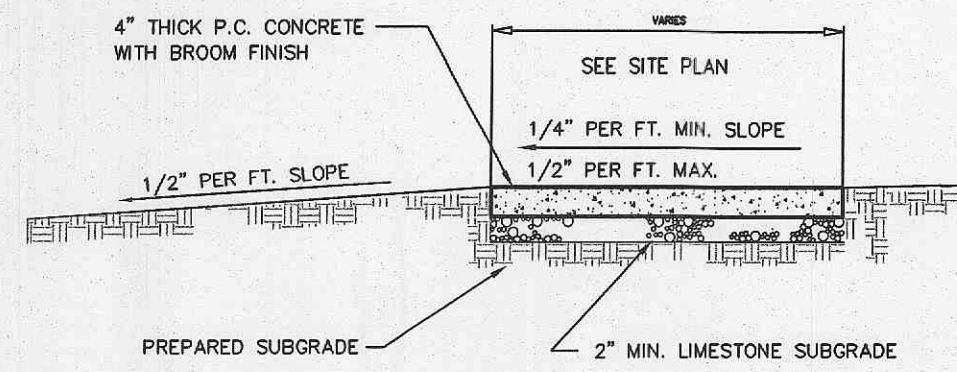
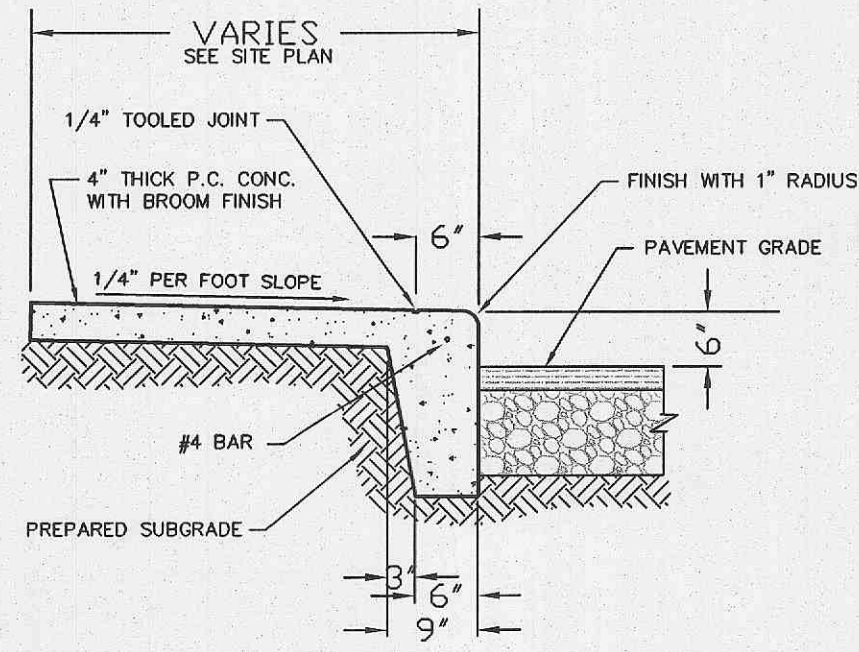


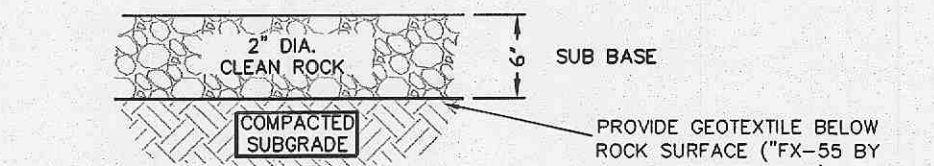
CONCRETE VERTICAL CURB
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE

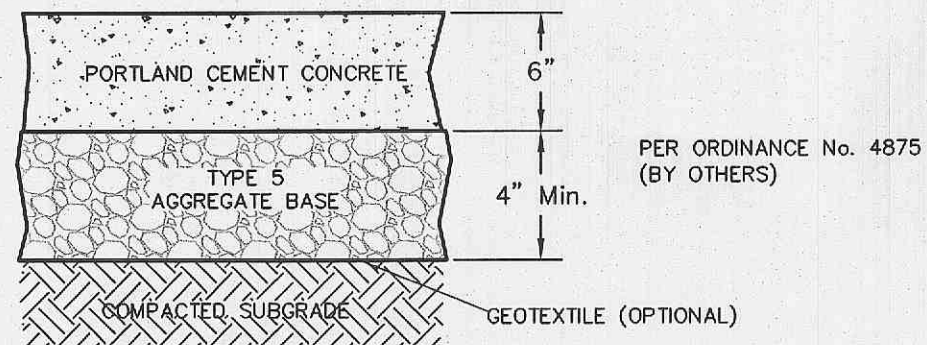


COMBINATION SIDEWALK/CURB
NOT TO SCALE



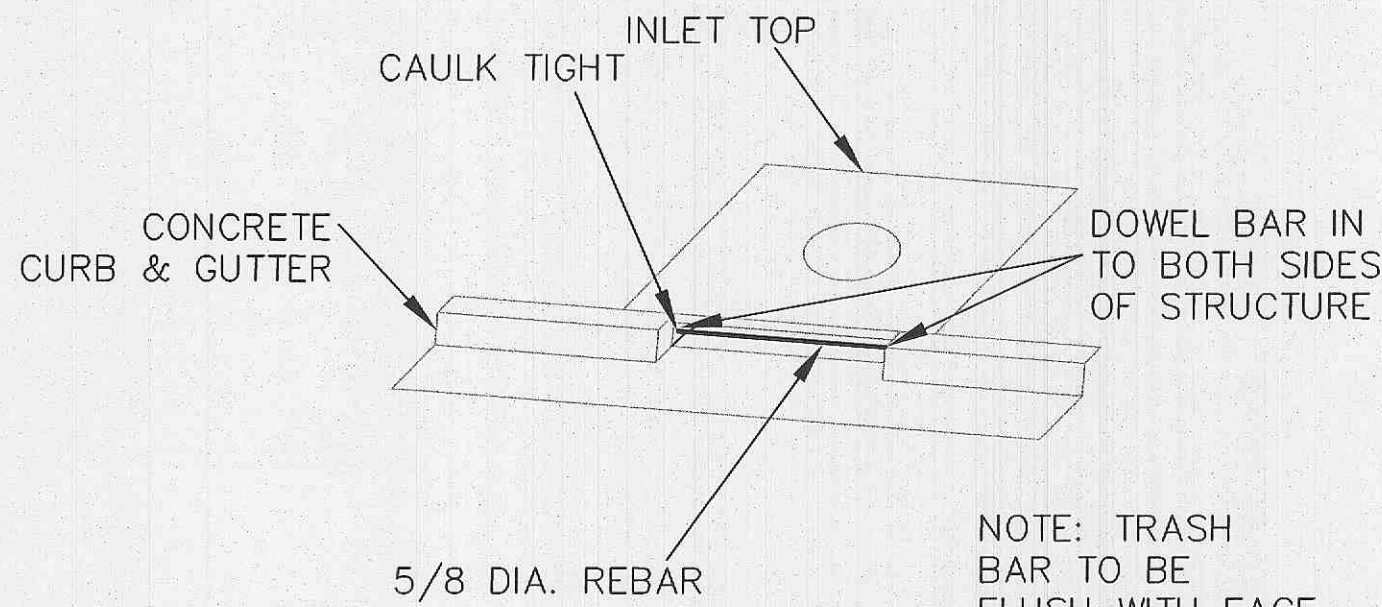
- CONTRACTOR TO PROVIDE TEMPORARY 25'x50' GRAVEL WASH-DOWN PAD.
- PAD TO BE 6 INCH DEEP OF 2 INCH DIAMETER CLEAN ROCK.
- WHEN PARKING LOT IS READY FOR CONSTRUCTION, MUD AND SILT TO BE REMOVED AND ADDITIONAL ROCK TO BE ADDED TO ACHIEVE REQUIRED GRADE AND COMPACTION FOR PAVING.
- ALL TRUCKS TO BE WASHED DOWN PRIOR TO LEAVING THE SITE.
- ADD MOUNTABLE BERM TO STREET SIDE OF PAD TO PREVENT SILT FROM FLOWING INTO STREET.

TYPICAL WASHDOWN PAD DETAIL
NOT TO SCALE



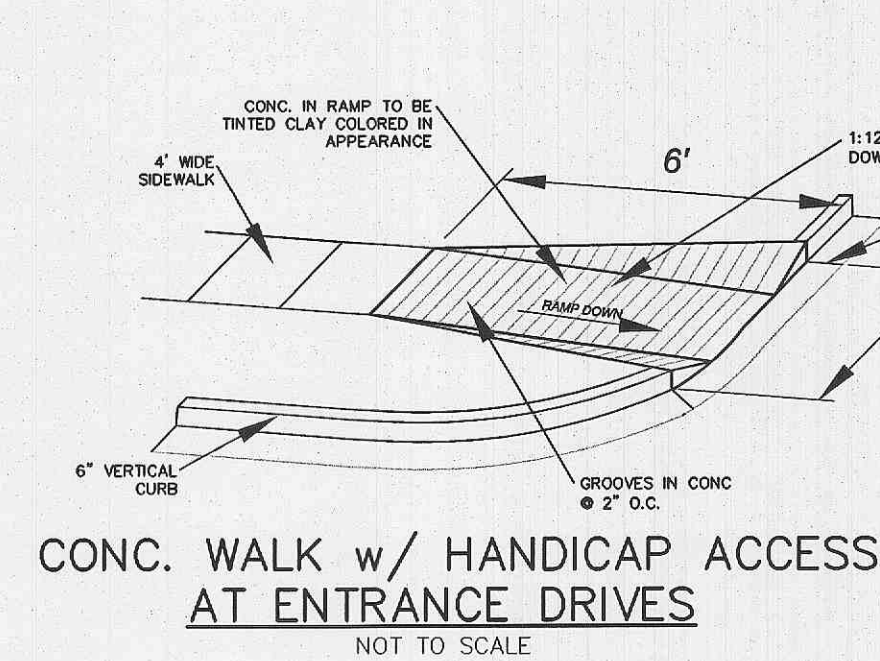
- PER ORDINANCE No. 4875 (BY OTHERS)
- AGGREGATE MATERIALS SHALL COMPLY WITH ASTM D 2321.
 - CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
 - GEOTEXTILE TO BE MIRAFI 600X WOVEN POLYPROPYLENE GEOTEXTILE AS MANUFACTURED BY NICOLSON MIRAFI, NARGROSS, GA OR EQUAL, APPROVED BY ENGINEER.
 - IN RIGHT-OF-WAY: 15' MAX. JOINT SPACING AND LONGITUDINAL TIE BARS @ 30" O.C. SPACING ON A PREPARED SUBGRADE WITH A MIN. COMPACTION OF 90% MODIFIED PROCTOR. COMPACTION CURVES TO BE USED IN SUBGRADE TESTING WILL BE SUPPLIED TO THE CITY ENGINEERING DEPT. BY DEVELOPER. CRACK SEALANT SHALL BE IN ACCORDANCE WITH ASTM 1190 OR AN APPROVED EQUAL.
 - IN RIGHT-OF-WAY: FINES NOT TO EXCEED 0-25% PASSING #30 SIEVE AND 0-8% PASSING #200 SIEVE, UNLESS OTHERWISE AUTHORIZED BY THE CITY.

