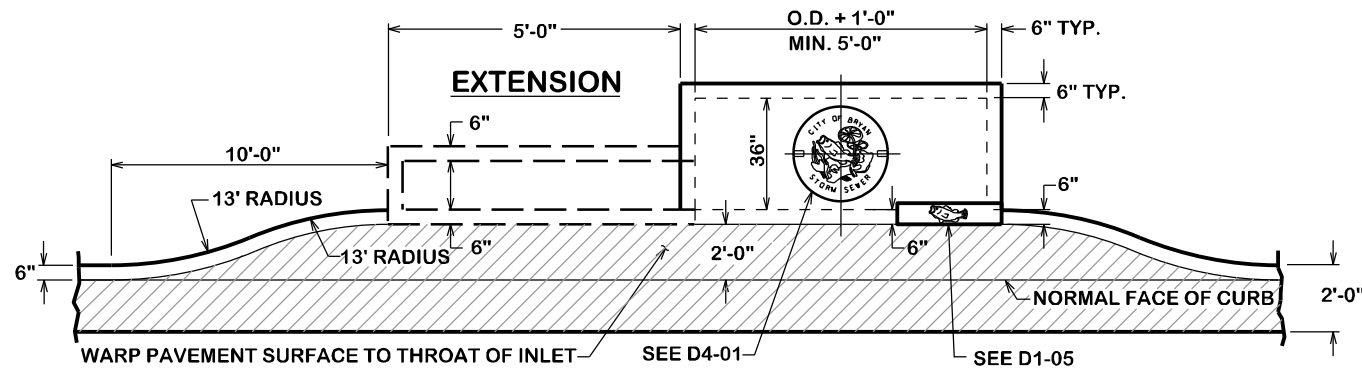
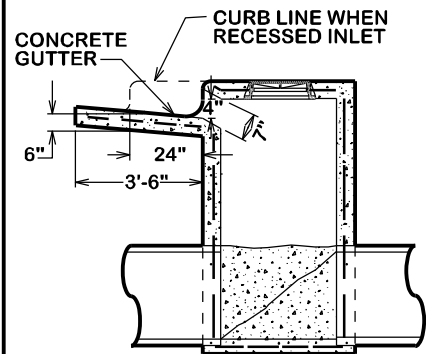


