



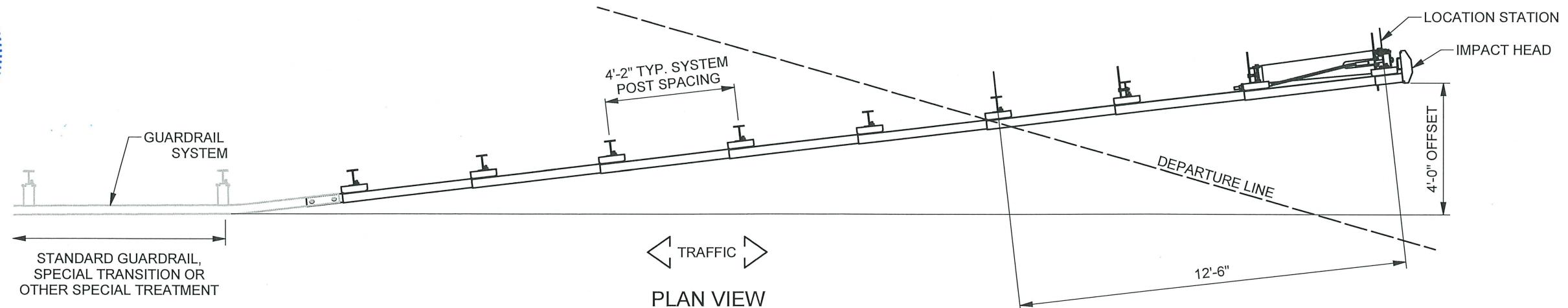
## FDOT GENERAL NOTES

1. THE TERMINAL SYSTEM REPRESENTED ON THIS DRAWING IS A PROPRIETARY DESIGN MANUFACTURED BY VALTIR, LLC AND MARKETED UNDER THE TRADE NAME 4 FOOT FLARED TREND TERMINAL (4F-T).
2. THIS DRAWING IS SUFFICIENT FOR PLAN DETAILS FOR THE 4F-T, MASH(16) FLARED GUARDRAIL END TERMINAL WHEN INSTALLED IN CONNECTION WITH STANDARD FDOT SHOULDER GUARDRAIL AND PRECLUDES THE REQUIREMENT FOR SHOP DRAWING SUBMITTALS UNLESS THE PLANS OTHERWISE CALL FOR SUCH SUBMITTALS. THE 4F-T MUST BE ASSEMBLED IN ACCORDANCE WITH THE MANUFACTURER'S DETAIL DRAWINGS AND CURRENT ASSEMBLY MANUAL AS REVISED AND UPDATED AT THE TIME OF INSTALLATION.
3. THE 4F-T, IS A STEEL POST CONFIGURATION. POST 1-3 WITH SOIL PLATES, POST 1 IS AN HBA® ANCHOR POST, AND POST 2-9 ARE SPECIAL STEEL YIELDING TERMINAL POST (SYTP®)
4. THE 4F-T, IS DESIGNED FOR USE AS AN APPROACH/DEPARTURE GUARDRAIL END TREATMENT FOR ROADSIDE OR GORE GUARDRAIL. THE BEGINNING LENGTH OF NEED POINT IS LOCATED AT POST 4 (SEE DRAWING) AND IS 12'-6" FROM THE CENTER OF POST 1. THE DESIGN LENGTH OF THE 4F-T, IS 34'-4 1/2" AND MUST BE INSTALLED AS A FLARED (4' STRAIGHT FLARE OVER THE 34' 4-1/2" LENGTH) GUARDRAIL END TREATMENT. THE 4F-T, CAN BE DIRECTLY ATTACHED TO GUARDRAIL HEIGHT OF 31" AND TO GUARDRAIL HEIGHT OF 27 3/4" WITH FDOT APPROVED TRANSITION (VALTIR DRAWING SS 4381).
5. FOR GRADING DETAILS AROUND THE 4F-T SEE FDOT STANDARD PLANS / SEE INDEX 536-001.
6. SITE CONDITIONS: A CLEAR AND TRAVERSABLE RUN-OUT AREA MUST BE MAINTAINED BEHIND THE 4F-T AND NO HANDRAIL / BACKING RAIL IS PERMITTED WITHIN THE 4F-T PAY LENGTH.
7. UNITS OF MEASUREMENT ARE IN INCH, UNLESS OTHERWISE SPECIFIED.

