

**GENERAL NOTES:**

**BENCHMARK:** Vertical Control Data are shown on the Survey Control Detail Sheets.

**CONSTRUCTION SPECIFICATIONS:** Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (2014 edition) with applicable Supplemental Specifications and Special Provisions. Section and Subsection refer to the Standard Construction Specifications unless otherwise noted in the plans.

**DESIGN SPECIFICATIONS:** AASHTO Standard Specifications for Highway Bridges, 17th Edition (2002).

**LIVE LOADING:** HS20 **DESIGN METHOD:** LOAD FACTOR

**MATERIALS AND STRENGTHS:**  
 Class S(AE) Concrete (superstructure)  $f'c = 4,000$  psi  
 Reinforcing Steel (AASHTO M 31 or M 322, Type A)  $f_y = 60,000$  psi  
 Structural Steel (ASTM A709, Gr. 36)  $F_y = 36,000$  psi

**POWDER COATING:** All metal bridge railing shall receive a powder coating finish. The color of paint shall be Black equal or close to Federal Std. 595B, Color Chip No. 27038 and as approved by the Engineer.

**EXPANSION JOINTS:** Expansion joints in the existing sidewalks and at begin and end bridge shall be rehabilitated. Remove existing preformed expansion joint material and replace with poured silicone joint sealant. Roadway channels and end bent angles shown on standard are not present on the existing bridge but the details are still applicable. See Std. Dwg. No. 55064 for additional information.

**TEXTURED COATING FINISH:** Class 3 Textured Coating Finish shall be applied to bridge surfaces as specified in the plans and in Special Provision "TEXTURED COATING FINISH" and in accordance with Subsection 802.19(b)(3). Textured Coating Finish shall not be applied on surfaces where Polymer Overlay is applied.

**POLYMER OVERLAY:** Polymer overlay shall be applied to the roadway, trail and sidewalk surfaces (including vertical face of sidewalk curb) from face of rail to face of rail and from begin bridge to end bridge. For additional information, see Special Provisions "POLYMER OVERLAY" and "BRIDGE DECK REPAIR FOR POLYMER OVERLAYS".

<b>DETAIL DRAWINGS:</b>	<b>DRAWING NO(S).</b>
Stage Construction	BR-04 - BR-05
Bridge Rail Details	BR-06 - BR-10
Metal Handrail Details	BR-11 - BR-12
Approach Slab Details	BR-13 - BR-14
Electrical Details	BR-15
Standard Details for Joint Repairs & Modification	55064

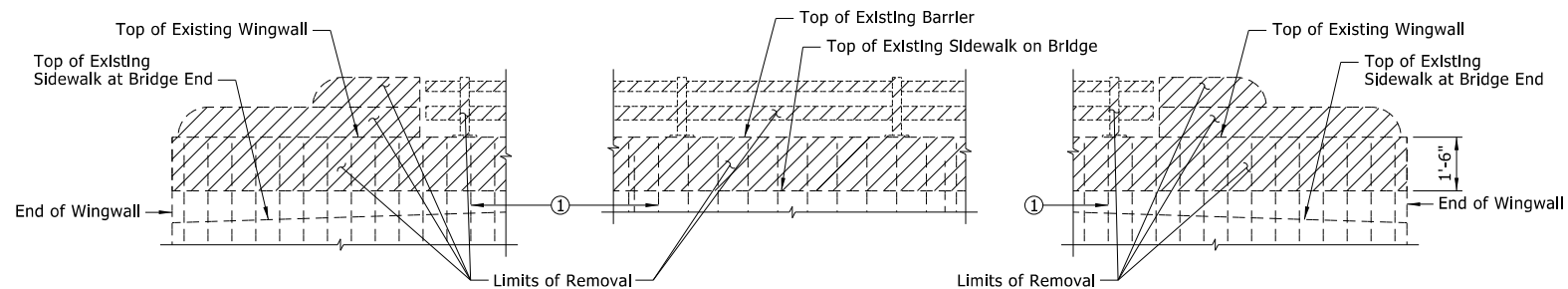
**EXISTING BRIDGE:** The Existing Bridge No. 03492 is 64.0' wide (52.0' clear roadway) and 116.8' long and consists of two 58'-5" reinforced concrete slab rigid frame spans supported by reinforced concrete walls with spread footings. Plans of the existing structure, if available, may be obtained upon request to the Construction Contract Development Section of the Program Management Division.

**REMODELING OF THE EXISTING BRIDGE:** The proposed work consists of a polymer overlay, textured coating finish, expansion joint rehabilitation, adding a concrete median bridge rail, replacing the approach slabs, and modifying the existing bridge rails as shown in the plans. For additional requirements of conducting the work, see Section 821. The cost associated with the removal and disposal of portions of the existing bridge and approach slabs shall be included in the pay item "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 03492)".

**VERIFICATION:** Except as noted, components of the existing bridge are to be retained and joined to the proposed work. Information and dimensions shown are based on the existing bridge plans and available survey data. The Contractor is to adhere strictly to the requirements for verification of the geometry of the existing bridge and its relationship to the proposed work described in Subsection 821.02 and make necessary adjustments to fit the proposed work to the existing structure. Payment for this work shall be considered subsidiary to the pay item "MODIFICATION OF EXISTING BRIDGE STRUCTURE (BRIDGE NO. 03492)".

**REMOVAL AND SALVAGE:** All material removed from the existing bridge under Item 821 shall be disposed of in accordance with Section 205. All material removed from the existing bridge shall become the property of the Contractor.

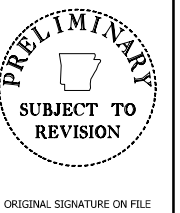
**MAINTENANCE OF TRAFFIC:** See Roadway Plans.



**BARRIER REMOVAL DETAILS**  
 Looking at Inside Face of Existing Barrier  
 Scale: 1/2" = 1'-0"

① Existing Vertical Reinforcing Steel to Remain. On West side, cut as shown in "SECTION A-A" and "SECTION B-B" on Dwg. No. BR-09. On East side, cut and bend as shown in "SECTION A-A" on Dwg. No. BR-06.

Burns & McDonnell Engineering Co., Inc.  
 9400 Ward Parkway  
 Kansas City, Missouri 64114  
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 Certificate of Authority  
 No. : 17  
 BMCD Project No. 149612



ORIGINAL SIGNATURE ON FILE

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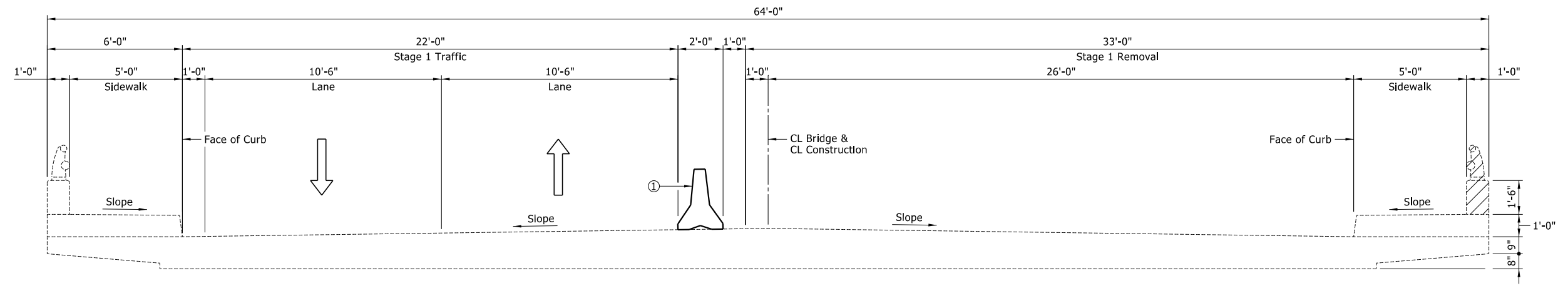
JOB NO. 061757  
 JONESBORO DR. CHILDREN'S TRAIL  
 (LITTLE ROCK) (S)  
 LITTLE ROCK, ARKANSAS

NO.	DATE	DESCRIPTION

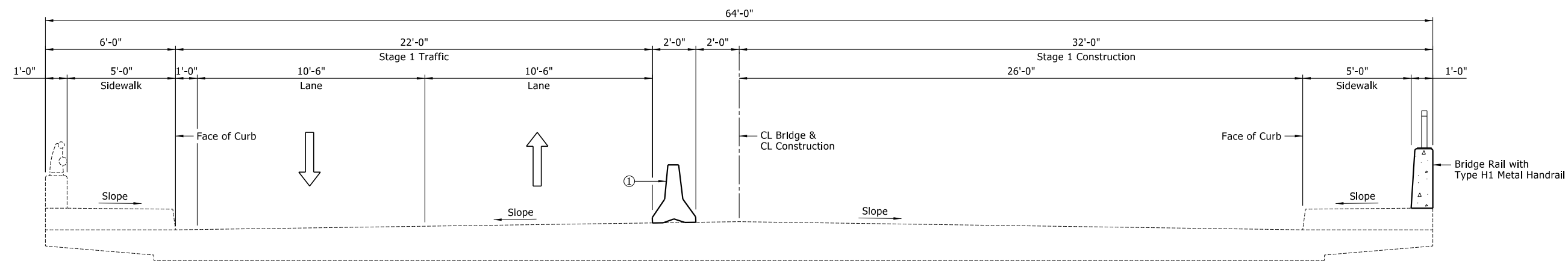
**GENERAL NOTES**

DRAWN BY: TWM	DATE: 7/2023
CHECKED BY: RMH	DATE: 5/2024
DESIGNED BY: TMR	DATE: 7/2023
ARDDOT BRIDGE NO. 03492	
SCALE: NONE	JOB NUMBER: 061757

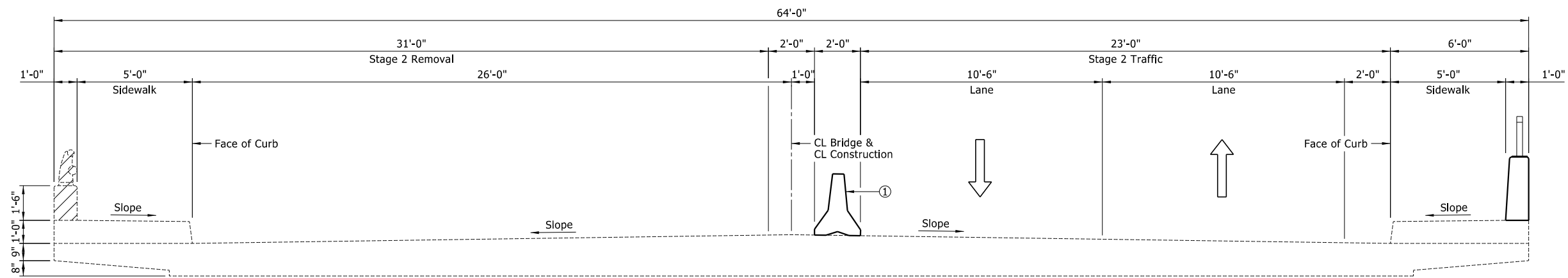
**BR-03**



**STAGE 1 REMOVAL & TRAFFIC**  
Looking Ahead Station



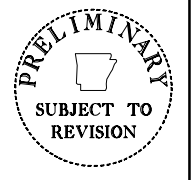
**STAGE 1 CONSTRUCTION**  
Looking Ahead Station



**STAGE 2 REMOVAL & TRAFFIC**  
Looking Ahead Station

NOTES:  
 Details related to Maintenance of Traffic on bridge plans for information only. For Maintenance of Traffic, see Roadway Plans.  
 Details which relate to Existing Bridge 03492 are shown for information only. Actual field conditions may vary and shall be verified by the Contractor.  
 ① Temporary Precast Barrier, see Std. Dwg. No. TC-4.

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 BMED Project No. 149612



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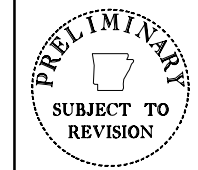
JOB NO. 061757  
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 (LITTLE ROCK) (S)  
 LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION	DATE	INC.

**STAGE CONSTRUCTION (SHEET 1 OF 2)**

DRAWN BY:	DATE:
TWM	4/2024
CHECKED BY:	DATE:
RMH	5/2024
DESIGNED BY:	DATE:
JGS	4/2024
ARDOT BRIDGE NO.	
03492	
SCALE:	JOB NUMBER:
3/8" = 1'-0"	061757

**BR-04**



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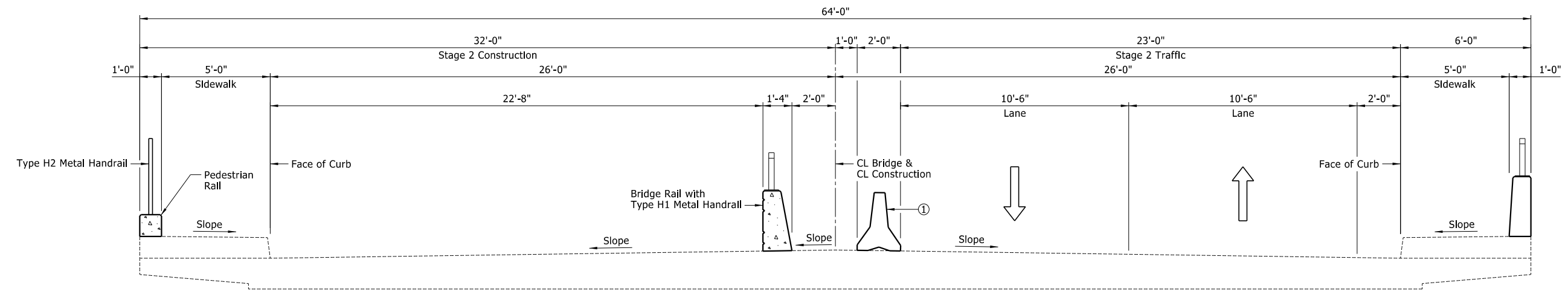
JOB NO. 061757  
**JONESBORO DR. CHILDREN'S TRAIL  
 (LITTLE ROCK) (S)**  
 LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION

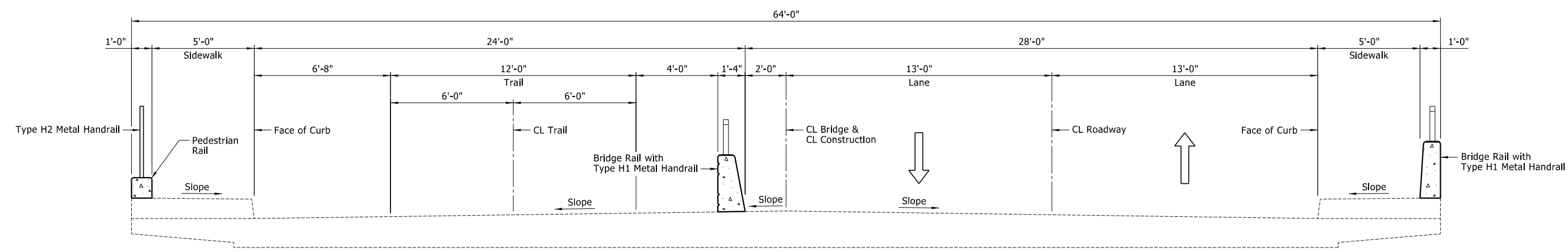
**STAGE  
 CONSTRUCTION  
 (SHEET 2 OF 2)**

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CHECKED BY: RMH	DATE: 5/2024
DESIGNED BY: JGS	DATE: 4/2024
ARDOT BRIDGE NO. 03492	
SCALE: 3/8" = 1'-0"	JOB NUMBER: 061757

**BR-05**



**STAGE 2 CONSTRUCTION**  
 Looking Ahead Station

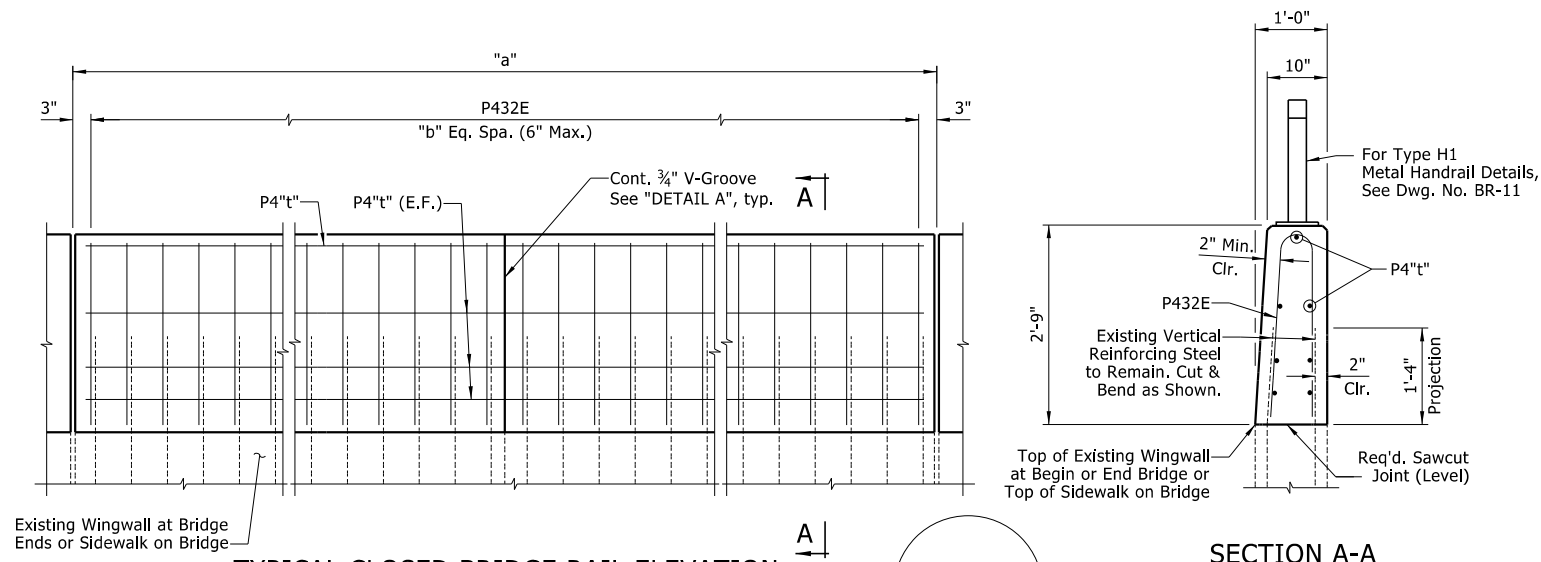


**COMPLETED SECTION**  
 Looking Ahead Station

NOTES:  
 Details related to Maintenance of Traffic on bridge plans for information only. For Maintenance of Traffic, see Roadway Plans.

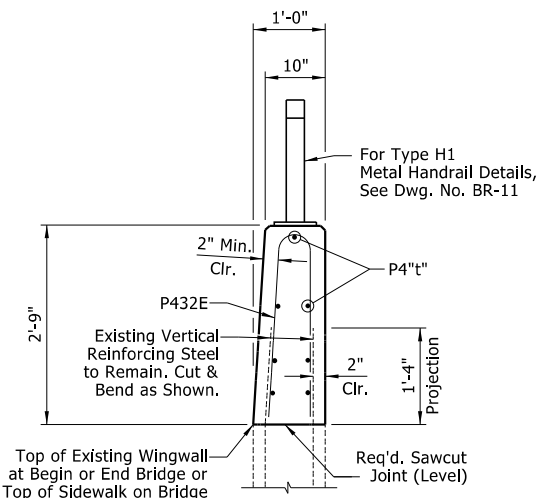
Details which relate to Existing Bridge 03492 are shown for information only. Actual field conditions may vary and shall be verified by the Contractor.

① Temporary Precast Barrier, see Std. Dwg. No. TC-4.



**TYPICAL CLOSED BRIDGE RAIL ELEVATION**

Looking at Front Face  
Handrail not shown for clarity  
Scale: 3/4" = 1'-0"



**SECTION A-A**

Section at Existing Wingwall Shown,  
Section on Bridge Similar  
Looking Back Station  
Scale: 3/4" = 1'-0"

BAR LIST					BENDING DIAGRAMS	
MARK	NO. REQ'D.	LENGTH	"A"	P.D.	Bar dimensions are out-to-out. Bars with an "E" suffix are to be epoxy coated. The first bar designation number indicates the reinforcing bar size.	
P405E	4	7'-11"		3"		
P406E	14	6'-1"		2"		
P407E	2 Each	4'-7"	2'-1"	2"		
P415E		2'-9"	1'-2"			
P416E	4	2'-8"		Str.		
P417E	4	4'-7"		Str.		
P418E	4	6'-7"		Str.		
P430E	28	31'-1"		Str.		
P432E	384	5'-4"		5 1/4"		
P433E	7	34'-8"		Str.		
P434E	7	39'-0"		Str.		

**TABLE OF BRIDGE RAIL VARIABLES**

PANEL LENGTH	BAR	SPACES	NUMBER OF PANELS
"a"	"t"	"b"	
① 39'-4 7/8"	34E	78	1
② 116'-10"	30E	233	1
③ 35'-0 15/16"	33E	70	1

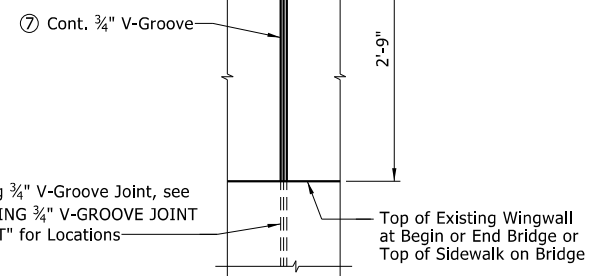
- From End of NE Wingwall to CL 1" Poured Silicone Joint at Bent 3
- From CL 1" Poured Silicone Joint at Bent 3 to CL 1" Poured Silicone Joint at Bent 1
- From CL 1" Poured Silicone Joint at Bent 1 to End of SE Wingwall

**EXISTING 3/4" V-GROOVE JOINT LAYOUT ④**

LOCATION	DISTANCE BETWEEN (FT.)
End of NE Wingwall to Joint 1	26.00
Joint 1 to Joint 2 ⑤	13.41
⑤ Joint 2 to Joint 3	7.04
Joint 3 to Joint 4	6.90
Joint 4 to Joint 5	7.64
Joint 5 to Joint 6	7.58
Joint 6 to Joint 7	8.67
Joint 7 to Joint 8	8.58
Joint 8 to Joint 9	5.96
Joint 9 to Joint 10	6.04
Joint 10 to Joint 11	5.96
Joint 11 to Joint 12	5.88
Joint 12 to Joint 13	8.63
Joint 13 to Joint 14	8.71
Joint 14 to Joint 15	7.54
Joint 15 to Joint 16	7.42
Joint 16 to Joint 17	7.13
Joint 17 to Joint 18 ⑥	7.15
⑥ Joint 18 to Joint 19	15.08
Joint 19 to End of SE Wingwall	20.00

- Contractor shall field verify all measurements prior to Construction
- Joint 2 shall be a 1" Poured Silicone Joint at End Bridge
- Joint 18 shall be a 1" Poured Silicone Joint at Begin Bridge

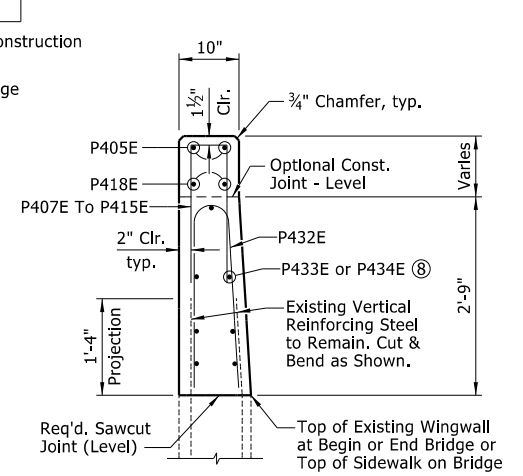
NOTES:  
Stirrup bars in bridge rail transition shall be spaced with P432E bars.  
For surface treatment, see "EAST BRIDGE RAIL SECTION" on Dwg. No. BR-10.



**DETAIL A**

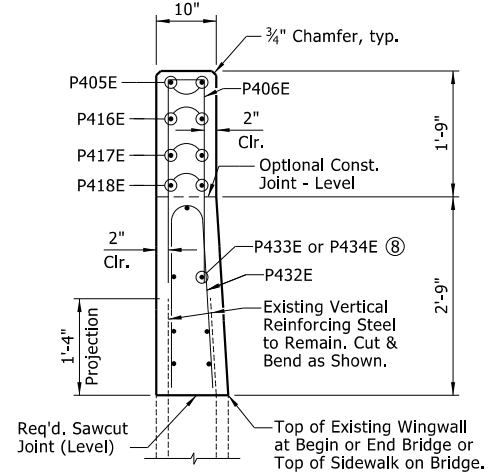
Scale: 3/4" = 1'-0"

- NOTE:  
3/4" V-Groove shall be continuous on inside face, top, & outside face of bridge rail. V-Groove joints shall be placed to match existing joint locations in wingwall or sidewalk (on bridge).



**SECTION B-B**

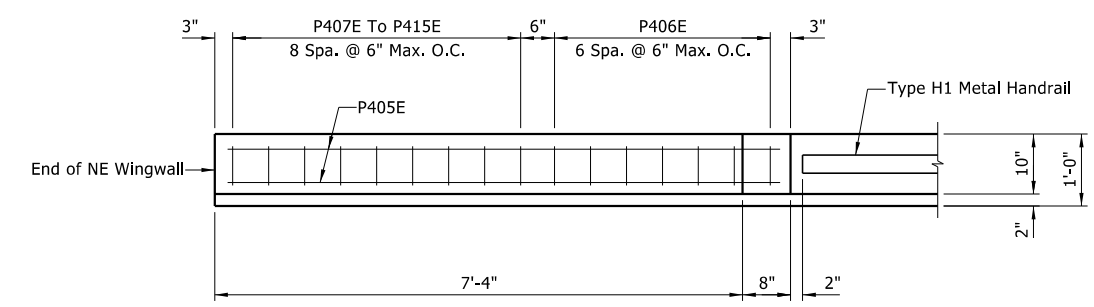
Looking Back Station  
Scale: 3/4" = 1'-0"



**SECTION C-C**

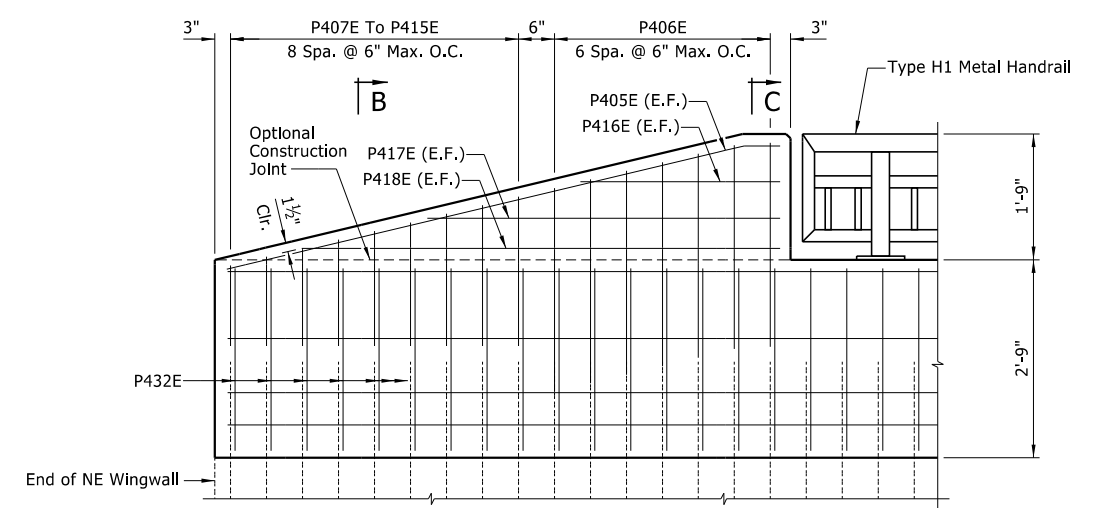
Looking Back Station  
Scale: 3/4" = 1'-0"

- Place P433E at SE Wingwall and P434E at NE Wingwall



**PLAN - EAST BRIDGE RAIL TRANSITION**

Transition at End Bridge Shown, Transition at Begin Bridge Similar  
Scale: 3/4" = 1'-0"



**ELEVATION - EAST BRIDGE RAIL TRANSITION**

Transition at End Bridge Shown, Transition at Begin Bridge Similar  
Looking at Front Face  
Scale: 3/4" = 1'-0"

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**PRELIMINARY**  
SUBJECT TO REVISION  
ORIGINAL SIGNATURE ON FILE

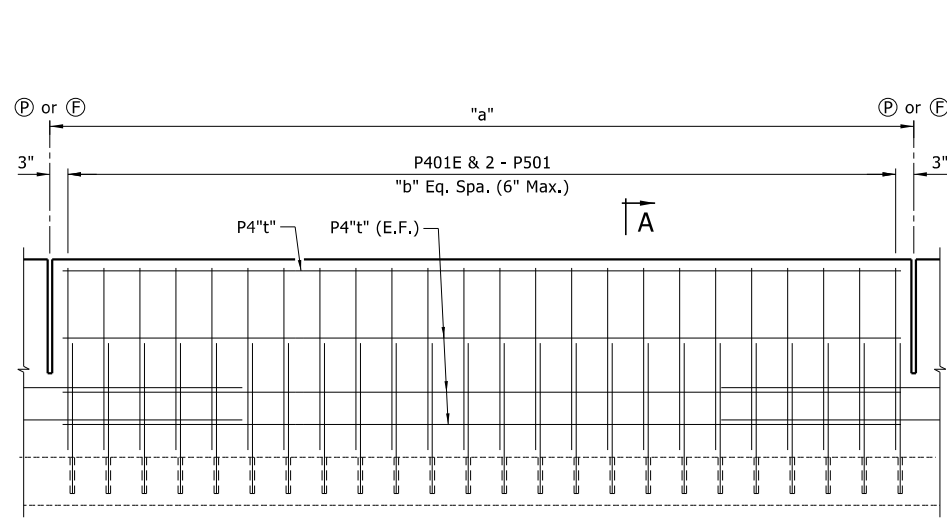
JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL  
(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION	DATE	INC.

**EAST BRIDGE RAIL DETAILS**

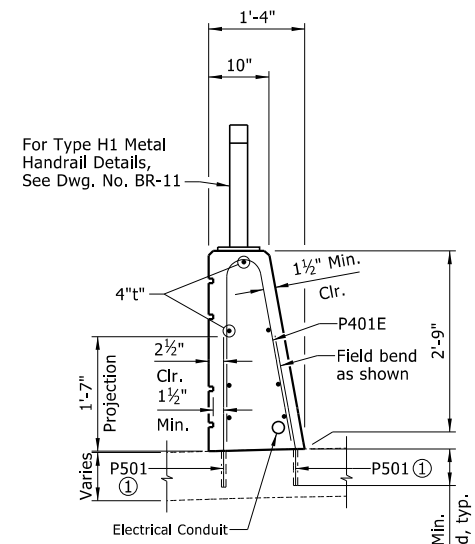
DRAWN BY:	DATE:
TLW	3/2024
CHECKED BY:	DATE:
RMH	5/2024
DESIGNED BY:	DATE:
JGS	3/2024
ARDOT BRIDGE NO.	
03492	
SCALE:	JOB NUMBER:
AS SHOWN	061757

**BR-06**



**TYPICAL CLOSED BRIDGE RAIL ELEVATION**

Looking at Front Face  
Handrail not shown for clarity  
Scale: 3/4" = 1'-0"



**SECTION A-A**

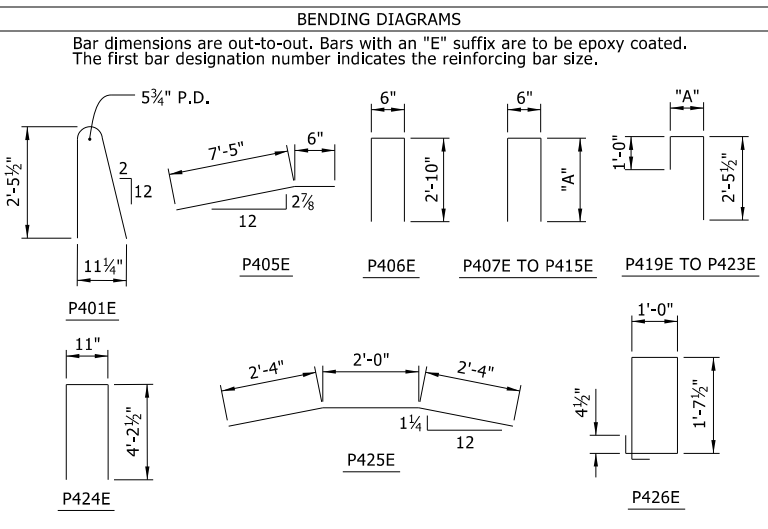
Scale: 3/4" = 1'-0"

① Drill and grout P501 bars with an approved epoxy anchor system listed on the OPL. Hole diameter and installation procedure shall be as recommended by the Manufacturer. This work and materials shall be considered subsidiary to the item "REINFORCING STEEL - BRIDGE (GRADE 60)" and will not be paid for directly.

NOTES:  
Stirrup bars in bridge rail transition shall be spaced with P401E bars.

MARK	NO. REQ'D.	LENGTH	"A"	P.D.
P401E	234	5'-4"	"A"	5 3/4"
P402E	16	5'-8"		Str.
P403E	14	10'-1"		Str.
P404E	56	11'-8"		Str.
P405E	4	7'-11"		3"
P406E	14	6'-1"		2"
P407E	2 Each	4'-7"	2'-1"	2"
TO		TO	TO	2"
P415E	4	2'-9"	1'-2"	
P416E	4	2'-8"		Str.
P417E	4	4'-7"		Str.
P418E	4	6'-7"		Str.
P419E	5 Each	4'-0 1/2"	9"	
TO		TO	TO	2"
P423E	4	4'-3"	11 1/2"	
P424E	8	9'-2"		2"
P425E	4	6'-8"		2"
P426E	6	5'-7"		2"
P501	468	2'-1"		Str.

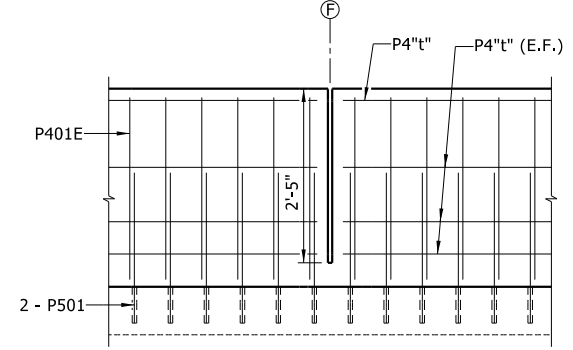
**BAR LIST**



**TABLE OF BRIDGE RAIL VARIABLES**

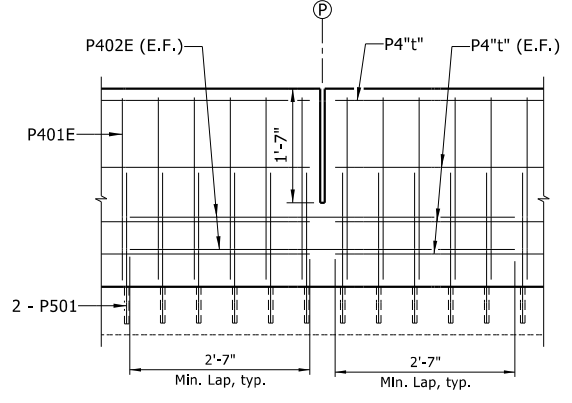
PANEL LENGTH	BAR	SPACES	NUMBER OF PANELS
"a"	"t"	"b"	
10'-5"	03E	20	2
12'-0"	04E	23	8

- Ⓟ CL Partial-Depth Bridge Rail Joint (1/4" to 1" Max.). Stop 1'-2" from top of slab.
- Ⓡ CL Full-Depth Bridge Rail Joint (1/4" to 1" Max.). Stop 4" from top of slab.



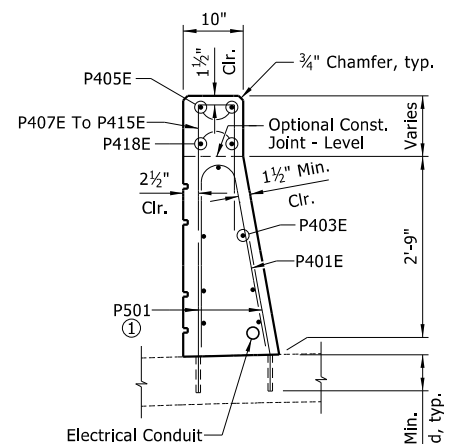
**MEDIAN BRIDGE RAIL REINFORCING (FULL DEPTH JOINTS)**

Looking at Front Face  
Scale: 3/4" = 1'-0"



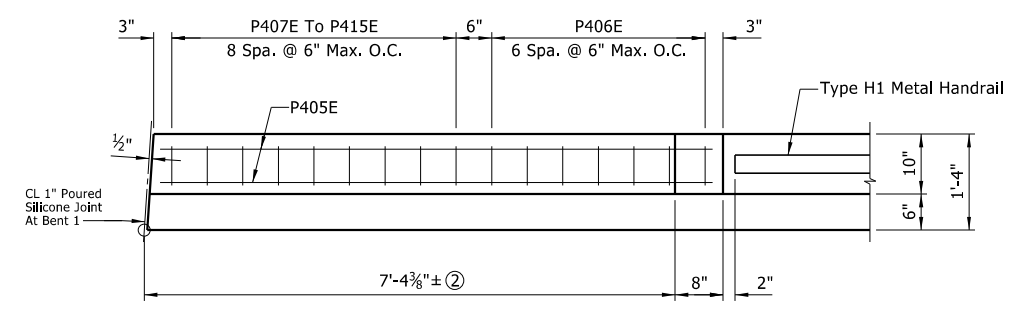
**MEDIAN BRIDGE RAIL REINFORCING (PARTIAL DEPTH JOINTS)**

Looking at Front Face  
Scale: 3/4" = 1'-0"



**SECTION B-B**

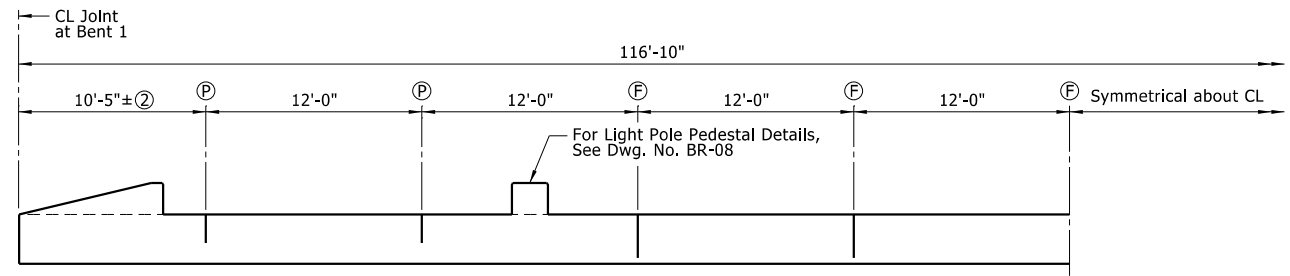
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**PLAN - MEDIAN BRIDGE RAIL TRANSITION**

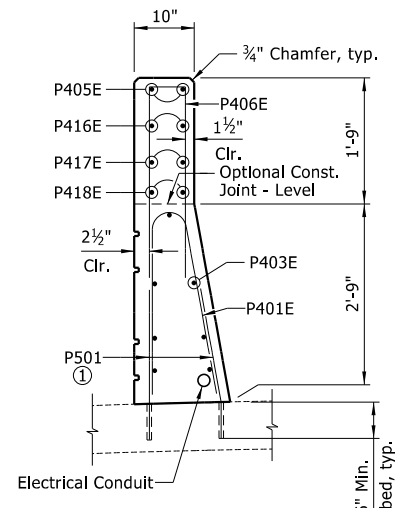
Transition at Begin Bridge Shown, Transition at End Bridge Similar  
Scale: 3/4" = 1'-0"

② Measured from CL Joint at Bottom Roadway Face of Median Bridge Rail.



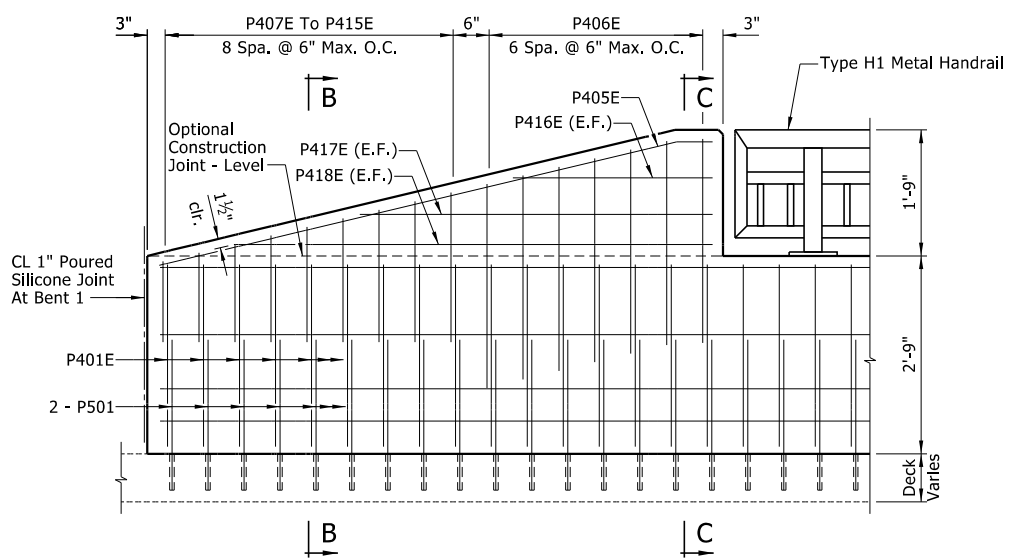
**PANEL AND JOINT LAYOUT**

Looking at Front Face  
Handrail not shown for clarity  
Scale: 3/16" = 1'-0"



**SECTION C-C**

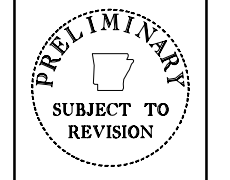
Scale: 3/4" = 1'-0"



**ELEVATION - MEDIAN BRIDGE RAIL TRANSITION**

Transition at Begin Bridge Shown, Transition at End Bridge Similar  
Scale: 3/4" = 1'-0"

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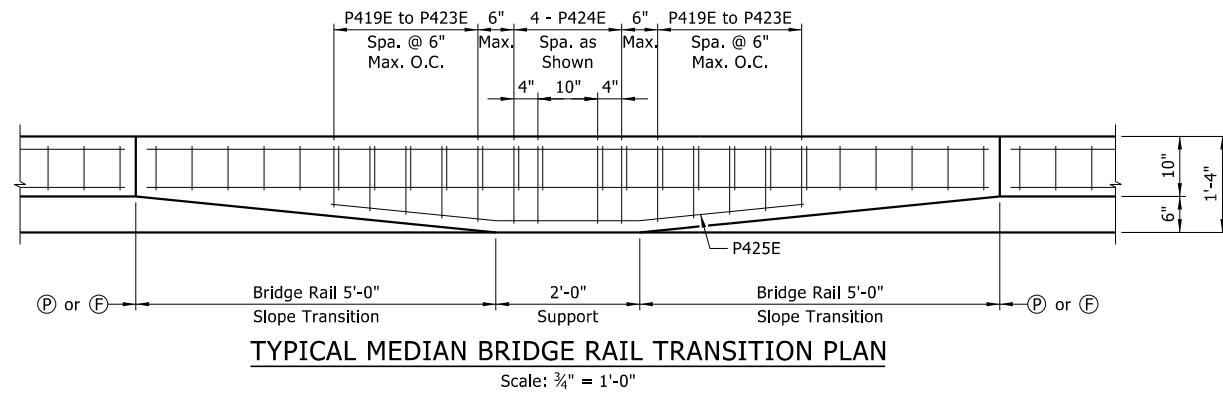
JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL  
(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION	DATE

**MEDIAN BRIDGE RAIL DETAILS**

DRAWN BY:	DATE:
TLW	3/2024
CHECKED BY:	DATE:
RMH	5/2024
DESIGNED BY:	DATE:
JGS	3/2024
ARDOT BRIDGE NO.	
03492	
SCALE:	JOB NUMBER:
AS SHOWN	061757

**BR-07**



**TYPICAL MEDIAN BRIDGE RAIL TRANSITION PLAN**  
Scale: 3/4" = 1'-0"



**NOTES:**  
Median bridge rail shall be widened by increasing top width from 10" to 1'-4" over 5'-0" transition length on each side of light pole support.

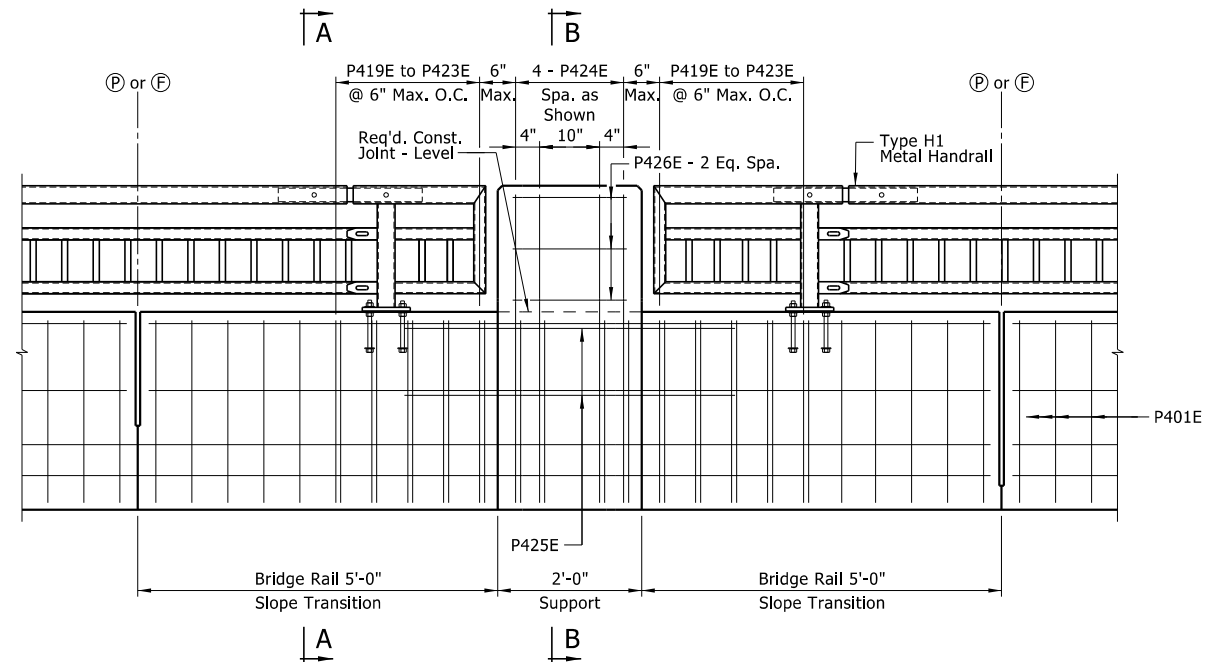
For typical median bridge rail reinforcement details, see Dwg. No. BR-07.

For "ARCHITECTURAL FINISH ELEVATION - MEDIAN BRIDGE RAIL" detail, see Dwg. No. BR-10.

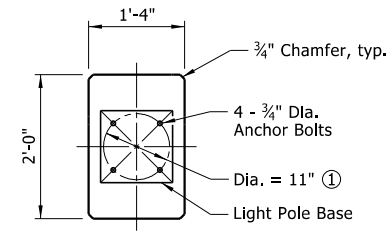
For "TYPICAL CLOSED BRIDGE RAIL ELEVATION" detail, see Dwg. No. BR-07.

Ⓟ CL Partial-Depth Rail Joint (1/4" to 1" Max.), Stop 1'-2" from top of slab.

Ⓡ CL Full-Depth Rail Joint (1/4" to 1" Max.), Stop 4" from top of slab.

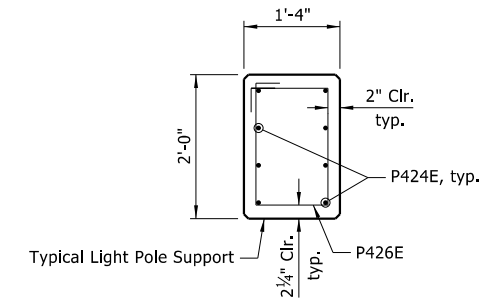


**TYPICAL MEDIAN BRIDGE RAIL TRANSITION ELEVATION**  
Scale: 3/4" = 1'-0"

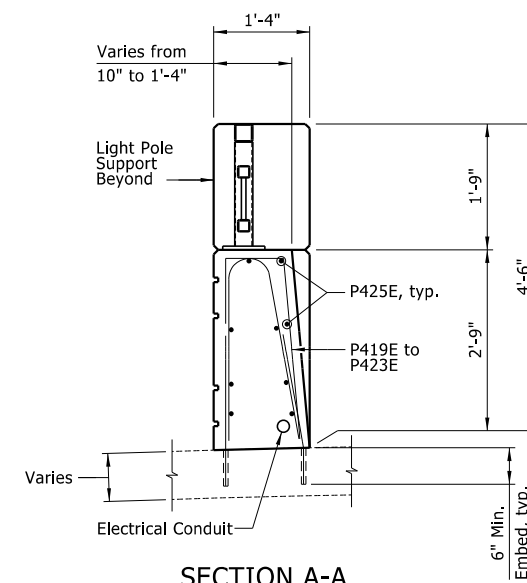


**LIGHT POLE SUPPORT PLAN**  
Scale: 3/4" = 1'-0"

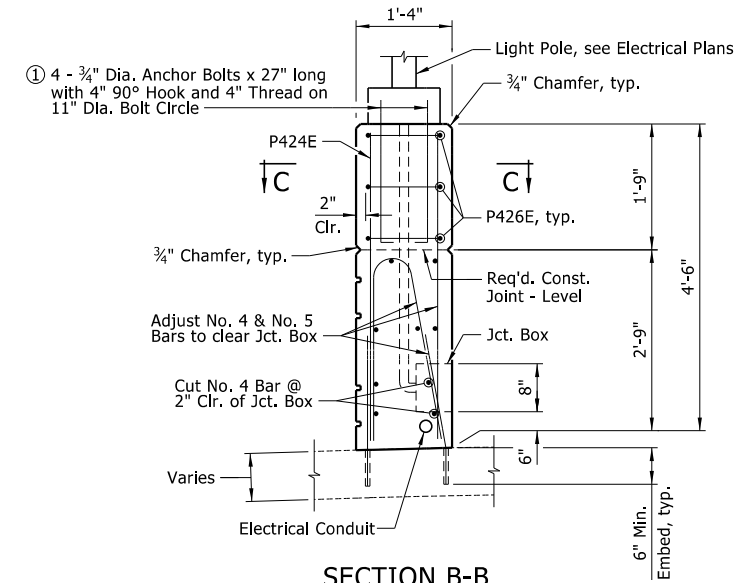
① Contractor shall verify the required anchor bolt size and corresponding bolt circle with the light pole manufacturer prior to installing anchor bolts. The light pole base shall not hang over the face of the light pole standard support.



