RMC: 6353-00-001 LARGE SIGNS

COUNTY: HIDALGO, ETC. PROJ. NO.
HWY. NO. IH 2, ETC. LETTING DATE
DATE ACCEPTED

FED. RD. DIV. NO.	PROJECT NO.		SHEET NO.
6	RMC: 6353-00-001		1
STATE	STATE DIST. NO.	COUNTY	
TEXAS	PHR	HIDALGO, ETC.	
CONT.	SECT.	JOB	HIGHWAY NO.
6353	00	001	IH 2, ETC.

STATE OF TEXAS
DEPARTMENT OF TRANSPORTATION

PLANS OF PROPOSED
HIGHWAY ROUTINE MAINTENANCE CONTRACT

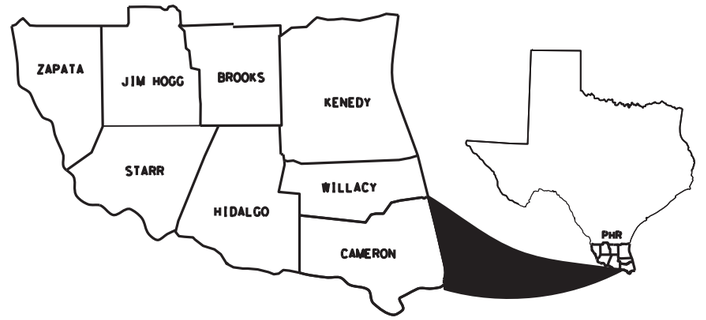
INDEX OF SHEETS

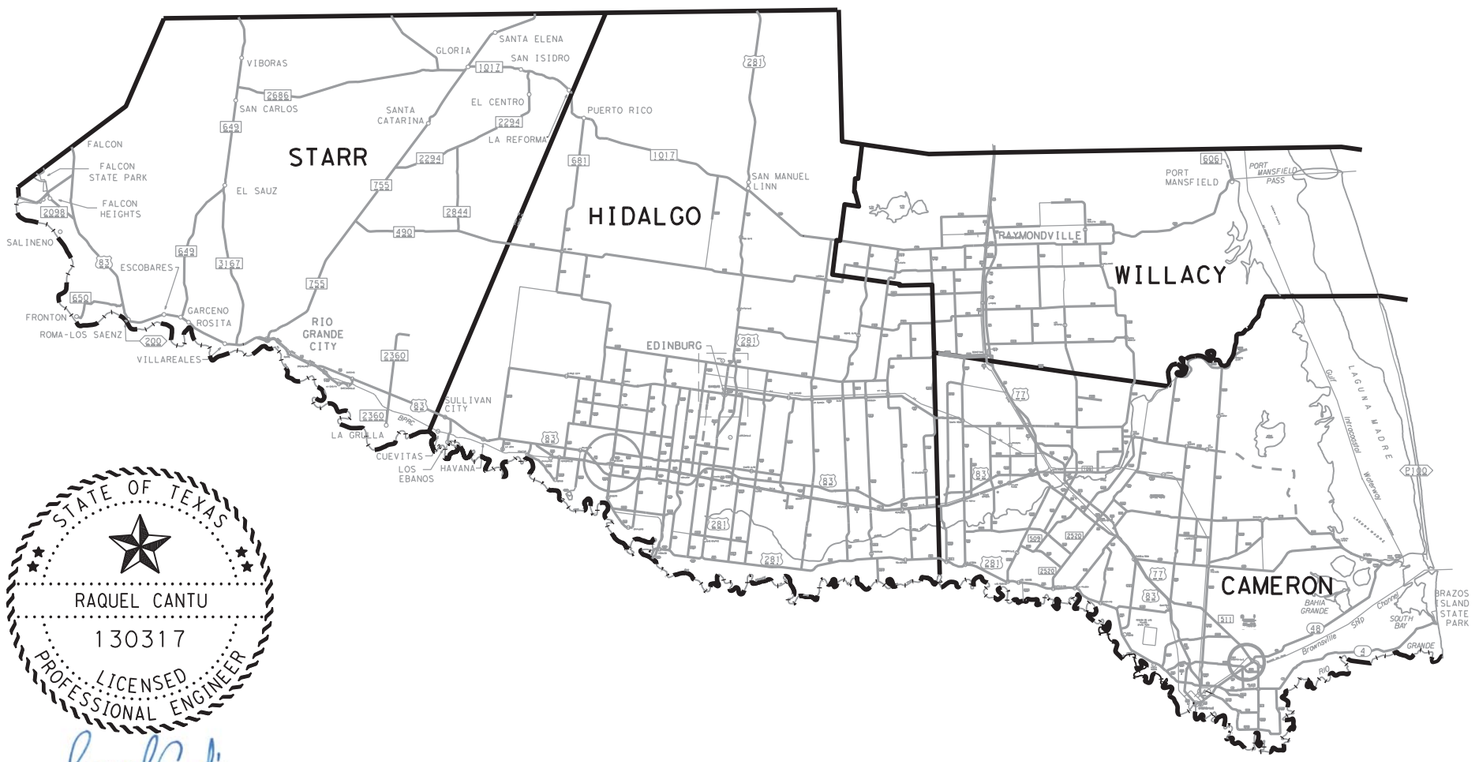
SEE SHEET NO. 2

TYPE OF WORK:

INSTALLATION, REMOVAL AND RELOCATION OF LARGE & SMALL GUIDE SIGNS
IN CAMERON, HIDALGO, STARR AND WILLACY COUNTIES

PROJECT: 6353-00-001
COUNTY: HIDALGO, ETC
HIGHWAY: IH 2, ETC.
LIMITS: VARIOUS LOCATIONS WITHIN PHARR DISTRICT





STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu

RAQUEL CANTU, P.E.
12/07/2020
DATE

SPECIFICATIONS ADOPTED BY THE TEXAS DEPARTMENT OF TRANSPORTATION ON NOVEMBER 1, 2014 AND SPECIFICATION ITEMS LISTED AND DATED AS FOLLOWS SHALL GOVERN ON THIS PROJECT:

FINAL PLAN DATA

FINAL CONTRACT PRICE: _____
CONTRACTORS NAME: _____
CONTRACTORS ADDRESS: _____
LETTING DATE: _____
DATE WORK BEGAN: _____
DATE WORK COMPLETED: _____
DATE OF ACCEPTANCE: _____

CHANGE ORDERS & SUPP. AGREEMENTS

TEXAS DEPARTMENT OF TRANSPORTATION

DocuSigned by: Rex Costley D7919223... 1/27/2021
LETTING :
DIRECTOR OF TRANSPORTATION OPERATIONS

DocuSigned by: Pedro R. Alvarez EABA335C2DAA48C... 1/28/2021
DISTRICT ENGINEER

DocuSigned by: Juan A. Sustaita Jr E353D62C01B2433... 1/28/2021
DIRECTOR OF MAINTENANCE

DETAILED INDEX OF SHEETS

THE STANDARD SHEETS 202 TO 274 HAVE BEEN SELECTED BY ME OR UNDER MY RESPONSIBLE SUPERVISION AS BEING APPLICABLE TO THIS PROJECT.

RAQUEL CANTU, P.E.

09/08/2020
DATE

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

LEGEND:

[D]... DENOTES DISTRICT STANDARDS
[S]... DENOTES STATE STANDARDS

Texas Department of Transportation

DETAILED
INDEX OF SHEETS

PROJECT NO.							SHEET NO.
							2
FED.RD. DIV.NO.	STATE	DIST.	COUNTY	CONT.	SECT.	JOB	HIGHWAY NO.
6	TEXAS	21	HIDALGO, ETC.	6353	00	001	IH 2, ETC

END PROJECT IH-69C
1 MILE NORTH OF FM 490
R.M. = 17

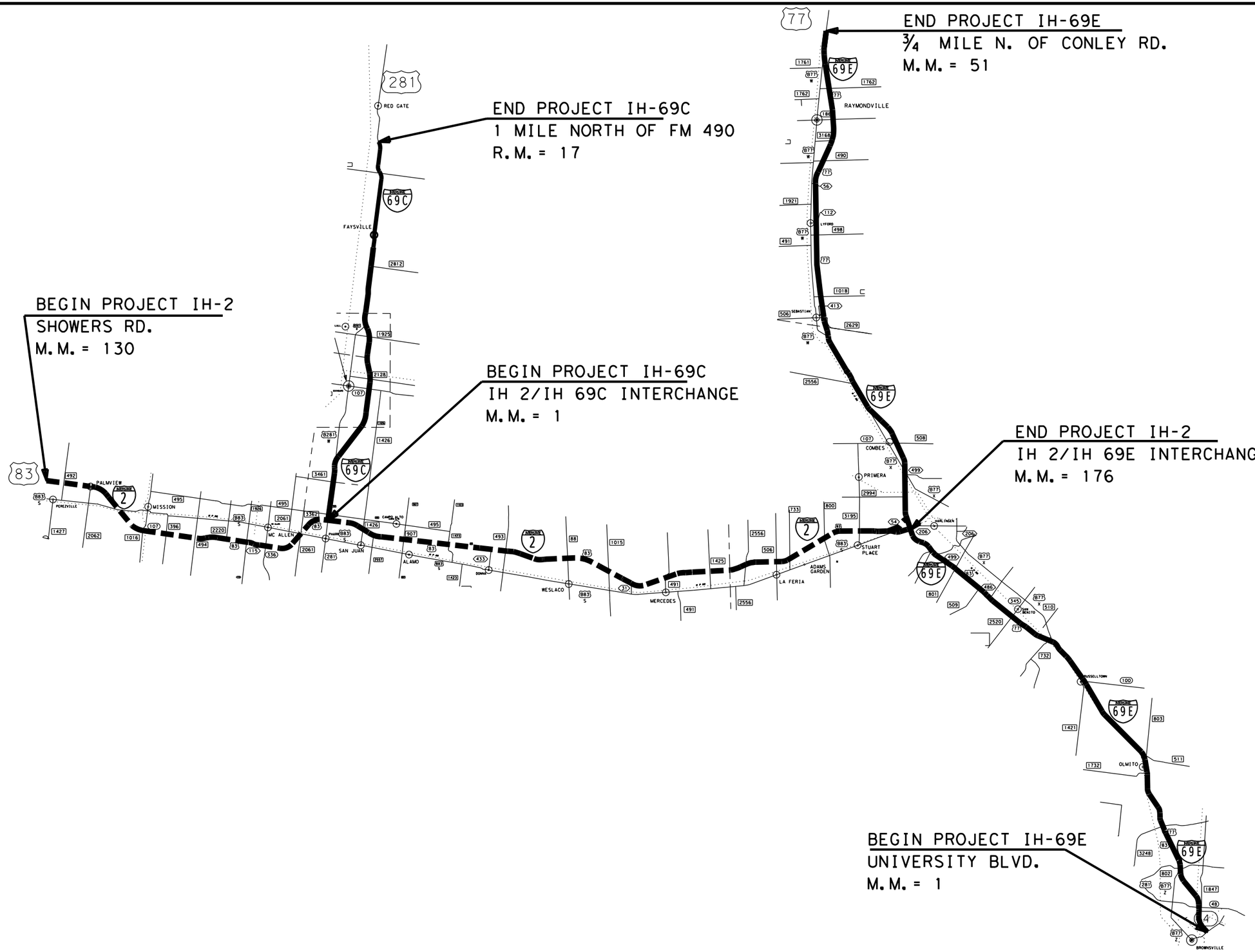
BEGIN PROJECT IH-2
SHOWERS RD.
M.M. = 130

BEGIN PROJECT IH-69C
IH 2/IH 69C INTERCHANGE
M.M. = 1

END PROJECT IH-69E
3/4 MILE N. OF CONLEY RD.
M.M. = 51

END PROJECT IH-2
IH 2/IH 69E INTERCHANGE
M.M. = 176

BEGIN PROJECT IH-69E
UNIVERSITY BLVD.
M.M. = 1



SHEET 1 OF 1

IH-2, IH-69C & IH-69E REMOVAL AND INSTALLATION OF LARGE & SMALL GUIDE SIGNS

LOCATION MAP

FILE:	DN: GV	CK: GV	DW:	CK: GG
© TxDOT	DIST	FED REG	PROJECT NO. •	SHEET
REVISIONS	21	6		3
	COUNTY	CONTROL	SECT	JOB	HIGHWAY
	HIDALGO, ETC.	6353	00	001	IH-2 ETC.

2014 SPECS GENERAL NOTES:

****

General Requirements and Covenants to ITEMS 1 thru 9

For all pits or quarries, comply with the "Texas Aggregate Quarry and Pit Safety Act."

Provide on a weekly basis a list of equipment, including idle equipment, utilized on the project that week.

The 1-800 call services for utility locations do not include TxDOT facilities. Contact the Pharr District Signal Section (956-702-6225) for coordination regarding TxDOT underground lines.

ITEM 2: Instructions to Bidders

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

Eugene Palacios, P.E., District Maintenance; Eugene.Palacios@txdot.gov

Contractor questions will be accepted through email, phone, and in person by the above individuals.

All Contractor questions will be reviewed by the Engineer. Once a response is developed, it will be posted to TxDOT's Public FTP at the following Address:

https://ftp.dot.state.tx.us/pub/txdot-info/Pre-Letting Responses/

All 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.

ITEM 4: Scope of Work

This Contract includes non-site specific work. Multiple work orders will be used to procure work of the type identified in the contract at locations that have not yet been determined.

The work is divided across three interstate segments as shown in the plans. Complete 75% of work within one segment before beginning work in the next segment, unless otherwise approved by the Engineer.

This project consists of installing new signs and removing, replacing or relocating existing signs including mounting hardware on various highways in the Pharr District.

The Contractor shall examine the specified work locations with the Engineer to view the nature of
the work prior to beginning the sign installations.

Notify the engineer's representative by telephone each morning by 8:15 a.m. that work is scheduled, with work location and time of arrival or reason for not working that day.

Any sign panels that are adjusted or removed or replaced shall be done the same workday unless otherwise approved.

Sign types conform to the Texas Manual on Uniform Traffic Control Devices and Standard Highway Sign Designs for Texas.

A new large sign with its exit number panel and any panels attached below the parent sign shall be considered as one unit.

It is the contractor's responsibility to set stakes and verify all dimensions and elevations in the field prior to ordering signs and supports.

New signs placed on existing bridges shall maintain a minimum of 17'-6" from the high point of the pavement.

Placement of an existing Type "O" or Type "G" sign onto a new mount is to be considered subsidiary to the new mount.

All ground mount signs shall maintain a 7'-0" minimum height in accordance with TxDOT standards.
The contractor shall take before and after pictures of every sign modified, removed, installed or replaced with a camera that is equipped to record the GPS location of the picture. Supply the information to the Department in an excel table format with hyperlinked latitude and longitude. An example is:

Sign Location Coordinates	Roadway	Mile Marker Or Reference Marker	Cross St
26.217299, -98.180523	IH-69C/US281	between MM 780 and MM 782	Sioux Rd.

Upon completion of installation of a Type "G" signs the contractor shall field very all X dimensions
and supply the information in tabular format to the Department.

Stock pile all removed sign panels and sign components that will be reused or that become property of the Department at approved locations.

Accept ownership of unsalvageable materials, and dispose of them in accordance with federal, state and local regulations.

Wash signs with biodegradable cleaning solution acceptable to the sheeting and screen ink manufacturers to remove dirt, grease, oil smears, streaks, finger marks, and other foreign material.

ITEM 5: Control of the Work

The contractor shall coordinate with the utility companies to verify the location of the existing underground utilities prior to construction to avoid conflict or damage to these utilities.

The 1-800 call services for utility locations do not include TxDOT facilities. Contact the Pharr District Signal Section (956-702-6225) for coordination regarding TxDOT underground lines. Contact TxDOT when construction operations are within 400 feet of a signalized intersection or in the vicinity of highway lighting or ITS systems. Traffic systems equipment damaged by the contractor will be repaired or replaced by the contractor at his expense by a pre-approved method.

The responsibility for the construction surveying on this contract will be in accordance with Article 5.9.3., "Method C."

Contractor shall field verify the existing grade and calculate the length of each post including the "X" dimension prior to fabrication to meet field conditions and sign-mounting heights.

The prosecution of the work will be conducted in such a manner as to impose minimum interference to traffic.

The Contractor shall review the monthly statement of time charges and will be allowed up to the end to the next estimate period to protest the correctness. This protest shall be in writing and shall show cause. Not filing protest by the end of the next estimate period for any statement will indicate the Contractor's approval of the time charges as shown on that time statement and future consideration of that statement will not be permitted. If the satisfactory completion of the contract requires unforeseen work, then additional working days or suspension of time charge will be allowed the Contractor equal to the time, which, in the opinion of the Engineer, the work as a whole is delayed.

ITEM 6: Control Of Materials

Remove materials or debris within the construction limits not incorporated in the finished
roadway section or right of way and dispose in a manner acceptable to the engineer at the expense of the contractor.

If wasted areas or material source areas result from this project, the contractor is reminded to follow the requirements of the Texas Aggregate Quarry and Pit Safety Act. In addition, it is requested that these areas not be visible from any highway on the state system.

ITEM 8: Prosecution And Progress

Working days will be computed and charged in accordance with Article 8.3.1.4. Standard Workweek.

A total of 360 working days will be allowed for this project. Work (Time Charges) shall begin no later than May 1, 2021

Prepare progress schedules as a Bar Chart.

No lane or ramp closures will be permitted during the peak hours of 6:00 a.m. and 9:00 a.m. and 4:00 p.m. to 7:00 p.m., on Mondays through Fridays.

Replacement of overhead signs will require lane closures. Some work on overhead signs must be done at night at the discretion of the Engineer. Allowable work times will be between 9:00 p.m. Sunday and 6:00 a.m. Friday morning. The contractor may begin lane closures by 8:00 p.m. and open traffic by 6:00 a.m. At least one week's notice is required for scheduling any night time work and 24 hours notification for cancelling night time work.
Work will not be permitted on holidays or weekends and during other major events that TxDOT determines will cause significant traffic congestion, unless otherwise approved.

ITEM 9: Measurement And Payment (Police Officers-Force Account)

As directed or approved, provide uniformed, off duty law enforcement officers with marked vehicles during work that requires a lane closure. The use and number of police officers with marked vehicles shall be approved by TxDOT at least 48 hours prior to any work day that the use
of police officers is proposed for traffic control. No payment shall be made for any unauthorized police officers utilized that do not have prior TxDOT approval. The officer(s) in marked vehicle(s) shall be located as approved to monitor or direct traffic during the closure. The method used to direct traffic at signalized intersections shall be approved.

Complete the weekly tracking form provided by the department and submit invoices that agree with the tracking form for payment at the end of each month approved services were provided.

For reimbursement, the invoice must show the officer's name and badge number, or other form of identification acceptable to the Engineer, and the date the police officer was utilized. The department will pay police officers only for the actual hours worked. Cancellation fees, minimums, scheduling fees, etc. will not be paid.

ITEM 416: Drilled Shaft Foundations

The Contractor shall coordinate with the utility companies to verify utility locations before drilling foundations.

Drill any necessary holes through existing riprap for sign foundations with a core barrel or other similar means as approved by the engineer to provide neat circular holes.
All drilled shaft foundations will be based on the lengths shown on the plans or those established in writing. Adequate calculations for measurements of foundations have been made in accordance with Article 9.1 of the Standard Specifications. Increases or decreases in the quantities required by change in design will be measured as specified and the revised quantities will be the basis for payment.

All drilled shaft foundations will be based on the lengths shown on the plans or those established in writing. Adequate calculations for measurements of foundations have been made in accordance with Article 9.1 of the Standard Specifications. Increases or decreases in the quantities required by change in design will be measured as specified and the revised quantities will be the basis for payment.

In the presence of excess ground water and/or unstable conditions in sub-grade soils prevents excavation to the line and depths indicated on the plans for "Drilled Shaft Foundation", other proposed methods of foundation installation such as casing, etc. shall be submitted for review and approved by the Engineer.

ITEM 432: Riprap

Provide Class "A" concrete for riprap placed on multiple post ground mounts signs requiring Class "A" concrete for sign post foundations, for steel reinforcement use #6-6"x6" reinforced wire mesh.

Provide Class "C" concrete for riprap placed on multiple post ground mounts signs requiring Class "C" concrete for sign post foundations, for steel reinforcement use #6-6"x6" reinforced wire mesh.

ITEM 502: Barricades, Signs, And Traffic Handling

Furnish and install all signs, barricades and other incidentals necessary for proper traffic control, in accordance with part VI of the "Texas Manual on Uniform Traffic Control Devices for Streets and Highways" and in accordance with the standards plan sheets. Additional devices may be needed to supplement these requirements. All warning signs shall be factory made and in satisfactory condition.

In addition to providing a Contractor's Responsible Person (CRP) and a phone number for emergency contact, have and employee(s) available to respond on the project for emergencies and for taking corrective measures within 30 minutes.

When a Traffic Control Plan (TCP) standard requires the use of one of the following devices, Type 3 barricades, channelizing devices or shadow vehicle with orange flags or warning lights, use a shadow vehicles equipped with a Truck Mounted Attenuator (TMA).

ANY MAINLANE CLOSURES INCLUDING SHOULDER WORK WILL REQUIRE A MINIMUM TWO TRUCKS WITH MOUNTED ATTENUATORS.

Any lane closures will require prior approval. At least 3 working days prior to the work, submit for approval a work plan including proposed traffic control, schedule of work and other details. If a lane closure has to be cancelled due to weather or other unforeseen circumstances, immediately notify the inspector and reschedule the lane closure as necessary.

Closures of freeway ramps and direct connectors shall be approved by the Engineer.
For complete closure of an exit ramp or direct connector, detour signing must be provided.

Arrow boards are required. Provide a standby unit in good working condition at the jobsite for immediate use.

From the beginning to the end of the project, all traffic control devices need to be in acceptable condition as per the Texas Quality Guidelines for Work Zone Traffic Control Devices.
No two consecutive ramps will be closed concurrently. The Contractor shall submit notifications that contain the following specific information: date of closure, roadway and direction of closed lane, the operations of work within the closure, and the names of cross-streets between which the closure will take place. Temporary lane closures not appearing on the list will not be permitted.

Repetitive submission of temporary lane closure notifications which are not implemented in, or are ineffective utilization of implemented lane closure will be subject to liquidated damages, as determined, in accordance with the Item, “Prosecution and Progress.”

Police assistance will be required when closing more than one lane of traffic on the freeway main-lanes or ramps. Scheduling and arrangements for police assistance will be the Contractor’s responsibility.

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 “Safety Contingency” is not intended to be used in lieu of bid items established by the contract.

ITEM 504: Field Office and Laboratory

For this project a field office will not be required at the project site.

ITEM 506: Temporary Erosion, Sedimentation, And Environmental Controls

Due to the nature of this project, it is unlikely a significant amount of soil will be disturbed. However, if erosion control logs are needed; it shall be placed as directed by the Engineer.

ITEM 531: Sidewalks

Construct ¼-inch thick score joints at a maximum 6-foot spacing and expansion joints at a maximum 18-foot spacing. Construct a joint in the center of the sidewalk if it is over 15-feet wide. For steel reinforcement, use 6x6-inch spacing with #3 bars or 6x6 – D6 welded wire fabric.

ITEMS 636: Aluminum Signs

Complete sign blanks and panels shall be handled and stored at the job site in such a manner that corners, edges and faces are not damaged. Finished sign blanks shall be stored in either a weatherproof ware-house or outside and off the ground in a vertical position. All paper, cardboard and chemically treated separators and packaging shall be removed prior to outside storage.

Exit number panel supports and sign plaque supports will be considered subsidiary to item 636 aluminum signs.

Bottom align overhead signs on the OSB structure unless the difference in height is 2 feet or greater. If the sign height difference is 2 feet or greater then center align the signs.

On sign replacement, contractor shall plumb all existing mounts prior to the placement of the new sign panel.

Signs to be replaced shall be done on the same-workday; no existing mount is to be left without a sign overnight. Existing signs shall remain in place until a new sign and mount is complete and in place.

All excess excavation shall be spread uniformly inside the Right of Way or as directed and shall be included in the price of this item.

All sign panels of aluminum Type “G” shall have stiffeners as per TxDOT standards.

Any sign assemblies or supports that require modifications shall be coordinated with the District Traffic Section.

Signs shown to be removed shall include the complete sign installation and separate the sign post at the concrete foundation. The concrete foundation shall be disposed in accordance with this Bid Item. Except for concrete foundations and plywood signs, all removed sign panels, sign posts, and hardware, shall remain the property of the department. All removed sign installations shall be completely disassembled. All salvageable sections of sign panels shall be recycled by TxDOT. The removed sign material will be required to be hauled to the TxDOT District Yard at: 600 W. Interstate 2, Pharr, TX 78577. No sign shall be removed without prior approval.

Contractor shall have equipment (e.g. bucket truck lifts, etc.) available for placement of signs as stated in the TxDOT standard specifications 2004 under item 636.

ITEM 644: Small Roadside Sign Assemblies

Existing signs shown to be removed and relocated within this project shall first be identified in the field before they are removed and relocated to their new installation position as determined in
the plans or as directed by the engineer in the field. The complete sign assembly shall be removed and the sign with post shall be separated at the concrete foundation. The concrete foundation shall be disposed of in accordance with this bid Item. No sign shall be removed without prior approval.

All excess excavation shall be spread uniformly inside the Right of Way as directed and shall be included in the price of this item.

All signs shall be installed as shown in the plans or in accordance with the current edition of the "Texas Manual on Uniform Traffic Control Devices" and the “Sign Crew Field Book” (SCFB). All signs shall be erected according to the locations shown on the signing layout sheets except that a sign may be shifted in order to secure a more desirable location. All sign locations will be staked as shown in the plans and as approved. It is the intent of the plans to erect all roadside traffic signs with the sign edge a minimum of 6 feet from the edge of the shoulder, or if none, 12 feet from the edge of the travel lane. In curb and gutter sections the sign edge shall be a minimum of 2 feet from the face of the curb.

For this project, aluminum type sign blanks as provided for under Item 636 will be required for all
proposed signing installed under Item 644. Aluminum sign blanks less than 7.5 square feet shall be 0.08 inch thick, sign blanks 7.5 to 15 square feet shall be 0.100 inch thick and sign blanks greater than 15 square feet shall be 0.125 inch thick.

Sign types which design details are not shown on the plans shall conform to the latest edition of the Department's "Standard Highway Sign Design for Texas" Manual.

Signs shown to be removed shall include the complete sign assembly and separate the sign post at
the concrete foundation. The concrete foundation shall be disposed in accordance with this Bid Item. Except for concrete foundations, all removed sign panels, sign posts, and hardware shall remain the property of the Department. All removed sign assemblies shall be completely disassembled. All salvageable sections of sign panels shall be recycled by TxDOT. The removed

sign material will be required to be hauled to the maintenance yard closest to the project. No signs
shall be removed without prior approval.

ITEM 647: Large Roadside Sign Supports and Assemblies

New sign foundation stubs, when left overnight without installing signs and posts, shall be protected with plastic construction fencing a minimum of 4 feet high and a TYPE 3 barricade or with plastic drums.

ALEX T:\PHRTRFOP\ALEX MV169(Phorr District)\eq2.dgn

ESTIMATE SUMMARY

ALT	ITEM-CODE			DESCRIPTION	UNIT	IH 2		IH 69C		IH 69E	
	ITEM NO	DESC CODE	SP NO			EST.	FINAL	EST.	FINAL	EST.	FINAL
	104	6028		REMOVING CONC (MISC)	SY	2.00		2.00		2.00	
	416	6015		DRILL SHAFT (NON REINFORCED)(12 IN)	LF					36.00	
	416	6018		DRILL SHAFT (SIGN MTS)(24 IN)	LF	48.00		12.00		36.00	
	432	6007		RIPRAP (CONC)(CL C)	CY	7.60		1.60		4.30	
	500	6001		MOBILIZATION	LS	1.00					
	502	6001		BARRICADES, SIGNS, AND TRAFFIC HANDLING	MO	18.00					
	506	6038	002	TEMP SEDMT CONT FENCE (INSTALL)	LF	50.00		50.00		50.00	
	506	6039	002	TEMP SEDMT CONT FENCE (REMOVE)	LF	50.00		50.00		50.00	
	506	6042	002	BIODEG EROSN CONT LOGS (INSTL)(18")	LF	100.00		100.00		100.00	
	531	6001		CONC SIDEWALKS (4")	SY	2.00		2.00		2.00	
	636	6001		ALUMINUM SIGNS (TY A)	SF	27.00		18.00		90.00	
	636	6002		ALUMINUM SIGNS (TY G)	SF	216.00		78.75		377.55	
	636	6008		REPLACE EXISTING ALUMINUM SIGNS (TY G)	SF	5,033.75		1,421.50		4,475.75	
	636	6009		REPLACE EXISTING ALUMINUM SIGNS (TY O)	SF	7,218.00		1,076.75		10,517.50	
	647	6001		INSTALL LRSS (STRUCT STEEL)	LB	10,089.58		1,683.85		17,497.80	
	647	6003		REMOVE LRSA	EA	4.00		1.00		2.00	

ESTIMATE & QUANTITY SHEET

STATE DISTRICT	COUNTY	PROJECT NO.	SHEET NO.
PHARR	HIDALGO, ETC.	6353-00-001	9

ALEX T:\PHRTRFOP\ALEX MV\169(Phorr District)\eq2.dgn

ESTIMATE SUMMARY

ALT °	ITEM-CODE ITEM NO	ITEM-CODE DESC CODE	ITEM-CODE SP NO	DESCRIPTION	UNIT	GRAND TOTAL EST.	GRAND TOTAL FINAL
	104	6028		REMOVING CONC (MISC)	SY	6.00	
	416	6015		DRILL SHAFT (NON REINFORCED)(12 IN)	LF	36.00	
	416	6018		DRILL SHAFT (SIGN MTS)(24 IN)	LF	96.00	
	432	6007		RIPRAP (CONC)(CL C)	CY	13.50	
	500	6001		MOBILIZATION	LS	1.00	
	502	6001		BARRICADES, SIGNS, AND TRAFFIC HANDLING	MO	18.00	
	506	6038	002	TEMP SEDMT CONT FENCE (INSTALL)	LF	150.00	
	506	6039	002	TEMP SEDMT CONT FENCE (REMOVE)	LF	150.00	
	506	6042	002	BIODEG EROSN CONT LOGS (INSTL)(18")	LF	300.00	
	531	6001		CONC SIDEWALKS (4")	SY	6.00	
	636	6001		ALUMINUM SIGNS (TY A)	SF	135.00	
	636	6002		ALUMINUM SIGNS (TY G)	SF	672.25	
	636	6008		REPLACE EXISTING ALUMINUM SIGNS (TY G)	SF	10,931.00	
	636	6009		REPLACE EXISTING ALUMINUM SIGNS (TY O)	SF	18,812.25	
	647	6001		INSTALL LRSS (STRUCT STEEL)	LB	29,271.23	
	647	6003		REMOVE LRSA	EA	7.00	

ESTIMATE & QUANTITY SHEET

STATE DISTRICT	COUNTY	PROJECT NO.	SHEET NO.
PHARR	HIDALGO, ETC.	6353-00-001	10

ALEX T:\PHRTRFOP\ALEX MV169(Phorr District)\eq2.dgn

OMIT

ESTIMATE & QUANTITY SHEET

STATE DISTRICT	COUNTY	PROJECT NO.	SHEET NO.
PHARR	HIDALGO, ETC.	6353-00-001	11

N

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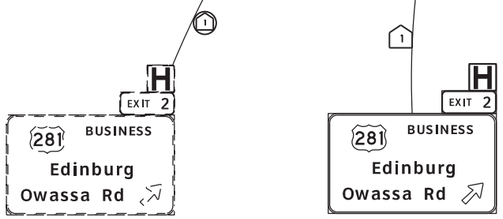


LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

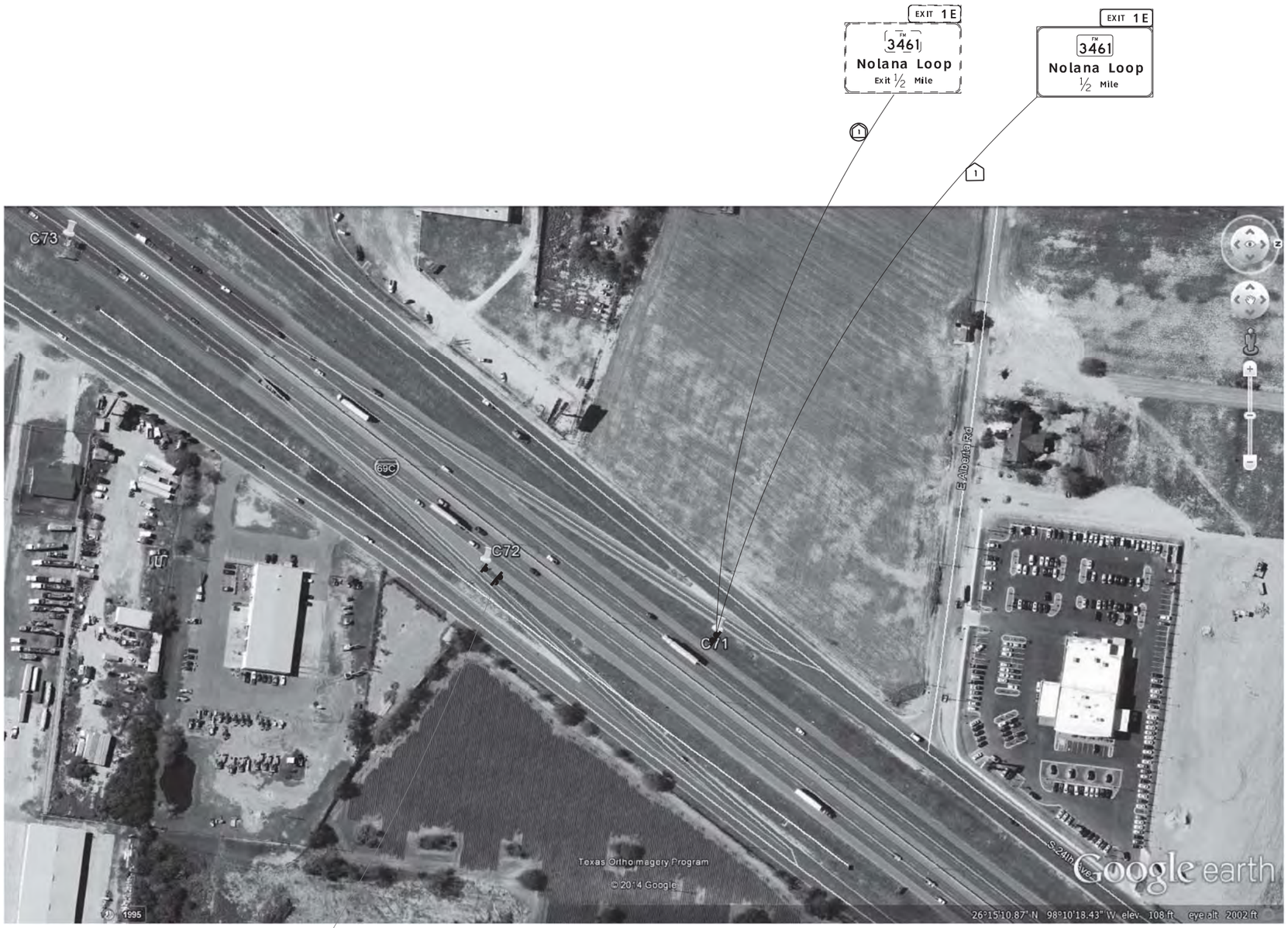
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 1 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				12
DN: CBR			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



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SCALE: N. T. S.

EXIT 3
E5-1c

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 2 OF 11

DN: CBR	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				13
DN: CBR			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

EXIT 2
E5-1c

1

EXIT 4
Canton Rd
Veterans Blvd
EXIT ½ MILE

1

EXIT 4
Canton Rd
Veterans Blvd
½ MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 3 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				14
DN: CBR			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

EXIT 4
Canton Rd
Veterans Blvd
EXIT ONLY

EXIT 4
Canton Rd
Veterans Blvd
EXIT ONLY

EXIT 4
E5-1c

H H
EXIT 2
281 BUSINESS
Owassa Rd
Edinburg
EXIT 1/2 MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
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Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 4 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				15
DN: CBR			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 5 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			16
DN: CBR			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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PROFESSIONAL ENGINEER

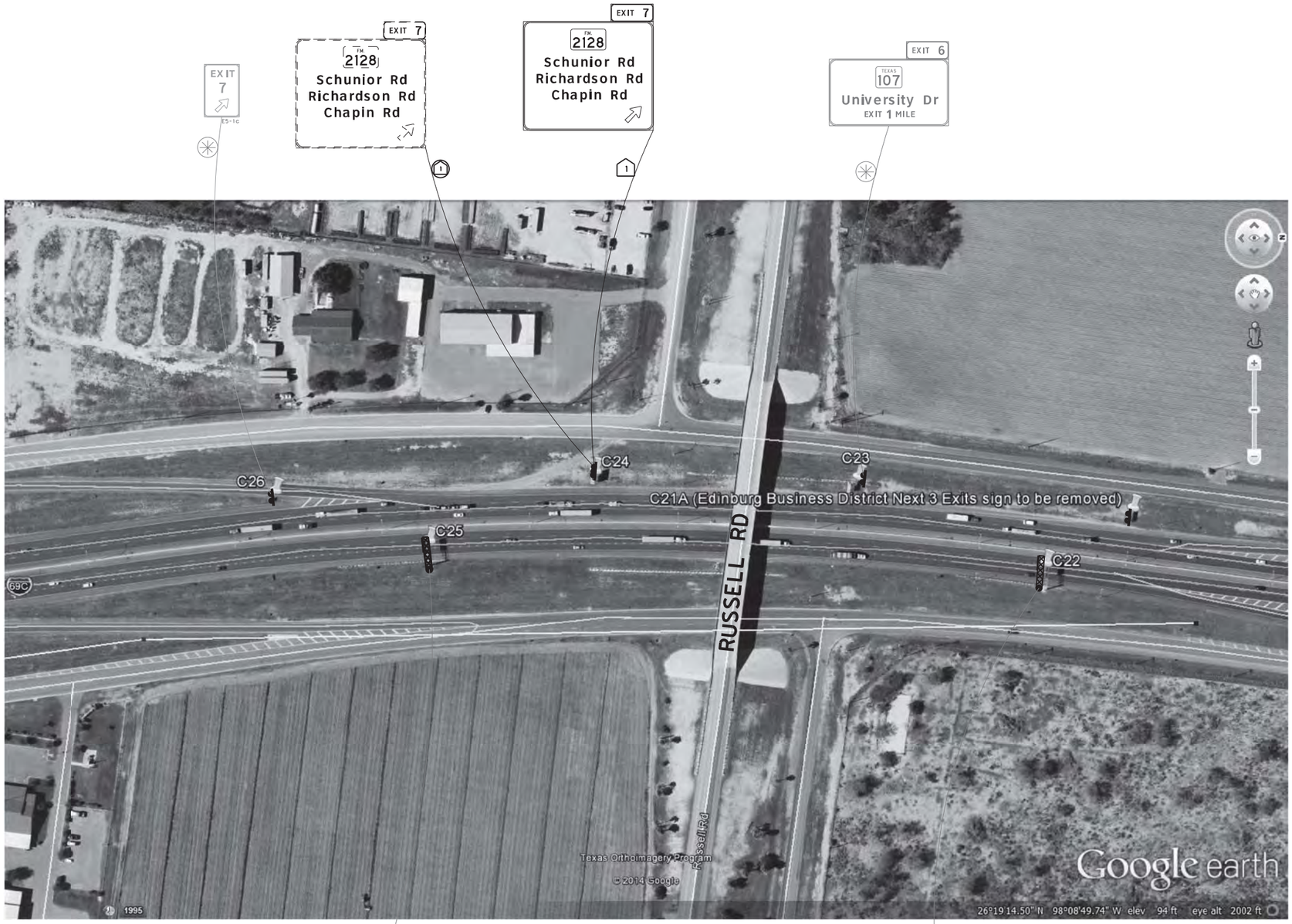
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 6 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS					17
DN: CBR			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001		IH-2, ETC.



N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

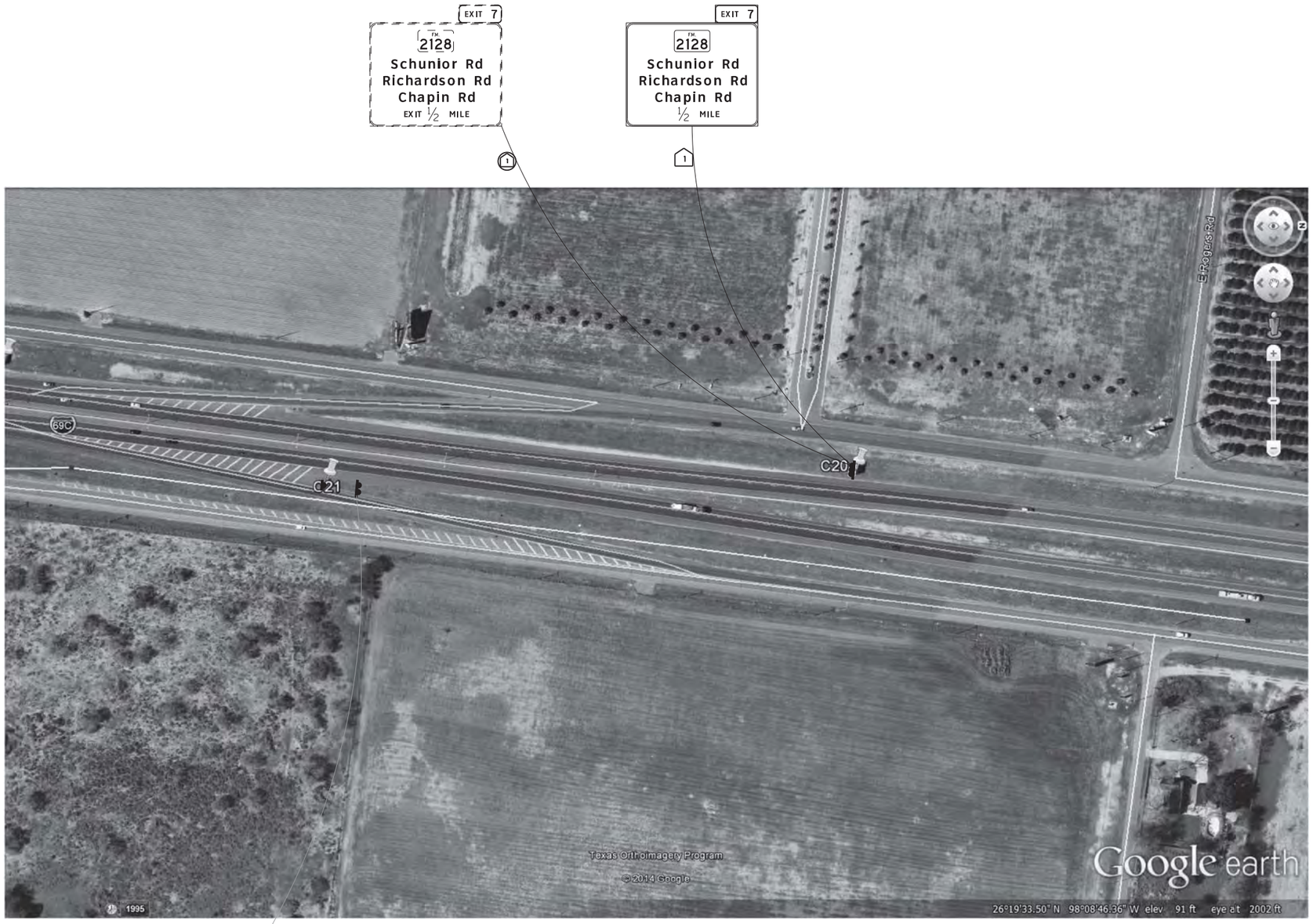
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 7 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		18
DN: CBR			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.



N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

SHEET 8 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			19
DN: CBR			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

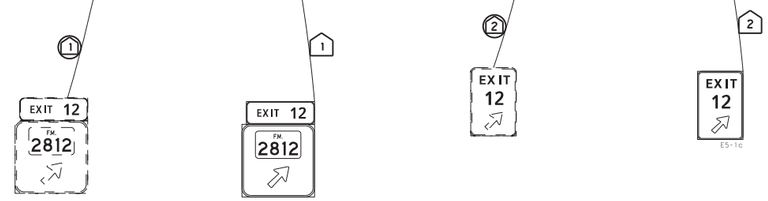
IH-69C
LARGE SIGN LAYOUTS

SHEET 9 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV. NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			20
DN: CBR			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.



LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
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PROFESSIONAL ENGINEER

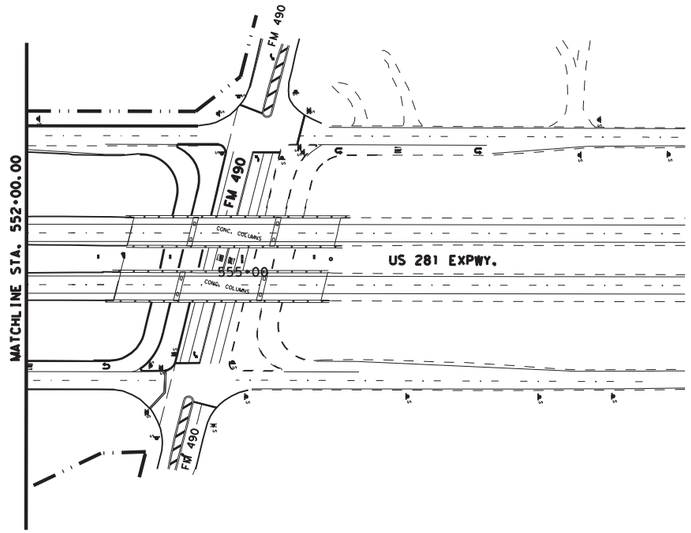
Raquel Cantu 11.05.20

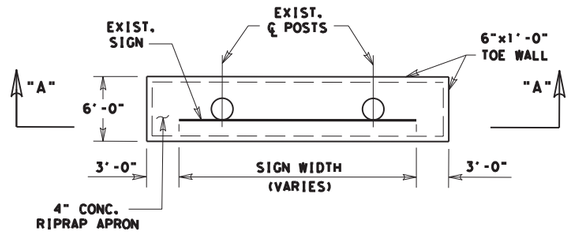
TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN LAYOUTS

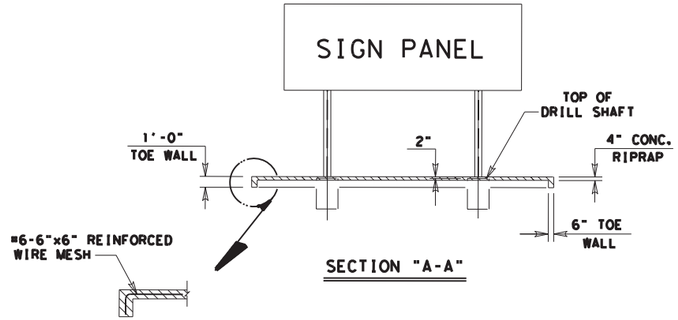
SHEET 10 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		21
DN: CBR			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.





PLAN



SECTION "A-A"

N

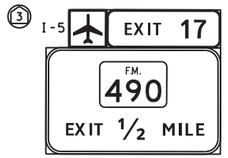
SCALE: N.T.S.

CONCRETE RIPRAP FOR SIGN MULTIPLE POST GROUND MOUNTS

NOTE:
CONCRETE FOR RIPRAP SHALL BE CLASS "B" AND SHALL BE REINFORCED AS SPECIFIED IN GENERAL NOTES FOR ITEM 432 "RIPRAP".

APPROX. .5 MILE
NORTH OF FM 490

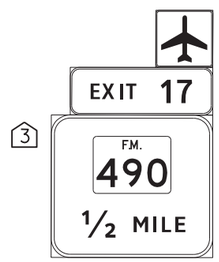
APPROX. .7 MILE
NORTH OF FM 490



APPROX. .92 MILE
NORTH OF FM 490

APPROX. .5 MILE
NORTH OF FM 490

APPROX. .7 MILE
NORTH OF FM 490



APPROX. .92 MILE
NORTH OF FM 490

LEGEND

- LARGE SIGN TO BE INSTALLED
- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE RELOCATED
- SIGN TO REMAIN IN PLACE
- SMALL SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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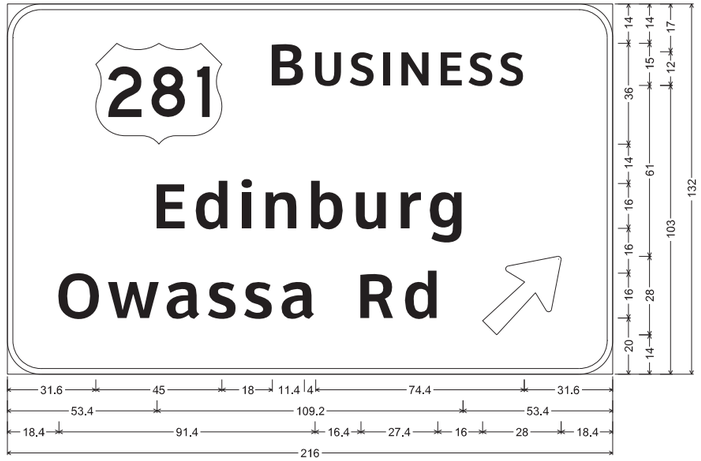
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C LARGE SIGN LAYOUTS

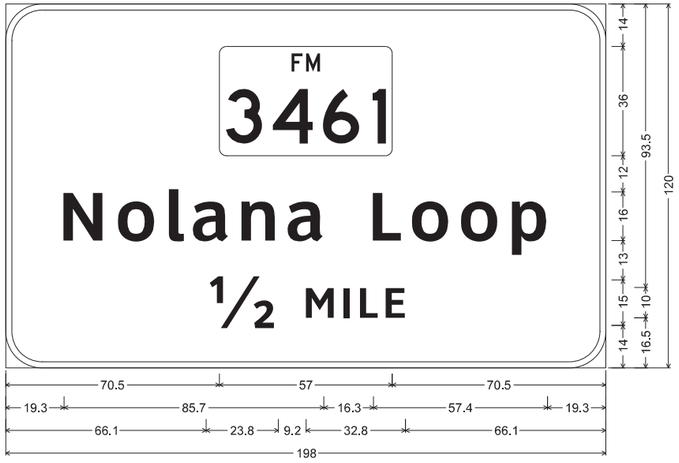
SHEET 11 OF 11

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020	6	TEXAS				22
DW: CBR	STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.		
CK DW: GV	PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.		



12.0" Radius, 2.0" Border, White on, Green;
US 281 M1-4; "B", ClearviewHwy-5-W-R; "USINESS", ClearviewHwy-5-W-R;
"Edinburg", ClearviewHwy-5-W-R; "Owassa Rd", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';

SHEET NO.	SIGN NO.
1/11	1



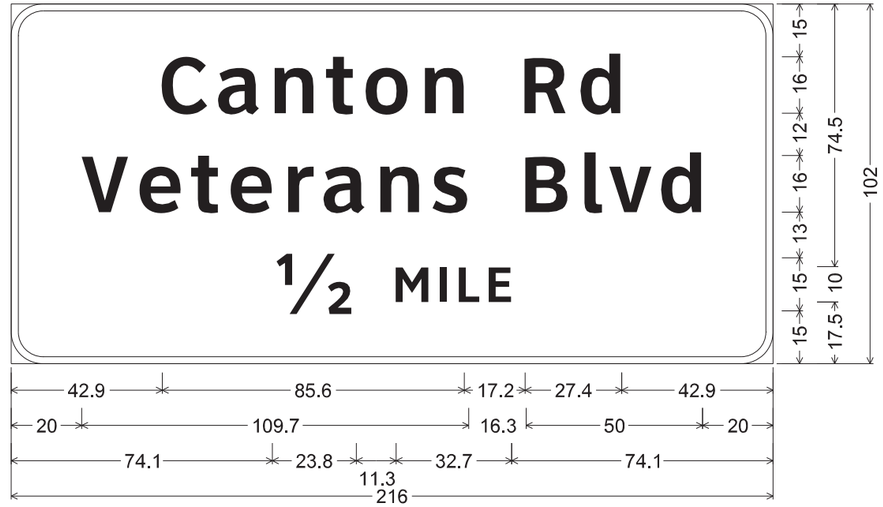
Sequence Sign;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 3461 M1-6F4; "Nolana Loop", ClearviewHwy-5-W-R; "½", ClearviewHwy-5-W-R;
"MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

3461
70.5

N	o	l	a	n	a	L	o	o	p
19.3	37.1	53.9	61.8	77.8	93.0	121.3	134.1	150.3	167.1

½	M	I	L	E
66.1	99.1	111.6	117.0	125.5

SHEET NO.	SIGN NO.
2/11	1



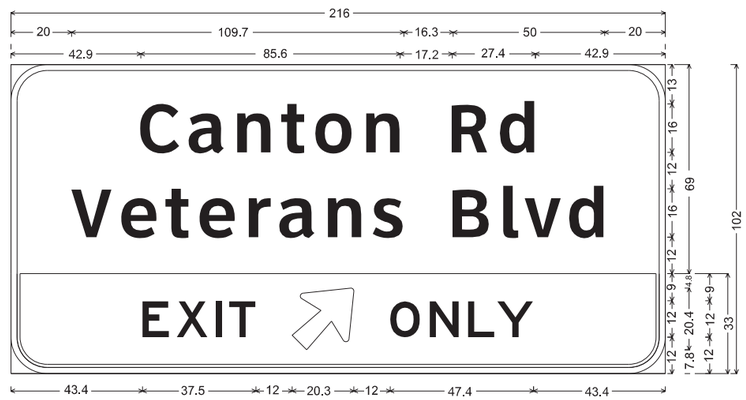
I Road exit 1/2 mile;
9.0" Radius, 2.0" Border, White on, Green;
"Canton Rd", ClearviewHwy-5-W-R; "Veterans Blvd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

C	a	n	t	o	n	R	d
42.9	58.7	74.8	89.3	100.5	117.4	145.7	161.5

V	e	t	e	r	a	n	s	B	l	v	d
20.0	36.5	51.1	62.3	78.6	88.6	104.7	119.4	146.0	162.6	169.6	184.3

½	M	I	L	E
74.1	109.2	121.6	127.1	135.5

SHEET NO.	SIGN NO.
3/11	1



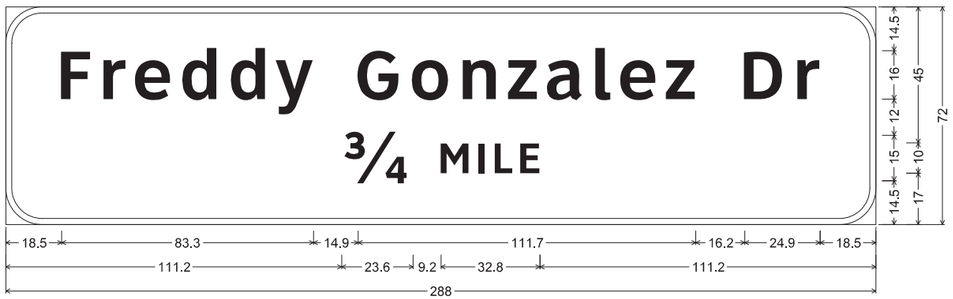
Identifier : E11-1aR;
12.0" Radius, 2.0" Border, White on Green;
[Canton Rd] ClearviewHwy-5-W-R; [Veterans Blvd] ClearviewHwy-5-W-R;
Identifier : E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on Yellow;
[EXIT] Black E; Arrow B-3 - 25.0" 45° Black; [ONLY] Black E;
Table of letter and object lefts.

C	a	n	t	o	n	R	d
42.9	58.7	74.8	89.3	100.5	117.4	145.7	161.5

V	e	t	e	r	a	n	s	B	l	v	d
20.0	36.5	51.1	62.3	78.6	88.6	104.7	119.4	146.0	162.6	169.6	184.3

E	X	I	T	↗	O	N	L	Y
43.4	54.7	67.5	72.1	92.9	125.2	138.3	150.9	160.6

SHEET NO.	SIGN NO.
4/11	1



12.0" Radius, 2.0" Border, White on, Green;
"Freddy Gonzalez Dr", ClearviewHwy-5-W-R; "¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

F	r	e	d	d	y	G	o	n	z	a	l	e	z
18.5	9.8	4.1	7.4	3.0	11.8	3.8	11.7	4.4	11.7	3.2	12.4	14.9	13.9	3.9	12.3	4.5	11.1	3.9	9.8	3.0	12.0	4.1	5.2	3.0	11.9	3.2	9.9

D	r
16.2	12.9	4.6	7.4	18.5

¾	M	I	L	E
111.2	23.6	9.2	9.2	3.3	2.1	3.4	5.8	2.6	6.4	111.2

SHEET NO.	SIGN NO.
5/11	1

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

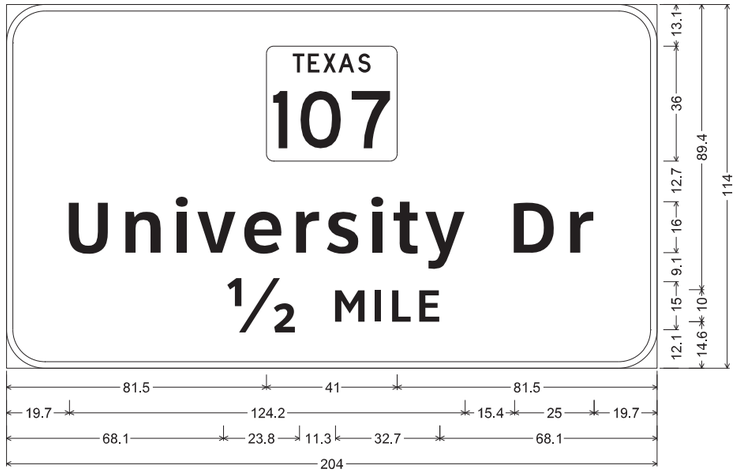
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN DETAIL SHEETS

SHEET 1 OF 5

DN: CBR	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		23
DW: CBR			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.



12.0" Radius, 2.0" Border, White on, Green;
State Highway 107 M1-6T3; "University Dr", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

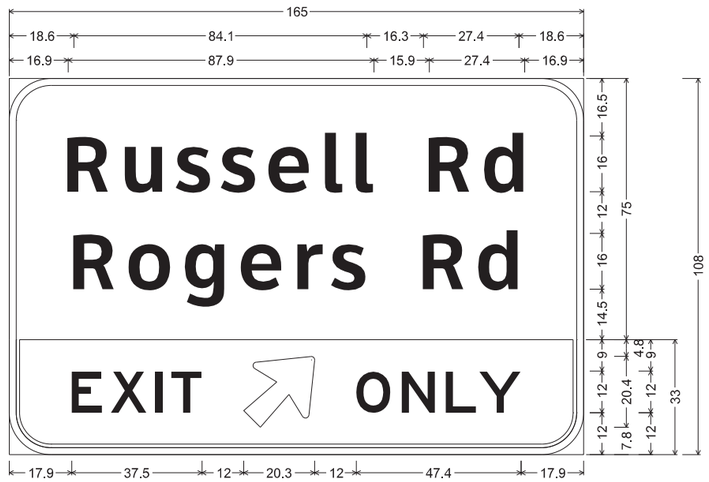
81.5	107 41.0	81.5

19.7	U 12.5	5.2	n 11.1	4.7	i 3.8	2.9	v 12.2	2.5	e 11.9	4.4	r 7.4	2.2	s 10.3	3.7	i 3.8	3.1	t 8.0	2.0	y 12.5

15.4	D 12.9	4.6	r 7.5	19.7	

68.1	½ 23.8	11.3	M 9.1	3.3	I 2.1	3.4	L 5.8	2.6	E 6.4	68.1	

SHEET NO. 6/11 **SIGN NO.** 1



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"Russell Rd", ClearviewHwy-5-W-R; "Rogers Rd", ClearviewHwy-5-W-R;

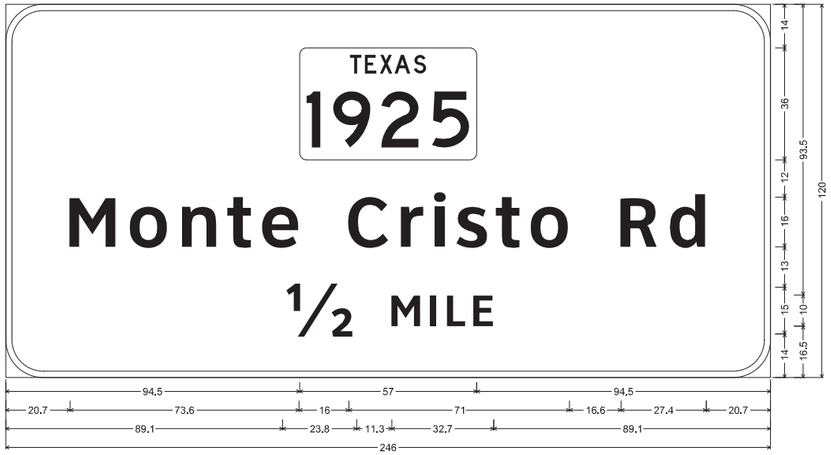
E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

R 16.9	u 33.3	s 47.8	s 60.8	e 74.5	l 90.8	l 99.6	R 120.7	d 136.4

R 18.6	o 34.3	g 50.5	e 66.6	r 82.9	s 92.4	R 119.0	d 134.7	

E 17.9	X 29.2	I 42.0	T 46.6	67.4	O 99.7	N 112.8	L 125.4	Y 135.1

SHEET NO. 6/11 **SIGN NO.** 3



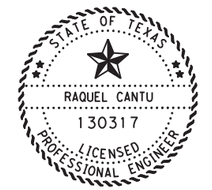
FM 2557 South Stewart Rd exit 3/4 mile;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 1925 M1-6T4; "Monte Cristo Rd", ClearviewHwy-5-W-R; "½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

125 94.5

M 20.7	o 39.9	n 56.7	t 71.3	e 82.5	C 110.3	r 127.2	i 137.8	s 145.0	t 157.7	o 168.9	R 197.9	d 213.7	

½ 89.1	M 124.2	I 136.6	L 142.1	E 150.5

SHEET NO. 6/11 **SIGN NO.** 2



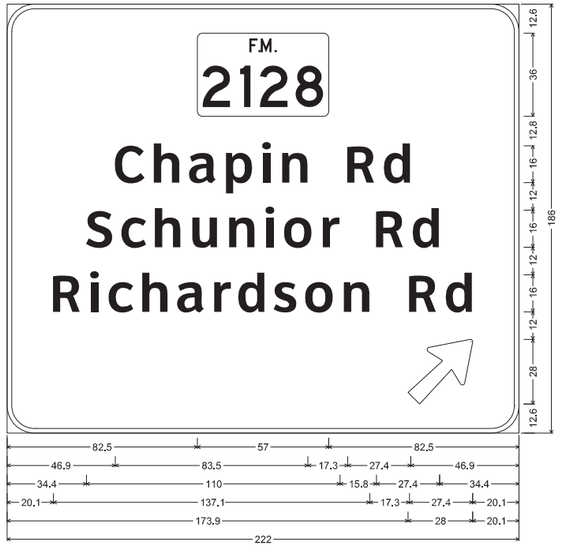
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN DETAIL SHEETS

SHEET 2 OF 5

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				24
DW: CBR			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



12.0" Radius, 2.0" Border, White on, Green;
State Highway 2128 4; "Chapin Rd", ClearviewHwy-5-W-R; "Schunior Rd", ClearviewHwy-5-W-R;
"Richardson Rd", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';
Table of widths and spaces

82.5	2128 57.0	82.5																		
46.9	C 13.1	3.7	h 11.1	4.1	a 11.9	4.2	p 11.7	4.0	i 3.8	4.8	n 11.1	17.3	R 11.9	3.8	d 11.7	46.9				
34.4	S 11.7	3.5	c 11.0	3.6	h 11.1	5.1	u 10.9	5.1	n 11.1	4.7	i 3.8	4.1	o 12.4	4.4	r 7.5	15.8	R 11.9	3.8	d 11.7	34.4
20.1	R 11.9	4.1	i 3.8	4.2	c 10.9	3.6	h 11.1	4.1	a 11.9	4.2	r 7.4	3.0	d 11.6	3.7	s 10.3	3.4	o 12.4	4.4	n 11.1	
	17.3	R 11.9	3.8	d 11.7	20.1															
173.9	↗ 28.0	20.1																		

SHEET NO. 7/11 **SIGN NO.** 1

12.0" Radius, 2.0" Border, White on, Green;
"Davis Dr", ClearviewHwy-5-W-R; "Ramseyer Rd", ClearviewHwy-5-W-R;
Arrow A-3 - 35.6" 45';
Table of widths and spaces

46.8	D 12.9	3.6	a 12.0	2.2	v 12.2	2.8	i 3.8	3.4	s 10.3	16.3	D 12.9	4.6	r 7.4	46.8	
17.3	R 12.0	3.4	a 11.9	4.2	m 18.1	3.7	s 10.3	3.4	e 11.9	2.5	y 12.5	2.6	e 11.8	4.5	r 7.4
	15.8	R 11.9	3.8	d 11.7	17.3										
152.7	↗ 28.0	17.3													

SHEET NO. 9/11 **SIGN NO.** 1

FM 2812 arrow 45 right;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 2812 4;
Arrow A-3 - 35.6" 45';
Table of letter and object lefts

2812 19.5
↗ 48.5

SHEET NO. 10/11 **SIGN NO.** 1

6.0" Radius, 1.5" Border, White on, Green;
"EXIT", ClearviewHwy-6-W; "12", ClearviewHwy-4-W;
Arrow A-2 - 29.3" 45';
Table of letter and object lefts

E 9.2	X 20.3	I 35.2	T 41.6
1 18.0	2 30.4		
↗ 18.5			

SHEET NO. 10/11 **SIGN NO.** 2

12.0" Radius, 2.0" Border, White on, Green;
State Highway 490 3; Arrow A-3 - 35.6" 45';
Table of letter and object lefts

490 20.5
↗ 41.5

SHEET NO. 11/11 **SIGN NO.** 1

RAQUEL CANTU
130317

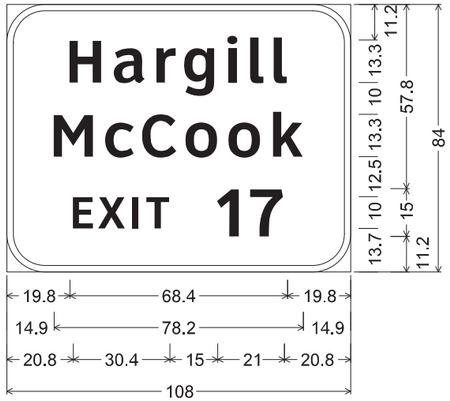
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN DETAIL SHEETS

SHEET 3 OF 5

DN: CBR	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				25
DW: CBR			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



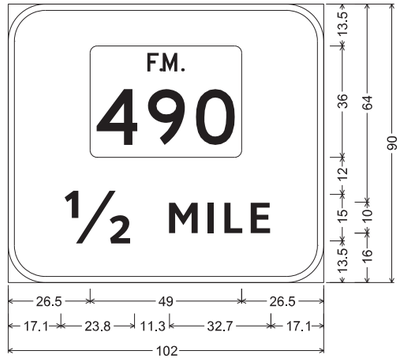
Virgen De San Juan Basilica & Shrine next exit;
12.0" Radius, 2.0" Border, White on, Green;
"Hargill", ClearviewHwy-5-W-R;
"McCook", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R;
"17", ClearviewHwy-5-W-R;
Table of letter and object lefts

H	a	r	g	i	l	l
19.8	33.6	47.0	55.7	69.3	76.5	83.9

M	c	C	o	o	k
14.9	30.9	42.7	56.1	69.6	83.6

E	X	I	T	1	7
20.8	28.7	39.5	43.9	66.2	76.6

SHEET NO.	SIGN NO.
11/11	2

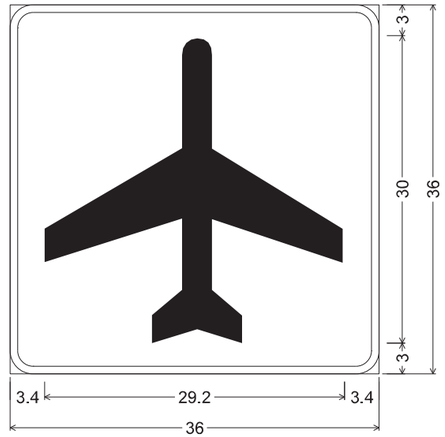


FM 1762 exit 1/2 mile;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 490 3;
"1/2 MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	490	
26.5	49.0	26.5

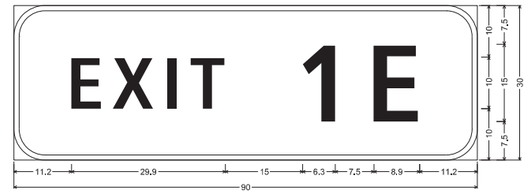
	1/2		M		I		L		E	
17.1	23.8	11.3	9.1	3.3	2.1	3.4	5.8	2.6	6.4	17.1

SHEET NO.	SIGN NO.
11/11	3



2.3" Radius, 0.8" Border, White on, Green;
Symbol RA010;

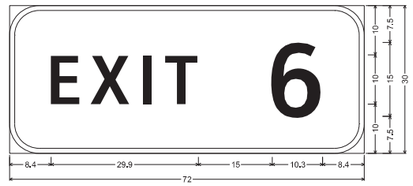
SHEET NO.	SIGN NO.
1/11	1
11/11	3



6.0" Radius, 1.0" Border, White on, Green:
"EXIT", ClearviewHwy-4-W; "1", ClearviewHwy-4-W; "E", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	E
11.2	19.2	29.8	34.3	56.1	69.9

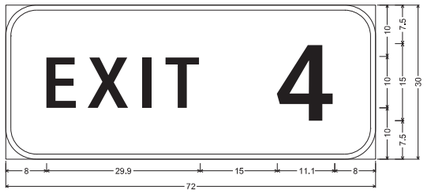
SHEET NO.	SIGN NO.
2/11	1



6.0" Radius, 1.0" Border, White on, Green:
"EXIT", ClearviewHwy-4-W; "6", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	6
8.4	16.5	27.1	31.5	53.3

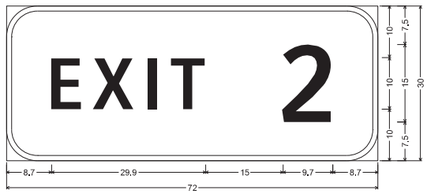
SHEET NO.	SIGN NO.
6/11	1



6.0" Radius, 1.0" Border, White on, Green:
"EXIT", ClearviewHwy-4-W; "4", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	4
8.0	16.0	26.6	31.1	52.9

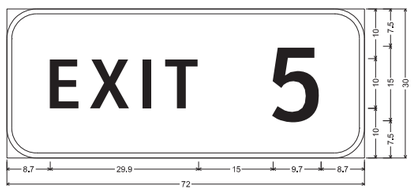
SHEET NO.	SIGN NO.
3/11	1
4/11	1



6.0" Radius, 1.0" Border, White on, Green:
"EXIT", ClearviewHwy-4-W; "2", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2
8.7	16.7	27.4	31.8	53.6

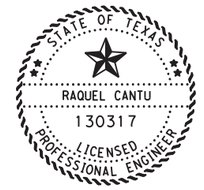
SHEET NO.	SIGN NO.
1/11	1



6.0" Radius, 1.0" Border, White on, Green:
"EXIT", ClearviewHwy-4-W; "5", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	5
8.7	16.7	27.4	31.8	53.6

SHEET NO.	SIGN NO.
5/11	1



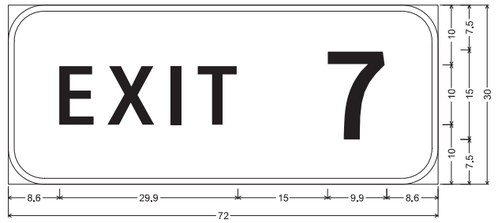
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN DETAIL SHEETS

SHEET 4 OF 5

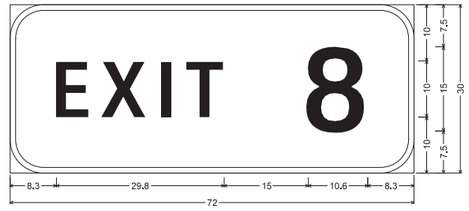
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			26
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "7", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	7
8.6	16.6	27.2	31.7	53.5

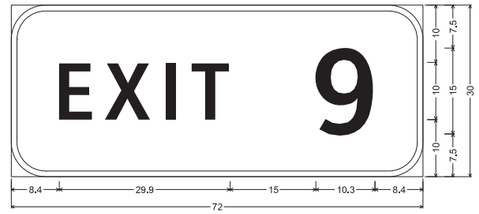
SHEET NO.	SIGN NO.
7/11	1
8/11	1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "8", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	8
8.3	16.3	26.9	31.4	53.1

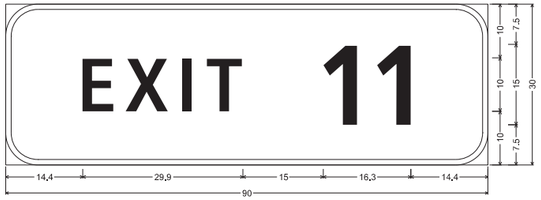
SHEET NO.	SIGN NO.
6/11	3



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "9", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	9
8.4	16.4	27.0	31.5	53.3

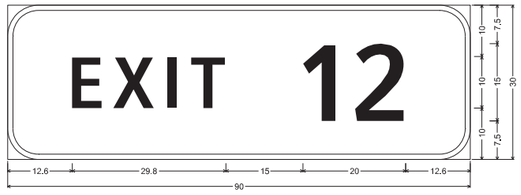
SHEET NO.	SIGN NO.
6/11	2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "11", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	1
14.4	22.4	33.0	37.5	59.3	69.3

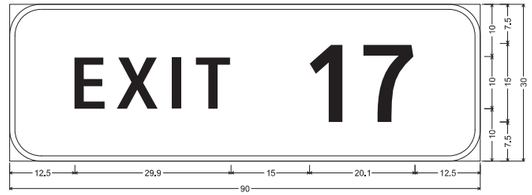
SHEET NO.	SIGN NO.
9/11	1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "12", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	2
12.6	20.6	31.2	35.7	57.4	67.8

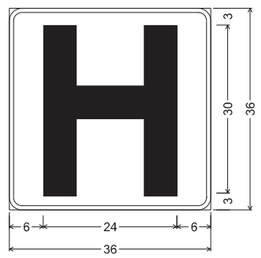
SHEET NO.	SIGN NO.
10/11	1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "17", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7
12.5	20.5	31.1	35.6	57.4	67.6

SHEET NO.	SIGN NO.
11/11	1
11/11	3



hospital;
2.3" Radius, 0.8" Border, White on, Blue;
"H", E Mod;
Table of letter and object lefts

H
6.0

SHEET NO.	SIGN NO.
1/11	1

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69C
LARGE SIGN DETAIL SHEETS

SHEET 5 OF 5

DN: CBR	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				27
DW: CBR			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
1/11	1	OVERHEAD	H EXIT 2 281 BUSINESS Edinburg Owassa Rd ↗	SIGN ONLY
2/11	1	GROUND MOUNT	EXIT 1E FM 3461 Nolana Loop Exit 1/2 Mile	SIGN ONLY
3/11	3	GROUND MOUNT	EXIT 4 Canton Rd Veterans Blvd EXIT 1/2 MILE	SIGN ONLY
4/11	1	OVERHEAD	EXIT 4 Canton Rd Veterans Blvd EXIT ↗ ONLY	SIGN ONLY
5/11	1	OVERHEAD	EXIT 5 Freddy Gonzalez Dr EXIT 3/4 MILE	SIGN ONLY
6/11	1	GROUND MOUNT	EXIT 6 TEXAS 107 University Dr EXIT 1/2 MILE	SIGN ONLY
6/11	3	OVERHEAD	EXIT 8 Russell Rd Rogers Rd EXIT ↗ ONLY	SIGN ONLY
6/11	2	OVERHEAD	EXIT 9 FM 1925 Monte Cristo Rd EXIT 1/2 MILE	SIGN ONLY
7/11	1	GROUND MOUNT	EXIT 7 FM 2128 Schunior Rd Richardson Rd Chapin Rd ↗	SIGN ONLY

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
8/11	1	GROUND MOUNT	EXIT 7 FM 2128 Schunior Rd Richardson Rd Chapin Rd EXIT 1/2 MILE	SIGN ONLY
9/11	1	OVERHEAD	EXIT 11 Davis Dr Ramseyer Rd ↗	SIGN ONLY
10/11	1	GROUND MOUNT	EXIT 12 FM 2812 ↗	SIGN ONLY
10/11	2	GROUND MOUNT	EXIT 12 ↗	SIGN ONLY
11/11	1	GROUND MOUNT	EXIT 17 FM 490 ↗	SIGN ONLY
11/11	2	GROUND MOUNT	EXIT 17 McCook Hargill NEXT EXIT	SIGN ONLY
11/11	3	GROUND MOUNT	EXIT 17 FM 490 EXIT 1/2 MILE	✳

DATE:
FILE:

IH-69C SHEET 1 OF 1

SUMMARY OF LARGE SIGNS TO BE REMOVED

		REVISIONS	
DN.:- CBR		11-93	1-04
CK.:- GV		8-95	9-08
DW.:- CBR		5-01	
CK.:- GV			

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
PHR	HIDALGO, ETC.		28

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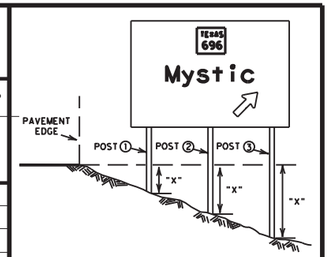
DATE: December 15, 2011
FILE: OSCAR d:\engdata\oscar\misc2011\us281(cibolo-fm490)\us281signsum.dgn

SUMMARY OF LARGE SIGNS

LAYOUT SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS: DIRECT APPLY	PLAQUES, & OTHER ATTACHMENTS: ⁎ ALUMINUM (TYPE A)	BACKGROUND SUBSTRATE (SQ FT): GROUND MOUNT (TYPE G)	BACKGROUND SUBSTRATE (SQ FT): OVERHEAD (TYPE O)	TYPE OF MOUNT	"X" DIMENSION ◒: post ①	"X" DIMENSION ◒: post ②	"X" DIMENSION ◒: post ③	GALVANIZED STRUCTURAL STEEL: SIZE	GALVANIZED STRUCTURAL STEEL: LINEAR FEET post ①	GALVANIZED STRUCTURAL STEEL: LINEAR FEET post ②	GALVANIZED STRUCTURAL STEEL: LINEAR FEET post ③	GALVANIZED STRUCTURAL STEEL: TOTAL WEIGHT LBS.	DRILLED SHAFT: LINEAR FEET NON-REINF 12"ϕ	DRILLED SHAFT: LINEAR FEET REINFORCED 24"ϕ	DRILLED SHAFT: LINEAR FEET REINFORCED 30"ϕ	DRILLED SHAFT: LINEAR FEET REINFORCED 36"ϕ	RIP RAP: CY
1/11	1	GREEN	H	3' x 3'		9																
			EXIT 2	6' x 2.5 '				15														
			281 BUSINESS Edinburg Owassa Rd	3.75' x 3'	11.25																	
				18' x 11'				198					S4x7.7	11	11	11	254.1					
			(N.B.)																			
2/11	1	GREEN	EXIT 1E	7.5' X 2.5'			18.75															
			FM 3461 Nolana Loop ½ MILE	4.75' x 3'	14.25																	
				16.5' X 10'			165															
			(S.B.)																			
3/11	1	GREEN	EXIT 4	6' x 2.5'			15															
			Canton Rd Veterans Blvd ½ MILE	18' X 8.5'			153															
			(N.B.)																			
4/11	1	GREEN	EXIT 4	6' x 2.5'				15														
			Canton Rd Veterans Blvd	18' X 8.5'				153					S4X7.7	8.5	8.5	8.5	196.35					
			EXIT ONLY	18' x 2.75'	49.50																	
			(N.B.)																			
5/11	1	GREEN	EXIT 5	6' x 2.5'				15														
			Freddy Gonzalez Dr ¾ MILE	24' X 6'				144					S4X7.7	6	6 6	6	231					
			(S.B.)																			
6/11	1	GREEN	EXIT 6	6' x 2.5'			15															
			TEXAS 107 University Dr ½ MILE	3.4 ' x 3'	10.20																	
				17' x 9.5'			161.50															
			(S.B.)																			
6/11	3	GREEN	EXIT 8	6' x 2.5'				15														
			Russell Rd Rogers Rd	14' x 9'				126					S4X7.7	9	9		138.60					
			EXIT ONLY	14'x 2.75'	38.50																	
			(N.B.)																			
6/11	2	GREEN	EXIT 9	6' x 2.5'				15														
			TEXAS 1925 Monte Cristo Rd ½ MILE	4.75' x 3'	14.25																	
				20.5' X 10'				205					S4X7.7	10	10 10	10	308					
			(N.B.)																			
7/11	1	GREEN	EXIT 7	6' x 2.5'			15															
			FM 2128 Chapin Rd Schunior Rd Richardson Rd	4.75' x 3'	14.25																	
				18.5' x 15.5'			286.75															
			(S.B.)																			
			PAGE TOTALS			9	830	901									1,128					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

⁎ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No. (0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass)

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69C

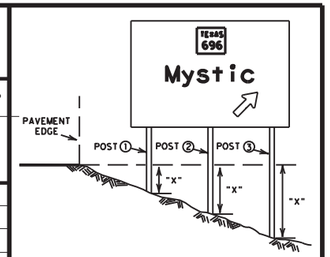
DN.:- CBR	CK.:- GV	DW.:- CBR	CK.:- GV	REVISIONS	
				11-93	1-04
				8-95	9-08
				5-01	

SHEET 1 OF 2

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		29

SUMMARY OF LARGE SIGNS

LAYOUT SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
			EXIT 7 / FM 2128 / Chapin Rd / Schunior Rd / Richardson Rd / ½ MILE	6' x 2.5'			15															
8/11	1	GREEN		4.75' x 3'	14.25																	
				18.5' x 14'			259															
			(S.B.)																			
			EXIT 11 / Davis Dr / Ramseyer Rd	7' x 2.5'				15														
9/11	1	GREEN		16.5' x 9.5'				156.75					S4X7.7	9.5	9.5	9.5	219.45					
			(N.B.)																			
			EXIT 12 / FM 2812	7' x 2.5'			15															
10/11	1	GREEN		4.75' x 3'	14.25																	
				8' x 8'			64															
			(N.B.)																			
10/11	2	GREEN	EXIT 12	5' x 7.5'			37.50															
			(N.B.)																			
			EXIT 17 / FM 490	7' x 2.5'			15															
11/11	1	GREEN		4.10' x 3'	12.30																	
				7.5' x 8'			60															
			(S.B.)																			
11/11	2	GREEN	Hargill / McCook / EXIT 17	10.5' x 8'			126															
			(S.B.)																			
			✈ / EXIT 17 / FM 490 / ½ MILE	3' x 3'			9															
				7' x 2.5'			15															
11/11	3	GREEN		4.1' x 3'	12.30																	
				8.5' x 7.5'			63.75															
			(S.B.)																			
										221	1.0	0.0	W6 x 9	15.5	14.5		336.4		12.00			1.6
			PAGE TOTALS			9	670.25	175.75									555.85		12.00			1.6
			GRAND TOTAL			18	1,500.25	1,076.75									1,683.85		12.00			1.6



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — Aluminum/Fiberglass; 1 Aluminum; 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69C

DN.: CBR	CK.: GV	DW.: CBR	CK.: GV	REVISIONS 11-93 8-95 5-01 1-04 9-08

SHEET 2 OF 2

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		30

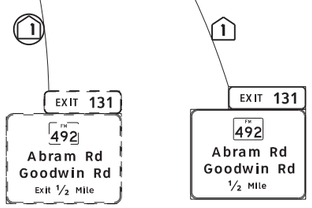
DATE: December 15, 2011
FILE: OSCAR d:\engdata\oscar\mitsc2011\us281(cibolo-fm490)\us281signsum.dgn

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED



STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

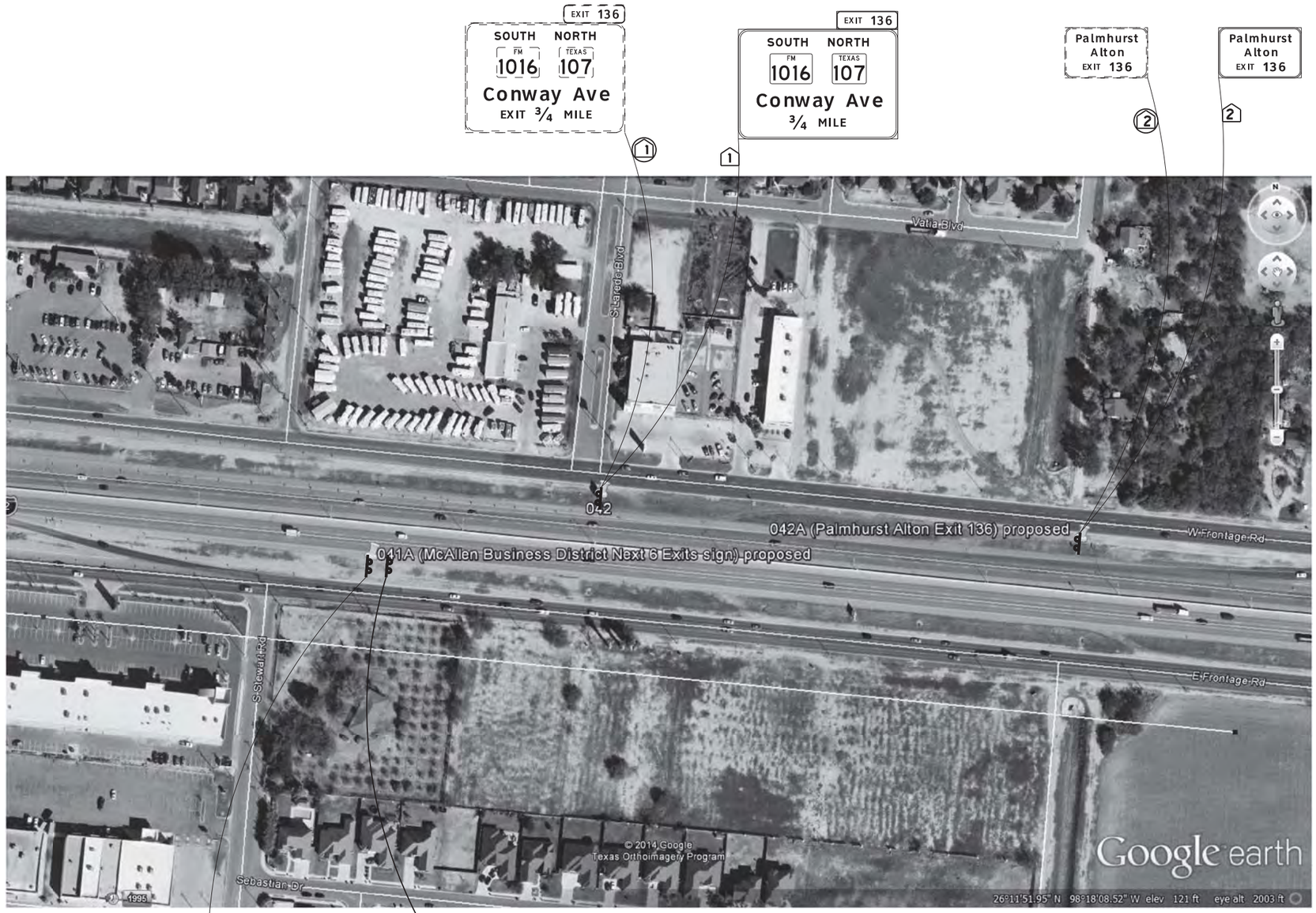
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 1 OF 54

DN: LS	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				31
DN: LS			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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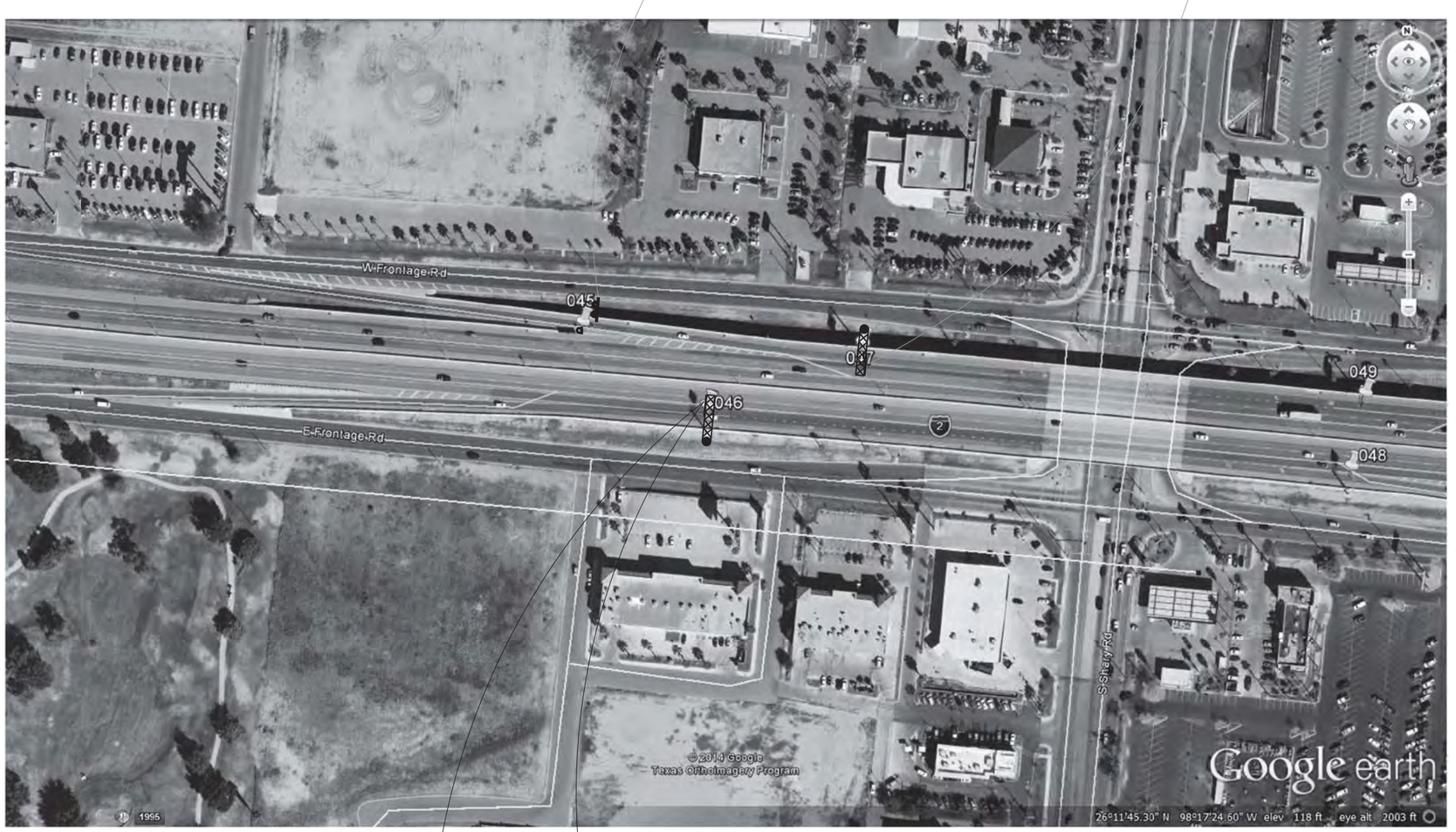
IH-2
LARGE SIGN LAYOUTS

SHEET 2 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	OCT. 2020		TEXAS			32
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 3 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	OCT. 2020		TEXAS				33
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 4 OF 54

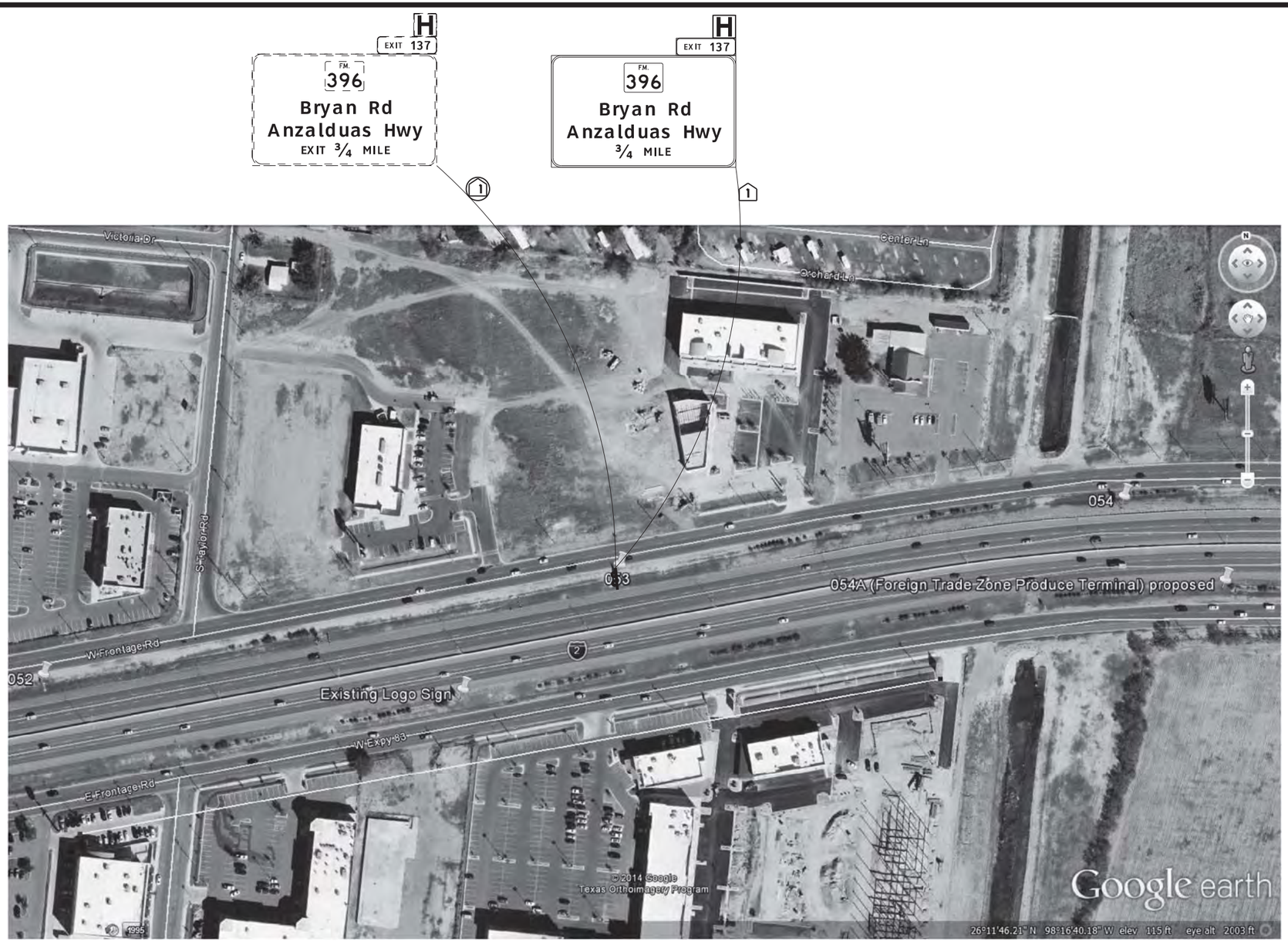
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	OCT. 2020		TEXAS			34
DS: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DS: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

OMIT

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORTGINAL	SEP. 2020		TEXAS				35
DSN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 5 OF 54

DN: LSJ	DRAWING	DATE	FED.RDL DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				36
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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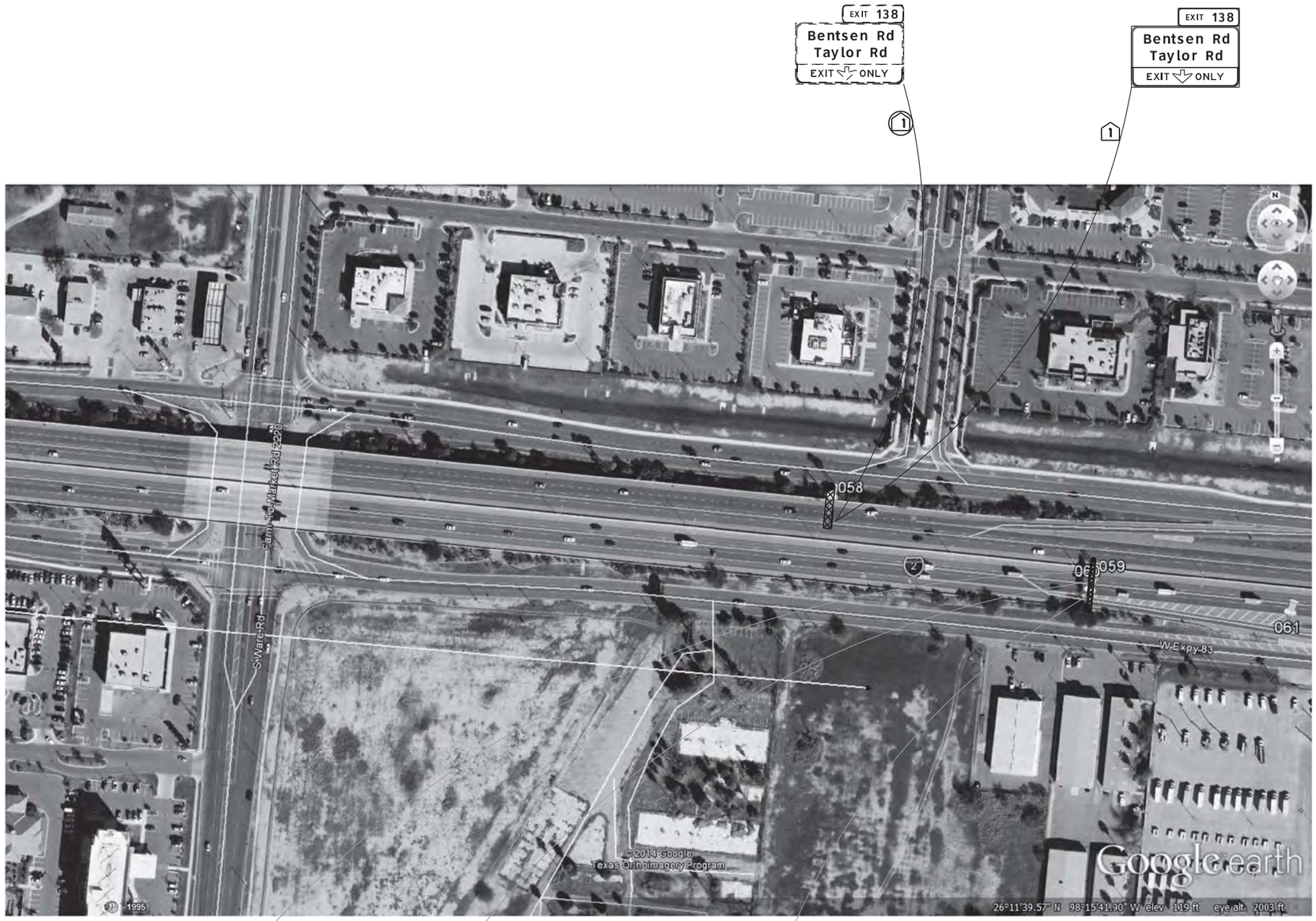
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 6 OF 54

DSN: LSJ	DRAWING	DATE	FED.RD. DIV. NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS			37
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 7 OF 54

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				38
DTN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DTN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

*ALL EXISTING SIGNS
TO REMAIN IN PLACE

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 8 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				39
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

EXIT 147 B

EXIT 147 B
FM 1426
San Juan
EXIT ONLY

EXIT 147 B
FM 1426
San Juan
EXIT ONLY

EXIT 150 A
FM 907
Alamo Rd
EXIT ½ MILE

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORTIGINAL	SEP. 2020		TEXAS					40
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001		IH-2, ETC.

N

SCALE: N. T. S.

EXIT 150 A
FM 907
Alamo Rd
EXIT ONLY

2

EXIT 150 A
FM 907
Alamo Rd
EXIT ONLY

2

EXIT 152
TEXAS 1423
Val Verde Rd
EXIT 1/2 MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 11 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			42
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 10 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				41
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED
- SMALL SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 12 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS		43
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 00 001	IH-2, ETC.

N

SCALE: N. T. S.

EXIT 150 B
Tower Rd
EXIT ONLY

EXIT 150 B
Tower Rd
EXIT ONLY

ALL TRUCKS MUST ENTER WEIGH STATION WHEN FLASHING

EXIT 153
Hutto Rd
EXIT 1 MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 13 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					44
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.	
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.	

SCALE: N.T.S.

11.06.20

EXIT 154
SPUR 433
Main St
Exit 1/2 Mile

EXIT 154
SPUR 433
Main St
1/2 Mile

LEGEND

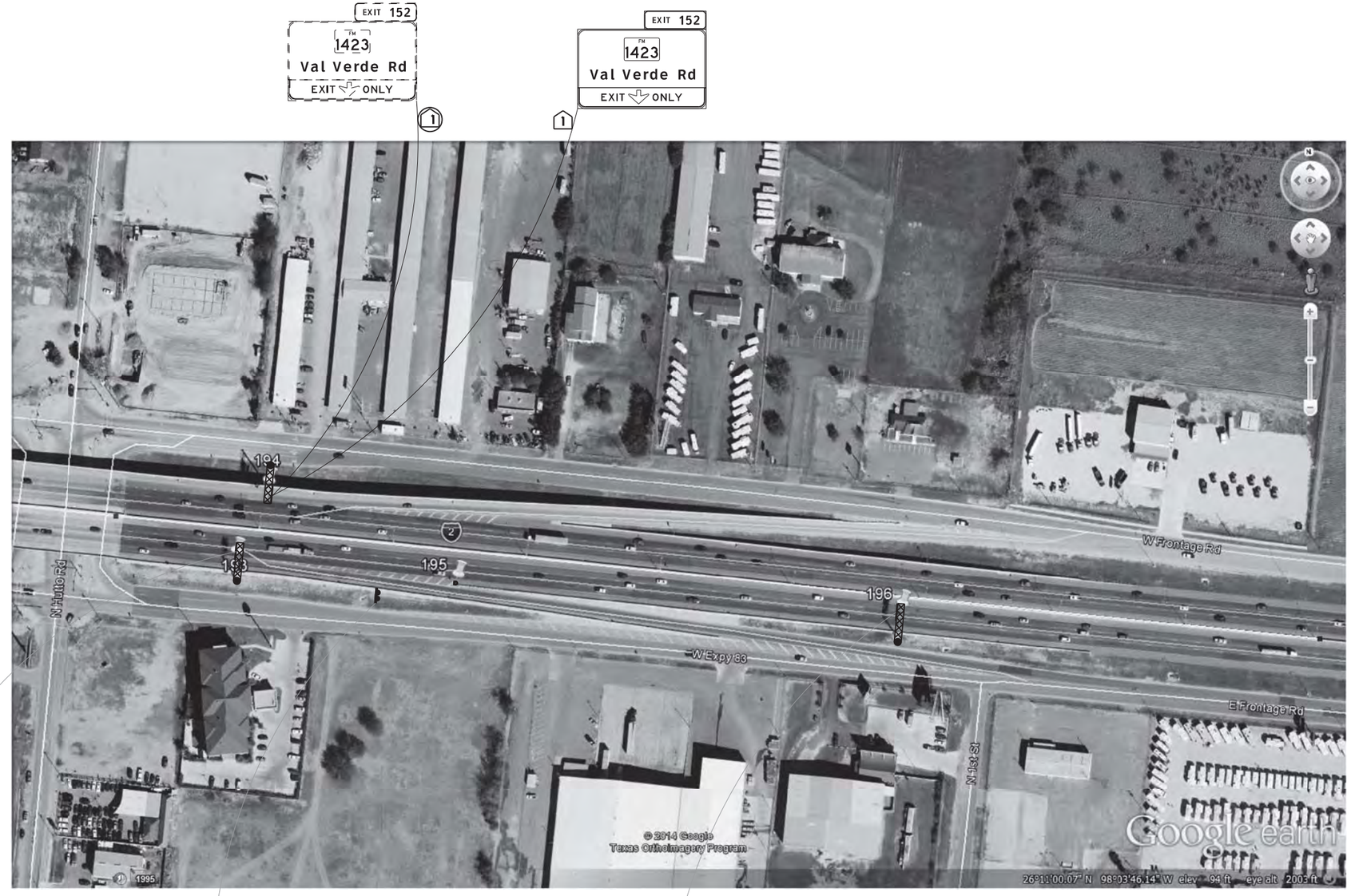
- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 14 OF 54

DSN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS					45
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001		IH-2, ETC.



N

SCALE: N.T.S.

EXIT 154
SPUR 433
Main St
EXIT ONLY

EXIT 154

EXIT 155 A
FM 493
Salinas Blvd
EXIT 3/4 MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
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Raquel Cantu

11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 15 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			46
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

EXIT 153
Hutto Rd
EXIT ONLY

EXIT 155 A
Mexico
Donna/Rio Bravo
Intl Bridge
NEXT EXIT

EXIT 155 A
FM 493
Salinas Blvd
EXIT ONLY

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2

LARGE SIGN LAYOUTS

SHEET 16 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				47
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu

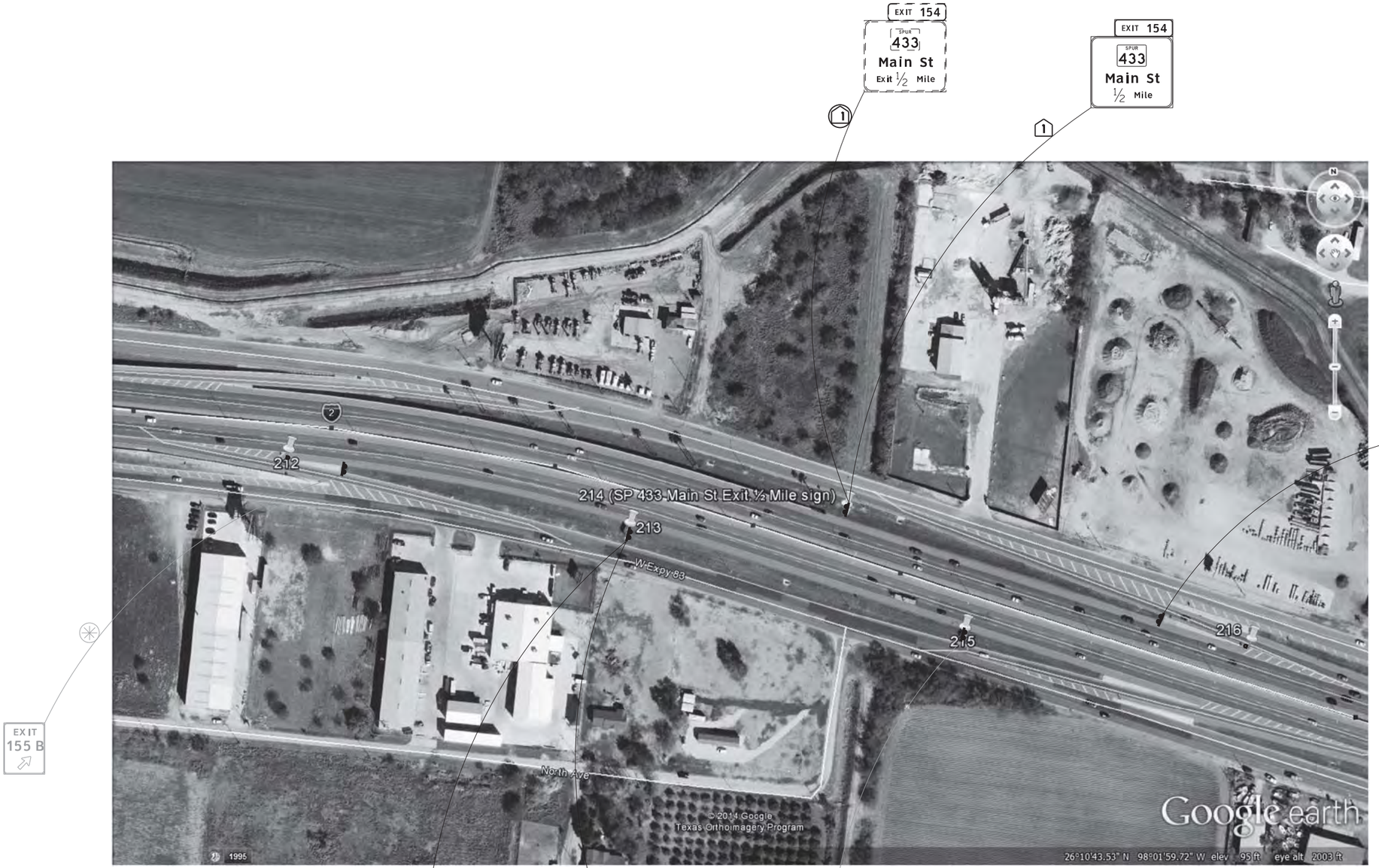
11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 17 OF 54

DN: LSJ	DRAWING	DATE	DIST. NO. DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		48
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 00 001	IH-2, ETC.



N

SCALE: N. T. S.

EXIT 155 A

EXIT 155 B

2

EXIT 157
Westgate Dr
Mile 6 W Rd
EXIT ½ MILE

2

EXIT 157
Westgate Dr
Mile 6 W Rd
½ MILE

Milano Rd
EXIT 157

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

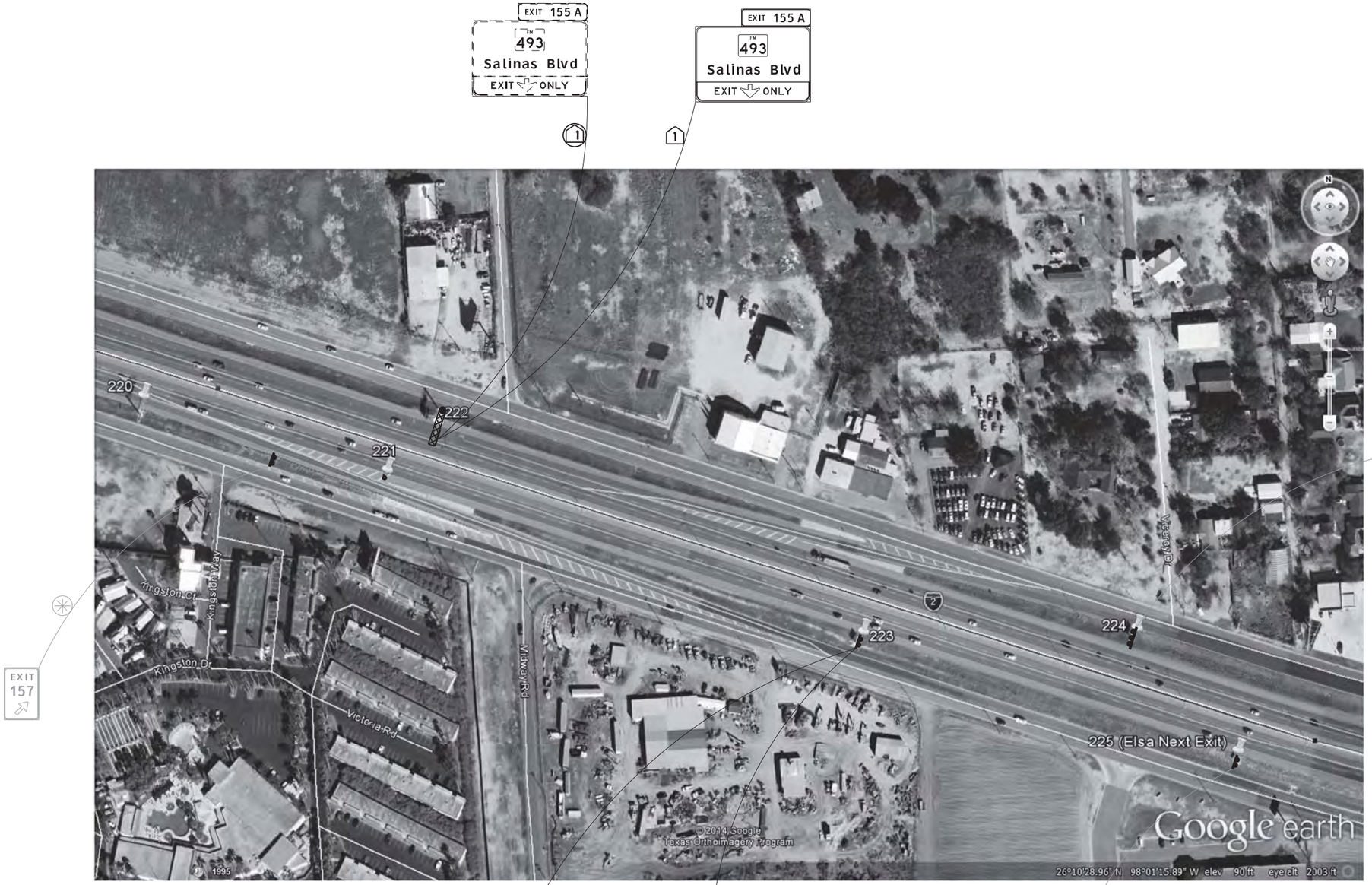
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 18 OF 54

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					49
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001		IH-2, ETC.



EXIT 155 A
Mexico
Donna/Rio Bravo
Intl Bridge
NEXT EXIT

EXIT
157

EXIT 158
FM 88
Texas Blvd
EXIT 1 MILE

EXIT 158
FM 88
Texas Blvd
1 MILE

Elsa
EXIT 158

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 19 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				50
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

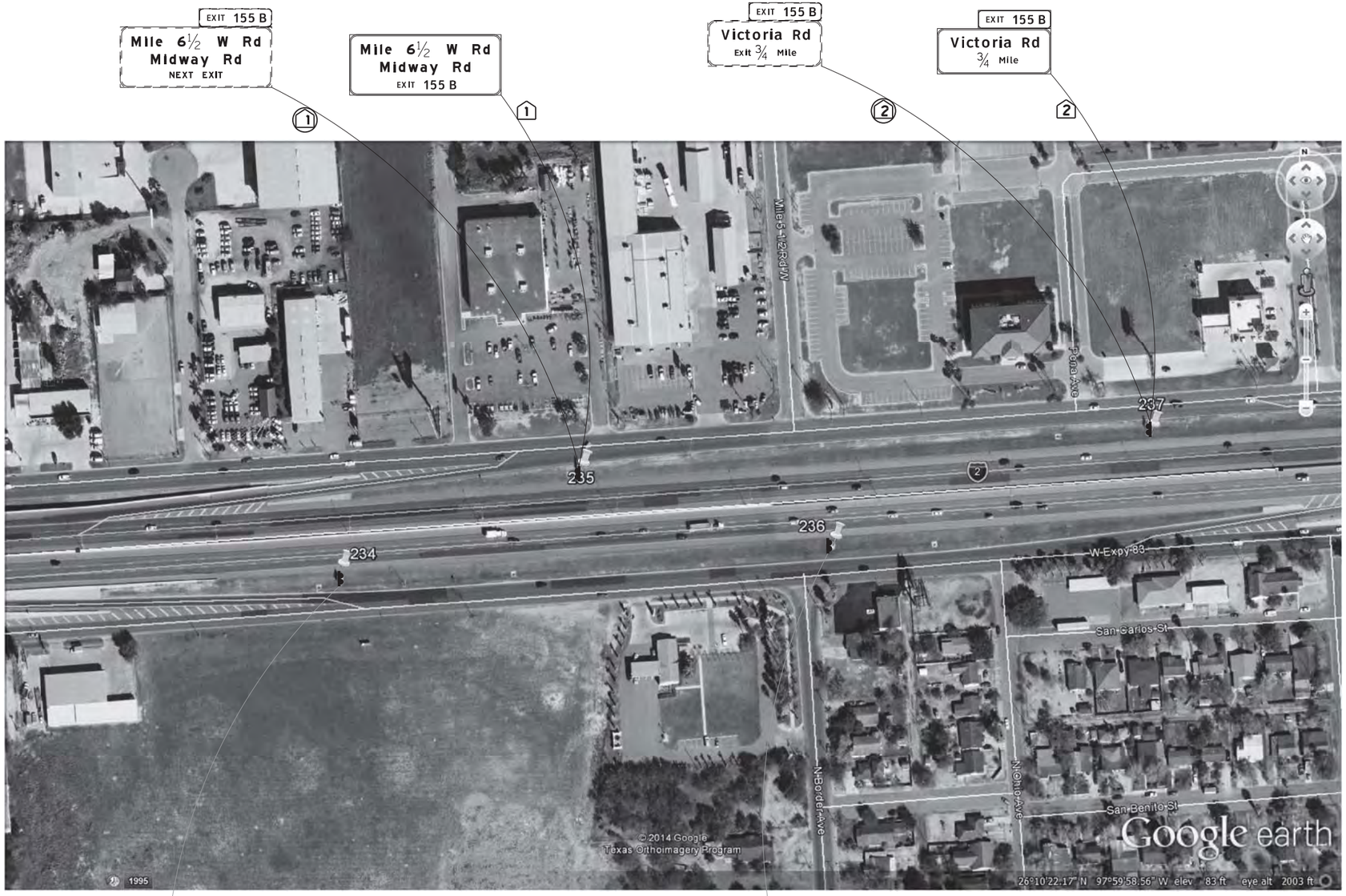
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 20 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		51
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.



SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

H
EXIT 159
Airport Dr
Pike Blvd
EXIT ¾ MILE

Bridge Ave
EXIT 159

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 21 OF 54

DRN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					52
DRN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.	
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.	

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

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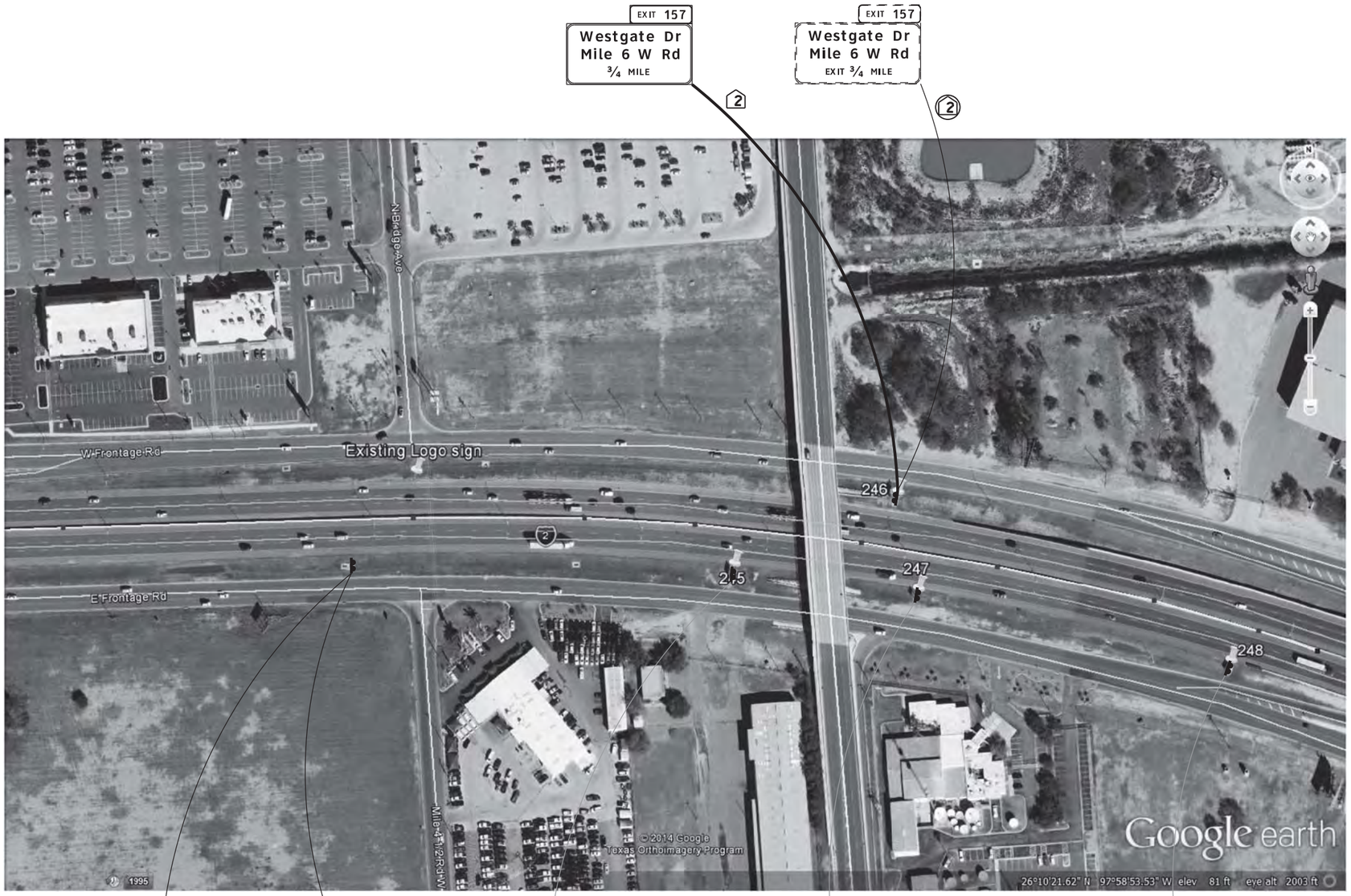
LARGE SIGN LAYOUTS

SHEET 22 OF 54

DSN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				53
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N. T. S.

EXIT 160
FM 1015
Intl Blvd
EXIT 3/4 MILE

EXIT 160
FM 1015
Intl Blvd
3/4 MILE

EXIT 160
Texas Dept of Public Safety Regional Hdqtrs
NEXT RIGHT

Edcouch Progreso
EXIT 160

Progreso Intl Bridge
EXIT 160

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 23 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				54
DS: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

EXIT 158
TEXAS 88
Texas Blvd
EXIT ONLY

EXIT 158
TEXAS 88
Texas Blvd
EXIT ONLY

EXIT 160
FM 1015
Intl Blvd
EXIT ONLY

EXIT 160
Bill Summers Intl Blvd
NEXT RIGHT

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

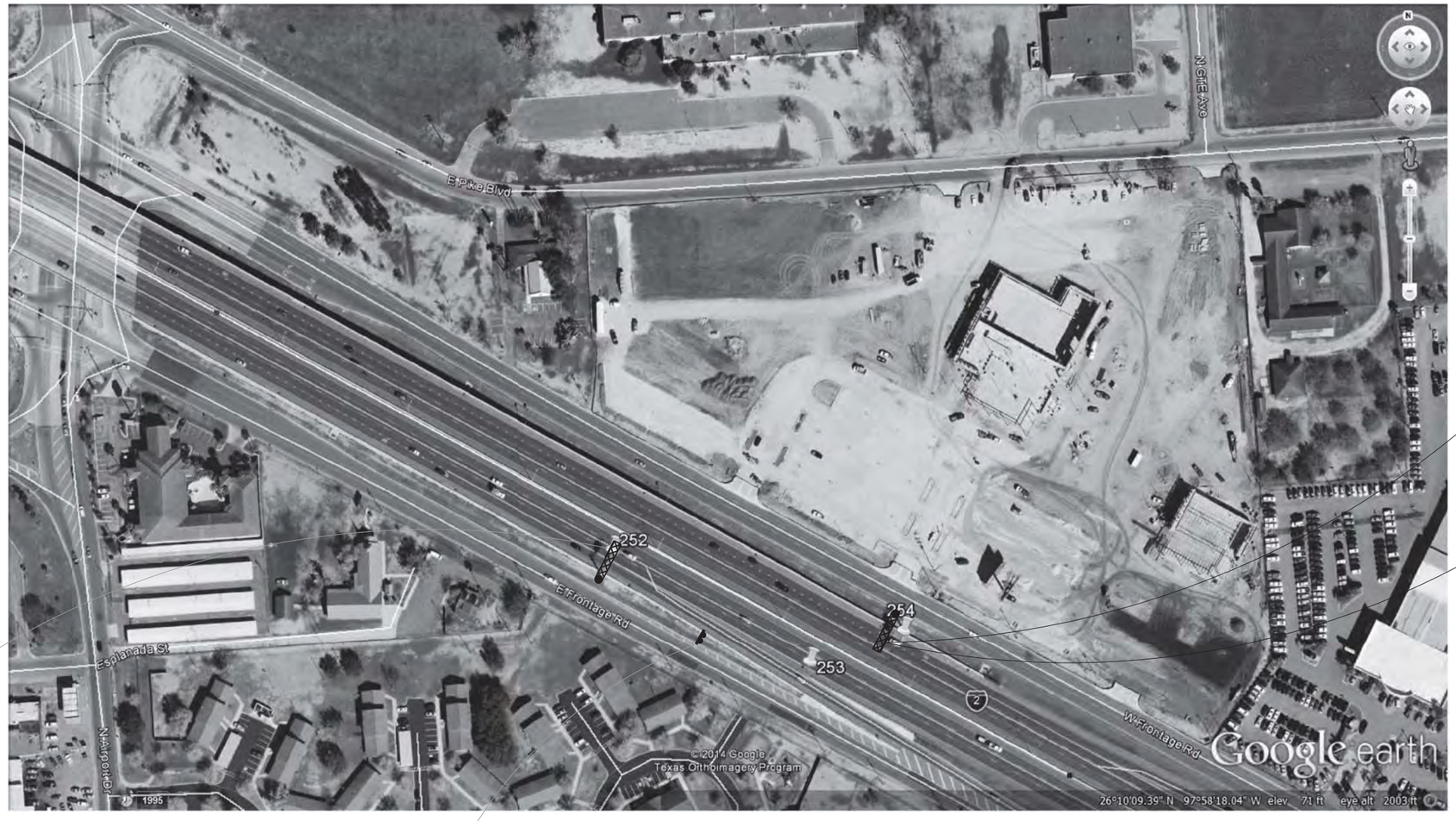
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 24 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				55
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N. T. S.