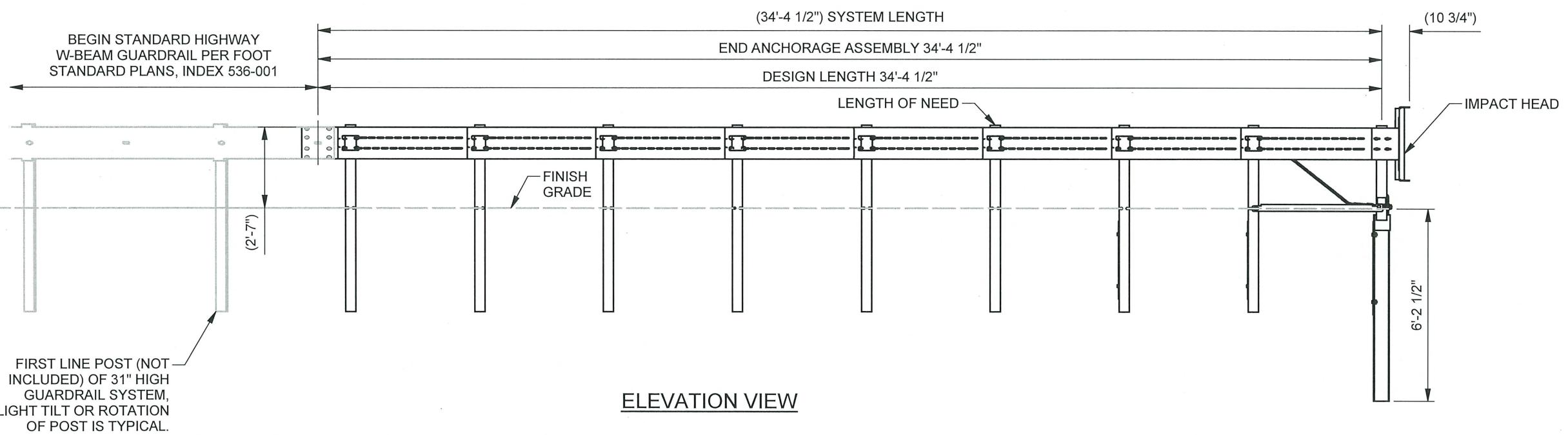
CONTENTS	
SHEET NUMBER	DRAWING NUMBER
1,2,3,4	4F-T 4 FOOT FLARED TREND TERMINAL MASH (16) (2'-7" Installation Height / TL-3 Terminal)

DRAWN: L. DELANCEY	DATE: 8/27/2024	MODEL: 4F-T (SS 4380-REV B)			
CHECKED: D. DANIELYAN	DATE: 9/5/2024	TRAFFIC DIRECTION: ROADSIDE			
UNLESS OTHERWISE NOTED, DIMENSIONS ARE IN INCH. DIMENSIONS ACCORDING TO ASME Y14.5-2018 AND QMS-SE-003 UNLESS OTHERWISE SPECIFIED.		DO NOT SCALE DRAWING			
REVISION DESCRIPTION	ECO	DATE	REV	BY	CHK
INITIAL RELEASE	9463	-	-	-	-
ADD APL #, ADD NOTE 7, TITLE WAS MM[IN]	10111	10/16/25	A	ML	ASB

4-FT™	4 FOOT FLARED TREND® TERMINAL MASH (16) (2'-7" INSTALLATION HEIGHT/TL-3 TERMINAL)	VALTIR
FDOT APL 536-006-009		
DRAWING: SS4380FL	REV: A	SHEET: 1 of 4



