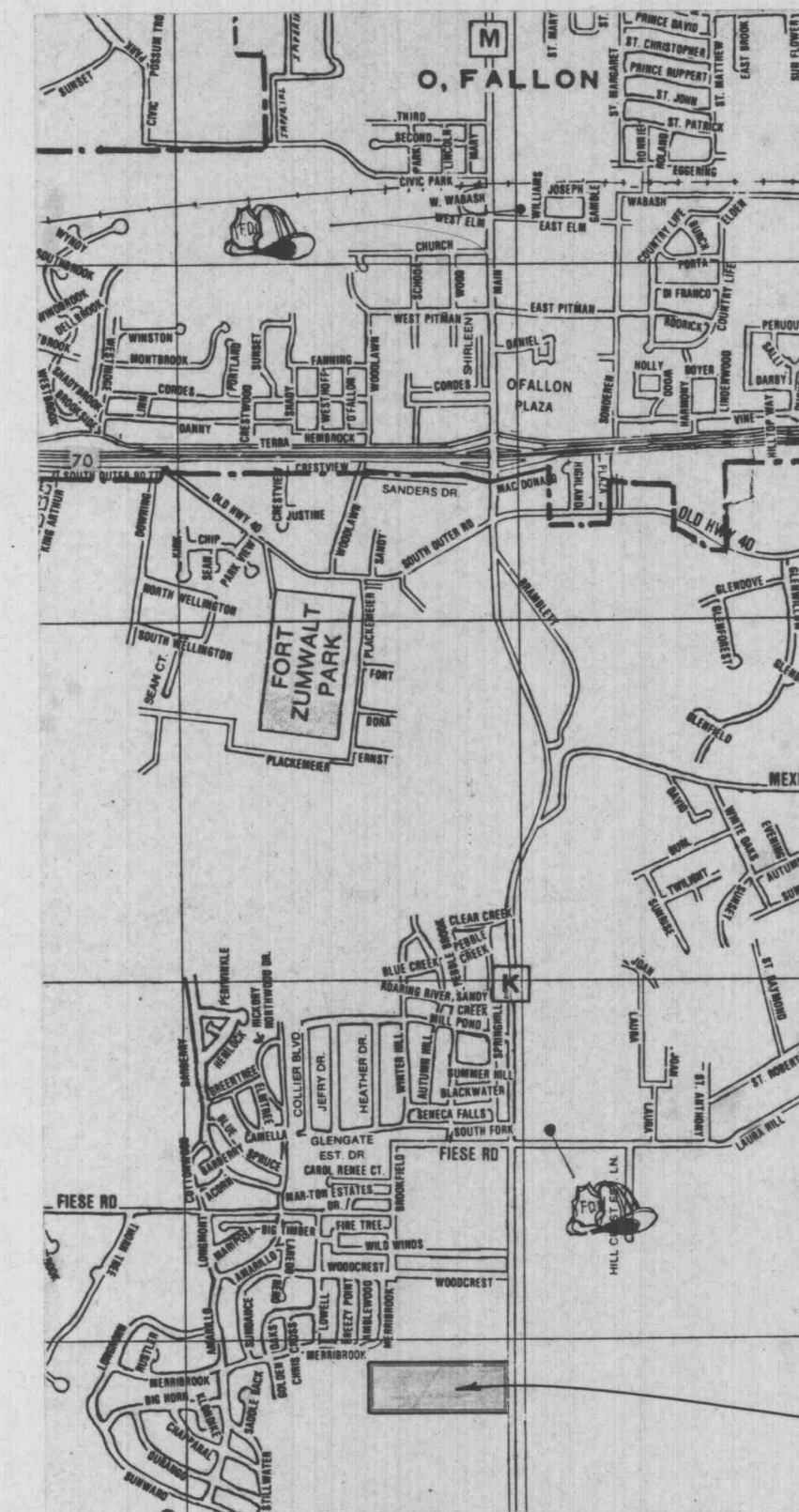


FORT ZUMWALT ELEMENTARY SCHOOL

1. Gas, water and other underground utilities shall not conflict with the depth or horizontal location 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, SDR35.
4. Storm sewers 18" diameter or smaller shall be A.S.T.M. C-14.
5. Storm sewers 21" diameter or larger shall be A.S.T.M. C-76, Class II.
6. All storm sewer pipe under pavement, regardless of size, shall be reinforced concrete pipe (A.S.T.M. C-76, Class II) unless noted otherwise on the plans.
7. Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M36, A.A.S.H.O. See plans for gauge.
8. All filled places under buildings, proposed storm and sanitary sewer lines and/or paved areas including trench backfills shall be compacted to 95% of maximum density as determined by the "Modified A.A.S.H.O. T-180 Compaction Test" (A.S.T.M. D-1557) unless otherwise specified by local governing authority specifications. All tests shall be verified by a Soils Engineer.
9. All filled places in paved State, County or City roads (Highways) shall be compacted to 90% of maximum density as determined by the "Standard Proctor Test A.A.S.H.O. T-99" (A.S.T.M. D-698) unless otherwise specified by local governing authority specifications. All tests shall be verified by a Soils Engineer.
10. All storm and sanitary trench backfills will be water jetted. Granular backfill will be used under pavement 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. All existing and proposed monuments will be shown on the final record plat.
12. No area shall be cleared without permission of the Construction Manager.
13. All grade 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 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 catch basin 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 to 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 7/10 of the pipe dia. above the bottom 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 reset at the completion of grading.
26. All streets within the public right-of-way must meet the Class "A" specifications and installation requirements of St. Charles County, Missouri.
