- 2. The grading contractor shall perform a complete grading and compaction operation as shown on the plans, stated in these notes, or reasonably implied there from, all in accordance with the plans and notes as interpreted by the Geotechnical
- 3. The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation
- 4. All areas shall be allowed to drain. All low points shall be provided with temporary ditches.
- 5. A sediment control plan that includes monitored and maintained sediment control basins and/or straw bales should be implemented as soon as possible. No graded area is to be allowed to remain bare without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and silting up existing downstream storm drainage system.
- 6. Debris and foundation material from any existing on-site building or structure which is scheduled to be razed for this development must be disposed of off-site.
- 7. All trash and debris on site, either existing or from construction, must be removed and properly disposed of off-site.
- 8. Soft soil in the bottom and banks of any existing or former pond sites or tributaries or on any sediment basins or traps should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed public right-of-way locations or on any storm sewer locations.
- Site preparation includes the clearance of all stumps, trees, bushes, shrubs, and weeds; the grubbing and removal of roots and other surface obstructions from the site; and the demolition and removal of any man-made structures. The material shall be properly disposed of off-site. Topsoil and grass in the fill areas shall be thoroughly disced prior to the placement of any fill. The Soils Engineer shall approve the discing operation.
- 10. Compaction equipment shall consist of tamping rollers, pneumatic-tired rollers, vibratory roller, or high speed impact type drum rollers acceptable to the Soils Engineer. The roller shall be designed so as to avoid the creation of a layered fill without proper blending of successive fill
- The Soils Engineer shall observe and test the placement of the fill to verify that specifications are met. A series of fill density tests will be determined on each lift of fill. Interim reports showing fill quality will be made to the Owner at regular intervals.
- 12. The Soils Engineer shall notify the Contractor of rejection of a lift of fill or portion thereof. The Contractor shall rework the rejected portion of fill and obtain notification from the Soils Engineer of its acceptance prior to the placement of additional fill.
- 13. All areas to receive fill shall be scarified to a depth of not less than 6 inches and then compacted in accordance with the specifications given below. Natural slopes steeper than 1 vertical to 5 horizontal to receive fill shall have horizontal benches, cut into the slopes before the placement of any fill. The width and height to be determined by the Soils Engineer. The fill shall be loosely placed in horizontal layers not exceeding 8 inches in thickness and compacted in accordance with the specifications given below. The Soils Engineer shall be responsible for determining the acceptability of soils placed. Any unacceptable soils placed shall be removed at the Contractor's expense
- The sequence of operation in the fill areas will be fill. compact, verify acceptable soil density, and repetition of the sequence. The acceptable moisture contents during the filling operation are those at which satisfactory dry densities can be obtained. The acceptable moisture contents during the filling operation in the remaining areas are from 2 to 8 percent above the optimum moisture control.
- 15. The surface of the fill shall be finished so that it will not impound water. If at the end of a days work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth. If the surface has been finished smooth for any reason, it shall be scarified before proceeding with the placement of succeeding lifts. Fill shall not be placed on frozen ground, nor shall filling operations continue when the temperature is such as to permit the layer under placement to freeze.
- 16. Fill and backfill should be compacted to the criteria specified in the following table:

CATEGORY	PERCENT COMPACTION
Fill in building areas below footings Fill under slabs, walks, and pavement Fill other than building areas Natural subgrade Pavement subgrade Pavement base course	90% 90% 88% 88% 90% 90%

MINIMUM

Measured as a percent of the maximum dry density as determined by modified Proctor Test (ASTM-D-1557).

Moisture content must be within 2 percent below or 4 percent above optimum moisture content if fill is deeper than 10 feet.

# A SET OF AS-BUILT PLANS FOR ESTATES AT LEGACY POINTE

PHASE ONE

A TRACT OF LAND BEING PART OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 4 AND THE NORTH HALF OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 46 NORTH, RANGE 3 EAST, OF THE FIFTH PRINCIPAL MERIDIAN, SAINT CHARLES COUNTY, MISSOURI