DOWNSTREAM      UPSTREAM

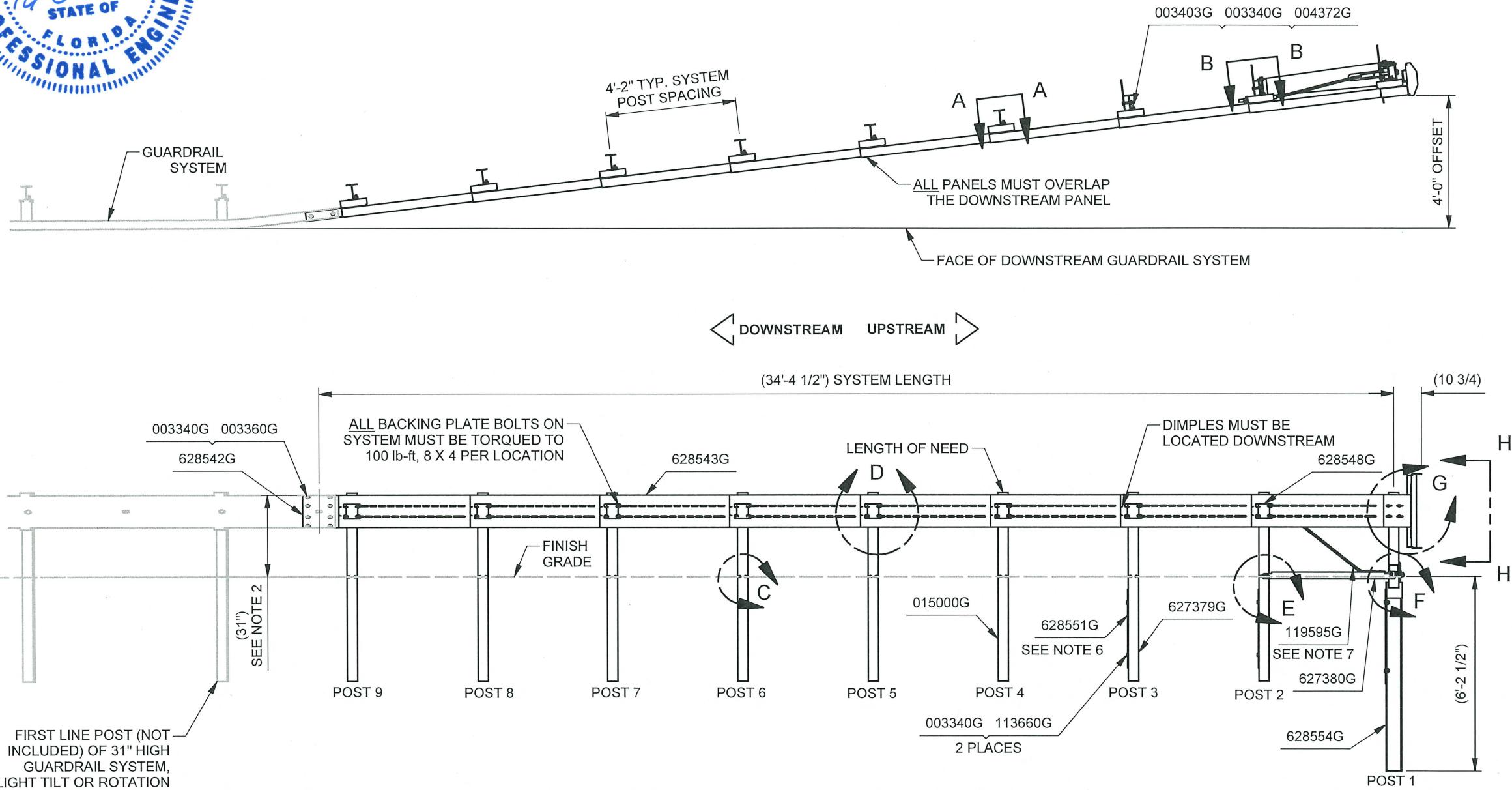
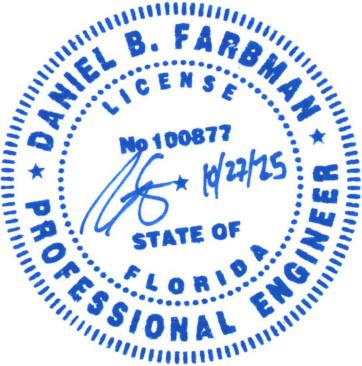


MODEL	SYSTEM WIDTH	SYSTEM LENGTH	DESIGN LENGTH	DESIGN SPEED	TEST LEVEL DESIGNATION
4F-T	14"	34'-4 1/2"	34'-4 1/2"	> 50 mph	MASH (16) TL-3

