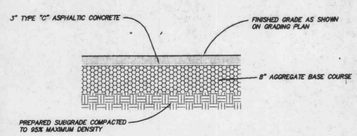
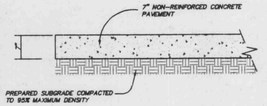
CITY OF O'FALLON GENERAL NOTES

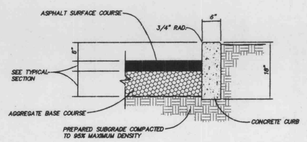
1. Gas, water and other underground utilities shall not conflict with the depth or horizontal locations of existing and proposed sanitary and storm sewers, including house laterals.
2. Underground utilities have been plotted from available information and, therefore, their locations must be considered 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 grading or construction of improvements.
3. Polyvinyl Chloride (PVC) shall conform to the requirements of ASTM D-3034 Standard Specifications for the PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings, SDR-35.
4. Storm sewers 18" in diameter or smaller shall be ASTM C-14.
5. Storm sewers 21" in diameter or larger shall be ASTM C-76, Class II.
6. All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise in the plans.
7. Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.T.O. See plans for gauge.
8. All filled places under buildings, proposed sanitary and storm sewer lines, and/or paved areas including trench backfills shall be compacted to 90% of maximum density as determined by the "Modified A.A.S.H.T.O. T-180 Compaction Test" (ASTM D-1557) unless otherwise specified by the local governing authority specifications. All tests will be verified by a soils engineer.
9. All earthen filled places within State, County, or City roads (Highways) shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test A.A.S.H.T.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a soils engineer.
10. All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.
11. Easements shall be provided for storm sewers, sanitary sewers, and all utilities on the record plat. See record plat for location and size of easements. This does not apply to house laterals.
12. No area shall be cleared without the permission of the developer.
13. All grades shall be within 0.2 feet (more or less) of those shown on the grading plan.
14. No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.
15. Hazard markers will consist of three (3) standard specification, "Manual on Uniform Traffic Control Devices," end of roadway markers mounted on two (2) pound "U" channel sign post. Each marker shall consist of an eighteen (18) inch diamond reflectorized red panel. The bottom of each panel shall be mounted a minimum of four (4) feet above the elevation of the pavement surface.
16. All manhole and curb inlet tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor. At the time of construction stake-out of the sewer lines, all curb and grate inlets will be face staked. If normal face stakes fall in line with sewer construction, the Engineer will set these stakes on a double offset. It shall be the responsibility of the sewer contractor to preserve all face stakes from destruction.
17. All standard street curb inlets to have front of inlet 2 feet behind curb.
18. The minimum vertical distance from the low point of the basement to the flowline of a sanitary sewer at the corresponding house connection shall not be less than the diameter of the sanitary sewer plus a vertical distance not less than two and one-half feet (2-1/2').
19. Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority.
20. All cast iron pipe for water mains shall conform to A.W.W.A. specification C-106 and/or C-108. The cast iron fittings shall conform to A.W.W.A. specification C-110. All rubber gasket joints for water cast iron pressure pipe and fittings shall conform to A.W.W.A specification C-111.
21. All water hydrants and valves shall be cast iron and installed in accordance with plans and details.
22. All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.
23. All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.
24. All PVC sanitary sewer pipe shall be DR-35 or equal with crushed stone bedding uniformly graded between 1" and 1/4" size. This bedding shall extend from 6" below the pipe to 12" above the top of the pipe.
25. All grading on Missouri State Highway Right-of-Way shall be seeded and mulched and all disturbed Right-of-Way markers shall be reest at the completion of grading.
26. All streets must meet the specifications and installation requirements of the City of O'Fallon.
27. All sanitary manholes top shall be set 0.2' higher than the proposed ground except in pavement areas.
28. All sanitary manholes shall have a 31 mil thick coat of coal tar pitch waterproofing.
29. All sanitary service lines shall have a 6" diameter for Multi-family and a 4" diameter for single-family developments.
30. Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenah R-1736 or Deeter 1315 or approved equal.
31. A drop of 0.2 feet is required through each sanitary manhole.
32. The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.
33. Brick shall not be used on manholes.
34. Sewer contractor shall maintain 24" vertical separation between all storm sewers and the sludge force main. Contractor shall be responsible for verifying separation prior to storm sewer installation.
35. Waterproofing: Waterproofing will be required on the exterior of all manholes. The bitumen shall consist of two coats of asphalt, coal-tar pitch, or a coating meeting American Society for Testing and Materials (ASTM) D-41. Asphalt shall conform to the requirements of ASTM D 449. Coal-tar pitch shall conform to the requirements of ASTM D-450. Coating shall be 31 mils thickness.
36. NOTE: The grading and elevations shown on the grading plans are for construction purposes only. Finished grades and slopes will vary from those shown on the plans depending upon the location, size and type of house built on the lot. However, care should be taken to insure that finished grading conforms to drainage area maps.