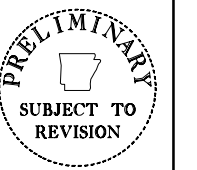
**SECTION C-C**  
Scale: 3/4" = 1'-0"



**SECTION A-A**  
Scale: 3/4" = 1'-0"



**SECTION B-B**  
Scale: 3/4" = 1'-0"



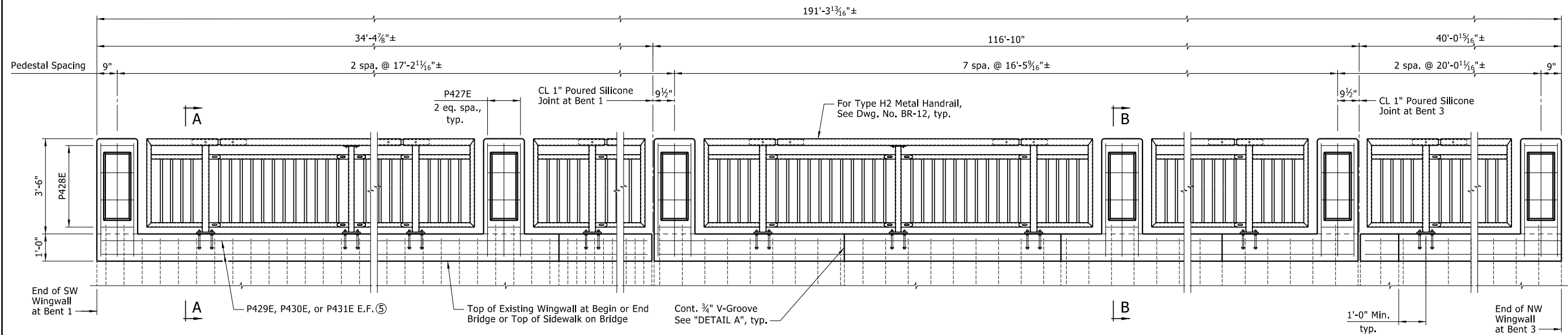
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(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION	DATE	INC.

**LIGHT POLE SUPPORT**

DRAWN BY:	DATE:
TLW	3/2024
CHECKED BY:	DATE:
RMH	5/2024
DESIGNED BY:	DATE:
JGS	3/2024
ARDOT BRIDGE NO.	
03492	
SCALE:	JOB NUMBER:
AS SHOWN	061757



**PEDESTRIAN RAIL ELEVATION**

Looking West at Inside Face of Rail  
Scale: 1/2" = 1'-0"

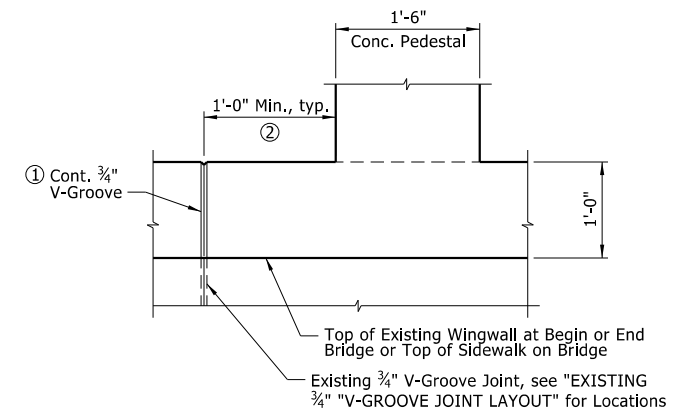
NOTE:  
For "PEDESTAL ENHANCEMENT DETAIL", see Dwg. No. BR-10.

⑤ Place P429E at SW Wingwall, P430E on Bridge (2'-7" Min. Lap), and P431E at NW Wingwall

**EXISTING 3/4" V-GROOVE JOINT LAYOUT ②**

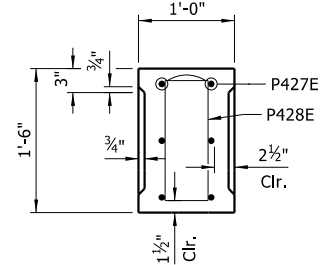
LOCATION	DISTANCE BETWEEN (FT.)
End of SW Wingwall to Joint 1	20.00
Joint 1 to Joint 2 ③	14.41
③ Joint 2 to Joint 3	7.04
Joint 3 to Joint 4	7.17
Joint 4 to Joint 5	7.46
Joint 5 to Joint 6	7.50
Joint 6 to Joint 7	8.63
Joint 7 to Joint 8	8.67
Joint 8 to Joint 9	5.96
Joint 9 to Joint 10	6.04
Joint 10 to Joint 11	6.00
Joint 11 to Joint 12	6.00
Joint 12 to Joint 13	8.58
Joint 13 to Joint 14	8.58
Joint 14 to Joint 15	7.54
Joint 15 to Joint 16	7.42
Joint 16 to Joint 17	7.21
Joint 17 to Joint 18 ④	7.02
④ Joint 18 to Joint 19	14.08
Joint 19 to End of NW Wingwall	26.00

- ② Contractor shall field verify all measurements prior to Construction
- ③ Joint 2 shall be a 1" Poured Silicone Joint at Begin Bridge
- ④ Joint 18 shall be a 1" Poured Silicone Joint at End Bridge

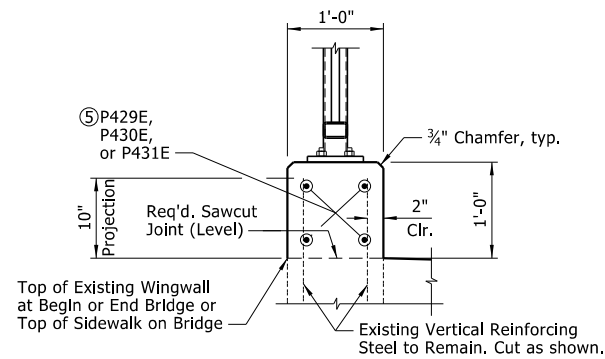


**DETAIL A**  
Scale: 1" = 1'-0"

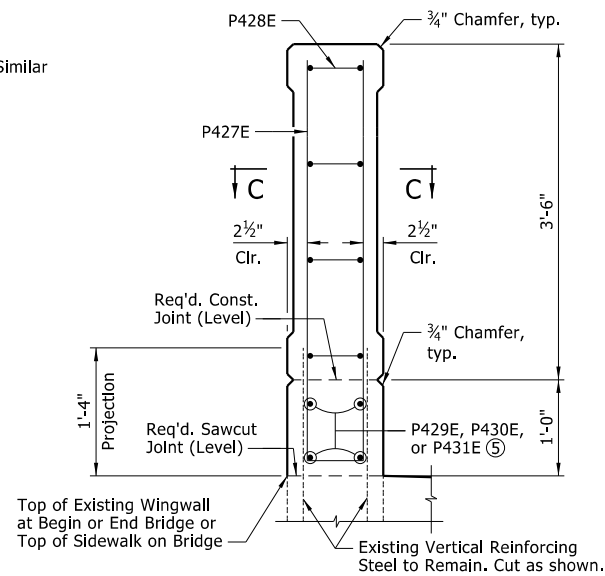
① NOTE:  
3/4" V-Groove shall be continuous on inside face, top, & outside face of pedestrian rail. V-Groove joints shall be placed to match existing joint locations in wingwall or sidewalk (on bridge).



**SECTION C-C**  
Scale: 1" = 1'-0"



**SECTION A-A**  
Section at SW Wingwall shown,  
Section on Bridge & at NW Wingwall Similar  
Scale: 1" = 1'-0"

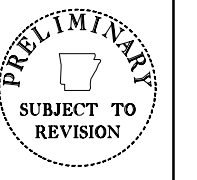


**SECTION B-B**  
Section at Existing Wingwall Shown,  
Section on Bridge Similar  
Scale: 1" = 1'-0"

**BAR LIST**

MARK	NO. REQ'D.	LENGTH	P.D.	BENDING DIAGRAMS
P427E	36	8'-9"	2"	
P428E	48	3'-10"	2"	
P429E	4	34'-0"	Str.	
P430E	16	31'-1"	Str.	
P431E	4	39'-9"	Str.	

Bar dimensions are out-to-out. Bars with an "E" suffix are to be epoxy coated. The first bar designation number indicates the reinforcing bar size.



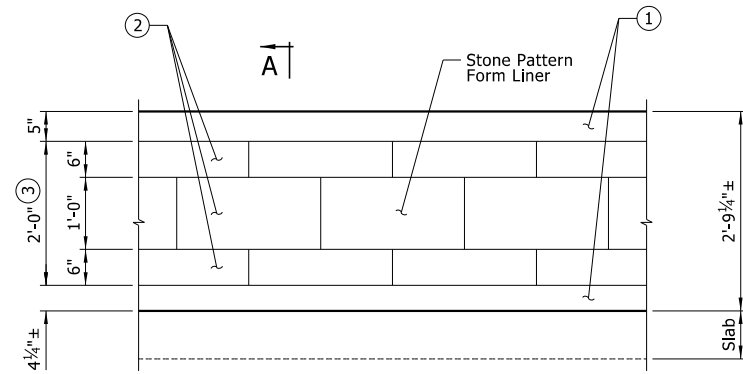
ORIGINAL SIGNATURE ON FILE

JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL  
(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION	DATE	INC.

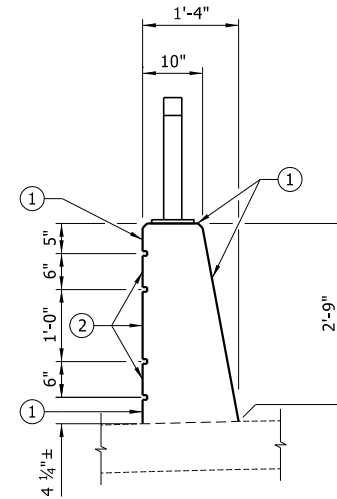
**PEDESTRIAN RAIL DETAILS**

DRAWN BY: TLW	DATE: 3/2024
CHECKED BY: RMH	DATE: 5/2024
DESIGNED BY: JGS	DATE: 3/2024
ARDOT BRIDGE NO. 03492	
SCALE: AS SHOWN	JOB NUMBER: 061757



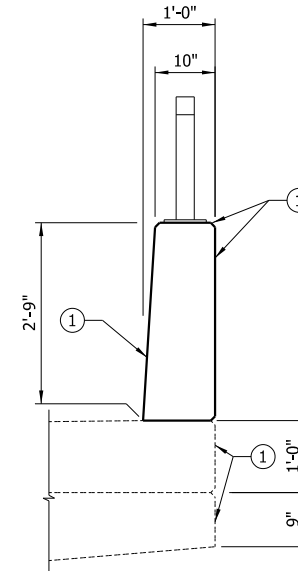
**ARCHITECTURAL FINISH ELEVATION - MEDIAN BRIDGE RAIL**

Showing Back Face of Barrier  
Scale: 3/4" = 1'-0"



**SECTION A-A**

Scale: 3/4" = 1'-0"



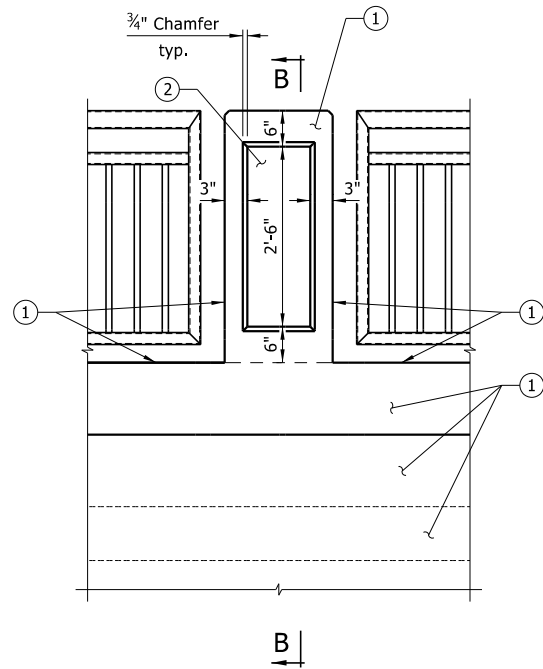
**EAST BRIDGE RAIL SECTION**

Section on Bridge Shown,  
Section at Existing Wingwall Similar  
Scale: 3/4" = 1'-0"

NOTES:  
Form liner shall be a max. depth of 1" to provide a min. clearance of 1 1/2" to bridge rail reinforcing.

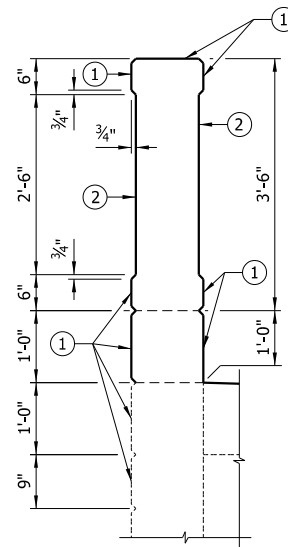
A Class 3 Textured Coating Finish shall be applied to bridge rail as specified in Special Provision "TEXTURED COATING FINISH" and in accordance with Subsection 802.19(b)(3).

- ① Class 3 Textured Coating Finish. Contractor shall match the color of the existing bridge.
- ② Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219).
- ③ Limits of Architectural Finish



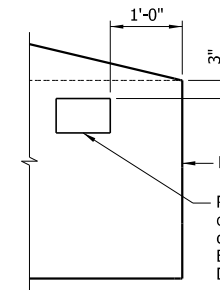
**PEDESTAL ENHANCEMENT DETAIL**

Scale: 3/4" = 1'-0"



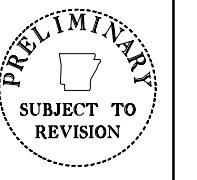
**SECTION B-B**

Section at Existing Wingwall Shown,  
Section on Bridge Similar  
Scale: 3/4" = 1'-0"



**VIEW SHOWING LOCATION OF BRIDGE NAME PLATE**

Scale: 3/4" = 1'-0"



ORIGINAL SIGNATURE ON FILE

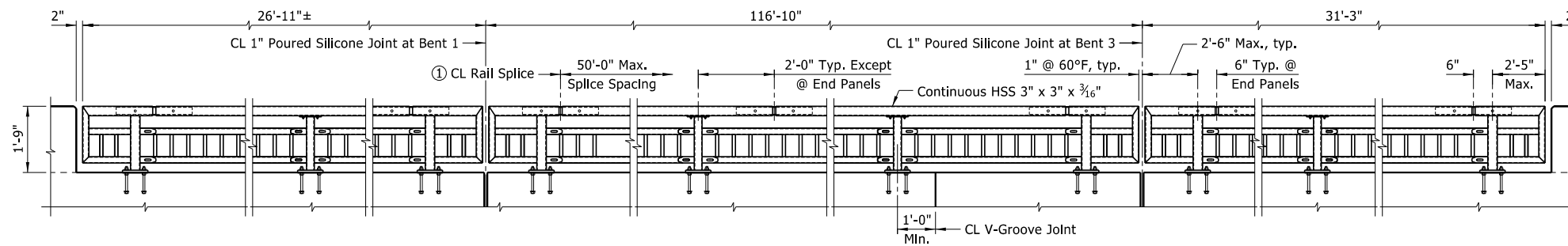
JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL  
(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

NO.	DATE	DESCRIPTION

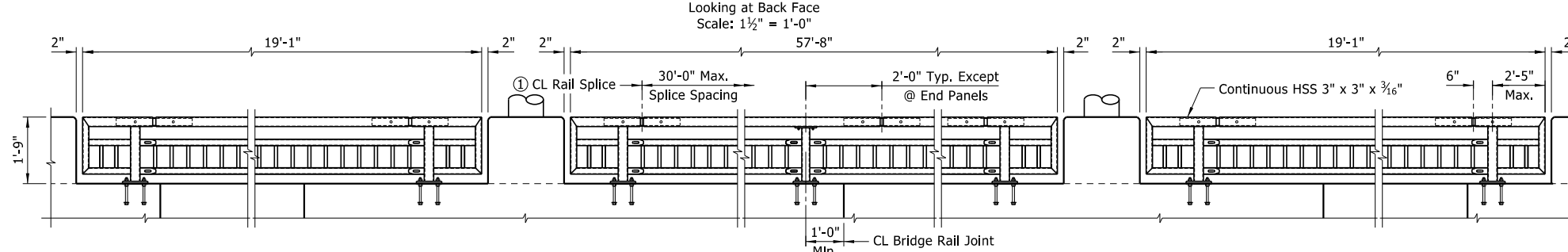
**AESTHETIC DETAILS**

DRAWN BY:	DATE:
TLW	4/2024
CHECKED BY:	DATE:
RMH	5/2024
DESIGNED BY:	DATE:
JGS	4/2024
ARDOT BRIDGE NO.	
03492	
SCALE:	JOB NUMBER:
AS SHOWN	061757

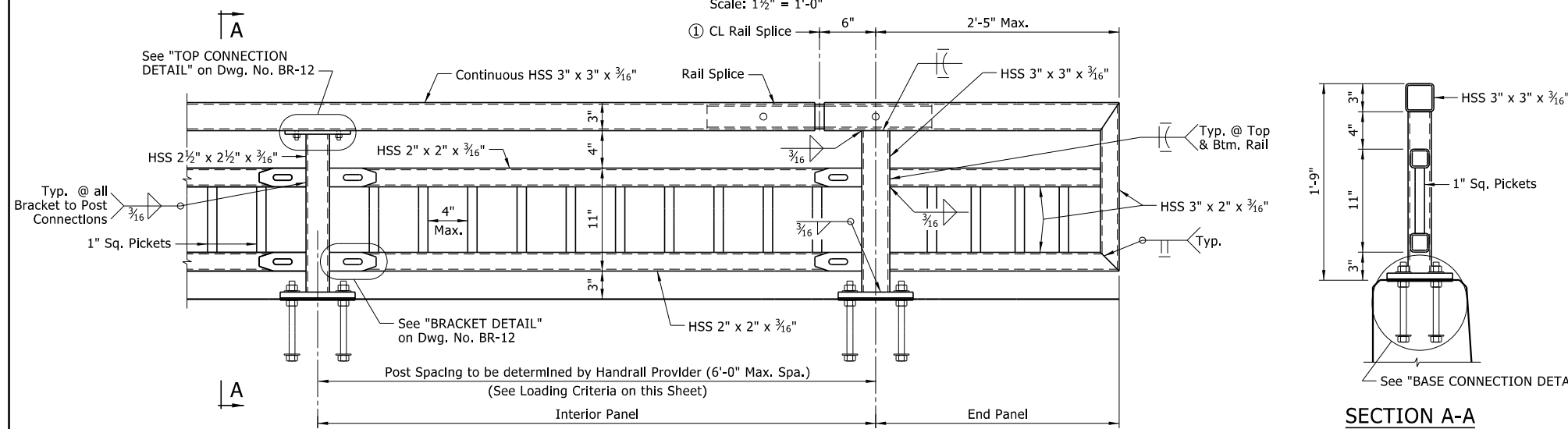




**TYPE H1 METAL HANDRAIL ELEVATION AT EAST BRIDGE RAIL**

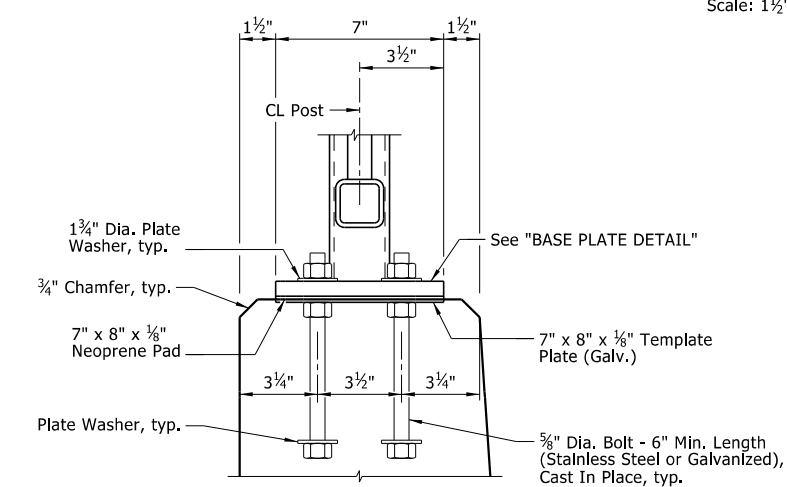


**TYPE H1 METAL HANDRAIL ELEVATION AT MEDIAN BRIDGE RAIL**



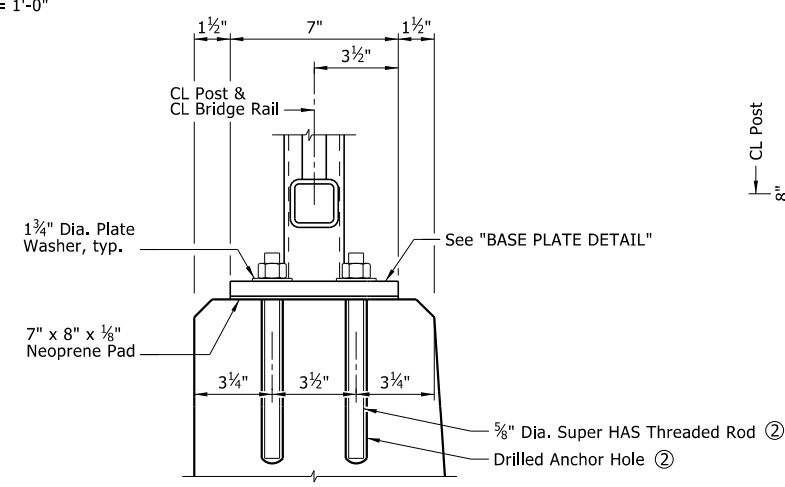
**TYPICAL INTERIOR AND END PANELS**

① See Dwg. No. BR-12 for "RAIL SPLICE DETAIL".



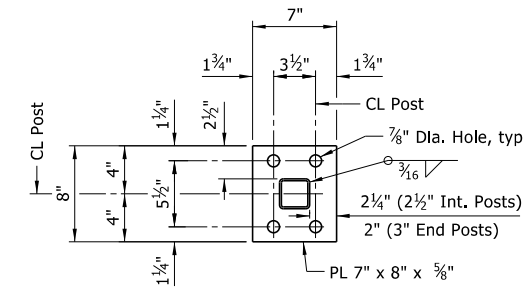
**BASE CONNECTION DETAIL**

Scale: 3" = 1'-0"



**DETAILS OF ALTERNATE POST ANCHOR SYSTEM**

Epoxy Adhesive Anchors  
Scale: 3" = 1'-0"



**BASE PLATE DETAIL**

Scale: 1 1/2" = 1'-0"

② HILTI HIT RE 500 Epoxy Adhesive Anchor System with 4 1/2" embedment or approved equal.

The Epoxy Adhesive Anchor System shall be installed in accordance with Manufacturer's recommendations.

**NOTES FOR METAL HANDRAIL:**

The metal handrail shall be designed, fabricated, and painted in accordance with Special Provision "METAL HANDRAIL".

The interior panels and posts shall be Aegis II Series manufactured by Ameristar Fence Products, Inc., Tulsa, Oklahoma or approved equal.

Rail layout shall conform to vertical and horizontal alignment of bridge. All posts shall be vertical. Rail sections shall be fabricated to attach to at least three posts.

Base plates shall not be placed upon areas that are improperly finished, deformed or irregular.

Maximum post spacing = 6'-0". Minimum distance from centerline post to centerline open or V-Groove joints in bridge rail = 1'-0".

Rail splices shall be at 50' maximum spacing. Centerline of splices shall be located at a minimum of 2 feet from centerline of post unless noted otherwise.

Shop drawings showing details of the metal handrail, including design calculations and a detailed post spacing layout in relation to the bridge rail joints and light pole pedestals, shall be submitted and approval secured prior to fabrication.

**MATERIALS:**

Rail tubing, posts, end caps, and base plates shall conform to ASTM A709, Grade 36 or ASTM A500-Grade B, and shall be galvanized after fabrication in accordance with Subsection 806.02(c). Steel rail members shall receive a powder coating process after galvanizing. Galvanized surfaces shall be prepared in accordance with Subsection 807.87 and the Manufacturer's recommendations prior to application of the powder coating process.

The powder coating process shall be a two coat system applied using electrostatic spray. The base coat shall be a thermosetting epoxy powder with a minimum thickness of 2-4 mils. The top coat shall be a tough polyester powder coat with a minimum thickness of 2-4 mils. Color shall be black, equal to or close to Federal Std. 595B, color chip 27038. Coated galvanized framework shall have a salt spray resistance of 3,000 hours using ASTM B117 without loss of adhesion. The powder coating process shall be in accordance with Manufacturer's recommendations. Any damage to the powder coated finish shall be repaired with a compatible touch-up system in accordance with the Manufacturer's recommendations and to the satisfaction of the Engineer at the Contractor's expense.

The Contractor shall submit a paint color sample prior to fabrication for Owner's approval.

Cast-in-place anchor bolts, nuts, washers, and set screws shall be galvanized high-strength steel or stainless steel. Mixing of galvanized and stainless steel fasteners will not be permitted.

**High-Strength Steel:**  
Cast-in-place anchor bolts shall conform to ASTM F3125, Grade A325, Type 1. Nuts shall conform to ASTM A563, Grade DH or AASHTO M 292, Grade 2H. Washers shall conform to ASTM F436. Plate Washers shall conform to ASTM A709, Grade 36. Template Plates shall conform to ASTM A709, Grade 36. Splice Set Screws shall conform to ASTM A307, Grade A. Anchor bolts, nuts, washers, plate washers, and set screws shall be galvanized in accordance with AASHTO M 232, Class C or ASTM B695, Class 50.

**Stainless Steel:**  
Cast-in-place anchor bolts shall conform to ASTM A193, Grade B8, Class 2 or A320, Grade B8, Class 2 with a minimum yield strength of 80,000 psi. Nuts shall conform to ASTM A194, Grade 8. Washers shall conform to ASTM A240, Type 302. Plate Washers shall conform to ASTM A240, Type 302. Splice Set Screws shall conform to ASTM A193, Grade B8, Class 1 or A320, Grade B8, Class 1.

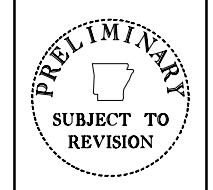
Threads on bolts, screws, and nuts shall conform to American Standard Coarse Series, Class 2 FIT, ASA Specification B1.1. Plate washers shall have dimensions meeting the requirements of ANSI/ASME B18.22.1, Type A plain washer (Wide Series) unless otherwise noted. Neoprene pads shall conform to the requirements of Subsection 807.15(b).

Metal handrail, including posts, fasteners, base plates, template plates, balusters, anchor bolts, neoprene pads, galvanizing and powder coatings; fabrication and erection; and all incidentals necessary to complete the work shall be paid for in accordance with Section 806 at the contract unit price per linear foot bid for "TYPE H1 METAL HANDRAIL" or "TYPE H2 METAL HANDRAIL".

**LOADING CRITERIA:**

- All horizontal members shall be designed for a uniform loading of 50 pounds per foot applied vertically and horizontally plus a concentrated load of 200 pounds applied in any direction at the top of the horizontal member. All loadings shall be applied simultaneously.
- All rail posts shall be designed for a transverse load (in kips) equal to 0.20 + 0.050L where L is equal to the post spacing (in feet).
- The top continuous 3" HSS member shall be fabricated to attach to a minimum of three posts.

Burns & McDonnell Engineering Co., Inc.  
9400 Ward Parkway  
Kansas City, Missouri 64114  
816-333-9400  
Certificate of Authority  
No.: 17  
BMEC Project No. 149612



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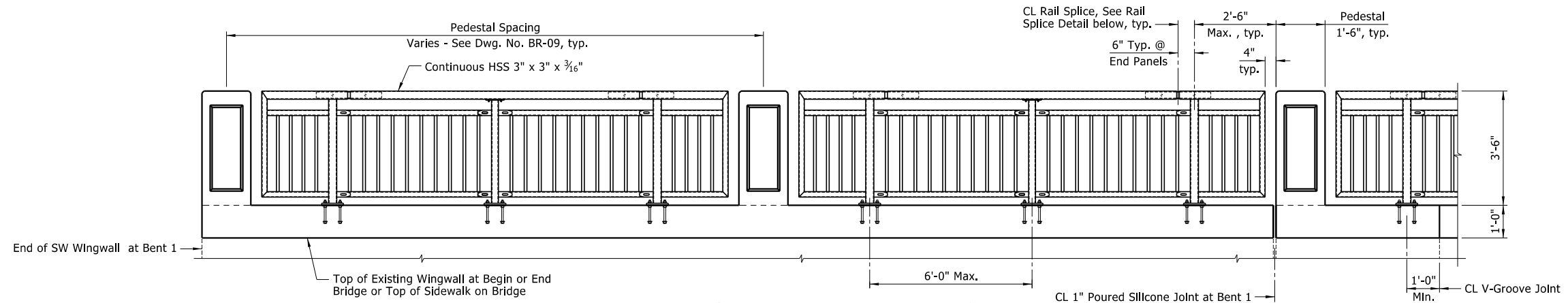
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JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL  
(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION	DATE

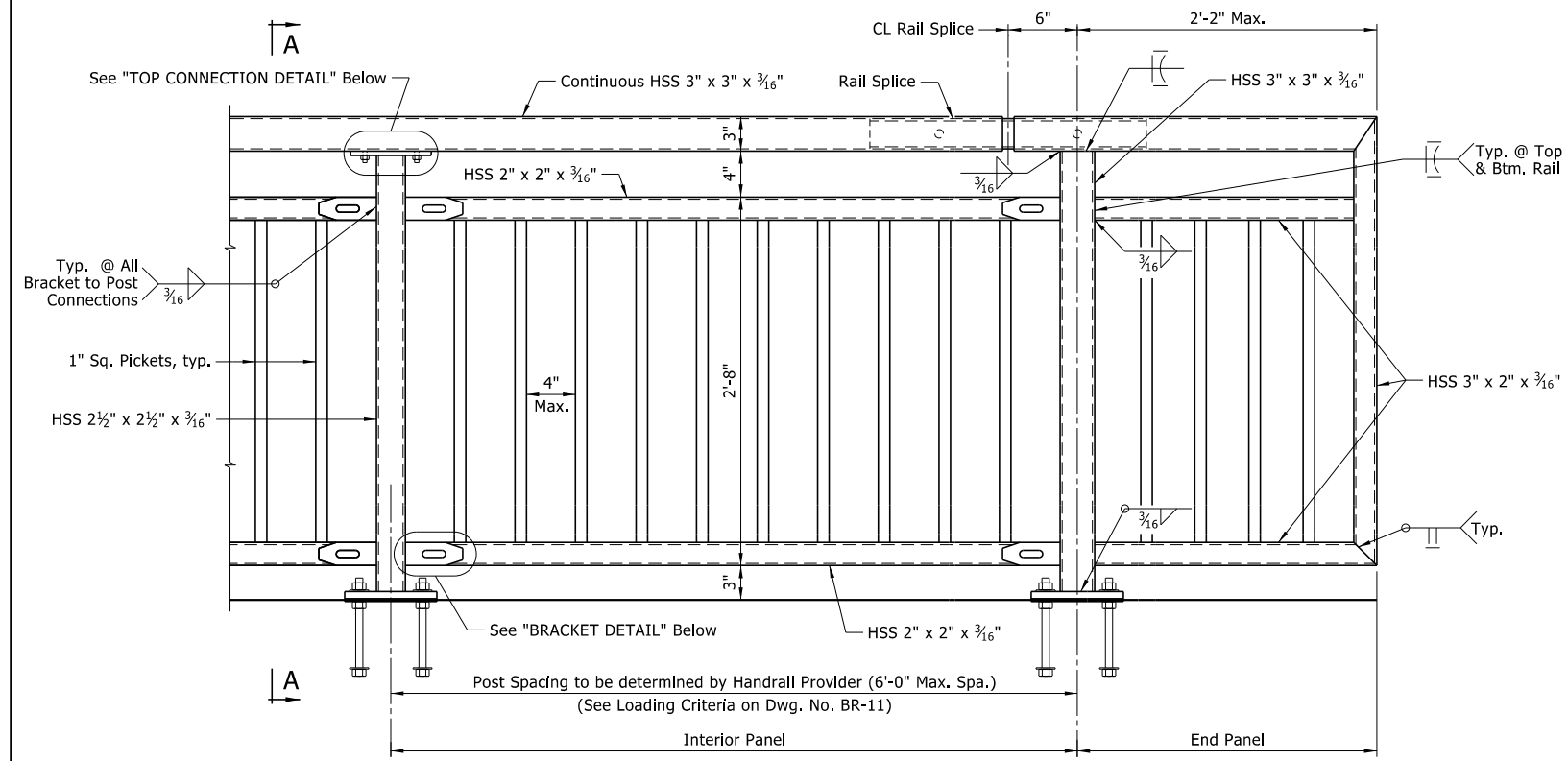
**TYPE H1 METAL HANDRAIL DETAILS**

DRAWN BY:	DATE:
TLW	3/2024
CHECKED BY:	DATE:
RMH	5/2024
DESIGNED BY:	DATE:
JGS	3/2024
ARDOT BRIDGE NO.	
03492	
SCALE:	JOB NUMBER:
AS SHOWN	061757

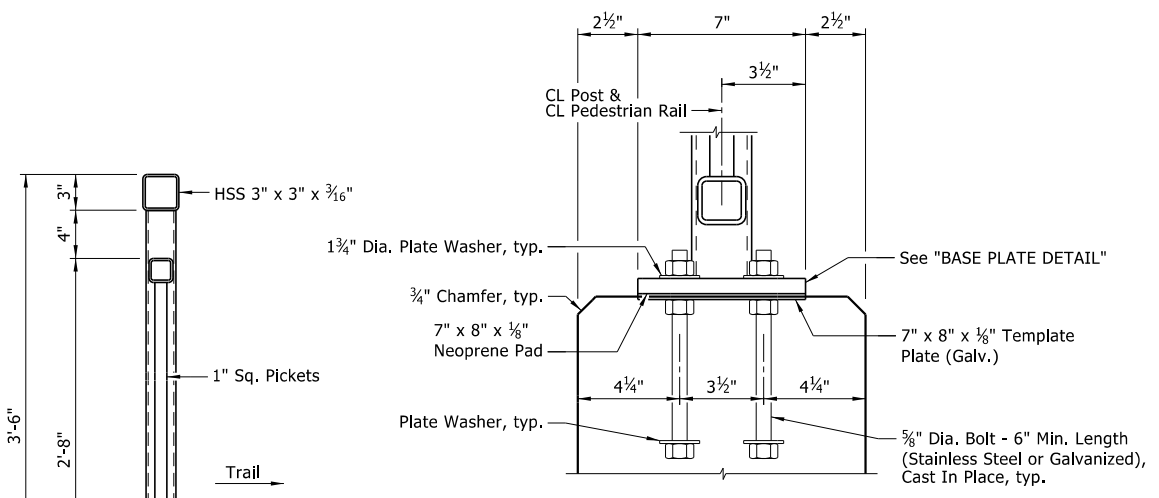


NOTES:  
 All posts shall be set vertical.  
 For "DETAILS OF ALTERNATE POST ANCHOR SYSTEM", See Dwg. No. BR-11.  
 For "NOTES FOR METAL HANDRAIL" and "MATERIALS", See Dwg. No. BR-11.

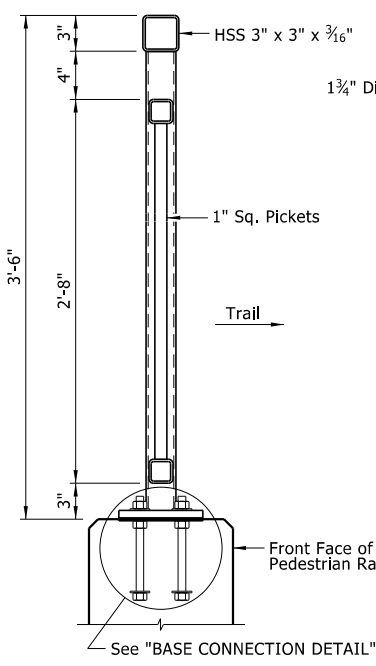
**TYPE H2 METAL HANDRAIL ELEVATION**  
 Looking West at Inside Face of Rail  
 Scale: 1 1/2" = 1'-0"



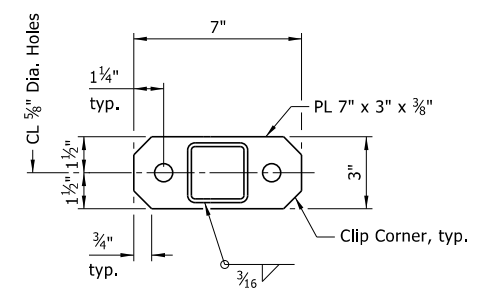
**TYPICAL INTERIOR AND END PANELS**  
 Looking West at Inside Face of Rail  
 Scale: 1 1/2" = 1'-0"



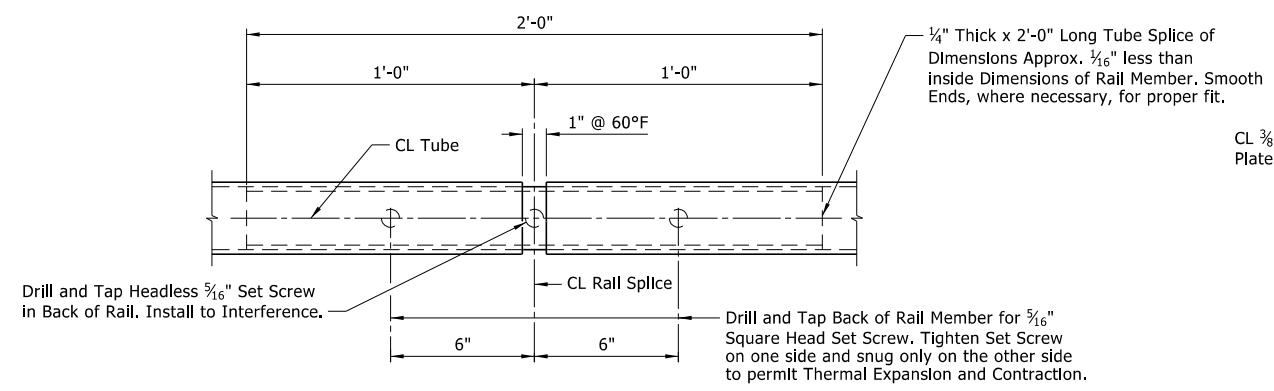
**BASE CONNECTION DETAIL**  
 Scale: 1 1/2" = 1'-0"



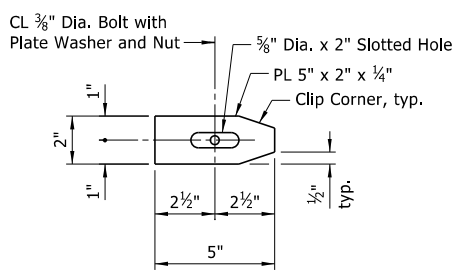
**SECTION A-A**  
 Scale: 1 1/2" = 1'-0"



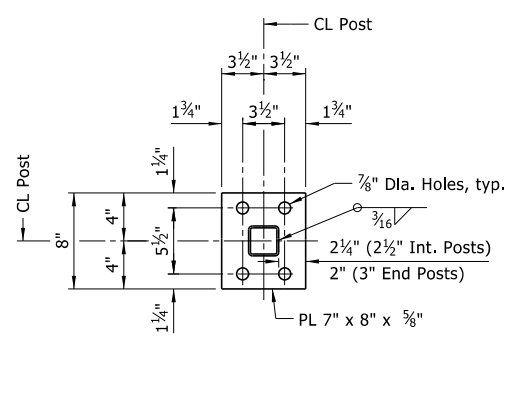
**SECTION B-B**  
 Scale: 3" = 1'-0"



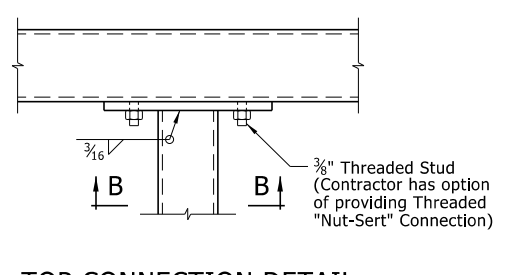
**RAIL SPLICE DETAIL**  
 Scale: 3" = 1'-0"



**BRACKET DETAIL**  
 Scale: 3" = 1'-0"



**BASE PLATE DETAIL**  
 Scale: 3" = 1'-0"



**TOP CONNECTION DETAIL**  
 Scale: 3" = 1'-0"

Burns & McDonnell Engineering Co., Inc.  
 9400 Ward Parkway  
 Kansas City, Missouri 64114  
 816-333-9400  
**BURNS MEDONNELL**  
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 No. : 17  
 BMEC Project No. 149612

**PRELIMINARY**  
 SUBJECT TO REVISION

ORIGINAL SIGNATURE ON FILE

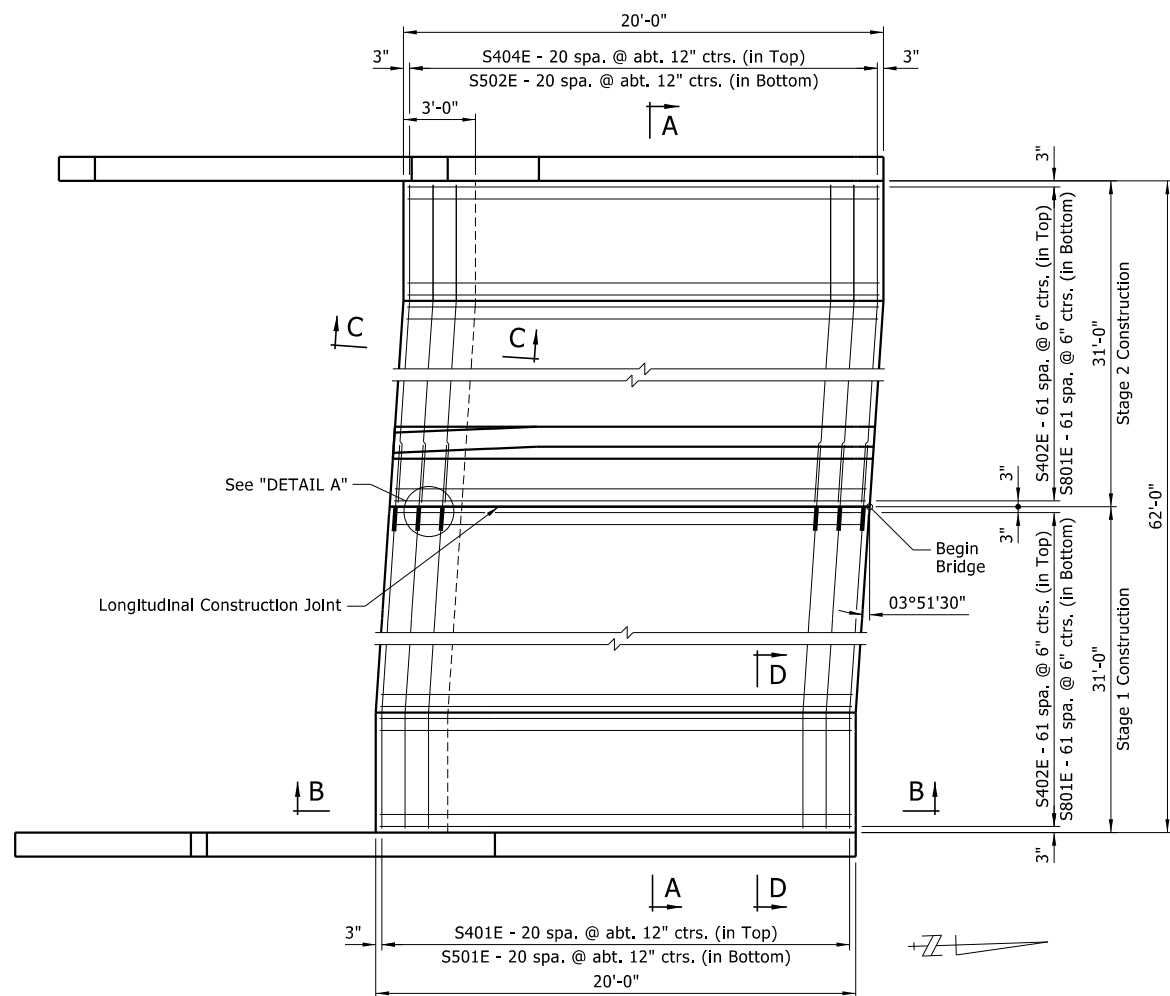
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JOB NO. 061757  
**JONESBORO DR. CHILDREN'S TRAIL**  
**(LITTLE ROCK) (S)**  
 LITTLE ROCK, ARKANSAS

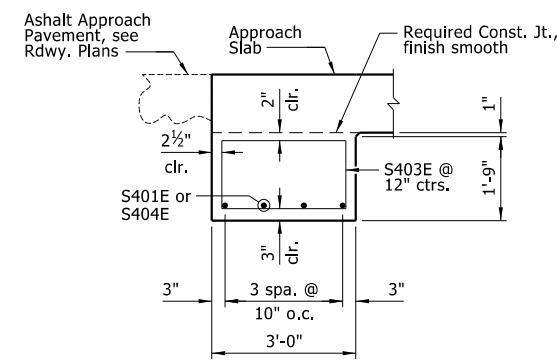
REVISIONS	DESCRIPTION	DATE	INC.

**TYPE H2 METAL HANDRAIL DETAILS**

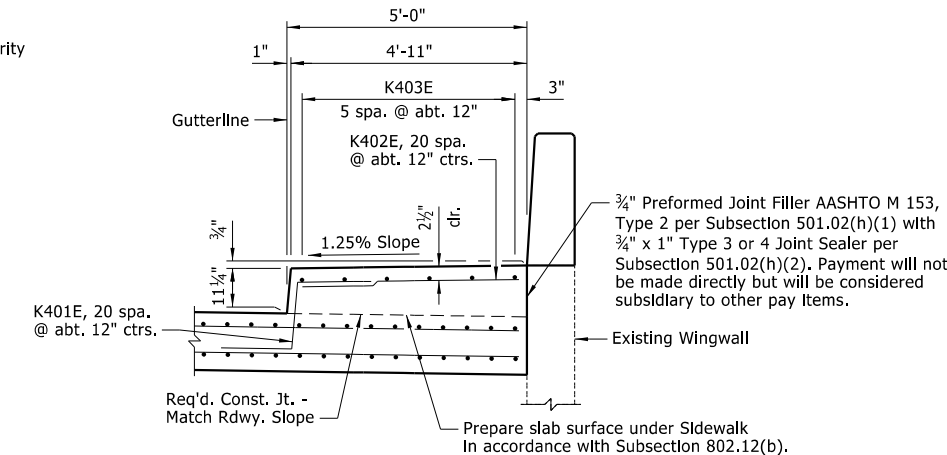
DRAWN BY: TLW DATE: 3/2024  
 CHECKED BY: RMH DATE: 5/2024  
 DESIGNED BY: JGS DATE: 3/2024  
 ARDOT BRIDGE NO. 03492  
 SCALE: AS SHOWN JOB NUMBER: 061757



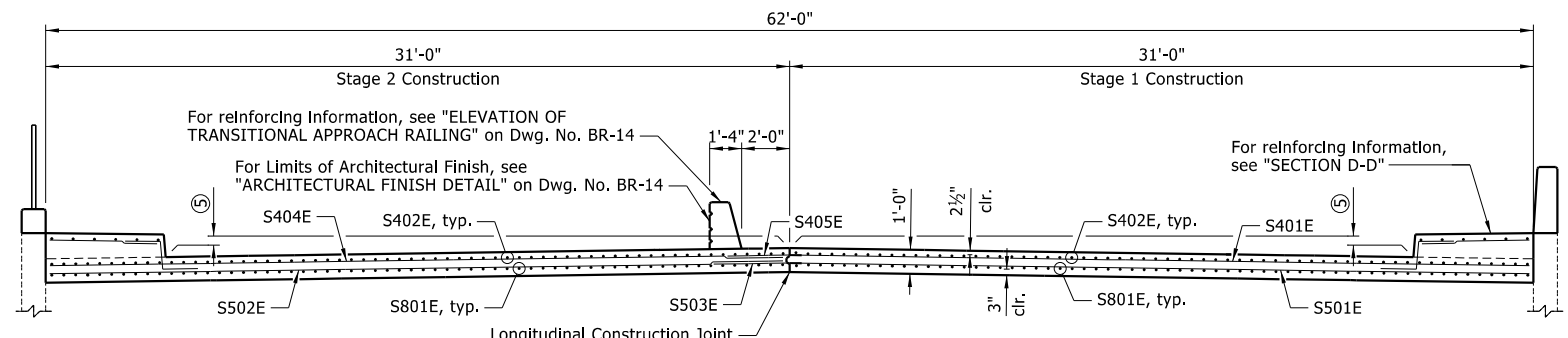
**PLAN - APPROACH SLAB AT BEGIN BRIDGE**  
Scale: 1/4" = 1'-0"



**SECTION C-C**  
Slab reinforcing omitted for clarity  
Scale: 1/2" = 1'-0"

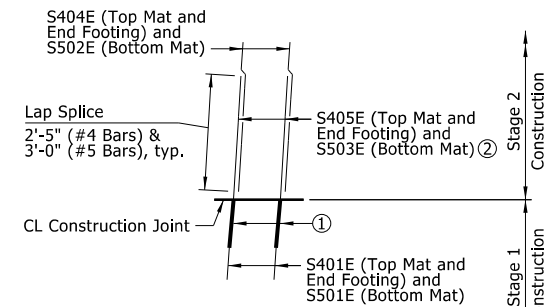


**SECTION D-D**  
Scale: 1/2" = 1'-0"

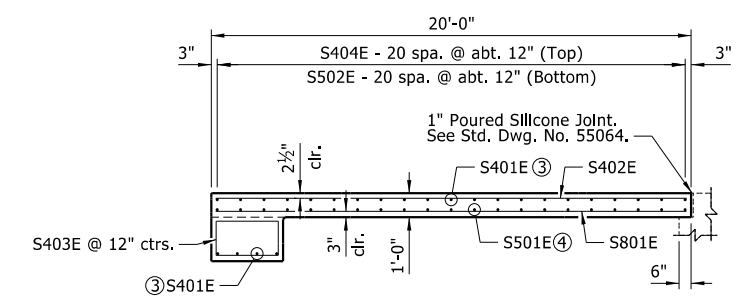


**SECTION A-A**  
Scale: 1/4" = 1'-0"

⑤ Match Existing Slope

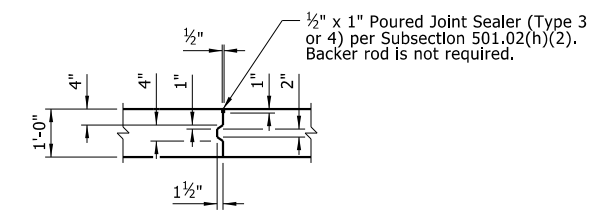


**DETAIL A**  
Scale: 1/2" = 1'-0"



**SECTION B-B**  
Scale: 1/4" = 1'-0"

③ S404E for Stage 2 Construction  
④ S502E for Stage 2 Construction



**LONGITUDINAL CONSTRUCTION JOINT**  
Scale: 1/2" = 1'-0"

**NOTES:**  
All concrete shall be Class S(AE) with a minimum 28 day compressive strength  $f_c = 4,000$  psi and shall be poured in the dry.