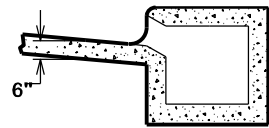
THROAT DETAIL



PLAN VIEW

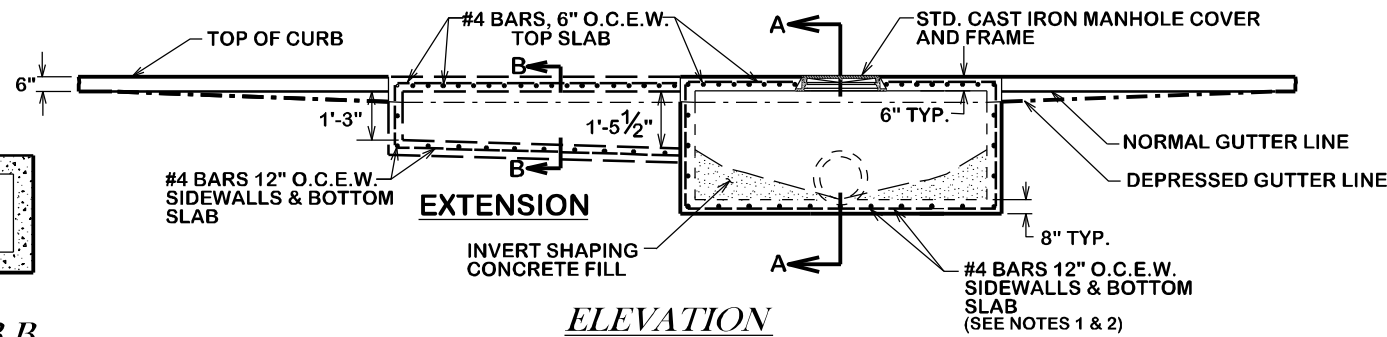


SECTION A-A



SECTION B-B

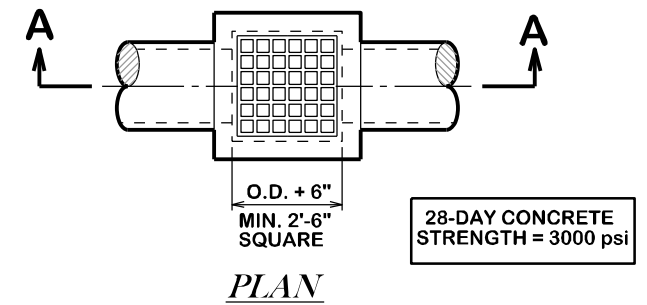
28-DAY CONCRETE STRENGTH = 3000 psi



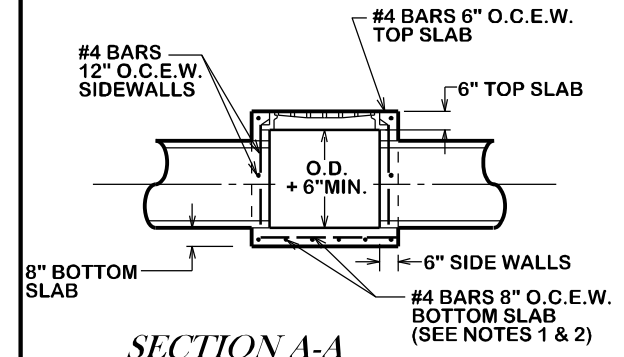
ELEVATION

SINGLE RECESSED CURB INLET & CURB INLET W/EXTENSION

D1-00



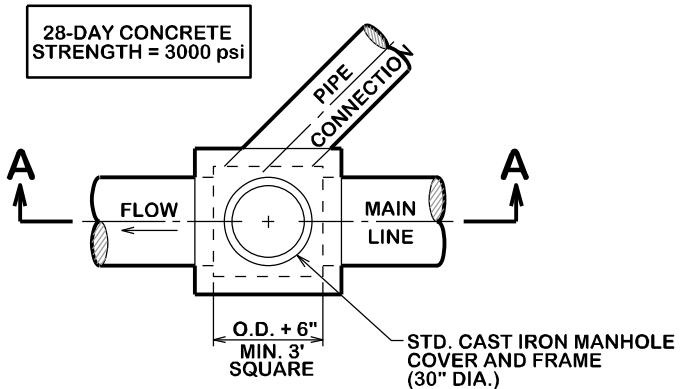
PLAN



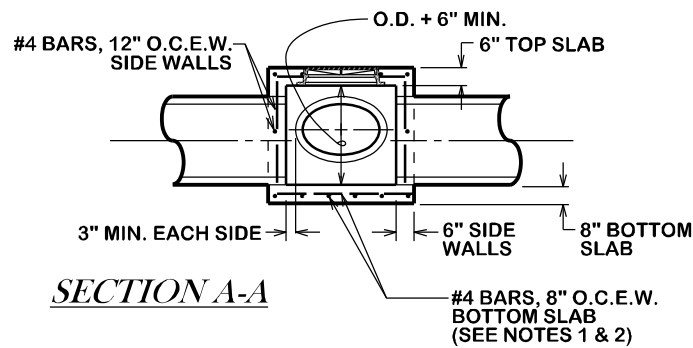
SECTION A-A

SINGLE GRATE INLET

D1-01



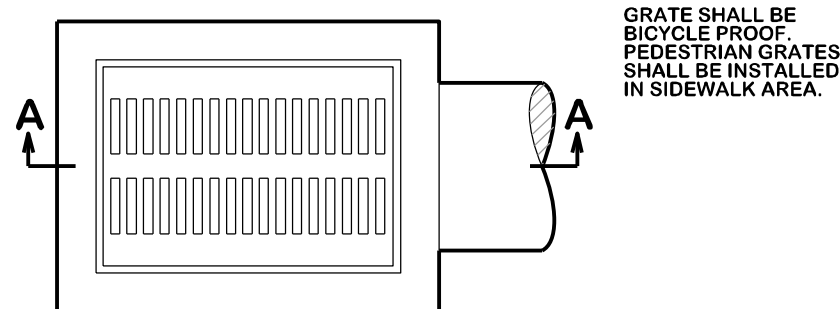
PLAN



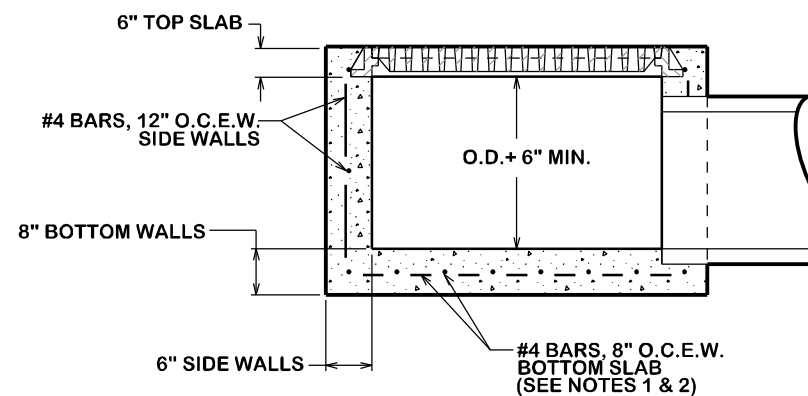
