#### **ADDENDUM NO. 1**

Project: 2022 ROAD MAINTENANCE PROJECT

Owner: City of Dripping Springs Texas

Engineer: B. Ryan Bell, P.E. – Project Engineer

Date: October 3, 2022



Bidders are hereby notified of the following revisions and/or clarifications to the construction plans, contract documents and specifications. This Addendum forms a part of the Contract and clarifies, corrects, or modifies original Bid Documents.

#### **BEGIN REVISIONS**

#### I. General

All bidder questions must be submitted in writing via email to Chad Gilpin, P.E., City Engineer, CGilpin@cityofdrippingsprings.com no later than 5:00 p.m. on Friday, October 7, 2022.

#### **II. Contract Documents and Specifications:**

#### Section B-1 BID FORM -

REPLACE – Bid form in its entirety with the bid form attached to this addendum.

#### **III. Construction Plan Revisions:**

#### Sheet 1 of 14 – COVERSHEET

REPLACE – Index of sheets with updated index to include additional sign mounting details.

#### Sheet 3 of 14 – SCHEDULE OF QUANTITIES

REPLACE – Quantity table with updated quantities.

#### Sheet 10 of 14 – PAVING DETAILS

REPLACE – Sheet with the attached version.

# Sheet 11 of 14 – SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS SMD(GEN)-08

ADD – New sheet

## <u>Sheet 12 of 14 – SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR</u> SLIPBASE SYSTEM SMD(SLIP-1)-08

ADD – New sheet

Sheet 13 of 14 – SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-2)-08

ADD – New sheet

Sheet 14 of 14 – SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-3)-08

ADD – New sheet

#### **IV. Contractor Questions**

1. QUESTION: When will the NTP be provided to begin work on this project?

<u>RESPONSE</u>: This bid is anticipated for Council approval on November 1, 2022. The NTP is expected to be issued on November 2, 2022.

2. QUESTION: The rate for the Tack Coat is shown on the plans as .20 GAL/SY which is very heavy (this is the rate for a Prime Coat on flex base). According to the HAYS County Specs the TACK COAT shall conform to COA 307S, "Tack Coat" which specifies the following: "The asphaltic material shall be applied on the clean surface by an approved type of self-propelled pressure distributor, so operated as to distribute the tack coat at a rate not to exceed 0.10 gallon per square yard (0.45 liters per square meter) of surface, evenly and smoothly with sufficient pressure to provide proper distribution". This pay item is bid by the SY so there will not be a price adjustment for rate adjustments (FYI), we would prefer to see it by the gallon in accordance with TxDOT Specifications so the City will only pay for what is used on the project. Also note, that Tack Coat will need to be applied to the entire area of the overlay which is 3,208 SY (x.10 rate = 321 gallons), Pay Item 4 on the bid form is showing 2,568 SY. Can this be reviewed and corrected?

<u>RESPONSE</u>: The tack coat rate has been changed to 0.1 GAL/SY in the plans. Quantities have been updated to be shown in units of gallons instead of square yards. The tack coat quantity has been updated to be applied to the entire area of the overlay.

3. QUESTION: We are comparing TxDOT Item 340 to Hays County Specifications, please confirm the most current Hays County Specification is dated May 13, 2019 (we obtained this from the Hays County Website: https://hayscountytx.com/departments/transportation-department/standards-specs/).

<u>RESPONSE:</u> We have confirmed that the most current Hays County Specification is dated May 13, 2019.

4. QUESTION: The current HAYS County specification references item TxDOT specification for Item 344 which is a super pave mix design. Is the HMAC specification for this project

Dense Graded Mix (Item 340) or Superpave Mix (Item 344). If you want us to provide asphalt per Item 344, please provide the correct pay items to remedy this conflict.

RESPONSE: The HMAC specification for this project is Dense Graded Mix (Item 340). We have removed the note on the plans which stated "WHERE BOTH HAYS COUNTY AND TXDOT SPECIFICATIONS ARE NAMED IN THE SCHEDULE OF QUANTITIES ABOVE THE DIRECTION PROVIDED BY THE HAYS COUNTY SPECIFICATIONS SHALL SUPERSEDE WHERE IN CONFLICT WITH THE TXDOT SPEC ITEM. WHERE ADDITIONAL INFORMATION PROVIDED BELOW CONFLICTS WITH EITHER THE TXDOT OR HAYS COUNTY SPECIFICATIONS THE INFORMATION BELOW SHALL SUPERSEDE," to avoid confusion.

5. QUESTION: Can you clarify the intent and scope of work for bid Item 1 PREPARING ROW – 12 STA?

<u>RESPONSE</u>: Bid item has been deleted. Please see attached revised bid form.

6. QUESTION: Do you have a detail for Bid Item #9 644-6001 IN SM RD SN SUP&AM TY10BWG(1)SA(P)? Are these for the R3-8 signs shown on 5 of 10 at the intersection of RR 12 & Mercer Street?

<u>RESPONSE:</u> Details have been added to describe bid item 644-6001 IN SM RD SN SUP&AM TY10BWG(1)SA(P). See sheets 11-14.

7. QUESTION: Can you check that the quantity for Pavement Marking Elimination pay items (677) are only for the West side of Mercer Street (from RR 12)? We won't need them on the East side where we are milling?

<u>RESPONSE:</u> The elimination quantities have been updated to only include quantities on the west side of Mercer Street.

8. QUESTION: Do you want the contractor to provide 2 PCMS (Portable Changeable Message Signs) for the project or does the city have any they can dedicate for the project; are PCMS units required in addition to project limit signage?