All reinforcing steel shall be Grade 60 (yield strength = 60,000 psi) conforming to AASHTO M 31 or M 322, Type A, mill test reports.

The surface finish for approach slabs, transitional approach rails, and sidewalks shall match that used on the bridge deck.

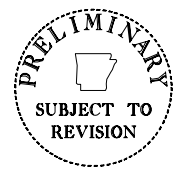
Approach slabs will be measured and paid for in accordance with Section 504.

All costs for transitional approach rails, sidewalks, approach slabs, end footings, epoxy coated reinforcing steel, sawed joints, preformed joint filler, poured joint sealer, Class 3 textured coating finish, architectural finish, mechanical reinforcing bar splices, and any other incidentals necessary to complete the work shall be considered subsidiary to the unit price bid per cubic yard for "APPROACH SLABS".

**NOTE:**  
The threaded dowel and coupler assembly shall consist of a QPL approved mechanical splice with protective cap and threaded dowel bars as shown and shall develop at least 125% of the yield strength of the dowel bars.

- ① Install Mechanical Reinforcing Bar Splice (Epoxy Coated) in accordance with Section 804.07. Installation shall follow the Manufacturer's recommendations. Couplers shall be attached to: S401E (Top Mat and End Footing) and S501E (Bottom Mat).
- ② Splice the following Bars:  
S401E with S405E (Top Mat and End Footing, Stage 2 Construction)  
S501E with S503E (Bottom Mat, Stage 2 Construction)

Lap the following Bars:  
S405E with S404E (Top Mat and End Footing, Stage 2 Construction)  
S503E with S502E (Bottom Mat, Stage 2 Construction)



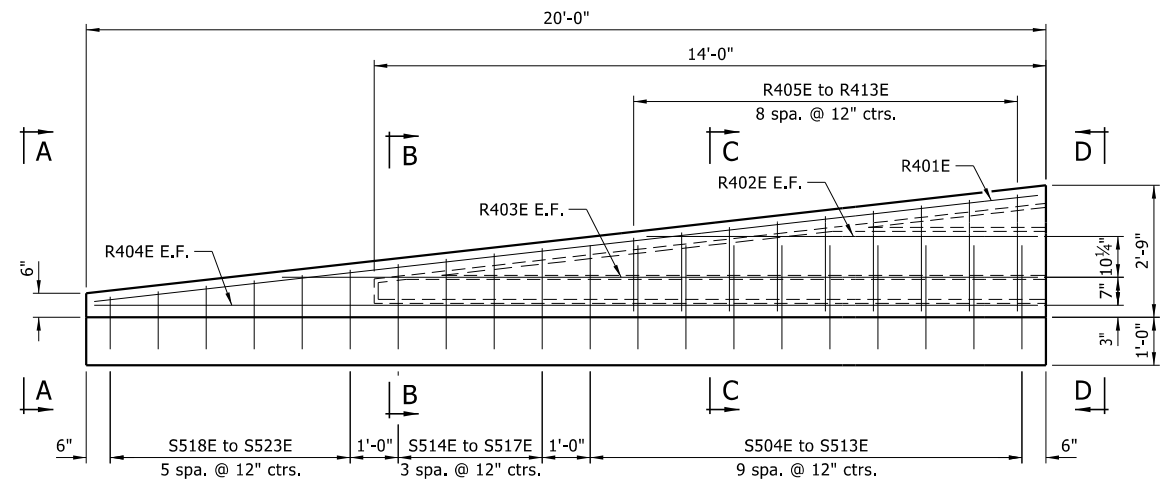
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JOB NO. 061757  
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(LITTLE ROCK) (S)  
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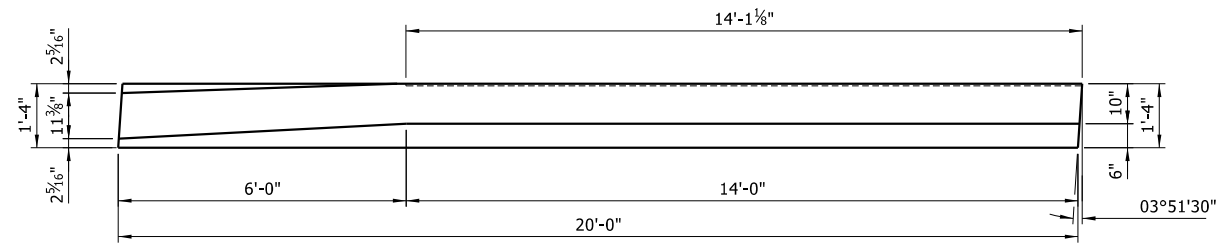
**APPROACH SLAB DETAILS (SHEET 1 OF 2)**

DRAWN BY:	DATE:
TLW	3/2024
CHECKED BY:	DATE:
RMH	5/2024
DESIGNED BY:	DATE:
JGS	3/2024
ARDOT BRIDGE NO.:	
03492	
SCALE:	JOB NUMBER:
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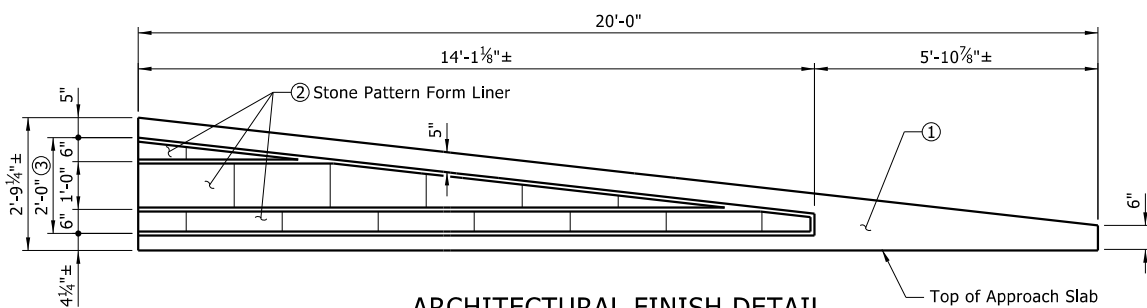
**ELEVATION OF TRANSITIONAL APPROACH RAILING**

Looking West at Begin Bridge, Railing at End Bridge Similar but Opposite Hand  
Scale: 1/2" = 1'-0"



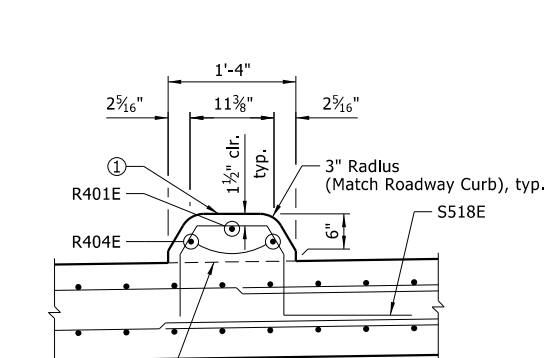
**PLAN OF TRANSITIONAL APPROACH RAILING**

Railing at Begin Bridge Shown, Railing at End Bridge Similar but Opposite Hand  
Scale: 1/2" = 1'-0"

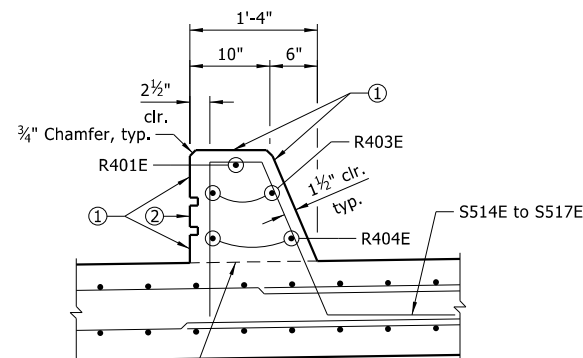


**ARCHITECTURAL FINISH DETAIL**

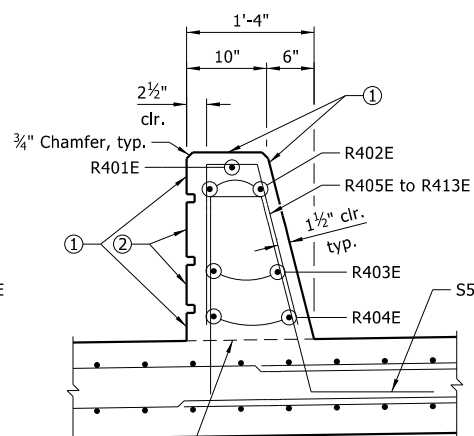
Looking East at Begin Bridge, Railing at End Bridge Similar but Opposite Hand  
Scale: 1/2" = 1'-0"



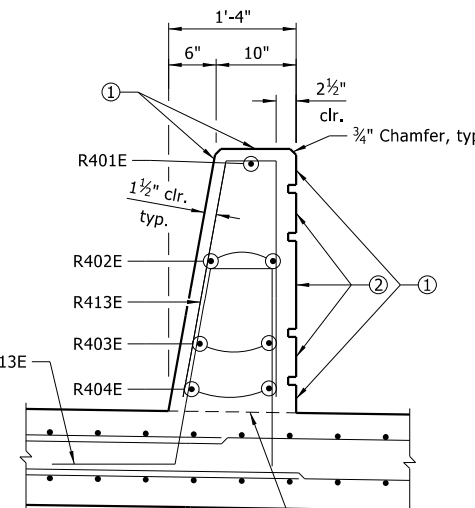
**VIEW A-A**  
Scale: 1" = 1'-0"



**SECTION B-B**  
Scale: 1" = 1'-0"



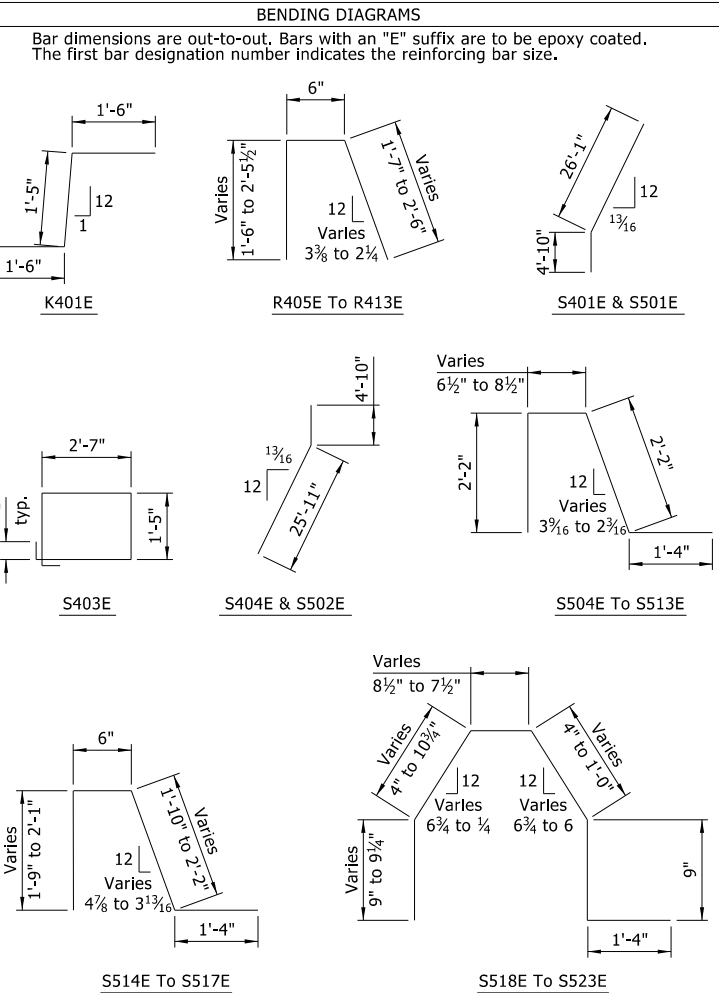
**SECTION C-C**  
Scale: 1" = 1'-0"



**VIEW D-D**  
Scale: 1" = 1'-0"

**BAR LIST - PER APPROACH SLAB**

MARK	NO. REQ'D.	LENGTH	P.D.
<b>STAGE 1 CONSTRUCTION</b>			
K401E	21	4'-3"	2"
K402E	21	4'-7"	Str.
K403E	6	19'-8"	Str.
S401E	25	30'-11"	3"
S402E	62	19'-8"	Str.
S403E	32	8'-4"	2"
S501E	21	30'-11"	3 3/4"
S801E	62	19'-8"	Str.
<b>STAGE 2 CONSTRUCTION</b>			
K401E	21	4'-3"	2"
K402E	21	4'-7"	Str.
K403E	6	19'-8"	Str.
R401E	1	19'-10"	Str.
R402E	2	8'-2"	Str.
R403E	2	15'-9"	Str.
R404E	2	19'-8"	Str.
R405E	To	3'-5"	To
R413E	1 Each	5'-3 1/2"	2"
S402E	62	19'-8"	Str.
S403E	32	8'-4"	2"
S404E	25	30'-9"	3"
S405E	25	2'-7"	Str.
S502E	21	30'-9"	3 3/4"
S503E	21	3'-2"	Str.
S504E	To	5'-11 1/2"	To
S513E	1 Each	6'-1 1/2"	2 1/2"
S514E	To	5'-2"	To
S517E	1 Each	5'-10"	2 1/2"
S518E	To	3'-11 1/2"	To
S523E	1 Each	5'-1 1/2"	2 1/2"
S801E	62	19'-8"	Str.



	CLASS S(AE) CONCRETE	EPOXY COATED REINFORCING STEEL (GRADE 60)	MECHANICAL COUPLERS	CLASS 3 TEXTURED COATING FINISH	ARCHITECTURAL FINISH
STAGE 1 CONSTRUCTION	33.00 CU. YD.	5,650 LB.	46 EACH	---	---
STAGE 2 CONSTRUCTION	34.30 CU. YD.	5,960 LB.	---	9.4 SQ. YD.	17.0 SQ. FT.

Quantities shown are for one Approach Slab only.

NOTES:  
Form liner shall be a max. depth of 1" to provide a min. clearance of 1 1/2" to approach railing reinforcing.

A Class 3 Textured Coating Finish shall be applied to approach railing as specified in Special Provision "TEXTURED COATING FINISH" and in accordance with Subsection 802.19(b)(3).

- ① Class 3 Textured Coating Finish. Contractor shall match the color of the existing bridge.
- ② Class 3 Textured Coating Finish (Color = Brown, Color Chip No. 30219).
- ③ Limits of Architectural Finish

Burns & McDonnell Engineering Co., Inc.  
9400 Ward Parkway  
Kansas City, Missouri 64114  
816-333-9400  
Certificate of Authority  
No. : 17  
BMEC Project No. 149612

**PRELIMINARY**  
SUBJECT TO REVISION

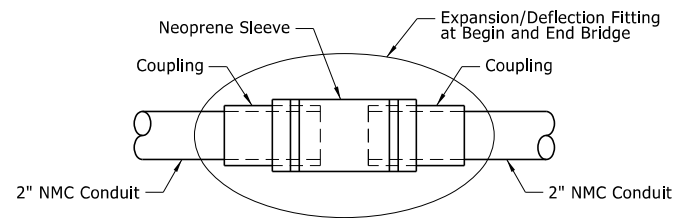
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JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL  
(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

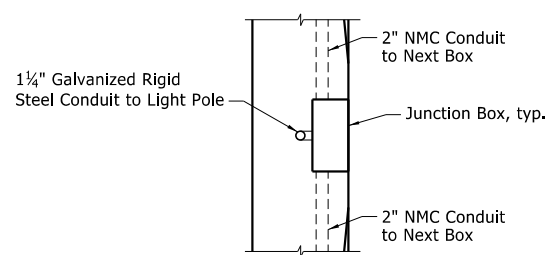
REVISIONS	DESCRIPTION	DATE	INC.

**APPROACH SLAB DETAILS (SHEET 2 OF 2)**

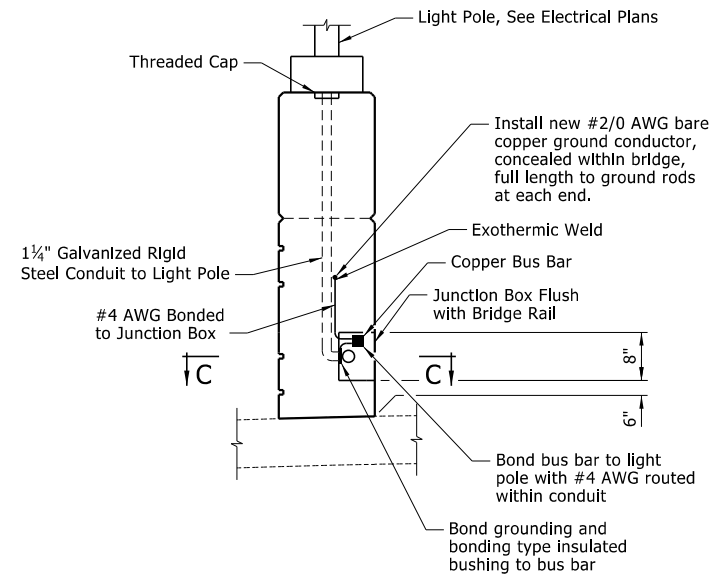
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CHECKED BY: RMH	DATE: 5/2024
DESIGNED BY: JGS	DATE: 3/2024
ARDOT BRIDGE NO. 03492	
SCALE: AS SHOWN	JOB NUMBER: 061757



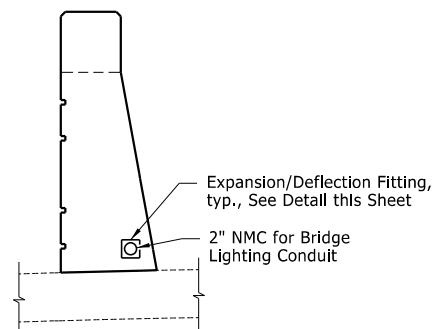
**EXPANSION FITTING DETAIL, TYP.**  
No Scale



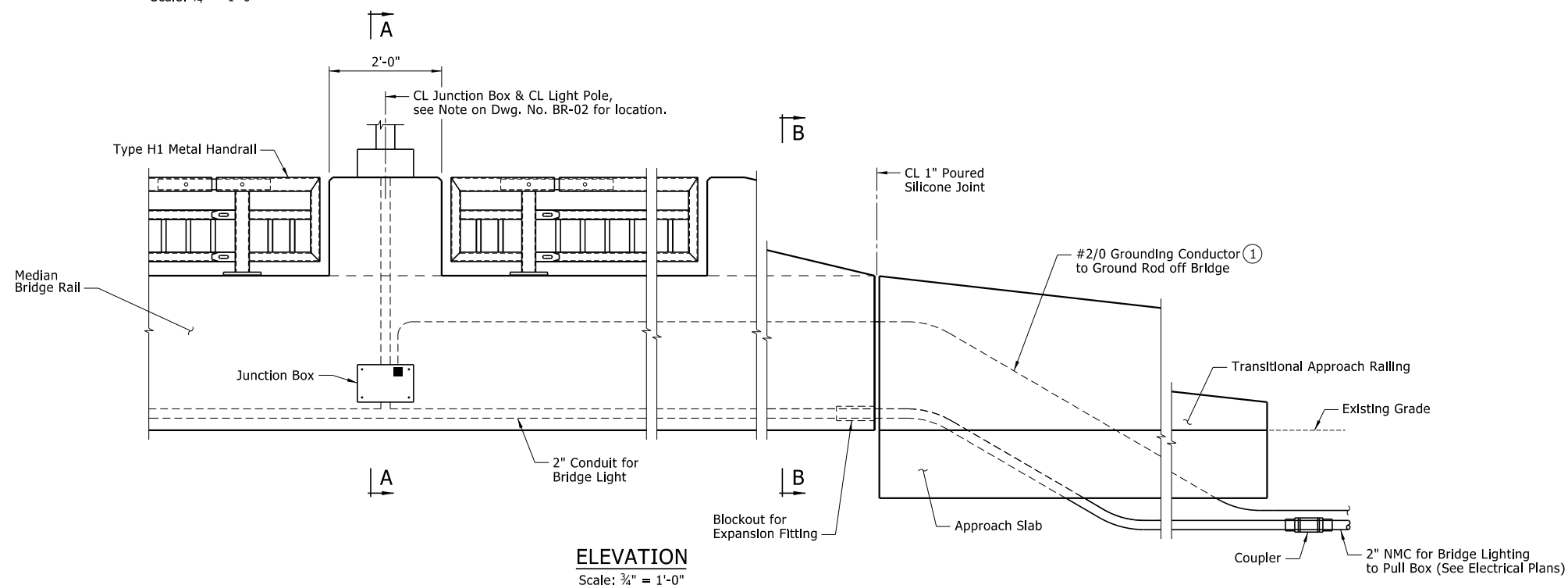
**SECTION C-C**  
Scale: 3/4" = 1'-0"



**SECTION A-A**  
Scale: 3/4" = 1'-0"



**SECTION B-B**  
Scale: 3/4" = 1'-0"



**ELEVATION**  
Scale: 3/4" = 1'-0"

① Internal copper ground bar bonded to box with minimum 6 lugs sized for connections as indicated.

**NOTES:**  
For light fixtures and pole details, see Electrical Plans.

All hardware shall be corrosion resistant, galvanized or stainless rigid steel.

Construct foundation in accordance with pole manufacturer's guidelines and per these plans. Contractor shall coordinate with the Engineer for manufacturing requirements.

Use long sweep 90° elbows on all conduit bends that meet NEC minimum radius requirements. All NMC shall be rigid PVC schedule 40.

Tie all pole, equipment ground, and all other metal equipment and grounding lugs together using minimum #4 AWG solid bare copper and approved connectors or exothermic welds and connect to ground rod system.

The Contractor shall use caution when installing conduits in bridge rail to not impact rebar or construction joints.

The general scope of the lighting work shall include junction boxes, expansion fittings, conduit and all incidentals necessary for installation of final lighting, wiring, power supply and additional pull boxes (see Electrical Plans). Only lighting materials and scope shown on the bridge plans will be included on the bridge. Payment for lighting work will be considered subsidiary to other pay items.

The Contractor shall coordinate the location of the pull boxes and other electrical details installed off the bridge with the City of Little Rock.

Provide and install 3/4" dia. x 10'-0" copper clad steel sectional ground rods. Top of ground rods shall be a minimum 18" below finished grade. Exothermically weld each copper grounding conductor to the top of the associated rod. Maintain 30" installation depth of copper grounding conductor otherwise. Ground rods shall be located within 20' of end of each approach slab.

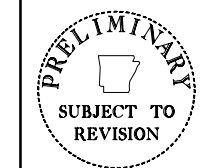
Contractor shall clearly mark the final location of the ground rods for future connection to lighting power source's grounding system.

Junction box and lid material shall be 1/4" A36 steel. Fasteners shall be 3/16" dia. x 3/4" S.S. FH socket screws. Weld per ARDOT standard spec. Hot dip galvanized and powder coat after fabrication per bridge railing general notes. Prefabricated junction boxes may be substituted by the Contractor if approved by the Engineer. The junction boxes shall be adequately anchored to the bridge rail by means of an approved mechanical device.

**BOX NOTES:**  
NEMA 3R galvanized steel construction with gasket, recessed and flush in bridge rail wall.

Junction box dimensions shall be a minimum of 8" high x 8" wide x 6" deep.

Splice wires in box according to NEC. All wires shall be type THHW, THHN/THWN-2, or XHHW-2.



ORIGINAL SIGNATURE ON FILE

© 2024

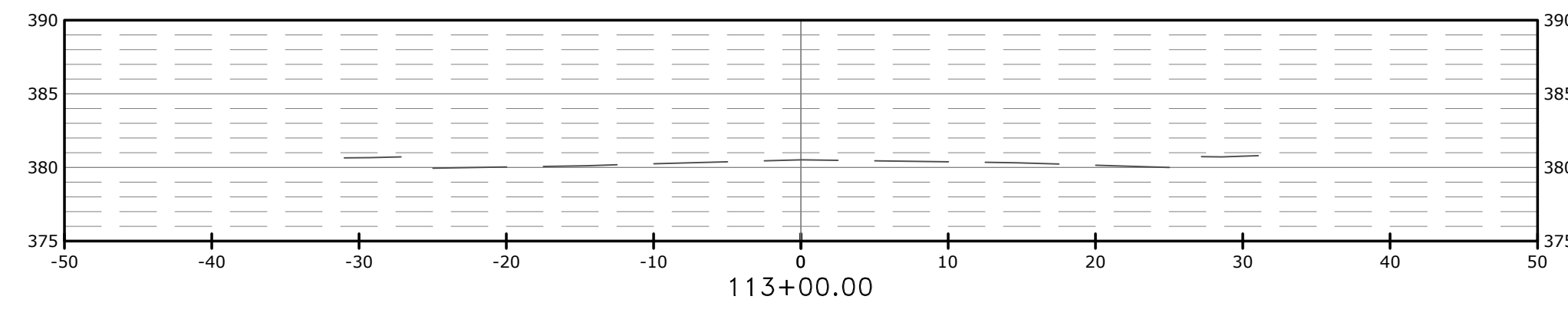
JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL  
(LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

REVISIONS	DESCRIPTION	DATE	INC.

**ELECTRICAL  
DETAILS**

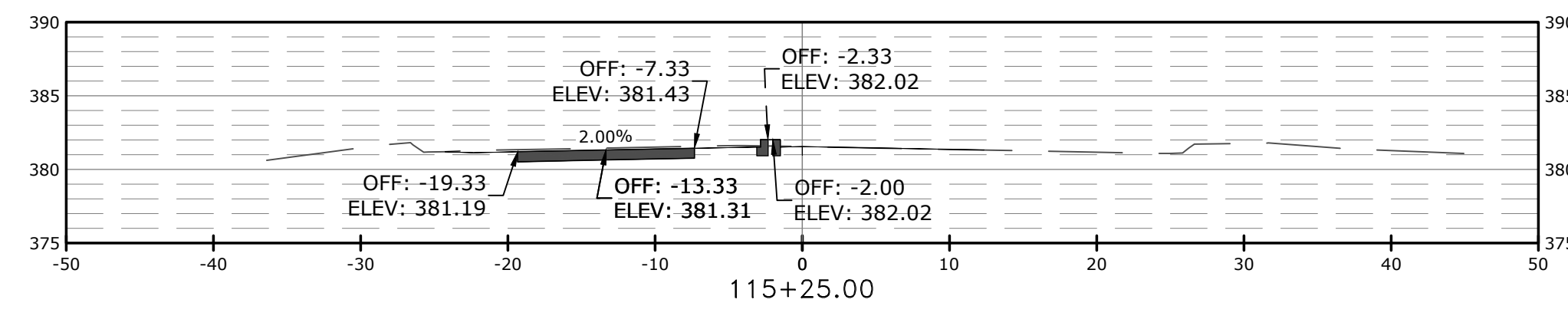
DRAWN BY: TLW	DATE: 3/2024
CHECKED BY: RMH	DATE: 5/2024
DESIGNED BY: JGS	DATE: 3/2024
ARDOT BRIDGE NO. 03492	
SCALE: AS SHOWN	JOB NUMBER: 061757

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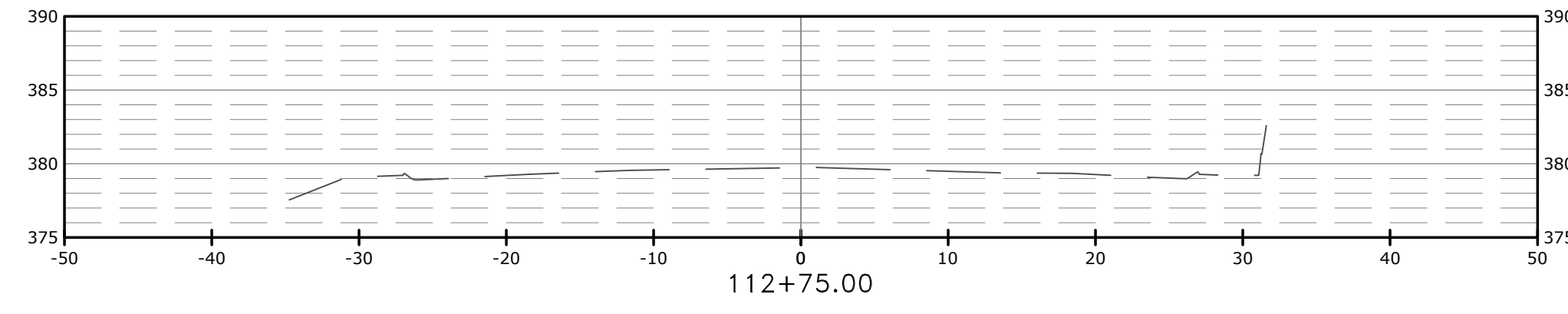
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DESIGN ELEV:

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Cut Vol	0.00
Fill Vol	0.00
Net Vol	0.00



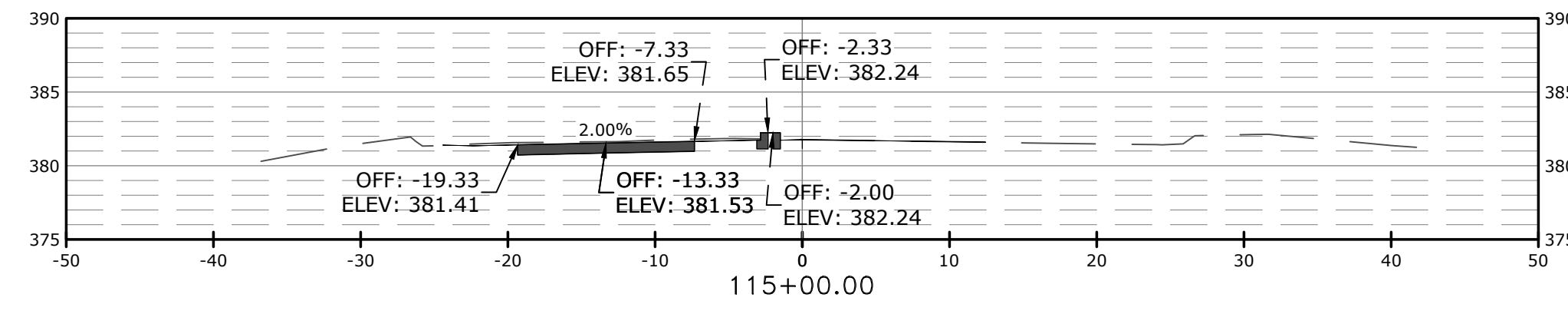
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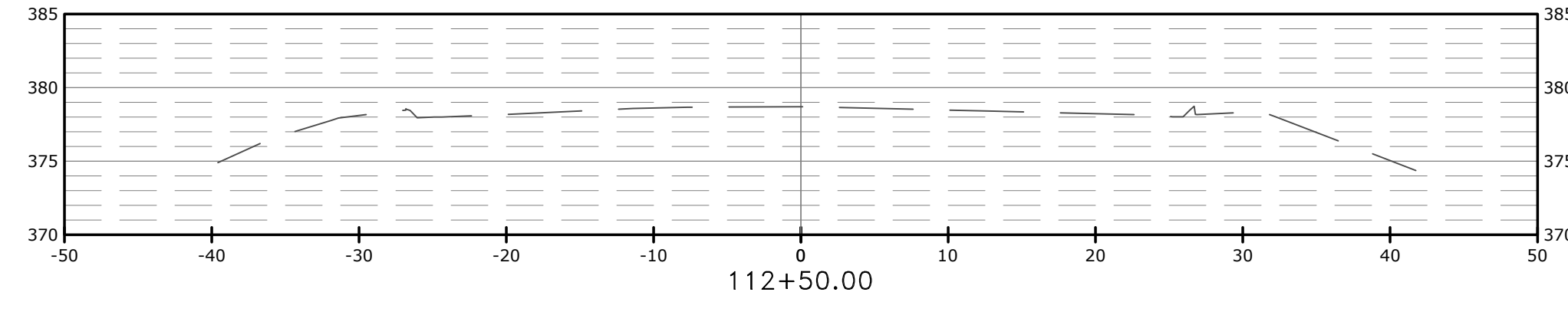
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Net Vol	0.00



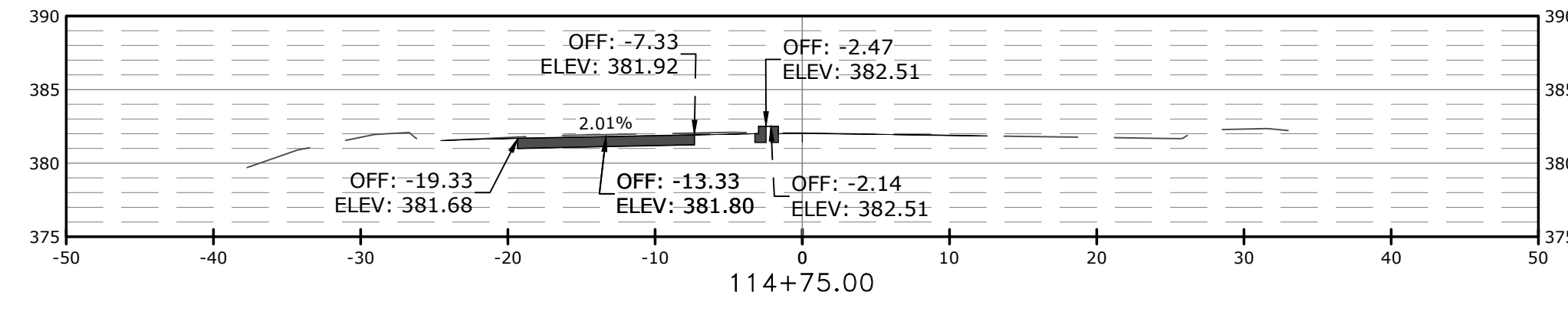
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Net Vol	21.35



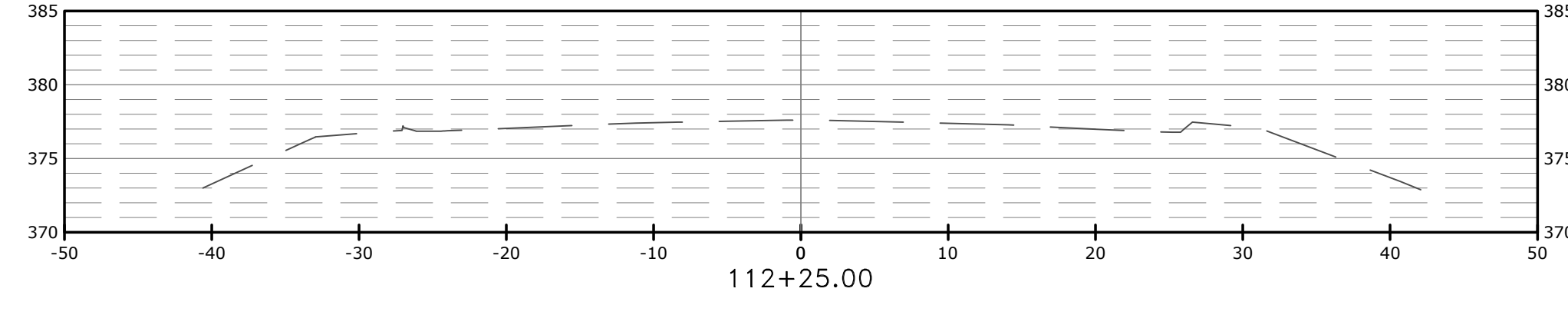
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Cut Vol	0.00
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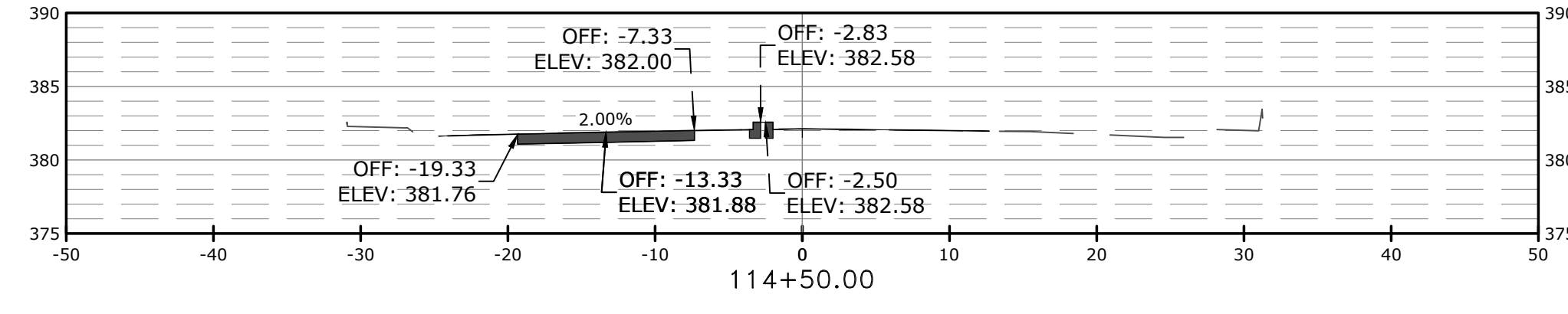
ORIGINAL ELEV: 382.04  
DESIGN ELEV: 382.04

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Fill Area	0.36
Cut Vol	8.76
Fill Vol	0.39
Net Vol	12.04



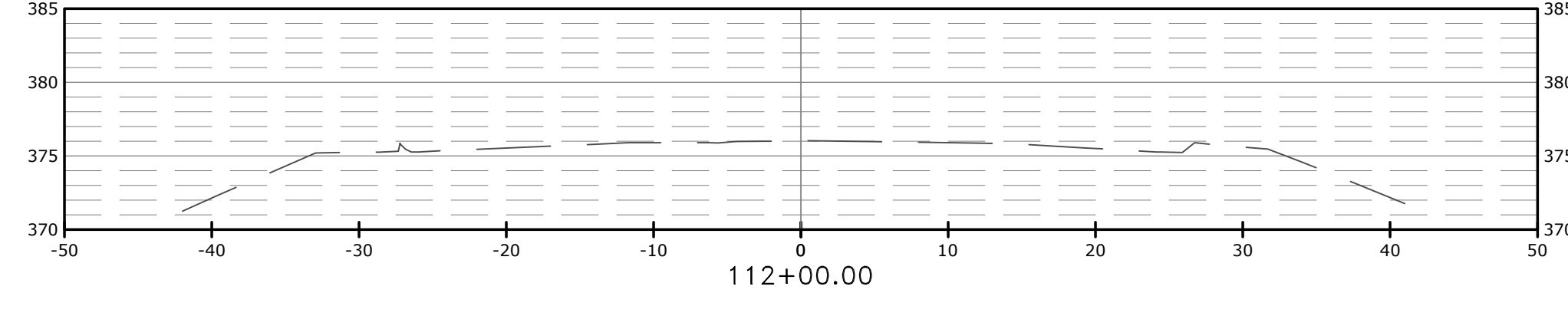
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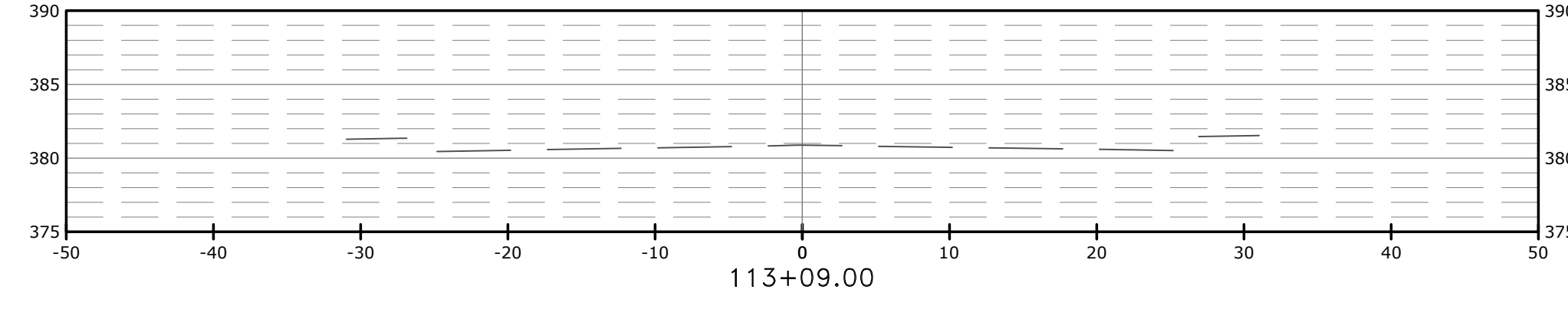
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DESIGN ELEV: 382.12

Total Volume at Station 114+50.00	
Cut Area	8.41
Fill Area	0.48
Cut Vol	3.89
Fill Vol	0.22
Net Vol	3.67



ORIGINAL ELEV: 376.04  
DESIGN ELEV:

Total Volume at Station 112+00.00	
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Cut Vol	0.00
Fill Vol	0.00
Net Vol	0.00



ORIGINAL ELEV: 380.87  
DESIGN ELEV:

Total Volume at Station 113+09.00	
Cut Area	0.00
Fill Area	0.00
Cut Vol	0.00
Fill Vol	0.00
Net Vol	0.00

EARTHWORK QUANTITIES:  
TO BE PAID PER PLAN  
QUANTITIES ONLY

SCALE:  
1" = 10' HORIZ.  
1" = 10' VERT.