SECTION A-A

STORM SEWER JUNCTION BOX

D1-02



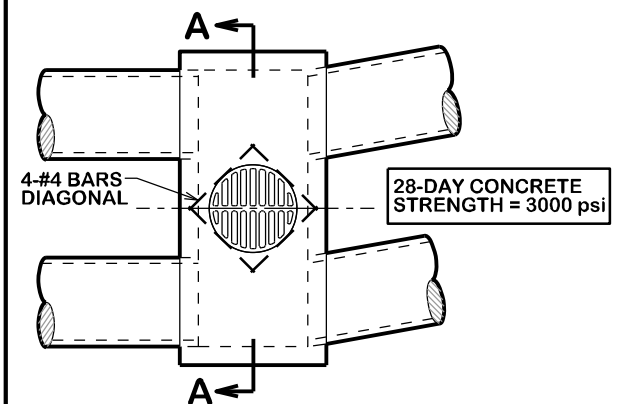
PLAN



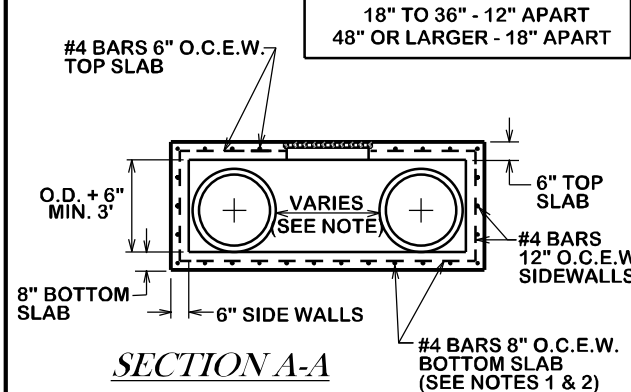
SECTION A-A

GRATE INLET

D1-03



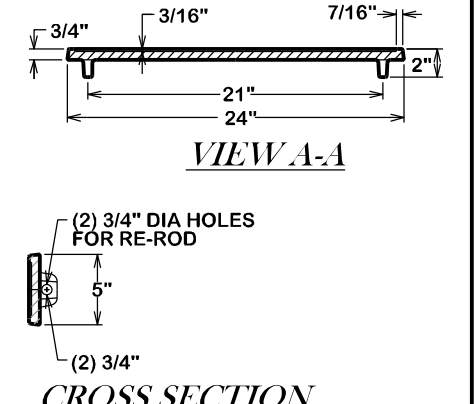
PLAN



SECTION A-A

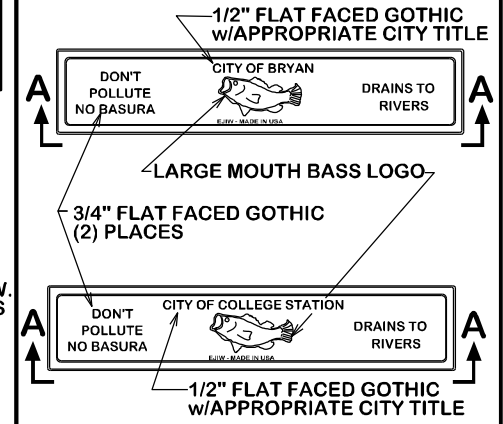
DOUBLE BARREL INLET

D1-04



VIEW A-A

CROSS SECTION



BASS LOGO PLATE

D1-05

REVISIONS

BRYAN - COLLEGE STATION
STANDARD DRAINAGE DETAILS

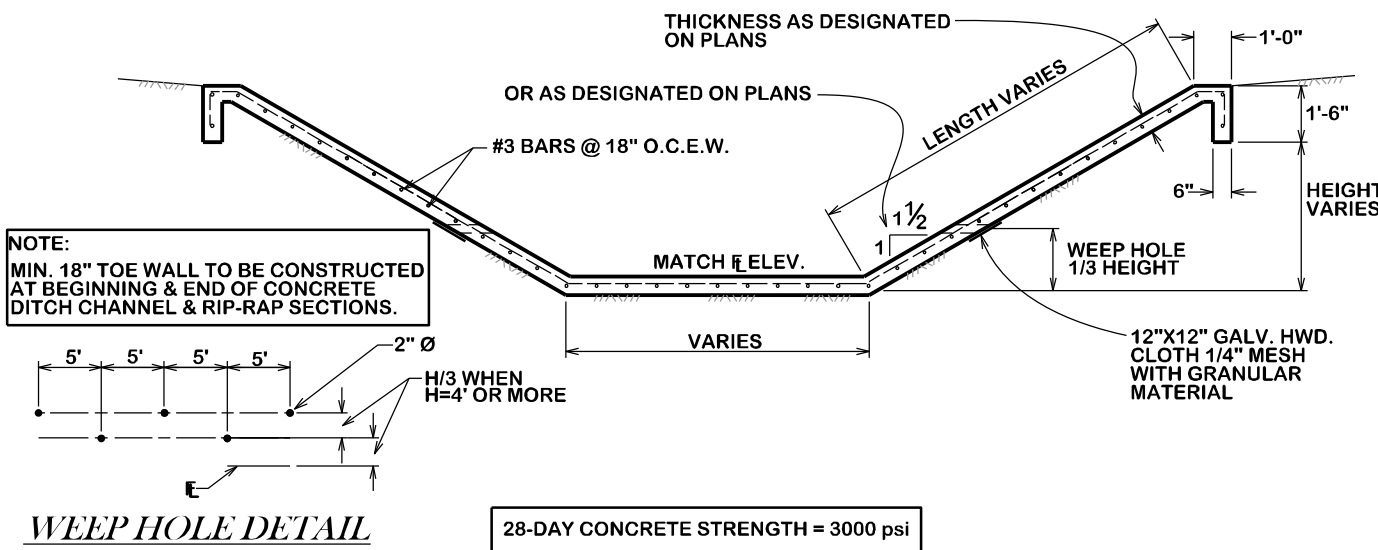


DRAWN BY: C.L.M.
DATE: 08-01-12
SCALE: N T S
APPROVED: W.P.K.

