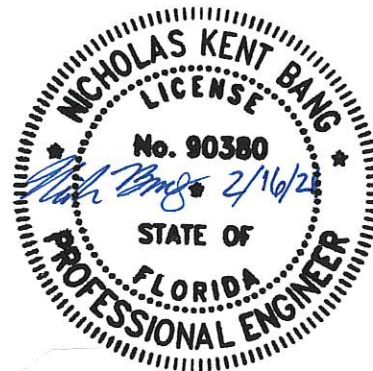


DRAWING INDEX

| SHEET NO | DESCRIPTION |
|----------|--|
| 1 OF 5 | GENERAL NOTES |
| 2 OF 5 | MAX-TENSION PARALLEL END TERMINAL SYSTEM LAYOUT |
| 3 OF 5 | MAX-TENSION PARALLEL END TERMINAL SYSTEM DETAILS |
| 4 OF 5 | MAX-TENSION PARALLEL END TERMINAL EXPLODED VIEW |
| 5 OF 5 | BILL OF MATERIALS |

31" MAX-TENSION GUARDRAIL END TERMINAL - PARALLEL

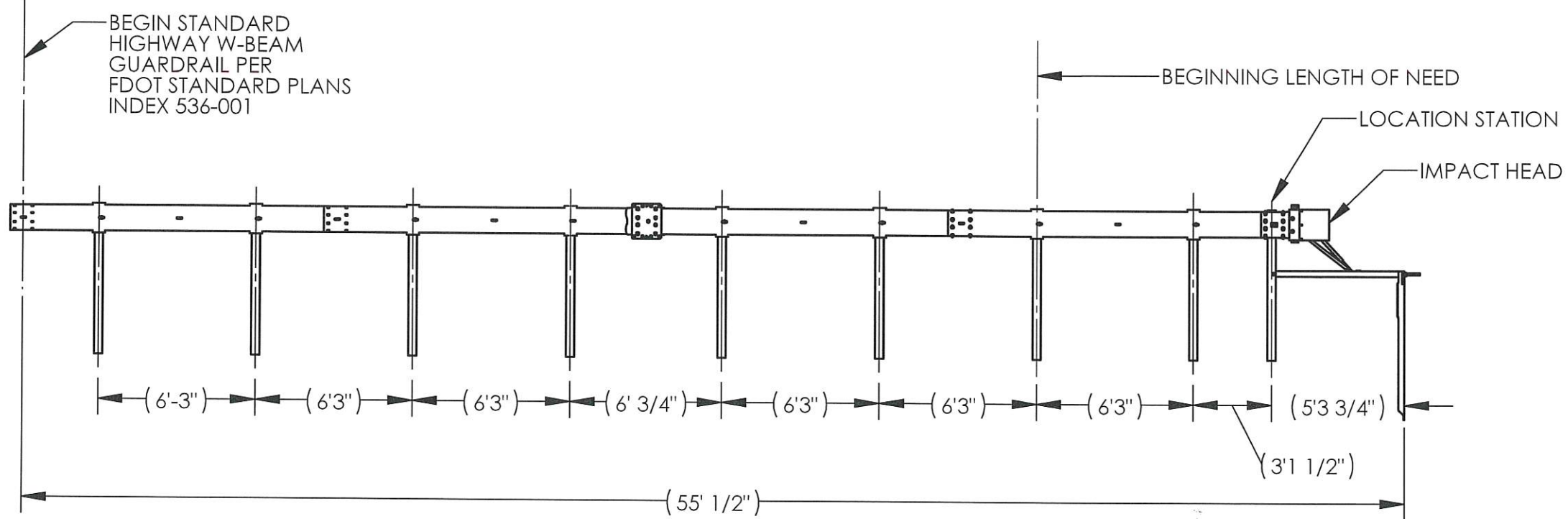
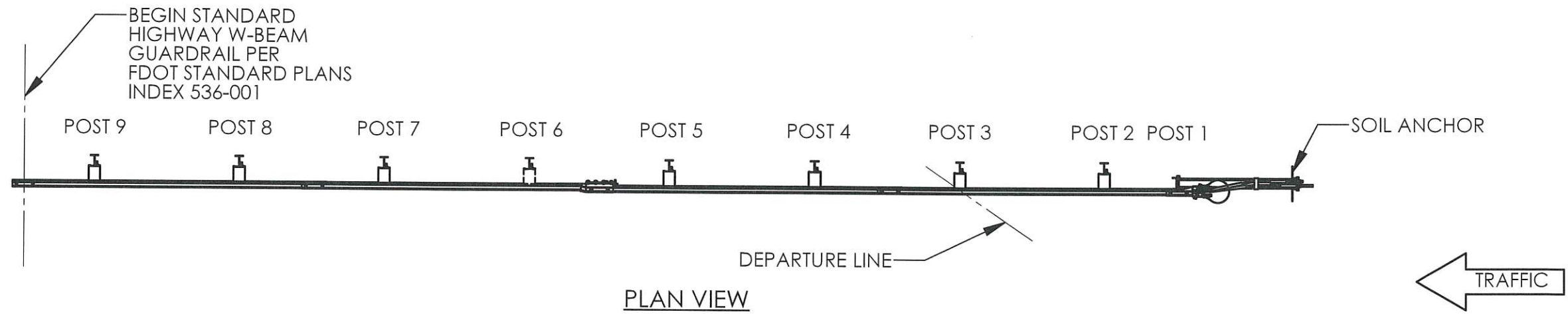
1. THE GUARDRAIL APPROACH TERMINAL SYSTEM REPRESENTED ON THESE APPROVED PRODUCT LIST (APL) DRAWINGS IS A PROPRIETARY DESIGN BY LINDSAY TRANSPORTATION SOLUTIONS (LTS) AND MARKETED UNDER THE TRADE NAME MAX-TENSION.
2. THESE DRAWINGS ARE SUFFICIENT FOR PLAN DETAILS FOR THE MAX-TENSION PARALLEL END TERMINAL WHEN INSTALLED IN CONNECTION WITH SHOULDER GUARDRAIL, AND PRECLUDES THE REQUIREMENT FOR SHOP DRAWING SUBMITTALS UNLESS THE PLANS OTHERWISE CALL FOR SUCH SUBMITTALS. THE MAX-TENSION PARALLEL END TERMINAL SHALL BE ASSEMBLED IN ACCORDANCE WITH THE MANUFACTURER'S DETAILED DRAWINGS, PROCEDURES, AND SPECIFICATIONS.
3. THE MAX-TENSION PARALLEL END TERMINAL IS AVAILABLE IN A STEEL POST CONFIGURATION ONLY. POST #1 IS A PROPRIETARY STEEL W6X8.5 OR W6X9 WIDE FLANGE POST. THE SOIL ANCHOR IN FRONT OF POST #1 IS A SPECIAL STEEL BENT CHANNEL DESIGN WITH AN INTEGRAL SOIL PLATE (SEE MANUFACTURER DETAILS).