RESPONSE: No. This will not be necessary.

#### V. Attachments:

This Addendum contains 13 page(s) of attachment(s).

- Project Manual Section B-1 Bid Form (6 Pages)
- Plan Sheet Revisions (7 Pages):
  - o Sheet 1 of 14 COVER SHEET
  - Sheet 3 of 14 SCHEDULE OF QUANTITIES
  - o Sheet 10 of 14 PAVING DETAILS

- o Sheet 11 of 14 SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS SMD(GEN)-08
- o Sheet 12 of 14 SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-1)-08
- o Sheet 13 of 14 SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-2)-08
- o Sheet 14 of 14 SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-3)-08

#### **END REVISIONS**

BIDDERS MUST ACKNOWLEDGE RECEIPT OF THIS ADDENDUM ON THEIR BID PROPOSAL TO HAVE THEIR BIDS RECOGNIZED.

Revisions By:		
B. Ryan Bell, PE	-	
Project Engineer		

Project: 2022 ROAD MAINTENANCE PROJECT

THIS BID IS SUBMITTED TO:

City of Dripping Springs City Hall 511 Mercer St. Dripping Springs, Texas 78620

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Contractor

- 1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
- 2. BIDDER agrees to commence Work under this Contract on a date to be specified in written "Notice to Proceed" of the OWNER and to reach Substantial Completion of the Work within **thirty (30) calendar days** thereafter. BIDDER further agrees to pay, as liquidated damages, the sum for each consecutive working day thereafter as provided in Division C, Section 7 thereafter that Substantial Completion has not been reached as provided in the Agreement.
- 3. BIDDER accepts all of the terms and conditions of the Advertisement, Notice to Bidders and Instructions to Bidders, including without limitation those dealing with the deposition of Bid Security. This Bid will remain subject to acceptance for **60 calendar days** after the day of Bid opening. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within **10 calendar days** after the date of OWNER's Notice of Award.
- 4. In submitting Bid, BIDDER represents, as more fully set forth in the Agreement, that:
  - A. BIDDER has examined copies of all the Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

Addendum No.:_	Addendum #1	Dated: _	10-3-22
Addendum No.:_		Dated:	
Addendum No.:		Dated:	
Addendum No.:		Dated:	
Addendum No.:		Dated:	

B. BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance, or furnishing of the Work.

- D. BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, and studies that pertain to the subsurface or physical conditions at the site or otherwise may affect the cost, progress, performance, or furnishing of the Work as BIDDER considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time, and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, explorations, tests, reports, or similar information or data are or will be required by BIDDER for such purposes.
- E. BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, or similar information or data in respect of said Underground Facilities are or will be required by BIDDER, of the OWNER and/or the ENGINEER, in order to perform and furnish the Work at the Contract Price, within the Contract Time, and in accordance with the other terms and conditions of the Contract Documents.
- F. BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents.
- G. BIDDER has given ENGINEER written notice of all conflicts, errors, or discrepancies that it has discovered in the Contract Documents, and the written resolution thereof by ENGINEER is acceptable to BIDDER.
- H. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation, and is not submitted in conformity with any Agreement or rules of any group, association, organization, or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm, or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other BIDDER or over OWNER.
- 5. The following documents (signed and completed) are attached to and made a condition of this Bid:
  - A. Required Bid Security in the form of a Bid Bond, Cashier's Check, or Certified Check.
  - B. Non-Collusion Affidavit
  - C. Conflict of Interest Statement
  - D. Information From Bidders

RESPECTFULLY SUBMITTED on	, 2022.
By:(Authorized Signature)	Bidder, if the Bidder is an individual Partner, if the Bidder is a Partnership Officer, if the Bidder is a Corporation
(Typed or Printed Name and Title)	
Bidder:	
Bidder: (Name of Company)	
Business Address:	
Telephone No:	
IF Bidder is a Corporation:	
ATTEST	
(Signature of Witness)	(Corporate Seal)
	(State of Incorporation)

#### IF Bidder is a Joint Venture:

Each joint venture must sign a separate copy of this page. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.

BIDDER will complete the Work for the following prices:

Bid					Approx		
ltem	TxDOT Spec	Description of Item with Unit Bid Price in Wr	itten Words	Unit	Qty	Unit Amount	Total Price
	'	D-GR HMA(SQ) TY-B PG64-22					
4	0240 0011	for	dollars	CV	640		
1	0340 6011	and		SY	640	\$	\$
		PER SQUARE YARD					
		D-GR HMA(SQ) TY-D PG70-22					
2	0340 6122	for	dollars	SY	3,208		
2	0340 0122	and		31	3,206	\$	\$
		PER SQUARE YARD					
		TACK COAT					
3	0340 6272	for	dollars	GAL	321		
3	0340 0272	and	cents	UAL	321	\$	\$
		PER SQUARE YARD					
		FLEXIBLE PAVEMENT STRUCTURE REPAIR					
4	0351 6006	for	dollars	SY	640 \$		
7	0331 0000	and	cents			\$	\$
		PER SQUARE YARD					
		PLAN & TEXT ASPH. CONC PAV (0" TO 2")					
5	0354 6002	for	dollars	SY	3,208		
5		and	cents		3,200	\$	\$
		PER SQUARE YARD					
	0500 6001	MOBILIZATION					
6		for		LS	1		
		and	cents			\$	\$
		PER LUMP SUM					
		BARRICADES, SIGNS, AND TRAFFIC HANDLING			MO 1		
7	0502 6001	for		МО			
		and	cents			\$	\$
		PER MONTH					
		IN SM RD SN SUP&AM TY10BWG(1)SA(P)					
8	0644 6001	for		EA	2	ć	ć
		and	cents			\$	\$
		PER EACH		+			
		REFL PAV MRK TY I (W) 4"(SLD)(100 MIL)	ما ما المام				
9	0666 6012	tor		LF	2,265	ė	\$
		and	cents			\$	ş
		PER LINEAR FOOT					
		REFL PAV MRK TY I (W) 8"(SLD)(100 MIL)	dollars				
10	0666 6036	forand		LF	180	\$	\$
		PER LINEAR FOOT	cents			٧	٧
		REFL PAV MRK TY I (W) 12"(SLD)(100 MIL)		+			
			dollars				
11	0666 6042	for	uollais	LF	193		
11	0666 6042	and	cents	L1	133	\$	\$