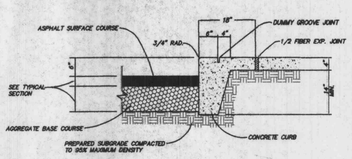
TYPICAL PAVEMENT SECTION



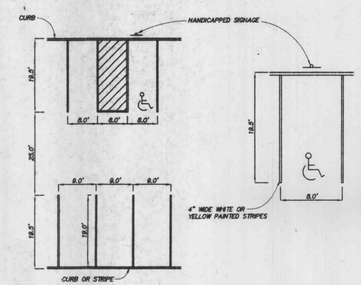
CONCRETE PAVEMENT DETAIL



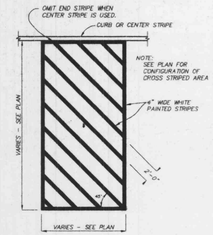
6" VERTICAL CONCRETE CURB



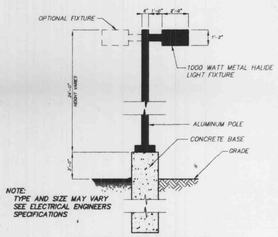
6" CONCRETE CURB WITH SIDEWALK



TYPICAL PARKING DIMENSIONS



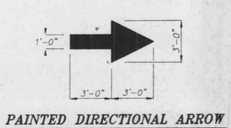
CROSS STRIPING DETAIL
N.T.S.



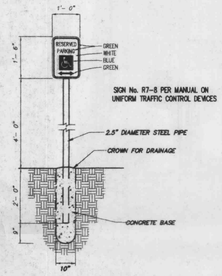
COORDINATE EXACT POLE BASE REQUIREMENTS WITH LIGHTING MANUFACTURER'S REPRESENTATIVE PRIOR TO INSTALLATION.

LIGHT POLE DETAIL

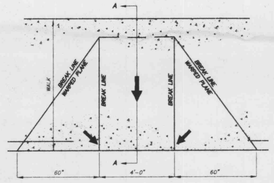
HANDICAPPED PARKING MARKING
N.T.S.



PAINTED DIRECTIONAL ARROW
N.T.S.