4. THE MAX-TENSION PARALLEL END TERMINAL IS INTENDED FOR USE AS AN APPROACH TERMINAL FOR SHOULDER GUARDRAIL. THE BEGINNING OF LENGTH OF NEED IS LOCATED AT POST #3. THE EFFECTIVE LENGTH OF THE MAX-TENSION PARALLEL END TERMINAL IS 55'- 1/2". THE ALIGNMENT OF THE MAX-TENSION PARALLEL END TERMINAL CAN BE OFFSET UP TO 2'-0".
5. THE MAX-TENSION PARALLEL END TERMINAL CANNOT BE USED IN MEDIANS WHERE HORIZONTAL CLEARANCE REQUIRES THE USE OF DOUBLE-FACED GUARDRAIL.
6. FOR DETAILS OF SHOULDER GRADING AROUND END TREATMENTS, MISCELLANEOUS ASPHALT PAVEMENT AND PAY LIMITS, SEE FDOT STANDARD PLANS, INDEX 536-001.
7. MAINTAIN A RELATIVELY CLEAR AND TRAVERSABLE RUN-OUT AREA BEHIND AND BEYOND ALL GATING END TERMINALS.
8. REGARDING THE ORIENTATION OF PANEL LAP SPLICES, INSTALL THE MAX-TENSION SYSTEM AS SHOWN IN THE DRAWINGS, REGARDLESS OF THE DIRECTION OF TRAFFIC IN THE ADJACENT LANES (I.E. PANEL LAPPING MAY NOT BE IN THE DIRECTION OF TRAFFIC UNDER SOME CONDITIONS).
9. FOR THE MAX-TENSION SYSTEM TO FUNCTION PROPERLY, I.E. TELESCOPE TO ABSORB ENERGY, THE GUARDRAIL PANELS WITHIN THE END TERMINAL MUST BE PROPERLY LAPPED STARTING FROM THE TERMINAL HEAD; FIRST PANEL IS LAPPED ON TOP OF START OF SECOND PANEL, SECOND PANEL IS LAPPED OVER TOP OF THIRD PANEL, THIRD PANEL IS LAPPED OVER TOP OF FOURTH PANEL, FOURTH PANEL IS LAPPED OVER EXISTING GUARDRAIL PANEL.