BIDDER will complete the Work for the following prices:

Bid					Approx		
Item	TxDOT Spec	Description of Item with Unit Bid Price in Writ	ten Words	Unit	Qty	Unit Amount	Total Price
	•	REFL PAV MRK TY I (W) 24"(SLD)(100 MIL)					
40	0666 6040	for	dollars	١			
12	0666 6048	and		LF	76	\$	\$
		PER LINEAR FOOT					
		REFL PAV MRK TY I (W)(ARROW)(100 MIL)					
42	0000 0054	for	dollars	- 4	0		
13	0666 6054	and		EA	8	\$	\$
		PER EACH					
		REFL PAV MRK TY I (W)(WORD)(SLD)(100 MIL)					
1.4	0666 6078	for	dollars	FA	_		
14	0000 0078	and		EA	6	\$	\$
		PER EACH					
		REFL PAV MRK TY I (Y) 4"(SLD)(100 MIL)					
15	0666 6126	for	dollars	LF	2,035		
15	0000 0120	and		LF	2,035	\$	\$
		PER LINEAR FOOT					
		REFL PAV MRK TY II (W) 4"(BRK)					
16	0666 6167	for	dollars	LF	15		
16	0666 6167	and		L	15	\$	\$
		PER LINEAR FOOT					
	0666 6170	REFL PAV MRK TY II (W) 4"(SLD)					
17		for	dollars	LF	668		
1/		and		LF	000	\$	\$
		PER LINEAR FOOT					
		REFL PAV MRK TY II (W) 8"(SLD)		LF	60		
18	0666 6178	for	dollars			\$	
10		and	cents				\$
		PER LINEAR FOOT					
		REFL PAV MRK TY II (W) 12"(SLD)					
19	0666 6180	for		LF	F 104	104 \$	
		and	cents				\$
		PER LINEAR FOOT					
		REFL PAV MRK TY II (W) 24"(SLD)					
20	0666 6182	for	dollars	LF	20		
		and	cents			\$	\$
		PER LINEAR FOOT					
		REFL PAV MRK TY II (W)(ARROW)					
21	0666 6184	for		EA	2		
		and	cents			\$	\$
		PER EACH		1			
		REFL PAV MRK TY II (W)(WORD)(SLD)					
22	0666 6192	for		EA	A 1		
	3000 0132	and	cents			\$	\$
		PER EACH					
		REFL PAV MRK TY II (Y) 4"(SLD)					
23	0666 6207	for		LF	586	<u>,</u>	
		and	cents			\$	\$
		PER LINEAR FOOT					

BIDDER will complete the Work for the following prices:

Bid				Appro	x l	
Item	TxDOT Spec	Description of Item with Unit Bid Price in Written Word	ds Un			Total Price
		RE PM W/RET REQ TY I (W)4"(BRK)(100MIL)				
24	0000 0000	fordollar	rs ,	.   ,,		
24	0666 6300	andcent		23	\$	\$
		PER LINEAR FOOT				
		REFL PAV MRKR TY I-C				
25	0672 6007	fordollar	rs EA	12		
23	0072 0007	andcent	:S	\	\$	\$
		PER EACH				
		REFL PAV MRKR TY II-A-A				
26	0672 6009	fordollar	rs EA	104		
20	0072 0003	andcent	:s	104	\$	\$
		PER EACH				
		ELIM EXT PAV MRK & MRKS (4")				
27	0677 6001	fordollar	rs Li	1,269	<b>1</b>	
21	0677 6001	andcent	:s	1,203	\$	\$
		PER LINEAR FOOT				
	0677 6003	ELIM EXT PAV MRK & MRKS (8")				
28		fordollar	rs Li	60		
20		andcent	:s		\$	\$
		PER LINEAR FOOT				
		ELIM EXT PAV MRK & MRKS (24")		LF 20		
29	0677 6007	fordollar	rs			
		andcent			\$	\$
		PER LINEAR FOOT				
		ELIM EXT PAV MRK & MRKS (ARROW)				
30	0677 6008	fordollar	I F	. 2		
		andcent	:S		\$	\$
		PER EACH				
		ELIM EXT PAV MRK & MRKS (WORD)				
31	0677 6012	fordollar		1		
31		andcent	:S		\$	\$
		PER EACH				
			ı			1
		TOTAL BID (BID ITEMS 1-31)				
		fordollar				
		andcent	:S		\$	\$

# CONSTRUCTION PLANS 2022 ROAD MAINTENANCE PROJECT

OCTOBER 2022

PROJECT # MAINT 2022-001

WORK TYPE: MILL & OVERLAY, FULL DEPTH REPAIR, AND PAVEMENT MARKINGS PROJECT LENGTH: 1,140 LF

	W S
MERCER ST	HWY 290
PROJECT AREA	RANCH ROAD 12
	RANCH

CITY OF DRIPPING SPRINGS, TEXAS

PREPARED FOR:

APPROX. SCALE: 1" = 1,000'



ROADWAY CLASSIFICATION: MERCER ST. - COLLECTOR

#### INDEX OF SHEETS

	Sheet List Table
Sheet Number	Sheet Title
01	COVER SHEET
02	GENERAL NOTES
03	SOQ
04	PAVING PLAN - MERCER ST
05	STRIPING PLAN - MERCER ST 1
06	STRIPING PLAN - MERCER ST 2
07	TRAFFIC CONTROL PLAN - MERCER ST
08	TRAFFIC CONTROL PLAN ONE-LANE TWO-WAY TRAFFIC CONTROL TCP(2-2)-18
09	TWO-WAY LEFT TURN LANES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS PM(3)-20
<del>10</del>	PAVING DETAILS
11	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS SMD(GEN)-08
12	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-1)-08
13	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-2)-08
14	SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM SMD(SLIP-3)-08

	REVISIO	N BLOCK			
NO.	REVISION DESCRIPTION	AFFECTED SHEETS	DATE	APPROVAL SIGNATURE	APPROVAL DATE
1	ADDENDUM 1	3, 10-14	10/03/2022		

#### NOTES:

- 1. THIS PROJECT LIES WITHIN THE CITY LIMITS OF DRIPPING SPRINGS,
- 2. THIS PROJECT LIES WITHIN THE CONTRIBUTING ZONE OF THE EDWARDS
- 3. A PORTION OF THIS PROJECT LIES WITHIN ZONE AE AS IDENTIFIED BY THE FEDERAL MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 48209C0105F DATED SEPTEMBER 2, 2005 HAYS COUNTY, TEXAS AND INCORPORATED AREAS.
- 4. CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL SURVEY VERIFICATION REQUIRED TO COMPLETE THE PROJECT.
- 5. RIGHT-OF-WAY LINES SHOWN HEREON ARE APPROXIMATE.

PREPARED BY:

BR-BN

B RYAN BELL PE

0<u>3 OCTOBER 202</u>2 DATE

> 10/3/22 DATE

> > DATE

RECOMMENDED BY:

CHAD CRPIN

CHAD GILPIN, P.E. - CITY ENGINEER

APPROVED BY:

CRAIG RICE, MAINTENANCE DIRECTOR

•

CONTRACTOR:

CONSTRUCTION START:\_\_\_

CONSTRUCTION ACCEPTED:\_

\_\_\_\_\_

TOTAL CONSTRUCTION COST:\_

PREPARED BY:



T.B.P.L.S. Firm Registration # 10193770 T.B.P.E. Firm Registration # F-9266 9701 BRODIE LN, SUITE 203 AUSTIN, TX 78748 PH: 512 220 8100

THESE PLANS ARE FULL SIZE AT 11" X 17"

01 of 14

#### SCHEDULE OF QUANTITIES:

/	$\vee$ $\vee$		~	$\vee$	
>	TxDOT SPEC	ITEM DESCRIPTION	UNITS	QTY	_ \
	0340 6011	D-GR HMA(SQ) TY-B PG64-22	SY	640	. /
>	0340 6122	D-GR HMA(SQ) TY-D PG70-22	SY	3208	)
	0340 6272	TACK COAT	GAL	321	
>	0351 6006	FLEXIBLE PAVEMENT STRUCTURE REPAIR	SY	640	/
>	0354 6002	PLAN & TEXT ASPH. CONC PAV (0" TO 2")	SY	3208	)
>	0500 6001	MOBILIZATION	LS	1	
	0502 6001	BARRICADES, SIGNS, AND TRAFFIC HANDLING	MO	1	$\langle$
>	0644 6001	IN SM RD SN SUP&AM TY10BWG(1)SA(P)	EA	2	/
	0666 6012	REFL PAV MRK TY I (W) 4"(SLD)(100 MIL)	LF	2265	)
>	0666 6036	REFL PAV MRK TY I (W) 8"(SLD)(100 MIL)	LF	180	_
>	0666 6042	REFL PAV MRK TY I (W) 12"(SLD)(100 MIL)	LF	193	)
	0666 6048	REFL PAV MRK TY I (W) 24"(SLD)(100 MIL)	LF	76	$\langle$
>	0666 6054	REFL PAV MRK TY I (W)(ARROW)(100 MIL)	EA	8	
>	0666 6078	REFL PAV MRK TY I (W)(WORD)(SLD)(100 MIL)	EA	6	)
	0666 6126	REFL PAV MRK TY I (Y) 4"(SLD)(100 MIL)	LF	2035	5
>	0666 6167	REFL PAV MRK TY II (W) 4"(BRK)	LF	15	$\langle$
>	0666 6170	REFL PAV MRK TY II (W) 4"(SLD)	LF	668	
	0666 6178	REFL PAV MRK TY II (W) 8"(SLD)	LF	60	$\langle$
>	0666 6180	REFL PAV MRK TY II (W) 12"(SLD)	LF	104	$\langle$
	0666 6182	REFL PAV MRK TY II (W) 24"(SLD)	LF	20	,
	0666 6184	REFL PAV MRK TY II (W)(ARROW)	EA	2	$\langle$
>	0666 6192	REFL PAV MRK TY II (W)(WORD)(SLD)	EA	1	
	0666 6207	REFL PAV MRK TY II (Y) 4"(SLD)	LF	586	$\langle$
	0666 6300	RE PM W/RET REQ TY I (W)4"(BRK)(100MIL)	LF	23	
	0672 6007	REFL PAV MRKR TY I-C	EA	12	$\langle$
>	0672 6009	REFL PAV MRKR TY II-A-A	EA	104	,
>	0677 6001	ELIM EXT PAV MRK & MRKS (4")	LF	1269	$\langle$
	0677 6003	ELIM EXT PAV MRK & MRKS (8")	LF	60	)
7	0677 6007	ELIM EXT PAV MRK & MRKS (24")	LF	20	$\langle$
>	0677 6008	ELIM EXT PAV MRK & MRKS (ARROW)	EA	2	
>	0677 6012	ELIM EXT PAV MRK & MRKS (WORD)	EA	1	
>					- /