EXIT 158
FM 88
Texas Blvd
EXIT ONLY

EXIT 158
FM 88
Texas Blvd
EXIT ONLY

EXIT 160
FM 1015
Intl Blvd
EXIT ONLY

EXIT 160

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 25 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			56
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 26 OF 54

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			57
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

EXIT 159
Airport Dr
Pike Blvd
EXIT ONLY

EXIT 159
Airport Dr
Pike Blvd
EXIT ONLY

EXIT 161
SPUR 31
Mile 2 W Rd
EXIT ONLY

EXIT 161
SPUR 31
Mile 2 W Rd
EXIT ONLY

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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Raquel Cantu 11.05.20

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IH-2
LARGE SIGN LAYOUTS

SHEET 27 OF 54

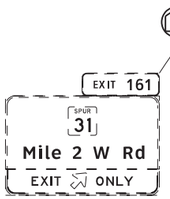
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK: DN: GV	ORIGINAL	SEP. 2020		TEXAS				58
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK: DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

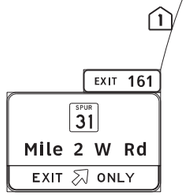
N

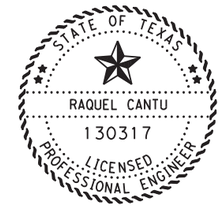
SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED







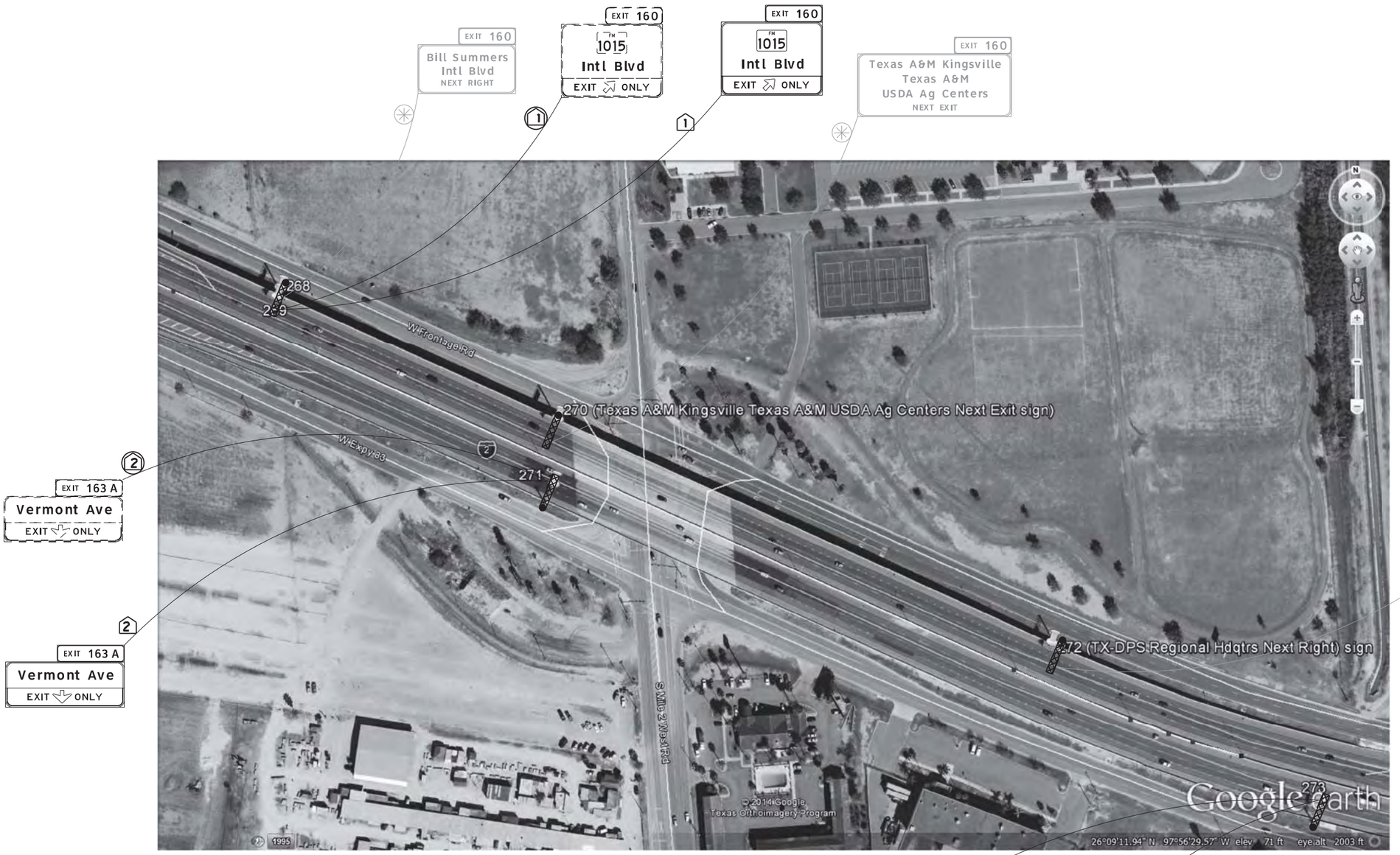
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 28 OF 54

DRN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			59
DRN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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Raquel Cantu 11.05.20

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IH-2
LARGE SIGN LAYOUTS

SHEET 29 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS					60
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6273	50	001		IH-2, ETC.

N

SCALE: N.T.S.

Progreso
Intl Bridge
EXIT 160

EXIT 160
FM 1015
Intl Blvd
EXIT 3/4 MILE

1

1

EXIT 160
FM 1015
Intl Blvd
3/4 MILE

EXIT
163 A

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

LEGEND

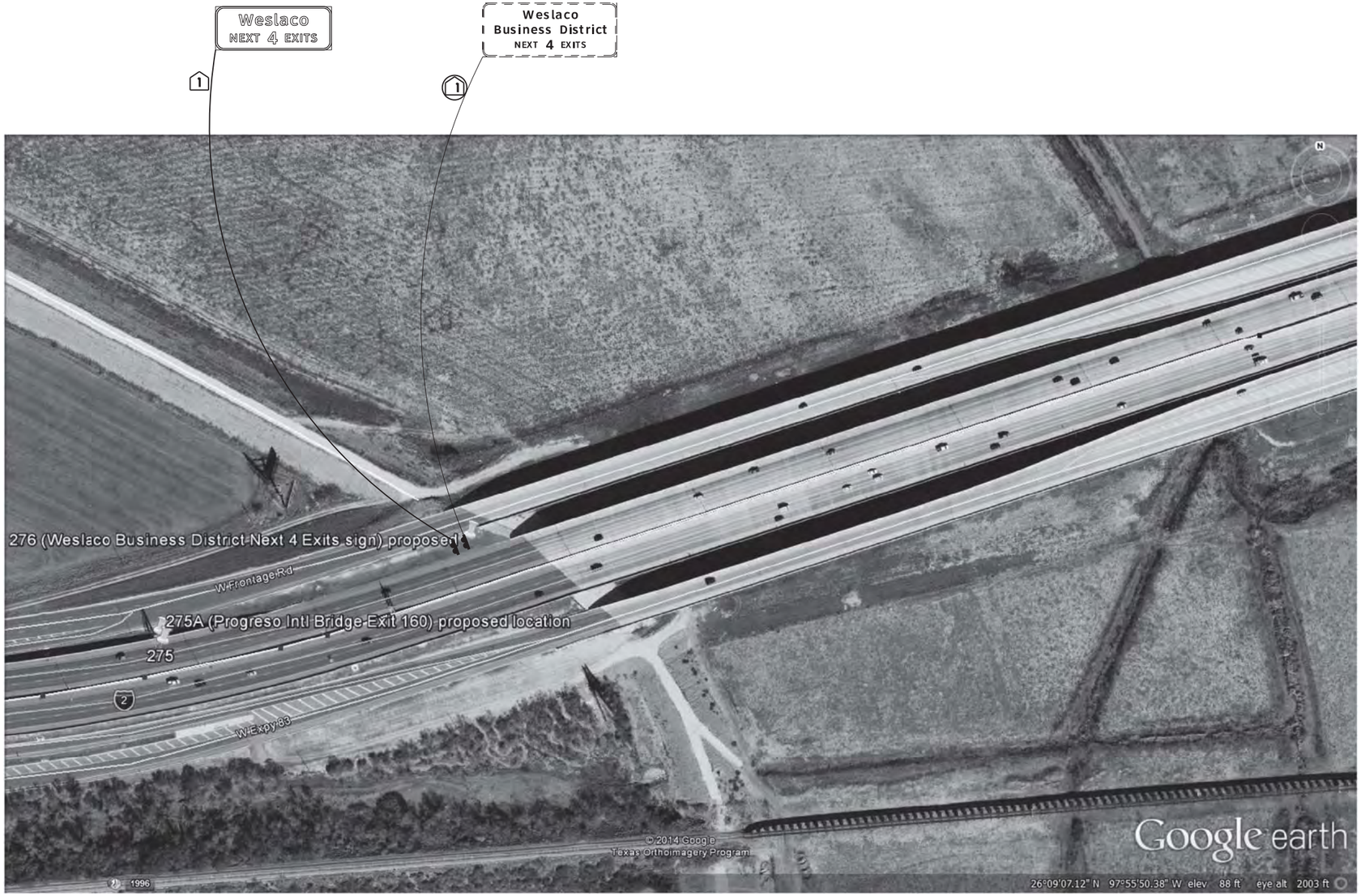
- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 30 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				61
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6352	00	001	IH-2, ETC.



N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
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Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 31 OF 54

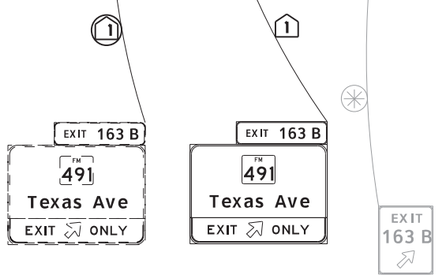
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				62
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED



STATE OF TEXAS
RAQUEL CANTU
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PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 32 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		63
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 33 OF 54

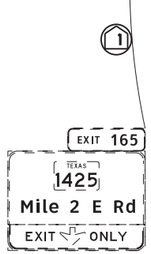
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				64
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

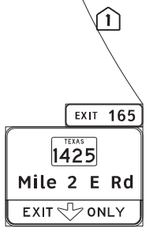
N

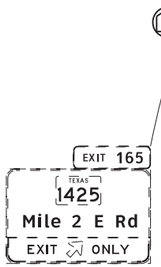
SCALE: N. T. S.

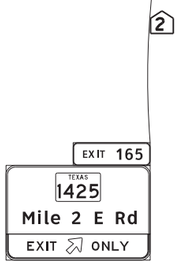
LEGEND

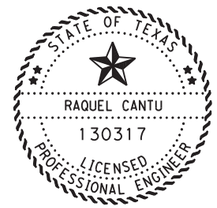
- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED











Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 34 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				65
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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LARGE SIGN LAYOUTS

SHEET 35 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				66
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 36 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		67
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.

N

SCALE: N.T.S.

Mercedes Business District
NEXT 5 EXITS

EXIT 167
FM 2556
Solis Rd
Rabb Rd
EXIT 1/2 MILE

EXIT 167
FM 2556
Solis Rd
Rabb Rd
1/2 MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 37 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					68
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.	
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.	

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 38 OF 54

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				69
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 39 OF 54

DES: LSJ	DRAWING	DATE	FED.AID PROJ. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DES: GV	ORIGINAL	SEP. 2020		TEXAS				70
DR: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DR: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

EXIT 167
FM 2556
Solis Rd
Mile 3 E Rd
EXIT ONLY

EXIT 167
FM 2556
Solis Rd
Mile 3 E Rd
EXIT ONLY

EXIT 167
FM 2556
Solis Rd
Mile 3 E Rd
EXIT ½ MILE

EXIT 167
FM 2556
Solis Rd
Mile 3 E Rd
½ MILE

EXIT 169
FM 506
La Feria
Santa Rosa
EXIT ONLY

EXIT 169
FM 506
La Feria
Santa Rosa
EXIT ONLY

EXIT 169

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 40 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS					71
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001		IH-2, ETC.

N

SCALE: N. T. S.

EXIT 168
Rabb Rd
EXIT ONLY
3

EXIT 168
Rabb Rd
EXIT ONLY
3

1
EXIT 170
FM 733
Kansas City Rd
White Ranch Rd
EXIT ½ MILE

1
EXIT 170
FM 733
Kansas City Rd
White Ranch Rd
½ MILE

2
EXIT 170
FM 733
Kansas City Rd
White Ranch Rd
EXIT ONLY

2
EXIT 170
FM 733
Kansas City Rd
White Ranch Rd
EXIT ONLY

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2

LARGE SIGN LAYOUTS

SHEET 41 OF 54

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS			72
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

EXIT 168
Rabb Rd
EXIT ONLY

2

EXIT 168
Rabb Rd
EXIT ONLY

2

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

1

EXIT 170
FM 733
Kansas City Rd
White Ranch Rd
EXIT ONLY

1

EXIT 170
FM 733
Kansas City Rd
White Ranch Rd
EXIT ONLY

EXIT
170

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					73
DN: LSJ			STATE DIST.NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 43 OF 54

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				74
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 44 OF 54

DSN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS			75
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 45 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				76
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

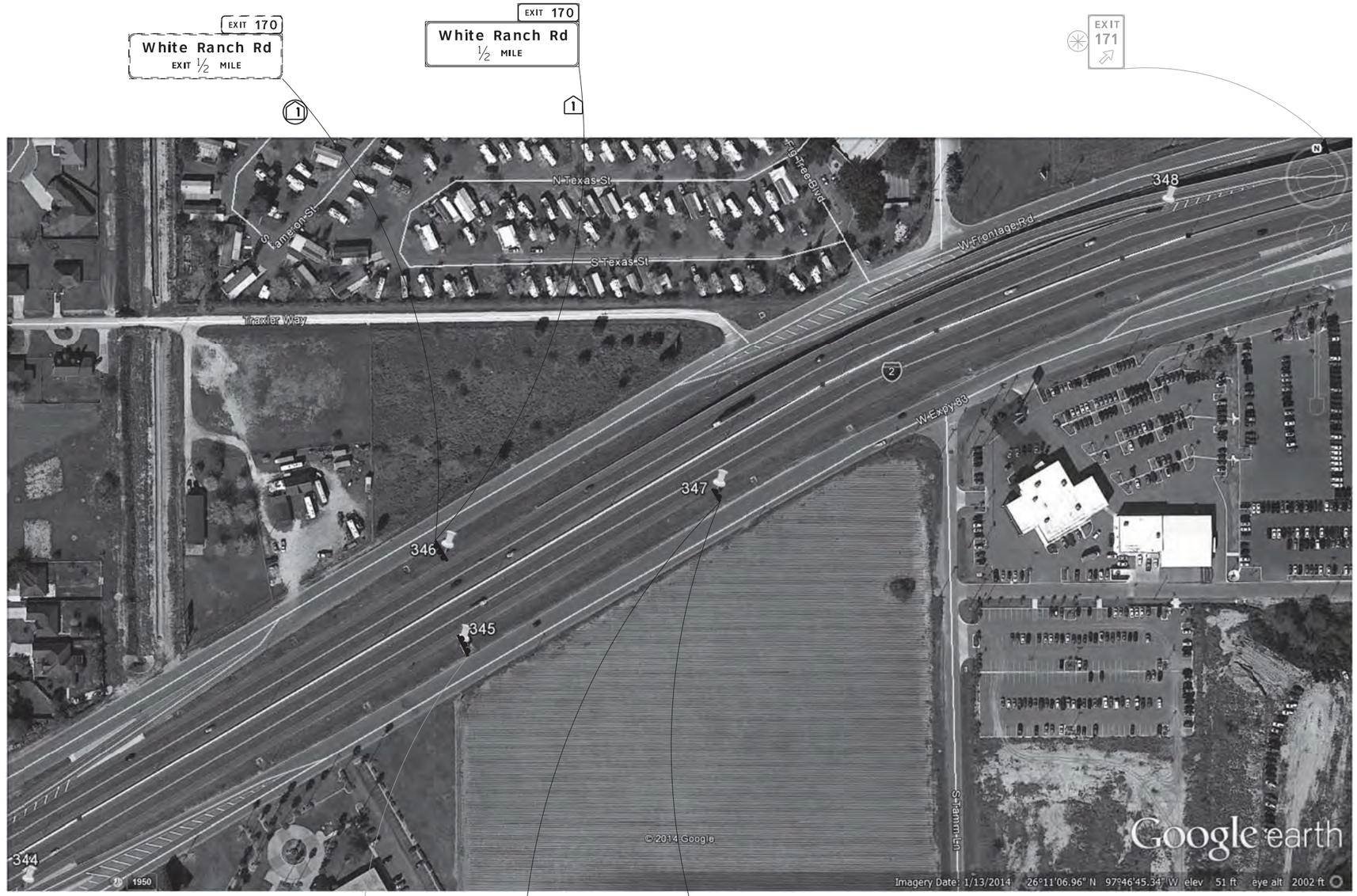
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 46 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				77
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

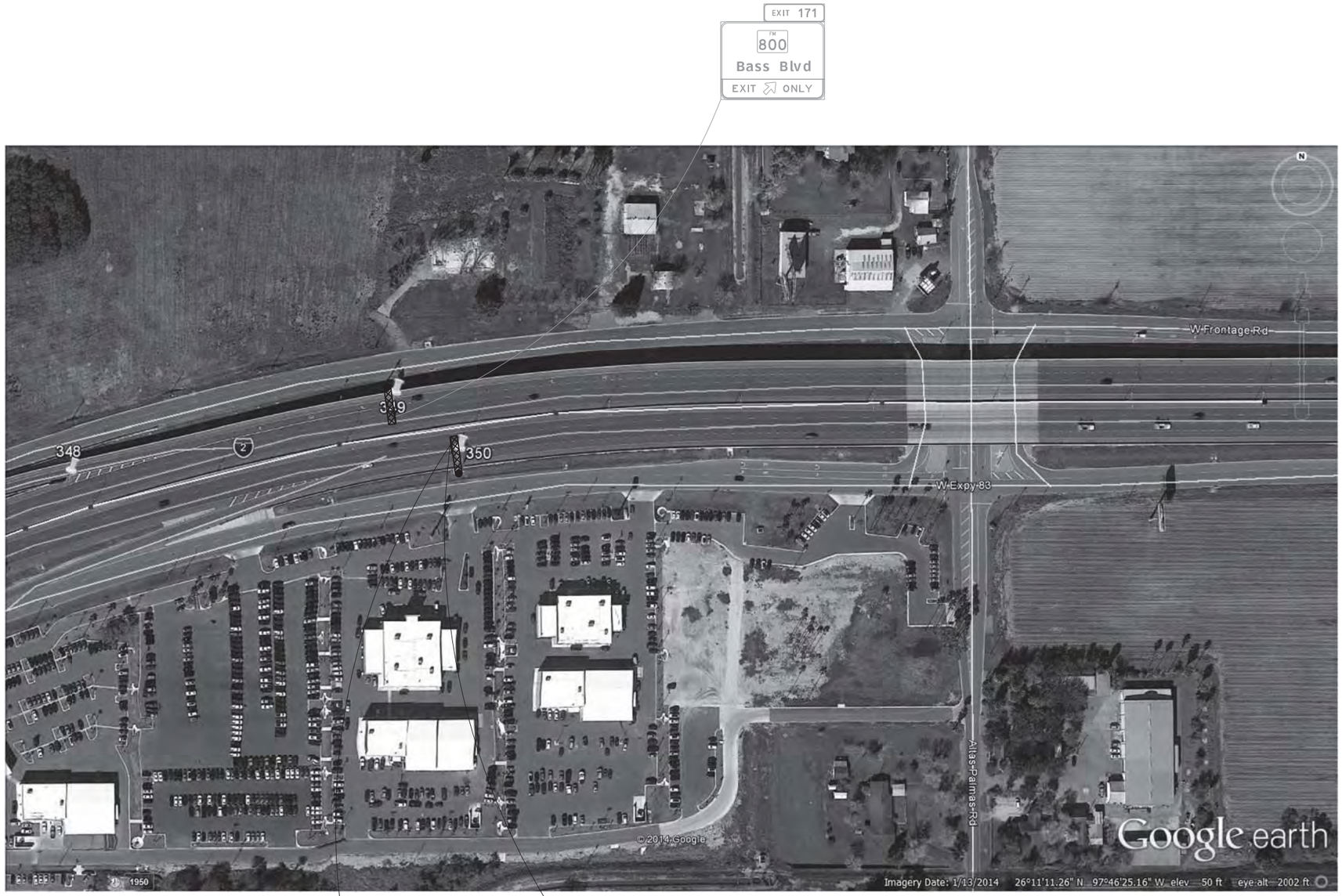
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 47 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				78
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

(1)

EXIT 173
FM 3195
Stuart Place Rd
EXIT ONLY

(1)

EXIT 173
FM 3195
Stuart Place Rd
EXIT ONLY

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 48 OF 54

DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
ORIGINAL	SEP. 2020		TEXAS				79
		STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
		PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

DW: LSJ
CK DW: GV
DW: LSJ
CK DW: GV

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 49 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS		80
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2

LARGE SIGN LAYOUTS

SHEET 50 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				81
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 51 OF 54

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				82
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

EXIT 173

EXIT 176
NORTH
69E 77
Raymondville
Corpus Christi
EXIT 1 MILE

EXIT 176
Valley
Intl Airport
EXIT LEFT 1 MILE

SOUTH
69E 77 83
Brownsville
EXIT 1 MILE

EXIT 172
FM 3195
Stuart Place
Rd

SOUTH
69E 77 83
Brownsville

EXIT 175
Downtown
Tyler Ave
Dixieland Rd
Bass Pro Dr
EXIT ½ MILE

EXIT 175
Downtown
Tyler Ave
Dixieland Rd
Bass Pro Dr
½ MILE

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 52 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				83
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 53 OF 54

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS					84
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.	
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.	

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

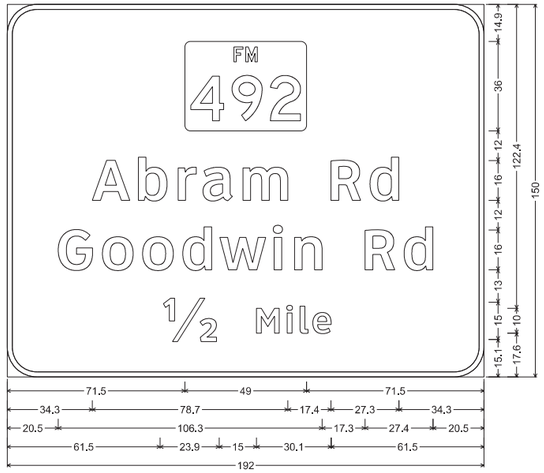
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 54 OF 54

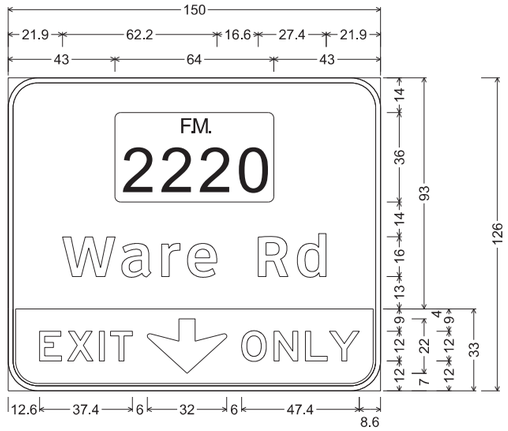
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					85
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.	
CK DN: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.	



Sequence Sign;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 492 M1-6F3; "Abram Rd", ClearviewHwy-5-W-R;
"Goodwin Rd", ClearviewHwy-5-W-R; "½", ClearviewHwy-5-W-R; "Mile", ClearviewHwy-5-W-R;
Table of letter and object lefts

71.5							
A 34.3	b 52.8	r 68.8	a 78.8	m 94.9	R 130.4	d 146.1	
G 20.5	o 38.3	o 54.5	d 70.7	w 85.6	i 107.1	n 115.7	R 144.1	d 159.8
½ 61.5	M 100.4	i 112.6	l 117.9	e 123.1			

SHEET NO. 1 OF 54 SIGN NO. 1

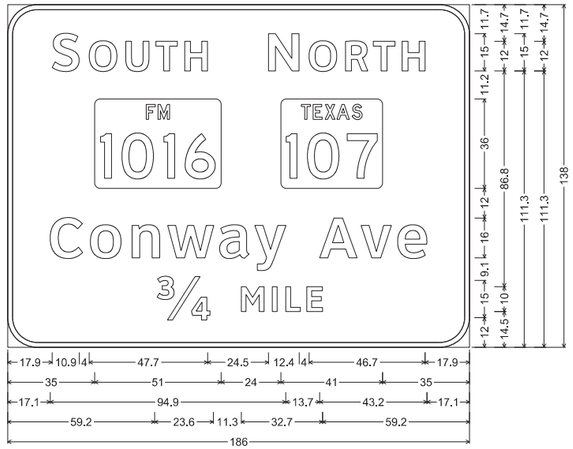


12.0" Radius, 2.0" Border, White on, Green;
State Highway 2220 4;
"Ware Rd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black;
"ONLY" Black, E;
Table of letter and object lefts

43.0						
W 21.9	a 45.8	r 61.8	e 72.2	R 100.7	d 116.4	
E 12.6	X 23.9	I 36.7	T 41.2	56.0	O 94.0	N 107.1	L 119.7	Y 129.4

SHEET NO. 3 OF 54 SIGN NO. 1



FM 396 Bryan Rd Anzalduas Hwy exit 3-4 mile;
12.0" Radius, 2.0" Border, White on, Green;
"S", ClearviewHwy-5-W-R; "OUTH", ClearviewHwy-5-W-R; "N", ClearviewHwy-5-W-R;
"ORTH", ClearviewHwy-5-W-R; State Highway 1016 M1-6F4;
State Highway 107 M1-6T3; "Conway Ave", ClearviewHwy-5-W-R;
"¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

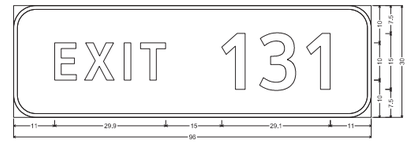
17.9	S 10.9	4.0	O 11.2	3.6	U 9.3	2.8	T 8.7	2.9	H 9.2	24.5	N 12.4		
	4.0	O 11.2	3.5	R 8.9	2.3	T 8.7	2.9	H 9.2	17.9				
35.0	51.0		24.0	41.0		35.0							
17.1	C 13.1	3.1	o 12.4	4.4	n 11.1	3.3	w 18.6	2.3	a 11.9	2.3	y 12.4		
	13.7	A 15.2	1.4	v 12.2	2.5	e 11.9	17.1						
59.2	¾ 23.6	11.3	M 9.1	3.4	I 2.0	3.4	L 5.9	2.6	E 6.3	59.2			

SHEET NO. 2 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Glasscock Rd", ClearviewHwy-5-W-R;
"Stewart Rd", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R; "137", ClearviewHwy-5-W-R;
Table of letter and object lefts

G 17.7	I 33.0	a 39.6	s 51.8	s 62.6	c 74.0	o 85.6	c 99.1	k 111.2	R 133.5	d 146.6	
S 29.6	t 41.5	e 50.8	w 62.9	a 80.3	r 93.7	t 101.5	R 121.5	d 134.6			
E 47.1	X 55.0	I 65.8	T 70.2	1 92.5	3 103.0	7 116.4					

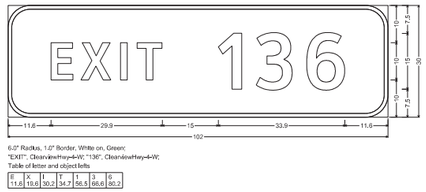
SHEET NO. 4 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "131", ClearviewHwy-4-W;
Table of letter and object lefts

E 11.0	X 19.0	I 29.8	T 34.1	55.9	5 66.0	1 78.7

SHEET NO. 1 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "136", ClearviewHwy-4-W;
Table of letter and object lefts

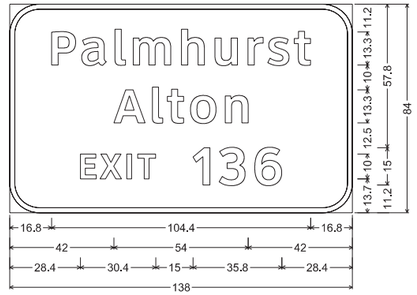
E 11.6	X 18.6	I 30.2	T 34.7	1 56.5	3 66.6	6 80.2

SHEET NO. 2 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "140", ClearviewHwy-4-W;
Table of letter and object lefts

E 10.4	X 18.4	I 29.1	T 33.5	1 55.3	4 65.5	0 80.0

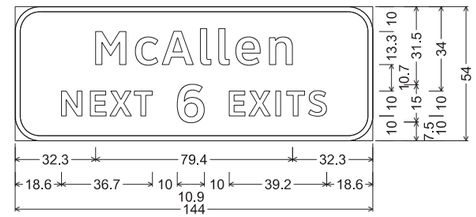
SHEET NO. 3 OF 54 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
"Palmhurst", ClearviewHwy-5-W-R;
"Alton", ClearviewHwy-5-W-R; "EXIT", ClearviewHwy-5-W-R;
"136", ClearviewHwy-5-W-R;
Table of letter and object lefts

P 16.8	a 29.0	l 42.4	m 49.8	h 69.1	u 82.6	r 95.9	s 103.9	t 114.5	
A 42.0	l 57.4	t 63.4	o 72.8	n 86.8					
E 28.4	X 36.3	I 47.1	T 51.5	1 73.8	3 84.3	6 98.6			

SHEET NO. 2 OF 54 SIGN NO. 2



10.0" Radius, 2.0" Border, White on, Green;
"McAllen", ClearviewHwy-5-W-R;
"NEXT", ClearviewHwy-5-W-R;
"6", ClearviewHwy-5-W-R;
"EXITS", ClearviewHwy-5-W-R;
Table of letter and object lefts

M 32.3	c 48.4	A 59.2	l 74.6	l 82.0	e 88.8	n 102.4
N 18.6	E 30.2	X 38.1	T 48.0	6 65.3		
	E 86.2	X 94.1	I 104.9	T 109.3	S 118.1	

SHEET NO. 2 OF 54 SIGN NO. 3

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

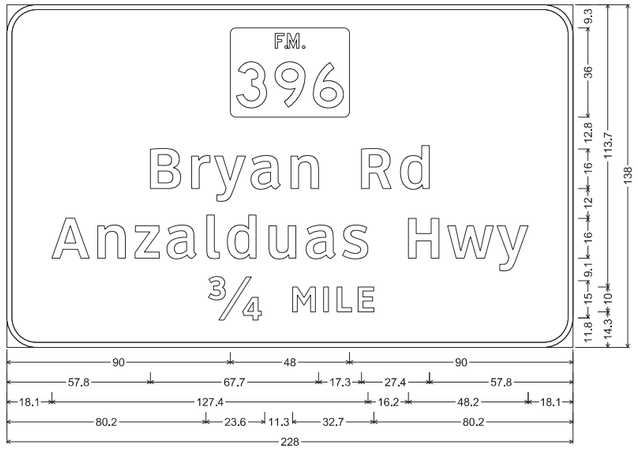
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 1 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			86
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



FM 396 Bryan Rd Anzalduas Hwy exit 3-4 mile;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 396 3; "Bryan Rd", ClearviewHwy-5-W-R; "Anzalduas Hwy", ClearviewHwy-5-W-R;
"¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

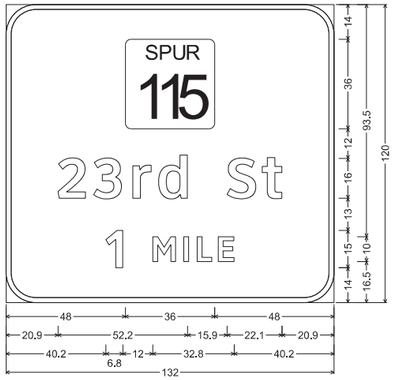
90.0	48.0	90.0

57.8	B 12.2	4.5	r 7.4	1.7	y 12.5	2.2	a 11.9	4.2	n 11.1	17.3	R 11.9	3.8	d 11.7	57.8		
18.1	A 15.2	3.3	n 11.1	3.9	z 9.9	3.0	a 11.9	4.2	I 5.1	3.1	d 11.6	5.1	u 10.9	4.1	a 11.9	2.8	s 10.3

	16.2	H 12.3	3.5	w 18.6	1.3	y 12.5	18.1

80.2	¾ 23.6	11.3	M 9.1	3.4	I 2.0	3.4	L 5.9	2.6	E 6.3	80.2

SHEET NO. 5 OF 54 SIGN NO. 1



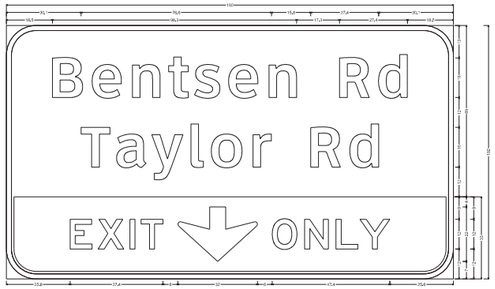
Sequence Sign;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 115 M1-6S3; "23rd St", ClearviewHwy-5-W-R;
"1", ClearviewHwy-5-W-R; "MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

48.0

2 20.9	3 35.3	r 51.0	d 61.4	S 89.0	1 103.2

1 40.2	M 59.0	I 71.5	L 77.0	E 85.4

SHEET NO. 6 OF 54 SIGN NO. 1

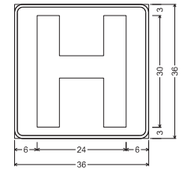


12.0" Radius, 2.0" Border, White on, Green;
"Bentsen Rd", ClearviewHwy-5-W-R; "Taylor Rd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E: Down Arrow 22 - 22.0° 270° Black "ONLY" Black, E:
Table of letter and object lefts

B 18,5	e 34,5	n 50,8	t 65,3	s 75,7	e 89,5	n 105,7	R 134,1	d 149,8
T 30,1	a 44,4	y 58,5	I 74,3	o 82,5	r 99,3	R 122,5	d 138,3	
E 25,6	X 36,9	I 49,7	T 54,2	69,0	O 107,0	N 120,1	L 132,7	Y 142,4

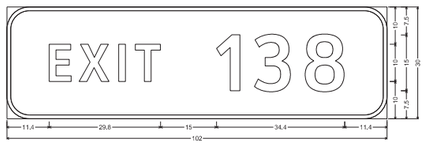
SHEET NO. 7 OF 54 SIGN NO. 1



hospital;
2.3" Radius, 0.8" Border, White on, Blue;
"H", E Mod;
Table of letter and object lefts

H 6.0

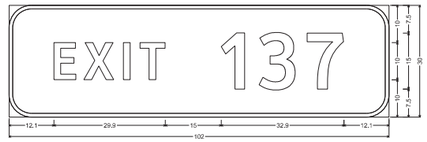
SHEET NO. 5 OF 54 SIGN NO. 1
SHEET NO. 27 OF 54 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "138", ClearviewHwy-4-W;
Table of letter and object lefts

E 11,4	X 19,4	I 30,0	T 34,5	1 56,2	3 66,4	8 80,1	

SHEET NO. 7 OF 54 SIGN NO. 1



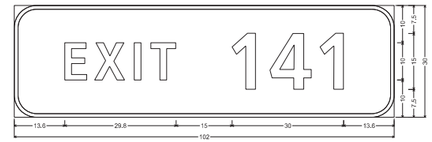
6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "137", ClearviewHwy-4-W;
Table of letter and object lefts

E 12,1	X 20,1	I 30,7	T 35,2	1 57,0	3 67,1	7 80,6

SHEET NO. 5 OF 54 SIGN NO. 1

2.3" Radius, 0.8" Border, White on, Green;
Symbol RA010;

SHEET NO. 6 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "141", ClearviewHwy-4-W;
Table of letter and object lefts

E 13,6	X 21,6	I 32,2	T 36,7	1 58,4	4 68,6	1 82,1

SHEET NO. 6 OF 54 SIGN NO. 1

STATE OF TEXAS
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PROFESSIONAL ENGINEER

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TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 2 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					87
DW: LSJ			STATE DIST. NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.

E11-1aR:

12,0" Radius, 2,0" Border, White on, Green:
State Highway 1426 M1-6F4; "San Juan", ClearviewHwy-5-W-R;

E11-1e:
1,0" Inner border Green, 12,0" Radius, 2,0" Outer border, White on, Yellow;
"EXIT" Black, E: Arrow B-3 - 25,0° 45' Black; "ONLY" Black, E:
Table of letter and object lefts

	56,0								
S	a	n	J	u	a	n			
27,1	42,0	58,1	84,5	98,6	113,6	129,7			
E	X	I	T	2	O	N	L	Y	
19,4	30,7	43,5	48,1	68,9	101,2	114,3	126,9	136,6	

SHEET NO. 9 OF 54 SIGN NO. 1

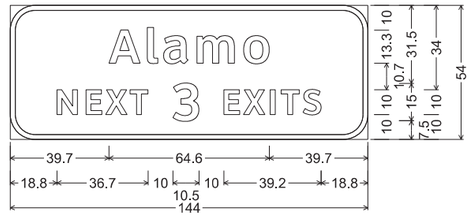
E11-1aR:

12,0" Radius, 2,0" Border, White on, Green:
State Highway 907 M1-6F3; "Alamo Rd", ClearviewHwy-5-W-R;

E11-1e:
1,0" Inner border Green, 12,0" Radius, 2,0" Outer border, White on, Yellow;
"EXIT" Black, E: Arrow B-3 - 25,0° 45' Black; "ONLY" Black, E:
Table of letter and object lefts

	60,0								
A	I	a	m	o	R	d			
23,3	41,8	49,6	65,7	88,3	117,4	133,1			
E	X	I	T	2	O	N	L	Y	
19,4	30,7	43,5	48,1	68,9	101,2	114,3	126,9	136,6	

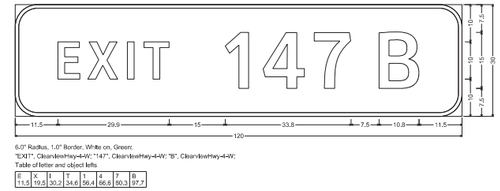
SHEET NO. 11 OF 54 SIGN NO. 2



10.0" Radius, 2.0" Border, White on, Green;
"Alamo", ClearviewHwy-5-W-R;
"NEXT", ClearviewHwy-5-W-R;
"3", ClearviewHwy-5-W-R;
"EXITS", ClearviewHwy-5-W-R;
Table of letter and object lefts

A	I	a	m	o
39.7	55.2	61.7	75.1	94.0
N	E	X	T	3
18.8	30.4	38.4	48.2	65.5
E	X	I	T	S
86.0	93.9	104.7	109.1	117.9

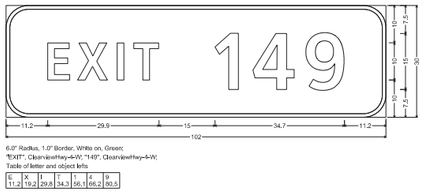
SHEET NO. 14 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "147", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	4	7	B
11,5	19,8	30,2	34,8	56,4	66,6	80,3	97,7

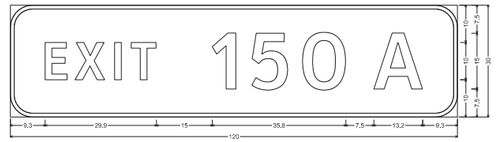
SHEET NO. 9 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "149", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	4	9	
11,2	19,2	29,8	34,3	56,1	66,2	80,5	

SHEET NO. 10 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "150", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	0	A
9,3	17,3	28,0	32,4	54,2	64,8	78,4	97,5

SHEET NO. 11 OF 54 SIGN NO. 2
SHEET NO. 12 OF 54 SIGN NO. 1

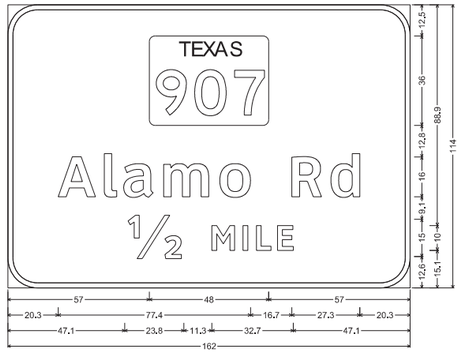
E11-1aR:

12,0" Radius, 2,0" Border, White on, Green:
"Cesar Chavez", ClearviewHwy-5-W-R; "Road", ClearviewHwy-5-W-R;

E11-1e:
1,0" Inner border Green, 12,0" Radius, 2,0" Outer border, White on, Yellow;
"EXIT" Black, E: Arrow B-3 - 25,0° 45' Black; "ONLY" Black, E:
Table of letter and object lefts

C	e	s	a	r	C	h	a	v	e	z	
20,5	36,7	51,5	64,9	81,0	103,6	120,4	135,8	149,8	164,5	179,6	
R	o	a	d								
75,7	91,4	107,2	122,7								
E	X	I	T	2	O	N	L	Y			
40,4	51,7	64,5	69,1	89,9	122,2	135,3	147,9	157,6			

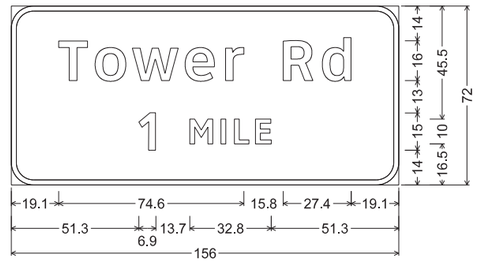
SHEET NO. 10 OF 54 SIGN NO. 1



12,0" Radius, 2,0" Border, White on, Green;
State Highway 907 M1-6T3; "Alamo Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

57,0		48,0		57,0											
20,3	A	15,1	3,4	I	5,1	2,7	a	12,0	4,1	m	18,1	4,5	o	12,4	16,7	R	11,9	3,8	d	11,6	20,3
47,1	½	23,8	11,3	M	9,1	3,3	I	2,1	3,4	L	5,8	2,6	E	6,4	47,1						

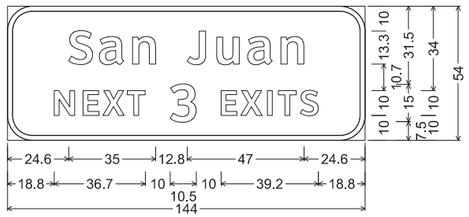
SHEET NO. 12 OF 54 SIGN NO. 1



I Road exit 1/2 mile;
9.0" Radius, 2.0" Border, White on, Green;
"Tower Rd", ClearviewHwy-5-W-R;
"1 MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

T	o	w	e	r	R	d
19.1	33.8	48.8	70.0	86.3	109.5	125.2
1	M	I	L	E		
51.3	71.9	84.4	89.8	98.3		

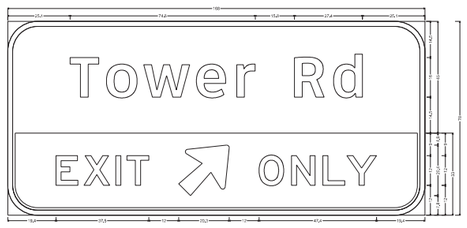
SHEET NO. 14 OF 54 SIGN NO. 2



10.0" Radius, 2.0" Border, White on, Green;
"San Juan", ClearviewHwy-5-W-R;
"NEXT", ClearviewHwy-5-W-R;
"3", ClearviewHwy-5-W-R;
"EXITS", ClearviewHwy-5-W-R;
Table of letter and object lefts

S	a	n	J	u	a	n
24.6	37.0	50.4	72.4	84.2	96.7	110.1
N	E	X	T	3		
18.8	30.4	38.4	48.2	65.5		
E	X	I	T	S		
86.0	93.9	104.7	109.1	117.9		

SHEET NO. 11 OF 54 SIGN NO. 1



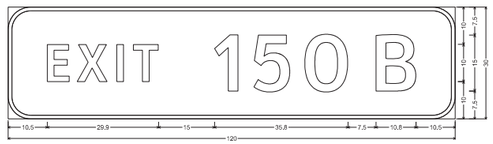
E11-1aR:

12,0" Radius, 2,0" Border, White on, Green:
"Tower Rd", ClearviewHwy-5-W-R;

E11-1e:
1,0" Inner border Green, 12,0" Radius, 2,0" Outer border, White on, Yellow;
"EXIT" Black, E: Arrow B-3 - 25,0° 45' Black; "ONLY" Black, E:
Table of letter and object lefts

T	o	w	e	r	R	d					
25,1	39,8	54,8	76,0	92,3	115,5	131,2					
E	X	I	T	2	O	N	L	Y			
19,4	30,7	43,5	48,1	68,9	101,2	114,3	126,9	136,6			

SHEET NO. 13 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "150", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	0	B
10,5	18,5	29,1	33,6	55,4	66,0	79,6	98,7

SHEET NO. 13 OF 54 SIGN NO. 1
SHEET NO. 14 OF 54 SIGN NO. 2

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

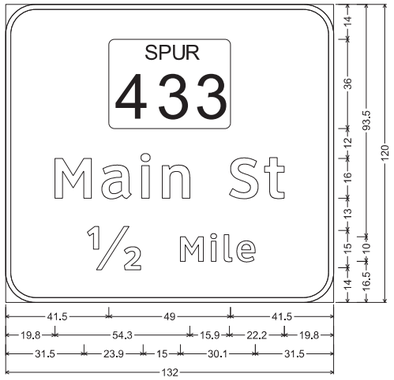
Raquel Cantu 11.05.20

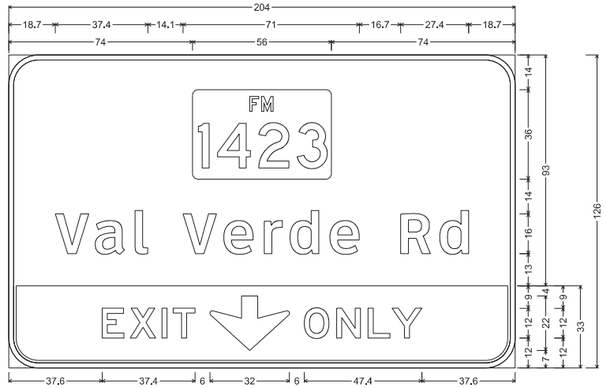
TEXAS DEPARTMENT OF TRANSPORTATION

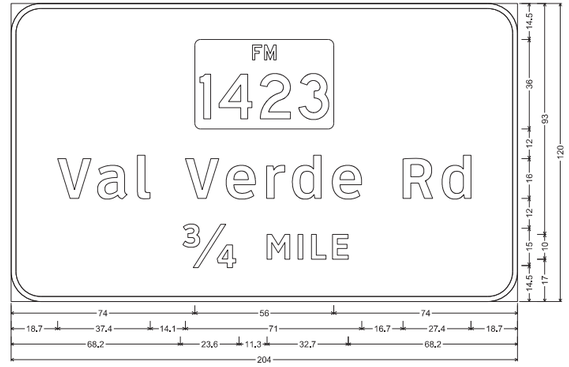
IH-2
LARGE SIGN DETAIL SHEETS

SHEET 3 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		88
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.







Sequence Sign;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 433 M1-6S3; "Main St", ClearviewHwy-5-W-R;
"½", ClearviewHwy-5-W-R; "Mile", ClearviewHwy-5-W-R;
Table of letter and object lefts

SPUR 433
41.5

M	a	i	n	S	t
19.8	38.7	54.4	63.0	90.0	104.2

½	M	i	l	e
31.5	70.4	82.6	87.9	93.1

SHEET NO. 14 OF 54 SIGN NO. 3

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1423 M1-6F4; "Val Verde Rd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

FM 1423
74.0

V	a	l	V	e	r	d	e	R	d
18.7	34.8	50.9	70.2	86.6	102.9	113.3	129.4	157.9	173.6

E	X	I	T	⇩	O	N	L	Y
37.6	48.9	61.7	66.2	81.0	119.0	132.1	144.7	154.4

SHEET NO. 15 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1423 M1-6F4; "Val Verde Rd", ClearviewHwy-5-W-R; "¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	FM 1423	
74.0	56.0	74.0

	V		a		l		V		e		r		d		e		R		d	
18.7	13.8	2.3	12.0	4.1	5.2	14.1	13.7	2.7	11.9	4.4	7.4	3.0	11.7	4.4	11.8	16.7	11.9	3.8	11.7	18.7

	¾		M		I		L		E	
68.2	23.6	11.3	9.1	3.4	2.0	3.4	5.9	2.6	6.3	68.2

SHEET NO. 16 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Victoria Rd", ClearviewHwy-5-W-R; "Midway Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	V		i		c		t		o		r		i		a
20.2	13.8	2.9	3.8	4.2	10.9	2.0	8.0	3.2	12.4	4.4	7.5	3.2	3.8	3.8	11.9

	R		d	
16.4	11.9	3.8	11.7	20.2

	M		i		d		w		a		y		R		d	
23.6	14.6	4.9	3.8	4.2	11.6	3.3	18.6	2.3	11.9	2.3	12.4	15.5	11.9	3.8	11.7	23.6

	½		M		I		L		E	
57.1	23.8	9.2	9.2	3.3	2.0	3.4	5.9	2.6	6.4	57.1

SHEET NO. 17 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "154", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	4
11.3	19.3	29.9	34.4	56.2	66.7	79.5

SHEET NO. 14 OF 54 SIGN NO. 3
SHEET NO. 18 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "152", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	2
11.9	20.0	30.6	35.1	56.8	67.4	80.4

SHEET NO. 15 OF 54 SIGN NO. 1
SHEET NO. 16 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "155", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	5	B
11.7	19.7	30.3	34.8	56.6	67.2	80.4	97.5

SHEET NO. 17 OF 54 SIGN NO. 1
SHEET NO. 21 OF 54 SIGN NO. 2

Sequence Sign;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 433 M1-6S3; "Main St", ClearviewHwy-5-W-R;
"½", ClearviewHwy-5-W-R; "Mile", ClearviewHwy-5-W-R;
Table of letter and object lefts

SPUR 433
41.8

M	a	i	n	S	t
20.1	39.0	54.7	63.3	90.3	104.5

½	M	i	l	e
31.8	70.6	82.8	88.2	93.3

SHEET NO. 18 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Westgate Dr", ClearviewHwy-5-W-R; "Mile 6 W Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	W		e		s		t		g		a		t		e
20.1	21.1	3.1	11.9	2.9	10.3	2.5	7.9	3.3	11.7	4.0	12.0	2.5	7.9	3.3	11.8

	D		r	
16.7	12.9	4.6	7.4	20.1

	M		i		l		e		6		W		R		d	
21.4	14.6	4.9	3.8	4.8	5.2	3.0	11.9	16.0	11.6	15.0	21.1	15.9	11.9	3.8	11.7	21.4

	½		M		I		L		E	
66.1	23.8	9.2	9.2	3.3	2.0	3.4	5.9	2.6	6.4	66.1

SHEET NO. 18 OF 54 SIGN NO. 2

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "157", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	7
11.9	19.9	30.5	35.0	56.7	67.3	80.2

SHEET NO. 18 OF 54 SIGN NO. 2
SHEET NO. 23 OF 54 SIGN NO. 2

RAQUEL CANTU
130317

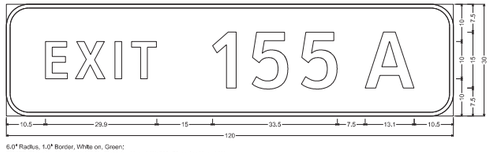
Raquel Cantu 11.05.20

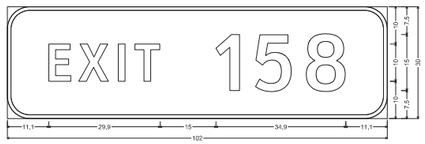
TEXAS DEPARTMENT OF TRANSPORTATION

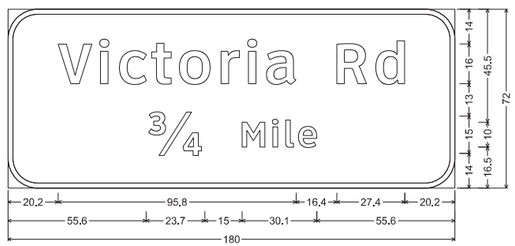
IH-2
LARGE SIGN DETAIL SHEETS

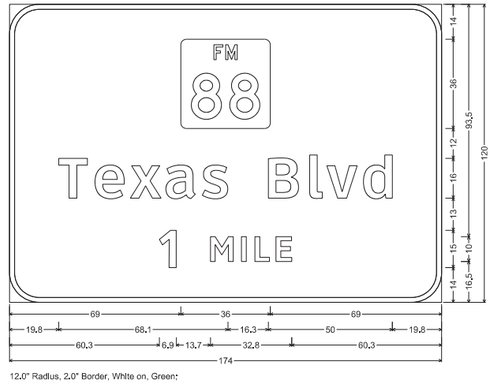
SHEET 4 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				89
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.









12.0" Radius, 2.0" Border, White on, Green;
State Highway 493 M1-6F3; "Salinas Blvd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

493
71.5

S	a	l	i	n	a	s	B	l	v	d
18.8	33.6	49.7	58.2	66.8	82.0	96.6	123.2	139.8	146.8	161.5

E	X	I	T	⇩	O	N	L	Y
31.6	42.9	55.7	60.2	75.0	113.0	126.1	138.7	148.4

SHEET NO. 19 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 88 M1-6F2; "Texas Blvd", ClearviewHwy-5-W-R; "1 MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	88	
69.0	36.0	69.0

	T		e		x		a		s		B		l		v		d	
19.8	11.7	2.9	11.9	2.3	12.4	2.0	11.9	2.7	10.3	16.3	12.2	4.5	5.1	1.8	12.2	2.5	11.7	19.8

	1		M		I		L		E	
60.3	6.9	13.7	9.2	3.3	2.0	3.4	5.9	2.6	6.4	60.3

SHEET NO. 19 OF 54 SIGN NO. 2

12.0" Radius, 2.0" Border, White on, Green;
State Highway 493 M1-6F3; "Salinas Blvd", ClearviewHwy-5-W-R; "1 MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	493	
71.5	49.0	71.5

	S		a		l		i		n		a		s		B		l		v		d	
18.8	11.7	3.1	12.0	4.1	5.2	3.3	3.8	4.8	11.1	4.1	11.9	2.7	10.3	16.3	12.2	4.4	5.2	1.8	12.2	2.5	11.7	18.8

	1		M		I		L		E	
69.3	6.9	13.7	9.2	3.3	2.0	3.4	5.9	2.6	6.4	69.3

SHEET NO. 20 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Mile 6½ W Rd", ClearviewHwy-5-W-R; "Midway Rd", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R; "155B", ClearviewHwy-5-W-R;
Table of letter and object lefts

M	i	l	e	6	½	W	R	d
17.7	37.2	45.8	54.0	81.9	95.3	133.9	170.9	186.6

M	i	d	w	a	y	R	d
41.6	61.1	69.1	84.0	104.9	119.1	147.0	162.7

E	X	I	T	1	5	5	B
59.6	67.5	78.3	82.7	105.0	116.1	130.1	145.0

SHEET NO. 21 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "155", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	5	A
10.5	18.5	29.1	33.6	55.4	66.0	79.2	96.4

SHEET NO. 19 OF 54 SIGN NO. 1
SHEET NO. 20 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1015 4; "Intl Blvd", ClearviewHwy-5-W-R;
"¾ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

1015
46.5

I	n	t	l	B	l	v	d
19.0	27.5	42.1	53.9	75.0	91.6	98.6	113.3

¾	M	I	L	E
38.2	73.1	85.6	91.0	99.5

SHEET NO. 23 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Westgate Dr", ClearviewHwy-5-W-R; "Mile 6 W Rd", ClearviewHwy-5-W-R;
"¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	W		e		s		t		g		a		t		e
17.1	21.1	3.1	11.9	2.9	10.3	2.5	7.9	3.3	11.7	4.0	12.0	2.5	7.9	3.3	11.8

	D		r	
16.7	12.9	4.6	7.4	17.1

	M		i		l		e		6		W		R		d	
18.4	14.6	4.9	3.8	4.8	5.2	3.0	11.9	16.0	11.6	15.0	21.1	15.9	11.9	3.8	11.7	18.4

	¾		M		I		L		E	
63.2	23.6	9.2	9.2	3.3	2.1	3.4	5.8	2.6	6.4	63.2

SHEET NO. 23 OF 54 SIGN NO. 2

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "158", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	5	8
11.1	19.2	29.8	34.2	56.0	66.6	80.3

SHEET NO. 19 OF 54 SIGN NO. 2
SHEET NO. 24 OF 54 SIGN NO. 2
SHEET NO. 25 OF 54 SIGN NO. 1
SHEET NO. 27 OF 54 SIGN NO. 1

Sequence Sign;
12.0" Radius, 2.0" Border, White on, Green;
"Victoria Rd", ClearviewHwy-5-W-R; "¾", ClearviewHwy-5-W-R;
"Mile", ClearviewHwy-5-W-R;
Table of letter and object lefts

V	i	c	t	o	r	i	a	R	d
20.2	36.9	44.9	57.8	69.0	85.8	96.5	104.1	132.4	148.1

¾	M	i	l	e
55.6	94.3	106.5	111.8	117.0

SHEET NO. 21 OF 54 SIGN NO. 2

12.0" Radius, 2.0" Border, White on, Green;
"Texas A&M Kingsville", ClearviewHwy-5-W-R; "Texas A&M", ClearviewHwy-5-W-R; "USDA Ag Centers", ClearviewHwy-5-W-R; "EXIT", ClearviewHwy-5-W-R;
"160", ClearviewHwy-5-W-R;
Table of letter and object lefts

T	e	x	a	s	A	&	M	K	i	n	g	s	v	i	l	l	e
19.4	31.6	43.4	55.4	67.6	88.2	103.3	117.9	144.7	157.6	164.8	177.7	190.5	200.9	213.4	220.5	227.9	234.7

T	e	x	a	s	A	&	M
76.6	88.8	100.7	112.6	124.8	145.5	160.5	175.2

U	S	D	A	A	g	C	e	n	t	e	r	s
41.2	54.9	68.3	81.5	105.6	120.5	144.1	157.6	171.2	183.3	192.6	206.2	214.2

E	X	I	T	1	6	0
90.2	98.1	108.9	113.3	135.6	146.9	161.5

SHEET NO. 22 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "160", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	6	0
10.3	18.3	28.9	33.4	55.1	66.1	80.1

SHEET NO. 22 OF 54 SIGN NO. 1
SHEET NO. 23 OF 54 SIGN NO. 1
SHEET NO. 29 OF 54 SIGN NO. 1
SHEET NO. 30 OF 54 SIGN NO. 1

RAQUEL CANTU
130317

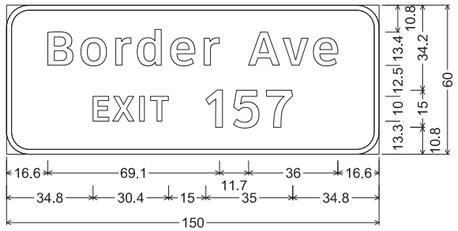
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 5 OF 13

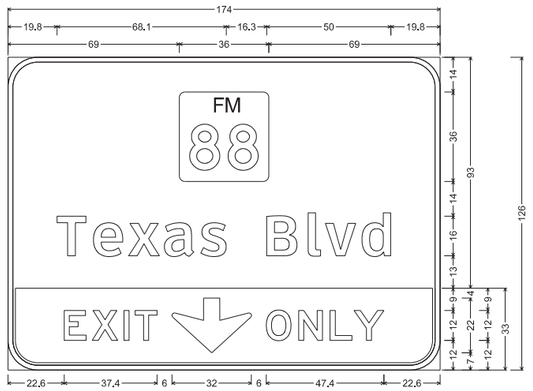
DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			90
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00 / 001	IH-2, ETC.



9.0" Radius, 2.0" Border, White on, Green;
"Border Ave", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R;
"157", ClearviewHwy-5-W-R;
Table of letter and object lefts

B 16.6	o 29.9	r 43.9	d 52.6	e 66.0	r 79.6	A 97.4	v 111.3	e 123.5
E 34.8	X 42.7	I 53.5	T 57.9	1 80.2	5 91.3	7 104.6		

SHEET NO. 24 OF 54 SIGN NO. 1

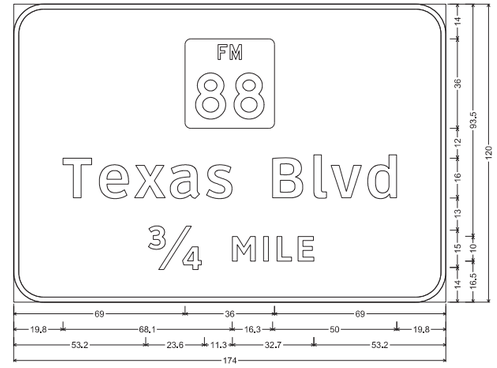


12.0" Radius, 2.0" Border, White on, Green;
State Highway 88 M1-6F2; "Texas Blvd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

69,0									
T 19,8	e 34,4	x 48,6	a 63,0	s 77,6	B 104,2	I 120,9	v 127,8	d 142,5	
E 22,6	X 33,9	I 46,7	T 51,2	66,0	O 104,0	N 117,1	L 129,7	Y 139,4	

SHEET NO. 25 OF 54 SIGN NO. 1

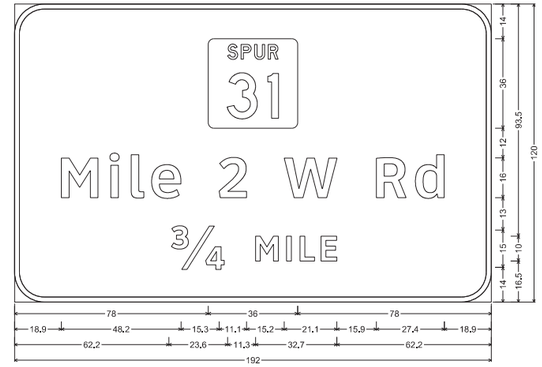


12.0" Radius, 2.0" Border, White on, Green;
State Highway 88 M1-6F2; "Texas Blvd", ClearviewHwy-5-W-R; "¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

69,0	36,0	69,0

T 19,8	T 11,7	2,9	e 11,9	2,3	x 12,4	2,0	a 11,9	2,7	s 10,3	16,3	B 12,2	4,5	I 5,1	1,8	v 12,2	2,5	d 11,7	19,8
¾ 53,2	23,6	11,3	M 9,1	3,4	I 2,0	3,4	L 5,9	2,6	E 6,3	53,2								

SHEET NO. 27 OF 54 SIGN NO. 1

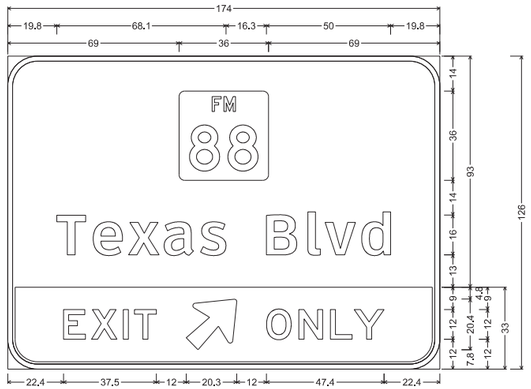


12.0" Radius, 2.0" Border, White on, Green;
State Highway 31 M1-6S2; "Mile 2 W Rd", ClearviewHwy-5-W-R; "¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

78,0	36,0	78,0

M 18,9	M 14,6	4,9	I 3,8	4,8	I 5,2	3,0	e 11,9	15,3	2 11,1	15,2	W 21,1	15,9	R 11,9	3,8	d 11,7	18,9		
¾ 62,2	23,6	11,3	M 9,1	3,4	I 2,0	3,4	L 5,9	2,6	E 6,3	62,2								

SHEET NO. 26 OF 54 SIGN NO. 1



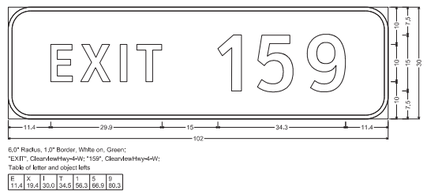
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 88 M1-6F2; "Texas Blvd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

69.0								
T 19.8	e 34.4	x 48.6	a 63.0	s 77.6	B 104.2	I 120.9	v 127.8	d 142.5
E 22.4	X 33.7	I 46.5	T 51.1	71.9	O 104.2	N 117.3	L 129.9	Y 139.6

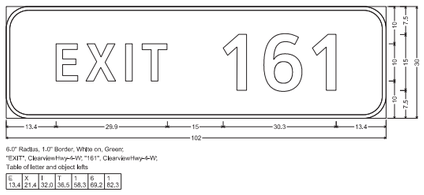
SHEET NO. 24 OF 54 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-64W; "159", ClearviewHwy-64W;
Table of letter and object lefts

E 11,4	X 19,4	I 30,0	T 34,5	56,3	66,9	9 80,2

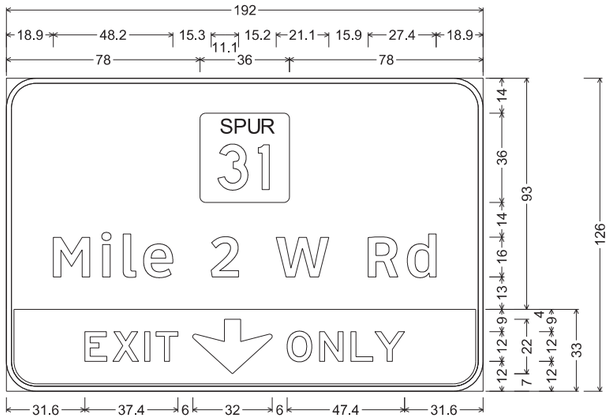
SHEET NO. 27 OF 54 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-64W; "161", ClearviewHwy-64W;
Table of letter and object lefts

E 13,4	X 21,4	I 32,0	T 36,5	I 58,3	69,2	L 82,3

SHEET NO. 26 OF 54 SIGN NO. 1
SHEET NO. 27 OF 54 SIGN NO. 3
SHEET NO. 28 OF 54 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
State Highway 31 M1-6S2; "Mile 2 W Rd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black;
"ONLY" Black, E;
Table of letter and object lefts

31 78.0								
M 18.9	i 38.4	I 47.0	e 55.2	2 82.4	W 108.7	R 145.7	d 161.4	
E 31.6	X 42.9	I 55.7	T 60.2	75.0	O 113.0	N 126.1	L 138.7	Y 148.4

SHEET NO. 27 OF 54 SIGN NO. 3
SHEET NO. 34 OF 54 SIGN NO. 1

SHEET NO. 27 OF 54 SIGN NO. 2

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

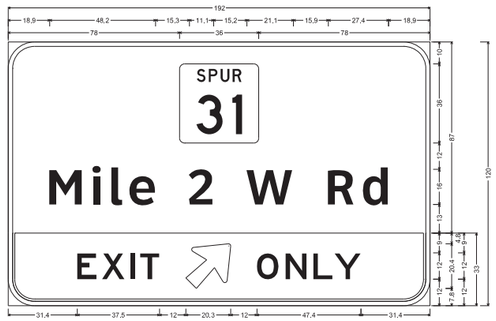
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 6 OF 13

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					91
DW: LSJ			STATE DIST. NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.



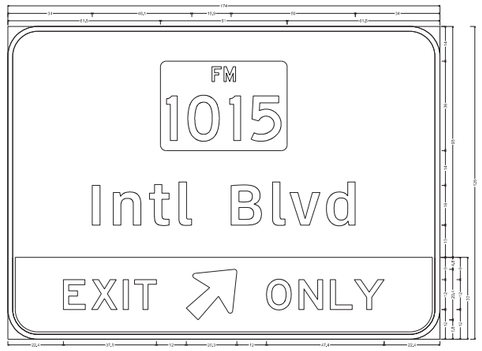
E11-1aR:

12.0" Radius, 2.0" Border, White on, Green:
State Highway 31 M1-6S2; "Mile 2 W Rd", ClearviewHwy-5-W-R;

E11-1e:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0° 45' Black; "ONLY" Black, E;
Table of letter and object lefts

78.0								
M	I	l	e	2	W	R	d	
18.9	38.4	47.0	55.2	82.4	108.7	145.7	161.4	
E	X	I	T	⇗	O	N	L	Y
31.4	42.7	55.5	60.1	80.9	113.2	128.3	138.9	148.6

SHEET NO. 28 OF 54 SIGN NO. 1



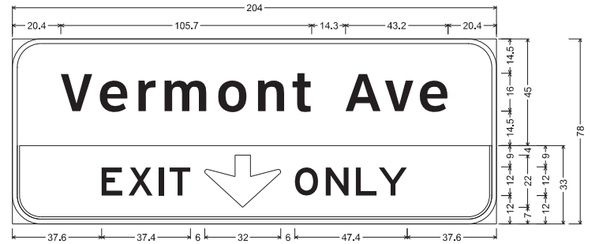
E11-1aR:

12.0" Radius, 2.0" Border, White on, Green:
State Highway 1015 M1-6F4; "Intl Blvd", ClearviewHwy-5-W-R;

E11-1e:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0° 45' Black; "ONLY" Black, E;
Table of letter and object lefts

61.5								
I	n	t	l	B	l	v	d	
34.0	42.5	57.1	68.9	90.0	106.6	113.6	128.3	
E	X	I	T	⇗	O	N	L	Y
22.4	33.7	46.5	51.1	71.9	104.2	117.3	129.9	139.6

SHEET NO. 29 OF 54 SIGN NO. 1

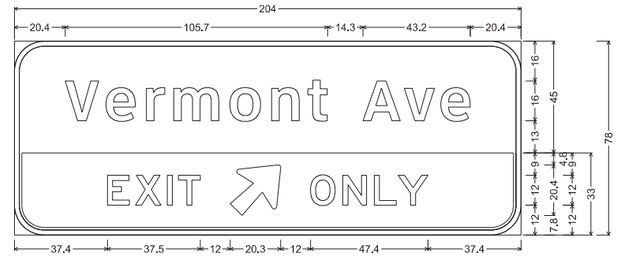


12.0" Radius, 2.0" Border, White on, Green:
"Vermont Ave", ClearviewHwy-5-W-R;

E11-1:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0° 270' Black; "ONLY" Black, E;
Table of letter and object lefts

V	e	r	m	o	n	t	A	v	e
20.4	36.9	53.1	64.2	86.8	103.6	118.1	140.4	157.0	171.7
E	X	I	T	⇩	O	N	L	Y	
37.6	48.9	61.7	66.2	81.0	119.0	132.1	144.7	154.4	

SHEET NO. 29 OF 54 SIGN NO. 2



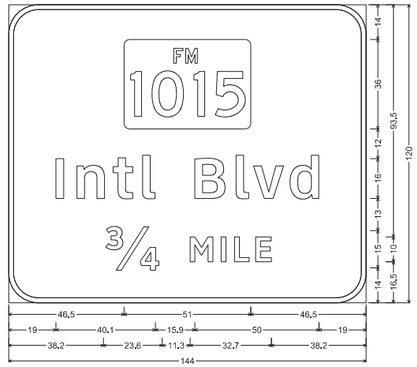
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"Vermont Ave", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0° 45' Black; "ONLY" Black, E;
Table of letter and object lefts

V	e	r	m	o	n	t	A	v	e
20.4	36.9	53.1	64.2	86.8	103.6	118.1	140.4	157.0	171.7
E	X	I	T	⇗	O	N	L	Y	
37.4	48.7	61.5	66.1	86.9	119.2	132.3	144.9	154.6	

SHEET NO. 29 OF 54 SIGN NO. 3



12,0" Radius, 2,0" Border, White on, Green;
State Highway 1015 4; "Intl Blvd", ClearviewHwy-5-W-R;
"¾ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

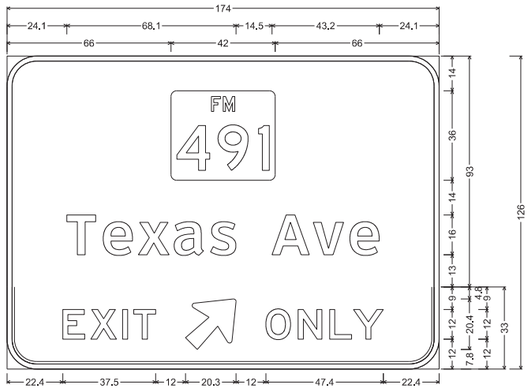
46.5							
I	n	t	l	B	l	v	d
19.0	27.5	42.1	53.9	75.0	91.6	98.6	113.3
¾	M	I	L	E			
38.2	73.1	85.6	91.0	99.5			

SHEET NO. 30 OF 54 SIGN NO. 1

10.0" Radius, 2.0" Border, White on, Green;
"Weslaco", ClearviewHwy-5-W-R;
"NEXT", ClearviewHwy-5-W-R;
"4", ClearviewHwy-5-W-R;
"EXITS", ClearviewHwy-5-W-R;
Table of letter and object lefts

W	e	s	l	a	c	o
29.1	49.3	61.6	73.6	80.1	93.0	104.6
N	E	X	T	4		
18.1	29.8	37.7	47.5	64.8		
E	X	I	T	S		
86.7	94.6	105.4	109.8	118.6		

SHEET NO. 31 OF 54 SIGN NO. 1



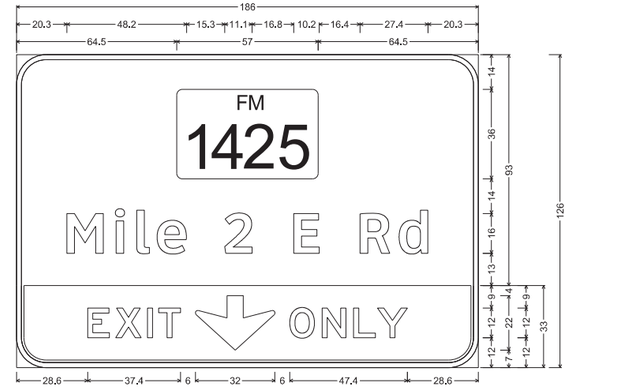
E11-1aR;

12,0" Radius, 2,0" Border, White on, Green;
State Highway 491 M1-6F3; "Texas Ave", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25,0° 45' Black; "ONLY" Black, E;
Table of letter and object lefts

66,0								
T	e	x	a	s	A	v	e	
24.1	38.7	52.9	67.3	81.9	106.7	123.3	138.1	
E	X	I	T	⇗	O	N	L	Y
22.4	33.7	46.5	51.1	71.9	104.2	117.3	129.9	139.6

SHEET NO. 32 OF 54 SIGN NO. 1

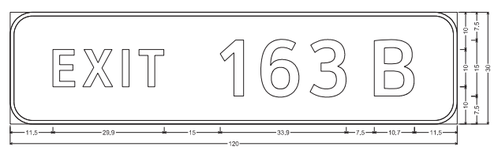


12,0" Radius, 2,0" Border, White on, Green;
State Highway 1425 M1-6F4; "Mile 2 E Rd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0° 270' Black; "ONLY" Black, E;
Table of letter and object lefts

64,5								
M	i	l	e	2	E	R	d	
20.3	39.8	48.4	56.6	83.8	111.7	138.3	154.1	
E	X	I	T	⇩	O	N	L	Y
28.6	39.9	52.7	57.2	72.0	110.0	123.1	135.7	145.4

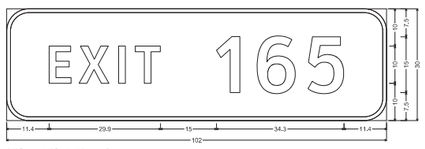
SHEET NO. 34 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-6-W; "163", ClearviewHwy-6-W; "B", ClearviewHwy-6-W;
Table of letter and object lefts

E	X	I	T	6	3	B	
11.5	19.5	30.1	34.8	56.4	67.3	80.5	97.8

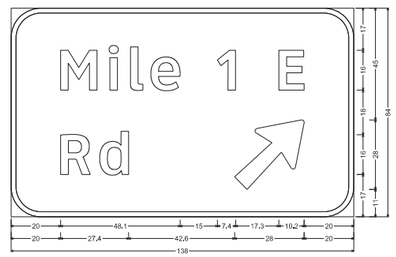
SHEET NO. 32 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-6-W; "165", ClearviewHwy-6-W;
Table of letter and object lefts

E	X	I	T	5	6	5	
11.4	19.5	30.1	34.5	56.3	67.3	80.9	

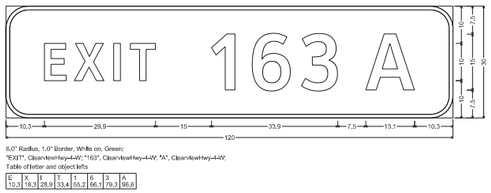
SHEET NO. 34 OF 54 SIGN NO. 2
SHEET NO. 37 OF 54 SIGN NO. 1
SHEET NO. 38 OF 54 SIGN NO. 1



12,0" Radius, 2,0" Border, White on, Green;
"Mile 1 E", ClearviewHwy-5-W-R; "Rd", ClearviewHwy-5-W-R; Arrow A-3 - 35.6° 45';
Table of letter and object lefts

M	i	l	e	t	E	
20.0	39.5	48.1	56.3	83.1	107.8	
R	d	⇗				
20.0	35.7	90.0				

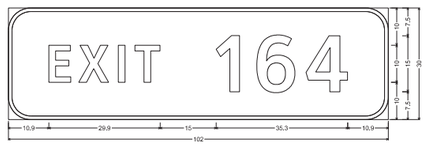
SHEET NO. 33 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "163", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	6	3	A	
10.3	19.3	28.9	33.4	59.2	66.1	79.3	96.6	

SHEET NO. 29 OF 54 SIGN NO. 2
SHEET NO. 29 OF 54 SIGN NO. 3



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-6-W; "164", ClearviewHwy-6-W;
Table of letter and object lefts

E	X	I	T	1	5	6	4	
10.9	18.9	29.5	34.0	55.8	66.7	79.9		

SHEET NO. 33 OF 54 SIGN NO. 1

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

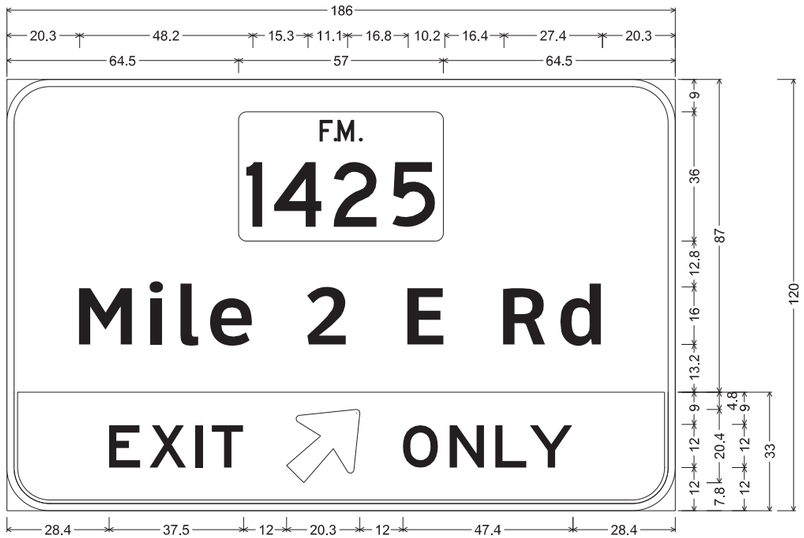
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 7 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				92
DW: LSJ			STATE DIST. NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1425 4; "Mile 2 E Rd", ClearviewHwy-5-W-R;

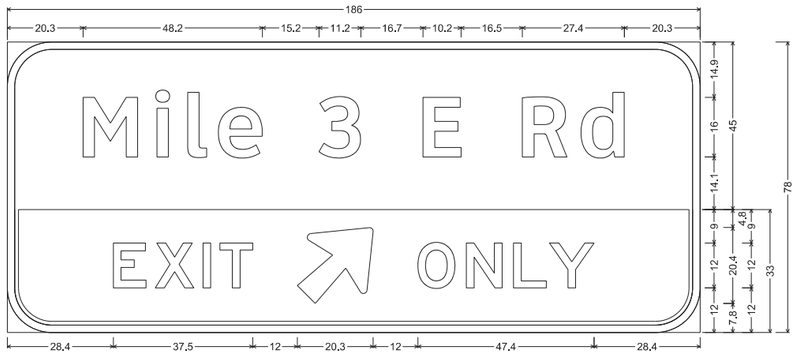
E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

1425
64.5

M	i	l	e	2	E	R	d
20.3	39.8	48.4	56.6	83.8	111.7	138.3	154.1

E	X	I	T		O	N	L	Y
28.4	39.7	52.5	57.1	77.9	110.2	123.3	135.9	145.6

SHEET NO. 34 OF 54 SIGN NO. 2



E11-1aR;

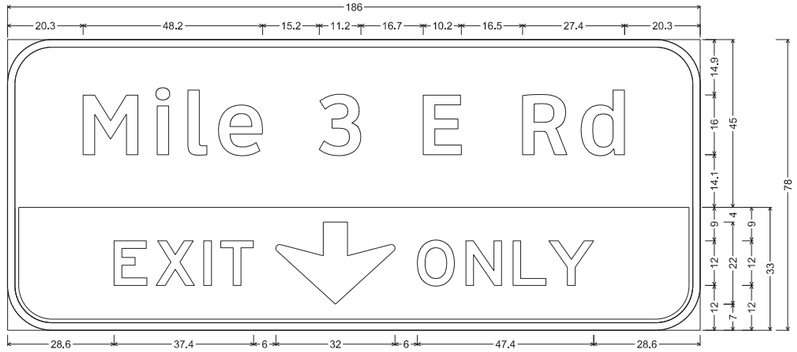
12.0" Radius, 2.0" Border, White on, Green;
"Mile 3 E Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

M	i	l	e	3	E	R	d
20.3	39.8	48.4	56.7	83.7	111.6	138.3	154,0

E	X	I	T		O	N	L	Y
28,4	39,7	52,5	57,1	77,9	110,2	123,3	135,9	145,6

SHEET NO. 36 OF 54 SIGN NO. 1



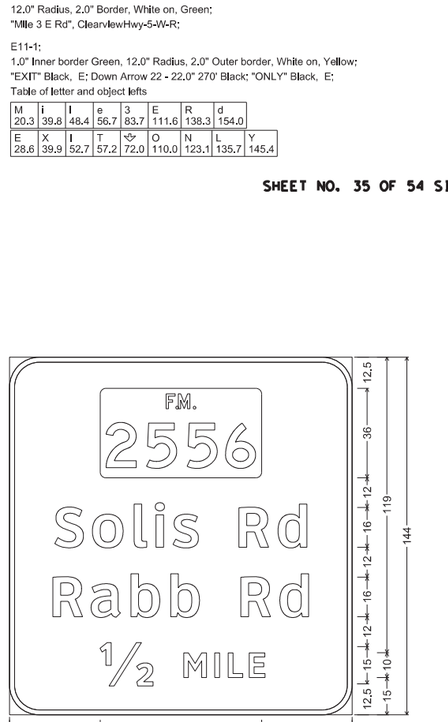
12.0" Radius, 2.0" Border, White on, Green;
"Mile 3 E Rd", ClearviewHwy-5-W-R;

E11-1:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

M	i	l	e	3	E	R	d
20.3	39.8	48.4	56.7	83.7	111.6	138.3	154.0

E	X	I	T		O	N	L	Y
28.6	39.9	52.7	57.2	72.0	110.0	123.1	135.7	145.4

SHEET NO. 35 OF 54 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
State Highway 2556 4; "Solis Rd", ClearviewHwy-5-W-R;
"Rabb Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

36.5	65.0	36.5

S	o	l	l	s
18.2 11.7	3.5 12.4	4.4 5.2	3.3 3.8	3.3 10.3

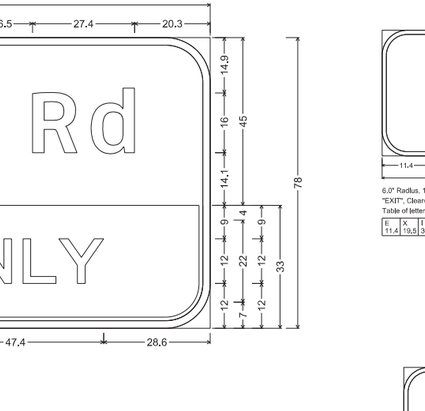
R	d
16.3 11.9	3.8 11.7

18.2

R	a	b	b	R	d	
17.5 11.9	3.4 12.0	4.1 11.7	4.3 11.7	16.5 12.0	3.8 11.6	17.5

½	M	l	L	E	
35.1 23.8	11.3 9.1	3.3 2.1	3.4 5.8	2.6 6.4	35.1

SHEET NO. 37 OF 54 SIGN NO. 2



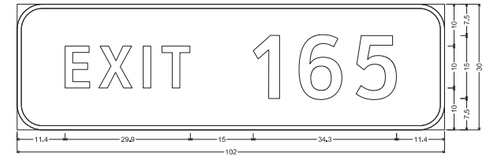
12.0" Radius, 2.0" Border, White on, Green;
State Highway 1425 4; "Mile 2 E", ClearviewHwy-5-W-R;
"Rd", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';
Table of letter and object lefts

1425
40.5

M	i	l	e	2	E
18.2	37.7	46.3	54.5	81.7	109.6

R	d	
18.2	33.9	91.8

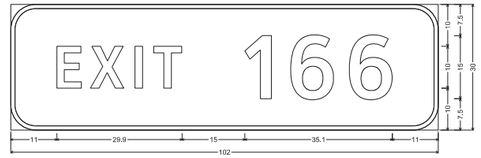
SHEET NO. 37 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "165", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	I	6	5
11,4	19,5	30,1	34,6	56,3	67,3	80,9

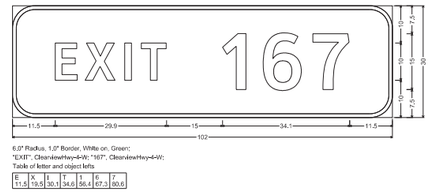
SHEET NO. 34 OF 54 SIGN NO. 2
SHEET NO. 37 OF 54 SIGN NO. 1
SHEET NO. 38 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "166", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	I	6	6
11,0	19.0	29,6	34.1	55.9	66.8	80,6

SHEET NO. 35 OF 54 SIGN NO. 1
SHEET NO. 36 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "167", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	I	6	7
11,5	19,5	30,1	34,6	56,4	67,3	80,6

SHEET NO. 37 OF 54 SIGN NO. 2
SHEET NO. 39 OF 54 SIGN NO. 1
SHEET NO. 40 OF 54 SIGN NO. 1
SHEET NO. 40 OF 54 SIGN NO. 3

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

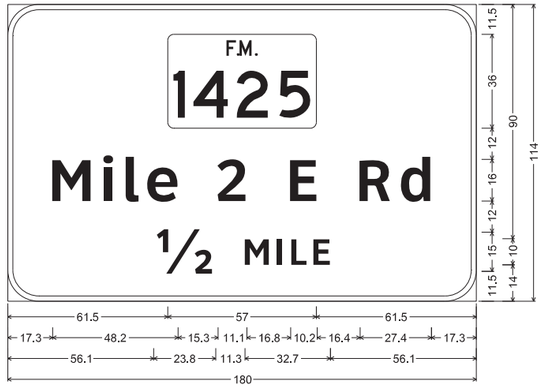
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 8 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		93
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.



12.0" Radius, 2.0" Border, White on, Green;
State Highway 1425 4; "Mile 2 E Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

61.5	57.0	61.5

	M		i		l		e		2		E		R		d			
17.3	14.6	4.9	3.8	4.8	5.1	3.1	11.9	15.3	11.1	16.8	10.2	16.4	12.0	3.8	11.6	17.3		

	½		M		l		L		E									
56.1	23.8	11.3	9.1	3.3	2.1	3.4	5.8	2.6	6.4	56.1								

SHEET NO. 38 OF 54 SIGN NO. 1

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 506 M1-6F3; "La Feria", ClearviewHwy-5-W-R; "Santa Rosa", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

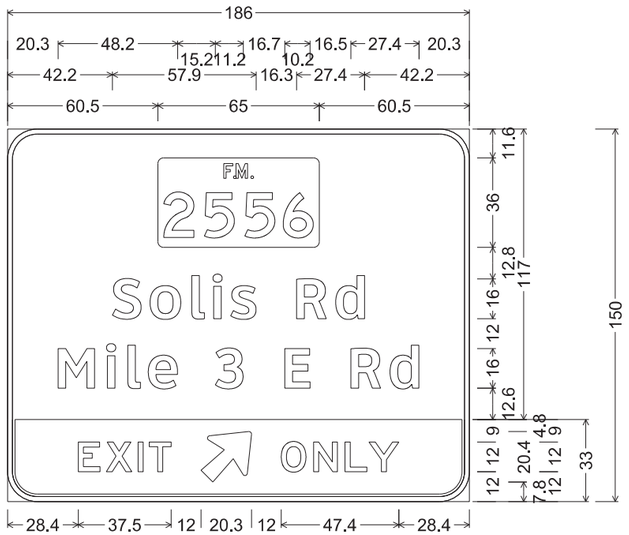
506
66.0

L	a	F	e	r	i	a	
39.8	52.2	80.5	93.8	110.0	120.7	128.3	

S	a	n	t	a	R	o	s	a	
19.5	34.3	50.4	65.0	75.8	104.1	119.8	135.2	148.6	

E	X	I	T	⇗	O	N	L	Y	
25.4	36.7	49.5	54.1	74.9	107.2	120.3	132.9	142.6	

SHEET NO. 40 OF 54 SIGN NO. 2



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 2556 4;
"Solis Rd", ClearviewHwy-5-W-R;
"Mile 3 E Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black;
"ONLY" Black, E;
Table of letter and object lefts

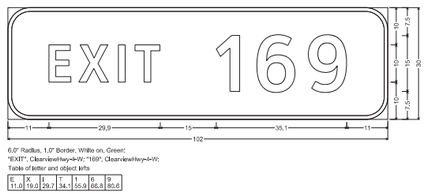
2556
60.5

S	o	l	i	s	R	d	
42.2	57.4	74.2	82.7	89.8	116.4	132.1	

M	i	l	e	3	E	R	d	
20.3	39.8	48.4	56.7	83.7	111.6	138.3	154.0	

E	X	I	T	⇗	O	N	L	Y	
28.4	39.7	52.5	57.1	77.9	110.2	123.3	135.9	145.6	

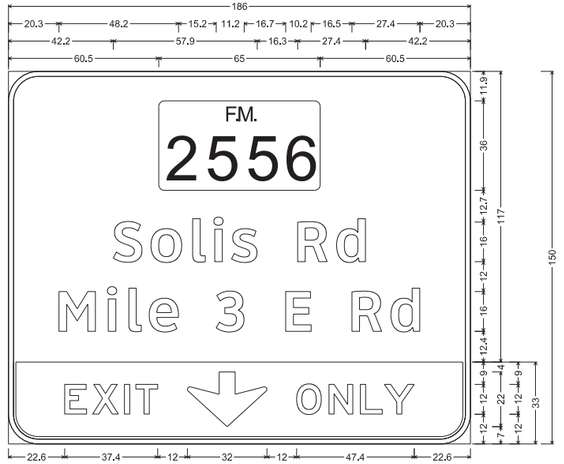
SHEET NO. 39 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-5W; "169", ClearviewHwy-5-W;
Table of letter and object lefts

E	X	I	T	1	6	9	
11.0	19.0	29.7	34.1	55.9	66.8	80.6	

SHEET NO. 40 OF 54 SIGN NO. 2



12.0" Radius, 2.0" Border, White on, Green;
State Highway 2556 4; "Solis Rd", ClearviewHwy-5-W-R; "Mile 3 E Rd", ClearviewHwy-5-W-R;

E11-1:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E: Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

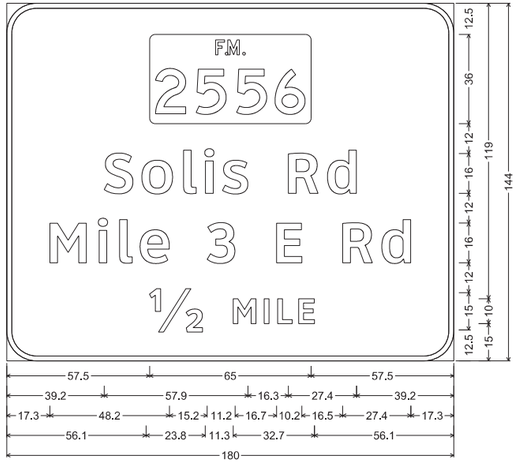
2556
60.5

S	o	l	i	s	R	d	
42.2	57.4	74.2	82.7	89.8	116.4	132.1	

M	l	l	e	3	E	R	d	
20.3	39.8	48.4	56.7	83.7	111.6	138.3	154.0	

E	X	I	T	⇩	O	N	L	Y	
22.6	33.9	46.7	51.2	72.0	116.0	129.1	141.7	151.4	

SHEET NO. 40 OF 54 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
State Highway 2556 4; "Solis Rd", ClearviewHwy-5-W-R;
"Mile 3 E Rd", ClearviewHwy-5-W-R; "½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

57.5	65.0	57.5

	S		o		l		i		s		R		d							
39.2	11.7	3.5	12.4	4.4	5.2	3.3	3.8	3.3	10.3	16.3	11.9	3.8	11.7	39.2						

17.3	M	14.7	4.8	i	3.8	4.8	l	5.2	3.1	e	11.8	15.2	3	11.2	16.7	E	10.2	16.5	R	11.9	3.8	d	11.7	17.3

56.1	½	23.8	11.3	M	9.1	3.3	I	2.1	3.4	L	5.8	2.6	E	6.4	56.1					

SHEET NO. 40 OF 54 SIGN NO. 3

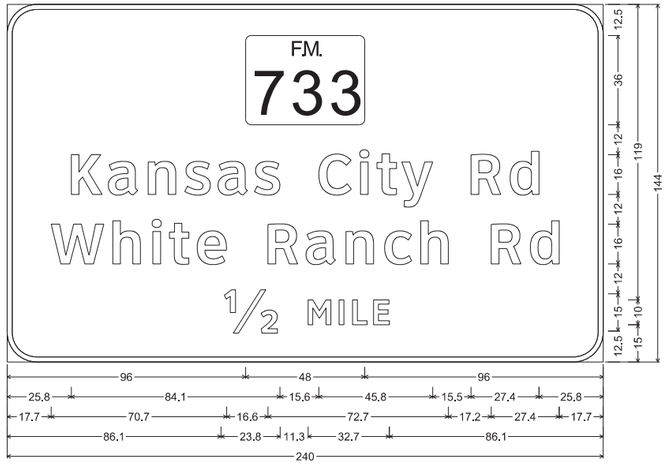
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 9 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				94
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



12.0" Radius, 2.0" Border, White on, Green;
State Highway 733 3; "Kansas City Rd", ClearviewHwy-5-W-R; "White Ranch Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	733	
96.0	48.0	96.0

	K		a		n		s		a		s		C		i		t		y
25.8	12.5	2.4	12.0	4.1	11.1	3.6	10.4	3.0	12.0	2.7	10.3	15.6	13.1	3.4	3.8	3.1	8.0	2.0	12.4

	R		d	
15.5	11.9	3.8	11.7	25.8

	W		h		i		t		e		R		a		n		c		h
17.7	21.1	3.7	11.1	4.8	3.7	3.2	8.0	3.2	11.9	16.6	11.9	3.5	11.9	4.2	11.1	4.4	10.9	3.7	11.1

	R		d	
17.2	12.0	3.8	11.6	17.7

	½		M		I		L		E	
86.1	23.8	11.3	9.1	3.3	2.1	3.4	5.8	2.6	6.4	86.1

SHEET NO. 41 OF 54 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 733 3; "Kansas City Rd", ClearviewHwy-5-W-R; "White Ranch Rd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

733
99.0

K	a	n	s	a	s	C	i	t	y	R	d
28.8	43.7	59.8	74.5	87.9	102.6	128.5	145.0	151.9	161.9	189.8	205.5

W	h	i	t	e	R	a	n	c	h	R	d
20.7	45.5	61.4	68.3	79.5	108.0	123.4	139.5	155.0	169.6	197.9	213.7

E	X	I	T	↓	O	N	L	Y
52.6	63.9	76.7	81.2	102.0	146.0	159.1	171.7	181.4

SHEET NO. 41 OF 54 SIGN NO. 2

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 733 3; "Kansas City Rd", ClearviewHwy-5-W-R;
"White Ranch Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

733
99.0

K	a	n	s	a	s	C	i	t	y	R	d
28.8	43.7	59.8	74.5	87.9	102.6	128.5	145.0	151.9	161.9	189.8	205.5

W	h	i	t	e	R	a	n	c	h	R	d
20.7	45.5	61.4	68.3	79.5	108.0	123.4	139.5	155.0	169.6	197.9	213.7

E	X	I	T	↗	O	N	L	Y
58.4	69.7	82.5	87.1	107.9	140.2	153.3	165.9	175.6

SHEET NO. 42 OF 54 SIGN NO. 1

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"Rabb Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

R	a	b	b	R	d
20.5	35.8	51.9	67.9	96.1	111.9

E	X	I	T	↗	O	N	L	Y
7.4	18.7	31.5	36.1	56.9	89.2	102.3	114.9	124.6

SHEET NO. 41 OF 54 SIGN NO. 3

12.0" Radius, 2.0" Border, White on, Green;
"Rabb Rd", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

R	a	b	b	R	d
20.5	35.8	51.9	67.9	96.1	111.9

E	X	I	T	↓	O	N	L	Y
7.6	18.9	31.7	36.2	51.0	89.0	102.1	114.7	124.4

SHEET NO. 42 OF 54 SIGN NO. 2

12.0" Radius, 2.0" Border, White on, Green;
"Rabb Rd", ClearviewHwy-5-W-R;
"¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	R		a		b		b		R		d	
20.5	11.9	3.4	12.0	4.1	11.7	4.3	11.7	16.5	12.0	3.8	11.6	20.5

	¾		M		I		L		E	
38.2	23.6	11.3	9.1	3.4	2.0	3.4	5.9	2.6	6.3	38.2

SHEET NO. 43 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "168", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	6	8
10.8	18.8	29.4	33.9	55.6	66.6	80.6

SHEET NO. 41 OF 54 SIGN NO. 3
SHEET NO. 42 OF 54 SIGN NO. 2
SHEET NO. 43 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "170", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7	0
11.0	19.0	29.7	34.1	55.9	66.2	79.4

SHEET NO. 41 OF 54 SIGN NO. 1
SHEET NO. 41 OF 54 SIGN NO. 2
SHEET NO. 42 OF 54 SIGN NO. 1
SHEET NO. 45 OF 54 SIGN NO. 1
SHEET NO. 46 OF 54 SIGN NO. 1
SHEET NO. 47 OF 54 SIGN NO. 1

RAQUEL CANTU
130317

Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 10 OF 13

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				95
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

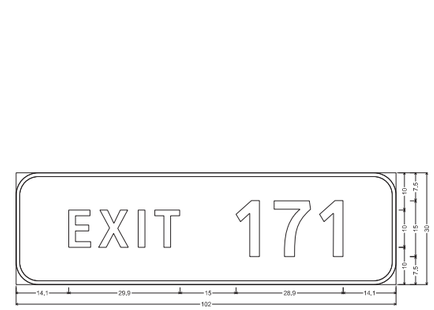
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 800 M1-6F3; "Bass Blvd", ClearviewHwy-5-W-R;

E11-1e:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

	59.5								
B	a	s	s	B	I	v	d		
24.1	39.8	54.4	67.3	93.9	110.5	117.5	132.2		
E	X	I	T		O	N	L	Y	
19.4	30.7	43.5	48.1	68.9	101.2	114.3	126.9	136.6	

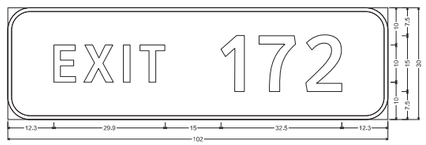
SHEET NO. 44 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "171", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7	1
14.1	22.2	32.8	37.3	59.0	69.3	81.5

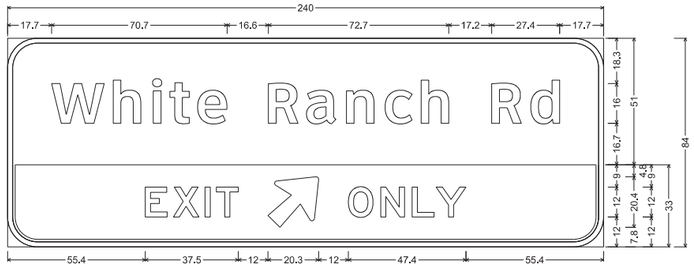
SHEET NO. 44 OF 54 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "172", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7	2
12.3	20.4	31.6	36.4	57.2	67.5	80.0

SHEET NO. 45 OF 54 SIGN NO. 2
SHEET NO. 46 OF 54 SIGN NO. 2
SHEET NO. 51 OF 54 SIGN NO. 1



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"White Ranch Rd", ClearviewHwy-5-W-R;

E11-1e:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

W	h	i	t	e	R	105.0	a	n	c	h	R	d
17.7	42.5	58.4	65.3	76.5	105.0	120.4	136.5	152.0	166.6	194.9	210.7	
E	X	I	T		O	N	L	Y				
55.4	66.7	79.5	84.1	104.9	137.2	150.3	162.9	172.6				

SHEET NO. 45 OF 54 SIGN NO. 1

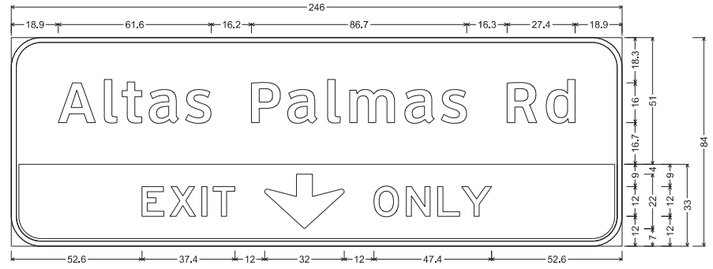
12.0" Radius, 2.0" Border, White on, Green;
"White Ranch Rd", ClearviewHwy-5-W-R;

E11-1:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

W	h	I	t	e	R	105.0	a	n	c	h	R	d
17.7	42.5	58.4	65.3	76.5	105.0	120.4	136.5	152.0	166.6	194.9	210.7	
E	X	I	T		O	N	L	Y				
49.6	60.9	73.7	78.2	99.0	143.0	156.1	168.7	178.4				

SHEET NO. 46 OF 54 SIGN NO. 1

SHEET NO. 47 OF 54 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
"Altas Palmas Rd", ClearviewHwy-5-W-R;

E11-1:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

A	l	t	a	s	P	a	l	127.4	m	136.2	a	s	R	d
18.9	37.4	44.7	55.5	70.2	96.7	111.3					158.5	173.1	199.7	215.4
E	X	I	T		O	N	L	Y						
52.6	63.9	76.7	81.2	102.0	146.0	159.1	171.7	181.4						

SHEET NO. 45 OF 54 SIGN NO. 2
SHEET NO. 51 OF 54 SIGN NO. 1

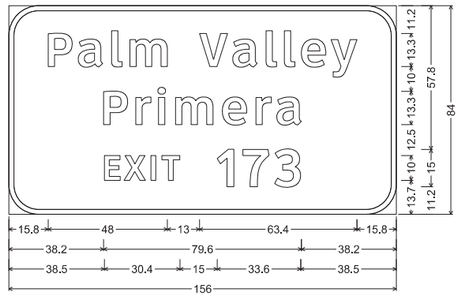
E11-1aR:

12.0" Radius, 2.0" Border, White on, Green;
"Altas Palmas Rd", ClearviewHwy-5-W-R;

E11-1e:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

A	l	t	a	s	P	a	l	127.4	m	136.2	a	s	R	d
18.9	37.4	44.7	55.5	70.2	96.7	111.3					158.5	173.1	199.7	215.4
E	X	I	T		O	N	L	Y						
58.4	69.7	82.5	87.1	107.9	140.2	153.3	165.9	175.6						

SHEET NO. 46 OF 54 SIGN NO. 2



12.0" Radius, 2.0" Border, White on, Green;
"Palm Valley", ClearviewHwy-5-W-R; "Primera", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R; "173", ClearviewHwy-5-W-R;
Table of letter and object lefts

P	a	l	m	V	a	l	l	e	y
15.8	27.9	41.4	48.7	76.8	90.2	103.6	111.0	117.8	129.8
P	r	i	m	e	r	a			
38.2	51.1	60.0	67.2	86.0	99.5	107.9			
E	X	I	T	1	7	3			
38.5	46.4	57.2	61.6	83.9	94.2	107.0			

SHEET NO. 47 OF 54 SIGN NO. 2

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

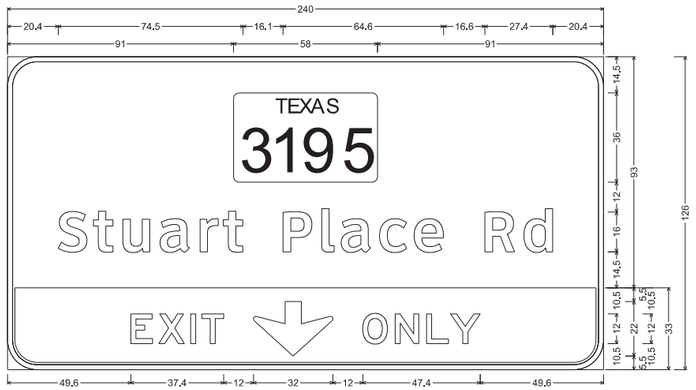
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 11 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					96
DW: LSJ			STATE DIST. NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.



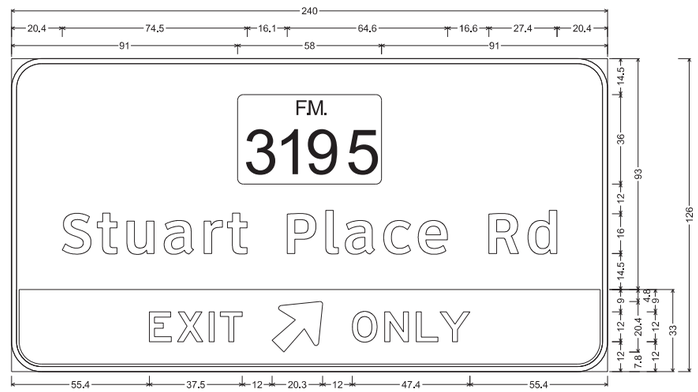
E11-1aR:

12.0" Radius, 2.0" Border, White on, Green;
State Highway 3195 M1-6T4; "Stuart Place Rd", ClearviewHwy-5-W-R;

E11-1e:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow Custom - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

91.0													
S 20.4	t 34.6	u 46.4	a 61.4	r 77.5	t 86.9	P 111.0	I 126.5	a 134.4	c 149.8	e 163.8	R 192.2	d 208.0	
E 49.6	X 60.9	I 73.7	T 78.2	⇩ 99.0	O 143.0	N 156.1	L 168.7	Y 178.4					

SHEET NO. 48 OF 54 SIGN NO. 1



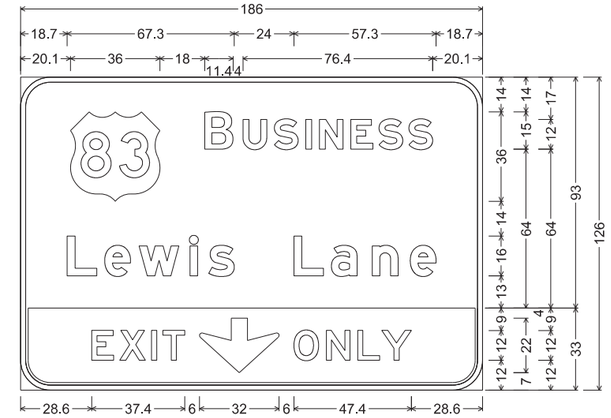
E11-1aR:

12.0" Radius, 2.0" Border, White on, Green;
State Highway 3195 4; "Stuart Place Rd", ClearviewHwy-5-W-R;

E11-1e:
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

91.0													
S 20.4	t 34.6	u 46.4	a 61.4	r 77.5	t 86.9	P 111.0	I 126.5	a 134.4	c 149.8	e 163.8	R 192.2	d 208.0	
E 55.4	X 66.7	I 79.5	T 84.1	⇗ 104.9	O 137.2	N 150.3	L 162.9	Y 172.6					

SHEET NO. 49 OF 54 SIGN NO. 1

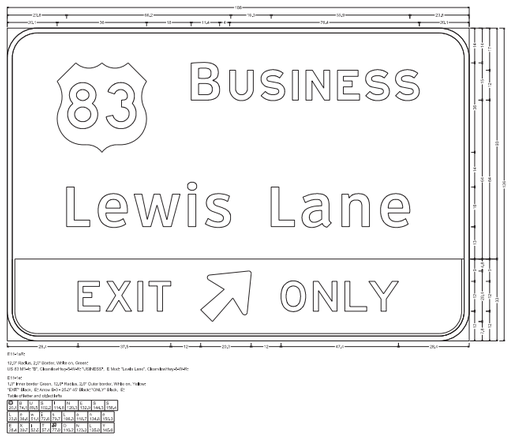


12.0" Radius, 2.0" Border, White on, Green;
US 83 M1-4; "B", ClearviewHwy-5-W-R; "USINESS", E Mod;
"Lewis Lane", E Mod;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black;
"ONLY" Black, E;
Table of letter and object lefts

83 20.1	B 74.1	U 89.5	S 102.2	I 114.8	N 120.3	E 132.9	S 144.3	S 156.4
L 18.7	e 33.8	w 47.7	i 68.2	s 75.7	L 110.0	a 125.1	n 141.6	e 156.9
E 28.6	X 39.9	I 52.7	T 57.2	⇩ 72.0	O 110.0	N 123.1	L 135.7	Y 145.4

SHEET NO. 50 OF 54 SIGN NO. 1



SHEET NO. 51 OF 54 SIGN NO. 2

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

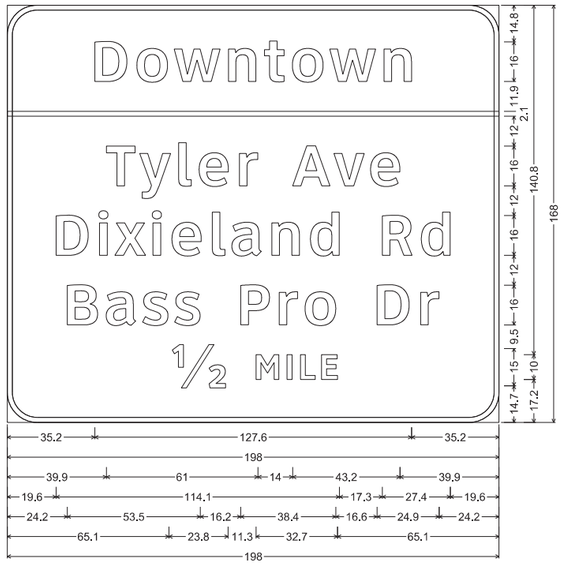
Raquel Cantu 11.05.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN DETAIL SHEETS

SHEET 12 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				97
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



Harlingen Tyler Ave Dixieland Rd exit 1/2 mile;
12.0" Radius, 2.0" Border, White on, Green;
"Downtown", ClearviewHwy-5-W-R; "Tyler Ave", ClearviewHwy-5-W-R;
"Dixieland Rd", ClearviewHwy-5-W-R; "Bass Pro Dr", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	D		o		w		n		t		o		w		n	
35.2	13.0	3.9	12.4	2.6	18.7	3.2	11.1	3.5	7.9	3.3	12.4	2.6	18.6	3.3	11.1	35.2

	—	
-0.0	198.0	0.0

	T		y		l		e		r		A		v		e	
39.9	11.6	1.8	12.4	3.3	5.1	3.1	11.9	4.4	7.4	14.0	15.2	1.4	12.2	2.6	11.8	39.9

	D		i		x		i		e		l		a		n		d
19.6	13.0	4.2	3.8	2.7	12.4	2.6	3.8	4.2	11.8	4.4	5.2	2.7	11.9	4.2	11.1	4.5	11.6

	R		d	
17.3	11.9	3.8	11.7	19.6

	B		a		s		s		P		r		o		D		r	
24.2	12.2	3.4	11.9	2.7	10.3	2.7	10.3	16.2	11.7	3.9	7.4	3.0	12.4	16.6	12.9	4.6	7.4	24.2

	½		M		I		L		E	
65.1	23.8	11.3	9.1	3.3	2.1	3.4	5.8	2.6	6.4	65.1

SHEET NO. 52 OF 54 SIGN NO. 1

FM 3195 Stuart Place Rd exit arrow 45 only;

12.0" Radius, 2.0" Border, White on, Green;
"Downtown", ClearviewHwy-5-W-R; "Tyler Ave", ClearviewHwy-5-W-R;
"Dixieland Rd", ClearviewHwy-5-W-R;
"Bass Pro Dr", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

D	o	w	n	t	o	w	n
35.2	52.1	67.1	89.0	103.6	114.8	129.8	151.7

—
-0.0

T	y	l	e	r	A	v	e
39.9	53.3	69.0	77.2	93.5	114.9	131.5	146.3

D	i	x	i	e	l	a	n	d	R	d
19.6	36.8	43.3	58.3	66.3	82.5	90.4	106.5	122.1	151.0	166.7

B	a	s	s	P	r	o	D	r
24.2	39.8	54.4	67.4	93.9	109.5	119.9	148.9	166.4

E	X	I	T	↗	O	N	L	Y
34.4	45.7	58.5	63.1	83.9	116.2	129.3	141.9	151.6

SHEET NO. 53 OF 54 SIGN NO. 1

E11-2aT_VARxVAR;

12.0" Radius, 2.0" Border, White on, Green;
"Dixieland Rd", ClearviewHwy-5-W-R; 90 Deg Advance Turn Arrow Custom 25.0" X 28.0";

1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"LEFT TURN ONLY" Black, E;

SHEET NO. 54 OF 54 SIGN NO. 1

RAQUEL CANTU
130317

Raquel Cantu 11.05.20

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "173", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7	3
12.4	20.4	31.0	35.5	57.3	67.5	79.9

SHEET NO. 48 OF 54 SIGN NO. 1
SHEET NO. 49 OF 54 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "174", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7	4
11.6	19.7	30.3	34.8	56.5	66.8	79.2

SHEET NO. 50 OF 54 SIGN NO. 1
SHEET NO. 51 OF 54 SIGN NO. 2

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "175", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7	5
12.2	20.2	30.8	35.3	57.1	67.3	80.1

SHEET NO. 52 OF 54 SIGN NO. 1
SHEET NO. 53 OF 54 SIGN NO. 1

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2
LARGE SIGN LAYOUTS

SHEET 13 OF 13

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					98
DW: LSJ			STATE DIST.NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.

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

DATE:
FILE:

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
1/54	1	GROUND MOUNT	EXIT 131 FM 492 Abram Rd Goodwin Rd Exit ½ Mile	SIGN ONLY
2/54	1	GROUND MOUNT	EXIT 136 SOUTH FM 1016 NORTH TEXAS 107 Conway Ave EXIT ¾ MILE	SIGN ONLY
2/54	2	GROUND MOUNT	Palmhurst Alton EXIT 136	SIGN ONLY
2/54	3	GROUND MOUNT	McAllen Business District NEXT 6 EXITS	✳
3/54	1	OVERHEAD	EXIT 140 FM 2220 Ware Rd EXIT ONLY	SIGN ONLY
4/54	1	GROUND MOUNT	Glasscock Rd Stewart Rd EXIT 137	SIGN ONLY
5/54	1	GROUND MOUNT	H EXIT 137 FM. 396 Bryan Rd Anzalduas Hwy EXIT ¾ MILE	SIGN ONLY
6/54	1	GROUND MOUNT	EXIT 141 SPUR 115 23rd St EXIT 1 MILE	SIGN ONLY
7/54	1	OVERHEAD	EXIT 138 Bentsen Rd Taylor Rd EXIT ONLY	SIGN ONLY
8/54			ALL EXISTING SIGNS TO REMAIN IN PLACE	
9/54	1	OVERHEAD	FM 1426 San Juan EXIT ONLY	SIGN ONLY
10/54	1	OVERHEAD	EXIT 149 Cesar Chavez Road EXIT ONLY	SIGN ONLY
11/54	1	GROUND MOUNT	San Juan Business District NEXT 3 EXITS	✳
11/54	2	OVERHEAD	EXIT 150 A FM 907 Alamo Rd EXIT ONLY	SIGN ONLY
12/54	1	GROUND MOUNT	EXIT 150 A FM 907 Alamo Rd EXIT ½ MILE	SIGN ONLY
13/54	1	OVERHEAD	EXIT 150 B Tower Rd EXIT ONLY	SIGN ONLY
14/54	1	GROUND MOUNT	Alamo Business District NEXT 3 EXITS	✳
14/54	2	GROUND MOUNT	EXIT 150 B Tower Rd EXIT 1 MILE	SIGN ONLY
14/54	3	GROUND MOUNT	EXIT 154 SPUR 433 Main St Exit ½ Mile	SIGN ONLY
15/54	1	OVERHEAD	EXIT 152 FM 1423 Val Verde Rd EXIT ONLY	SIGN ONLY
16/54	1	GROUND MOUNT	EXIT 152 FM 1423 Val Verde Rd EXIT ¾ MILE	SIGN ONLY
17/54	1	GROUND MOUNT	EXIT 155 B Victoria Rd Midway Rd EXIT ½ MILE	SIGN ONLY
18/54	1	GROUND MOUNT	EXIT 154 SPUR 433 Main St Exit ½ Mile	SIGN ONLY
18/54	2	GROUND MOUNT	EXIT 157 Westgate Dr Mile 6 W Rd EXIT ½ MILE	SIGN ONLY

IH-2 SHEET 1 OF 4

SUMMARY OF LARGE SIGNS TO BE REMOVED

DN.: CBR	CK.: GV	DW.: CBR	CK.: GV	REVISIONS		
				11-93	1-04	
				8-95	9-08	
				5-01		

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
PHR	HIDALGO, ETC.		99

DATE:
FILE:

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
19/54	1	OVERHEAD	EXIT 155 A FM 493 Salinas Blvd EXIT ONLY	SIGN ONLY
19/54	2	GROUND MOUNT	EXIT 158 FM 88 Texas Blvd EXIT 1 MILE	SIGN ONLY
20/54	2	GROUND MOUNT	EXIT 155 A FM 493 Salinas Blvd EXIT 1 MILE	SIGN ONLY
21/54	1	GROUND MOUNT	EXIT 155 B Mile 6 ½ W Rd Midway Rd NEXT EXIT	SIGN ONLY
21/54	2	GROUND MOUNT	EXIT 155 B Victoria Rd Exit ¾ Mile	SIGN ONLY
22/54	2	GROUND MOUNT	EXIT 160 Texas A&M Kingsville Texas A&M USDA Ag Centers NEXT EXIT	SIGN ONLY
23/54	1	GROUND MOUNT	EXIT 160 FM 1015 Intl Blvd EXIT ¾ MILE	SIGN ONLY
23/54	2	GROUND MOUNT	EXIT 157 Westgate Dr Mile 6 W Rd EXIT ¾ MILE	SIGN ONLY
24/54	1	GROUND MOUNT	Border Ave EXIT 157	SIGN ONLY
24/54	2	OVERHEAD	EXIT 158 TEXAS 88 Texas Blvd EXIT ONLY	SIGN ONLY
25/54	1	OVERHEAD	EXIT 158 FM 88 Texas Blvd EXIT ONLY	SIGN ONLY
26/54	1	GROUND MOUNT	EXIT 161 SPUR 31 Mile 2 W Rd EXIT ¾ MILE	SIGN ONLY
27/54	1	GROUND MOUNT	EXIT 158 FM 88 Texas Blvd EXIT ¾ MILE	SIGN ONLY
27/54	2	OVERHEAD	H EXIT 159 Airport Dr Pike Blvd EXIT ONLY	SIGN ONLY
27/54	3	OVERHEAD	EXIT 161 SPUR 31 Mile 2 W Rd EXIT ONLY	SIGN ONLY
28/54	1	OVERHEAD	EXIT 161 SPUR 31 Mile 2 W Rd EXIT ONLY	SIGN ONLY
29/54	1	OVERHEAD	EXIT 160 FM 1015 Intl Blvd EXIT ONLY	SIGN ONLY
29/54	2	OVERHEAD	EXIT 163 A Vermont Ave EXIT ONLY	SIGN ONLY
29/54	3	OVERHEAD	EXIT 163 A Vermont Ave EXIT ONLY	SIGN ONLY
30/54	1	OVERHEAD	EXIT 160 FM 1015 Intl Blvd EXIT ¾ MILE	SIGN ONLY
31/54	1	GROUND MOUNT	Weslaco Business District NEXT 4 EXITS	✳
32/54	1	OVERHEAD	EXIT 163 B FM 491 Texas Ave EXIT ONLY	SIGN ONLY
33/54	1	OVERHEAD	EXIT 164 Mile 1 E Rd	SIGN ONLY

IH-2 SHEET 2 OF 4

SUMMARY OF LARGE SIGNS TO BE REMOVED

DN.: CBR	CK.: GV	REVISIONS 11-93 1-04	
DW.: CBR	CK.: GV	8-95 9-08	
		5-01	

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
PHR	HIDALGO, ETC.		100

DATE:
FILE:

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
34/54	1	OVERHEAD	EXIT 165 / TEXAS 1425 / Mile 2 E Rd / EXIT ONLY	SIGN ONLY
34/54	2	OVERHEAD	EXIT 165 / TEXAS 1425 / Mile 2 E Rd / EXIT ONLY	SIGN ONLY
35/54	1	OVERHEAD	EXIT 166 / Mile 3 E Rd / EXIT ONLY	SIGN ONLY
36/54	1	OVERHEAD	EXIT 166 / Mile 3 E Rd / EXIT ONLY	SIGN ONLY
37/54	1	GROUND MOUNT	EXIT 165 / FM 1425 / Mile 2 E Rd	SIGN ONLY
37/54	2	GROUND MOUNT	EXIT 167 / FM 2556 / Solis Rd / Rabb Rd / EXIT 1/2 MILE	SIGN ONLY
38/54	1	GROUND MOUNT	EXIT 165 / FM 1425 / Mile 2 E Rd / EXIT 1/2 MILE	SIGN ONLY
39/54	1	GROUND MOUNT	EXIT 167 / FM 2556 / Solis Rd / Mile 3 E Rd / EXIT ONLY	SIGN ONLY
40/54	1	OVERHEAD	EXIT 167 / FM 2556 / Solis Rd / Mile 3 E Rd / EXIT ONLY	SIGN ONLY
40/54	2	OVERHEAD	EXIT 169 / FM 506 / La Feria / Santa Rosa / EXIT ONLY	SIGN ONLY
40/54	3	GROUND MOUNT	EXIT 167 / FM 2556 / Solis Rd / Mile 3 E Rd / EXIT 1/2 MILE	SIGN ONLY
41/54	1	GROUND MOUNT	EXIT 170 / FM 733 / Kansas City Rd / White Ranch Rd / EXIT 1/2 MILE	SIGN ONLY
41/54	2	OVERHEAD	EXIT 170 / FM 733 / Kansas City Rd / White Ranch Rd / EXIT ONLY	SIGN ONLY
41/54	3	OVERHEAD	EXIT 168 / Rabb Rd / EXIT ONLY	SIGN ONLY
42/54	1	OVERHEAD	EXIT 170 / FM 733 / Kansas City Rd / White Ranch Rd / EXIT ONLY	SIGN ONLY
42/54	2	OVERHEAD	EXIT 168 / Rabb Rd / EXIT ONLY	SIGN ONLY
43/54	1	GROUND MOUNT	EXIT 168 / Rabb Rd / Exit 3/4 Mile	SIGN ONLY
44/54	1	OVERHEAD	EXIT 171 / FM 800 / Bass Blvd / EXIT ONLY	SIGN ONLY
45/54	1	OVERHEAD	EXIT 170 / White Ranch Rd / EXIT ONLY	SIGN ONLY
45/54	2	OVERHEAD	EXIT 172 / Altas Palmas Rd / EXIT ONLY	SIGN ONLY
46/54	1	OVERHEAD	EXIT 170 / White Ranch Rd / EXIT ONLY	SIGN ONLY

IH-2 SHEET 3 OF 4

SUMMARY OF LARGE SIGNS TO BE REMOVED

DN.: CBR	CK.: GV	DW.: CBR	CK.: GV

REVISIONS: 11-93, 1-04, 8-95, 9-08, 5-01

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.