CONCRETE PAVEMENT
(NOT TO SCALE)

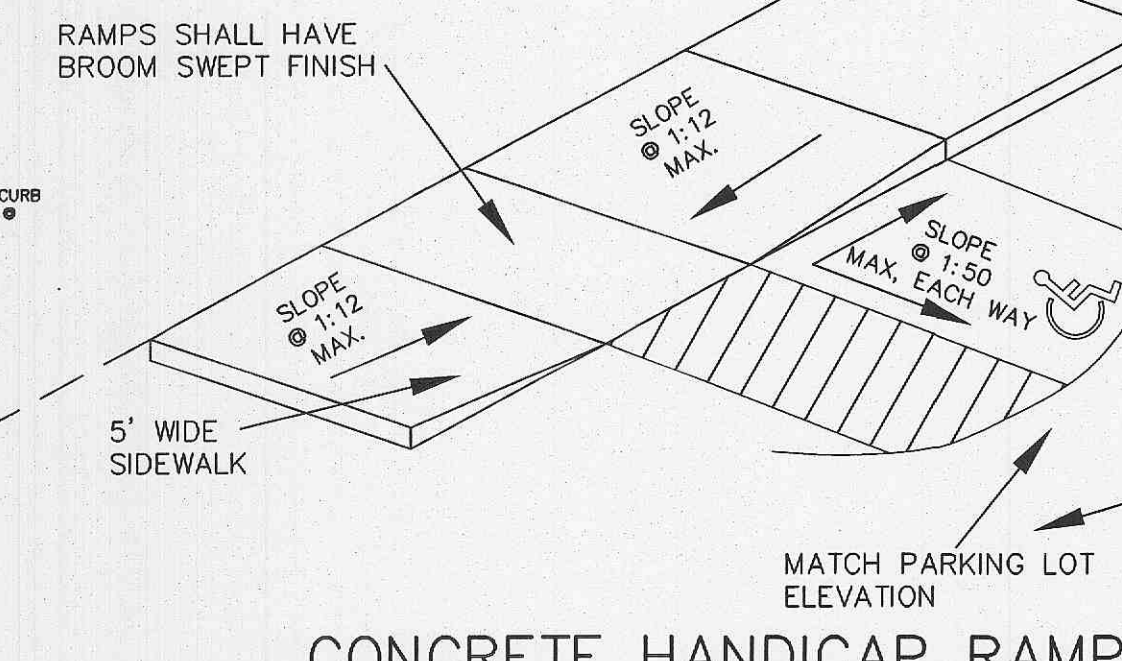


NOTE: TRASH BAR TO BE