DRAWN: L. DELANCEY	DATE: 8/27/2024	MODEL: 4F-T (SS 4380-REV B)
CHECKED: D. DANIELYAN	DATE: 9/5/2024	TRAFFIC DIRECTION: ROADSIDE
UNLESS OTHERWISE NOTED, DIMENSIONS ARE IN INCH. DIMENSIONS ACCORDING TO ASME Y14.5-2018 AND QMS-SE-003 UNLESS OTHERWISE SPECIFIED.		
REVISION DESCRIPTION	DO NOT SCALE DRAWING	<input checked="" type="checkbox"/> <input type="checkbox"/>
INITIAL RELEASE	ECO DATE	REV BY CHK
SEE SHT 1	9463 - - - -	

4-FT™  
4 FOOT FLARED TREND® TERMINAL  
MASH (16)  
(2'-7" INSTALLATION HEIGHT/TL-3 TERMINAL)  
FDOT APL 536-006-009  
DRAWING: SS4380FL  
REV: A  
SHEET: 2 of 4





NOTES:

- PROPER SITE GRADING MUST BE ACCOMPLISHED BEFORE ASSEMBLY AND IN ACCORDANCE WITH STATE/SPECIFYING AGENCY GUIDELINES AND/OR THE AASHTO ROADSIDE DESIGN GUIDE.
- GUARDRAIL INSTALLATION HEIGHT TO BE 31" ABOVE FINISHED GRADE, +1", -0".
- UNDER NO CIRCUMSTANCES SHALL THE 4F-T SYSTEM PANELS BE CURVED OR RADIUSED.
- ALL FASTENERS NOT REQUIRED TO BE TORQUED SHALL BE TIGHTENED TO A SNUG POSITION WITH A MINIMUM OF 2 BOLT THREADS PROTRUDING BEYOND THE NUT.
- ONLY ATTACH THE 4F-T DIRECTLY TO OTHER STRONG POST SINGLE SIDED W-BEAM GUARDRAIL SYSTEMS, SEE MANUAL FOR DETAILS.
- ENSURE ALL SOIL PLATES ARE POSITIONED ON THE DOWNSTREAM SIDE OF POST 1, 2 & 3. OPTIONAL GALVANIZING HOLE LOCATION MAY VARY.
- TIGHTEN ANCHOR CABLE UNTIL TAUT. CABLE IS CONSIDERED TAUT WHEN IT DOES NOT DEFLECT MORE THAN 1" WHEN HEAVY PRESSURE IS APPLIED BY HAND IN AN UP OR DOWN DIRECTION. RESTRAIN THE CABLE WITH PIPE WRENCH OR LOCKING PLIERS WHILE TIGHTENING NUT WITH A WRENCH TO PREVENT CABLE FROM TWISTING.
- REFER TO 4F-T ASSEMBLY MANUAL FOR ADDITIONAL INFORMATION.

DRAWN:	L. DELANCEY	DATE:	8/27/2024	MODEL:	4F-T (SS 4380-REV B)
CHECKED:	D. DANIELYAN	DATE:	9/5/2024	TRAFFIC DIRECTION:	ROADSIDE
UNLESS OTHERWISE NOTED, DIMENSIONS ARE IN INCH. DIMENSIONS ACCORDING TO ASME Y14.5-2018 AND QMS-SE-003 UNLESS OTHERWISE SPECIFIED.					
DO NOT SCALE DRAWING					
REVISION DESCRIPTION	ECO	DATE	REV	BY	CHK
INITIAL RELEASE	9463	-	-	-	-
SEE SHT 1	10111	10/16/25	A	ML	ASB

4-FT™  
4 FOOT FLARED TRENDS® TERMINAL MASH (16)  
(2'-7" INSTALLATION HEIGHT/TL-3 TERMINAL)  
FDOT APL 536-006-009  
DRAWING: SS4380FL  
REV: A  
SHEET: 3 of 4

