUTTERS
____ STORM SEWERS
____ VELOCITY CONTROL DEVICES
_X_ EROSION CONTROL LOGS

OTHER:

NARRATIVE - SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

The order of construction activity will be as follows:
1. Install erosion control measures
2. Construct curb ramps and sidewalks
3. Maintain erosion control devices until all disturbed areas are stabilized

STORM WATER MANAGEMENT:

Some filtration will occur in existing adjacent grass lined areas and the remainder of contaminants will enter existing storm sewer after being minimized by stabilization practices.

OTHER EROSION AND SEDIMENT CONTROLS:

MAINTENANCE: All erosion and sediment controls will be maintained in good working order. If a repair is necessary it will be done at the earliest date possible, but no later than 7 calendar days after the surrounding exposed ground has dried sufficiently to prevent further damage from heavy equipment. The area adjacent to creeks and drainageways shall have priority followed by devices protecting storm sewer inlets.

INSPECTION: All inspections will be performed by a TxDOT inspector per one of the options below as directed by the Area Engineer
1. At least every 7 calendar days
2. At least every 14 days or after 0.5 inches or more of rainfall

An inspection and maintenance report should be made for each inspection. Based on the inspection results, the controls shall be revised according to the inspection report.

WASTE MATERIALS: The dumpster used to store all waste material will meet all state and local city solid waste management regulations. All trash and construction debris will be deposited in the dumpster. The dumpster will be emptied as necessary or as required by local regulation and the trash will be hauled to a local dump. No construction waste material will be buried on site.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING): In the event of a spill which may be considered hazardous, the Houston District Safety Office shall be contacted immediately at 713-802-5962.

SANITARY WASTE: All Sanitary Waste will be collected from the portable units as necessary or as required by local regulations by a licensed sanitary waste management contractor.

OFFSITE VEHICLE TRACKING:

____ HAUL ROADS DAMPENED FOR DUST CONTROL
_X_ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
_X_ EXCESS DIRT ON ROAD REMOVED DAILY
____ STABILIZED CONSTRUCTION ENTRANCE

OTHER:

REMARKS: Disposal areas, stockpiles, and haul roads shall be constructed in a manner that will minimize and control the sediment that may enter receiving waterways. Disposal areas shall not be located in any waterway, waterbody or streambed. Construction staging areas and vehicle maintenance areas shall be constructed by the contractor in a manner which minimizes the runoff of all pollutants. All waterways shall be cleared as soon as practical of temporary embankments, temporary bridges, matting, falsework, piling, debris, and other obstructions placed during construction operations that are not part of the finished work.

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

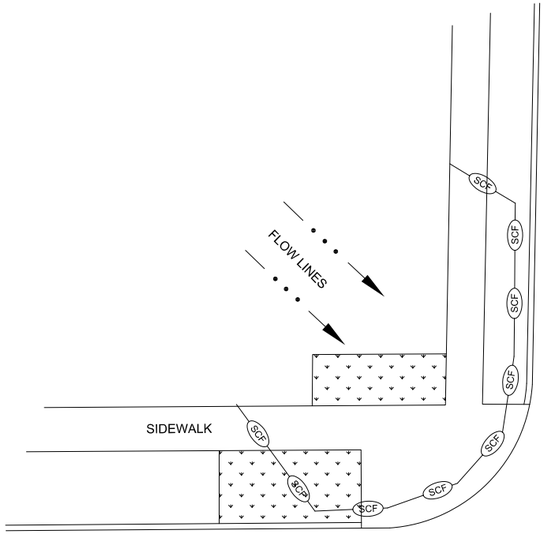
Texas Department of Transportation
Houston District