PRELIMINARY  
NOT FOR  
CONSTRUCTION

ORIGINAL SIGNATURE ON FILE

JOB NO. 061757  
JONESBORO DR. CHILDREN'S  
TRAIL (LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

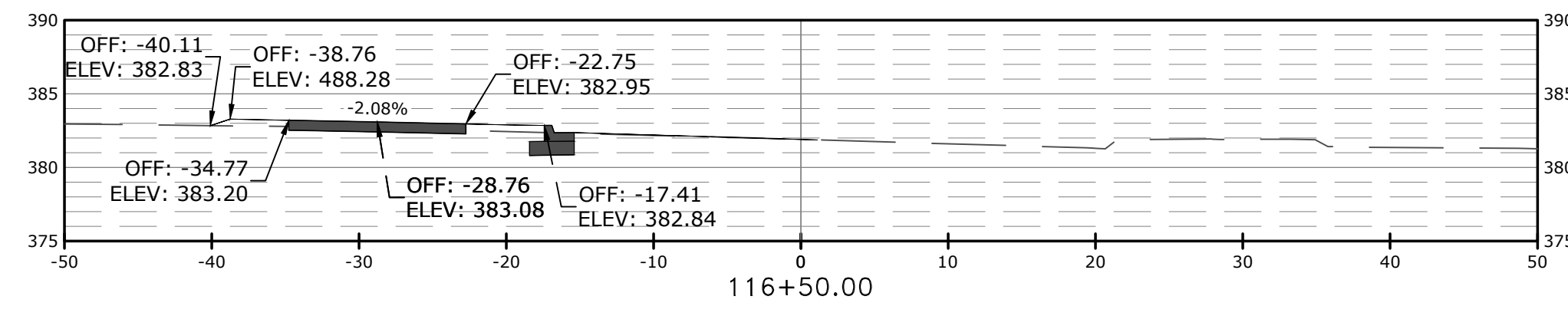


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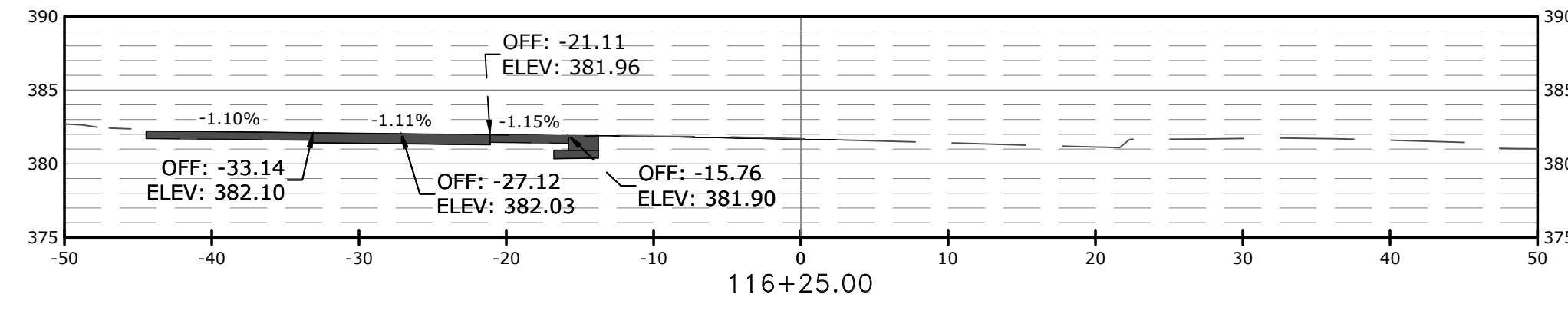
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SECTIONS I

DESIGNED BY: WTC	DRAWN BY: WTC
DATE: JUL 2024	REVISION:
SCALE: N.T.S.	JOB NUMBER: 22-5767

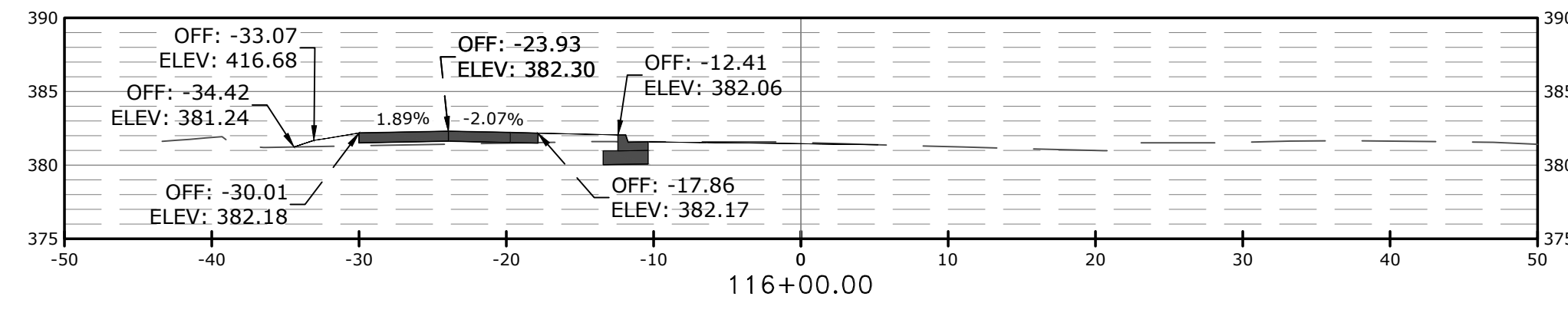
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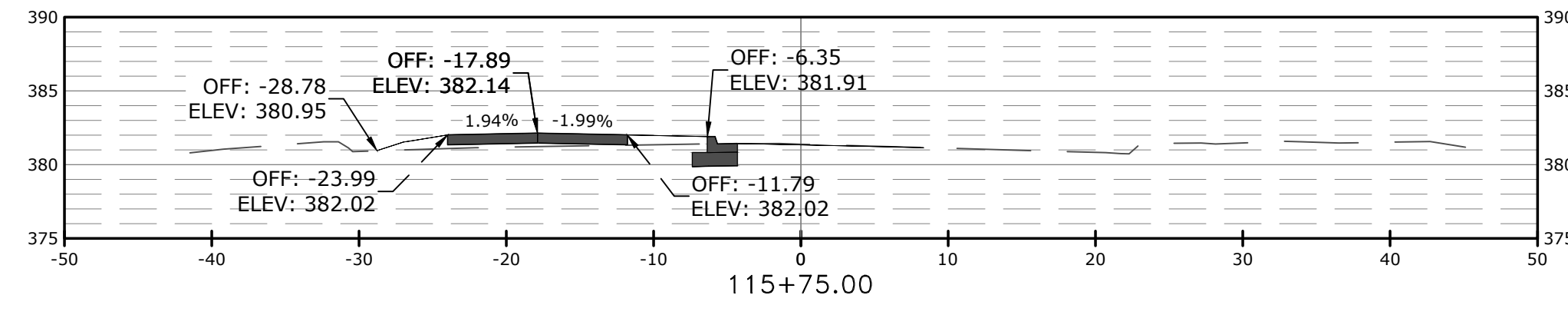
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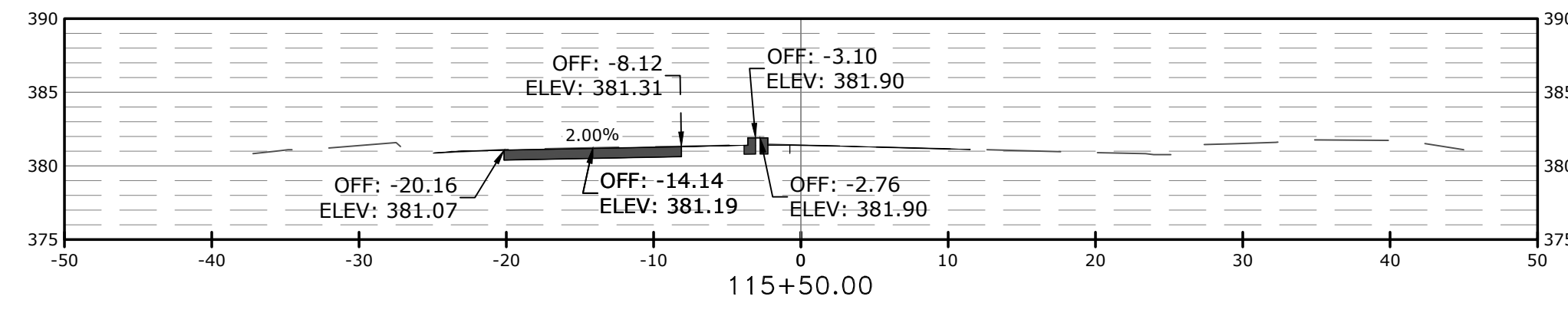
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ORIGINAL ELEV: 381.39  
DESIGN ELEV: 381.34



ORIGINAL ELEV: 381.41  
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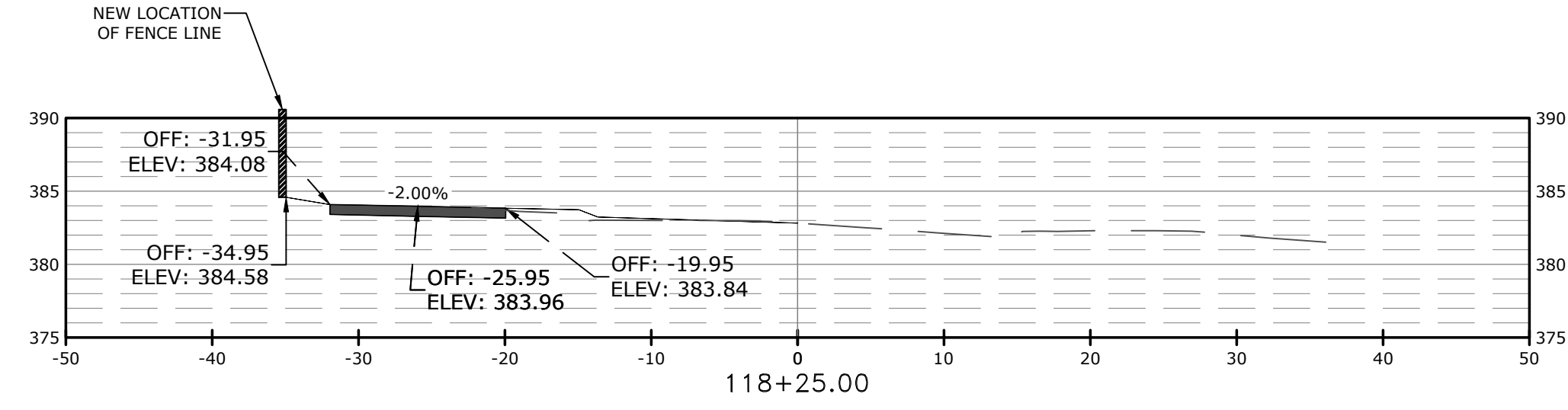
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Net Vol	16.31

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Fill Area	10.48
Cut Vol	9.69
Fill Vol	11.87
Net Vol	15.50

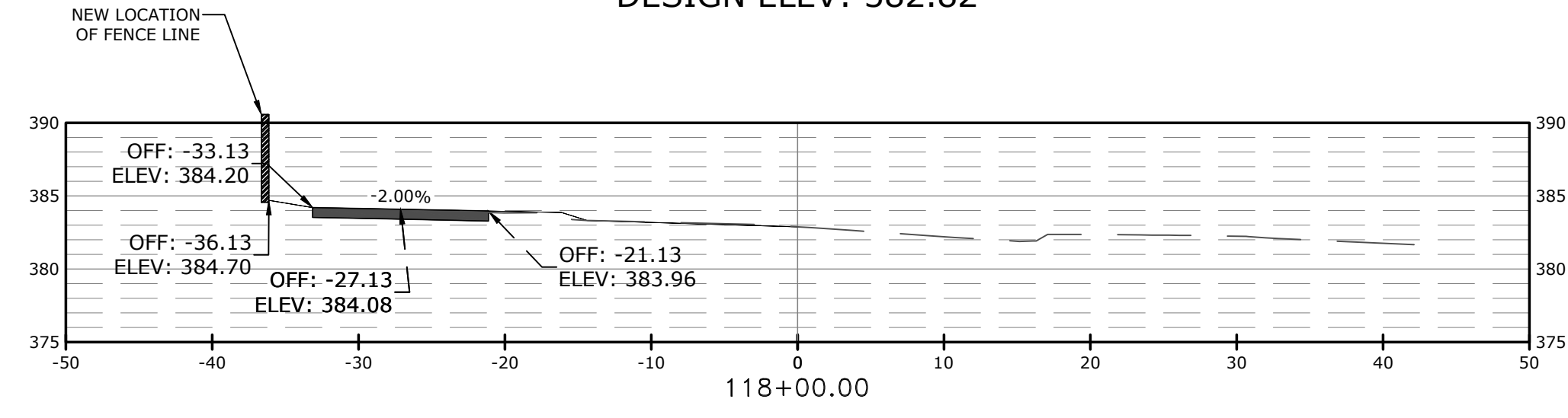
Cut Area	5.56
Fill Area	16.08
Cut Vol	5.00
Fill Vol	15.11
Net Vol	17.67

Cut Area	4.86
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Fill Vol	11.57
Net Vol	27.78

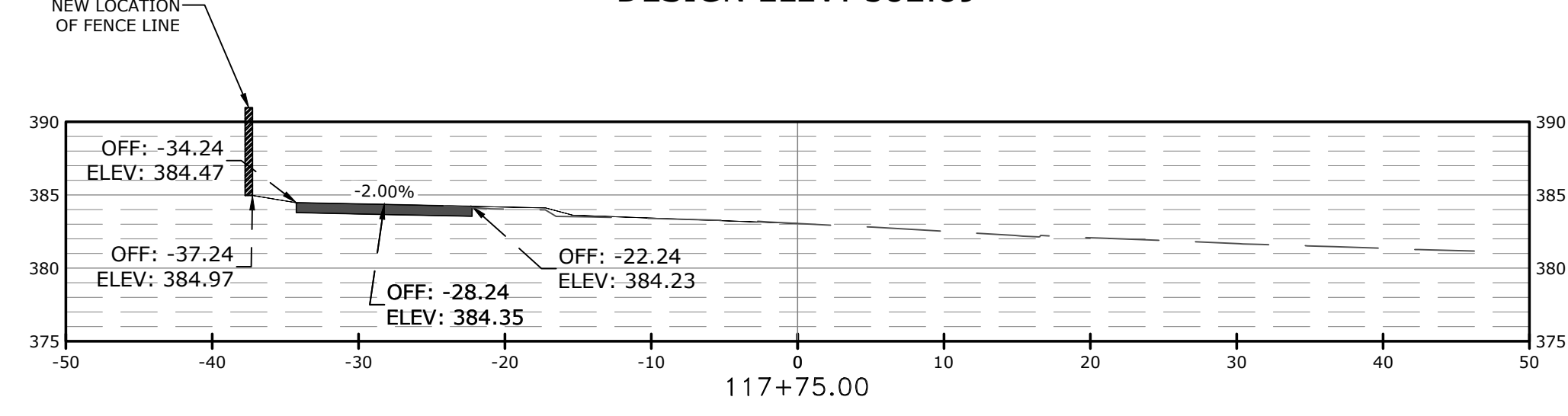
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Cut Vol	9.58
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Net Vol	32.67



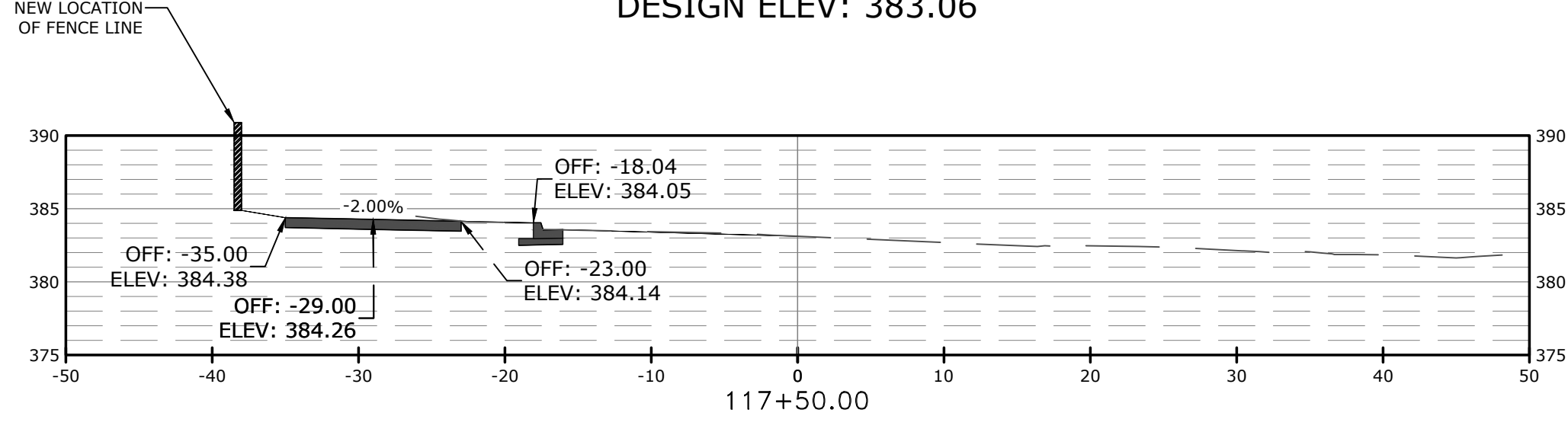
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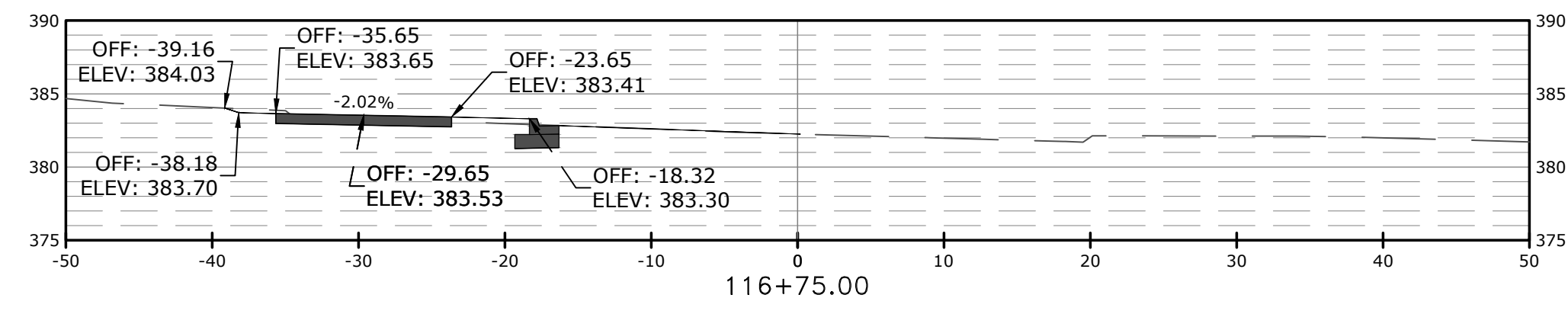
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EARTHWORK QUANTITIES:  
TO BE PAID PER PLAN  
QUANTITIES ONLY

ORIGINAL ELEV: 382.25  
DESIGN ELEV: 382.25

SCALE:  
1" = 10' HORIZ.  
1" = 10' VERT.

PRELIMINARY  
NOT FOR  
CONSTRUCTION

ORIGINAL SIGNATURE ON FILE

JOB NO. 061757  
JONESBORO DR. CHILDREN'S  
TRAIL (LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

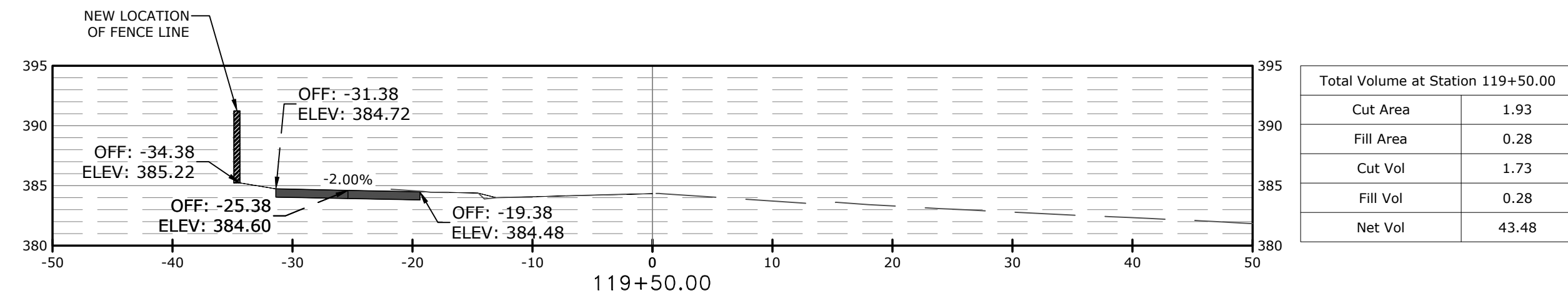


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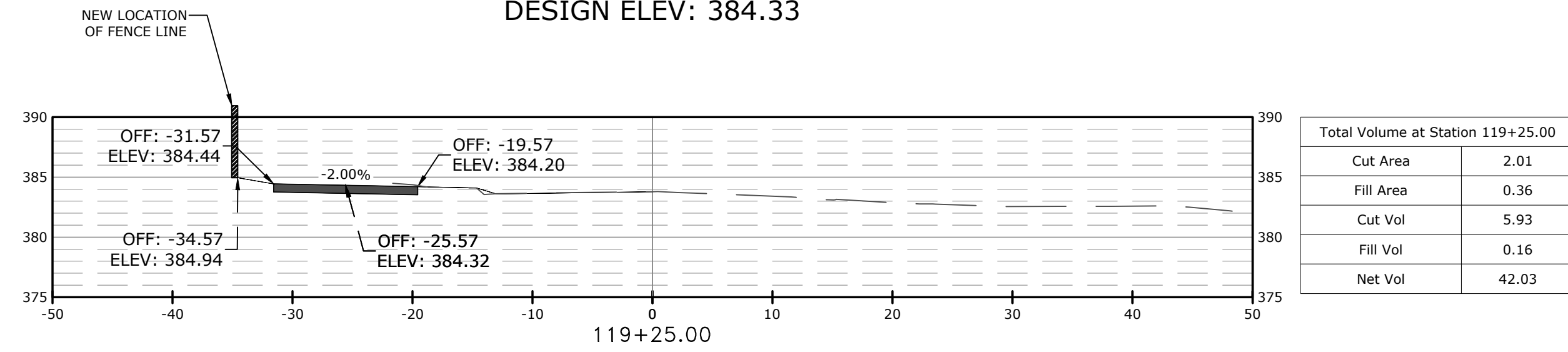
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DESIGNED BY: WTC	DRAWN BY: WTC
DATE: JUL 2024	REVISION:
SCALE: N.T.S.	JOB NUMBER: 22-5767

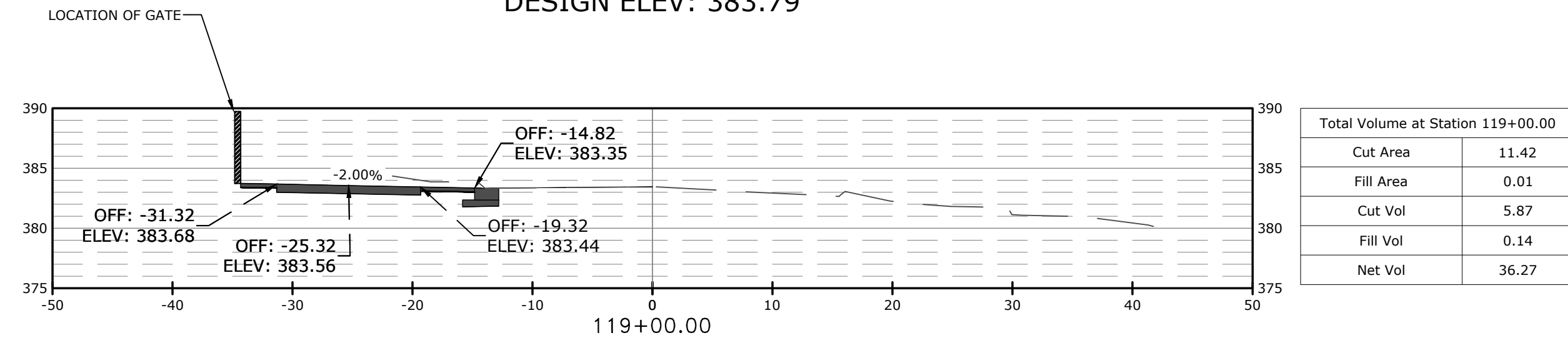
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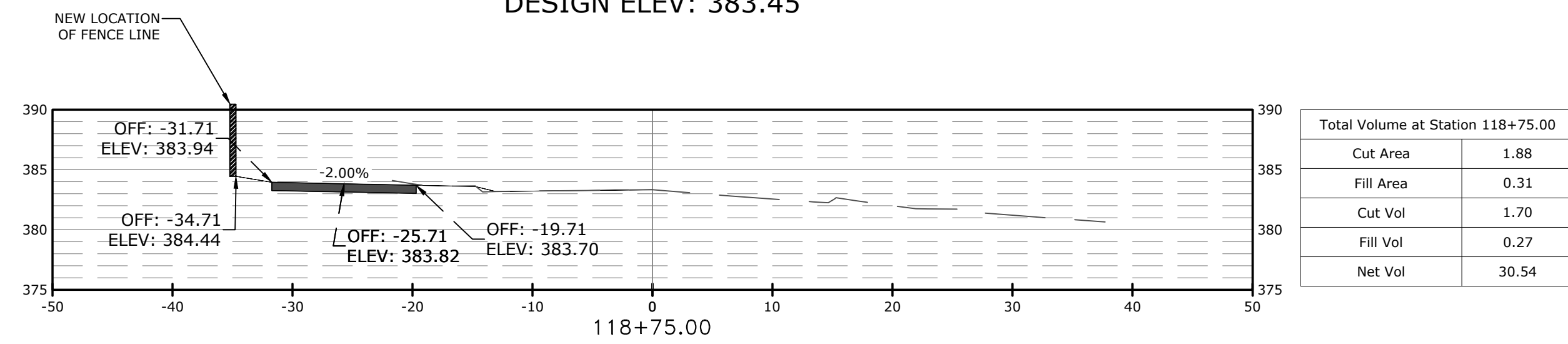
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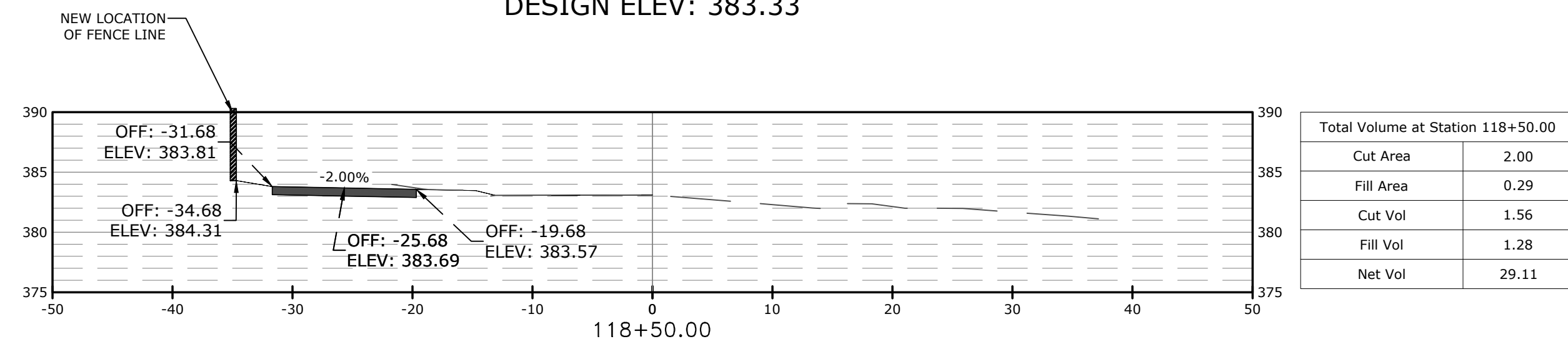
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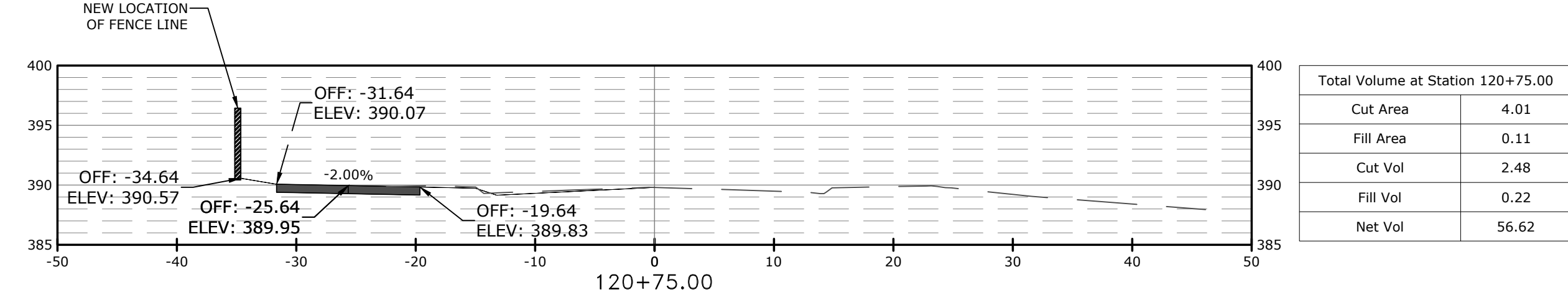
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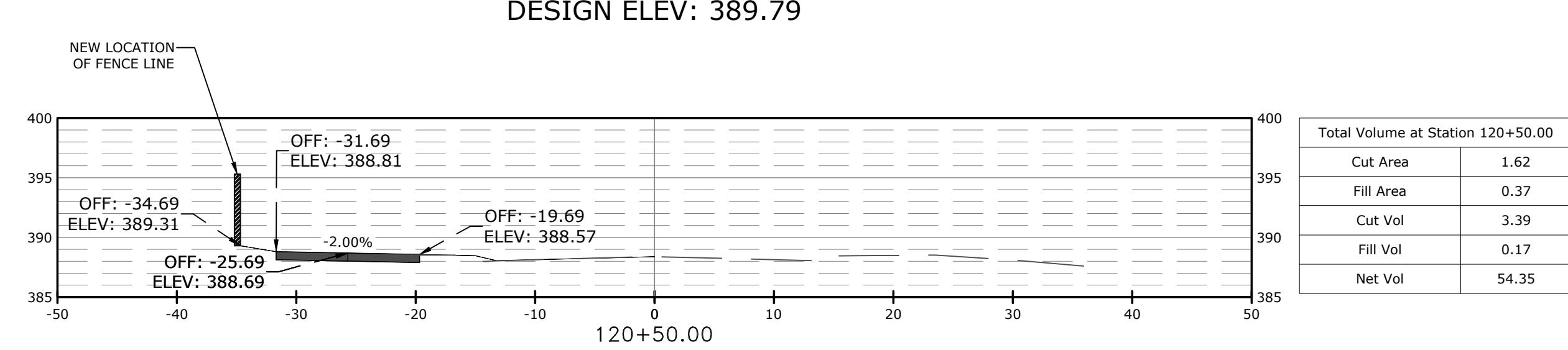
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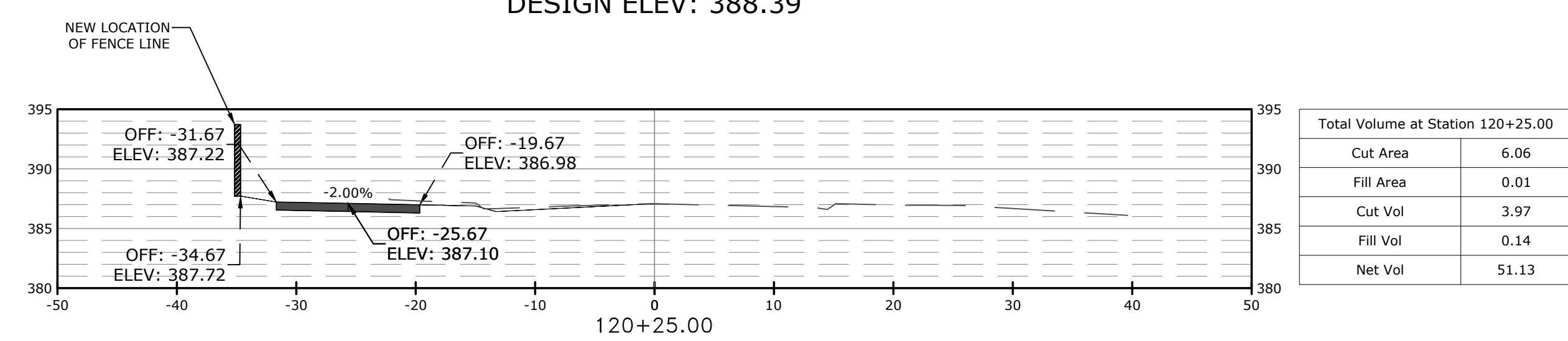
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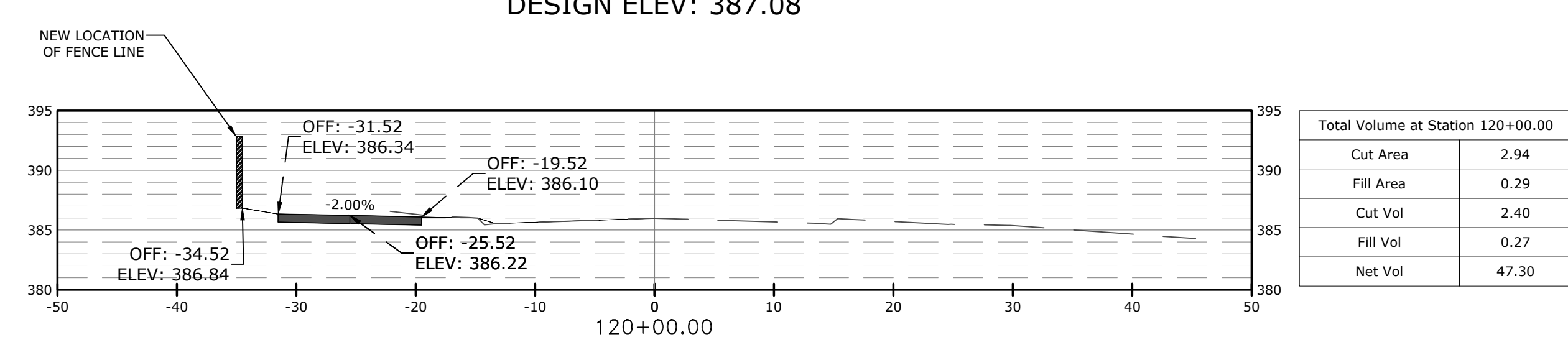
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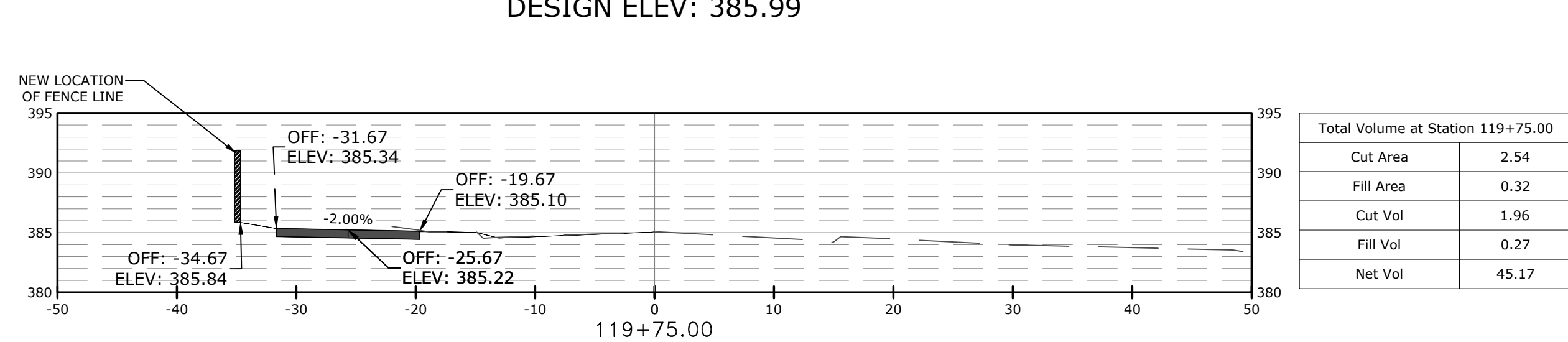
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DESIGN ELEV: 385.99



ORIGINAL ELEV: 385.05  
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EARTHWORK QUANTITIES:  
TO BE PAID PER PLAN  
QUANTITIES ONLY

SCALE:  
1" = 10' HORIZ.  
1" = 10' VERT.

PRELIMINARY  
NOT FOR  
CONSTRUCTION

ORIGINAL SIGNATURE ON FILE

JOB NO. 061757  
JONESBORO DR. CHILDREN'S  
TRAIL (LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

**811**  
Know what's below.  
Call before you dig.

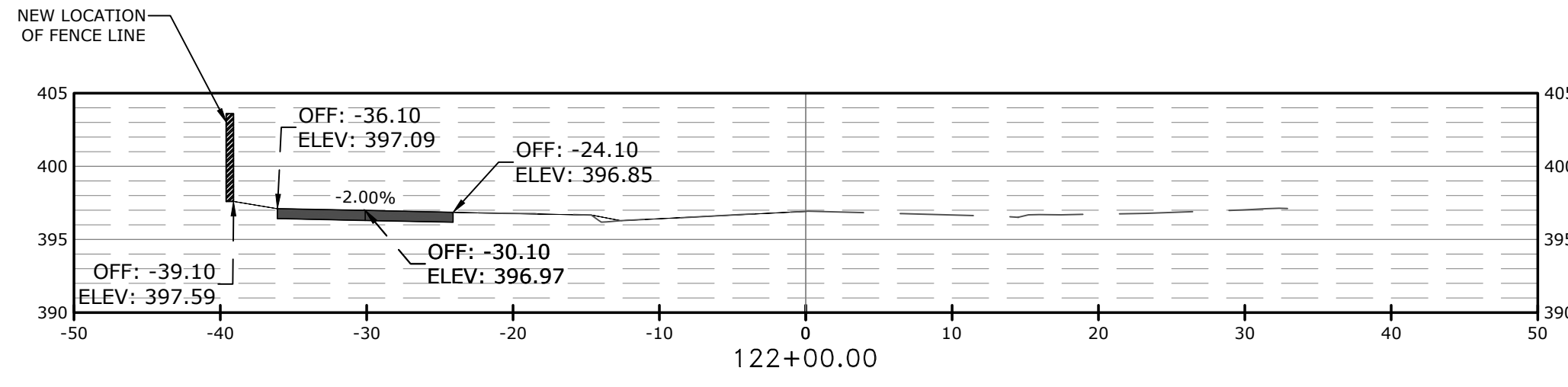
REVISIONS	DESCRIPTION	DATE	REV

CROSS  
SECTIONS III

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WTC	WTC
DATE:	REVISION:
JUL 2024	
SCALE:	JOB NUMBER:
N.T.S.	22-5767

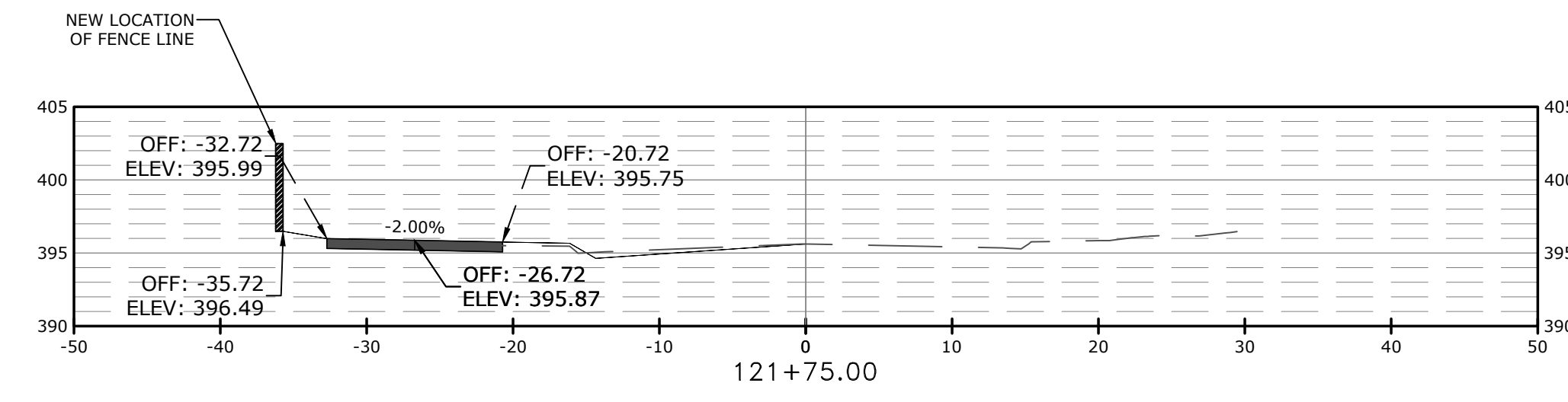


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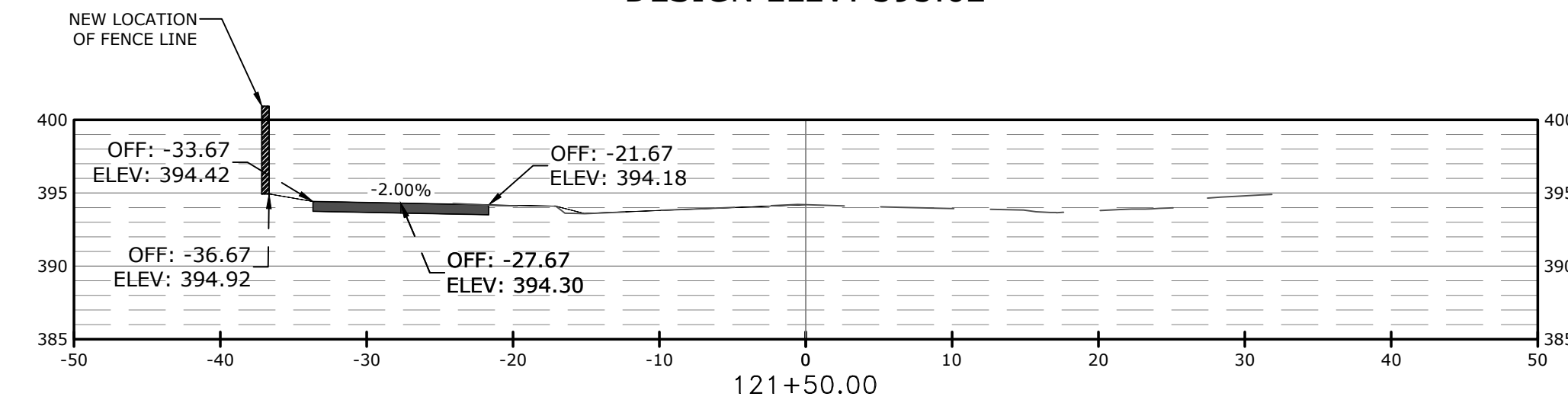
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Fill Area	0.36
Cut Vol	2.03
Fill Vol	0.71
Net Vol	75.40

ORIGINAL ELEV: 396.92  
DESIGN ELEV: 396.92



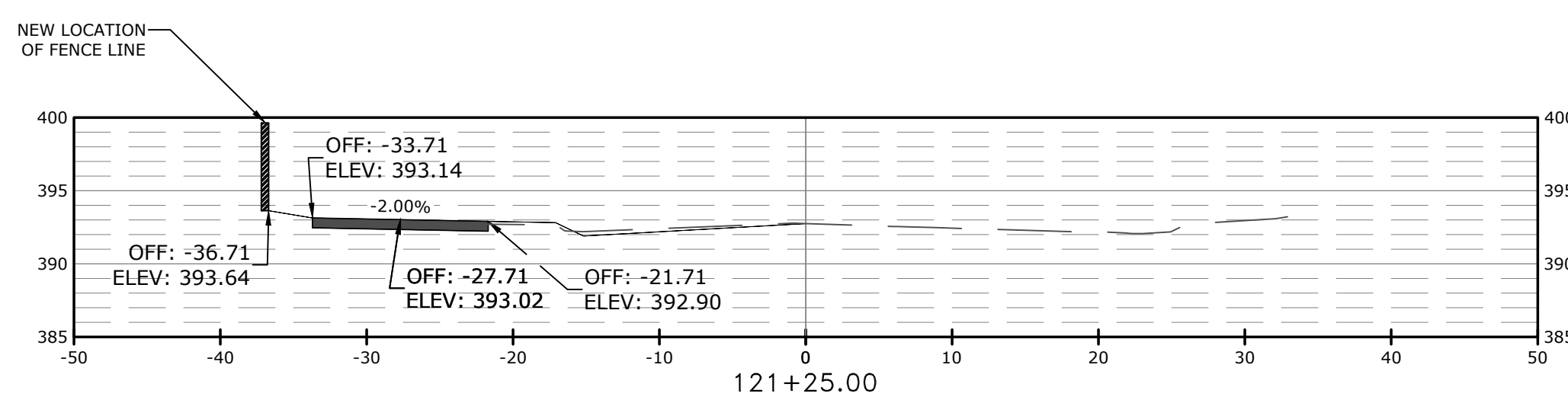
Total Volume at Station 121+75.00	
Cut Area	4.48
Fill Area	1.25
Cut Vol	2.82
Fill Vol	0.73
Net Vol	74.08

ORIGINAL ELEV: 395.62  
DESIGN ELEV: 395.62



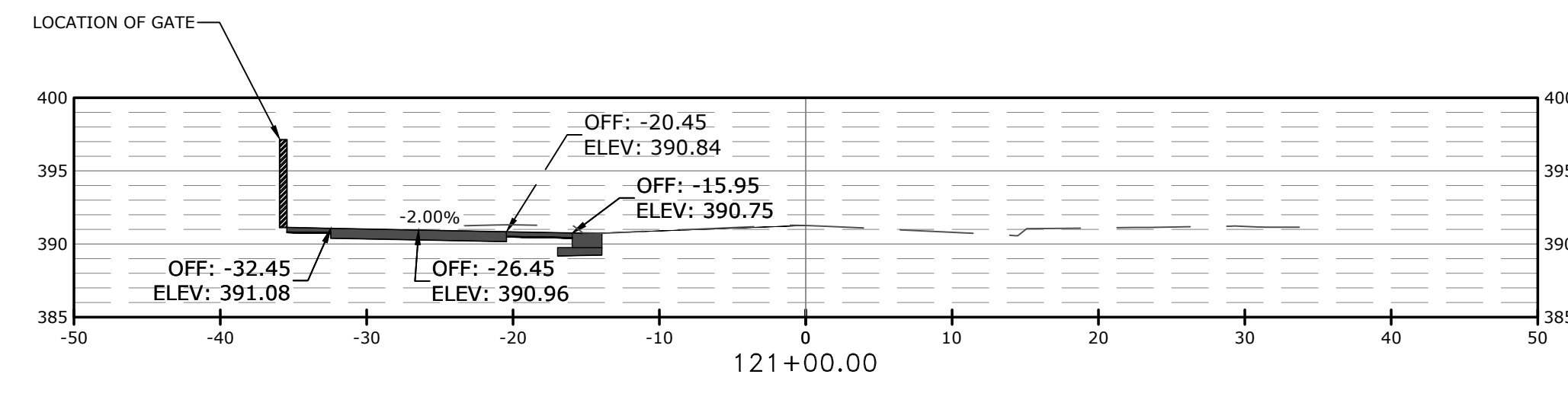
Total Volume at Station 121+50.00	
Cut Area	1.87
Fill Area	0.42
Cut Vol	2.56
Fill Vol	0.62
Net Vol	71.99

ORIGINAL ELEV: 394.19  
DESIGN ELEV: 394.19



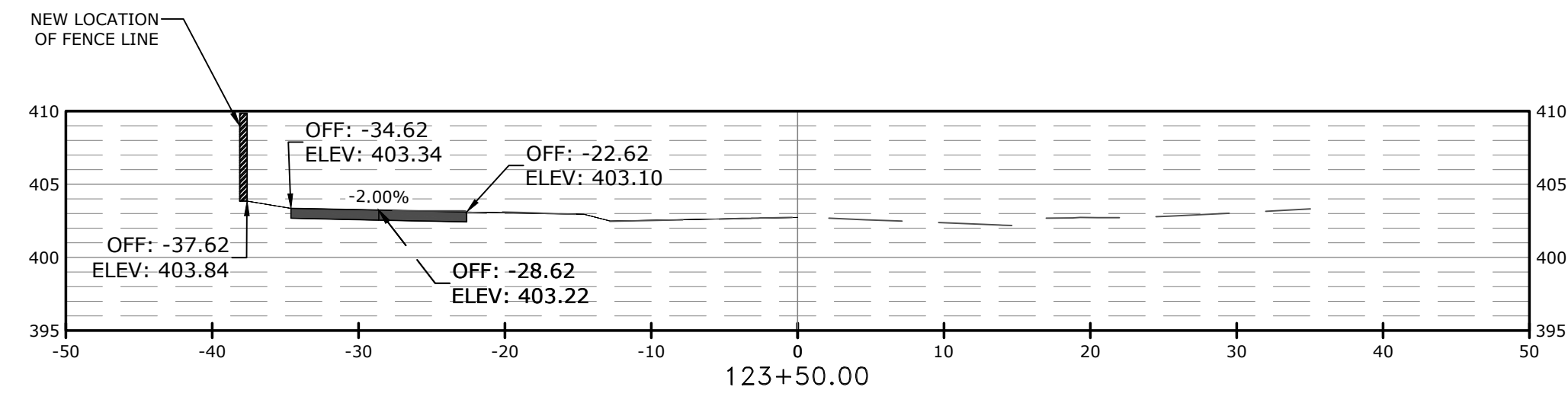
Total Volume at Station 121+25.00	
Cut Area	3.91
Fill Area	0.99
Cut Vol	6.94
Fill Vol	0.43
Net Vol	70.05

ORIGINAL ELEV: 392.75  
DESIGN ELEV: 392.75



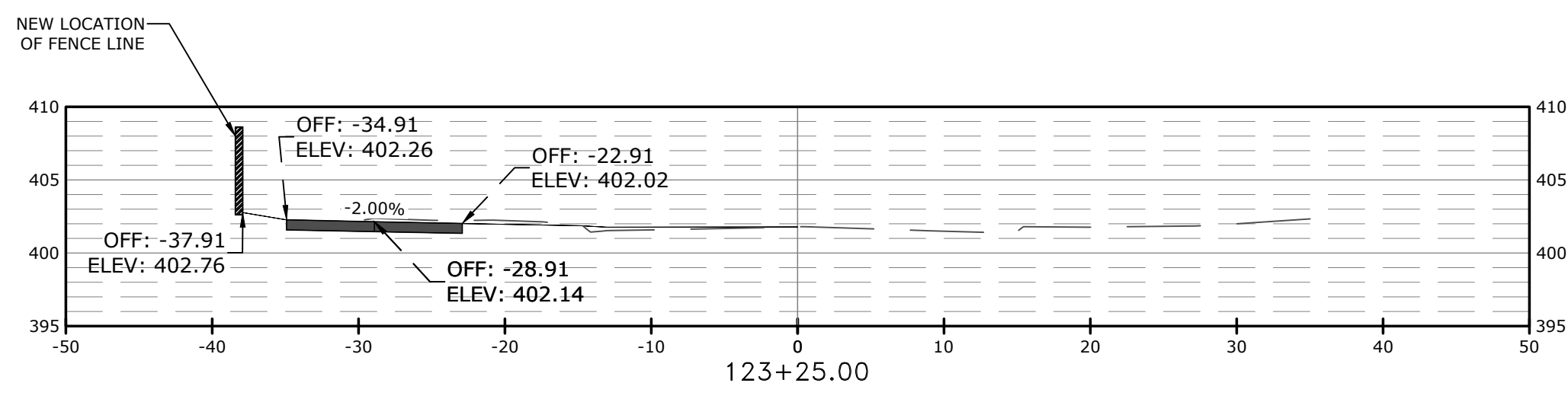
Total Volume at Station 121+00.00	
Cut Area	11.79
Fill Area	0.00
Cut Vol	6.97
Fill Vol	0.05
Net Vol	63.55

ORIGINAL ELEV: 391.27  
DESIGN ELEV: 391.27



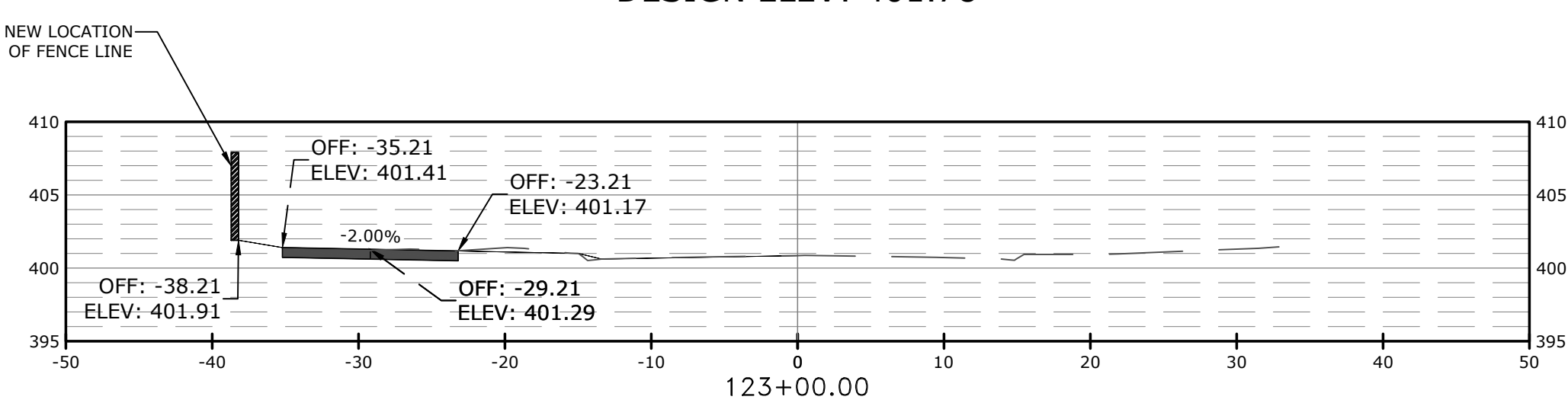
Total Volume at Station 123+50.00	
Cut Area	6.99
Fill Area	0.39
Cut Vol	6.73
Fill Vol	1.14
Net Vol	102.52

ORIGINAL ELEV: 402.73  
DESIGN ELEV: 402.73



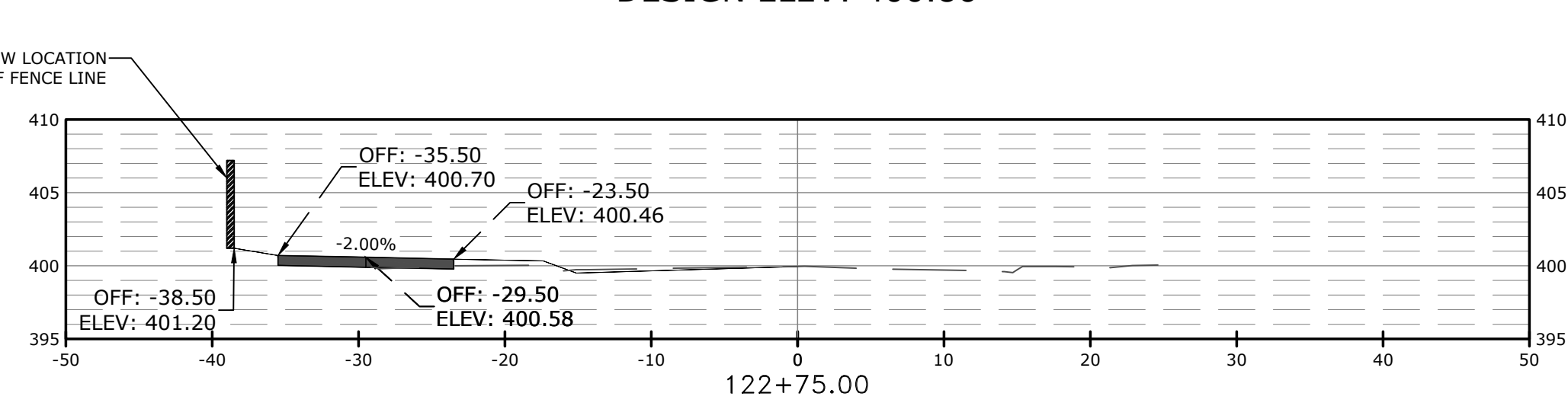
Total Volume at Station 123+25.00	
Cut Area	7.55
Fill Area	2.08
Cut Vol	6.24
Fill Vol	1.08
Net Vol	96.93

ORIGINAL ELEV: 401.78  
DESIGN ELEV: 401.78



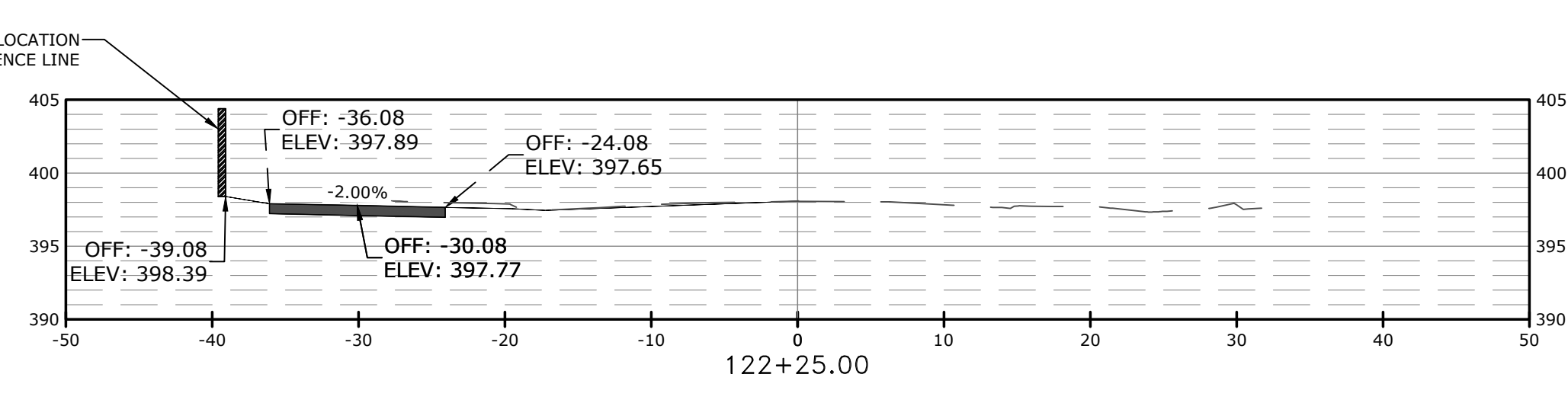
Total Volume at Station 123+00.00	
Cut Area	5.93
Fill Area	0.26
Cut Vol	3.66
Fill Vol	1.44
Net Vol	91.77

ORIGINAL ELEV: 400.86  
DESIGN ELEV: 400.86



Total Volume at Station 122+75.00	
Cut Area	1.98
Fill Area	2.86
Cut Vol	4.42
Fill Vol	1.56
Net Vol	89.56

ORIGINAL ELEV: 399.96  
DESIGN ELEV: 399.96



Total Volume at Station 122+25.00	
Cut Area	9.08
Fill Area	0.11
Cut Vol	4.10
Fill Vol	0.22
Net Vol	79.28

EARTHWORK QUANTITIES:  
TO BE PAID PER PLAN  
QUANTITIES ONLY

ORIGINAL ELEV: 398.07  
DESIGN ELEV: 398.07

SCALE:  
1" = 10' HORIZ.  
1" = 10' VERT.