HANDICAPPED SIGN DETAIL

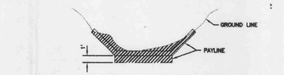


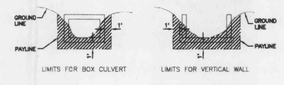
SECTION A-A

STRAIGHT CURB HANDICAPPED RAMP DETAIL

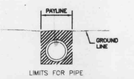
ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
Inside Diameter of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement	Inside Diameter of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)	Pay-volumes cu. ft. per ft. Concrete Encasement
4	28	2.33	3.20				
6	28	2.33	3.46				
8	28	2.33	3.70				
10	28	2.33	3.88				
12	28	2.33	3.95				
15	32	2.67	4.89				
18	35	2.92	5.63	14 X 23	41	3.42	5.94
21	39	3.25	6.81				
24	42	3.50	7.38	19 X 30	49	4.08	7.88
27	45	3.75	8.18	22 X 34	53	4.42	8.81
30	49	4.08	8.30	24 X 38	56	4.83	9.70
33	53	4.42	10.53	27 X 42	62	5.17	10.71
36	56	4.67	11.43	29 X 45	66	5.50	11.72
38	DISCONTINUED			32 X 49	71	5.83	13.14
42	63	5.25	13.38	34 X 53	75	6.25	14.05
48	70	5.83	15.67	38 X 60	83	6.82	16.18
54	77	6.42	18.15	43 X 68	92	7.67	18.81
60	84	7.00	20.73	48 X 76	101	8.43	21.59
66	91	7.58	23.45	53 X 83	109	9.08	24.35
72	98	8.17	26.37	58 X 91	118	9.83	27.45
78	105	8.75	29.39	63 X 98	126	10.50	30.50
84	112	9.33	32.57	68 X 106	135	11.25	33.81
90	119	9.92	35.90	72 X 113	143	11.92	36.99
96	126	10.50	39.37	77 X 121	152	12.67	40.89
102	133	11.08	42.99	82 X 128	160	13.33	44.45
108	140	11.67	46.75	87 X 136	168	14.00	47.79
114	147	12.25	50.66	92 X 143	176	14.67	51.70
120	154	12.83	54.70	97 X 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 X 166	202	16.83	64.48
144	182	15.17	72.40	116 X 180	218	18.17	73.59

TABLE NO. 1
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE

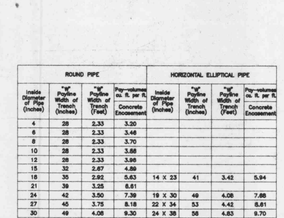




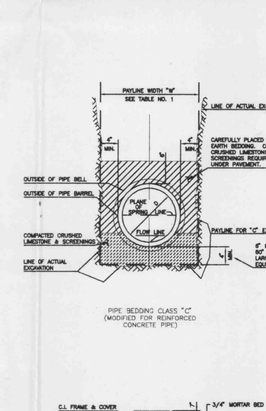
NOTE: PAYLINE FOR ANY OTHER TYPE CHANNEL EXCAVATION SHALL BE THE EXACT SHAPE OF THE SUBGRADE.



PAYLINE LIMITS FOR EXCAVATION



PIPE BEDDING CLASS "C"
(MODIFIED FOR REINFORCED CONCRETE PIPE)

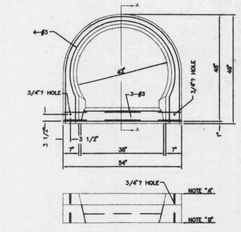


LINE MANHOLE
PIPE SEWERS 8"-24" DIA.

DOBBS
OUTLOT 2 OF DEER CREEK CROSSING
CONSTRUCTION DETAILS & SEWER PROFILES

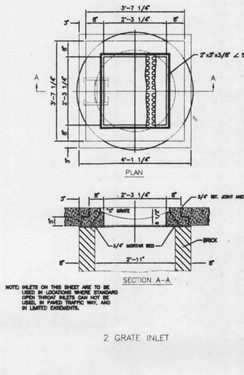
FEBRUARY, 1998 95-080F

2-18-98 REVISED PER GREYSTONE CONSTRUCTION
2-25-98 REVISED PER CITY OF O'FALLON



NOTES:
A. SET STANDARD INLET STONE IN 3/4" MORTAR BED AND DOWEL WITH 3/4"ø 1'-0" LONG PINS AND GROUT.
B. GROUT TO FINAL GRADE WITH 1:3 MORTAR MIX AND 3/4" MORTAR BED.
C. THIS UNIT TO BE USED WITH 42" I.D., POURED IN PLACE CONCRETE OR BRICK BASE.
D. 4000 P.S.I. CONCRETE REQ'D.

PRECAST CONCRETE UNIT FOR SINGLE CURB INLET



NOTE: INLETS ON THIS SHEET ARE TO BE USED IN LOCATIONS WHERE STANDARD INLETS WITH GRATES CAN NOT BE USED, THEREFORE TRAFFIC MAY, AND IN LIMITED EASEMENTS.

2 GRATE INLET