FIGURE:

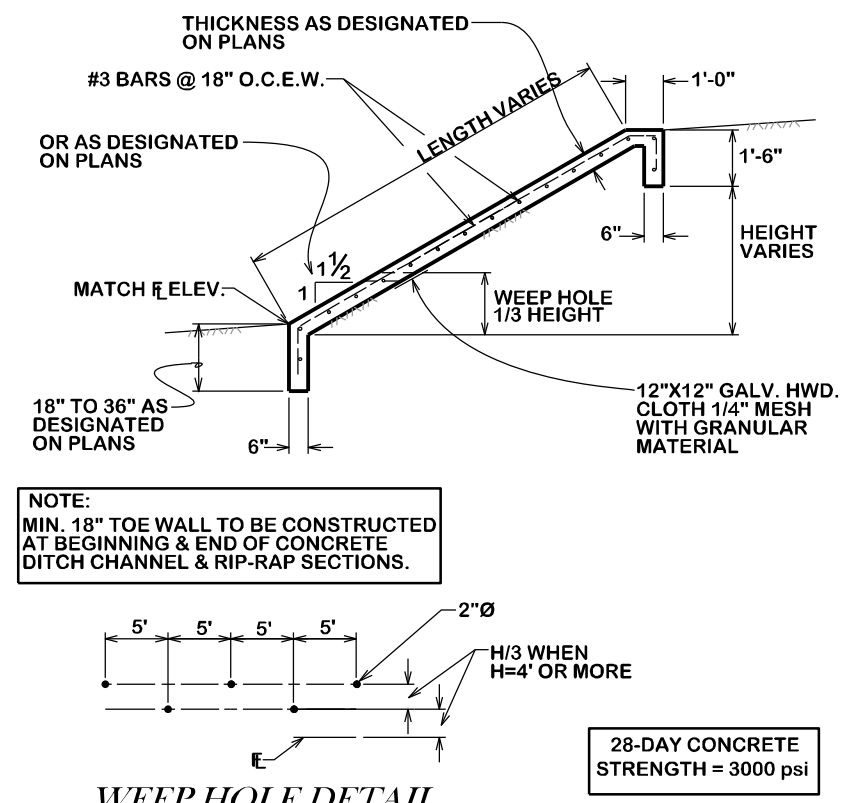
D1

SHEET 1 OF 4



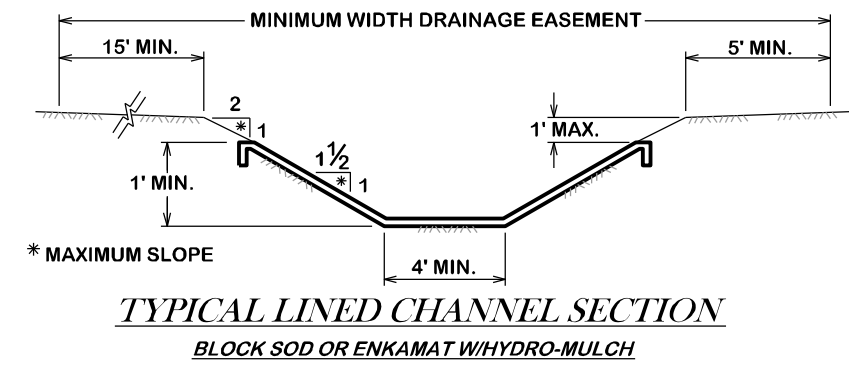
CONCRETE CHANNEL LINING

D2-00



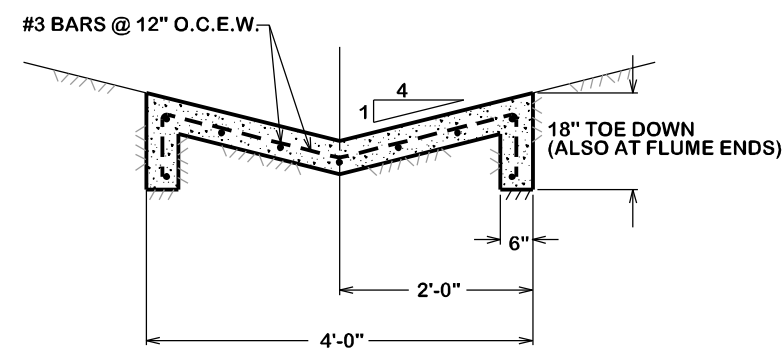
CONCRETE RIP-RAP

D2-01



STANDARD CHANNEL SECTION

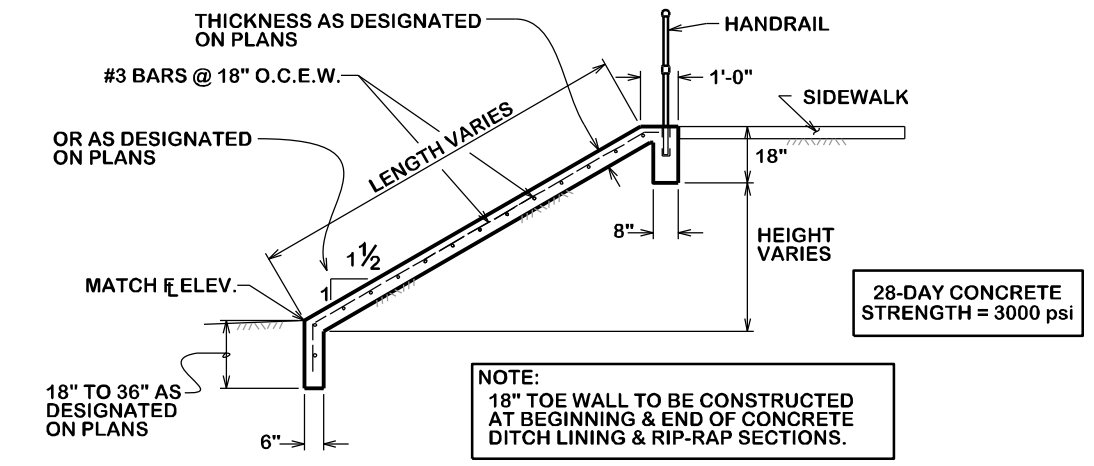
D2-02



STANDARD FLUME SECTION

EXPANSION JOINTS AT 60' O.C.