| | | | | | | | |
|---|---|--|--|---|--|--|--|
| <small>© 2012 BARRIER SYSTEMS INC. THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BARRIER SYSTEMS INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF BARRIER SYSTEMS INC. IS PROHIBITED.</small> | | <small>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ±1/16 .XX = ±.03 ±1/2° .XXX = ±.010</small> | | | | <small>BARRIER SYSTEMS INC. 3333 Vaca Valley Parkway Ste 800 Vacaville, CA 95688 Tel: 888-800-3691 www.barriersystemsinc.com</small> | |
| APPROVALS | | <small>INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1994</small> | | <small>TITLE</small> MAX-TENSION PARALLEL TL-3 2'-1" MOUNTING HEIGHT FDOT APL NO. 536-006-004 | | <small>SIZE DWG NO. REV.</small> B BSI-1712021-AP D | |
| <small>DRAWN BY:</small> NKB <small>DRAWN DATE:</small> 12/07/17 <small>APPR'D BY:</small> GAD <small>APPR'D DATE:</small> 12/07/17 | <small>THIRD ANGLE PROJECTION</small> | | <small>REV</small> ECN# <small>DATE</small> | <small>SCALE</small> NTS FDOT APL 536-006-004 | | <small>SHEET</small> 1 OF 5 | |

| SYSTEM WIDTH | MODEL NUMBER | DESIGN SPEED | TEST LEVEL | SYSTEM LENGTH | SYSTEM HEIGHT | DESIGN LENGTH |
|--------------|--------------|--------------|------------|---------------|---------------|---------------|
| 17.5" | MT3SIS8W4 | ≥ 50 MPH | TL-3 | 55'- 1/2" | 2'-1" | 55'- 1/2" |

NOTE: MAY BE USED FOR LOWER DESIGN SPEEDS.



ELEVATION VIEW



MAX-TENSION PARALLEL GUARDRAIL
END TERMINAL SYSTEM LAYOUT

| | | |
|------------------|----------------------------------|------------------|
| SIZE B | DWG NO. BSI-1712021-AP | REV. D |
| SCALE 1:64 | FDOT APL 536-006-004 | SHEET 2 OF 5 |

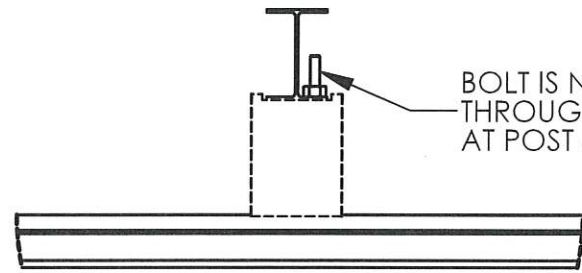
NOTES: UNLESS OTHERWISE SPECIFIED.

1. ALL GUARDRAIL POSTS, PANELS, BLOCKOUTS AND ASSOCIATED HARDWARE SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATION 536 AND STANDARD PLANS, INDEX 536-001. ALL METALLIC COMPONENTS SHALL MEET THE GALVANIZING REQUIREMENTS FOR GUARDRAIL, STANDARD SPECIFICATION 967.
2. IF ROCK EXCAVATION IS ENCOUNTERED, CONSULT THE MANUFACTURER'S INSTALLATION MANUAL FOR RECOMMENDATIONS.
3. WHEN SITE CONDITIONS PERMIT, POSTS MAY BE DRIVEN. IF POSTS ARE PLACED IN A DRILLED HOLE, THE BACKFILL MATERIAL MUST BE SATISFACTORILY COMPACTED TO PREVENT SETTLEMENT.



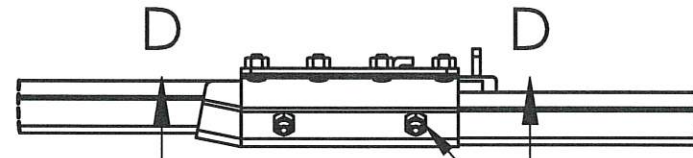
DETAIL A
(SCALE 1 : 12)

INSTALL GUARDRAIL RECESSED NUTS ON TRAFFIC SIDE.