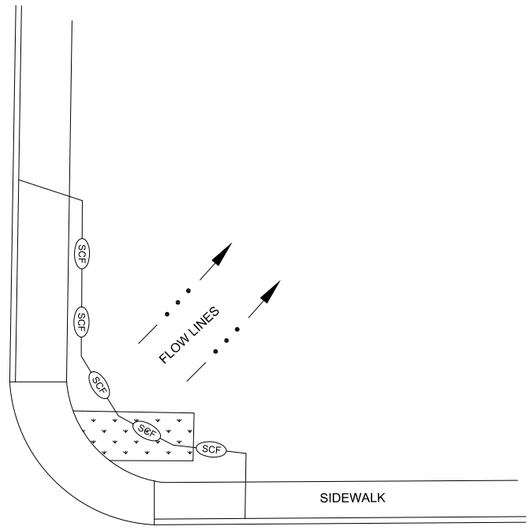
TxDOT STORM WATER POLLUTION PREVENTION PLAN

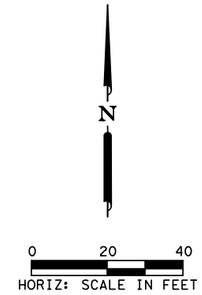
SWP3

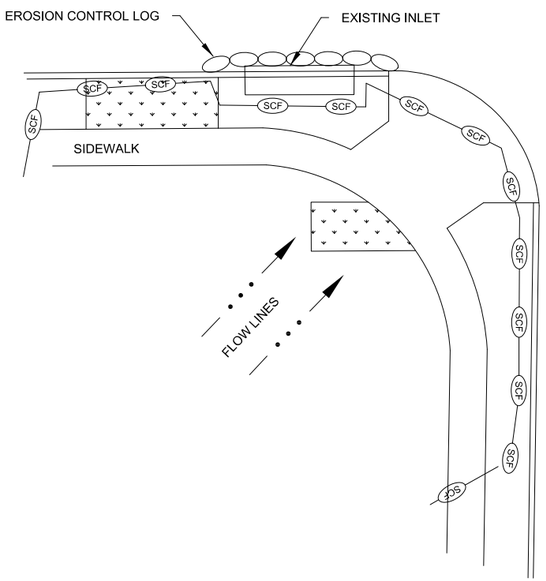
FILE: STDG1.DGN	DN: TxDot	CK: TxDot	DW: TxDot	CK: TxDot
©TxDOT JANUARY 2007	DIST	FED REG	FEDERAL AID PROJECT	SHEET
REVISIONS 9/2010 INSPECTION NOTE 9/2013 INSPECTION NOTE 11/2013 SW3P TO SWP3 03/2015 2014 SPECS	HOU	5	F 2022(720)	126
	COUNTY		CONTROL	SECT	JOB	HIGHWAY
	HARRIS		0912	72	390	VAR

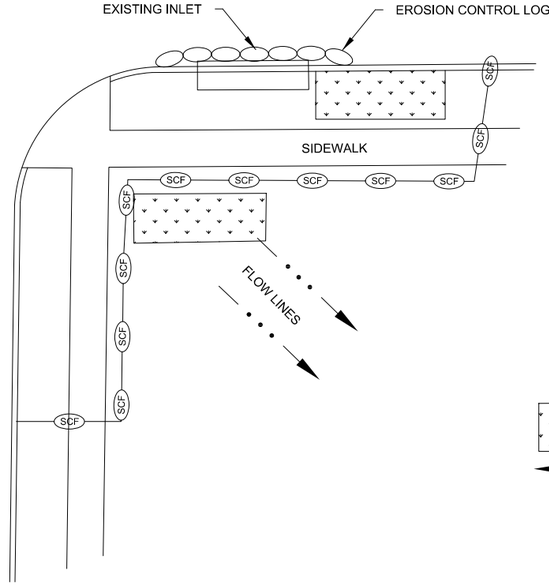
STD G-1











LEGEND

- SODDING
- FLOW LINES
- SCF — SEDIMENT CONTROL FENCE
- EROSION CONTROL LOG

3/1/2023

STATE OF TEXAS
MOHAMMED AFROZ SHAIKH
103764
LICENSED
PROFESSIONAL ENGINEER

HUITT-ZOLLARS INC.
TBPE FIRM REGISTRATION NO 761

REV	DATE	DESCRIPTION	BY

downtown district

HUITT-ZOLLARS
Huitt-Zollars, Inc. TBPE REG. NO. F-761
10350 Richmond Ave, Suite 300
Houston, Texas 77042

Texas Department of Transportation

DOWNTOWN HOUSTON SOUTHEAST SIDEWALKS

SWPPP SAMPLE INTERSECTION SILT FENCE & INLET PROTECTION

DGN:	FED. RD. DIV. RD.	STATE	FEDERAL AID PROJECT			HIGHWAY NO.
CHK DGN:	6	TEXAS	F 2022(720)			VAR
DWG:	DIST	COUNTY	CONT. NO.	SECT. NO.	JOB NO.	SHEET NO.
CHK DWG:	HOU	HARRIS	0912	72	390	127