DIST	COUNTY	SHEET NO.
PHR	HIDALGO, ETC.	101

DATE:
FILE:

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
46/54	2	OVERHEAD	EXIT 172 Altas Palmas Rd EXIT ⇗ ONLY	SIGN ONLY
47/54	1	GROUND MOUNT	EXIT 170 White Ranch Rd EXIT ½ MILE	SIGN ONLY
47/54	2	GROUND MOUNT	Palm Valley Primera EXIT 173	SIGN ONLY
48/54	1	GROUND MOUNT	EXIT 173 FM 3195 Stuart Place Rd EXIT ⇩ ONLY	SIGN ONLY
49/54	1	OVERHEAD	EXIT 173 FM 3195 Stuart Place Rd EXIT ⇗ ONLY	SIGN ONLY
50/54	1	OVERHEAD	EXIT 174 83 BUSINESS Lewis Lane EXIT ⇩ ONLY	SIGN ONLY
51/54	1	OVERHEAD	EXIT 172 Altas Palmas Rd EXIT ⇩ ONLY	SIGN ONLY
51/54	2	OVERHEAD	EXIT 174 83 BUSINESS Lewis Lane EXIT ⇗ ONLY	SIGN ONLY

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
52/54	1	OVERHEAD	EXIT 175 Downtown Tyler Ave Dixieland Rd Bass Pro Dr EXIT ½ MILE	SIGN ONLY
53/54	1	OVERHEAD	EXIT 175 Downtown Tyler Ave Dixieland Rd Bass Pro Dr EXIT ⇗ ONLY	SIGN ONLY
54/54	1	OVERHEAD	Dixieland Rd ↰ LEFT TURN ONLY	SIGN ONLY

IH-2 SHEET 4 OF 4

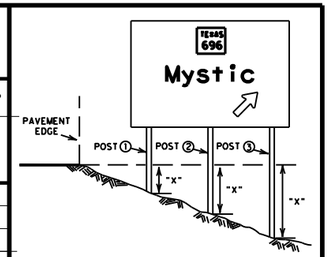
SUMMARY OF LARGE SIGNS TO BE REMOVED

		REVISIONS	
DN.: CBR	CK.: GV	11-93	1-04
DW.: CBR	CK.: GV	8-95	9-08
		5-01	

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
PHR	HIDALGO, ETC.		102

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
1/54	1	GREEN	EXIT 131 / IH 492 / Abram Rd / Goodwin Rd / ½ Mile	8′ x 2.5′			20															
				4′ x 3′	12																	
				16′ x 12.5′			200															
			(E.B.)																			
2/54	1	GREEN	EXIT 136 / SOUTH IH 1016 / NORTH TEXAS 107 / Conway Ave / ⅜ MILE	8.5′ x 2.5′	21.25																	
				15.5′ x 11.5′			178.25															
			(W.B.)																			
2/54	2	GREEN	Palmhurst / Alton / EXIT 136	11.5′ x 7′			80.5															
			(W.B.)																			
2/54	3	GREEN	McAllen / NEXT 6 EXITS	12′ x 4.5′			54		221	0.25	0.40		S4X7.7	11.75	11.90		182.11		12.00			1.9
			(10′ OFFSET) (E.B.)																			
3/54	1	GREEN	EXIT 140 / IH 2220 / Ware Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				5.3′ x 3′	16																	
				12.5′ x 10.5′				131.25					S4x7.7	10.5	10.5		161.70					
			(E.B.)	12.5′ x 2.75′	34.4																	
4/54	1	GREEN	Glasscock Rd / Stewart Rd / EXIT 137	14.5′ x 7′			101.50															
			(W.B.)																			
5/54	1	GREEN	EXIT 137 / FM 396 / Bryan Rd / Anzalduas Hwy / ⅜ MILE	3′ x 3′		9																
				8.5′ x 2.5′			21.25															
				4′ x 3′	12																	
				19′ x 11.5′			218.50															
			(W.B.)																			
6/54	1	GREEN	EXIT 141 / SPUR 115 / 23rd St / 1 MILE	3′ x 3′		9																
				8.5′ x 2.5′			21.25															
				3′ x 3′	9																	
				11′ x 10′			110															
			(E.B.)																			
			PAGE TOTALS			18.00	1,005.25	152.50									349.81		12.00			1.9



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No.
  - 0 Aluminum/Fiberglass
  - 1 Aluminum
  - 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-2

DN.: LSJ	CK.: GV	DW.: LSJ	CK.: GV	REVISIONS
11-93	8-95	5-01		1-04 9-08

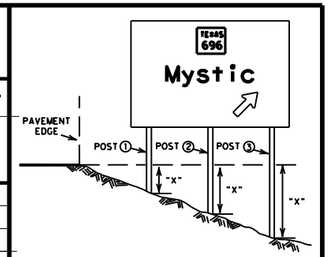
SHEET 1 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		103

DATE: September 11, 2020
FILE: I:\PHRTROP\Projects\RMC (Large Sign Project) 2020\Leo*IH 69E\Sum Large Signs Install*IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
7/54	1	GREEN	EXIT 138 Bentsen Rd Taylor Rd EXIT ONLY	8.5′ x 2.5′				21.25														
				15′ x 8.5′				127.50					S4X7.7	8.5	8.5		130.90					
				15′ x 2.75′	41.25																	
			(W.B.)																			
9/54	1	GREEN	EXIT 147 B FM 1426 San Juan EXIT ONLY	10′ x 2.5′				25														
				14′ x 10.5′				147					S4x7.7	10.5	10.5		161.70					
				4.6′ x 3′	14																	
				14′ x 2.75′	38.50																	
			(W.B.)																			
10/54	1	GREEN	EXIT 149 Cesar Chavez Road EXIT ONLY	8.5′ x 2.5′				21.25														
				17.5′ x 8.5′				148.75					S4x7.7	8.5	8.5	8.5	196.35					
				17.5′ x 2.5′	48.13																	
			(W.B.)																			
11/54	1	GREEN	San Juan NEXT 3 EXITS	12′ x 4.5′			54		221	0.55	1.16		S4X7.7	12.55	12.66		194.12		12.00			1.9
			(10′ OFFSET)																			
			(W.B.)																			
11/54	1	GREEN	EXIT 150 A FM 907 Alamo Rd EXIT ONLY	10′ x 2.5′				25														
				14′ x 10.5′				147					S4x7.7	10.5	10.5		161.70					
				4′ x 3′	12																	
				14′ x 2.75′	38.50																	
			(W.B.)																			
12/54	1	GREEN	EXIT 150 A TEXAS 907 Alamo Rd ½ MILE	10′ x 2.5′			25															
				13.5′ x 9.5′			128.25															
				4′ x 3′	12																	
			(W.B.)																			
13/54	1	GREEN	EXIT 150 B Tower Rd EXIT ONLY	10′ x 2.5′				25														
				14′ x 6.5′				91					S4x7.7	6.5	6.5		100.10					
				14′ x 2.75′	38.5																	
			(W.B.)																			
14/54	1	GREEN	Alamo NEXT 3 EXITS	12′ x 4.5′			54		221	1.5	1.6		S4X7.7	13.00	13.10		200.97		12.00			1.9
			(10′ OFFSET)																			
			(W.B.)																			
14/54	2	GREEN	Tower Rd 1 MILE	13′ x 6′			78															
			(W.B.)																			
14/54	3	GREEN	EXIT 154 SPUR 433 Main St ½ Mile	8.5′ x 2.5′			21.25															
				11′ x 10′			110															
				4′ x 3′	12																	
			(E.B.)																			
			PAGE TOTALS				470.50	778.75					PAGE TOTALS				1,145.84		24.00			3.8



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No.
  - 0 Aluminum/Fiberglass
  - 1 Aluminum
  - 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-2

		REVISIONS	
DN.: LSJ	CK.: GV	11-93	1-04
DW.: LSJ	CK.: GV	8-95	9-08
		5-01	

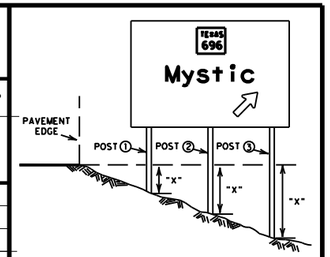
SHEET 2 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		104

DATE: September 11, 2020
FILE: t:\PHR1RFOP\Projects\RMC (Large Sign Project) 2020\Leo*IH 69E\Sum Large Signs Install*IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
15/54	1	GREEN	EXIT 152 / FM 1423 / Val Verde Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				17′ x 10.5′				178.50					S4x7.7	10.5	10.5	10.5	242.55					
				4.6′ x 3′	14																	
				17′ x 2.75′	46.75																	
			(W.B.)																			
16/54	1	GREEN	EXIT 152 / FM 1423 / Val Verde Rd / ¾ MILE	8.5′ x 2.5′			21.25															
				17′ x 10′			170						S4x7.7	10	10	10	231.00					
				4.6′ x 3′	14																	
			(W.B.)																			
17/54	1	GREEN	EXIT 155 B / Victoria Rd / Midway Rd / ½ MILE	10′ x 2.5′			25															
				15′ x 8′			120						S4x7.7	8	8	8	184.80					
			(E.B.)																			
18/54	1	GREEN	EXIT 154 / SPUR 433 / Main St / ½ Mile	8.5′ x 2.5′			21.25															
				11′ x 10′			110						S4x7.7	10	10		154.00					
				4′ x 3′	12																	
			(W.B.)																			
18/54	2	GREEN	EXIT 157 / Westgate Dr / Mile 6 W Rd / ½ MILE	8.5′ x 2.5′			21.25															
				16.5′ x 8′			132															
			(E.B.)																			
19/54	1	GREEN	EXIT 155 A / FM 493 / Salinas Blvd / EXIT ONLY	10′ x 2.5′				25														
				16′ x 10.5′				168					S4x7.7	10.5	10.5	10.5	242.55					
				4′ x 3′	12																	
				16′ x 2.75′	44																	
			(W.B.)																			
19/54	2	GREEN	EXIT 158 / FM 88 / Texas Blvd / 1 MILE	8.5′ x 2.5′			21.25															
				14.5′ x 10′			145															
				3′ x 3′	9																	
			(E.B.)																			
20/54	1	GREEN	EXIT 155 A / FM 493 / Salinas Blvd / 1 MILE	10′ x 2.5′			25															
				16′ x 10′			160															
				4′ x 3′	12																	
			(W.B.)																			
21/54	1	GREEN	Mile 6½ W Rd / Midway Rd / EXIT 155B	18′ x 8′			144															
			(W.B.)																			
			PAGE TOTALS				1,116.00	392.75									1,054.90					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- No. of Posts

See sheet SMD(8W1)

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

DATE: September 11, 2020
FILE: T:\PRRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

SUMMARY OF LARGE SIGNS
SOLS IH-2

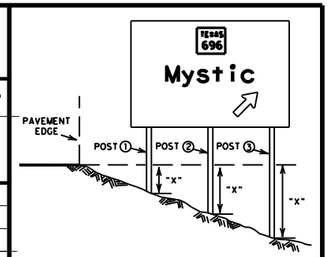
DN.:- LSJ	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- LSJ	8-95	9-08
CK.:- GV	5-01	

SHEET 3 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		105

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
21/54	2	GREEN	EXIT 155 B Victoria Rd 3/4 Mile	10′ x 2.5′			25															
				15′ x 6′			90															
			(W.B.)																			
22/54	1	GREEN	Texas A&M Kingsville Texas A&M USDA Ag Centers EXIT 160	22′ x 9.5′			209															
			(E.B.)																			
23/54	1	GREEN	EXIT 160 FM 1015 Intl Blvd 3/4 MILE	8.5′ x 2.5′			21.25															
				12′ x 10′			120															
				4.25′ x 3′	12.75																	
			(E.B.)																			
23/54	2	GREEN	EXIT 157 Westgate Dr Mile 6 W Rd 3/4 MILE	8.5′ x 2.5′			21.25															
				16.5′ x 8′			132.00															
			(W.B.)																			
24/54	1	GREEN	Border Ave EXIT 157	12.5′ x 5′			62.50															
			(W.B.)																			
24/54	2	GREEN	EXIT 158 FM 88 Texas Blvd EXIT ONLY	8.5′ x 2.5′				21.25														
				14.5′ x 10.5′				145					S4x7.7	10.5	10.5		161.70					
				3′ x 3′	9																	
				14.5′ x 2.75′	36.25																	
			(W.B.)																			
25/54	1	GREEN	EXIT 158 FM 88 Texas Blvd EXIT ONLY	8.5′ x 2.5′				21.25														
				14.5′ x 10.5′				145					S4x7.7	10.5	10.5		161.70					
				3′ x 3′	9																	
				14.5′ x 2.75′	36.25																	
			(W.B.)																			
26/54	1	GREEN	EXIT 161 SPUR 31 Mile 2 W Rd 3/4 MILE	8.5′ x 2.5′			21.25															
				16′ x 10′			160															
				3′ x 3′	9																	
			(E.B.)																			
27/54	1	GREEN	EXIT 158 FM 88 Texas Blvd 3/4 MILE	8.5′ x 2.5′			21.25															
				14.5′ x 10′			145															
				3′ x 3′	9																	
			(W.B.)																			
			PAGE TOTALS				1,028.50	332.50									323.40					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

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The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

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DATE: September 11, 2020
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SUMMARY OF LARGE SIGNS
SOLS IH-2

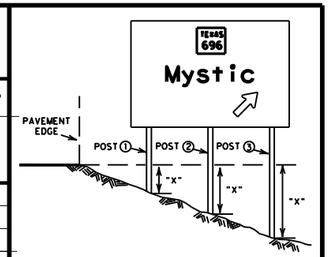
DN.:- LSJ	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- LSJ	8-95	9-08
CK.:- GV	5-01	

SHEET 4 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		106

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
27/54	2	GREEN	EXIT 159 / Airport Dr / Pike Blvd / ⅜ Mile / EXIT ONLY (W.B)	3′ x 3′		9																
				8.5′ x 2.5′			21.25															
				14′ x 8.5′			160															
				14′ x 2.75′	38.50																	
27/54	3	GREEN	EXIT 161 / SPUR 31 / Mile 2 W Rd / EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				16′ x 10.5′				168					S4x7.7	10.5	10.5	10.5	242.55					
				3′ x 3′	9																	
				16′ x 2.75′	44																	
28/54	1	GREEN	EXIT 161 / SPUR 31 / Mile 2 W Rd / EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				16′ x 10′				160.00					S4x7.7	10	10	10	30					
				3′ x 3′	9																	
				16′ x 2.75′	44.00																	
29/54	1	GREEN	EXIT 160 / FM 1015 / Intl Blvd / EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				14.5′ x 10.5′				152.25					S4x7.7	10.5	10.5		161.70					
				4.25′ x 3′	12.75																	
				14.5′ x 2.75′	39.90																	
29/54	2	GREEN	EXIT 163 A / Vermont Ave / EXIT ONLY (E.B.)	10′ x 2.5′				25														
				17′ x 6.5′				110.50					S4x7.7	7	7	7	161.70					
				17′ x 2.75′	42.50																	
29/54	3	GREEN	EXIT 163 A / Vermont Ave / EXIT ONLY (E.B.)	10′ x 2.5′				25														
				17′ x 6.5′				110.50					S4x7.7	6.5	6.5	6.5	150.15					
				17′ x 2.75′	42.50																	
30/54	1	GREEN	EXIT 160 / FM 1015 / Intl Blvd / ⅜ MILE (W.B.)	8.5′ x 2.5′			21.25															
				12′ x 10′			120															
				4.25′ x 3′	12.75																	
31/54	1	GREEN	Weslaco / NEXT 4 EXITS (10′ OFFSET) (W.B.)	12′ x 4.5′			54		221	0.5	0.25		S4x7.7	12.00	11.75		182.88		12.00			1.9
32/54	1	GREEN	EXIT 163 B / FM 491 / Texas Ave / EXIT ONLY (E.B.)	10′ x 2.5′				25														
				14.5′ x 10.5′				152.25					S4x7.7	10.5	10.5		161.70					
				3.5′ x 3′	10.50																	
			PAGE TOTALS			9	376.50	992.25						PAGE TOTALS				1,090.68		12.00			1.9



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

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Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS
SOLS IH-2

DN.:- LSJ	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- LSJ	8-95	9-08
CK.:- GV	5-01	

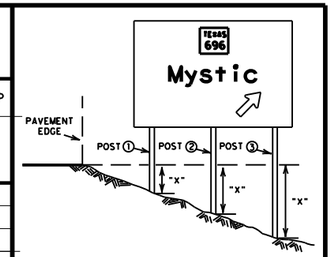
SHEET 5 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		107

DATE: September 11, 2020
FILE: I:\PRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo\IH 69E\Sum Large Signs Install*IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
33/54	1	GREEN	EXIT 164 / Mile 1 E Rd ↗ (E.B.)	8.5′ x 2.5′				21.25														
				11.5′ x 7′				80.50					S4x7.7	7	7		107.80					
34/54	1	GREEN	EXIT 165 / FM 1425 / Mile 2 E Rd / EXIT ⇩ ONLY (E.B.)	8.5′ x 2.5′				21.25														
				15.5′ x 10.5′				162.75					S4x7.7	10.5	10.5	10.5	242.55					
				4.75′ x 3′	14.25																	
				15.5′ x 2.75′	42.60																	
34/54	2	GREEN	EXIT 165 / FM 1425 / Mile 2 E Rd / EXIT ⇗ ONLY (E.B.)	8.5′ x 2.5′				21.25														
				15.5′ x 10′				155.00					S4x7.7	10	10	10	231.00					
				4.75′ x 3′	14.25																	
				15.25′ x 2.75′	42																	
35/54	1	GREEN	EXIT 166 / Mile 3 E Rd / EXIT ⇩ ONLY (E.B.)	8.5′ x 2.5′				21.25														
				15.5′ x 6.5′				100.75					S4x7.7	6.5	6.5	6.5	150.15					
				15.5′ x 2.75′	42.60																	
36/54	1	GREEN	EXIT 166 / Mile 3 E Rd / EXIT ⇗ ONLY (E.B.)	8.5′ x 2.5′				21.25														
				15.5′ x 6.5′				100.75					S4x7.7	6.5	6.5	6.5	150.15					
				15.5′ x 2.75′	42.60																	
37/54	1	GREEN	EXIT 165 / FM 1425 / Mile 2 E Rd ↗ (W.B.)	8.5′ x 2.5′			21.25															
				11.5′ x 10.5′			120.75															
				4.75′ x 2.75′	13																	
37/54	2	GREEN	EXIT 167 / FM 2556 / Solis Rd / Rabb Rd / ½ MILE (E.B.)	8.5′ x 2.5′			21.25															
				11.5′ x 12′			138															
				5.5′ x 2.75′	15																	
38/54	1	GREEN	EXIT 165 / FM 1425 / Mile 2 E Rd / ½ MILE (W.B.)	8.5′ x 2.5′			21.25															
				15′ x 9.5′			142.50															
				15′ x 2.75′	41.25																	
39/54	1	GREEN	EXIT 167 / FM 2556 / Solis Rd / Mile 3 E Rd / EXIT ⇗ ONLY (W.B.)	8.5′ x 2.5′				21.25														
				15.5′ x 12.5′				193.75					S4x7.7	12.5	12.5	12.5	242.55					
				5.4′ x 3′	16.20																	
				15.5′ x 2.75′	42.60																	
			PAGE TOTALS					465.00	921.00								1,124.20					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

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Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — No. of Posts

0 Aluminum/Fiberglass
1 Aluminum
2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS
SOLS IH-2

DN.:- LSJ	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- LSJ	8-95	9-08
CK.:- GV	5-01	

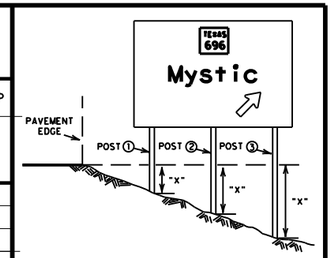
SHEET 6 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		108

DATE: September 11, 2020
FILE: I:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
40/54	1	GREEN	EXIT 167 / FM 2556 / Solis Rd / Mile 3 E Rd / EXIT ONLY (W.B.)	8.5′ x 2.5′				21.25														
				15.5′ x 12.5′				193.75					S4x7.7	12.5	12.5	12.5	288.75					
				5.4′ x 3′	16.20																	
				15.5′ x 2.75′	42.60																	
40/54	2	GREEN	EXIT 169 / FM 506 / La Feria / Santa Rosa / EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				15′ x 12.5′				187.50					S4x7.7	12.5	12.5	12.5	288.75					
				4′ x 3′	12																	
				15.5′ x 2.75′	42.60																	
40/54	3	GREEN	EXIT 167 / FM 2556 / Solis Rd / Mile 3 E Rd / ½ MILE (W.B.)	8.5′ x 2.5′			21.25															
				15′ x 12′			180															
				5.4′ x 3′	16																	
41/54	1	GREEN	EXIT 170 / FM 733 / Kansas City Rd / White Ranch Rd / ½ MILE (E.B.)	8.5′ x 2.5′			21.25															
				20′ x 12′			240															
				4′ x 3′	12																	
41/54	2	GREEN	EXIT 170 / FM 733 / Kansas City Rd / White Ranch Rd / EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				20.5′ x 12.5′				256.25					S4x7.7	12.5	12.5	12.5	385.00					
				4′ x 3′	12																	
41/54	3	GREEN	EXIT 168 / Rabb Rd / EXIT ONLY (W.B.)	8.5′ x 2.5′				21.25														
				12′ x 7′				84					S4x7.7	7	7	7	161.70					
42/54	1	GREEN	EXIT 170 / FM 733 / Kansas City Rd / White Ranch Rd / EXIT ONLY (W.B.)	8.5′ x 2.5′				21.25														
				20.5′ x 12.5′				256.25					S4x7.7	12.5	12.5	12.5	385.00					
				4′ x 3′	12																	
				20.5′ x 2.75′	56.40																	
42/54	2	GREEN	EXIT 168 / Rabb Rd / EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				12′ x 7′				84					S4x7.7	7	7	7	161.70					
43/54	1	GREEN	EXIT 168 / Rabb Rd / ⅜ MILE (W.B.)	8.5′ x 2.5′			21.25															
				12′ x 6′			72															
PAGE TOTALS							555.75	1,189.25									1,670.90					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — Aluminum/Fiberglass; 1 Aluminum; 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-2

DN.: LSJ	REVISIONS	
CK.: GV	11-93	1-04
DW.: LSJ	8-95	9-08
CK.: GV	5-01	

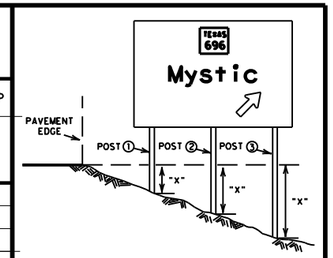
SHEET 7 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		109

DATE: September 11, 2020
FILE: T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
44/54	1	GREEN	EXIT 171 / FM 600 / Bass Blvd / EXIT ONLY	8.5′ x 2.5′				21.25														
				14′ x 10.5′				147					S4x7.7	10.5	10.5	10.5	242.55					
				4′ x 3′	12																	
				14′ x 2.75′	38.50																	
			(E.B.)																			
45/54	1	GREEN																				
			EXIT 170 / White Ranch Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				20′ x 7′				140					S4x7.7	7 7	7	7	215.60					
				20′ x 2.75′	55																	
			(W.B.)																			
45/54	2	GREEN																				
			EXIT 172 / Altas Palmas Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				20.5′ x 7′				143.50					S4x7.7	7 7	7	7	215.60					
				20.5′ x 2.75′	56.40																	
			(E.B.)																			
46/54	1	GREEN																				
			EXIT 170 / White Ranch Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				20′ x 7′				140					S4x7.7	7 7	7	7	215.60					
				20′ x 2.75′	55																	
			(W.B.)																			
46/54	2	GREEN																				
			EXIT 172 / Altas Palmas Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				20.5′ x 7′				143.50					S4x7.7	7 7	7	7	215.60					
				20.5′ x 2.75′	56.40																	
			(E.B.)																			
47/54	1	GREEN																				
			EXIT 170 / White Ranch Rd / ½ MILE	8.5′ x 2.5′			21.25															
				20′ x 6′			120															
			(W.B.)																			
47/54	2	GREEN																				
			Palm Valley / Primera / EXIT 173	13′ x 7′			91															
			(E.B.)																			
48/54	1	GREEN																				
			EXIT 173 / TEXAS 3195 / Stuart Place Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				20′ x 10.5′				210					S4x7.7	10.5 10.5	10.5	10.5	323.40					
				5′ x 3′	15																	
				20′ x 2.75′	55																	
			(E.B.)																			
49/54	1	GREEN																				
			EXIT 173 / FM 3195 / Stuart Place Rd / EXIT ONLY	8.5′ x 2.5′				21.25														
				20′ x 10.5′				210					S4x7.7	10.5 10.5	10.5	10.5	323.40					
				5′ x 3′	15																	
				20′ x 2.75′	55																	
			(E.B.)																			
			PAGE TOTALS				232.25	1,282.75						PAGE TOTALS			1,751.75					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — No. of Posts

0 Aluminum/Fiberglass
1 Aluminum
2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-2

DN.:- LSJ	CK.:- GV	DW.:- LSJ	CK.:- GV

REVISIONS: 11-93, 8-95, 5-01, 1-04, 9-08

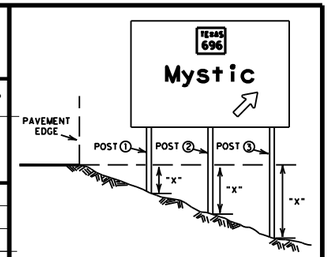
SHEET 8 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		110

DATE: September 11, 2020
FILE: T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
50/54	1	GREEN	EXIT 174 83 BUSINESS Lewis Lane EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				15.5′ x 10.5′				162.75					S4x7.7	10.5	10.5	10.5	242.55					
				3′ x 3′	9																	
				15.5′ x 2.75′	42.60																	
51/54	1	GREEN	EXIT 172 Altas Palmas Rd EXIT ONLY (W.B.)	8.5′ x 2.5′				21.25														
				20.5′ x 7′				143.50					S4x7.7	7 7	7	7	215.60					
				20.5′ x 2.75′	56.40																	
51/54	2	GREEN	83 BUSINESS Lewis Lane EXIT ONLY (E.B.)	15.5′ x 10.5′				162.75					S4x7.7	10.5	10.5	10.5	242.55					
				3′ x 3′	9																	
				15.5′ x 2.75′	42.60																	
52/54	1	GREEN	EXIT 175 Downtown Tyler Ave Dixieland Rd Bass Pro Dr ½ MILE (E.B.)	8.5′ x 2.5′				21.25														
				16.5′ x 14′				231					S4x7.7	14	14	14	323.40					
53/54	1	GREEN	EXIT 175 Downtown Tyler Ave Dixieland Rd Bass Pro Dr EXIT ONLY (E.B.)	8.5′ x 2.5′				21.25														
				16.5′ x 14.5′				239.25					S4x7.7	14.5	14.5	14.5	334.95					
				16.5′ x 2.75′	45.38																	
54/54	1	GREEN	Dixieland Rd LEFT TURN ONLY (W.B.)	16′ x 9.5′				152.00					S4x7.7	9.5	9.5	9.5	219.45					
				16′ x 2.75′	44																	
PAGE TOTALS								1,176.25									1,578.50					
GRAND TOTAL					27.00		5,249.75	7,218.00									10,089.98		48.00			7.6



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Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

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Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS
SOLS IH-2

DN.:- LSJ	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- LSJ	8-95	9-08
CK.:- GV	5-01	

SHEET 9 OF 9

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		111

DATE: September 11, 2020
FILE: T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

WARNING
ILLEGAL TO CARRY
FIREARMS/AMMUNITION
INTO MEXICO
PENALTY - PRISON

WARNING
ILLEGAL TO CARRY
FIREARMS/AMMUNITION
INTO MEXICO
PENALTY - PRISON

N

SCALE: N. T. S.

EXIT 1A
U T Brownsville
Texas Southmost
College
NEXT EXIT

EXIT 1A
TEXAS 4 Intl Blvd
Intl Airport
Gateway Intl Bridge
1/4 MILE

EXIT 1A
TEXAS 4 Intl Blvd
Intl Airport
Gateway Intl Bridge
EXIT 1/4 MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 1 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				112
DSN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

FREEWAY ENDS
½ MILE

WARNING
ILLEGAL TO CARRY
FIREARMS/AMMUNITION
INTO MEXICO
PENALTY - PRISON
BY MEXICAN LAW

N

SCALE: N. T. S.

EXIT
1A
E5-1c

1

EXIT 1A
TEXAS 4 Intl Blvd
Intl Airport
Gateway Intl Bridge

1

EXIT 1A
TEXAS 4 Intl Blvd
Intl Airport
Gateway Intl Bridge

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

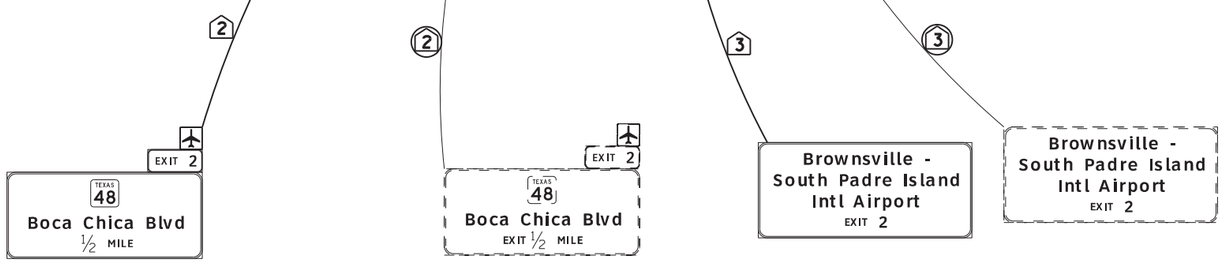
IH-69E
LARGE SIGN LAYOUTS

SHEET 2 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				113
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED



STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 3 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				114
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

3 EXIT 2 — TEXAS 48 Boca Chica Blvd — EXIT ONLY

3 EXIT 2 — TEXAS 48 Boca Chica Blvd — EXIT ONLY

4 EXIT 3 — Price Rd / Old Alice Rd — EXIT ½ MILE

4 EXIT 3 — Price Rd / Old Alice Rd — ½ MILE

5 EXIT 2 — TEXAS 48 Boca Chica Blvd — EXIT ONLY

5 EXIT 2 — TEXAS 48 Boca Chica Blvd — EXIT ONLY

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 4 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK: DN: GV	ORTGINAL	SEP. 2020		TEXAS				115
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK: DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

EXIT 2
E5-1c

1

EXIT 3
Price Rd
Old Alice Rd
EXIT ONLY

1

EXIT 3
Price Rd
Old Alice Rd
EXIT ONLY

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 5 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				116
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

EXIT 1B
12th - 14th St
¾ MILE

EXIT 1B
12th - 14th St
EXIT ¾ MILE

EXIT 1C
6th St
EXIT ONLY

EXIT 1C
6th St
EXIT ONLY

N

SCALE: N.T.S.

H
EXIT 4
BUSINESS 77 FM 802
Ruben M Torres Sr Blvd
1 MILE

H
EXIT 4
BUSINESS 77 FM 802
Ruben M Torres Sr Blvd
EXIT 1 MILE

EXIT 3
Price Rd
Old Alice Rd
EXIT ONLY

EXIT 3
Price Rd
Old Alice Rd
EXIT ONLY

EXIT 3
E5-1c

5
EXIT 4
HOSPITAL
NEXT EXIT

5
HOSPITAL
EXIT 4

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 6 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				117
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

TEXAS TRAVEL INFORMATION CENTER
23 MILES
OFICINA DE TURISMO
37 KM

TEXAS TRAVEL INFORMATION CENTER
23 MILES
OFICINA DE TURISMO
37 KM

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 7 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				118
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

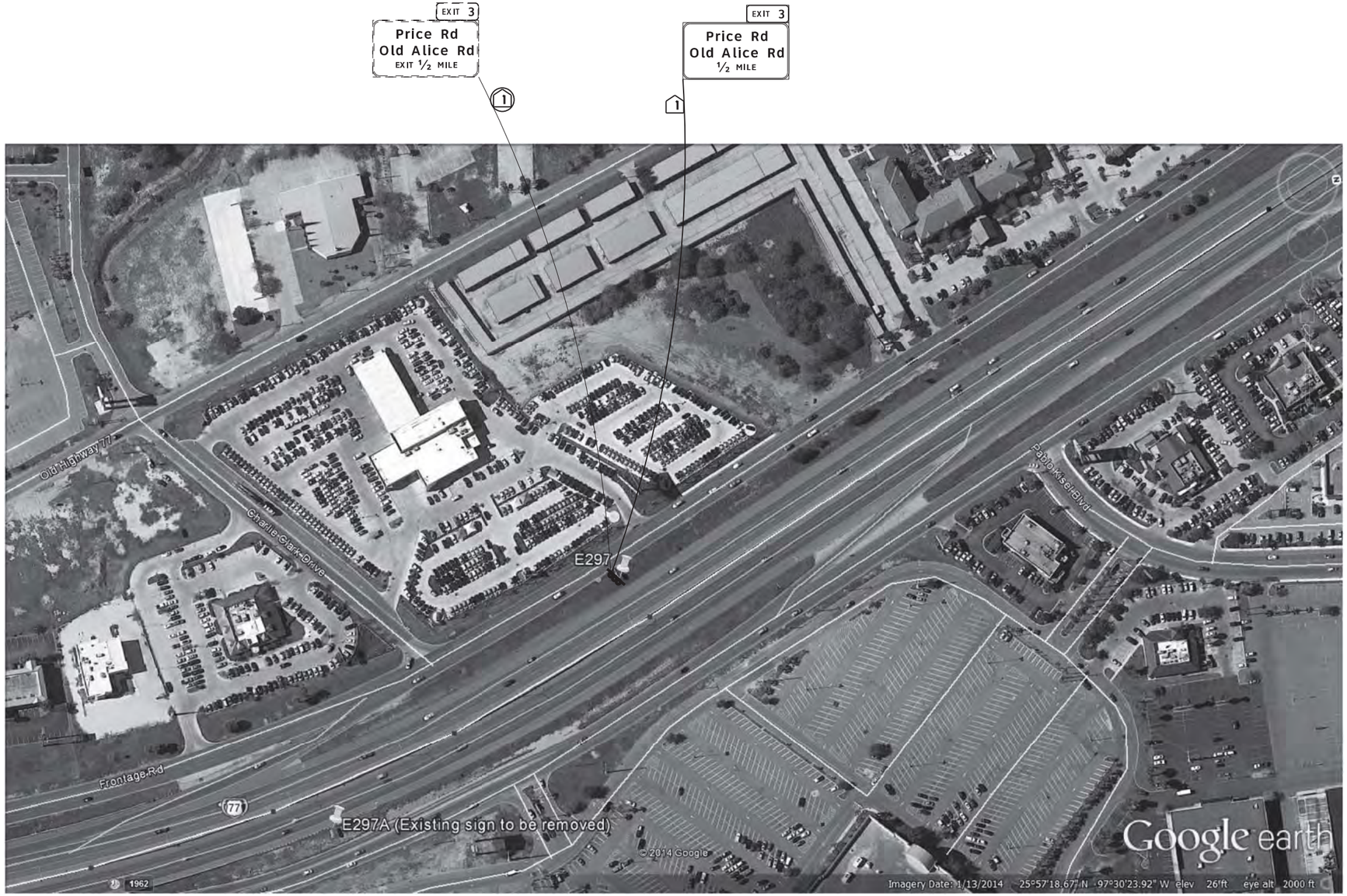
TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 8 OF 53

DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
ORIGINAL	SEP. 2020		TEXAS				119
		STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
		PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

DSN: LSJ CK DSN: GV DRN: LSJ CK DRN: GV



N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 9 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				120
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 10 OF 53

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					121
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001		IH-2, ETC.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 11 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS			122
DSN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 12 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		123
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 13 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			124
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

EXIT 10 A
Palo Alto Battlefield Natl Historic Park
NEXT RIGHT

EXIT 10 A
Senator Eddie Lucio Jr Highway
NEXT RIGHT

EXIT 10 A
TO
TEXAS 550 FM 511
Port of Brownsville

EXIT 10 A
TO
169 TEXAS 550 FM 51
Port of Brownsville

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

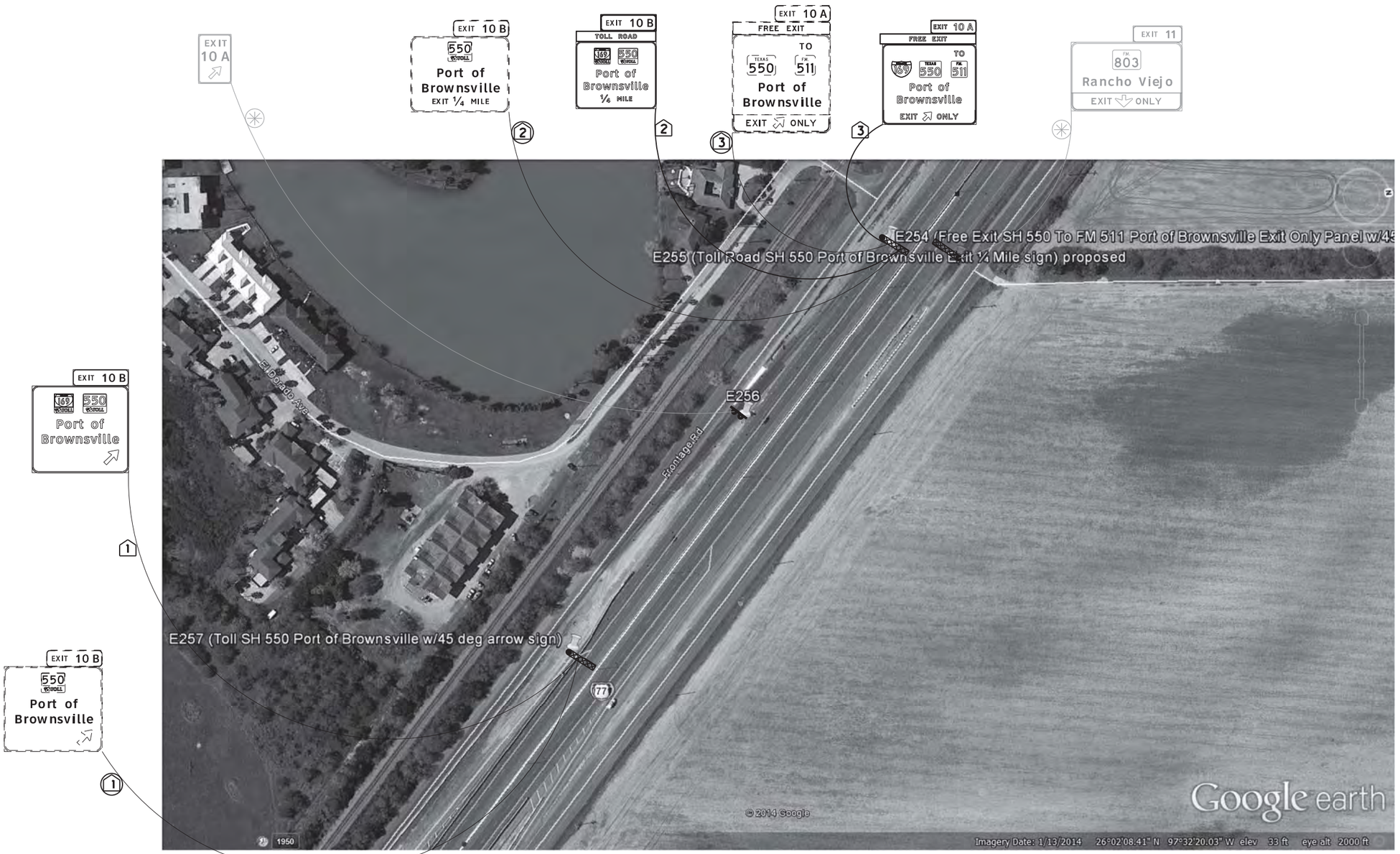
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 14 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				125
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 15 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			126
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

EXIT 10 A
Senator Eddie Lucio Jr Highway
NEXT RIGHT

1

EXIT 11
FM 803
Rancho Viejo
EXIT ONLY

1

EXIT 11
FM 803
Rancho Viejo
EXIT ONLY

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 16 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORTGINAL	SEP. 2020		TEXAS				127
DSN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 17 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				128
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

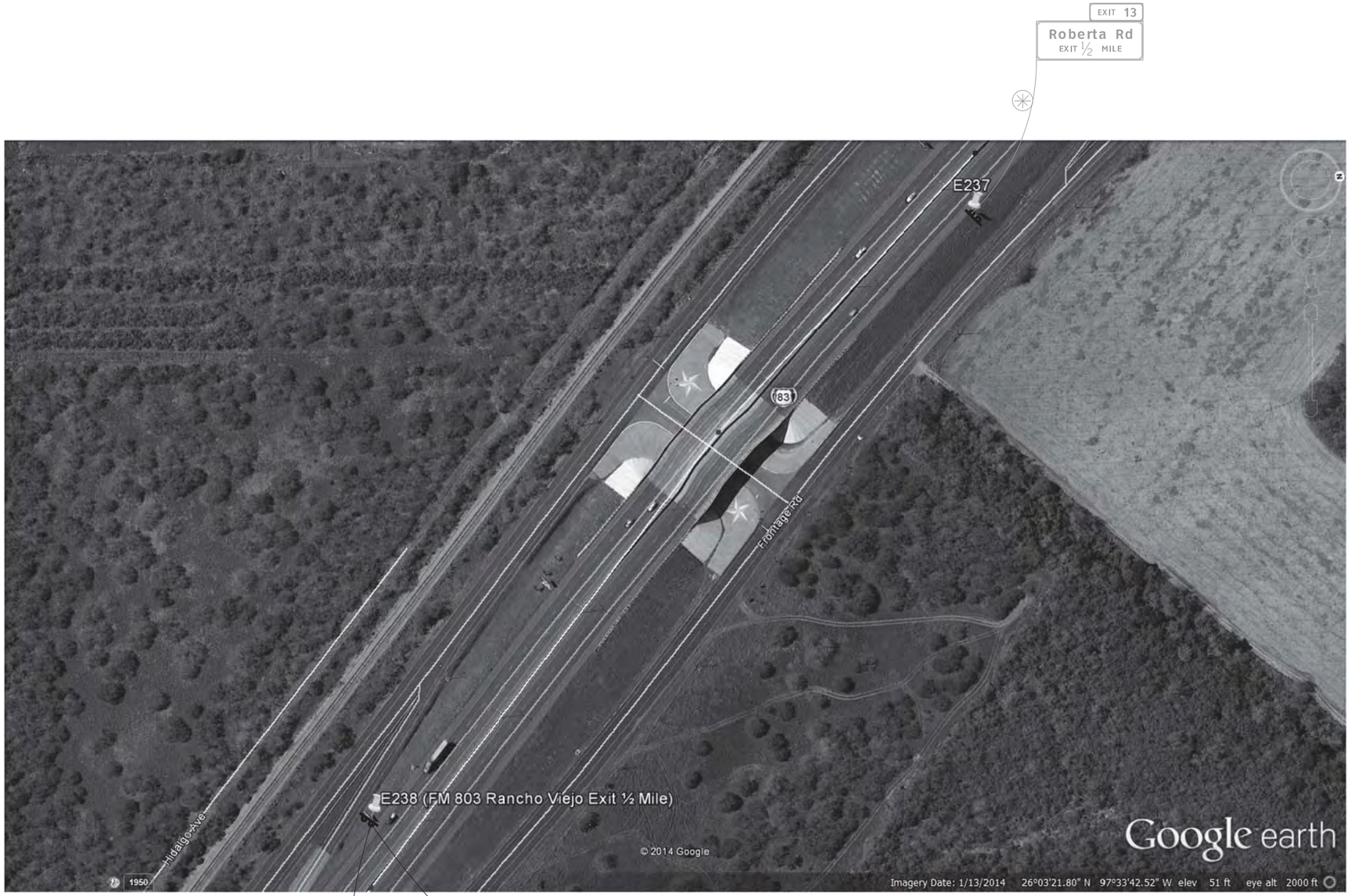
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 18 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS			129
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.



N

SCALE: N. T. S.

1

EXIT 11
FM 803
Rancho Viejo
EXIT ½ MILE

1

EXIT 11
FM 803
Rancho Viejo
½ MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 19 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				130
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 20 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			131
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 21 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				132
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

EXIT 13
E5-1c

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 22 OF 53

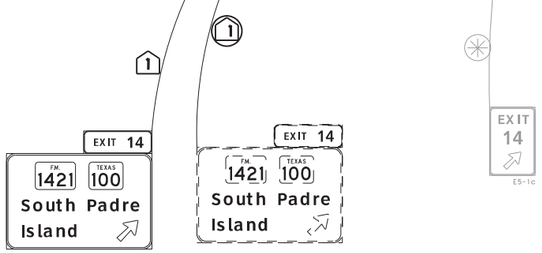
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			133
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED



STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 23 OF 53

DN: LSJ	DRAWING	DATE	TXDOT DES. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				134
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 24 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				135
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 25 OF 53

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		136
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
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Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 26 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				137
DN: LSJ	STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.		
CK DN: GV	PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.		

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
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Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 27 OF 53

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS		138
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.

N

SCALE: N. T. S.

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

EXIT 19 B
ES-1c

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 28 OF 53

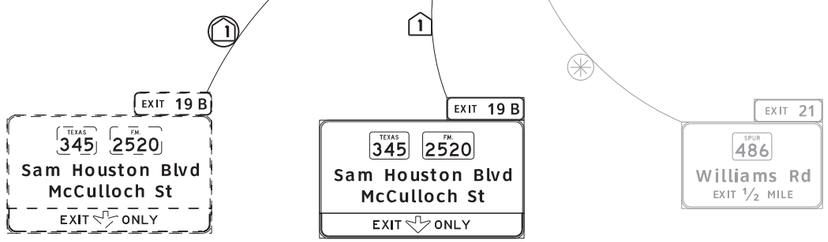
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					139
DN: LSJ			STATE DIST. NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED



STATE OF TEXAS
RAQUEL CANTU
130317
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PROFESSIONAL ENGINEER

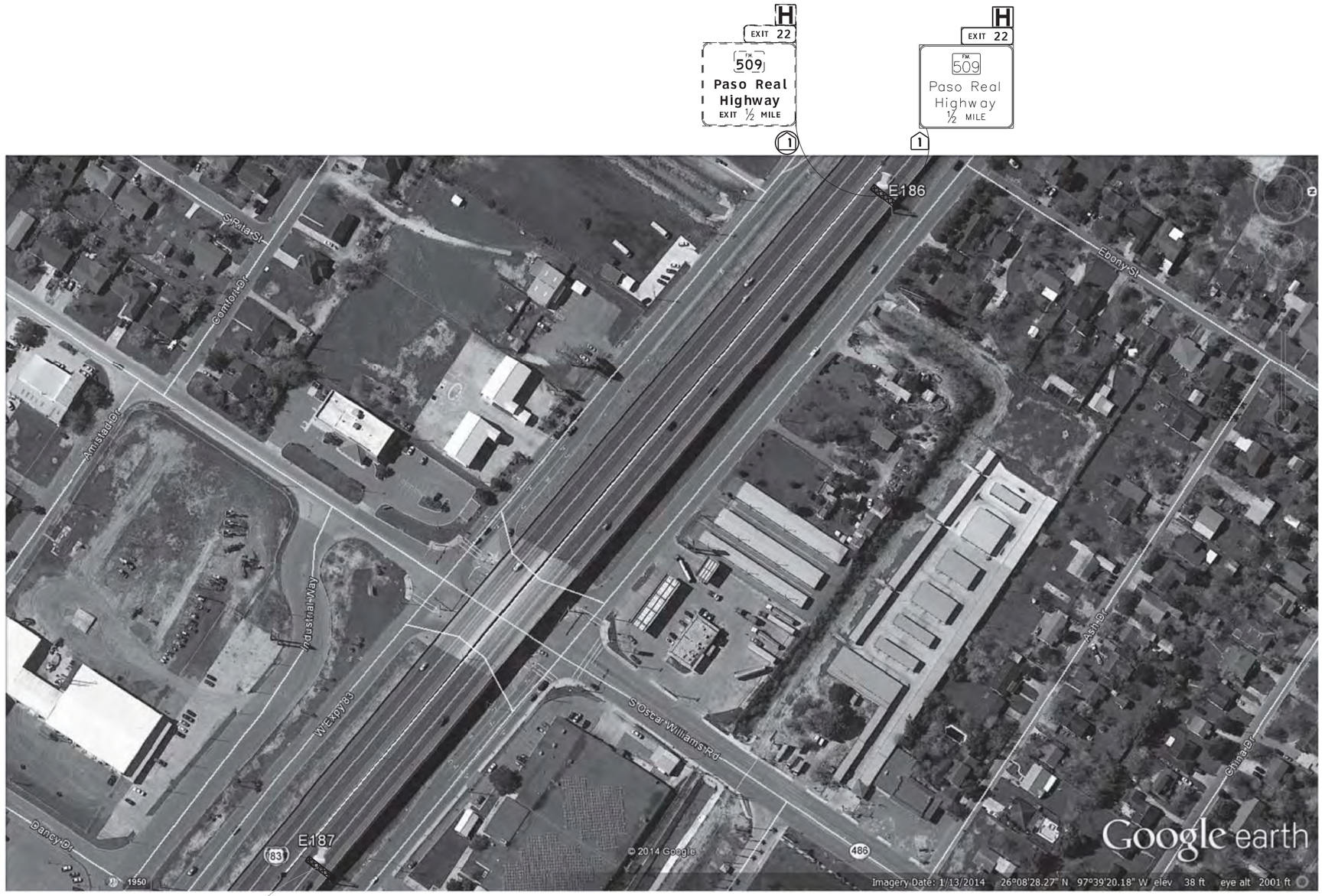
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 29 OF 53

DN: LSJ	DRAWING	DATE	TED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		140
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6273 / 50 / 001	IH-2, ETC.



N

SCALE: N. T. S.

Mexico
Free Trade Intl Bridge
EXIT 22

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 30 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS					141
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001		IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 31 OF 53

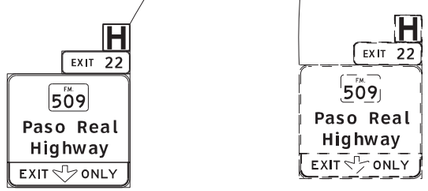
DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				142
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED



STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 32 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				143
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
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Raquel Cantu 11.06.20

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IH-69E
LARGE SIGN LAYOUTS

SHEET 33 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				144
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

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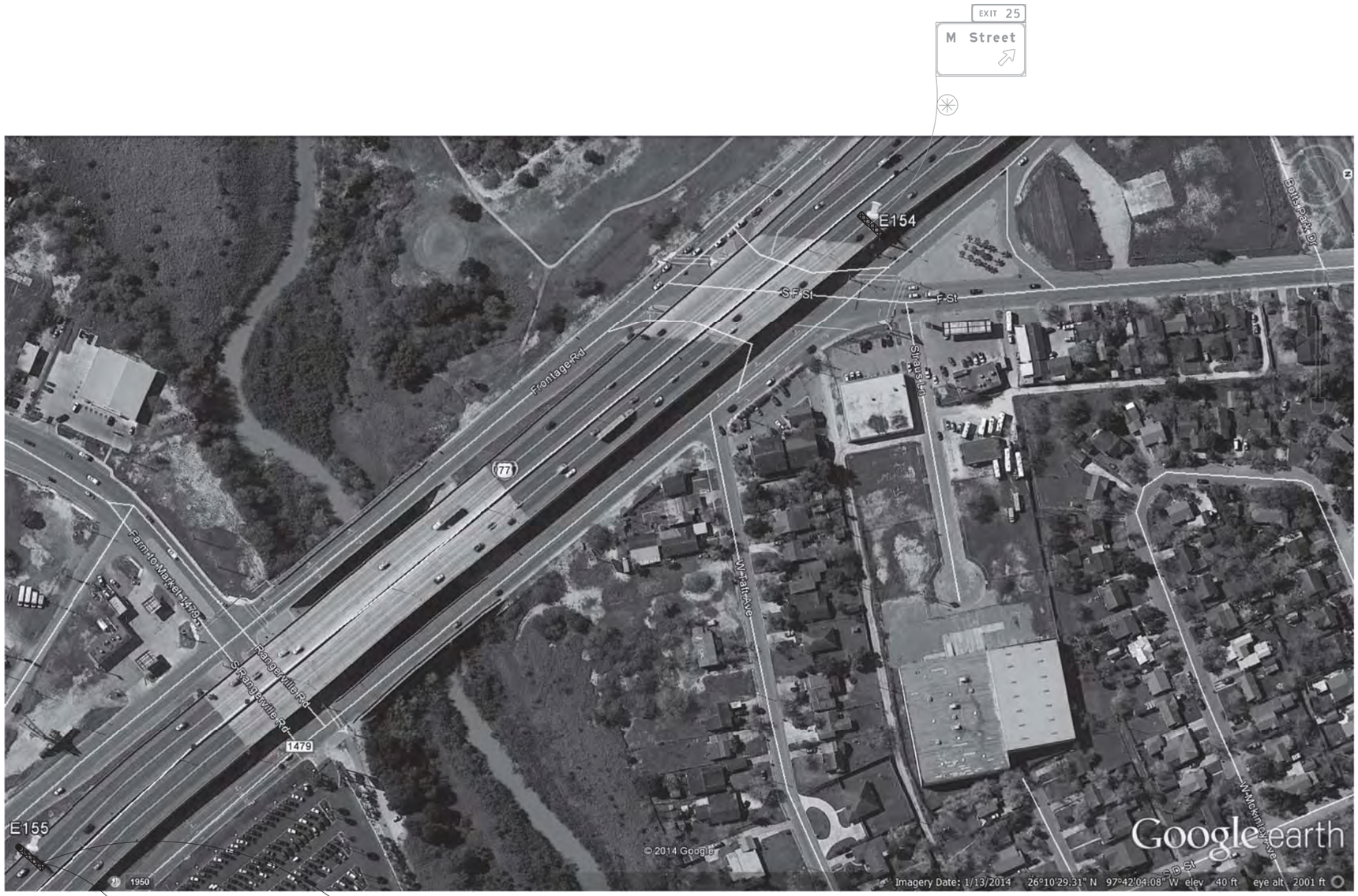
IH-69E
LARGE SIGN LAYOUTS

SHEET 34 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				145
DSN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6273	50	001	IH-2, ETC.

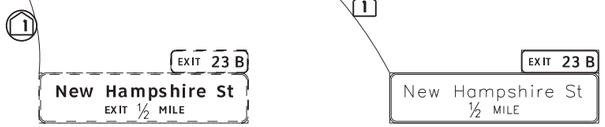


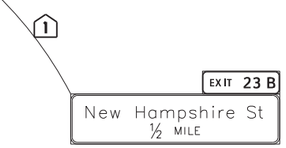
N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED





STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

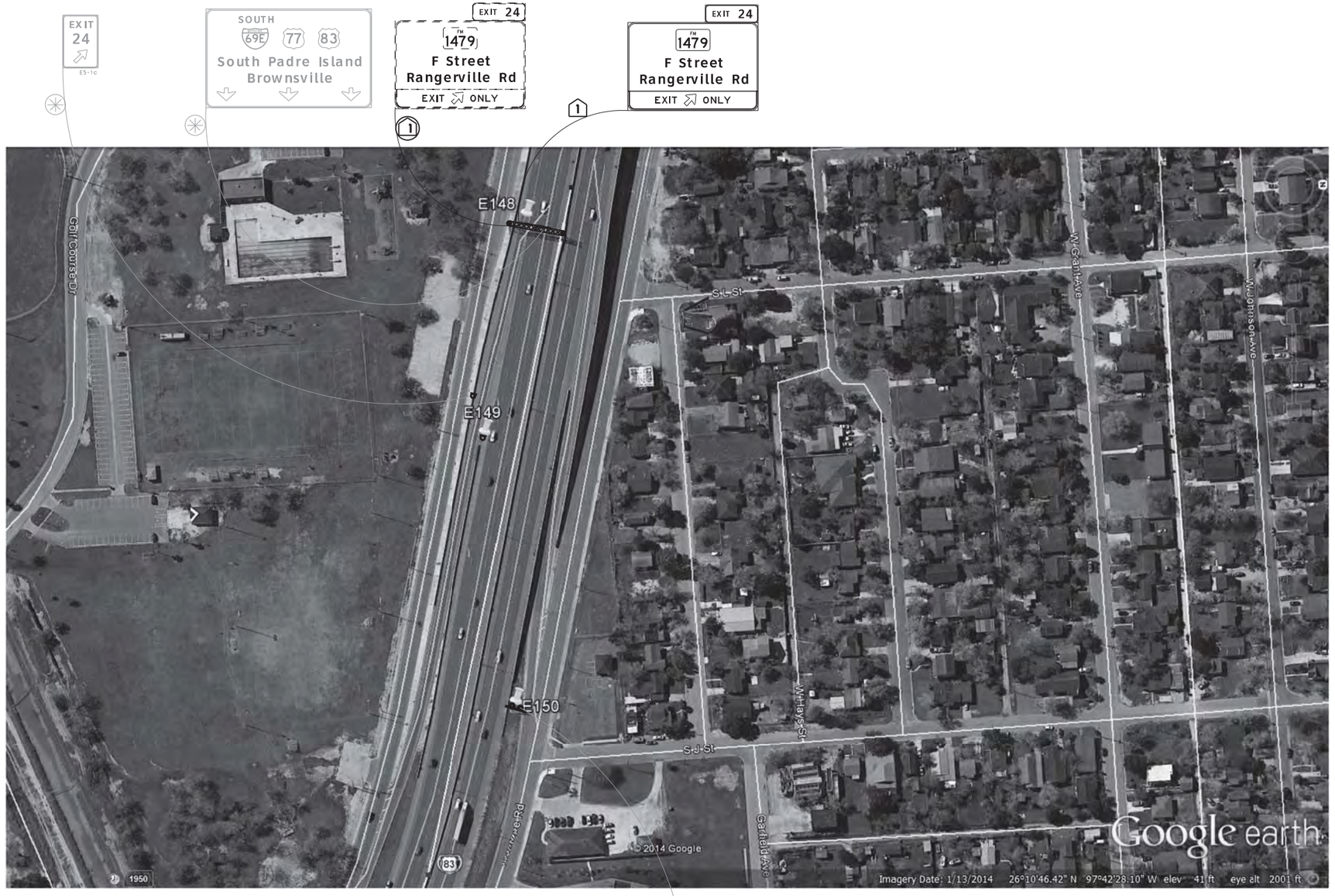
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 35 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				146
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N. T. S.

EXIT 26 A
Lincoln Ave
EXIT 1/4 MILE

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 36 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS				147
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

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IH-69E
LARGE SIGN LAYOUTS

SHEET 37 OF 53

DSN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				148
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

EXIT 26 B
E5-1c

EXIT 26 C
Baseball Stadium
NEXT EXIT

EXIT 26 C
E5-1c

EXIT 24
FM 1479
F Street
Rangerville Rd
EXIT 1/2 MILE

EXIT 26 C
Downtown
83 BUSINESS
Tyler Ave
Fairpark Blvd

Texas Travel Information Center
NEXT RIGHT

Texas Travel Information Center
EXIT 26 C

Downtown
83 BUSINESS
Tyler Ave
Fairpark Blvd
NEXT RIGHT

Downtown
83 BUSINESS
Tyler Ave
Fairpark Blvd
EXIT 26 C

EXIT 26 B
EVACUATION ROUTE VIA IH 2
WEST
2 83
McAllen
EXIT ONLY

EVACUATION ROUTE VIA I69E
NORTH
69E 77
Raymondville
Corpus Christi

EVACUATION ROUTE VIA I69E
NORTH
69E 77
Raymondville
Corpus Christi

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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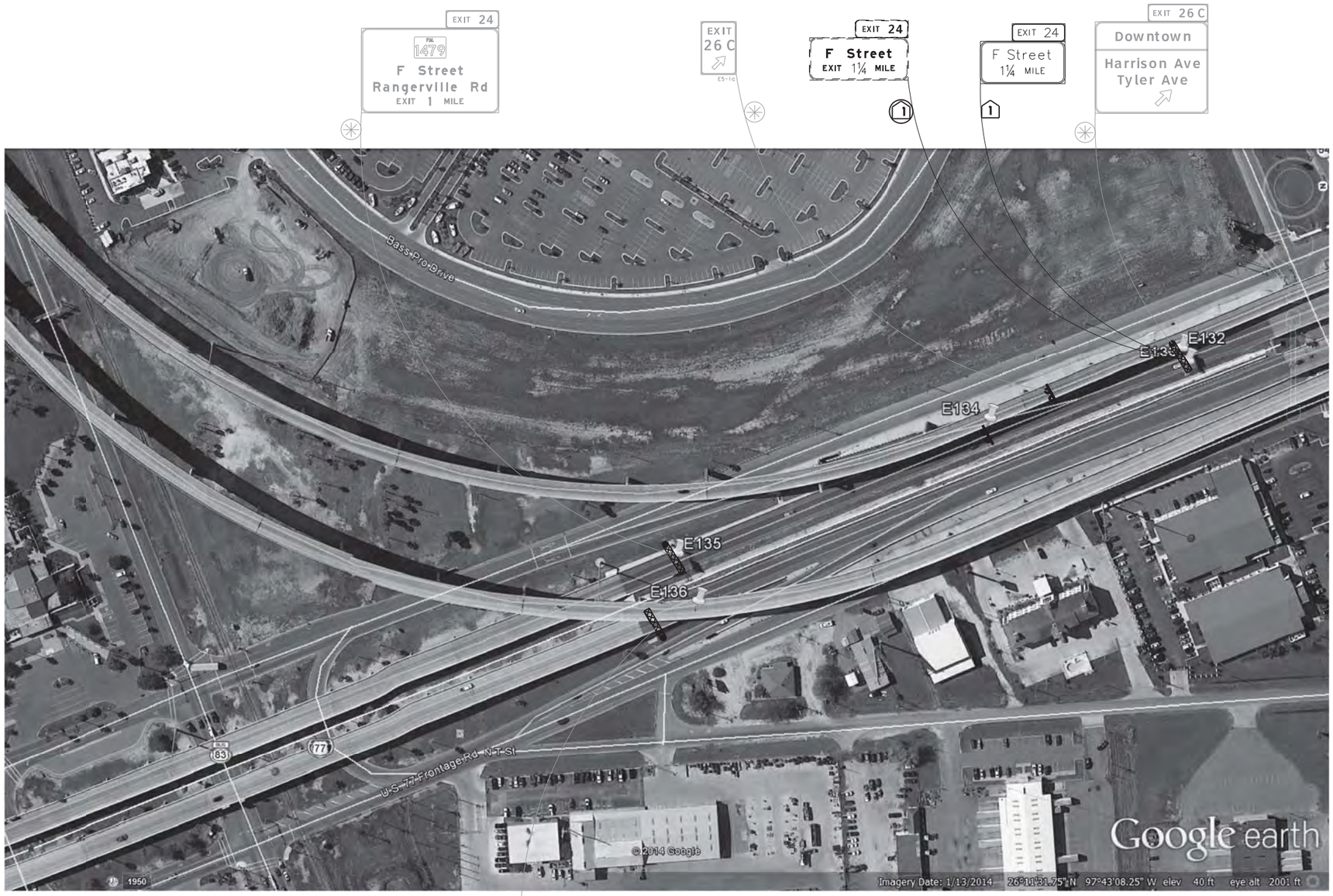
TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 38 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS			149
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



N

SCALE: N. T. S.

EXIT 28
FM 2994
Wilson Rd
Exit 1 Mile

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 39 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				150
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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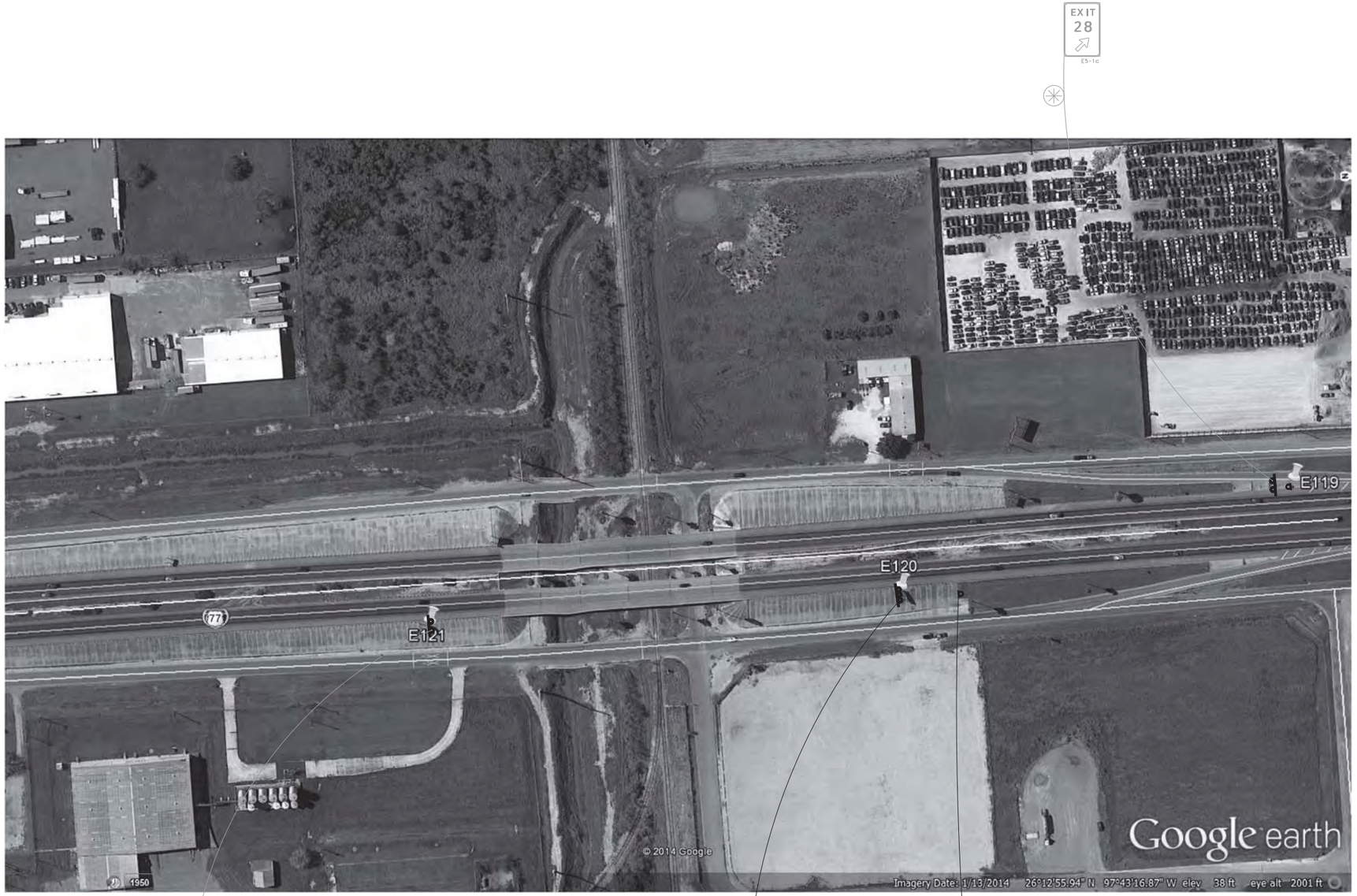
IH-69E
LARGE SIGN LAYOUTS

SHEET 40 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				151
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



EXIT 28
E5-1c

N

SCALE: N. T. S.

EXIT 29 A
BUSINESS
77
LOOP 499
Primera Rd
EXIT ½ MILE

1
EXIT 29 A
Valley International Airport
NEXT EXIT

1
Valley Intl Airport
EXIT 29 A

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 41 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				152
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

EXIT 29 A
BUSINESS
77
LOOP 499
Primera Rd

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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Raquel Cantu 11.06.20

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IH-69E
LARGE SIGN LAYOUTS

SHEET 42 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			153
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN LAYOUTS

SHEET 43 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			154
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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IH-69E
LARGE SIGN LAYOUTS

SHEET 44 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				155
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
RAQUEL CANTU
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Raquel Cantu 11.06.20

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IH-69E
LARGE SIGN LAYOUTS

SHEET 45 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				156
DSN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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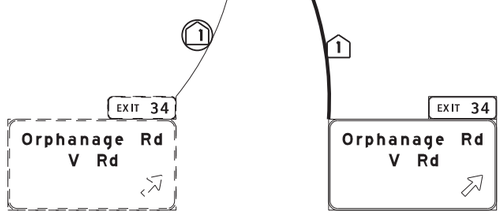
IH-69E
LARGE SIGN LAYOUTS

SHEET 46 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				157
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.



LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

STATE OF TEXAS
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LARGE SIGN LAYOUTS

SHEET 47 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			158
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N.T.S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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IH-69E
LARGE SIGN LAYOUTS

SHEET 48 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORIGINAL	SEP. 2020		TEXAS				159
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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IH-69E
LARGE SIGN LAYOUTS

SHEET 49 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORTGINAL	SEP. 2020		TEXAS				160
DSN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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LARGE SIGN LAYOUTS

SHEET 50 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				161
DN: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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LARGE SIGN LAYOUTS

SHEET 51 OF 53

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				162
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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LARGE SIGN LAYOUTS

SHEET 52 OF 53

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORTGINAL	SEP. 2020		TEXAS			163
DN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2 ETC.

N

SCALE: N. T. S.

LEGEND

- LARGE SIGN TO BE REMOVED
- LARGE SIGN TO BE INSTALLED
- SMALL SIGN TO BE REMOVED
- SMALL SIGN TO BE INSTALLED
- SIGN TO REMAIN IN PLACE
- LARGE SIGN TO BE RELOCATED

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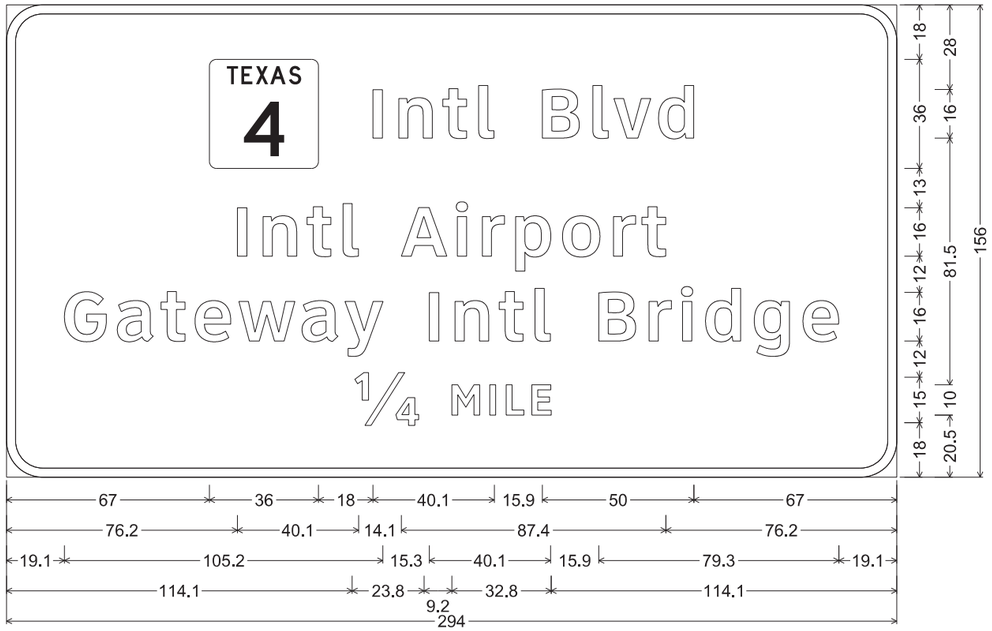
SHEET 53 OF 53

DSN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DSN: GV	ORTGINAL	SEP. 2020		TEXAS				164
DSN: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DSN: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



12.0" Radius, 3.0" Border, White on, Green;
State Highway 4 M1-6T1; "Intl Blvd", ClearviewHwy-5-W-R; "Intl Airport", ClearviewHwy-5-W-R;
"Gateway Intl Bridge", ClearviewHwy-5-W-R; "1/4 MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

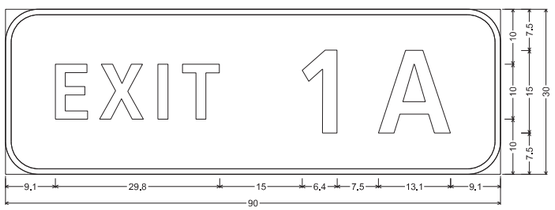
4	I	n	t	l	B	l	v	d
67.0	121.0	129.5	144.1	155.9	177.0	193.6	200.6	215.3

I	n	t	l	A	i	r	p	o	r	t
76.2	84.7	99.3	111.1	130.4	148.5	157.1	168.2	183.6	200.4	209.8

G	a	t	e	w	a	y	I	n	t	l	B	r	i	d	g	e
19.1	36.6	51.0	62.3	76.7	97.6	111.8	139.6	148.1	162.7	174.5	195.6	212.2	222.9	230.8	246.9	263.0

1/4	M	I	L	E
114.1	147.1	159.6	165.0	173.5

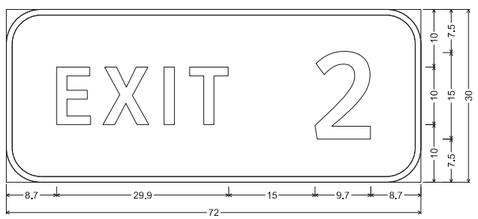
SHEET NO. 1 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "1", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	A
9.1	17.1	27.7	32.2	53.9	67.8

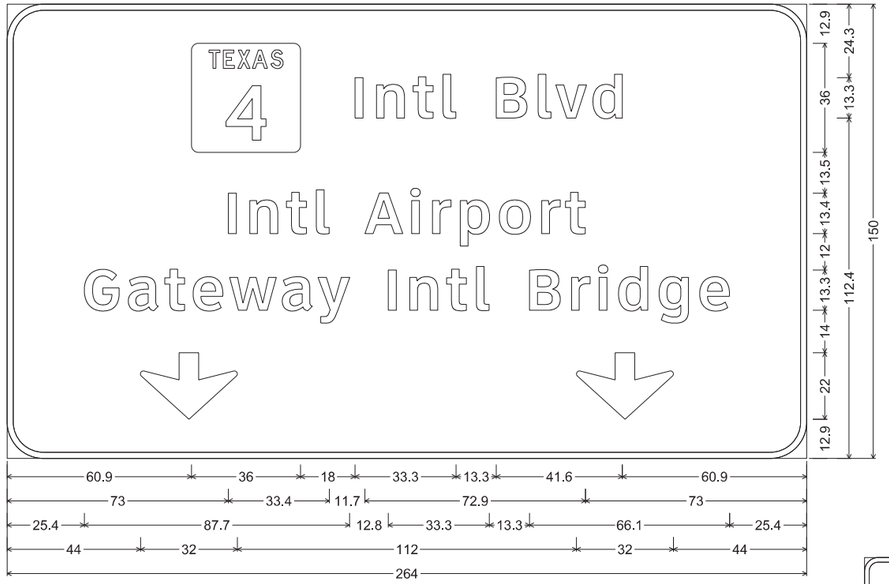
SHEET NO. 1 OF 53 SIGN NO. 1
SHEET NO. 2 OF 53 SIGN NO. 1
SHEET NO. 3 OF 53 SIGN NO. 1
SHEET NO. 4 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "2", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2
8.7	16.7	27.4	31.8	53.6

SHEET NO. 3 OF 53 SIGN NO. 2
SHEET NO. 4 OF 53 SIGN NO. 3
SHEET NO. 4 OF 53 SIGN NO. 5



12.0" Radius, 2.0" Border, White on, Green;
State Highway 4 M1-6T1; "Intl Blvd", ClearviewHwy-5-W-R; "Intl Airport", ClearviewHwy-5-W-R;
"Gateway Intl Bridge", ClearviewHwy-5-W-R; Down Arrow 22 - 22.0" 270'; Down Arrow 22 - 22.0" 270';
Table of letter and object lefts

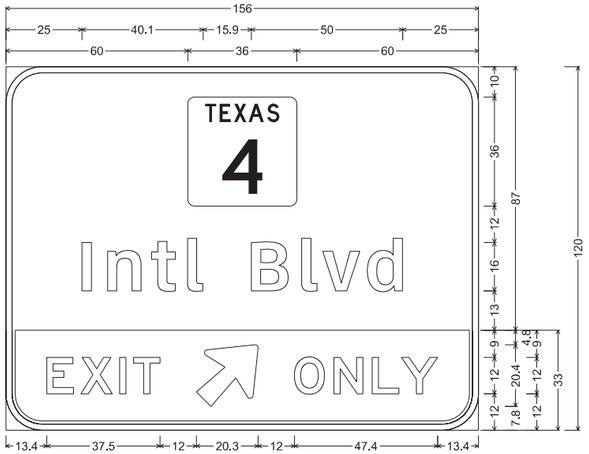
4	I	n	t	l	B	l	v	d
60.9	114.9	121.9	134.1	143.9	161.5	175.3	181.1	193.4

I	n	t	l	A	i	r	p	o	r	t
73.0	80.1	92.2	102.1	118.1	133.3	140.4	149.6	162.5	176.5	184.4

G	a	t	e	w	a	y	I	n	t	l	B	r	i	d	g	e
25.4	40.0	52.0	61.4	73.4	90.8	102.7	125.9	132.9	145.1	154.9	172.5	186.4	195.2	201.9	215.3	228.7

44.0	188.0

SHEET NO. 2 OF 53 SIGN NO. 1



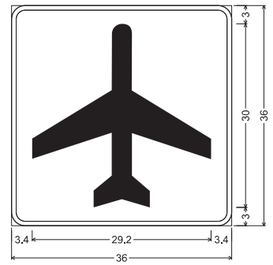
E11-1aR;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 4 M1-6T1; "Intl Blvd", ClearviewHwy-5-W-R;
E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

4
60.0

I	n	t	l	B	l	v	d
25.0	33.5	48.1	59.1	81.0	97.6	104.6	119.3

E	X	I	T		O	N	L	Y
13.4	24.7	37.5	42.1	62.9	95.2	108.3	120.9	130.6

SHEET NO. 3 OF 53 SIGN NO. 1



2.3" Radius, 0.8" Border, White on, Green;
Symbol RA010;

SHEET NO. 3 OF 53 SIGN NO. 2
SHEET NO. 4 OF 53 SIGN NO. 3
SHEET NO. 33 OF 53 SIGN NO. 2

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

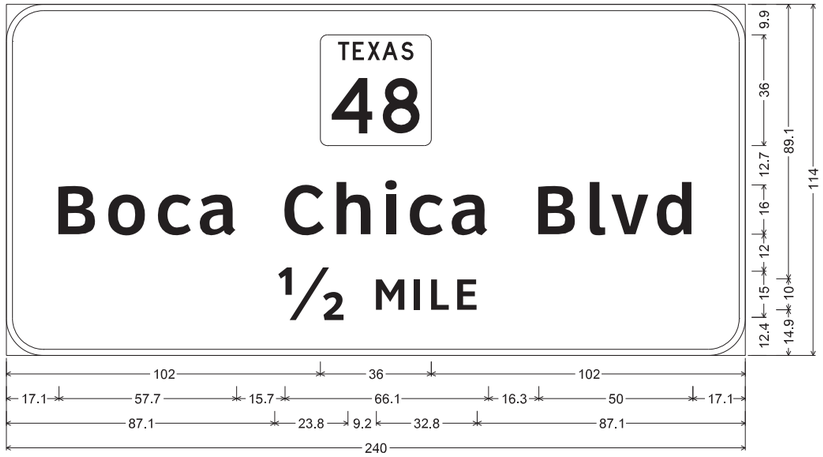
Raquel Cantu 11.06.20

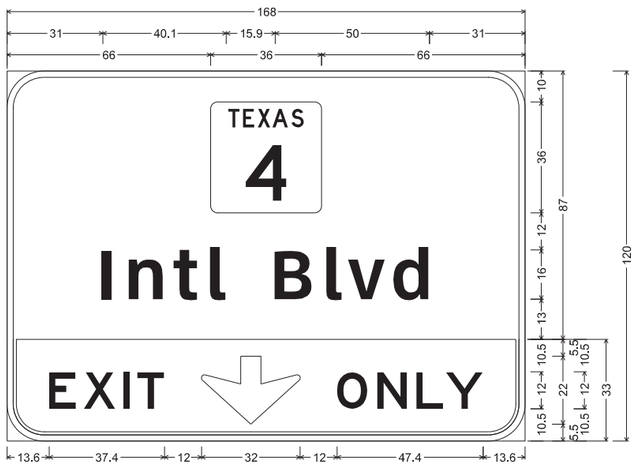
TEXAS DEPARTMENT OF TRANSPORTATION

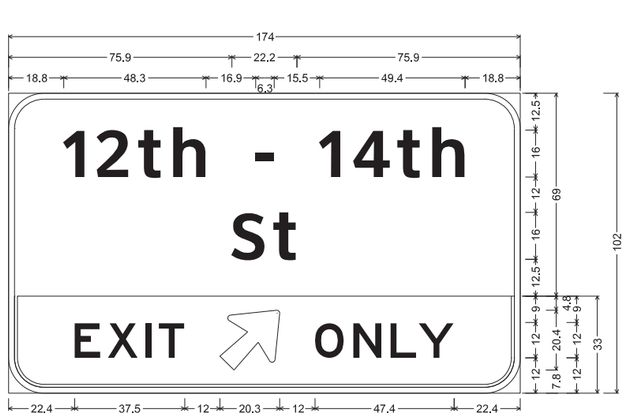
IH-69E
LARGE SIGN DETAIL SHEETS

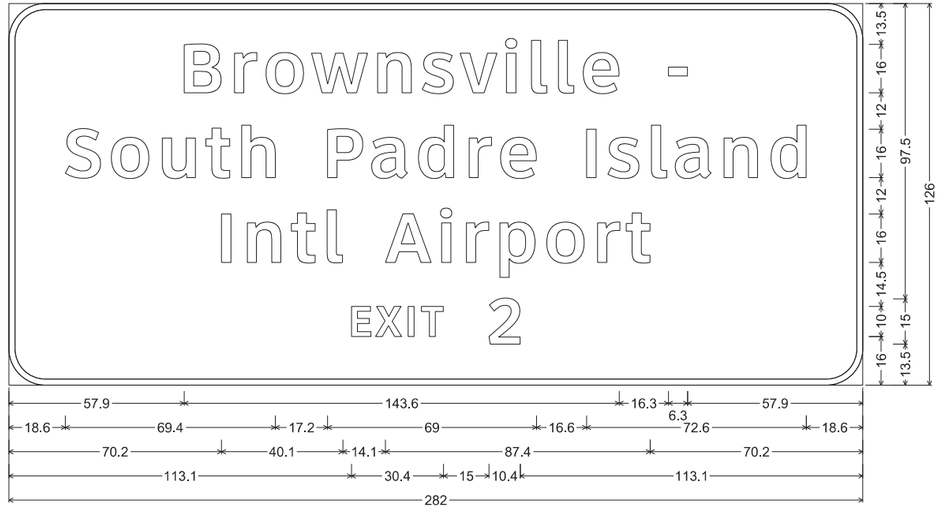
SHEET 1 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		165
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.









12.0" Radius, 2.0" Border, White on, Green;
State Highway 48 M1-6T2; "Boca Chica Blvd", ClearviewHwy-5-W-R; "½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	48	
102.0	36.0	102.0

	B		o		c		a		C		h		i		c		a
17.1	12.2	3.8	12.4	3.8	10.9	2.6	12.0	15.7	13.1	3.7	11.1	4.7	3.8	4.2	10.9	2.6	12.0

	B		l		v		d	
16.3	12.2	4.5	5.1	1.8	12.2	2.6	11.6	17.1

	½		M		I		L		E	
87.1	23.8	9.2	9.2	3.3	2.0	3.4	5.9	2.6	6.4	87.1

SHEET NO. 3 OF 53 SIGN NO. 2

12.0" Radius, 2.0" Border, White on, Green;
"Brownsville -", ClearviewHwy-5-W-R; "South Padre Island", ClearviewHwy-5-W-R; "Intl Airport", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R; "2", ClearviewHwy-5-W-R;
Table of widths and spaces

	B		r		o		w		n		s		v		i		l		l		e		-	
57.9	12.2	4.4	7.4	3.0	12.4	2.6	18.6	3.3	11.1	3.6	10.3	2.2	12.2	2.8	3.8	4.8	5.1	3.8	5.1	3.1	11.8	16.3	6.3	57.9

	S		o		u		t		h		P		a		d		r		e
18.6	11.7	3.5	12.4	4.4	11.0	3.4	8.0	3.9	11.1	17.2	11.7	2.9	11.9	3.6	11.6	5.1	7.4	3.0	11.8

	I		s		l		a		n		d	
16.6	3.2	3.8	10.3	4.1	5.1	2.8	11.9	4.1	11.2	4.4	11.7	18.6

	I		n		t		l		A		i		r		p		o		r		t	
70.2	3.3	5.2	11.1	3.5	7.9	3.9	5.2	14.1	15.2	2.9	3.8	4.8	7.4	3.7	11.6	3.8	12.4	4.4	7.4	2.0	8.0	70.2

	E		X		I		T		2	
113.1	6.4	1.5	8.7	2.1	2.1	2.3	7.3	15.0	10.4	113.1

SHEET NO. 3 OF 53 SIGN NO. 3

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 4 M1-6T1; "Intl Blvd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow Custom - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

4
66.0

I	n	t	l	B	l	v	d
31.0	39.5	54.1	65.9	87.0	103.6	110.6	125.3

E	X	I	T	⇩	O	N	L	Y
13.6	24.9	37.7	42.2	63.0	107.0	120.1	132.7	142.4

SHEET NO. 4 OF 53 SIGN NO. 1

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"12th - 14th", ClearviewHwy-5-W-R; "St", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

1	2	t	h	-	1	4	t	h
18.8	30.1	44.2	56.0	84.0	105.8	117.2	132.3	144.1

S	t
75.9	90.1

E	X	I	T	⇗	O	N	L	Y
22.4	33.7	46.5	51.1	71.9	104.2	117.3	129.9	139.6

SHEET NO. 4 OF 53 SIGN NO. 2

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "1", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	B
10.2	18.3	28.9	33.4	55.1	69.0

SHEET NO. 4 OF 53 SIGN NO. 2
SHEET NO. 6 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

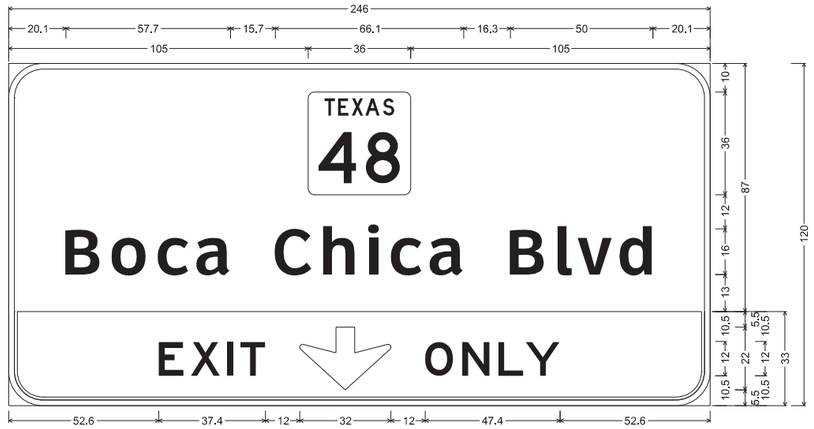
Raquel Cantu 11.06.20

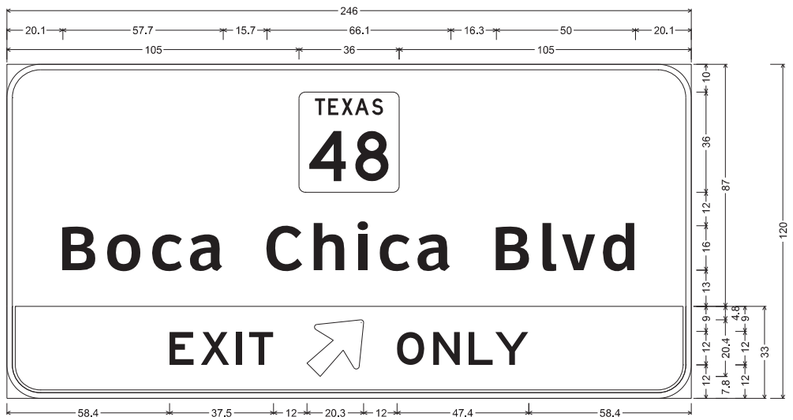
TEXAS DEPARTMENT OF TRANSPORTATION

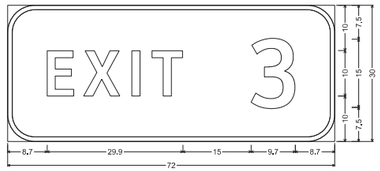
IH-69E
LARGE SIGN DETAIL SHEETS

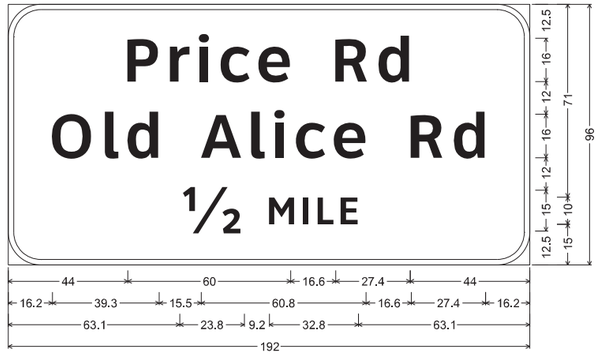
SHEET 2 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					166
DW: LSJ			STATE DIST.NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.









E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 48 M1-6T2; "Boca Chica Blvd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow Custom - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

48
105.0

B	o	c	a	C	h	i	c	a	B	l	v	d
20.1	36.1	52.3	65.8	93.5	110.3	126.1	134.1	147.6	175.9	192.6	199.5	214.3

E	X	I	T	⇩	O	N	L	Y
52.6	63.9	76.7	81.2	102.0	146.0	159.1	171.7	181.4

SHEET NO. 4 OF 53 SIGN NO. 3

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "3", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	3
8.7	16.7	27.3	31.8	53.6

SHEET NO. 4 OF 53 SIGN NO. 4
SHEET NO. 5 OF 53 SIGN NO. 1
SHEET NO. 6 OF 53 SIGN NO. 4
SHEET NO. 9 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Price Rd", ClearviewHwy-5-W-R; "Old Alice Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	P		r		i		c		e		R		d	
44.0	11.7	3.9	7.4	3.2	3.8	4.2	10.9	3.0	11.9	16.6	11.9	3.8	11.7	44.0

	O		l		d		A		l		i		c		e
16.2	14.9	4.6	5.1	3.1	11.6	15.5	15.2	3.3	5.2	3.3	3.8	4.2	10.9	3.0	11.9

	R		d	
16.6	11.9	3.8	11.7	16.2

	½		M		I		L		E	
63.1	23.8	9.2	9.2	3.3	2.0	3.4	5.9	2.6	6.4	63.1

SHEET NO. 4 OF 53 SIGN NO. 4

12.0" Radius, 2.0" Border, White on, Green;
"12th - 14th", ClearviewHwy-5-W-R; "St", ClearviewHwy-5-W-R;
"¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	1		2		t		h		-
18.8	7.3	4.0	11.1	3.0	7.9	3.9	11.1	16.9	6.3

	1		4		t		h	
15.5	7.3	4.1	12.6	2.5	7.9	3.9	11.1	18.8

	S		t	
75.9	11.7	2.5	8.0	75.9

	¾		M		I		L		E	
54.2	23.6	9.2	9.2	3.3	2.1	3.4	5.8	2.6	6.4	54.2

SHEET NO. 6 OF 53 SIGN NO. 1

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 48 M1-6T2; "Boca Chica Blvd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

48
105.0

B	o	c	a	C	h	i	c	a	B	l	v	d
20.1	36.1	52.3	65.8	93.5	110.3	126.1	134.1	147.6	175.9	192.6	199.5	214.3

E	X	I	T	⇗	O	N	L	Y
58.4	69.7	82.5	87.1	107.9	140.2	153.3	165.9	175.6

SHEET NO. 4 OF 53 SIGN NO. 5

RAQUEL CANTU
130317

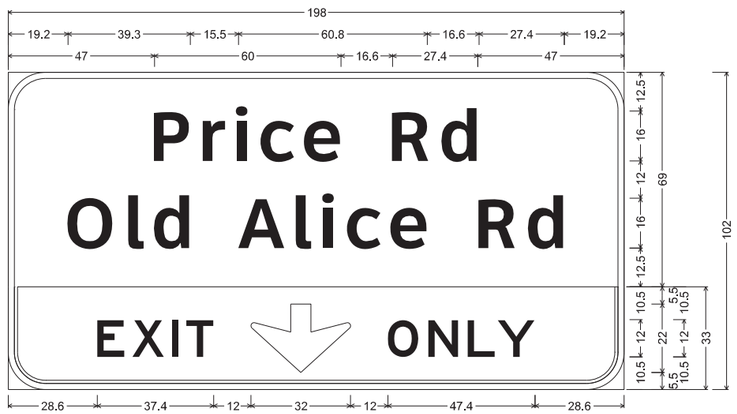
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 3 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				167
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



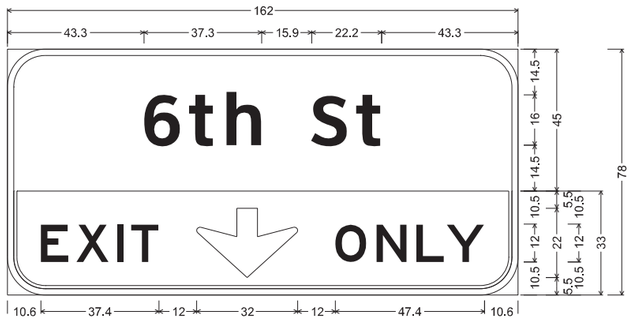
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"Price Rd", ClearviewHwy-5-W-R; "Old Alice Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow Custom - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

P	r	i	c	e	R	d				
47.0	62.6	73.2	81.2	95.1	123.6	139.3				
O	l	d	A	l	i	c	e	R	151.4	d
19.2	38.7	46.9	74.0	92.5	101.0	109.0	122.9			167.1
E	X	I	T	⇩	O	N	L	Y		
28.6	39.9	52.7	57.2	78.0	122.0	135.1	147.7	157.4		

SHEET NO. 5 OF 53 SIGN NO. 1



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"6th St", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow Custom - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

6	t	h	S	t					
43.3	57.7	69.5	96.5	110.7					
E	X	I	T	⇩	O	N	L	Y	
10.6	21.9	34.7	39.2	60.0	104.0	117.1	129.7	139.4	

SHEET NO. 6 OF 53 SIGN NO. 2

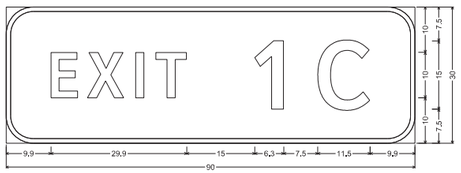
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"Price Rd", ClearviewHwy-5-W-R; "Old Alice Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

P	r	i	c	e	R	d				
47.0	62.6	73.2	81.2	95.1	123.6	139.3				
O	l	d	A	l	i	c	e	R	151.4	d
19.2	38.7	46.9	74.0	92.5	101.0	109.0	122.9			167.1
E	X	I	T	⇗	O	N	L	Y		
34.4	45.7	58.5	63.1	83.9	116.2	129.3	141.9	151.6		

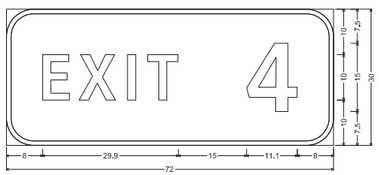
SHEET NO. 6 OF 53 SIGN NO. 4



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "1", ClearviewHwy-4-W; "C", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	T	C
9.9	17.9	28.5	33.0	54.8	68.6

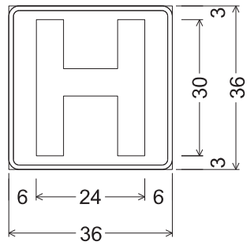
SHEET NO. 6 OF 53 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "4", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	4
8.0	16.8	26.6	31.1	52.9

SHEET NO. 6 OF 53 SIGN NO. 3
SHEET NO. 10 OF 53 SIGN NO. 1



2.3" Radius, 1.0" Border, White on, Blue;
"H", E Mod;
Table of widths and spaces

	H	
6.0	24.0	6.0

SHEET NO. 6 OF 53 SIGN NO. 3
SHEET NO. 10 OF 53 SIGN NO. 1
SHEET NO. 30 OF 53 SIGN NO. 1
SHEET NO. 32 OF 53 SIGN NO. 1
SHEET NO. 32 OF 53 SIGN NO. 2
SHEET NO. 33 OF 53 SIGN NO. 1
SHEET NO. 33 OF 53 SIGN NO. 2
SHEET NO. 33 OF 53 SIGN NO. 1
SHEET NO. 33 OF 53 SIGN NO. 2

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

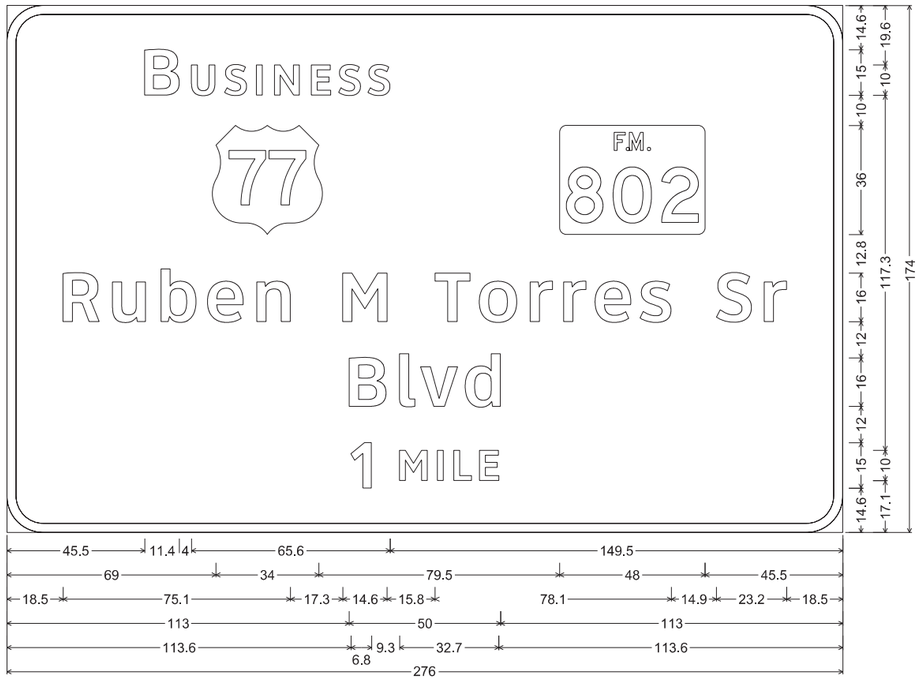
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 4 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				168
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



12.0" Radius, 3.0" Border, White on, Green;
"B", ClearviewHwy-5-W; "USINESS", ClearviewHwy-5-W; US 77 M1-4; State Highway 802 3;
"Ruben M Torres Sr", ClearviewHwy-5-W-R; "Blvd", ClearviewHwy-5-W-R; "1 MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	B		U		S		I		N		E		S		S	
45.5	11.4	4.0	7.8	3.2	7.3	3.1	2.1	3.9	8.3	3.9	6.5	2.5	7.3	2.4	7.3	149.5

	77		802	
69.0	34.0	79.5	48.0	45.5

	R		u		b		e		n		M		T		o		r		r		e		s
18.5	11.9	4.5	10.9	5.1	11.6	3.7	11.9	4.4	11.1	17.3	14.6	15.8	11.7	3.0	12.4	4.4	7.4	3.6	7.4	3.0	11.9	3.0	10.3

	S		r	
14.9	11.6	4.2	7.4	18.5

	B		l		v		d	
113.0	12.2	4.4	5.2	1.8	12.2	2.5	11.7	113.0

	1		M		I		L		E	
113.6	6.8	9.3	9.1	3.3	2.1	3.4	5.8	2.6	6.4	113.6

SHEET NO. 6 OF 53 SIGN NO. 3

12.0" Radius, 2.0" Border, White on, Green;
"Morrison", ClearviewHwy-5-W-R; "Road", ClearviewHwy-5-W-R;
Arrow A-3 - 35.6" 45';
Table of widths and spaces

	M		o		r		r		i		s		o		n	
18.7	14.7	4.6	12.4	4.4	7.4	3.6	7.4	3.3	3.8	3.3	10.3	3.5	12.3	4.5	11.1	18.7

	R		o		a		d		↗	
18.7	11.9	3.8	12.4	3.5	11.9	3.5	11.7	19.9	28.0	18.7

SHEET NO. 10 OF 53 SIGN NO. 2

12.0" Radius, 2.0" Border, White on, Green;
"TEXAS TRAVEL", ClearviewHwy-5-W-R; "INFORMATION CENTER", ClearviewHwy-5-W-R;
"23 MILES", ClearviewHwy-5-W-R; "OFICINA DE TURISMO", ClearviewHwy-5-W-R;
"37 KM", ClearviewHwy-5-W-R;
Table of widths and spaces

	T		E		X		A		S		T		R		A		V		E		L	
51.1	8.7	2.9	7.6	1.9	10.4	1.2	11.4	1.6	8.8	11.0	8.8	2.8	9.0	2.1	11.4	1.2	10.4	2.6	7.7	3.3	7.0	51.1

	I		N		F		O		R		M		A		T		I		O		N
13.5	2.4	4.1	9.9	4.1	7.4	2.7	11.2	3.5	8.9	3.5	11.0	2.7	11.4	1.4	8.8	2.7	2.5	3.6	11.2	3.5	9.9

	C		E		N		T		E		R	
12.6	9.8	2.9	7.7	3.3	9.9	2.9	8.7	2.9	7.6	3.3	9.0	13.5

	2		3		M		I		L		E		S	
75.9	8.3	2.5	8.4	12.6	11.0	4.0	2.4	4.1	7.0	3.1	7.7	2.3	8.8	75.9

	O		F		I		C		I		N		A		D		E
17.6	11.2	3.6	7.3	3.2	2.4	3.6	9.8	2.9	2.4	4.1	9.9	2.7	11.4	11.6	9.7	3.6	7.7

	T		U		R		I		S		M		O	
11.1	8.8	2.8	9.4	4.0	8.9	3.4	2.4	3.1	8.7	3.3	11.0	3.6	11.2	17.6

	3		7		K		M	
89.9	8.5	2.3	8.4	11.9	9.4	2.7	11.0	89.9

SHEET NO. 7 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "5", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	5
8.7	16.7	27.4	31.8	53.6

SHEET NO. 8 OF 53 SIGN NO. 1
SHEET NO. 10 OF 53 SIGN NO. 2

9.0" Radius, 1.5" Border, White on, Blue;
"HOSPITAL", ClearviewHwy-5-W-R; "EXIT", ClearviewHwy-5-W-R; "4", ClearviewHwy-5-W-R;
Table of letter and object lefts

H	O	S	P	I	T	A	L
16.6	29.4	43.1	55.1	66.8	72.1	82.3	96.4

E	X	I	T	4
31.4	39.3	50.1	54.5	76.8

SHEET NO. 6 OF 53 SIGN NO. 5

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"Pablo Kisel Blvd", ClearviewHwy-5-W-R; "Morrison Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow Custom - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

P	a	b	l	o	K	i	s	e	l	B	l	v	d
19.2	33.7	49.8	65.8	74.1	103.1	118.6	125.8	139.5	155.8	176.8	193.5	200.4	215.2

M	o	r	r	i	s	o	n	R	d
47.4	66.6	83.5	94.5	105.1	112.3	126.0	142.8	171.2	187.0

E	X	I	T	⇩	O	N	L	Y
52.6	63.9	76.7	81.2	102.0	146.0	159.1	171.7	181.4

SHEET NO. 8 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

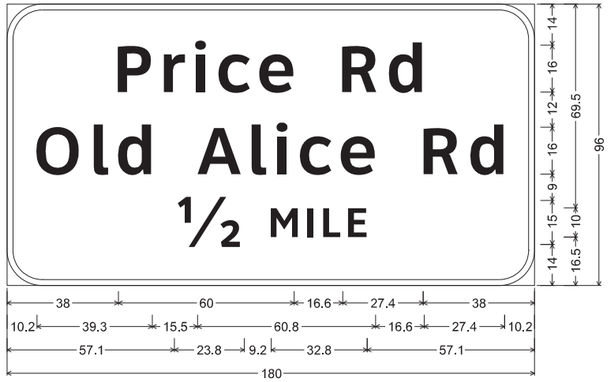
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 5 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		169
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



12.0" Radius, 2.0" Border, White on, Green;
"Price Rd", ClearviewHwy-5-W-R; "Old Alice Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	P		r		i		c		e		R		d	
38.0	11.7	3.9	7.4	3.2	3.8	4.2	10.9	3.0	11.9	16.6	11.9	3.8	11.7	38.0

	O		l		d		A		l		i		c		e
10.2	14.9	4.6	5.1	3.1	11.6	15.5	15.2	3.3	5.2	3.3	3.8	4.2	10.9	3.0	11.9

	R		d	
16.6	11.9	3.8	11.7	10.2

	½		M		I		L		E	
57.1	23.8	9.2	9.2	3.3	2.0	3.4	5.9	2.6	6.4	57.1

SHEET NO. 9 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 3248 4; "Alton Gloor", ClearviewHwy-5-W-R;
"Boulevard", ClearviewHwy-5-W-R; "¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	3248	
61.0	64.0	61.0

	A		l		t		o		n
18.7	15.2	3.3	5.2	2.1	7.9	3.3	12.4	4.4	11.1

	G		l		o		o		r	
16.6	14.0	4.5	5.1	3.1	12.4	3.8	12.4	4.4	7.4	18.7

	B		o		u		l		e		v		a		r		d	
31.0	12.2	3.8	12.4	4.4	11.0	5.0	5.2	3.1	11.8	2.5	12.2	2.2	12.0	4.1	7.4	3.0	11.7	31.0

	¾		M		I		L		E	
60.2	23.6	9.2	9.2	3.3	2.1	3.4	5.8	2.6	6.4	60.2

SHEET NO. 12 OF 53 SIGN NO. 1

12.0" Radius, 3.0" Border, White on, Green;
"B", ClearviewHwy-5-W; "USINESS", ClearviewHwy-5-W; US 77 M1-4; State Highway 802 3;
"Ruben M Torres Sr", ClearviewHwy-5-W-R; "Blvd", ClearviewHwy-5-W-R; "½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	B		U		S		I		N		E		S		S	
45.5	11.4	4.0	7.8	3.2	7.3	3.1	2.1	3.9	8.3	3.9	6.5	2.5	7.3	2.4	7.3	149.5

	77		802	
69.0	34.0	79.5	48.0	45.5

	R		u		b		e		n		M		T		o		r		r		e		s
18.5	11.9	4.5	10.9	5.1	11.6	3.7	11.9	4.4	11.1	17.3	14.6	15.8	11.7	3.0	12.4	4.4	7.4	3.6	7.4	3.0	11.9	3.0	10.3

	S		r	
14.9	11.6	4.2	7.4	18.5

	B		l		v		d	
113.0	12.2	4.4	5.2	1.8	12.2	2.5	11.7	113.0

	½		M		I		L		E	
105.1	23.8	9.2	9.2	3.3	2.0	3.4	5.9	2.6	6.4	105.1

SHEET NO. 10 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "6", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	6
8.4	16.5	27.1	31.5	53.3

SHEET NO. 12 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Sports Park", ClearviewHwy-5-W-R; "Blvd", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R; "8", ClearviewHwy-5-W-R;
Table of widths and spaces

	S		p		o		r		t		s
16.5	9.7	3.5	9.7	3.2	10.3	3.7	6.2	1.6	6.7	2.0	8.6

	P		a		r		k	
13.6	9.7	2.4	9.9	3.5	6.2	3.0	9.5	16.5

	B		l		v		d	
57.2	10.1	3.7	4.3	1.5	10.2	2.1	9.7	57.2

	E		X		I		T		8	
49.8	6.4	1.5	8.7	2.1	2.0	2.4	7.3	15.0	11.0	49.8

SHEET NO. 11 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

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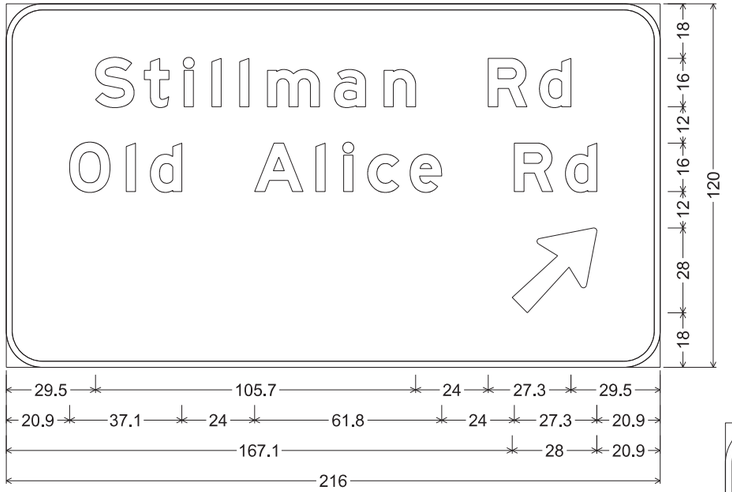
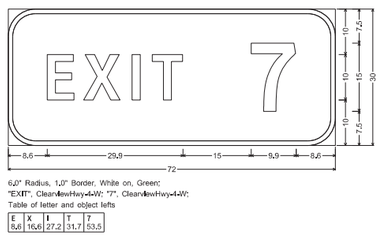
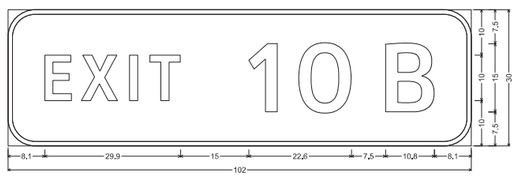
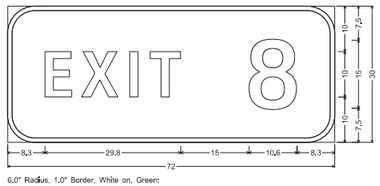
SHEET 6 OF 23

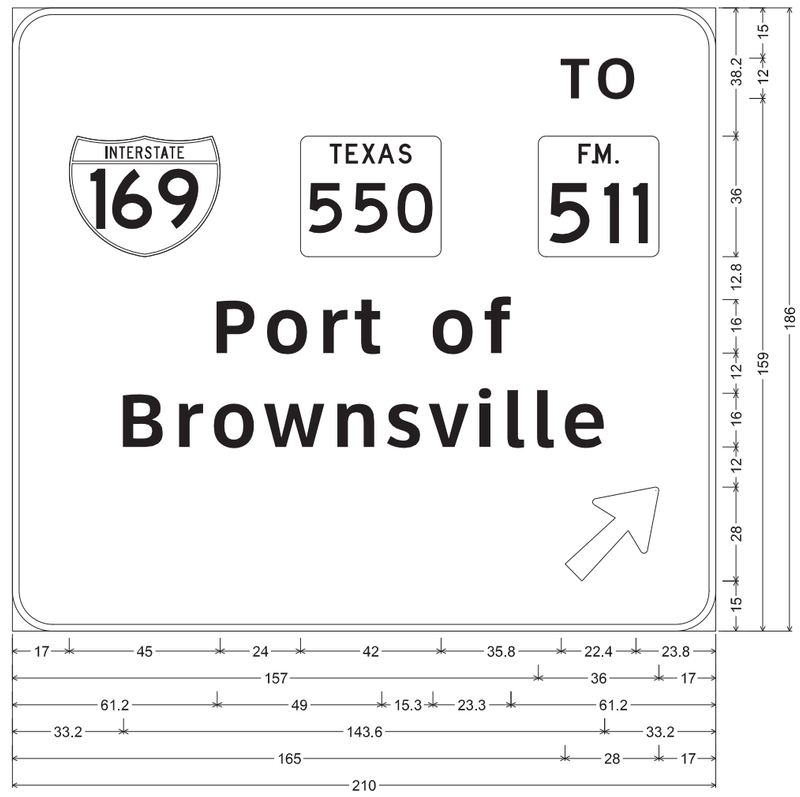
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				170
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.











12.0" Radius, 2.0" Border, White on, Green;
"Stillman Rd", E Mod; "Old Alice Rd", E Mod; Arrow A-3 - 35.6" 45';
Table of letter and object lefts

S	**t**	**i**	**l**	**l**	**m**	**a**	**n**	**R**	**d**
29.5	45.6	58.8	67.9	77.1	86.3	108.4	124.8	159.2	176.1

O	**l**	**d**	**A**	**l**	**i**	**c**	**e**	**R**	**d**	
20.9	39.7	47.6	82.0	102.3	111.4	119.4	133.4	167.8	184.7	

↗
167.1

SHEET NO. 12 OF 53 SIGN NO. 2

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "7", ClearviewHwy-4-W;
Table of letter and object lefts

E	**X**	**I**	**T**	**7**
8.6	16.6	27.2	31.7	53.5

SHEET NO. 12 OF 53 SIGN NO. 2

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "10", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	**X**	**I**	**T**	**1**	**0**	**B**
8.1	16.1	26.8	31.2	53.0	64.0	83.1

SHEET NO. 14 OF 53 SIGN NO. 2
SHEET NO. 15 OF 53 SIGN NO. 1
SHEET NO. 15 OF 53 SIGN NO. 2
SHEET NO. 17 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "8", ClearviewHwy-4-W;
Table of letter and object lefts

E	**X**	**I**	**T**	**8**
8.3	16.3	26.9	31.4	53.1

SHEET NO. 11 OF 53 SIGN NO. 1
SHEET NO. 13 OF 53 SIGN NO. 1
SHEET NO. 14 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
Interstate 169 M1-1; State Highway 550 M1-6T3 15.0" D; "TO", ClearviewHwy-5-W-R;
State Highway 511 3; "Port of", ClearviewHwy-5-W-R; "Brownsville", ClearviewHwy-5-W-R;
Arrow A-3 - 35.6" 45';
Table of widths and spaces

	169		**550**		**T**		**O**	
17.0	45.0	24.0	42.0	35.8	8.8	2.4	11.2	23.8

	511	
157.0	36.0	17.0

	P		**o**		**r**		**t**		**o**		**f**	
61.2	11.6	3.3	12.4	4.4	7.4	2.0	7.9	15.3	12.4	3.2	7.7	61.2

	B		**r**		**o**		**w**		**n**		**s**		**v**		**i**		**l**		**l**		**e**		
33.2	12.2	4.4	7.4	3.0	12.4	2.6	18.6	3.3	11.1	3.6	10.3	2.2	12.2	2.8	3.8	4.8	5.1	3.8	5.1	3.1	11.8	33.2	

	↗	
165.0	28.0	17.0

SHEET NO. 14 OF 53 SIGN NO. 2

9.0" Radius, 2.0" Border, White on, Green;
"Merryman Rd", ClearviewHwy-5-W-R; "¾ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	M		**e**		**r**		**r**		**y**		**m**		**a**		**n**
19.2	14.7	4.6	11.8	4.5	7.4	3.6	7.4	1.7	12.5	3.3	18.0	4.2	11.9	4.2	11.1

	R		**d**	
17.3	11.9	3.8	11.7	19.2

	¾		**M**		**I**		**L**		**E**	
69.2	23.6	9.2	9.2	3.3	2.1	3.4	5.8	2.6	6.4	69.2

SHEET NO. 14 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Merryman Rd", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';
Table of widths and spaces

	M		**e**		**r**		**r**		**y**		**m**		**a**		**n**
16.2	14.7	4.6	11.8	4.5	7.4	3.6	7.4	1.7	12.5	3.3	18.0	4.2	11.9	4.2	11.1

	R		**d**	
17.3	11.9	3.8	11.7	16.2

	↗	
153.8	28.0	16.2

SHEET NO. 13 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

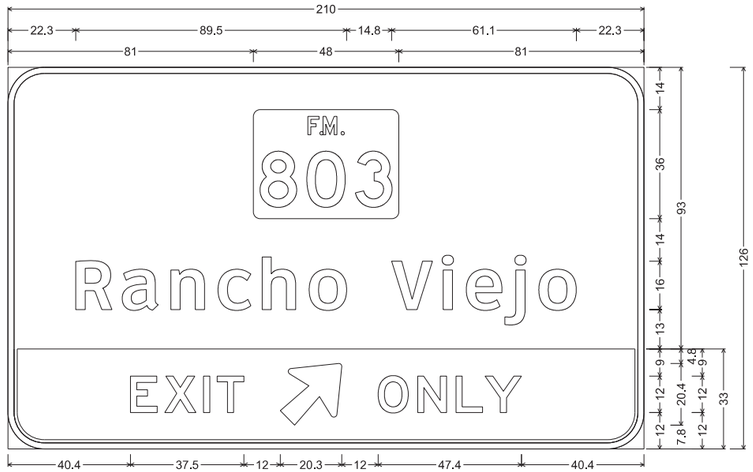
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 7 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					171
DW: LSJ			STATE DIST.NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.



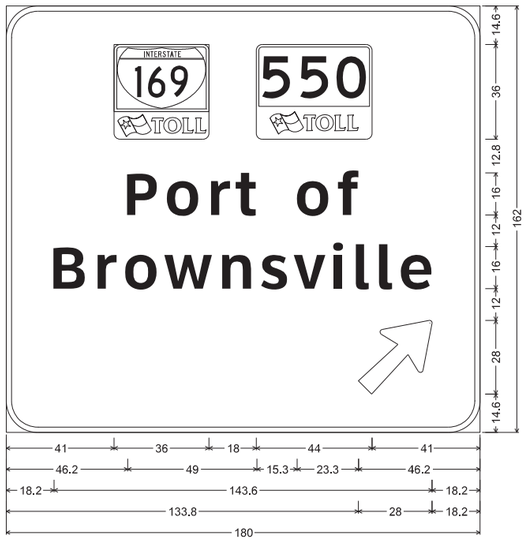
E11-1aR;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 803 3; "Rancho Viejo", ClearviewHwy-5-W-R;
E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

803
81.0

R	a	n	c	h	o	V	i	e	j	o
22.3	37.7	53.8	69.3	83.9	99.4	126.6	143.4	151.3	164.1	175.3

E	X	I	T	⇗	O	N	L	Y
40.4	51.7	64.5	69.1	89.9	122.2	135.3	147.9	157.6

SHEET NO. 16 OF 53 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
State Highway 550 M1-6TT3; "Port of", ClearviewHwy-5-W-R;
"Brownsville", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';
Table of widths and spaces

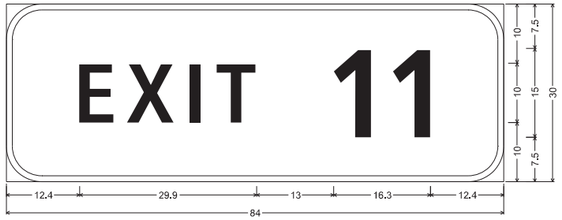
41.0	550	36.0	18.0	550	44.0	41.0

46.2	P	11.6	3.3	o	12.4	4.4	r	7.4	2.0	t	7.9	15.3	o	12.4	3.2	f	7.7	46.2

18.2	B	12.2	4.4	r	7.4	3.0	o	12.4	2.6	w	18.6	3.3	n	11.1	3.6	s	10.3	2.2	v	12.2	2.8	i	3.8	4.8	l	5.1	3.8	l	5.1	3.1	e	11.8	18.2

133.8	⇗	28.0	18.2

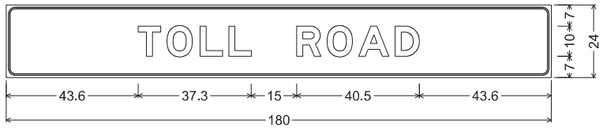
SHEET NO. 15 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "11", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	1
12.4	20.4	31.0	35.5	55.3	65.3

SHEET NO. 16 OF 53 SIGN NO. 1
SHEET NO. 19 OF 53 SIGN NO. 1



3.0" Radius, 0.5" Border, 0.8" Indent, Black on, Yellow;
"TOLL ROAD", E Mod;
Table of widths and spaces

43.6	T	7.4	2.1	O	8.3	2.6	L	7.4	2.1	L	7.4	15.0	R	8.0	2.1	O	8.3	2.1	A	10.0	2.0	D	8.0	43.6

12.0" Radius, 2.0" Border, White on, Green;
State Highway 550 M1-6TT3; "Port of", ClearviewHwy-5-W-R;
"Brownsville", ClearviewHwy-5-W-R; "1/4", ClearviewHwy-5-W-R;
"MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

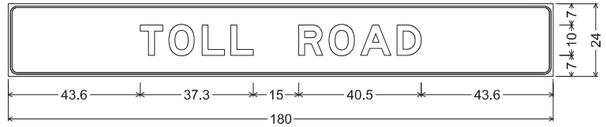
41.0	550	36.0	18.0	550	44.0	41.0

46.2	P	11.6	3.3	o	12.4	4.4	r	7.4	2.0	t	7.9	15.3	o	12.4	3.2	f	7.7	46.2

8.2	B	12.2	4.4	r	7.4	3.0	o	12.4	2.6	w	18.6	3.3	n	11.1	3.6	s	10.3	2.2	v	12.2	2.8	i	3.8	4.8	l	5.1	3.8	l	5.1	3.1	e	11.8	18.2

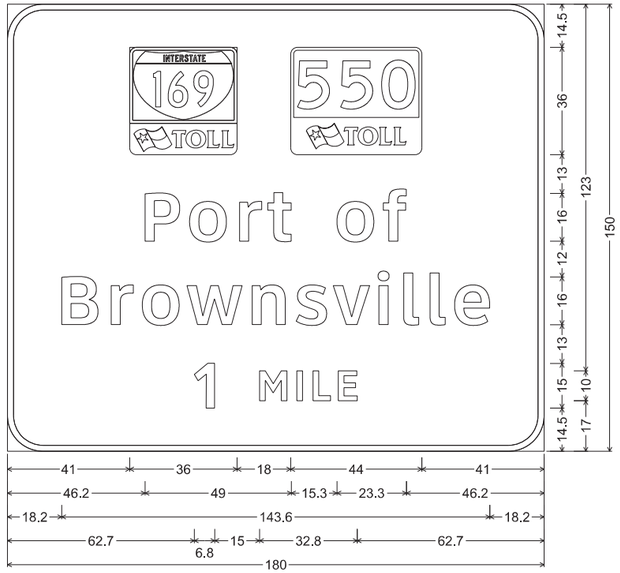
54.3	1/4	23.7	15.0	M	9.1	3.4	I	2.0	3.4	L	5.9	2.6	E	6.3	54.3

SHEET NO. 15 OF 53 SIGN NO. 2



3.0" Radius, 0.5" Border, 0.8" Indent, Black on, Yellow;
"TOLL ROAD", E Mod;
Table of widths and spaces

43.6	T	7.4	2.1	O	8.3	2.6	L	7.4	2.1	L	7.4	15.0	R	8.0	2.1	O	8.3	2.1	A	10.0	2.0	D	8.0	43.6



12.0" Radius, 2.0" Border, White on, Green;
State Highway 550 M1-6TT3; "Port of", ClearviewHwy-5-W-R;
"Brownsville", ClearviewHwy-5-W-R; "1", ClearviewHwy-5-W-R;
"MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

41.0	550	36.0	18.0	550	44.0	41.0

46.2	P	11.6	3.3	o	12.4	4.4	r	7.4	2.0	t	7.9	15.3	o	12.4	3.2	f	7.7	46.2

18.2	B	12.2	4.4	r	7.4	3.0	o	12.4	2.6	w	18.6	3.3	n	11.1	3.6	s	10.3	2.2	v	12.2	2.8	i	3.8	4.8	l	5.1	3.8	l	5.1	3.1	e	11.8	18.2

62.7	1	6.8	15.0	M	9.2	3.3	I	2.1	3.4	L	5.8	2.6	E	6.4	62.7

SHEET NO. 17 OF 53 SIGN NO. 1

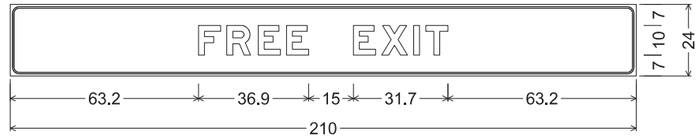
STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER
Raquel Cantu 11.06.20

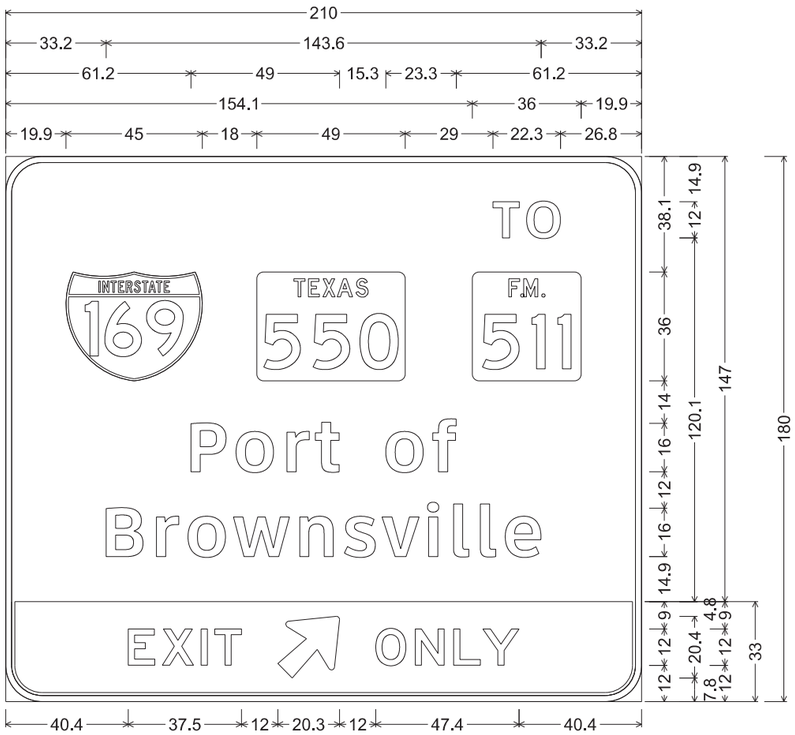
TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 8 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					172
DW: LSJ			STATE DIST. NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.





