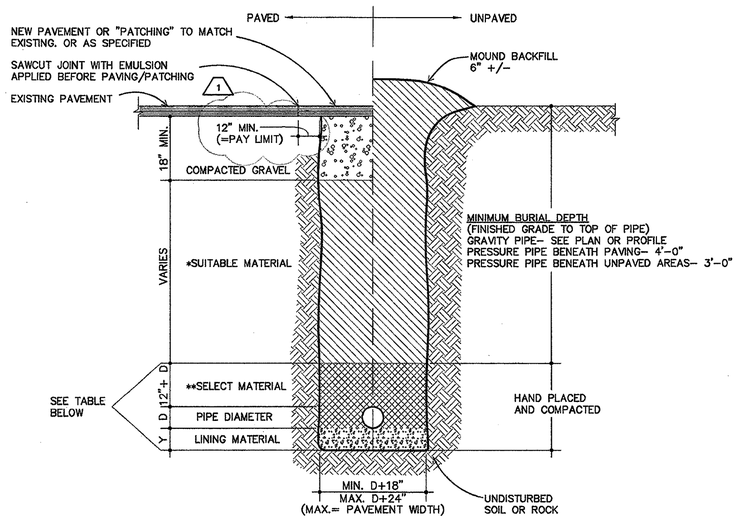


NOTES

A. WHERE BACKFILL IS DESIGNATED "COMPACTED", THIS MEANS 90% TO 95% STANDARD PROCTOR, AASHTO T-99. ALL FILL PLACED BELOW PIPES AND STRUCTURES MUST MEET THIS REQUIREMENT.

B. FOR ALL TRENCHES WITH A GRADE GREATER THAN 4% AND/OR WHERE GROUNDWATER IS APPARENT, INSTALL CLAY DAMS AROUND PIPE AT 100' INTERVALS.

CONDITION AND PIPE	**SELECT MATERIAL	LINING MATERIAL	3" Y-DIMENSION
DUCTILE IRON PIPE IN "ORDINARY SOIL"	TYPE I, II, OR III	SAND OR TYPE III	3"
RCP PIPE IN "ORDINARY SOIL"	TYPE II OR III	SAND OR TYPE III	6"
ALL PIPE OVER BEDROCK OR LEDGE	TYPE II OR III	SAND OR TYPE III	4"
DUCTILE IRON PIPE IN CLAY OR MUCK	TYPE II OR III	SAND	6"
RCP PIPE IN CLAY	TYPE II OR III	SAND	6"
PLASTIC-ALL	SAND OR TYPE III	SAND OR TYPE III	

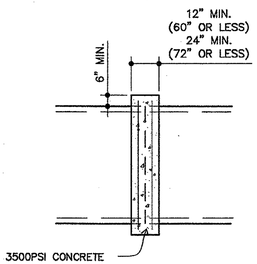
* SUITABLE MATERIAL SHOULD CONTAIN NO STONES GREATER THAN 4" IN DIAMETER, NO FROZEN LUMPS, AND ONLY MINOR AMOUNTS OF CLAY OR ORGANIC MATERIAL. ALL MATERIAL TO BE PLACED IN MAXIMUM OF 12" LIFTS AND COMPACTED BEFORE PLACING NEXT LIFT.

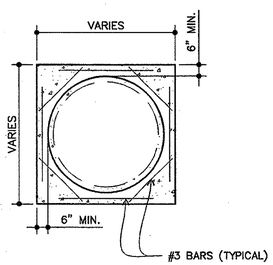
** TYPE I MATERIAL SHALL BE EITHER GRAVEL OR EXCAVATED MATERIAL CONTAINING NO STONES GREATER THAN 1 1/2" IN DIAMETER, NO FROZEN LUMPS, NO CLAY, AND NO ORGANIC MATERIAL.

** TYPE II MATERIAL SHALL BE CLEAN, HARD, CRUSHED OR NATURAL STONE WITH A GRADATION BY WEIGHT OF 100% PASSING A 1 1/2" SQUARE OPENING, NOT MORE THAN 25% PASSING A 3/4" SQUARE OPENING AND NOT MORE THAN 5% PASSING A 1/2" SQUARE OPENING.