I:\R300342.01-SE SIDEWALKS\4 DESIGN PHASE\4-21 Published Documents\4-21-1 Drawings\STANDARDS\ENVIRONMENTAL\SWPP SAMPLE INT.DGN
3/1/2023
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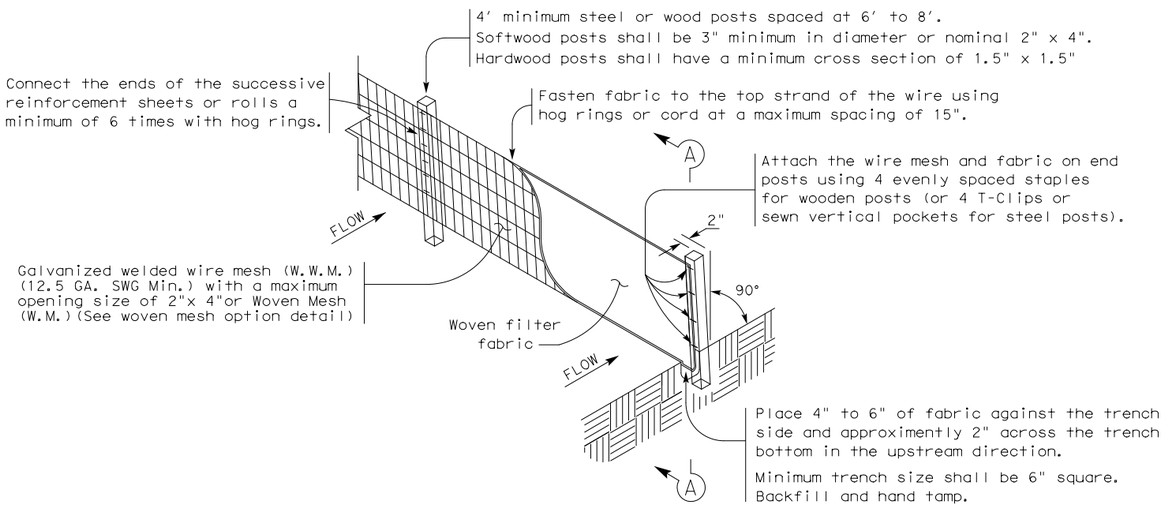
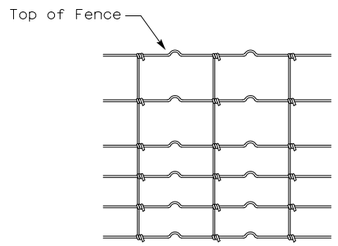
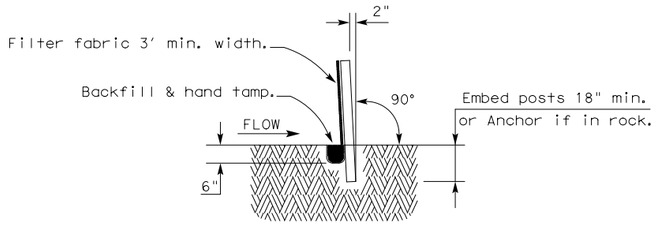


TEMPORARY SEDIMENT CONTROL FENCE

SCF





SECTION A-A

HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

Galvanized hinge joint knot woven mesh (12.5 GA.SWG Min.) requires a minimum of five horizontal wires spaced at a maximum of 12 inches apart and all vertical wires spaced at a maximum of 12 inches apart.

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a maximum flow through rate of 100 GPM/FT^2. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