3.0" Radius, 0.5" Border, 0.8" Indent, Black on, Yellow;
"FREE EXIT", E Mod;
Table of widths and spaces

	F		R		E		E		E		X		I		T	
63.2	7.4	2.1	7.9	2.6	7.4	2.1	7.4	15.0	7.4	2.1	8.7	2.0	2.0	2.1	7.4	63.2

FM 511 FM 803 Port of Brownsville exit arrow 45 right only;
12.0" Radius, 2.0" Border, White on, Green;
Interstate 169 M1-1; State Highway 550 M1-6T3; "TO", ClearviewHwy-5-W-R;
State Highway 511 3; "Port of", ClearviewHwy-5-W-R;
"Brownsville", ClearviewHwy-5-W-R;
E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of widths and spaces

	169		550		T		O	
19.9	45.0	18.0	49.0	29.0	8.8	2.3	11.2	26.8

	511	
154.1	36.0	19.9

	P		o		r		t		o		f	
61.2	11.6	3.3	12.4	4.4	7.4	2.0	7.9	15.3	12.4	3.2	7.7	61.2

	B		r		o		w		n		s		v		i		l		l		e	
33.2	12.2	4.4	7.4	3.0	12.4	2.6	18.6	3.3	11.1	3.6	10.3	2.2	12.2	2.8	3.8	4.8	5.1	3.8	5.1	3.1	11.8	33.2

	E		X		I		T		↗
40.4	8.9	2.4	10.3	2.5	2.1	2.5	8.8	12.0	20.3

	O		N		L		Y	
12.0	10.0	3.1	9.5	3.1	8.8	0.9	12.0	40.4

SHEET NO. 15 OF 53 SIGN NO. 3

3.0" Radius, 0.5" Border, 0.8" Indent, Black on, Yellow;
"FREE EXIT", E Mod;
Table of widths and spaces

	F		R		E		E		E		X		I		T	
55.2	7.4	2.1	7.9	2.6	7.4	2.1	7.4	15.0	7.4	2.1	8.7	2.0	2.0	2.1	7.4	55.2

12.0" Radius, 2.0" Border, White on, Green;
Interstate 169 M1-1; State Highway 550 M1-6T3 15.0" D; "TO", ClearviewHwy-5-W-R;
State Highway 511 3; "Port of", ClearviewHwy-5-W-R;
"Brownsville", ClearviewHwy-5-W-R; "1", ClearviewHwy-5-W-R;
"MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	169		550		T		O	
16.9	45.0	18.0	42.0	24.0	8.8	2.4	11.2	23.7

	511	
139.1	36.0	16.9

	P		o		r		t		o		f	
52.2	11.6	3.3	12.4	4.4	7.4	2.0	7.9	15.3	12.4	3.2	7.7	52.2

	B		r		o		w		n		s		v		i		l		l		e	
24.2	12.2	4.4	7.4	3.0	12.4	2.6	18.6	3.3	11.1	3.6	10.3	2.2	12.2	2.8	3.8	4.8	5.1	3.8	5.1	3.1	11.8	24.2

	1		M		I		L		E	
68.7	6.8	15.0	9.2	3.3	2.1	3.4	5.8	2.6	6.4	68.7

SHEET NO. 18 OF 53 SIGN NO. 1

3.0" Radius, 0.5" Border, 0.8" Indent, Black on, Yellow;
"FREE EXIT", E Mod;
Table of widths and spaces

	F		R		E		E		E		X		I		T	
55.2	7.4	2.1	7.9	2.6	7.4	2.1	7.4	15.0	7.4	2.1	8.7	2.0	2.0	2.1	7.4	55.2

12.0" Radius, 2.0" Border, White on, Green;
Interstate 169 M1-1; State Highway 550 M1-6T3 15.0" D; "TO", ClearviewHwy-5-W-R;
State Highway 511 3; "Port of", ClearviewHwy-5-W-R;
"Brownsville", ClearviewHwy-5-W-R; "¾", ClearviewHwy-5-W-R;
"MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	169		550		T		O	
16.9	45.0	18.0	42.0	24.0	8.8	2.4	11.2	23.7

	511	
139.1	36.0	16.9

	P		o		r		t		o		f	
52.2	11.6	3.3	12.4	4.4	7.4	2.0	7.9	15.3	12.4	3.2	7.7	52.2

	B		r		o		w		n		s		v		i		l		l		e	
24.2	12.2	4.4	7.4	3.0	12.4	2.6	18.6	3.3	11.1	3.6	10.3	2.2	12.2	2.8	3.8	4.8	5.1	3.8	5.1	3.1	11.8	24.2

	¾		M		I		L		E	
60.3	23.6	15.0	9.2	3.3	2.1	3.3	5.9	2.6	6.4	60.3

SHEET NO. 17 OF 53 SIGN NO. 2

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "10", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	0	A
6.9	14.9	25.6	30.0	51.8	62.8	81.9

SHEET NO. 14 OF 53 SIGN NO. 2
SHEET NO. 15 OF 53 SIGN NO. 3
SHEET NO. 17 OF 53 SIGN NO. 2
SHEET NO. 18 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

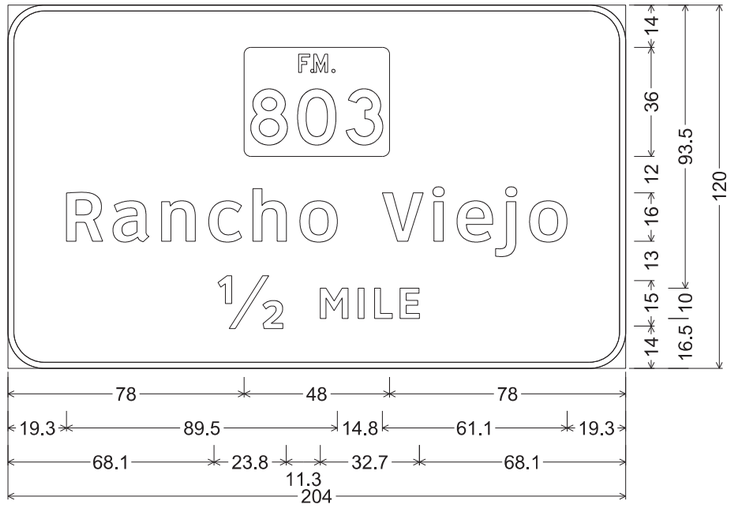
Raquel Cantu 11.06.2020

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 9 OF 23

DN: LSJ	DRAWING	DATE	FED. RD. DIV. NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				173
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



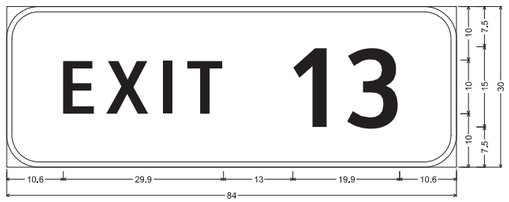
Rancho Viejo exit 1/2 mile;
12.0" Radius, 2.0" Border, White on, Green;
State Highway 803 3; "Rancho Viejo", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

803
78.0

R	a	n	c	h	o	V	i	e	j	o
19.3	34.7	50.8	66.3	80.9	96.4	123.6	140.4	148.3	161.1	172.3

½	M	I	L	E
68.1	103.2	115.6	121.1	129.5

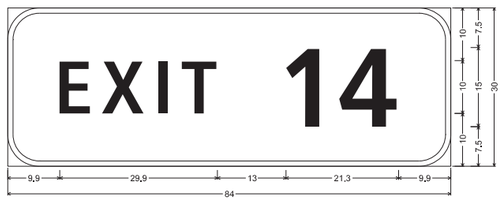
SHEET NO. 19 OF 53 SIGN NO. 1



6,0" Radius, 1,0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "13", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	3
10,6	18,6	29,2	33,7	53,5	63,7

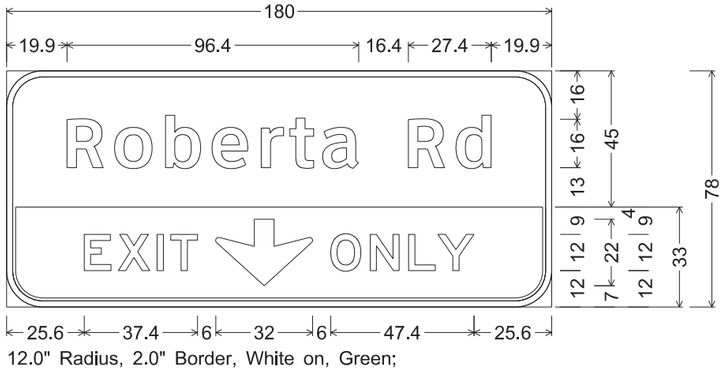
SHEET NO. 20 OF 53 SIGN NO. 1
SHEET NO. 22 OF 53 SIGN NO. 1
SHEET NO. 23 OF 53 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "14", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	4
9,9	17,9	28,5	33,0	52,8	62,9

SHEET NO. 21 OF 53 SIGN NO. 1
SHEET NO. 23 OF 53 SIGN NO. 1

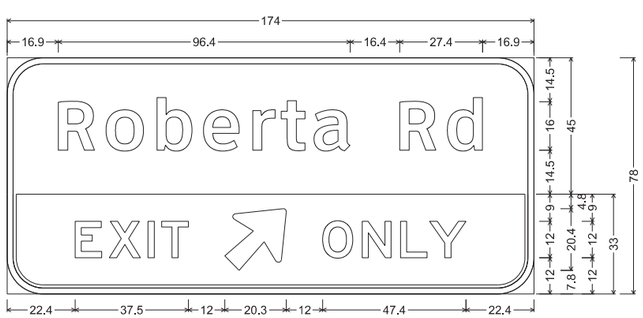


12.0" Radius, 2.0" Border, White on, Green;
"Roberta Rd", ClearviewHwy-5-W-R;
E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black;
"ONLY" Black, E;
Table of letter and object lefts

R	o	b	e	r	t	a	R	d
19.9	35.7	52.5	67.9	84.1	93.5	104.4	132.7	148.4

E	X	I	T	⇩	O	N	L	Y
25.6	36.9	49.7	54.2	69.0	107.0	120.1	132.7	142.4

SHEET NO. 20 OF 53 SIGN NO. 1



E11-1aR;

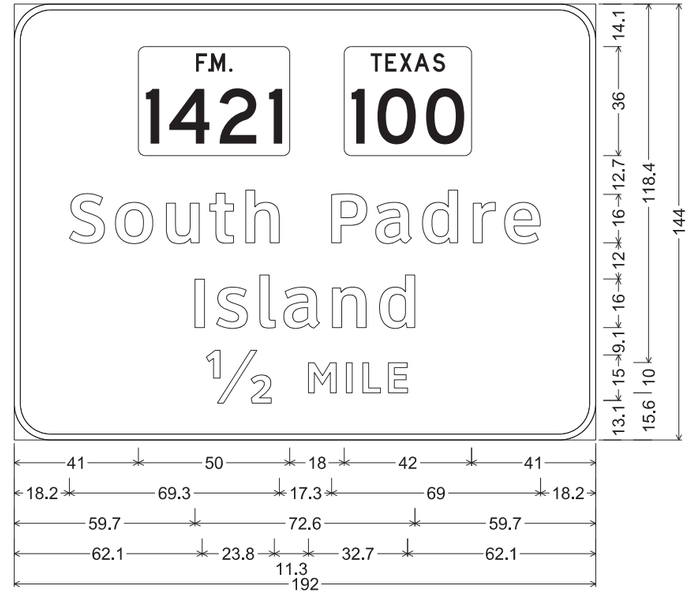
12.0" Radius, 2.0" Border, White on, Green;
"Roberta Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25,0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

R	o	b	e	r	t	a	R	d
16.9	32.7	49.5	64.9	81.1	90.5	101.4	129.7	145.4

E	X	I	T	⇗	O	N	L	Y
22.4	33.7	46.5	51.1	71.9	104.2	117.3	129.9	139.6

SHEET NO. 22 OF 53 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
State Highway 1421 4; State Highway 100 M1-6T3;
"South Padre", ClearviewHwy-5-W-R; "Island", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

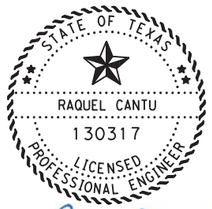
1421	100
41.0	109.0

S	o	u	t	h	P	a	d	r	e
18.2	33.4	50.2	64.6	76.4	104.8	119.4	134.8	151.5	161.9

I	s	l	a	n	d
59.7	66.8	81.1	89.0	105.1	120.6

½	M	I	L	E
62.1	97.2	109.6	115.1	123.5

SHEET NO. 21 OF 53 SIGN NO. 1



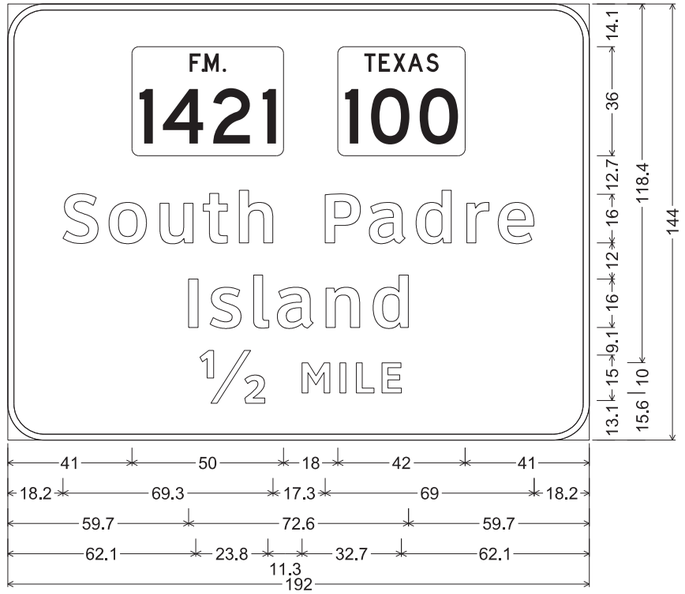
Raquel Cantu 11.06.20

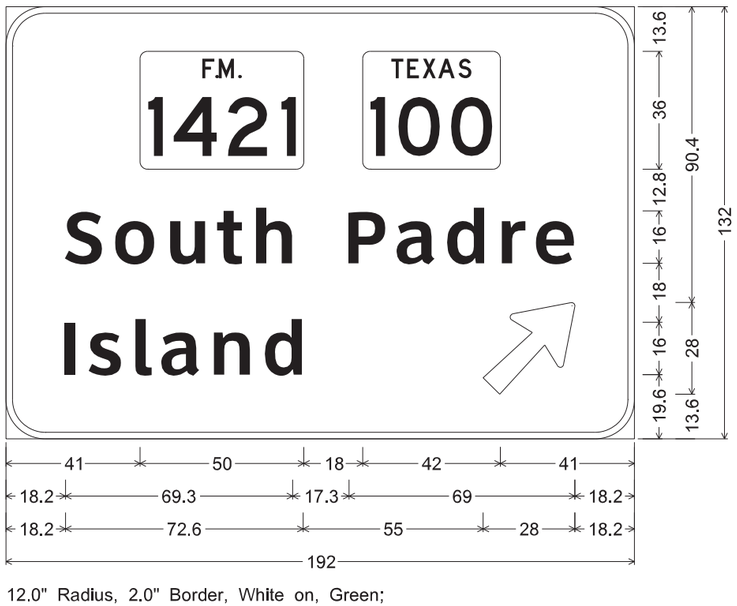
TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 10 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		174
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.





12.0" Radius, 2.0" Border, White on, Green;
State Highway 1421 4; State Highway 100 M1-6T3;
"South Padre", ClearviewHwy-5-W-R; "Island", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

1421	100
41.0	109.0

S	o	u	t	h	P	a	d	r	e
18.2	33.4	50.2	64.6	76.4	104.8	119.4	134.8	151.5	161.9

I	s	l	a	n	d
59.7	66.8	81.1	89.0	105.1	120.6

½	M	I	L	E
62.1	97.2	109.6	115.1	123.5

SHEET NO. 21 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Roberta Rd", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

R	o	b	e	r	t	a	R	d
19.9	35.7	52.5	67.9	84.1	93.5	104.4	132.7	148.4

½	M	I	L	E
56.1	91.2	103.6	109.1	117.5

SHEET NO. 23 OF 53 SIGN NO. 2

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1421 4; State Highway 100 M1-6T3;
"South Padre", ClearviewHwy-5-W-R; "Island", ClearviewHwy-5-W-R;
Arrow A-3 - 35.6" 45';
Table of letter and object lefts

1421	100
41.0	109.0

S	o	u	t	h	P	a	d	r	e
18.2	33.4	50.2	64.6	76.4	104.8	119.4	134.8	151.5	161.9

I	s	l	a	n	d	↗
18.2	25.3	39.6	47.5	63.6	79.1	145.8

SHEET NO. 23 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Frontage Rd", ClearviewHwy-5-W-R; Arrow A-2 - 29.3" 45';
Table of letter and object lefts

F	r	o	n	t	a	g	e	R	d
19.0	32.9	43.3	60.2	74.7	85.6	101.0	117.1	145.6	161.3

↗
149.9

SHEET NO. 24 OF 53 SIGN NO. 2

12.0" Radius, 2.0" Border, White on, Green;
"Los Fresnos", ClearviewHwy-5-W-R;
"Port Isabel", ClearviewHwy-5-W-R; "EXIT", ClearviewHwy-5-W-R;
"14", ClearviewHwy-5-W-R;
Table of widths and spaces

	L		o		s
15.7	7.9	2.8	10.3	2.5	8.6

	F		r		e		s		n		o		s	
13.5	8.2	3.4	6.2	2.5	9.8	2.5	8.6	3.4	9.3	3.7	10.3	2.5	8.6	15.7

	P		o		r		t
20.3	9.8	2.7	10.3	3.7	6.2	1.6	6.6

	I		s		a		b		e		l	
13.4	2.7	3.1	8.6	2.6	9.9	3.5	9.7	3.1	9.9	3.7	4.3	20.3

	E		X		I		T		1		4	
44.0	6.4	1.5	8.7	2.1	2.1	2.3	7.3	15.0	6.9	3.8	11.9	44.0

SHEET NO. 24 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "16", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	6
12.0	20.0	30.6	35.1	56.9	67.8

SHEET NO. 24 OF 53 SIGN NO. 2

RAQUEL CANTU
130317

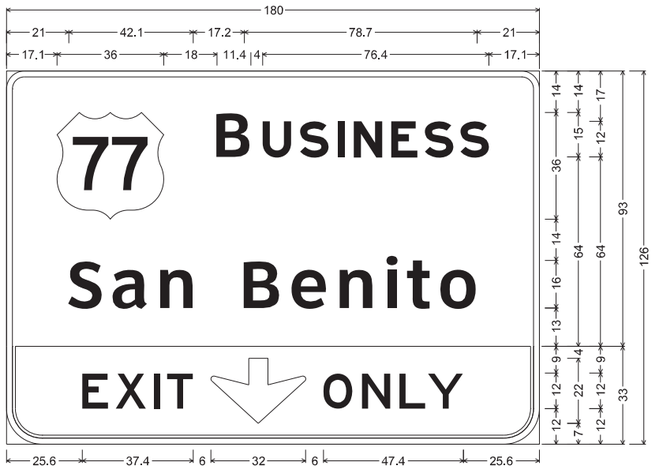
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 11 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		175
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.



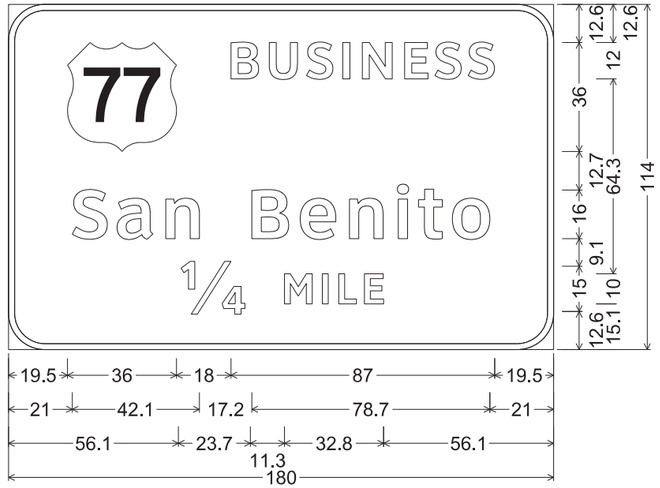
E11-1_VARxVAR;

6.0" Radius, 2.0" Border, White on, Green;
US 77 M1-4; "B", ClearviewHwy-5-W-R; "USINESS", E Mod;
"San Benito", ClearviewHwy-5-W-R;

1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270° Black; "ONLY" Black, E;

(77)	B	U	S	I	N	E	S	S
17.1	71.1	86.5	99.2	111.8	117.3	129.9	141.3	153.4
S	**a**	**n**	**B**	**e**	**n**	**i**	**t**	**o**
21.0	35.9	51.9	80.3	96.3	112.6	128.4	135.4	146.6
E	**X**	**I**	**T**	⇩	**O**	**N**	**L**	**Y**
25.6	36.9	49.7	54.2	69.0	107.0	120.1	132.7	142.4

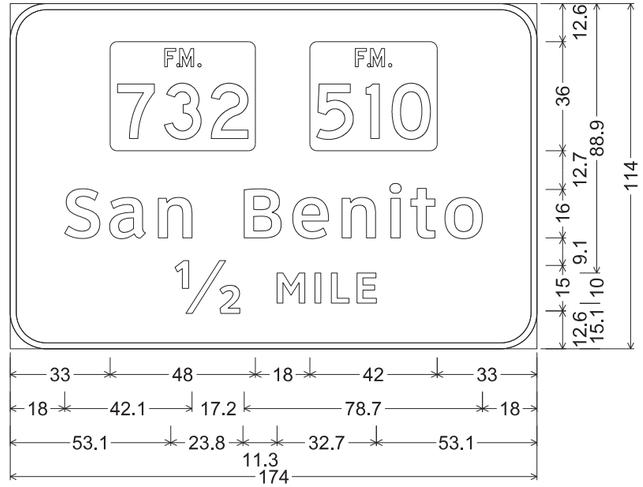
SHEET NO. 25 OF 53 SIGN NO. 1



12.0" Radius, 2.0" Border, White on, Green;
US 77 M1-4; "BUSINESS", ClearviewHwy-5-W-R;
"San Benito", ClearviewHwy-5-W-R;
"¼ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

(77)	B	U	S	I	N	E	S	S
19.5	73.5	86.1	98.4	110.4	116.9	130.8	140.8	151.8
S	**a**	**n**	**B**	**e**	**n**	**i**	**t**	**o**
21.0	35.9	51.9	80.3	96.3	112.6	128.4	135.4	146.6
¼	**M**	**I**	**L**	**E**				
56.1	91.1	103.6	109.0	117.5				

SHEET NO. 25 OF 53 SIGN NO. 2

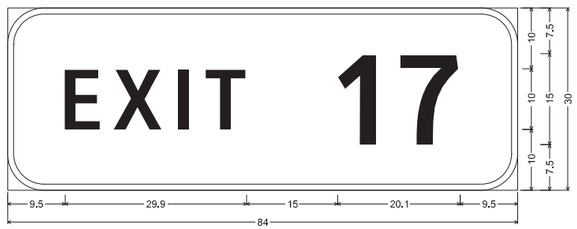


12.0" Radius, 2.0" Border, White on, Green;
State Highway 732 3; State Highway 510 3;
"San Benito", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

732	510
33.0	99.0

S	**a**	**n**	**B**	**e**	**n**	**i**	**t**	**o**
18.0	32.9	48.9	77.3	93.3	109.6	125.4	132.4	143.6
½	**M**	**I**	**L**	**E**				
53.1	88.2	100.6	106.1	114.5				

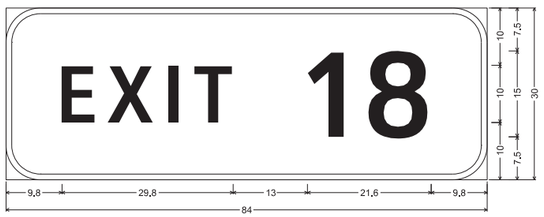
SHEET NO. 26 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "17", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	7
9.5	17.5	28.1	32.6	54.4	64.6

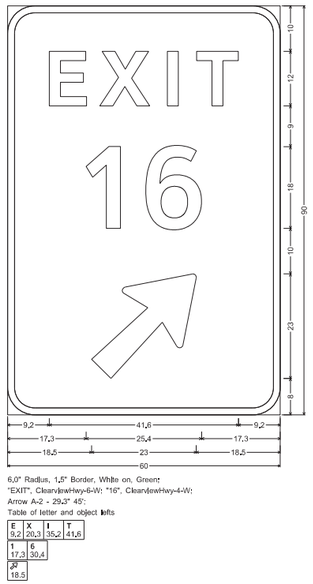
SHEET NO. 25 OF 53 SIGN NO. 1
SHEET NO. 25 OF 53 SIGN NO. 2
SHEET NO. 26 OF 53 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "18", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	1	8
9,8	17,8	28,4	32,9	52,6	63,7

SHEET NO. 26 OF 53 SIGN NO. 1



6,0" Radius, 1,5" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "16", ClearviewHwy-4-W;
Arrow A-2 - 29,3° 45°;
Table of letter and object lefts

E	X	I	T
9,2	20,3	35,2	41,6

1	6
17,3	30,4

2°
18,5

SHEET NO. 26 OF 53 SIGN NO. 3

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

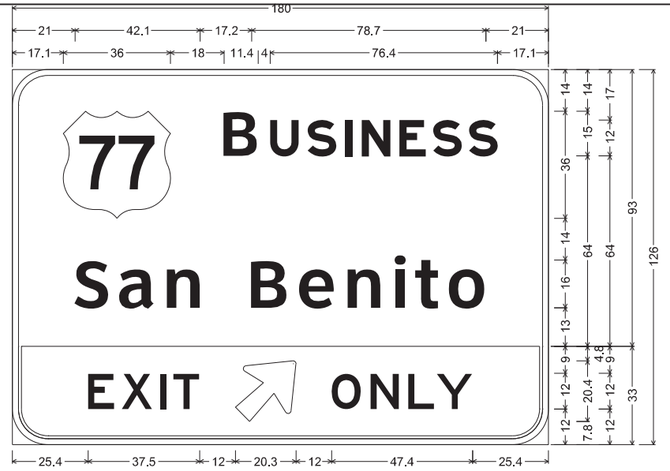
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 12 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				176
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



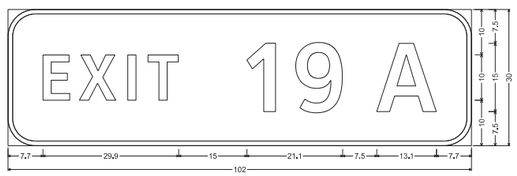
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
US 77 M1-4; "B", ClearviewHwy-5-W-R; "USINESS", E Mod;
"San Benito", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

77 17.1	B 71.1	U 86.5	S 99.2	I 111.8	N 117.3	E 129.9	S 141.3	S 153.4	
S 21.0	a 35.9	n 51.9	B 80.3	e 96.3	n 112.6	i 128.4	t 135.4	o 146.6	
E 25.4	X 36.7	I 49.5	T 54.1	74.9	O 107.2	N 120.3	L 132.9	Y 142.6	

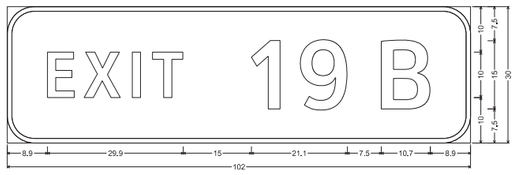
SHEET NO. 26 OF 53 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "19", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E 7.7	X 15.7	I 26.3	T 30.8	1 52.6	9 63.3	A 81.2

SHEET NO. 27 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "19", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E 8.9	X 16.9	I 27.5	T 32.0	1 53.8	9 64.5	B 82.4

SHEET NO. 28 OF 53 SIGN NO. 1
SHEET NO. 29 OF 53 SIGN NO. 1

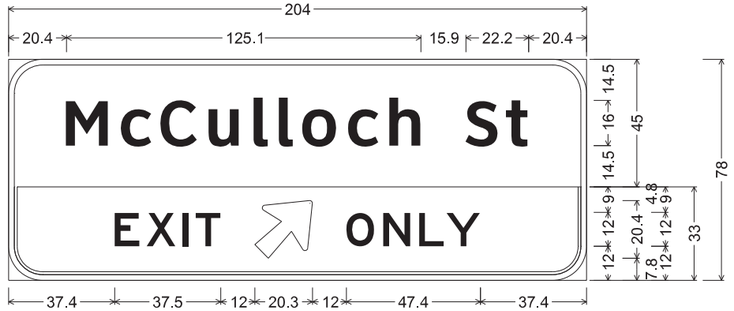
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 345 M1-6T3; State Highway 2520 4; "Sam Houston Blvd", ClearviewHwy-5-W-R;
"McCulloch St", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

345 69.5	2520 136.5													
S 18.1	a 32.9	m 49.0	H 84.5	o 101.4	u 118.2	s 132.7	t 145.5	o 156.7	n 173.5	B 201.9	l 218.5	v 225.5	d 240.2	
M 53.4	c 72.7	C 86.8	u 103.6	l 119.6	l 128.4	o 136.7	c 152.9	h 167.4	S 194.4	t 208.6				
E 70.4	X 81.7	I 94.5	T 99.1	119.9	O 152.2	N 165.3	L 177.9	Y 187.6						

SHEET NO. 28 OF 53 SIGN NO. 1



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"McCulloch St", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

M 20.4	c 39.7	C 53.8	u 70.6	l 86.6	l 95.4	o 103.7	c 119.9	h 134.4	S 161.4	t 175.6
E 37.4	X 48.7	I 61.5	T 66.1	86.9	O 119.2	N 132.3	L 144.9	Y 154.6		

SHEET NO. 27 OF 53 SIGN NO. 1

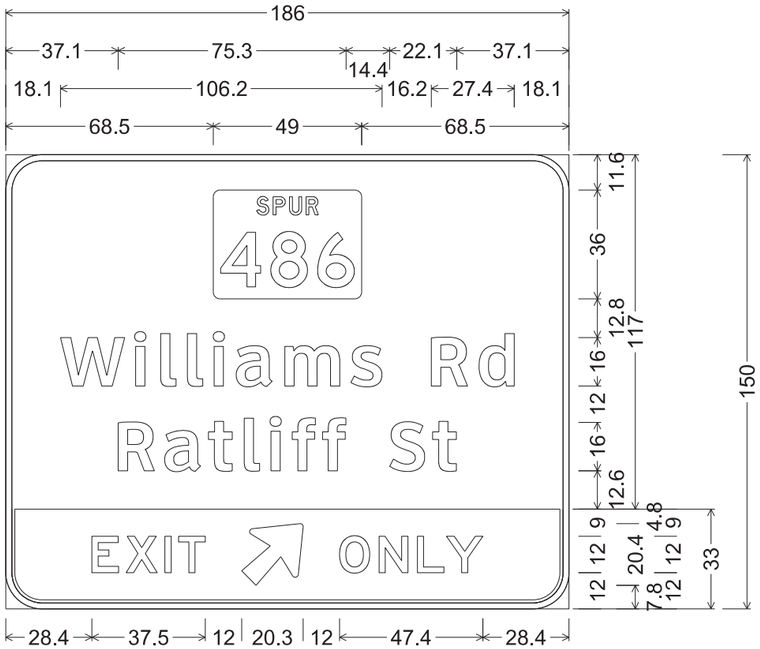
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 13 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			177
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 486 M1-6S3;
"Williams Rd", ClearviewHwy-5-W-R;
"Ratliff St", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black;
"ONLY" Black, E;
Table of letter and object lefts

486
68.5

W	i	l	l	i	a	m	s
18.1	42.6	51.1	60.0	68.5	76.1	92.2	114.0

R	d
140.5	156.3

R	a	t	l	i	f	f	S	t
37.1	52.5	66.9	78.8	87.3	94.6	104.6	126.8	141.0

E	X	I	T		O	N	L	Y
28.4	39.7	52.5	57.1	77.9	110.2	123.3	135.9	145.6

SHEET NO. 31 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 345 M1-6T3; State Highway 2520 4; "Sam Houston Blvd", ClearviewHwy-5-W-R;
"McCulloch St", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

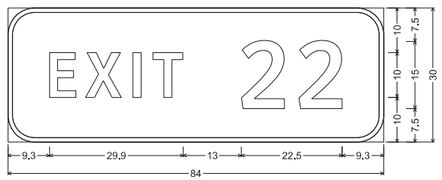
345	2520
69.5	136.5

S	a	m	H	o	u	s	t	o	n	B	l	v	d
18.1	32.9	49.0	84.5	101.4	118.2	132.7	145.5	156.7	173.5	201.9	218.5	225.5	240.2

M	c	C	u	l	l	o	c	h	S	t
53.4	72.7	86.8	103.6	119.6	128.4	136.7	152.9	167.4	194.4	208.6

E	X	I	T		O	N	L	Y
70.6	81.9	94.7	99.2	114.0	152.0	165.1	177.7	187.4

SHEET NO. 29 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "22", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	2
9.3	17.3	27.9	32.4	52.2	65.1

SHEET NO. 30 OF 53 SIGN NO. 1
SHEET NO. 32 OF 53 SIGN NO. 1
SHEET NO. 32 OF 53 SIGN NO. 2
SHEET NO. 33 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 509 3; "Paso Real", ClearviewHwy-5-W-R;
"Highway", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

509
57.0

P	a	s	o	R	e	a	l
18.9	33.5	48.1	61.8	90.9	106.6	121.9	137.9

H	i	g	h	w	a	y
29.1	46.3	54.2	71.0	85.3	106.2	120.4

½	M	I	L	E
48.1	81.1	93.6	99.0	107.5

SHEET NO. 30 OF 53 SIGN NO. 1

11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 14 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				178
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.

12.0" Radius, 2.0" Border, White on, Green;
State Highway 509 3; "Paso Real", ClearviewHwy-5-W-R;
"Highway", ClearviewHwy-5-W-R;

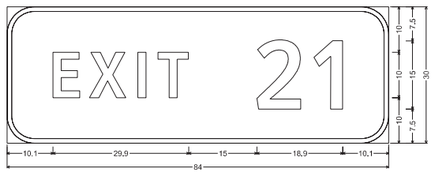
E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black;
"ONLY" Black, E;
Table of letter and object lefts

509
57.0

P	a	s	o	R	e	a	l
18.9	33.5	48.1	61.8	90.9	106.6	121.9	137.9

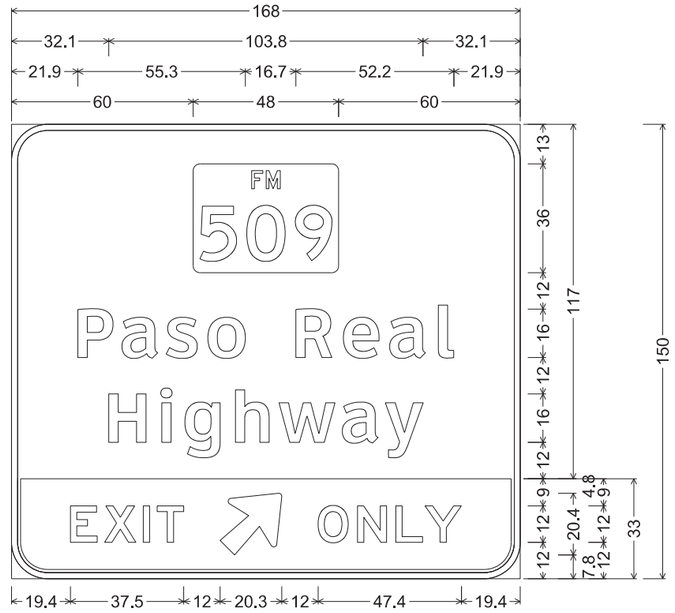
H	i	g	h	w	a	y
29.1	46.3	54.2	71.0	85.3	106.2	120.4

E	X	I	T	⇩	O	N	L	Y
16.6	27.9	40.7	45.2	60.0	98.0	111.1	123.7	133.4



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "21", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	1
10.1	18.1	26.8	33.2	55.0	67.5



E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 509 M1-6F3;
"Paso Real", ClearviewHwy-5-W-R;
"Highway", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black;
"ONLY" Black, E;
Table of letter and object lefts

509
60.0

P	a	s	o	R	e	a	l
21.9	36.5	51.1	64.8	93.9	109.6	124.9	140.9

H	i	g	h	w	a	y
32.1	49.3	57.2	74.0	88.3	109.2	123.4

E	X	I	T	⇗	O	N	L	Y
19.4	30.7	43.5	48.1	68.9	101.2	114.3	126.9	136.6

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED PROFESSIONAL ENGINEER

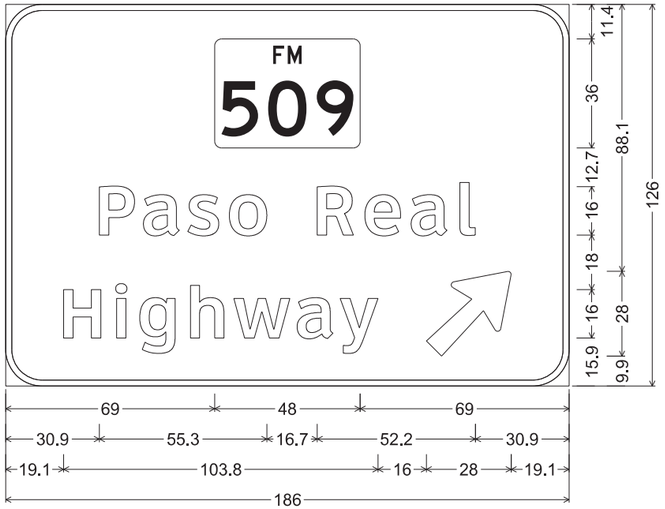
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 15 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			179
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



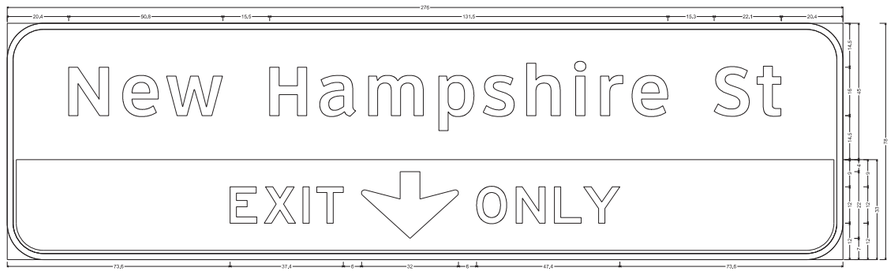
12.0" Radius, 2.0" Border, White on, Green;
State Highway 509 M1-6F3; "Paso Real", ClearviewHwy-5-W-R;
"Highway", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';
Table of letter and object lefts

509
69.0

P	a	s	o	R	e	a	l
30.9	45.5	60.1	73.8	102.9	118.6	133.9	149.9

H	i	g	h	w	a	y	
19.1	36.3	44.2	61.0	75.3	96.2	110.4	138.9

SHEET NO. 33 OF 53 SIGN NO. 1



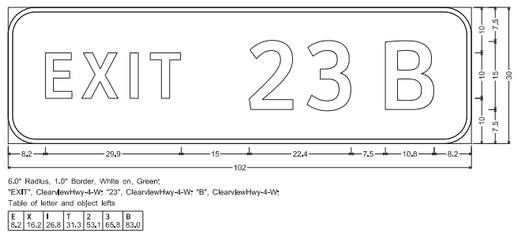
12.0" Radius, 2.0" Border, White on, Green;
"New Hampshire St", ClearviewHwy-5-W-R;

E11-4;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

N	E	W	H	A	M	P	S	H	I	R	E	S	T
26.4	44.2	58.6	92.7	109.2	125.3	148.6	163.2	177.6	193.4	202.0	212.4	239.5	253.7

E	X	I	T		O	N	L	Y
81.6	92.9	105.7	110.2	125.0	163.0	176.1	188.7	198.4

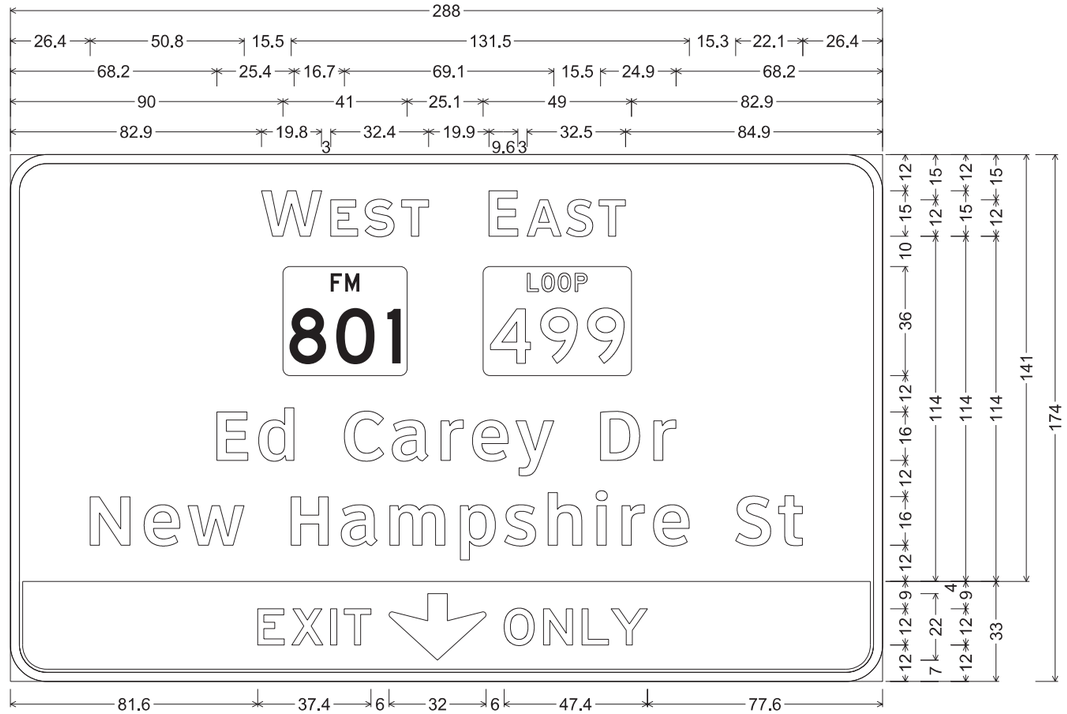
SHEET NO. 34 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "23", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	3	B
8.2	16.2	26.8	31.3	53.1	65.8	83.0

SHEET NO. 34 OF 53 SIGN NO. 1
SHEET NO. 35 OF 53 SIGN NO. 1



12.0" Radius, 3.0" Border, White on, Green;
"W", ClearviewHwy-5-W-R; "EST", E Mod; State Highway 801 M1-6F3; "E", ClearviewHwy-5-W-R;
"AST", ClearviewHwy-5-W-R; State Highway 499 M1-6L3; "Ed Carey Dr", ClearviewHwy-5-W-R;
"New Hampshire St", ClearviewHwy-5-W-R;

E11-1;
1.0" Inner border Green, 12.0" Radius, 3.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

W	E	S	T	E	A	S	T
82.9	105.7	117.1	129.2	158.0	170.6	183.6	194.4

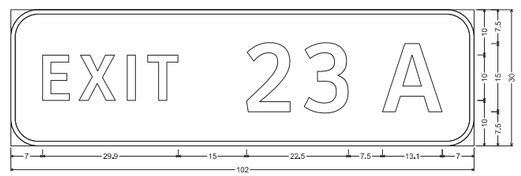
801	499
90.0	156.1

E	d	C	a	r	e	y	D	r
68.2	82.0	110.3	126.1	142.2	152.6	167.0	194.9	212.4

N	e	w	H	a	m	p	s	h	i	r	e	S	t
26.4	44.2	58.6	92.7	109.2	125.3	148.6	163.2	177.6	193.4	202.0	212.4	239.5	253.7

E	X	I	T		O	N	L	Y
81.6	92.9	105.7	110.2	125.0	163.0	176.1	188.7	198.4

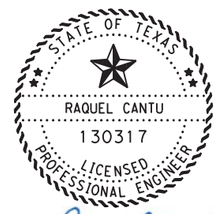
SHEET NO. 33 OF 53 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "23", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	3	A
7.0	15.0	25.7	30.1	51.9	64.8	81.9

SHEET NO. 33 OF 53 SIGN NO. 2



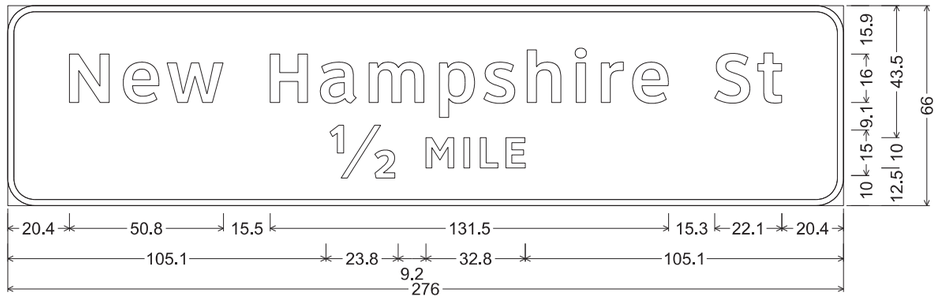
Raquel Cantu 11.06.20

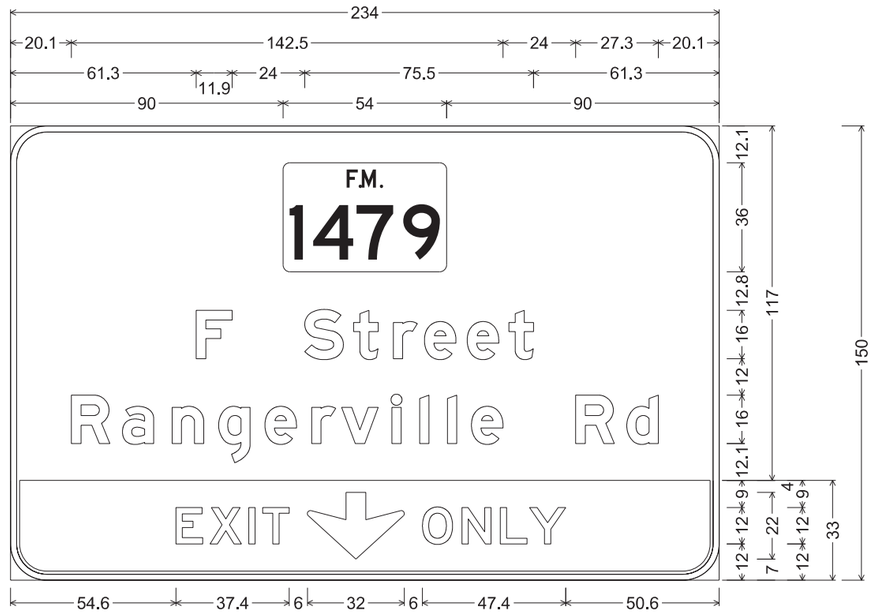
TEXAS DEPARTMENT OF TRANSPORTATION

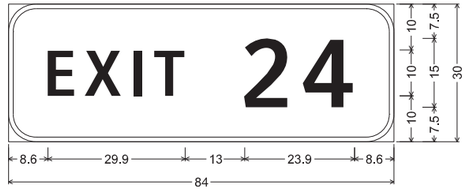
IH-69E
LARGE SIGN DETAIL SHEETS

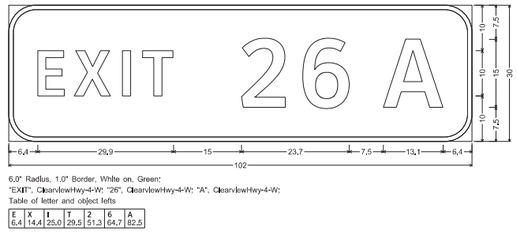
SHEET 16 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		180
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO. / SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353 / 00 / 001	IH-2, ETC.









9.0" Radius, 2.0" Border, White on, Green;
"New Hampshire St", ClearviewHwy-5-W-R; "½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

N	e	w	H	a	m	p	s	h	i	r	e	S	t
20.4	38.2	52.6	86.7	103.2	119.3	142.6	157.2	171.6	187.4	196.0	206.4	233.5	247.7

½	M	I	L	E
105.1	138.1	150.6	156.0	164.5

SHEET NO. 35 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "24", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	4
8.6	16.6	27.3	31.7	51.5	64.2

SHEET NO. 36 OF 53 SIGN NO. 1
SHEET NO. 37 OF 53 SIGN NO. 1

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1479 M1-6F4; "F Street", ClearviewHwy-5-W-R; "Rangerville Rd", ClearviewHwy-5-W-R;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of widths and spaces

	1479	
82.5	54.0	82.5

	F		S		t		r		e		e		t	
59.8	9.8	15.0	11.6	2.5	8.0	3.9	7.4	3.0	11.8	3.8	11.9	2.8	7.9	59.8

	R		a		n		g		e		r		v		i		l		l		e		R		d	
17.0	11.9	3.4	12.0	4.1	11.2	4.4	11.7	4.4	11.8	4.4	7.5	1.7	12.2	2.8	3.8	4.8	5.1	3.7	5.2	3.1	11.8	16.6	12.0	3.8	11.6	17.0

	E		X		I		T		↗		O		N		L		Y	
44.9	8.9	2.4	10.3	2.5	2.1	2.5	8.8	12.0	20.3	12.0	10.0	3.1	9.5	3.1	8.8	0.9	12.0	44.9

SHEET NO. 36 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1479 4; "F Street", E Mod; "Rangerville Rd", E Mod;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

1479
90.0

F	S	t	r	e	e	t
61.3	97.2	113.3	126.4	136.7	150.8	164.6

R	a	n	g	e	r	v	i	l	l	e	R	d
20.1	37.0	53.4	68.7	84.0	99.4	109.4	125.9	135.1	144.3	152.2	186.6	203.5

E	X	I	T	↓	O	N	L	Y
54.6	65.9	78.7	83.2	98.0	136.0	149.1	161.7	171.4

SHEET NO. 37 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "26", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	6	A
6.4	14.4	25.0	29.5	51.3	64.7	82.5

SHEET NO. 37 OF 53 SIGN NO. 3

12.0" Radius, 2.0" Border, White on, Green;
"Lincoln Ave", E Mod; Arrow A-3 - 35.6" 45';
Table of letter and object lefts

L	i	n	c	o	l	n	A	v	e
19.8	36.4	45.6	60.9	74.9	90.5	99.7	134.1	152.6	167.8

↗
150.2

SHEET NO. 37 OF 53 SIGN NO. 3

RAQUEL CANTU
130317

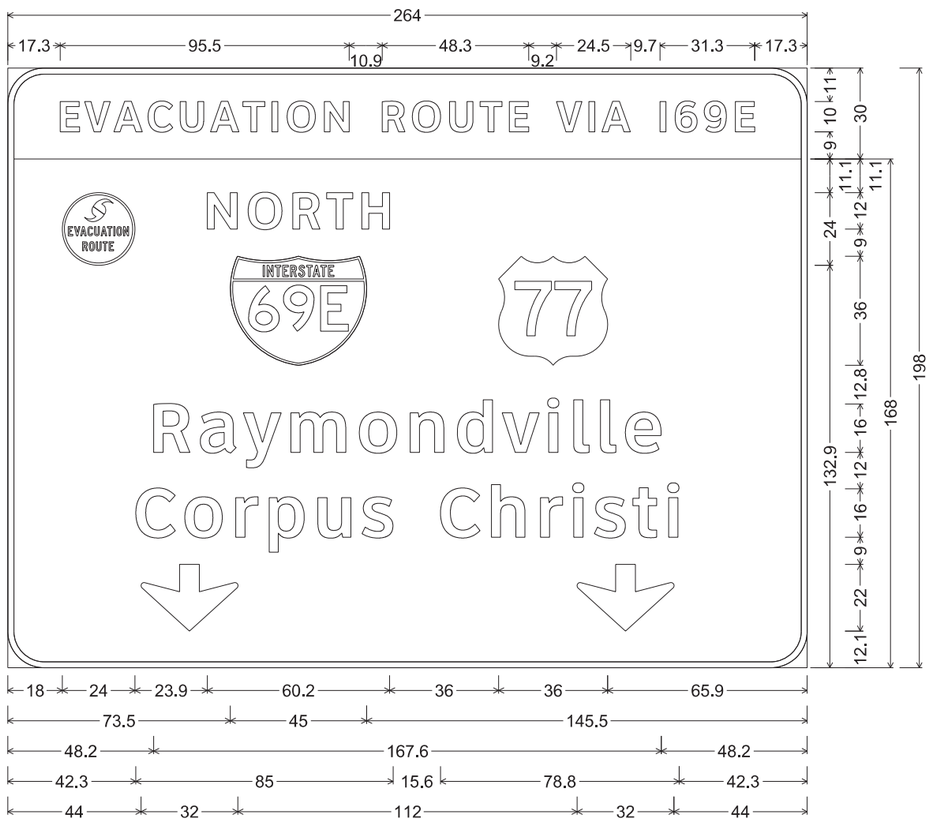
Raquel Cantu 11.06.20

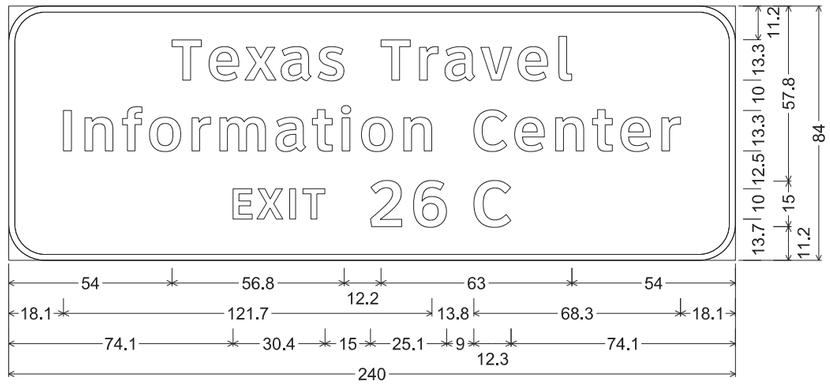
TEXAS DEPARTMENT OF TRANSPORTATION

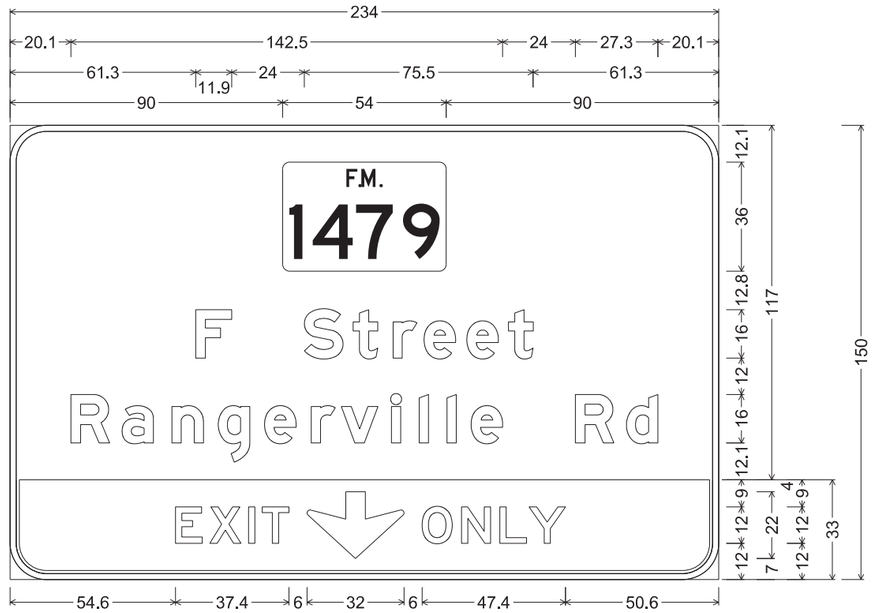
IH-69E
LARGE SIGN DETAIL SHEETS

©2020 SHEET 17 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.				SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS					181
DW: LSJ			STATE DIST.NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.		6353	00	001	IH-2, ETC.







12.0" Radius, 2.0" Border, White on, Blue;
"EVACUATION ROUTE VIA I69E", ClearviewHwy-5-W-R;

12.0" Radius, 2.0" Border, White on, Green;
"NORTH", ClearviewHwy-5-W-R; Interstate 69E M1-1 15.0" D; US 77 M1-4;
"Raymondville", ClearviewHwy-5-W-R; "Corpus Christi", ClearviewHwy-5-W-R;
Down Arrow 22 - 22.0" 270'; Down Arrow 22 - 22.0" 270';

SHEET NO. 37 OF 53 SIGN NO. 2
SHEET NO. 38 OF 53 SIGN NO. 3

12.0" Radius, 2.0" Border, White on, Green;
State Highway 1479 4; "F Street", E Mod; "Rangerville Rd", E Mod;

E11-1;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Down Arrow 22 - 22.0" 270' Black; "ONLY" Black, E;
Table of letter and object lefts

1479
90.0

F	S	t	r	e	e	t
61.3	97.2	113.3	126.4	136.7	150.8	164.6

R	a	n	g	e	r	v	i	l	l	e	R	d
20.1	37.0	53.4	68.7	84.0	99.4	109.4	125.9	135.1	144.3	152.2	186.6	203.5

E	X	I	T	↓	O	N	L	Y
54.6	65.9	78.7	83.2	98.0	136.0	149.1	161.7	171.4

SHEET NO. 37 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Blue;
"Texas Travel", ClearviewHwy-5-W-R; "Information Center", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R; "26", ClearviewHwy-5-W-R; "C", ClearviewHwy-5-W-R;
Table of letter and object lefts

T	e	x	a	s	T	r	a	v	e	l
54.0	66.2	78.0	90.0	102.2	123.0	135.7	144.1	155.9	168.2	181.7

I	n	f	o	r	m	a	t	i	o	n
18.1	25.2	37.6	46.5	60.5	69.7	88.2	100.3	109.9	116.5	130.5

C	e	n	t	e	r
153.6	167.1	180.7	192.8	202.1	215.7

E	X	I	T	2	6	C
74.1	82.0	92.8	97.2	119.5	133.7	153.6

SHEET NO. 38 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

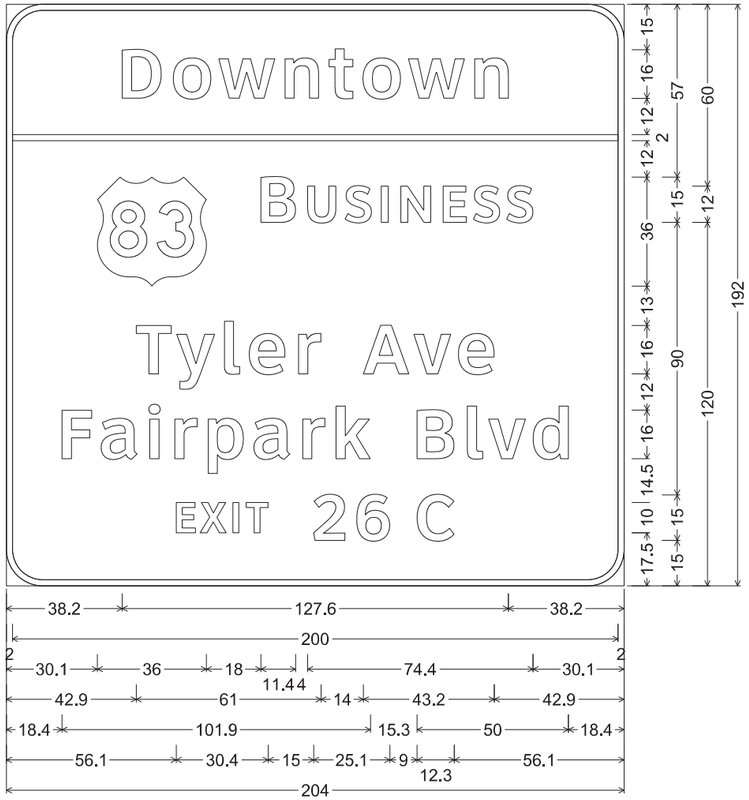
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 18 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				182
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



12.0" Radius, 2.0" Border, White on, Green;
"Downtown", ClearviewHwy-5-W-R; US 83 M1-4; "B", ClearviewHwy-5-W-R;
"USINESS", ClearviewHwy-5-W-R; "Tyler Ave", ClearviewHwy-5-W-R;
"Fairpark Blvd", ClearviewHwy-5-W-R; "EXIT", ClearviewHwy-5-W-R;
"26", ClearviewHwy-5-W-R; "C", ClearviewHwy-5-W-R;
Table of letter and object lefts

D	o	w	n	t	o	w	n
38.2	55.1	70.1	92.0	106.6	117.8	132.8	154.7

—
2.0

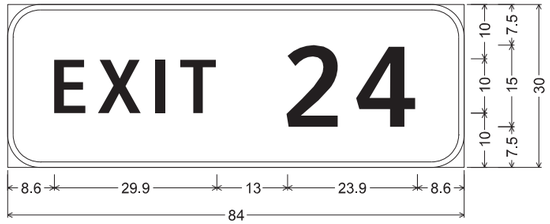
83	B	U	S	I	N	E	S	S
30.1	84.1	99.5	111.8	123.8	130.3	144.2	154.2	165.2

T	y	l	e	r	A	v	e
42.9	56.3	72.0	80.2	96.5	117.9	134.5	149.3

F	a	i	r	p	a	r	k	B	l	v	d	
18.4	31.3	47.0	55.6	66.7	81.8	97.8	108.9	135.6	152.3	159.2	174.0	

E	X	I	T	2	6	C	
56.1	64.0	74.8	79.2	101.5	115.7	135.6	

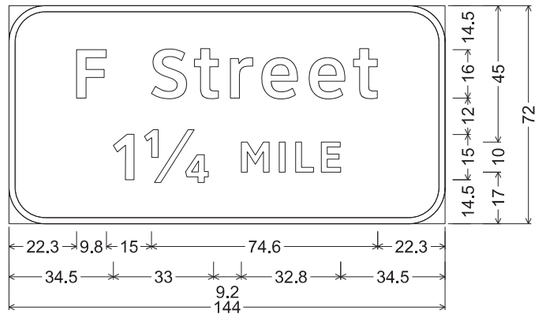
SHEET NO. 38 OF 53 SIGN NO. 2



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "24", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	4
8.6	16.6	27.3	31.7	51.5	64.2

SHEET NO. 39 OF 53 SIGN NO. 1

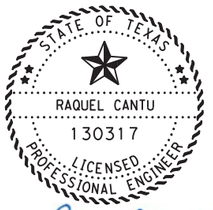


12.0" Radius, 2.0" Border, White on, Green;
"F Street", ClearviewHwy-5-W-R;
"1¼ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

F	S	t	r	e	e	t
22.3	47.1	61.2	73.1	83.5	99.1	113.8

1	¼	M	I	L	E
34.5	43.8	76.7	89.2	94.7	103.1

SHEET NO. 39 OF 53 SIGN NO. 1



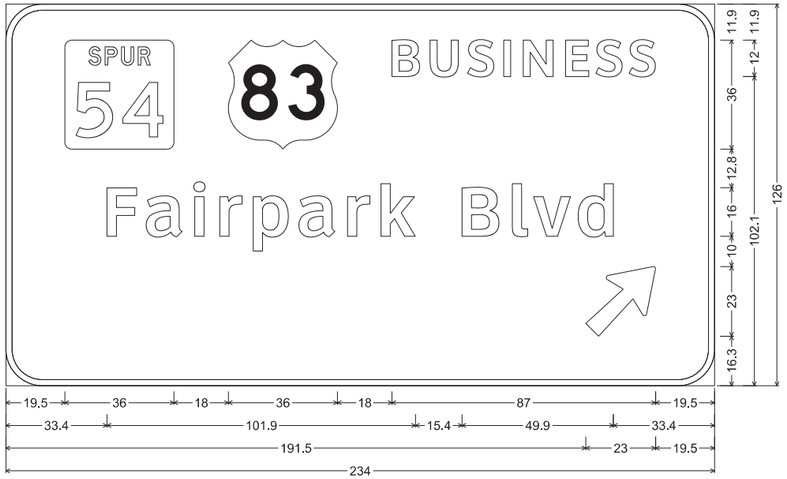
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 19 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				183
DW: LSJ	STATE DIST.NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
CK DW: GV	PHARR	HIDALGO, ETC.		6353	00	001		IH-2, ETC.



12.0" Radius, 2.0" Border, White on, Green;
State Highway 54 M1-6S2; US 83 M1-4; "BUSINESS", ClearviewHwy-5-W-R; "Fairpark Blvd", ClearviewHwy-5-W-R;
Arrow A-2 - 29.3" 45';
Table of widths and spaces

	54		83		B		U		S		I		N		E		S		S	
19.5	36.0	18.0	36.0	18.0	9.1	3.5	9.4	2.9	8.8	3.1	2.5	4.1	9.9	4.0	7.8	2.3	8.6	2.3	8.8	19.4

	F		a		i		r		p		a		r		k		B		l		v		d	
33.4	9.9	3.0	12.0	3.8	3.8	4.8	7.4	3.5	11.8	3.4	11.9	4.1	7.5	3.6	11.4	15.4	12.1	4.5	5.1	1.9	12.1	2.5	11.8	33.3

	↗	
191.5	23.0	19.5

SHEET NO. 40 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "27", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	7
9.2	17.2	27.8	32.3	52.1	64.9

SHEET NO. 40 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "28", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	8
8.5	16.5	27.1	31.6	51.4	64.9

SHEET NO. 42 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "29", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	2	9	B
7.6	15.6	26.2	30.7	52.5	65.8	83.6

SHEET NO. 43 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 2994 M1-6F4; "Wilson Rd", ClearviewHwy-5-W;
Arrow A-3 - 35.6" 45';
Table of widths and spaces

	2994	
55.0	64.0	55.0

	W		i		l		s		o		n		R		d	
19.7	21.3	4.3	3.8	5.6	5.1	3.5	10.3	4.4	12.5	5.4	11.2	18.8	12.0	4.7	11.7	19.7

	↗	
126.3	28.0	19.7

SHEET NO. 42 OF 53 SIGN NO. 1

Business 77 South Conley Rd arrow 45 right;
12.0" Radius, 2.0" Border, White on, Green;
"B", ClearviewHwy-5-W-R; "USINESS", ClearviewHwy-5-W-R;
US 77 M1-4; "N", ClearviewHwy-5-W-R; "ORTH", ClearviewHwy-5-W-R;
Arrow A-3 - 35.6" 45';
Table of letter and object lefts

B	U	S	I	N	E	S	S
16.5	32.0	44.3	56.2	62.7	76.7	86.7	97.7

77	N	O	R	T	H
43.5	118.4	134.8	149.5	160.7	172.3

↗
153.5

SHEET NO. 43 OF 53 SIGN NO. 1
SHEET NO. 48 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Valley", ClearviewHwy-5-W-R;
"Intl Airport", ClearviewHwy-5-W-R;
"EXIT", ClearviewHwy-5-W-R;
"29", ClearviewHwy-5-W-R; "A", ClearviewHwy-5-W-R;
Table of letter and object lefts

V	a	l	l	e	y
43.3	56.7	70.1	77.5	84.3	96.3

I	n	t	l
16.0	23.1	35.2	45.1

A	i	r	p	o	r	t
61.1	76.3	83.4	92.6	105.5	119.5	127.4

E	X	I	T	2	9	A
28.1	36.1	46.8	51.2	73.5	87.6	107.6

SHEET NO. 41 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

Raquel Cantu 11.06.20

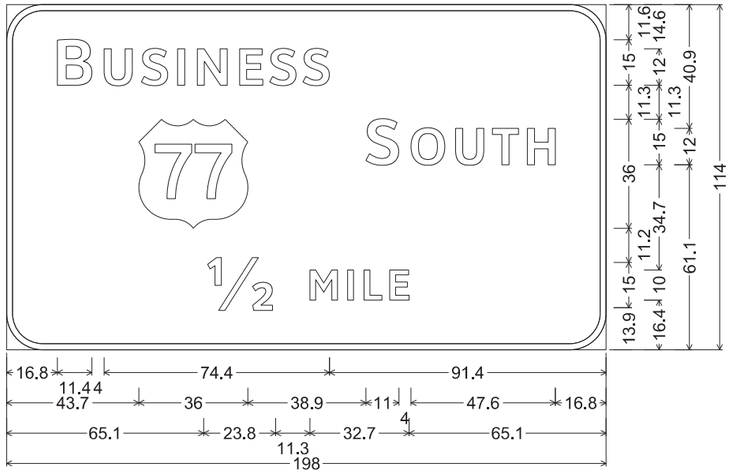
TEXAS DEPARTMENT OF TRANSPORTATION

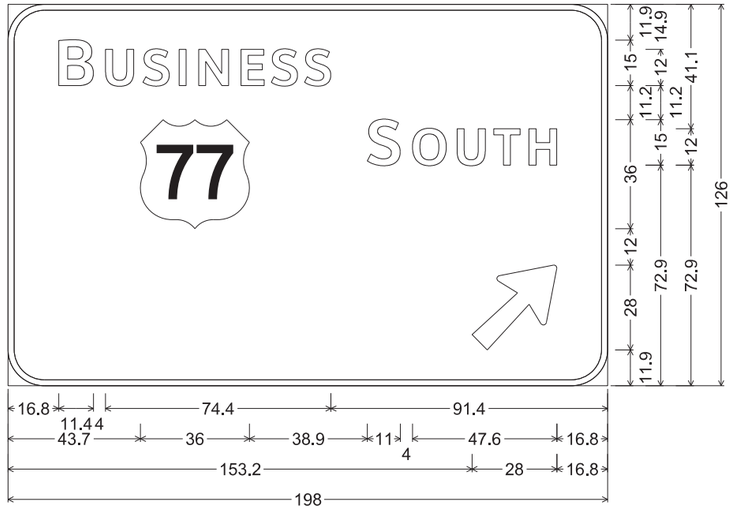
IH-69E
LARGE SIGN DETAIL SHEETS

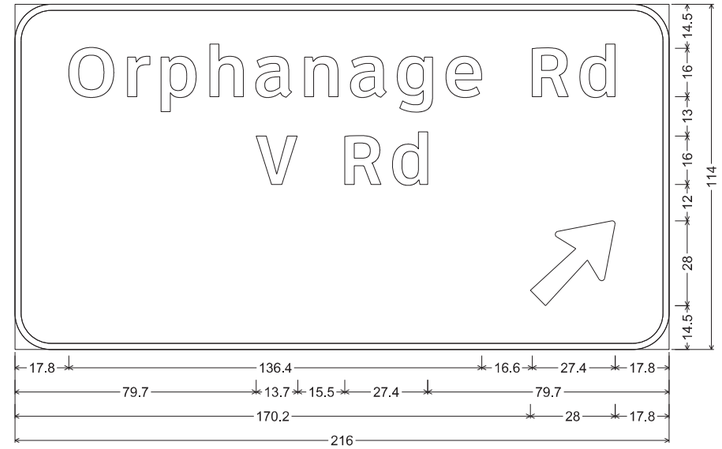
SHEET 20 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.	SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS		184

DW: LSJ	STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV	PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.







Business 77 South Conley Rd exit 1/2 mile;
12.0" Radius, 2.0" Border, White on, Green;
"B", ClearviewHwy-5-W-R; "USINESS", ClearviewHwy-5-W-R;
US 77 M1-4; "S", ClearviewHwy-5-W-R; "OUTH", ClearviewHwy-5-W-R;
"½ MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

B	U	S	I	N	E	S	S
16.8	32.2	44.5	56.5	63.0	76.9	86.9	97.9

77	S	O	U	T	H
43.7	118.6	133.6	148.3	160.4	172.0

½	M	I	L	E
65.1	100.2	112.6	118.1	126.5

SHEET NO. 44 OF 53 SIGN NO. 1

Business 77 South Conley Rd arrow 45 right;
12.0" Radius, 2.0" Border, White on, Green;
"B", ClearviewHwy-5-W-R; "USINESS", ClearviewHwy-5-W-R;
US 77 M1-4; "S", ClearviewHwy-5-W-R; "OUTH", ClearviewHwy-5-W-R;
Arrow A-3 - 35.6" 45';
Table of letter and object lefts

B	U	S	I	N	E	S	S
16.8	32.2	44.5	56.5	63.0	76.9	86.9	97.9

77	S	O	U	T	H
43.7	118.6	133.6	148.3	160.4	172.0

↗
153.2

SHEET NO. 45 OF 53 SIGN NO. 1
SHEET NO. 46 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
"Orphanage Rd", ClearviewHwy-5-W-R; "V Rd", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';
Table of widths and spaces

	O		r		p		h		a		n		a		g		e
17.8	14.9	4.5	7.4	3.6	11.7	4.4	11.2	4.0	12.0	4.1	11.1	4.1	11.9	3.6	11.7	4.4	11.8

	R		d	
16.6	12.0	3.8	11.6	17.8

	V		R		d	
79.7	13.7	15.5	12.0	3.8	11.6	79.7

	↗	
170.2	28.0	17.8

SHEET NO. 47 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "32", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	3	2
9.2	17.3	27.9	32.4	52.1	65.1

SHEET NO. 44 OF 53 SIGN NO. 1
SHEET NO. 45 OF 53 SIGN NO. 1
SHEET NO. 46 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "34", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	3	4
8.6	16.6	27.2	31.7	51.5	64.2

SHEET NO. 47 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

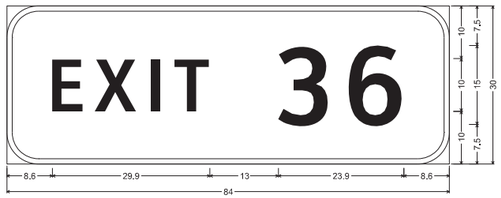
Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 21 OF 23

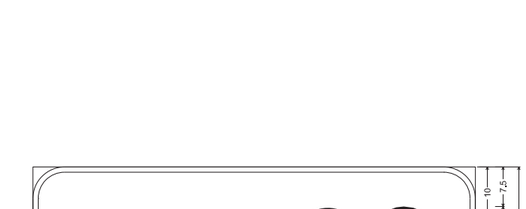
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				185
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "36", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	3	6
8.6	16.7	27.3	31.8	51.5	65.1

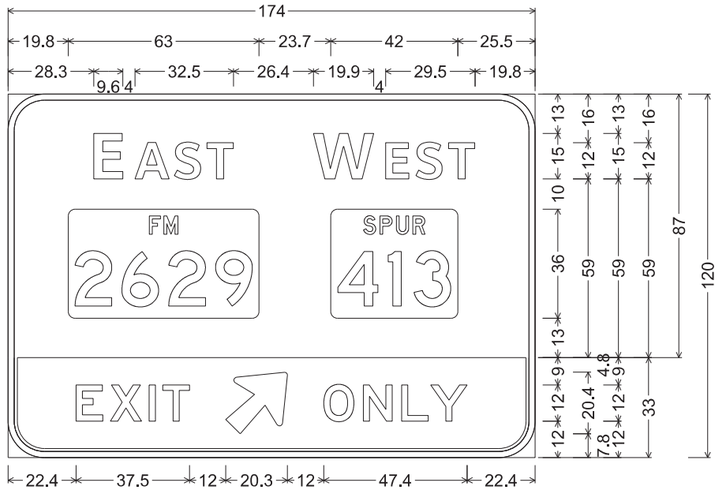
SHEET NO. 48 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "38", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	3	8
8.4	16.5	27.1	31.5	51.3	65.0

SHEET NO. 49 OF 53 SIGN NO. 1



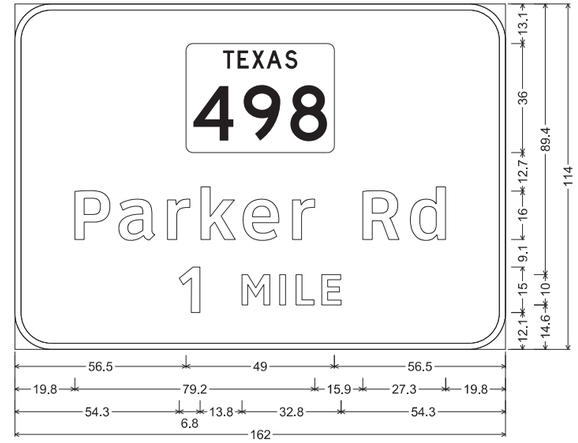
E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
"E", ClearviewHwy-5-W-R; "AST", ClearviewHwy-5-W-R;
State Highway 2629 M1-6F4; "W", ClearviewHwy-5-W-R;
"EST", ClearviewHwy-5-W-R; State Highway 413 M1-6S3;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black;
"ONLY" Black, E;
Table of letter and object lefts

E	A	S	T	W	E	S	T	
28.3	41.9	54.9	65.7	100.8	124.7	134.6	145.4	
2629	19.8	413	106.5					
E	X	I	T	↗	O	N	L	Y
22.4	33.7	46.5	51.1	71.9	104.2	117.3	129.9	139.6

SHEET NO. 49 OF 53 SIGN NO. 1



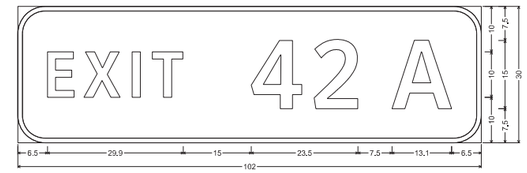
12.0" Radius, 2.0" Border, White on, Green;
State Highway 498 M1-6T3; "Parker Rd", ClearviewHwy-5-W-R;
"1", ClearviewHwy-5-W-R; "MILE", ClearviewHwy-5-W-R;
Table of letter and object lefts

498
56.5

P	a	r	k	e	r	R	d
19.8	34.3	50.4	61.4	75.4	91.6	114.9	130.6

1	M	I	L	E
54.3	74.9	87.4	92.9	101.3

SHEET NO. 50 OF 53 SIGN NO. 1



6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "42", ClearviewHwy-4-W; "A", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	4	2	A
6,5	14,5	25,1	29,6	51,4	65,2	82,4

SHEET NO. 50 OF 53 SIGN NO. 1

STATE OF TEXAS
RAQUEL CANTU
130317
LICENSED
PROFESSIONAL ENGINEER

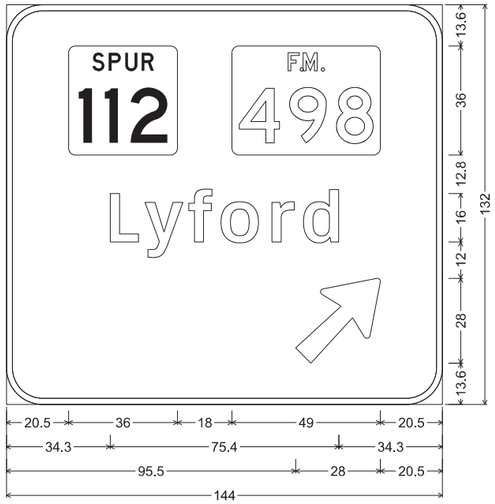
Raquel Cantu 11.06.20

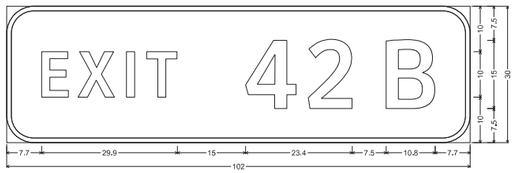
TEXAS DEPARTMENT OF TRANSPORTATION

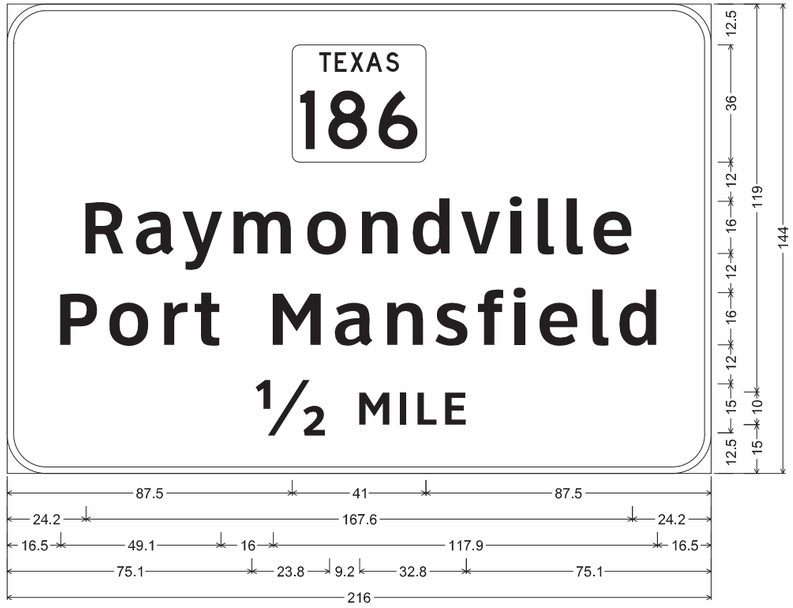
IH-69E
LARGE SIGN DETAIL SHEETS

SHEET 22 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS				186
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.	JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00	001	IH-2, ETC.







12.0" Radius, 2.0" Border, White on, Green;
State Highway 112 M1-6S3; State Highway 498 3;
"Lyford", ClearviewHwy-5-W-R; Arrow A-3 - 35.6" 45';
Table of widths and spaces

	112		498	
20.5	36.0	18.0	49.0	20.5

	L		y		f		o		r		d	
34.3	9.4	2.0	12.5	2.0	7.8	2.9	12.4	4.4	7.4	3.0	11.6	34.3

	↗	
95.5	28.0	20.5

SHEET NO. 51 OF 53 SIGN NO. 1

12.0" Radius, 2.0" Border, White on, Green;
State Highway 186 M1-6T3; "Raymondville", ClearviewHwy-5-W-R;
"Port Mansfield", ClearviewHwy-5-W-R; "½ MILE", ClearviewHwy-5-W-R;
Table of widths and spaces

	186	
87.5	41.0	87.5

	R		a		y		m		o		n		d		v		i		l		l		e	
24.2	11.9	3.5	11.9	2.3	12.4	3.3	18.1	4.5	12.4	4.4	11.1	4.5	11.6	3.2	12.2	2.8	3.8	4.8	5.1	3.7	5.2	3.1	11.8	24.2

	P		o		r		t
16.5	11.6	3.3	12.4	4.4	7.4	2.0	8.0

	M		a		n		s		f		i		e		l		d	
16.0	14.7	4.2	12.0	4.1	11.2	3.6	10.3	2.8	7.7	3.2	3.8	4.2	11.8	4.4	5.2	3.1	11.6	16.5

	½		M		I		L		E	
75.1	23.8	9.2	9.2	3.3	2.0	3.4	5.9	2.6	6.4	75.1

SHEET NO. 53 OF 53 SIGN NO. 1

E11-1aR;

12.0" Radius, 2.0" Border, White on, Green;
State Highway 490 M1-6F3;

E11-1e;
1.0" Inner border Green, 12.0" Radius, 2.0" Outer border, White on, Yellow;
"EXIT" Black, E; Arrow B-3 - 25.0" 45' Black; "ONLY" Black, E;
Table of letter and object lefts

490
53.5

E	X	I	T	↗	O	N	L	Y
13.4	24.7	37.5	42.1	62.9	95.2	108.3	120.9	130.6

SHEET NO. 52 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "45", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	4	5
8.2	16.2	26.8	31.3	52.1	66.1

SHEET NO. 52 OF 53 SIGN NO. 1

6.0" Radlus, 1.0" Border, Whlte on, Green;
"EXIT", ClearviewHwy-4-W; "42", ClearviewHwy-4-W; "B", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	4	2	B
7.7	15.7	26.3	30.8	52.6	66.4	83.5

SHEET NO. 51 OF 53 SIGN NO. 1

6.0" Radius, 1.0" Border, White on, Green;
"EXIT", ClearviewHwy-4-W; "48", ClearviewHwy-4-W;
Table of letter and object lefts

E	X	I	T	4	8
8.5	16.5	27.2	31.6	50.4	64.9

SHEET NO. 53 OF 53 SIGN NO. 1

RAQUEL CANTU
130317

Raquel Cantu 11.06.20

TEXAS DEPARTMENT OF TRANSPORTATION

IH-69E
LARGE SIGN DETAIL SHEETS

©2020

SHEET 23 OF 23

DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.		SHEET NO.
CK DN: GV	ORIGINAL	SEP. 2020		TEXAS			187
DW: LSJ			STATE DIST.NO.	COUNTY	CONTROL NO.	SECTION NO. / JOB NO.	HIGHWAY NO.
CK DW: GV			PHARR	HIDALGO, ETC.	6353	00 / 001	IH-2, ETC.

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DATE:
FILE:

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
1/53	1	GROUND MOUNT	EXIT 1A TEXAS 4 Intl Blvd Intl Airport Gateway Intl Bridge EXIT 1/4 MILE	SIGN ONLY
2/53	1	OVERHEAD	EXIT 1A TEXAS 4 Intl Blvd Intl Airport Gateway Intl Bridge	SIGN ONLY
3/53	1	OVERHEAD	EXIT 1A TEXAS 4 Intl Blvd EXIT ONLY	SIGN ONLY
3/53	2	OVERHEAD	EXIT 2 TEXAS 48 Boca Chica Blvd EXIT 1/2 MILE	SIGN ONLY
3/53	3	OVERHEAD	Brownsville - South Padre Island Intl Airport EXIT 2	SIGN ONLY
4/53	1	OVERHEAD	EXIT 1A TEXAS 4 Intl Blvd EXIT ONLY	SIGN ONLY
4/53	2	OVERHEAD	EXIT 1B 12th - 14th St EXIT ONLY	SIGN ONLY
4/53	3	OVERHEAD	EXIT 2 TEXAS 48 Boca Chica Blvd EXIT ONLY	SIGN ONLY

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
4/53	4	OVERHEAD	EXIT 3 Price Rd Old Alice Rd EXIT 1/2 MILE	SIGN ONLY
4/53	5	OVERHEAD	EXIT 2 TEXAS 48 Boca Chica Blvd EXIT ONLY	SIGN ONLY
5/53	1	OVERHEAD	EXIT 3 Price Rd Old Alice Rd EXIT ONLY	SIGN ONLY
6/53	1	OVERHEAD	EXIT 1B 12th - 14th St EXIT 3/4 MILE	SIGN ONLY
6/53	2	GROUND MOUNT	EXIT 1C 6th St EXIT ONLY	SIGN ONLY
6/53	3	OVERHEAD	H EXIT 4 BUSINESS 77 FM 802 Ruben M Torres Sr Blvd EXIT 1 MILE	SIGN ONLY
6/53	4	OVERHEAD	EXIT 3 Price Rd Old Alice Rd EXIT ONLY	SIGN ONLY
6/53	5	GROUND MOUNT	EXIT 4 HOSPITAL NEXT EXIT	SIGN ONLY
7/53	1	GROUND MOUNT	TEXAS TRAVEL INFORMATION CENTER 23 MILES OFICINA DE TURISMO 37 KM	SIGN ONLY

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
8/53	1	OVERHEAD	EXIT 5 Pablo Kisel Blvd Morrison Rd EXIT ONLY	SIGN ONLY
9/53	1	GROUND MOUNT	EXIT 3 Price Rd Old Alice Rd EXIT 1/2 MILE	SIGN ONLY
10/53	1	OVERHEAD	H EXIT 4 BUSINESS 77 FM 802 Ruben M Torres Sr Blvd EXIT 1/2 MILE	SIGN ONLY
10/53	2	OVERHEAD	EXIT 5 Morrison Rd	SIGN ONLY
11/53	1	GROUND MOUNT	EXIT 8 Sports Park Blvd NEXT EXIT	SIGN ONLY
12/53	1	GROUND MOUNT	H EXIT 6 FM 3248 Alton Gloor Blvd EXIT 3/4 MILE	SIGN ONLY

IH-69E SHEET 1 OF 4

SUMMARY OF LARGE SIGNS TO BE REMOVED

DN.: LSJ	CK.: GV	DW.: LSJ	CK.: GV	REVISIONS	
				11-93 8-95 5-01	1-04 9-08

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
PHR	HIDALGO, ETC.		188

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DATE:
FILE:

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
12/53	2	OVERHEAD	EXIT 7 Stillman Rd Old Alice Rd	SIGN ONLY
13/53	1	OVERHEAD	EXIT 8 Merryman Rd	SIGN ONLY
14/53	1	GROUND MOUNT	EXIT 8 Merryman Rd EXIT 3/4 MILE	SIGN ONLY
14/53	2	GROUND MOUNT	EXIT 10 A TO TEXAS 550 FM 511 Port of Brownsville	✕
15/53	1	OVERHEAD	EXIT 10 B 550 SCROLL Port of Brownsville	SIGN ONLY
15/53	2	OVERHEAD	EXIT 10 B 550 SCROLL Port of Brownsville EXIT 1/4 MILE	SIGN ONLY
15/53	3	OVERHEAD	EXIT 10 A FREE EXIT TO TEXAS 550 FM 511 Port of Brownsville EXIT ONLY	SIGN ONLY
16/53	1	OVERHEAD	EXIT 11 FM 803 Rancho Viejo EXIT ONLY	SIGN ONLY
17/53	1	OVERHEAD	EXIT 10 B TOLL ROAD 550 SCROLL Port of Brownsville EXIT 1 MILE	SIGN ONLY
17/53	2	OVERHEAD	EXIT 10 A FREE EXIT TO TEXAS 550 FM 511 Port of Brownsville EXIT 3/4 MILE	SIGN ONLY
18/53	1	GROUND MOUNT	EXIT 10 A FREE EXIT TO TEXAS 550 FM 511 Port of Brownsville EXIT 1 MILE	SIGN ONLY
19/53	1	GROUND MOUNT	EXIT 11 FM 803 Rancho Viejo EXIT 1/2 MILE	SIGN ONLY
20/53	1	OVERHEAD	EXIT 13 Roberta Rd EXIT ONLY	SIGN ONLY
21/53	1	GROUND MOUNT	EXIT 14 FM 1421 TEXAS 100 South Padre Island EXIT 1/2 MILE	SIGN ONLY
22/53	1	OVERHEAD	EXIT 13 Roberta Rd EXIT ONLY	SIGN ONLY
23/53	1	GROUND MOUNT	EXIT 14 FM 1421 TEXAS 100 South Padre Island	SIGN ONLY
23/53	2	GROUND MOUNT	EXIT 13 Roberta Rd EXIT 1/2 MILE	SIGN ONLY
24/53	1	OVERHEAD	EXIT 14 Los Fresnos Port Isabel NEXT EXIT	SIGN ONLY
24/53	2	OVERHEAD	EXIT 16 Frontage Rd	SIGN ONLY
25/53	1	OVERHEAD	EXIT 17 77 BUSINESS San Benito EXIT ONLY	SIGN ONLY
25/53	2	GROUND MOUNT	EXIT 17 77 BUSINESS San Benito EXIT 1/4 MILE	SIGN ONLY
26/53	1	GROUND MOUNT	EXIT 18 FM 732 FM 510 San Benito EXIT 1/2 MILE	SIGN ONLY

IH-69E SHEET 2 OF 4

SUMMARY OF LARGE SIGNS TO BE REMOVED

DN.:- LSJ	REVISIONS		
CK.:- GV	11-93	1-04	
DW.:- LSJ	8-95	9-08	
CK.:- GV	5-01		

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.

DIST	COUNTY	SHEET NO.
PHR	HIDALGO, ETC.	189

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
26/53	2	OVERHEAD	EXIT 17 77 BUSINESS San Benito EXIT ONLY	SIGN ONLY
26/53	3	GROUND MOUNT	EXIT 16	SIGN ONLY
27/53	1	OVERHEAD	EXIT 19 A McCulloch St EXIT ONLY	SIGN ONLY
28/53	1	OVERHEAD	EXIT 19 B TEXAS 345 FM 2520 Sam Houston Blvd McCulloch St EXIT ONLY	SIGN ONLY
29/53	1	OVERHEAD	EXIT 19 B TEXAS 345 FM 2520 Sam Houston Blvd McCulloch St EXIT ONLY	SIGN ONLY
30/53	1	OVERHEAD	H EXIT 22 FM 509 Paso Real Highway EXIT ½ MILE	SIGN ONLY
31/53	1	OVERHEAD	EXIT 21 SPUR 486 Williams Rd Ratliff St EXIT ONLY	SIGN ONLY
32/53	1	OVERHEAD	H EXIT 22 FM 509 Paso Real Highway EXIT ONLY	SIGN ONLY
32/53	2	OVERHEAD	H EXIT 22 FM 509 Paso Real Highway EXIT ONLY	SIGN ONLY
33/53	1	GROUND MOUNT	H EXIT 22 FM 509 Paso Real Highway	SIGN ONLY
33/53	2	OVERHEAD	H EXIT 23 A WEST FM 801 EAST LOOP 499 Ed Carey Dr New Hampshire St EXIT ONLY	SIGN ONLY
34/53	1	OVERHEAD	EXIT 23 B New Hampshire St EXIT ONLY	SIGN ONLY
35/53	1	OVERHEAD	EXIT 23 B New Hampshire St EXIT ½ MILE	SIGN ONLY
36/53	1	OVERHEAD	EXIT 24 FM 1479 F Street Rangerville Rd EXIT ONLY	SIGN ONLY
37/53	1	OVERHEAD	EXIT 24 FM 1479 F Street Rangerville Rd EXIT ONLY	SIGN ONLY
37/53	2	OVERHEAD	EVACUATION ROUTE VIA I69E NORTH 69E 77 Raymondville Corpus Christi	SIGN ONLY
37/53	3	OVERHEAD	EXIT 26 A Lincoln Ave	SIGN ONLY
38/53	1	OVERHEAD	Texas Travel Information Center NEXT RIGHT	SIGN ONLY
38/53	2	OVERHEAD	Downtown 83 BUSINESS Tyler Ave Fairpark Blvd NEXT RIGHT	SIGN ONLY
38/53	3	OVERHEAD	EVACUATION ROUTE VIA I69E NORTH 69E 77 Raymondville Corpus Christi	SIGN ONLY

DATE:
FILE:

IH-69E SHEET 3 OF 4

SUMMARY OF LARGE SIGNS TO BE REMOVED

DN.:- LSJ	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- LSJ	8-95	9-08
CK.:- GV	5-01	

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
PHR	HIDALGO, ETC.		190

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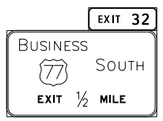
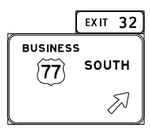
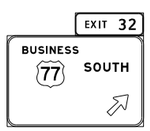
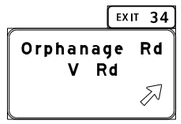
DATE:
FILE:

SUMMARY OF LARGE SIGNS TO BE REMOVED

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
39/53	1	OVERHEAD		SIGN ONLY
40/53	1	OVERHEAD		SIGN ONLY
41/53	1	GROUND MOUNT		✳
42/53	1	GROUND MOUNT		SIGN ONLY
43/53	1	GROUND MOUNT		SIGN ONLY
44/53	1	GROUND MOUNT		SIGN ONLY
45/53	1	GROUND MOUNT		SIGN ONLY
46/53	1	GROUND MOUNT		SIGN ONLY

PLAN SHEET NO.	SIGN NO.	TYPE OF MOUNT	SIGN TEXT	REMOVE LARGE RDSD ASSMS
47/53	1	GROUND MOUNT		SIGN ONLY
48/53	1	GROUND MOUNT		SIGN ONLY
49/53	1	OVERHEAD		SIGN ONLY
50/53	1	GROUND MOUNT		SIGN ONLY
51/53	1	GROUND MOUNT		SIGN ONLY
52/53	1	OVERHEAD		SIGN ONLY
53/53	1	OVERHEAD		SIGN ONLY

IH-69E SHEET 4 OF 4

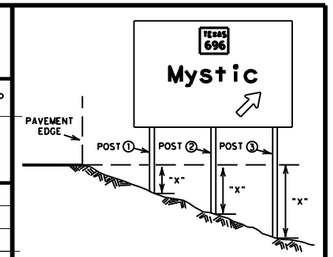
SUMMARY OF LARGE SIGNS TO BE REMOVED

DN.:- LSJ	REVISIONS		
CK.:- GV	11-93	1-04	
DW.:- LSJ	8-95	9-08	
CK.:- GV	5-01		

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
PHR	HIDALGO, ETC.		191

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
1/53	1	GREEN	EXIT 1A TEXAS 4 Intl Blvd Intl Airport Gateway Intl Bridge 1/8 MILE	7.5′ X 2.5′			18.75															
				3.0′ X 3.0′	9.00																	
				24.5′ X 13.0′			318.5															
			(N.B.)																			
2/53	1	GREEN	EXIT 1A TEXAS 4 Intl Blvd Intl Airport Gateway Intl Bridge	7.5′ X 2.5′				18.75														
				3.0′ X 3.0′	9.00																	
				22.0′ X 12.5′				275.0					S4X7.7	12.5	12.5	12.5	481.25					
			(N.B.)																			
3/53	1	GREEN	EXIT 1A TEXAS 4 Intl Blvd EXIT ONLY	7.5′ X 2.5′				18.75														
				3.0′ X 3.0′	9.00																	
				13.0′ X 10.0′				130.0					S4X7.7	10.0	10.0	10.0	231.00					
				13.0′ X 2.75′	35.75																	
			(S.B.)																			
3/53	2	GREEN	EXIT 2 TEXAS 48 Boca Chica Blvd 1/2 MILE	3.0′ X 3.0′		9.0																
				6.0′ X 2.5′				15.0														
				3.0′ X 3.0′	9.00																	
				20.0′ X 9.5′				190.0					S4X7.7	9.5	9.5	9.5	365.75					
			(N.B.)																			
3/53	3	GREEN	Brownsville - South Padre Island Intl Airport EXIT 2	23.5′ X 10.5′				246.75					S4X7.7	10.5	10.5	10.5	404.25					
			(N.B.)																			
4/53	1	GREEN	EXIT 1A TEXAS 4 Intl Blvd EXIT ONLY	7.5′ X 2.5′				18.75														
				3.0′ X 3.0′	9.00																	
				14.0′ X 10.0′				140.0					S4X7.7	10.0	10.0	10.0	231.00					
				14.0′ X 2.75′	38.50																	
			(S.B.)																			
4/53	2	GREEN	EXIT 1B 12th - 14th St EXIT ONLY	7.5′ X 2.5′				18.75														
				14.50′ X 8.5′				123.25					S4X7.7	8.5	8.5	8.5	196.35					
				14.50′X 2.75′	39.875																	
			(S.B.)																			
4/53	3	GREEN	EXIT 2 TEXAS 48 Boca Chica Blvd EXIT ONLY	3.0′ X 3.0′		9.0																
				6.0′ X 2.5′				15.0														
				3.0′ X 3.0′	9.0																	
				20.5′ x 10.0′				205.0					S4X7.7	10.0	10.0	10.0	385.00					
				20.5′ X 2.75	56.375																	
			(N.B.)																			
4/53	4	GREEN	EXIT 3 Price Rd Old Alice Rd 1/2 MILE	6.0′ X 2.5′				15.0														
				16.0′ X 8.0′				128.0					S4X7.7	8.0	8.0	8.0	184.80					
			(N.B.)																			
			PAGE TOTALS			18.00	337.25	1,558.00						PAGE TOTALS			2,479.40					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No.: 0 Aluminum/Fiberglass; 1 Aluminum; 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS
SOLS IH-69E

DN.:- CBR	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- CBR	8-95	9-08
CK.:- GV	5-01	

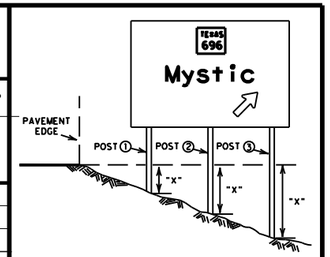
SHEET 1 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		192

DATE: September 11, 2020
FILE: I:\PRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo\IH 69E\Sum Large Signs Install IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
4/53	5	GREEN	EXIT 2 / TEXAS 48 / Boca Chica Blvd / EXIT ONLY	6.0′ X 2.5′				15.0														
				3.0′ X 3.0′	9.00																	
				20.50′ X 2.75′	56.375																	
				20.50′ X 10.0′				205.0					S4X7.7	10.0 10.0	10.0	10.0 10.0	385.00					
			(N.B.)																			
5/53	1	GREEN	EXIT 3 / Price Rd / Old Alice Rd / EXIT ONLY	7.5′ X 2.5′				18.75														
				16.50′ X 2.75′	45.375																	
				16.50′ X 8.5′				140.25					S4X7.7	8.5	8.5	8.5	196.35					
			(N.B.)																			
6/53	1	GREEN	EXIT 1B / 12th - 14th St / ¾ MILE	7.5′ X 2.5′				18.75														
				14.5′ X 8.0′				116.0					S4X7.7	8.0	8.0	8.0	184.80					
			(S.B.)																			
6/53	2	GREEN	EXIT 1C / 6th St / EXIT ONLY	7.5′ X 2.5′				18.75														
				13.50′ X 2.75′	37.125																	
				13.50′ X 6.5′				87.75					S4X7.7	6.5	6.5	6.5	150.15					
			(S.B.)																			
6/53	3	BLUE	H / EXIT 4 / BUSINESS 77 FM 802 / Ruben M Torres Sr Blvd / 1 MILE	3.0′ X 3.0′		9.0																
		GREEN		6.0′ X 2.5′	15.0																	
				3.0′ X 3.0′	9.00																	
				4.0′ X 3.0′				12.0														
				23.0′ X 14.5′				333.5					S4X7.7	14.5 14.5	14.5	14.5 14.5	558.25					
			(N.B.)																			
6/53	4	GREEN	EXIT 3 / Price Rd / Old Alice Rd / EXIT ONLY	6.0′ X 2.5′				15.0														
				16.50′ X 2.75′	45.375																	
				16.50′ X 9.0′				148.5					S4X7.7	9.0 9.0	9.0	9.0	277.20					
			(N.B.)																			
6/53	5	BLUE	HOSPITAL EXIT 4	10.0′ X 5.0′			50.00															
			(N.B.)																			
7/53	1	BLUE	TEXAS TRAVEL INFORMATION CENTER 23 MILES OFICINA DE TURISMO 37 KM	19.5′ X 11.0′			214.5															
			(N.B.)																			
8/53	1	GREEN	Pablo Kisel Blvd / Morrison Rd / EXIT ONLY	20.5′ X 9.0′				184.5					S4X7.7	9.0 9.0	9.0	9.0	277.20					
				20.50′ X 2.75′	56.375																	
			(N.B.)																			
9/53	1	GREEN	Price Rd / Old Alice Rd / ½ MILE	15.0′ X 8.0′			120.0															
			(S.B.)																			
PAGE TOTALS						9.00	384.50	1,313.75					PAGE TOTALS				2,028.95					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — Aluminum/Fiberglass; 1 Aluminum; 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69E

DN.: CBR	CK.: GV	DW.: CBR	CK.: GV	REVISIONS			
				11-93	1-04		
				8-95	9-08		
				5-01			

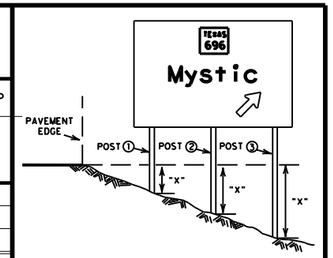
SHEET 2 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		193

DATE: September 11, 2020
FILE: T:\PHRTROP\Projects\RMC (Large Sign Project) 2020\Leo=IH 69E\Sum Large Signs Install=IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
10/53	1	BLUE	EXIT 6 / BUSINESS 77 / FM 802 / Ruben M Torres Sr Blvd / ½ MILE	3.0′ X 3.0′		9.0																
		GREEN		6.0′ X 2.5′	15.0																	
				3.0′ X 3.0′	9.00																	
				4.0′ X 3.0′				12.0														
				23.0′ X 14.5′				333.5					S4X7.7	14.5	14.5	14.5	558.25					
			(S.B.)																			
10/53	2	GREEN	EXIT 5 / Morrison Road	6.0′ X 2.5′				15.0														
				12.0′ X 7.0′				84.0					S4X7.7	7.0	7.0	7.0	161.70					
			(S.B.)																			
11/53	1	GREEN	Sports Park Blvd / EXIT 8	13.0′ X 7.5′			91.5															
			(N.B.)																			
12/53	1	GREEN	EXIT 6 / FM 3248 / Alton Gloor Boulevard / ⅚ MILE	6.0′ X 2.5′			15.0															
				5.33′ X 3.0′	15.99																	
				15.5′ X 12.0′			186.0															
			(S.B.)																			
12/53	2	GREEN	EXIT 7 / Stillman Rd / Old Alice Rd	6.0′ X 2.5′				15.0														
				18.0′ X 10.0′				180.0					S4X7.7	10.0	10.0	10.0	308.00					
			(S.B.)																			
13/53	1	GREEN	EXIT 8 / Merryman Rd	6.0′ X 2.5′				15.0														
				16.5′ X 6.5′				107.25					S4X7.7	6.5	6.5	6.5	150.15					
			(N.B.)																			
14/53	1	GREEN	EXIT 8 / Merryman Rd / ⅚ MILE	6.0′ X 2.5′			15.0															
				17.0′ X 5.5′			107.25															
			(S.B.)																			
14/53	2	GREEN	EXIT 10B / TO / 69 / TEXAS 550 / FM 511 / Port of Brownsville	8.5′ X 2.5′			21.25															
				3.75′ X 3.0′	11.25																	
				3.5′ X 3.0′	10.50																	
				3.0′ X 3.0′	9.00																	
				17.5′ X 15.0′			262.5		121	0.5	1.0		W10x26	22.5	23.0		1,279.0		20.0			2.4
			10′ OFFSET (N.B.)																			
15/53	1	GREEN	EXIT 10B / I69 SCHOOL / 550 SCHOOL / Port of Brownsville	8.5′ X 2.5′				21.25														
				3.0′ X 3.0′	9.0																	
				3.7′ X 3.0′	11.0																	
				15.0′ X 13.5′				202.50					S4X7.7	13.5	13.5	13.5	311.85					
			(S.B.)																			
			PAGE TOTALS			9.00	698.50	985.50					PAGE TOTALS				2,768.95		20.0			2.4



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No.: 0 Aluminum/Fiberglass; 1 Aluminum; 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69E

DN.:- CBR	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- CBR	8-95	9-08
CK.:- GV	5-01	

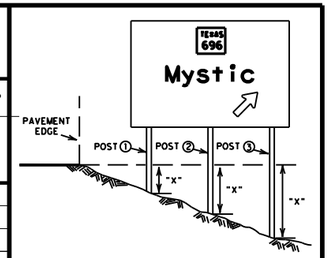
SHEET 3 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		194

DATE: September 11, 2020
FILE: T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
15/53	2	GREEN	EXIT 10B / TOLL ROAD / 169 / 550 / Port of Brownsville / ⅛ MILE	8.5′ X 2.5′				21.25														
				15.0′ X 2.0′				30.00														
				3.0′ X 3.0′	9.00																	
				3.7′ X 3.0′	11.00																	
				15.0′ X 12.5′				187.5					S4X7.7	14.5	14.5	14.5	334.95					
			(S.B.)																			
15/53	3	GREEN	EXIT 10A / FREE EXIT / TO / 169 / TEXAS 550 / FM 511 / Port of Brownsville / EXIT ONLY	8.5′ X 2.5′				21.25														
				17.5′ X 2.0′				35.0														
				3.75′ X 3.0′	11.25																	
				3.5′ X 3.0′	10.50																	
				3.0′ X 3.0′	9.00																	
				17.50′ X 2.75′	48.125																	
				17.5′ X 15.0′				262.5					S4X7.7	17.0	17.0	17.0	392.70					
			(N.B.)																			
16/53	1	GREEN	EXIT 11 / FM 803 / Rancho Viejo / EXIT ONLY	7.0′ X 2.5′				17.50														
				4.0′ X 3.0′	12.00																	
				17.50′ X 2.75′	48.125																	
				17.5′ X 10.5′				183.75					S4X7.7	10.5	10.5	10.5	242.55					
			(N.B.)																			
17/53	1	GREEN	EXIT 10B / TOLL ROAD / 169 / 550 / Port of Brownsville / 1 MILE	8.5′ X 2.5′				21.25														
				15.0′ X 2.0′				30.0														
				3.7′ X 3.0′	11.00																	
				3.5′ X 3.0′	10.50																	
				15.0′ X 12.5′				187.5					S4X7.7	14.5	14.5	14.5	334.95					
			(S.B.)																			
17/53	2	GREEN	EXIT 10A / FREE EXIT / TO / 169 / TEXAS 550 / FM 511 / Port of Brownsville / ⅛ MILE	8.5′ X 2.5′				21.25														
				16.0′ X 2.0′				32.0														
				3.7′ X 3.0′	11.00																	
				3.5′ X 3.0′	10.50																	
				3.0′ X 3.0′	9.00																	
				16.0′ X 14.0′				224.0					S4X7.7	16.0	16.0	16.0	369.60					
			(S.B.)																			
18/53	1	GREEN	EXIT 10A / FREE EXIT / TO / 169 / TEXAS 550 / FM 511 / Port of Brownsville / 1 MILE	8.5′ X 2.5′			21.25															
				16.0′ X 2.0′			32.0															
				3.75′ X 3.0′	11.25																	
				3.5′ X 3.0′	10.50																	
				3.0′ X 3.0′	9.00																	
				16.0′ X 14.0′			224.0															
			(S.B.)																			
19/53	1	GREEN	EXIT 11 / FM 803 / Rancho Viejo / ½ MILE	7.0′ X 2.5′			17.50															
				4.0′ X 3.0′	12.0																	
				17.0′ X 10.0′			170.0															
			(S.B.)																			
20/53	1	GREEN	EXIT 13 / Roberta Rd / EXIT ONLY	7.0′ X 2.5′				17.50														
				15.00′ X 2.75′	41.25																	
				15.0′ X 6.5′				97.50					S4X7.7	6.5	6.5	6.5	150.15					
			(S.B.)																			
			PAGE TOTALS			00.00	464.75	1,389.75									1,824.90					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69E

DN.:- CBR	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- CBR	8-95	9-08
CK.:- GV	5-01	

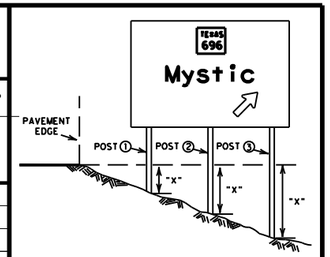
SHEET 4 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		195

DATE: September 11, 2020
FILE: I:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
21/53	1	GREEN	EXIT 14 / FM 1421 / TEXAS 100 / South Padre Island / ½ MILE	7.0′ X 2.5′			17.50															
				4.16′ X 3.0′	12.48																	
				3.50′ X 3.0′	10.50																	
				16.0′ X 12.0′			192.00															
			(N.B.)																			
22/53	1	GREEN	EXIT 13 / Roberta Rd / EXIT ONLY	7.0′ X 2.5′				17.50														
				14.50′ X 2.75′	39.875																	
			(S.B.)	14.5′ X 6.5′				94.25					S4X7.7	6.5	6.5	6.5	150.15					
23/53	1	GREEN	EXIT 14 / FM 1421 / TEXAS 100 / South Padre Island	7.0′ X 2.5′			17.50															
				4.16′ X 3.0′	12.48																	
				3.50′ X 3.0′	10.50																	
				16.0′ X 11.0′			176.00															
			(N.B.)																			
23/53	2	GREEN	EXIT 13 / Roberta Rd / ½ MILE	7.0′ X 2.5′			17.50															
				15.0′ X 6.0′			90.00															
			(S.B.)																			
24/53	1	GREEN	Los Fresnos / Port Isabel / EXIT 16	13.0′ X 7.0′			91.0															
			(S.B.)																			
24/53	2	GREEN	EXIT 16 / Frontage Rd	7.5′ X 2.5′			18.75															
				16.0′ X 7.0′			112.0															
			(N.B.)																			
25/53	1	GREEN	EXIT 17 / BUSINESS 77 / San Benito / EXIT ONLY	7.0′ X 2.5′				17.50														
				3.0′ X 3.0′	9.00																	
				15.00′ X 2.75′	41.25																	
				15.0′ X 10.5′				157.50					S4X7.7	10.5	10.5	10.5	242.55					
			(N.B.)																			
25/53	2	GREEN	EXIT 17 / BUSINESS 77 / San Benito / ½ MILE	7.0′ X 2.5′			17.50															
				3.0′ X 3.0′	9.00																	
				15.0′ X 9.5′			142.50															
			(N.B.)																			
26/53	1	GREEN	EXIT 18 / FM 732 / FM 510 / San Benito / ½ MILE	7.0′ X 2.5′			17.50															
				4.00′ X 3.00′	12.00																	
				3.5′ X 3.0′	10.50																	
				14.5′ X 9.5′			137.75															
			(N.B.)																			
26/53	2	GREEN	EXIT 17 / BUSINESS 77 / San Benito / EXIT ONLY	7.5′ X 2.5′				17.50														
				3.0′ X 3.0′	9.00																	
				15.00′ X 2.75′	41.25																	
				15.0′ X 10.50′				157.50					S4X7.7	10.5	10.5	10.5	242.55					
			(N.B.)																			
			PAGE TOTALS			00.00	1,047.50	461.75									635.25					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No. 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-96E

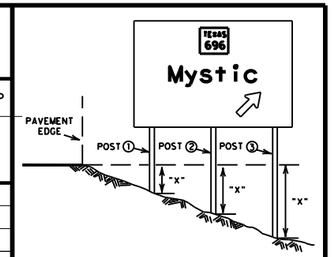
		REVISIONS	
DN.:- CBR		11-93	1-04
CK.:- GV		8-95	9-08
DW.:- CBR		5-01	
CK.:- GV			SHEET 5 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		196

September 11, 2020
T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo•IH 69E\Sum Large Signs Install•IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
26/53	3	GREEN	EXIT 16 ↗	5.0′ X 7.5′			37.50															
			(S.B.)																			
27/53	1	GREEN	EXIT 19A McCulloch St EXIT ↗ ONLY	8.5′ X 2.5′				21.25														
				17.00′ X 2.75′	46.75																	
				17.00′ X 6.5′				110.50					S4X7.7	6.5	6.5	6.5	150.15					
			(N.B.)																			
28/53	1	GREEN	EXIT 19B TEXAS 345 FM 2520 Sam Houston Blvd McCulloch St EXIT ↗ ONLY	8.5′ X 2.5′				21.25														
				4.08′ X 3.0′	12.25																	
				5.33′ X 3.0′	15.99																	
				22.50′ X 2.75′	61.875																	
				22.5′ X 12.5′				281.25					S4X7.7	12.5 12.5	12.5	12.5 12.5	481.25					
			(S.B.)																			
29/53	1	GREEN	EXIT 19B TEXAS 345 FM 2520 Sam Houston Blvd McCulloch St EXIT ↘ ONLY	8.5′ X 2.5′				21.25														
				4.08′ X 3.0′	12.25																	
				5.33′ X 3.0′	15.99																	
				22.50′ X 2.75′	61.875																	
				22.5′ X 12.5′				281.25					S4X7.7	12.5	12.5 12.5	12.5	481.25					
			(S.B.)																			
30/53	1	BLUE GREEN	EXIT 22 FM 509 Paso Real Highway ½ MILE	3.0′ X 3.0′		9.00																
				7.0′ X 2.5′				17.50														
				4.0′ X 3.0′	12.00																	
				13.5′ X 12.0′				162.00					S4X7.7	12.0	12.0	12.0	277.20					
			(N.B.)																			
31/53	1	GREEN	EXIT 21 FM 486 Williams Rd Ratliff St EXIT ↗ ONLY	7.0′ X 2.5′				17.50														
				4.08′ X 3.0′	12.25																	
				15.50′ X 2.75′	42.625																	
				15.5′ X 12.5′				193.75					S4X7.7	12.5	12.5	12.5	288.75					
			(S.B.)																			
32/53	2	BLUE GREEN	EXIT 22 FM 509 Paso Real Highway EXIT ↗ ONLY	3.0′ X 3.0′		9.00																
				7.0′ X 2.5′				17.50														
				4.08′ X 3.0′	12.25																	
				14.00′ X 2.75′	38.50																	
				14.0′ X 12.5′				175.00					S4X7.7	12.5	12.5	12.5	288.75					
			(N.B.)																			
32/53	1	BLUE GREEN	EXIT 22 FM 509 Paso Real Highway EXIT ↘ ONLY	3.0′ X 3.0′		9.00																
				7.0′ X 2.5′				17.50														
				4.08′ X 3.0′	12.25																	
				13.50′ X 2.75′	37.125																	
				13.5′ X 12.5′				168.75					S4X7.7	12.5	12.5	12.5	288.75					
			(N.B.)																			
PAGE TOTALS							27.00	37.50	1,506.25					PAGE TOTALS			2,544.85					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0

- 1 — Wind Design Zone
- 3 — Series No.
- 0 — No. of Posts

Series No.: 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

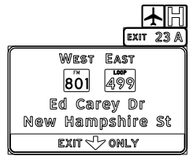
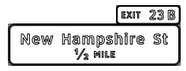
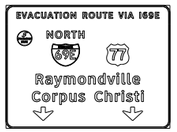
SOLS IH-69E

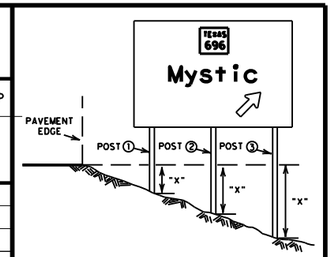
DN.: CBR	CK.: GV	DW.: CBR	CK.: GV	REVISIONS			
				11-93	1-04		
				8-95	9-08		
				5-01			

SHEET 6 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		197

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	⚹ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
33/53	1	BLUE		3.0′ X 3.0′		9.00																
		GREEN		7.0′ X 2.5′			17.50															
				4.08′ X 3.0′	12.25																	
				15.5′ X 10.5′			162.75															
			(N.B.)																			
33/53	2	BLUE		3.0′ X 3.0′		9.00																
		GREEN		3.0′ X 3.0′		9.00																
				8.5′ X 2.5′				21.25														
				3.12′ X 3.0′	9.36																	
				3.95′ X 3.0′	11.85																	
				24.00′ X 2.75′	66.00																	
				24.0′ X 14.5′				348.00					S4X7.7	14.5	14.5	14.5	558.25					
			(N.B.)																			
34/53	1	GREEN		8.5′ X 2.5′				21.25														
				23.00′ X 2.75′	63.25																	
				23.0′ X 6.5′				149.50					S4X7.7	6.5	6.5	6.5	250.25					
			(S.B.)																			
35/53	1	GREEN		8.5′ X 2.5′				21.25														
				23.0′ X 5.5′				126.50					S4X7.7	5.5	5.5	5.5	211.75					
			(S.B.)																			
36/53	1	GREEN		7.0′ X 2.5′				17.50														
				4.5′ X 3.0′	13.50																	
				18.5′ X 2.75′	50.88																	
				18.5′ X 12.5′				231.25					S4X7.7	12.5	12.5	12.5	385.00					
			(S.B.)																			
37/53	1	GREEN		7.5′ X 2.5′				18.75														
				4.5′ X 3.0′	13.50																	
				19.50′ X 2.75′	53.625																	
				19.50′ X 12.5′				243.75					S4X7.7	12.5	12.5	12.5	385.00					
			(S.B.)																			
37/53	2	GREEN		2.0′ X 2.0′	4.0																	
				3.75′ X 3.0′	11.25																	
				3.0′ X 3.0′	9.00																	
				22.0′ X 16.5′				363.0					S4X7.7	16.5	16.5	16.5	635.25					
			(N.B.)																			
37/53	3	GREEN		8.5′ X 2.5′				21.25														
				16.50′ X 7.0′				115.5					S4X7.7	7.0	7.0	7.0	161.70					
			(N.B.)																			
38/53	1	BLUE		20.00′ X 7.0′				140.00														
			(N.B.)																			
			PAGE TOTALS		27.00		180.25	1,838.75						PAGE TOTALS			2,802.80					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

⚹ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — Aluminum/Fiberglass
  - 1 Aluminum
  - 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69E

DN.: CBR	CK.: GV	DW.: CBR	CK.: GV
REVISIONS			
11-93	1-04		
8-95	9-08		
5-01			

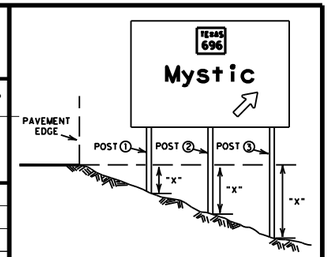
SHEET 7 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		198

September 11, 2020
T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo*IH 69E\Sum Large Signs Install*IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
38/53	2	GREEN	Downtown 83 BUSINESS Tyler Ave Fairpark Blvd EXIT 26 C	3.0′ X 3.0′	9.00																	
			(N.B.)	17.00′ X 16.00′				272.00					S4X7.7	16.0	16.0	16.0	369.60					
38/53	3	GREEN	EVACUATION ROUTE VIA I69E NORTH 69E 77 Raymondville Corpus Christi	2.0′ X 2.0′	4.0																	
				3.75′ X 3.0′	11.25																	
				3.0′ X 3.0′	9.00																	
			(N.B.)	22.0′ X 16.5′				363.0					S4X7.7	16.5 16.5	16.5	16.5 16.5	635.25					
39/53	1	GREEN	EXIT 24 F Street 1¼ MILE	7.0′ X 2.5′				17.50														
			(S.B.)	12.00′ X 6.0′				72.00					S4X7.7	6.0	6.0	6.0	138.60					
40/53	1	GREEN	EXIT 27 SPUR 54 83 BUSINESS Fairpark Blvd	7.0′ X 2.5′				17.50														
				3.0′ X 3.0′	9.0																	
				3.0′ X 3.0′	9.0																	
			(S.B.)	19.50′ X 10.50′				204.75					S4X7.7	10.5	10.5 10.5	10.5	323.40					
41/53	1	GREEN	Valley Inti Airport EXIT 29 A 10′ OFFSET	12.50′ X 7.50′			93.75		121	1.0	2.0		W6X12	15.50	16.50		464.60		16.00			1.9
			(N.B.)																			
42/53	1	GREEN	EXIT 28 FM 2994 Wilson Rd	7.0′ X 2.5′			17.50															
				5.33′ X 3.0′	15.99																	
			(S.B.)	14.50′ X 11.00′			159.50															
43/53	1	GREEN	EXIT 29B BUSINESS 77 NORTH	8.5′ X 2.5′			21.25															
				3.0′ X 3.0′	9.0																	
			(N.B.)	16.50′ X 10.50′			173.25															
44/53	1	GREEN	EXIT 32 BUSINESS 77 SOUTH ½ MILE	7.0′ X 2.5′			17.50															
				3.0′ X 3.0′	9.00																	
			(N.B.)	16.50′ X 9.50′			156.75															
			PAGE TOTALS			00.00	639.50	946.75									1,931.45		16.00			1.9



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — Series No.
- 0 — 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- 0 — No. of Posts

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS
SOLS IH-69E

DN.:- CBR	REVISIONS	
CK.:- GV	11-93	1-04
DW.:- CBR	8-95	9-08
CK.:- GV	5-01	

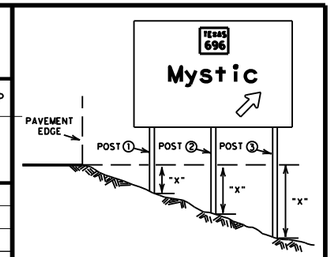
SHEET 8 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		199

September 11, 2020
T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo*IH 69E\Sum Large Signs Install*IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT				RIP RAP
					DIRECT APPLY	✳ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
45/53	1	GREEN	EXIT 32 / BUSINESS 77 SOUTH	7.0′ X 2.5′			17.50															
				3.0′ X 3.0′	9.00																	
				16.50′ X 10.50′			173.25															
			(N.B.)																			
46/53	1	GREEN	EXIT 32 / BUSINESS 77 SOUTH	7.0′ X 2.5′			17.50															
				3.0′ X 3.0′	9.00																	
				16.50′ X 10.50′			173.25															
			(S.B.)																			
47/53	1	GREEN	EXIT 34 / Orphanage Rd V Rd	7.0′ X 2.5′			17.50															
				18.00′ X 9.50′			171.00															
			(N.B.)																			
48/53	1	GREEN	EXIT 36 / BUSINESS 77 NORTH	7.0′ X 2.5′			17.50															
				3.0′ X 3.0′	9.00																	
				16.50′ X 10.50′			173.25															
			(S.B.)																			
49/53	1	GREEN	EXIT 38 / EAST WEST FM 2629 SPUR 413 / EXIT ONLY	7.0′ X 2.5′				17.50														
				5.25′ X 3.0′	15.75																	
				3.5′ X 3.0′	10.50																	
				14.50′ X 2.75′	39.875																	
				14.50′ X 10.00′				145.00					S4X7.7	10.0	10.0	10.0	231.00					
			(S.B.)																			
50/53	1	GREEN	EXIT 42A / TEXAS 498 Parker Rd 1 MILE	8.5′ X 2.5′			21.25															
				4.08′ X 3.0′	12.25																	
				13.50′ X 9.50′			128.25															
			(N.B.)																			
51/53	1	GREEN	EXIT 42B / SPUR 112 FM 498 Lyford	8.5′ X 2.5′			21.25															
				3.0′ X 3.0′	9.00																	
				4.08′ X 3.0′	12.25																	
				12.00′ X 11.00′			132.00															
			(S.B.)																			
			PAGE TOTALS			00.00	1,063.50	162.50					PAGE TOTALS				231.00					



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

✳ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No.: 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69E

		REVISIONS	
DN.: CBR	CK.: GV	11-93	1-04
DW.: CBR	CK.: GV	8-95	9-08
		5-01	

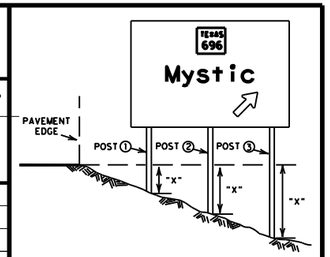
SHEET 9 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		200

September 11, 2020
T:\PHRTRFOP\Projects\RMC (Large Sign Project) 2020\Leo*IH 69E\Sum Large Signs Install*IH69E.dgn

SUMMARY OF LARGE SIGNS

PLAN SHEET NO.	SIGN NO.	SIGN BACK-GROUND COLOR	SIGN TEXT	SIGN DIMENSIONS	PLAQUES, & OTHER ATTACHMENTS		BACKGROUND SUBSTRATE (SQ FT)		TYPE OF MOUNT	"X" DIMENSION ◒			GALVANIZED STRUCTURAL STEEL					DRILLED SHAFT					RIP RAP
					DIRECT APPLY	⁎ ALUMINUM (TYPE A)	GROUND MOUNT (TYPE G)	OVERHEAD (TYPE O)		post ①	post ②	post ③	SIZE	LINEAR FEET post ①	post ②	post ③	TOTAL WEIGHT LBS.	NON-REINF 12"ϕ	LINEAR FEET REINFORCED 24"ϕ	30"ϕ	36"ϕ	CY
52/53	1	GREEN	EXIT 45 / FM 490 / EXIT ONLY	7.0′ X 2.5′				17.50														
				4.08′ X 3.00′	12.25																	
				13.00′ X 2.75′	35.75																	
				13.00′ X 8.00′				104.00					S4X7.7	8.0	8.0	8.0	184.80					
			(S.B.)																			
53/53	1	GREEN	EXIT 48 / TEXAS 186 / Raymondville Port Mansfield / ½ MILE	7.0′ X 2.5′				17.50					S4X7.7	11.5	11.5 11.5	11.5	354.20					
				3.42′ X 3.0′	10.25																	
				18′ X 12′				216.00														
			(S.B.)																			
PAGE TOTALS					00.00	00.00		355.00					PAGE TOTALS	539.00					36.00			4.3
PAGE GRAND TOTALS					90.00	4,853.25		10,517.00					PAGE GRAND TOTALS	17,785.95								



◒ The "X" dimension is the elevation difference at the post between the ground and the edge of pavement or top of curb.