** TYPE III MATERIAL SHALL BE CLEAN, HARD, CRUSHED STONE FREE FROM COATINGS AND THOROUGHLY WASHED WITH A GRADATION BY WEIGHT OF 100% PASSING A 1" SQUARE OPENING AND 0 TO 5% PASSING A 1/4" SQUARE OPENING.

01 TRENCH/BACKFILL NOTES
SCALE: NONE





04 CONCRETE COLLAR
SCALE: NONE

SITE ELECTRICAL NOTES

A. FINAL ADJUSTMENTS OF THE FLOODLIGHTS ANGLE AND DIRECTION ARE TO BE MADE AFTER DARK TO AVOID INTERFERENCE WITH TRAFFIC OR ADJACENT PROPERTY, PER SATISFACTION OF OWNERS REPRESENTATIVE.

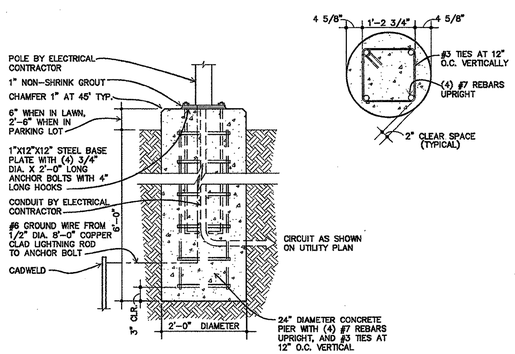
B. ALL SITE LIGHTING TO BE WIRED IN 1" P.V.C. CONDUIT. EACH CIRCUIT TO HAVE DIRECT RUN TO THE SWITCH- GEAR. EACH CIRCUIT TO HAVE ITS OWN CONDUIT, UNLESS NOTED OTHERWISE.

C. FLOODLIGHTS, POLE SIGNS, SIDE BUILDING SIGNS AND ROOF LIGHTS ARE TURNED ON/OFF THROUGH A LIGHTING CONTROLLER (WITH PHOTOCELL) AND TIME CLOCKS.

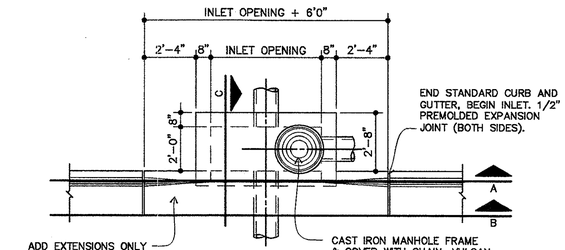
D. RAISE SITE LIGHT BASE TO 2'-6" ABOVE FINISHED GRADE WHEN LOCATED IN PARKING LOT.

E. RUN 1 1/2" CONDUIT FOR THE POLE SIGN(S) UNLESS NOTED OTHERWISE.

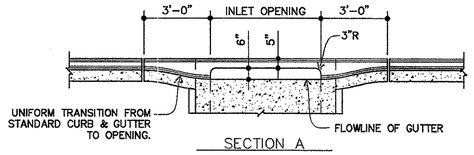
F. COORDINATE BASE PLATE AND ANCHOR BOLT LAYOUT WITH POLE SUPPLIER.



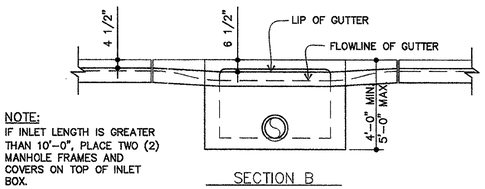
05 SITE LIGHT POLE BASE
SCALE: NONE



PLAN VIEW

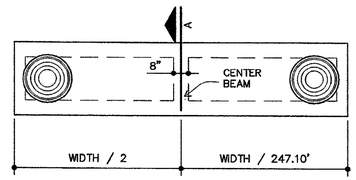


SECTION A

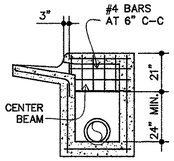


NOTE:
IF INLET LENGTH IS GREATER THAN 10'-0", PLACE TWO (2) MANHOLE FRAMES AND COVERS ON TOP OF INLET BOX.