D2-04



CONCRETE SIDE SLOPE PROTECTION

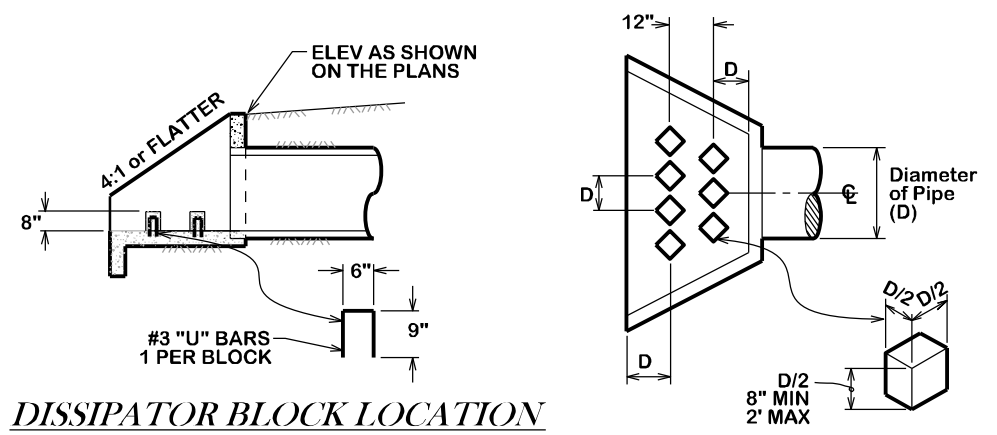
D2-03

REVISIONS

BRYAN - COLLEGE STATION
STANDARD DRAINAGE DETAILS

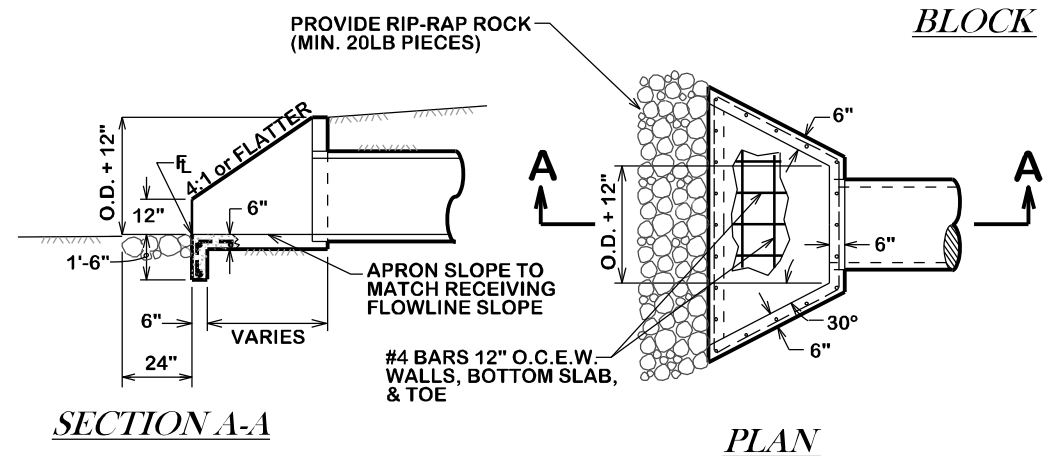


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DATE: 08-01-12
SCALE: N T S
APPROVED: W.P.K.
FIGURE:
D2
SHEET 2 OF 4