COMPONENTS LIST		
PART NO.	DESCRIPTION	QTY.
628553G	4F-T HBA POST #1 TOP	1
628554G	4F-T HBA POST #1 BOTTOM	1
627379G	6'-0" POST/W6X8.5 SYT / 7/S PL	2
628550G	1/4X22X36 SOIL PL/4 H	1
628551G	1/4X18X30 SOIL PL/2 H	2
628540G	4F-T SPACER, 3/16	8
628555G	4F-T ANCHOR SPACER	1
628542G	4F-T TRANSITION, 10 GA	1
628543G	4F-T SYSTEM RAIL, 10 GA	8
628556G	4F-T HEAD RAIL, 10 GA	1
628548G	4F-T BACKING PLATE, 10 GA	8
628549G	4F-T BEARING PLATE	1
119595G	4F-T CABLE ASSY (5'-10")	1
627380G	4F-T GROUND STRUT	1
628557B	4F-T IMPACT HEAD	1
015000G	6'0 POST/8.5/SYT-POST/7:25	6
003279G	NUT,HX,1/2,DH,G	2
003340G	NUT,GR,5/8,A563,G	26
003360G	BOLT,GR,5/8X1 1/4,A307,G	8
003361G	NUT,HX,5/8,A563,DH,G	38
003403G	BOLT,HX,5/8X2,A307,G,AT	9
003479G	BOLT,HX,5/8X7 1/2,A325,G	1
003700G	WASHER,FLT,3/4X2,F844,G	2
003704G	NUT,HX,3/4,A563,DH,G	2
003717G	BOLT,HX,3/4X2 1/2,A325,G	2
003900G	WASHER,FLT,1X1 1/16,F844,G	2
003910G	NUT,HX,1",A563,G	2
004372G	WASHER,FLT,5/8,HARD,TY 1,G	10
113473G	BOLT,HX,1/2X2,G5,G	2
113654G	BOLT,HX,5/8X1 1/2,G5,G	4
113660G	BOLT,HX,5/8X3 1/2,G5,G	4
118009G	WASHER,FLT,1/2X1 3/8,G	2
118614G	BOLT,RAIL,5/8X2,G5,G	38
118615G	WASHER,FLT,5/8,THICK,G	36
119692G	WASHER,FLT,5/8 X 2 1/2 OD,G	2
SEE TABLE	REFL SHT,DG3,10X25,4IN,B/Y,R	REF

TABLE	
PART NO.	DESCRIPTION
105377B	REFL SHT,DG3,10X25,4IN,B/Y,L
105378B	REFL SHT,DG3,10X25,4IN,B/Y,R
211299B	TAPE,24,REFL,DG3,Y





FIRST LINE POST (NOT INCLUDED) OF 31"  
HIGH GUARDRAIL SYSTEM, SLIGHT TILT  
OR ROTATION OF POST IS TYPICAL.

DOWNSTREAM      UPSTREAM

4'-2" TYP. SYSTEM  
POST SPACING  
POST 6  
POST 7

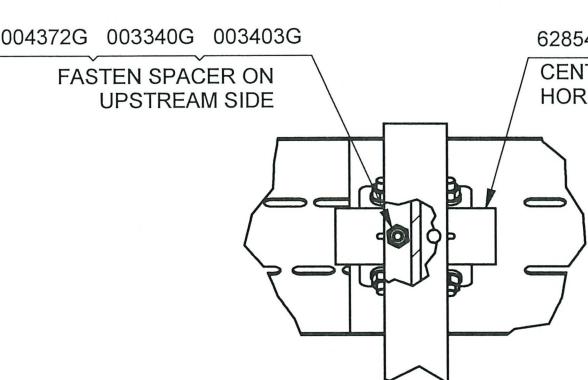
POST 5  
POST 4  
POST 3

POST 2

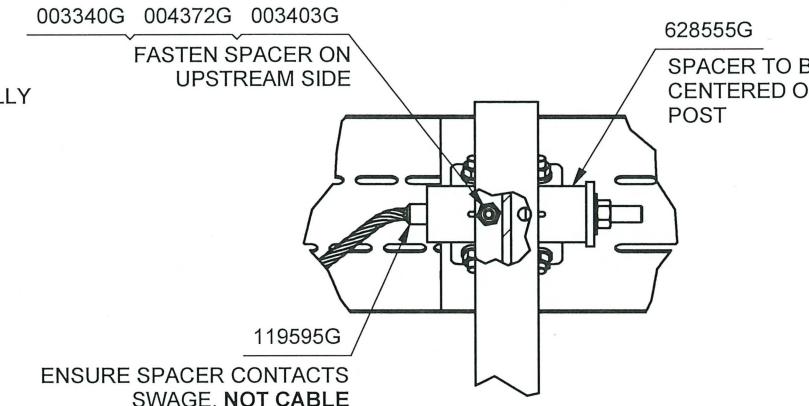
H  
POST 1  
4'-6" 1 1/4"  
4'-11 3/4" SEE NOTE 1

