SANITARY SEWER AND WATER PLANS

HIDDEN MEADOWS

A TRACT OF LAND BEING PART OF THE
WEST HALF OF THE NORTHWEST QUARTER
OF SEC.31, TWP. 47 N., RNG. 3 E.,
ST. CHARLES COUNTY, MISSOURI

"AS-BUILTS"

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. All storm sewer pipe to be dedicated, regardless of size, shall be reinforced concrete pipe (ASTM C-76, Class III) unless noted otherwise in the plans.

5. Corrugated metal pipe shall conform to the standard specifications for corrugated culvert pipe M-36, A.A.S.H.O. See plans for gauge.

6. 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.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.

7. 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.O. T-99" (ASTM D-698) unless otherwise specified by local governing authority specifications. All tests will be verified by a soils engineer.

8. All storm and sanitary trench backfills shall be water jetted. Granular fill will be used under paved areas.

9. 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.

10. No area shall be cleared without the permission of the developer.

11. All grades shall be within 0.2 feet (more or less) of those shown on the grading plan.

12. No slope shall be greater than 3:1 and shall be either sodded or seeded and mulched.

13. 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.

14. 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.

15. All standard street curb inlets to have front of inlet 2 feet behind curb.

16. 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').

17. Water lines, valves, sleeves, meters and etc., shall meet all specifications and installation requirements of the local governing authority.

18. 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.

19. All water hydrants and valves shall be cast iron and installed in accordance with plans and details.

20. All sanitary and storm sewers shall meet all specifications and installation requirements of the local governing authority.

21. All PVC water pipe shall have a minimum pressure rating of PR-200 or SDR-21.

22. 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.

23. 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.

24. All streets must meet the specifications and installation requirements of the City of O'Fallon.

25. All sanitary manholes top shall be set 0.2' higher than the proposed ground except in pavement areas.

27. All sanitary service lines shall have a 6" diameter for Multi-family and a 4" diameter for single-family developments.

28. Manhole frame and cover shall be Clay and Bailey No. 2008 or Neenah R-1736 or Deeter 1315 or approved equal.

29. A drop of 0.2 feet is required through each sanitary manhole.

30. The City of O'Fallon shall be notified at least 48 hours prior to construction of sanitary sewers for coordination and inspection.

31. Brick shall not be used on manholes.

32. 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.

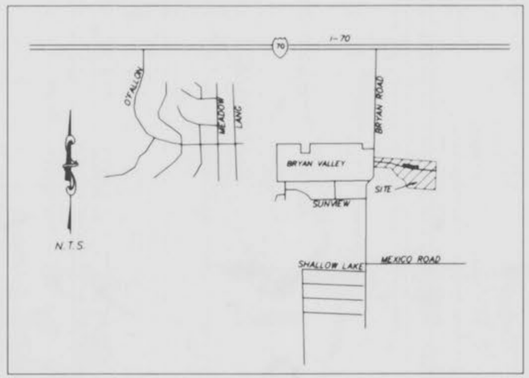
33. Waterproofing: Waterproofing will be required on the exterior of all manholes. The bitumen shall consist of two coats of asphalt, coal-tar pitch, or a coating meeting American Society for Testing and Materials (ASTM) D-41. Asphalt shall conform to the requirements of ASTM D 449. Coal-tar pitch shall conform to the requirements of ASTM D-450. Coating shall be 31 mils thickness.

34. Site served by:
    City of O'Fallon Sewer District
    Union Electric Company
    St. Charles Gas Company
    St. Charles County Water District #2
    GTE Telephone Company
    Fort Zumwalt School District
    O'Fallon Fire Protection District

35. Blow-off hydrants and water meters shall not be located in sidewalks or driveways.

36. As needed, silt fences shall be installed as a protective barrier for trees to remain.

LOCATION MAP



DRAWING INDEX

Sheet	Description
1	COVER SHEET
2	PLAN AND PROFILES
~~3-5~~	~~CONSTRUCTION DETAILS~~

