

Index 430-001

Miscellaneous Drainage Details

ORIGINATION

Date: May 7, 2019
Name: Rick Jenkins
Phone: (850) 414-4355
Email: rick.jenkins@dot.state.fl.us

COMMENTARY

Reorganized Index, Added additional Sheets. Moved callout information to Notes.
 Clarified Note 4 on new Sheet 3.

Reorganized Details and Sheets to declutter Index. Moved information from detail callouts to Notes in order to decrease clutter of the drawing. Reworded Note 4 on new Sheet 3 to remove confusion on usage of concrete jackets.

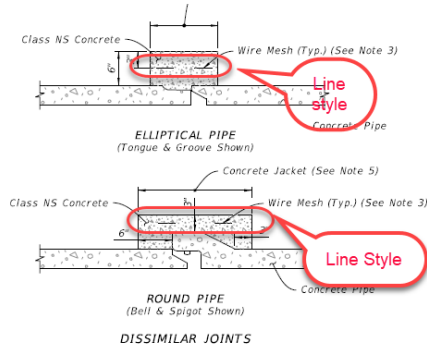
COMMENTS AND RESPONSES

BLACK = Industry Review Comments **RED** = Standard Plans Response

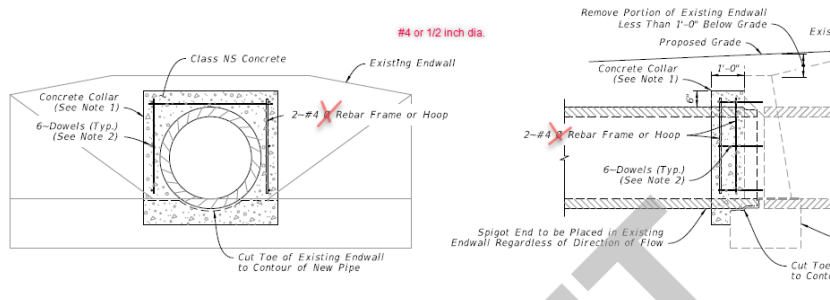
Name: Erin Yao
Date: August 8, 2019

COMMENT:

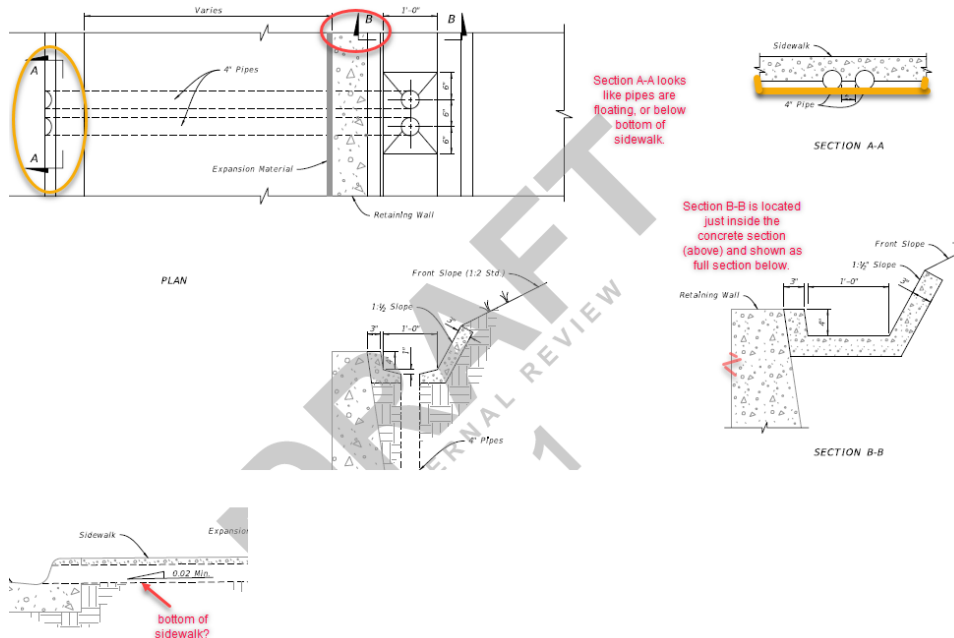
Sheet 3: Wire mesh should be full width (probably used a very large dashed line that looks like two pieces)



Sheet 4:



Sheet 6:



RESPONSE:

Date 8/1/2019

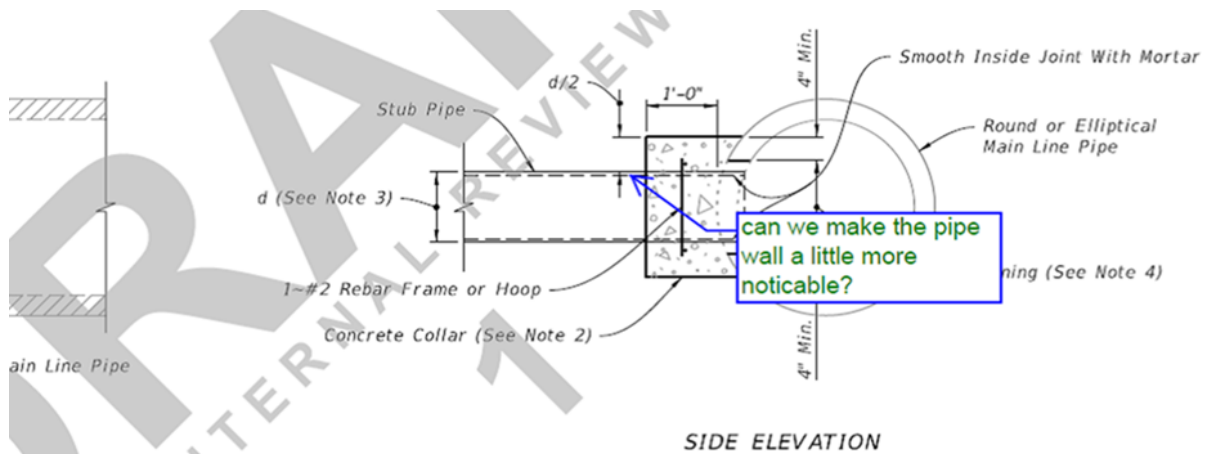
Made all changes

Name: Erin, Yao

Date: August 7, 2019

COMMENT:

Sheet 4:



JOINING MAINLINE PIPE TO STUB PIPE

Sheet 5:

GUARD TABLE						
Pipe Dia.	Top Steel Bracket	Bottom Steel Plate	Number of Vert. Bars and Plate Holes	Number of Horiz. Bars	Bars Size	Weight lbs.
18"	2'-6"	3'-6"	4	1	1/2"	48
24"	3'-0"	4'-0"	5	2	1/2"	58
30"	3'-0"	4'-6"	5	3	5/8"	74
36"	3'-8"	5'-0"	6	4	5/8"	90
42"	4'-8"	5'-6"	7	5	5/8"	111

NOTES:

1. Construct guards only at locations specifically called for in Plans.
2. Install anchor bolt to a 6 1/2" minimum embedment. Hex Bolt: cast-in-place. Adhesive-bonded anchor: fully threaded rod installed in accordance with Specification 416.

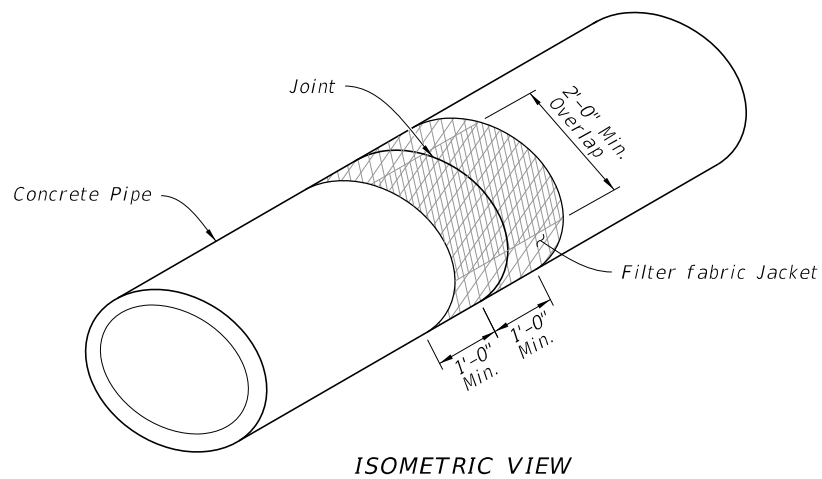
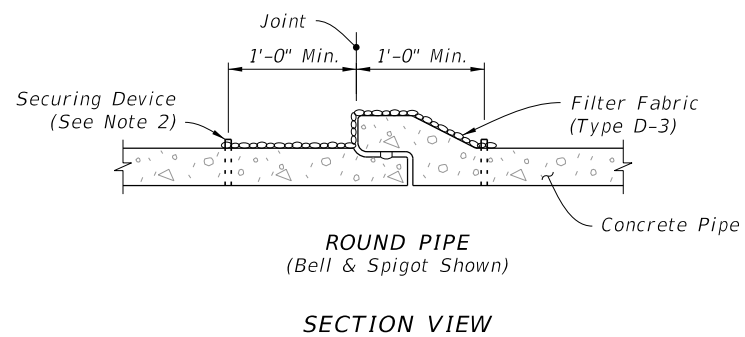
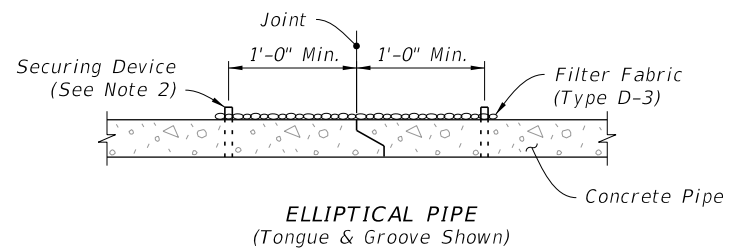
Tumpike typically has larger pipes that guards are needed for. Can this table be expanded to include more options?

PIPE END GUARD
INDEX SHEET

RESPONSE:

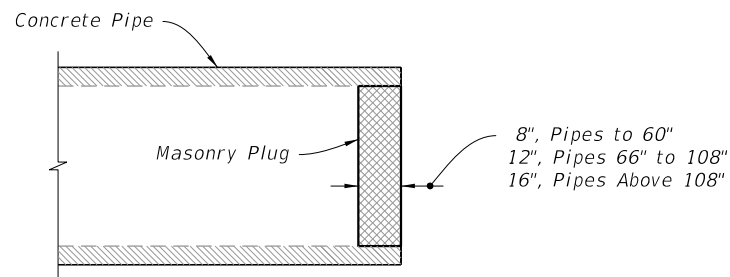
Date 8/8/2019

We will look at the pipe wall thickness. It is drawn to scale which does limit our ability to alter. Regarding the pipe guards, I agree that larger pipes do require guards in certain situations. It is my understanding that guards for the larger pipes are currently detailed in the plans. We could talk to structures and consider adding some larger pipes to the index Unfortunately, this is out of the scope of our current revisions and would need to be considered in next year's cycle.