FLUSH WITH FACE OF INLET TOP

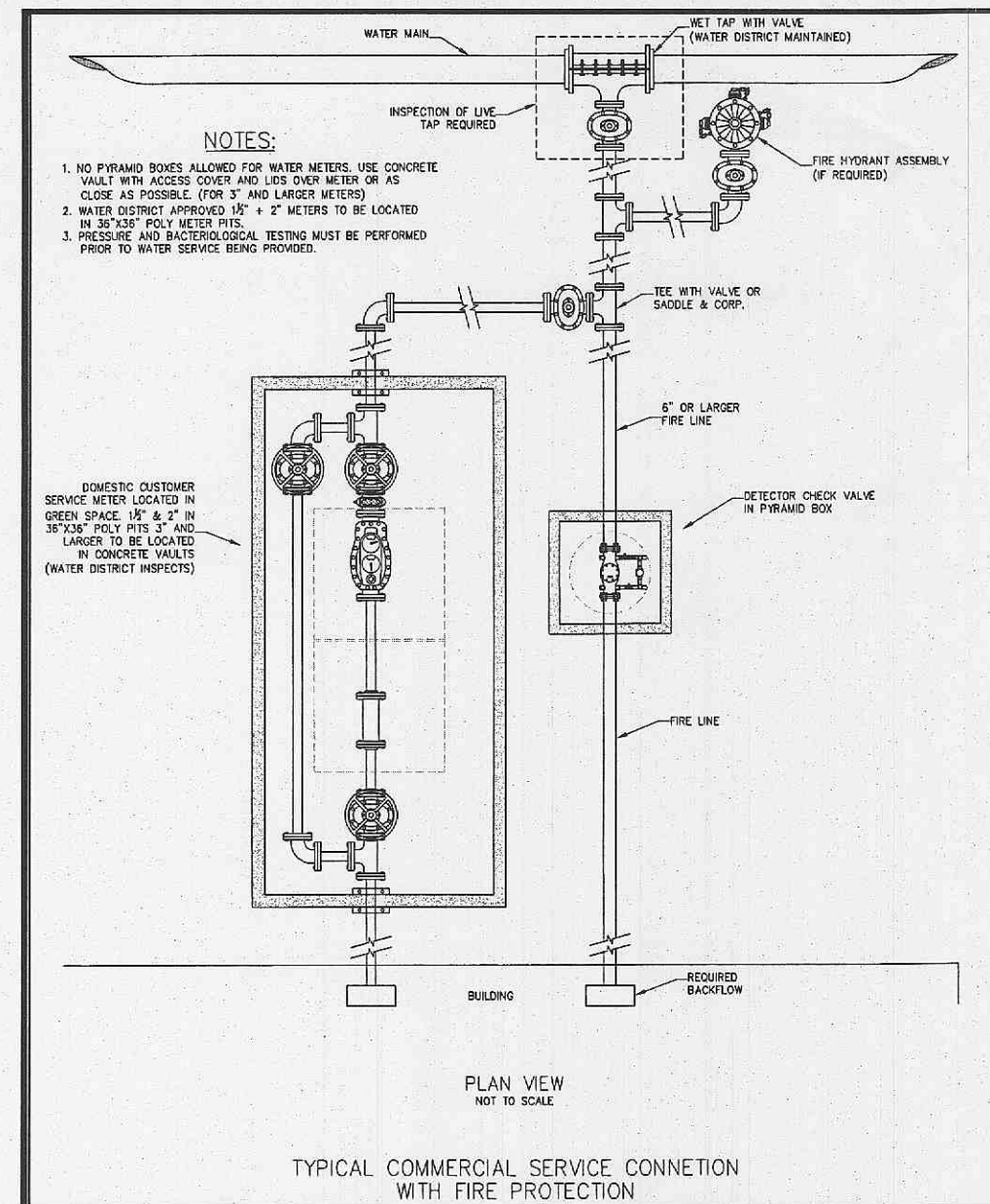
TRASH BAR FOR CURB INLET DETAIL