LEGEND

Sanitary Sewer (Proposed)		Sanitary Structure		R.C.P.	Reinforced Concrete Pipe
Sanitary Sewer (Existing)		Storm Structure		C.M.P.	Corrugated Metal Pipe
Storm Sewer (Proposed)		Test Hole		C.I.P.	Cast Iron Pipe
Storm Sewer (Existing)		Power Pole		P.V.C.	Polyvinyl Chloride
8"W Water Line & Size		Light Standard		V.C.P.	Vitrified Clay Pipe
EX W Existing water line		Double Water Meter Setting			
WV Tee & Valve		Single Water Meter Setting		C.O.	Clean Out
Hydrant	C.I.	Curb Inlet		V.T.	Vent Trap
Cap	S.C.I.	Skewed Curb Inlet		T.B.R.	To Be Removed
18 Lot or Building Number	D.C.I	Double Curb Inlet		T.B.R.&R	To Be Removed & Relocated
Existing Fence Line	G.I.	Grate Inlet		T.B.P.	To Be Protected
Existing Tree Line	A.I.	Area Inlet		T.B.A.	To Be Abandoned
Street Sign	D.A.I.	Double Area Inlet		B.C.	Base Of Curb
Existing Contour	C.C.	Concrete Collar		T.C.	Top Of Curb
Proposed Contour	F.E.	Flared End Section		T.W.	Top Of Wall
Grouted Rip-Rap	E.P.	End Pipe		B.W.	Base Of Wall
End of Lateral	E.D.	Energy Dissipator		(TYP)	Typical
Asphalt Pavement	M.H.	Manhole		U.N.O.	Unless Noted Otherwise
Concrete Pavement	C.P.	Concrete Pipe		U.I.P.	Use in Place

SITE BENCHMARK

T.B.M.
[3] 16 PENNY NAILS IN POWER POLE
SOUTH SIDE OF CUL-DE-SAC- ON
PEDROTTI LANE.
ELEV. 575.41

REVISIONS

1-22-96 1. Revised Sht. 2 per City of O'Fallon
8-5-96 2. Revised Sht. 2 Inside Drop MH's

This is to certify to City of O'Fallon, that these "As-Built" Sanitary plans are based on actual field surveys conducted during May, 1996 and the results are shown here on.

by Pickett Ray & Silver

Delmar R. Vincent
MO R.L.S. No 1869

6-12-96
Date

ENGINEERS AUTHENTICATION

The responsibility for professional engineering liability on this project is hereby limited to the set of plans authenticated by the seal, signature and date hereunder attached. Responsibility is disclaimed for all other engineering plans involved in the project and specifically excludes revisions after this date unless reauthenticated.

PICKETT, RAY & SILVER, INC.

STATE OF MISSOURI
HAROLD J. BARTCH
NUMBER E-17751
REGISTERED PROFESSIONAL ENGINEER

1/21/96
Signature Date

DEVELOPER

SANITARY SEWERS
HIDDEN MEADOWS HOMEOWNERS
C/O BILL YATES, #9 PEDROTTI LANE
O'FALLON, MO. 63366
978-4406

WATER LINE
GLEN EAGLE ASSOCIATES
13100 MANCHESTER ROAD SUITE G-55
ST. LOUIS, MISSOURI 63131
965-8000

6-12-96 **"AS-BUILTS"**

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DRAWN	GM	DATE	12-27-95
CHECKED	JC	DATE	12-27-95
FIELD BOOK	598	PROJECT #	95-175
		JOB ORDER #	34069