DISSIPATOR BLOCK LOCATION

DISSIPATOR BLOCK



SECTION A-A

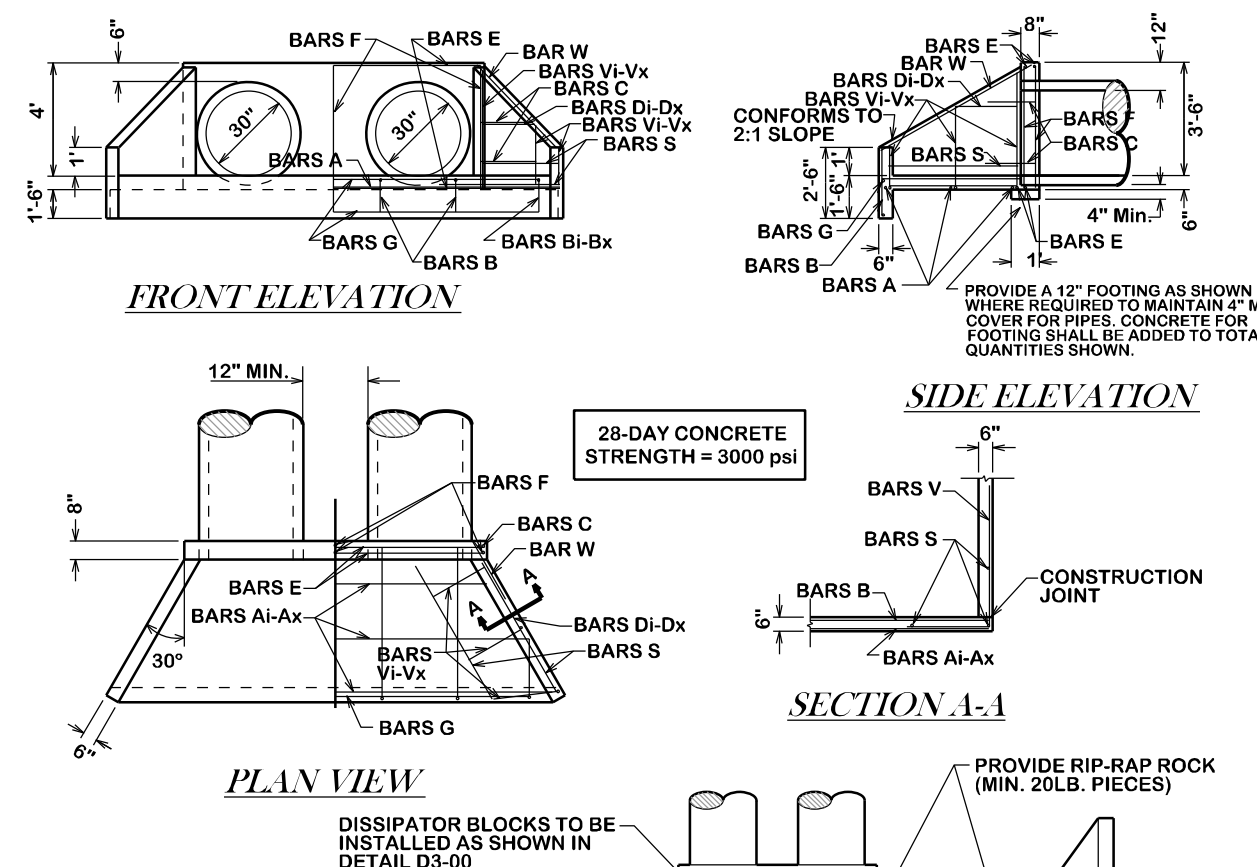
PLAN

28-DAY CONCRETE STRENGTH = 3000 psi

MINIMUM DISTANCE BETWEEN TWO PIPES
18" TO 36" - 12" APART
48" OR LARGER - 18" APART

TYPICAL CONCRETE HEADWALL & END WALL WITH WINGS

D3-00



FRONT ELEVATION

SIDE ELEVATION

SECTION A-A

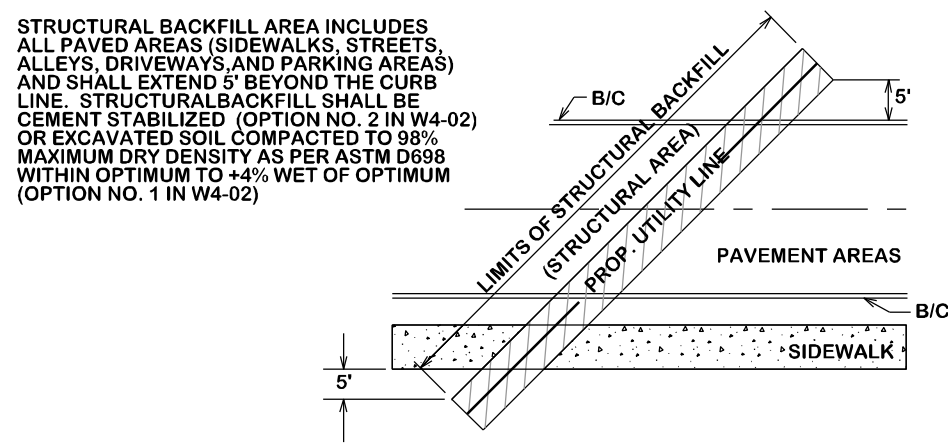
DISSIPATOR BLOCKS TO BE INSTALLED AS SHOWN IN DETAIL D3-00

GENERAL NOTES:
ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
REINFORCING STEEL SHALL BE PLACED WITH THE CENTER OF THE OUTSIDE LAYER OF BARS 2" FROM THE SURFACE OF THE CONCRETE. TOTAL QUANTITIES INCLUDE ONE 20 DIAMETER LAP FOR ALL BARS OVER 6'-0" IN LENGTH.

REINFORCING STEEL FOR ONE HEADWALL											
BARS A _{i-Ax}	BARS B	BARS B _{i-Bx}	BARS C	BARS D _{i-Dx}	BARS E	BARS F	BARS G	BARS S	BARS V _{i-Vx}	BARS W	
#4@12"±	#3@18"±	#3@18"±	#4@12"±	#3@12"±	#5	#4	#3	#4	#4@12"±	#5	