NOT TO SCALE



CONC. WALK w/ HANDICAP ACCESS AT ENTRANCE DRIVES
NOT TO SCALE

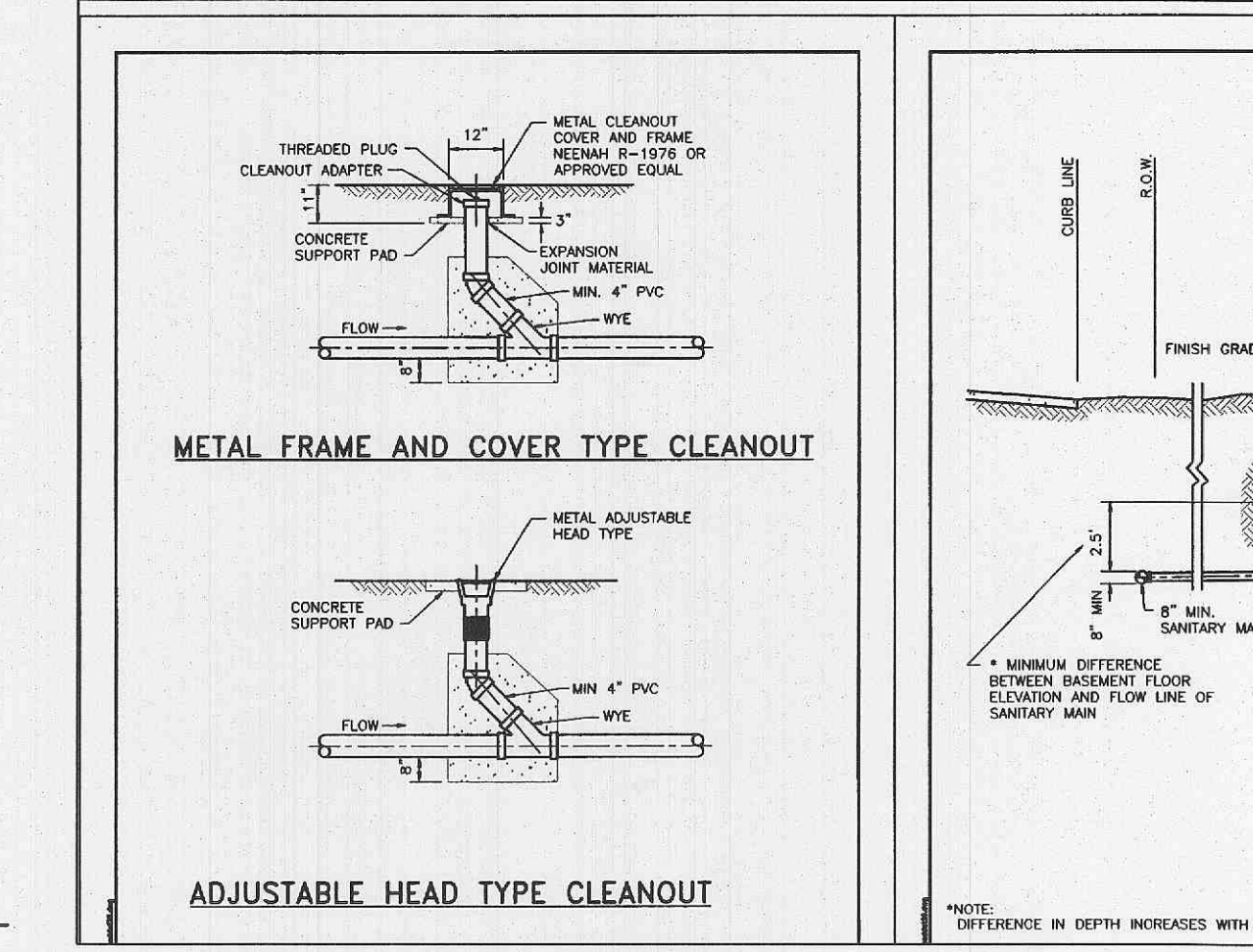
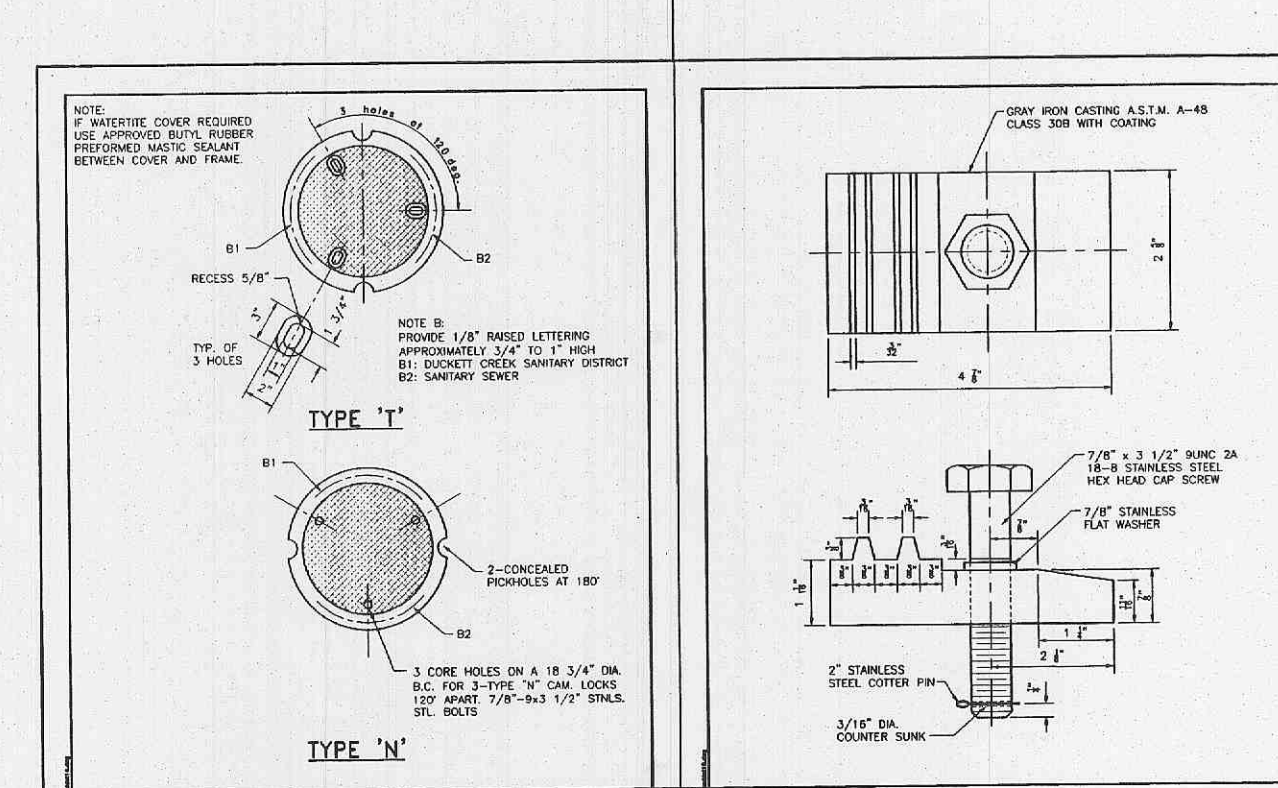
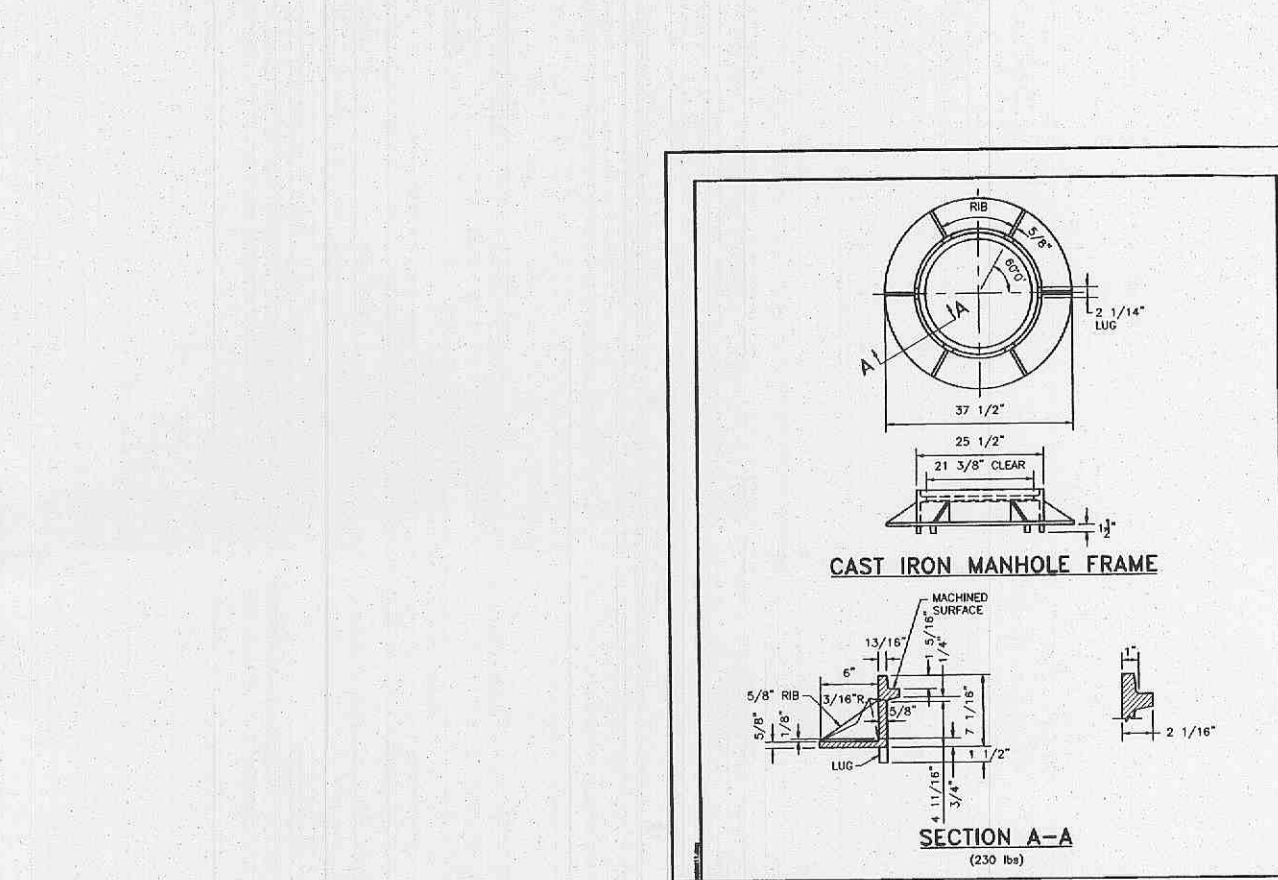