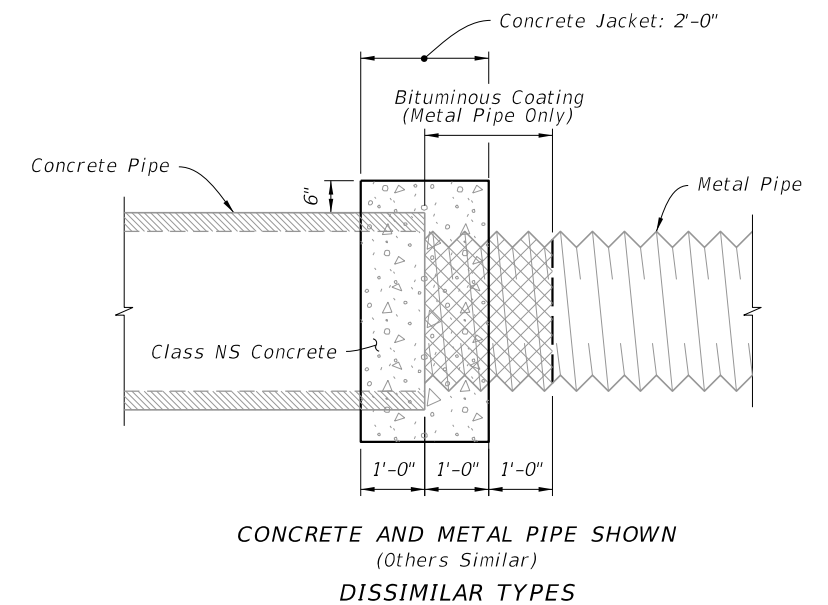
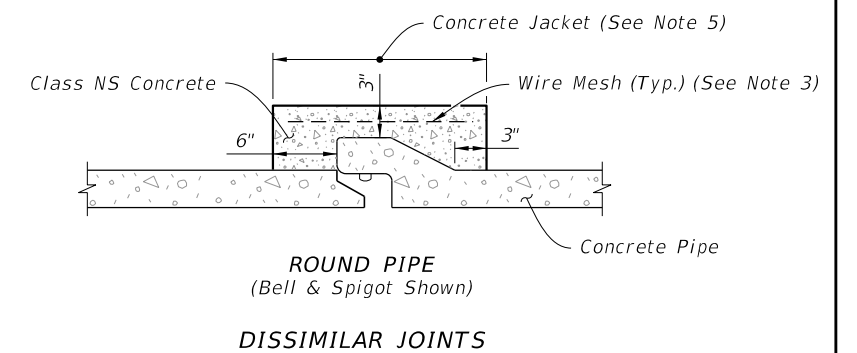
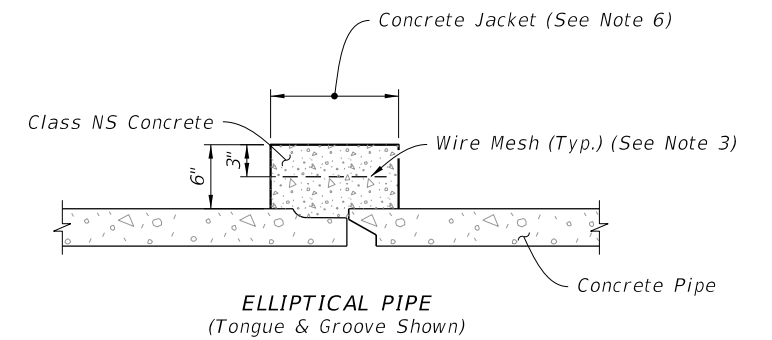
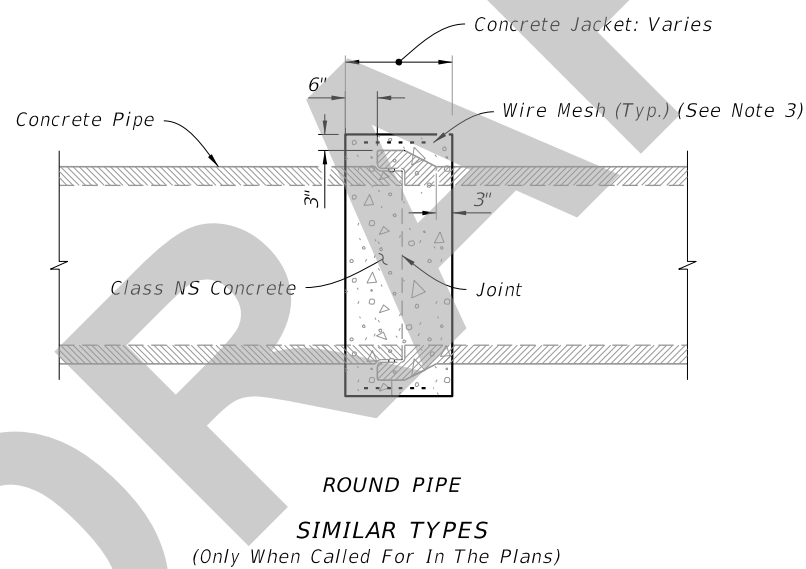
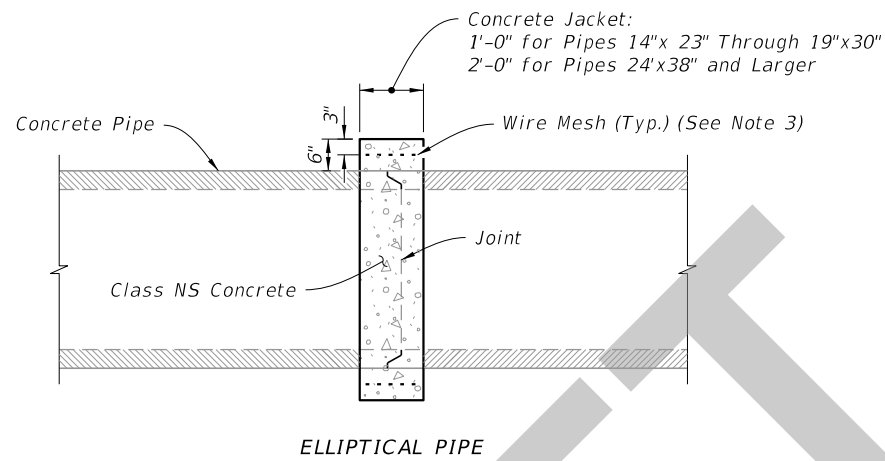