### POST LAYOUT

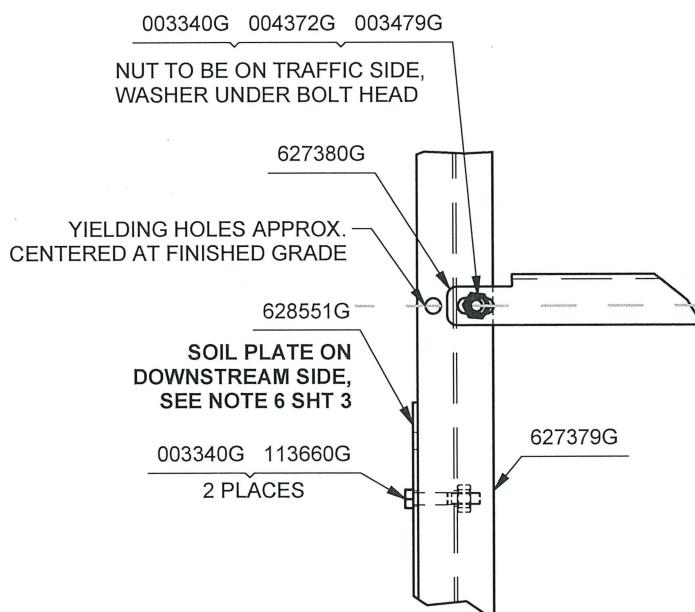
FACE OF DOWNSTREAM GUARDRAIL SYSTEM



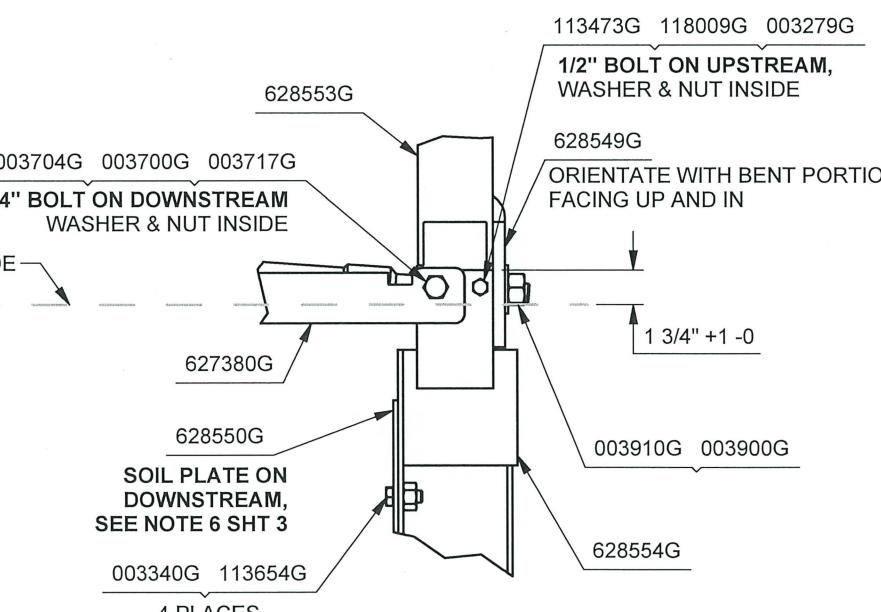
**DETAIL A**  
TYP POST 1,3,4,5,6,7,8,9  
\*\* BACKSIDE VIEW \*\*



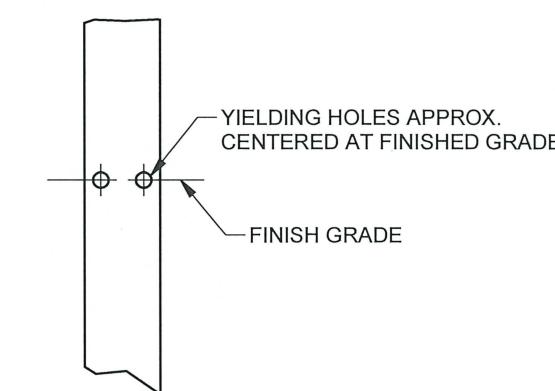
**DETAIL B**  
POST 2  
\*\* BACKSIDE VIEW \*\*