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ORIGINAL SIGNATURE ON FILE

JOB NO. 061757  
JONESBORO DR. CHILDREN'S  
TRAIL (LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

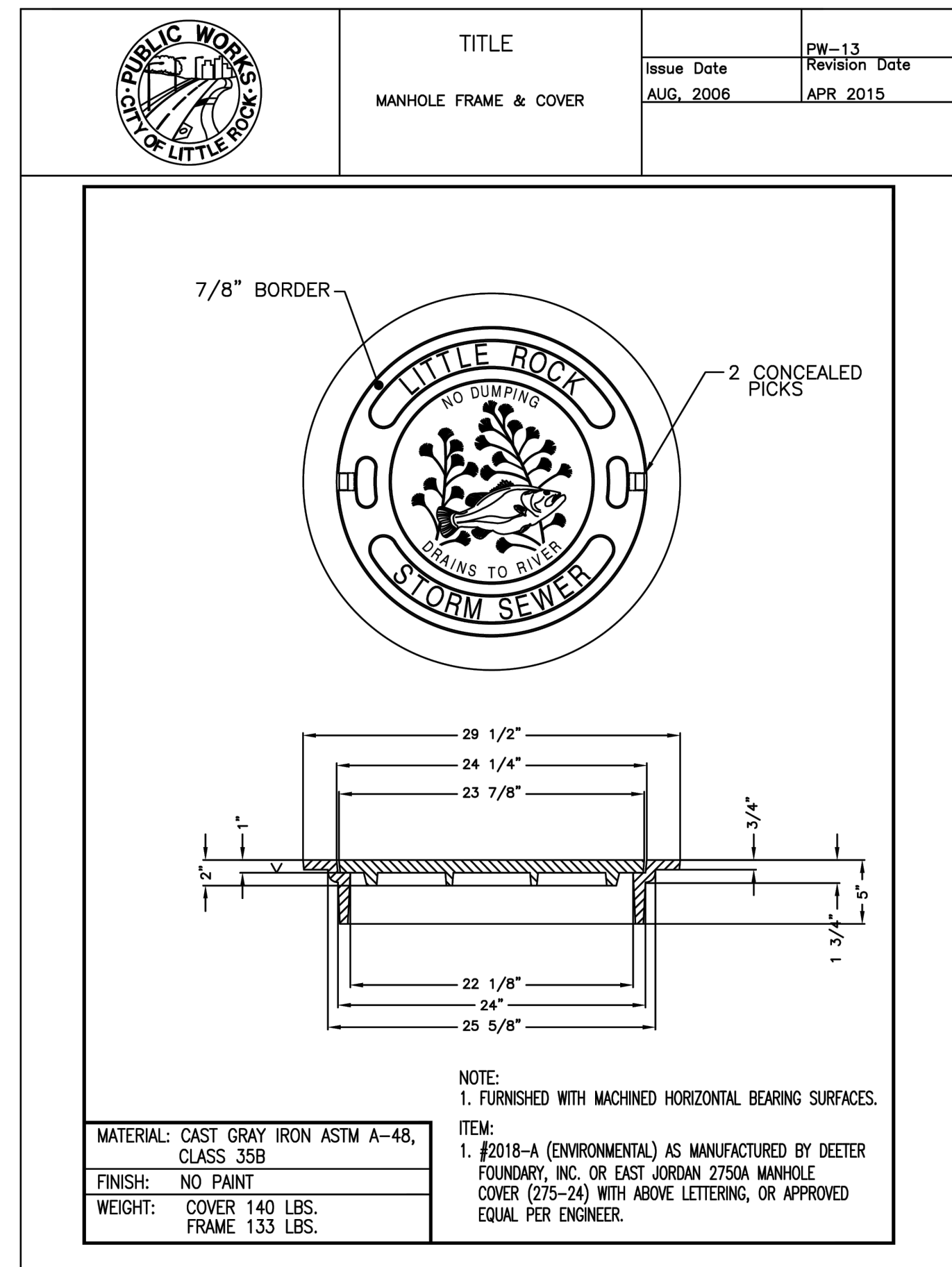
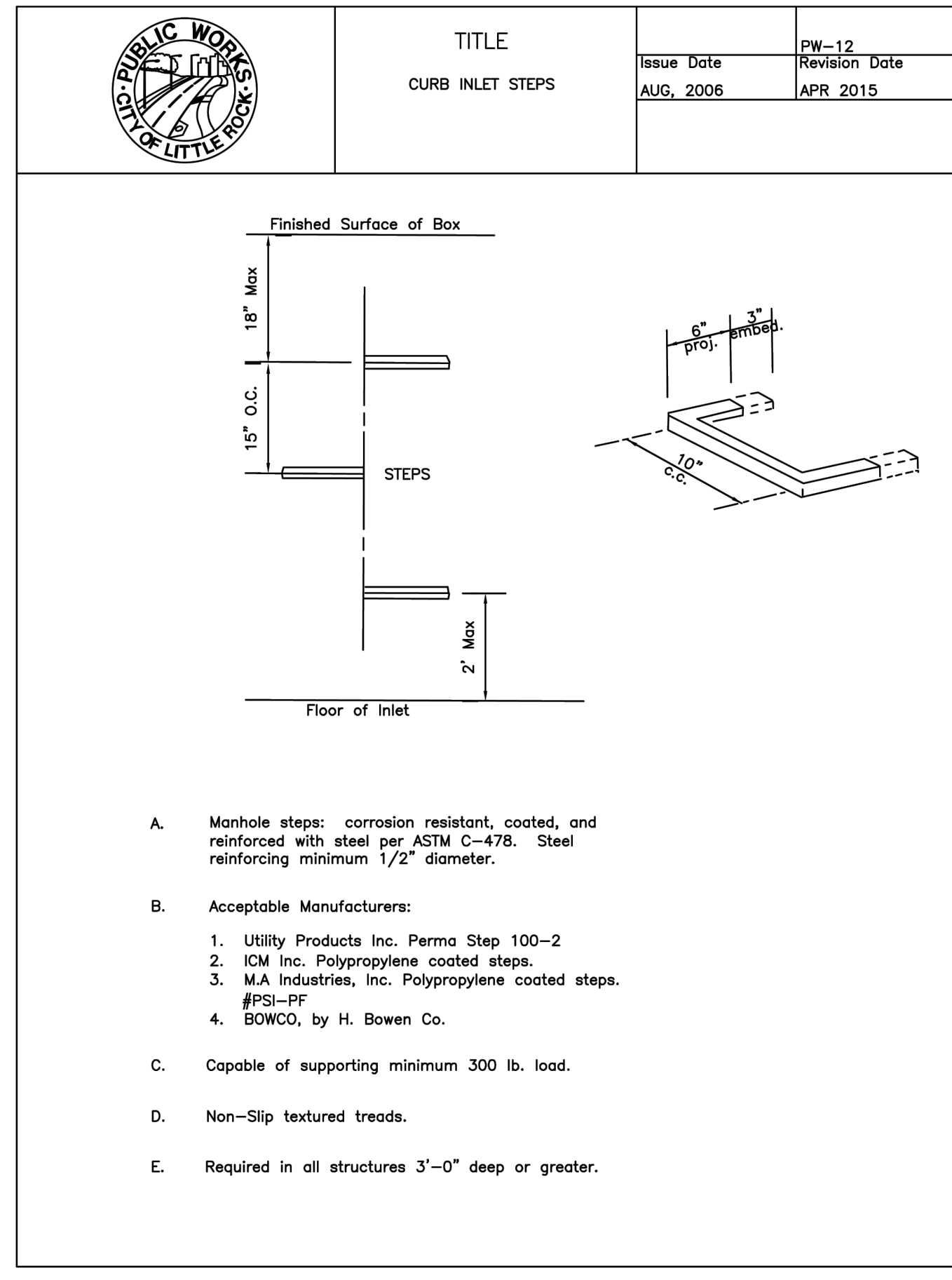
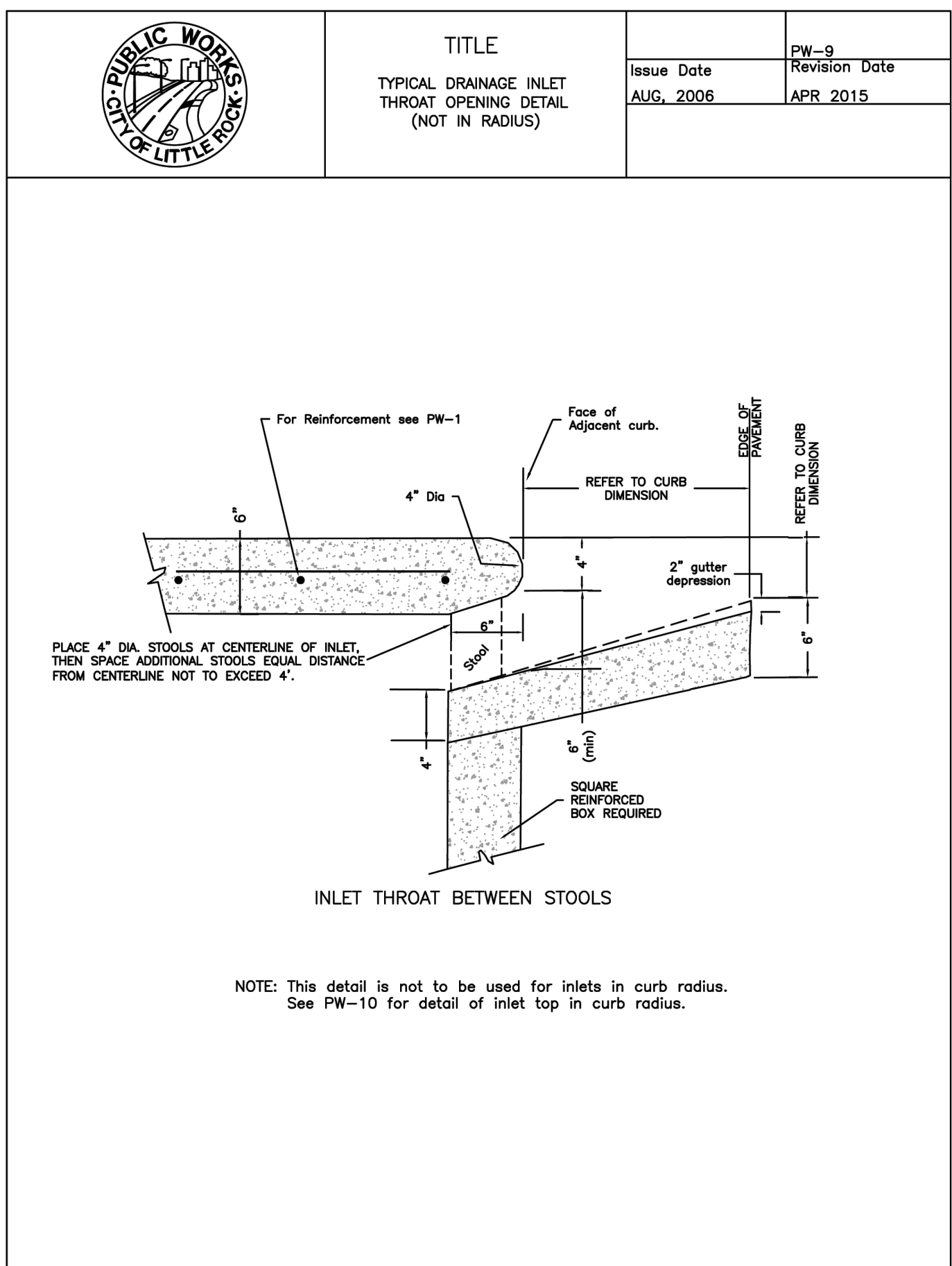
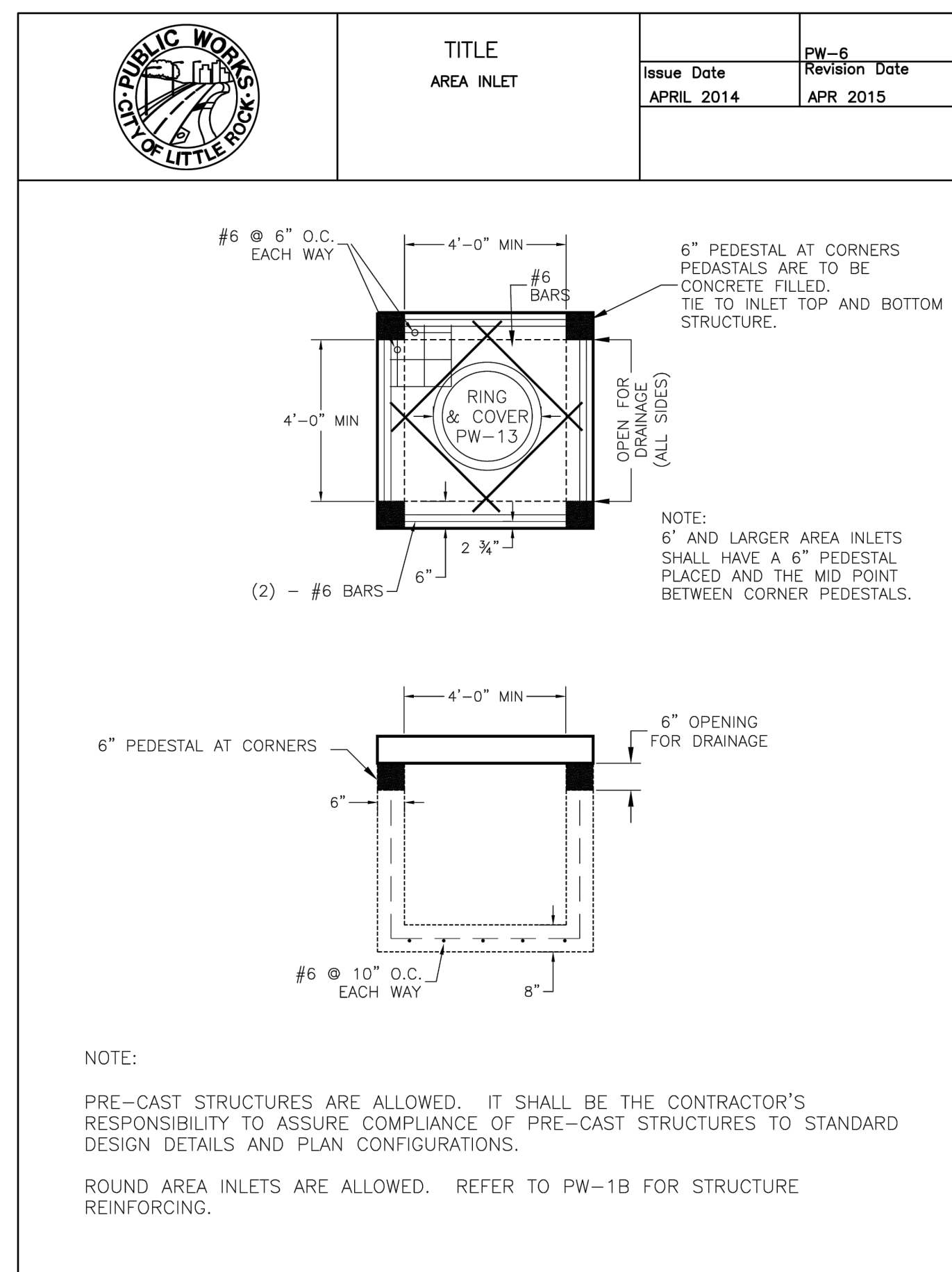
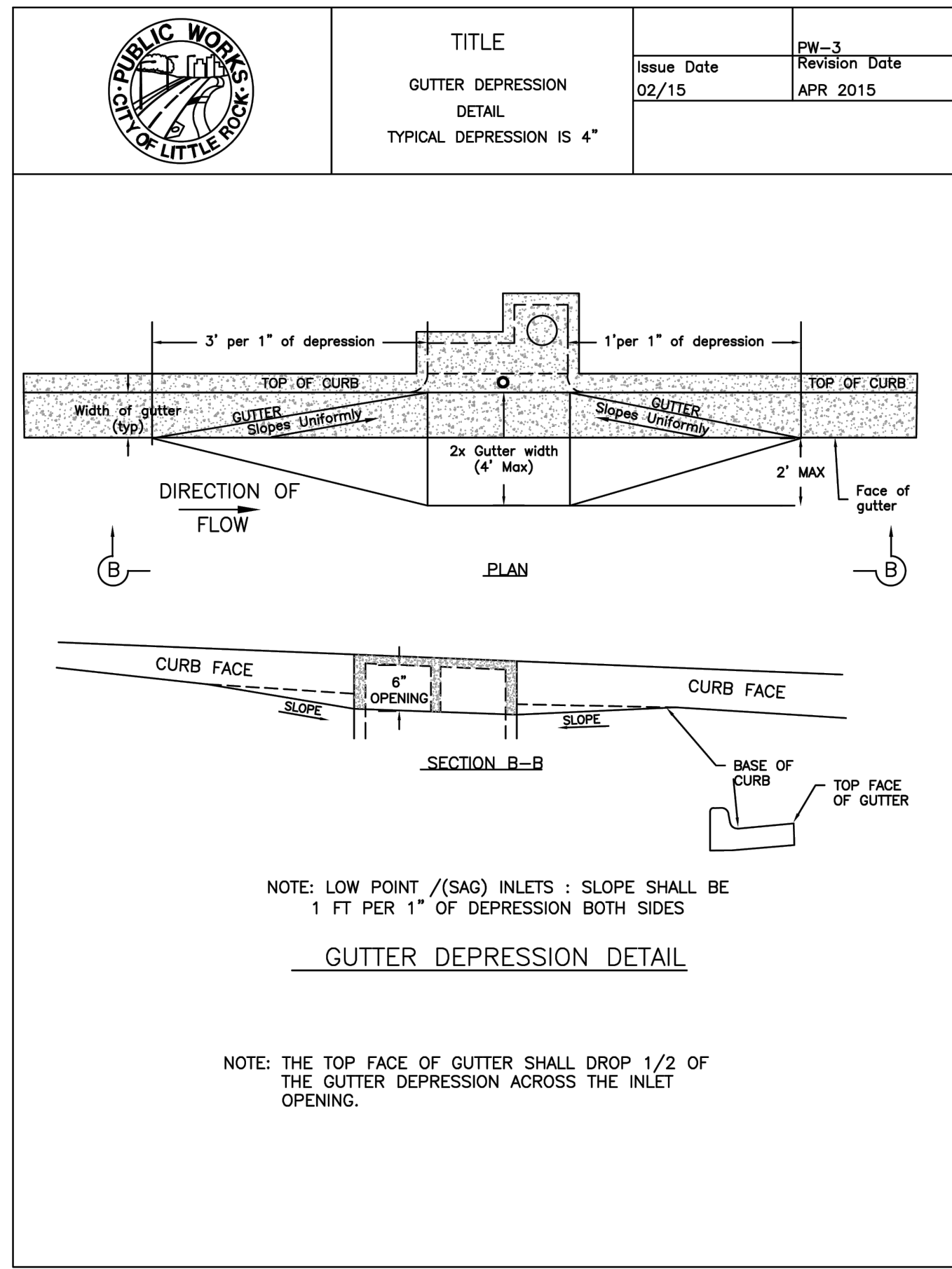
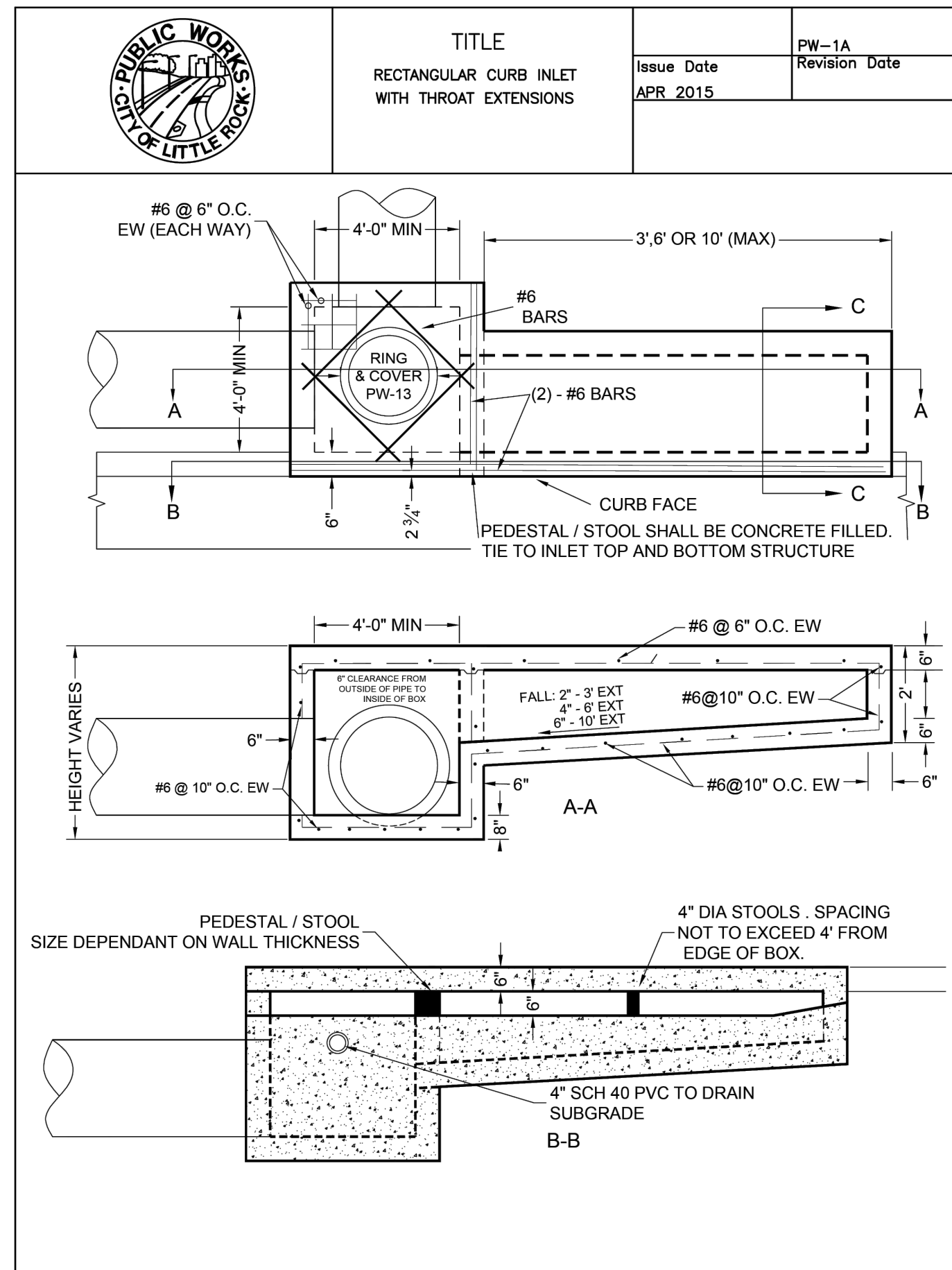


REV	DATE	DESCRIPTION

CROSS  
SECTIONS IV

DESIGNED BY:	DRAWN BY:
WTC	WTC
DATE:	REVISION:
JUL 2024	
SCALE:	JOB NUMBER:
N.T.S.	22-5767

W:\2022\22-5767-Little Rock, S. Job No. 061757 Jonesboro Childrens Trail\Design Drawings\Civil\SURVEY CONTROL DETAILS (I).dwg, PRINTED ON: July 1, 2024 @ 1:59 PM



**MCE McCLELLAND CONSULTING, INC.**  
DESIGNED TO SURVIVE ENGINEERS, INC.  
7302 KANIS ROAD  
LITTLE ROCK, ARKANSAS 72204  
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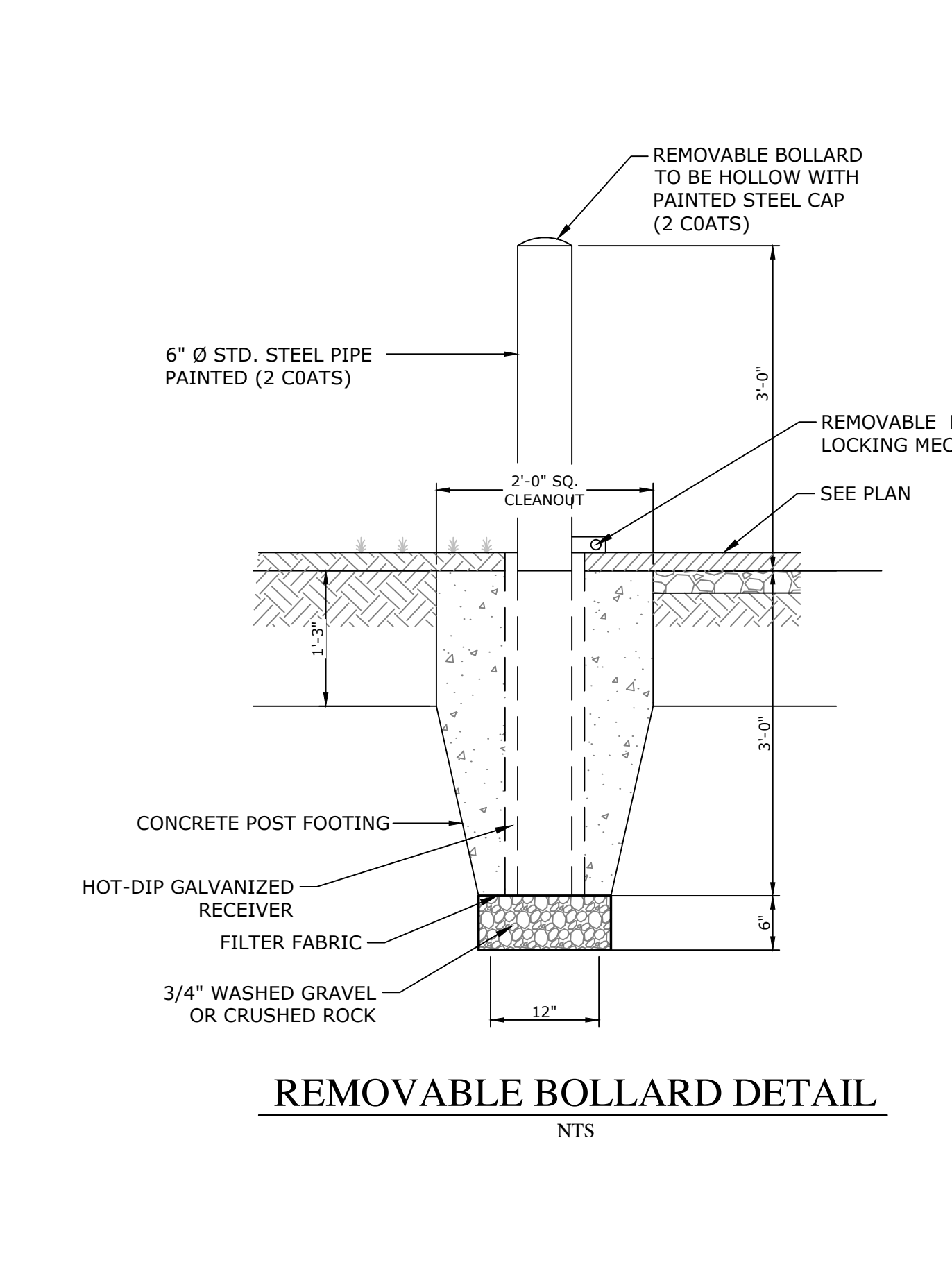
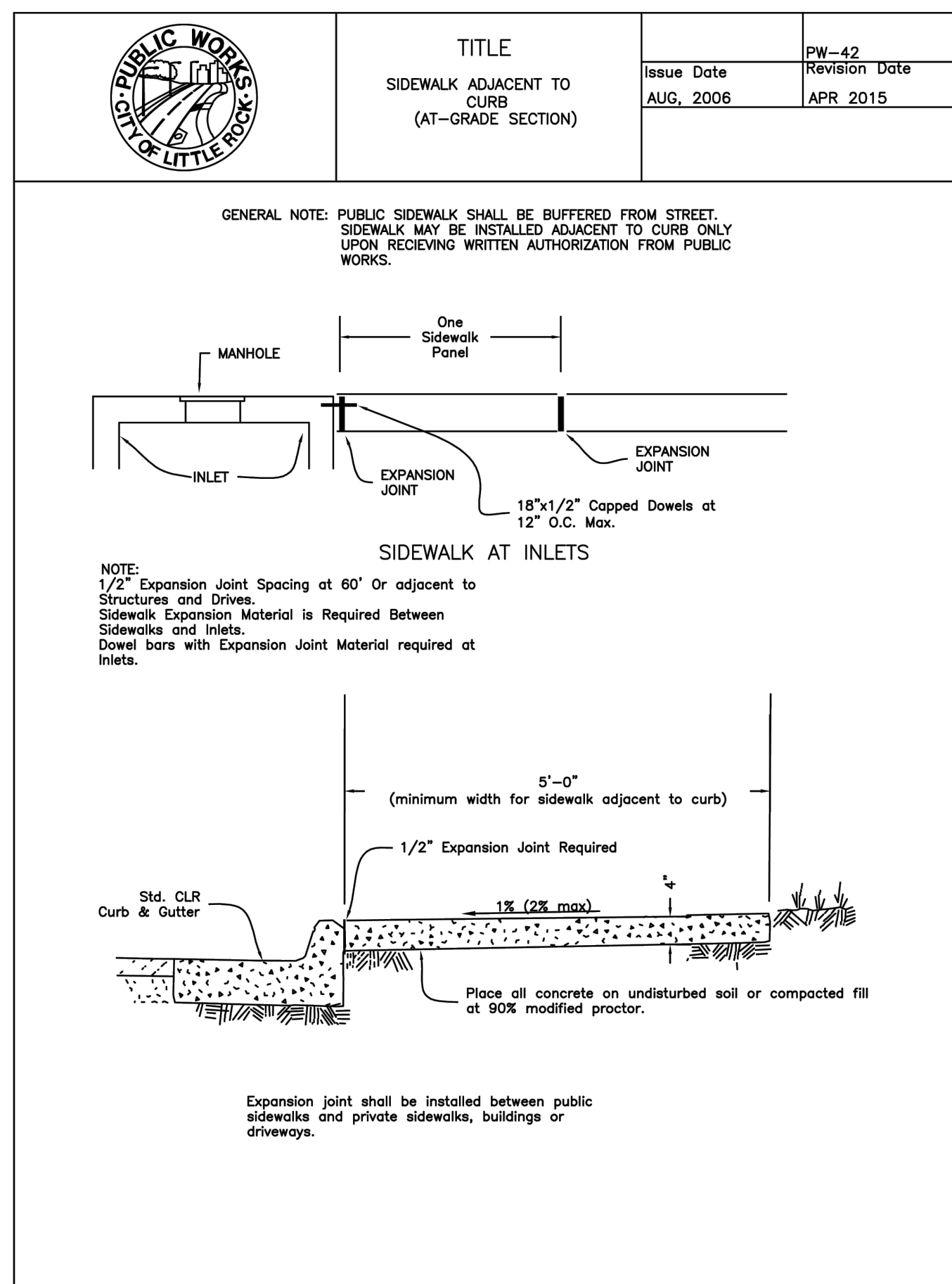
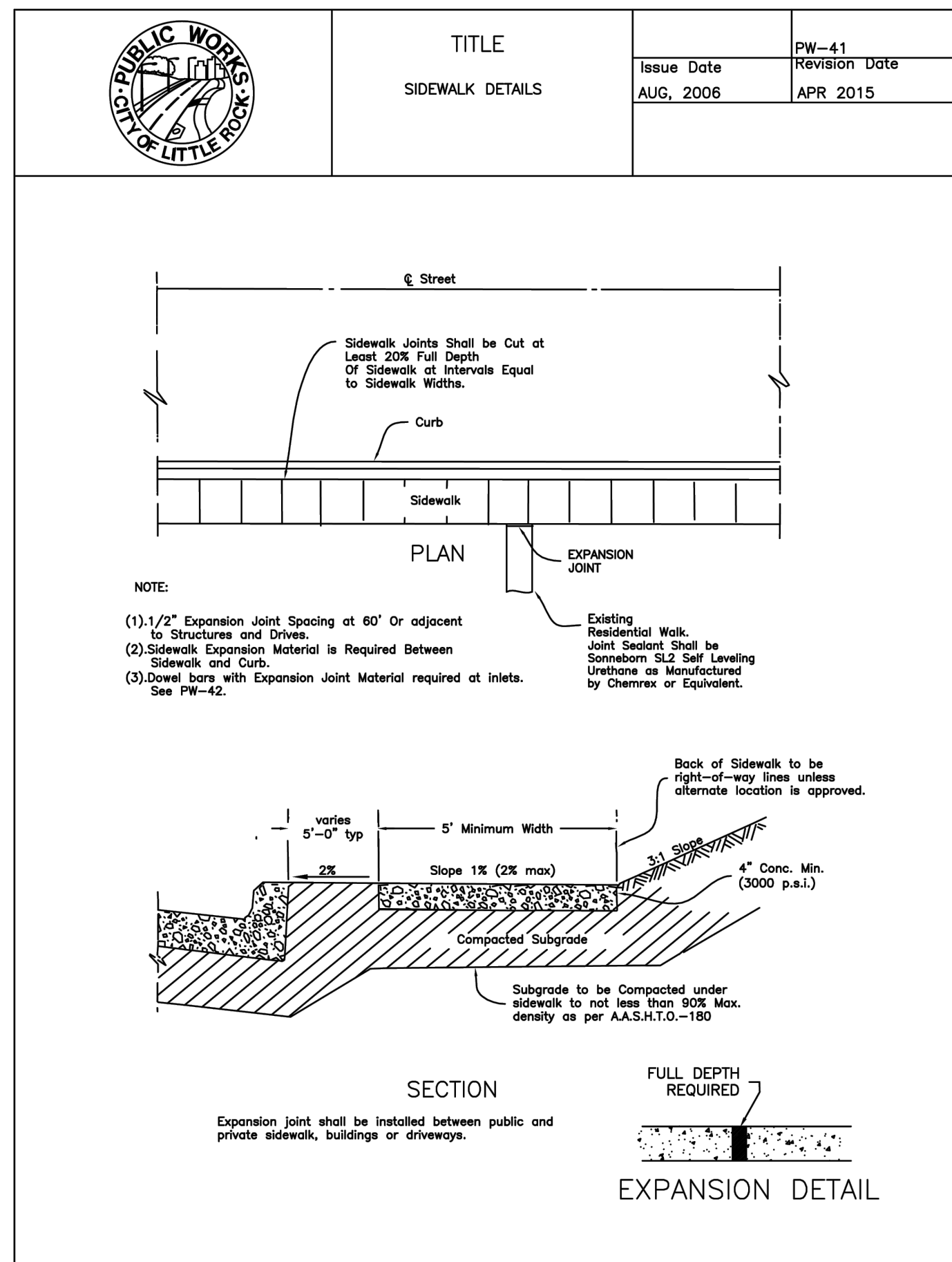
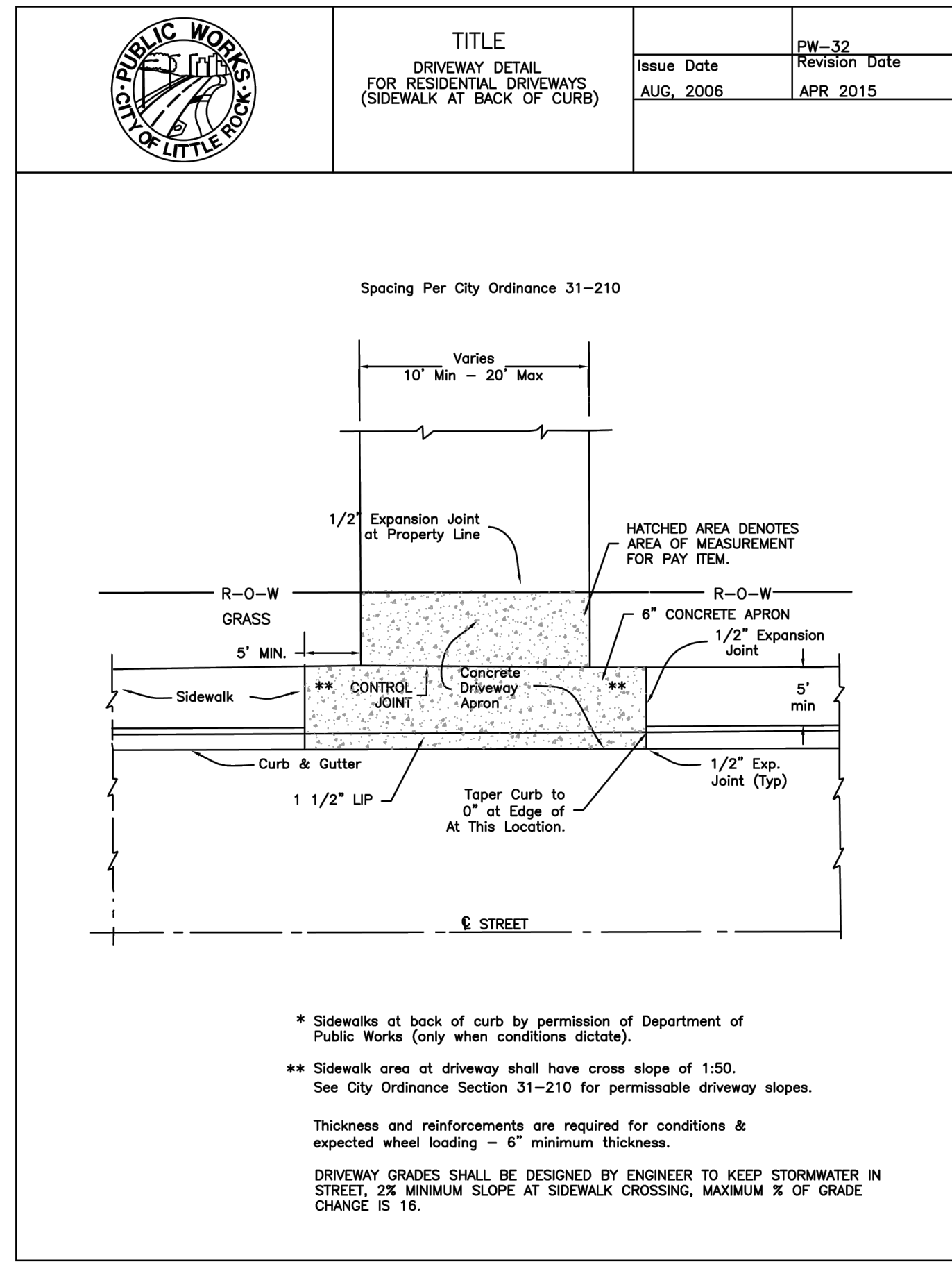
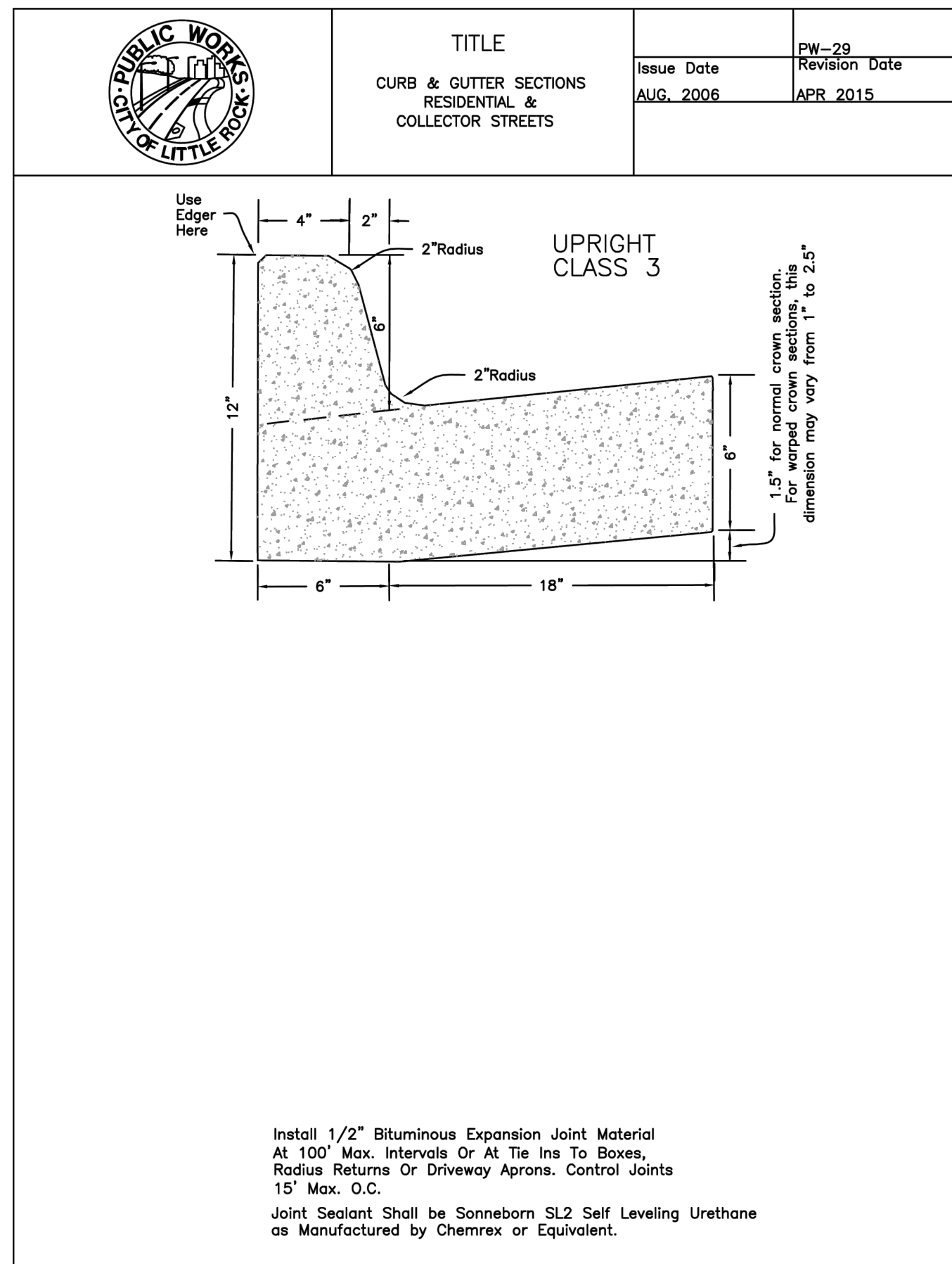
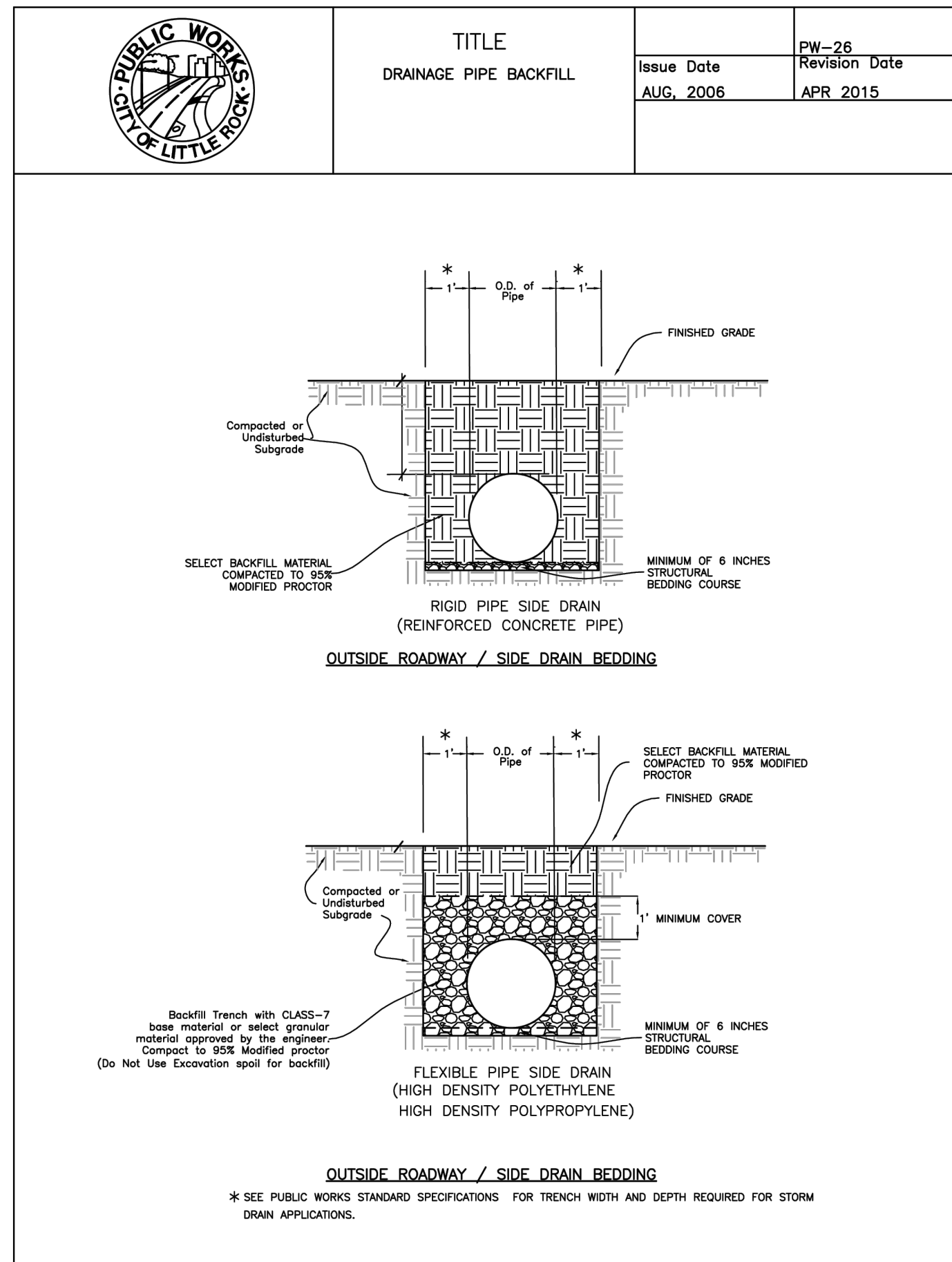
JOB NO. 061757  
JONESBORO DR. CHILDREN'S TRAIL (LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

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STANDARD DETAILS I

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WTC	WTC
DATE:	REVISION:
JUL 2024	
SCALE:	JOB NUMBER:
N.T.S.	22-5767



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**STANDARD DETAILS II**

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DATE: JUL 2024	REVISION:
SCALE: N.T.S.	JOB NUMBER: 22-5767

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	TITLE	PW-48
	ACCESS RAMP (GENERAL NOTES & RAMP CRITERIA)	Revision Date APR 2015
	Issue Date AUG. 2006	Revision Date APR 2015

(A) THE SLOPE OF THE RAMP SHALL NOT EXCEED 1:12 (8.33%). CONTRACTORS SHOULD FORM RAMPS AT A GRADE LOWER THAN 8.33% TO ALLOW ROOM FOR CONSTRUCTION TOLERANCES. POURING AND FINISHING RAMPS WITHOUT THE AID OF A DIGITAL LEVEL IN CHECKING GRADES IS DISCOURAGED, BECAUSE CONTRACTORS WILL BE REQUIRED TO REMOVE ANY RAMP WITH GRADES EXCEEDING REQUIREMENTS SHOWN IN STANDARD DETAILS. RAMP SURFACE SHALL BE COURSE BROOMED TRANSVERSE TO THE SLOPE. GROOVES/JOINTS ARE NOT TO BE INSTALLED IN THE RAMP SURFACE.