FILTER FABRIC JACKET

(For All Pipe Types - Concrete Elliptical Pipe Shown)



PIPE PLUG



CONCRETE JACKET

NOTES:

1. Alternate connection must be approved by the Engineer.
2. Install securing device in accordance with Specification 985.
3. Any wire mesh arrangement which provides 0.126 square inches of steel area per linear foot both ways may be used, provided the wires are spaced a minimum of 2" and/or a maximum of 6" on centers.
4. Do not use a concrete jacket to join dissimilar metal pipes.
5. 12" for pipes 15" through 24"; 24" for pipes 30" and larger.
6. 12" for pipes 14" x 23" through 19" x 30"; 24" for pipes 24" x 38" and larger.

FILTER FABRIC JACKET, CONCRETE JACKET, AND PIPE PLUG

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LAST REVISION	DESCRIPTION:
11/01/19	

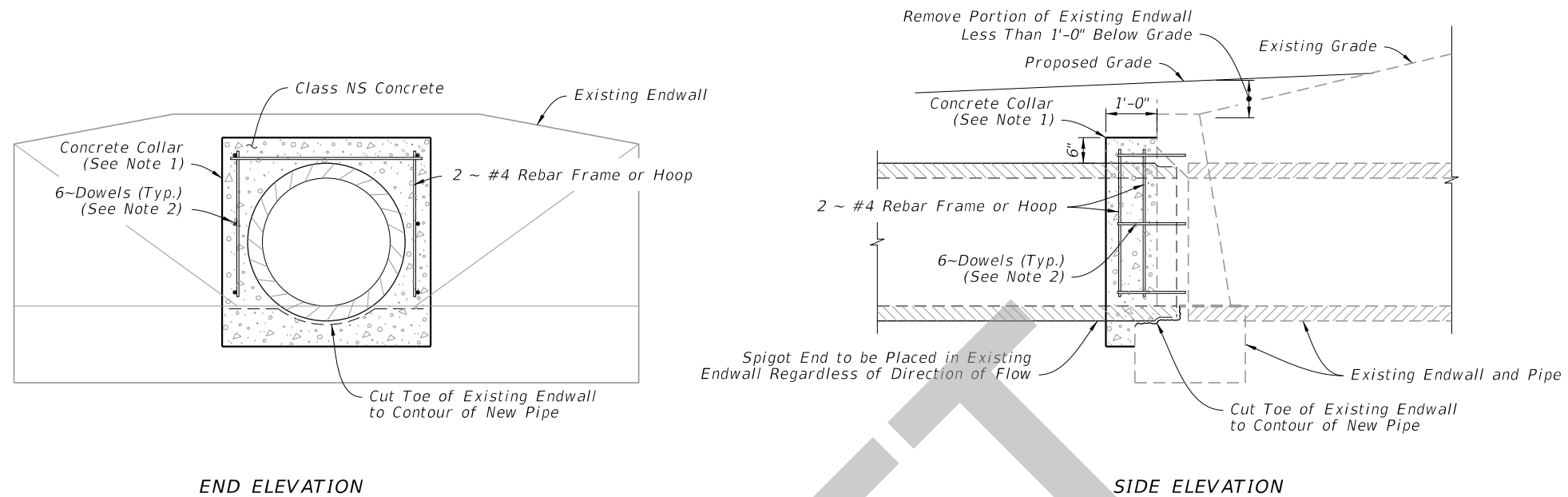


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STANDARD PLANS

MISCELLANEOUS DRAINAGE DETAILS

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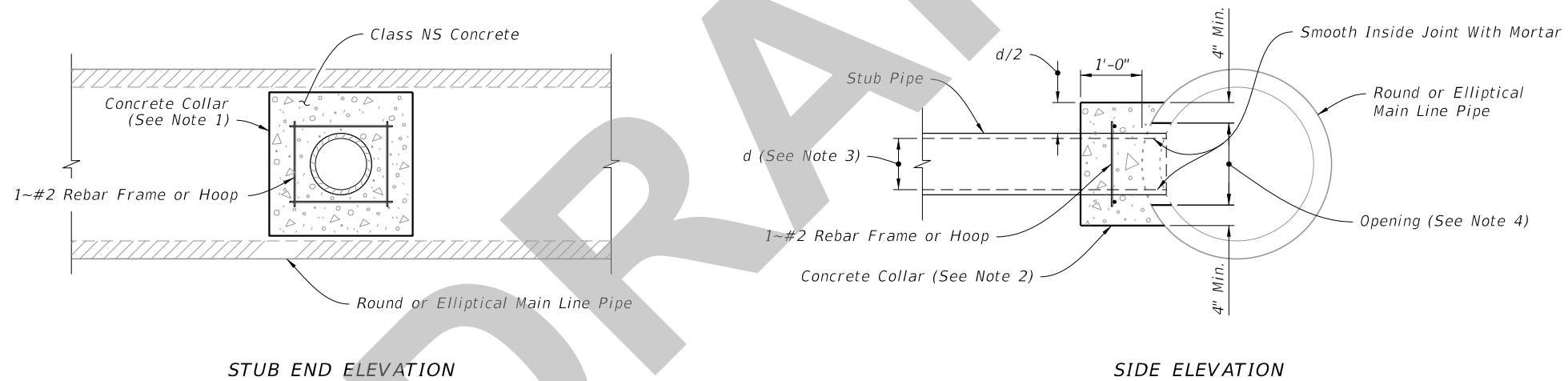