Sign supports shall be located as shown on the plans, except that the Engineer may shift the sign supports, within design guidelines, where necessary to secure a more desirable location or to avoid conflict with utilities. Unless otherwise shown on the plans, the Contractor shall stake and the Engineer will verify all sign support locations.

The post lengths listed here are approximations, The corrected post lengths will be furnished by the Contractor after the stud posts are placed.

Tower heights shall be verified with the Engineer before fabrication.

⁎ This column is for aluminum Type A and not direct apply. Direct apply is subsidiary to the sign.

SIGN TYPE

SIGN TYPE 1 3 0
- 1 — Wind Design Zone
- 3 — No. of Posts
- 0 — Series No.: 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass

See sheet SMD(8W1)

SUMMARY OF LARGE SIGNS

SOLS IH-69E

DN.:- CBR	CK.:- GV	DW.:- CBR	CK.:- GV	REVISIONS
				11-93 1-04 8-95 9-08 5-01

SHEET 10 OF 10

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH 2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		201

September 11, 2020
T:\PHRTROP\Projects\RMC (Large Sign Project) 2020\Leo*IH 69E\Sum Large Signs Install*IH69E.dgn

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. As shown on BC(2), the OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER (see Sign Detail G20-10T) and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. However, the TRAFFIC FINES DOUBLE sign will not be required on projects consisting solely of mobile operation work, such as striping or milling edgeline rumble strips. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits.

11. Except for devices required by Note 10, traffic control devices should be in place only while work is actually in progress or a definite need exists.

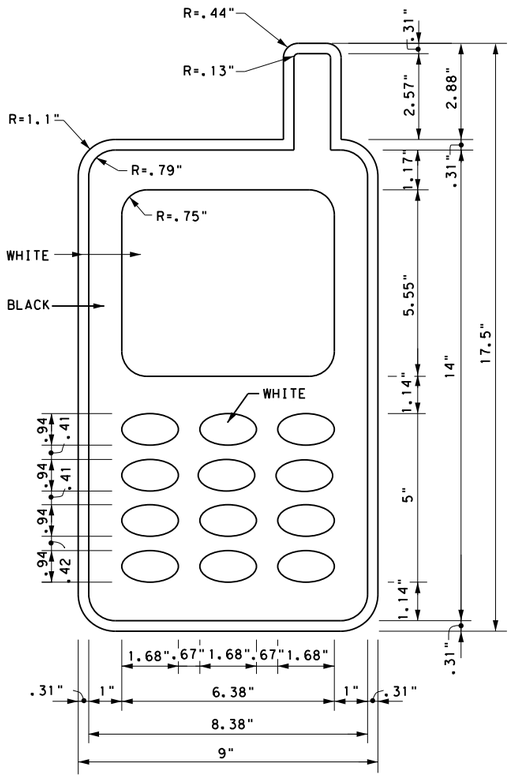
12. The Engineer has the final decision on the location of all traffic control devices.

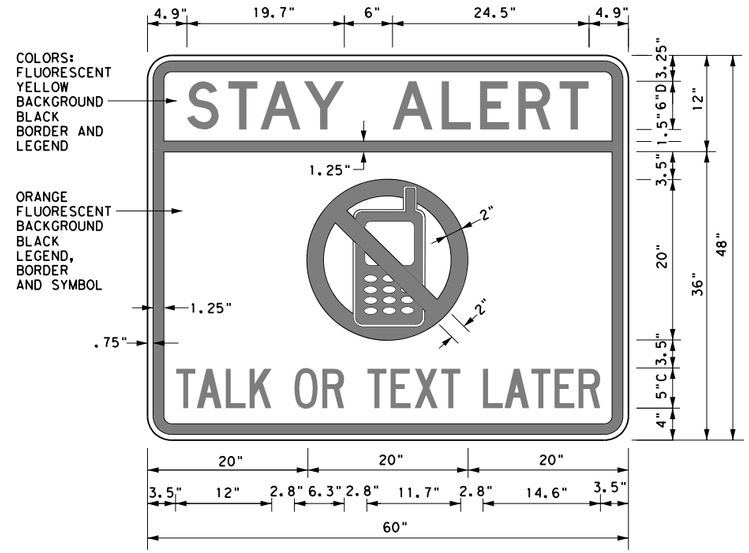
13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY APPAREL 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.

DATE: $DATE$ $TIME$
FILE: $FILE$





3.0" Radius, 1.25" Border, 0.75" Indent, Black on Yellow;
[STAY ALERT] Font: D
3.0" Radius, 1.25" Border, 0.75" Indent, Black on Orange;
[TALK OR TEXT LATER] Font: C specified length;

SIGN DETAIL (G20-10T)

Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be found on-line at the web address given below or by contacting:

Texas Department of Transportation
Traffic Operations Division - TE
Phone (512) 416-3118

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

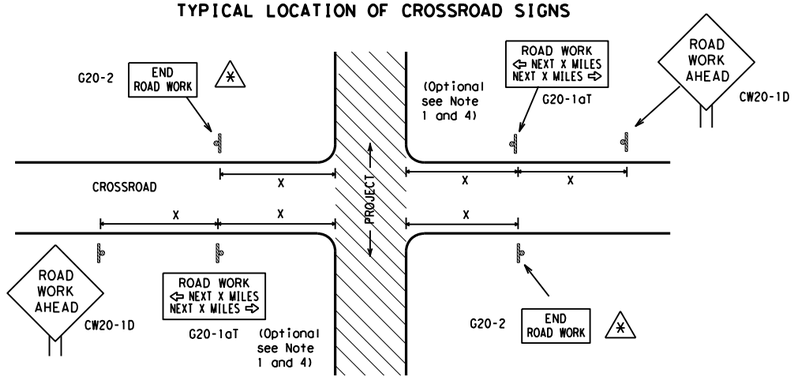
Texas Department of Transportation | Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
4-03 5-10 8-14	DIST	COUNTY		SHEET NO.
9-07 7-13	21	HIDALGO, ETC.		202

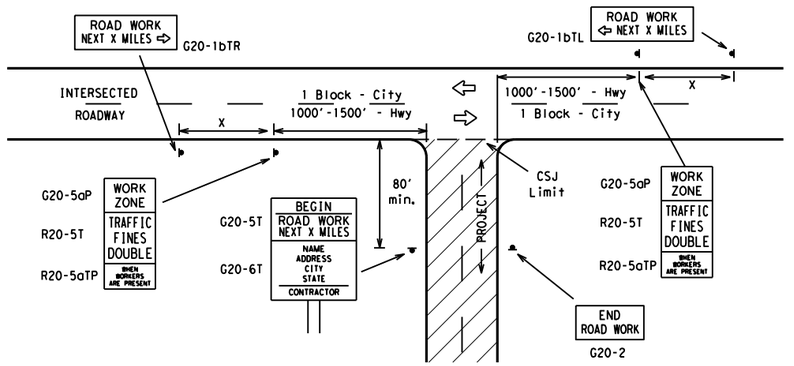
TYPICAL LOCATION OF CROSSROAD SIGNS



✱ 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. 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]

SIZE			SPACING	
Sign Number or Series	Conventional Road	Expressway/ Freeway	Posted Speed	Sign Spacing "X" △
			MPH	Feet (Apprx.)
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"	30	120
			35	160
			40	240
			45	320
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"	50	400
			55	500[2]
			60	600[2]
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"	65	700[2]
			70	800[2]
			75	900[2]
			80	1000[2]
			✱	✱ [3]

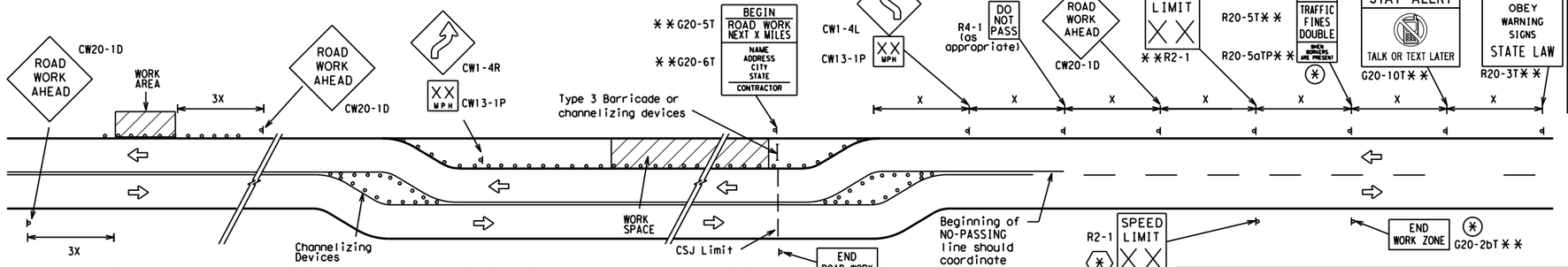
✱ For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

△ 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. 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.

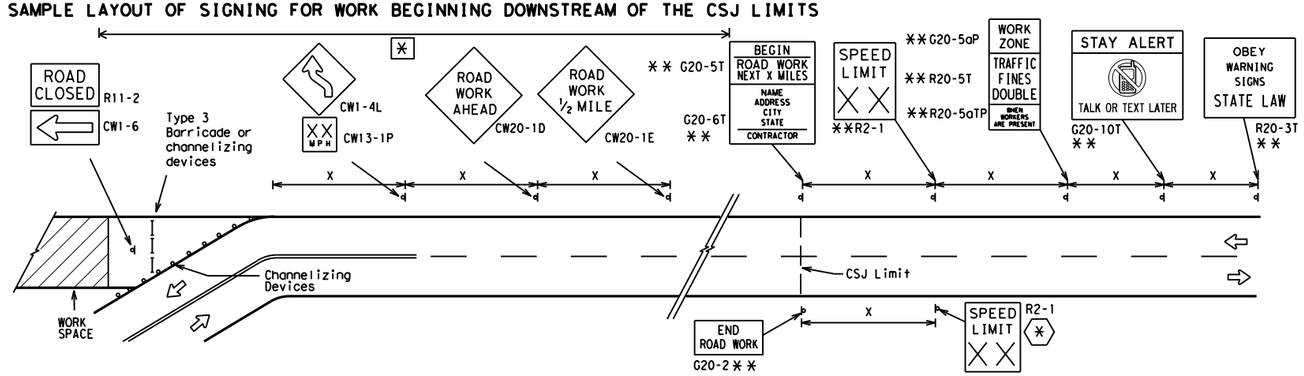
WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS



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 AT THE CSJ LIMITS

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.

✱✱ Required CSJ Limit signing. See Note 10 on BC(1). TRAFFIC FINES DOUBLE signs will not be required on projects consisting solely of mobile operations work.

✱ 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 Operations Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2,ETC.
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13	21	HIDALGO,ETC.		203

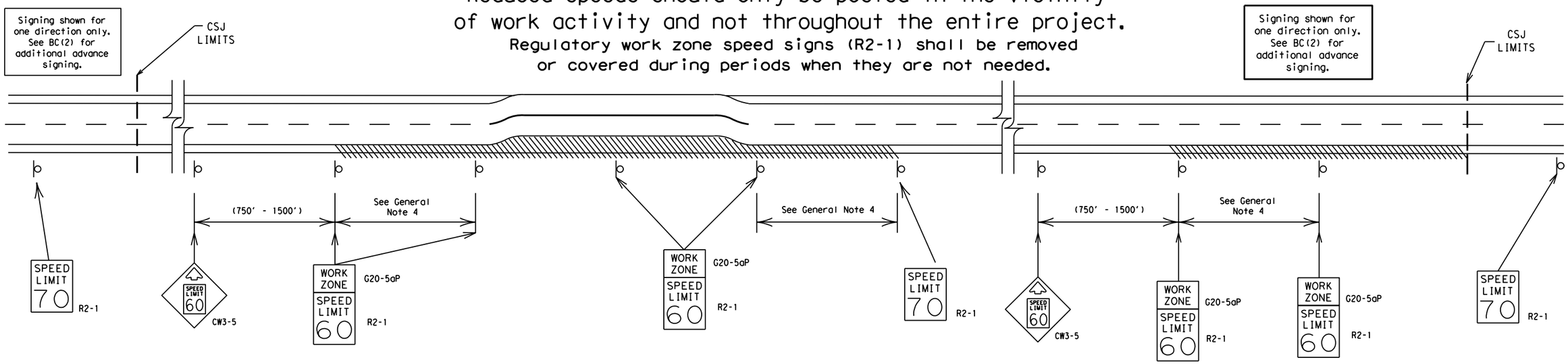
DATE: $DATE$ $TIME$
FILE: $FILE$

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 travelled 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 Operations Division Standard

BARRICADE AND CONSTRUCTION WORK ZONE SPEED LIMIT

BC(3)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS 9-07 8-14 7-13	6353	00	001	IH-2,ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO,ETC.		204

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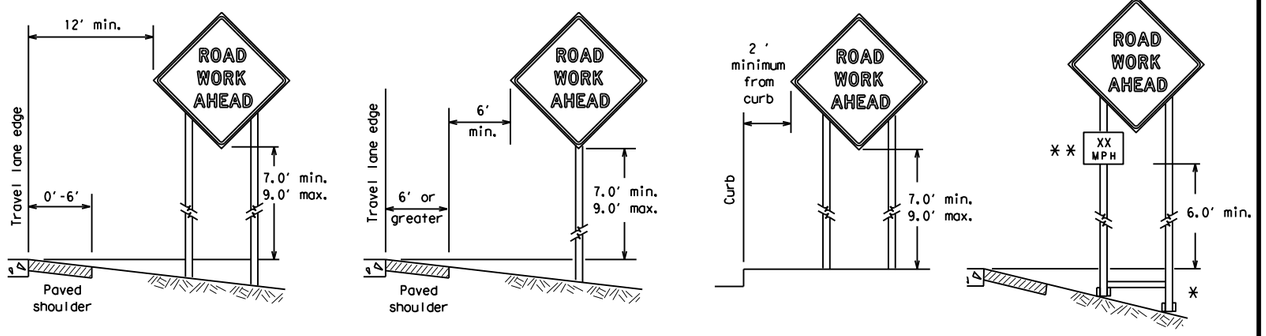
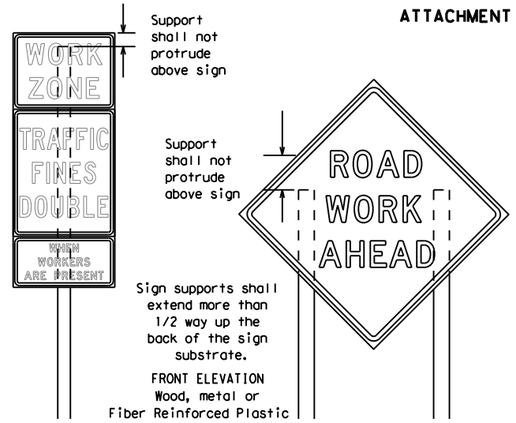
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS

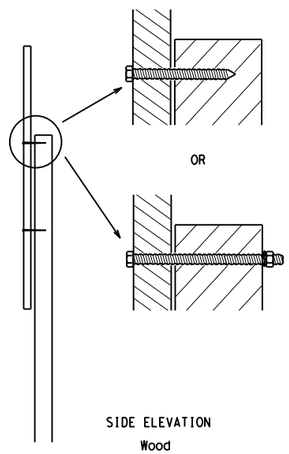


* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

** 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





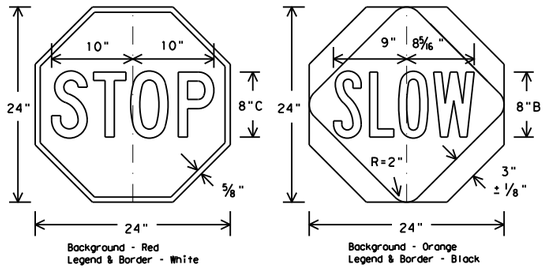
Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

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" as detailed below.
2. When used at night, the STOP/SLOW paddle shall be retroreflectorized.
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.



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, 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.
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 sheets or the CWZTCD. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards 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). 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 Operations Division Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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9-07 8-14	DIST	COUNTY		SHEET NO.
7-13	21	HIDALGO, ETC.		205

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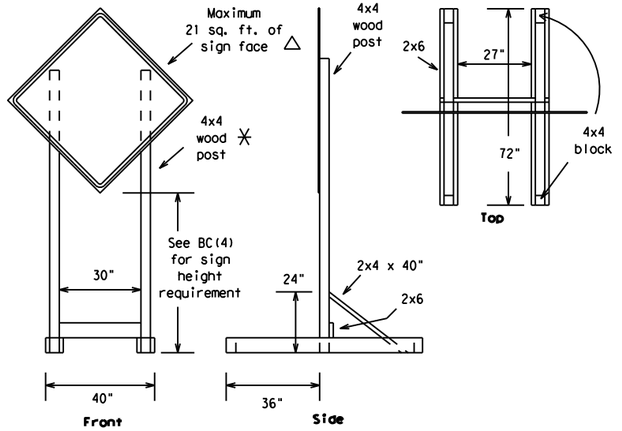
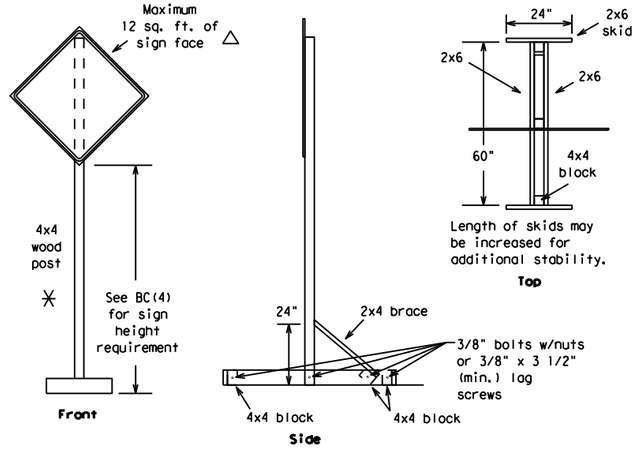
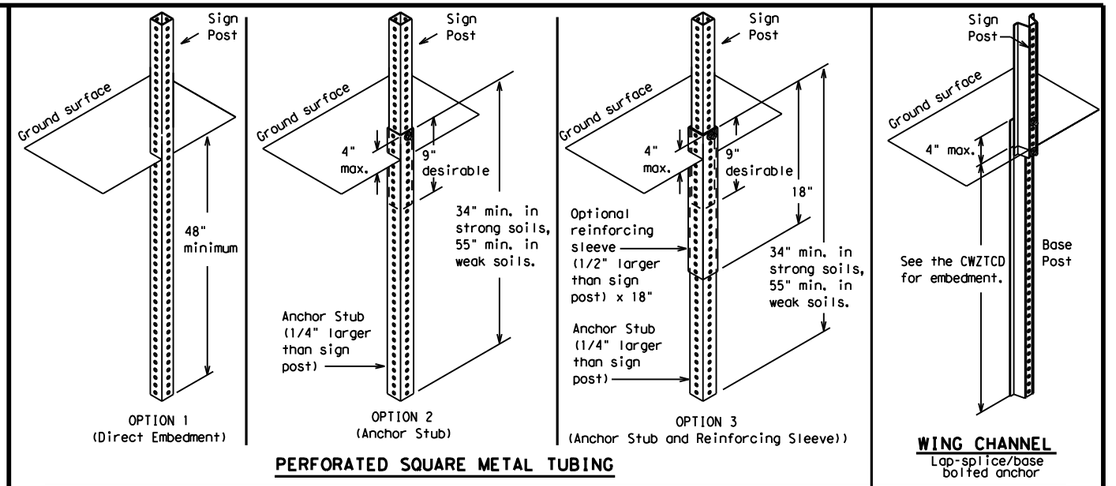




SKID MOUNTED WOOD SIGN SUPPORTS

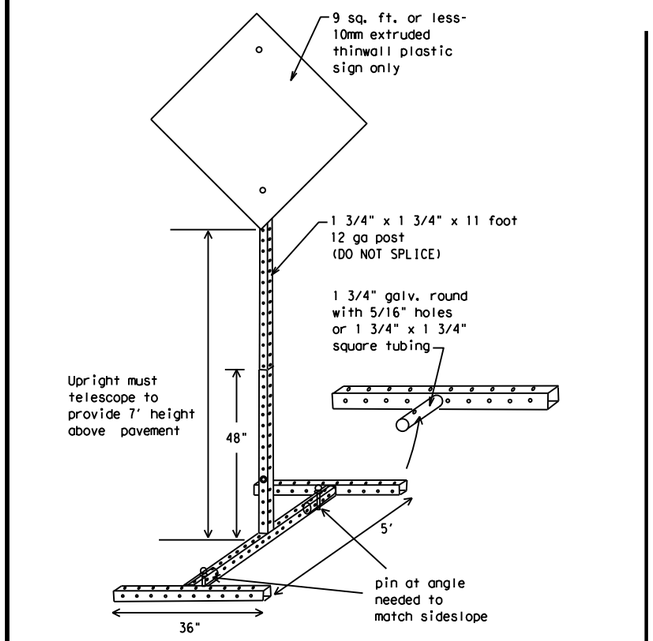
LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS □

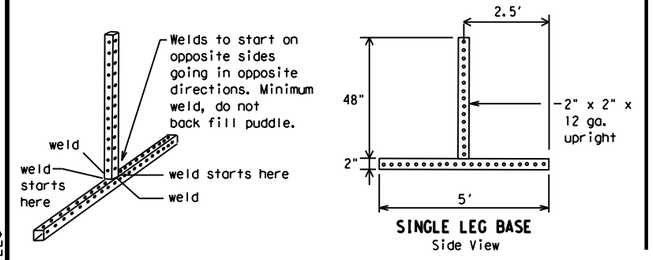


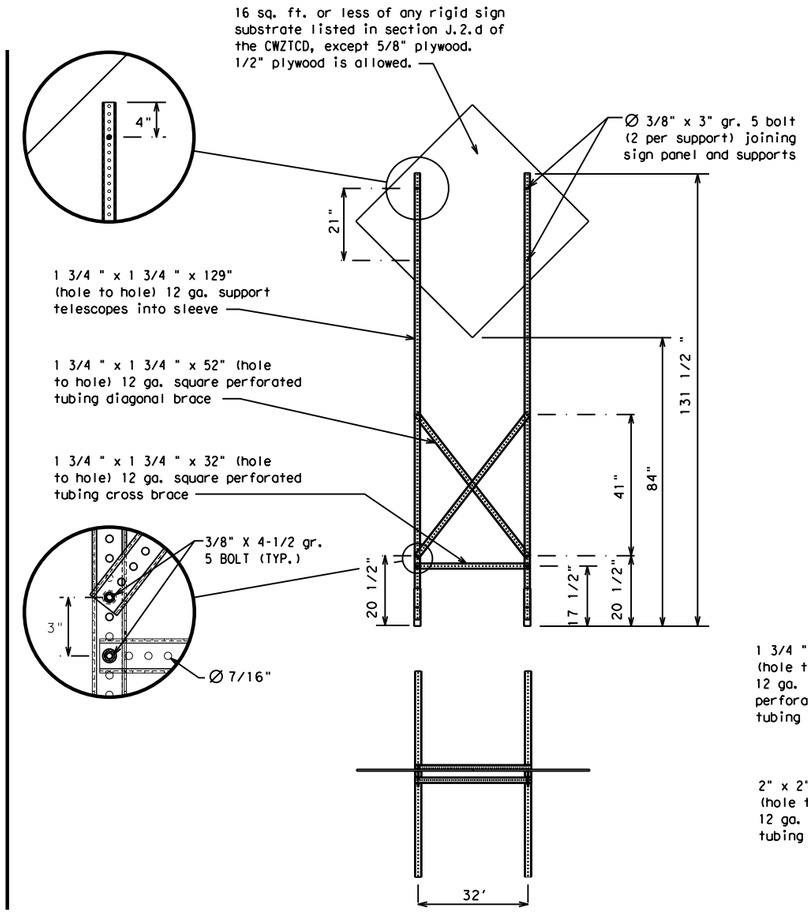
PERFORATED SQUARE METAL TUBING

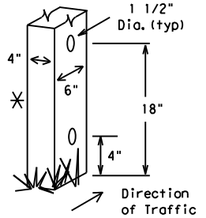
GROUND MOUNTED SIGN SUPPORTS

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.



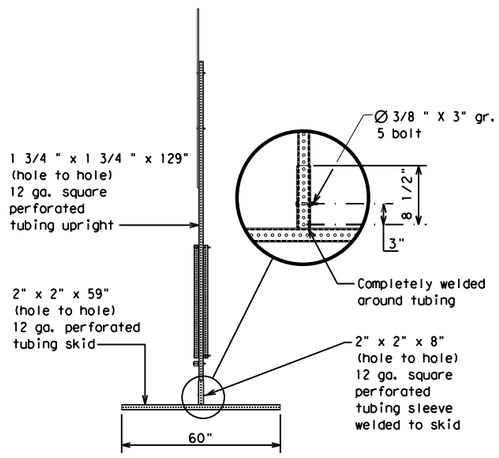






Nominal Post Size	Number of Posts	Maximum Sq. feet of Sign Face	Minimum Soil Embedment	Drilled Hole(s) Required
4 x 4	1	12	36"	NO
4 x 4	2	21	36"	NO
4 x 6	1	21	36"	YES
4 x 6	2	36	36"	YES

WOOD POST SYSTEM FOR GROUND 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.

SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

Texas Department of Transportation | Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-14

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7-13	21	HIDALGO, ETC.		206

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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 *

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

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

** 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 Operations Division Standard

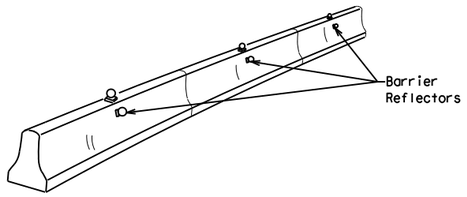
BARRICADE AND CONSTRUCTION PORTABLE CHANGEABLE MESSAGE SIGN (PCMS)

BC(6)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2,ETC.
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13	21	HIDALGO,ETC.		207

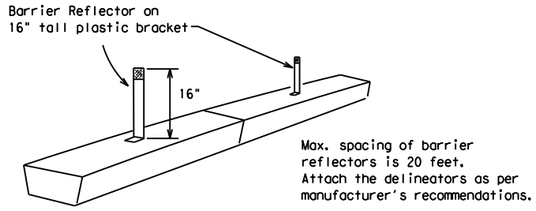
100

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.

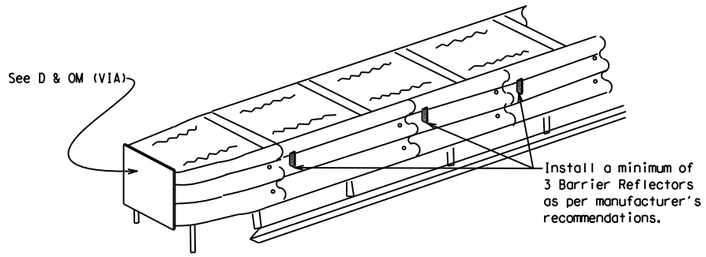


CONCRETE TRAFFIC BARRIER (CTB)

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.



LOW PROFILE CONCRETE BARRIER (LPCB)

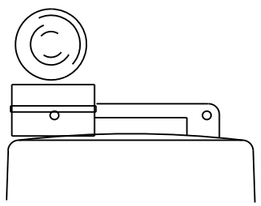


DELINEATION OF END TREATMENTS

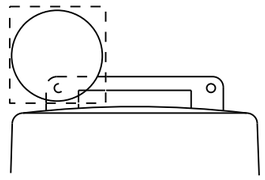
END TREATMENTS FOR CTB'S USED IN WORK ZONES

End treatments used on CTB's in work zones shall meet crashworthy standards as defined in the National Cooperative Highway Research Report 350. 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

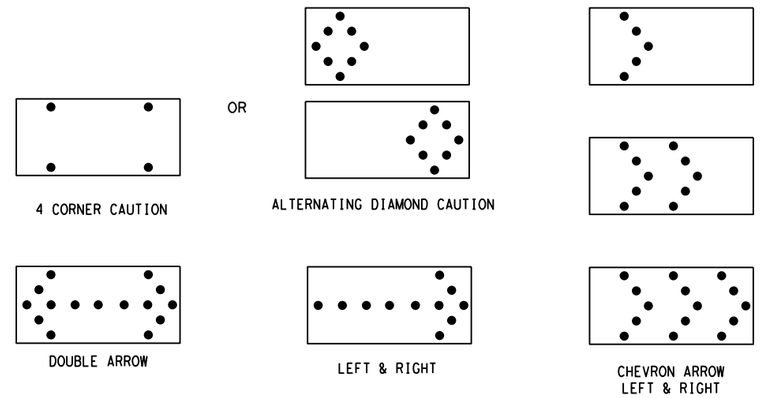
1. Type A flashing warning lights are intended to warn drivers that they are approaching or are in a potentially hazardous area.
2. Type A random flashing warning lights are not intended for delineation and shall not be used in a series.
3. A series of sequential flashing warning lights placed on channelizing 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:



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 National Cooperative Highway Research Report No. 350 (NCHRP 350) or 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 Operations Division Standard

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

BC(7)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13	21	HIDALGO, ETC.		208

101

DATE: $DATE$ $TIME$
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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:

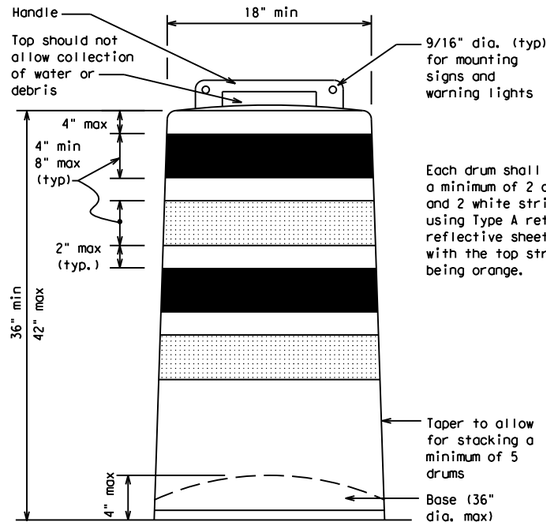
1. Plastic drums shall be a two-piece design; the "body" of the drum shall be the top portion and the "base" shall be the bottom.
2. The body and base shall lock together in such a manner that the body separates from the base when impacted by a vehicle traveling at a speed of 20 MPH or greater but prevents 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.

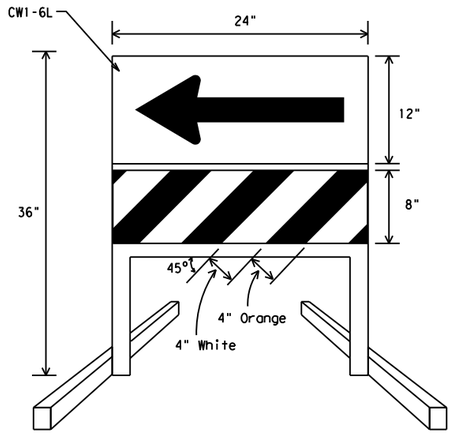
RETROREFLECTIVE SHEETING

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 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

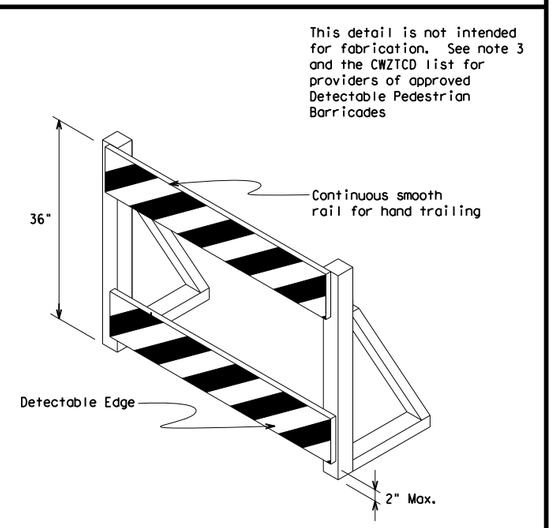
1. Unballasted bases shall be large enough to hold up to 50 lbs. of sand. This base, when filled with the ballast material, should weigh between 35 lbs (minimum) and 50 lbs (maximum). The ballast may be sand in one to three sandbags separate from the base, sand in a sand-filled plastic base, or other 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.





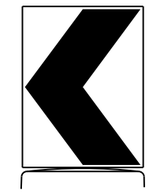
DIRECTION INDICATOR BARRICADE

1. The Direction Indicator Barricade may be used in tapers, transitions, and other areas where specific directional guidance to drivers is necessary.
2. If used, the Direction Indicator Barricade should be used in series to direct the driver through the transition and into the intended travel lane.
3. The Direction Indicator Barricade shall consist of One-Direction Large Arrow (CW1-6) sign in the size shown with a black arrow on a background of Type B_{FL} or Type C_{FL} Orange retroreflective sheeting above a rail with Type A retroreflective sheeting in alternating 4" white and orange stripes sloping downward at an angle of 45 degrees in the direction road users are to pass. Sheeting types shall be as per DMS 8300.
4. Double arrows on the Direction Indicator Barricade will not be allowed.
5. Approved manufacturers are shown on the CWZTCD List. Ballast shall be as approved by the manufacturers instructions.

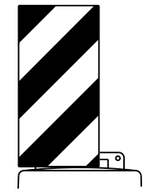


DETECTABLE PEDESTRIAN BARRICADES

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.
2. Where pedestrians with visual disabilities normally use the closed sidewalk, a device that is detectable by a person with a visual disability traveling with the aid of a long cane shall be placed across the full width of the closed sidewalk.
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 for Buildings and Facilities (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 may 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 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.

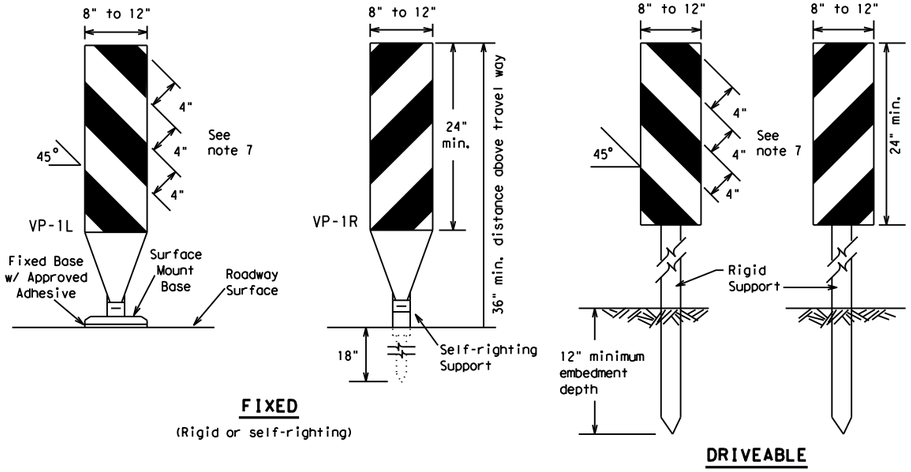
Texas Department of Transportation

Traffic Operations Division Standard

BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

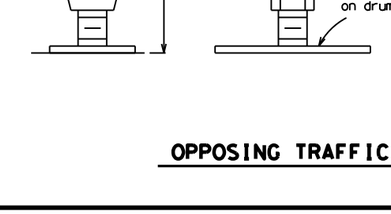
BC(8)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT November 2002	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2,ETC.
4-03 7-13	DIST	COUNTY		SHEET NO.
9-07 8-14	21	HIDALGO,ETC.		209



FIXED
(Rigid or self-righting)

DRIVEABLE

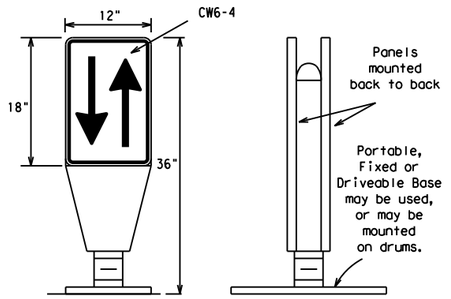


(Rigid or self-righting)

PORTABLE

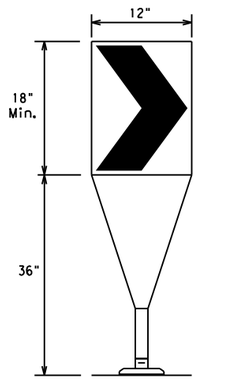
1. Vertical Panels (VP's) are normally used to channelize traffic or divide opposing lanes of traffic.
2. VP's may be used in daytime or nighttime situations. They may be used at the edge of shoulder drop-offs and other areas such as lane transitions where positive daytime and nighttime delineation is required. The Engineer/Inspector shall refer to the Roadway Design Manual Appendix B "Treatment of Pavement Drop-offs in Work Zones" for additional guidelines on the use of 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 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.

VERTICAL PANELS (VPs)



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.

OPPOSING TRAFFIC LANE DIVIDERS (OTLD)



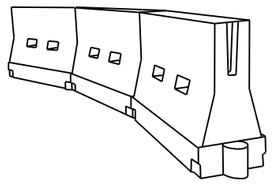
Fixed Base w/ Approved Adhesive (Driveable Base, or Flexible Support can be used)

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) placed 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 NCHRP 350 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 ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices 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

SHEET 9 OF 12

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BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(9)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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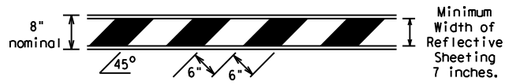
REVISIONS	6353	00	001	IH-2, ETC.
9-07 8-14	DIST	COUNTY		SHEET NO.
7-13	21	HIDALGO, ETC.		210

DATE: $DATE$ $TIME$
FILE: $FILE$

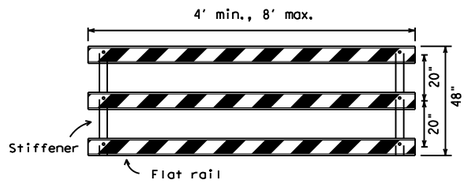
TYPE 3 BARRICADES

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 conforming to Departmental Material Specification DMS-8300 unless otherwise noted.

Barricades shall NOT be used as a sign support.



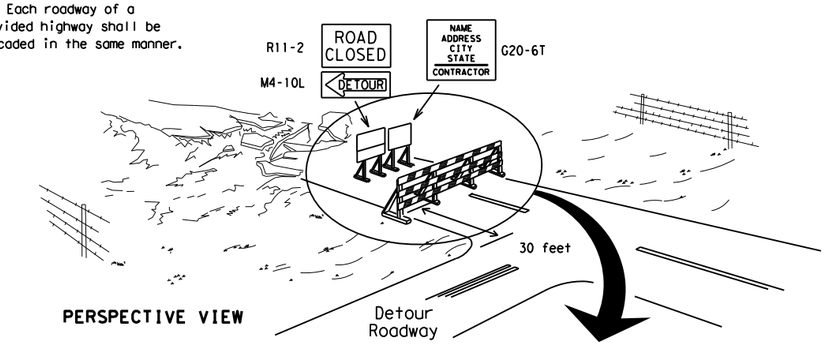
TYPICAL STRIPING DETAIL FOR BARRICADE RAIL



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

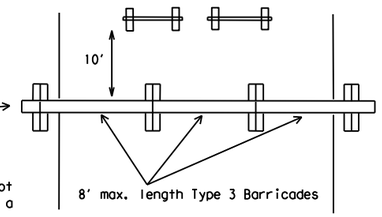
TYPICAL PANEL DETAIL FOR SKID OR POST TYPE BARRICADES

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



PERSPECTIVE VIEW

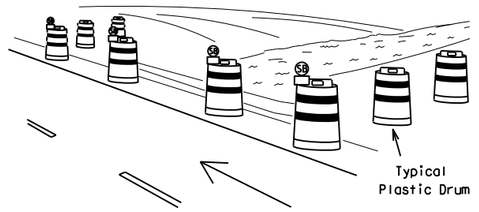
The three rails on Type 3 barricades shall be reflectorized orange and reflective white stripes on one side facing one-way traffic and both sides for two-way traffic.
Barricade striping should slant downward in the direction of detour.



PLAN VIEW

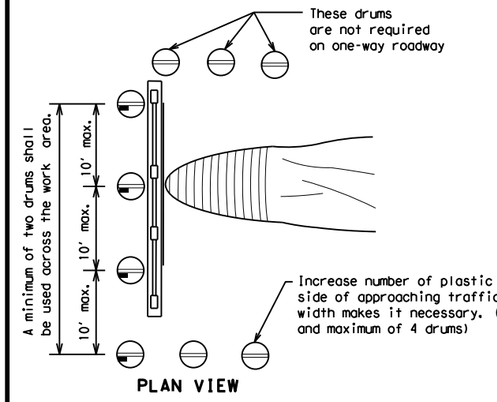
1. Signs should be mounted on independent supports at a 7 foot mounting height in center of roadway. The signs should be a minimum of 10 feet behind Type 3 Barricades.
2. Advance signing shall be as specified elsewhere in the plans.

TYPE 3 BARRICADE (POST AND SKID) TYPICAL APPLICATION



PERSPECTIVE VIEW

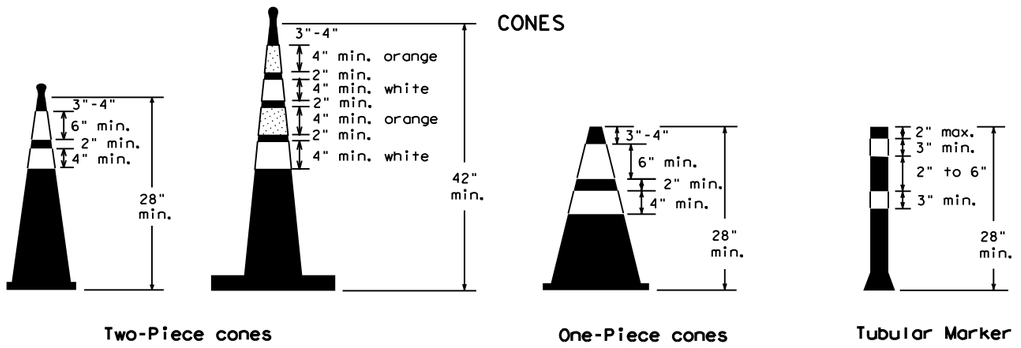
1. Where positive redirectional capability is provided, drums may be omitted.
2. Plastic construction fencing may be used with drums for safety as required in the plans.
3. Vertical Panels on flexible support may be substituted for drums when the shoulder width is less than 4 feet.
4. When the shoulder 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.



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

PLAN VIEW

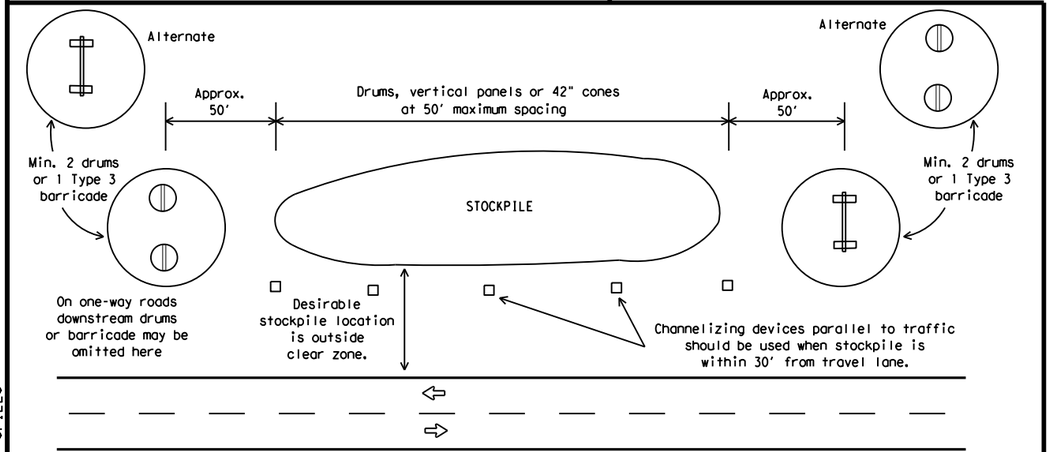
CULVERT WIDENING OR OTHER ISOLATED WORK WITHIN THE PROJECT LIMITS



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

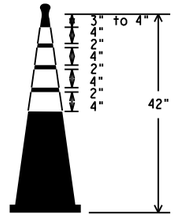
42" 2-piece cones shall have a minimum weight of 30 lbs. including base.

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 used at night 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.
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

THIS DEVICE SHALL NOT BE USED ON PROJECTS LET AFTER MARCH 2014.



EDGELINE CHANNELIZER

1. This device is intended only for use in place of a vertical panel to channelize traffic by indicating the edge of the travel lane. It is not intended to be used in transitions or tapers.
2. This device shall not be used to separate lanes of traffic (opposing or otherwise) or warn of objects.
3. This device is based on a 42 inch, two-piece cone with an alternate striping pattern: four 4 inch retroreflective bands, with an approximate 2 inch gap between bands. The color of the band should correspond to the color of the edgeline (yellow for left edgeline, white for right edgeline) for which the device is substituted or for which it supplements. The reflectorized bands shall be retroreflective Type A conforming to Departmental Material Specification DMS-8300, unless otherwise noted.
4. The base must weigh a minimum of 30 lbs.

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BARRICADE AND CONSTRUCTION CHANNELIZING DEVICES

BC(10)-14

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	21	HIDALGO, ETC.		211

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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.

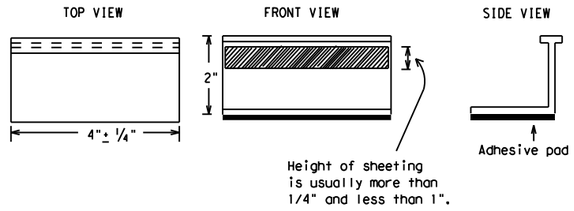
MAINTAINING WORK ZONE PAVEMENT MARKINGS

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 Operations Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKINGS

BC(11)-14

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2-98 9-07	DIST	COUNTY		SHEET NO.
1-02 7-13	21	HIDALGO,ETC.		212
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DATE: $DATE$ $TIME$
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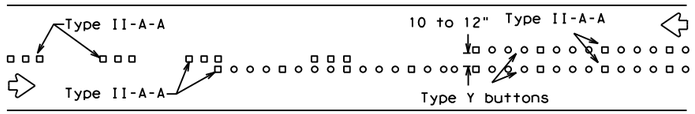
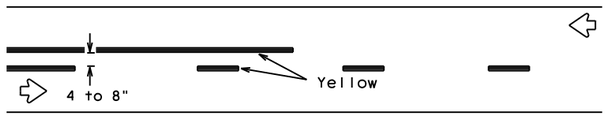
PAVEMENT MARKING PATTERNS

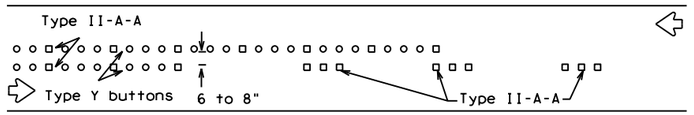
REFLECTORIZED PAVEMENT MARKINGS - PATTERN A



RAISED PAVEMENT MARKERS - PATTERN A



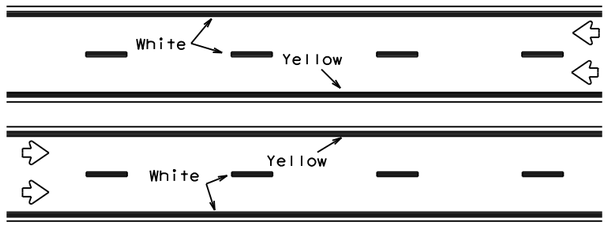
REFLECTORIZED PAVEMENT MARKINGS - PATTERN B



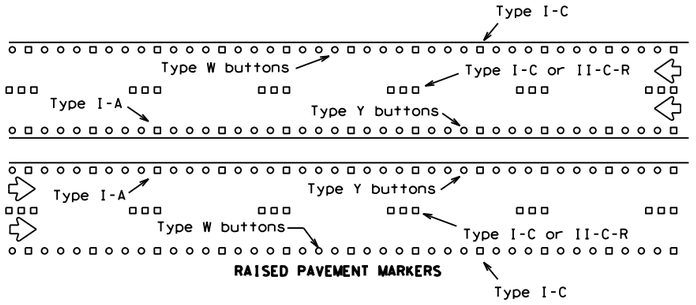
RAISED PAVEMENT MARKERS - PATTERN B

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



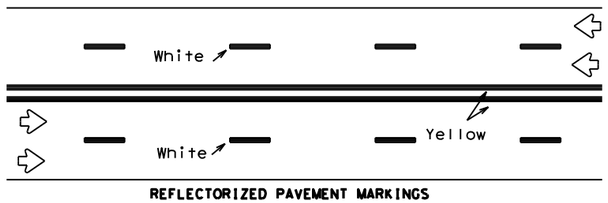
REFLECTORIZED PAVEMENT MARKINGS



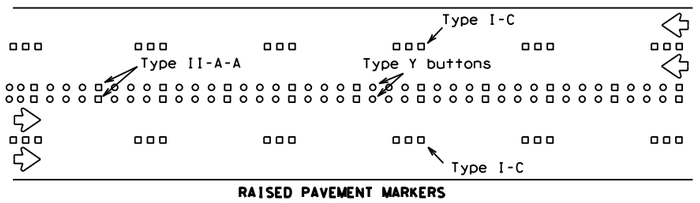
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

EDGE & LANE LINES FOR DIVIDED HIGHWAY



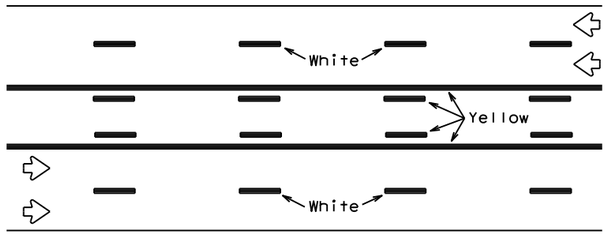
REFLECTORIZED PAVEMENT MARKINGS



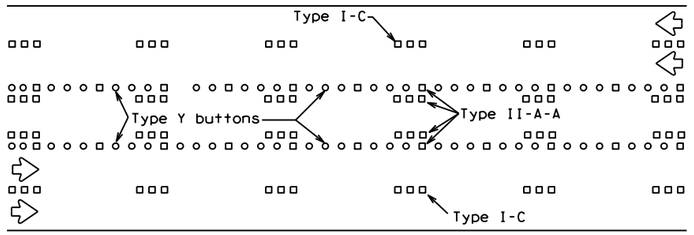
RAISED PAVEMENT MARKERS

Prefabricated markings may be substituted for reflectorized pavement markings.

LANE & CENTER LINES FOR MULTILANE UNDIVIDED HIGHWAYS



REFLECTORIZED PAVEMENT MARKINGS



RAISED PAVEMENT MARKERS

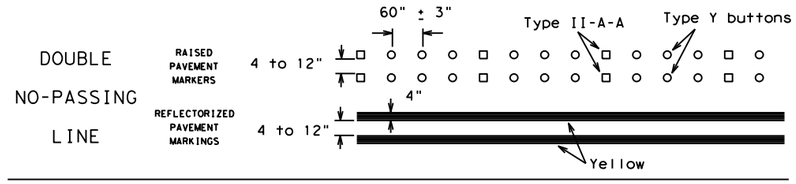
Prefabricated markings may be substituted for reflectorized pavement markings.

TWO-WAY LEFT TURN LANE

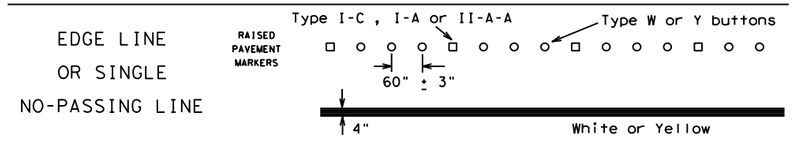
STANDARD WORK ZONE PAVEMENT MARKINGS DETAILS

SOLID LINES

DOUBLE NO-PASSING LINE

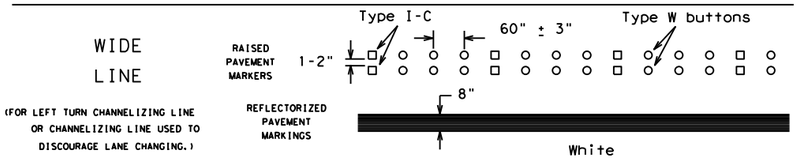


EDGE LINE OR SINGLE NO-PASSING LINE



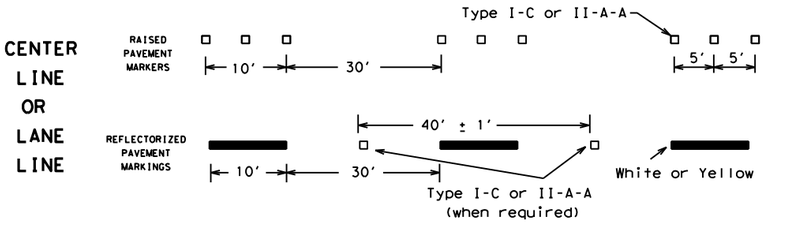
WIDE LINE

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

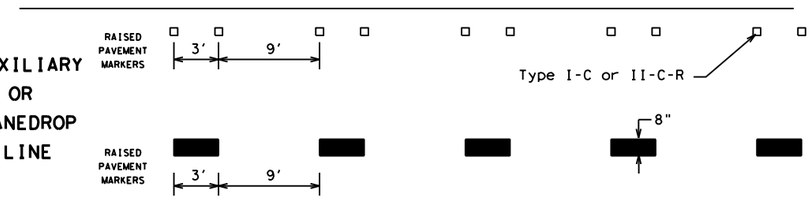


BROKEN LINES

CENTER LINE OR LANE LINE

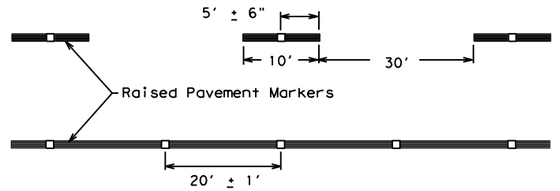


AUXILIARY OR LANEDROP LINE



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 Operations Division Standard

BARRICADE AND CONSTRUCTION PAVEMENT MARKING PATTERNS

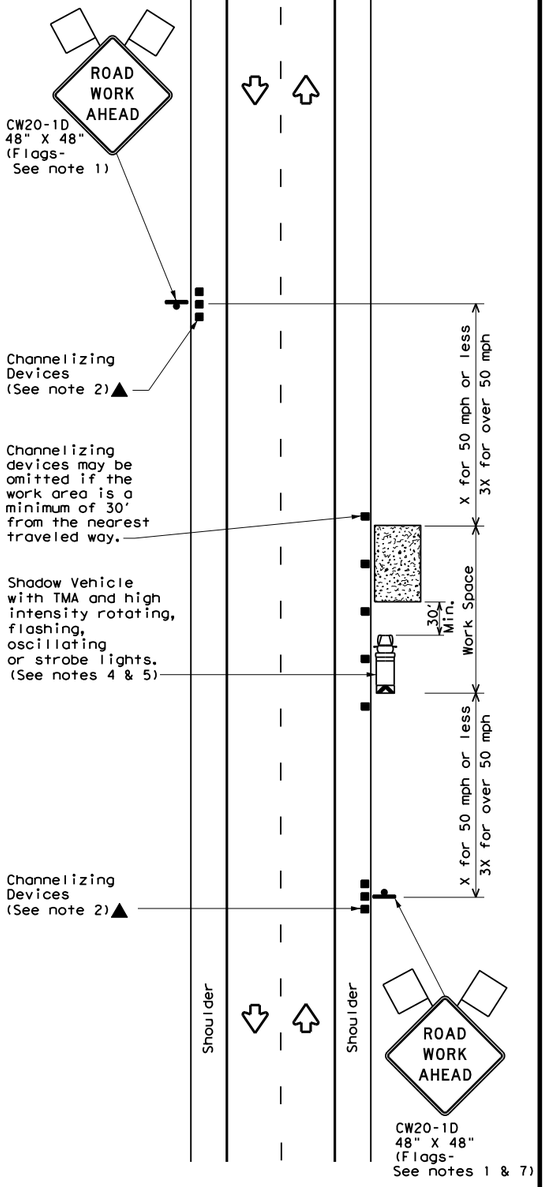
BC(12)-14

FILE: bc-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2,ETC.
1-97 9-07	DIST	COUNTY		SHEET NO.
2-98 7-13	21	HIDALGO,ETC.		213
11-02 8-14				

106

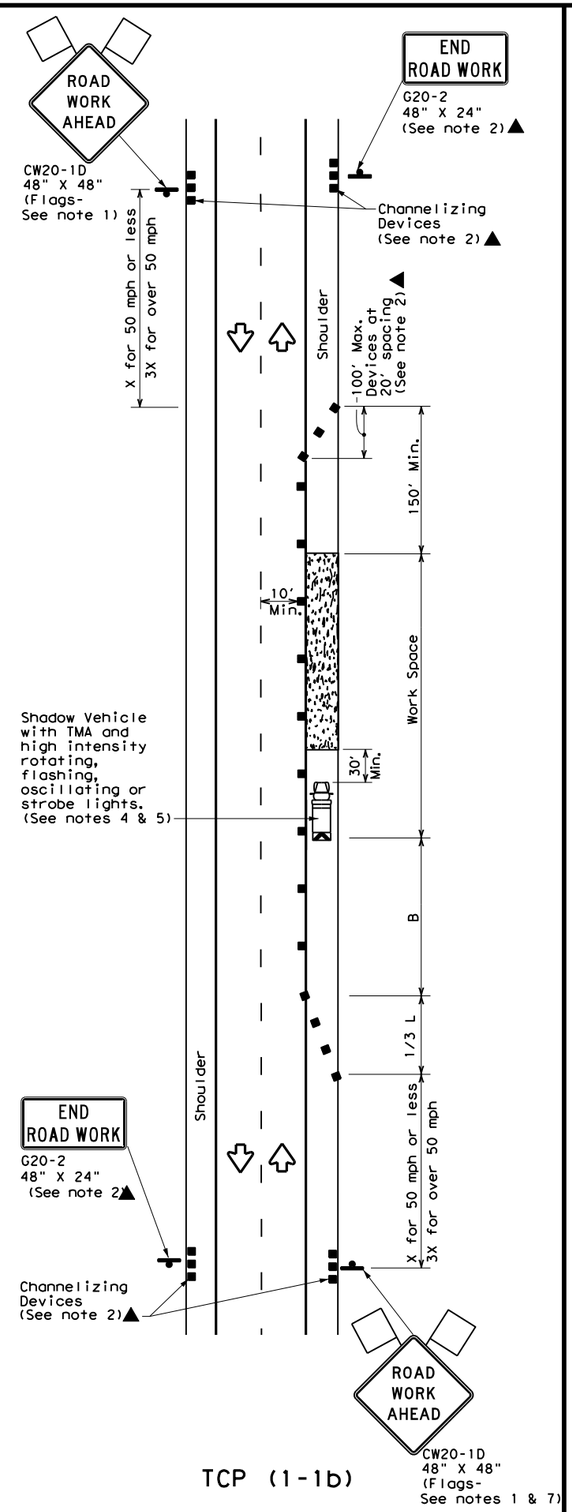
DATE: $DATE$ $TIME$
FILE: $FILE$

DATE:
FILE:



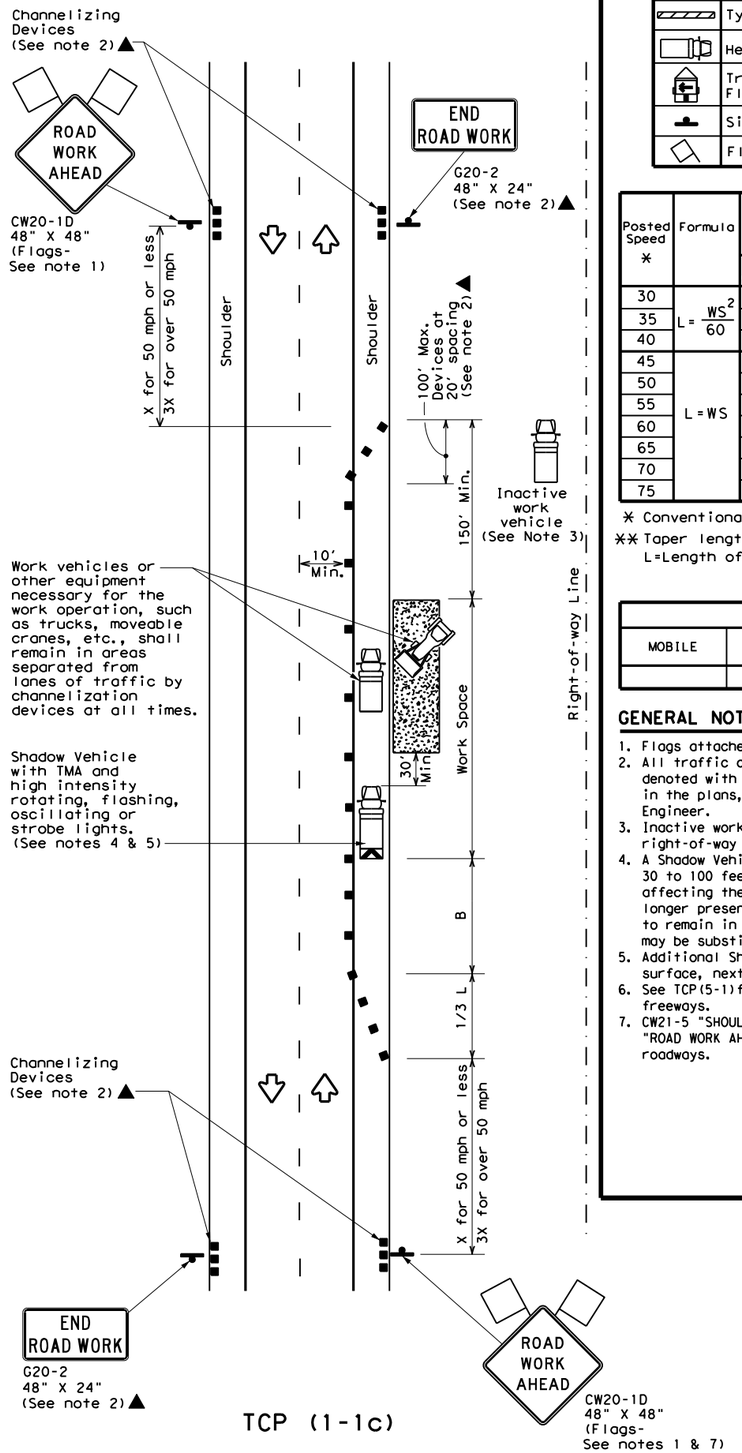
TCP (1-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads



TCP (1-1b)

WORK SPACE ON SHOULDER
Conventional Roads



TCP (1-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
6. See TCP(5-1)for shoulder work on divided highways, expressways and freeways.
7. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP(1-1)-18

FILE: tcp1-1-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		214

DATE:
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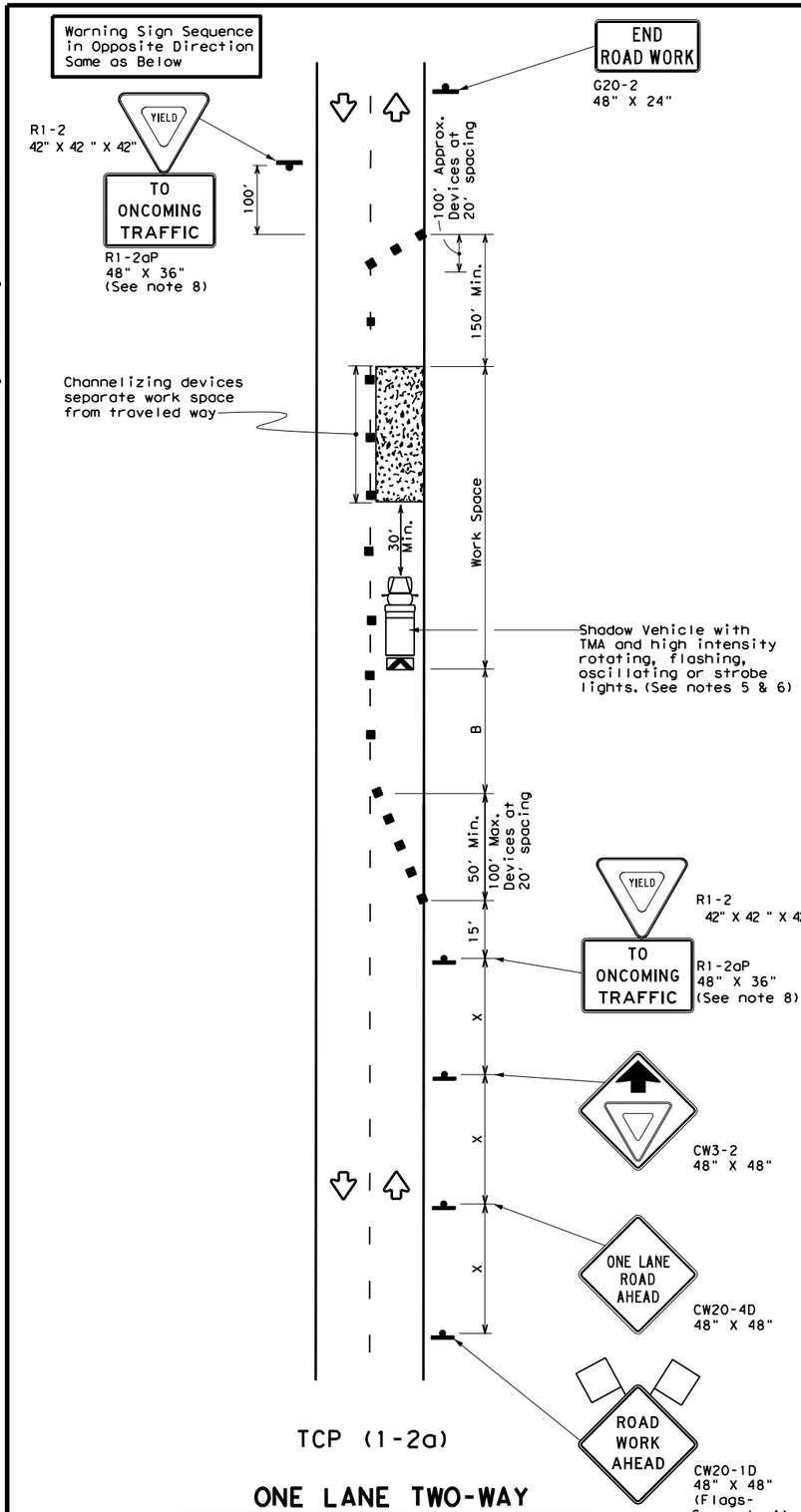
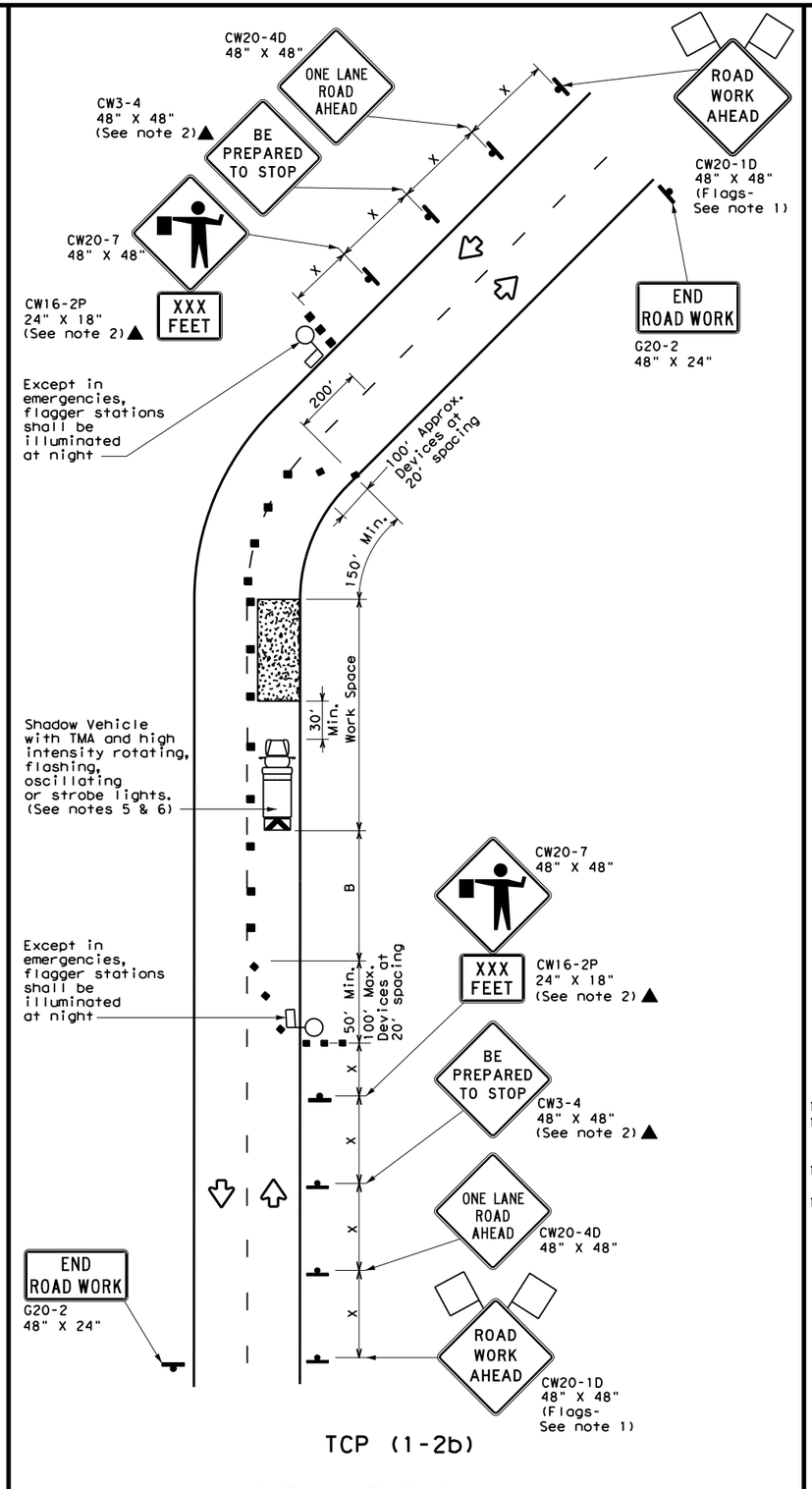


TCP (1-2a)

ONE LANE TWO-WAY
CONTROL WITH YIELD SIGNS
(Less than 2000 ADT - See note 7)



TCP (1-2b)

ONE LANE TWO-WAY
CONTROL WITH FLAGGERS

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L = WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

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

TYPICAL USAGE

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The CW3-4 "BE PREPARED TO STOP" sign may be installed after the CW20-4D "ONE LANE ROAD AHEAD" sign, but proper sign spacing shall be maintained.
4. Sign spacing may be increased or an additional CW20-1D "ROAD WORK AHEAD" sign may be used if advance warning ahead of the flagger or R1-2 "YIELD" sign is less than 1500 feet.
5. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
6. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.

TCP (1-2a)

7. R1-2 "YIELD" sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work spaces should be no longer than one half city block. In rural areas on roadways with less than 2000 ADT, work spaces should be no longer than 400 feet.
8. R1-2 "YIELD" sign with R1-2aP "TO ONCOMING TRAFFIC" plaque shall be placed on a support at a 7 foot minimum mounting height.

TCP (1-2b)

9. Flaggers should use two-way radios or other methods of communication to control traffic.
10. Length of work space should be based on the ability of flaggers to communicate.
11. If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain adequate stopping sight distance to the flagger and a queue of stopped vehicles (see table above).
12. Channelizing devices on the center-line may be omitted when a pilot car is leading traffic and approved by the Engineer.
13. Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situations.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
ONE-LANE TWO-WAY
TRAFFIC CONTROL

TCP(1-2)-18

FILE: tcp1-2-18.dgn	DN:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 4-90 4-98	6353	00	001	IH-2, ETC.
2-94 2-12	DIST	COUNTY		SHEET NO.
1-97 2-18	21	HIDALGO, ETC.		215

DATE:
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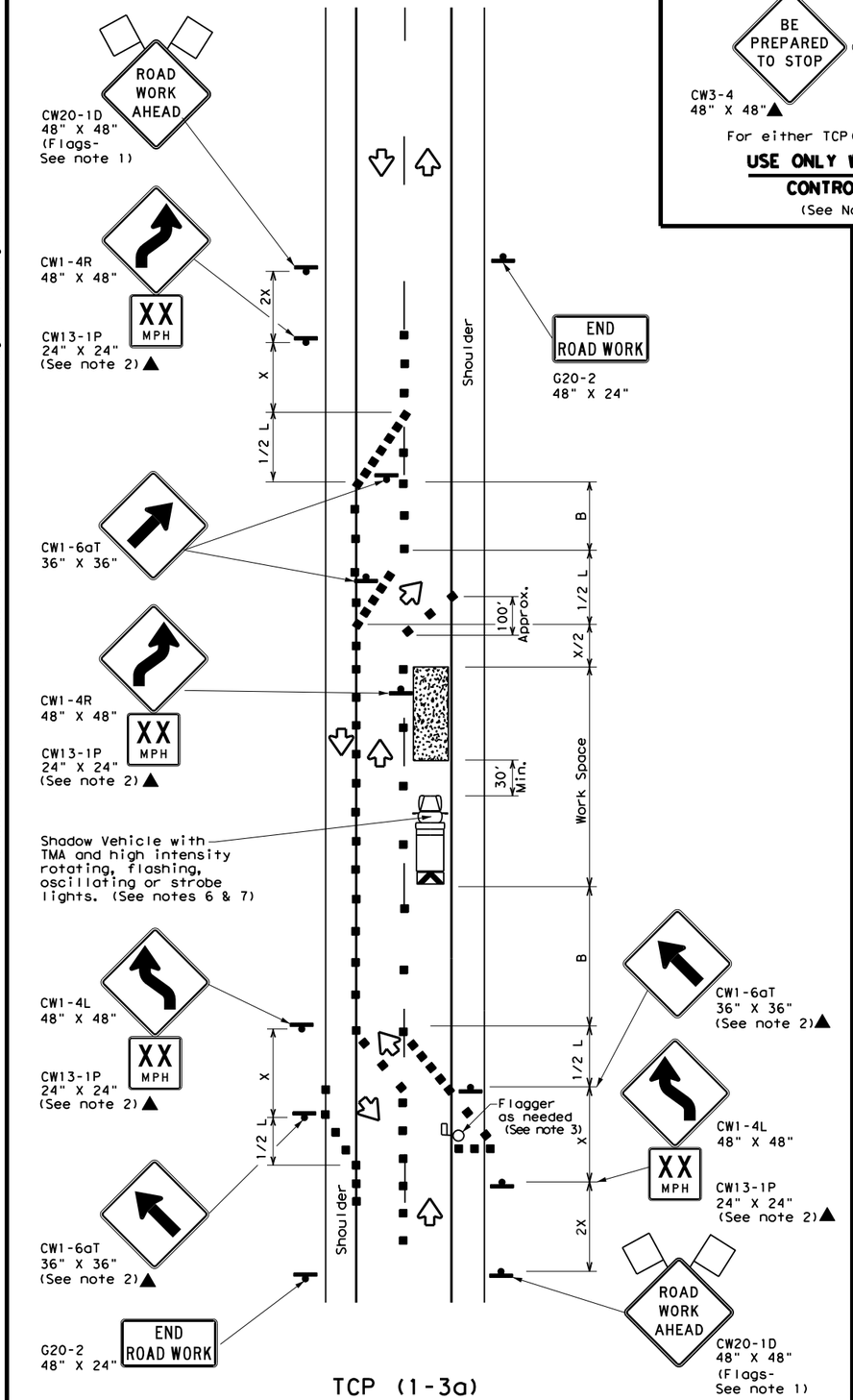


TCP (1-3a)
2-LANE ROADWAY WITH PAVED SHOULDERS

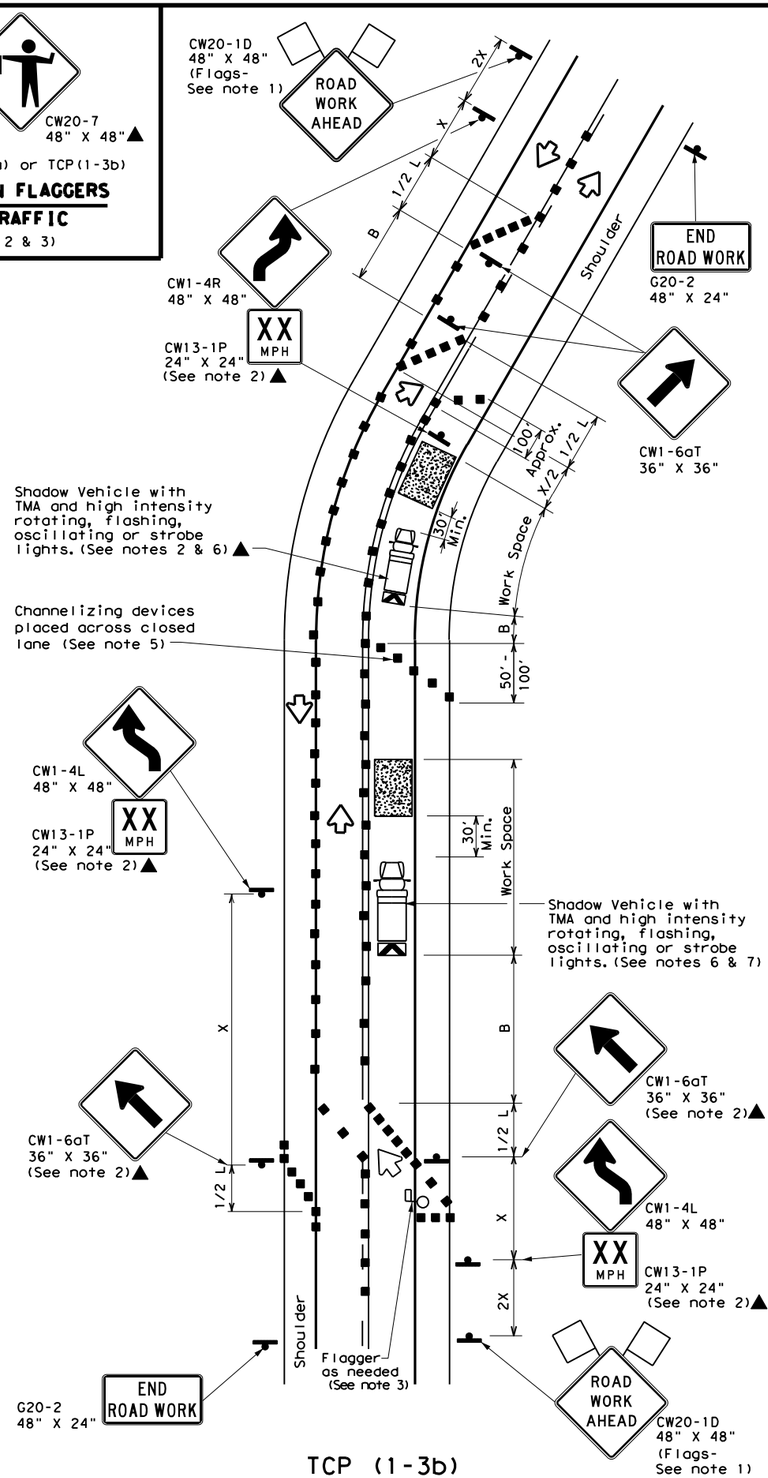
ONE LANE CLOSED
ADEQUATE FIELD OF VIEW

BE PREPARED TO STOP
CW3-4 48" X 48"
CW20-7 48" X 48"

For either TCP(1-3a) or TCP(1-3b)

USE ONLY WHEN FLAGGERS CONTROL TRAFFIC

(See Notes 2 & 3)



TCP (1-3b)
2-LANE ROADWAY WITH PAVED SHOULDERS

ONE LANE CLOSED
INADEQUATE FIELD OF VIEW

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Flagger control should NOT be used unless roadway conditions or heavy traffic volume require additional emphasis to safely control traffic. Additional flaggers may be positioned in advance of traffic queues to alert traffic to reduce speed.
4. DO NOT PASS, PASS WITH CARE and construction regulatory speed zone signs may be installed downstream of the ROAD WORK AHEAD signs.
5. When the work zone is made up of several work spaces, channelizing devices should be placed laterally across the closed lane to re-emphasize closure. Laterally placed channelizing devices should be repeated every 500 to 1000 feet in urban areas and every 1/4 to 1/2 mile in rural areas.
6. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
8. Where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20', or 15' if posted speed are 35 mph or slower, and for tangent sections, at 1/2S where S is the speed in mph. This tighter device spacing is intended for the area of conflicting markings not the entire work zone.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
TRAFFIC SHIFTS ON TWO LANE ROADS

TCP(1-3)-18

FILE: tcp1-3-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 2-12	21	HIDALGO, ETC.		216
1-97 2-18				

DATE:
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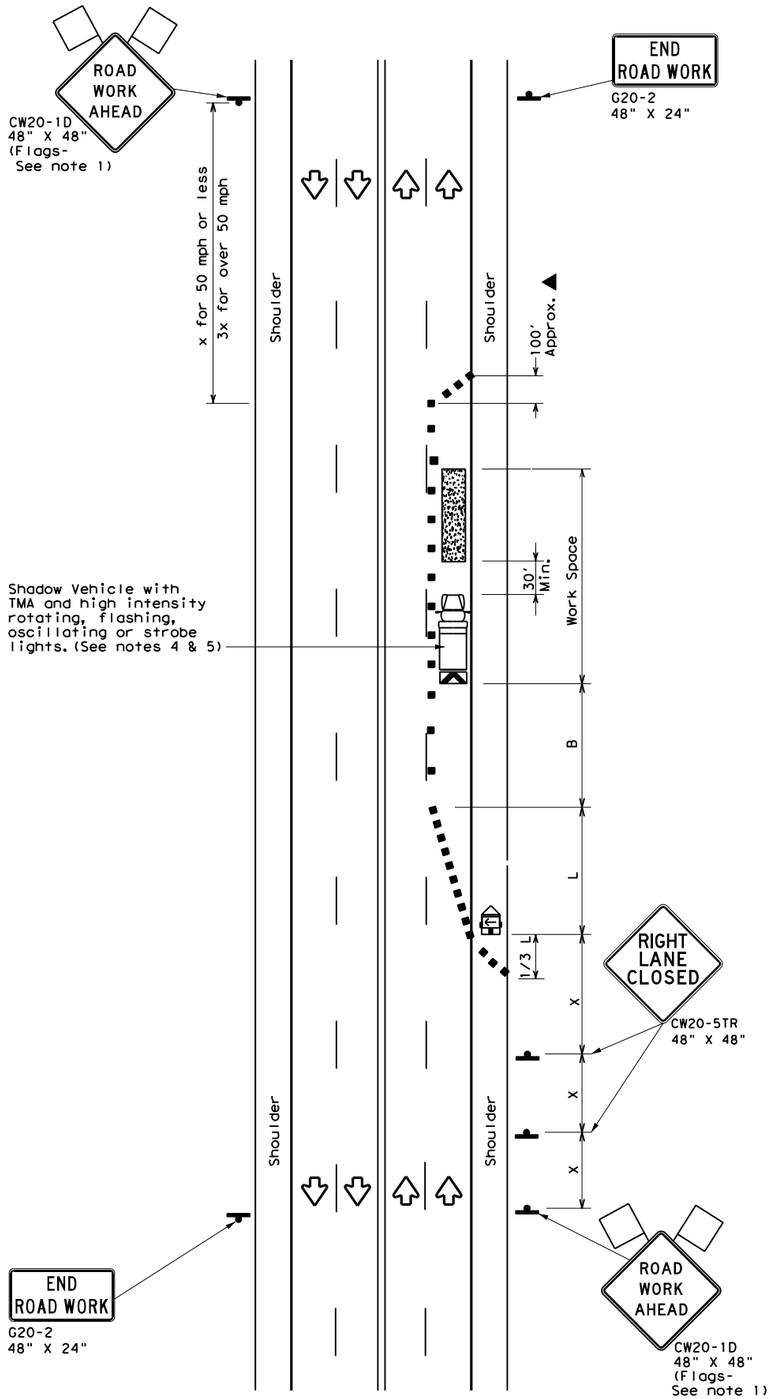
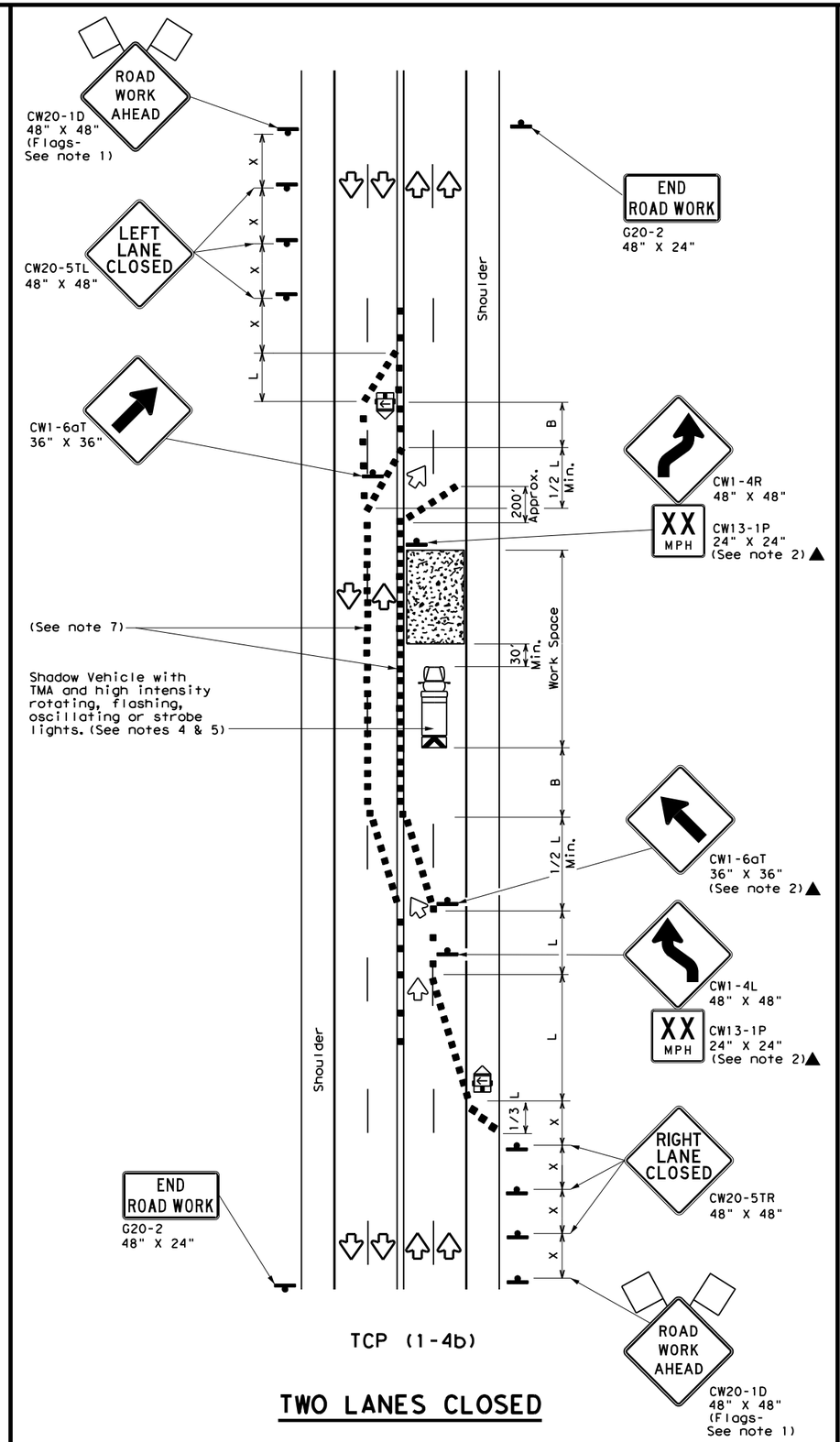


TCP (1-4a)

ONE LANE CLOSED



TCP (1-4b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The CW20-1D "ROAD WORK AHEAD" sign may be repeated if the visibility of the work zone is less than 1500 feet.
4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.

TCP (1-4a)

6. If this TCP is used for a left lane closure , CW20-5TL "LEFT LANE CLOSED" signs shall be used and channelizing devices shall be placed on the centerline where needed to protect the work space from opposing traffic with the arrow panel placed in the closed lane near the end of the merging taper.

TCP (1-4b)

7. Where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2S where S is the speed in mph. This tighter device spacing is intended for the areas of conflicting markings, not the entire work zone.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS

TCP(1-4)-18

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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 2-12	21	HIDALGO, ETC.		217
1-97 2-18				

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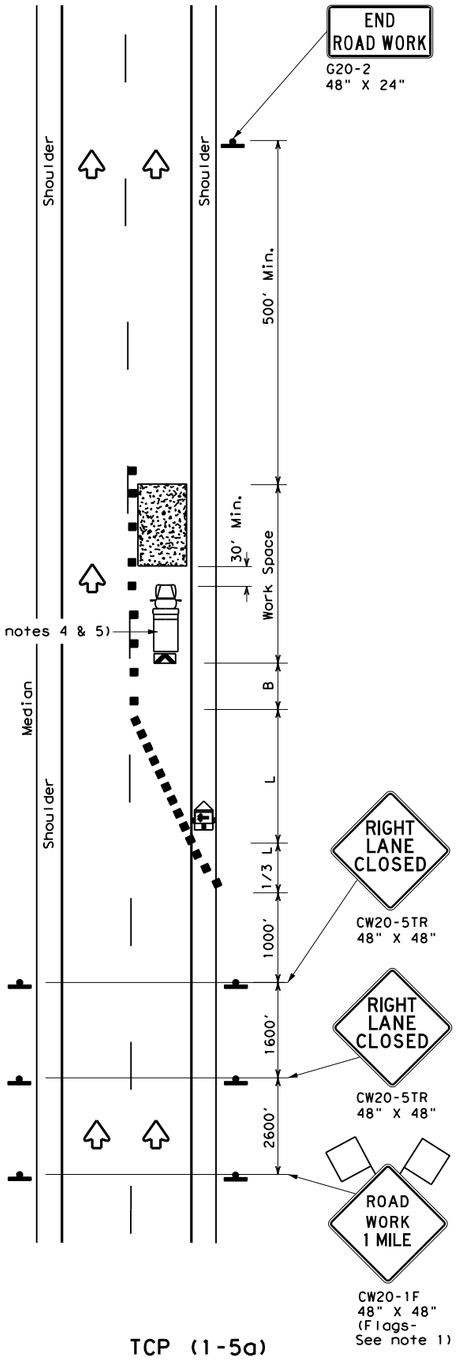
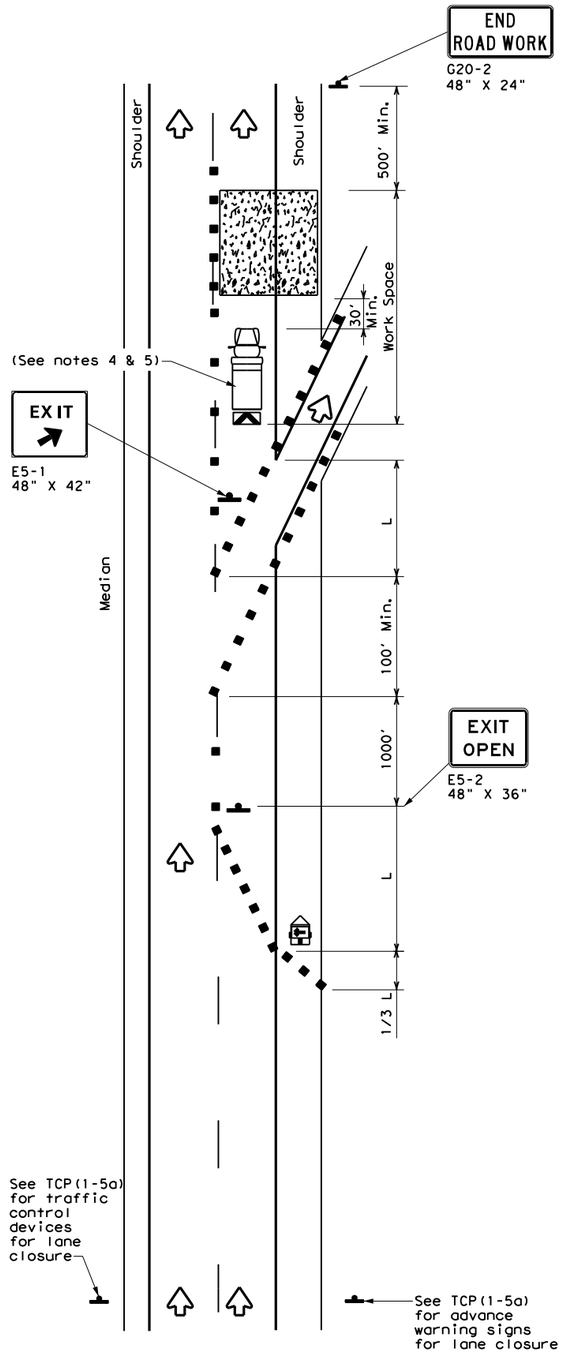


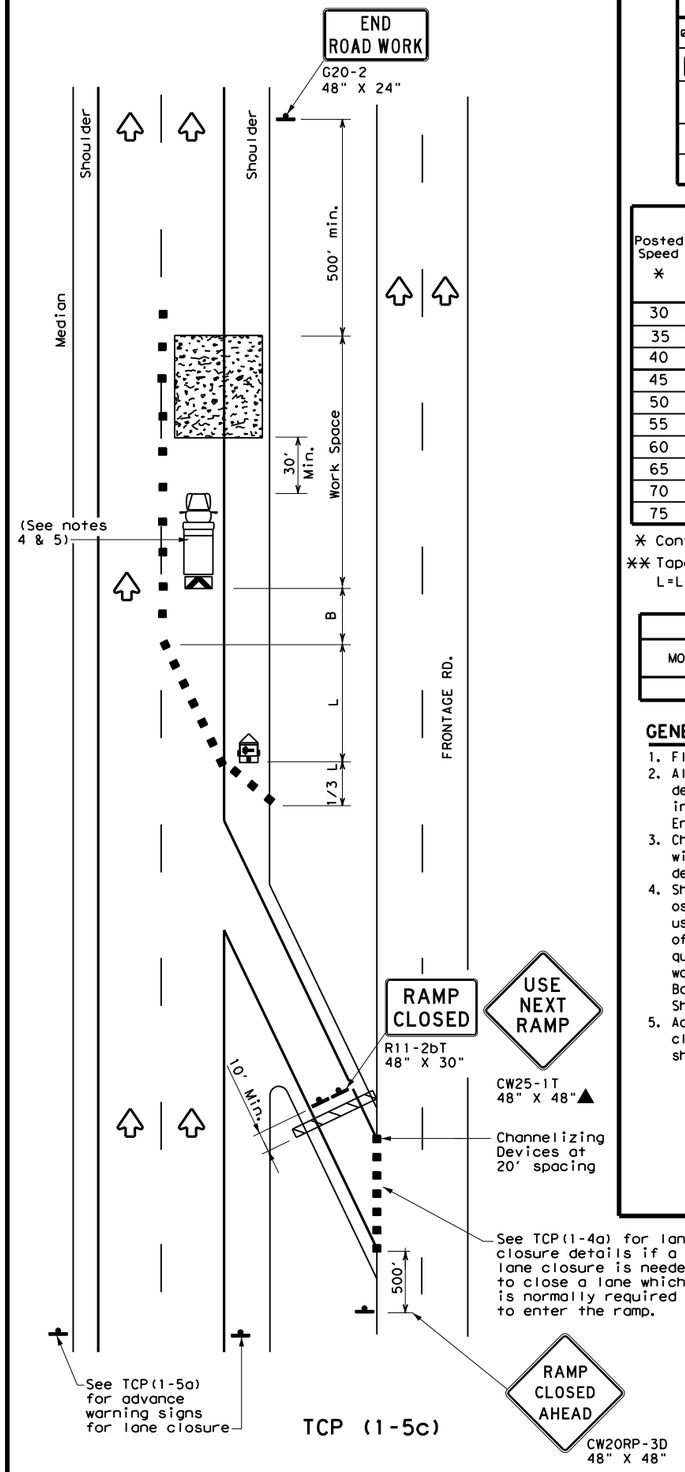
TCP (1-5a)

ONE LANE CLOSURE



TCP (1-5b)

LANE CLOSURE NEAR EXIT RAMPS



TCP (1-5c)

LANE CLOSURE NEAR ENTRANCE RAMPS

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		✓		

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Channelizing devices used to close lanes may be supplemented with the Chevron Alignment Sign placed on every other channelizing device. Chevrons may be attached to plastic drums as per BC Standards.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES FOR DIVIDED HIGHWAYS

TCP(1-5)-18

FILE: tcp1-5-18.dgn	DN:	CK:	DW:	CK:
©TxDOT February 2012	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-18	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		218

DATE:
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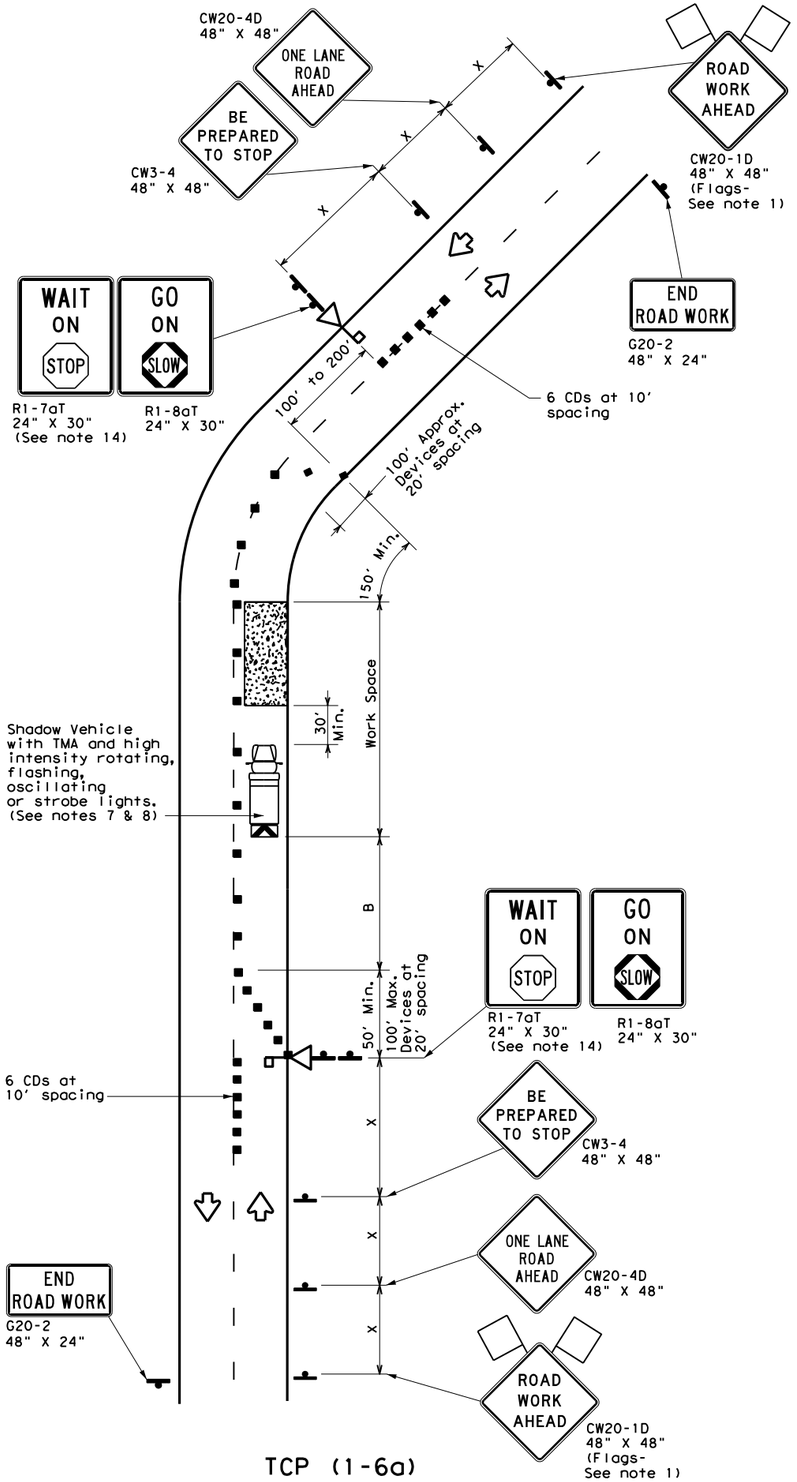
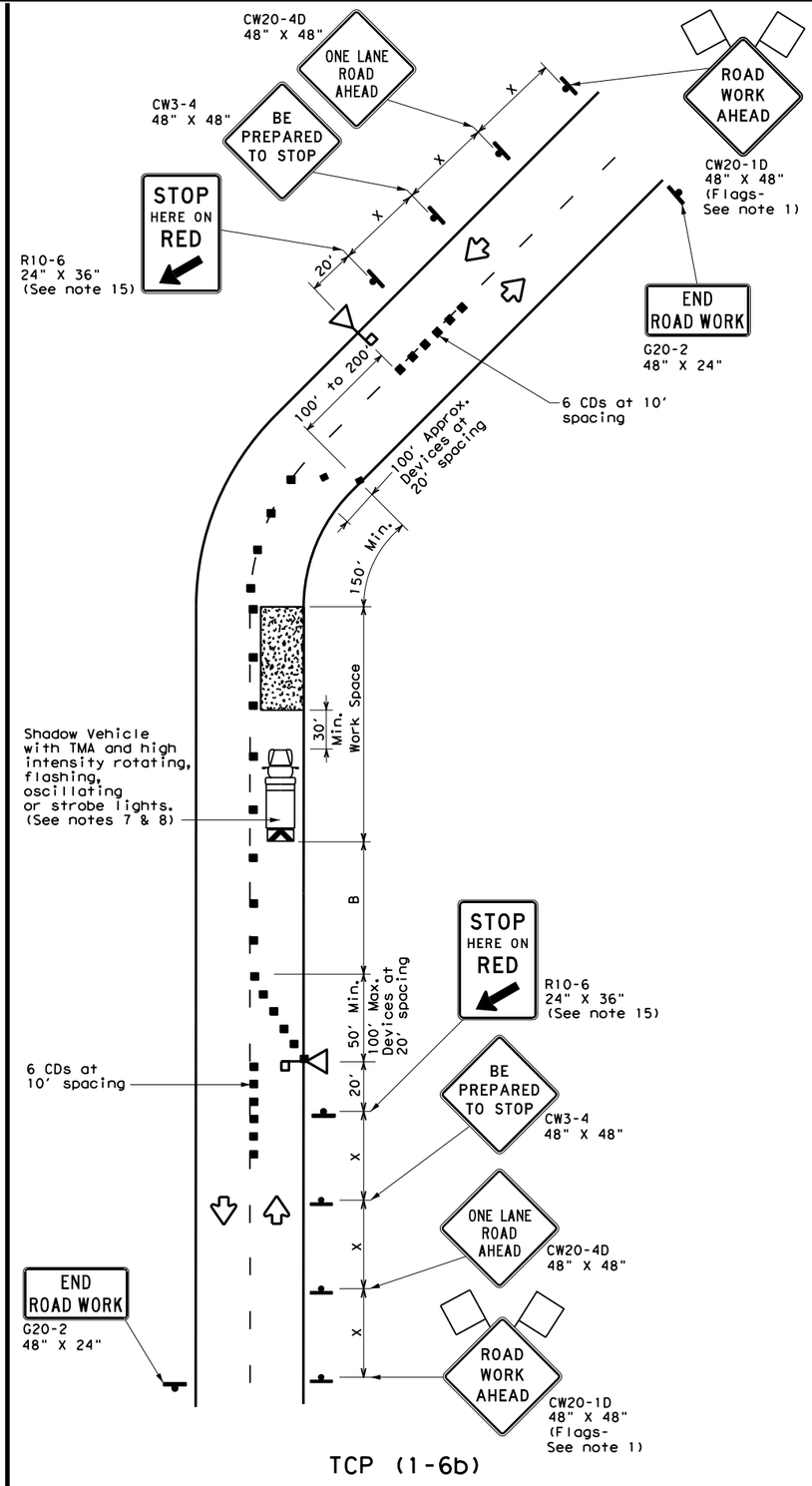


TCP (1-6a)

ONE LANE TWO-WAY
CONTROL WITH STOP/SLOW AFADs



TCP (1-6b)

ONE LANE TWO-WAY CONTROL
WITH RED/YELLOW LENS AFADs

LEGEND			
	Type 3 Barricade		Channelizing Devices (CDs)
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Automated Flagger Assistance Device (AFAD)	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L=WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. AFADs shall only be used in situations where there is one lane of approaching traffic in the direction to be controlled.
3. Adequate stopping sight distance must be provided to each AFAD location for approaching traffic. (See table above).
4. Each AFAD shall be operated by a qualified/certified flagger. Flaggers operating AFADs shall not leave them unattended while they are in use.
5. One flagger may operate two AFADs only when the flagger has an unobstructed view of both AFADs and of the approaching traffic in both directions.
6. When pilot cars are used, a flagger controlling traffic shall be located on each approach. AFADs shall not be operated by the pilot car operator.
7. All AFADs shall be equipped with gate arms with an orange or fluorescent red-orange flag attached to the end of the gate arm. The flag shall be a minimum of 16" square.
8. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
9. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.
10. Flaggers should use two-way radios or other methods of communication to control traffic.
11. Length of work space should be based on the ability of flaggers to communicate.
12. If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain stopping sight distance to the AFAD.
13. Channelizing devices on the center line may be omitted when a pilot car is leading traffic and approved by the Engineer.
14. The R1-7aT "WAIT ON STOP" sign and the R1-8aT "GO ON SLOW" sign shall be installed at the AFAD location on separate supports or they may be fabricated as one 48" x 30" sign. They shall not obscure the face of the STOP/SLOW AFAD.
15. The R10-6 "STOP HERE ON RED" arrow sign shall be offset so as not to obscure the lenses of the AFAD.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
AUTOMATED FLAGGER ASSISTANCE DEVICES (AFADS)

TCP(1-6)-18

FILE: tcp1-6-18.dgn	DN:	CK:	DW:	CK:
© TxDOT February 2012	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-18	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		219

DATE:
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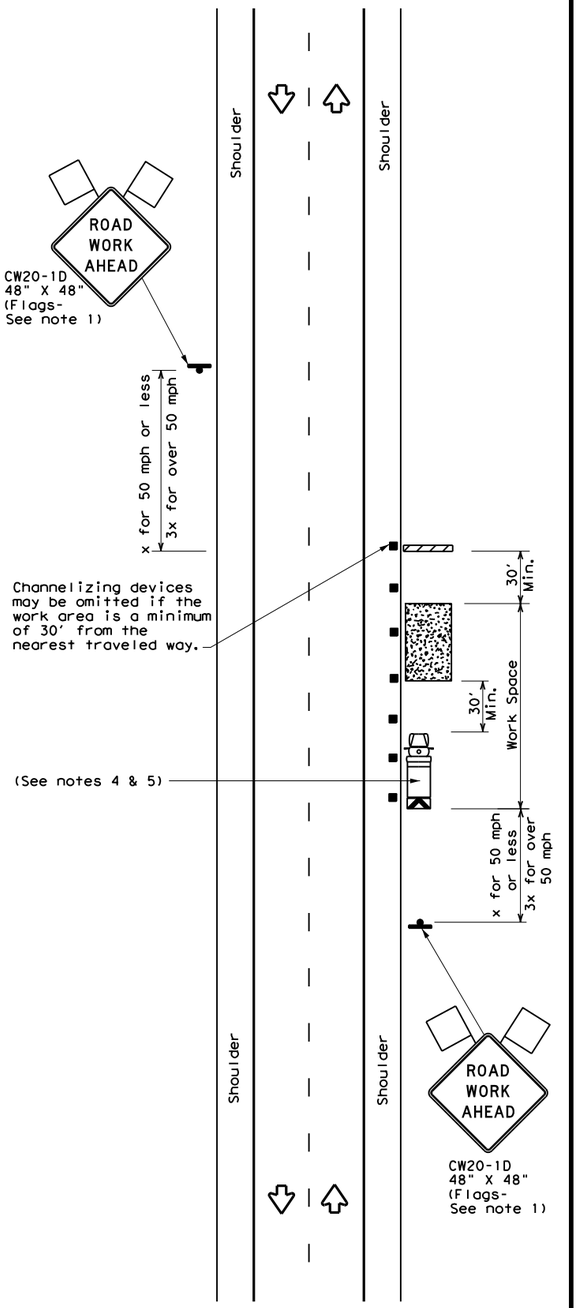
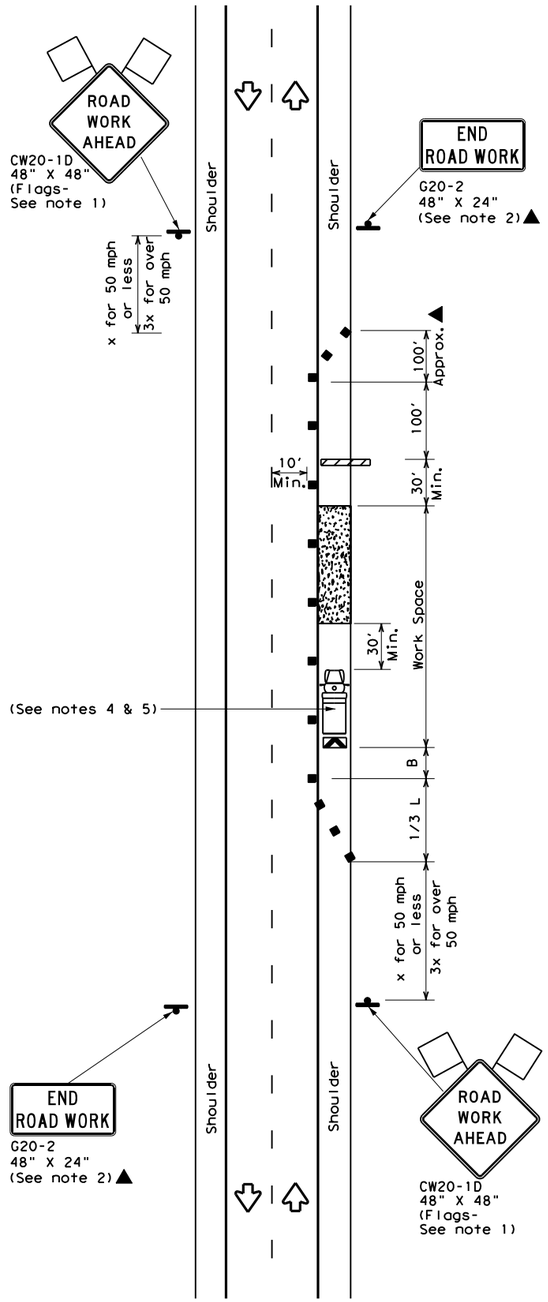


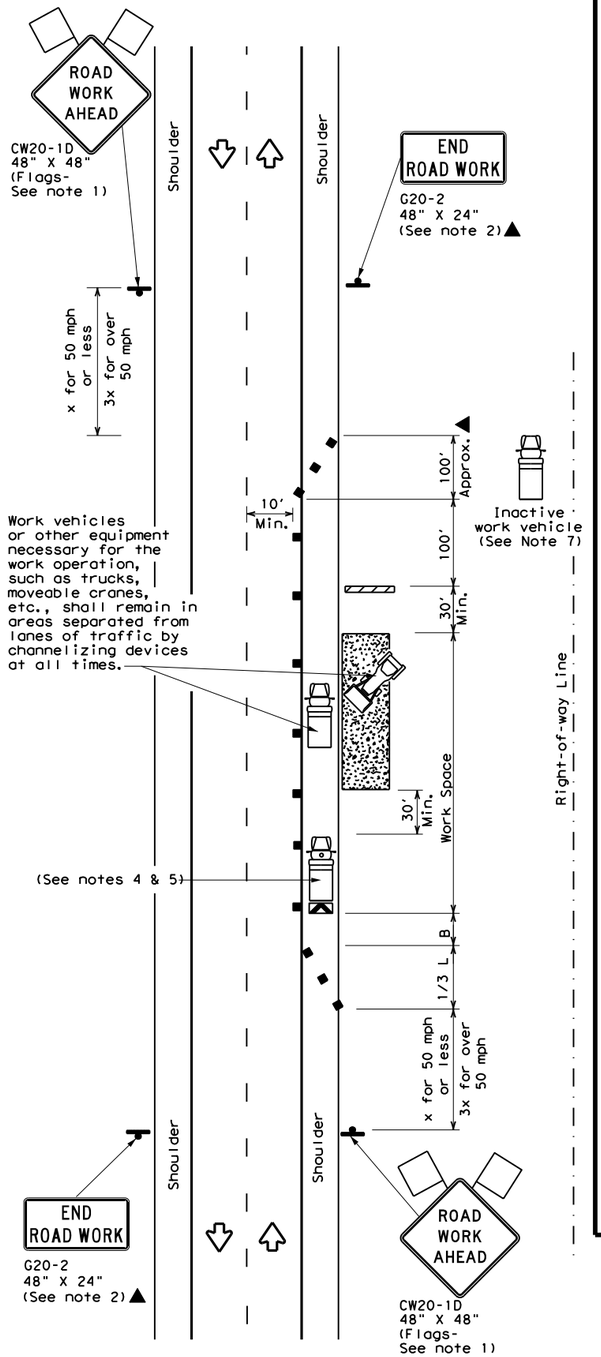
TCP (2-1a)

WORK SPACE NEAR SHOULDER
Conventional Roads



TCP (2-1b)

WORK SPACE ON SHOULDER
Conventional Roads



TCP (2-1c)

WORK VEHICLES ON SHOULDER
Conventional Roads

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated in the plans, or for routine maintenance work, when approved by the Engineer.
3. Stockpiled material should be placed a minimum of 30 feet from nearest traveled way.
4. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.
6. See TCP(5-1) for shoulder work on divided highways, expressways and freeways.
7. Inactive work vehicles or other equipment should be parked near the right-of-way line and not parked on the paved shoulder.
8. CW21-5 "SHOULDER WORK" signs may be used in place of CW20-1D "ROAD WORK AHEAD" signs for shoulder work on conventional roadways.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN CONVENTIONAL ROAD SHOULDER WORK

TCP(2-1)-18

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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
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2-94 4-98	DIST	COUNTY		SHEET NO.
8-95 2-12	PHARR	HIDALGO, ETC.		220
1-97 2-18				

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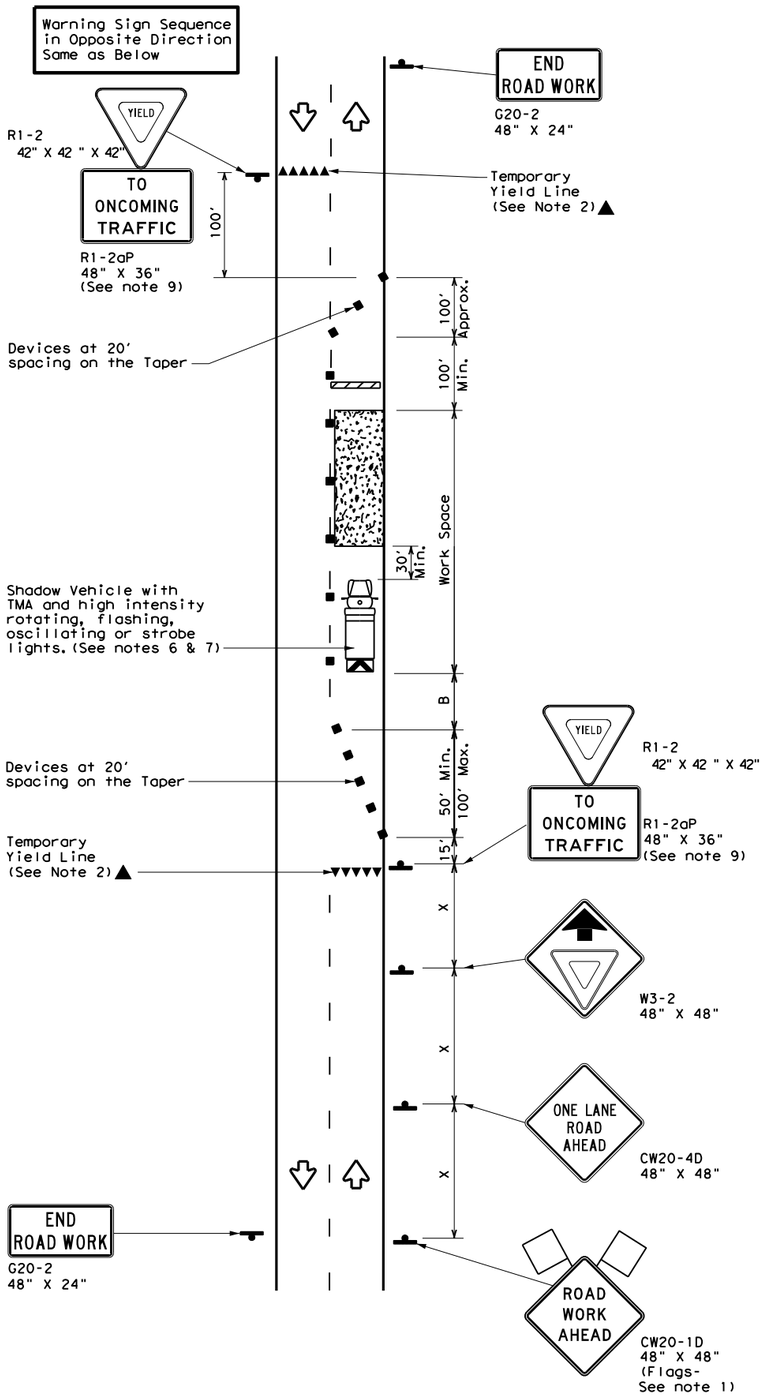
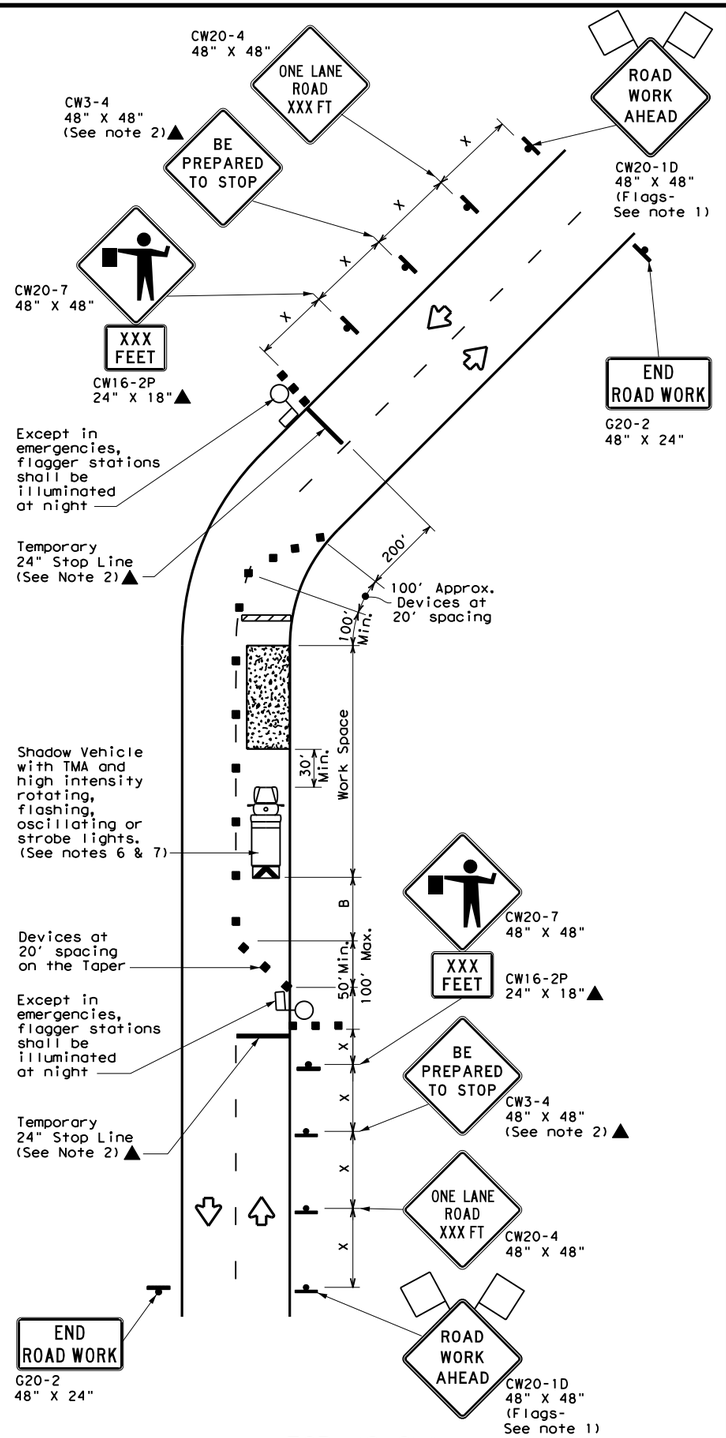


TCP (2-2a)
2-LANE ROADWAY WITHOUT PAVED SHOULDERS
ONE LANE TWO-WAY
CONTROL WITH YIELD SIGNS
(Less than 2000 ADT - See Note 9)



TCP (2-2b)
2-LANE ROADWAY WITHOUT PAVED SHOULDERS
ONE LANE TWO-WAY
CONTROL WITH FLAGGERS

LEGEND

	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L=WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The CW3-4 "BE PREPARED TO STOP" sign may be installed after the CW20-4 "ONE LANE ROAD XXX FT" sign, but proper sign spacing shall be maintained.
4. Flaggers should use two-way radios or other methods of communication to control traffic.
5. Length of work space should be based on the ability of flaggers to communicate.
6. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-2a)

8. The R1-2 "YIELD" sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work space should be no longer than one half city block. In rural areas, roadways with less than 2000 ADT, work space should be no longer than 400 feet.
9. The R1-2aP "YIELD TO ONCOMING TRAFFIC" sign shall be placed on a support at a 7 foot minimum mounting height.