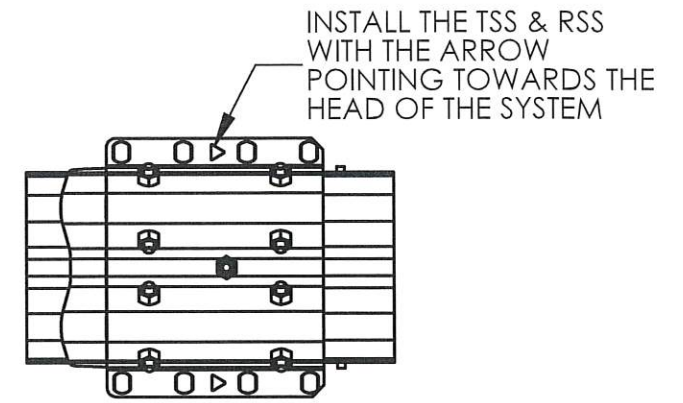
DETAIL B
(SCALE 1 : 12)

BOLT IS NOT PASSED THROUGH THE GUARDRAIL AT POST 6.



DETAIL C
(SCALE 1 : 12)

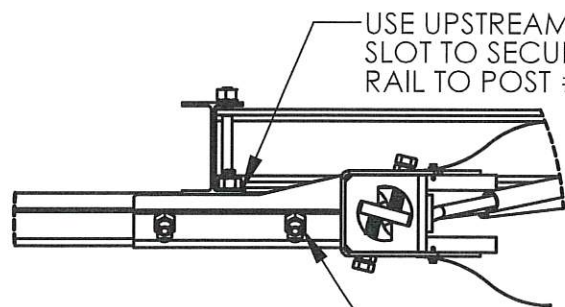
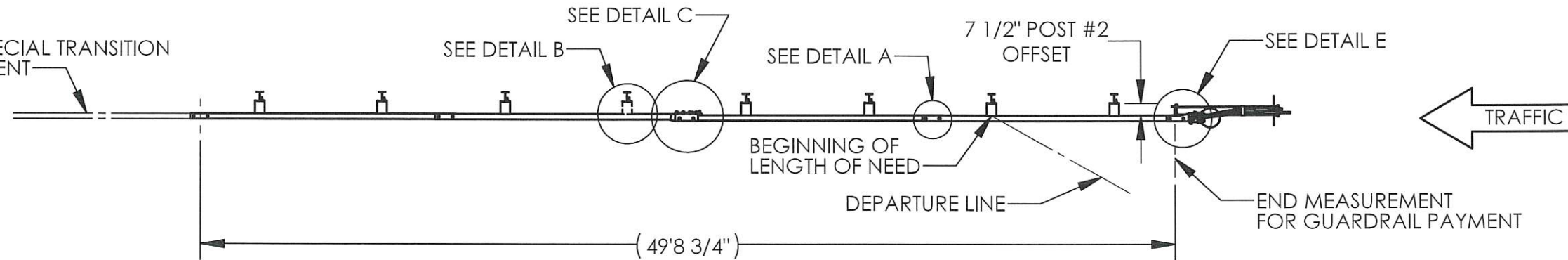
INSTALL GUARDRAIL RECESSED NUTS ON TRAFFIC SIDE.



VIEW D-D
(SCALE 1 : 12)

INSTALL THE TSS & RSS WITH THE ARROW POINTING TOWARDS THE HEAD OF THE SYSTEM

STANDARD GUARDRAIL, SPECIAL TRANSITION OR OTHER SPECIAL TREATMENT



DETAIL E
(SCALE 1 : 12)

INSTALL GUARDRAIL RECESSED NUTS ON TRAFFIC SIDE.