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END ELEVATION

SIDE ELEVATION

EXTENSION OF EXISTING PIPE CULVERTS



STUB END ELEVATION

SIDE ELEVATION

JOINING MAINLINE PIPE TO STUB PIPE

NOTES:

1. The collar may be formed by any method approved by the Engineer.
2. Install 1/2"x16" dowels in adhesive bond material.
3. Stub Pipes maximum diameter: 1/2 of a round main line pipe diameter, or 1/2 the height of elliptical main line pipes.
4. Opening by Pipe Manufacturer.
5. Install riser reinforcement using #5 Bars @ 18" centers vertically and 6" centers horizontally. Bend pipe steel to riser.
6. Reinforced concrete top required when inlet: manhole or junction box riser is less than 4 feet in diameter; or when 3'-6", alt. b inlet, manhole or junction box riser is used; or when rectangular inlet is used.
7. See Index 425-001 for optional construction joints.

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LAST REVISION	11/01/19	REVISION	DESCRIPTION:
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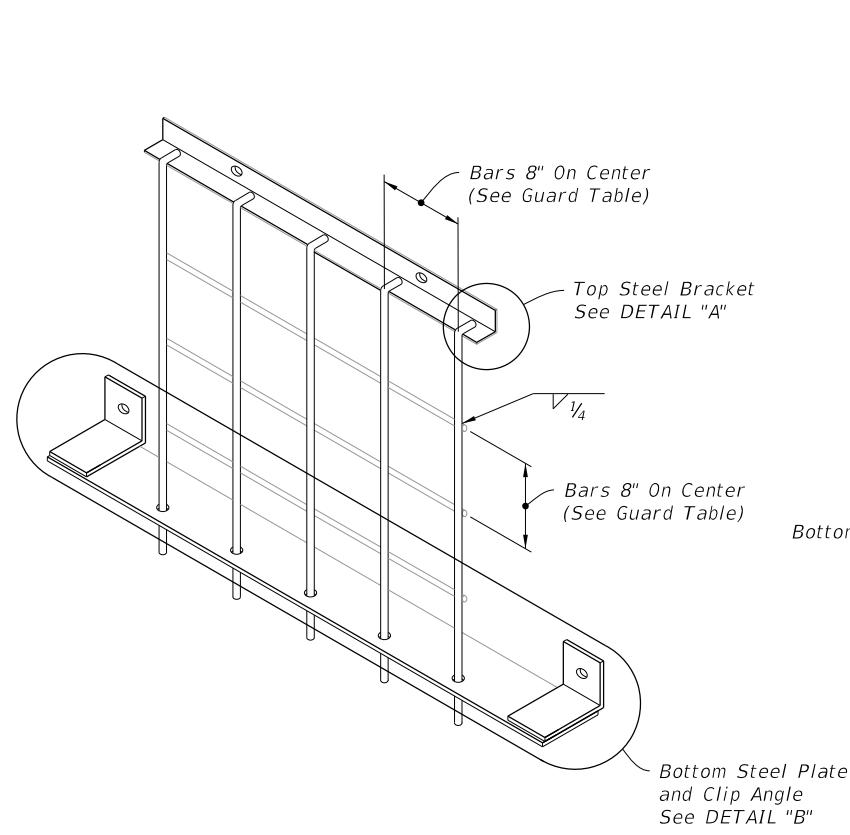