(B) THE MINIMUM THICKNESS OF RAMPS, SIDEWALKS AND LANDING AREAS SHALL BE 4 INCHES. CONCRETE TO BE MINIMUM 3000 p.s.i. EXPOSED AGGREGATE CONCRETE SHALL NOT BE USED ON SURFACE RAMPS. WIRE REINFORCEMENT IS NOT REQUIRED IN RAMPS OR SIDEWALKS UNLESS SPECIFICALLY STATED IN DESIGN PLANS.

(C) THE MAXIMUM RAMP AND LANDING CROSS-SLOPE SHALL BE 2.0% UNLESS THE STREET GRADE EXCEEDS 2.0%. THEN THE CROSS-SLOPE OF THE RAMP SHALL MATCH THE STREET RUNNING GRADE. DO NOT PROVIDE TRANSITIONAL WARPS IN THE CUTTER, RAMP SURFACE OR LANDING AREA. THE STREET RUNNING GRADE IS MEASURED DIRECTLY IN FRONT OF THE RAMP WITH A 4 FOOT DIGITAL LEVEL AND IS THE GRADE OF THE STREET PERPENDICULAR TO THE RAMP RUNNING SLOPE WHERE THE ASPHALT ABUTS THE GUTTER.

(D) GUTTER SHALL NOT EXCEED 5.0% DIRECTLY IN FRONT OF A CURB RAMP. NO LIP OR VERTICLE SEPARATION SHALL BE INSTALLED BETWEEN THE GUTTER AND THE RAMP.

(E) THE MINIMUM RAMP WIDTH SHALL BE 4 FEET. A THREE FOOT WIDE RAMP IS ACCEPTABLE ONLY IN THE CASE OF AN OBSTRUCTION AND WITH PUBLIC WORKS WRITTEN APPROVAL. CURB RAMPS, SIDEWALKS, MEDIAN CUTS AND CROSSWALKS SHALL BE ALIGNED UNLESS NOT POSSIBLE TO AID IMPAIRED USERS.

(F) RAMP SIDE FLARES SHALL NOT EXCEED 10.0% RELATIVE TO THE STREET. (EXAMPLE: IF THE STREET SLOPE IS 5.0% THEN THE SIDE FLARE SLOPE MAY BE UP TO 15.0% ON THE LOW SIDE TO ALLOW THE FLARE TO MATCH CURB HEIGHT IN A REASONABLE DISTANCE. THE SIDE FLARE SLOPE ON THE HIGH SIDE OF THE RAMP WOULD REMAIN AT 10.0% OR LESS GRADE SINCE IT WILL MATCH CURB HEIGHT QUICKLY).

(G) A MINIMUM 3 FOOT LONG SIDEWALK TRANSITION SHALL BE PROVIDED WHEN MATCHING CURB RAMP/LEVEL LANDING TO EXISTING SIDEWALKS WITH CROSS SLOPE EXCEEDING 2.0%. ADDITIONAL TRANSITION LENGTH MAY BE REQUIRED WHEN MATCHING TO EXISTING SIDEWALK WITH SEVERE CROSS SLOPE.

(H) MEDIAN CUTS SHALL BE 6 FEET WIDE FOR TWO-WAY PEDESTRIAN TRAFFIC ALIGNED WITH CROSSING. MEDIAN CUT CROSS SLOPE SHALL BE MAXIMUM 2.0% OR MATCH STREET GRADE WHEN ROADWAY SLOPE EXCEEDS 2.0%.

(I) RAMP LENGTH IS LIMITED TO 15 FEET.

**GENERAL NOTES FOR DETECTABLE WARNING DEVICES**

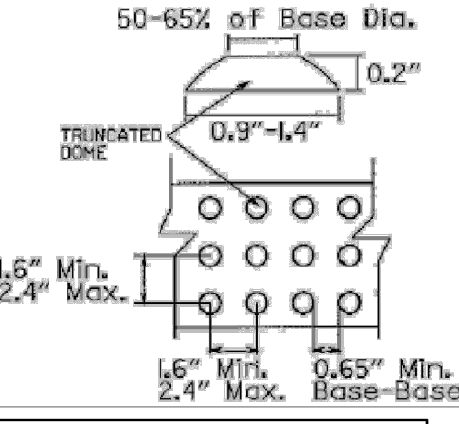
THE DETECTABLE WARNING DEVICE SHALL BE LOCATED SO THAT THE NEAREST EDGE OF THE DEVICE IS 6 TO 8 INCHES FROM THE FACE OF CURB.

TRUNCATED DOMES IN THE DETECTABLE WARNING SURFACE SHALL MEET THE REQUIREMENTS OF THE GEOMETRIC CONFIGURATION SHOWN.


DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT THE WHEELS TO ROLL BETWEEN DOMES.

DETECTABLE WARNING DEVICE SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.

DETECTABLE WARNING DEVICE SHALL BE ON THE AHT QUALIFIED PRODUCTS LIST FOR CAST-IN-PLACE TACTILE PANELS (ADA DETECTABLE WARNING).



FIRST CHOICE	TYPE
	TYPE 1 CORNER LOCATIONS WITH WALK ADJACENT TO CURB BOTH NEW CONSTRUCTION AND ALTERATIONS
	TYPE 2 CORNER LOCATIONS WITH WALK OFFSET FROM CURB A DISTANCE INSUFFICIENT TO ALLOW REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS)
	TYPE 3 CORNER LOCATIONS WITH WALK OFFSET FROM CURB A DISTANCE SUFFICIENT TO ALLOW REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS)
	TYPE 4 TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS)
SECOND CHOICE	TYPE 5 TANGENT LOCATIONS (ALTERATIONS ONLY)

	TITLE	PW-51
	ACCESS RAMP TYPE 3 EXPANSION JOINT ALTERNATE 1	Revision Date APR 2015
	Issue Date AUG. 2006	Revision Date APR 2015

Ramp must cross street perpendicular to center line unless otherwise approved by the Public Works Department.

CURB THIS LOCATION MUST BE POURED WITH GUTTER AS MONOLITHIC UNIT.

1' Side flare or 4" wide curb adjacent to ramp to protect landscape.

LEVEL LANDING NOT REQUIRED ON TYPE 3 RAMPS

EXPANSION JOINT

DETECTABLE WARNING DEVICE

RAMP

LEGEND

- Ⓐ SEE NOTE "A" ON PW-48
- Ⓒ SEE NOTE "C" ON PW-48
- Ⓓ SEE NOTE "D" ON PW-48
- Ⓔ SEE NOTE "G" ON PW-48

Ⓓ DENOTES ACCESS RAMP UNIT PAY AREA

TYPE 3 RAMP PLAN


EXPANSION JOINT ALTERNATE 1

SECTION A-A

Curb Beyond Constructed Monolithic w/ Gutter

EXPANSION JOINT

Ramp Surface (12:1 Max Slope)

	TITLE	PW-52
	ACCESS RAMP TYPE 3 EXPANSION JOINT ALTERNATE 2	Revision Date APR 2015
	Issue Date AUG. 2006	Revision Date APR 2015

Ramp must cross street perpendicular to center line unless otherwise approved by the Public Works Department.

CURB THIS LOCATION MUST BE POURED WITH GUTTER AS MONOLITHIC UNIT.

1' Side flare or 4" wide curb adjacent to ramp to protect landscape.

LEVEL LANDING NOT REQUIRED ON TYPE 3 RAMPS

EXPANSION JOINT

DETECTABLE WARNING DEVICE

RAMP

LEGEND

- Ⓐ SEE NOTE "A" ON PW-48
- Ⓒ SEE NOTE "C" ON PW-48
- Ⓓ SEE NOTE "D" ON PW-48
- Ⓔ SEE NOTE "G" ON PW-48

Ⓓ DENOTES ACCESS RAMP UNIT PAY AREA

TYPE 3 RAMP PLAN

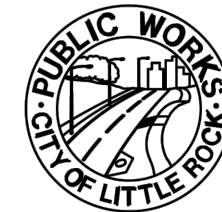
EXPANSION JOINT ALTERNATE 2

SECTION A-A

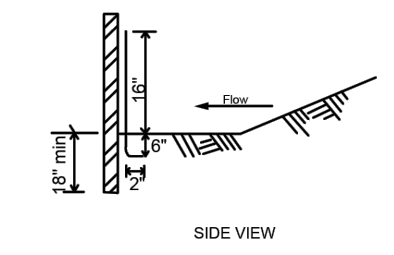
Curb Beyond Constructed Monolithic w/ Gutter

EXPANSION JOINT

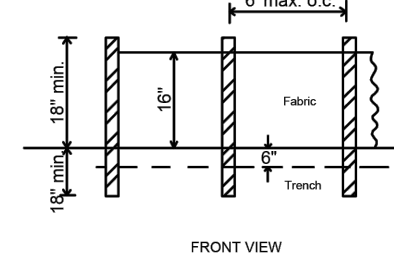
Ramp Surface (12:1 Max Slope)

	TITLE	PW-63
	SILT FENCE	Revision Date APR 2015
	Issue Date AUG. 2006	Revision Date APR 2015

SIDE VIEW



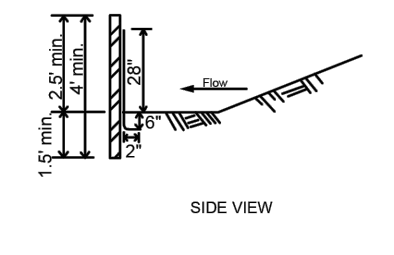
FRONT VIEW



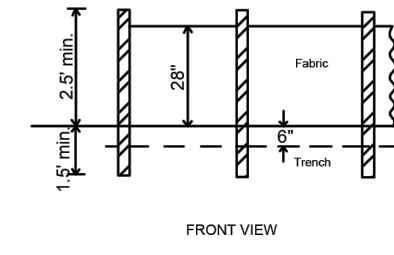
NOTE:  
Use wood or steel posts

SF-A SILT FENCE (TYPE A)

SIDE VIEW



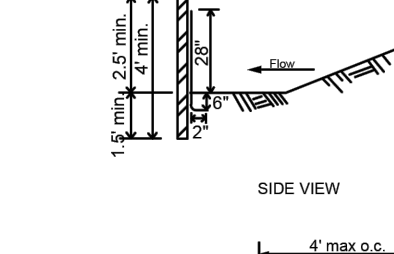
FRONT VIEW



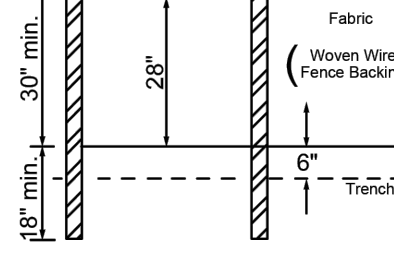
NOTE:  
Use wood or steel posts

SF-B SILT FENCE (TYPE B)

SIDE VIEW



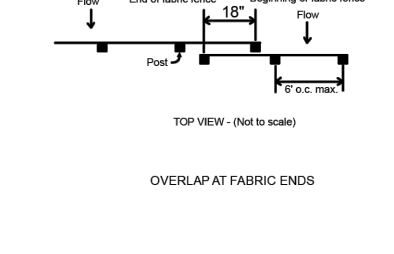
FRONT VIEW



NOTE:  
Use steel posts - only

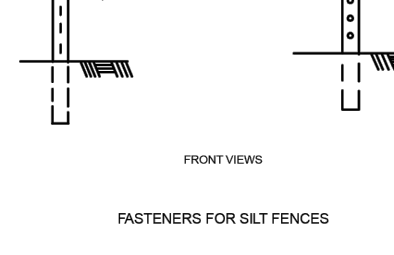
SF-C SILT FENCE (TYPE C)

TOP VIEW - (Not to scale)




OVERLAP AT FABRIC ENDS

FRONT VIEWS



FASTENERS FOR SILT FENCES

	TITLE	PW-63
	SILT FENCE	Revision Date APR 2015
	Issue Date AUG. 2006	Revision Date APR 2015

NOTES:

- GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625 (AHT SPECS).
- TYPE A - USE ON SMALL DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS LESS THAN SIX MONTHS AND THE SLOPE GRADIENT IS LESS THAN 3:1.
- TYPE B - USE ON DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS GREATER THAN SIX MONTHS AND WHERE THE SLOPE GRADIENT IS 3:1 OR GREATER.
- TYPE C - USE WHERE SLOPES EXCEED A VERTICAL HEIGHT OF 20 FEET AND THE SLOPE GRADIENT IS STEEPER THEN 3:1.
- INSPECT BARRIERS AT THE END OF EACH WORKING DAY, OR AFTER EACH RAIN, AND REPAIR OR CLEAN AS NECESSARY.
- REMOVE SEDIMENT FROM BARRIER WHEN ONE HALF FULL.
- DISPOSE OF SEDIMENT AND STABILIZE IT WITH VEGETATION.
- REPLACE FILTER FABRIC WHEN DETERIORATED.
- DESIGN LIFE OF A SYNTHETIC SILT FENCE IS APPROXIMATELY 6 MONTHS.
- MAINTAIN UNTIL THE PROJECT IS VEGETATED OR OTHERWISE STABILIZED.
- REMOVE BARRIERS AND ACCUMULATED SEDIMENT AND STABILIZE THE EXPOSED AREA WHEN THE PROJECT IS STABILIZED.
- SILT FENCE SHALL BE INSTALLED ALONG THE CONTOUR, NEVER UP OR DOWN A SLOPE.
- THE MAXIMUM DRAINAGE AREA FOR A CONTINUOUS FENCE WITHOUT BACKING SHALL BE 1/4 ACRE PER 100 LINEAR FEET OF FENCE LENGTH, UP TO A MAXIMUM AREA OF 2 ACRES. THE MAXIMUM SLOPE LENGTH BEHIND THE FENCE ON THE UPSLOPE SIDE SHOULD BE 110 FEET (AS MEASURED ALONG THE GROUND SURFACE).
- THE MAXIMUM DRAINAGE AREA FOR A CONTINUOUS SILT FENCE WITH BACKING SHALL BE 1 ACRE PER 150 LINEAR FEET OF FENCE LENGTH. THE SLOPE LENGTH ABOVE THE SILT FENCE WITH BACKING SHOULD BE NO MORE THAN 300 FEET.

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JOB NO. 061757  
JONESBORO DR. CHILDREN'S  
TRAIL (LITTLE ROCK) (S)  
LITTLE ROCK, ARKANSAS

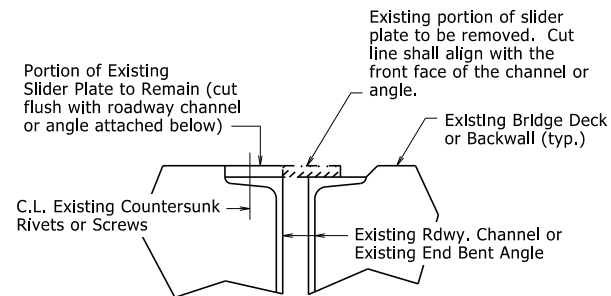
**811**  
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REV	DATE	DESCRIPTION

STANDARD  
DETAILS III

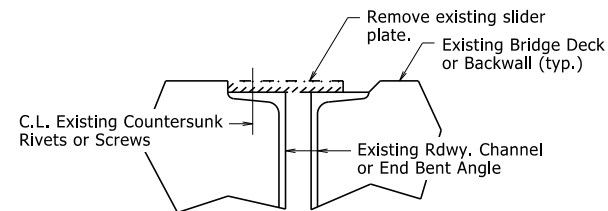
DESIGNED BY: WTC	DRAWN BY: WTC
DATE: JUL 2024	REVISION:
SCALE: N.T.S.	JOB NUMBER: 22-5767

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.				
1 JOINT REPAIR - 55064								



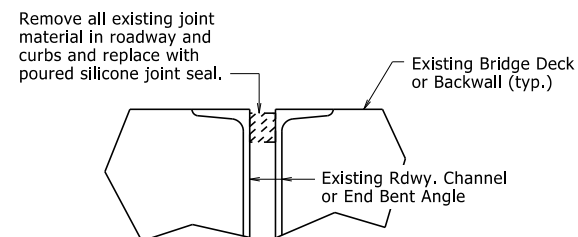
### REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS

At the direction of the Engineer, the portion of existing slider plate shown shall be removed and replaced with a new plate as shown in "SLIDER PLATE JOINT MODIFICATION". The portion of existing slider plate shall be removed and disposed of in accordance with Section 821. The cut face shall be ground square and flush with the face of the existing angle or channel. Removal and disposal of existing slider plate material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant". Properly functioning slider plates need not be modified.



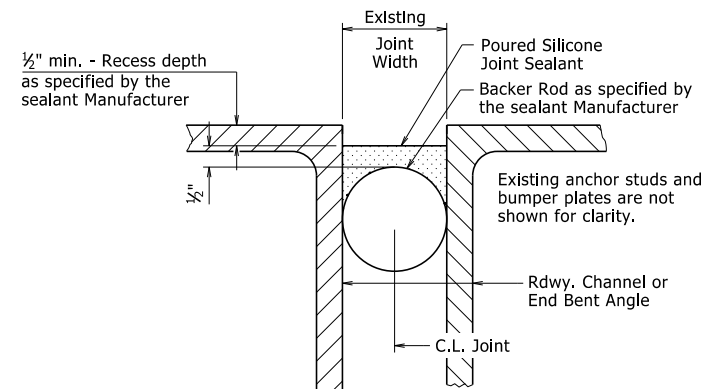
### REMOVAL DETAILS AT EXISTING SLIDER PLATE JOINTS WITH GRADE RAISE

The existing slider plate shown shall be removed and replaced with new plates as shown in "JOINT MODIFICATION WITH GRADE RAISE". The existing slider plate shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing slider plate material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant".



### REMOVAL DETAILS AT EXISTING FILLED JOINTS

The existing joint material shall be removed and disposed of in accordance with Section 821. Removal and disposal of existing joint material will not be paid for directly, but shall be considered subsidiary to the item "Silicone Joint Sealant".



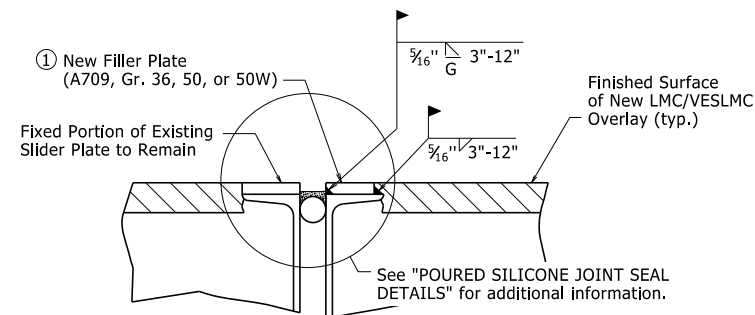
### POURED SILICONE JOINT SEAL DETAILS

Existing Joint Seal shall be completely removed, backer rods placed, and Silicone Joint Sealant installed across the entire width of the bridge deck in accordance with these details, Section 809, and the Manufacturer's recommendations. Removal of existing Joint Seal will not be paid for directly, but shall be considered incidental to the item "Silicone Joint Sealant".

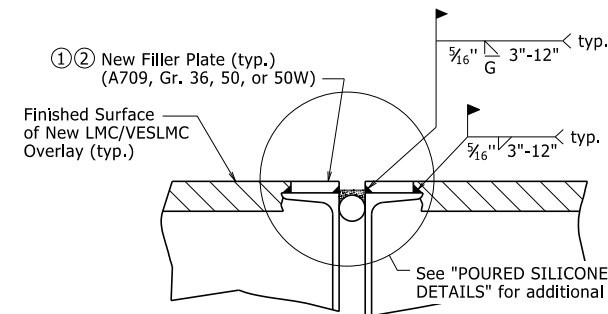
Backer rods shall be extended beyond the length of the poured joint in the initial joint repair area so that the two pieces can be properly spliced together prior to installing sealant for the adjacent joint repair. Manufacturer's recommendations shall be followed to prevent sealant leakage during repair work.

Backer rods shall be appropriately sized and set to the depth shown in the Manufacturer's literature based on the joint width at the time of sealing. Except as noted, do not install more backer rod than can be sealed in the same day. The Contractor shall verify separation of the backer rod from the joint material after joint material has set.

Backer rod shall be notched or otherwise fit around any existing seal supports or bumper plates to maintain its proper depth as defined above.



### SLIDER PLATE JOINT MODIFICATION

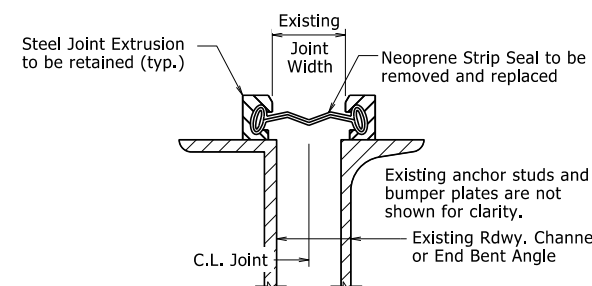


### JOINT MODIFICATION WITH GRADE RAISE

1 New field attached plates atop existing roadway channels or angles are required. The plate thickness shall be adjusted as necessary to match surface of finished surface of LMC/VESLMC Overlay and the width shall be 3/8 inch less than the existing channel flange or angle width to allow for fillet weld as shown.

All new Structural Steel shall be ASTM A709 (Gr. 36, 50, or 50W). The surfaces not in contact with concrete shall be cleaned and painted in accordance with Section 638. Only one coat of paint is required and shall be applied in the fabricator's shop. Grade 50W steel shall not be painted, but shall be cleaned in accordance with Subsection 807.84(e). Structural Steel and Painting will not be paid for directly, but shall be subsidiary to the item "Silicone Joint Sealant".

2 Details shown are for an expansion joint where two bridge units meet. Eliminate filler plate on backwall and proceed with backwall repair in accordance with "BACKWALL REPAIR REMOVAL DETAIL" and "BACKWALL REPAIR INSTALLATION DETAIL" at end bents for bridge decks with grade raise, see Standard Drawing Number 55065.



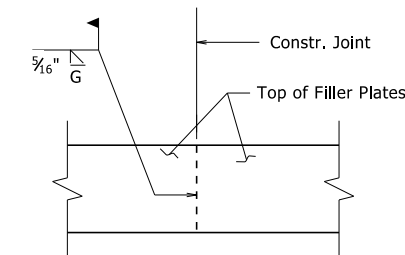
### STRIP SEAL JOINT DETAILS

Existing neoprene strip seal joint material shall be completely removed and new neoprene strip seal joint material shall be installed across the entire width of the steel extrusions in accordance with these details, Section 809, and the Manufacturer's recommendations. Prior to installing the new joint material, the Contractor shall clean the steel extrusion at the Engineer's direction and in accordance with the new strip seal joint material Manufacturer's recommendations.

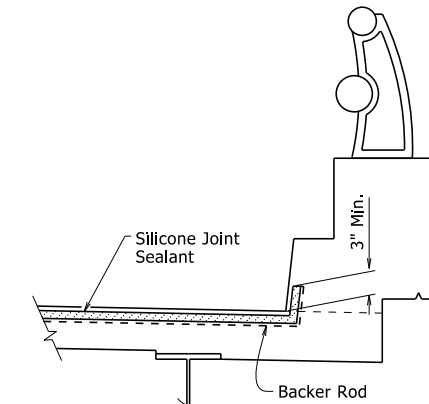
Removal and replacement of the existing neoprene strip seal joint material will require the removal of the parapet slider plates, where present. Parapet slider plates removed for this work shall be reinstalled after installation of the new neoprene strip seal joint material.

The new neoprene strip seal joint material shall provide a movement rating of four inches. The repaired expansion joint shall be capable of sealing the deck surface and parapet area to prevent moisture and other contaminants from descending through the joint.

All work and material associated with removing the existing joint material, cleaning the extrusions, removal and reinstallation of parapet slider plates, and installation of new joint material shall be paid for under the item "Modification of Existing Bridge Structure (Bridge No. \_)".

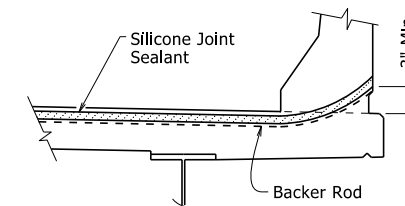


### PLAN VIEW OF FILLER PLATE

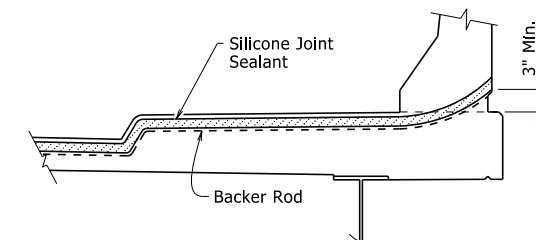


### SILICONE JOINT SEAL PLACEMENT AT CURB

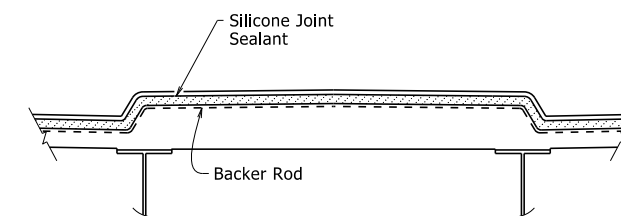
Vertical joints may require forming. The clearance from deck surface to joint material shall be maintained.



### SILICONE JOINT SEAL PLACEMENT AT RAIL



### SILICONE JOINT SEAL PLACEMENT AT SIDEWALK



### SILICONE JOINT SEAL PLACEMENT AT MEDIAN

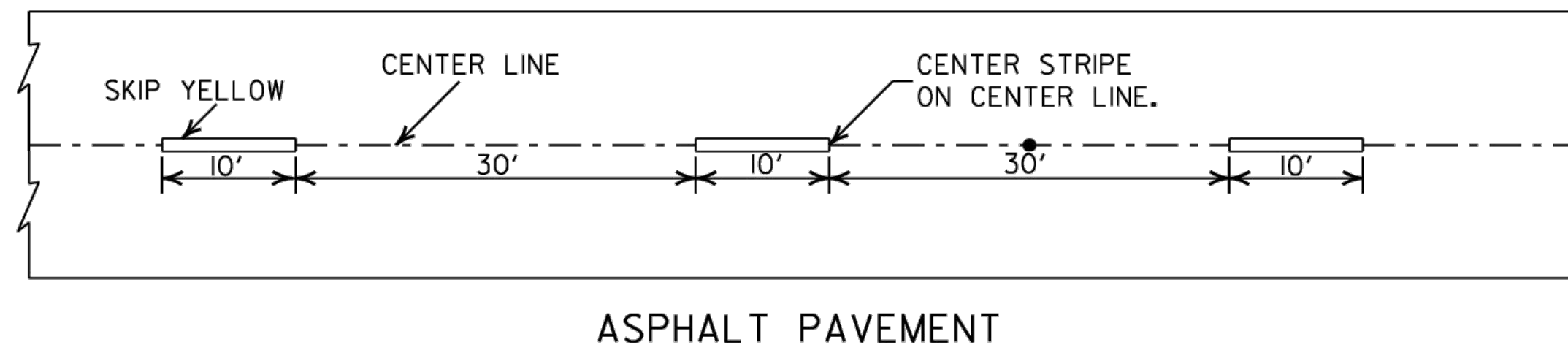
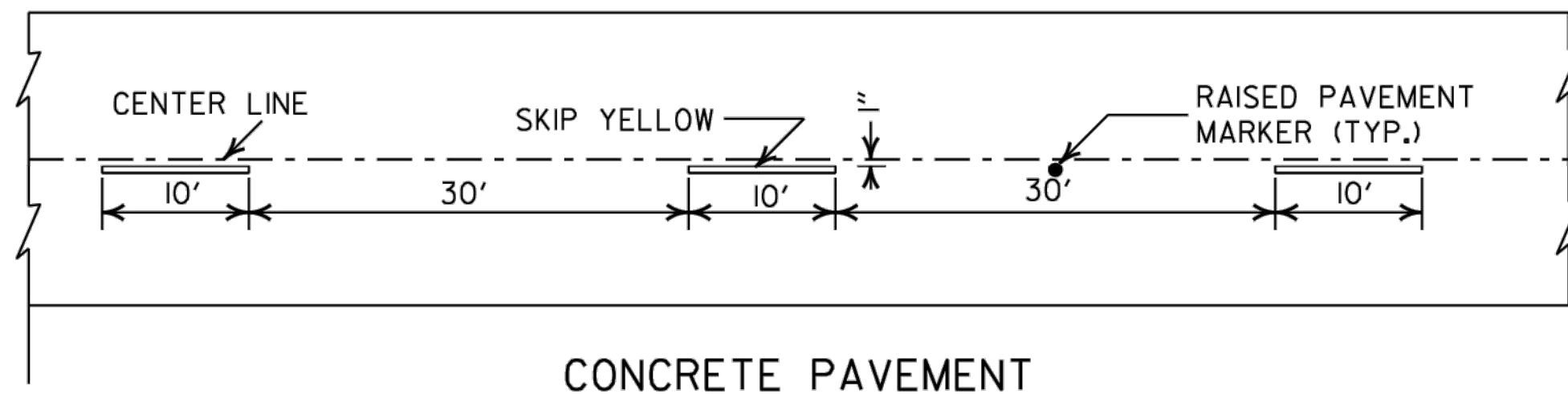
## STANDARD DETAILS FOR JOINT REPAIRS & MODIFICATIONS ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: KWY DATE: 11/7/2019 FILENAME: b55064.dgn  
 CHECKED BY: SWP DATE: 11/7/2019 SCALE: None  
 DESIGNED BY: STD. DATE: -----

BRIDGE ENGINEER

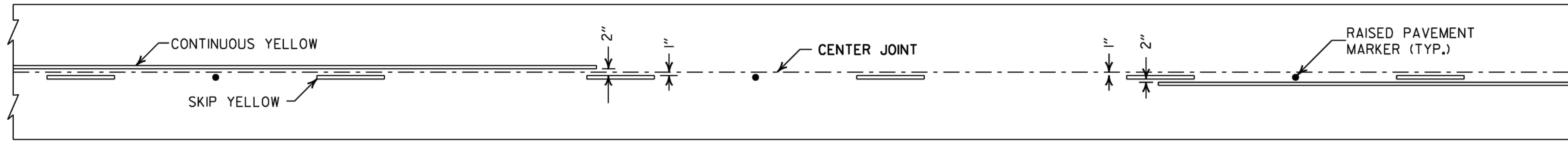
DRAWING NO. 55064



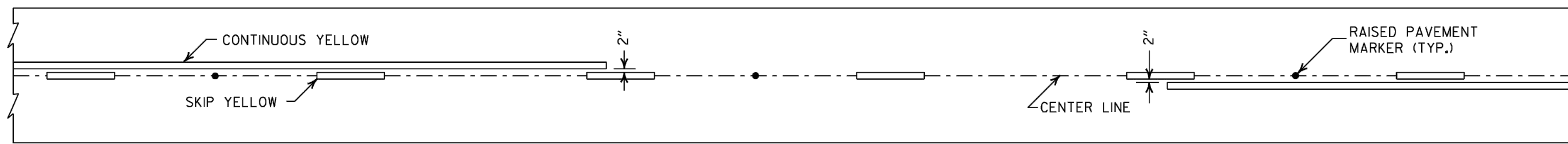
CONCRETE PAVEMENT

ASPHALT PAVEMENT

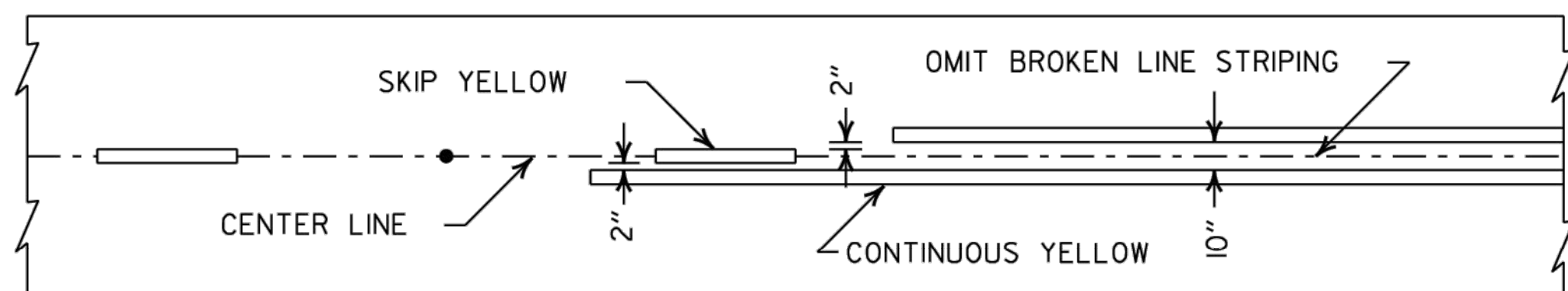
**BROKEN LINE STRIPING**



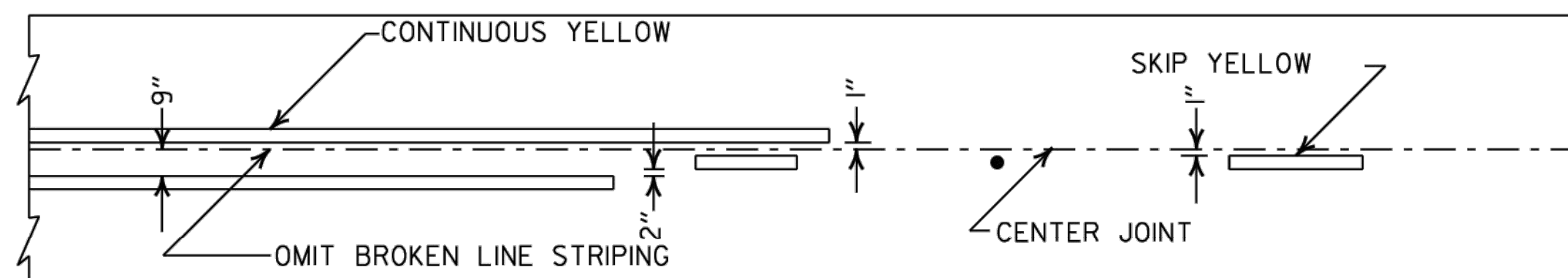
**SOLID LINE STRIPING ON CONCRETE PAVEMENT**



**SOLID LINE STRIPING ON ASPHALT PAVEMENT**

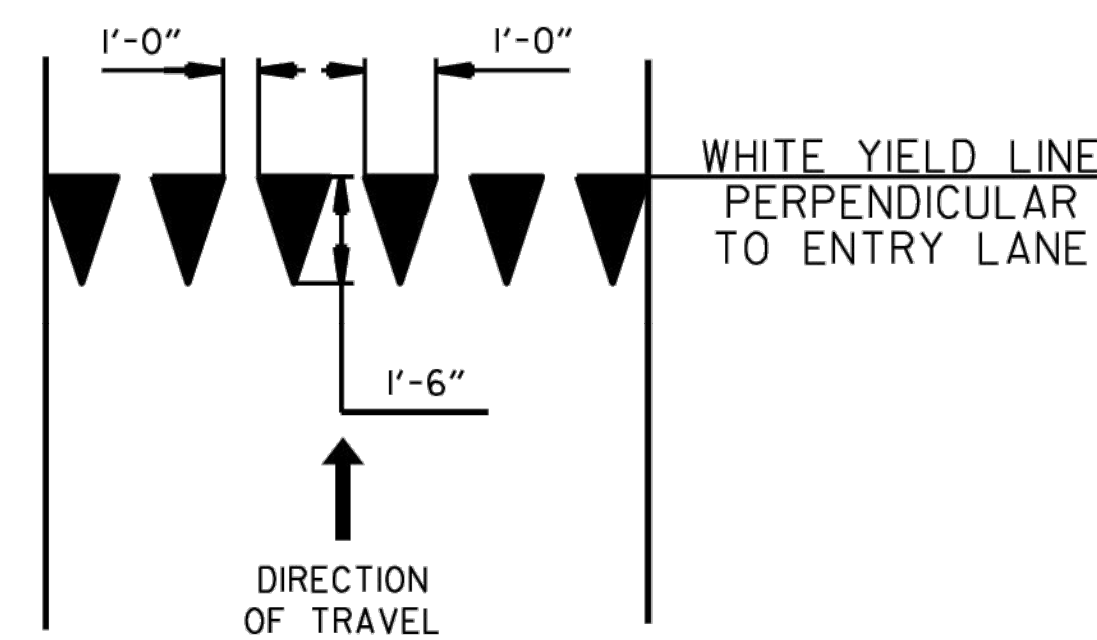


ASPHALT PAVEMENT

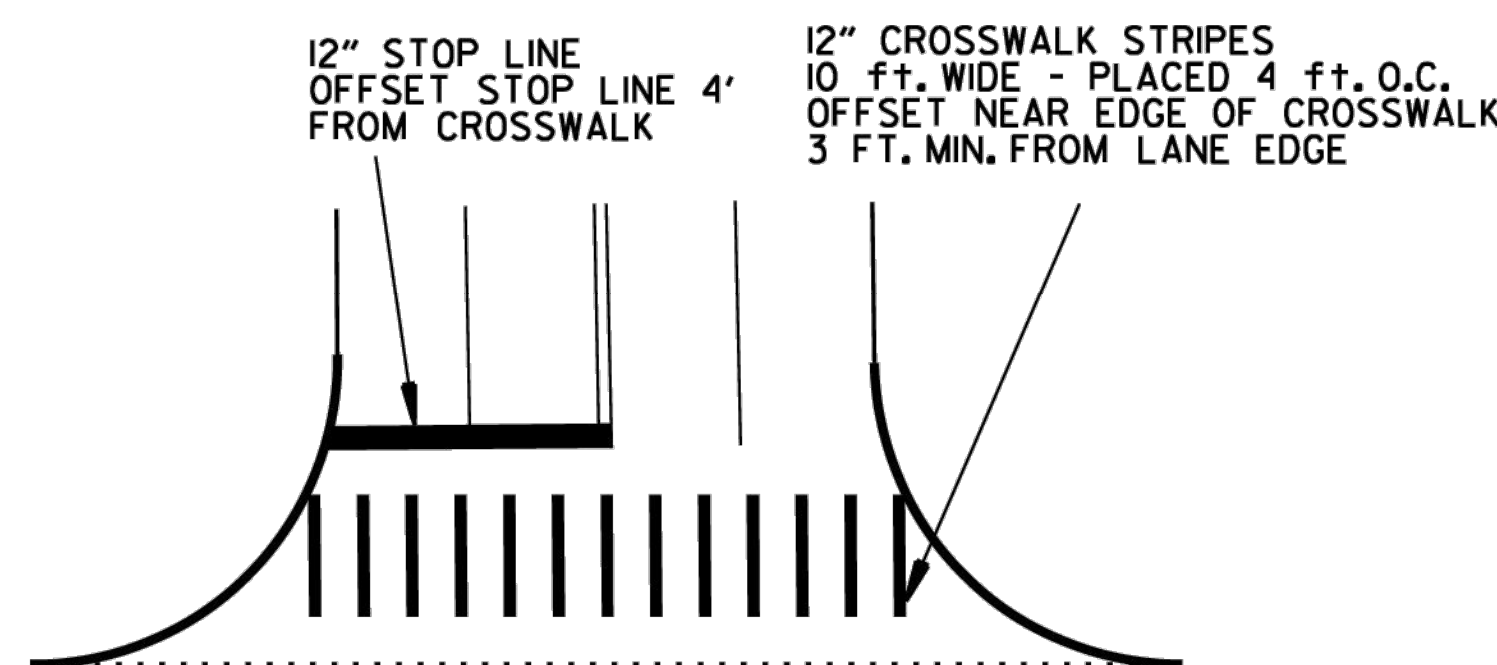


CONCRETE PAVEMENT

**STRIPING AT ADJACENT NO PASSING LANES**

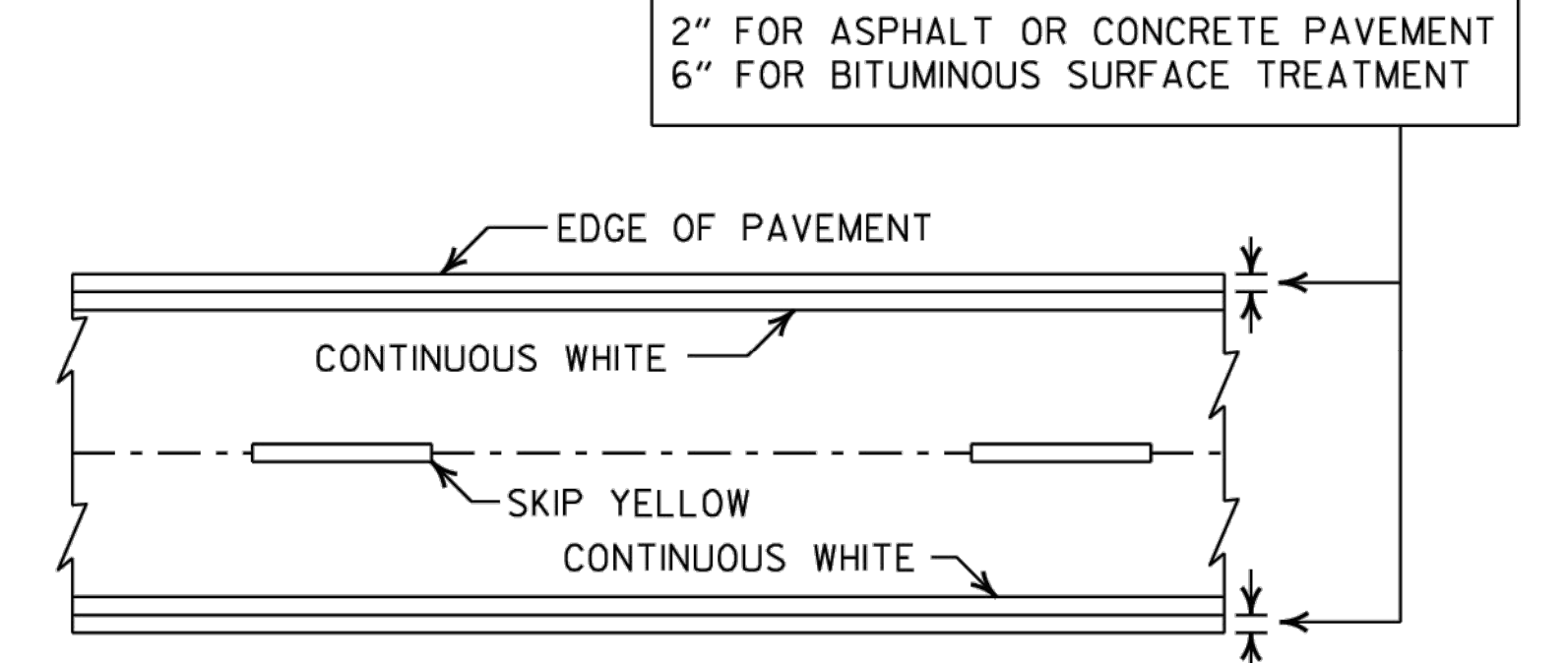


**YIELD LINE DETAIL**



**CROSSWALK AND STOP LINE DETAILS**

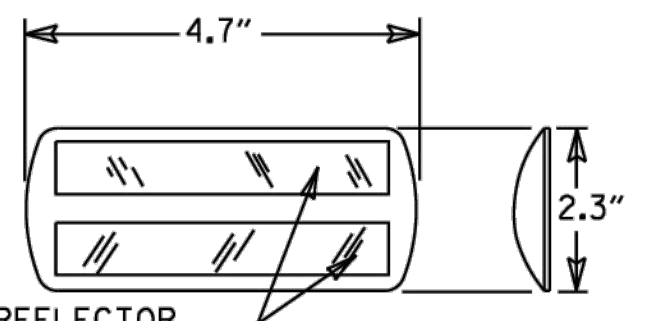
- NOTES:
1. REFER TO THE STRIPING DETAILS FOR PAVEMENT MARKING LINE WIDTHS.
  2. THIS DRAWING SHALL BE USED IN CONJUNCTION WITH THE LATEST REVISED ADDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
  3. RAISED PAVEMENT MARKERS SHALL BE PLACED ON AN 80 FEET SPACING UNLESS OTHERWISE SHOWN IN THE PLANS.



**PAVEMENT EDGE LINE MARKING**

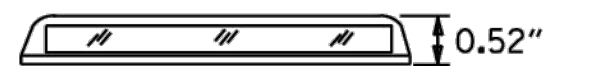
NOTE: THE RED LENS OF THE TYPE II R.P.M. SHALL FACE THE INCORRECT TRAFFIC MOVEMENT.

TYPE II RED/CLEAR OR YELLOW/YELLOW



PRISMATIC REFLECTOR

NOTE: DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ARDOT QUALIFIED PRODUCTS LIST.