TCP (2-2b)

10. Channelizing devices on the center line may be omitted when a pilot car is leading traffic and approved by the Engineer.
11. If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain stopping sight distance to the flagger and a queue of stopped vehicles. (See table above).
12. Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situtations.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN ONE-LANE TWO-WAY TRAFFIC CONTROL

TCP(2-2)-18

FILE: tcp2-2-18.dgn	DN:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 3-03 1-97 2-12 4-98 2-18	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		221

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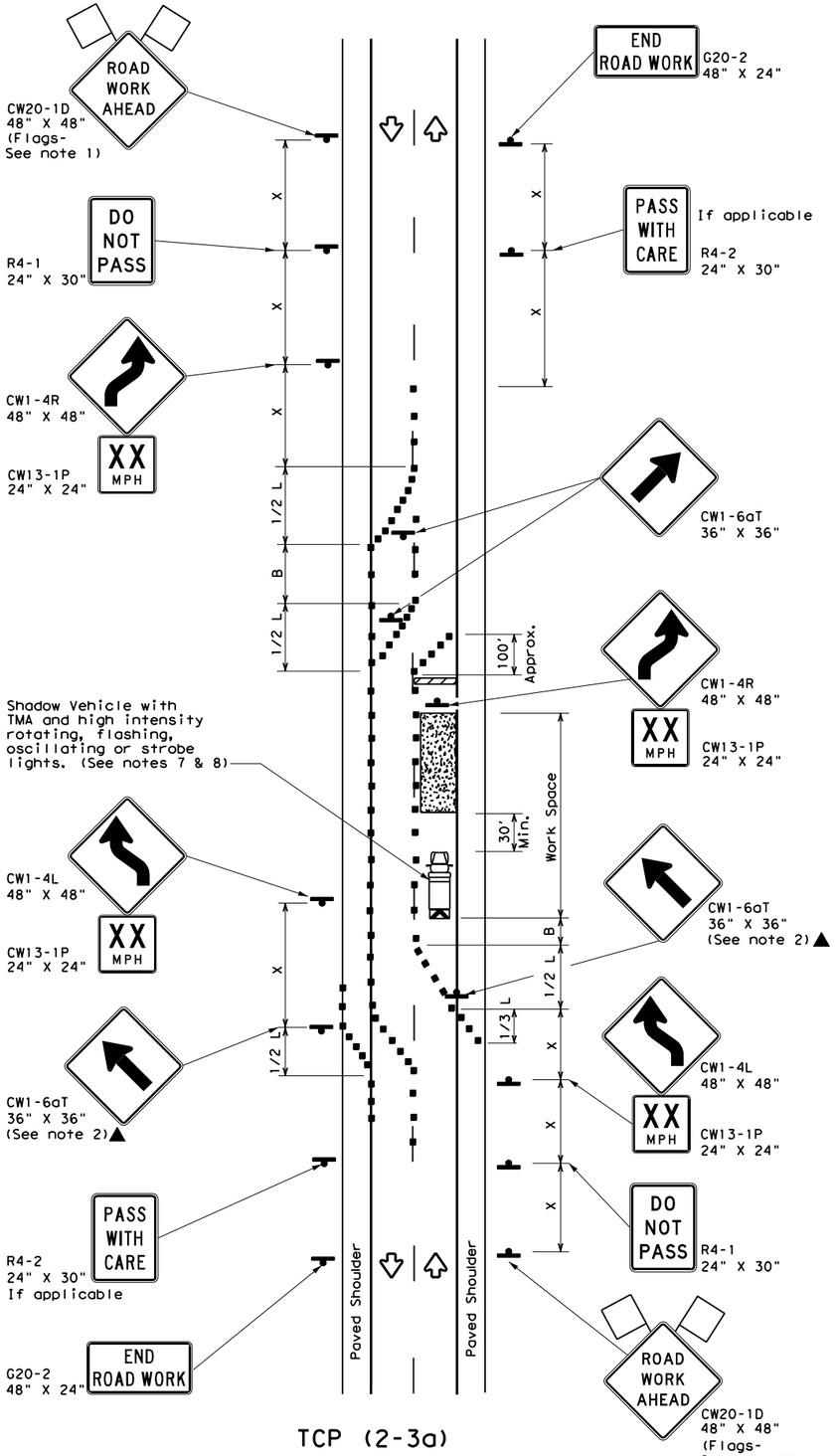
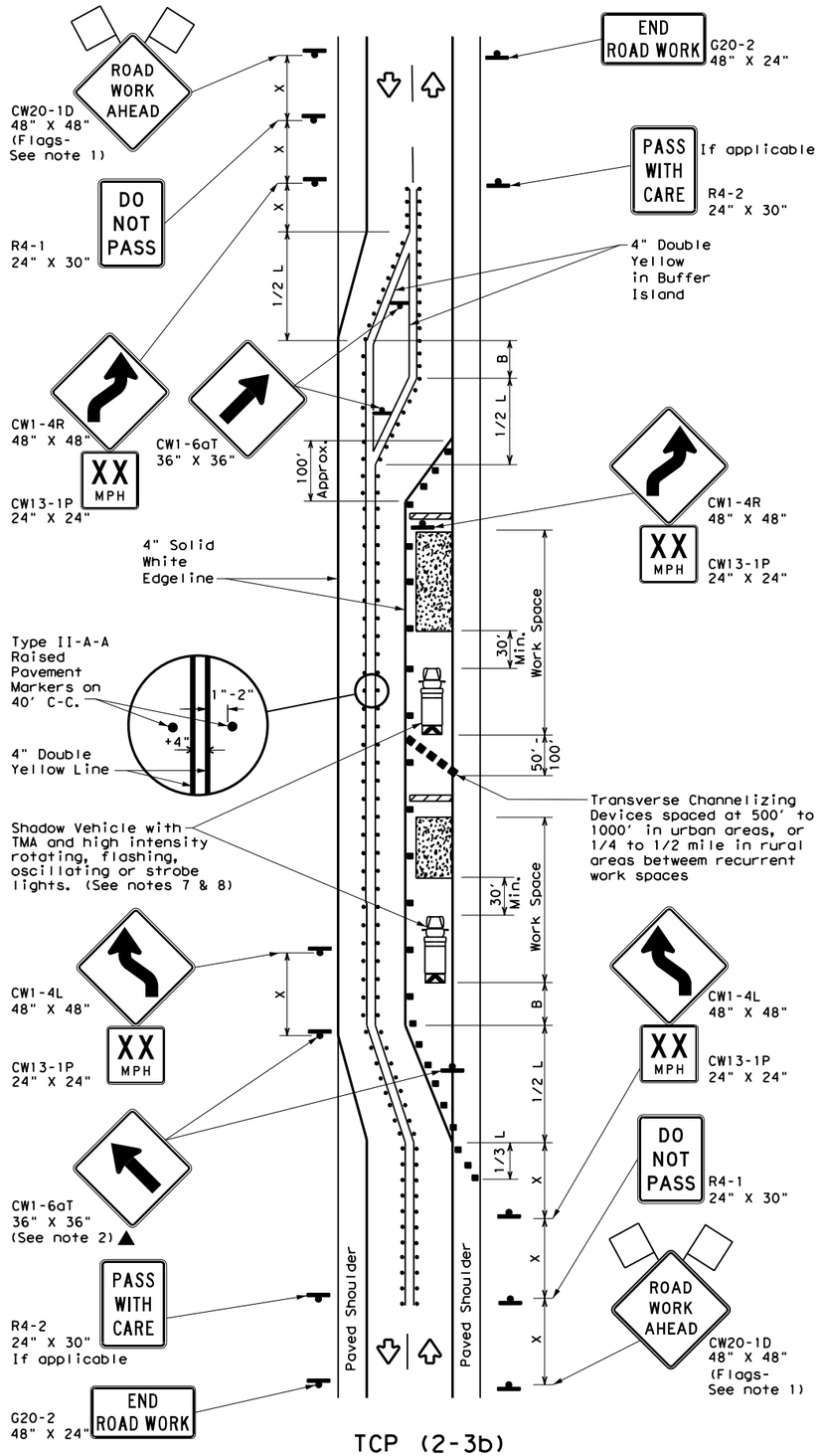
DATE:
FILE:



TCP (2-3a)
2-LANE ROADWAY WITH PAVED SHOULDERS

ONE LANE CLOSED
ADEQUATE FIELD OF VIEW



TCP (2-3b)
2-LANE ROADWAY WITH PAVED SHOULDERS

ONE LANE CLOSED
INADEQUATE FIELD OF VIEW

LEGEND			
	Type 3 Barricade	■ ■	Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	....	Raised Pavement Markers Ty II-AA
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
				TCP(2-3b)ONLY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. When work space will be in place less than three days existing pavement markings may remain in place. Channelizing devices shall be used to separate traffic.
4. Flagger control should NOT be used unless roadway conditions or heavy traffic volume require additional emphasis to safely control traffic. Flagger should be positioned at end of traffic queue.
5. The R4-1 "DO NOT PASS," R4-2 " PASS WITH CARE" and construction regulatory speed zone signs may be installed within CW20-1D "ROAD WORK AHEAD" signs. Proper spacing of signs shall be maintained.
6. Conflicting pavement marking shall be removed for long term projects.
7. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted.
8. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-3a)

9. Conflicting pavement markings shall be removed for long-term projects. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter device spacing is intended for the area of the conflicting markings, not the entire work zone.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN TRAFFIC SHIFTS ON TWO-LANE ROADS

TCP(2-3)-18

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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
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8-95 3-03	DIST	COUNTY		SHEET NO.
1-97 2-12	21	HIDALGO, ETC.		222
4-98 2-18				

DATE:
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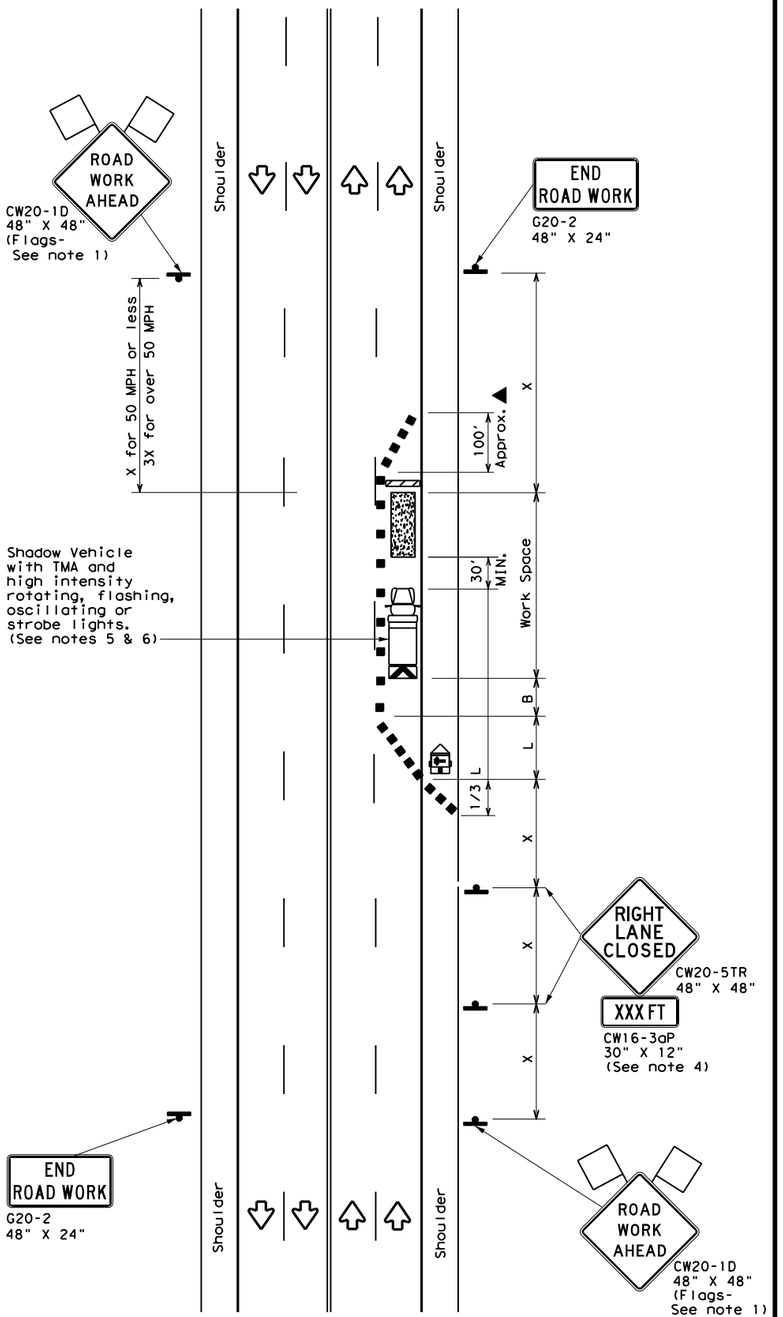
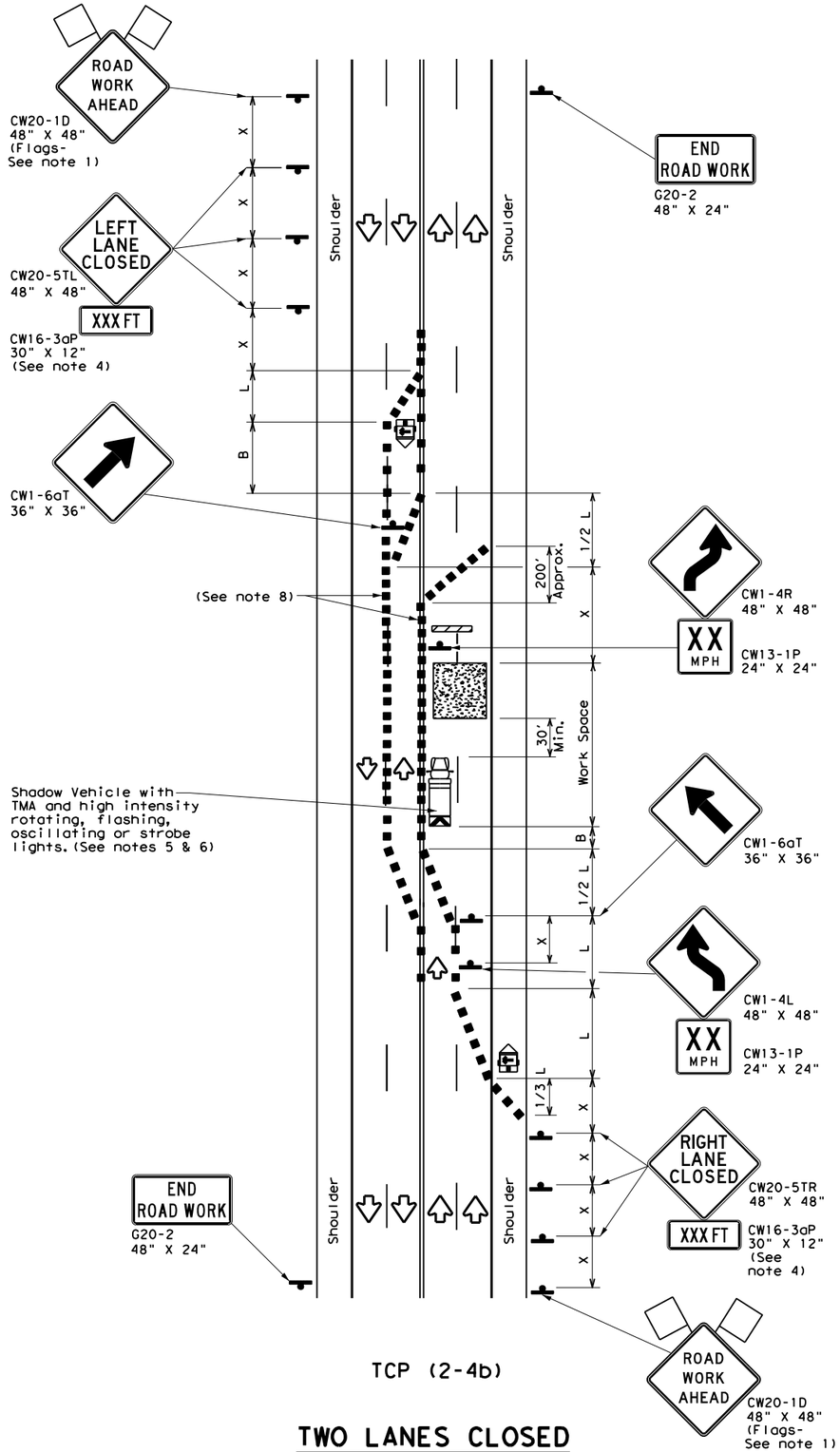


TCP (2-4a)

ONE LANE CLOSED



TCP (2-4b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
		✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The downstream taper is optional. When used, it should be 100 feet minimum length per lane.
4. For short term applications, when post mounted signs are not used, the distance legend may be shown on the sign face rather than on a CW16-3aP supplemental plaque.
5. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
6. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-4a)

7. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED"signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic with the arrow board placed in the closed lane near the end of the merging taper.

TCP (2-4b)

8. For shorter durations where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2(S) where S is the speed in mph. This tighter devices spacing is intended for the area of conflicting markings, not the entire work zone.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS

TCP(2-4)-18

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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
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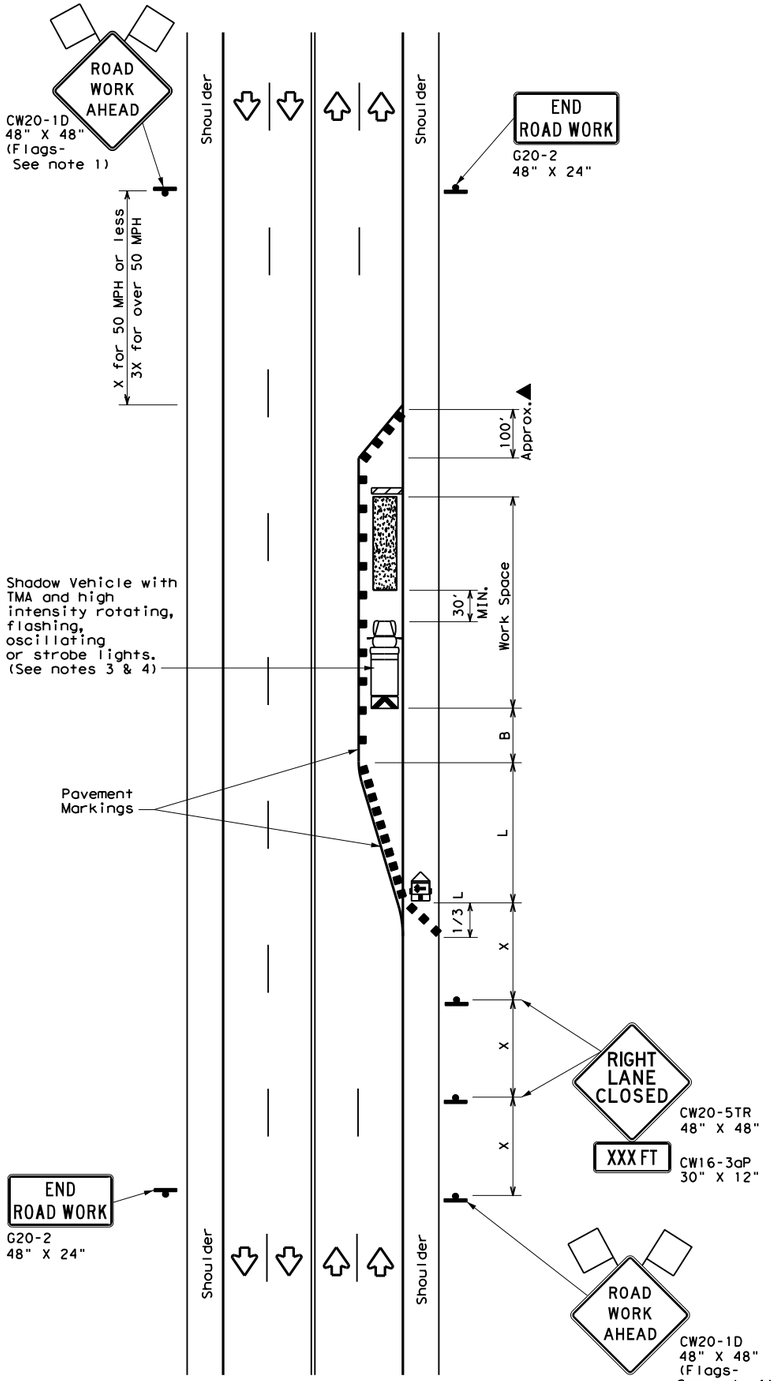
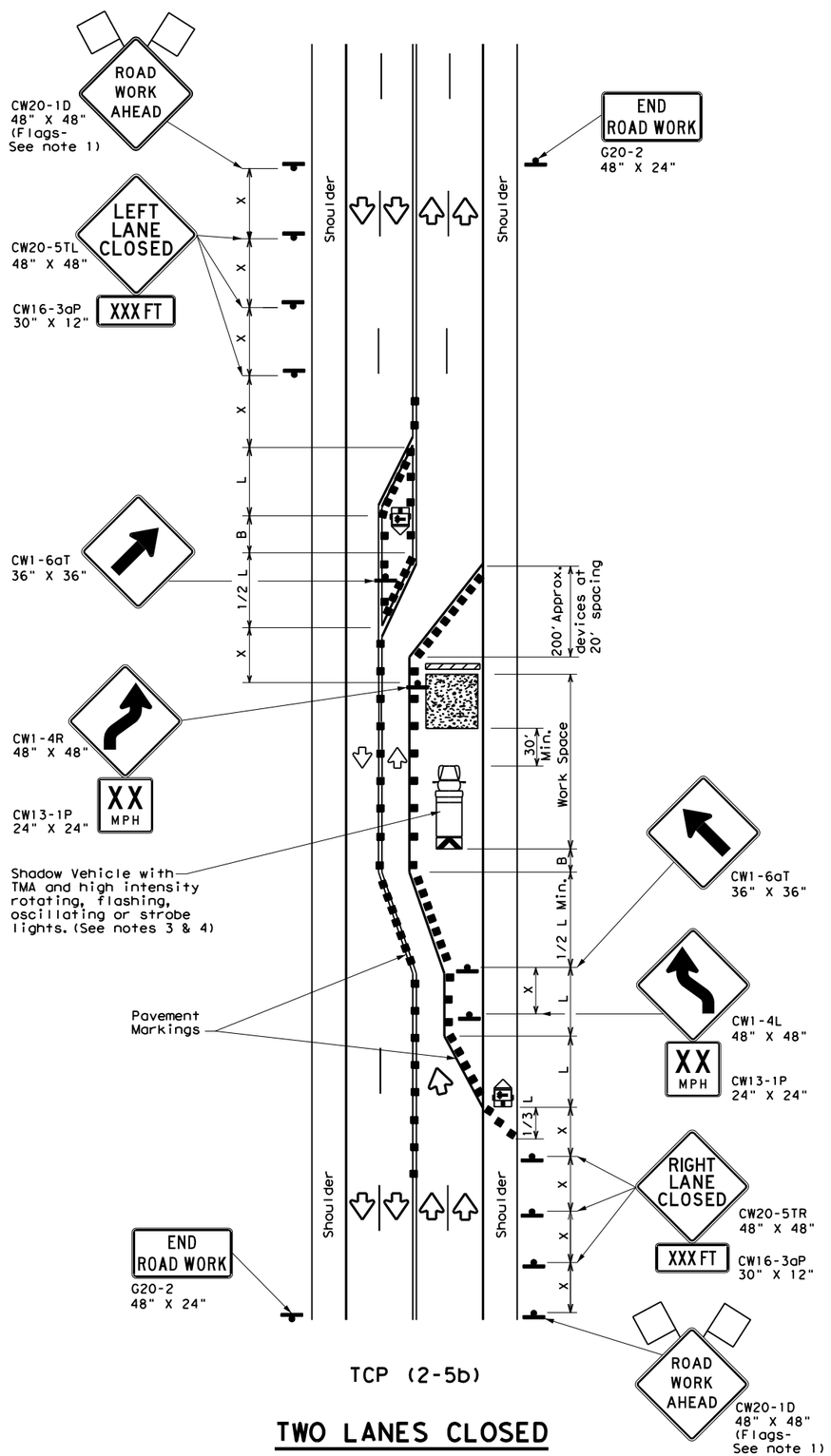
1-97 2-12	DIST	COUNTY		SHEET NO.
4-98 2-18	21	HIDALGO, ETC.		223



TCP (2-5a)

ONE LANE CLOSED



TCP (2-5b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew eposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substitutued for the Shadow Vehicle and TMA.
4. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.
5. The downstream taper is optional. When used, it should be 100 feet approximately per lane, with channelizing devices spaced at 20 feet.

TCP (2-5a)

6. If this TCP is used for a left lane closure, CW20-5TL "LEFT LANE CLOSED" signs shall be used and channelizing devices shall be placed on the centerline to protect the work space from opposing traffic, with the arrow board placed in the closed lane near the end of the merging taper.

TCP (2-5b)

7. Conflicting pavement markings shall be removed for long-term projects.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LONG TERM LANE CLOSURES MULTILANE CONVENTIONAL RDS.

TCP(2-5)-18

FILE: tcp2-5-18.dgn	DN:	CK:	DW:	CK:
©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 8-95 2-12	6353	00	001	IH-2, ETC.
1-97 3-03	DIST	COUNTY		SHEET NO.
4-98 2-18	21	HIDALGO, ETC.		224

DATE:
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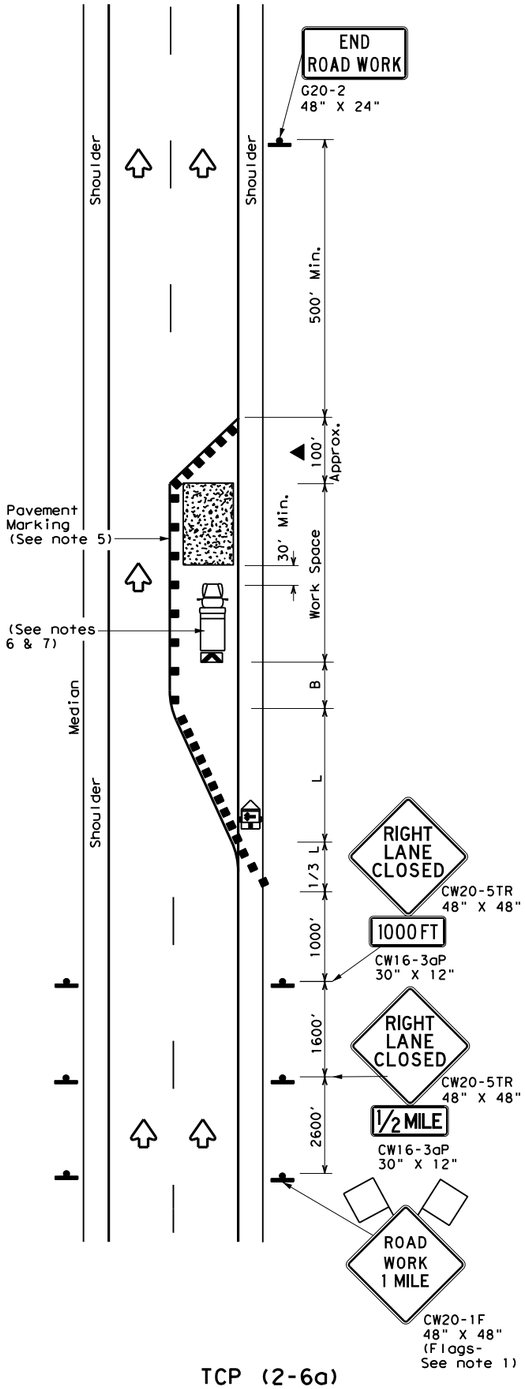
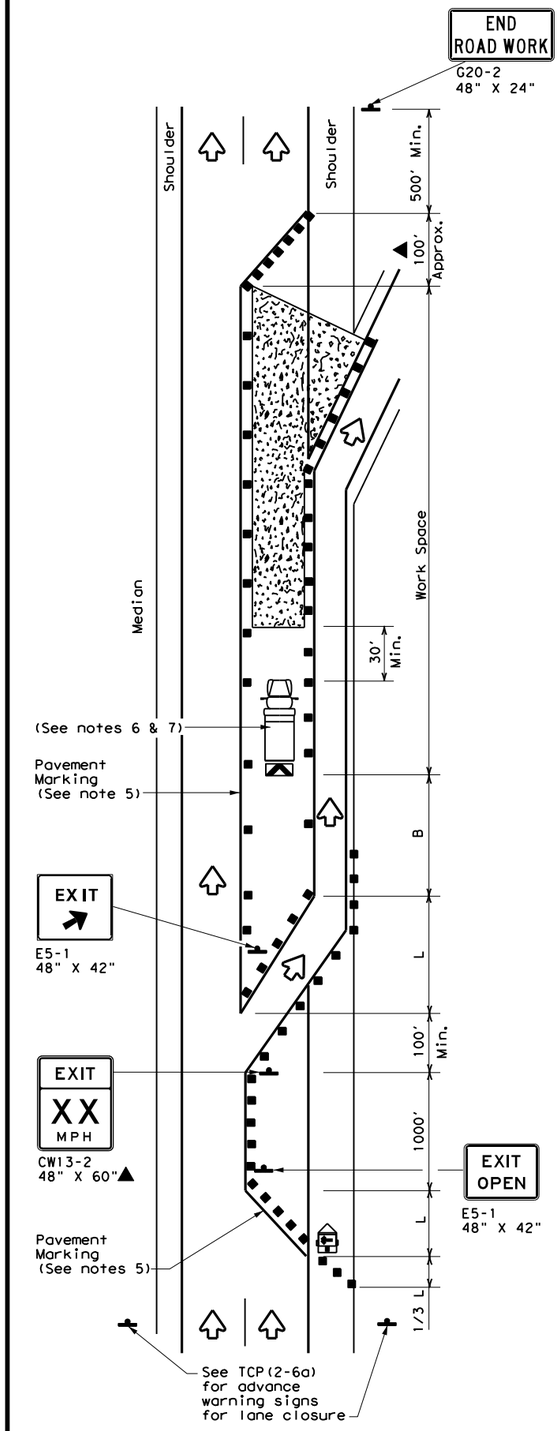


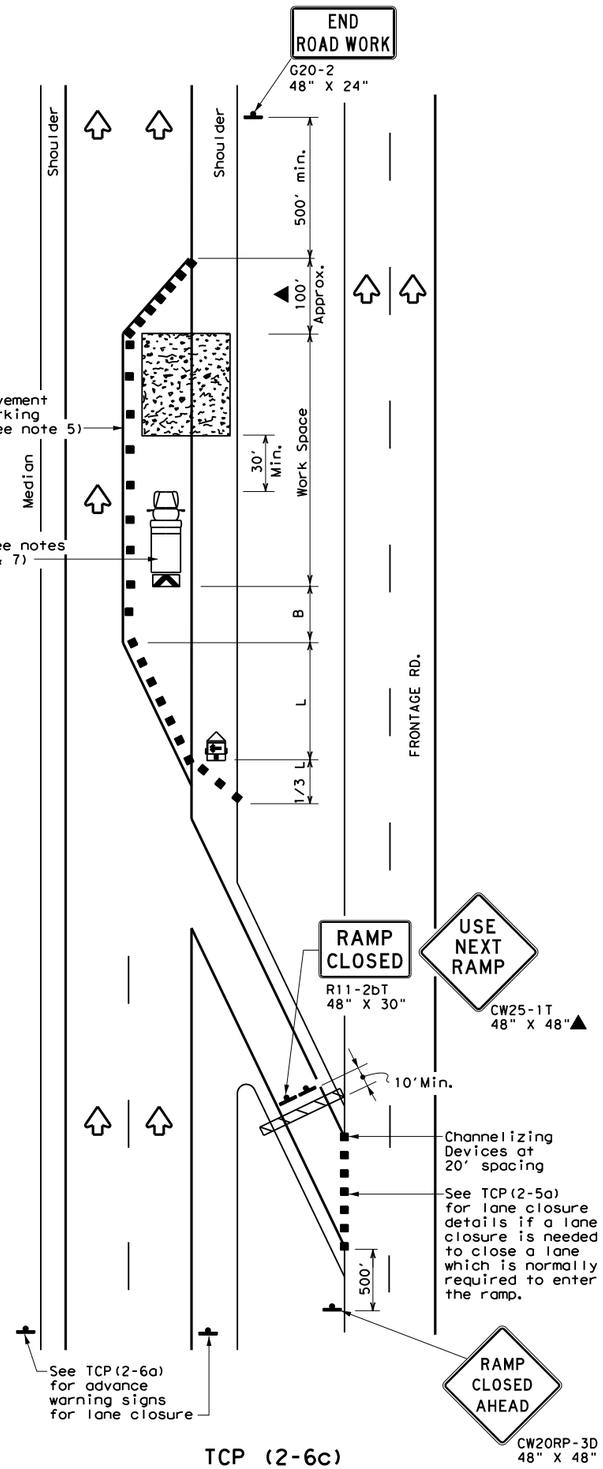
TCP (2-6a)

ONE LANE CLOSURE



TCP (2-6b)

LANE CLOSURE NEAR EXIT RAMPS



TCP (2-6c)

LANE CLOSURE NEAR ENTRANCE RAMPS

LEGEND			
	Type 3 Barricade	■ ■	Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. Channelizing devices used to close lanes may be supplemented with the Chevron Alignment Sign placed on every other channelizing device. Chevrons may be attached to plastic drums as per BC Standards.
4. Channelizing devices used along the work space or along tangent sections may be supplemented with vertical panels (VP) placed on everyother channelizing device. If night time conditions make it difficult to see at least two VPs, the VPs may be placed on each channelizing device.
5. The placement of pavement markings may be omitted on Intermediate-term stationary work zones with the approval of the Engineer.
6. Shadow Vehicle with TMA and high intensity rotating, flashing,oscillating or strobe lights. Shadow Vehicle with TMA and high intensity rotating, flashing, oscillating or strobe lights. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned in each closed lane, on the shoulder or off the paved surface, next to those shown in order to protect a wider work space.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN LANE CLOSURES ON DIVIDED HIGHWAYS

TCP(2-6)-18

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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 8-95 2-12 1-97 2-18	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		225

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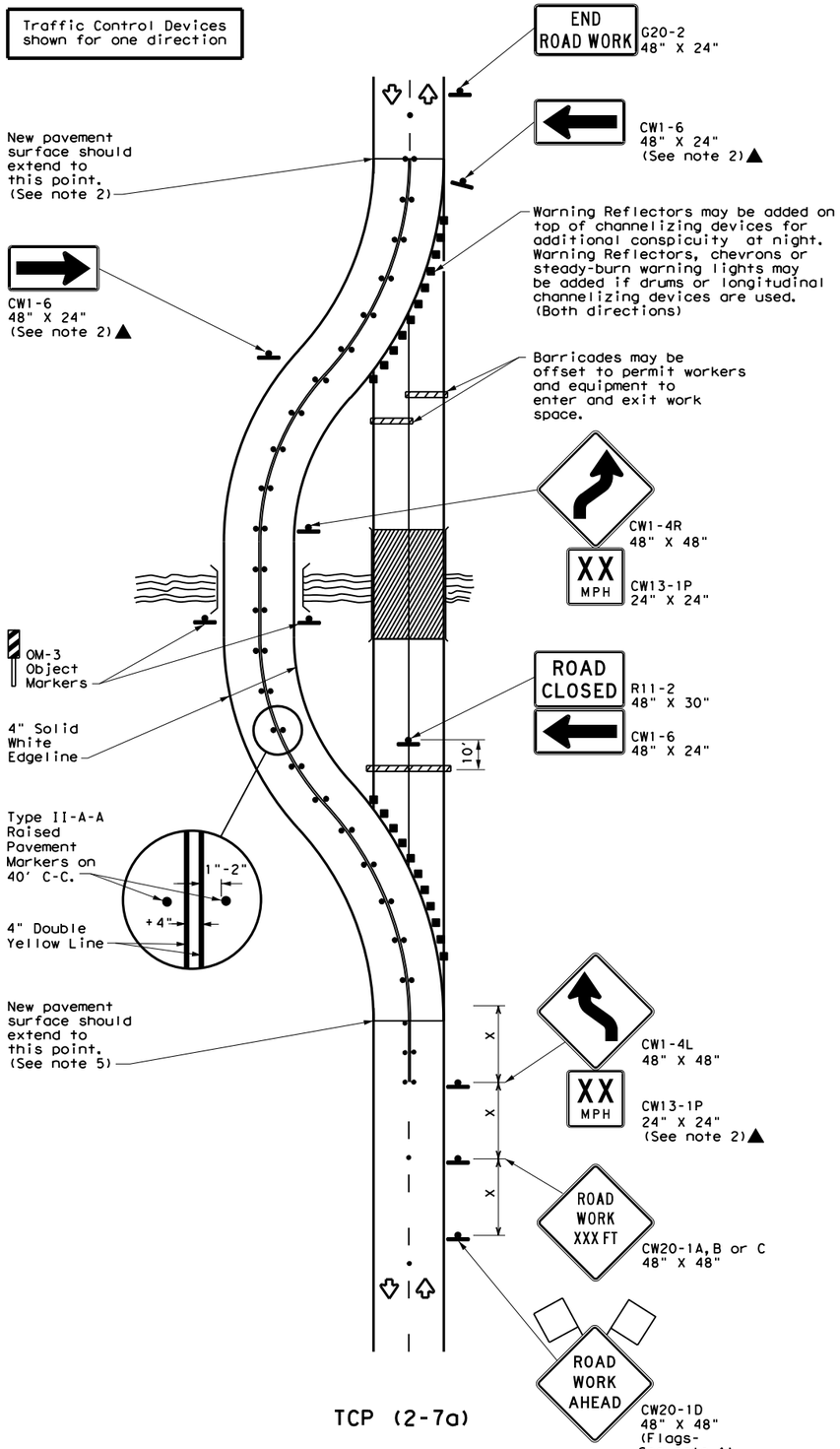
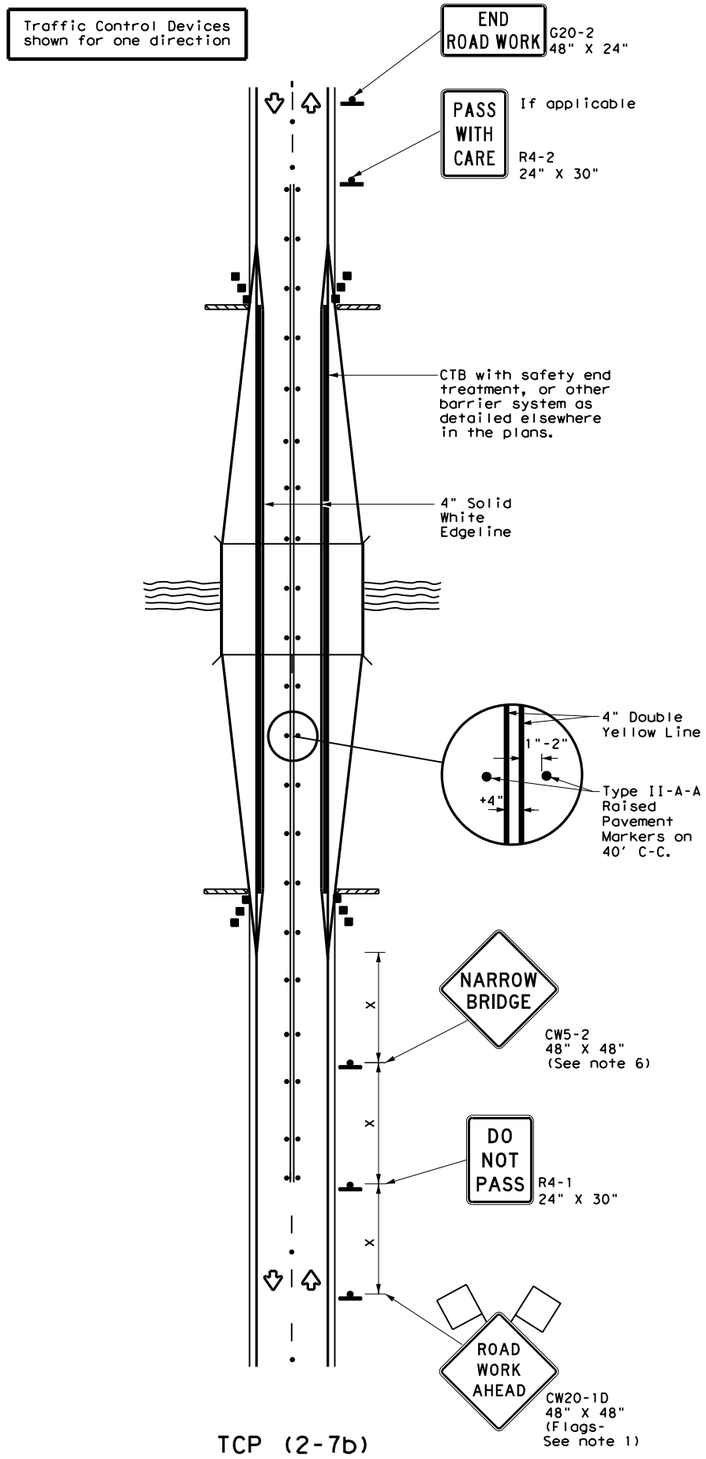


TCP (2-7a)

ROADWAY DIVERSION



TCP (2-7b)

BRIDGE WIDENING

LEGEND			
	Type 3 Barricade	■ ■	Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	• • • •	Raised Pavement Markers Ty II-AA
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths **			Suggested Maximum Spacing of Channelizing Devices		Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
		10' Offset	11' Offset	12' Offset	On a Taper	On a Tangent		
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L=WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.

TCP (2-7a)

3. Raised pavement markers shall be placed 40 feet c-c on centerline throughout project.
4. Roadway diversion design requirements should be based on posted speed limit or prevailing speed.
5. New pavement surface should be extended across existing roadway edge to a point where existing pavement markings left in place during project do not conflict with construction area pavement marking.

TCP (2-7b)

6. The CW5-2 "Narrow Bridge" sign may be omitted if lane and shoulder widths are maintained.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN DIVERSIONS AND NARROW BRIDGES

TCP(2-7)-18

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©TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
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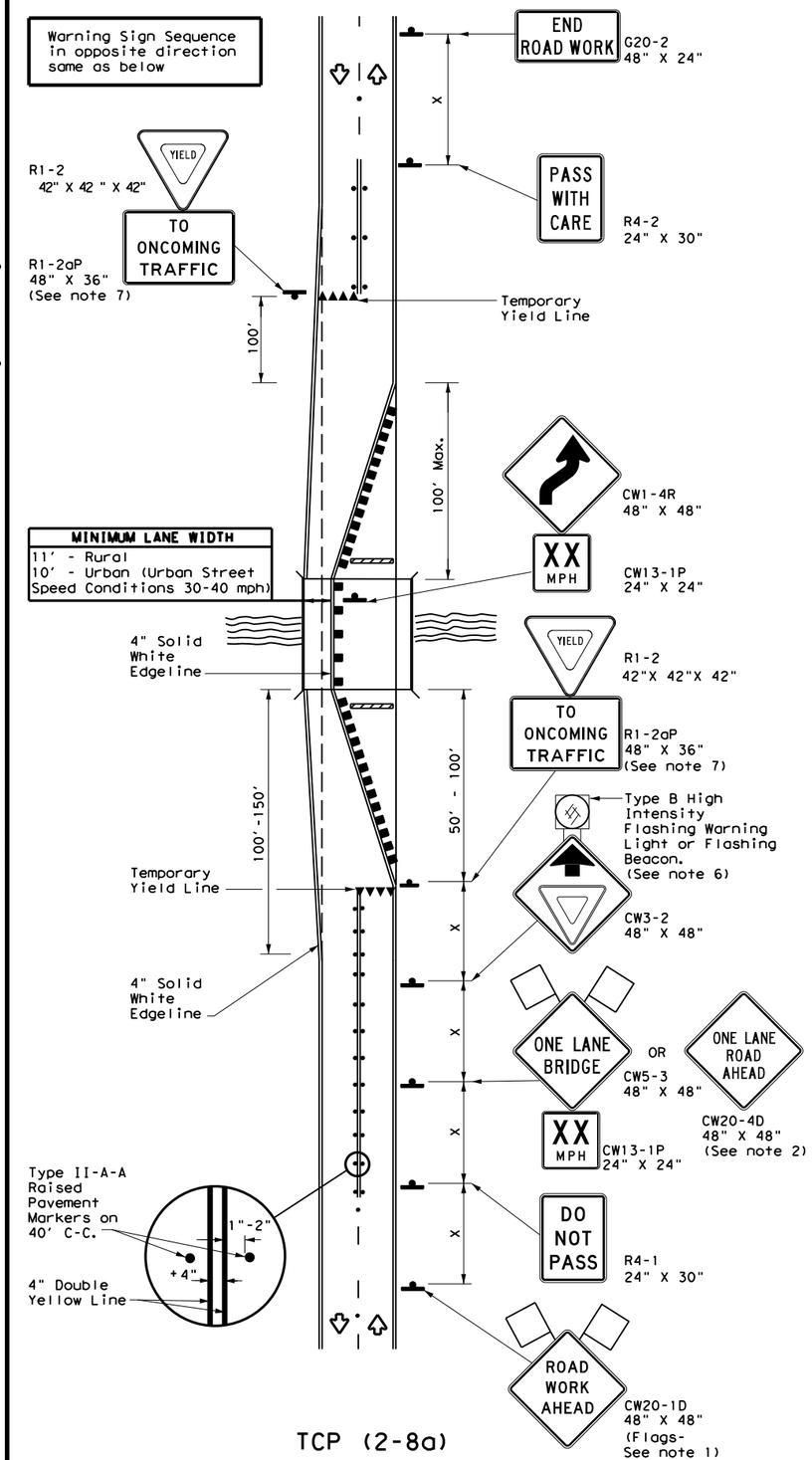
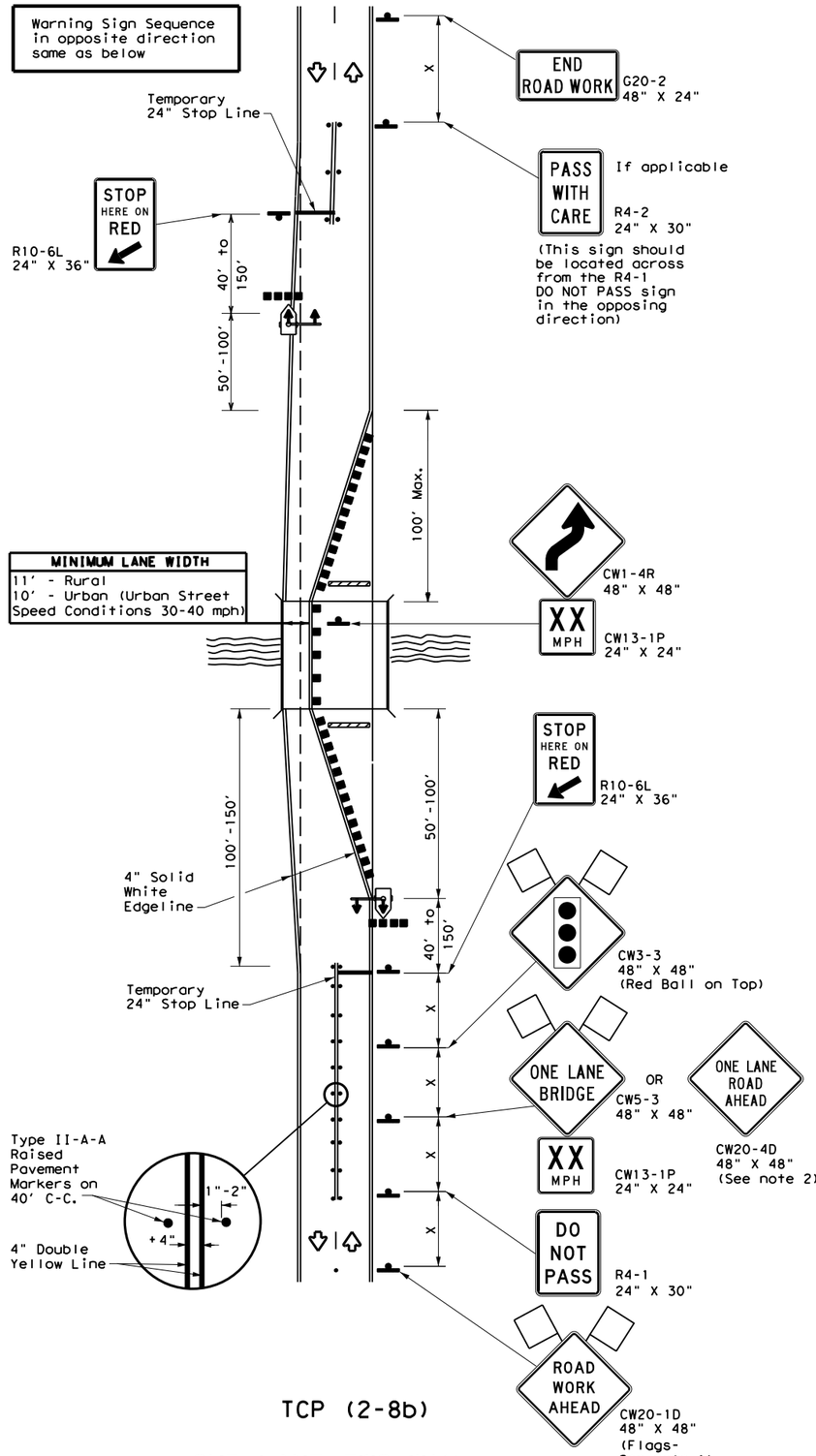


TCP (2-8a)

ONE LANE TWO-WAY
TRAFFIC CONTROL WITH YIELD SIGNS
(Less Than 2000 ADT-See Note 5)



TCP (2-8b)

ONE LANE TWO-WAY
TRAFFIC CONTROL WITH TRAFFIC SIGNAL

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Sign		Traffic Flow
	Flag		Flagger
	Raised Pavement Markers Ty II-AA		Temporary or Portable Traffic Signal

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L=WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

* Conventional Roads Only

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
			✓	✓

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. When this TCP is used at a location which does not involve a bridge, a 48" x 48" CW20-4D "ONE LANE ROAD AHEAD" signs should be used in lieu of the CW5-3 "ONE LANE BRIDGE" signs. The CW13-1P Advisory Speed Plaque is required with either warning sign.
3. Raised pavement markers shall be placed 40 feet c-c on centerline between DO NOT PASS signs and stop or yield lines.
4. For intermediate term situations, when it is not feasible to remove and restore pavement markings, the channelization must be made dominant by using a very close spacing. This is especially important in locations of conflicting information, such as where traffic is directed over a double yellow centerline. In such locations a maximum channelizing device spacing of 20 feet is recommended. The 20 foot channelizing device spacing recommendation is intended for the area of conflicting information and not the entire work zone.

TCP (2-8a)

5. Traffic control by CW3-2 "YIELD AHEAD" symbol signs for one lane two-way traffic control operations should be limited to work spaces less than 400 feet long and roadways with less than 2000 ADT. Otherwise, portable traffic signals should be used.
6. If power is available, a flashing beacon should be attached to the CW3-2 "YIELD AHEAD" symbol sign for emphasis.
7. The R1-2 "YIELD" and R1-2aP "TO ONCOMING TRAFFIC" signs and other regulatory signs shall be installed at 7 foot minimum mounting height.

TCP (2-8b)

8. A list of approved Portable Traffic Signals can be found in the "Compliant Work Zone Traffic Control Devices" list.
9. Portable traffic signals should be located to provide adequate stopping sight distance for approaching motorist (See table above).

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
LONG TERM ONE-LANE TWO-WAY CONTROL

TCP(2-8)-18

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© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
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1-97 2-12	21	HIDALGO, ETC.		227
4-98 2-18				

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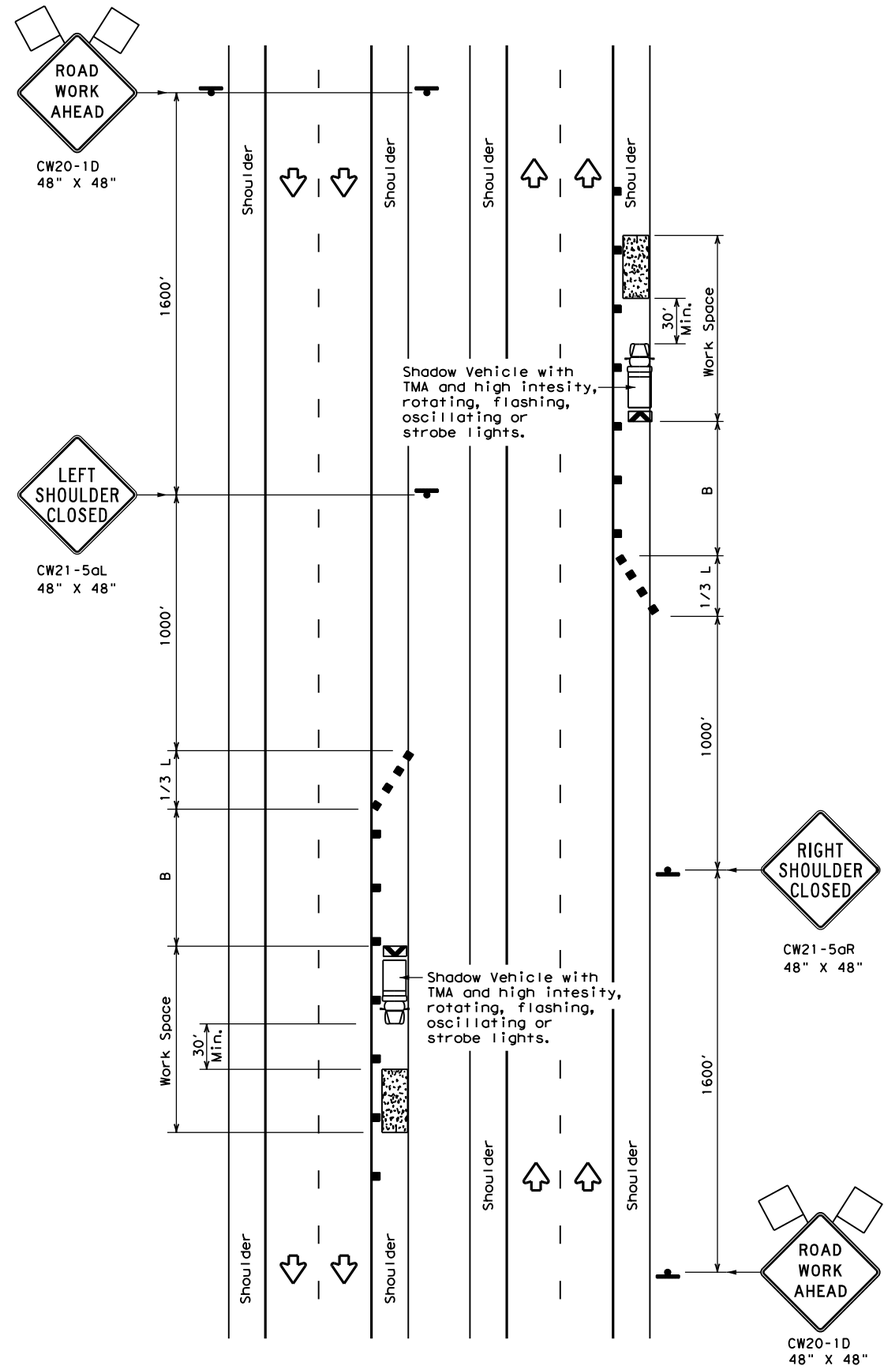
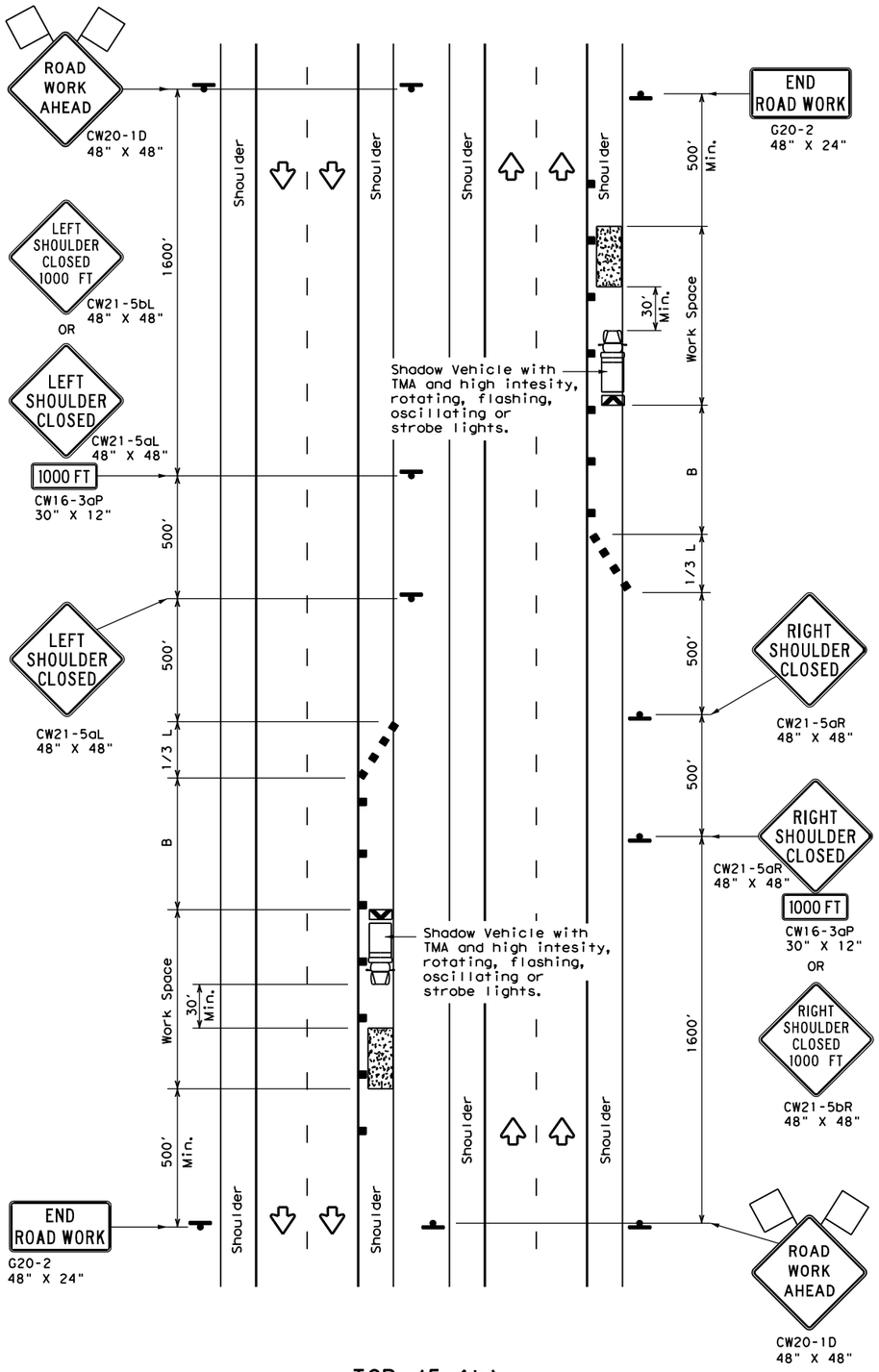


TCP (5-1a)

WORK AREA ON SHOULDER



TCP (5-1b)

WORK AREA ON SHOULDER

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	90'
35		205'	225'	245'	35'	70'	120'
40		265'	295'	320'	40'	80'	155'
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	TCP(5-1a)	TCP(5-1b)	TCP(5-1b)	

GENERAL NOTES

1. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30' to 100' in advance of the area of crew exposure without adversely effecting the performance or quality of the work. Type 3 barricades or drums may be substituted when workers on foot are no longer present when approved by the Engineer.
2. 28" tall or taller one-piece cones will be allowed only for Short Duration or Short Term stationary operations when workers are present to maintain the devices upright and in proper location. Intermediate Term stationary work areas should use Drums, Vertical Panels or 42" tall two-piece cones.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC CONTROL PLAN SHOULDER WORK FOR FREEWAYS / EXPRESSWAYS

TCP(5-1)-18

FILE: tcp5-1-18.dgn	DN:	CK:	DW:	CK:
©TxDOT February 2012	CONT	SECT	JOB	HIGHWAY
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	21	HIDALGO, ETC.		228

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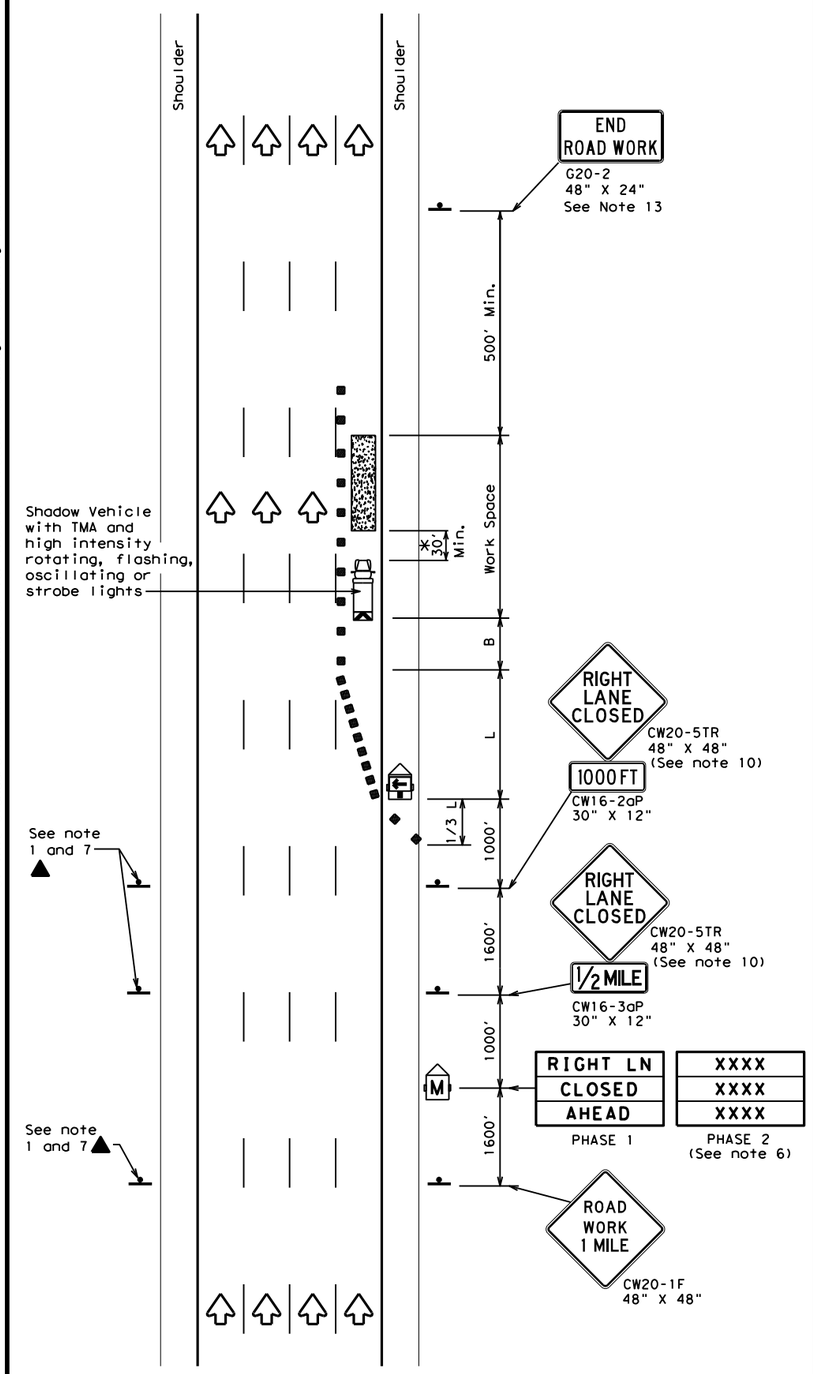
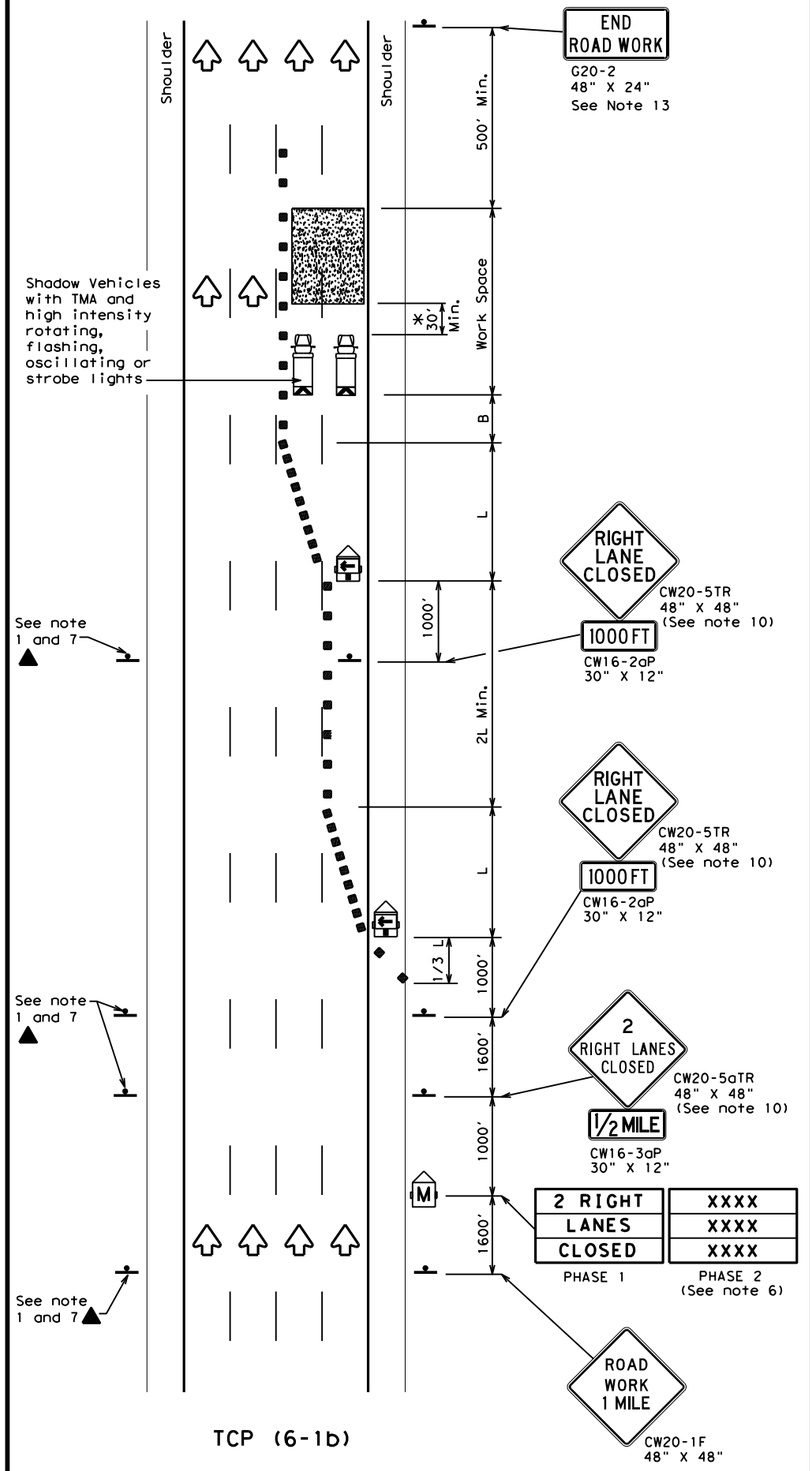


TCP (6-1a)

TYPICAL FREEWAY ONE LANE CLOSURE



TCP (6-1b)

TYPICAL FREEWAY TWO LANE CLOSURE

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. Drums or 42"cones are the typical channelizing devices. For Intermediate Term Stationary work, drums shall be used on tapers with drums or 42" cones used on tangent sections. Other channelizing devices may be used as directed by the Engineer.
3. All construction signs and barricades placed during any phase of work shall remain in place until removal is approved by the Engineer.
4. The Engineer may direct the Contractor to furnish additional signs and barricades as required to maintain traffic flow, detours and motorist safety during construction.
5. Static message boards or changeable message signs stating the date and duration of ramp or freeway lane closures shall be placed a minimum of seven (7) calendar days in advance of the actual closure.
6. Phase 2 of the PCMS message should include appropriate information formatted as shown on BC(6), such as "MERGE LEFT," recommended advisory speed, delay information, or other specific warnings.
7. Duplicate construction warning signs should be erected on the medians side of freeways where median width will permit and traffic volume justifies the signing.
8. The number of closed lanes may be increased provided the spacing of traffic control devices, taper lengths and tangent lengths meet the requirements of the TMUTCD.
9. Warning signs for intermediate term stationary work should be mounted at 7' to the bottom of the sign.
10. Warning signs shown shall be appropriately altered for left lane closures. When signs are mounted at 1' height for short term stationary or short duration work, sign versions shown in the SHSD for Texas with distances on the sign face rather than mounted on a plaque below the sign may be used.
11. When possible, PCMS units should be located in advance of the last available exit ramp prior to the lane closure to allow motorists an alternate route. They may also be relocated to improve advance warning in case of unanticipated queuing or congestion.
12. For Intermediate Term Stationary work at night, floodlights should be used to illuminate the work area and equipment crossings. Floodlights shall not produce a disabling glare condition for road users or workers.
13. The END ROAD WORK (G20-2) sign may be omitted when it conflicts with G20-2 signs already in place on the project.

* A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN FREEWAY LANE CLOSURES

TCP(6-1)-12

FILE: tcp6-1.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1998	CONT	SECT	JOB	HIGHWAY
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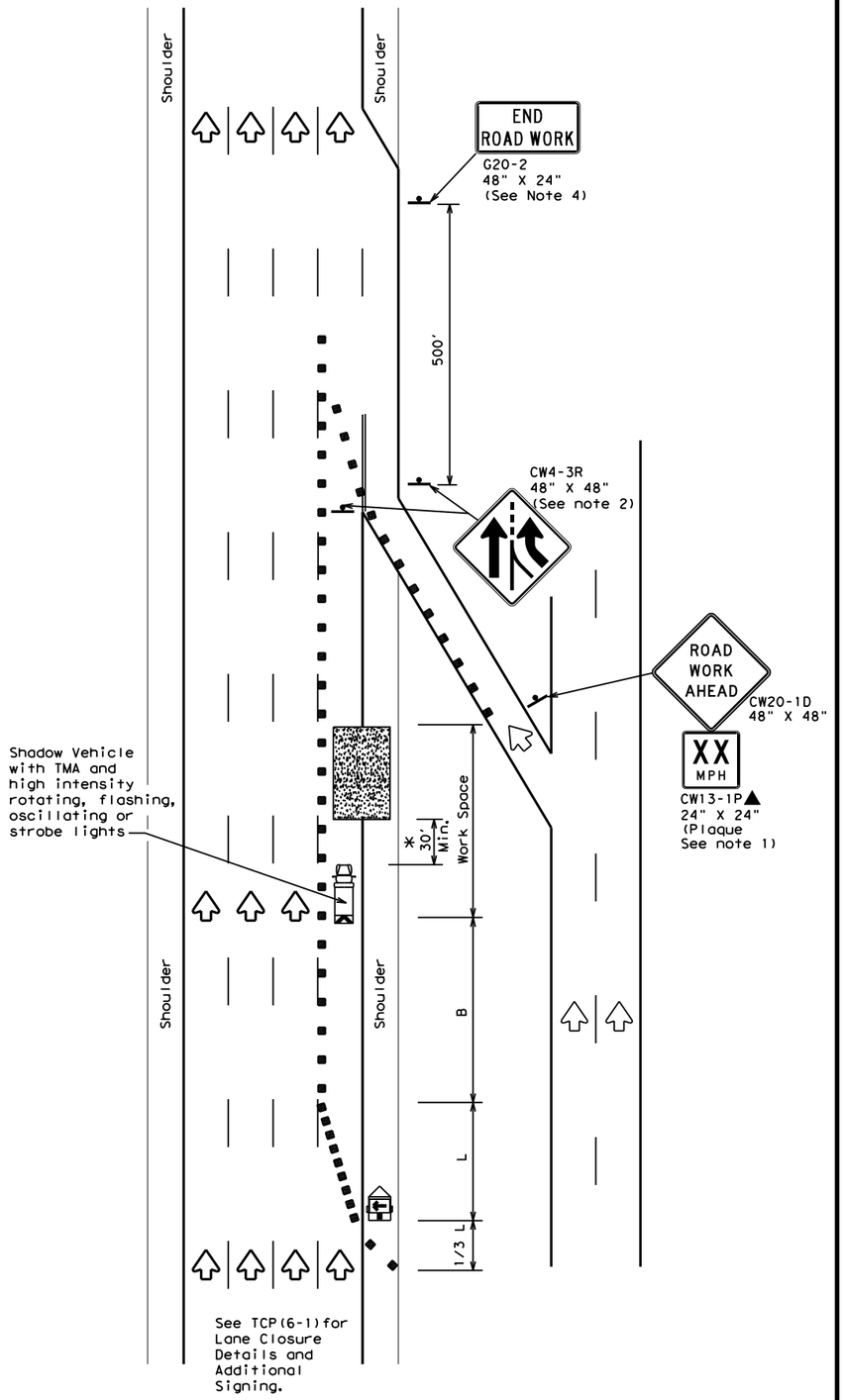
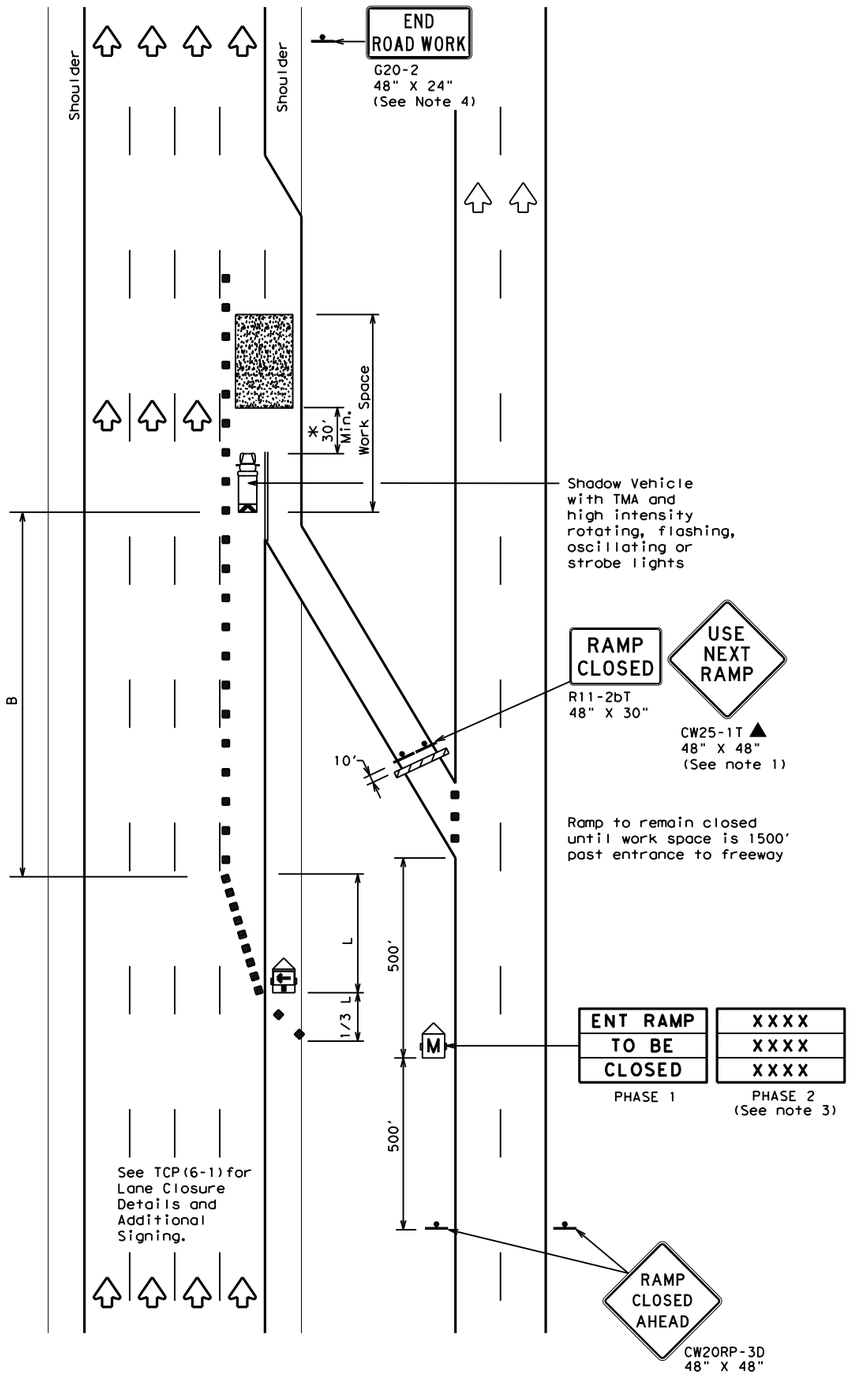


TCP (6-2a)

ENTRANCE RAMP OPEN
WORK WITHIN 500' OF RAMP



TCP (6-2b)

ENTRANCE RAMP CLOSED

LEGEND

	Type 3 Barricade	■ ■	Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. ADDED LANE Symbol (CW4-3) sign may be omitted when sign between ramp and mainlane can be seen from both roadways.
3. See "Advance Notice List" on BC(6) for recommended date and time formatting options for PCMS Phase 2 message.
4. The END ROAD WORK (G20-2) sign may be omitted when it conflicts with G20-2 signs already in place on the project.

*A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

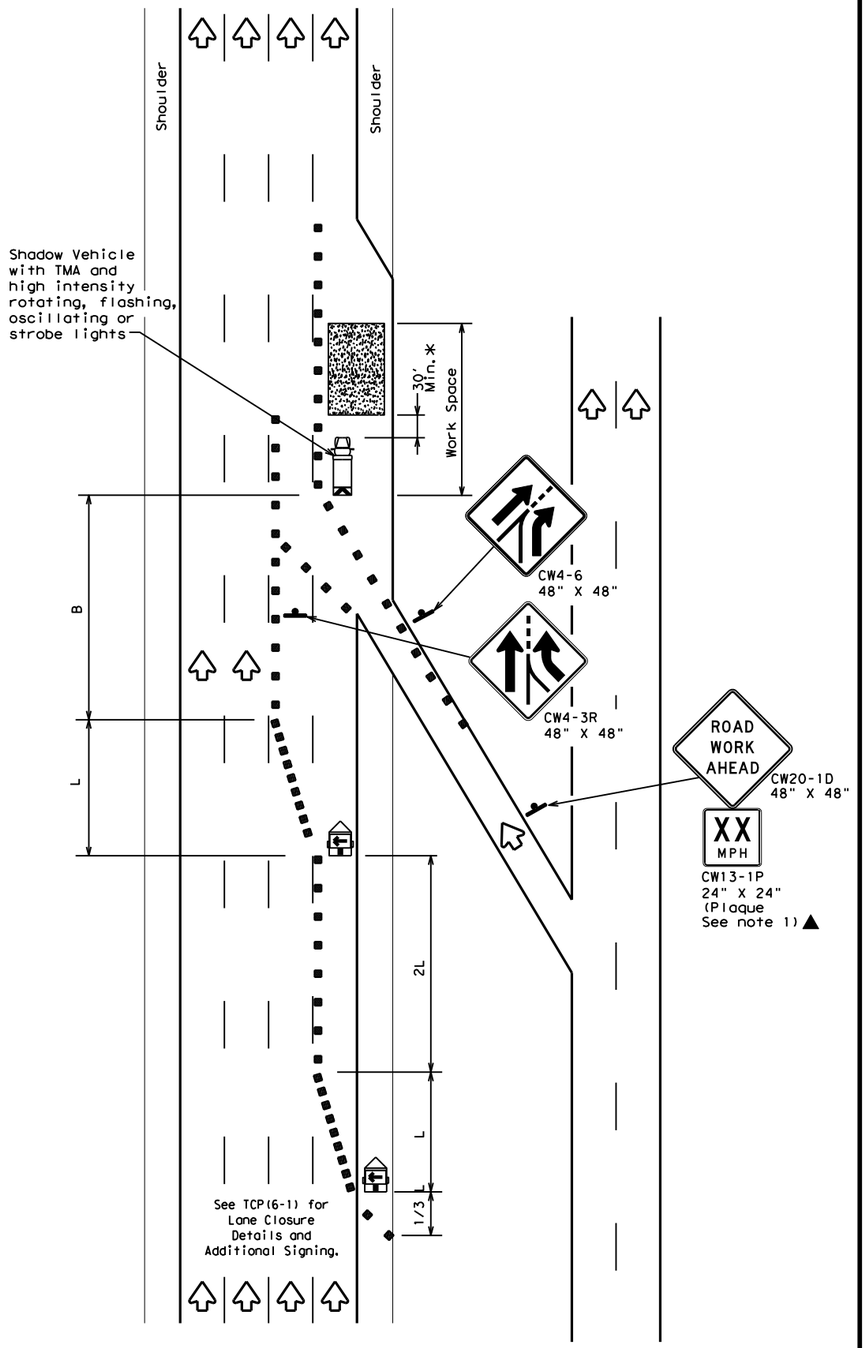
Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
WORK AREA NEAR RAMP

TCP(6-2)-12

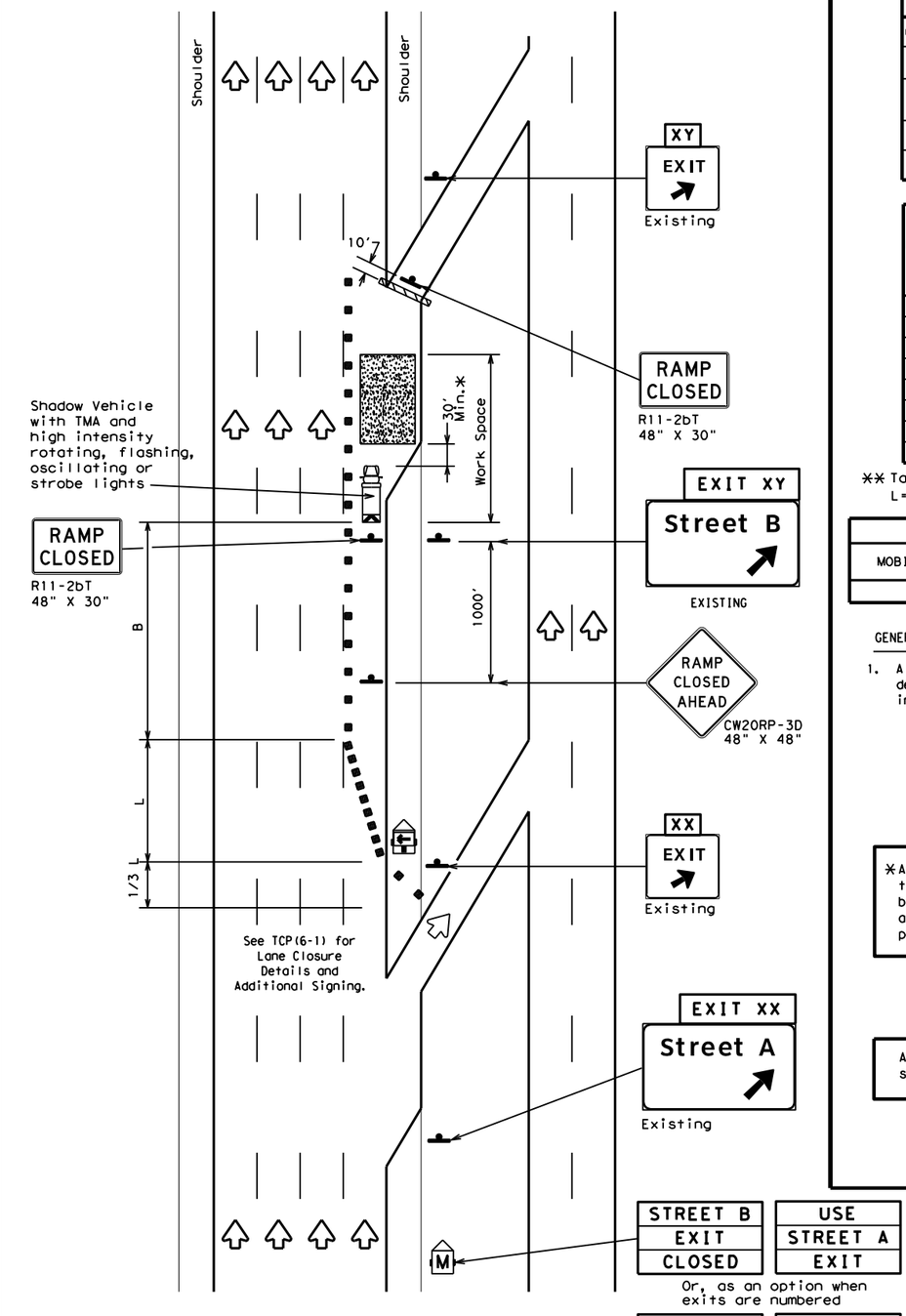
FILE: tcp6-2.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	21	HIDALGO, ETC.		230

DATE:
FILE:



TCP (6-3a)

ENTRANCE RAMP OPEN



TCP (6-3b)

EXIT RAMP CLOSED

TRAFFIC EXITS PRIOR TO CLOSED RAMP

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES:

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.

*A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

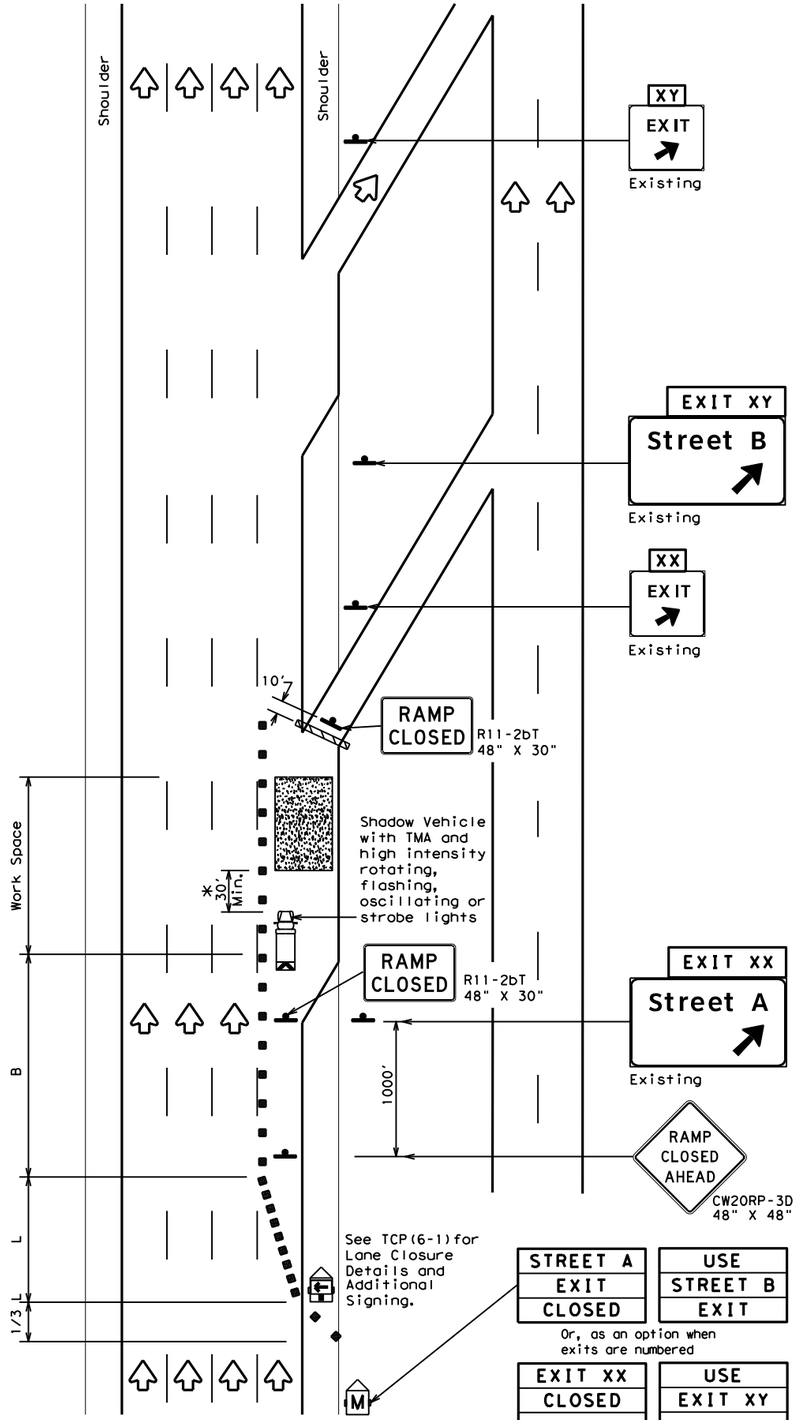
Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
WORK AREA BEYOND RAMP

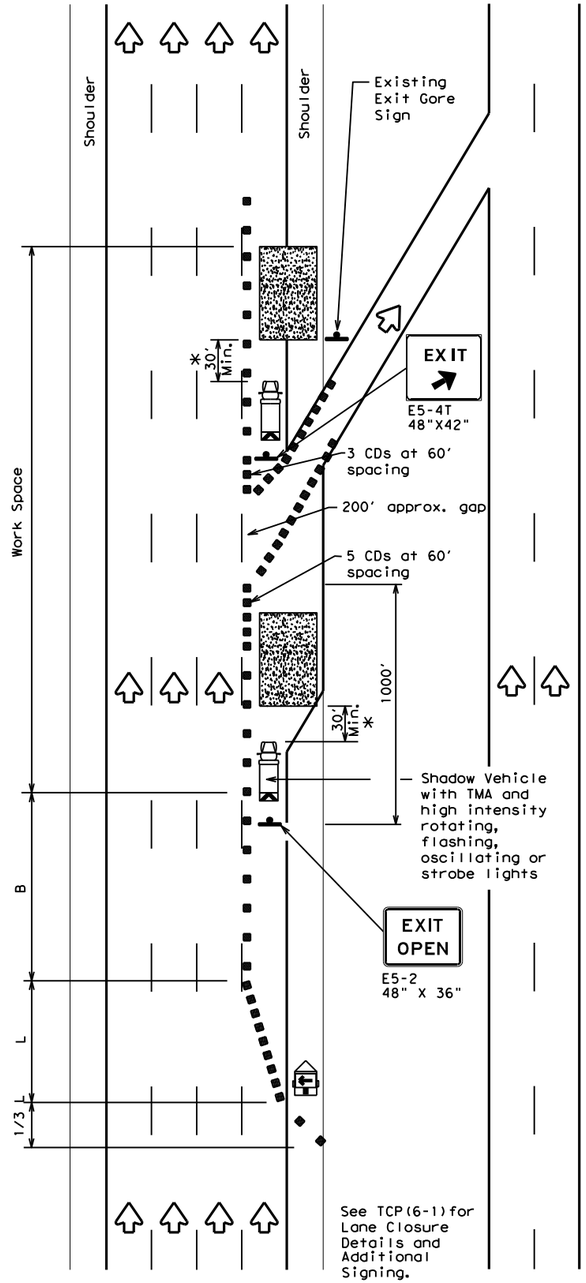
TCP(6-3)-12

FILE: tcp6-3.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	21	HIDALGO, ETC.		231



TCP (6-4a)

EXIT RAMP CLOSED
TRAFFIC EXITS PAST CLOSED RAMP



TCP (6-4b)

EXIT RAMP OPEN

LEGEND

	Type 3 Barricade		Channelizing Devices (CDs)
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. See BC Standards for sign details.

*A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

Texas Department of Transportation
Traffic Operations Division Standard

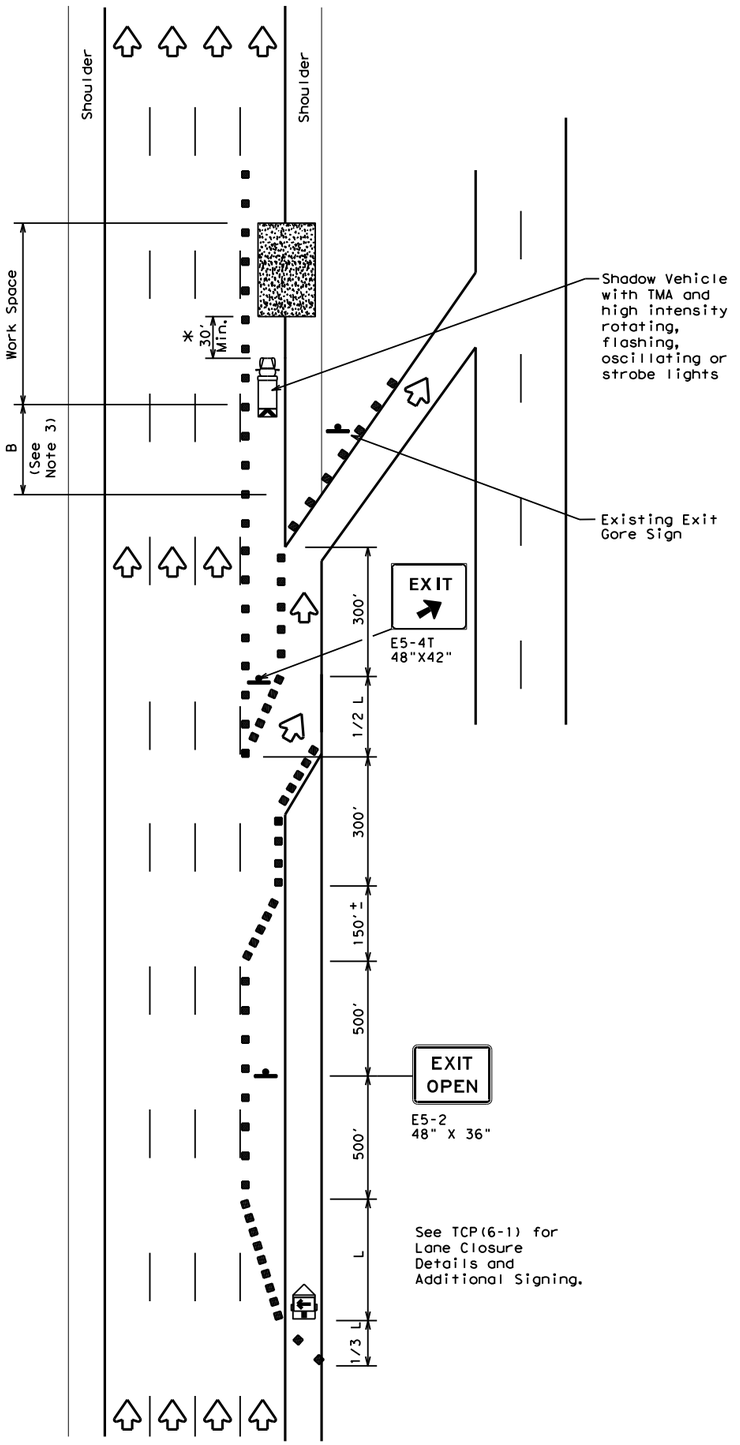
TRAFFIC CONTROL PLAN
WORK AREA AT EXIT RAMP

TCP(6-4)-12

FILE: tcp6-4.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT Feburary 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	21	HIDALGO, ETC.		232

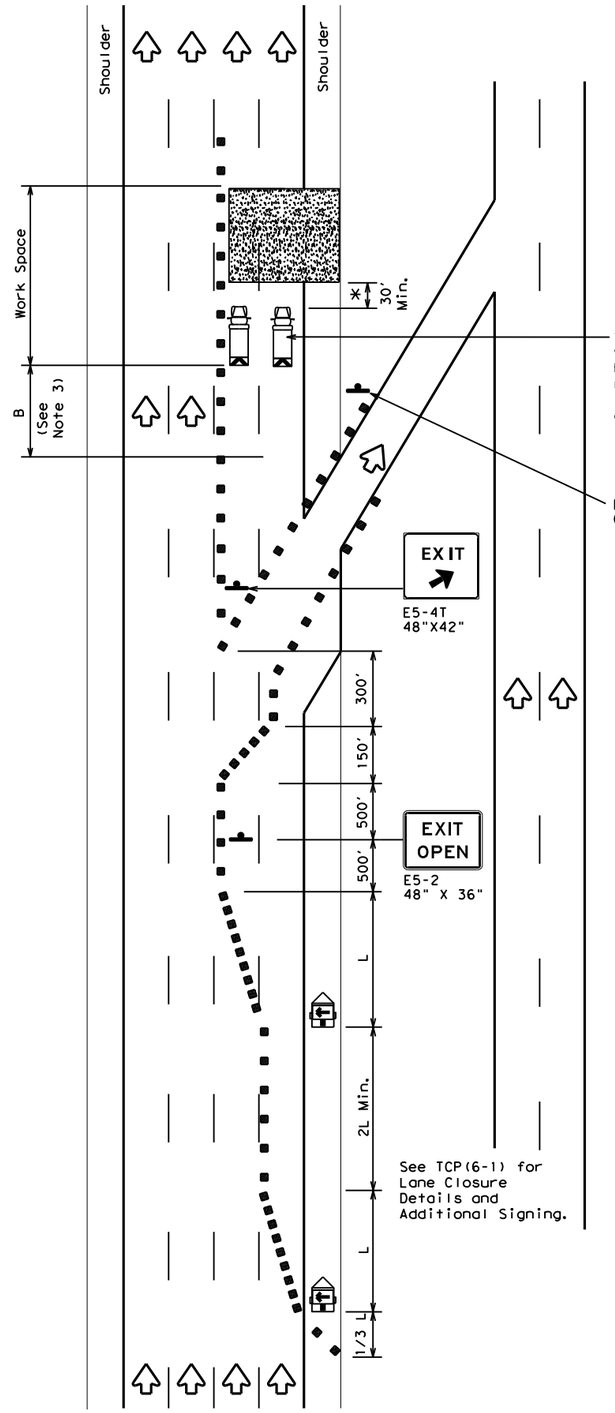
DATE:
FILE:

DATE:
FILE:



TCP (6-5a)

EXIT RAMP OPEN



TCP (6-5b)

EXIT RAMP OPEN
TWO LANE CLOSURE WITHIN 1500' PAST EXIT RAMP

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. See BC standards for sign details.
3. If adequate longitudinal buffer length "B" does not exist between the work space and the exit ramp, consideration should be given to closing the ramp.

* A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

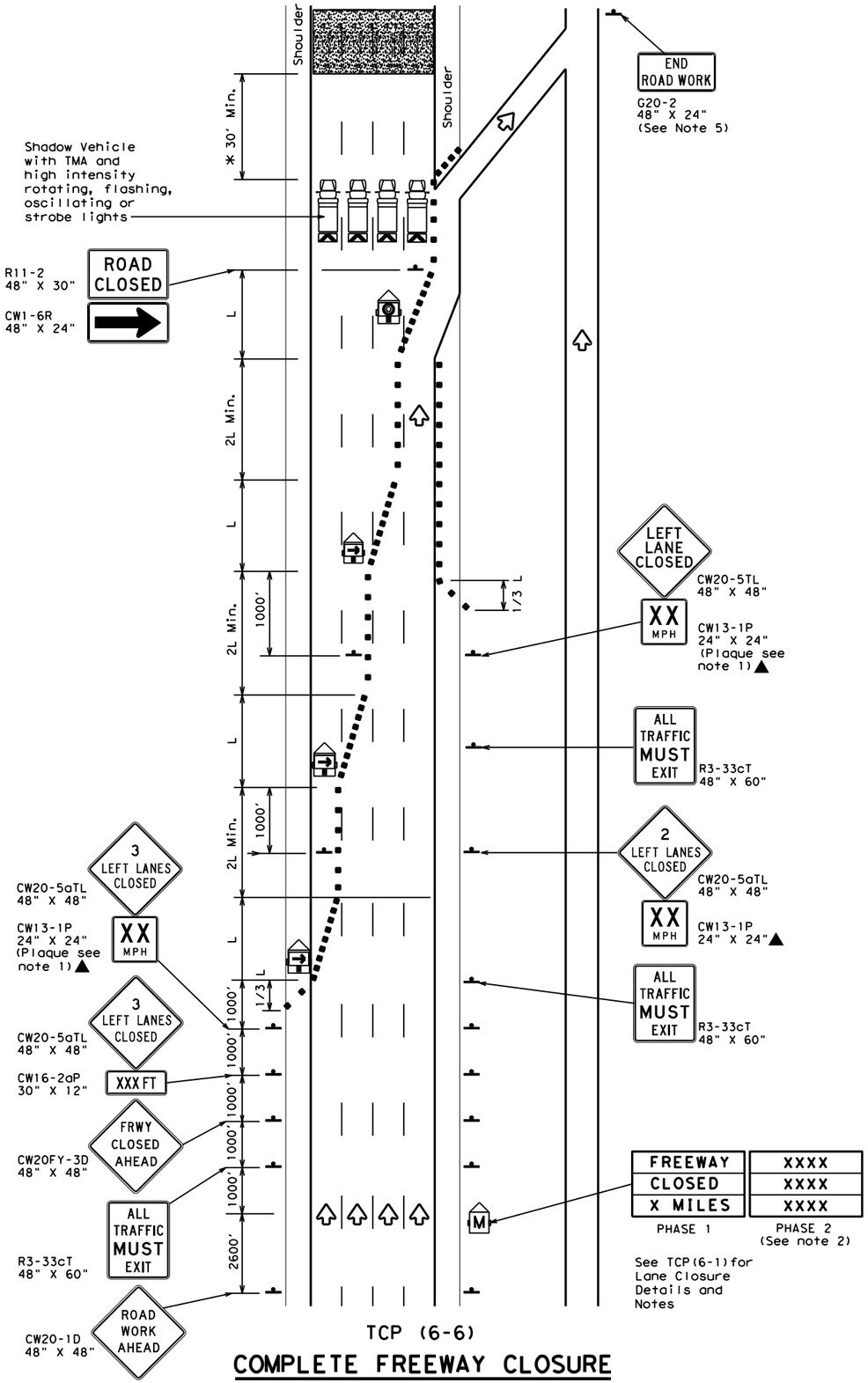
Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
WORK AREA BEYOND EXIT RAMP

TCP(6-5)-12

FILE: tcp6-5.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT Feburary 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	21	HIDALGO, ETC.		233

DATE:
FILE:



TCP (6-6)

COMPLETE FREEWAY CLOSURE

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Flashing Arrow Board in Caution Mode		Traffic Flow
	Sign		

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices: On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. All traffic control devices illustrated are REQUIRED. Devices denoted with the triangle symbol may be omitted when stated elsewhere in the plans.
2. Phase 2 of the PCMS message should include appropriate information formatted as shown on BC(6), such as "MERGE RIGHT," recommended speed, delay, exit information, or other specific warnings.
3. Where queuing is anticipated beyond signing shown, additional PCMS signs, other warning signs, devices or Law Enforcement Officers should be available to warn approaching high speed traffic of the end of the queue, as directed by the Engineer.
4. Entrance ramps located from the advance warning area to the exit ramp should be closed whenever possible.
5. The END ROAD WORK (G20-2) sign may be omitted when it conflicts with G20-2 signs already in place on the project.

* A shadow vehicle equipped with a Truck Mounted Attenuator is typically required. A shadow vehicle equipped with a TMA shall be used if it can be positioned 30' to 100' in advance of the area of crew exposure without adversely affecting the work performance.

Additional requirements for lane closures and advance signing shall be as shown on TCP (6-1) or as directed by the Engineer.

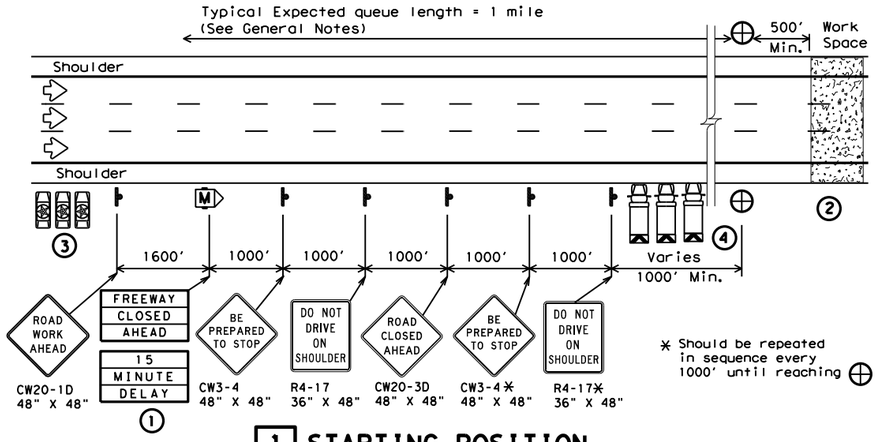
Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN
FREEWAY CLOSURE

TCP(6-6)-12

FILE: tcp6-6.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 1994	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
1-97 8-98	DIST	COUNTY		SHEET NO.
4-98 8-12	21	HIDALGO, ETC.		234

DATE:
FILE:



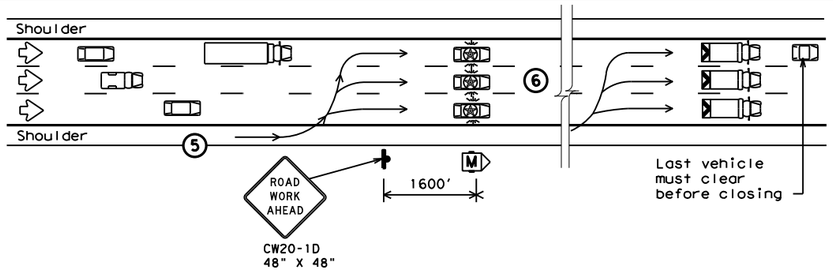
1 STARTING POSITION

① Traffic control devices should be installed or located near their intended position prior to beginning temporary roadway closure sequence. Duplicate signs should be erected on the median side of the roadway when median width permits. Warning signs should not be placed on the paved shoulders that will be used by the WARNING LEOV, or where movement of the LEOVs or barrier vehicles will be impeded.

② Prior to beginning the roadway closure sequence, all equipment, materials, personnel, and other items necessary to complete the work should be gathered near the work area. Entrance ramps located in the area where a queue is expected to build should be closed.

③ There should be one LEOV for every lane to be controlled, plus a minimum of one to warn traffic approaching a queue. An additional lead law enforcement officer is desirable to remain with the Engineer's or Contractor's point of contact (POC) during the operation in order to improve communication with all LEOVs involved.

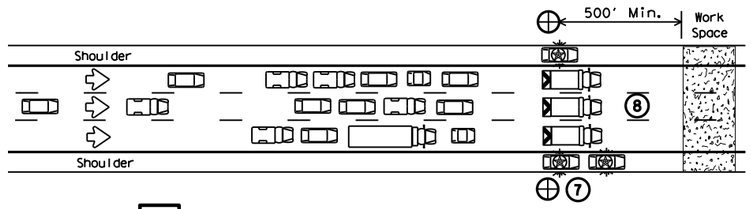
④ One barrier vehicle with a Truck Mounted Attenuator and amber or blue and amber high intensity flashing/oscillating/strobe lighting shall be used for each lane to be closed.



2 REDUCING SPEED OPERATION

⑤ Starting position of the LEOVs should be in advance of the most distant warning signs.

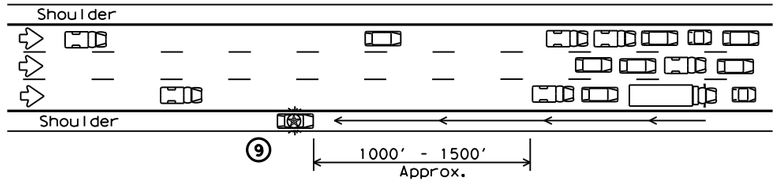
⑥ Once the LEOVs have achieved an abreast blocking formation while traveling toward the CP, emergency lights and headlights should be turned "ON". The LEOVs should maintain formation, not allow traffic to pass, and begin to decelerate. The LEOVs should continue to decelerate, giving the barrier vehicles opportunity to be staged upstream of the work space after traffic has cleared. The LEOVs should then continue to decelerate slowly until bringing traffic to a stop near the barrier vehicles.



3 ALL TRAFFIC STOPPED AT CP

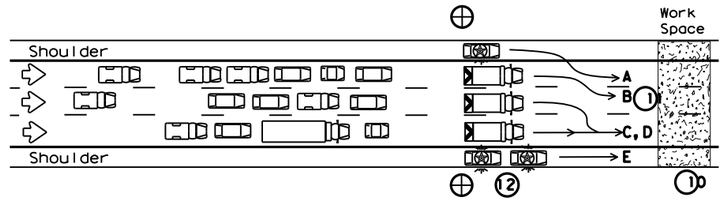
⑦ Once traffic is stopped the LEOVs should park on the shoulders with emergency lighting "ON" in order to provide law enforcement presence at the closure and keep shoulders blocked ahead of the work space. They should stay in radio contact with the WARNING LEOV.

⑧ The barrier vehicles should be parked, one in each lane, the parking brake set, with the high visibility flashing/oscillating/strobe lighting "ON," and the transmission in gear.



4 WARNING THE TRAFFIC QUEUE

⑨ The WARNING LEOV should proceed to the right shoulder of the roadway, with emergency lights on approximately 1000' in advance of the traffic queue (stopped traffic) as the queue develops. When determined that limited sight distance situations (crest of hills, sharp roadway curvature, etc.) may occur to motorists approaching the queue, the WARNING LEOV may proceed ¼ mile or more in advance of the queue.



5 RELEASING STOPPED TRAFFIC

⑩ All equipment, materials, personnel, and other items should be removed from the roadway and maintain an adequate clear zone.

⑪ When the roadway is clear for traffic, the LEOV should proceed forward from the left shoulder followed by the barrier vehicles, from left to right, as shown alphabetically in the plan view.

⑫ The LEOV or LEOVs on the right shoulder may remain on the shoulder until satisfied that traffic is moving satisfactorily before merging or proceeding.

⑬ LEOVs and barrier vehicles should re-group at their respective starting positions if necessary.

LEGEND			
■ ■	Channelizing Devices	⊕	Control Position (CP)
(M)	Portable Changeable Message Sign (PCMS)		Barrier Vehicle with Truck Mounted Attenuator
	Law Enforcement Officer's Vehicle(LEOV)		Traffic Flow

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓			

GENERAL NOTES

1. All traffic control devices shall conform with the latest edition of the Texas Manual on Uniform Traffic Control Devices (TMUTCD). Additional guidelines for traffic control devices may be found in the TMUTCD. Signs conflicting with the roadway closure sequence should be completely removed or covered. Additional traffic control devices may be required for closure of access roads, cross streets, exit and entrance ramps as directed by the Engineer.

2. Law enforcement officers and all workers involved should review and understand all procedures before the roadway closure sequence begins. Pre-work meetings may be held for this purpose. Local emergency services and media should have advance notification of roadway closure, expected dates and approximate times of closures.

3. Law enforcement officers shall be in uniform and have jurisdiction in the locale of the work area. An additional WARNING Law Enforcement Officer's Vehicle (LEOV) may be used on the median side of the roadway where median shoulder width permits (See sequence #9).

4. The roadway closure should be during off-peak hours, as shown in the plans, or as directed by the Engineer.

5. Work should be limited to approximately 15 minutes maximum duration unless otherwise directed by the Engineer based on existing roadway conditions. If the work is not complete within 15 minutes, or if the end of the traffic queue extends past the most distant advance warning signs, the work area should be cleared of all equipment, materials, personnel, and other items, and the roadway reopened. When the queue has dissipated and the traffic flow appears normal the roadway closure sequence may be repeated.

6. For traffic volumes greater than 1000 Passenger Cars Per Hour Per Lane (PCPHPL), or for roadway closures that exceed 15 minutes, see details elsewhere in the plan.

7. If traffic queues beyond the advance warning signs during one road closure sequence, the advance warning should be extended prior to repeating the road closure sequence. When possible, PCMS signs should be located in advance of the last available exit prior to the closure to allow motorists the choice of an alternate route.

THIS PLAN IS INTENDED TO BE USED AT LOCATIONS/TIMES WHEN TRAFFIC VOLUMES ARE LESS THAN 1000 PASSENGER CARS PER HOUR PER LANE.

Texas Department of Transportation
Traffic Operations Division Standard

TRAFFIC CONTROL PLAN SHORT DURATION FREEWAY CLOSURE SEQUENCE

TCP(6-7)-12

FILE: tcp6-7.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT Feburary 1998	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
1-97 8-12	DIST	COUNTY		SHEET NO.
4-98	21	HIDALGO, ETC.		235

DATE:
FILE:

TCP (6-8a)

TCP (6-8b)

TCP (6-8c)

LEGEND

	Type 3 Barricade	▪▪	Channelizing Devices (CDs)
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10′ Offset	11′ Offset	12′ Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450′	495′	540′	45′	90′	195′
50		500′	550′	600′	50′	100′	240′
55		550′	605′	660′	55′	110′	295′
60		600′	660′	720′	60′	120′	350′
65		650′	715′	780′	65′	130′	410′
70		700′	770′	840′	70′	140′	475′
75		750′	825′	900′	75′	150′	540′
80		800′	880′	960′	80′	160′	615′

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

TYPICAL USAGE

MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Place channelizing devices in the gore at 20′ spacing.
2. See the Standard Highway Sign Design for Texas (SHSD) for sign details.
3. The PCMS may be omitted when a permanent DMS sign is available in an appropriate location to display a similar message as called for on the PCMS.
4. When it is determined that a through lane should be closed in addition to the exit ramp, refer to TCP(6-4) for traffic control details.
5. Truck mounted attenuator is required.
6. The PCMS may be omitted if replaced with a "RAMP CLOSED" AHEAD (CW20RP-3D) Sign.
7. Roadway ADT should be greater than 10,000.

Texas Department of Transportation

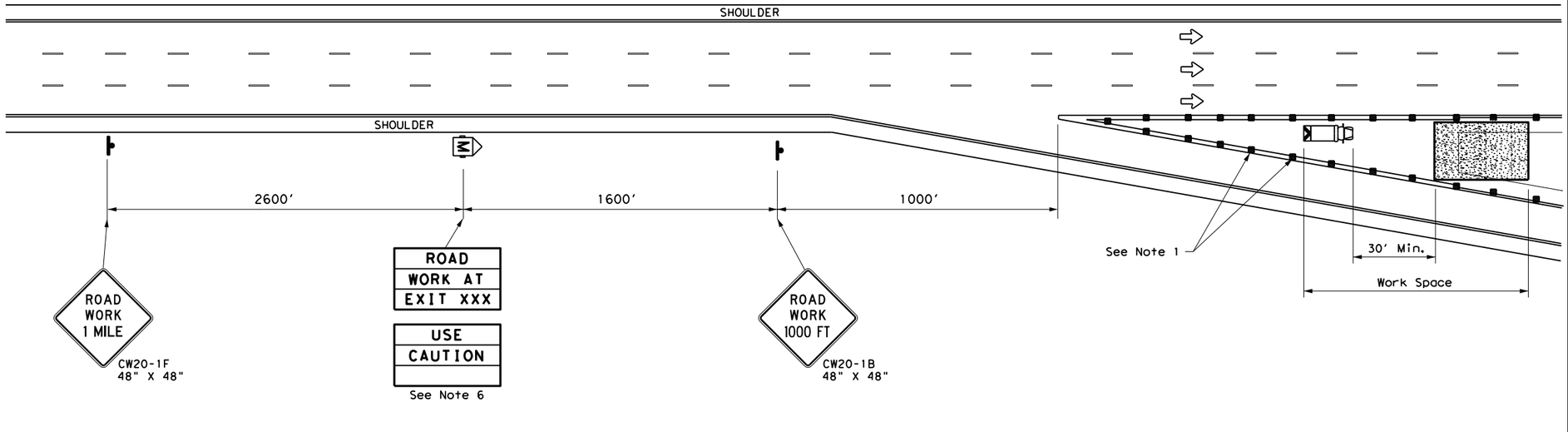
Traffic Operations Division Standard

WORK IN EXIT GORE FOR ADT GREATER THAN 10,000

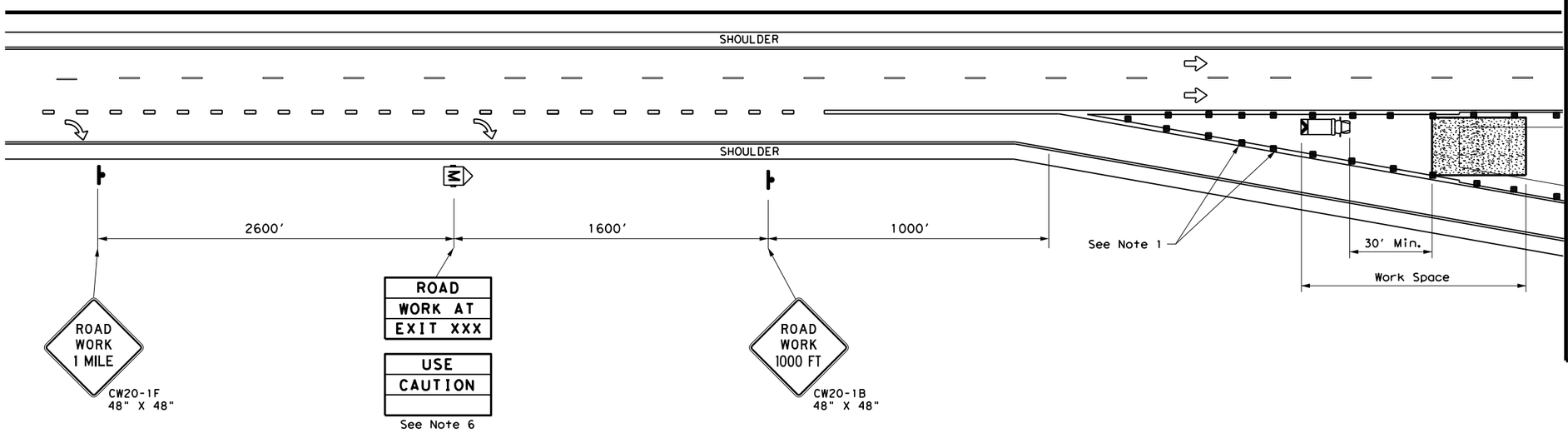
TCP(6-8)-14

FILE: tcp6-8.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT February 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		236

DATE:
FILE:



TCP (6-9a)



TCP (6-9b)

LEGEND			
	Type 3 Barricade		Channelizing Devices (CDs)
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board		Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed	Formula	Minimum Desirable Taper Lengths "L" ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Suggested Longitudinal Buffer Space "B"
45	L=WS	450'	495'	540'	45'	90'	195'
50		500'	550'	600'	50'	100'	240'
55		550'	605'	660'	55'	110'	295'
60		600'	660'	720'	60'	120'	350'
65		650'	715'	780'	65'	130'	410'
70		700'	770'	840'	70'	140'	475'
75		750'	825'	900'	75'	150'	540'
80		800'	880'	960'	80'	160'	615'

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

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Place channelizing devices in the gore at 20' spacing.
2. See the Standard Highway Sign Design for Texas (SHSD) for sign details.
3. The PCMS may be omitted when a permanent DMS sign is available in an appropriate location to display a similar message as called for on the PCMS.
4. When it is determined that a through lane should be closed in addition to the exit ramp, refer to TCP(6-4) and TCP(6-8)for traffic control details.
5. Truck mounted attenuators are required.
6. The PCMS may be omitted if replaced with a "ROAD WORK ½ MILE" (CW20-1E).
7. Roadway ADT should be less than 10,000.