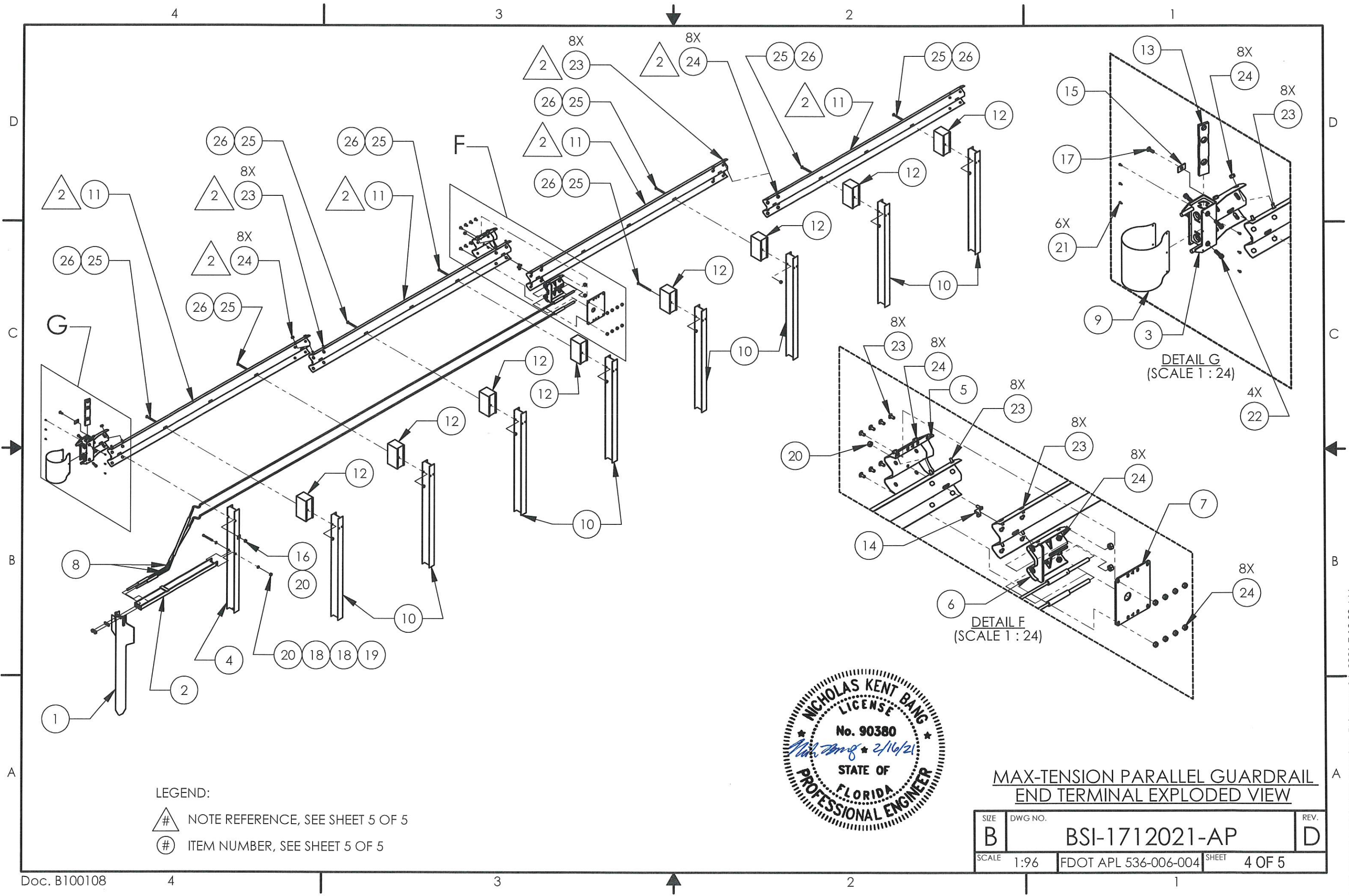
USE UPSTREAM SLOT TO SECURE RAIL TO POST #1-5 & 7-9

NOTE: PARALLEL END TERMINAL MAY BE FLARED AT A RATE OF 1:25.



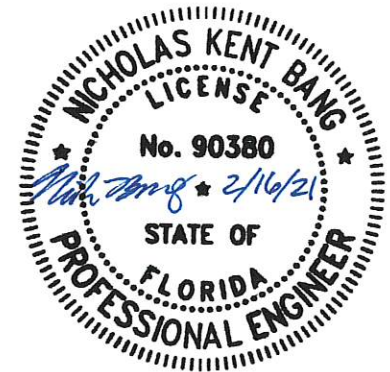
MAX-TENSION PARALLEL GUARDRAIL
END TERMINAL DETAILS

| | | |
|------------------|----------------------------------|------------------|
| SIZE B | DWG NO. BSI-1712021-AP | REV. D |
| SCALE 1:96 | FDOT APL 536-006-004 | SHEET 3 OF 5 |



LEGEND:

- △ # NOTE REFERENCE, SEE SHEET 5 OF 5
- # ITEM NUMBER, SEE SHEET 5 OF 5



**MAX-TENSION PARALLEL GUARDRAIL
END TERMINAL EXPLODED VIEW**

| | | |
|------------------|----------------------------------|------------------|
| SIZE B | DWG NO. BSI-1712021-AP | REV. D |
| SCALE 1:96 | FDOT APL 536-006-004 | SHEET 4 OF 5 |

| ITEM | PART NO | DESCRIPTION | QTY | SPEC |
|--|----------------|---|-----|------|
| 1 | BSI-1610060-00 | Soil Anchor, Galvanized | 1 | MAX |
| 2 | BSI-1610061-00 | Groundstrut, Galvanized | 1 | MAX |
| 3 | BSI-1610062-00 | Impact Head, Chase Threads | 1 | MAX |
| 4 | BSI-1610063-00 | Post, I-Beam, W6x9, 6FT, Galvanize | 1 | MAX |
| 5 | BSI-1610064-00 | TSS Panel, Galvanized | 1 | MAX |
| 6 | BSI-1610065-00 | ISS Panel, Galvanized | 1 | MAX |
| 7 | BSI-1610067-00 | RSS Plate, Galvanized | 1 | MAX |
| 8 | BSI-1610069-00 | Cable Assembly, MXTN | 2 | MAX |
| 9 | BSI-1701063-00 | BRACKET, DELINEATION, MAX-TENSION | 1 | MAX |
| 10 | BSI-1012078-00 | 6' GUARDRAIL LINE POST | 8 | FDOT |
| 11 | BSI-4004386 | W-Beam Guardrail RWM04a | 4 | FDOT |
| 12 | 4002337 | W-Beam Timber Blockout PDB01b | 8 | FDOT |
| 13 | B061058 | BSI, Cable Friction Plate, | 1 | MAX |
| BSI-1702051-KT: MAX-Tension System HW Kit | | | | |
| 14 | BSI-1610066-00 | Tooth, Geomet | 1 | MAX |
| 15 | 4002051 | Guardrail Wshr Rect AASHTO | 1 | FDOT |
| 16 | BSI-1102027-00 | WASHER, SQUARE, X-LITE, GALV | 1 | MAX |
| 17 | BSI-2001888 | Bolt CH 5/8-11x2 Fully Threaded, Gr5, Geomet | 1 | FDOT |
| 18 | 2001636 | Wshr 5/8 F436 Struct MGal | 2 | FDOT |
| 19 | BSI-2001886 | Bolt HH 5/8-11x7,2in Threads, Gr5, Geomet | 1 | FDOT |
| 20 | 4001116 | Guardrail Nut Recessed 5/8-11, Gr2 Mgal. | 3 | FDOT |
| 21 | BSI-2001887 | Screw SD, HH 1/4-14x3/4, 410 SS | 6 | FDOT |
| 22 | BSI-2001885 | Bolt HH 3/4-10x3, Fully Threaded, Gr5, Geomet | 4 | FDOT |
| BSI-1702052-KT: MAX-Tension Guardrail Splice HW Kit, Imperial | | | | |
| 23 | 4001115 | Guardrail Bolt 5/8-11x 1 1/4, Gr2, Mgal | 48 | FDOT |
| 24 | 4001116 | Guardrail Nut Recessed 5/8-11, Gr2 Mgal | 48 | FDOT |
| BSI-1702053-KT: MAX-Tension Post HW Kit, 8in, Imperial | | | | |
| 25 | 2001840 | Guardrail bolt 5/8-11x10, Mgal | 8 | FDOT |
| 26 | 4001116 | Guardrail Nut Recessed 5/8-11, Gr2 Mgal | 8 | FDOT |
| 27 | MANMAX | MAX-Tension Installation Manual | 1 | MAX |

NOTES: UNLESS OTHERWISE SPECIFIED.

1. IN LIEU OF TIMBER OFFSET BLOCKS, COMPOSITE OFFSET BLOCKS MEETING THE REQUIREMENTS OF SPECIFICATION SECTION 536 MAY BE USED.

2. THE BILL OF MATERIALS TABLE SHOWN IS FOR A SYSTEM THAT USES FOUR 12'-6" GUARDRAIL PANELS. TWO 25' GUARDRAIL PANELS CAN BE USED IN PLACE OF THE FOUR 12'-6" PANELS. THE QUANTITY OF ITEMS 23 AND 24 IS REDUCED BY 16 IF THE 25' GUARDRAIL PANEL CONFIGURATION IS USED.



MAX-TENSION PARALLEL GUARDRAIL
END TERMINAL BILL OF MATERIALS

| | | |
|------------------|----------------------------------|------------------|
| SIZE B | DWG NO. BSI-1712021-AP | REV. D |
| SCALE 1:96 | FDOT APL 536-006-004 | SHEET 5 OF 5 |