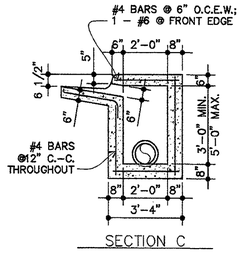
SECTION B



PLAN VIEW



SECTION A
(CENTER BEAM DETAIL)

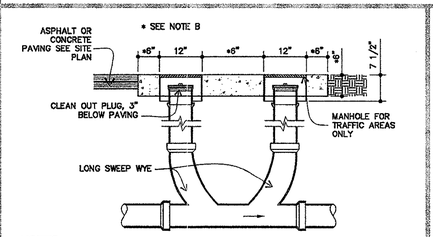


SECTION C

GENERAL NOTES:

1. IN GENERAL, INLET REINFORCING STEEL SHALL BE #4 BARS ON 12" CENTERS BOTH WAYS FOR GUTTER, BOTTOM SLAB ENDS, FRONT AND BACK WALLS, AND #4 BARS ON 6" CENTERS BOTH WAYS FOR TOP SLAB. AN ADDITIONAL #6 BAR SHALL BE PLACED IN THE FRONT EDGE OF THE TOP SLAB IN THE INLETS AND ADDITIONAL STEEL SHALL BE PLACED AROUND MANHOLES AS SHOWN.
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. ALL CONCRETE SHALL BE CLASS "A". ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
4. ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2" TO THE CENTERS OF THE BARS.
5. 10'-0" OF EXISTING CURB AND GUTTER UPSTREAM AND 10'-0" OF EXISTING CURB AND GUTTER DOWNSTREAM SHALL BE REMOVED AND REPOURED INTEGRALLY WITH EACH INLET.
6. ALL BACK FILLING SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.
7. CENTER BEAM IS REQUIRED FOR ALL INLET OPENINGS GREATER THAN 10'-0".
8. TWO MANHOLE FRAMES AND COVERS ARE REQUIRED WHEN INLET OPENING IS GREATER THAN 10'-0".
9. ALL INLET FLOORS ARE TO HAVE A 2% SLOPE TOWARDS THE OUTLET PIPE.
10. MINIMUM INLET OPENING SIZE IS 5'-0".
11. MAXIMUM INLET OPENING SIZE IS 20'-0".
12. OUTLET PIPE TO BE PLACED AT LOWEST END OF FLOOR INLET. MANHOLE COVER TO BE PLACED ABOVE OUTLET END OF INLET.
13. MANHOLE FRAME AND COVER SHALL BE CAST IRON, VULCAN V-1874 OR BASS AND HAYES PATTERN 103 OR APPROVED EQUAL.
14. MANHOLE COVERS SHALL HAVE CHAINS ATTACHED TO PREVENT COVERS FROM BEING WASHED AWAY DURING FLOOD CONDITIONS.

02 CURB INLET
SCALE: NONE

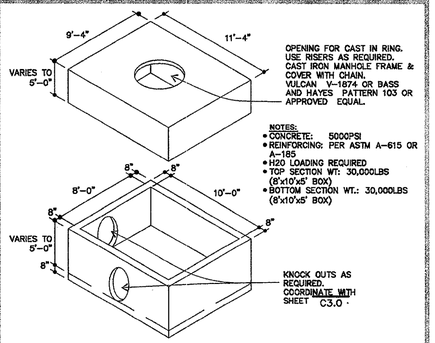


NOTES

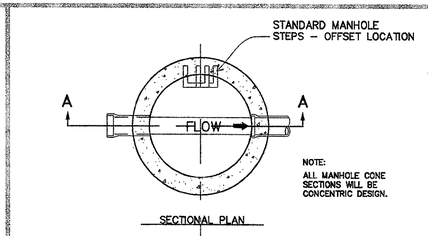
A. CLEAN OUT LOCATIONS INDICATED ON GRADING & UTILITY PLANS AS "CO"
B. IF CLEANOUT IS LOCATED IN ASPHALT OR LANDSCAPE, ENSURE 6 INCHES MINIMUM OF CONCRETE ON ALL SIDES AND BOTTOM.
C. PROVIDE CLEANOUTS AS SPECIFIED BELOW:
- -ZURN Z-1400 CLEAN OUTS IN NON-TRAFFIC AREAS & SIDEWALKS
- -ZURN Z-1449 CLEAN OUTS IN LANDSCAPED AREAS
- -ZURN Z-1400 HD CLEAN OUTS IN TRAFFIC AREAS WITH A "SERVICE STATION" TYPE MANHOLE, OPW #104 A12 - DOVER CORP./OPW DIV.