Texas Department of Transportation

Traffic Operations Division Standard

WORK IN EXIT GORE FOR ADT LESS THAN 10,000

TCP(6-9)-14

FILE: tcp6-9.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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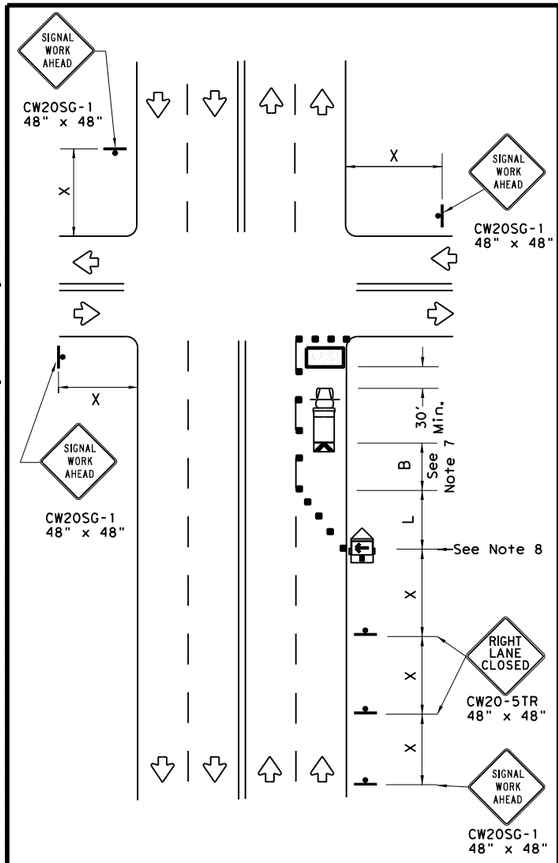
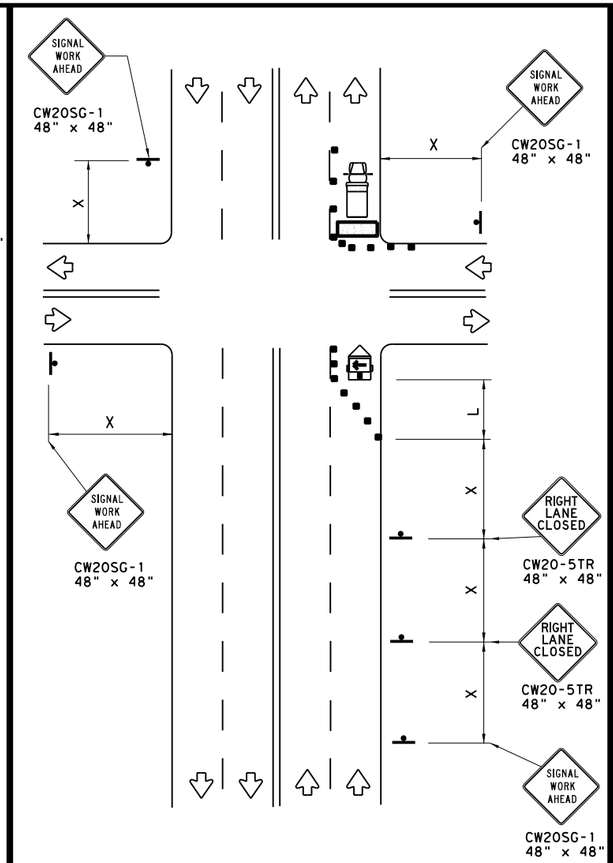


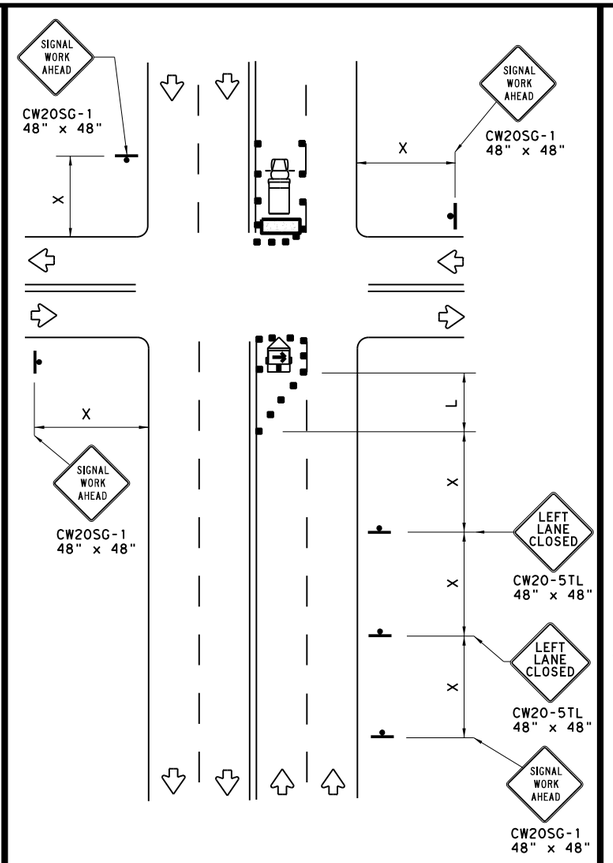
NEAR SIDE LANE CLOSURE

SHORT DURATION OR SHORT TERM STATIONARY



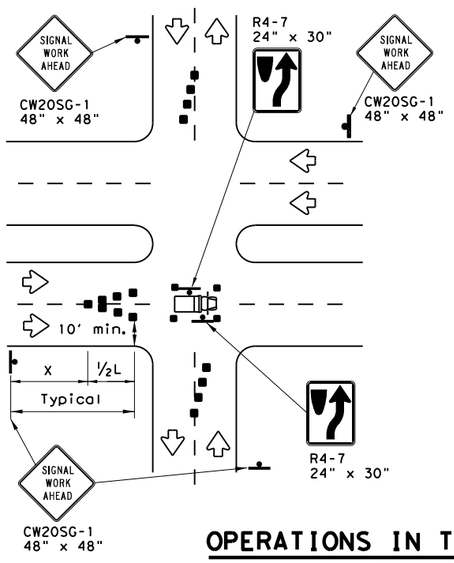
FAR SIDE RIGHT LANE CLOSURE

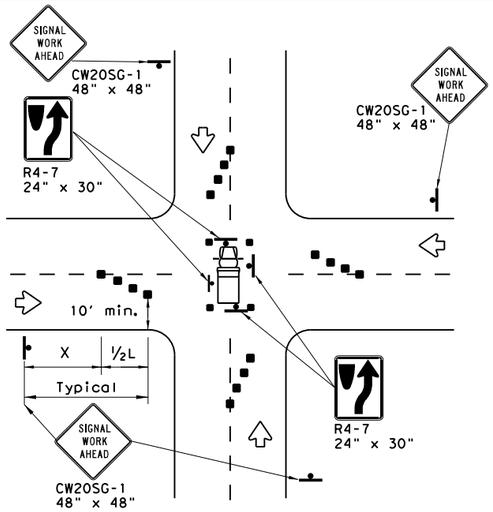
SHORT DURATION OR SHORT TERM STATIONARY



FAR SIDE LEFT LANE CLOSURE

SHORT DURATION OR SHORT TERM STATIONARY





OPERATIONS IN THE INTERSECTION

SHORT DURATION

GENERAL NOTES

1. The minimum size channelizing device is the 28" cone. 42" Two-piece cones, drums, vertical panels or barricades will be required when the device must be left unattended at night.
2. Obstructions or hazards at the work area shall be clearly marked and delineated at all times.
3. Flaggers and Flagger Symbol (CW20-7) signs may be required according to field conditions.
4. Vehicles parked in roadway shall be equipped with at least two high intensity rotating, flashing, oscillating or strobe type lights.
5. High level warning devices (flag trees) may be used at corners of the vehicle.
6. When work operations are performed on existing signals, the signals may be placed in flashing red mode when approved by the engineer. If existing signals do not have power, All-Way Stop (R1-1 and R1-3P) signs may be implemented when approved by the engineer.
7. For Short-Term Stationary work the buffer space "B" from the above table should be used if field conditions permit. For Short Duration (less than 1 hour) any buffer space provided will enhance the safety of the setup.
8. The arrow board at this location may be omitted for Short Duration work if the work vehicle has an arrow board in operation. As an option, the arrow board may be placed at the end of the taper in the closed lane if space is not available at the beginning of the taper.
9. Signs and devices for the NEAR SIDE LANE CLOSURE may be altered for a left lane closure by using a LEFT LANE CLOSED (CW20-5TL) and adding channelizing devices on the centerline to protect the work space from opposing traffic.

LEGEND

	Type 3 Barricade	■ ■	Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only

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

WORKERS IN BUCKET TRUCKS SHALL NOT WORK ABOVE OPEN LANES OF TRAFFIC.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC SIGNAL WORK TYPICAL DETAILS

WZ(BTS-1)-13

FILE: wzbts-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS	6353	00	001	IH-2, ETC.
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4-98 3-03	PHARR	HIDALGO, ETC.		238

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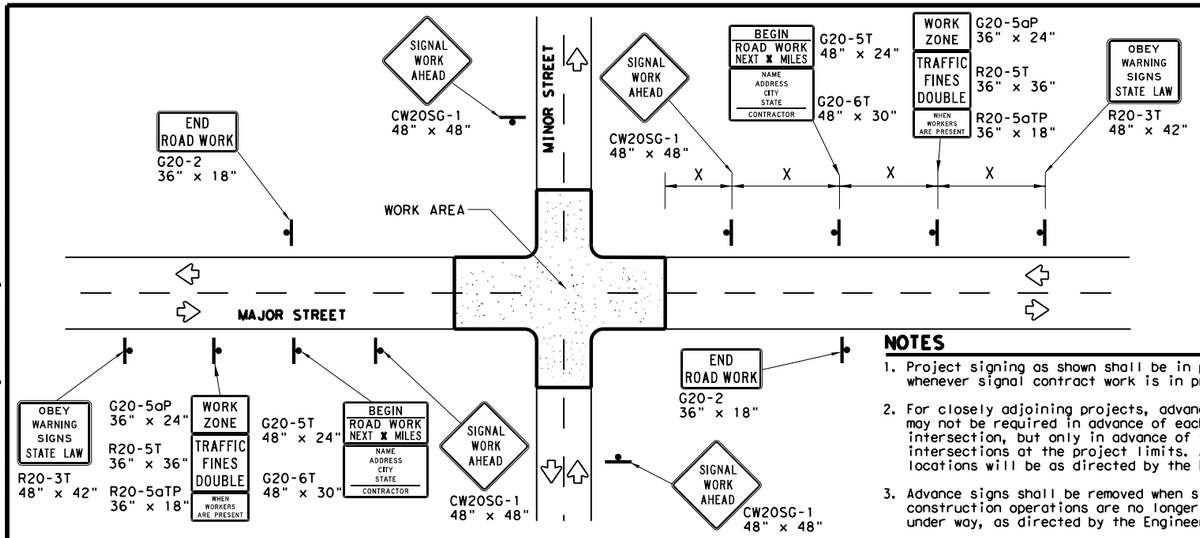


TYPICAL ADVANCE SIGNAL PROJECT SIGNING

FOR LONG TERM and INTERMEDIATE-TERM STATIONARY WORK OPERATIONS

NOTES

1. Project signing as shown shall be in place whenever signal contract work is in progress.
2. For closely adjoining projects, advance signing may not be required in advance of each intersection, but only in advance of the intersections at the project limits. Actual locations will be as directed by the Engineer.
3. Advance signs shall be removed when signal construction operations are no longer under way, as directed by the Engineer.
4. Warning sign spacing shown is typical for both directions.
5. See the Table on sheet 1 of 2 for Typical warning sign spacing.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Signs shall be installed and maintained in a straight and plumb condition.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. Nails shall NOT be used to attach signs to any support.
5. All signs shall be installed in accordance with the plans or as directed by the Engineer.
6. The Contractor shall furnish the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD).
7. The Contractor shall furnish sign supports and substrates listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD), installed as per the manufacturer's recommendations.
8. Temporary signs that have damaged or cracked substrates and/or damaged or marred reflective sheeting shall be replaced as directed by the Engineer.
9. 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".
10. Damaged wood posts shall be replaced. Splicing wood posts will not be allowed.

DURATION OF WORK

1. Work zone durations are defined in Part 6, Section 6G.02 of the Texas Manual on Uniform Traffic Control Devices (TMUTCD).

SIGN MOUNTING HEIGHT

1. Sign height of Long-term/Intermediate-term warning signs shall be as shown on Figure 6F-1 of the TMUTCD.
2. Sign height of Short-term/Short Duration warning signs shall be as shown on Figure 6F-2 of the TMUTCD.
3. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered, unless otherwise approved by the Engineer.
2. 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. Burlap, or heavy materials such as plywood or aluminum shall not be used to cover signs.
3. Duct tape or other adhesive material shall NOT be affixed to a sign face.
4. Signs and anchor stubs shall be removed and holes back filled upon completion of the work.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the requirements of the DMS and color usage table shown on this sheet.

SIGN SUPPORT WEIGHTS

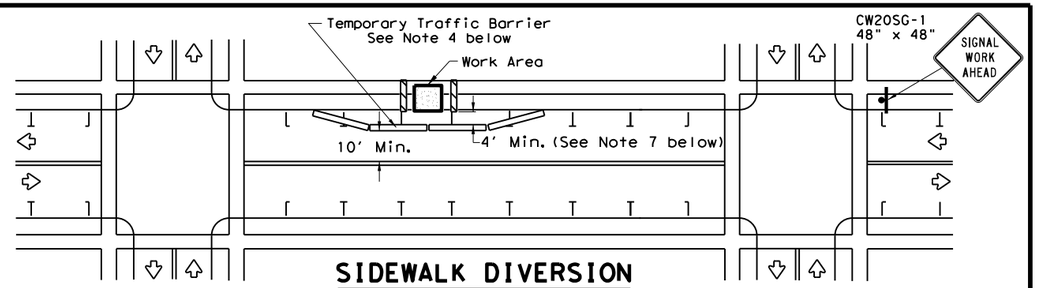
1. Weights used to keep signs from turning over should be sandbags filled with dry, cohesionless material.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects will not be permitted for use as sign support 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 fastners. 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.

LEGEND	
	Sign
	Channelizing Devices
	Type 3 Barricade

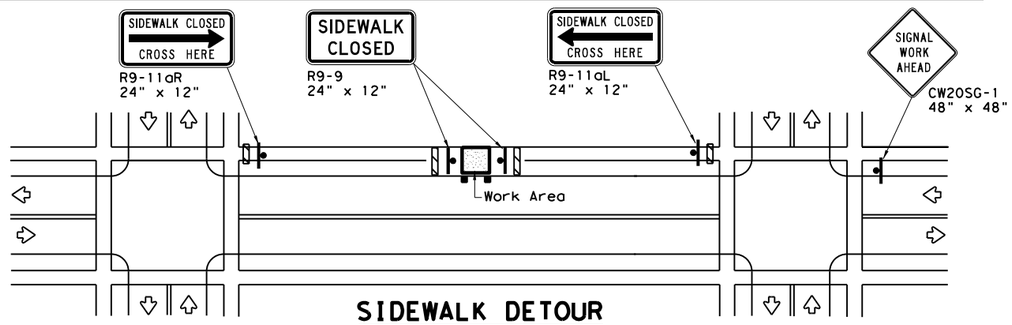
DEPARTMENTAL MATERIAL SPECIFICATIONS	
SIGN FACE MATERIALS	DMS-8300
FLEXIBLE ROLL-UP REFLECTIVE SIGNS	DMS-8310

COLOR	USAGE	SHEETING MATERIAL
ORANGE	BACKGROUND	TYPE B_{FL} OR TYPE C_{FL} SHEETING
WHITE	BACKGROUND	TYPE A SHEETING
BLACK	LEGEND & BORDERS	ACRYLIC NON-REFLECTIVE SHEETING

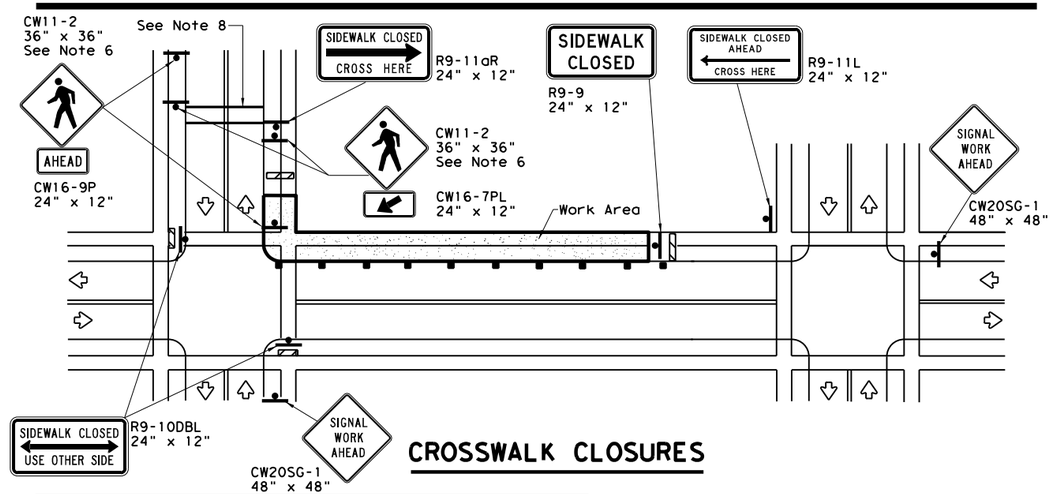
Only pre-qualified products shall be used. A copy of the "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources and may be found at the following web address:
http://www.txdot.gov/txdot_library/publications/construction.htm



SIDEWALK DIVERSION



SIDEWALK DETOUR



CROSSWALK CLOSURES

PEDESTRIAN CONTROL

1. Holes, trenches or other hazards shall be adequately protected by covering, delineating or surrounding the hazard with orange plastic pedestrian fencing or longitudinal channelizing devices, or as directed by the Engineer.
2. "CROSSWALK CLOSURES" as detailed above will require the Engineer's approval prior to installation.
3. R9 series signs shown may be placed on supports detailed on the BC standards or CWZTCD list, or when fabricated from approved lightweight plastic substrates, they may be mounted on top of a plastic drum at or near the location shown.
4. For speeds less than 45 mph longitudinal channelizing devices may be used instead of traffic barriers when approved by the Engineer. Attenuation of blunt ends and installation of water filled devices shall be as per BC(9) and manufacturer's recommendations.
5. Location of devices are for general guidance. Actual device spacing and location must be field adjusted to meet actual conditions.
6. Where pedestrians with visual disabilities normally use the closed sidewalk Detectable Pedestrian Barricades should be used instead of the Type 3 Barricades shown.
7. The width of existing sidewalk should be maintained if practical.
8. Pavement markings for mid-block crosswalks shall be paid for under the appropriate bid items.
9. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

Texas Department of Transportation

Traffic Operations Division Standard

TRAFFIC SIGNAL WORK BARRICADES AND SIGNS

WZ(BTS-2)-13

FILE: wzbts-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS	6353	00	001	IH-2, ETC.
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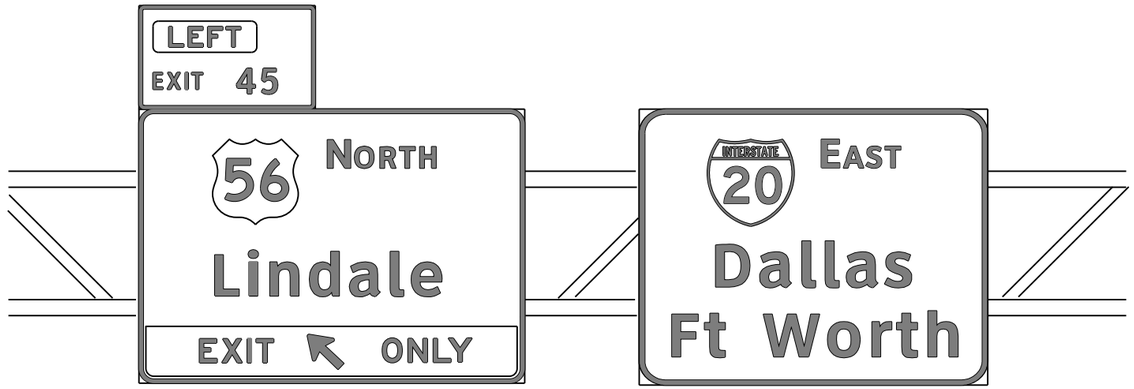
4-98 3-03	PHARR	HIDALGO, ETC.		239

REQUIREMENTS FOR OVERHEAD AND LARGE GROUND-MOUNTED SIGNS

TYPICAL EXAMPLES



GENERAL NOTES

1. Signs to be furnished shall be as detailed elsewhere in the plans and/or as shown on sign summary sheet. Standard sign designs and arrow dimensions can be found in the "Standard Highway Sign Designs for Texas" (SHSD).
2. Black legend shall use the Federal Highway Administration (FHWA) Standard Highway Alphabets (B, C, D, E, Emod, or F).
   White legend shall use the Clearview Alphabet.
   The following Clearview fonts shall be used to replace the existing white FHWA lettering, when not specified in the SHSD or in the plans.

B	CV-1W
C	CV-2W
D	CV-3W
E	CV-4W
Emod	CV-5WR
F	CV-6W

3. Lateral spacing between letters and numerals shall conform with the SHSD, and any approved changes thereto. Lateral spacing of legend shall provide a balanced appearance when spacing is not shown.
4. Black legend shall be applied by screening process or cut-out acrylic non-reflective black film to background sheeting, or combination thereof.
5. White legend and borders shall be cut-out white sheeting applied to colored background sheeting.
6. Information regarding borders and radii for signs is found in the "Standard Highway Sign Designs for Texas". Dimensions shown and described for borders and corner radii on parent sign are nominal. Borders may vary in width as much as 1/2 inch. Corner radii above 3 inches may vary in width as much as 1 inch. Borders and corner radii within a parent sign must be of matching widths. The sign area outside the corner radius need not be trimmed or rounded if fabricated from an extruded material.
7. Sign substrate for ground-mounted signs shall be any material that meets the Departmental Material Specification requirements of DMS-7110 or approved alternative. Sign substrate for overhead signs shall be any material that meets DMS-7110. Exit Number Panels attached above the parent sign shall be made with the same substrate and sheeting as the parent sign.
8. Mounting details of attachments to parent sign face are shown on Standard Plan Sheet TSR(5). Mounting details of exit number panels above parent sign are shown in the "SMD series" Standard Plan Sheets.
9. Background sheeting shall be applied to the substrate per sheeting manufacturer's recommendations. Sheeting will not be allowed to bridge the horizontal gap between panels.
10. Cut all legend, symbols, borders, and direct applied sign attachments at panel joints.

DEPARTMENTAL MATERIAL SPECIFICATIONS	
ALUMINUM SIGN BLANKS	DMS-7110
SIGN FACE MATERIALS	DMS-8300

The Standard Highway Sign Designs for Texas (SHSD) can be found at the following website.

http://www.txdot.gov/

SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	WHITE	TYPE B OR C SHEETING
BACKGROUND	ALL OTHERS	TYPE B OR C SHEETING
LEGEND & BORDERS	WHITE	TYPE D SHEETING
LEGEND & BORDERS	BLACK	ACRYLIC NON-REFLECTIVE FILM

Texas Department of Transportation

Traffic Operations Division Standard

TYPICAL SIGN REQUIREMENTS

TSR(1)-13

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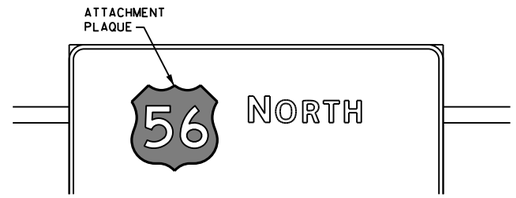
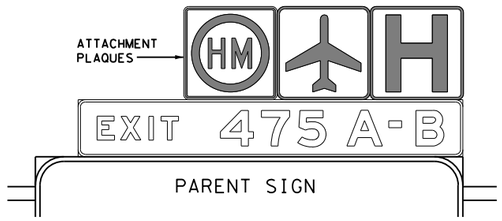
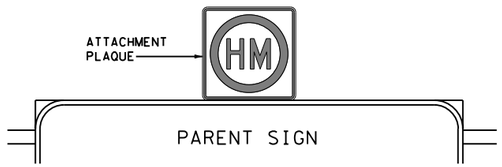
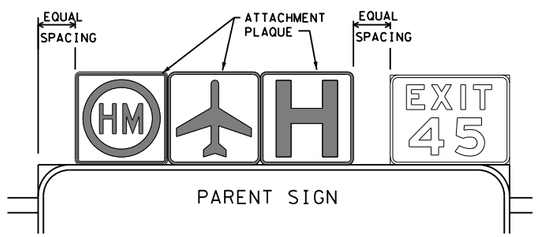
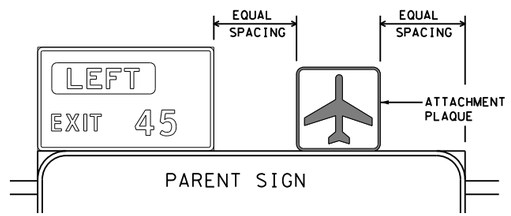
REQUIREMENTS FOR ATTACHMENTS TO OVERHEAD AND LARGE GROUND MOUNTED SIGNS











TYPICAL EXAMPLES

DEPARTMENTAL MATERIAL SPECIFICATIONS	
ALUMINUM SIGN BLANKS	DMS-7110
SIGN FACE MATERIALS	DMS-8300

SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	ALL	TYPE B OR C SHEETING
LEGEND & BORDERS	BLACK	ACRYLIC NON-REFLECTIVE FILM
LEGEND & BORDERS	ALL OTHERS	TYPE B OR C SHEETING

GENERAL NOTES

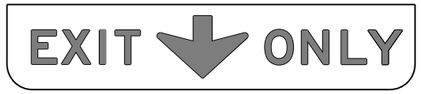
1. Signs to be furnished shall be as detailed elsewhere in the plans and/or as shown on sign tabulation sheet. Standard sign designs and arrow dimensions can be found in the "Standard Highway Sign Designs for Texas" (SHSD).
2. Route Marker legends (ie. IH, US, SH and FM shields) shall use the Federal Highway Administration (FHWA) Standard Highway Alphabets (B, C, D, E, Emod, or F).
3. Lateral spacing between letters and numerals shall conform with the SHSD, and any approved changes thereto. Lateral spacing of legend shall provide a balanced appearance when spacing is not shown.
4. Black legend and borders shall be applied by screening process or cut-out acrylic non-reflective black film to background sheeting, or combination thereof.
5. White legend and borders shall be applied by screening process with transparent colored ink, transparent colored overlay film to white background sheeting or cut-out white sheeting to colored background sheeting, or combination thereof.
6. Colored legend and borders shall be applied by screening process with transparent colored ink, transparent colored overlay film or colored sheeting to white background sheeting, or combination thereof.
7. Route markers and other attachments within the parent sign face shall be direct applied unless otherwise specified in the plans. Attachments not direct applied shall use 0.063 inch thick one piece sheet aluminum signs (Type A).
8. General Service Plaques shall be 0.080 inch thick and Routing Plaques shall be 0.100 inch thick.
9. The priority for Routing Plaques shall be (left to right) Hazardous Material, Airport then Hospital. See examples for mounting location.
10. Mounting details of attachments to parent signs face are shown on Standard Plan Sheet TSR(5). Mounting details of sign plaque attachments above and below parent sign are shown in the "SMD series" Standard Plan Sheets.
11. Plaques shall be horizontally centered at the top of the parent sign. If an exit number panel exists, the plaque shall be centered between the edge of the parent sign and the edge of the exit number panel. The plaque may be placed above the exit number panel when there is insufficient space.

TYPICAL EXAMPLES

REQUIREMENTS FOR EXIT ONLY AND LEFT EXIT PANELS

DEPARTMENTAL MATERIAL SPECIFICATIONS	
ALUMINUM SIGN BLANKS	DMS-7110
SIGN FACE MATERIALS	DMS-8300

SHEETING REQUIREMENTS FOR OVERHEAD EXIT PANELS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	FLUORESCENT YELLOW	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND	BLACK	ACRYLIC NON-REFLECTIVE FILM



TYPICAL EXAMPLES

GENERAL NOTES

1. Signs to be furnished shall be as detailed elsewhere in the plans and/or as shown on sign tabulation sheet. Standard sign designs and arrow dimensions can be found in the "Standard Highway Sign Designs for Texas" (SHSD). Individual panel sizes shown in the plans may be adjusted to fit actual parent sign sizes if necessary.
2. Exit Panel legend shall use the Federal Highway Administration (FHWA)Standard Highway Alphabets E Series.
3. Lateral spacing between letters and numerals shall conform with the SHSD, and any approved changes thereto. Lateral spacing of legend shall provide a balanced appearance when spacing is not shown.
4. Black legend shall be applied by screening process or cut-out acrylic non-reflective black film to yellow background sheeting, or combination thereof.
5. Exit Only and Left Exit panels within the parent sign face shall be direct applied unless otherwise specified in the plans. Panels not direct applied shall use 0.063 inch thick one piece sheet aluminum signs (Type A).
6. Mounting details of Exit Only and Left Exit panel attachments to parent signs face are shown on Standard Plan Sheet TSR(5).

The Standard Highway Sign Designs for Texas (SHSD) can be found at the following website.

http://www.txdot.gov/

Texas Department of Transportation

Traffic Operations Division Standard

TYPICAL SIGN REQUIREMENTS

TSR(2)-13

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9-08	21	HIDALGO, ETC.		241

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DATE:
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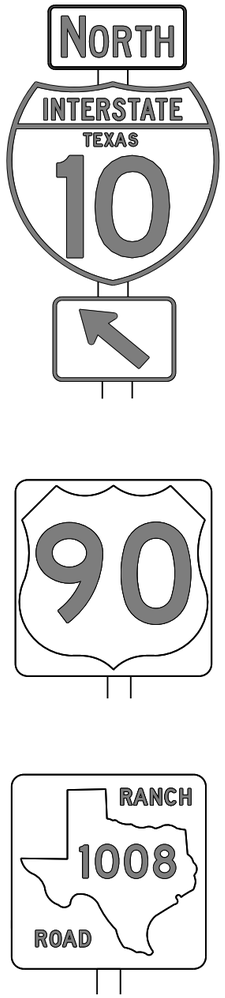
REQUIREMENTS FOR INDEPENDENT MOUNTED ROUTE SIGNS

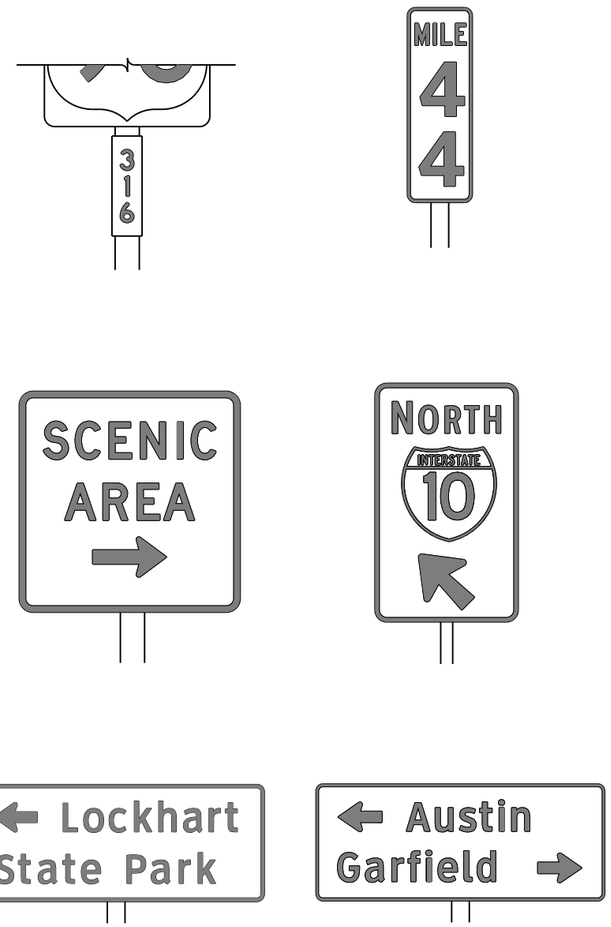
SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	WHITE	TYPE A SHEETING
BACKGROUND	ALL OTHERS	TYPE B OR C SHEETING
LEGEND & BORDERS	WHITE	TYPE A SHEETING
LEGEND & BORDERS	BLACK	ACRYLIC NON-REFLECTIVE FILM
LEGEND & BORDERS	ALL OTHERS	TYPE B or C SHEETING



TYPICAL EXAMPLES

REQUIREMENTS FOR BLUE, BROWN & GREEN D AND I SERIES GUIDE SIGNS

SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	ALL	TYPE B OR C SHEETING
LEGEND & BORDERS	WHITE	TYPE D SHEETING
LEGEND, SYMBOLS & BORDERS	ALL OTHERS	TYPE B OR C SHEETING



TYPICAL EXAMPLES

GENERAL NOTES

1. Signs to be furnished shall be as detailed elsewhere in the plans and/or as shown on sign tabulation sheet. Standard sign designs and arrow dimensions can be found in the "Standard Highway Sign Designs for Texas" (SHSD).

2. White legend shall use the Clearview Alphabet. The following Clearview fonts shall be used to replace the existing white Federal Highway Administration (FHWA) Standard Highway Alphabets, when not specified in the SHSD, or in the plans.

B	CV-1W
C	CV-2W
D	CV-3W
E	CV-4W
Emod	CV-5WR
F	CV-6W

3. Route sign legend (ie. IH, US, SH and FM shields) shall use the Federal Highway Administration (FHWA) Standard Highway Alphabets B, C, D, E, Emod or F).

4. Lateral spacing between letters and numerals shall conform with the SHSD, and any approved changes thereto. Lateral spacing of legend shall provide a balanced appearance when spacing is not shown.

5. Independent mounted route sign with white or colored legend and borders shall be applied by screening process with transparent color ink, transparent colored overlay film to white background sheeting or cut-out white sheeting to colored background sheeting, or combination thereof. White legend, symbols and borders on all other signs shall be cut-out white sheeting applied to colored background sheeting.

6. Information regarding borders and radii for signs is found in the "Standard Highway Sign Designs for Texas". Dimensions shown and described for borders and corner radii on parent sign are nominal. Borders may vary in width as much as 1/2 inch. Corner radii above 3 inches may vary in width as much as 1 inch. Borders and corner radii within a parent sign must be of matching widths. The sign area outside the corner radius should be trimmed or rounded.

7. Sign substrate shall be any material that meets the Departmental Material Specification requirements of DMS-7110 or approved alternative.

8. Mounting details of roadside signs are shown in the "SMD series" Standard Plan Sheets.

DEPARTMENTAL MATERIAL SPECIFICATIONS	
ALUMINUM SIGN BLANKS	DMS-7110
SIGN FACE MATERIALS	DMS-8300

ALUMINUM SIGN BLANKS THICKNESS	
Square Feet	Minimum Thickness
Less than 7.5	0.080
7.5 to 15	0.100
Greater than 15	0.125

The Standard Highway Sign Designs for Texas (SHSD) can be found at the following website.

http://www.txdot.gov/

Texas Department of Transportation

Traffic Operations Division Standard

TYPICAL SIGN REQUIREMENTS

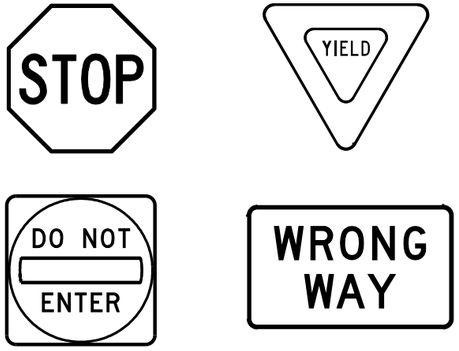
TSR(3)-13

FILE: tsr3-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT October 2003	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
12-03 7-13	DIST	COUNTY		SHEET NO.
9-08	21	HIDALGO, ETC.		242

DATE:
FILE:

REQUIREMENTS FOR RED BACKGROUND REGULATORY SIGNS

(STOP, YIELD, DO NOT ENTER AND WRONG WAY SIGNS)



REQUIREMENTS FOR FOUR SPECIFIC SIGNS ONLY

SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	WHITE	TYPE B OR C SHEETING
LEGEND & BORDERS	WHITE	TYPE B OR C SHEETING
LEGEND	RED	TYPE B OR C SHEETING

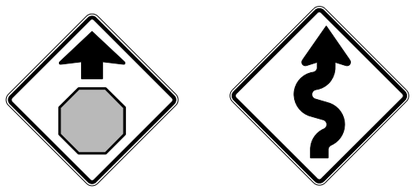
REQUIREMENTS FOR WHITE BACKGROUND REGULATORY SIGNS

(EXCLUDING STOP, YIELD, DO NOT ENTER AND WRONG WAY SIGNS)

TYPICAL EXAMPLES

SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	WHITE	TYPE A SHEETING
BACKGROUND	ALL OTHERS	TYPE B OR C SHEETING
LEGEND, BORDERS AND SYMBOLS	BLACK	ACRYLIC NON-REFLECTIVE FILM
LEGEND, BORDERS AND SYMBOLS	ALL OTHER	TYPE B OR C SHEETING

REQUIREMENTS FOR WARNING SIGNS



TYPICAL EXAMPLES

SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	FLOURESCENT YELLOW	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDERS	BLACK	ACRYLIC NON-REFLECTIVE FILM
LEGEND & SYMBOLS	ALL OTHER	TYPE B OR C SHEETING

REQUIREMENTS FOR SCHOOL SIGNS

TYPICAL EXAMPLES

SHEETING REQUIREMENTS		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	WHITE	TYPE A SHEETING
BACKGROUND	FLOURESCENT YELLOW GREEN	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND, BORDERS AND SYMBOLS	BLACK	ACRYLIC NON-REFLECTIVE FILM
SYMBOLS	RED	TYPE B OR C SHEETING

GENERAL NOTES

1. Signs to be furnished shall be as detailed elsewhere in the plans and/or as shown on sign tabulation sheet. Standard sign designs and arrow dimensions can be found in the "Standard Highway Sign Designs for Texas" (SHSD).
2. Sign legend shall use the Federal Highway Administration (FHWA) Standard Highway Alphabets (B, C, D, E, Emod or F).
3. Lateral spacing between letters and numerals shall conform with the SHSD, and any approved changes thereto. Lateral spacing of legend shall provide a balanced appearance when spacing is not shown.
4. Black legend and borders shall be applied by screening process or cut-out acrylic non-reflective black film to background sheeting, or combination thereof.
5. White legend and borders shall be applied by screening process with transparent colored ink, transparent colored overlay film to white background sheeting or cut-out white sheeting to colored background sheeting, or combination thereof.
6. Colored legend shall be applied by screening process with transparent colored ink, transparent colored overlay film or colored sheeting to background sheeting, or combination thereof.
7. Sign substrate shall be any material that meets the Departmental Material Specification requirements of DMS-7110 or approved alternative.
8. Mounting details for roadside mounted signs are shown in the "SMD series" Standard Plan Sheets.

ALUMINUM SIGN BLANKS THICKNESS	
Square Feet	Minimum Thickness
Less than 7.5	0.080
7.5 to 15	0.100
Greater than 15	0.125

DEPARTMENTAL MATERIAL SPECIFICATIONS	
ALUMINUM SIGN BLANKS	DMS-7110
SIGN FACE MATERIALS	DMS-8300

The Standard Highway Sign Designs for Texas (SHSD) can be found at the following website.

http://www.txdot.gov/

Texas Department of Transportation

Traffic Operations Division Standard

TYPICAL SIGN REQUIREMENTS

TSR(4)-13

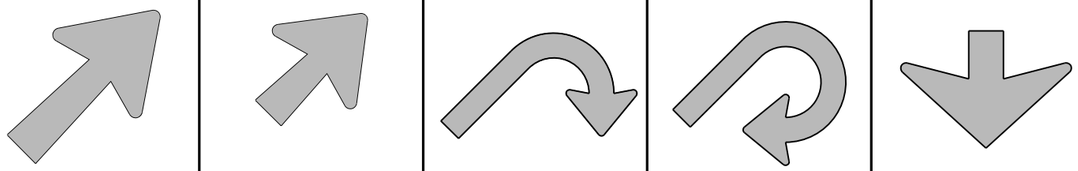
FILE: tsr4-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT October 2003	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
12-03 7-13	DIST	COUNTY		SHEET NO.
9-08	21	HIDALGO, ETC.		243

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

DATE:
FILE:

ARROW DETAILS

for Large Ground-Mounted and Overhead Guide Signs



TYPE	LETTER SIZE	USE
A-1	10.67" U/L and 10" Caps	Single Lane Exits
A-2	13.33" U/L and 12" Caps	
A-3	16" & 20" U/L	
B-1	10.67" U/L and 10" Caps	Multiple Lane Exits
B-2	13.33" U/L and 12" Caps	
B-3	16" & 20" U/L	

CODE	USED ON SIGN NO.
E-3	E5-1aT
E-4	E5-1bT

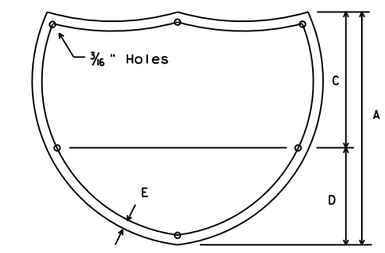
NOTE

Arrow dimensions are shown in the "Standard Highway Sign Designs for Texas" manual.

The Standard Highway Sign Designs for Texas (SHSD) can be found at the following website.

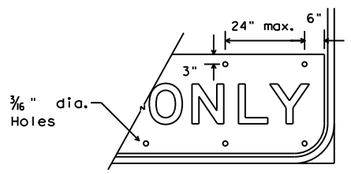
http://www.txdot.gov/

SIGN BLANK PUNCHING DETAILS FOR ATTACHMENTS WHEN SPECIFIED TO BE TYPE A ALUMINUM SIGNS (FOR MOUNTING TO GUIDE SIGN FACE)

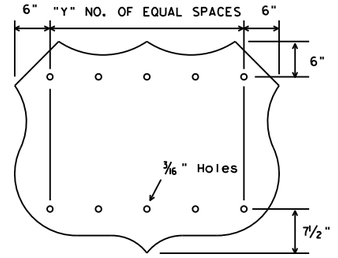


INTERSTATE ROUTE MARKERS

A	C	D	E
36	21	15	1 1/2
48	28	20	1 3/4

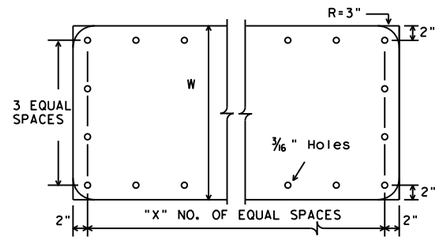


EXIT ONLY PANEL



U.S. ROUTE MARKERS

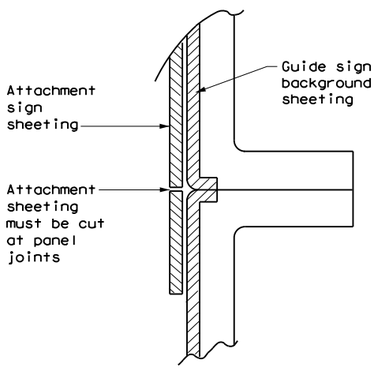
Sign Size	"Y"
24x24	2
30x24	3
36x36	3
45x36	4
48x48	4
60x48	5



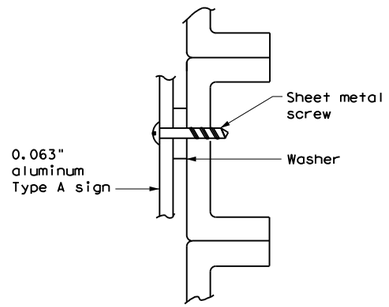
STATE ROUTE MARKERS

No. of Digits	W	X
4	24	4
4	36	5
4	48	6
3	24	3
3	36	4
3	48	5

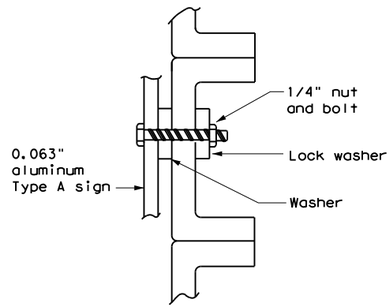
MOUNTING DETAILS OF ATTACHMENTS TO GUIDE SIGN FACE ("EXIT ONLY" AND "LEFT EXIT" PANELS, ROUTE MARKERS AND OTHER ATTACHMENTS)



DIRECT APPLIED ATTACHMENT



SCREW ATTACHMENT



NUT/BOLT ATTACHMENT

NOTE:

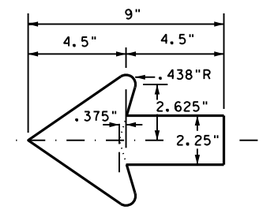
1. Sheeting for legend, symbols, and borders must be cut at panel joints.
2. Direct applied attachment signs will be subsidiary to "Aluminum Signs" or "Fiberglass Signs".

NOTE:

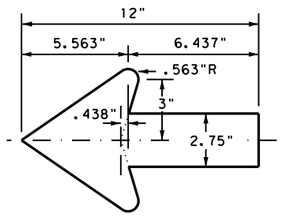
Furnish Type A aluminum sign attachments only when specified in the plans. These signs will be paid for under "Aluminum Signs".

ARROW DETAILS

for Destination Signs (Type D)



Standard arrow to be used with 6 inch letters.



Standard arrow to be used with 8 inch letters.

Texas Department of Transportation

Traffic Operations Division Standard

TYPICAL SIGN REQUIREMENTS

TSR(5)-13

FILE: tsr5-13.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT October 2003	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
12-03 7-13	DIST	COUNTY		SHEET NO.
9-08	21	HIDALGO, ETC.		244

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))

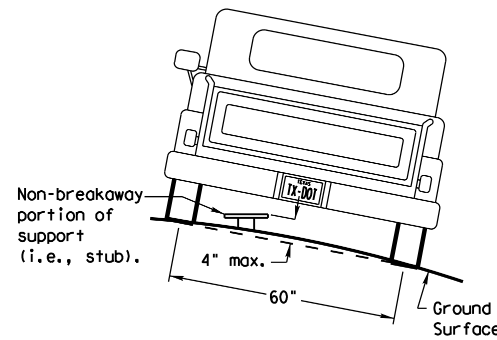
Sign Mounting Designation

- 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))

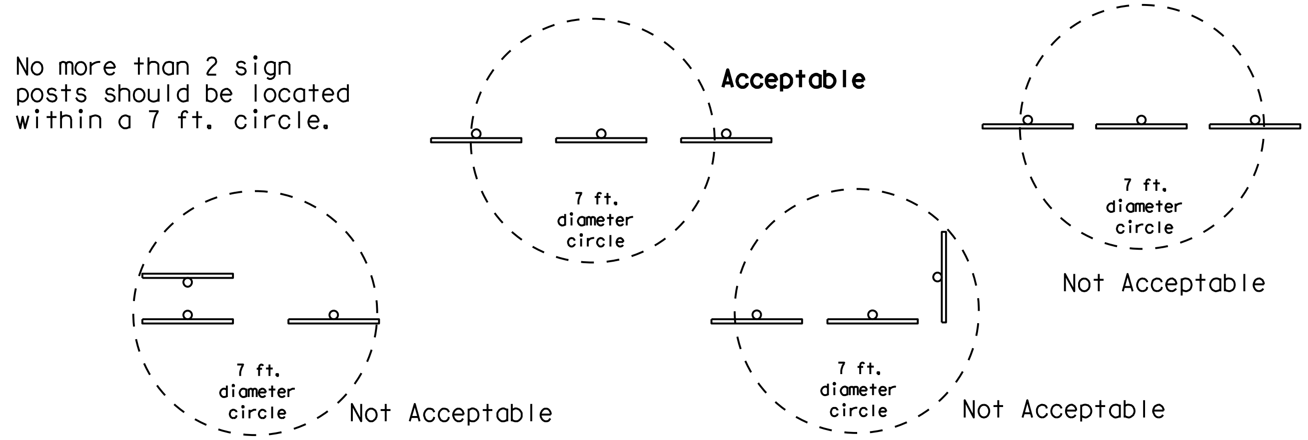
IF REQUIRED

- 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-3))

REQUIRED CLEARANCE FOR BREAKAWAY SUPPORT

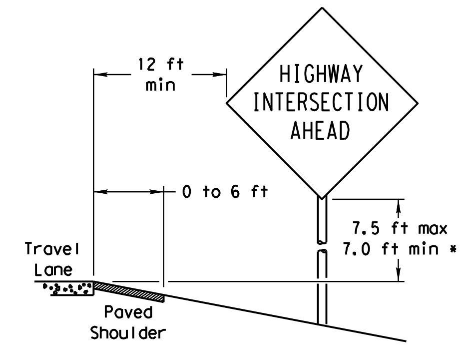


To avoid vehicle undercarriage snagging, any substantial remains of a breakaway support, when it is broken away, should not project more than 4 inches above a 60-inch chord (i.e., typical space between wheel paths).



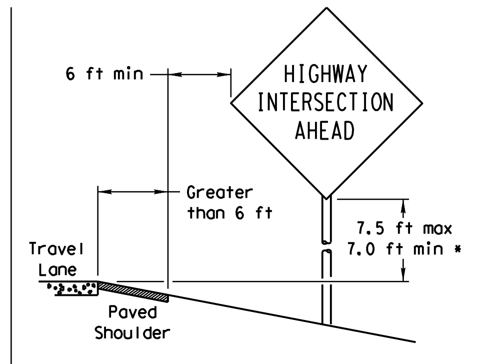
SIGN LOCATION

PAVED SHOULDERS



LESS THAN 6 FT. WIDE

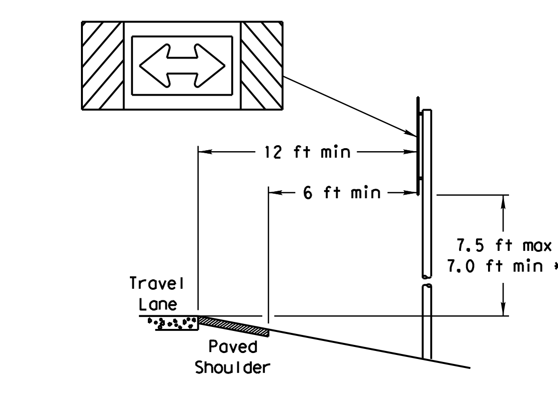
When the shoulder is 6 ft. or less in width, the sign must be placed at least 12 ft. from the edge of the travel lane.



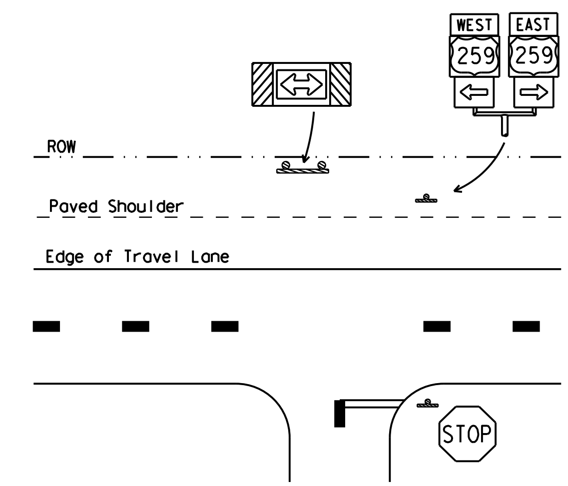
GREATER THAN 6 FT. WIDE

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.

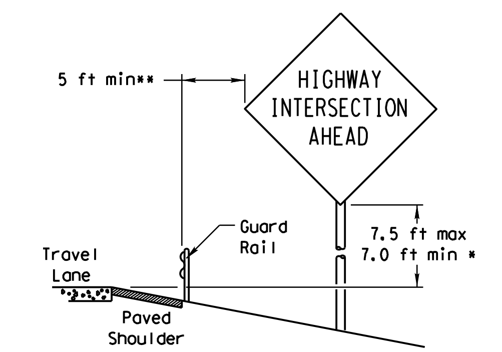
T-INTERSECTION



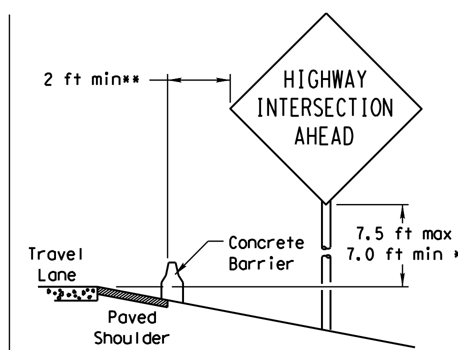
When this sign is needed at the end of a two-lane, two way roadway, the right edge of the sign should be in line with the centerline of the roadway. Place as close to ROW as practical.



BEHIND BARRIER



BEHIND GUARDRAIL



BEHIND CONCRETE BARRIER

**Sign clearance based on distance required for proper guard rail or concrete barrier performance.

* 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.

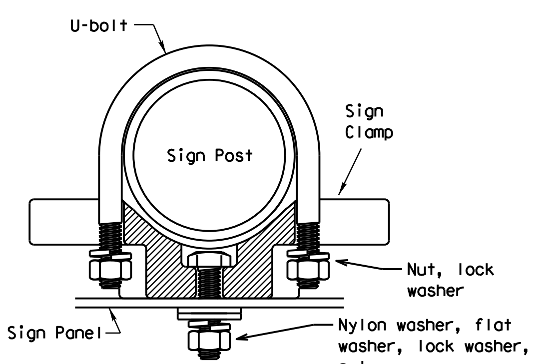
The maximum values may be increased when directed by the Engineer.

See the Traffic Operations Division website for detailed drawings of sign clamps, Triangular Slipbase System components and Wedge Anchor System components.

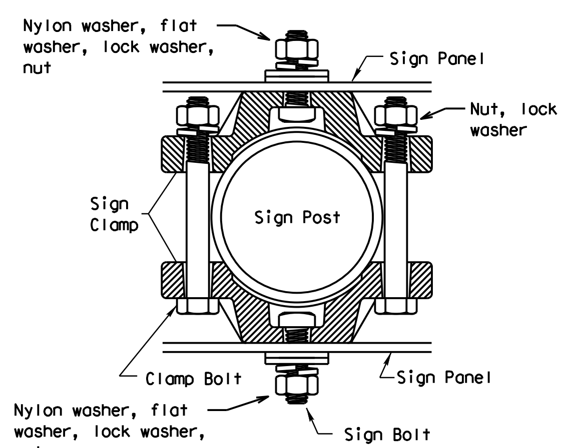
The website address is:
http://www.txdot.gov/publications/traffic.htm

TYPICAL SIGN ATTACHMENT DETAIL

Single Signs



Back-to-Back Signs



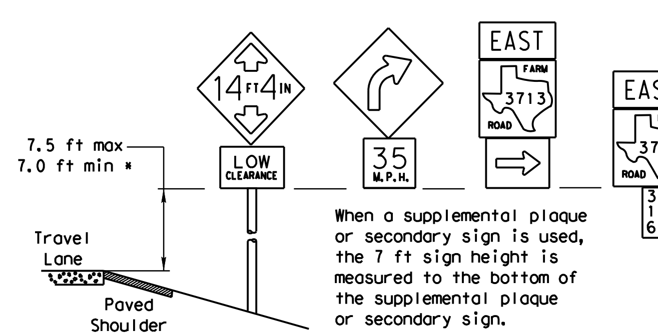
Bolts used to mount sign panels to the clamp are 5/16-18 UNC galvanized square head with nut, nylon washer, flat washer and lock washer. The bolt length is 1 inch for aluminum.

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.

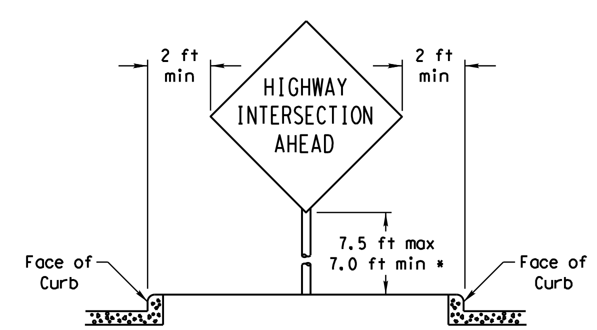
Pipe Diameter	Approximate Bolt Length	
	Specific Clamp	Universal Clamp
2" nominal	3"	3 or 3 1/2"
2 1/2" nominal	3 or 3 1/2"	3 1/2 or 4"
3" nominal	3 1/2 or 4"	4 1/2"

SIGNS WITH PLAQUES



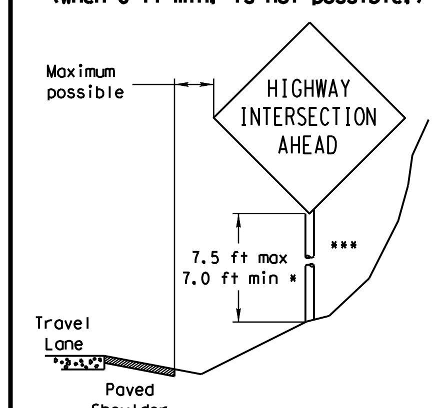
When a supplemental plaque or secondary sign is used, the 7 ft sign height is measured to the bottom of the supplemental plaque or secondary sign.

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

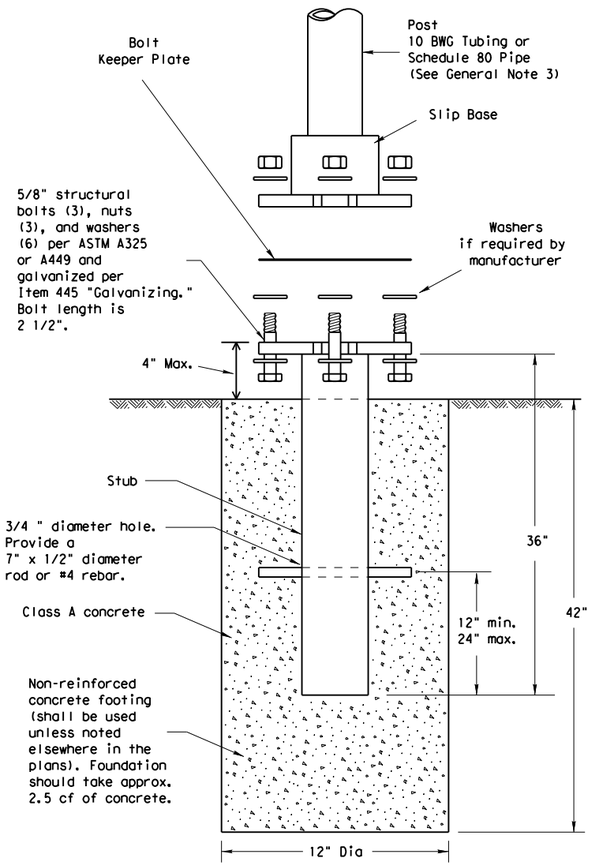
SMD(GEN)-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT
REVISIONS 9-08			
CONT 6353	SECT 00	JOB 001	HIGHWAY IH-2, ETC.
DIST 21	COUNTY HIDALGO, ETC.		SHEET NO. 245

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.

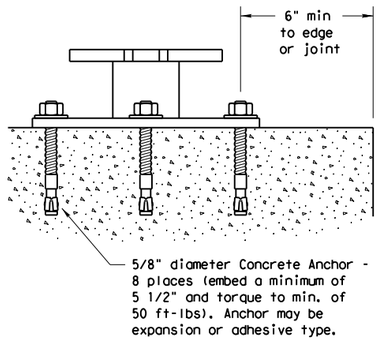
   Schedule 80 Pipe (2.875" outside diameter)
   - 0.276" nominal wall thickness
   - Steel tubing per ASTM A500 Gr C
   - Other seamless or electric-resistance welded steel tubing or pipe with equivalent outside diameter and wall thickness may be used if they meet the following:
     - 46,000 PSI minimum 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

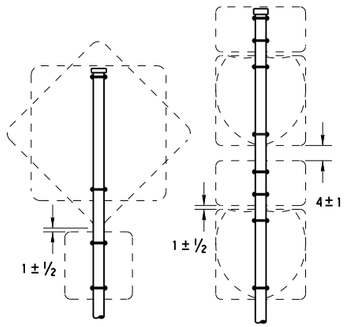
REVISIONS
9-08

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.

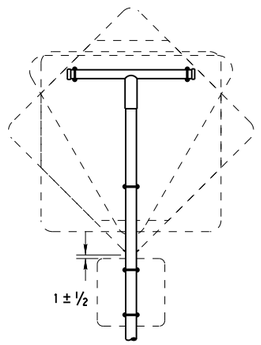
DIST	COUNTY	SHEET NO.
21	HIDALGO, ETC.	246

DATE:
FILE:

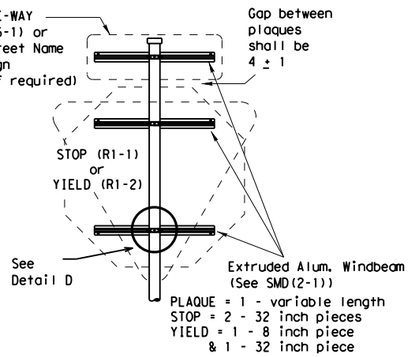
DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.



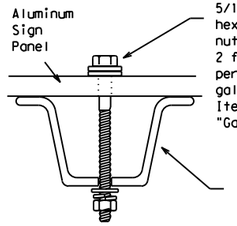
SM RD SGN ASSM TY XXXXX(1)XX(P)



SM RD SGN ASSM TY XXXXX(1)XX(T)

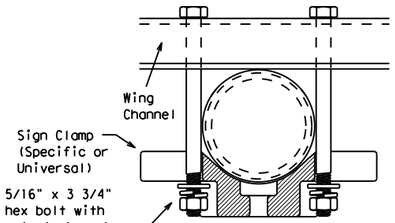


SM RD SGN ASSM TY XXXXX(1)XX(P-BM)



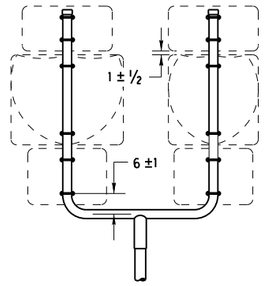
Top View

Detail A

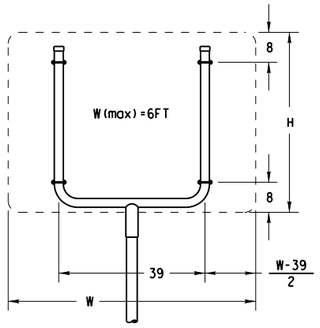


Top View

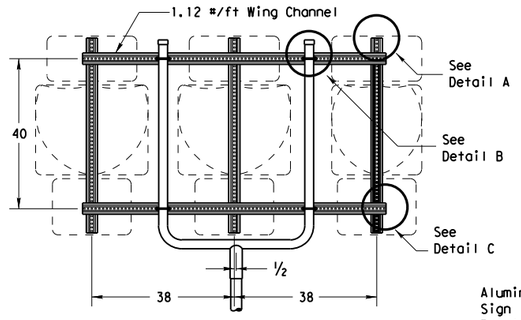
Detail B



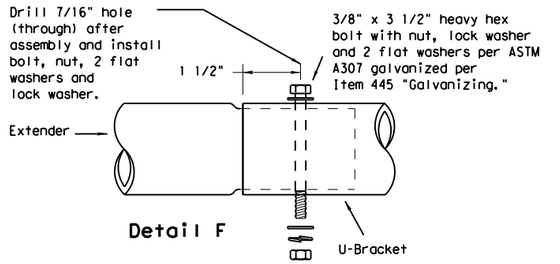
SM RD SGN ASSM TY XXXXX(1)XX(U)



SM RD SGN ASSM TY XXXXX(1)XX(U)

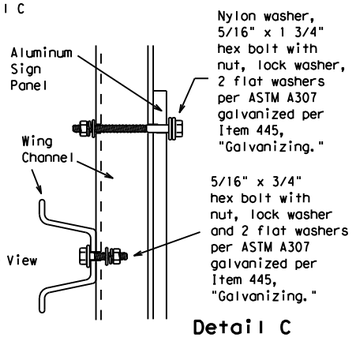


SM RD SGN ASSM TY XXXXX(1)XX(U-WC)
(See Note 11)

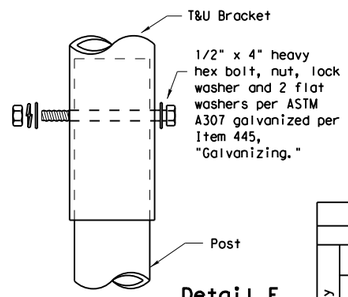


Detail F

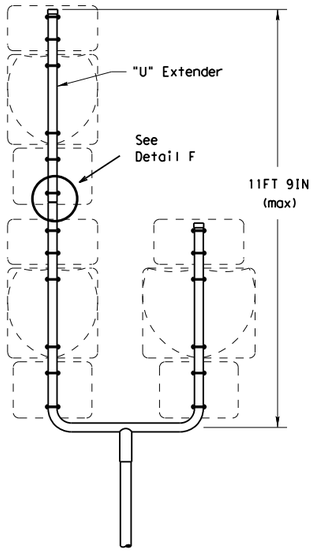
Splices shall only be allowed behind the sign substrate.



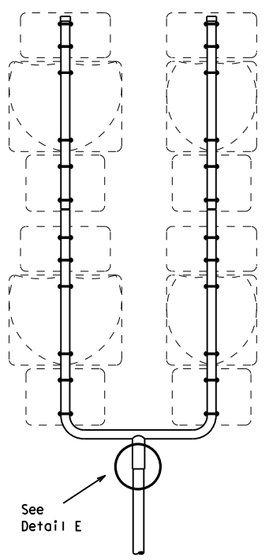
Detail C



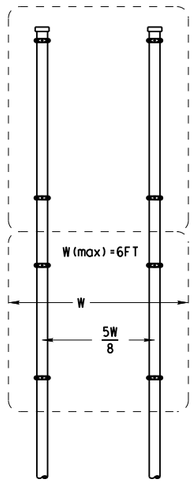
Detail E



SM RD SGN ASSM TY S80(1)XX(U-1EXT)

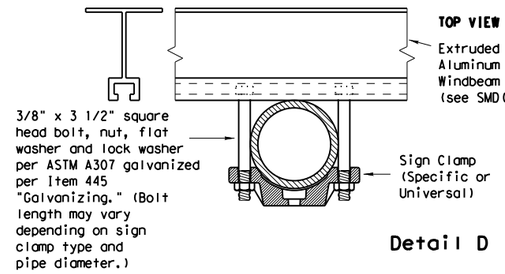


SM RD SGN ASSM TY S80(1)XX(U-2EXT)

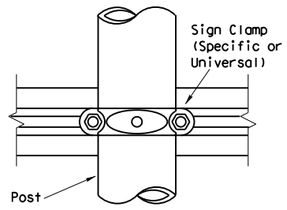


SM RD SGN ASSYM TY XXXXX(2)XX(P)

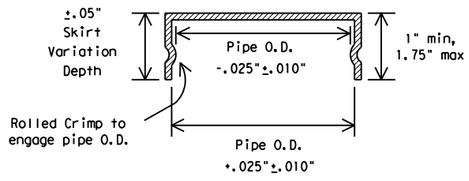
SIDE VIEW



Detail D



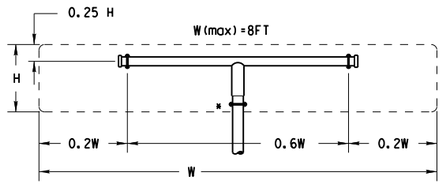
FRICTION CAP DETAIL



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.



All dimensions are in english unless detailed otherwise.

SM RD SGN ASSM TY XXXXX(1)XX(T)
(* - See Note 12)

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.
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

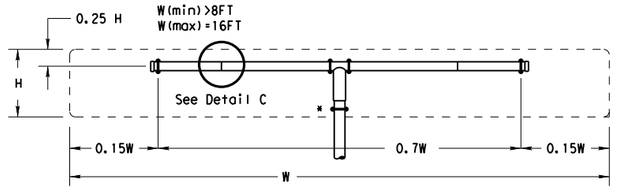
DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS	CONT	SECT	JOB	HIGHWAY
9-08	6353	00	001	IH-2, ETC.

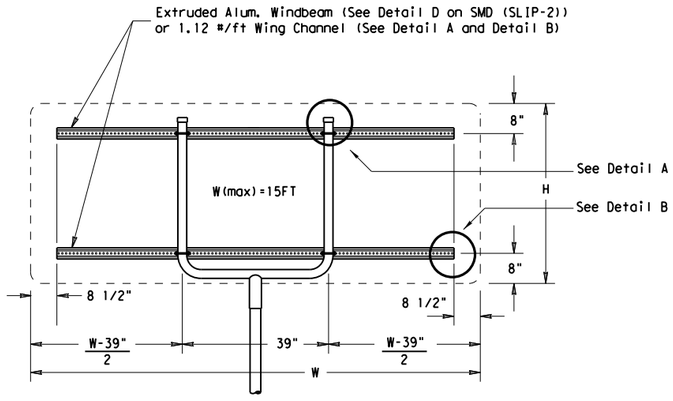
DIST	COUNTY	SHEET NO.
21	HIDALGO, ETC.	247

DATE:
FILE:

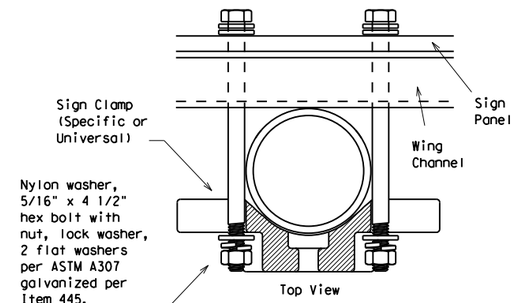
DATE:
FILE:



SM RD SGN ASSM TY XXXXX(1)XX(T-2EXT)
(* - See Note 12)

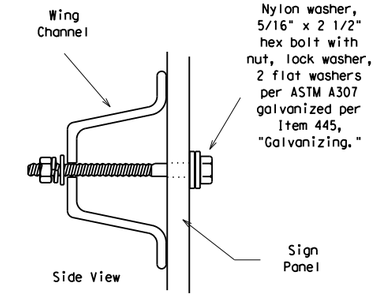


SM RD SGN ASSM TY XXXXX(1)XX(U-XX)

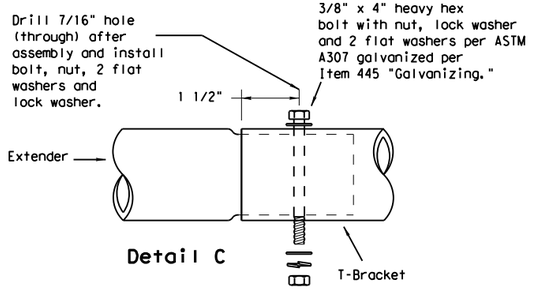


Top View

Detail A

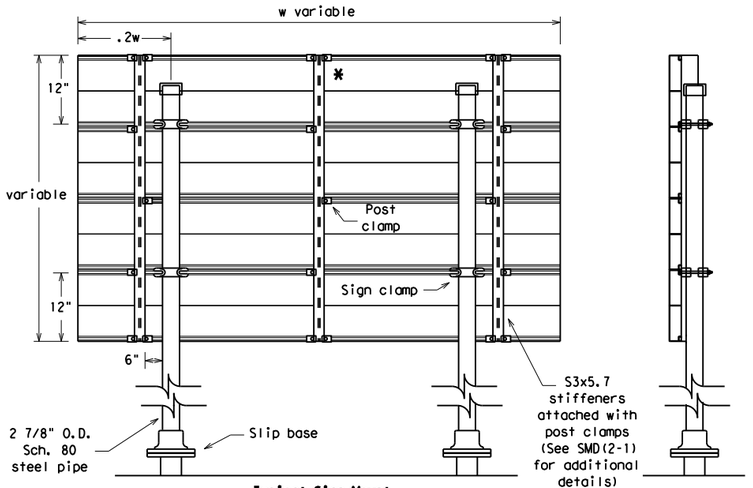


Detail B



Detail C

Splices shall only be allowed behind the sign substrate.

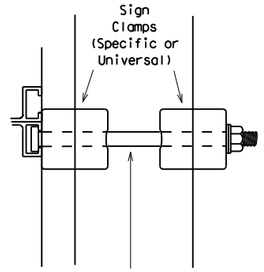


Typical Sign Mount

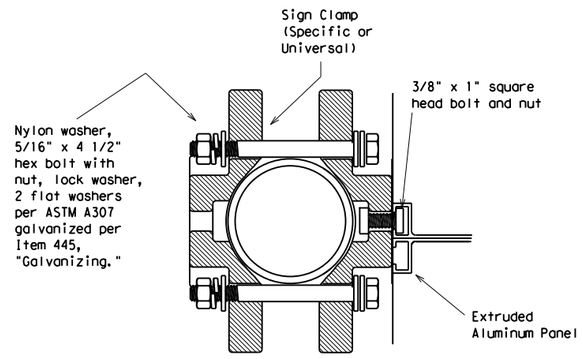
SM RD SGN ASSM TY S80(2)XX(P-EXAL)

* Additional stiffener placed at approximate center of signs when sign width is greater than 10'.

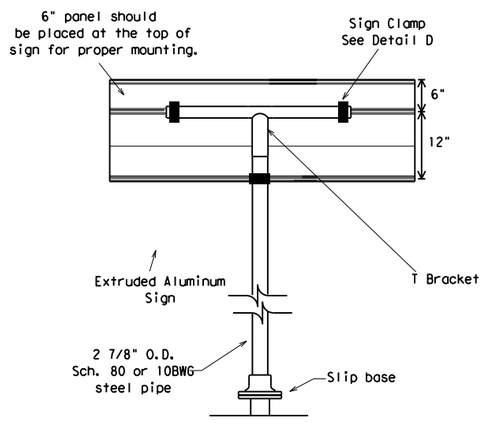
See Detail E
for clamp installation



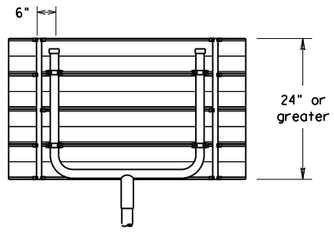
Detail E



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. See table above.
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. Sign blanks shall be the sizes and shapes shown on the plans.
11. 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.
12. 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

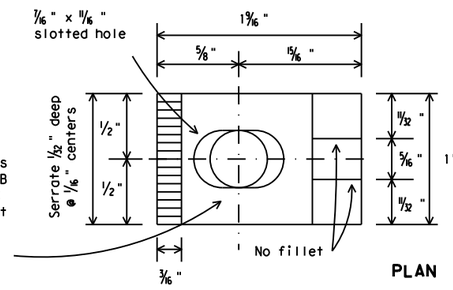
REVISIONS
9-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

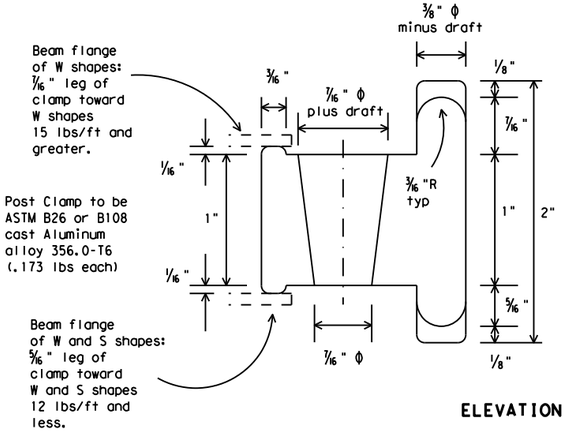
CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.

DIST	COUNTY	SHEET NO.
21	HIDALGO, ETC.	248

NOTE: centerline of hole for 3/8" diameter squarehead bolt x 2 1/4" long with a flat washer and self-locking nut, or lock washer and hex. nut. Bolt head dimensions shall be in accordance with ANSI B 18.2.1 as referred to in the AISC Manual of steel construction. Bolt assembly shall be galvanized.

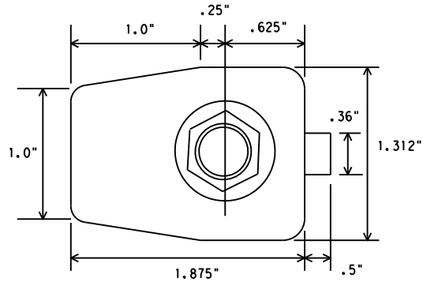


PLAN

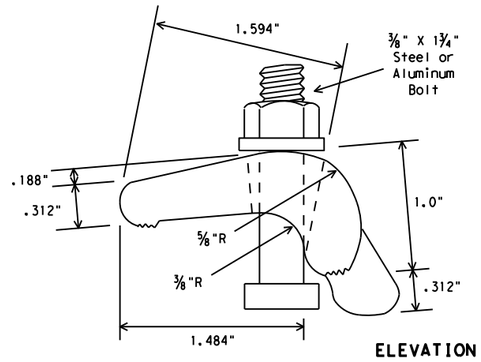


ELEVATION

POST CLAMP DETAIL

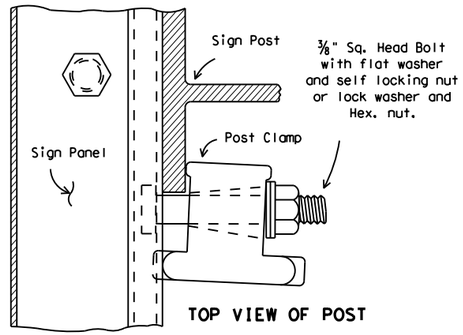


PLAN

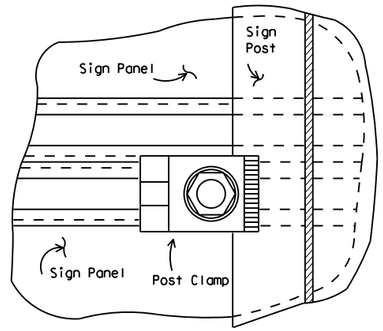


ELEVATION

ALTERNATE POST CLAMP DETAIL



TOP VIEW OF POST



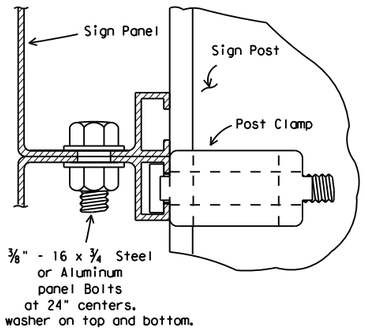
TOP VIEW OF CLAMP

DEPARTMENTAL MATERIAL SPECIFICATIONS

SIGN HARDWARE — DMS-7120

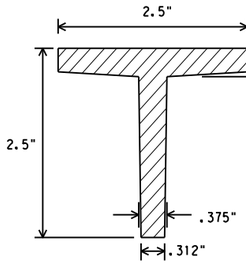
GENERAL NOTES:

1. Design conforms with AASHTO Specifications for the design and construction of structural supports for highway signs.
2. Materials and fabrication shall conform to the requirements of the Department material specifications.
3. Structural steel shall be "low-alloy steel" for non-bridge structures per Item 442, "Metal For Structures."
4. For fiberglass substrate connection details, see manufacturer's recommendations.



SIDE VIEW OF PANELS

CONNECTION DETAILS

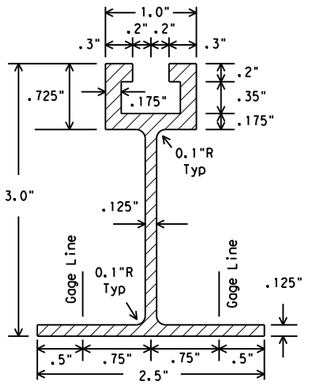


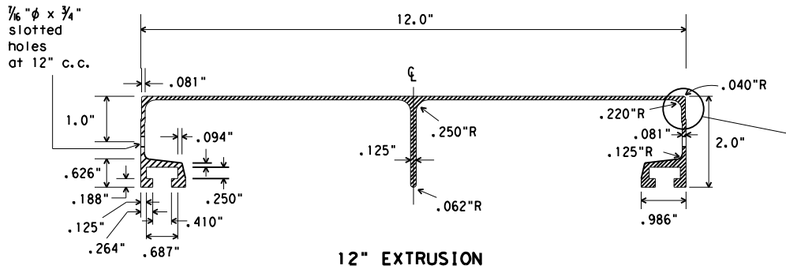
1.912 lbs/ft

ALUMINUM T SECTION OR APPROVED ALTERNATIVE

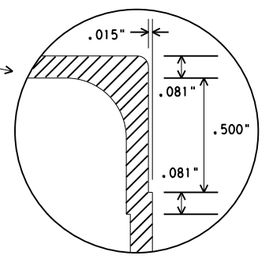
WINDBEAM CROSS SECTION

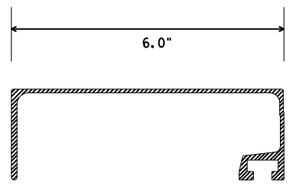
Windbeam to be extruded aluminum (1.175 lbs/ft) or approved alternative





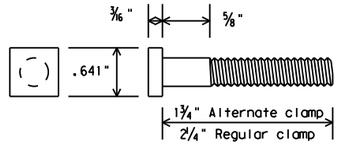
12" EXTRUSION





6" EXTRUSION

ALUMINUM SIGN PANEL EXTRUSION DETAILS



POST CLAMP BOLT DETAIL

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS- EXTRUDED ALUMINUM SIGN PANELS & HARDWARE

SMD(2-1)-08

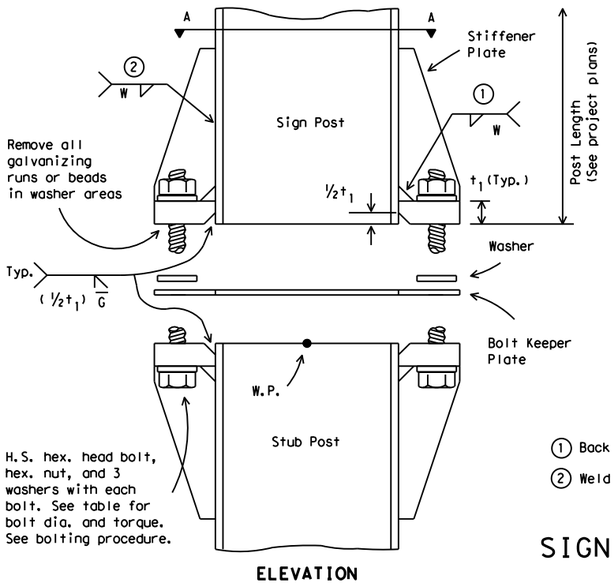
DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS	CONT	SECT	JOB	HIGHWAY
9-08	6353	00	001	IH-2, ETC.

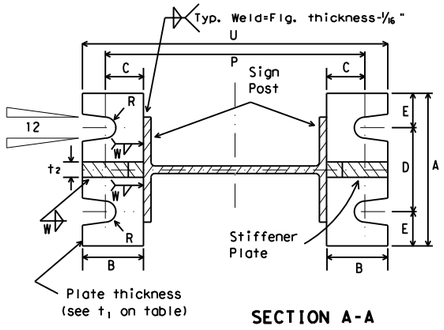
DIST	COUNTY	SHEET NO.
21	HIDALGO, ETC.	249

DATE:
FILE:

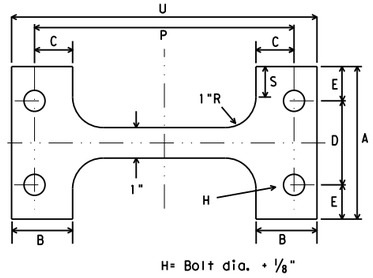
DATE:
FILE:



ELEVATION

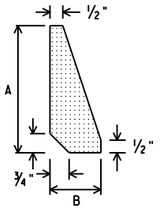


SECTION A-A



H= Bolt dia. + ⅛"

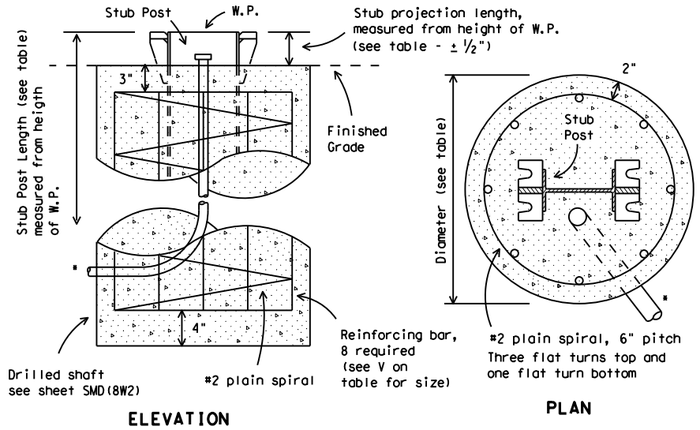
BOLT KEEPER PLATE
30 Ga galv. sheet steel



STIFFENER PLATE DETAIL

Steel Plate (thickness = t_2)

(See table for dimensions)



ELEVATION PLAN

FOUNDATION DETAIL

*Note: For signs with electrical apparatus, see ED(10) for conduit required in founation.

① Back up weld to be made before installing stiffener plate

② Weld W may be continued across clips to seal joint

SIGN POST AND STUB POST

(For W Shapes)

BOLTING PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

1. Assemble sign post, BOLT KEEPER PLATE and stub post with bolts and three flat washers per bolt as shown.
2. Shim as required to plumb post.
3. Tighten all bolts the maximum possible with a 12 to 15 inch wrench to clean bolt threads and to bed washers and shims.
4. Loosen each bolt in sequence and retighten bolts in a systematic order to the prescribed torque. Do not overtighten.
5. To prevent nut loosening, burr threads of bolt at junction with nut using a center punch.

Dimensions / Post Size	Base Connection Data Table: Bolt Size & Torque	A	B	C	D	E	t_1	t_2	W	R
W6x9	⅝"ϕ x 2¾" 440-450 inch pounds 36-38 foot pounds	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"
W6x12										
W6x15										
W8x18										
W8x21	¾"ϕ x 3½" 740-750 inch pounds 62-63 foot pounds	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"
W10x22										
W10x26										
W12x26										
S3x5.7	½"ϕ x 2½" 440-450 inch pounds 36-38 foot pounds	See Detail Below								
S4x7.7										

Perforated Fuse Plate Data Table												Bolt Keeper Data			Foundation Data			
F	G	J	K	M	d_1	d_2	t_3	Bolt Dia.	Wt. (ea.) (lbs.)	Bolt length	P	S	U	Stub length	Stub projection	Dr. Shaft diameter	Bar V Size
4¼"	2"	4"	2¼"	1"	9/16"	¾"	¼"	½"	1.01	1½"	8⅜"	1"	9⅞"	2'-0"	3"	24"	#5
											8½"		10"	2'-0"	3"		#5
5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.51	2¼"	8½"		10"	2'-6"	3"		#6
5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.26	2¼"	10⅝"		12⅛"	2'-6"	3"		#7
5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.35	2¼"	11"	1½"	12¾"	3'-0"	2½"		#8
6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	4.03	2¼"	12⅞"		14⅝"	3'-0"	2½"		#9
											13⅛"		14⅞"	3'-0"	2½"		#10
6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.47	2¼"	15"		16¾"	3'-0"	2½"		#11
3¾"	1½"	2⅝"	1½"	⅝"	9/16"	⅜"	¼"	½"	0.60	1½"	See Detail Below			3'-3½"	3½"	12"	Non-reinforced ③

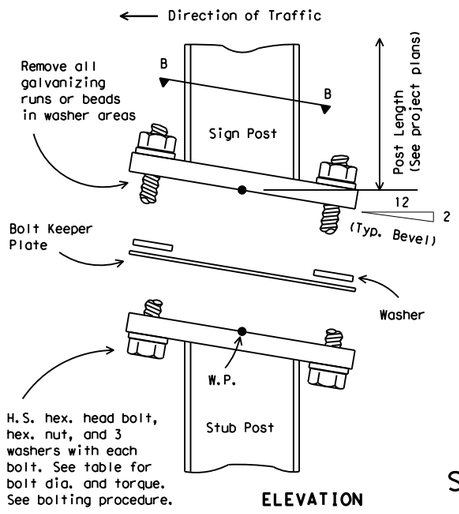
③ Foundation design shall be Type G Mount, see SMD (TY G).

SHIM DETAIL

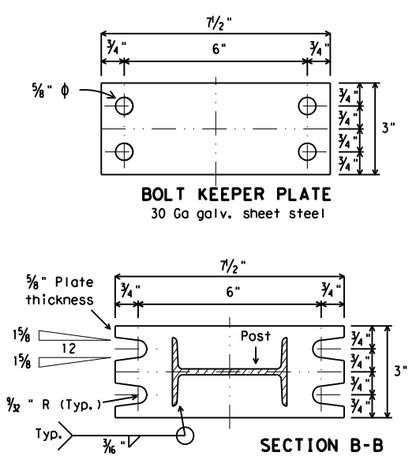
Furnish two .012"± thick and two .032"± thick shims per post. Shims shall be fabricated from brass shim stock or strip conforming to ASTM B36.

PERFORATED FUSE PLATE DETAIL

Use H.S. hex head bolts, hex head nut and bevel or flat washer (where req'd) under nut. All holes shall be drilled, sub-punched and reamed. All plate cuts shall preferably be saw cuts. However, flame cutting will be permitted provided all edges are ground. Metal projecting beyond the plane of the plate face will not be permitted. Steel fuse plates shall conform to the requirements of ASTM A36. ASTM A572 Grade 50 or ASTM A588 may be substituted for A36 at the option of the fabricator. Mill test reports shall be submitted for Fuse Plates. Steel used shall have an ultimate tensile strength not to exceed 80 KSI. For alternative Fuse Plate contact Traffic Operations Division.

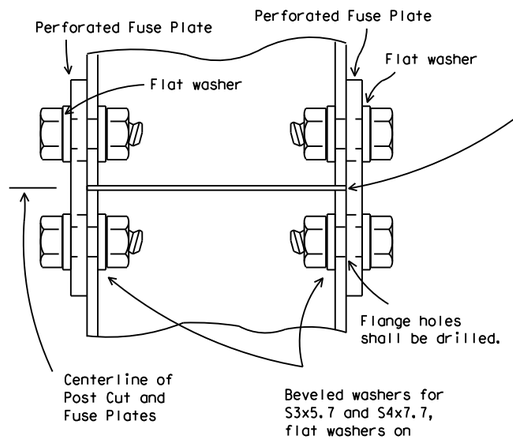


ELEVATION



SIGN POST AND STUB POST

(For S4x7.7 and S3x5.7)



DETAIL "A"

Parts shall be saw cut either before galvanizing and the galvanized cut cleaned of zinc build-up, or saw cut after galvanizing and the cut surface repaired per Item 445, "Galvanizing."

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS- LARGE ROADSIDE SIGNS FOUNDATION & STUB

SMD(2-2)-08

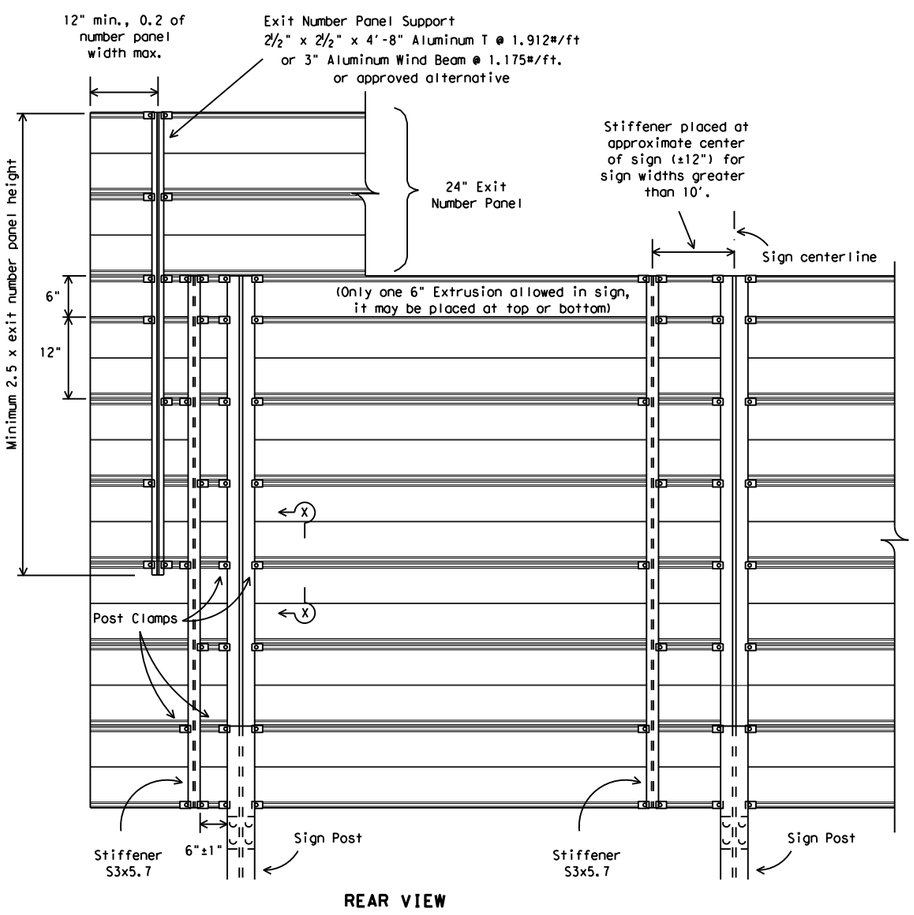
REVISIONS
4-98
9-08

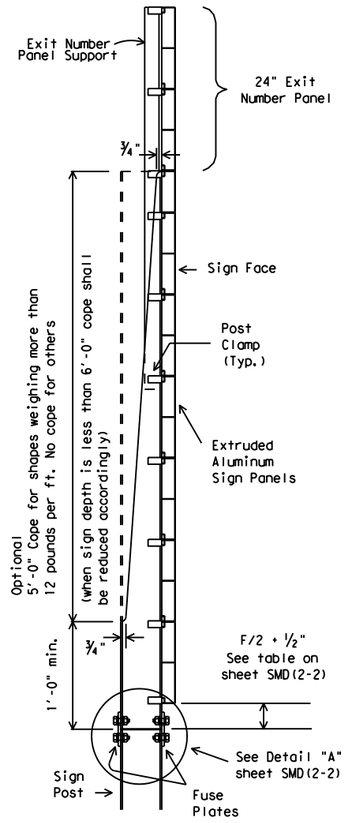
DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.

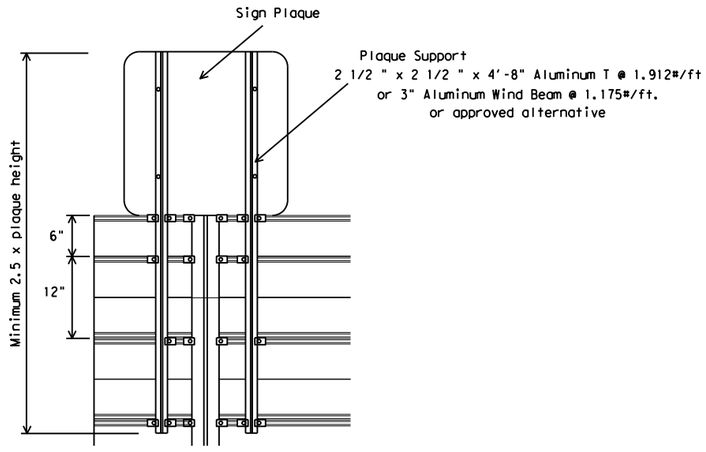
DIST	COUNTY	SHEET NO.
21	HIDALGO, ETC.	250

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.



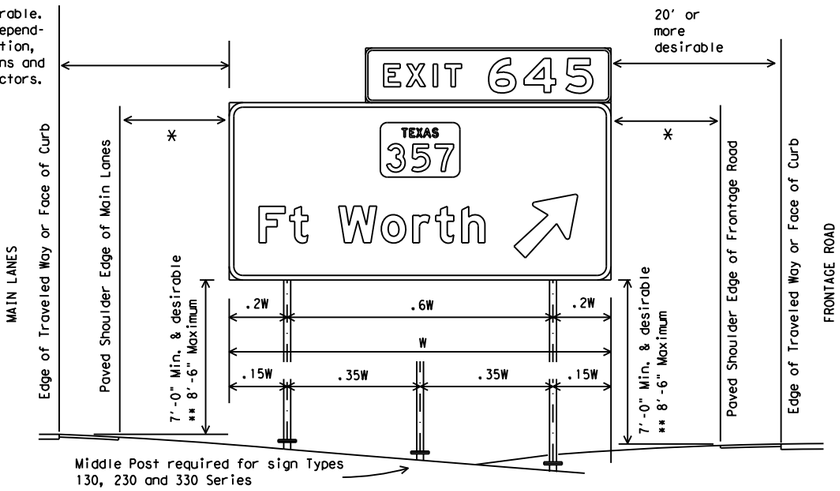


ALUMINUM PARENT SIGN & EXIT NUMBER PANEL MOUNTING DETAILS



SIGN PLAQUE MOUNTING DETAIL TO ALUMINUM PARENT SIGN

30' or more desirable. May be reduced depending on cross section, viewing conditions and other related factors.



TYPICAL SIGN INSTALLATION AND LOCATION

LATERAL CLEARANCE NOTES:

Lateral clearances of signs mounted on median side of main lanes are the same as shown above where space will permit.

Where a sign is to be located behind guardrail, an allowable minimum clearance of five feet may be used, measured from the face of the guardrail to the near edge of sign.

⁎ - 6' minimum and desirable may be used only in areas of limited lateral clearance and when approved by the Engineer.

POST SPACING NOTES:

Post spacing on a two post sign may vary a maximum of plus or minus 10% of total sign width to fit field conditions.

Post spacing on a three post sign may vary a maximum of plus or minus 5% of total sign width to fit field conditions.

SIGN HEIGHT NOTES:

** The 8' 6" maximum may be exceeded when placing signs on extreme slopes. In these conditions, a 7' minimum from natural ground to bottom of sign must be maintained.

DEPARTMENTAL MATERIAL SPECIFICATIONS	
ALUMINUM SIGN BLANKS	DMS-7110
SIGN HARDWARE	DMS-7120

GENERAL NOTES:

1. Exit number panel shall be mounted to the right hand side of the parent sign for right exits and to the left hand side for left exits. The number panel shall be mounted with two uprights so its right edge is even with the right edge of the parent sign or vice-versa for left hand exits.
2. Exit number panel support shall be symmetrical about number panel centerline.
3. Exit number panel support shall be ASTM A36 structural steel galvanized after fabrication, or ASTM B221 aluminum alloy 6061-T6 or approved alternative.
4. All bolts, nuts and washers shall be galvanized per ASTM Designation: B695 Class 50, or A153 Class C or D.
5. Posts, parent sign panels, and exit number panels shall comply with notes on sheets SMD(2-1) and SMD(2-2).
6. Signs (such as exit number panels) attached above a parent sign shall be made of the same type material as the parent sign. General Service and Routing signs may be fabricated from flat sheet aluminum.
7. Exit number panel support and other connection hardware required to fasten exit number panel to parent sign shall be subsidiary to "Aluminum Signs" or "Fiberglass Signs."
8. For fiberglass sign installation details, see manufacturer's recommendations.

DATE:
FILE:

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS-LARGE ROADSIDE SIGNS

SMD(2-3)-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS
9-08

CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		251

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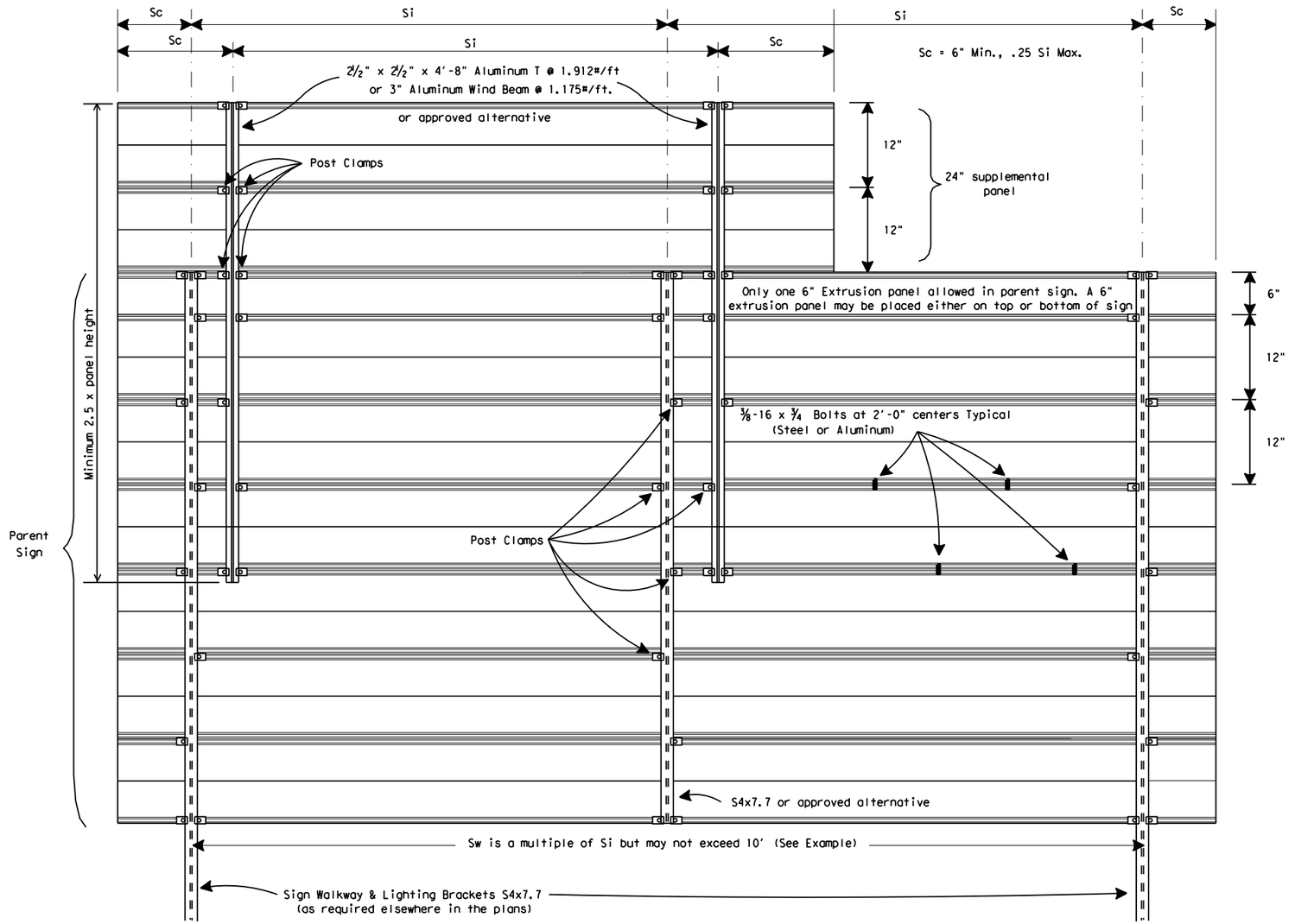
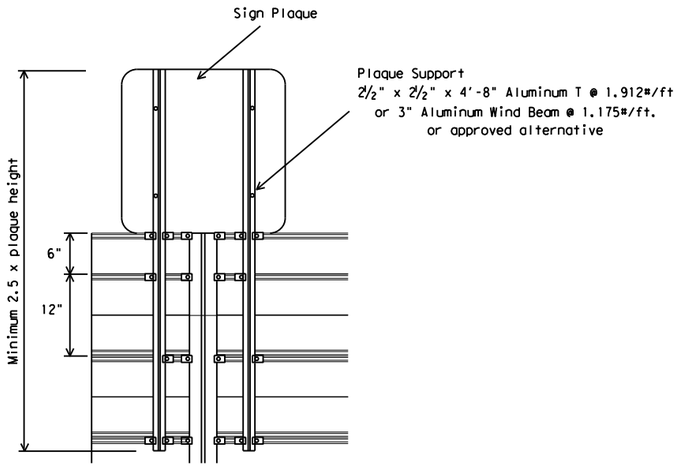


REAR VIEW

EXAMPLES (FOR DETERMINING Si and Sw)

NO.	ZONE	"d"	EXIT PANEL	WALKWAY	Si	Sw	COMMENT
1	1	15.0	YES	YES	4.5	9.0	Sw=2x(Si)
2	2	14.0	YES	NO	7.5	7.5	Sw = Si
3	1	15.0	NO	NO	8.5	8.5	Sw = Si
4	3	14.0	NO	YES	10.0	10.0	Sw = Si

Values shown for Si are maximum values. Si may be varied for different sign lengths and Truss mounting conditions. Sw should not exceed two times Si(Max.) or 10 feet.



SIGN PLAQUE MOUNTING DETAIL

MAXIMUM SIGN SUPPORT SPACING "Si" (FEET)

"d" Deepest Sign in Group (Ft.)	EXTRUDED ALUMINUM SIGN PANELS															
	WITH EXIT NUMBER PANELS								WITHOUT EXIT NUMBER PANELS							
	WITH WALKWAYS				WITHOUT WALKWAYS				WITH WALKWAYS				WITHOUT WALKWAYS			
	WIND ZONE				WIND ZONE				WIND ZONE				WIND ZONE			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
15	4.5	7	8	10	5	7	8	10	7	8	9	10	8.5	10	10	10
14	6	7.5	9.5	10	6	7.5	9.5	10	8	9	10	10	10	10	10	10
13	7.5	9	10	10	7.5	9	10	10	9	10	10	10	10	10	10	10
12	8.5	10	10	10	8.5	10	10	10	10	10	10	10	10	10	10	10
11 or less	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

For fiberglass sign installations, see manufacturer's recommendations.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS- OVERHEAD SIGNS EXTRUDED ALUMINUM

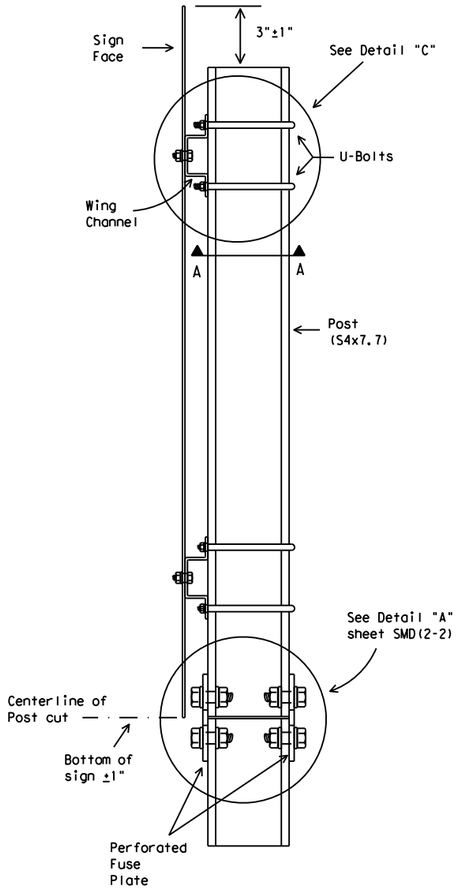
SMD(2-4)-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

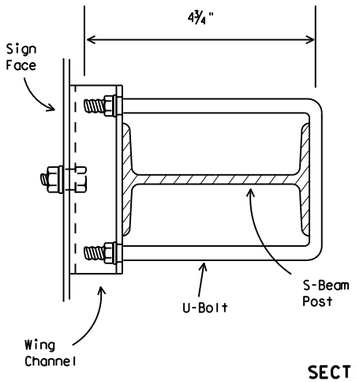
REVISIONS	CONT	SECT	JOB	HIGHWAY
9-08	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		252

DATE:
FILE:

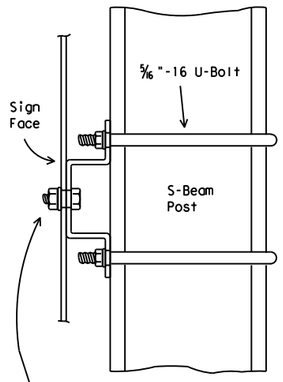
WING CHANNEL CLAMP DETAIL FOR TYPE G MOUNT



SIDE VIEW

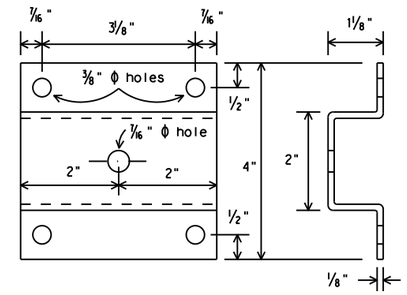


SECTION A-A



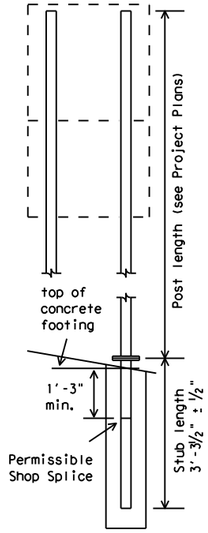
Galvanized steel or aluminum self-locking hex. head nut. 3/8 " - 16 x 3/4 " hex. head bolt for sheet metal. 3/8 " - 16 x 1 1/4 " hex. head bolt for plywood. 3/8 " galvanized medium washer.

DETAIL "C"

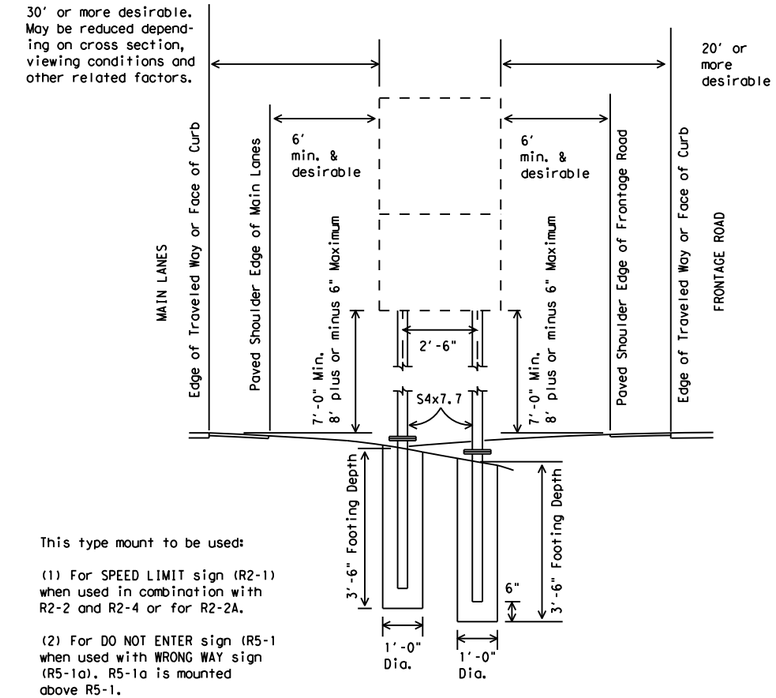


WING CHANNEL

Wing channel, 4" width x 1⅛" depth x ⅛" thickness, shall be aluminum (ASTM B221 6061-T6 or B308 6061-T6), galvanized steel (ASTM A36) or stainless steel (ASTM A167 type 304, No. 2B finish).



The weight of one S4x7.7 post is equal to 112.2 lbs. plus 7.7 lbs./ft x (post length in feet minus 10 ft). The weight of 112.2 lbs. includes 10 feet of post length, post foundation stub, related connection plates, friction fuse plate, and all high strength bolts, nuts and washers.



This type mount to be used:

(1) For SPEED LIMIT sign (R2-1) when used in combination with R2-2 and R2-4 or for R2-2A.

(2) For DO NOT ENTER sign (R5-1 when used with WRONG WAY sign (R5-1a). R5-1a is mounted above R5-1.

DEPARTMENTAL MATERIAL SPECIFICATIONS
SIGN HARDWARE DMS-7120

GENERAL NOTES:

1. Design conforms with AASHTO Specifications for the design and construction of structural supports for highway signs.
2. Materials and fabrication shall conform to the requirements of the Department material specifications.
3. Structural steel shall be "Low-Alloy Steel" for non-bridge structures per Item 442, "Metal For Structures."
4. Parts shall be saw cut either before galvanizing and the galvanized cut cleaned of zinc build-up, or saw cut after galvanizing and the cut surface repaired per Item 445, "Galvanizing." (Cut surface will not be treated until plate is installed and all bolts fully tightened.)

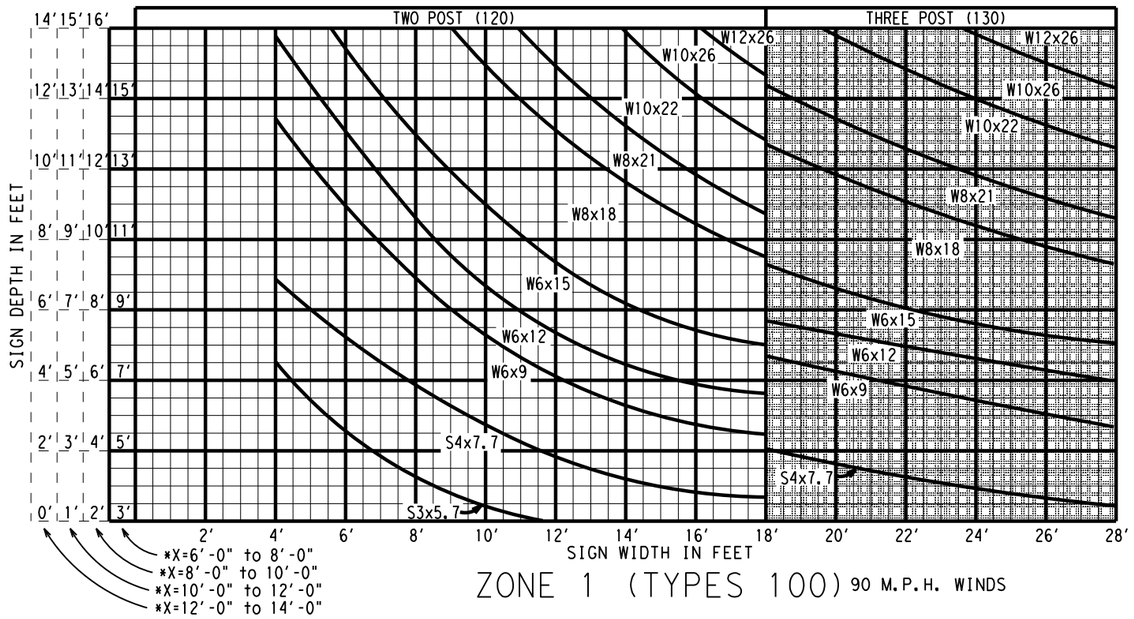
Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS, TYPE G SUPPORT

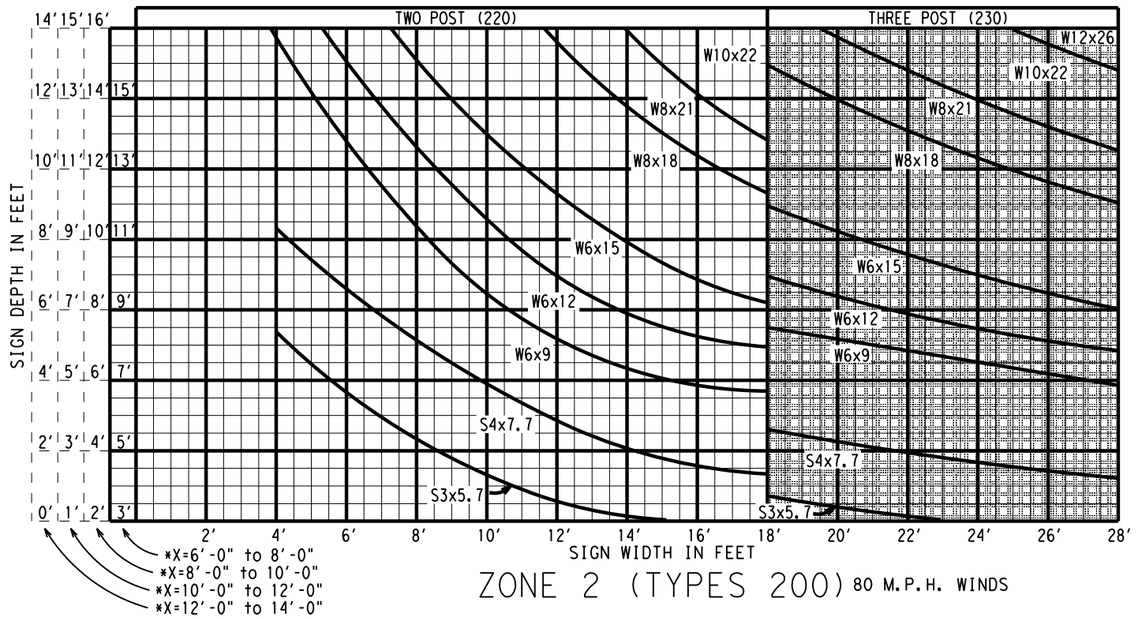
SMD(TY G)-08

REVISIONS	DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT
1-97	CONT	SECT	JOB	HIGHWAY
9-08	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		253

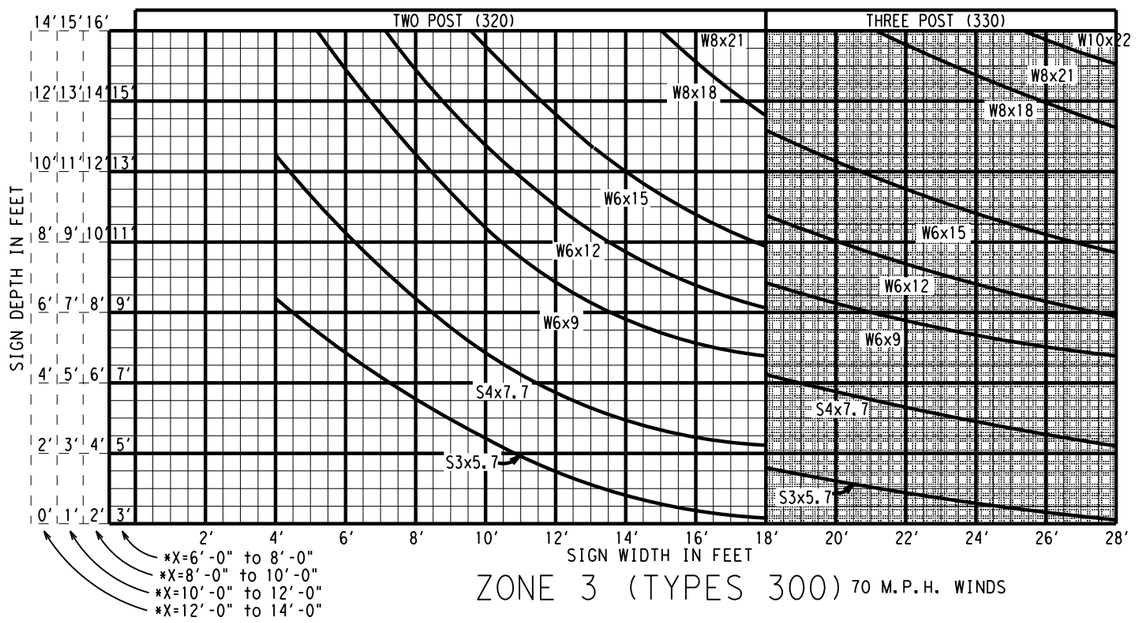
DATE:
FILE:



ZONE 1 (TYPES 100) 90 M.P.H. WINDS



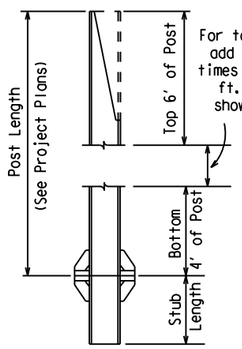
ZONE 2 (TYPES 200) 80 M.P.H. WINDS



ZONE 3 (TYPES 300) 70 M.P.H. WINDS

* NOTE: "X" EQUALS THE AVERAGE HEIGHT FROM THE GROUND LINE TO THE BOTTOM EDGE OF THE SIGN.

SHADED AREA DENOTES 3 POST SUPPORTS



POST WEIGHT DATA

POST SIZE	WEIGHT OF ONE POST (#)	WEIGHT OF TWO POSTS (#)	WEIGHT OF THREE POSTS (#)
W6x9*	123.2	246.4	369.6
W6x12*	160.3	320.6	480.9
W6x15*	167.8	335.6	503.4
W8x18*	201.8	403.6	605.4
W8x21*	254.7	509.4	764.1
W10x22*	266.0	532.0	798.0
W10x26*	308.0	616.0	924.0
W12x26*	308.6	617.2	925.8
S3x5.7*	85.9	171.8	257.7
S4x7.7*	112.2	224.4	336.6

*LAST FIGURES=POST WT. PER FT.

Weight Data is the weight of items shown for one, two or three posts - (includes top 6' of post, bottom 4' of post, post foundation stub, related base connection plates and stiffeners, friction fuse plate and all high strength bolts, nuts and washers).

SIGN TYPE

SIGN TYPE 1 3 0

- 1 — Wind Design Zone
- 3 — Series No.
- 0 — 0 Aluminum/Fiberglass, 1 Aluminum, 2 Fiberglass
- 0 — No. of Posts

Note: Footings for S3x5.7 and S4x7.7 post sizes shall be non-reinforced with Class A concrete, while footing for all other post sizes shall be reinforced with Class C concrete.

Texas Department of Transportation
Traffic Operations Division

LARGE ROADSIDE SIGN SUPPORTS POST SELECTION WORKSHEET

SMD(8W1)-08

DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT

REVISIONS
1-82
5-01
9-08

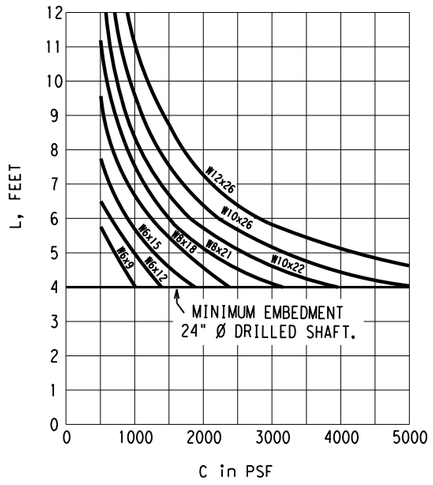
CONT	SECT	JOB	HIGHWAY
6353	00	001	IH-2, ETC.
DIST	COUNTY		SHEET NO.
21	HIDALGO, ETC.		254

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.

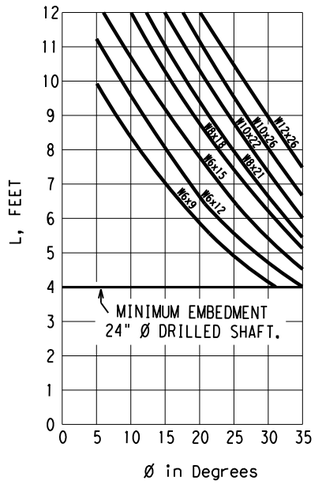
DATE:
FILE:

I



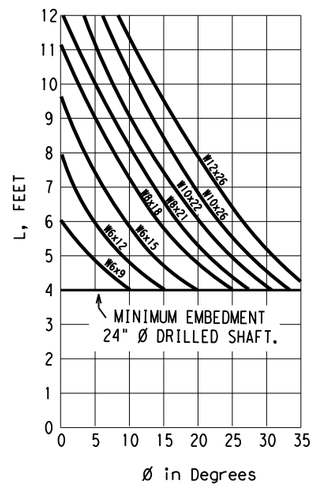
Ø = 0 Degrees

II



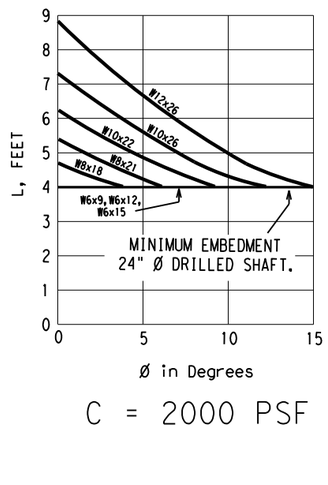
C = 0 PSF

III



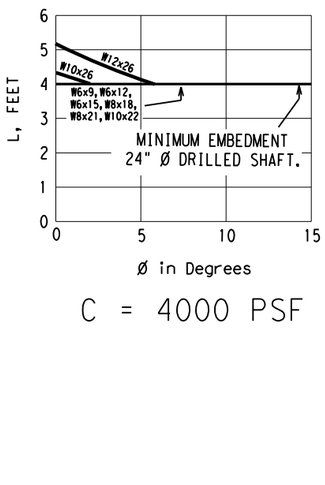
C = 500 PSF

IV



C = 2000 PSF

V



C = 4000 PSF

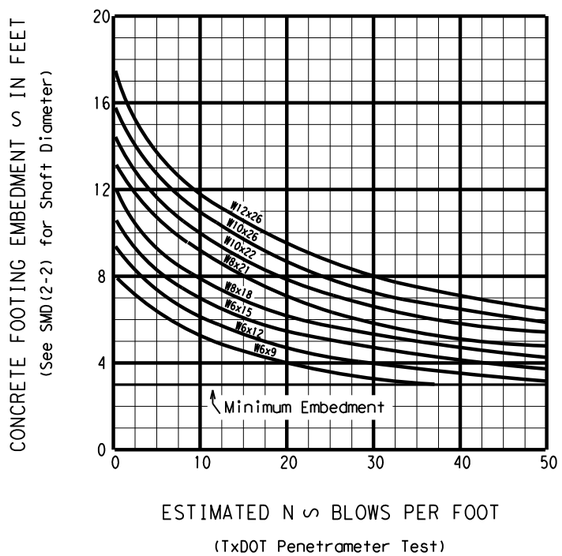
DRILLED CONCRETE FOOTING DEPTH CHART
(COHFRIC DESIGN)

NOTE: THESE CHARTS MAY BE USED AS AN ALTERNATE TO THE CHART BELOW, PROVIDED THAT SOIL COHESION AND INTERNAL FRICTION (COHFRIC) DATA ARE AVAILABLE.