CONCRETE HEADWALL FOR 2 PIPES

D3-01

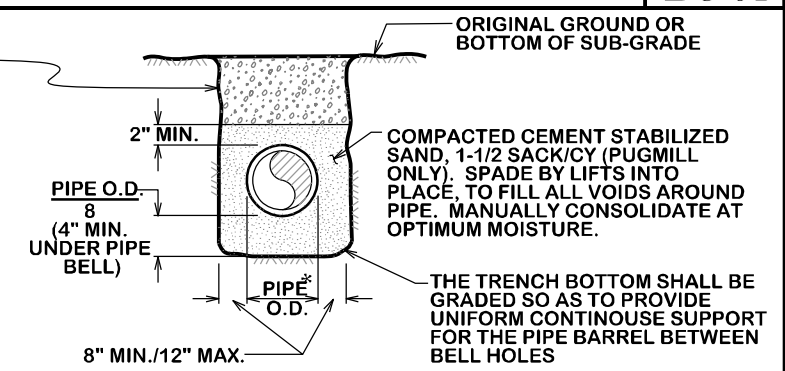


STRUCTURAL BACKFILL AREA

D3-02

SELECT MATERIAL
MATERIAL EXCAVATED FROM THE DITCH, (WHICH IS FREE OF ROCKS, LUMPS, CLODS, OR DEBRIS LARGER THAN TWO (2) INCHES IN THE LARGEST DIMENSION, COMPACTED TO A MINIMUM OF 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NON-STRUCTURAL AREAS (ie...YARDS, PASTURES, EASEMENTS) AND TO A MINIMUM OF 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 (STANDARD) AT A MOISTURE CONTENT WITHIN OPTIMUM TO +4% OF OPTIMUM UNDER NEW STREET AREAS AND STREETS TO BE RECONSTRUCTED.

* PE MUST DESIGN TRENCH DETAIL SITE SPECIFIC FOR HDPE PIPE.
HDPE PIPE IS NOT TO BE USED UNDER PUBLIC STREET PAVEMENT
CEMENT STABILIZED SAND AS A MINIMUM WILL ALWAYS BE REQUIRED.



BEDDING AND TRENCH FOR REINFORCED CONCRETE PIPE AND BOX CULVERTS

D3-03

REVISIONS

BRYAN - COLLEGE STATION
STANDARD DRAINAGE DETAILS

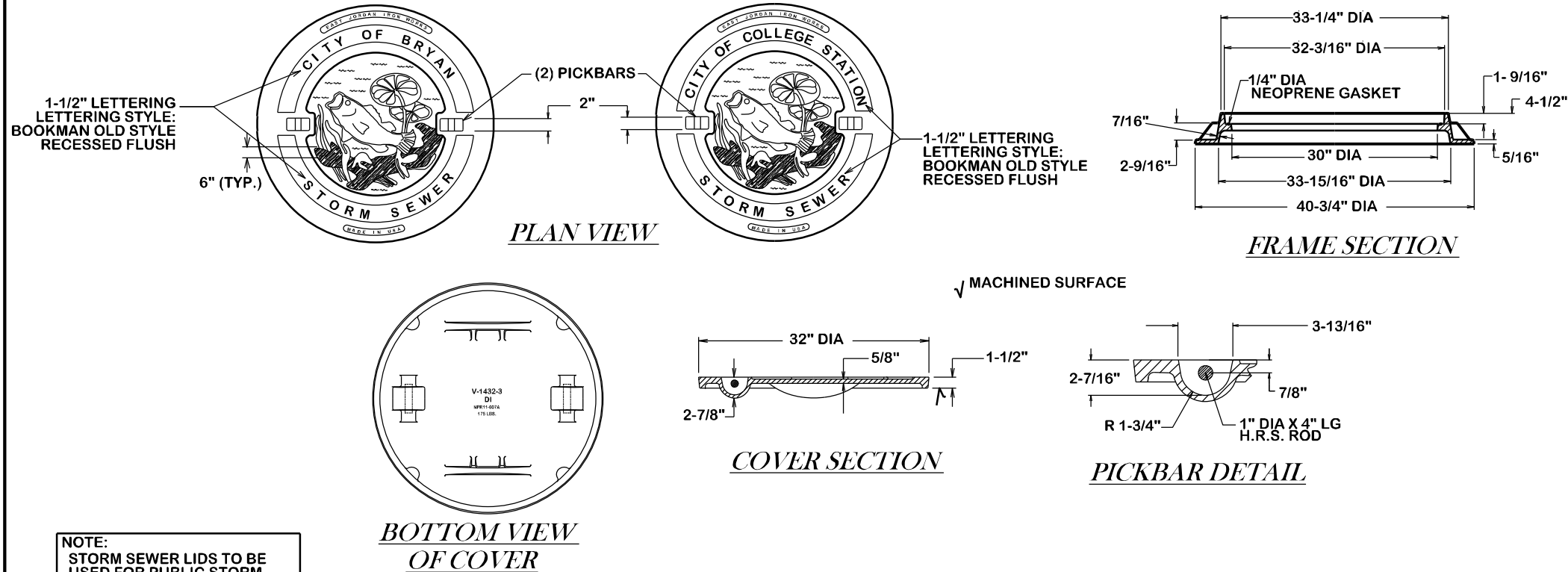


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FIGURE:
D3
SHEET 3 OF 4

GENERAL NOTES:

1. BASE THICKNESS AND FOUNDATION SHALL BE AS FOLLOWS:
- | INLET DEPTH (FT.)
(MEASURED FROM FLOWLINE
TO FINAL GRADE) | BASE
THICKNESS |
|---|-------------------|
| 0 - 12 ----- | 8" |
| 12 AND OVER ----- | 12" |
2. DEPTHS GREATER THAN 12' WILL REQUIRE 2 MATS OF REINFORCING STEEL IN THE BASE.
3. ALL AREAS WHERE EXISTING VEGETATION AND GRASS COVER HAVE BEEN BARED BY CONSTRUCTION SHALL BE ADEQUATELY BLOCK SODDED OR HYDROMULCHED AND WATERED UNTIL GROWTH IS ESTABLISHED. IN DEVELOPED AREAS WHERE GRASS IS PRESENT, BLOCK SOD WILL BE REQUIRED.
4. APPROVED EROSION CONTROL MEASURES MUST BE INSTALLED DURING THE ENTIRE TIME THAT EARTH HAS BEEN BARED BY CONSTRUCTION AND SHALL STAY IN PLACE UNTIL ACCEPTABLE VEGETATIVE GROWTH IS ESTABLISHED AFTER CONSTRUCTION IS COMPLETE AND THEN REMOVED BY CONTRACTOR.

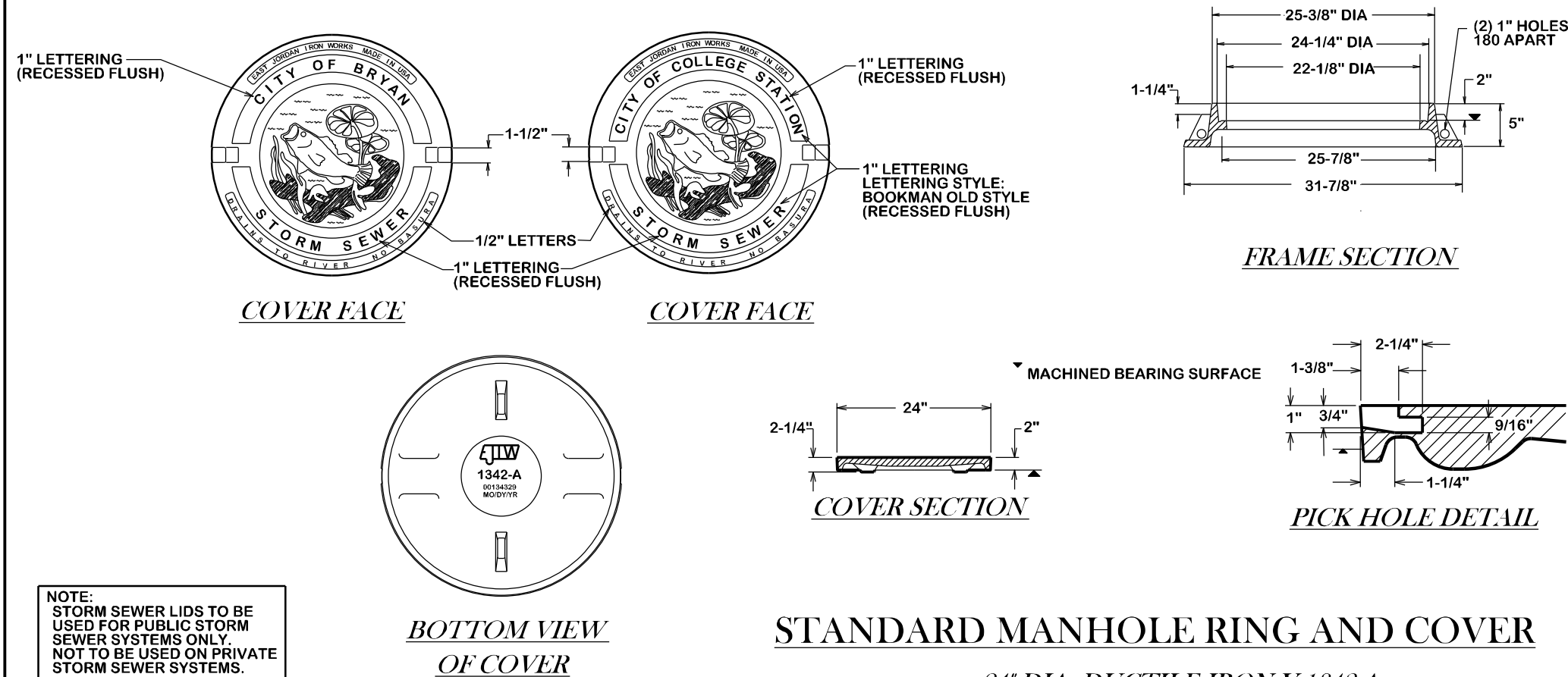


NOTE:
STORM SEWER LIDS TO BE
USED FOR PUBLIC STORM
SEWER SYSTEMS ONLY.
NOT TO BE USED ON PRIVATE
STORM SEWER SYSTEMS.

STANDARD MANHOLE RING AND COVER

32" DIA. DUCTILE IRON V-1432-3

D4-00



NOTE:
STORM SEWER LIDS TO BE
USED FOR PUBLIC STORM
SEWER SYSTEMS ONLY.
NOT TO BE USED ON PRIVATE
STORM SEWER SYSTEMS.

STANDARD MANHOLE RING AND COVER

24" DIA. DUCTILE IRON V-1342-A

D4-01

REVISIONS

BRYAN - COLLEGE STATION
STANDARD DRAINAGE DETAILS



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FIGURE:
D4
SHEET 4 OF 4