\*TXDOT ITEM 0678, PAVEMENT SURFACE PREPARATION FOR MARKINGS IS SUBSIDIARY TO APPLICABLE BID ITEMS. NO SEPARATE PAYMENT WILL

BE MADE FOR PAVEMENT SURFACE PREPARATION

#### NOTES RELATED TO PAY ITEMS AND SPECIFICATIONS

WHERE BOTH HAYS COUNTY AND TXDOT SPECIFICATIONS ARE NAMED IN THE SCHEDULE OF QUANTITIES ABOVE THE DIRECTION PROVIDED BY THE HAYS COUNTY SPECIFICATIONS SHALL SUPERSEDE WHERE IN CONFLICT WITH THE TXDOT SPECIFIEM. WHERE-

-ADDITIONAL INFORMATION PROVIDED BELOW CONFLICTS WITH EITHER THE TXDOT OR HAYS COUNTY SPECIFICATIONS THE

INFORMATION BELOW SHALL SUPERSEDE.

THERE WILL BE NO SEPARATE PAY ITEM FOR TEMPORARY WATER FOR IRRIGATION AND ESTABLISHMENT OF GRASSES, ALL IRRIGATION WATER REQUIRED FOR THE ESTABLISHMENT OF 85% COVER FOR THIS PROJECT SHALL BE SUBSIDIARY TO THIS PAY

#### TXDOT ITEM 340 / HAYS CO. ITEM 6.00 - HOT MIX ASPHALT CONCRETE PAVEMENT

HMAC SHALL BE APPLIED AT THE FOLLOWING RATES:

HMAC TY B 115 LB/SY/IN HMAC TY D -115 LB/SY/JN TACK COAT 0.1 GAL/SY

TXDOT ITEM 132 - EMBANKMENT

ITEM SHALL BE PAID BY STATION ALONG AREA OF SUBGRADE WIDENING.



T.B.P.L.S. Firm Registration # 10193770 T.B.P.E. Firm Registration # F-9266 9701 BRODIE LANE #203 AUSTIN, TX 78748 PH: 512.220.8100

ENGINEER'S SEAL



COPYRIGHT NOTICE:
THE DESIGNS REPRESENTED BY THESE PLANS ARE
COPYRIGHTED AND ARE SUBJECT TO COPYRIGHT
PROTECTION UNDER 17 U.S.C. §101. ET SEQ., AS
AMENDED. UNAUTHORIZED USE OF THESE PLANS
OR THE DESIGNS REPRESENTED THEREIN WILL
SUBJECT THE INFRINGER TO DAMAGES ANDIOR
JUDICIAL ACTION AS PROVIDED BY FEDERAL LAW.

#### REVISIONS:

NO.	REVISION	DATE
1	ADDENDUM 1	10/03/202

DATE: 10/03/2022 DESIGNED BY: RP

CHECKED BY: \_\_

PROJ #:



MAINT-2022-001

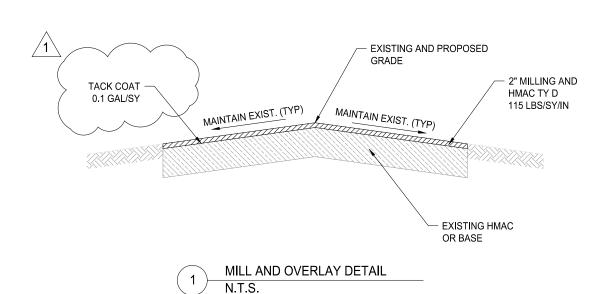
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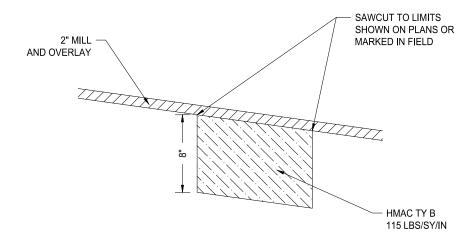
2022 ROAD MAINTENANCE **PROJECT** 

SHEET TITLE:

SCHEDULE OF QUANTITIES

03 OF 14





FULL DEPTH REPAIR DETAIL N.T.S.

#### SEQUENCE OF CONSTRUCTION:

- 1. INSTALL TRAFFIC CONTROL DEVICES PER PLANS AND TEXAS MUTCD STANDARDS.
- MILL EXISTING HMAC TO THE LIMITS SHOWN ON THE PLANS.
- PERFORM FULL-DEPTH PAVEMENT REPAIRS TO THE LIMITS SHOWN ON THE PLANS.
- APPLY TACK COAT TO ALL AREAS OUTSIDE OF THE FULL-DEPTH PAVEMENT REPAIRS.
- PLACE HMAC SURFACE COURSE TO THE LIMITS SHOWN ON THE PLANS.
- PERFORM SURFACE PREPARATION FOR PAVEMENT MARKINGS PER SPECIFICATIONS. ALLOW 7 DAYS FOR TY II MARKINGS TO CURE PRIOR TO INSTALLING TY I MARKINGS.
- 7. INSTALL TY II MARKINGS AND SIGNS AS SHOWN ON THE PLANS.
- REMOVE TRAFFIC CONTROL DEVICES AND OPEN ALL LANES TO TRAFFIC.