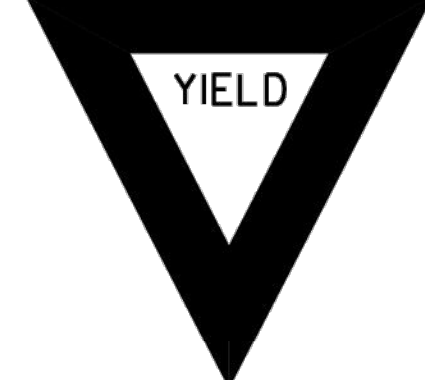
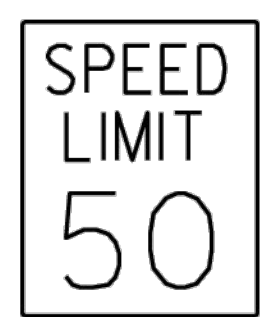


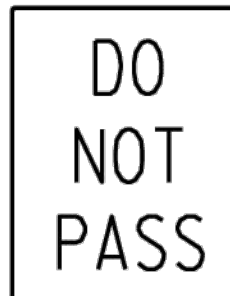




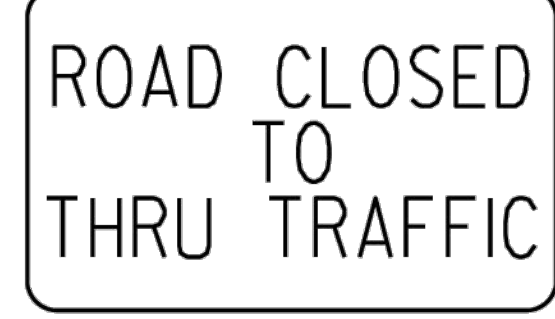

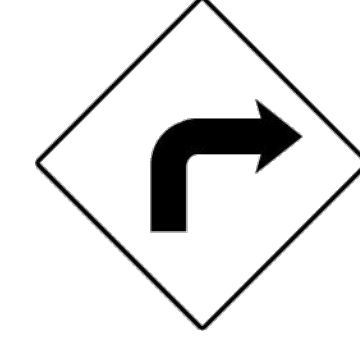




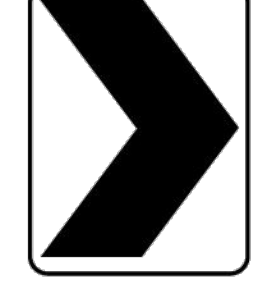
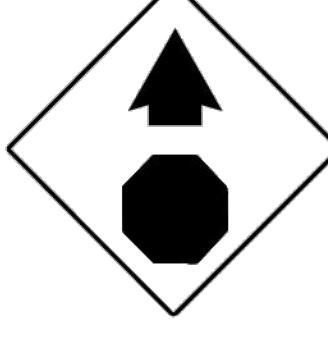
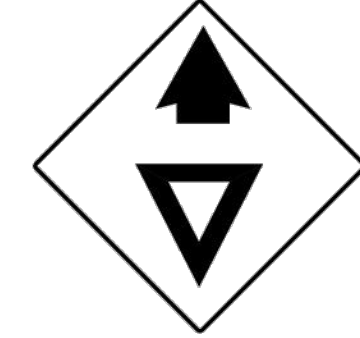
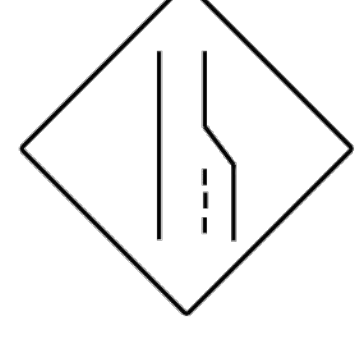

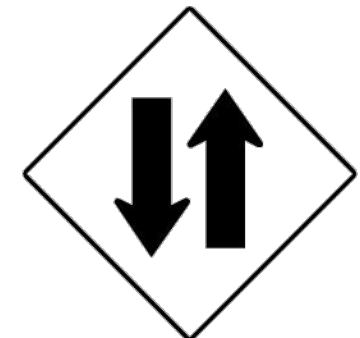

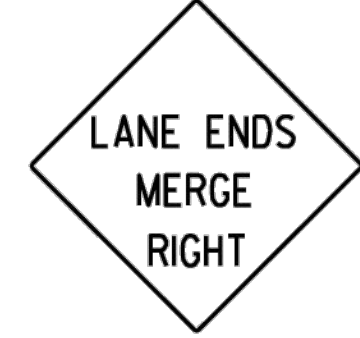













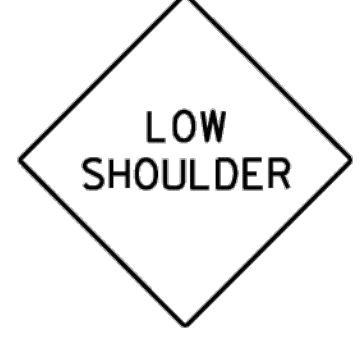

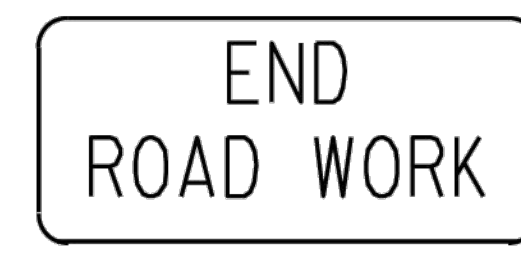
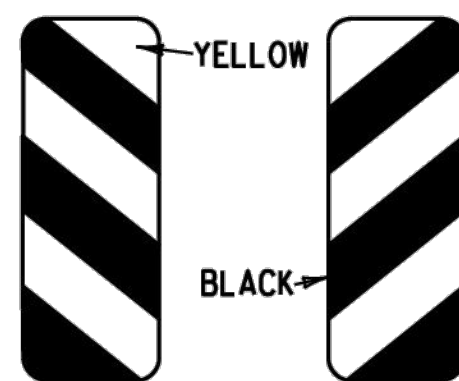


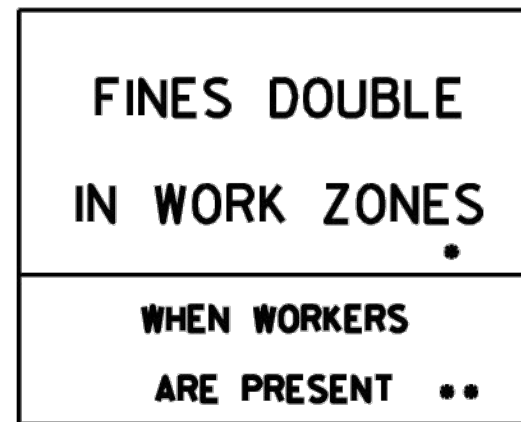
**DETAIL OF STANDARD RAISED PAVEMENT MARKERS**

2-27-20	REVISED STOP LINE DETAILS	
6-1-17	ADDED YIELD LINE DETAIL	
5-12-16	REVISED LINE WIDTHS, SPACING, & NOTES	
9-12-13	REVISED DETAIL OF STANDARD RAISED PAVEMENT MARKERS	
11-17-10	REVISED GENERAL NOTES & REMOVED PLOWABLE PVMT MRKRS	
11-18-04	REVISED NOTE 2 & GENERAL NOTES	
8-22-02	ADDED CROSSWALK & STOPBAR DTLS.	
7-02-98	ADDED DETAILS OF STD. RAISED PAV'T. MARKERS	
4-26-96	REV. NOTES 3&4; ADDED R.P.M.	
9-30-80	DRAWN	1-9-30-80
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION

**PAVEMENT MARKING DETAILS**

STANDARD DRAWING PM-1

<p>RI-1</p>  <p>STANDARD 30"x30" EXPRESSWAY 36"x36" SPECIAL 48"x48"</p>	<p>RI-2</p>  <p>STD. 36"x36"x36" EXPWY. 48"x48"x48" FWY. 60"x60"x60"</p>	<p>R2-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>W3-5</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</p>	<p>W3-5a</p>  <p>STD. 36"x36" EXPWY. 48"x48" FWY. 48"x48"</p>	<p>R4-1</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	<p>R4-2</p>  <p>STD. 24"x30" EXPWY. 36"x48" FWY. 48"x60"</p>	
<p>R5-1</p>  <p>STD. 30"x30" EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>R11-2</p>  <p>48"x30"</p>	<p>R11-3A</p>  <p>60"x30"</p>	<p>R11-4</p>  <p>60"x30"</p>	<p>W21-5a</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W1-1</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W1-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>W1-3</p>  <p>STD. 48"x48"</p>	<p>W1-4</p>  <p>STD. 48"x48"</p>	<p>W1-6</p>  <p>STD. 48"x24" SPECIAL 60"x30"</p>	<p>W1-8</p>  <p>STD. 18"x24" SPECIAL 24"x30" EXPWY. 30"x36" FWY. 36"x48"</p>	<p>W3-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W3-2</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W4-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	
<p>W5-1</p>  <p>STD. 36"x36" SPECIAL 48"x48"</p>	<p>W6-3</p>  <p>EXPWY. 36"x36" SPECIAL 48"x48"</p>	<p>W8-7</p>  <p>EXPWY. 36"x36" FWY. 48"x48"</p>	<p>W9-2</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W13-1</p>  <p>STD. 24"x24"</p>	<p>W20-1</p>  <p>STD. 48"x48"</p>	<p>W20-2</p>  <p>STD. 48"x48"</p>	<p>W20-3</p>  <p>STD. 48"x48"</p>
<p>W20-4</p>  <p>STD. 48"x48"</p>	<p>W20-5</p>  <p>STD. 48"x48"</p>	<p>W20-7a</p>  <p>18" 500 FEET W16-2 24"</p> <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W21-2</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W21-5</p>  <p>STD. 30"x30" SPECIAL 36"x36"</p>	<p>W24-1</p>  <p>STD. 36"x36"</p>	<p>W1-4b</p>  <p>STD. 48"x48"</p>	<p>R56-1</p>  <p>STD. 18"x18"</p>
<p>W8-11</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>W8-9</p>  <p>STD. 36"x36" FWY. 48"x48"</p>	<p>G20-1</p>  <p>60"x24"</p>	<p>G20-2</p>  <p>48"x24"</p>	<p>OM-3L OM-3R</p>  <p>12"x36"</p>	<p>M4-9</p>  <p>STD. 30"x24" SPECIAL 48"x36" SPECIAL 60"x48"</p>	<p>M4-10</p>  <p>48"x18"</p>	<p>R55-1</p>  <p>36"x60"</p> <p>• USE 6" C LETTERS •• USE 4" D LETTERS</p>

**ADVANCE DISTANCES (XXXX)**

500 FT	1/2 MILE
1000 FT	3/4 MILE
1500 FT	1 MILE AHEAD

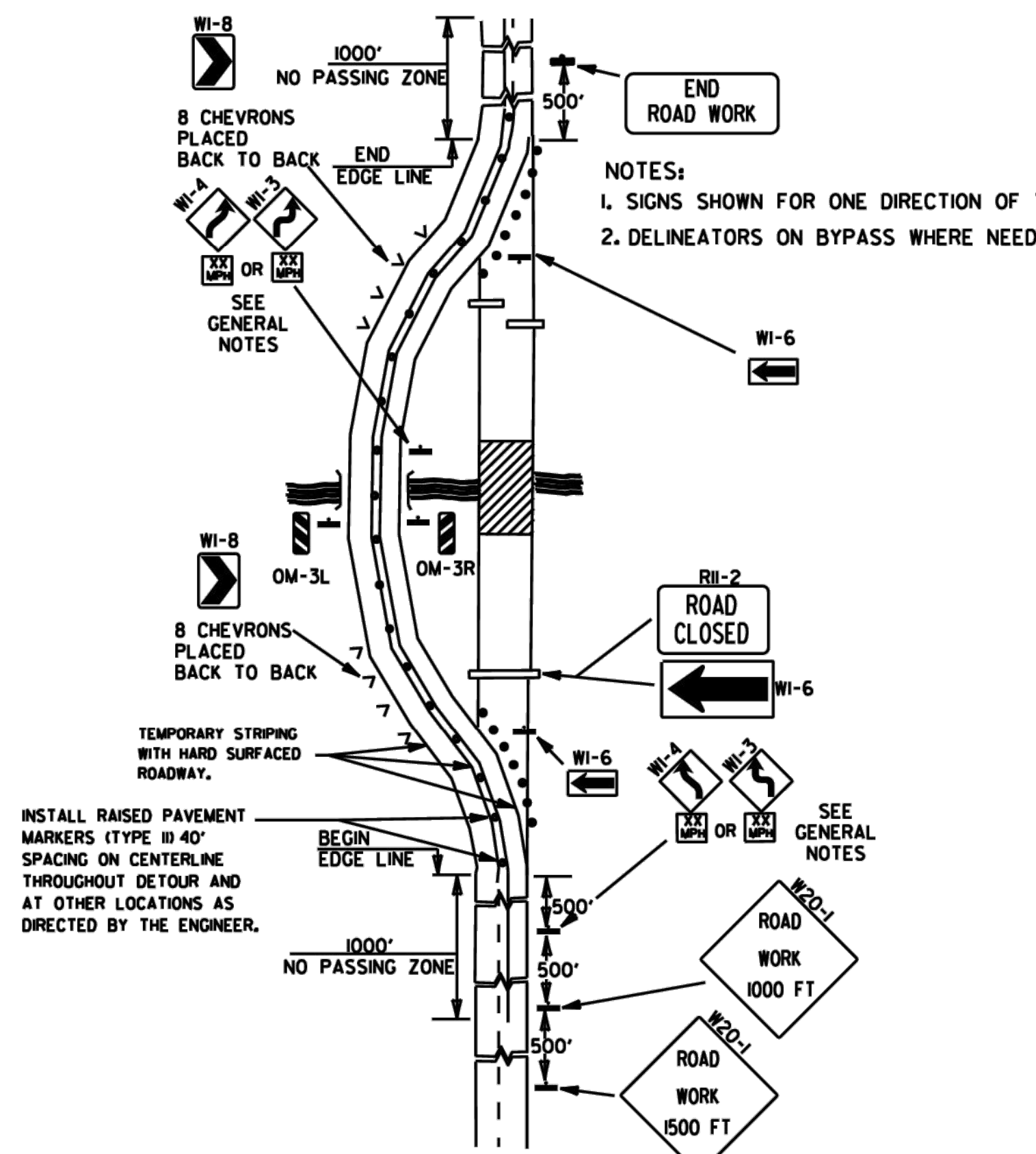
**GENERAL NOTES:**

- ALL TRAFFIC CONTROL DEVICES USED ON ROAD CONSTRUCTION SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND TO THE STANDARD HIGHWAY SIGNS, LATEST EDITION, OR AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION.
- TRAFFIC CONTROL DEVICES SHALL BE SET UP JUST BEFORE THE START OF CONSTRUCTION OPERATIONS AND SHALL BE PROPERLY MAINTAINED DURING THE TIME SUCH CONDITIONS EXIST. THEY SHALL REMAIN IN PLACE ONLY AS LONG AS NEEDED AND REMOVED THEREAFTER.
- EXISTING SIGNS AND CONSTRUCTION SIGNS SHALL BE KEPT IN PROPER POSITION, AND BE CLEAN AND LEGIBLE AT ALL TIMES. SIGNS THAT DO NOT APPLY TO EXISTING CONDITIONS SHALL BE REMOVED. SIGNS THAT ARE DAMAGED, DEFACED, OR THAT ACCUMULATE DIRT DURING CONSTRUCTION SHALL BE CLEANED, REPAIRED, OR REPLACED.
- SIGNS ARE USUALLY MOUNTED ON A SINGLE POST, ALTHOUGH THOSE WIDER THAN 36" OR LARGER THAN 10 SQ. FT. SHALL BE MOUNTED ON TWO POSTS OR ABOVE A TYPE III BARRICADE.
- SIGN POSTS DIRECT BURIED IN SOIL SHALL BE 2 LB. MINIMUM CHANNEL POST OR 4"x4" WOOD POSTS. CHANNEL POSTS SHALL BE PAINTED GREEN. WOOD POSTS SHALL BE PAINTED WHITE. ALL POSTS SHALL BE NEATLY CONSTRUCTED, AND SHALL BE REPLUMBED, CLEANED, OR REPAIRED AS NEEDED FOR THE DURATION OF THE JOB. THERE SHALL NOT BE MORE THAN 2 POSTS IN A 7' PATH FOR WOOD OR CHANNEL POSTS. ANY CHANNEL POST SPLICE SHALL BE IN ACCORDANCE WITH STANDARD DRAWING TC-3.
- POST MOUNTED SIGNS IN RURAL AREAS SHALL BE CONSTRUCTED WITH THE NEAR EDGE OF THE SIGN FROM 6 TO 12 FEET FROM THE PAVEMENT EDGE. SIGNS IN URBAN AREAS AND BARRICADE MOUNTED SIGNS SHALL BE MOUNTED A MINIMUM OF 2 FEET FROM THE PAVEMENT EDGE.
- ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN URBAN AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE. ALL POST AND BARRICADE MOUNTED SIGNS MOUNTED IN RURAL AREAS SHALL BE MOUNTED A MINIMUM DISTANCE OF 7' FROM THE BOTTOM OF THE SIGN TO THE ROADWAY SURFACE, EXCEPT A MINIMUM OF 6' SHALL BE USED WHEN MOUNTING AN ADVISORY SIGN BELOW A WARNING SIGN. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR INTERMEDIATE TERM STATIONARY WORK CONDITIONS. THE SIGNS MINIMUM MOUNTING HEIGHT SHALL BE 5'. RETROREFLECTIVE DEVICES SHALL BE USED. TEMPORARY SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS FOR SHORT-TERM, SHORT DURATION, AND MOBILE CONDITIONS. THEY SHALL BE NO LESS THAN ONE (1) FOOT ABOVE THE TRAVELED WAY. LONG-TERM STATIONARY SIGNS SHALL BE DIRECT BURIED IN SOIL, UNLESS CONDITIONS NECESSITATE THE USE OF PORTABLE SIGNS, OR AS APPROVED BY THE ENGINEER. CONCRETE PADS, CONCRETE OR ROCK BALLAST, OR OTHER SOLID MATERIALS SHALL NOT BE UTILIZED WITH PORTABLE SIGN SUPPORTS.
- FLAGGERS SHALL USE REFLECTORIZED STOP-SLOW PADDLES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
- MOST OF THE SIGNS SHOWN ARE ORIENTED TO THE RIGHT. HOWEVER, THIS DOES NOT PRECLUDE THE USE OF MIRROR IMAGES OF THESE SIGNS WHERE THE REVERSE ORIENTATION MIGHT BETTER CONVEY TO MOTORISTS THE PROPER DIRECTION OF MOVEMENT.
- R55-1 SIGNS SHALL BE PLACED AT LEAST 1500' BUT NOT MORE THAN 1 MILE IN ADVANCE OF THE WORK ZONE. IF A SPEED LIMIT REDUCTION IS IN EFFECT, THE SIGN SHALL BE PLACED A MINIMUM OF 500' IN ADVANCE OF THE "REDUCED SPEED AHEAD" SIGN.

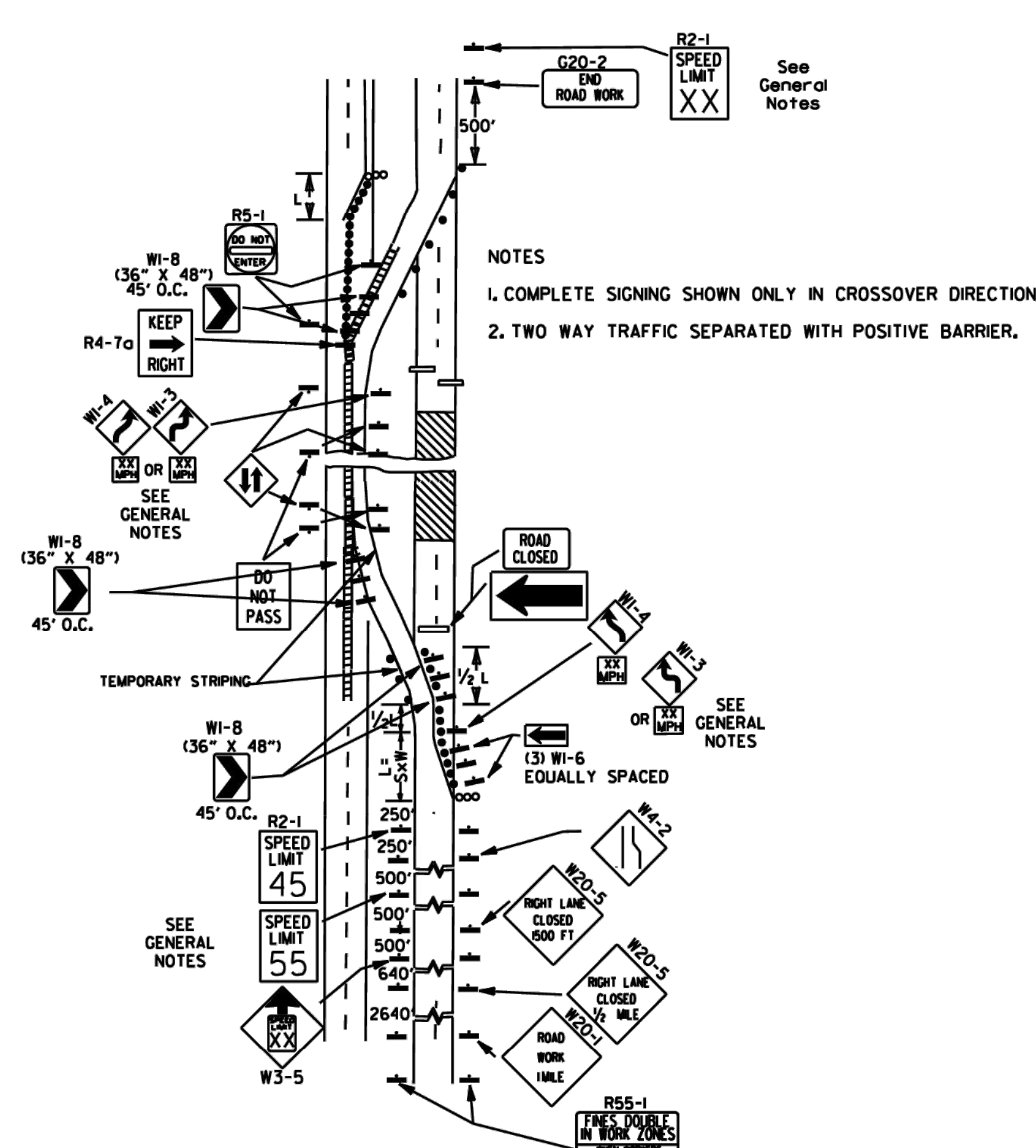
**NOTE:** SUPPORTS FOR SIGNS, BARRICADES, AND VERTICAL PANELS THAT ARE DIFFERENT FROM THE REQUIREMENTS SHOWN IN NOTES 4 & 5, BUT MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH), WILL BE ACCEPTED COMPLIANCE WITH THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) IS REQUIRED FOR ALL PROJECTS.

DATE	REVISION	FILMED
11-07-19	REVISED FOR MASH	
4-13-17	DELETED RSP-1 & ADDED W21-5a	
9-2-15	REVISED REDUCED SPEED LIMIT AHEAD SIGNS REVISED ROAD WORK NEXT XX MILES	
12-15-11	REVISED W24-1	
11-17-10	DELETED W8-9a & ADDED W8-9	
10-15-09	ADDED REFERENCE TO MASH & ADDED SIGN W24-1	
4-17-08	REVISED SIGN DESIGNATIONS	
11-18-04	REVISED NOTES	
10-9-03	REVISED NOTE 1	
11-16-01	REVISED NOTE 7	
9-28-00	REVISED NOTE	
11-18-98	ADDED NOTE	
6-26-97	REVISED NOTE 5	
4-03-97	REVISED NOTE 5	
10-18-96	ADDED CONTROLLED ACCESS HWY. SIGN & TO NOTE 7	
10-12-95	ADDED R55-1	
6-8-95	REVISED TO CORRECT SIGN ILLUSTRATIONS	6-8-95
2-2-95	REVISED PER PART VI, MUTCD SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	

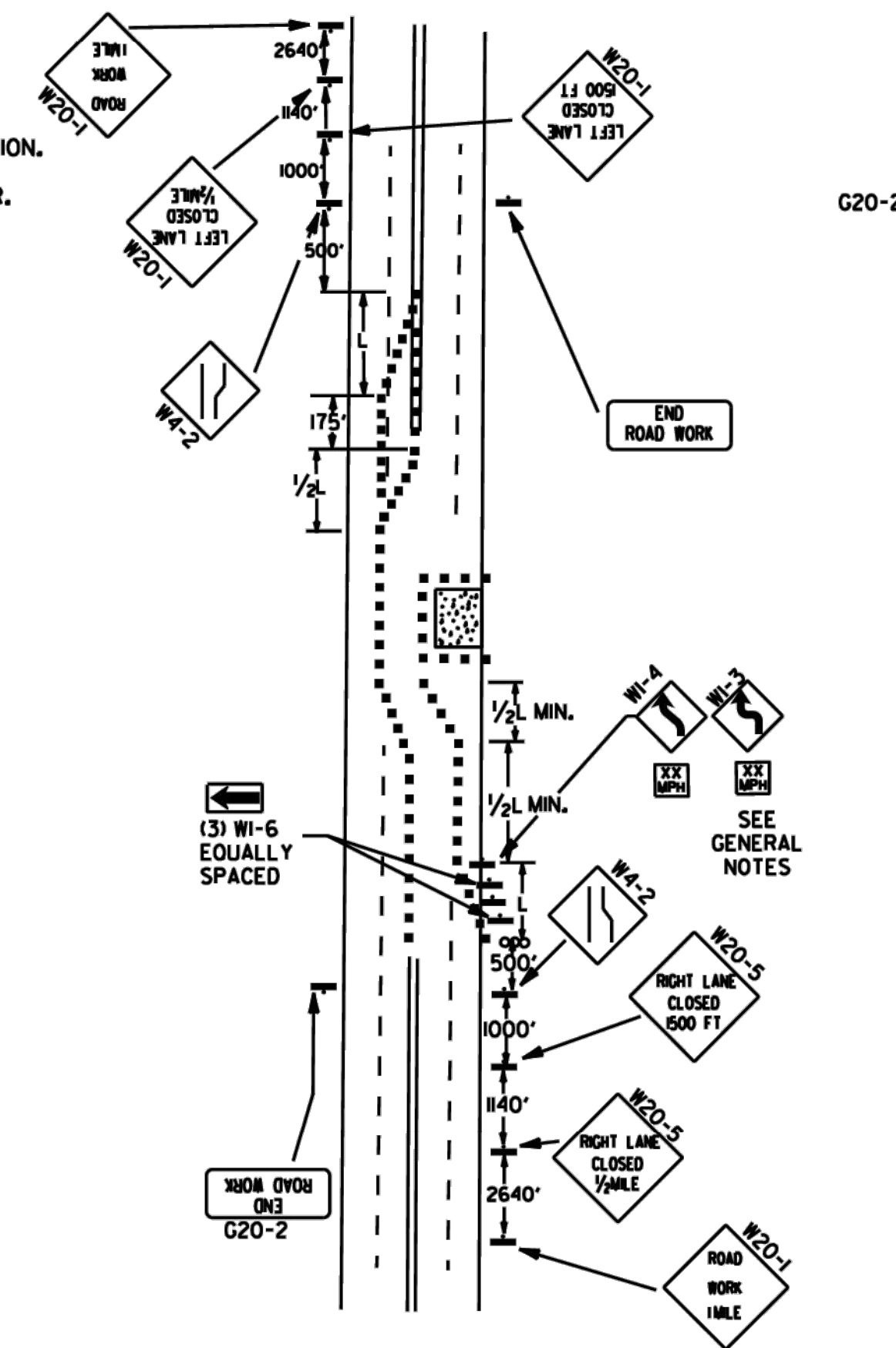
ARKANSAS STATE HIGHWAY COMMISSION  
STANDARD TRAFFIC CONTROLS  
FOR HIGHWAY CONSTRUCTION  
STANDARD DRAWING TC-1



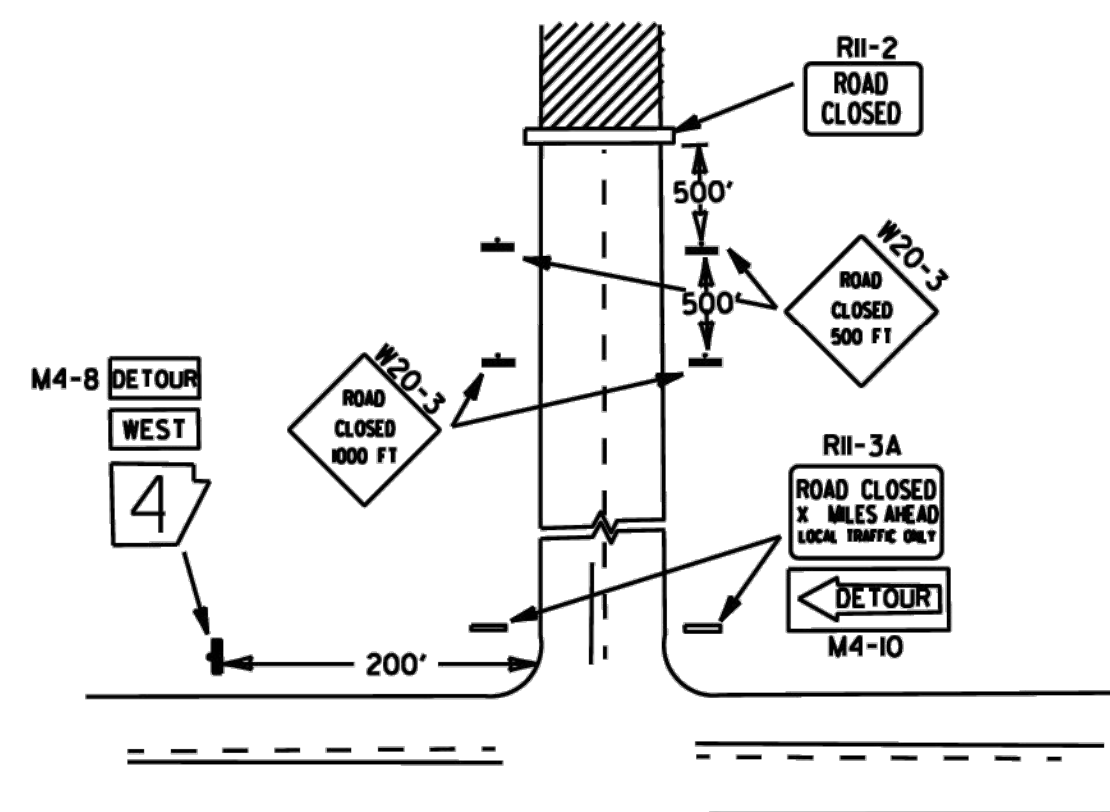
(A) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON A 2-LANE HIGHWAY WHERE THE ENTIRE ROADWAY IS CLOSED AND A BYPASS DETOUR IS PROVIDED.



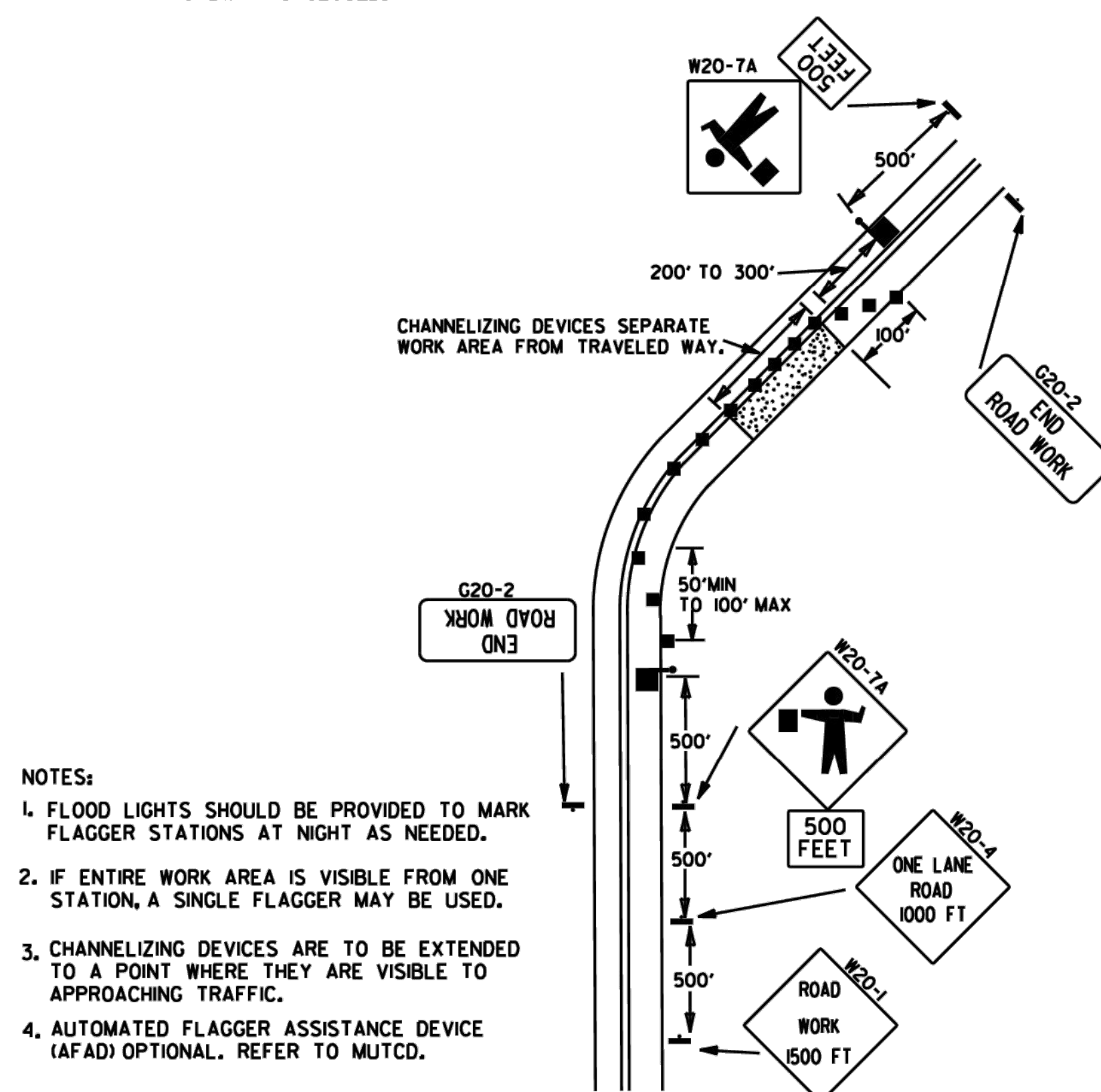
(B) TYPICAL APPLICATION - 4-LANE DIVIDED ROADWAY WHERE ONE ROADWAY IS CLOSED.



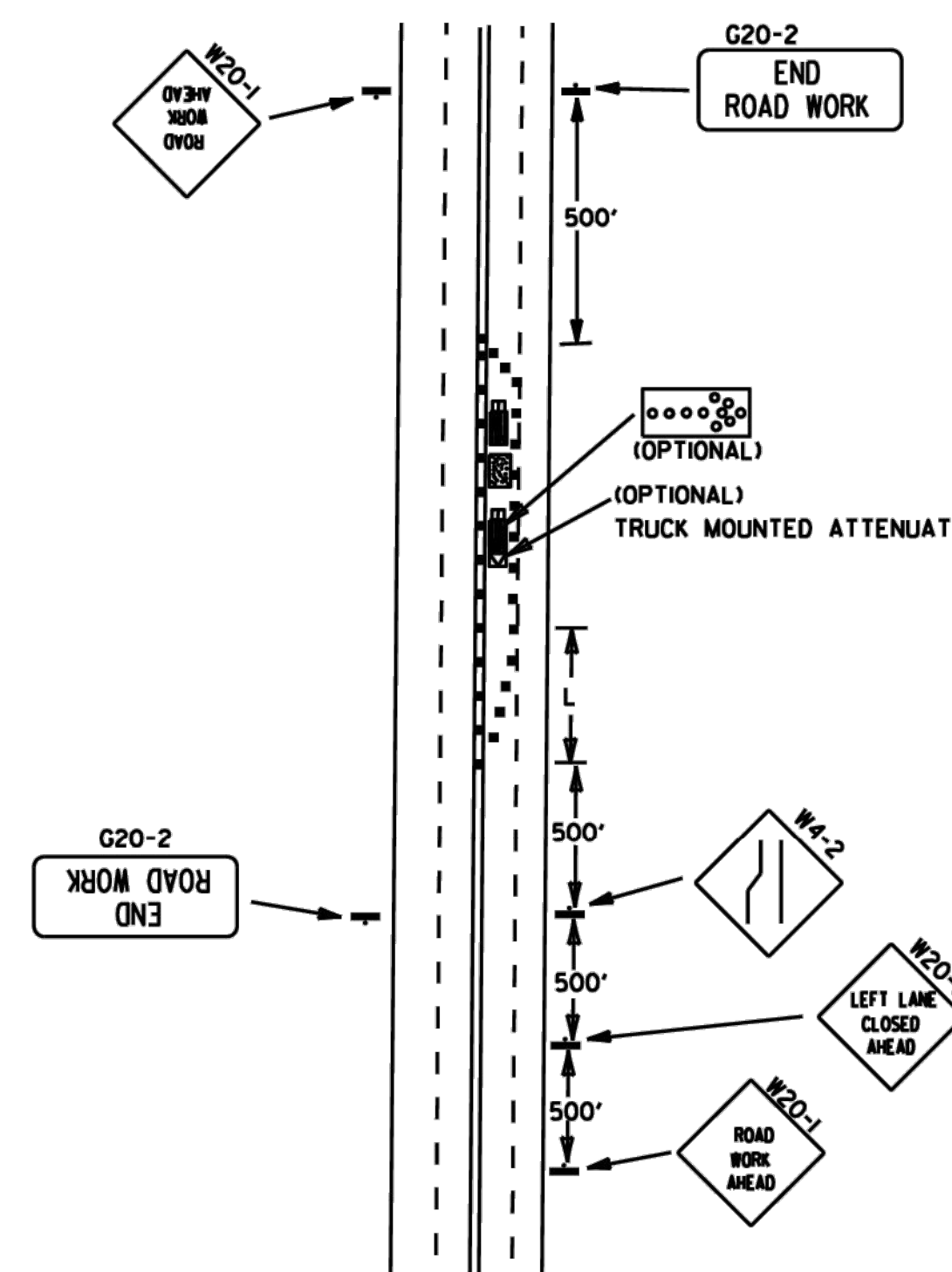
(C) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(D) TYPICAL APPLICATION - ROADWAY CLOSED BEYOND DETOUR POINT.

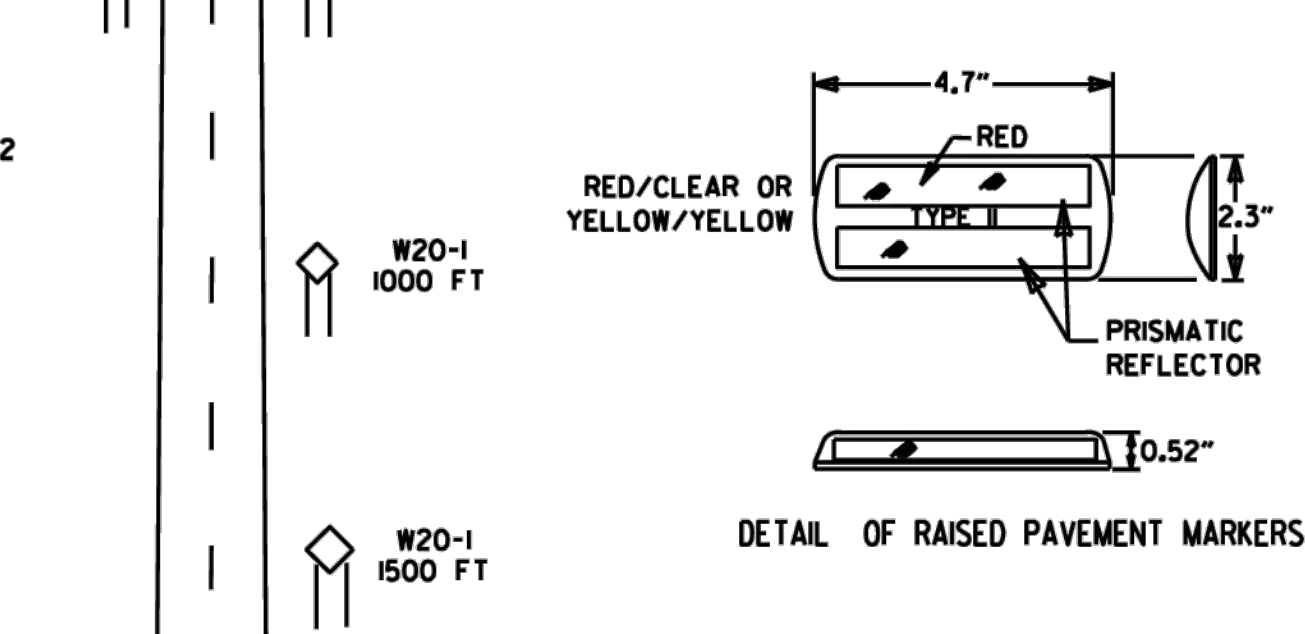


(E) TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.



(F) TYPICAL APPLICATION - 4-LANE UNDIVIDED ROADWAY WITH INSIDE LANE CLOSED.

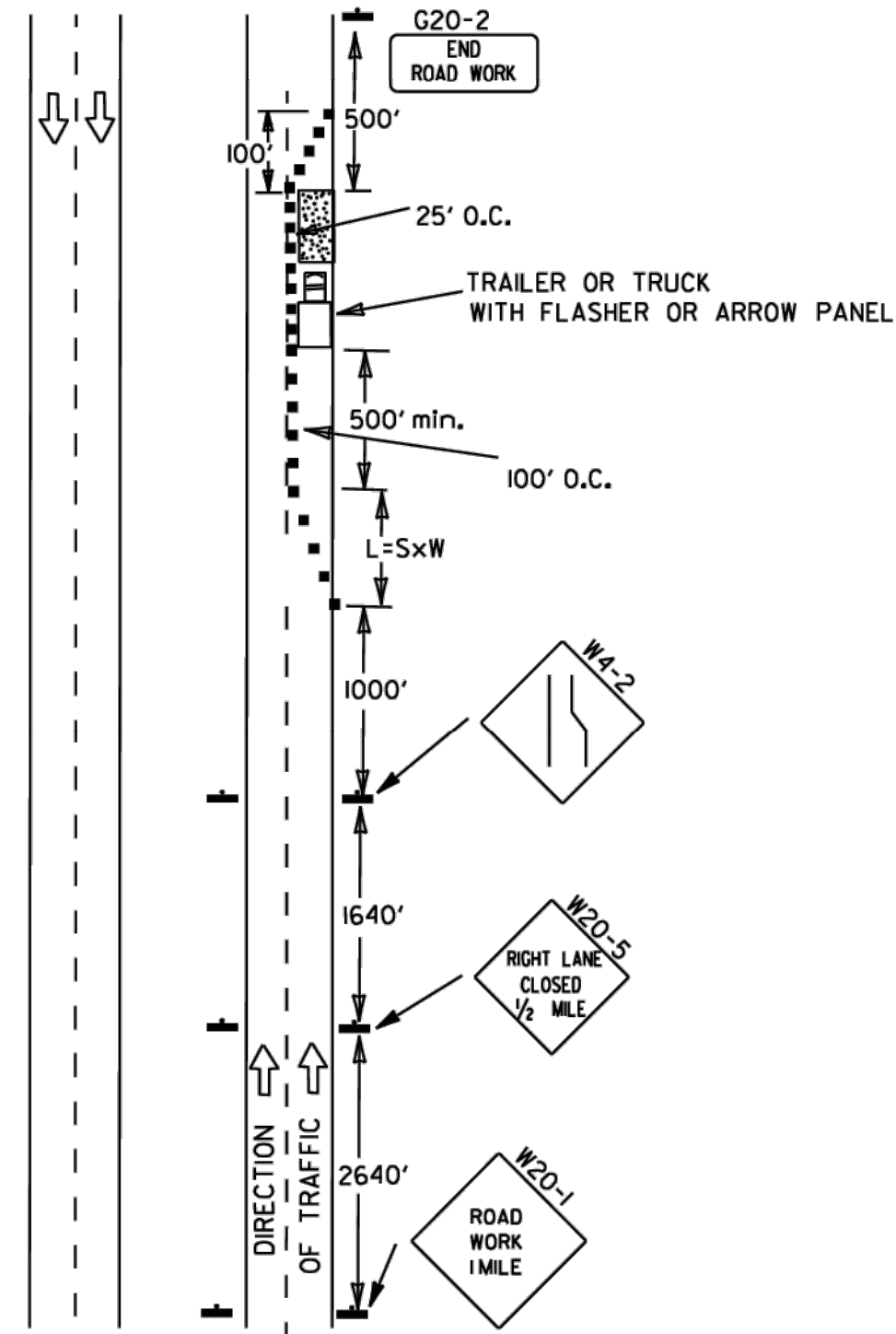
- KEY:
- FLAGGER
  - POSITIVE BARRIER
  - ARROW PANEL (IF REQUIRED)
  - TYPE III BARRICADE
  - CHANNELIZING DEVICE
  - TRAFFIC DRUM
  - RAISED PAVEMENT MARKER



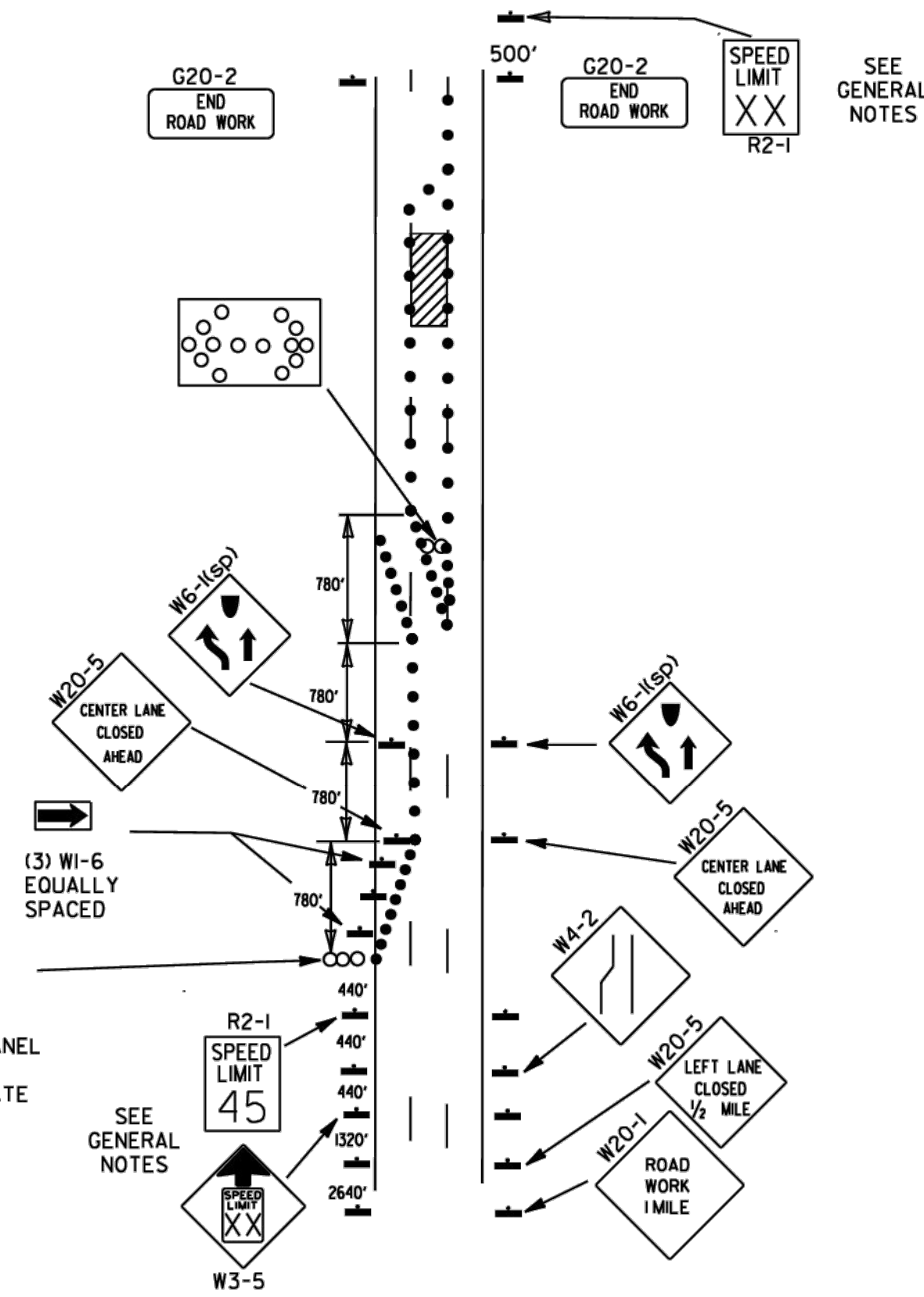
- GENERAL NOTES:
- THE MAINTENANCE DIVISION SHALL CONDUCT A BALL BANK STUDY TO DETERMINE THE ADVISORY SPEED LIMIT PRIOR TO OPENING TO TRAFFIC. THE ADVISORY SPEED WILL BE POSTED ON W1-3 OR W1-4 CURVE WARNING SIGNS. USE W1-4 WHEN SPEED IS GREATER THAN 30MPH AND W1-3 WHEN 30MPH OR LESS.
  - WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(55) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/4 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-K(X) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
  - WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(65) SHALL BE OMITTED. ADDITIONAL R2-1(55)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/4 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-K(X) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
  - THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT, OR AS DIRECTED BY THE ENGINEER.
  - WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
  - PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
  - TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
  - DIMENSIONS SHOWN FOR RAISED PAVEMENT MARKERS ARE TYPICAL. THE CONTRACTOR MAY SUBSTITUTE SIMILAR MARKERS WITH THE APPROVAL OF THE ENGINEER. REQUESTING APPROVAL FOR SIMILAR MARKERS MAY BE MADE BY REFERRING TO THE ADOT QUALIFIED PRODUCTS LIST.
  - ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).

DATE	REVISION	FILMED
05-20-21	REVISED NOTE 7	
11-07-19	REVISED NOTE 4, ADDED NOTE 9	
9-2-15	REVISED NOTE 2, ADDED NOTE 8, REVISED DRAWING (A) & REPLACED R2-5A WITH W3-5	
9-12-13	REVISED DETAIL OF RAISED PAVEMENT MARKERS	
3-11-10	ADDED (AFAD)	
11-20-08	REVISED SIGN DESIGNATIONS	
11-18-04	ADDED GENERAL NOTE	
10-18-96	ADDED R55-1	
4-26-96	CORRECTED (a) BEHIND G20-2	
6-8-95	CORRECTED SIGN IDENT. ON W1-4A	6-8-95
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993	
8-15-91	DRAWN AND PLACED IN USE	





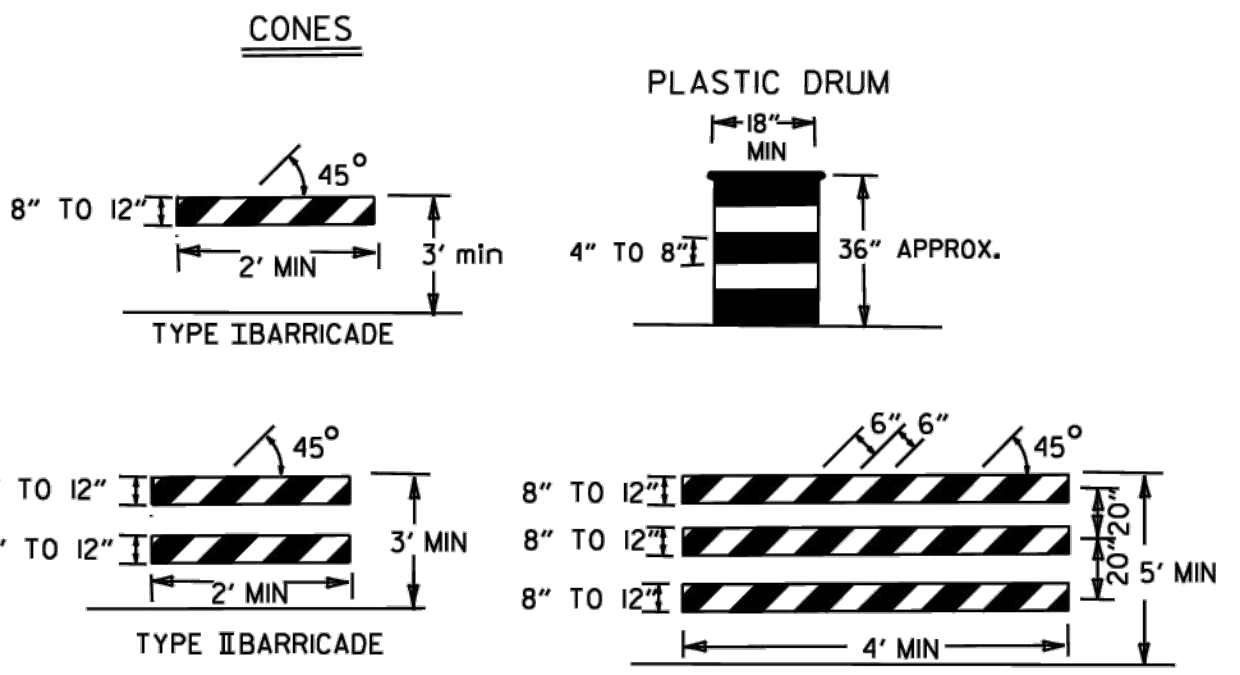
(A) TYPICAL APPLICATION - DAYTIME MAINTENANCE OPERATIONS OF SHORT DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



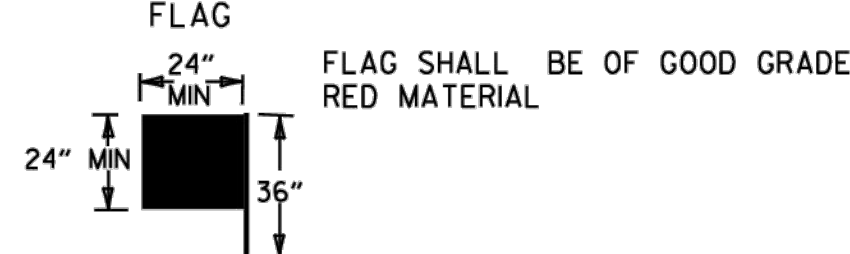
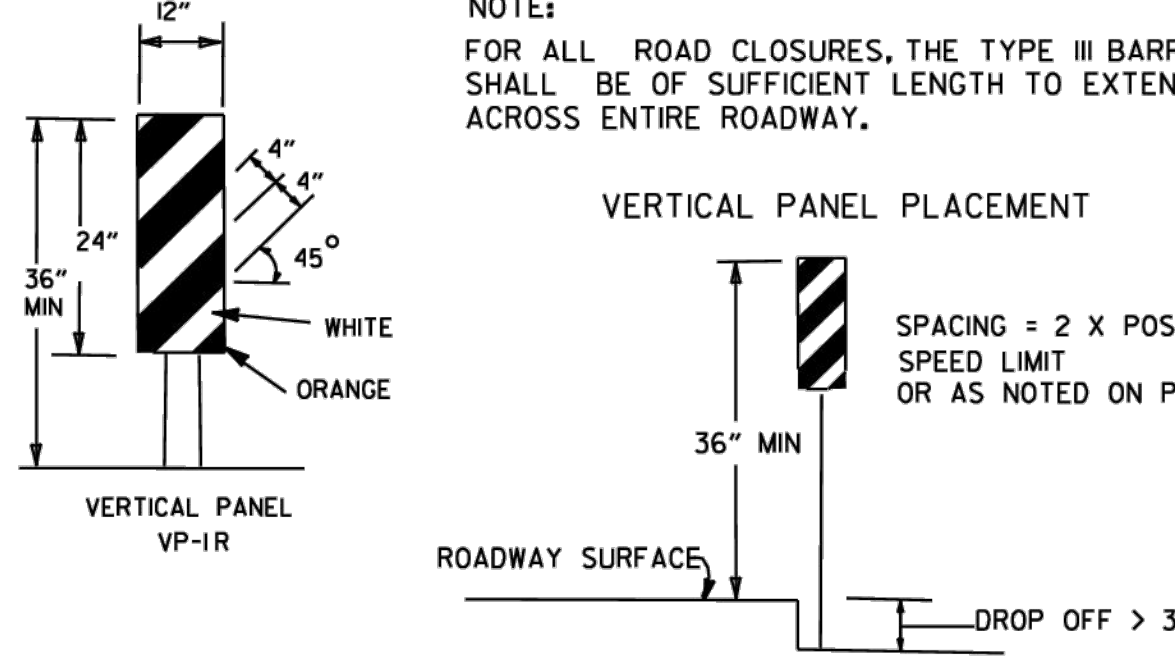
(B) TYPICAL APPLICATION - 3-LANE ONEWAY ROADWAY WHERE CENTER LANE IS CLOSED.