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STANDARD PLANS

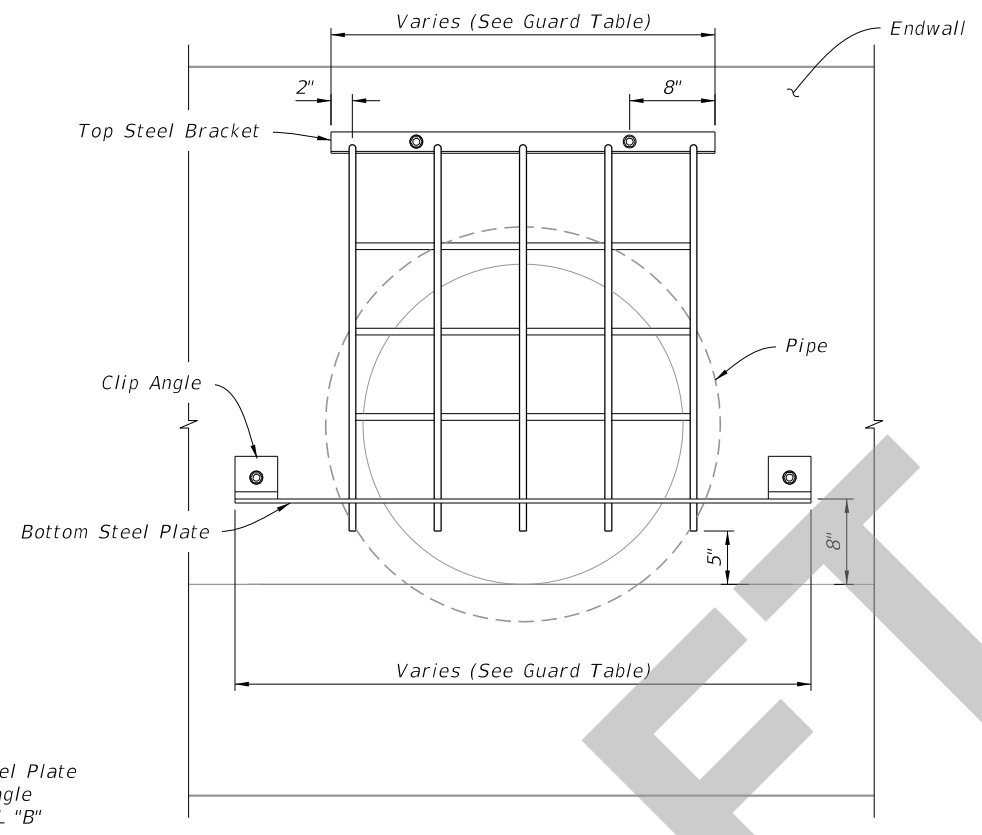
MISCELLANEOUS DRAINAGE DETAILS

CONCRETE COLLARS

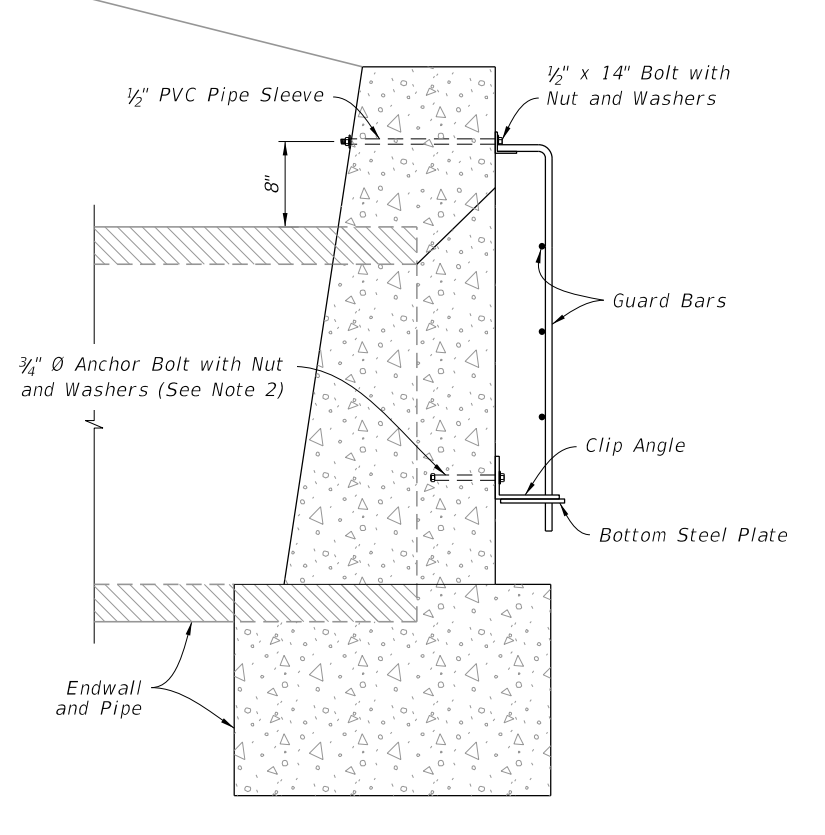
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ISOMETRIC VIEW