T.B.P.L.S. Firm Registration # 10193770 T.B.P.E. Firm Registration # F-9266 9701 BRODIE LANE #203 AUSTIN, TX 78748 PH: 512.220.8100

ENGINEER'S SEAL:



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OR THE DESIGNS REPRESENTED THEREIN WILL
SUBJECT THE INFRINGER TO DAMAGES ANDIOR
JUDICIAL ACTION AS PROVIDED BY FEDERAL LAW.

#### REVISIONS:

NO.	REVISION	DATE
1	ADDENDUM 1	10/03/2022

BRB MAINT-2022-001

DATE: 10/03/2022 DESIGNED BY: RP

CHECKED BY: \_

PROJ #:



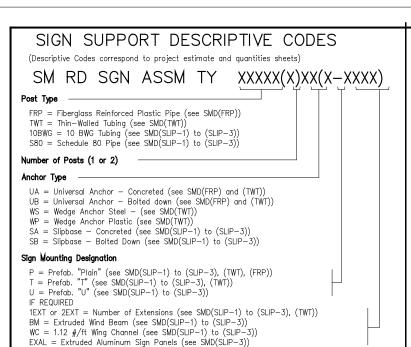
PROJECT:

2022 ROAD MAINTENANCE **PROJECT** 

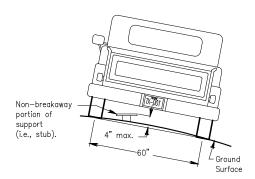
SHEET TITLE:

PAVING DETAILS

10 OF 14



#### REQUIRED CLEARANCE FOR BREAKAWAY SUPPORT

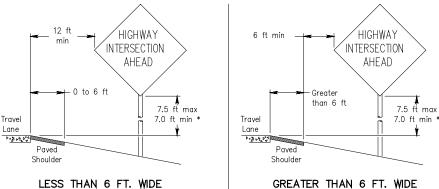


To avoid vehicle undercarriage snagging, any substantial remains of a breakaway support, when it is broken away, should not project more than 4 inches above a 60-inch chord (i.e., typical space between wheel paths).

Not Acceptable

Not Acceptable

## SIGN LOCATION



BEHIND BARRIER

PAVED SHOULDERS

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

RESTRICTED RIGHT-OF-WAY

7.5 ft max

7.0 ft min

HIGHWAY

INTERSECTION

AHEAD

(When 6 ft min. is not possible.)

Maximum

possible

Travel

D.2 . 4 1°4

Paved

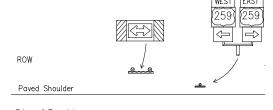
Shoulder

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.

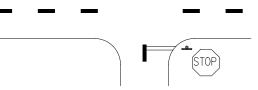
## -12 ft min 7.5 ft max 7.0 ft min Travel Lane D-21-4-0°4 Shoulde

T-INTERSECTION

When this sign is needed at the end of a two-lane, two way roadway, the right edge of the sign should be in line with the centerline of the roadway. Place as close to ROW as practical.





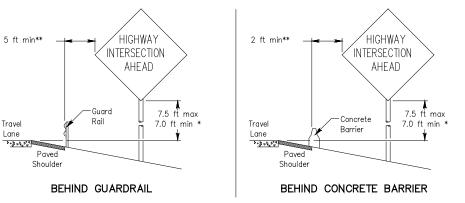


- \* Signs shall be mounted using the following condition that results in the greatest sign elevation:
- (1) a minimum of 7 to a maximum of 7.5 feet above the edge of the travel lane or
- (2) a minimum of 7 to a maximum of 7.5 feet above the grade at the base of the support when sign is installed on the backslope.

The maximum values may be increased when directed by the Engineer.

See the Traffic Operations Division website for detailed drawings of sign clamps, Triangular Slipbase System components and Wedge Anchor System components.

The website address is: http://www.txdot.gov/publications/traffic.htm



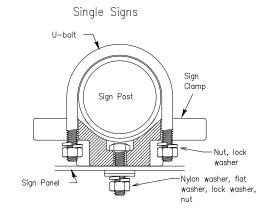
\*\*Sign clearance based on distance required for proper guard rail or concrete barrier performance.

### TYPICAL SIGN ATTACHMENT DETAIL

Not Acceptable

diameter

circle



diameter

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 gluminum

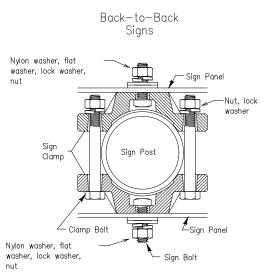
No more than 2 sign

within a 7 ft. circle.

posts should be located

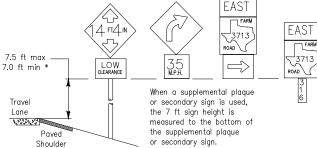
When two sign clamps are used to mount signs back-to-back, use a 5/16-18 UNC galvanized hex head per ASTM A307 with nut and helical-spring lock washer. The approximate bolt lengths for various post sizes and sign clamp types are given in the table at right. The bolt length may need to be adjusted depending upon field conditions.

Sign clamps may be either the specific size clamp or the universal clamp.