1/2

PICKETT RAY & SILVER

Civil Engineers
Planners
Land Surveyors

333 Mid Rivers Mall Dr.
St. Peters, MO 63376

397-1211 FAX 397-1104

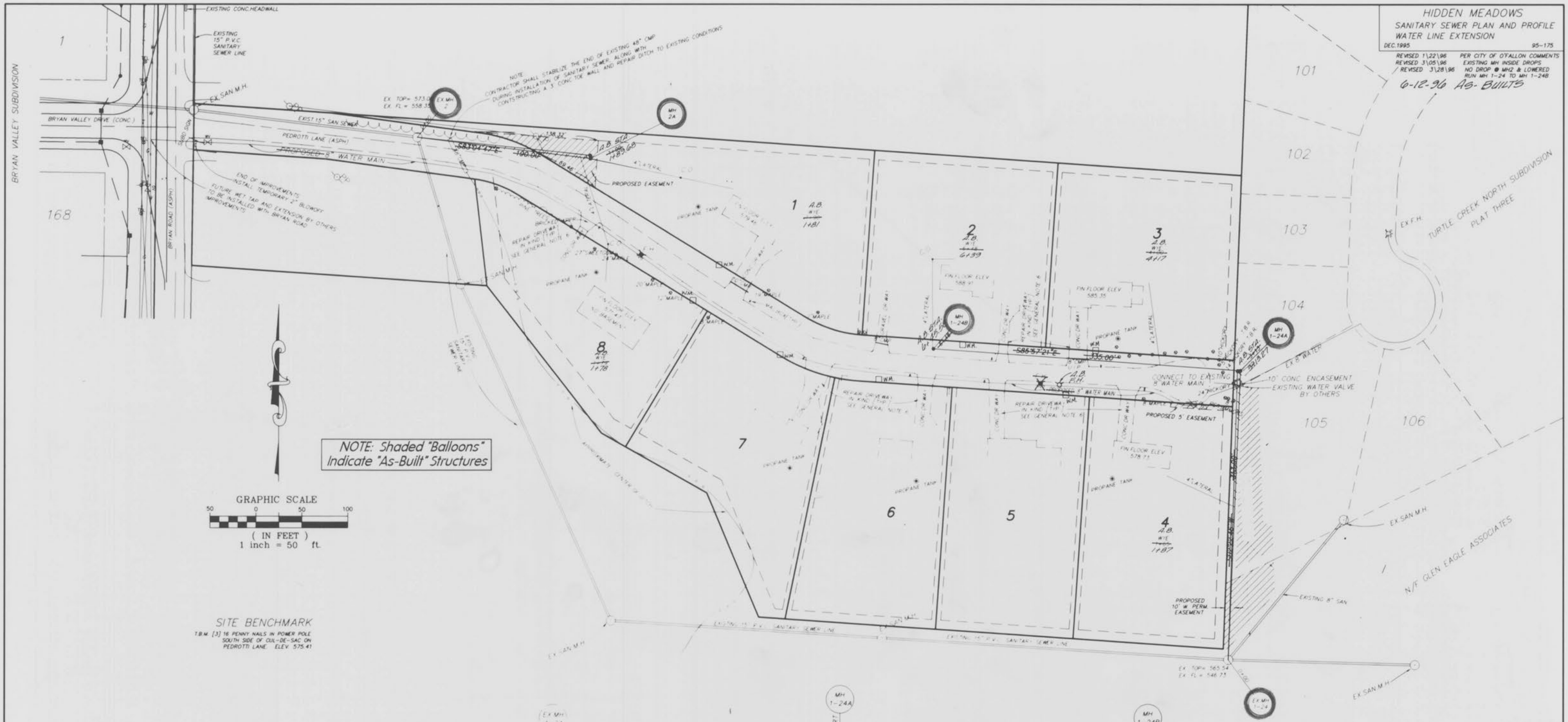
Hidden Meadows As-Builts (Water + Sewer) 1/2
CK 7/1/96

HIDDEN MEADOWS
SANITARY SEWER PLAN AND PROFILE
WATER LINE EXTENSION

DEC.1995 — 95-175

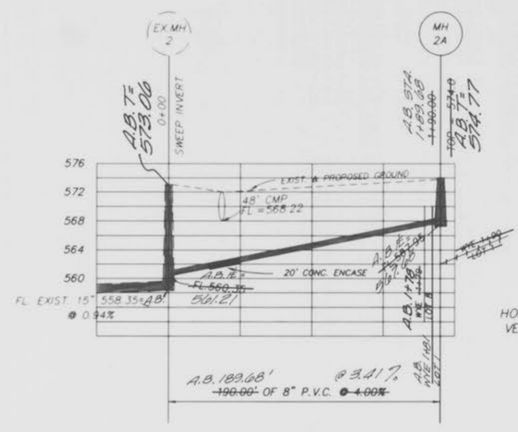
REVISED 1\22\96 — PER CITY OF O'FALLON COMMENTS
REVISED 3\05\96 — EXISTING MH INSIDE DROPS
REVISED 3\28\96 — NO DROP @ MH2 & LOWERED RUN MH 1-24 TO MH 1-24B