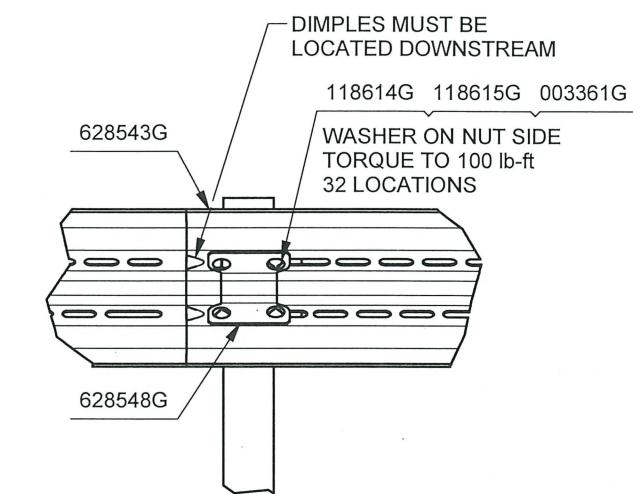
**DETAIL E**  
POST 2



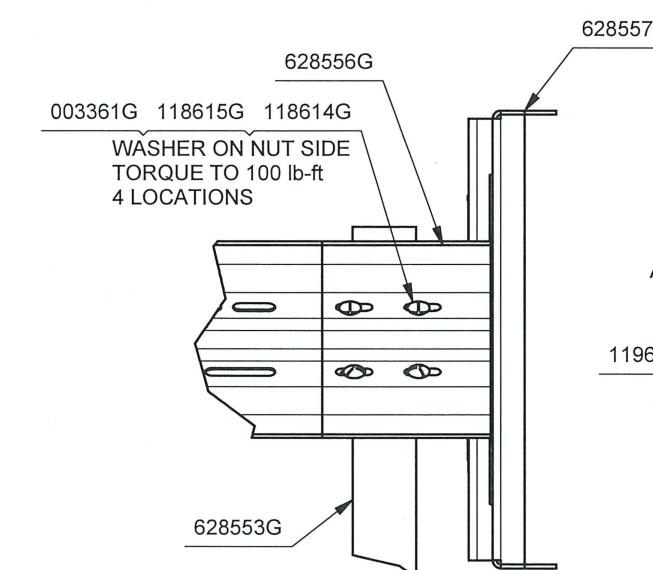
**DETAIL F**  
POST 1



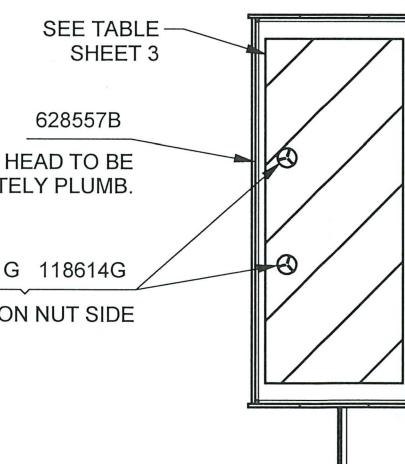
**DETAIL C**  
TYP POST 3-9



**DETAIL D**  
TYP POST 2-9



**DETAIL G**  
POST 1



**VIEW H**  
POST 1

**NOTES:**

1. DIMENSION DOES NOT INCLUDE WELDED PLATES.
2. SITE CONDITIONS: A CLEAR AND TRAVERSABLE RUN-OUT AREA MUST BE MAINTAINED BEHIND THE 4F-T AND NO HANDRAIL / BACKING RAIL IS PERMITTED WITHIN THE 4F-T PAY LENGTH.

DRAWN: L. DELANCEY	DATE: 8/27/2024	MODEL: 4F-T (SS 4380-REV B)
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REVISION DESCRIPTION	DO NOT SCALE DRAWING	
INITIAL RELEASE	ECO 9463	DATE - REV - BY - CHK -
SEE SHT 1, SOIL PLATE NOTE WAS 2, SEE TABLE WAS SHEET 1, 119595G NOTE WAS SWAGE-SPACER	10111	10/16/25 A ML ASB

4 FOOT FLARED TREND® TERMINAL  
MASH (16)  
(2'-7" INSTALLATION HEIGHT/TL-3 TERMINAL)

FDOT APL 536-006-009

SS4380FL



REV: A

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