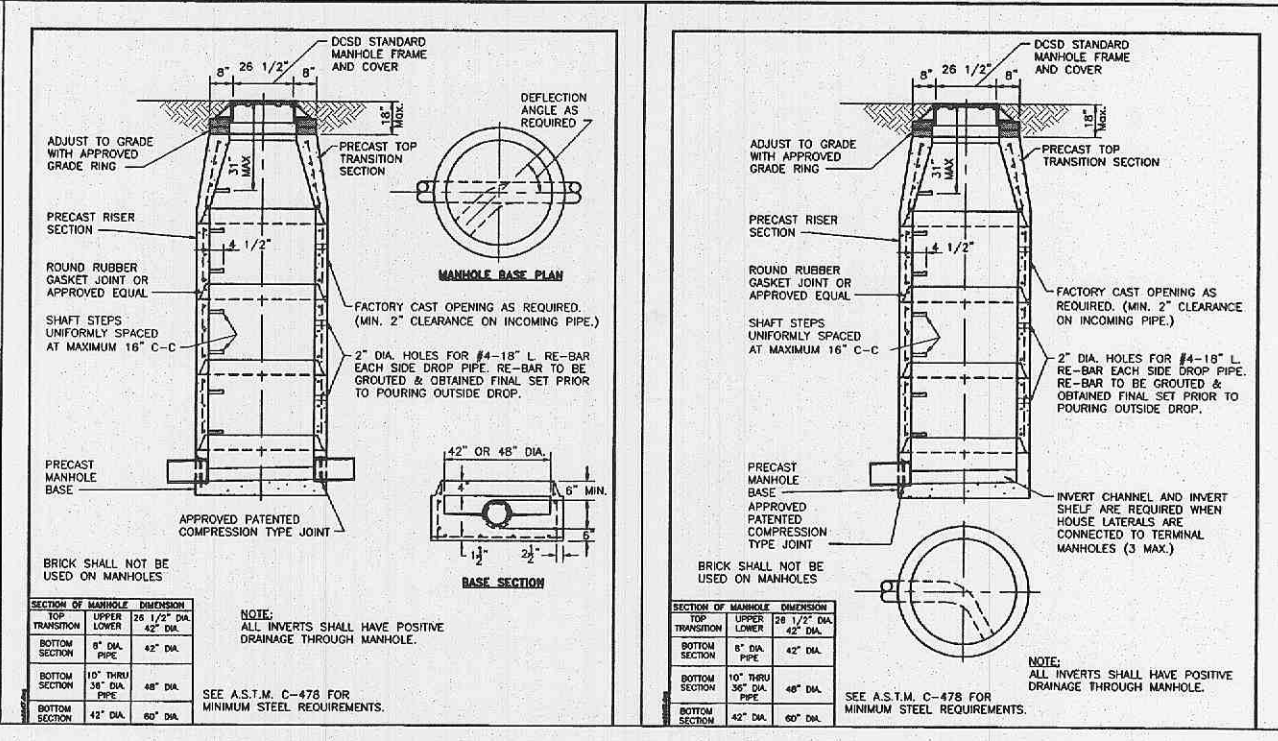
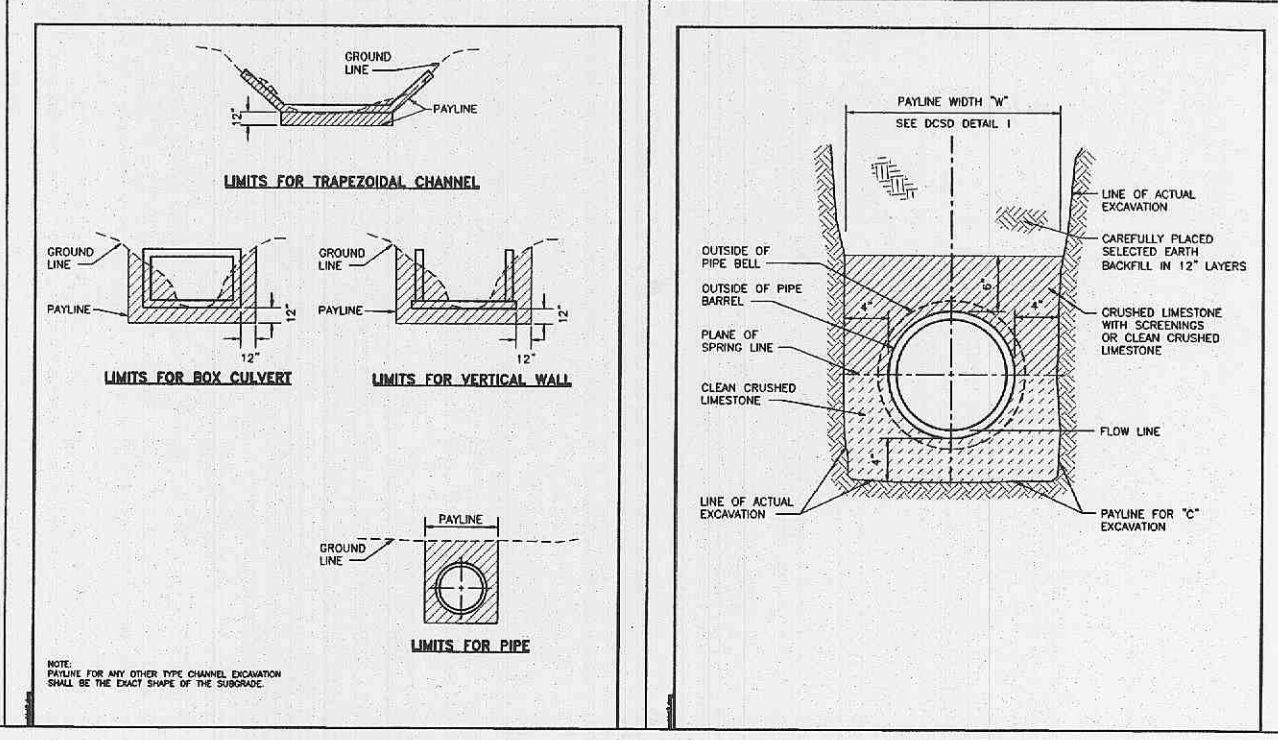