CHANNELIZING DEVICES

\* WHEN CONES ARE USED ON FREEWAYS AND MULTI-LANE HIGHWAYS, THEY SHALL BE 28" MIN. DURING HOURS OF DARKNESS, 28" CONES SHALL BE USED ON ALL ROADWAYS, AND SHALL BE REFLECTORIZED IN ACCORDANCE WITH THE M.U.T.C.D.

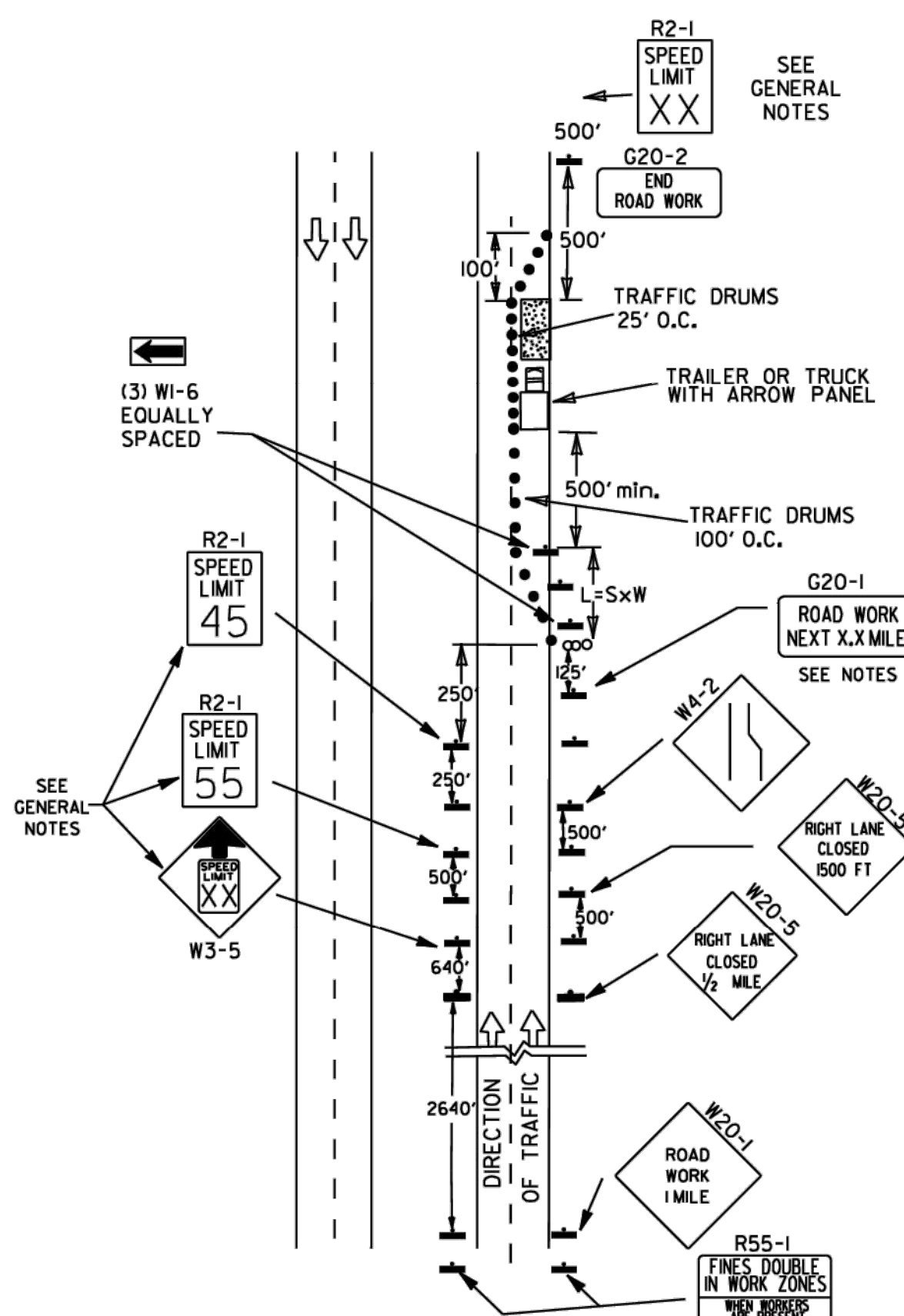


NOTE: FOR ALL ROAD CLOSURES, THE TYPE III BARRICADES SHALL BE OF SUFFICIENT LENGTH TO EXTEND ACROSS ENTIRE ROADWAY.

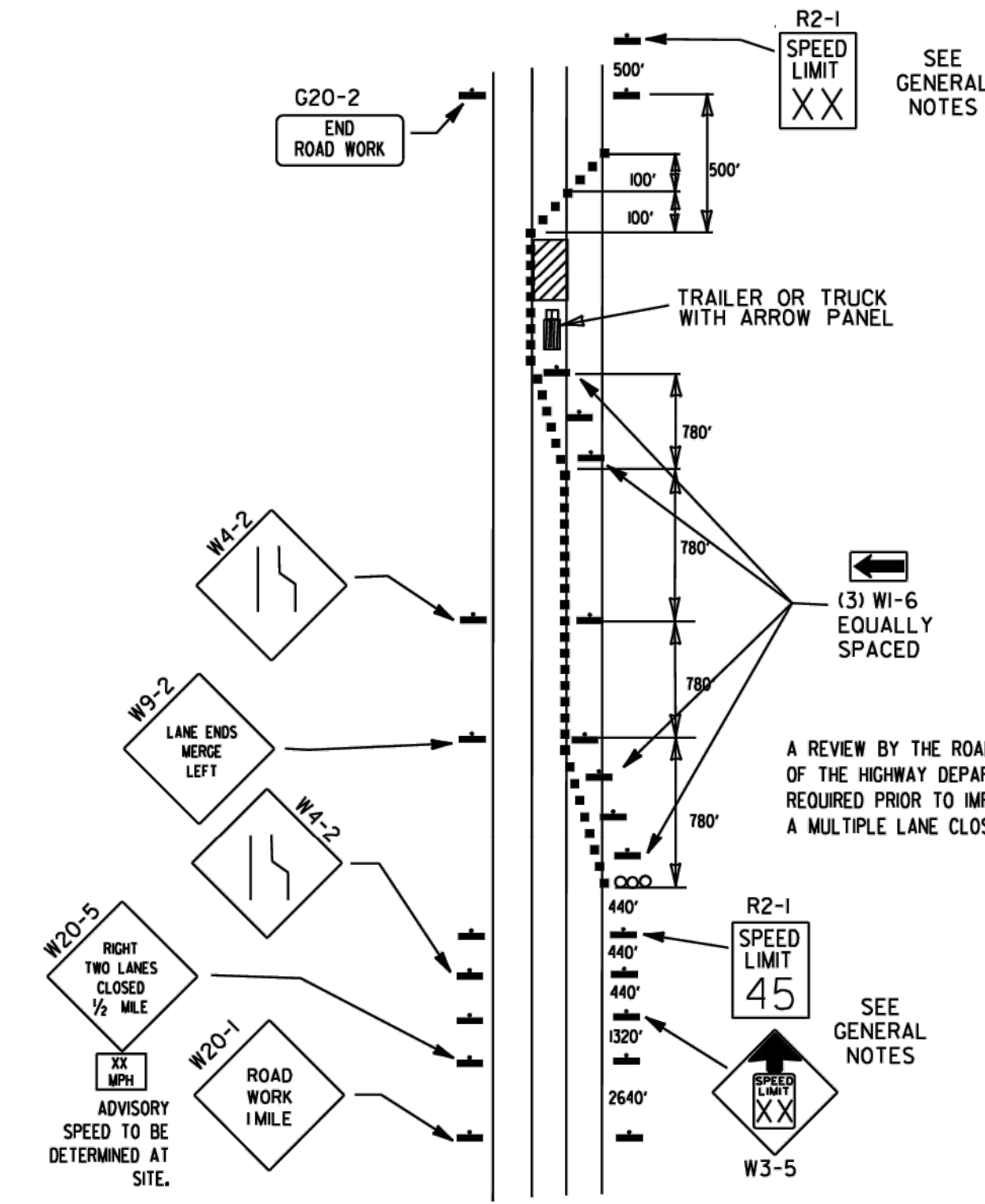


- KEY:
- ○ ○ ○ ARROW PANEL (IF REQUIRED)
  - CHANNELIZING DEVICE
  - TRAFFIC DRUM

- GENERAL NOTES:
- A SPEED LIMIT REDUCTION MAY BE IMPLEMENTED ONLY WHEN DESIGNATED IN THE PLAN OR WHEN RECOMMENDED BY THE ROADWAY DESIGN DIVISION.
  - WHEN THE EXISTING SPEED LIMIT IS 55MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 45MPH, THE R2-1(45) SHALL BE OMITTED AND THE W3-5 SHALL BE INSTALLED AT THAT LOCATION. ADDITIONAL R2-1(45)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
  - WHEN THE EXISTING SPEED LIMIT IS 65MPH AND THE PLANS REQUIRE A SPEED LIMIT OF 55MPH, THE R2-1(45) SHALL BE OMITTED. ADDITIONAL R2-1(55)MPH SPEED LIMIT SIGNS SHALL BE INSTALLED AT A MAXIMUM OF 1/2 MILE INTERVALS. AT THE END OF THE WORK AREA A R2-1(XX) SHALL BE INSTALLED TO MATCH ORIGINAL SPEED LIMIT.
  - THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT. BEYOND THE TAPER, MAXIMUM SPACING SHALL BE TWO TIMES THE SPEED LIMIT OR AS DIRECTED BY THE ENGINEER.
  - WARNING LIGHTS AND/OR FLAGS MAY BE MOUNTED TO SIGNS OR CHANNELIZING DEVICES AT NIGHT AS NEEDED.
  - PAVEMENT MARKINGS NO LONGER APPLICABLE WHICH MIGHT CREATE CONFUSION IN THE MINDS OF VEHICLE OPERATORS SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE.
  - THE G20-1 SIGN WILL BE REQUIRED ON JOBS OF OVER TWO MILES IN LENGTH. WHEN THE LANE CLOSURE IS NOT AT THE BEGINNING OF THE PROJECT, THE G20-1 SIGN SHALL BE ERRECTED 125' IN ADVANCE OF THE JOB LIMIT. ADDITIONAL W20-1(1/2 MILE) SIGNS ARE NOT REQUIRED IN ADVANCE OF LANE CLOSURES THAT BEGIN INSIDE THE PROJECT LIMITS.
  - FLAGGERS SHALL USE STOP/SLOW PADDLES FOR CONTROLLING TRAFFIC THROUGH WORK ZONES. FLAGS MAY BE USED ONLY FOR EMERGENCY SITUATIONS.
  - ALL PLASTIC DRUMS AND CONES SHALL MEET THE REQUIREMENTS OF MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).
  - TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE DELINEATED BY AFFIXING CONSPICUITY MATERIAL IN A CONTINUOUS LINE ON THE FACE OF THE TRAILER. WHEN PLACED ON OR ADJACENT TO THE SHOULDER AND NOT BEHIND A POSITIVE BARRIER, THESE DEVICES SHALL BE DELINEATED BY PLACING FIVE (5) TRAFFIC DRUMS, EQUALLY SPACED ALONG THE TRAFFIC SIDE OF THE DEVICE. PAYMENT FOR TRAFFIC DRUMS SHALL BE CONSIDERED INCLUDED IN THE PRICE BID FOR VARIOUS TRAILER MOUNTED DEVICES.
  - ALL TRAILER MOUNTED DEVICES SUCH AS ARROW PANELS AND PORTABLE CHANGEABLE MESSAGE SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH).



(C) TYPICAL APPLICATION - CONSTRUCTION OPERATIONS OF INTERMEDIATE TO LONG TERM DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF THE ROADWAY IS CLOSED.



(D) TYPICAL APPLICATION - CLOSING MULTIPLE LANES OF A MULTILANE HIGHWAY.

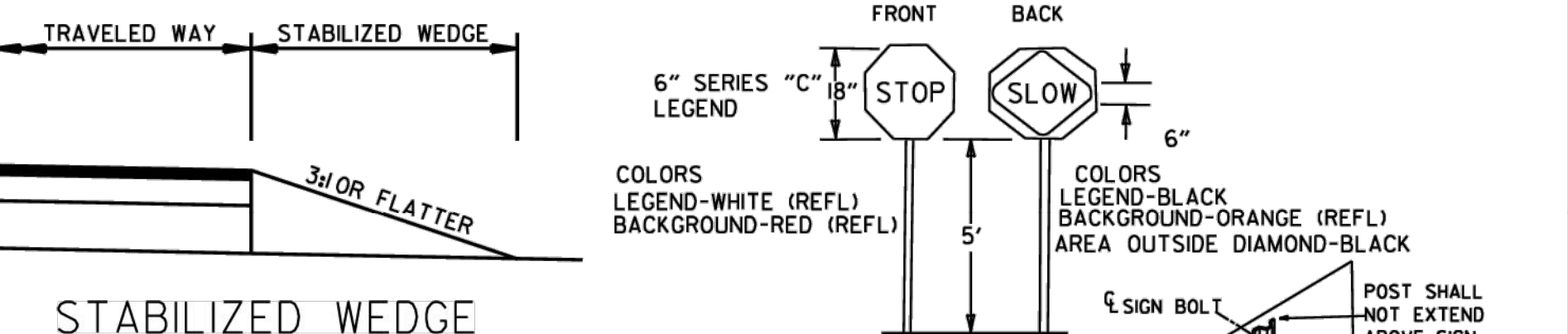
TRAFFIC CONTROL DEVICES

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL	
		≤ 45 MPH	> 45 MPH
≤ 1"	CENTERLINE	W8-11	W8-11
> 1"	CENTERLINE	W8-11 AND CENTERLINE LANE STRIPING	W8-11 AND CENTERLINE LANE STRIPING
≤ 3"	CENTERLINE	STANDARD LANE CLOSURE <sup>(6)</sup>	STANDARD LANE CLOSURE <sup>(6)</sup>
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9 AND TRAFFIC DRUMS <sup>(1)</sup>	W8-9 AND TRAFFIC DRUMS <sup>(1)</sup>
> 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>
≤ 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(1)</sup>	A STABILIZED WEDGE, W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(3)</sup>
≤ 24"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER <sup>(4)</sup> & EDGE LINES	PRECAST CONCRETE BARRIER <sup>(4)</sup> & EDGE LINES

VERTICAL DIFFERENTIAL	LOCATION	TRAFFIC CONTROL
≤ 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-9, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>
> 3"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	W8-17, EDGE LINE STRIPING, AND TRAFFIC DRUMS <sup>(2)</sup>
> 6"	EDGE OF TRAVELED LANE OR EDGE OF SHOULDER	PRECAST CONCRETE BARRIER & EDGE LINES

INTERSTATE AND NON-INTERSTATE		
FORESLOPE	HEIGHT	TRAFFIC CONTROL
1:1	> 2 FT	PRECAST CONCRETE BARRIER
2:1	≤ 5 FT	TRAFFIC DRUMS
2:1	> 5 FT	PRECAST CONCRETE BARRIER
Flatter than 2:1	N/A	TRAFFIC DRUMS

- GENERAL NOTES:
- WHEN THE SHOULDER AREA IS USED AS PART OF THE TRAVELED LANE AND THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, THEN VERTICAL PANELS SHALL BE USED.
  - WHEN THERE IS INSUFFICIENT WIDTH TO PLACE TRAFFIC DRUMS ON THE REMAINING SHOULDER WIDTH, A STABILIZED WEDGE SHALL BE USED. PRECAST CONCRETE BARRIER WALL CAN BE USED IN LIEU OF A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS, IF AND WHERE DIRECTED BY THE ENGINEER.
  - A STABILIZED WEDGE, W8-17 SIGN, EDGE LINE STRIPING, AND TRAFFIC DRUMS CAN BE USED IN LIEU OF PRECAST CONCRETE BARRIER WALL, IF AND WHERE DIRECTED BY THE ENGINEER.
  - W21-5, W21-5a, AND/OR W21-5b SIGNS SHALL BE USED WHERE THE ROADWAY IS UNOBSTRUCTED IF AND WHERE DIRECTED BY THE ENGINEER.
  - TIME LIMITATIONS MUST CONFORM TO SECTION 603 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION).

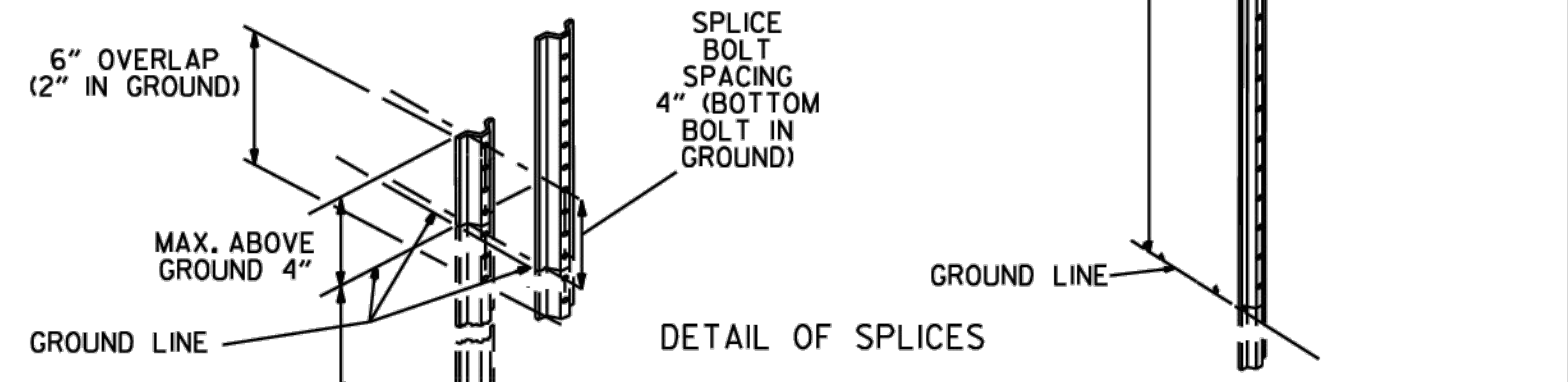


STABILIZED WEDGE

NOTE: MATERIALS FOR THE STABILIZED WEDGE SHALL MEET THE REQUIREMENTS PROVIDED IN SECTION 603.02 OF THE STANDARD SPECIFICATIONS.

NOTES:

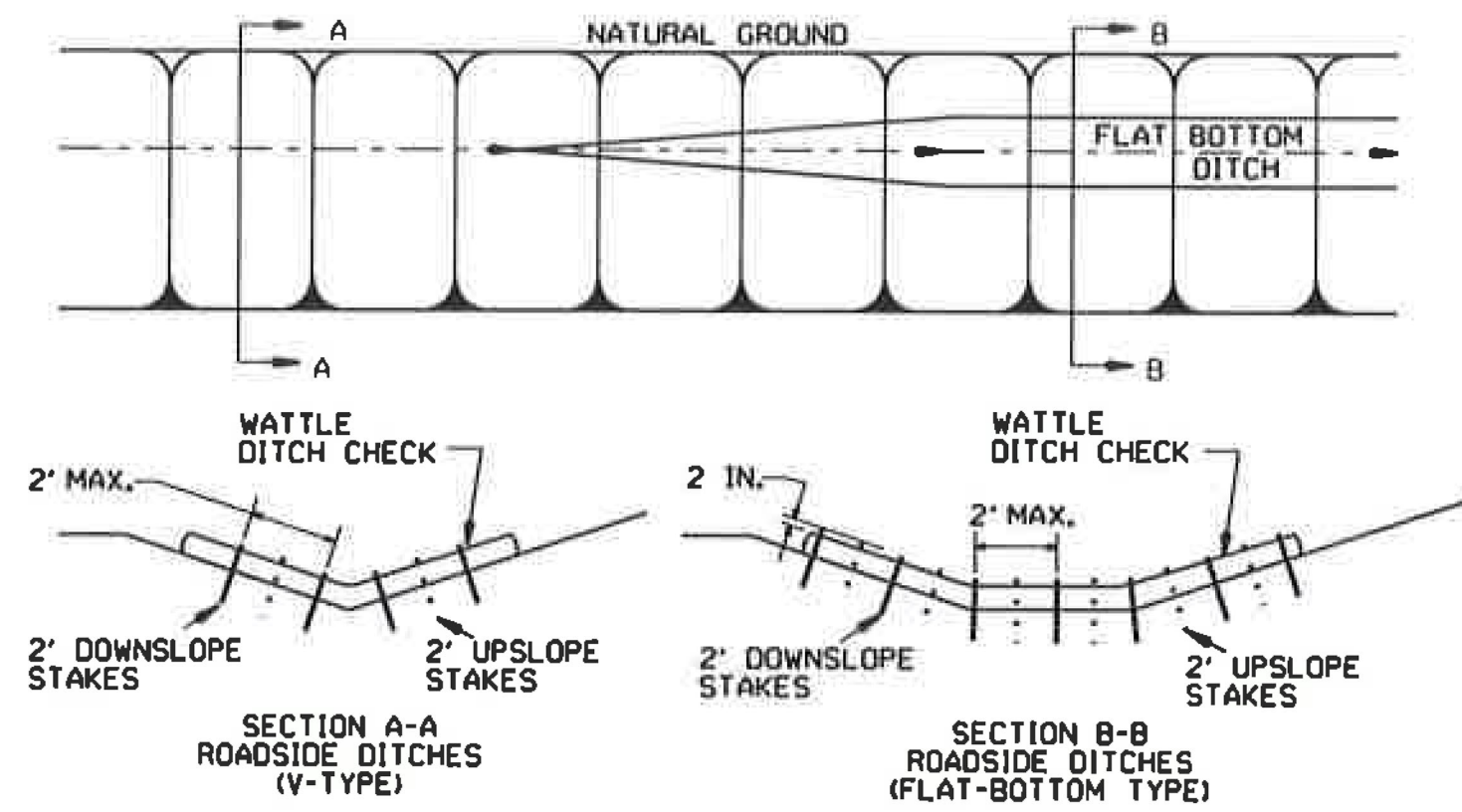
- USE SPLICES ONLY WHEN NECESSARY FOR INSTALLATION. TYPICAL INSTALLATION SHOULD HAVE NO SPLICES (SEE STD. DRAWING NO. SHS-2)
- NORMAL INSTALLATIONS WILL REQUIRE 1/4" DIA. BOLTS TO MOUNT SIGNS TO POST AND 5/16" DIA. BOLTS TO ASSEMBLE THE VARIOUS POST SUPPORTS. EACH OF THESE BOLTS SHALL BE CARRIAGE BOLTS.
- SIGN POSTS SHALL BE PAINTED GREEN; SIGNS SHALL NOT BE PAINTED.
- ALL SIGN POSTS SHALL BE PLUMB.



DATE	REVISION	REVISION	FILMED
08-12-21	REVISED TRAFFIC CONTROL DEVICES AND NOTES		
05-20-21	REVISED NOTE 10		
2-27-20	REVISED TRAFFIC CONTROL DEVICES DETAILS		
11-07-19	REVISED NOTE 9, ADDED NOTE II		
7-25-19	REVISED TRAFFIC CONTROL DEVICES DETAILS		
9-2-15	REVISED NOTE 2 & REPLACED R2-5A WITH W3-5		
10-15-09	ADDED REFERENCE TO MASH		
11-20-08	REVISED SIGN DESIGNATIONS		
11-18-04	ADDED NOTE		
10-1-98	ADDED NOTE		
4-03-97	ADDED (SP) TO W6-1 & REVISED TRAFFIC CONTROL DEVICES NOTE		
10-18-96	ADDED R55-1		
10-12-95	MOVED UPPER SPLICE		
6-8-95	REVISED SPLICE DETAIL, TEXT	6-8-95	
2-2-95	REVISED PER PART VI, MUTCD, SEPT. 3, 1993		
8-15-91	DRAWN AND PLACED IN USE		

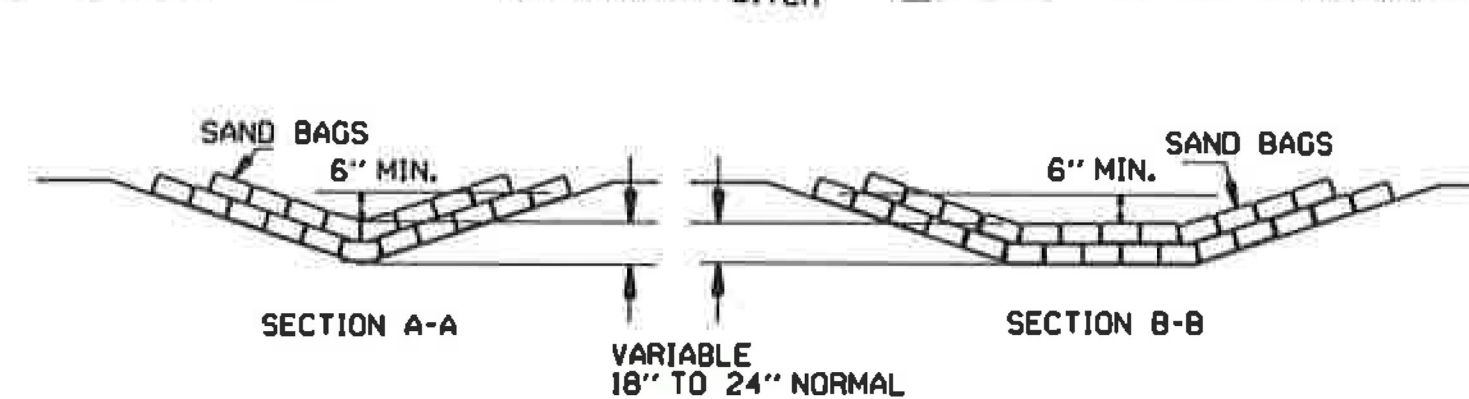
**GENERAL NOTES**

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

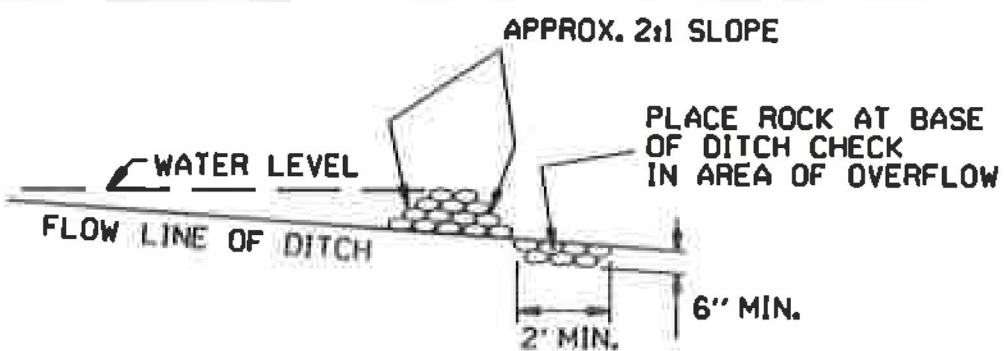


**WATTLE DITCH CHECK (E-1)**

NUMBER OF SAND BAGS AND ARRANGEMENT VARIABLE WITH ON-SITE CONDITIONS. PLACE SAND BAGS AT BASE OF DITCH CHECK IN AREA OF OVERFLOW.

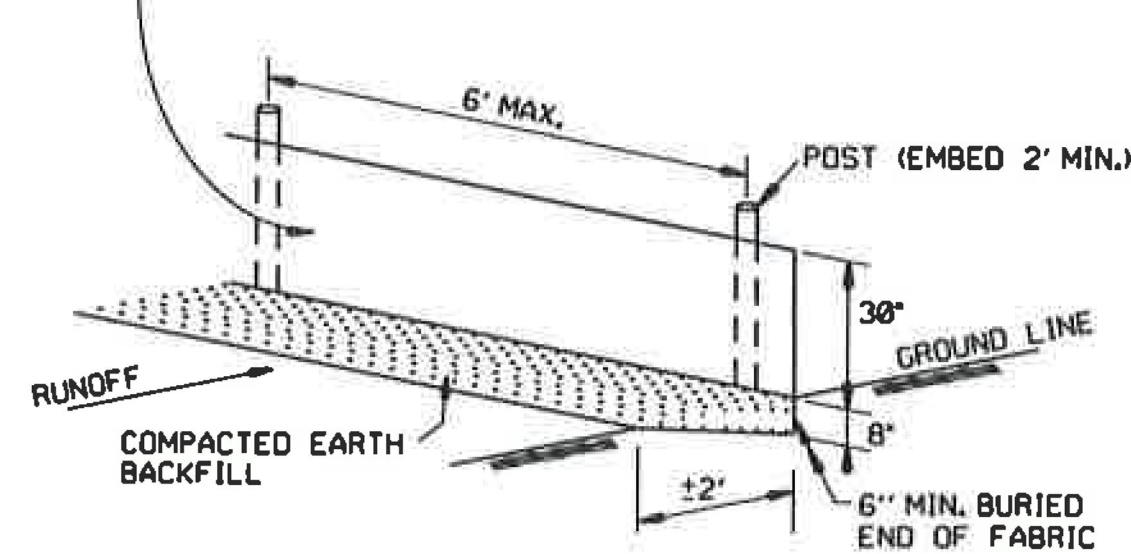


**SAND BAG DITCH CHECK (E-5)**

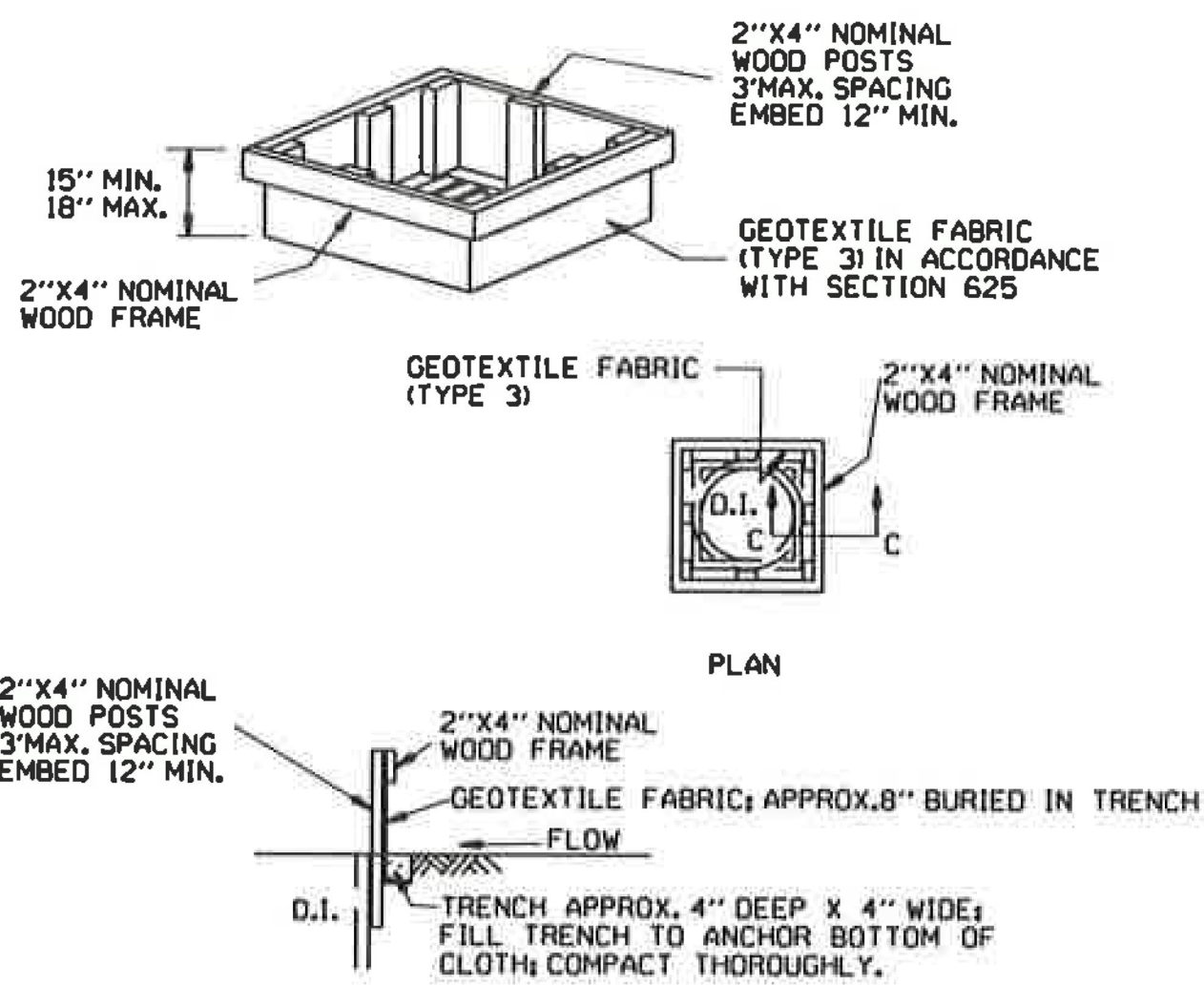


**ROCK DITCH CHECK (E-6)**

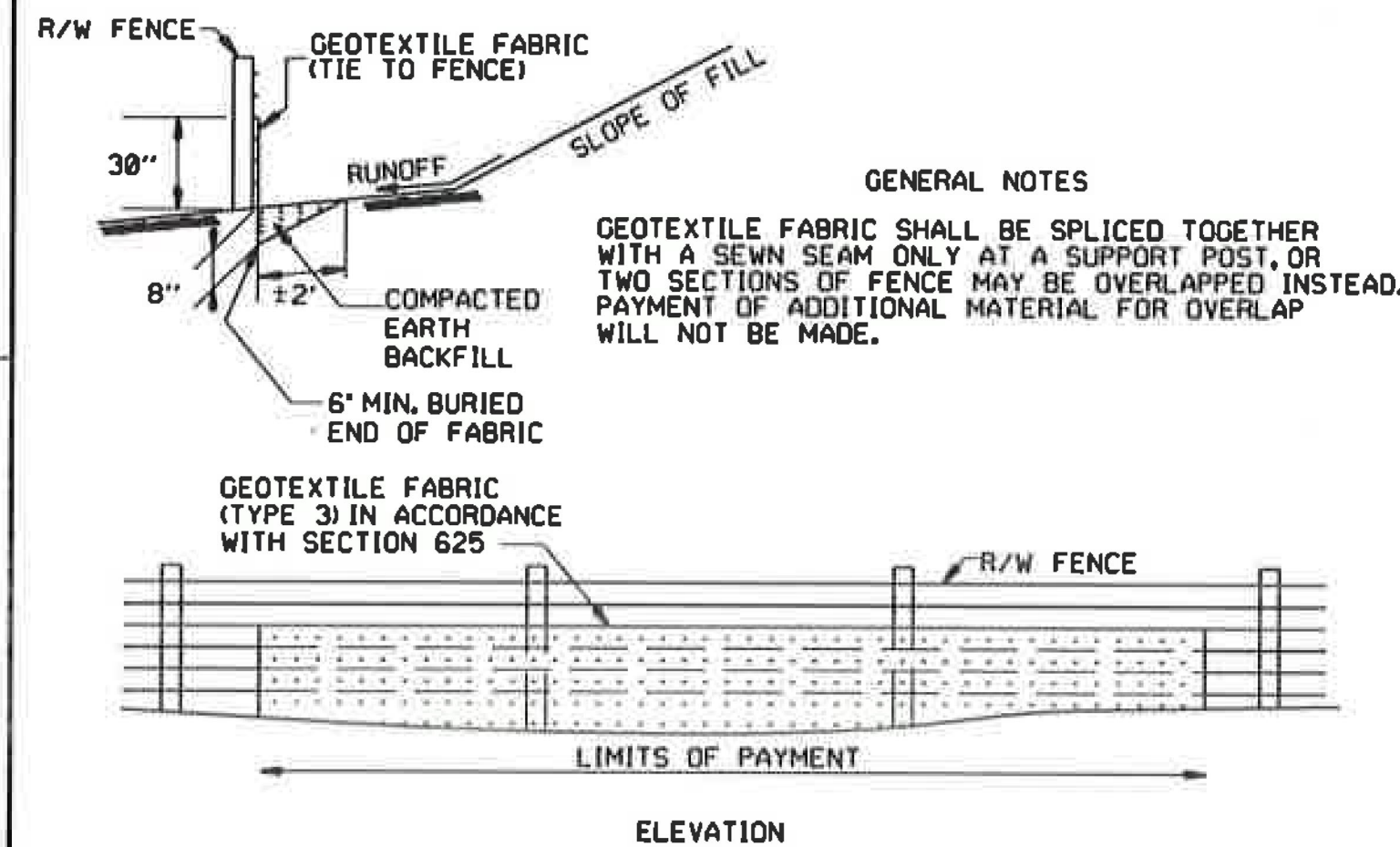
**GENERAL NOTES**  
 GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625  
 GEOTEXTILE FABRIC SHALL BE SPLICED TOGETHER WITH A SEWN SEAM ONLY AT A SUPPORT POST OR TWO SECTIONS OF FENCE MAY BE OVERLAPPED INSTEAD. PAYMENT OF ADDITIONAL MATERIAL FOR OVERLAP WILL NOT BE MADE.



**SILT FENCE (E-11)**

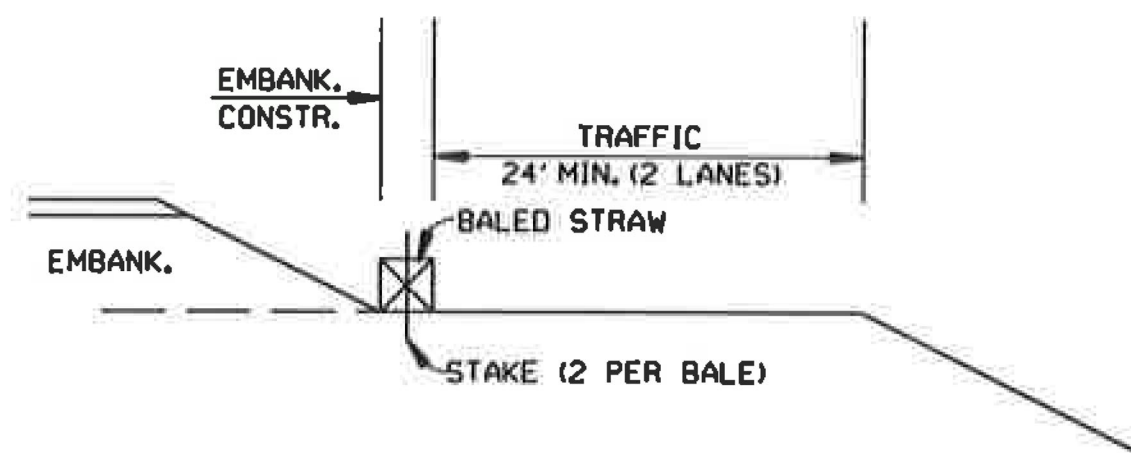


**DROP INLET SILT FENCE (E-7)**

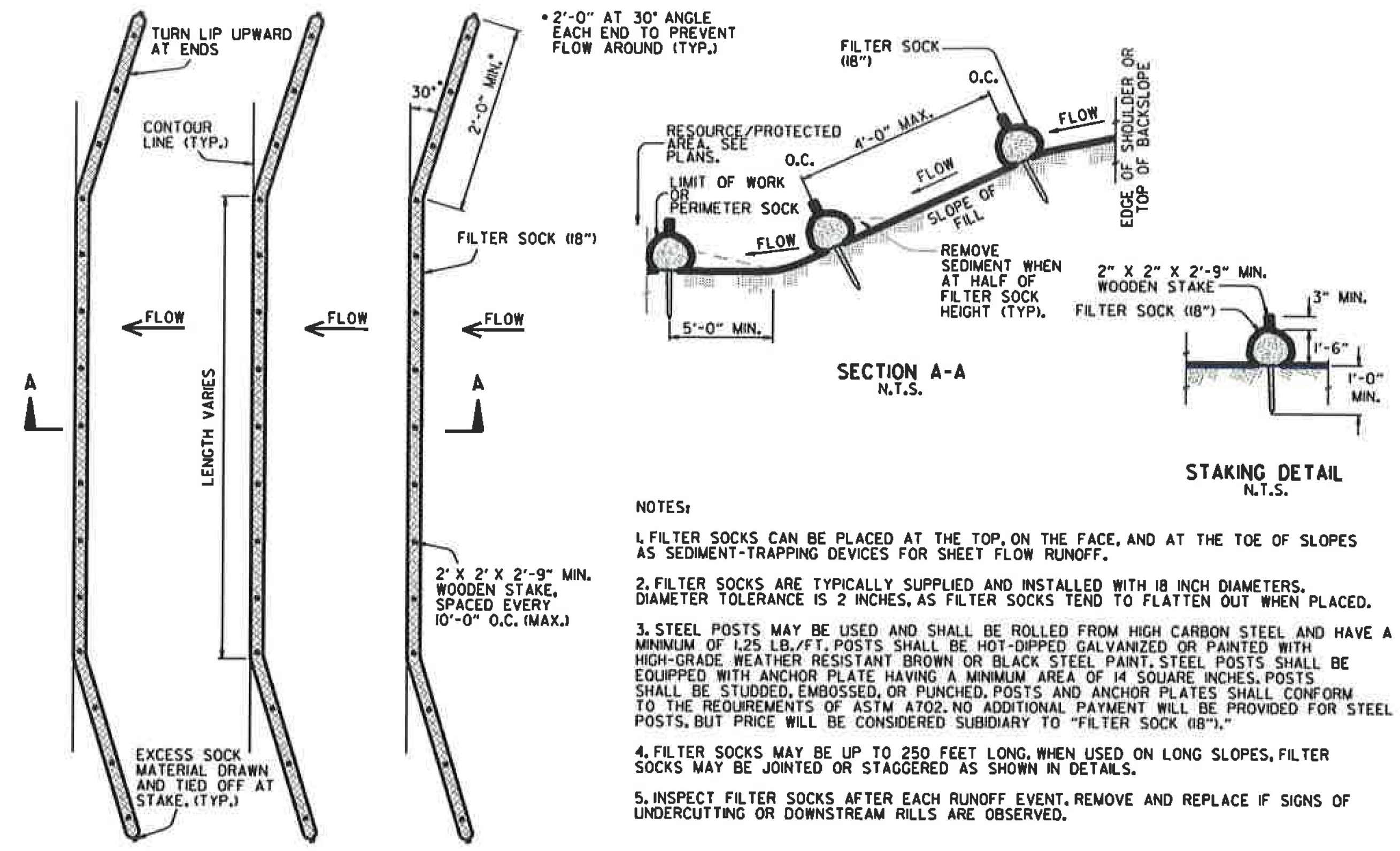


**SILT FENCE ON R/W FENCE (E-4)**

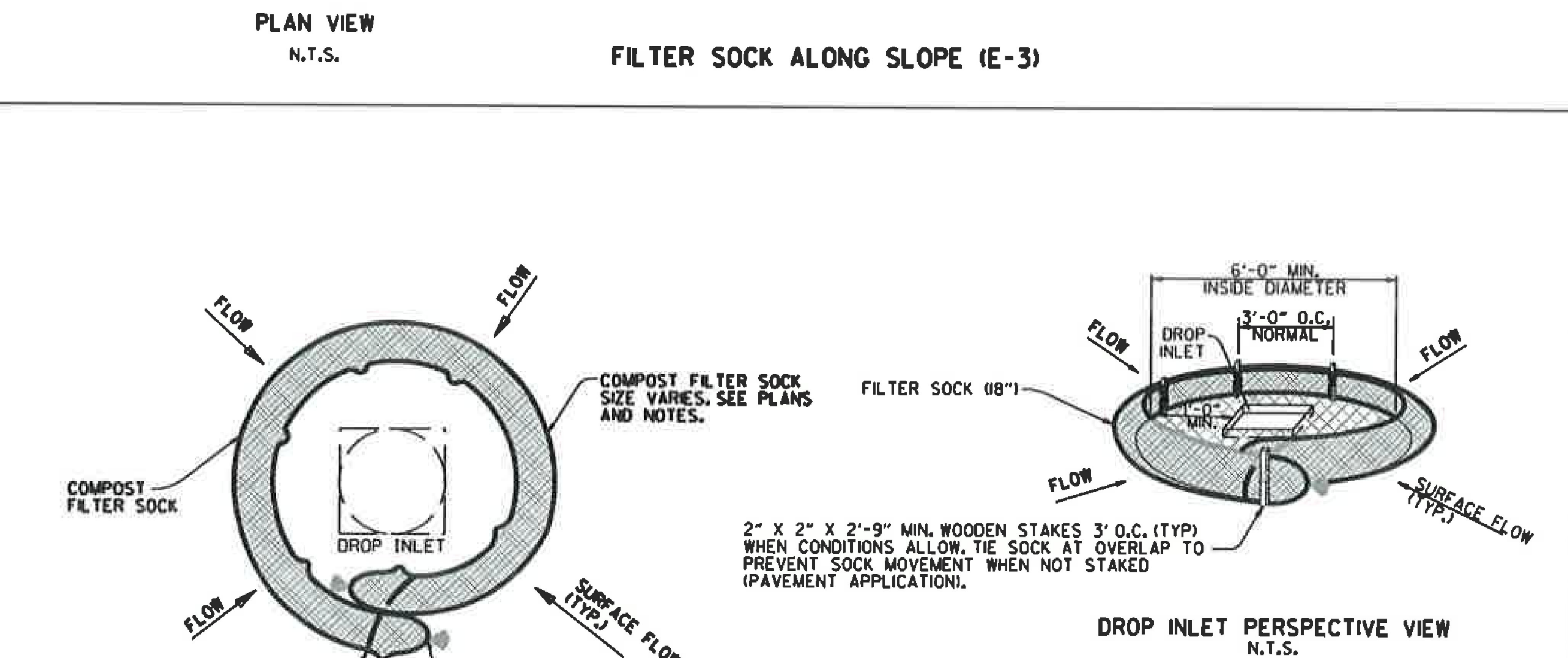
**GENERAL NOTES**  
 1. STRAW BALES SHALL BE INSTALLED SO THAT THE BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES. THE BALES SHALL BE A MINIMUM OF 30 INCHES IN LENGTH.  
 2. NO GAPS SHALL BE LEFT BETWEEN BALES.  
 3. BALED STRAW FILTER BARRIERS COMPLETED AND ACCEPTED WILL BE MEASURED BY THE BALE IN PLACE AS AUTHORIZED BY THE ENGINEER AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE BID PER BALE FOR BALED STRAW DITCH CHECKS.



**BALED STRAW FILTER BARRIER (E-2)**



**NOTES:**  
 1. FILTER SOCKS CAN BE PLACED AT THE TOP, ON THE FACE, AND AT THE TOE OF SLOPES AS SEDIMENT-TRAPPING DEVICES FOR SHEET FLOW RUNOFF.  
 2. FILTER SOCKS ARE TYPICALLY SUPPLIED AND INSTALLED WITH 18 INCH DIAMETERS. DIAMETER TOLERANCE IS 2 INCHES, AS FILTER SOCKS TEND TO FLATTEN OUT WHEN PLACED.  
 3. STEEL POSTS MAY BE USED AND SHALL BE ROLLED FROM HIGH CARBON STEEL AND HAVE A MINIMUM OF 1.25 LB./FT. POSTS SHALL BE HOT-DIPPED GALVANIZED OR PAINTED WITH HIGH-GRADE WEATHER RESISTANT BROWN OR BLACK STEEL PAINT. STEEL POSTS SHALL BE EQUIPPED WITH ANCHOR PLATE HAVING A MINIMUM AREA OF 14 SQUARE INCHES. POSTS SHALL BE STUDDED, EMBOSSED, OR PUNCHED. POSTS AND ANCHOR PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A702. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR STEEL POSTS, BUT PRICE WILL BE CONSIDERED SUBSIDIARY TO "FILTER SOCK (18\"/>



**NOTES:**  
 1. OVERLAP ENDS OF SOCK (1' MIN. 3' MAX.).  
 2. USE 18" DIA. SOCK IN NON-TRAFFIC AREAS OR AREAS WHERE SAFETY IS NOT A CONCERN.

**COMPOST FILTER SOCK DROP INLET PROTECTION (E-13)**

11-16-17	ADDED FILTER SOCK E-3 AND E-13	
12-15-11	DELETED BALED STRAW DITCH CHECK & ADDED WATTLE DITCH CHECK	
1-18-98	ADDED NOTES	
07-02-98	ADDED BALED STRAW FILTER BARRIER (E-2)	
07-20-95	REVISED SILT FENCE E-4 AND E-11	7-20-95
07-15-94	REV. E-4 & E-11 MIN. 13" BURIED END OF FABRIC	
06-02-94	REVISED E-1, 4, 7 & 11 DELETED E-2 & 3	6-2-94
04-01-93	REDRAWN	
10-01-92	REDRAWN	
08-02-76	ISSUED R.D.M.	298-7-28-76
DATE	REVISION	FILMED

ARKANSAS STATE HIGHWAY COMMISSION  
 TEMPORARY EROSION CONTROL DEVICES  
 STANDARD DRAWING TEC-1