Acceptable

54 54 4	Approximate B	olt Length			
Pipe Diameter	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"			

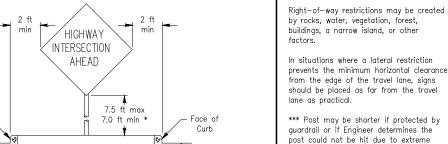


SIGNS WITH PLAQUES

## HIGHWAY INTERSECTION AHEAD 7.5 ft max 7.0 ft min

\* \$ \$ \$ 4 4 b \$ b \$

## CURB & GUTTER OR RAISED ISLAND



\$4144.99.4874.



SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS

SMD(GEN)-08

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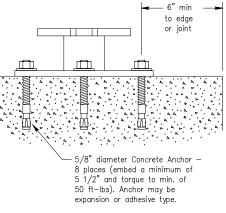
#### TRIANGULAR SLIPBASE INSTALLATION GENERAL REQUIREMENTS

#### 10 BWG Tubing or Bolt Keeper Plate Schedule 80 Pipe (See General Note 3) Slip Base 5/8" structural bolts (3), nuts Washers (3), and washers (6) per ASTM A325 if required by or A449 and galvanized per Item 445 "Galvanizing." Bolt length is 2 1/2". W//W//W//W// Stub 3/4 " diameter hole. Provide a 7" x 1/2" diameter rod or #4 rebar. Class A concrete 12" min. 24" max Non-reinforced concrete footing (shall be used unless noted elsewhere in the plans). Foundation should take approx. 2.5 cf of concrete 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.

#### 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 vield and ultimate tensile strenath 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 normalweight concrete with a 5 1/2" minimum embedment, shall have a minimum allowable tension and shear of 3900 and 3100 psi, respectively.

#### 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

- 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
- 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.

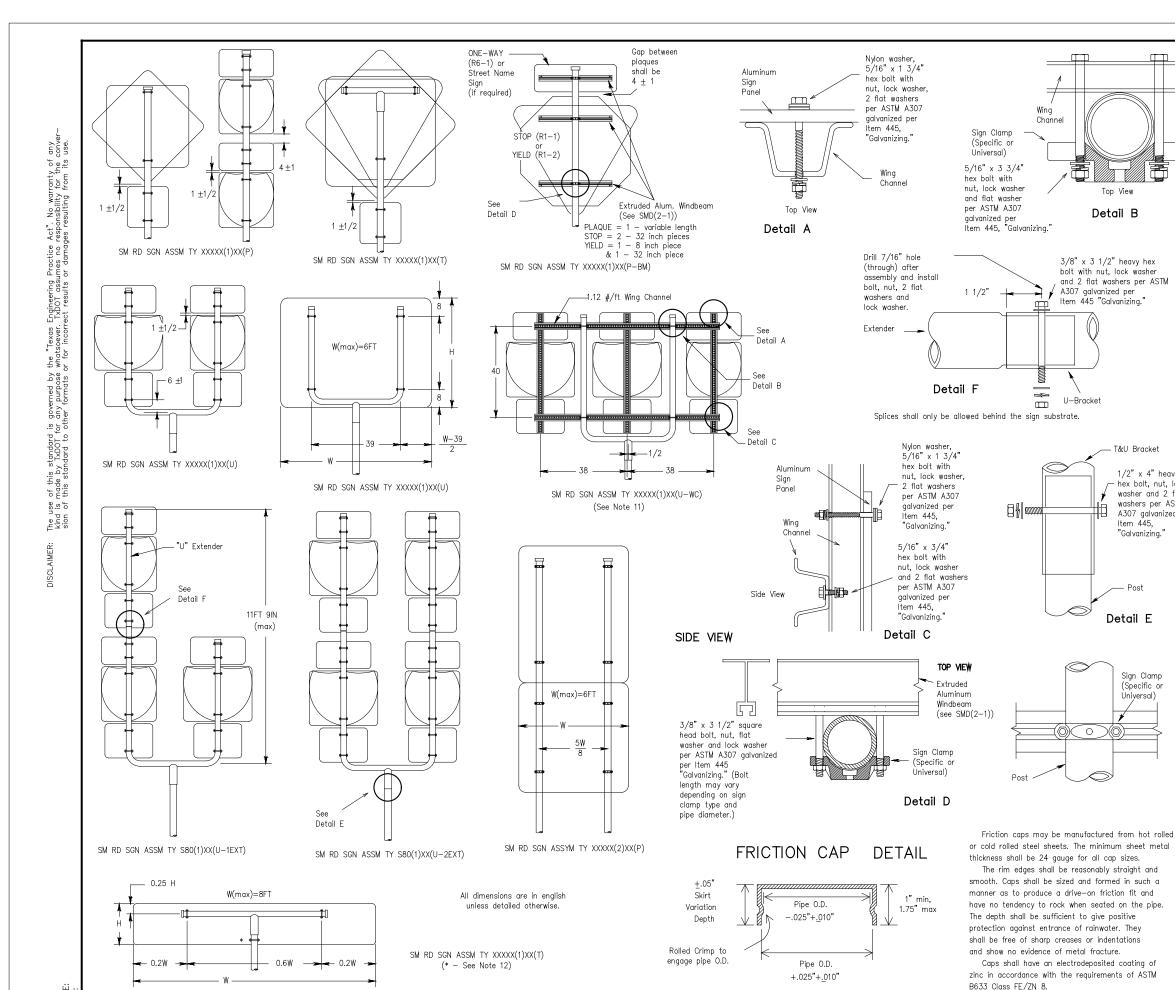


### SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-1)-08

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12 OF 14



GENERAL NOTES:

Top View

Detail B

U-Bracket

T&U Bracket

Item 445,

- Post

Detail E

Sign Clamp

(Specific or

Ùniyersal)

0

"Galvanizing.