CONCRETE HANDICAP RAMP
NOT TO SCALE



DOMESTIC WATER SERVICE & FIRE PROTECTION CONNECTION DETAIL
NOT TO SCALE

ROUND PIPE	HORIZONTAL ELLIPTICAL PIPE	
	INSIDE DIAMETER (INCHES)	OUTSIDE DIAMETER (INCHES)
12	12.00	12.00
14	14.00	14.00
16	16.00	16.00
18	18.00	18.00
20	20.00	20.00
22	22.00	22.00
24	24.00	24.00
26	26.00	26.00
28	28.00	28.00
30	30.00	30.00
32	32.00	32.00
34	34.00	34.00
36	36.00	36.00
38	38.00	38.00
40	40.00	40.00
42	42.00	42.00
44	44.00	44.00
46	46.00	46.00
48	48.00	48.00
50	50.00	50.00
52	52.00	52.00
54	54.00	54.00
56	56.00	56.00
58	58.00	58.00
60	60.00	60.00
62	62.00	62.00
64	64.00	64.00
66	66.00	66.00
68	68.00	68.00
70	70.00	70.00
72	72.00	72.00
74	74.00	74.00
76	76.00	76.00
78	78.00	78.00
80	80.00	80.00
82	82.00	82.00
84	84.00	84.00
86	86.00	86.00
88	88.00	88.00
90	90.00	90.00
92	92.00	92.00
94	94.00	94.00
96	96.00	96.00
98	98.00	98.00
100	100.00	100.00



- SANITARY SEWER CONSTRUCTION NOTES**
- Underground utilities have been plotted from available information and therefore location shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans, shall be the responsibility of the contractor and shall be located prior to any grading or construction of improvements.
 - Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary and storm sewers, including house laterals.
 - All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match preconstruction conditions.
 - All fill including places under proposed storm and sanitary sewer lines and paved areas including trench backfills within and off the road right-of-way shall be compacted to 90 percent of maximum density as determined by the "Modified AASHTO T-198 Compaction Test (ASTM D1557)". All tests shall be verified by a Soils Engineer concurrent with grading and backfilling operations. The compacted fill shall be free of rutting and shall be non-yielding and non-pumping during proofrolling and compaction.
 - The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
 - All sanitary sewer flowlines and tops built without elevations furnished by the engineer will be the responsibility of the sewer contractor.
 - Excavations shall be provided for all sanitary sewers, storm sewers and all utilities on the record plat.
 - All sanitary sewer construction and materials shall conform to the current construction standards of the Duckett Creek Sanitary District.
 - The Duckett Creek Sanitary District shall be notified at least 48 hours prior to construction for coordination of inspection.
 - All sanitary sewer building connections shall be designed so that the minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding building connection shall not be less than the diameter of the pipe plus the vertical distance of 2-1/2 feet.
 - All sanitary sewer manholes shall be waterproofed on the exterior in accordance with Missouri Dept. of Natural Resources specification 10 CSR-8.120(7)(E).
 - All PVC sanitary sewer pipe shall conform to the requirements of ASTM D-3034 Standard Specification for PSM Polyvinyl Chloride Sewer Pipe, SDR-35 or equal, with "clean" 1/2 inch to 1 inch granular stone bedding uniformly graded. This bedding shall extend from 4 inches below the pipe to springline of pipe. Immediate backfill over pipe shall consist of same size "clean" or "minus" stone from springline of pipe to 6 inches above the top of pipe.
 - All sanitary and storm sewer trench backfills shall be water jetted. Granular backfill will be used under pavement areas.
 - All pipes shall have positive drainage through manholes. Flat invert structures not allowed.
 - All creek crossings shall be grouted rip-rap as directed by District Inspectors. (All grout shall be high slump ready-mix concrete).
 - Brick shall not be used on sanitary sewer manholes.
 - Existing sanitary sewer service shall not be interrupted.
 - Maintain access to existing residential driveways and streets.
 - Pre-manufactured adapters shall be used at all PVC to DIP connections. Rubber boot / Mission-type couplings will not be allowed.
 - Any permits, licenses, easements, or approvals required to work on public or private properties or roadways are the responsibility of the developer.
 - Type 'N' Lock-Type Cover and Locking Device (Lock-Lug) shall be used where lock-type covers are required.

Disclaimer

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Richard G. Wachmann
PE - 2003015059

Revision/Issue	Date	City Comments	City Comments
2	10-23-06		
1	9-14-06		

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CITY/COUNTY JOB NO: P&Z 2204.06, 04/06/06
MSD P-BASEMAP
Original Issue Date: 5-17-06
Drawn By: ZPS PM
RGR FGW
Project No: 04126F
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