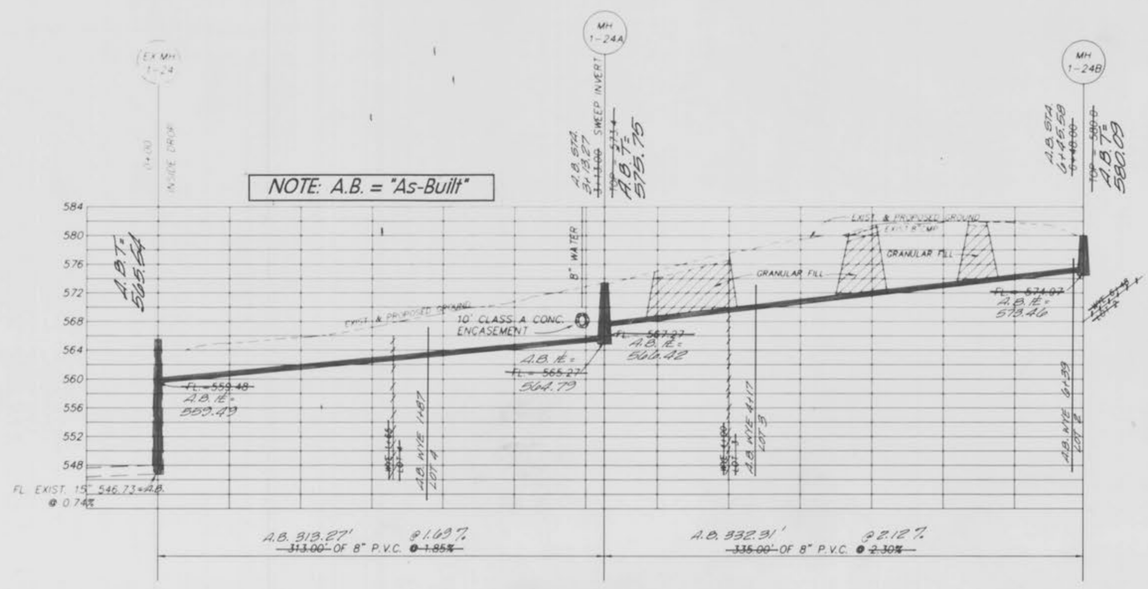
6-12-96 AS-BUILTS



SITE BENCHMARK

T.B.M. [3] 16 PENNY NAILS IN POWER POLE SOUTH SIDE OF CUL-DE-SAC ON PEDROTTI LANE. ELEV. 575.41





SCALE
HORIZ: 1" = 50'
VERT: 1" = 10'

GENERAL NOTES:

1. LATERALS ARE SUBJECT TO RELOCATION DUE TO SEPTIC TANK AND FIELD LOCATIONS
2. ALL DISTURBED AREAS TO BE RESTORED BY CONTRACTOR WITH LIKE MATERIAL
3. WATER MAIN TO BE INSTALLED 4 FEET FROM EDGE OF PAVEMENT, WITH A MINIMUM OF 42" COVER TO TOP OF PIPE
4. EXHIBITS FOR ALL NECESSARY EASEMENTS SHALL BE PROVIDED CORRESPONDING TO EASEMENTS SHOWN ABOVE
5. ALL LANDOWNERS SHALL BE NOTIFIED PRIOR TO CONSTRUCTION
6. ALL DRIVEWAYS SHALL BE REPLACED FROM EXISTING CONSTRUCTION JOINT TO JOINT, OR TO THE R.O.W. LINE.

NOTE
Underground utilities and structures have been plotted from available information and therefore, their location must be considered approximate only. It is the responsibility of the individual contractors to notify the utility companies before actual construction.

"AS-BUILTS"

2/2

95175

Hidden Meadows As-Builts (Water + Sewer) 2/2