1

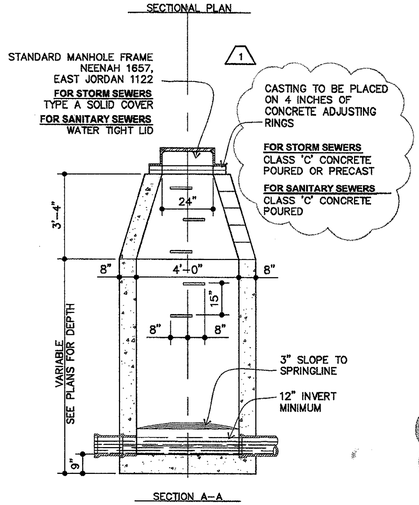
03 TWO-WAY CLEANOUT
SCALE: NONE



06 PRECAST JUNCTION BOX
SCALE: NONE

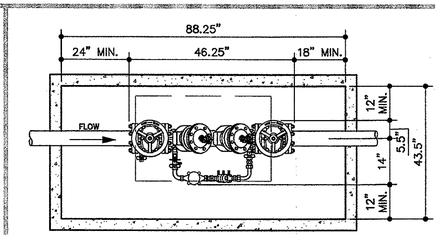


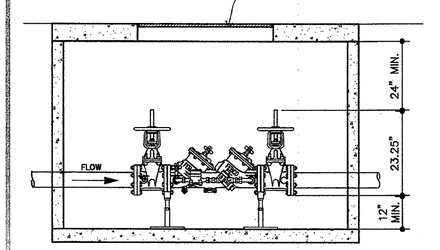
SECTIONAL PLAN



SECTION A-A

07 SANITARY SEWER MANHOLE
SCALE: NONE





NOTES

A. BACKFLOW PREVENTOR TO BE A DOUBLE CHECK WITH DETECTOR ASSEMBLY. FEBCO MODEL 856 IN-LINE SHOWN. MUST MEET ADDISON SPECS.
B. CONCRETE VAULT MUST HAVE THE MINIMUM CLEARANCES SPECIFIED. INCREASE BOX SIZE BASED UPON MODEL OF BFP CHOSEN.
C. VAULT TOP AND ACCESS HATCH MUST BE H20 TRAFFIC RATED. VAULT AND COVER WILL BE ORDERED FROM THE SAME MANUFACTURER AS A PACKAGE. EXCEPTABLE MODEL IS THE BROOKS MV-466-800-VAR
CONCRETE TO BE 4500 PSI
REINF. TO BE #4 @ 8"O.C.E.W (GRADE 60)
2
D. ACCESS HATCH MUST BE SIZED AND POSITION FOR EASY REMOVAL OF THE BFP IN ONE ASSEMBLY.
E. BFP AND VAULT WILL MEET TOWN OF ADDISON SPECIFICATIONS. CONSULT THE SUPPLEMENTAL SPECIFICATION BOOK FOR A COPY OF THE TOWN'S REQUIREMENTS. IN THE EVENT ADDISON REQUIREMENTS ARE MORE STRINGENT, THE TOWN'S REQUIREMENTS SUPERCEDE THIS DETAIL AND NOTES.

1

08 BACKFLOW PREVENTER
SCALE: NONE

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STATE OF TEXAS
SCOTT LEWIS GRAVES
88150
LICENSED PROFESSIONAL ENGINEER
1/24/03

REVISIONS
1 12/19/02 (City)
2 01/24/03 (City)

PROTOTYPE

STORE NUMBER

WD PROJECT NUMBER
0000.659-00

C4.1 UTILITY DETAILS

Civil Resubmittal 01/10/03

Last Plotted: P:\Two_Rows\Dallas_Tollway_TX\0659_Addison_DallasNorthTollway\Civil\659DOC_C41_utilitydetail.dwg 01/29/03 12:49
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