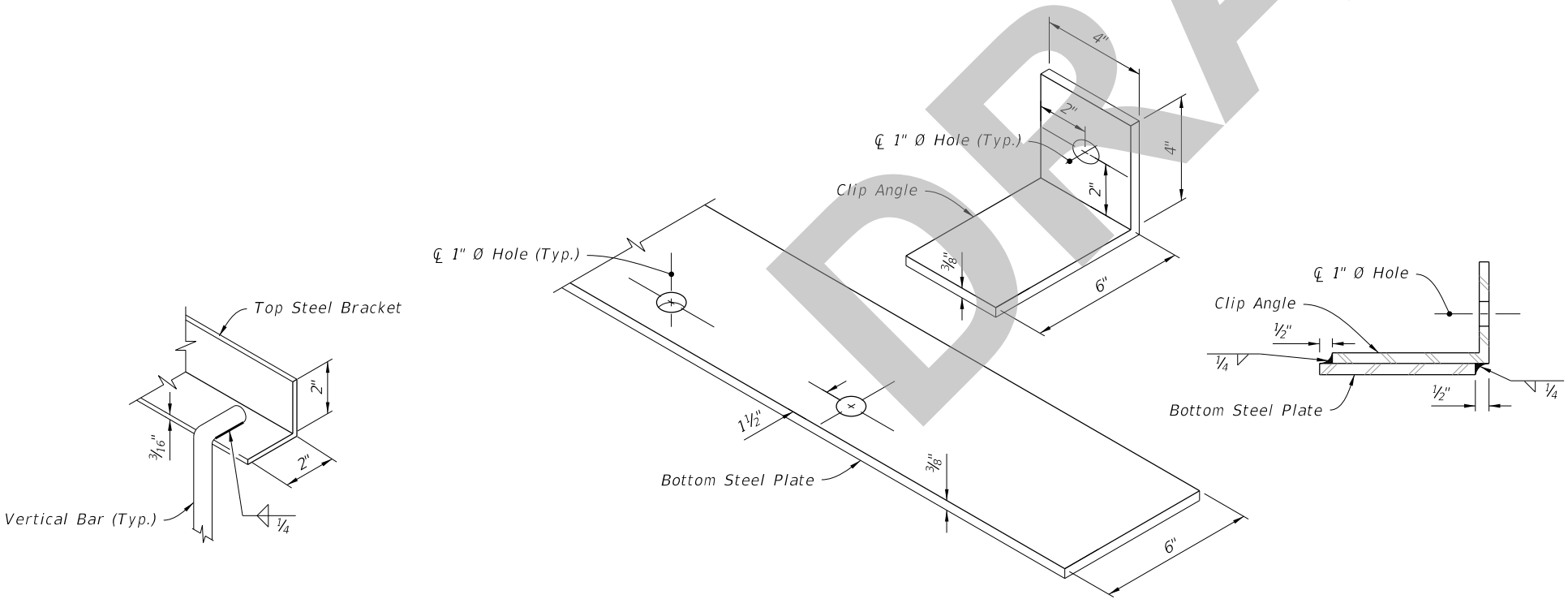


END ELEVATION



SIDE ELEVATION

GUARD



DETAIL "A"

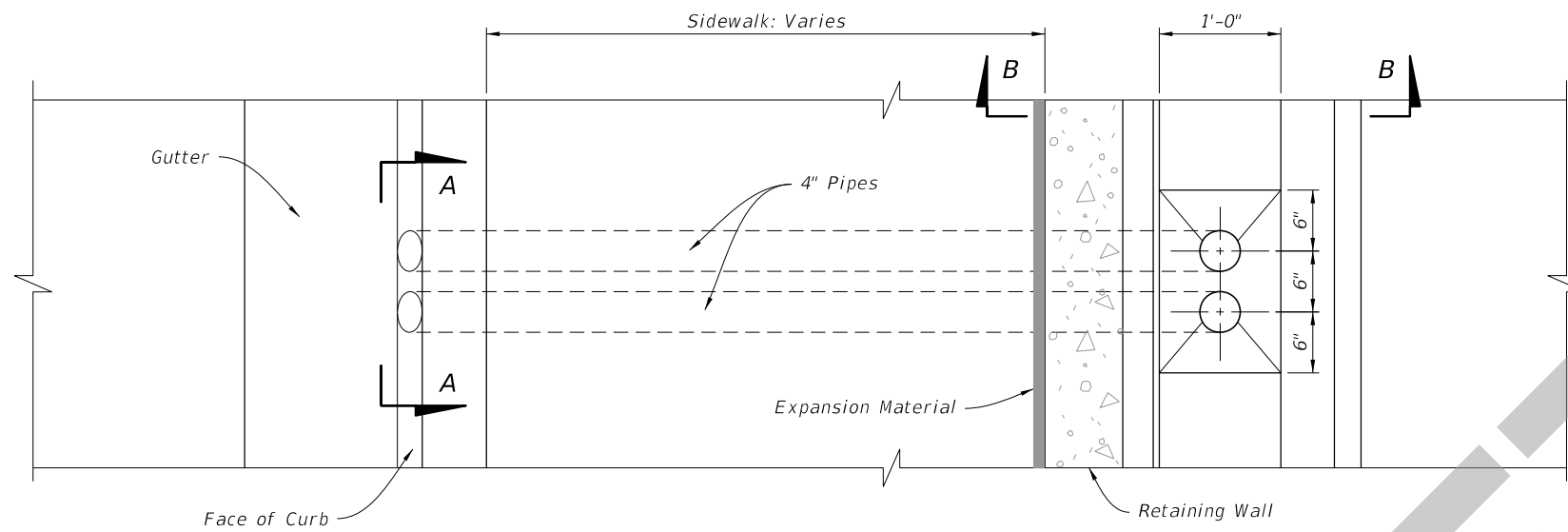
DETAIL "B"

GUARD TABLE						
Pipe Dia.	Top Steel Bracket	Bottom Steel Plate	Number of Vert. Bars and Plate Holes	Number of Horiz. Bars	Bars Size	Weight lbs.
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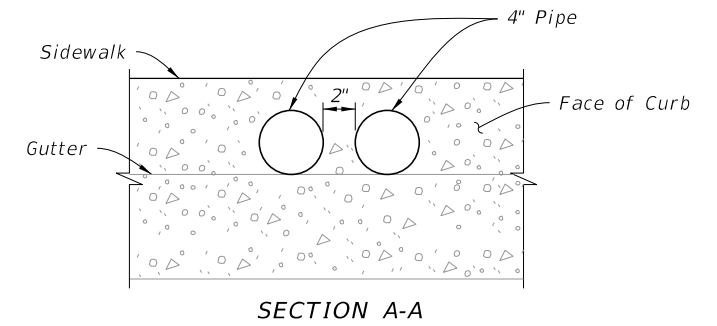
NOTES:

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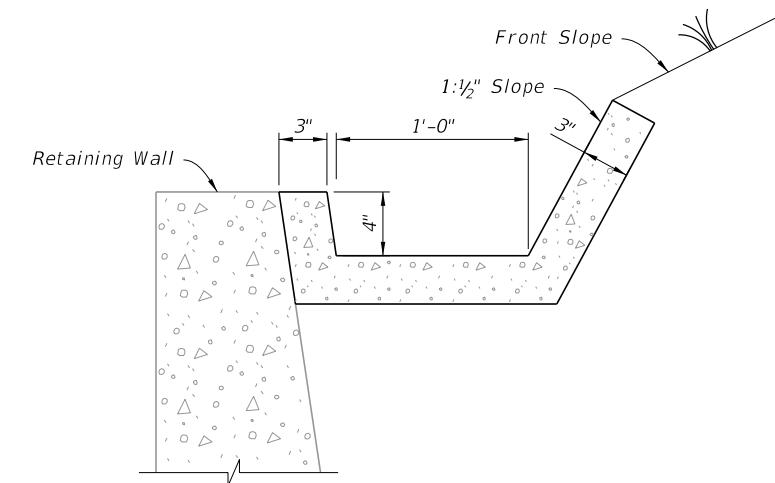
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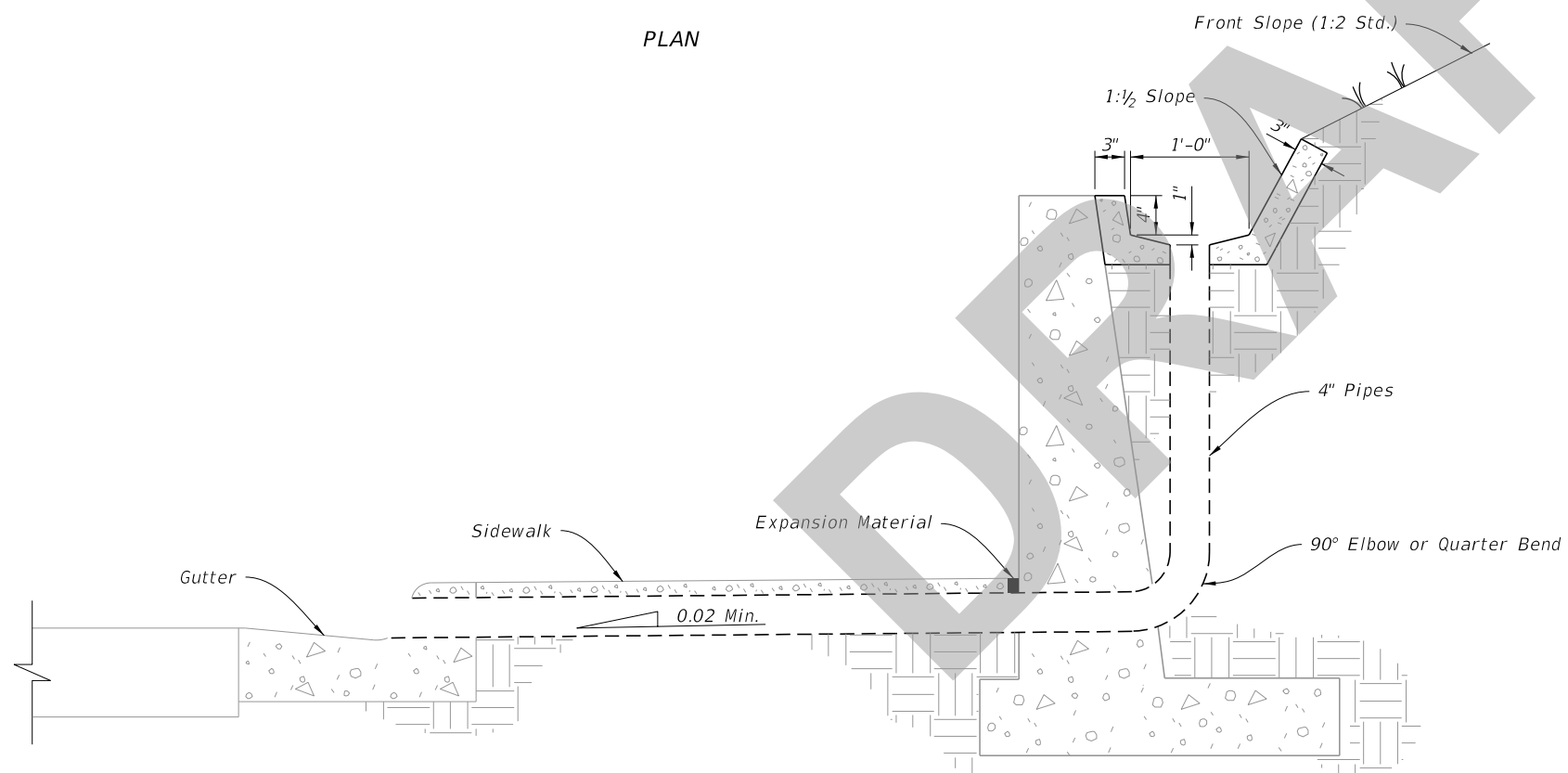
PLAN



SECTION A-A



SECTION B-B



ELEVATION

GUTTER AND DRAINS

RETAINING WALL CONCRETE GUTTER AND DRAINS

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LAST REVISION 11/01/19	DESCRIPTION:
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MISCELLANEOUS DRAINAGE DETAILS

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