1/2" x 4" heavy

— hex bolt, nut, lock

washer and 2 flat

washers per ASTM

A307 galvanized per

1.	SIGN SUPPORT #	OF POSTS	MAX. SIGN AREA
	10 BWG	1	16 SF
	10 BWG	2	32 SF
	Sch 80	1	32 SF
	Sch 80	2	64 SF

- 2. The Engineer may require that a Schedule 80 post be used in place of a 10 BWG where a sign height is abnormally high due to a fill slope.
- 3. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.
- 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.
- 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
- areater heiaht. 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

REQUIRED SUPPORT SIGN DESCRIPTION TY 10BWG(1)XX(T)
TY 10BWG(1)XX(P-BM) 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) 48x16-inch ONE-WAY sign (R6-1) 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) 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)

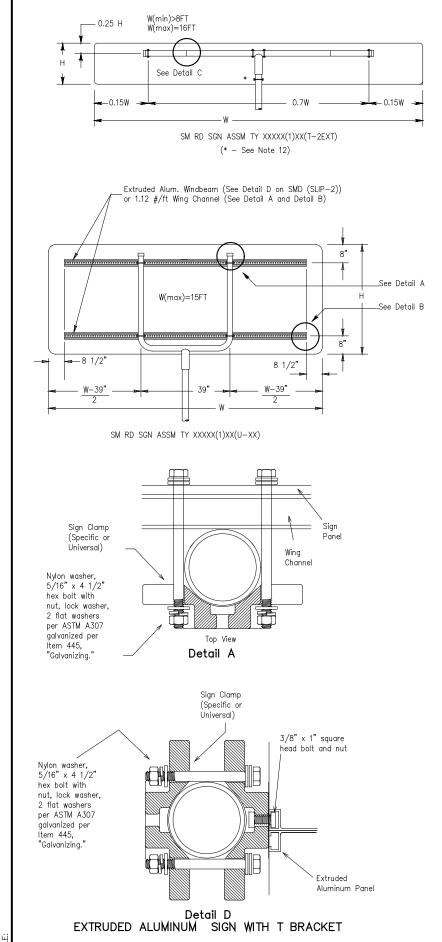


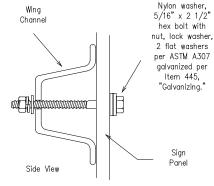
#### SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM

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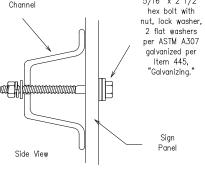
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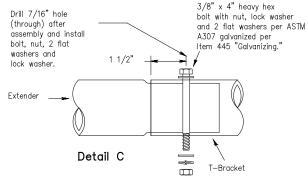
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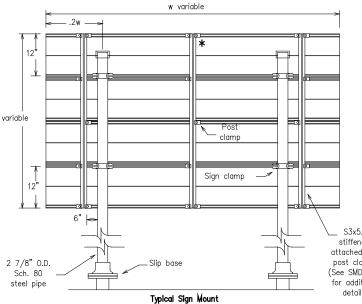


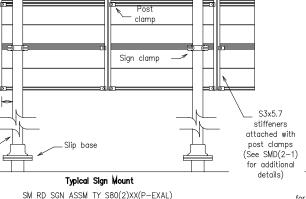
Detail B



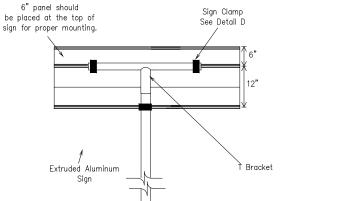


Splices shall only be allowed behind the sign substrate.



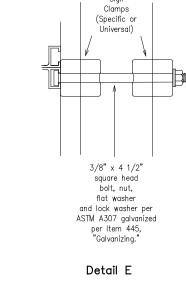


Additional stiffener placed at approximate center of signs when sign width is greater than 10'.

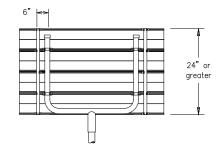


Extruded Aluminum Sign With T Bracket

2 7/8" O.D. Sch. 80 or 10BWGsteel pipe



See Detail E for clamp installation



Use Extruded Alum. Windbeam as stiffeners See SMD (2-1) for additional details

See Detail F for clamp installation

#### GENERAL NOTES:

1.	SIGN SUPPORT ;	# OF POSTS	MAX. SIGN AREA
	10 BWG	1	16 SF
	10 BWG	2	32 SF
	Sch 80	1	32 SF
	Sch 80	2	64 SF

- 2. The Engineer may require that a Schedule 80 post be used in place of a 10 BWG where a sign height is abnormally high due to a fill slope.
- Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.
   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.
- 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
	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)
regulatory	48x16-inch ONE-WAY sign (R6-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
иegan	36x48, 48x36, and 48x48—inch signs	TY 10BWG(1)XX(T)
	48x60—inch signs	TY S80(1)XX(T)
	48x48—inch signs (diamond or square)	TY 10BWG(1)XX(T)
	48x60—inch signs	TY S80(1)XX(T)
Warning	48-inch Advance School X-ing sign (S1-1)	TY 10BWG(1)XX(T)
Š.	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)

Exas Department of Transportation Traffic Operations Division

## SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM

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