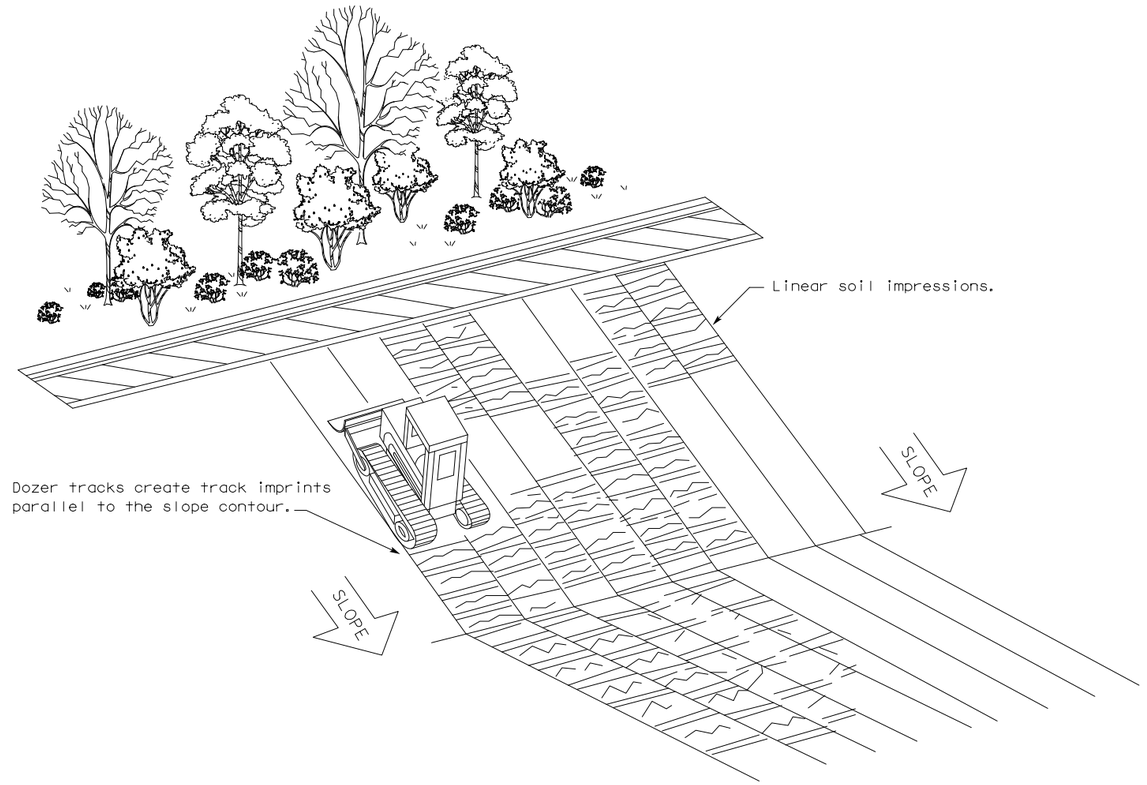
LEGEND

Sediment Control Fence

SCF

GENERAL NOTES

1. Vertical tracking is required on projects where soil distributing activities have occurred unless otherwise approved.
2. Perform vertical tracking on slopes to temporarily stabilize soil.
3. Provide equipment with a track undercarriage capable of producing linear soil impressions measuring a minimum of 12" in length by 2" to 4" in width by 1/2" to 2" in depth.
4. Do not exceed 12" between track impressions.
5. Install continous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.



VERTICAL TRACKING

Texas Department of Transportation

Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

FENCE & VERTICAL TRACKING

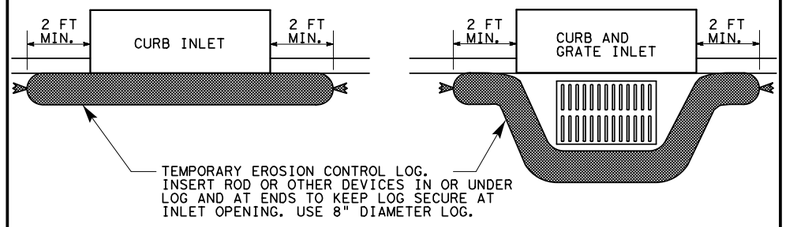
EC(1)-16

FILE: ec116	DN: TxDOT		CK: KM		DW: VP	DN/CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB		HIGHWAY	
REVISIONS	0912	72	390		VAR	
	DIST	COUNTY			SHEET NO.	
	HOU	HARRIS			128	

DATE
FILE

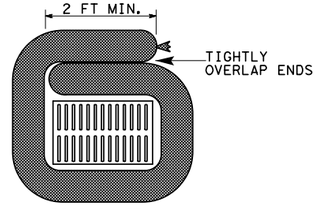
CURB INLETS
8" DIAMETER LOGS

ITEM 506-6040 BIODEG EROSN CONT LOGS (INSTL) (8")



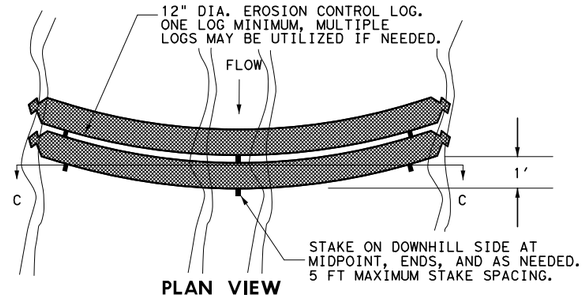
DROP INLETS AND OTHER LOCATIONS
12" DIAMETER LOGS

ITEM 506-6041 BIODEG EROSN CONT LOGS (INSTL)(12")