27. This tract is served by
 - A. Central Telephone
 - B. Laclede Gas Company
 - C. St. Char. Co. Public Water Div. #2
 - D. Union Electric
 - E. Duckett Creek Sewers
28. All existing and proposed monuments as required will be shown on the Final Record Plat.
29. All grout for rip-rap shall be high sump ready-mix concrete.
30. On Site Sewer Stake Out to be the Responsibility of Category "K" Contractor. Stake Out of Off-Site Sewers Shall be by Pickett, Ray & Silver.
31. All Sewers To Be Private.

A Tract of Land being part of
Frac. Section 5, Township 46 North, Range 3 East,
St. Charles, County Missouri

SHEET	DESCRIPTION
C-1.	COVER SHEET
C-2.	FLAT PLAN & GRADING PLAN
C-3.	STREET, SANITARY & STORM PROFILES
C-4-7.	DETAIL SHEETS
C-8.	DRAINAGE AREA MAP



PROJECT AREA

LOCATION MAP

PROJECT BENCHMARK

CL - CL Cross Spring Hill Drive and Spring Hill Court USGS Elevation: 595.09
Existing 80D Nail @ S.E. Corner of Wolf Property USGS Elevation: 615.35

LEGEND

C.I.	Curb Inlet
D.C.I.	Double Curb Inlet
A.I.	Area Inlet
G.I.	Grate Inlet
M.H.	Manhole
FE	Flared end section
E.P.	End pipe
C.P.	Concrete pipe
R.C.P.	Reinforced concrete pipe
C.M.P.	Corrugated metal pipe
C.I.P.	Cast iron pipe
P.V.C.	Polyvinyl chloride pipe
V.C.P.	Vitrified clay pipe
CO	Clean out
V.T.	Vent trap
—●—	Storm sewer (proposed)
—○—	Sanitary sewer (proposed)
—550—	Existing contour
—530—	Proposed contour
—S—	Street sign
— —	End of lateral
— —	Lateral
5	Lot or building number
⊙	Test Hole
—x—	Existing fence line
—w—	Existing tree line
— —	Storm sewer (existing)
— —	Sanitary sewer (existing)
— —	Water line
— —	Tee and valve
— —	Cap
— —	Hydrant
— —	Thrust block

the **DMA** corporation
Design & Management Associates

314-946-2060 202 Transit Street St. Charles, Mo. 63301

CIVIL ENGINEERS AND SURVEYORS

Pickett, Ray & Silver INC.

333 MID RIVERS DRIVE 278-1211 ST. PETERS, MO 63376 441-1211

REV	DATE	DESCRIPTION	BY	CHKD

Prepared For:
The DMA Corporation
202 Transit Street
St. Charles, MO 63301
Phone: 946-2060

DRAWN BY mc DATE July 7, 1986
CHECKED BY rvs DATE July 7, 1986

85-176