LEGEND:

L = Required embedment of concrete drilled shaft, in feet
C = Cohesive shear strength of soil, in psf
Ø = Angle of internal friction of soil, in degrees

For values of C and Ø which are intermediate to those on the charts, embedments may be determined by straight - line interpolation.



DRILLED CONCRETE FOOTING DEPTH CHART
(TxDOT PENETROMETER DESIGN)

NOTE: ESTIMATED N SHOULD BE BASED AT APPROXIMATELY THE UPPER ONE-THIRD POINT OF THE DRILLED CONCRETE FOOTING BELOW THE GROUND LINE

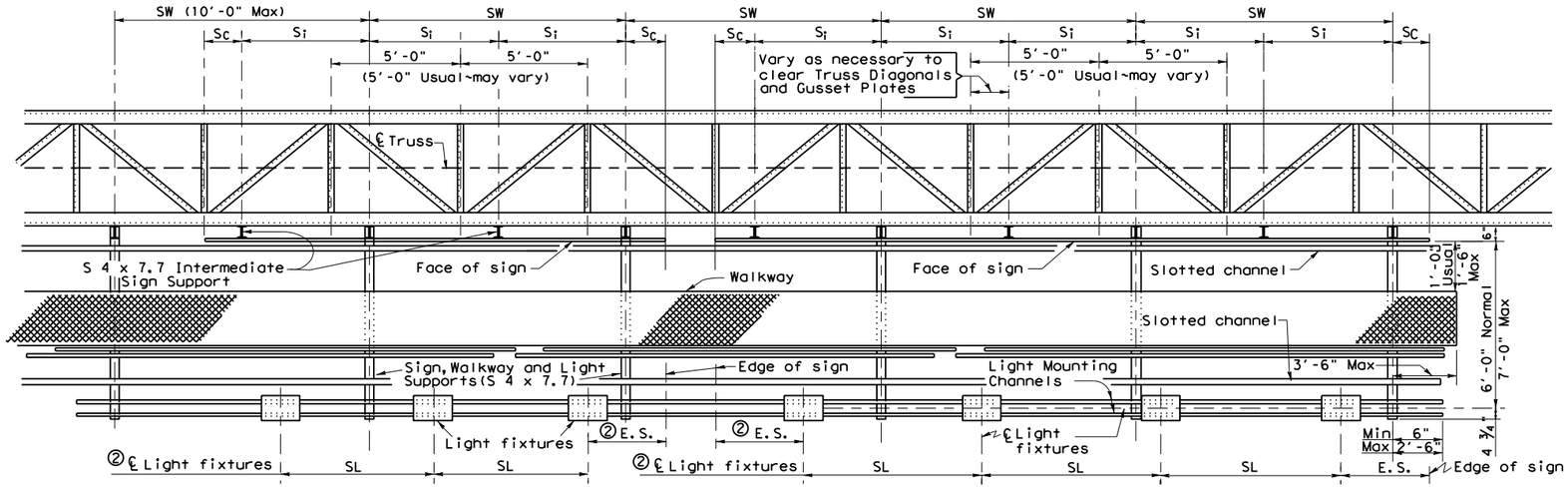
Note:
1. Curves shown on this sheet are applicable for reinforced concrete footings only.

Texas Department of Transportation
Traffic Operations Division

LARGE ROADSIDE SIGN SUPPORTS FOUNDATION WORKSHEET
SMD(8W2)-08

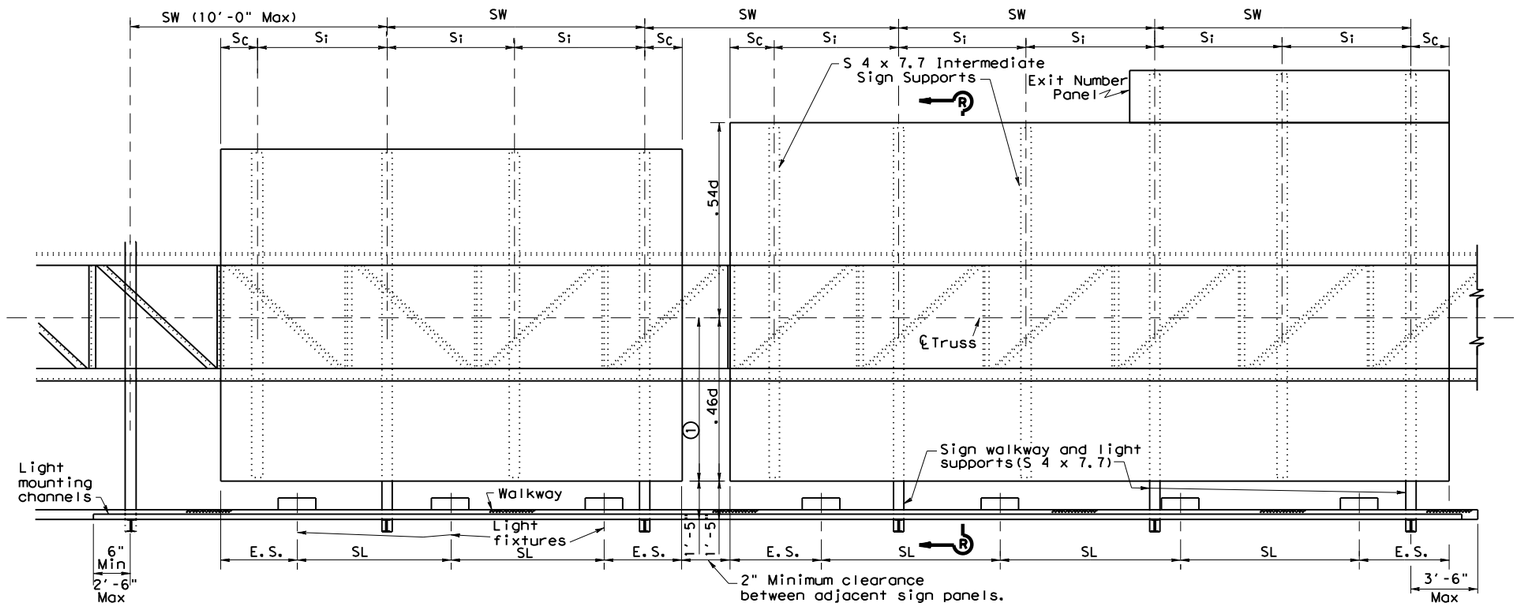
REVISIONS	DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT
5-74	CONT	SECT	JOB	HIGHWAY
4-78	6353	00	001	IH-2, ETC.
9-08	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		255

DATE:
FILE:



Sc=6" Min and .25 Si Max
② See SL(MV) for light fixture spacing.

PART PLAN
(Showing Truss, Signs, Walkways and Lights)

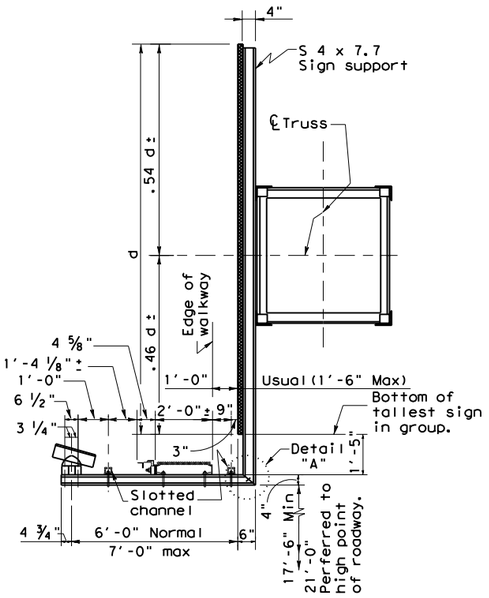


PART ELEVATION

① Where signs of different depths are used, the bottom edge of all signs may be placed in line. Where this is done, all signs should be so positioned that the bottom edges are approximately 0.46 of the depth of the deepest sign below the ℄ of the truss. When signs are spaced thus, Si is determined by the deepest sign.

See sheet SL(MV) for Lighting Details & Spa. S.L. & E.S.
See sheet SWW(1) for Walkway Details.
See sheet SMD(2-4) for Extruded Aluminum Sign Details & Max. Spa. for Si.
Sc = 6" min, .25 Si max.

Note: Exit Number Panel may be supported by sign support brackets as shown hereon, or may be supported as shown on sheet SMD(2-4). Regardless of method used spacing of supports shall not exceed Si.



SECTION R-R

SHEET 1 OF 2

Texas Department of Transportation

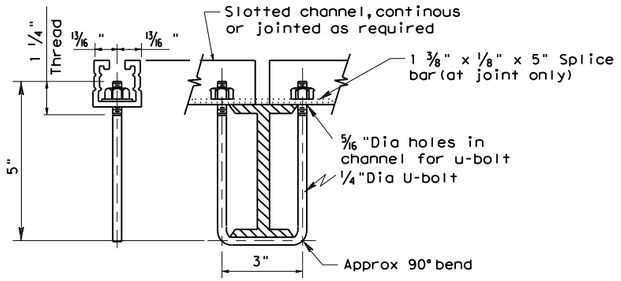
Traffic Operations Division Standard

SUPPORT BRACKETS FOR SIGNS, WALKWAYS & LIGHTS

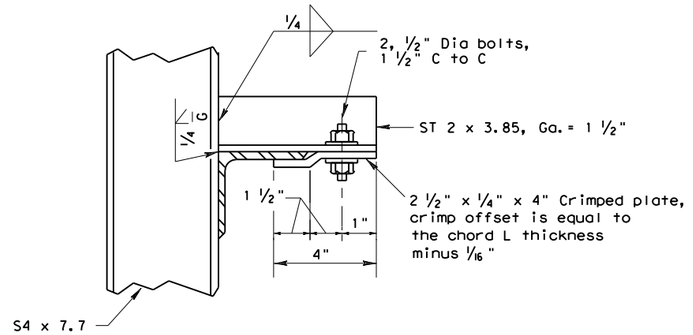
SB(SWL-1)-14

FILE: swl-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT April 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		256

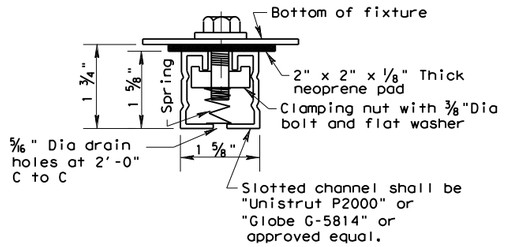
DATE:
FILE:



SECTION A-A

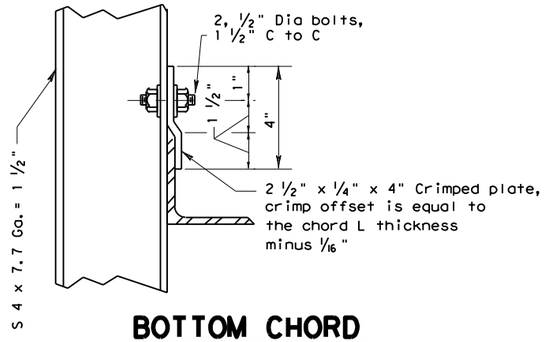


TOP CHORD



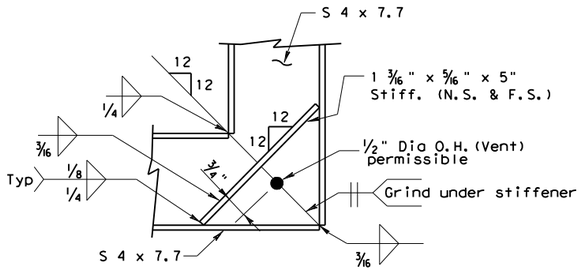
TYPICAL SLOTTED CHANNEL

CONNECTED TO
LIGHTING FIXTURE



BOTTOM CHORD

SUPPORT TO TRUSS CONNECTION



DETAIL "A"

GENERAL NOTES:

Design conforms to 1994 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals and Interim revisions thereto.

Materials, fabrication, construction and erection shall conform to Item 654, "Sign Walkways" and with details, dimensions, and weld procedures shown herein. Structural steel shall conform with ASTM A36 unless noted otherwise.

Bolts shall have hexagon heads and nuts and conform with ASTM A307.

All parts shall be galvanized after fabrication per Item 445, "Galvanizing".

Texas Department of Transportation

Traffic Operations Division Standard

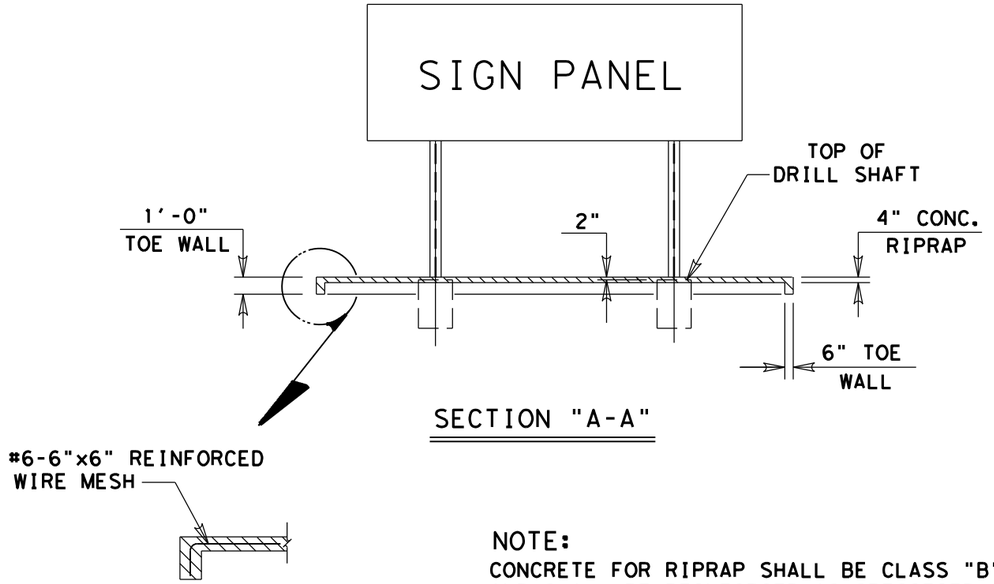
SUPPORT BRACKETS FOR SIGNS, WALKWAYS & LIGHTS

SB(SWL-1)-14

FILE: swl-14.DGN	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT April 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		257

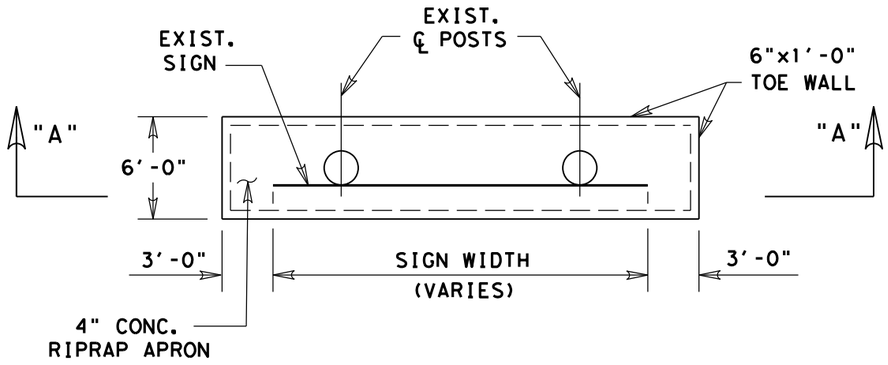
CONCRETE RIPRAP APRON CHART VOLUMES FOR HIGHWAY SIGNS

SIGN WIDTHS	CONC. CU. YDS.	SIGN WIDTHS	CONC. CU. YDS.	SIGN WIDTHS	CONC. CU. YDS.
2'-0"		12'-6"	1.9	23'-0"	3.0
2'-6"		13'-0"	2.0	23'-6"	3.0
3'-0"		13'-6"	2.0	24'-0"	3.1
3'-6"		14'-0"	2.1	24'-6"	3.1
4'-0"		14'-6"	2.1	25'-0"	3.2
4'-6"		15'-0"	2.2	25'-6"	3.2
5'-0"	1.2	15'-6"	2.2	26'-0"	3.3
5'-6"	1.3	16'-0"	2.3	26'-6"	3.3
6'-0"	1.3	16'-6"	2.3	27'-0"	3.4
6'-6"	1.4	17'-0"	2.4	27'-6"	3.4
7'-0"	1.4	17'-6"	2.4	28'-0"	3.5
7'-6"	1.5	18'-0"	2.5	28'-6"	
8'-0"	1.5	18'-6"	2.5	29'-0"	
8'-6"	1.6	19'-0"	2.6	29'-6"	
9'-0"	1.6	19'-6"	2.6	30'-0"	
9'-6"	1.7	20'-0"	2.7	30'-6"	
10'-0"	1.7	20'-6"	2.7	31'-0"	
10'-6"	1.8	21'-0"	2.8	31'-6"	
11'-0"	1.8	21'-6"	2.8	32'-0"	
11'-6"	1.9	22'-0"	2.9	32'-6"	
12'-0"	1.9	22'-6"	2.9	33'-0"	



SECTION "A-A"

NOTE:
CONCRETE FOR RIPRAP SHALL BE CLASS "B" AND SHALL BE REINFORCED AS SPECIFIED IN GENERAL NOTES FOR ITEM 432 "RIPRAP".



PLAN

CONCRETE RIPRAP FOR SIGN MULTIPLE POST GROUND MOUNTS

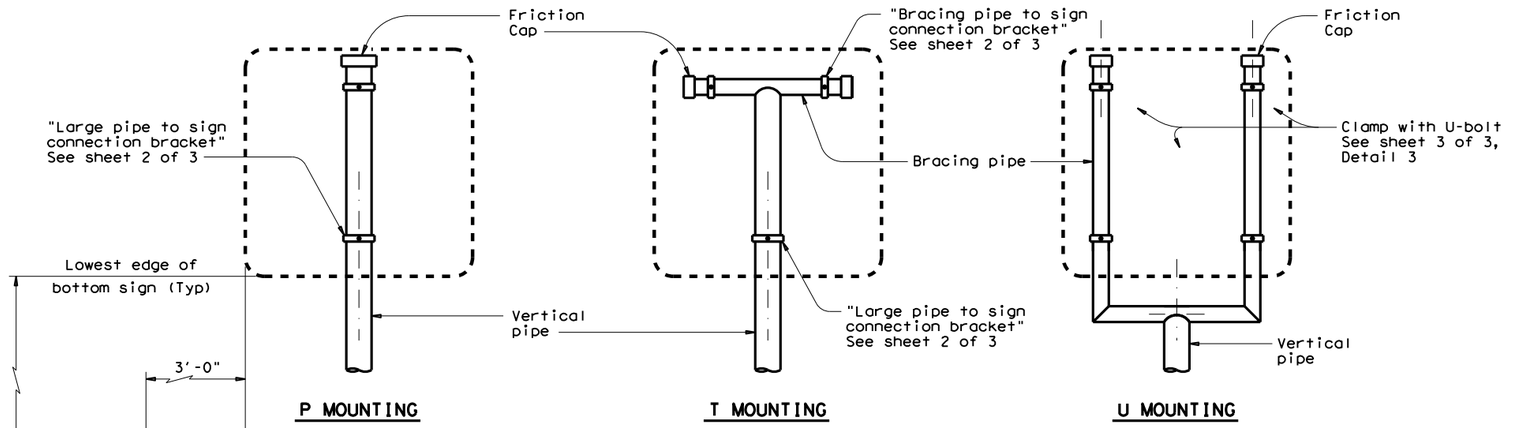
TEXAS DEPARTMENT OF TRANSPORTATION

TYPICAL SIGN RIPRAP DETAILS

SHEET 1 OF 1

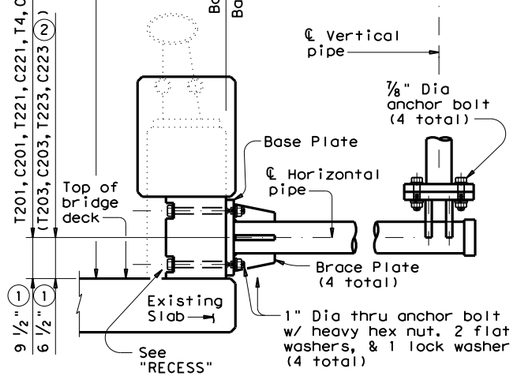
DN: LSJ	DRAWING	DATE	FED.RD. DIV.NO.	STATE	STATE PROJECT NO.				SHEET NO.
CK DN: RDG	ORTGTNAL	SEP. 2020	6	TEXAS					258
DW: LSJ			STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION	JOB NO.	HIGHWAY NO.	
CK DW: RDG			PHARR	HIDALGO, ETC.	6353	00	001	IH-2 ETC.	

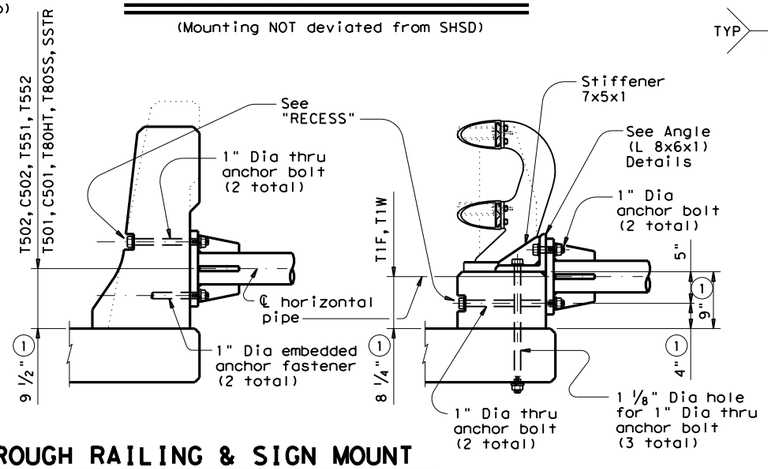
DATE:
FILE:



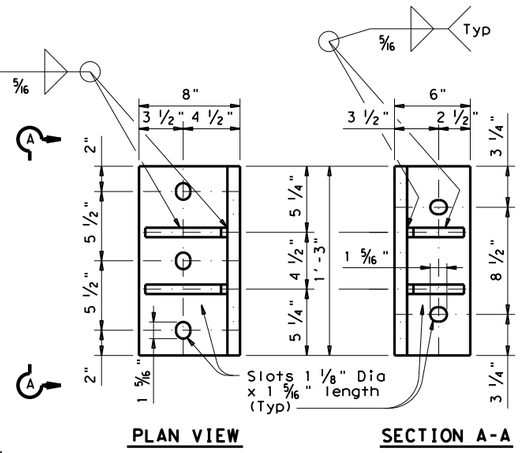
VARIOUS SIGN ATTACHMENTS

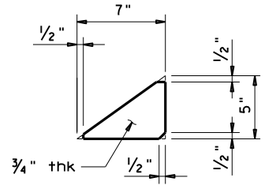
(Mounting NOT deviated from SHSD)





LONGITUDINAL SECTION THROUGH RAILING & SIGN MOUNT



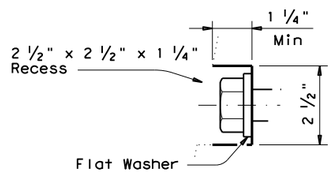


STIFFENER

ANGLE (L 8x6x1) DETAILS

① Increase 2" for structure with overlay.

② Attached at ℄ post.



RECESS

PIPE SIZE AND THICKNESS			
Pipe Placement / Design Wind Speed	Horizontal	Vertical	Bracing
90 mph	5" X-Strong (.375")	4" X-Strong (.337")	2 ½" Standard (.203")
130 mph	6" X-Strong (.432")	5" X-Strong (.375")	3" X-Strong (.300")

GENERAL NOTES:

Design conforms to 2013 AASHTO Standard Specifications for Highway Signs, Luminaires, and Traffic Signals and Interim Specifications thereto. Design 3-second gust wind speeds of 90 mph and 130 mph with a 1.14 gust factor, and a wind importance factor of 1.0 (50-year mean recurrence interval) for the supporting structures. For mounting connection between sign panel and pipe, wind importance factors of 0.71 and 0.54, for 90 mph and 130 mph winds, respectively, are applied to adjust the wind speeds to a 10-year mean recurrence interval.

See standard sheet WV & IZ(LTS2013) for the boundaries of each design wind zone. All mounting shall be based on 130 mph wind speed design except when located in 90 mph wind zone. Maximum panel area is 30 sq. ft. Maximum design height is 50 ft, with design height defined as the distance between natural ground (average elevation of surrounding terrain) and the center of sign(s) at the mounting location.

Material for pipe shall be ASTM A53 Grade B, or A501. Structural steel plates shall be ASTM A36, A572 Grade 50, or A588. Bolts used to connect pipe and mounting bracket, and wind beam to sign panel shall be ASTM A307. Anchor bolts shall be ASTM A325 or A193 B7. Each anchor bolt shall be provided with 2 flat washers, 1 lock washer, and 1 heavy hex nut. All parts shall be galvanized in accordance with Standard Specifications Item 445, "Galvanizing".

Attach horizontal pipe at least 2'-0" from the edge of any nearby drain slot.

Contractor shall verify applicable field dimensions before fabrication. Holes drilled through the railing parapet wall shall be drilled with rotary (coring or masonry drill) type equipment. Percussion (star) drilling shall not be allowed. Anchorage for pipe attached to rail shall be placed using an anchoring system approved by the engineer. Installation of anchor fasteners including hole depth, diameter and material shall be in accordance with the manufacturers' recommendation.

Each embedded anchor fastener shall resist an allowable design loading (after applying the reduction factors of bolt spacing and bolt edge distance) of:

	130 mph	90 mph
Tension	12.5 kips	7.5 kips
Shear	9.0 kips	5.0 kips

Each anchoring system shall provide a capacity to resist the required tension and shear acting simultaneously.

For sign connection to mounting, shop drill holes on sign blank in accordance with the current Standard Highway Sign Designs for Texas (SHSD). Additional hole(s) needed to meet a stipulated-type mounting may be field drilled. For multi-sign or back-to-back signs mounting, the engineer shall determine the proper type which ensures each individual mounting meets requirements.

Refer to Standard sheets SMD(GEN), SMD(SLIP-2 and SMD(2-1) for details not covered here.

Texas Department of Transportation

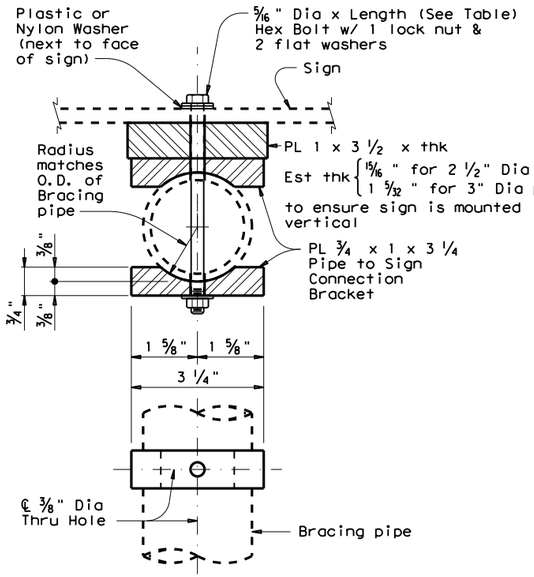
Traffic Operations Division Standard

BRIDGE RAILING SIGN MOUNT DETAILS

SMD(BR-1)-14

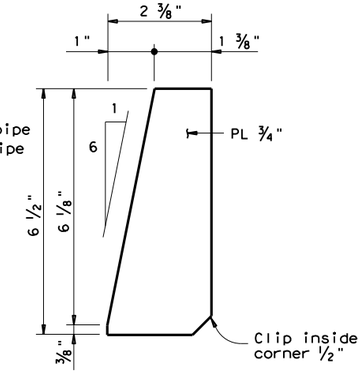
FILE: smdbr-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT August 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		259

DATE:
FILE:

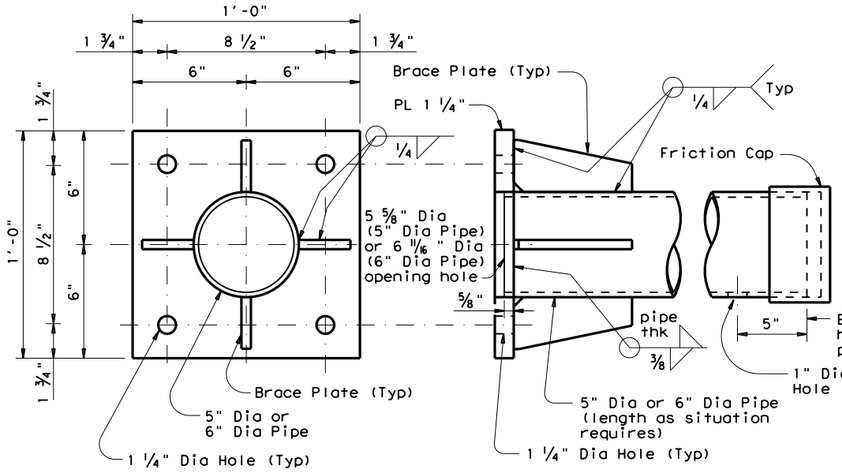


BRACING PIPE TO SIGN CONNECTION BRACKET DETAILS

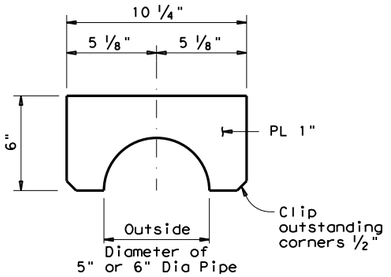
(Showing T Mounting)



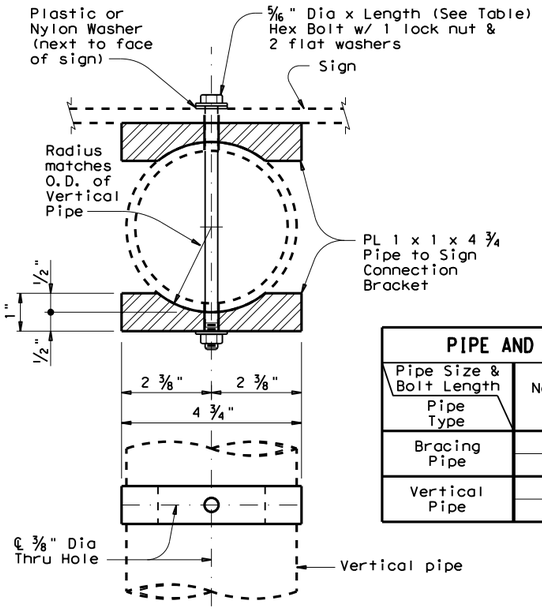
BRACE PLATE DETAILS



BASE PLATE DETAILS



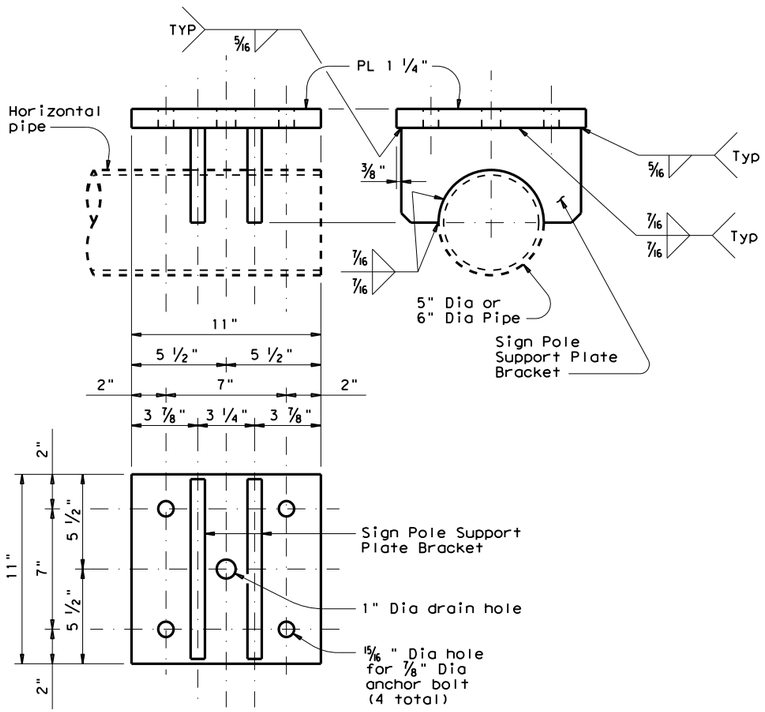
SIGN POLE SUPPORT PLATE BRACKET DETAILS



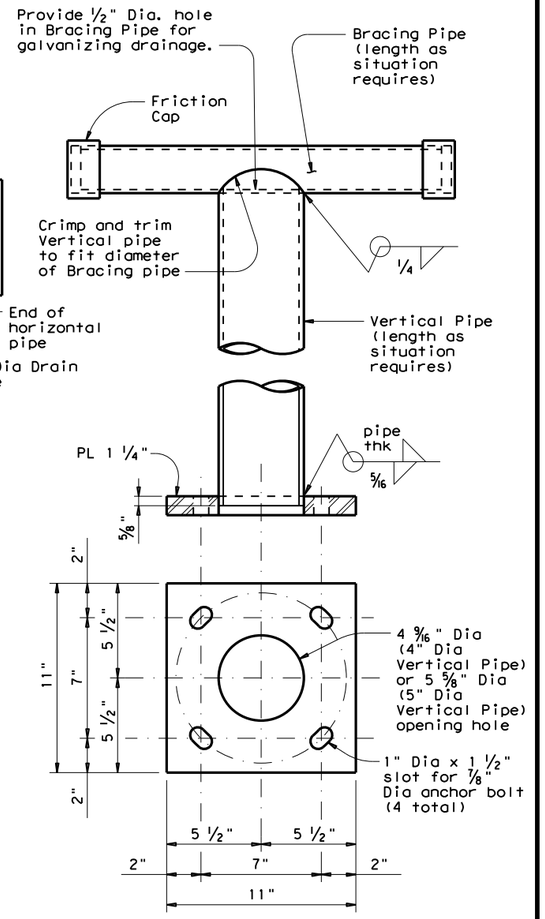
PIPE AND BOLT SPECIFICATIONS		
Pipe Size & Bolt Length / Pipe Type	Nominal Pipe Dia (in.)	Bolt Length (in.)
Bracing Pipe	2 1/2	6
	3	7
Vertical Pipe	4	7
	5	8

LARGE PIPE TO SIGN CONNECTION BRACKET DETAILS

(Showing P or T Mounting)



SIGN POLE SUPPORT PLATE DETAILS



SIGN POLE & POLE BASE PLATE DETAILS

(Showing only T Mounting)

SHEET 2 OF 3

Texas Department of Transportation

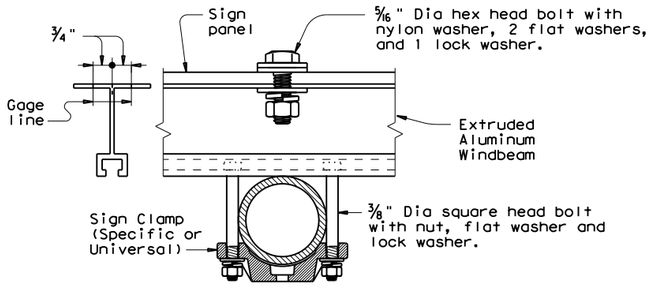
Traffic Operations Division Standard

BRIDGE RAILING SIGN MOUNT DETAILS

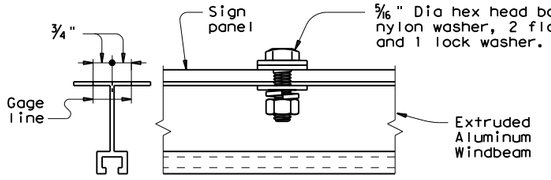
SMD(BR-2)-14

FILE: smdbr-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT August 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		260

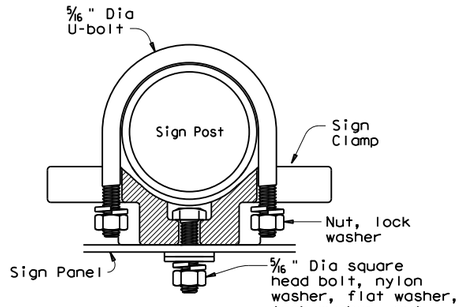
26H



DETAIL 1



DETAIL 2

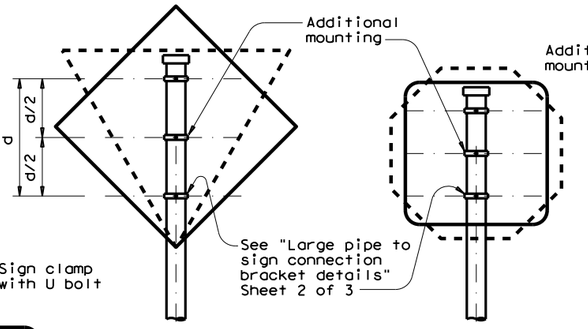


DETAIL 3

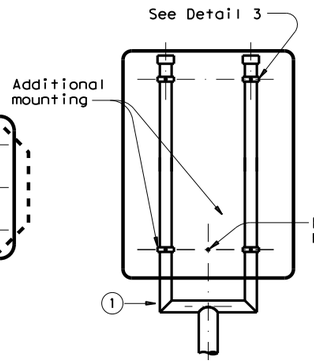
SIGN SHAPE	SQUARE			HORIZONTAL RECTANGLE			VERTICAL RECTANGLE			DIAMOND			OCTAGON			EQUILATERAL TRIANGLE			INTERSTATE SHIELD	PENTAGON (SCHOOL)	
Type of Sign Mounting on SHSD / Design Wind Speed	P	T	U	P	T	U	P	T	U	P	T	U	P	T	U	P	T	U	P	P	T
90 mph					(Type 23) 60"x48"	(Type 3) 72"x36" 78"x36" (Type 23) 72"x30" 84"x24"		(Type 2) 36"x48" (Type 32) 36"x60" 36"x72" 42"x60" 48"x54" 48"x60" 48"x72" (Type 3) 48"x84"			(Type 3) 60"x60"									(Type Special) 45"x36"		
130 mph	(Type 1) 30"x30" 36"x36"	(Type 3) 48"x48"		(Type 1) 36"x24" 36"x30"	(Type 23) 48"x42" 54"x42" 60"x30" 66"x36" 84"x24" (Type 3) 60"x48"	(Type 3) 72"x36" 78"x36" (Type 23) 72"x30" 84"x24"	(Type 1) 30"x36" 30"x42"	(Type 3) 36"x48" 36"x60" 36"x72" 42"x60" 48"x54" 48"x60" (Type 4) 48"x72" 48"x84"	(Type 3) 48"x60"	(Type 1) 36"x36"	(Type 3) 48"x48" 60"x60"					(Type 1) 48"x48"			(Type Special) 36"x36" 45"x36"		

Notes:
1. Drill holes in addition to the hole pattern of the Standard Highway Sign Designs for Texas (SHSD) at specified locations to meet a stipulated-type mounting indicated in the parenthesis ( ).
2. "Blank" in the above table indicates all other signs excluded from stipulated mounting shall be mounted in accordance with SHSD.

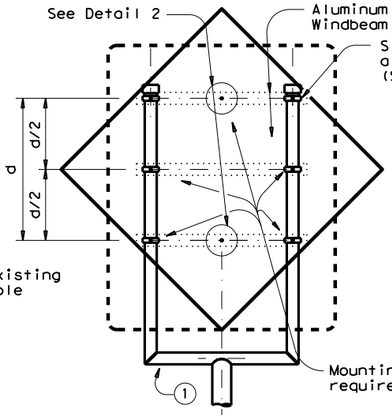
(1) In lieu of welding, the Fabricator may bend bracing pipe elbows if the following conditions are met:
a. Spacing between vertical bracing pipes is equal to or greater than 2'-6".
b. Bending radius is 12".
c. The distance between the lowest clamp and centerline of horizontal bent pipe is 13" max.

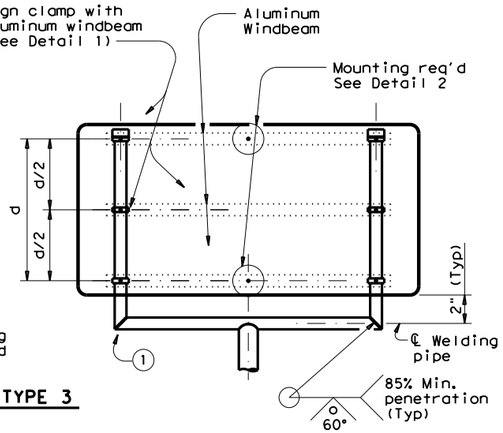


TYPE 1

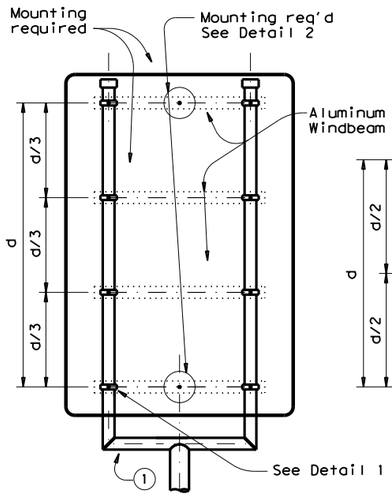


TYPE 2

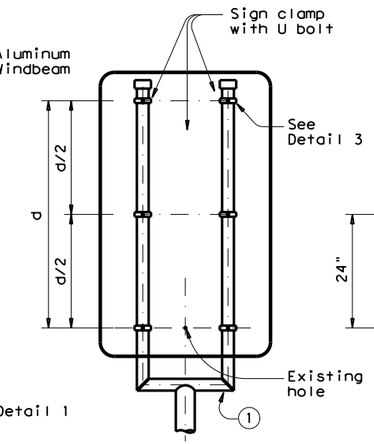




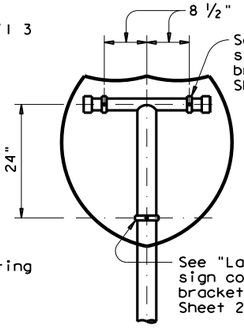
TYPE 3



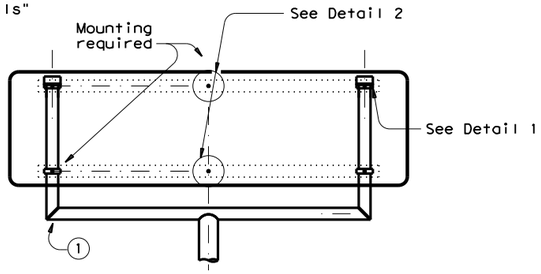
TYPE 4



TYPE 32



TYPE SPECIAL



TYPE 23

SHEET 3 OF 3

Texas Department of Transportation | Traffic Operations Division Standard

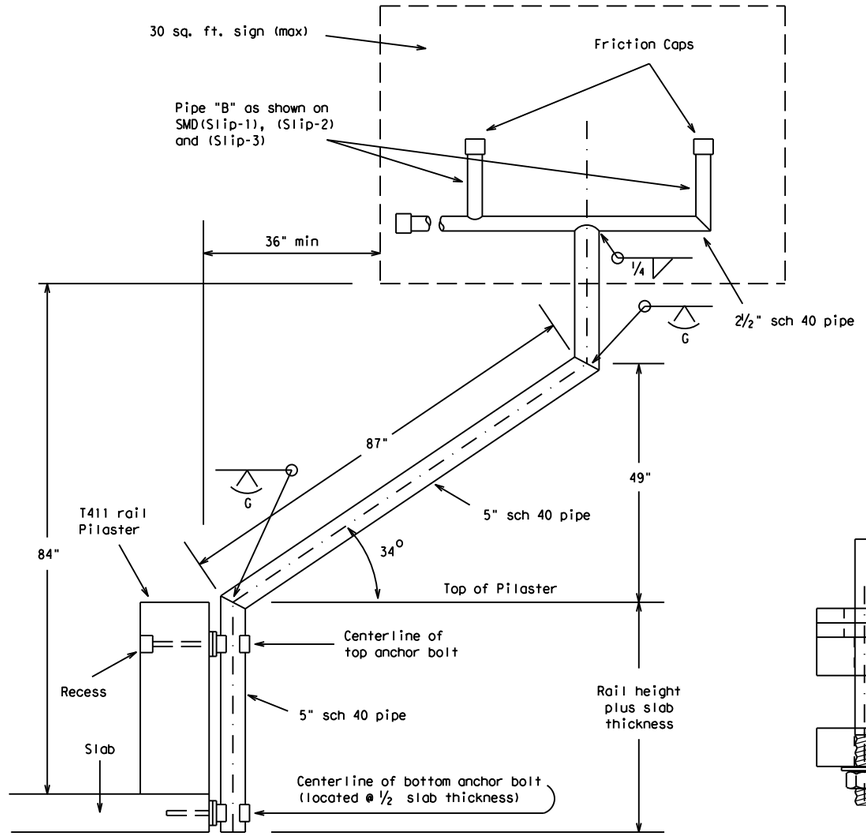
BRIDGE RAILING SIGN MOUNT DETAILS

SMD(BR-3)-14

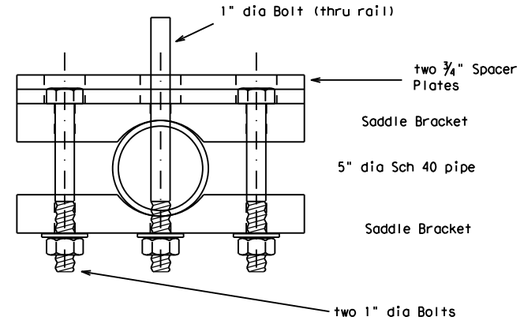
FILE: smdbr-14.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT August 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		261

DATE:
FILE:

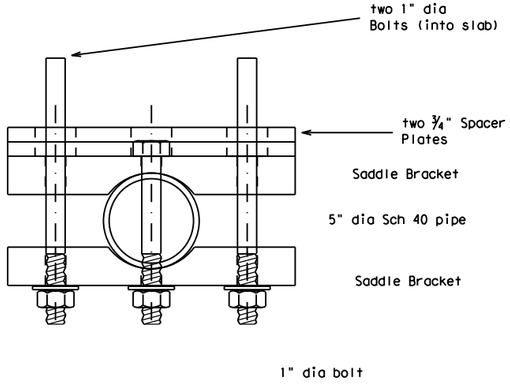
26J



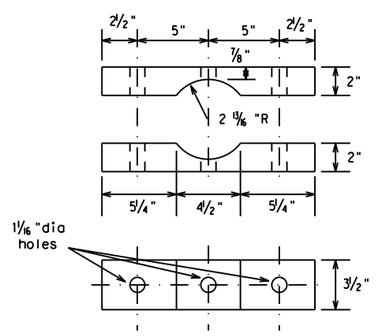
MOUNTING DETAIL



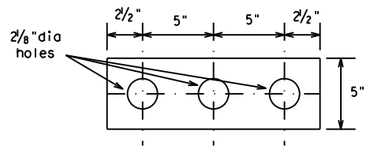
TOP ANCHOR ASSEMBLY



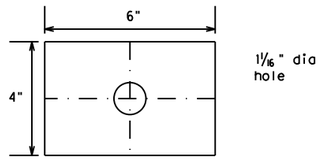
BOTTOM ANCHOR ASSEMBLY



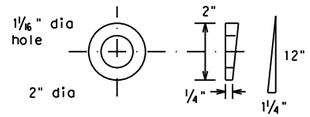
SADDLE CLAMP DETAILS



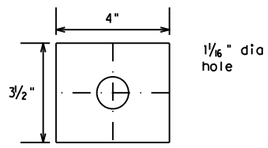
3/4" SPACER PLATE



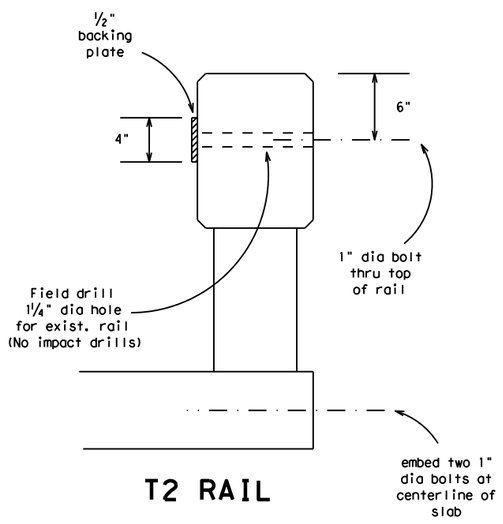
BACKING PLATE DETAIL
(For T2 &T5 Rail)



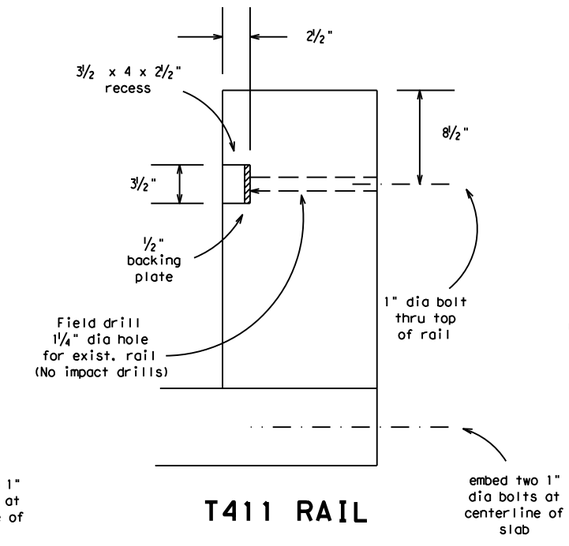
TAPERED SPACER
(For T5 Rail)



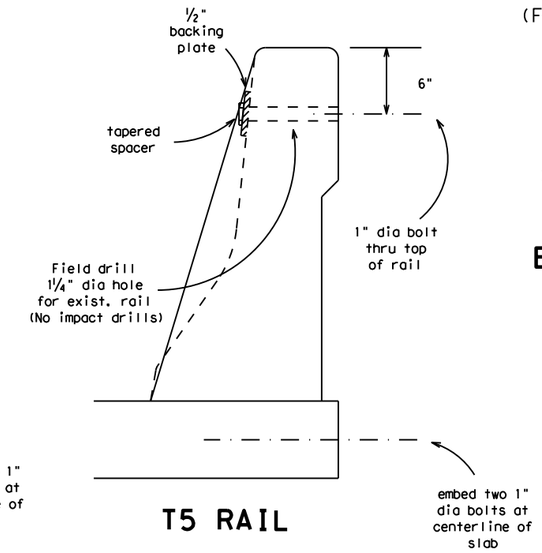
BACKING PLATE DETAIL
(For T411 Rail)



T2 RAIL



T411 RAIL



T5 RAIL

GENERAL NOTES:

Design conforms to 1994 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals and Interim Specifications thereto. Design Wind Speed equals 70 mph plus 1.3 gust factor.

Material for pipe shall be ASTM A53 Gr B, or A501. Saddle clamps and base plates shall conform to Special Specification A36M55 or ASTM M193B7 or A687. Nuts for anchor bolt shall comform to ASTM A563 Grade D or better. Bolt, nut and washers shall be galvanized in accordance with specifications.

Bottom anchor bolts for pipe attached to the concrete slab shall be placed using an adhesive doweling system approved by the engineer. Bottom anchor bolts shall have an allowable capacity of 36 kips in tension and 20 kips in shear. Installation of the bottom anchor bolts, including hole depth and diameter, shall be in accordance with the manufacturers' recommendation. If required by the engineer, 3 of the first 10 anchor bolts, and 5% of the remaining anchor bolts shall be tested to 70% of minimum specified yield. The contractor shall provide a suitable ram, pump, pressure gauge and reaction system.

Saddle clamp connection bolts shall comform to ASTM A325 or A449. Bolts, washers and nuts shall be galvanized in accordance with specifications.

Contractor shall verify applicable field dimensions before fabrication.

Core drilling shall be permitted to obtain the hole diameter and recess on existing rails. Percission drilling is not permitted. Patch if spall occors.

For Type 411 Rail, the roadside sign can only be erected by attaching to the pilaster.

NOTE:
Sign panel area is a maximum of 30 square feet. Pipe mounting supports for the sign panel shall refer to SMD(Slip-1), (Slip-2) and (Slip-3). The diameter of "B" support as shown on these standards shall be 2 1/2 inches.

DN:
CK:
DW:
CK:

DATE:
ACC:
FILE:

LEVELS DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 31 41 51 61
17 18 19 20 21 22 32 42 52 62 72 82 93 03 13 23
33 43 53 63 73 83 94 04 14 24 34 44 54 64 74 84
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

PHARR DISTRICT
STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION

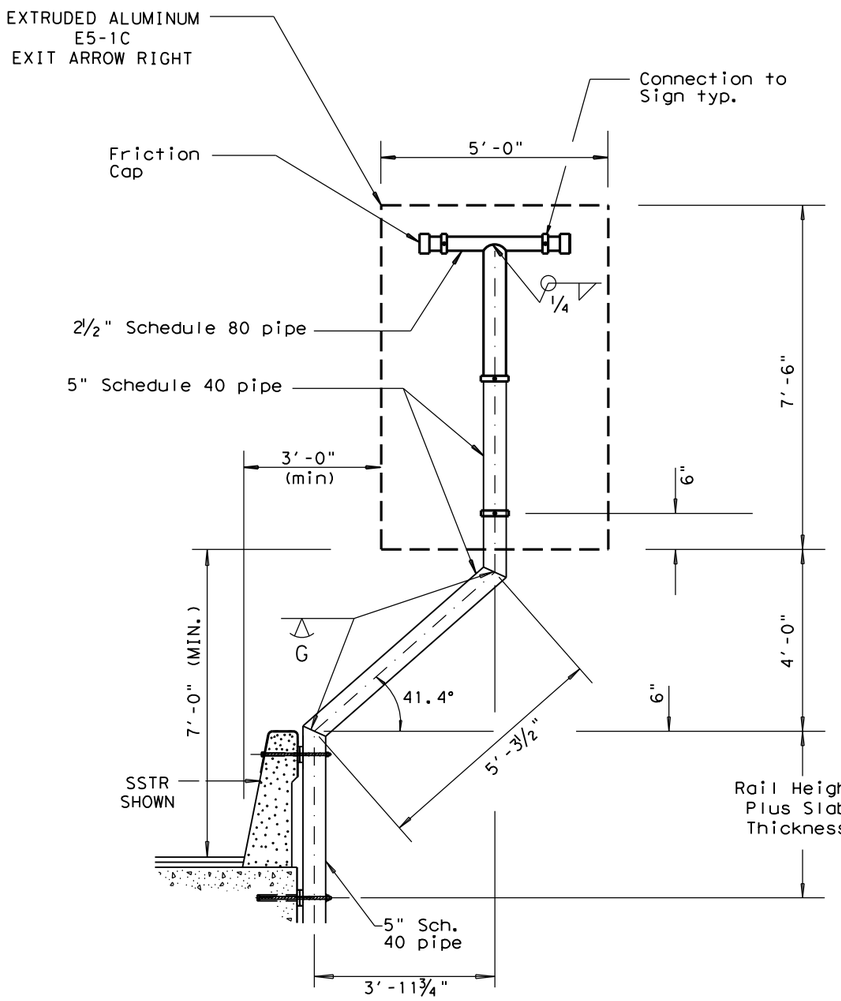
SIGN MOUNTING DETAILS-RAIL MOUNTINGS

SMD (RM) -98

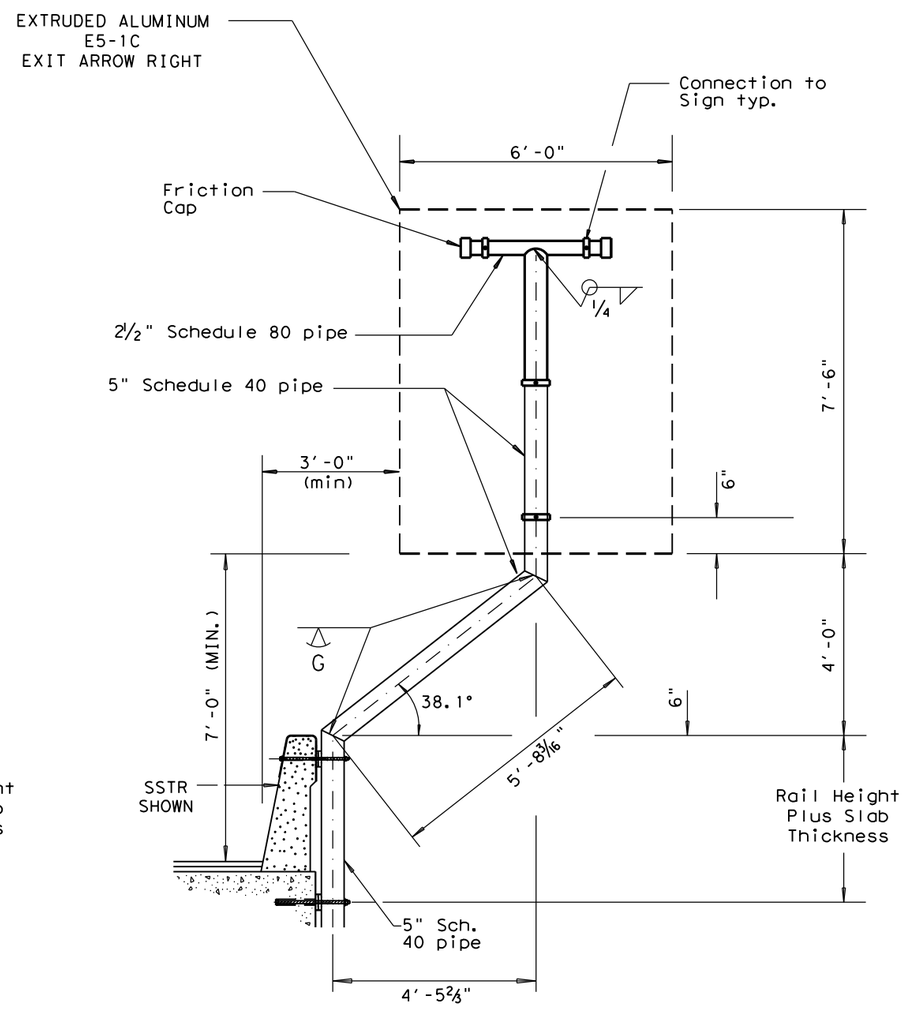
DN: GB	CK: DTN	DW: DN	CK: DM	MEG NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
12-09	PHARR	6		262

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
HIDALGO, ETC.	6353	00	001	IH-2, ETC



60"x 90"
SPECIAL SIGN MOUNT DETAIL



72"x 90"
SPECIAL SIGN MOUNT DETAIL

GENERAL NOTES

1. SIGN SUPPORTS SHALL MANUFACTURED IN ACCORDANCE SMD(RM)-98 General Notes:
2. FOR DETAILS ATTACHING SPECIAL SIGN MOUNT TO TRAFFIC RAIL SEE SHEET SMD(RM)-98
3. ALL WELDS SHALL BE IN ACCORDANCE WITH ITEM 441 (STEEL STRUCTURES) AND ITEM 448 (STRUCTURAL WELDING). ALL GALVANIZING SHALL BE IN ACCORDANCE WITH ITEM 442 (METAL FOR STRUCTURES).
4. WHERE THE GALVANIZING HAS BEEN SCRAPED OFF FROM THE SHIPMENT, THE STEEL TUBING, ETC. SHALL BE PAINTED WITH A GALVANIZED COMPOUND MEETING FEDERAL SPECIFICATION ASTM A-780.

LEVELS DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
ACC:

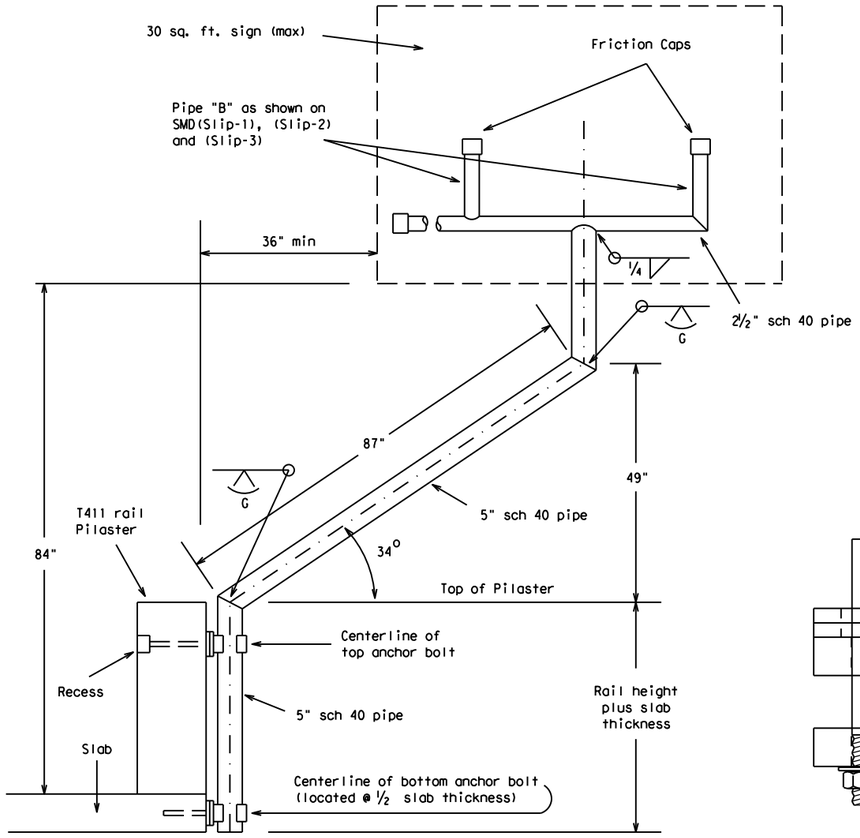
Pharr District Standard

SPECIAL SIGN MOUNT DETAILS

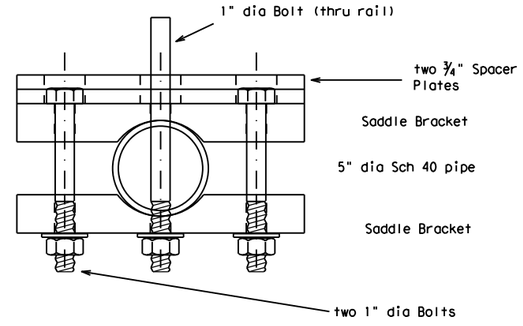
REVISIONS	FED. RD. DIV. NO.	FEDERAL AID PROJECT NO.		SHEET NO.
	6			263
	STATE	DIST.	COUNTY	
	TEXAS	21	HIDALGO, ETC.	
	CONT.	SECT.	JOB	HIGHWAY NO.
	6353	00	001	IH-2,ETC.

LEVELS DISPLAYED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

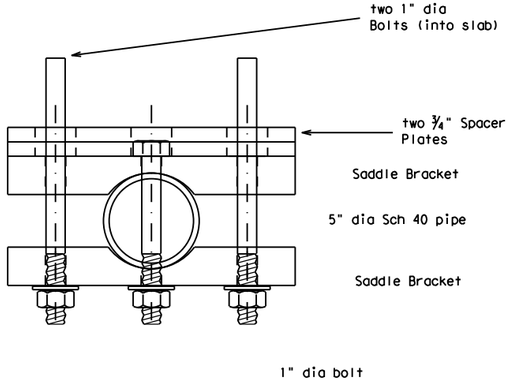
DN:
CK:
DW:
CK:
DATE:
ACC:
FILE:



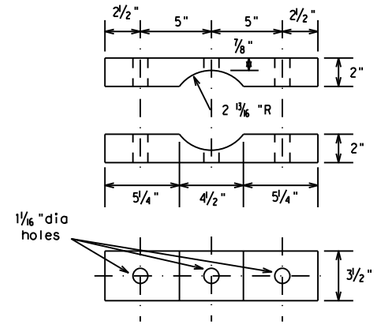
MOUNTING DETAIL



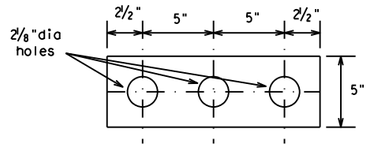
TOP ANCHOR ASSEMBLY



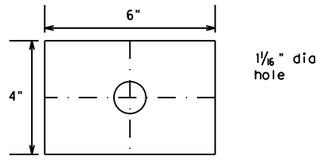
BOTTOM ANCHOR ASSEMBLY



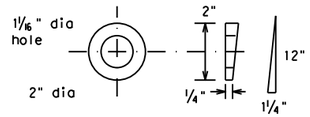
SADDLE CLAMP DETAILS



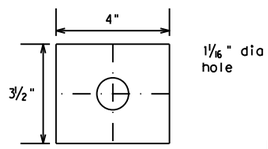
3/4" SPACER PLATE



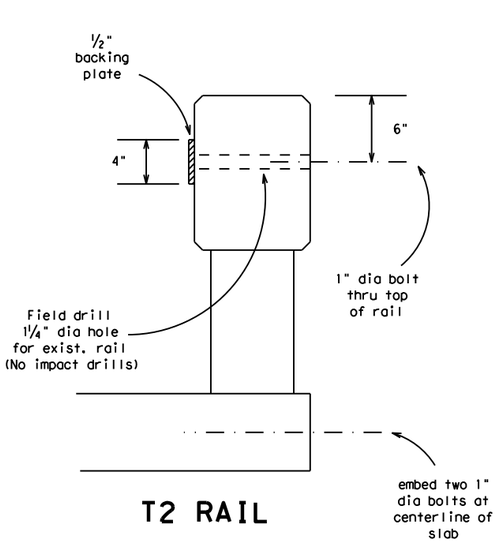
BACKING PLATE DETAIL
(For T2 &T5 Rail)



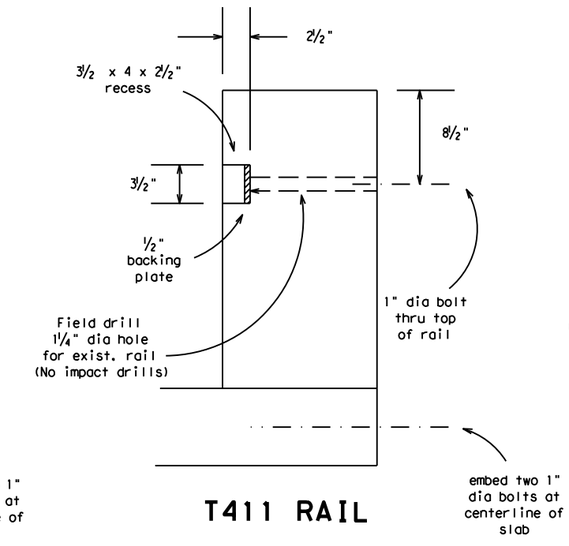
TAPERED SPACER
(For T5 Rail)



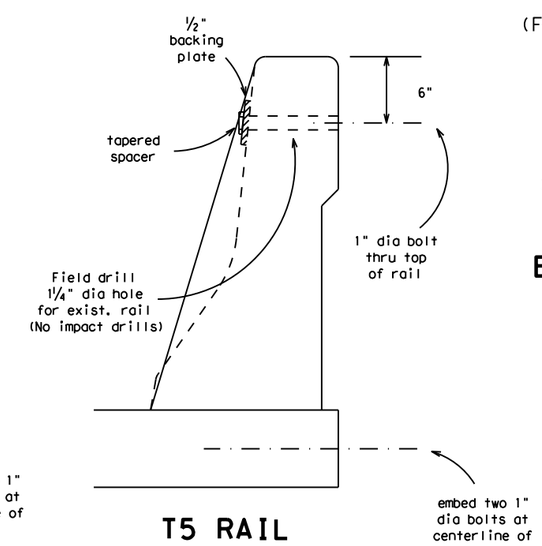
BACKING PLATE DETAIL
(For T411 Rail)



T2 RAIL



T411 RAIL



T5 RAIL

GENERAL NOTES:

Design conforms to 1994 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals and Interim Specifications thereto. Design Wind Speed equals 70 mph plus 1.3 gust factor.

Material for pipe shall be ASTM A53 Gr B, or A501. Saddle clamps and base plates shall conform to Special Specification A36M55 or ASTM M193B7 or A687. Nuts for anchor bolt shall comform to ASTM A563 Grade D or better. Bolt, nut and washers shall be galvanized in accordance with specifications.

Bottom anchor bolts for pipe attached to the concrete slab shall be placed using an adhesive doweling system approved by the engineer. Bottom anchor bolts shall have an allowable capacity of 36 kips in tension and 20 kips in shear. Installation of the bottom anchor bolts, including hole depth and diameter, shall be in accordance with the manufacturers' recommendation. If required by the engineer, 3 of the first 10 anchor bolts, and 5% of the remaining anchor bolts shall be tested to 70% of minimum specified yield. The contractor shall provide a suitable ram, pump, pressure gauge and reaction system.

Saddle clamp connection bolts shall comform to ASTM A325 or A449. Bolts, washers and nuts shall be galvanized in accordance with specifications.

Contractor shall verify applicable field dimensions before fabrication.

Core drilling shall be permitted to obtain the hole diameter and recess on existing rails. Percission drilling is not permitted. Patch if spall occors.

For Type 411 Rail, the roadside sign can only be erected by attaching to the pilaster.

NOTE:

Pipe mounting supports for the sign panel shall refer to SMD(Slip-1), (Slip-2) and (Slip-3). The diameter of "B" support as shown on these standards shall be 2 1/2 inches.

PHARR DISTRICT
STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION

SIGN MOUNTING DETAILS-RAIL MOUNTINGS

SMD (RM) -98

DN: GB	CK: DTN	DW: DN	CK: DW	NEG NO.:

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
12-09	PHARR	6		264

COUNTY	CONTROL	SECTION	JOB	HIGHWAY
HIDALGO, ETC.	6273	50	001	IH-2,ETC

OMIT

TEXAS DEPARTMENT OF TRANSPORTATION

IH-2

LARGE SIGN PROJECT

DRAWING	DATE	FED.RD. DIV.NO.	STATE	FEDERAL PROJECT NO.			SHEET NO.
ORTGINAL	SEP. 2020		TEXAS				265
STATE DIST.NO.	COUNTY		CONTROL NO.	SECTION NO.	JOB NO.		HIGHWAY NO.
PHARR	HIDALGO, ETC.		6353	00	001		IH-2, ETC.

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

DATE:
FILE:

NOTE: Structures north of ice line to be designed for ice.

ZONE 2
(90 MPH WIND)

ZONE 3
(80 MPH WIND)

ZONE 4
(70 MPH WIND)

ICE LINE

ZONE 4
(70 MPH WIND)

ICE LINE

ZONE 3
(80 MPH WIND)

ZONE 1
(100 MPH WIND)

LEGEND

ZONE 1 - = (100 MPH WIND)
ZONE 2 - = (90 MPH WIND)
ZONE 3 - = (80 MPH WIND)
ZONE 4 - = (70 MPH WIND)
= (ICE LINE)
= (DISTRICT LINES)

WIND VELOCITY & ICE ZONES FOR APPLICABLE OVERHEAD SIGN SUPPORTS, HIGH MAST POLES, AND TRAFFIC SIGNAL POLES

Based on 50 Year Mean Recurrence Interval of Fastest Mile Wind Velocity at 33 feet height.

THIS SHEET TO BE INCLUDED IN ALL P.S.&E. PACKAGES CONTAINING ONE OR MORE OF THE APPLICABLE STANDARD SHEETS LISTED HEREON

APPLICABLE STANDARDS SHEETS

OVERHEAD SIGN BRIDGE STANDARDS:

OSB-SE
OSB-Z#
OSB-Z#1
HOSB-Z#
HOSB-Z1L
HOSB-Z#1
OSBT
OSBC
OSBC-SC-Z#
OSBS-SC
OSB-FD
OSB-FD-SC

CANTILEVER OVERHEAD SIGN SUPPORT STANDARDS:

COSS-SE
COSS-Z#-10
HCOSS-Z#-10
COSS-Z21-10
COSS-Z#&Z#1-10
COSSD
COSSF
COSS-FD

Note: # = Wind Zone number 1, 2, 3 or 4

HIGH MAST ILLUMINATION POLE STANDARDS:

HMIP-98
HMIF-98

WALKWAYS AND BRACKETS STANDARDS:

SWW
SB(SWL-1)

TRAFFIC SIGNAL POLE STANDARDS:

SP-80
SP-100
SMA-80
SMA-100
DMA-80
DMA-100
MA-C
MAC(ILSN)
MAD-D
TS-FD
LUM-A
CFA
LMA
TS-C
MA-DPD

FOR HARRIS CO. ONLY
Zone line is just North of US 90, around on the North, West and South sides of IH 610 and down the West side of SH 288.

FOR JACKSON CO. ONLY
Zone line is just North of SH 616.

Texas Department of Transportation

Traffic Operations Division Standard

WIND VELOCITY AND ICE ZONES

WV & IZ-14

FILE: windice.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT April 1996	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	IH-2, ETC.
8-14-Added list of applicable standards, restricting use to structures designed for Fastest Mile wind speeds.	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		266

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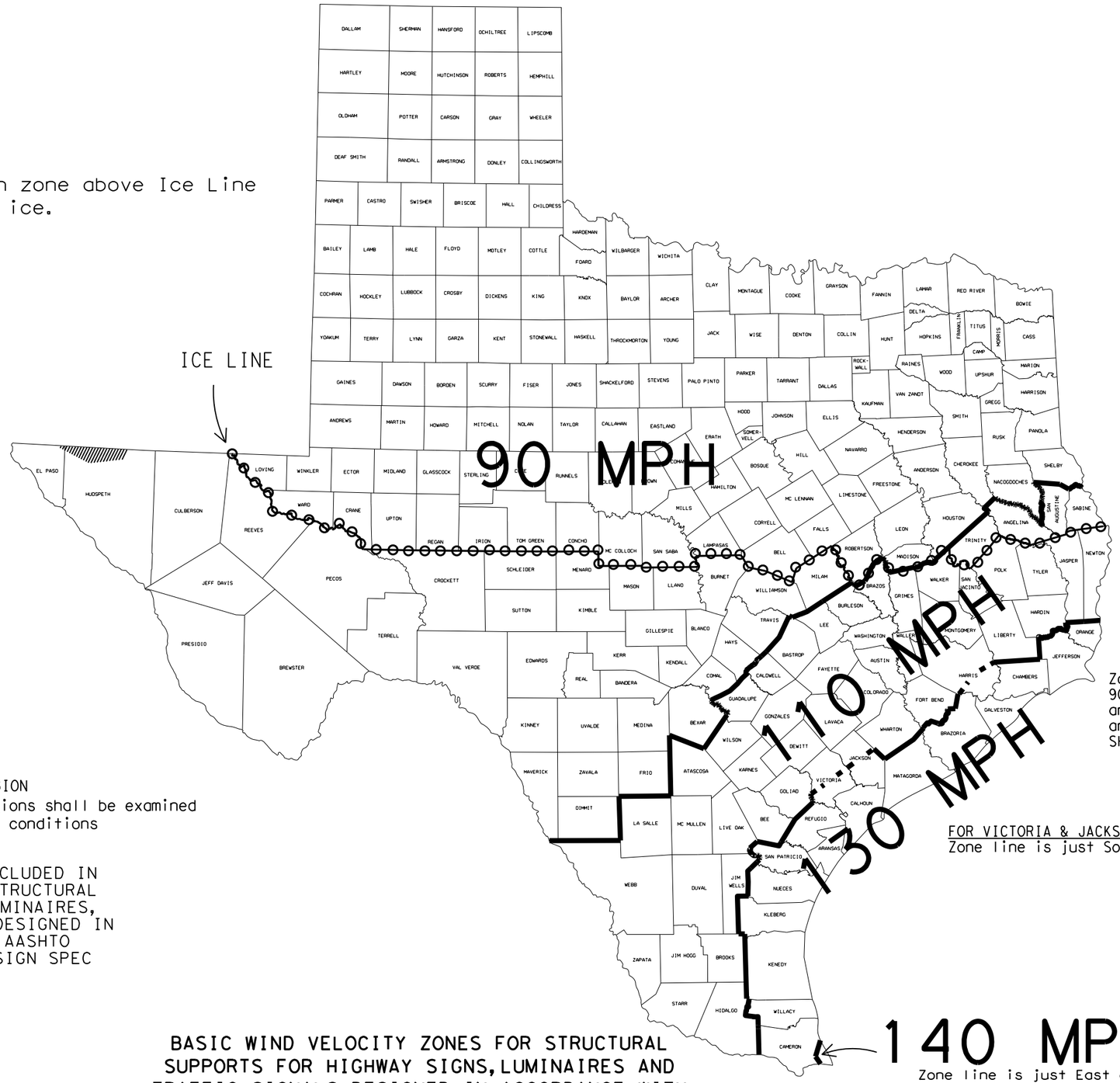
DATE:
FILE:

NOTE: Structures in zone above Ice Line to be designed for ice.



SPECIAL WIND REGION
Special wind regions shall be examined for unusual wind conditions

THIS SHEET IS TO BE INCLUDED IN ALL P.S.&E.'s HAVING STRUCTURAL SUPPORTS FOR SIGNS, LUMINAIRES, AND/OR TRAFFIC SIGNALS DESIGNED IN ACCORDANCE WITH THE AASHTO 2001 THRU 2013 LTS DESIGN SPEC

FOR HARRIS CO. ONLY
Zone line is just North of US 90, around on the North, West and South sides of IH 610 and down the West side of SH 288.

FOR VICTORIA & JACKSON COUNTIES ONLY
Zone line is just South of US 59.

140 MPH
Zone line is just East of both CO 1847 & FM 511

BASIC WIND VELOCITY ZONES FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS DESIGNED IN ACCORDANCE WITH THE AASHTO 2001 THRU 2013 LTS DESIGN SPEC

Values are nominal design 3-sec gust wind speeds in mph at 33 ft above ground for Exposure C category. (50-year mean recurrence interval)

NOTE: AASHTO 2001 THRU 2013 LTS DESIGN SPEC =AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 4th thru 6th Edition

Texas Department of Transportation

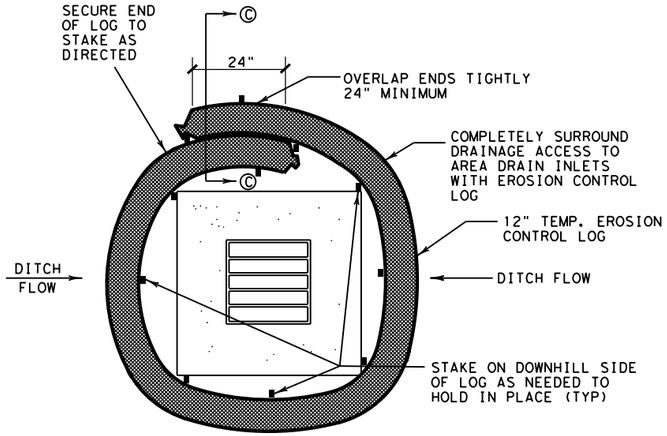
Traffic Operations Division Standard

WIND VELOCITY AND ICE ZONES (AASHTO 2001-2013 LTS DESIGN SPEC)

WV & IZ(LTS2013)-14

FILE:	its2013.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
© TxDOT	August 2014	CONT	SECT	JOB	HIGHWAY
REVISIONS		6353	00	001	IH-2, ETC.
		DIST	COUNTY		SHEET NO.
		21	HIDALGO, ETC.		267

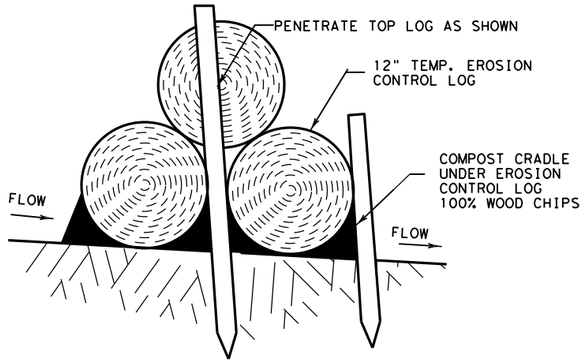
30B



DROP INLET SEDIMENT TRAP

NTS

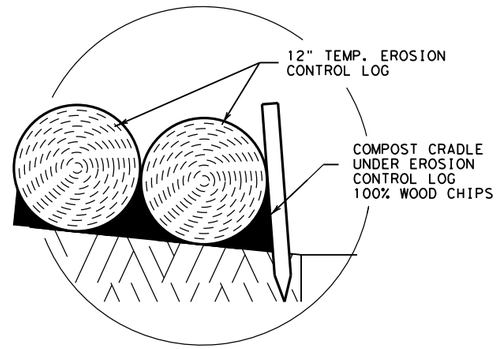
DI-ST



SECTION A-A

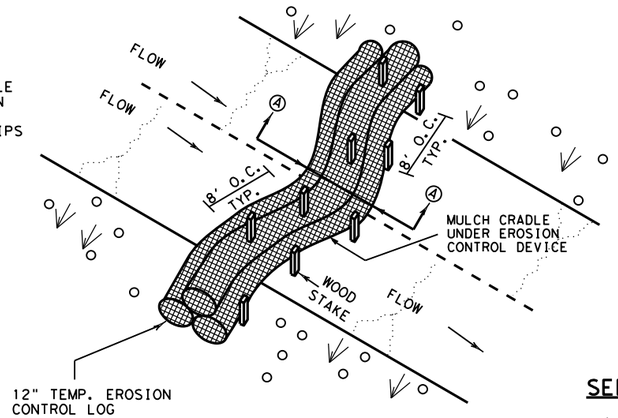
DITCH LINE SEDIMENT TRAP A-A

DL-ST



SECTION C-C

OVERLAP WITH COMPOST CRADLE



DITCH LINE SEDIMENT TRAP

DL-ST

PLANS SHEET LEGEND

DI-ST — DROP INLET SEDIMENT TRAP

DL-ST — DITCH LINE SEDIMENT TRAP

BOCI-ST — BACK OF CURB INLET SEDIMENT TRAP

ROW-ST — RIGHT OF WAY SEDIMENT TRAP

CI-ST — CURB INLET SEDIMENT TRAP

SEDIMENT BASIN & TRAP USAGE GUIDELINES

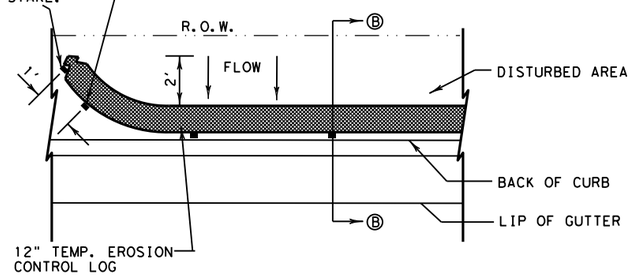
A sediment trap may be used to precipitate sediment out of runoff draining from an unstabilized area.

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:

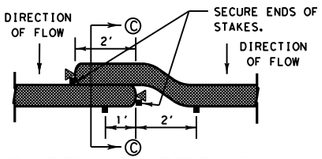
1. Immediately preceding drain inlets
2. Just before the drainage enters a water course
3. Just before the drainage leaves the right of way
4. Just before the drainage leaves the construction limits where drainage flows away from the project

The trap should be cleaned when the capacity has been reduced by ½ or the sediment has accumulated to a depth of 1', whichever is less. Cleaning and removal of accumulated sediment deposits is incidental and will not be paid for seperately.



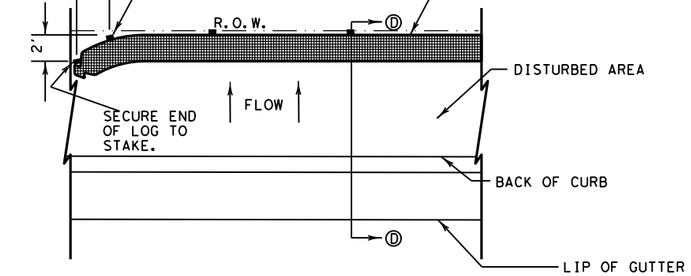
PLAN VIEW

NTS



OVERLAP DETAIL PLAN VIEW

NTS

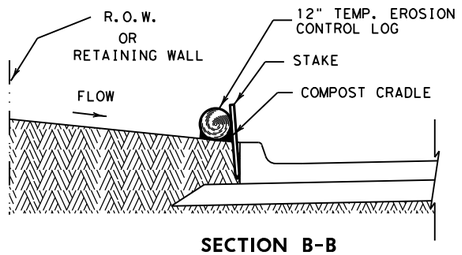


PLAN VIEW

NTS

GENERAL NOTES

1. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED. MAXIMUM LENGTH OF LOGS SHALL BE 30' FOR 12" DIAMETER LOGS.
2. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
3. STUFF LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE DENSITY THAT WILL HOLD SHAPE WITHOUT EXCESSIVE DEFORMATION.
4. STAKES SHALL BE 2" X 2" WOOD 4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG.
5. COMPOST CRADLE MATERIAL IS INCIDENTAL AND WILL NOT BE PAID FOR SEPARATELY.

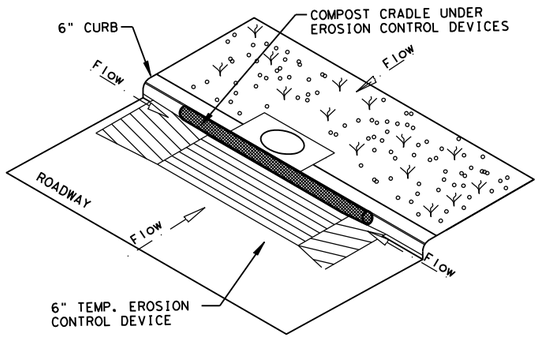


SECTION B-B

BACK OF CURB INLET SEDIMENT TRAP

NTS

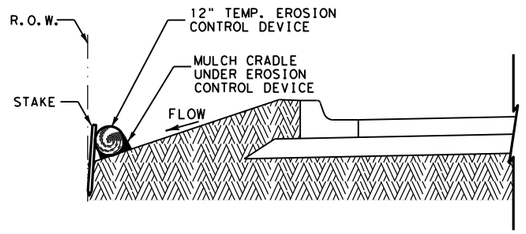
BOCI-ST



CURB INLET SEDIMENT TRAP

NTS

CI-ST



SECTION D-D

RIGHT-OF-WAY SEDIMENT TRAP

NTS

ROW-ST

PHARR DISTRICT STANDARD

Texas Department of Transportation

TEMPORARY EROSION CONTROL LOGS TECL-17 (PHR)

FED.RD. DIV.NO.	PROJECT NO.		HIGHWAY NO.
6			IH-2, ETC.
STATE	DISTRICT	COUNTY	SHEET NO.
TEXAS	PHARR	HIDALGO, ETC.	268
CONTROL	SECTION	JOB	
6353	00	001	

LEVELS DISPLAYED

1	2	3	4	5	6	7	8	9	10	11	21	31	41	51	61	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
49	50	51	52	53	54	55	56	57	58	59	60	61	62	63		

During the planning phase of project development, the following Environmental Permits, Issues and Commitments have been developed during coordination with resource agencies, local governmental entities and the general public. Any change orders and/or deviations from the final design must be reported to the Engineer prior to the commencement of construction activities as additional environmental clearances may be required.

I. Clean Water Act, Section 402; Stormwater Pollution Prevention

Action Items Required : ☐ No Action Required

1. ☒ The contractor must implement the SW3P by installing Best Management Practices (BMPs) as indicated in the construction plans and maintained appropriately throughout construction. BMPs must be in place prior to the start of construction. The SW3P may need to be revised as necessary as construction progresses.

2. ☒ For all construction PSL's off the ROW, the contractor must certify compliance with all applicable laws, rules and regulations pertaining to the preservation of cultural resources, natural resources and the environment.

3. ☒ Based on the acreage of impact, select the appropriate box below:

   ☒ This project will disturb less than 1 acre of soil and is not part of a larger common plan of development; therefore, a NOI and TPDES Site Notice are not required for this project.

   or

   ☐ This project will disturb equal to or more than 1 acre of soil but less than 5 acres; therefore a NOI is not required but a TPDES Site Notice is required. The Construction Site Notice (CSN) is required to be posted at the construction site in a publicly accessible location for review by the public, TCEQ, EPA and other Inspectors.

   or

   ☐ This project will disturb equal to or more than 5 acres of soil and will require a NOI and TPDES Site Notice. The NOI and Site Notice are required to be posted at the construction site in a publicly accessible location.

4. ☒ Need to address MS4 requirements (Cameron & Hidalgo Counties only) ☐ MS4 requirements not needed

II. Clean Water Act, Sections 401 and 404 Compliance

Action Items Rquired : ☐ No Action Required

1. ☒ Filling, dredging or excavating in any water bodies, rivers, creeks, streams, wetlands or wet areas is prohibited unless specified in the USACE permit and approved by the Engineer. The contractor shall adhere to all agreements, mitigation plans, and BMPs required by the NWP as regulated by the USACE.

   The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

   ☒ No Permit Required

   ☐ Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)

   ☐ Nationwide Permit 14 - PCN Required (1/10th to <1/2 acre, 1/3 in tidal waters)

   ☐ Individual 404 Permit Required

   ☐ Other Nationwide Permit Required: NWP#_____

2. ☒ The contractor is responsible for obtaining new or revised Section 404 permit(s) for Contractor initiated changes in construction methods that change Impacts To Waters Of The U.S., including wetlands. The Contractor will ensure that the water quality of the State will be maintained and not degraded.

3. ☒ Best Management Practices for applicable Section 401 General Conditions:

General Condition 12 - Categories I and II BMPs required

Category I (Erosion Control)

☐ Temporary Vegetation	☐ Interceptor Swale	☐ Mulch Filter Berms and/or Socks
☐ Blankets, Matting	☐ Diversion Dike	☒ Compost Filter Berms and/or Socks
☐ Mulch	☐ Erosion Control Compost	☐ Compost Blankets
☐ Sodding		

Category II (Sedimentation Control)

☐ Silt Fence	☐ Hay (Straw) Bale Dike	☐ Mulch Filter Berms and/or Socks
☐ Rock Berm	☐ Brush Berms	☒ Compost Filter Berms and/or Socks
☐ Triangular Filter Dike	☐ Sediment Basins	☐ Stone Outlet Sediment Traps
☐ Sand Bag Berm	☐ Erosion Control Compost	

General Condition 21 - Category III BMPs required

Category III (Post-Construction TSS Control)

☐ Vegetative Filter Strips	☐ Wet Basins	☐ Mulch Filter Berms and/or Socks
☐ Retention/Irrigation	☐ Grassy Swales	☒ Compost Filter Berms and/or Socks
☐ Extended Detention Basin	☐ Vegetation-Lined Ditches	☐ Sand Filter Systems
☐ Constructed Wetlands	☐ Erosion Control Compost	☐ Sedimentation Chambers

II. Clean Water Act, Sections 401 and 404 Compliance - Continued:

4. ☒ The Contractor's designated and qualified Contractor Responsible Person Environmental (CRPe) will monitor the project site daily to ensue compliance with SW3P and TPDES General Permit TXR 150000. Daily Monitoring Reports shall be provided to TxDOT within 48 hours, in accordance with Item 506.3.1.

5. ☐ Other Project Specific Actions:

III. Cultural Resources

Action Items Required : ☐ No Action Required

1. ☒ Refer to the 2014 TxDOT Standard Specifications For Construction And Maintenance Of Highways, Streets, And Bridges, Item 7.7.1., 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 immediate area and contact the Engineer immediately.

2. ☐ Other Project Specific Actions:

IV. Vegetation Resources

Action Items Required : ☐ No Action Required

1. ☒ In accordance with the 2014 TxDOT Standard Specifications; Item 164 - Seeding For Erosion Control; provide and install temporary or permanent seeding for erosion control as shown on the plans or as directed by the Engineer for all seeding and replanting of right of way where possible. (Required for Urban Settings)

2. ☒ In accordance with Executive Order 13112 on invasive species and the Executive Memorandum on Beneficial Landscaping, native species of plants shall be used for all seeding and replanting of right of way where possible for rural roadways. (Required for Rural Settings)

3. ☒ Preserve vegetation where possible throughout the project and minimize clearing, grubbing and excavation within stream banks, bed and approach sections.

4. ☐ Other Project Specific Actions:

Pharr District Contact No. 956-702-6100 Revised 01/30/2017

List of Abbreviations

BMP: Best Management Practice	NWP: Nationwide Permit
CGP: Construction General Permit	PCN: Pre-Construction Notification
CRPe: Contractor Responsible Person Environmental	PSL: Project Specific Location
DSHS: Texas Department of State Health Services	SPCC: Spill Prevention Control and Countermeasure
FEMA: Federal Emergency Management Agency	SW3P: Storm Water Pollution Prevention Plan
FHWA: Federal Highway Administration	TCEQ: Texas Commission on Environmental Quality
MOA: Memorandum of Agreement	THC: Texas Historical Commission
MOU: Memorandum of Understanding	TPDES: Texas Pollutant Discharge Elimination System
MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
MSAT: Mobile Source Air Toxic	TxDOT: Texas Department of Transportation
MBTA: Migratory Bird Treaty Act	T&E: Threatened and Endangered Species
NOI: Notice of Intent	USACE: U.S. Army Corp of Engineers
NOT: Notice of Termination	USFWS: U.S. Fish and Wildlife Service

Texas Department of Transportation

PHARR DISTRICT

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS (EPIC)

SHEET 1 OF 2

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6			IH-2, ETC.
STATE	DISTRICT	COUNTY	
TEXAS	PHR	HIDALGO, ETC.	SHEET NO.
CONTROL	SECTION	JOB	
6353	00	001	269

Date Printed: X-X-XX

V. Federal Listed, and Proposed Threatened and Endangered Species, Critical Habitat, State Listed Species, Candidate Species and Migratory Birds

Action Items Required : ☐ No Action Required

1. ☒ Under the Migratory Bird Treaty Act (MBTA) of 1918, codified at 16 U.S.C. § 703-712 and as enforced by the USFWS, the proposed construction work will not remove active nests from bridges, trees, ground and other structures during migratory bird nesting season, (February 1st. through October 1st.). If the Contractor needs to perform work within the right of way during nesting season, a qualified Biologist shall conduct a survey to determine if active nests are present. If present, the Contractor shall maintain a buffer zone around the nest(s) as directed by the Biologist. The buffer zone will be protected from clearing and disturbance until such time as the Biologist has determined that the nest(s) is no longer active. Prior to the nesting season, existing bridges and culverts should be treated against migratory bird nesting by utilizing Bird Exclusion Methods. Bird Exclusion Methods should be monitored and maintained throughout the nesting season. Refer to Standard Bird Exclusion Details.

2. ☒ There is the potential for the presence of state-listed species & species of concern in the project area and state law prohibits the taking (incidental or otherwise) of state-listed species. Taking is defined as the collection, hooking, hunting, netting, shooting, or share by any means or devices. If any listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately.

3. ☒ Other Project Specific Actions:

- South Texas siren (Large Form)
- Black-spotted newt
- Wright's trichocoronis
- Texas ayenia
- Runyon's water-willow
- St. Joseph's staff
- Texas stonecrop
- Vasey's adelia
- Mexican mud-plantain
- Western hog-nosed skunk
- Green Island echeandia
- Bailey's ballmoss

VI. Hazardous Materials on Contamination Issues

Action Items Required : ☐ No Action Required

General (applies to all projects):

Comply with the Hazard Communication Act (HCA) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the HCA.

Maintain an adequate supply of on-site spill response materials as indicated in the MSDS. In the event of a spill, take immediate action to mitigate the spill as indicated in the MSDS and in accordance with safe work practices. Contact the TxDOT Pharr District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

- Dead or distressed vegetation (identified as not normal)
- Trash piles, drums, canisters, barrels, etc.
- Undesirable smells or odors
- Evidence of leaching or seepage of contaminant substances

Any other evidence indicating possible hazardous materials or contamination discovered on site.

1. ☒ If potentially hazardous material and/or contaminated media (i.e.: soil, groundwater, surface water, sediment, building materials) are unexpectedly encountered during construction, assure that such materials and contamination are handled according to applicable federal and state regulations, cease work in the immediate area and contact the Engineer immediately.

VI. Hazardous Materials on Contamination Issues - Continued:

2. Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

☐ Yes ☒ No

If "No", then no further action required.
If "Yes", then TxDOT is responsible for completing an asbestos assessment/inspection.

3. Are the results of the asbestos inspection positive (is asbestos present)?

☐ Yes ☐ No

If "Yes", then TxDOT must retain a Texas Department of State Health Services (DSHS) licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled abatement activities and/or demolition.

If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

4. ☒ The Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and an Asbestos Consultant in order to minimize construction delays and subsequent claims.

VII. Other Environmental Issues

Action Items Required : ☐ No Action Required

1. ☒ Noise

Contractor shall make every reasonable effort to minimize construction noise through abatement measures such as work hour controls and proper maintenance of equipment mufflers.

2. ☒ Air

Contractor shall practice common dust control techniques such as surface chemical treatment or watering of unpaved road surfaces and vehicle speed reduction shall be implemented to minimize and prevent airborne dust during construction.

Contractor should minimize MSAT by utilizing measures to encourage use of EPA required cleaner diesel fuels, limits on idling, increase use of cleaner burning diesel engines, and other emission limitation techniques, as appropriate.

Pharr District Contact No. 956-702-6100 Revised 01/30/2017

List of Abbreviations

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MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
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Texas Department of Transportation

PHARR DISTRICT

ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS

(EPIC)

FED. RD. DIV. NO.	PROJECT NO.		HIGHWAY NO.
6			IH-2, ETC.
STATE	DISTRICT	COUNTY	
TEXAS	PHR	HIDALGO, ETC.	SHEET NO.
CONTROL	SECTION	JOB	
6353	00	001	270

Date Printed: X-X-XX

SITE DESCRIPTION

PROJECT LIMITS:
(Same as stated on the Title Sheet)

PROJECT SITE MAPS:
**Project Location Map: Title Sheet (Sheet 1)*

PROJECT DESCRIPTION:
INSTALLATION, REMOVAL AND RELOCATION OF LARGE & SMALL GUIDE SIGNS.

MAJOR SOIL DISTURBING ACTIVITIES:
INSTALLATION OF SIGN POSTS

TOTAL PROJECT AREA: *< 1 ACRE*

TOTAL AREA TO BE DISTURBED: *< 1 ACRE*

WEIGHTED RUNOFF COEFFICIENT:
Before Construction: N/A
After Construction: N/A

EXISTING CONDITION OF SOIL & VEGETATIVE
area of existing grass/dirt.

NAME OF RECEIVING WATERS:
ditches and curb and gutters that go to an outfall

ENDANGERED SPECIES, DESIGNATED CRITICAL HABITAT AND HISTORICAL PROPERTY:

A. No Endangered Species. Designated Critical Habitat or Historic Property has been found on this project site.

or

B. (Statement of What) has been found on this project site. (These stated name/names of found species and/or conditions must be same as stated within the project EPIC sheet, Sections - III, IV & V if any such is determined to exist within the limits of the project and/or adjacent properties and surrounding areas.)

Note: Designer shall supply statement A. or B. only.

The documentation satisfying TPDES Construction General Permit eligibility pertaining to the existence or of any protective action taken with regards to endangered species or designated critical habitat or historical property in this project area is contained in the project's Environmental Impact Study and can be viewed under the State Open Records Act at the address shown below:

TEXAS DEPARTMENT OF TRANSPORTATION
PHARR DISTRICT HEADQUARTERS
ATTN: ENVIRONMENTAL COORDINATOR
600 W. EXPRESSWAY 83
PHARR, TX 78577
PHONE: 956-702-6100

EROSION AND SEDIMENT CONTROLS

SOIL STABILIZATION PRACTICES: (Select T = Temporary or P = Permanent, as applicable)

___ TEMPORARY SEEDING
___ MULCHING (Hay or Straw)
___ BUFFER ZONES
___ PLANTING
___ SEEDING
___ SODDING
___ OTHER: (Specify Practice)

___ PRESERVATION OF NATURAL RESOURCES
___ FLEXIBLE CHANNEL LINER
___ RIGID CHANNEL LINER
___ SOIL RETENTION BLANKET
___ COMPOST MANUFACTURED COMPOST
T BIODEGRADABLE EROSION CONTROL SOCKS

STRUCTURAL PRACTICES: (Select T = Temporary or P = Permanent, as applicable)

___ SILT FENCES
T BIODEGRADABLE EROSION CONTROL SOCKS
___ HAY BALES
___ ROCK FILTER DAMS
___ 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
___ PIPE MATTING OR EQUAL AT CONSTRUCTION EXIT
___ CHANNEL LINERS
___ SEDIMENT TRAPS
___ SEDIMENT BASINS
___ STORM INLET SEDIMENT TRAP
___ STONE OUTLET STRUCTURES
___ CURBS AND GUTTERS
___ STORM SEWERS
___ VELOCITY CONTROL DEVICES
___ OTHER: (Specify Practice)

STORM WATER MANAGEMENT: *N/A*

STORM WATER MANAGEMENT ACTIVITIES: (Sequence of Construction)

The order of activities will be as follows:
1.- Install perimeter controls, clear R.O.W. on side where construction will take place, if necessary.
2. Install Proposed large signs including foundations.
3. Remove any drill cuttings and rake and even out remaining sediment.

NON-STORM WATER MANAGEMENT DISCHARGES:
Non-storm water discharges should be filtered, or held in retention basins, before being allowed to mix with storm water. These discharges consist of non-polluted ground water, spring water, foundation and/or footing drain water; and water used for dust control, pavement washing and vehicle wastewater containing no detergents.

OTHER REQUIREMENTS & 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 areas adjacent to creeks and drainage ways shall have priority followed by devices protecting storm sewer inlets.*

INSPECTION: *For areas of the construction site that have not been finally stabilized, area used for storage of materials, structural control measures, and locations where vehicles enter or exit the site, personnel provided by the permittee and familiar with the SW3P must inspect disturbed areas at least once every fourteen (14) calendar days and within twenty-four (24) hours of the end of a storm event 0.5 inches or greater.*

WASTE MATERIALS: *All waste materials will be collected and stored in a securely lidded dumpster. All trash and construction debris from the site will be deposited as necessary at a local dump. No construction waste material will be buried on site.*

HAZARDOUS WASTE (INCLUDING SPILL REPORTING): *At a minimum, any products in the following categories to be hazardous: Paints, Acids for cleaning masonry surfaces, Cleaning Solvents, Asphalt products, Chemical additives for soil stabilization, or Concrete curing compounds and additives. In the event of a spill which may be hazardous, the spill Coordinator should be contacted immediately. Emptying of excess concrete should not be allowed on site. Likewise, washout of concrete trucks should not be performed on site. These discharges are considered non-allowable non-storm water discharges. Concrete trucks should never be allowed to dump into storm drains or sanitary sewers.*

SANITARY WASTE: *All sanitary waste will be collected from the portable units as necessary or as required by local regulation by a licensed sanitary waste management contractor.*

OFFSITE VEHICLE TRACKING: *The Contractor shall be rquired, on a regular basis or as may be directed by the Engineer, to dampen haul roads for dust control, stabilize construction entrances and to remove excess dirt from the roadway.*

MANAGEMENT PRACTICES: *(Example Below - May be used as applicable, revised or expanded):*
1. Disposal areas, stockpiles, and haul roads shall be constructed in a manner that will minimize and control the amount of sediment that may enter receiving waters. Disposal areas shall not be located in any wetland, water body or stream bed.
2. Construction staging areas and vehicle maintenance areas shall be constructed by the Contractor in a manner to minimize the runoff of pollutants.
3. All waterways shall be cleared as soon as practicable of temporary embankment, temporary bridges, matting, falsework, piling, or debris or other obstructions placed during construction operations that are not a part of the finished work.

OTHER: *Contractor shall adhere to the following:*
1. Construction Materials List of materials stored on job site to be provided by Contractor.
2. The project SW3P File shall be located at the project field office or within the Contractor's mobile office at all times and shall contain the N.O.I., CGP, Signature Authorization, Certification/Qualification Statements, Inspection Reports, Required Maps, and the TPDES Permit, Part II. This File to be persented to authorized State and Federal Agents upon request.

STATE OF TEXAS
Raquel Cantu
130317
LICENSED PROFESSIONAL ENGINEER

Raquel Cantu 11.06.2020
Signature of Registrant & Date , P.E.

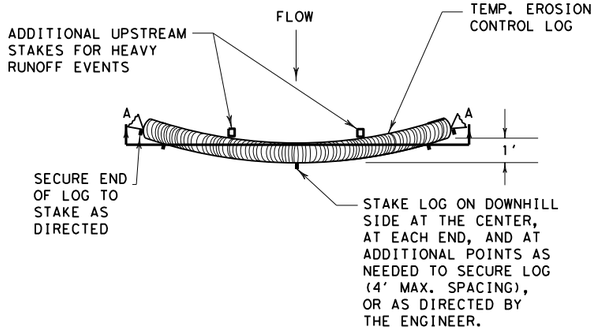
Texas Department of Transportation

TxDOT STORM WATER POLLUTION PREVENTION PLAN (SW3P)

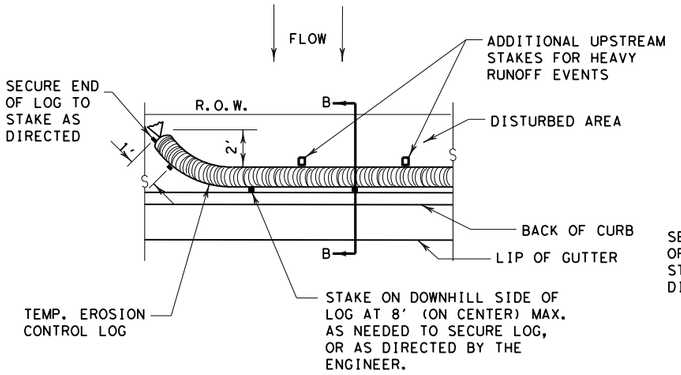
REV. 2-20-14 SW3P.DGN

FED.RD. DIV.NO.	PROJECT NO.		SHEET NO.
6			271
STATE	DIST.	COUNTY	
TEXAS	PHARR	HIDALGO	
CONT.	SECT.	JOB	HIGHWAY NO.
6353	00	001	IH 2, ETC.

DATE:
FILE:



PLAN VIEW



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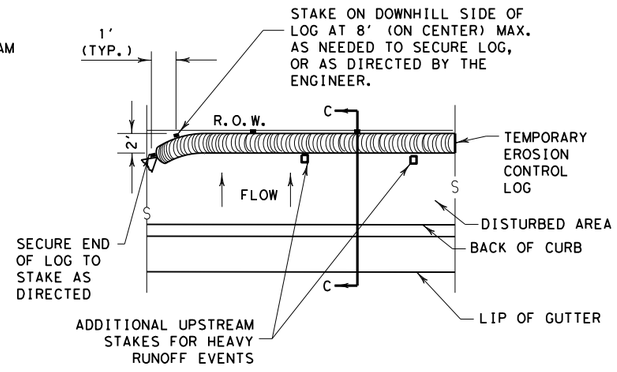

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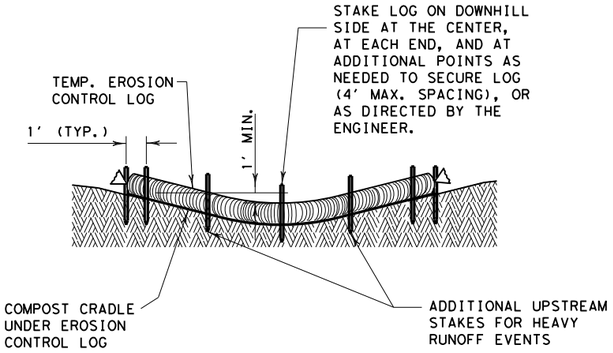
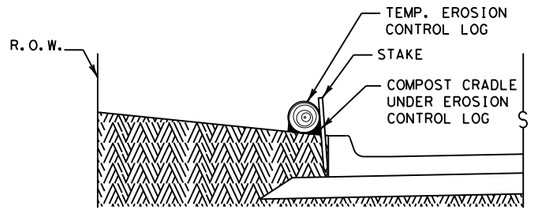


SECTION A-A

EROSION CONTROL LOG DAM

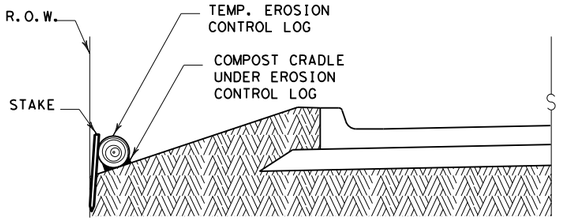
CL-D



SECTION B-B

EROSION CONTROL LOG AT BACK OF CURB

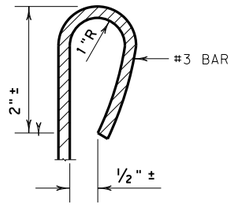
CL-BOC



SECTION C-C

EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY

CL-ROW



REBAR STAKE DETAIL

LEGEND

- CL-D — EROSION CONTROL LOG DAM
- CL-BOC — EROSION CONTROL LOG AT BACK OF CURB
- CL-ROW — EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY
- CL-SST — EROSION CONTROL LOGS ON SLOPES STAKE AND TRENCHING ANCHORING
- CL-SSL — EROSION CONTROL LOGS ON SLOPES STAKE AND LASHING ANCHORING
- CL-DI — EROSION CONTROL LOG AT DROP INLET
- CL-CI — EROSION CONTROL LOG AT CURB INLET
- CL-GI — EROSION CONTROL LOG AT CURB & GRATE INLET

GENERAL NOTES:

1. EROSION CONTROL LOGS SHALL BE INSTALLED IN ACCORDANCE WITH MANFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER.
2. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED.
3. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
4. FILL LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE THE MINIMUM COMPACTED DIAMETER SPECIFIED IN THE PLANS WITHOUT EXCESSIVE DEFORMATION.
5. STAKES SHALL BE 2" X 2" WOOD OR #3 REBAR, 2'-4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG, OR AS DIRECTED BY THE ENGINEER.
6. DO NOT PLACE STAKES THROUGH CONTAINMENT MESH.
7. COMPOST CRADLE MATERIAL IS INCIDENTAL & WILL NOT BE PAID FOR SEPARATELY.
8. SANDBAGS USED AS ANCHORS SHALL BE PLACED ON TOP OF LOGS & SHALL BE OF SUFFICIENT SIZE TO HOLD LOGS IN PLACE.
9. TURN THE ENDS OF EACH ROW OF LOGS UPSLOPE TO PREVENT RUNOFF FROM FLOWING AROUND THE LOG.
10. FOR HEAVY RUNOFF EVENTS, ADDITIONAL UPSTREAM STAKES MAY BE NECESSARY TO KEEP LOG FROM FOLDING IN ON ITSELF.

SEDIMENT BASIN & TRAP USAGE GUIDELINES

An erosion control log sediment trap may be used to filter sediment out of runoff draining from an unstabilized area.

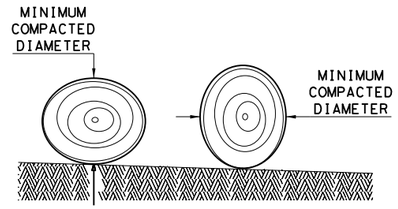
Log Traps: The drainage area for a sediment trap should not exceed 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).

Control logs should be placed in the following locations:

1. Within drainage ditches spaced as needed or min. 500' on center
2. Immediately preceding ditch inlets or drain inlets
3. Just before the drainage enters a water course
4. Just before the drainage leaves the right of way
5. Just before the drainage leaves the construction limits where drainage flows away from the project.

The logs should be cleaned when the sediment has accumulated to a depth of 1/2 the log diameter.

Cleaning and removal of accumulated sediment deposits is incidental and will not be paid for separately.



DIAMETER MEASUREMENTS OF EROSION CONTROL LOGS SPECIFIED IN PLANS

Texas Department of Transportation

Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

EROSION CONTROL LOG

EC(9)-16

FILE: ec916	DN: TxDOT	CK: KM	DW: LS/PT	CK: LS	
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY	
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	21	HIDALGO, ETC.		272	

DATE:
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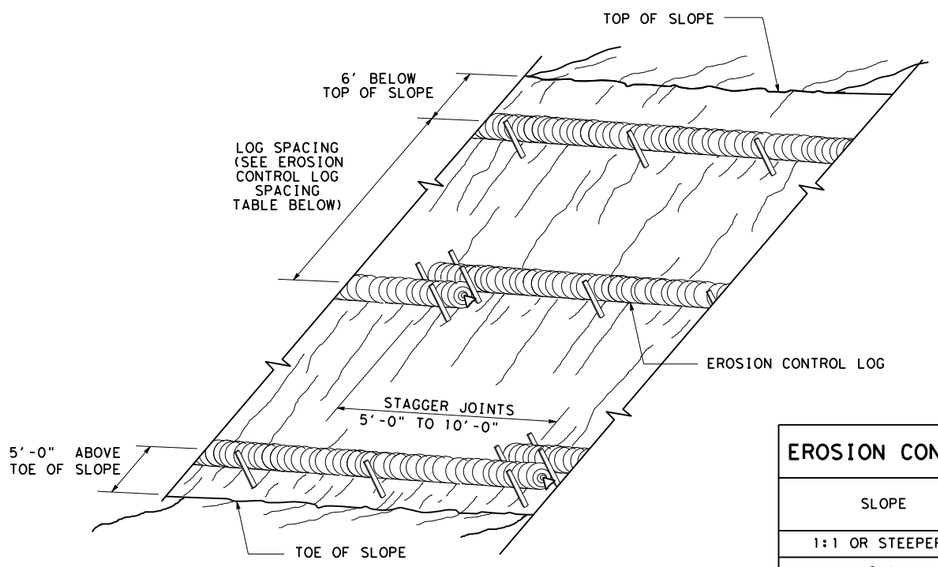
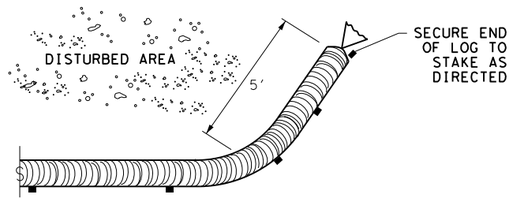


EROSION CONTROL LOGS ON SLOPES
STAKE AND TRENCHING ANCHORING

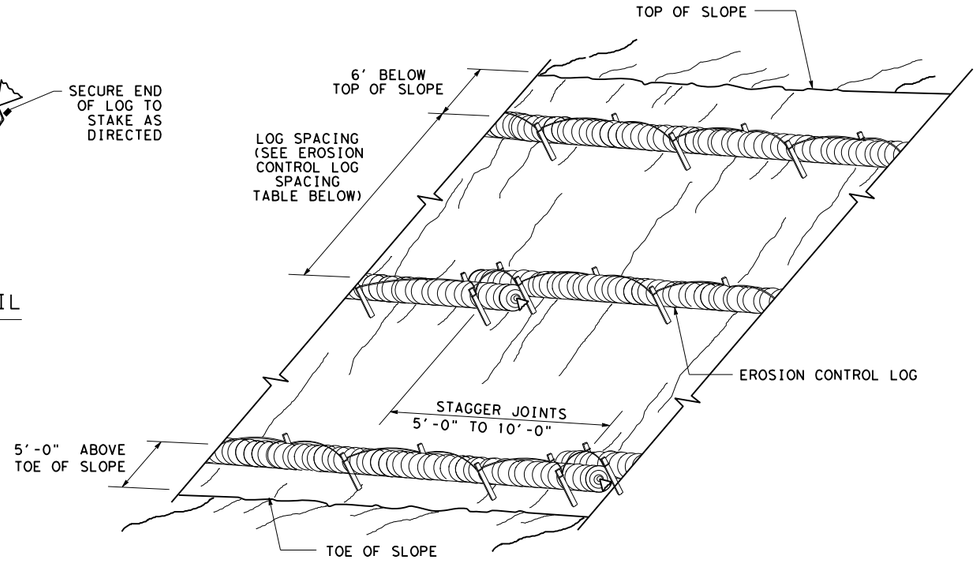
CL-SST



END SECTION RAP DETAIL

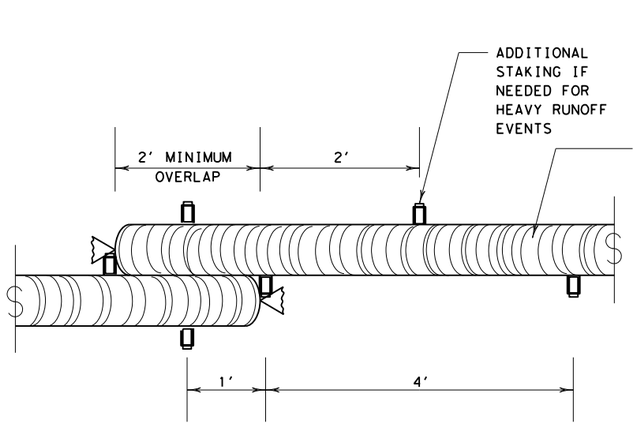
EROSION CONTROL LOG SPACING TABLE				
SLOPE	LOG DIAMETER			
	6"	8"	12"	18"
1:1 OR STEEPER	5'	10'	15'	20'
2:1	10'	20'	30'	40'
3:1	15'	30'	45'	60'
4:1 OR FLATTER	20'	40'	60'	80'

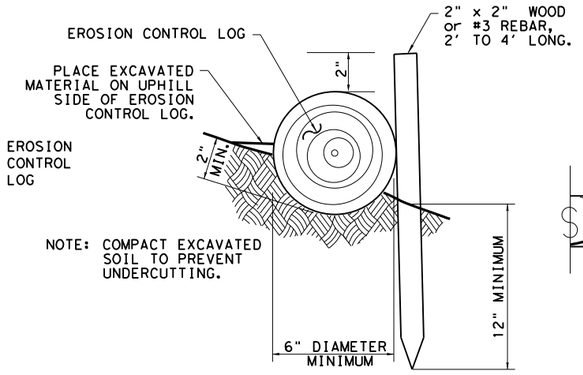
* ADJUSTMENTS CAN BE MADE FOR SOIL TYPE:
SOFT, LOAMY SOILS-ADJUST ROWS CLOSER TOGETHER;
HARD, ROCKY SOILS- ADJUST ROWS FARTHER APART



EROSION CONTROL LOGS ON SLOPES
STAKE AND LASHING ANCHORING

CL-SSL

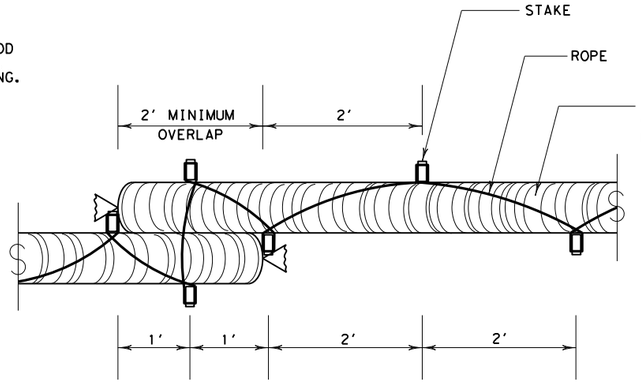


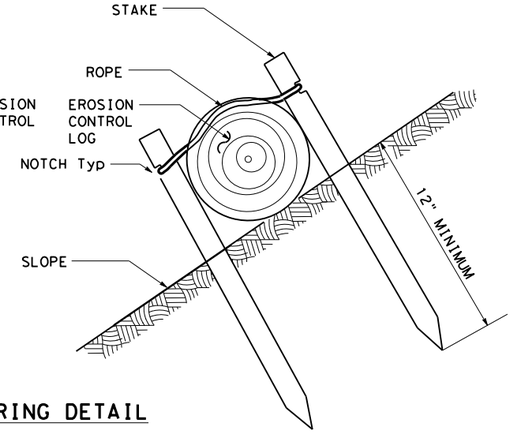


STAKE AND TRENCHING ANCHORING DETAIL

CL-SST

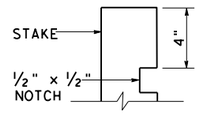
TRENCH DEPTH TABLE	
LOG DIAMETER	DEPTH
6"	2"
8"	3"
12"	4"
18"	5"





STAKE AND LASHING ANCHORING DETAIL

CL-SSL



STAKE NOTCH DETAIL

Texas Department of Transportation

Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES
EROSION CONTROL LOG
EC(9)-16

FILE: ec116	DN: TxDOT	CK: KM	DW: LS/PT	CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	6353
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		273

DATE:
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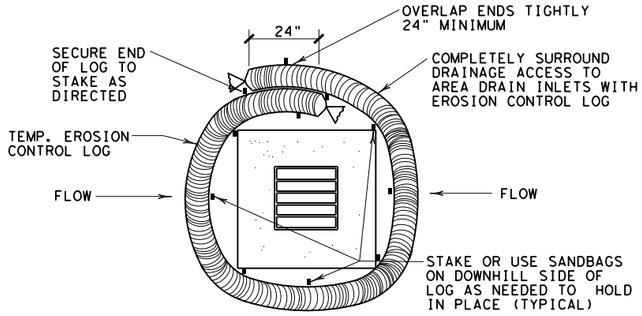
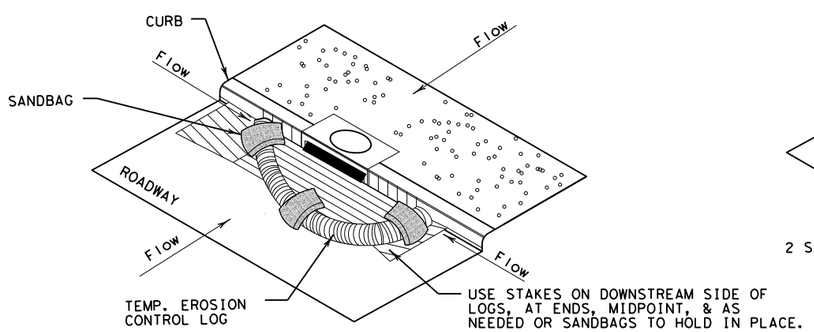


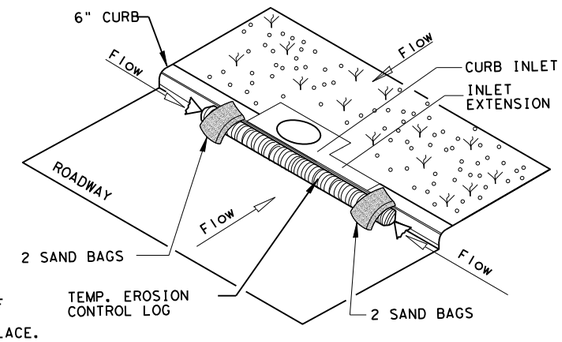
EROSION CONTROL LOG AT DROP INLET

CL-DI



EROSION CONTROL LOG AT CURB INLET

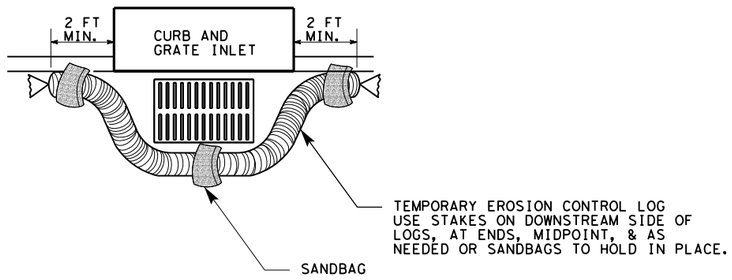
CL-CI



EROSION CONTROL LOG AT CURB INLET

CL-CI

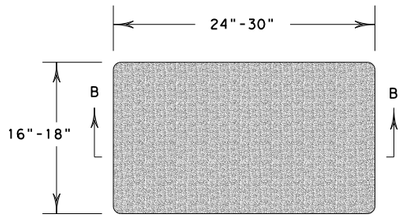
NOTE:
EROSION CONTROL LOGS USED AT CURB INLETS SHOULD ONLY BE USED IF THEY WILL NOT IMPEDE TRAFFIC OR FLOOD THE ROADWAY OR WHEN THE STORM SEWER SYSTEM IS NOT FULLY FUNCTIONAL.



EROSION CONTROL LOG AT CURB & GRADE INLET

CL-GI

SECTION B-B



SANDBAG DETAIL

SHEET 3 OF 3

Texas Department of Transportation

Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

EROSION CONTROL LOG

EC(9)-16

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© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS	6353	00	001	6353
	DIST	COUNTY		SHEET NO.
	21	HIDALGO, ETC.		274