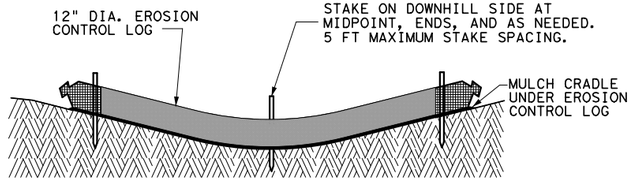


DROP INLET
USE 12" DIAMETER LOG

DROP INLETS

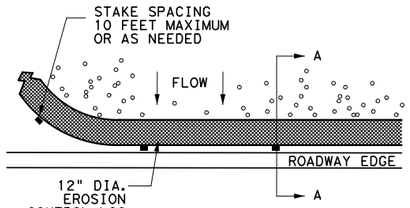


PLAN VIEW

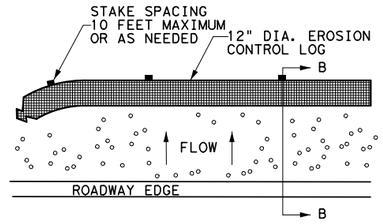


SECTION C-C

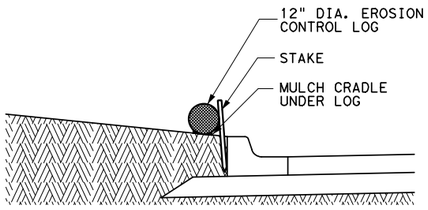
DRAINAGE SWALE OR DITCH



PLAN VIEW

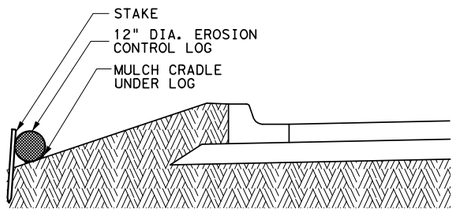


PLAN VIEW



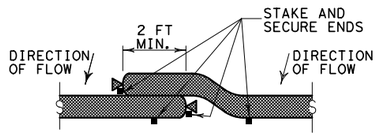
SECTION A-A

SLOPE TO ROADWAY EDGE



SECTION B-B

SLOPE AWAY FROM ROADWAY EDGE



END OF LOG OVERLAP

MATERIAL REQUIREMENTS

FILL:

Use 100% shredded mulch or other non-compost biodegradable material as fill for logs. No compost or fines.

DO NOT USE MATERIAL WHICH PROHIBITS WATER INFILTRATION.

LOG MESH:
Use mesh with 1/4" openings or larger. Mesh must allow water infiltration but also hold fill material in place.

SEDIMENT BASIN & TRAP USAGE GUIDELINES

A sediment trap (erosion control log) may be used to filter sediment out of runoff draining from an unstabilized area.

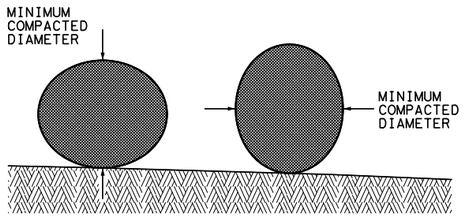
Traps: The drainage area for a sediment trap should not exceed 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).

Sediment traps should be placed in the following locations:
1. Within drainage ditches spaced as needed or min. 500' on center
2. Immediately preceding ditch inlets
3. Just before the drainage enters a water course
4. Just before the drainage leaves the right of way

The trap should be cleaned when the capacity has been reduced by 1/2 or the sediment has accumulated to a depth of 1', whichever is less.

REQUIRED ITEMS:

- ITEM 506-6040 BIODEG EROSN CONT LOGS (INSTL) (8") LF
- ITEM 506-6041 BIODEG EROSN CONT LOGS (INSTL) (12") LF
- ITEM 506-6043 BIODEG EROSN CONT LOGS (REMOVE) LF



DIAMETER MEASUREMENTS OF EROSION CONTROL LOGS SPECIFIED IN PLANS

Texas Department of Transportation
Houston District

EROSION CONTROL LOG

ECL-12

FILE: STDG4a.DGN	DN: TxDot	CK: TxDot	DW: TxDot	CK: TxDot
© TxDOT 2014	DISTRICT	FED REG	PROJECT NUMBER	SHEET
REVISIONS 3/15 MINOR CORRECTIONS	HOU	5	F 2022(720)	129
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	HARRIS	0912	72	390	VAR

STD G-4A