- 1. Underground utilities have been plotted from available information and therefore their locations 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 the improvements.
- 2. All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor.
- 3. All filled places, including trench backfills, under buildings, proposed storm and sanitary sewer lines and/or paved areas, shall be compacted to 90% maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All filled places within public roadways shall be compacted to 95% of maximum density as determined by the "Standard Proctor Test AASHTO T-99, Method C" (A.S.T.M.-D-698).
- 4. All trench backfills under paved areas shall be granular backfill, and shall be compacted to 90% of the maximum density as determined by the "Modified AASHTO T-180 Compaction Test," (A.S.T.M.-D-1557). All other trench backfills may be earth material (free of large clods or stones). All trench backfills shall be water jetted.
- 5. No area shall be cleared without the permission of the Project
- 6. All soils test shall be verified by a Soils Engineer concurrent with the grading and backfilling operations.
- 7. Easements shall be provided for sanitary sewers, and all utilities on the Record Plat. See Record Plat for location and size of easements.
- 8. Maintenance and upkeep of the common ground area shall be the responsibility of the developer and/or successors.
- 9. A 25' building line shall be established along all Public Rights-Of-Way. 29. All Fire Hydrants and Water Meters shall not be located in driveways
- 10. All water lines shall be laid at least 10 feet horizontally, from any sanitary sewer, storm sewer, or manhole. 18" vertical clearance from outside of pipe to outside of pipe shall be maintained wherever water lines must cross sanitary sewers, laterals, or storm drains the water line shall be laid at such an elevation that the bottom of the water line is above the top of the drain or sewer. A full length of water pipe shall be centered over the sewer line to be crossed so that the joints will be equally distant from the sewer and as remote therefrom as possible. This vertical separation shall be maintained for that portion of the water line located within 10 feet horizontally, of any sewer or drain it crosses.
- 11. All PVC water pipe shall conform to A.S.T.M.-D-2241, SDR 21 Standard Specification for P.V.C. Pressure Pipe, 200 P.S.I. working pressure for water, with approved joint.
- 12. Water lines, valves, sleeves, meters, and fittings shall meet all specifications and installation requirements of Public Water Supply District No. 2 of St. Charles County.
- 13. All water hydronts and valves shall be ductile iron and installed in accordance with plans and details. All ductile iron pipe for water mains shall conform to A.W.W.A. Specifications C-106 and/or C-108. The ductile iron fittings shall conform to A.W.W.A. Specification CC-110. All rubber gasket joints for water ductile iron pressure pipe and fittings shall conform to A.W.W.A. Specification C-111.
- 14. All pipes shall have positive drainage through manholes. No flat base structures are allowed.
- 15. The City of O'Fallon shall be notified 48 hours prior to construction for coordination and inspection.
- 16. Gas, water and other underground utilities shall not conflict with the depth or horizontal location of existing or proposed sanitary or storm sewers, including house laterals.

## GENERAL NOTES (CONTINUED)

- 17. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match pre-construction conditions.
- 18. All construction and materials shall conform to the current construction standards of the City of O'Fallon.
- 19. All sanitary and storm sewer trench backfills shall be water jetted. Granular backfill will be used under pavement areas
- 20. No flushing hydrants or water meters shall be located in driveways and/or walkways
- 21. Concrete pipe for storm sewers shall be Class III, A.S. T.M. C-76 with a minimum diameter of 12", except in the R.O.W. it shall be 15"
- 22. The ADS N-12 pipe shall have a smooth interior wall
- 23. Concrete pipe joints shall be MSD type "A" approved compression—type joints and shall conform to the requirements of the specifications for joints for circular concrete sewer and culvert pipe, using flexible, watertight, rubber-type gaskets (A.S.T.M.-C-443). Band-type depending entirely on cement for adhesion and resistance to displacement during jointing shall not be used
- 24. When HDPE pipe is used, City of O'Follon specifications or manufacturer's specifications, which ever are more stringent, shall be followed.
- 25. The use of High Density Polyethylene Corrugated pipe, ADS N-12 or equal will be permitted as an acceptable alternative to reinforced concrete pipe, ADS N-12 HC, shall be used for all ADS pipe greater than 36". Pipe shall meet A.S.T.M. D-2321 and A.A.S.H.T.O. M-294-291.
- 26. All flared end sections and injet structures will be concrete.
- 27. All storm sewer pipe installed in the Public Right-of-Way shall be reinforced concrete Class III pipe.
- 28. All concrete pipe or ADS N-12 pipe shall be installed with "O-Ring" Rubber type gaskets per M.S.D. standard construction specifications or 10. All sanitary sewer building connections shall be designed so that the
- and/or sidewalks.
- 30. Any permits, licenses, easements or approvals required to work on public or private properties or roadways are the responsibility of the developer.
- 31 No slopes shall exceed 3 (horizontal) to 1 (vertical).
- 32. Driveway locations shall not interfere with the sidewalk handicap ramps in the cul-de-sacs.
- 33. Additional traffic signage may be added as required by the City traffic

## SITE BENCHMARK

ELEV: 580.09 - "0" in open on top of fire hydrant at S. E. corner of High Trail Drive and Knaust Road. Approximately 205' from N. E. corner of Avondale Heights, Plot One

## DUCKETT CREEK SANITARY DISTRICT CONSTRUCTION NOTES

- 1. 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.
- 2. 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.
- 3. All existing site improvements disturbed, damaged or destroyed shall be repaired or replaced to closely match preconstruction conditions.
- 4. 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-180 Compaction Test (ASTM D 1557)". 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
- 5. The contractor shall prevent all storm, surface water, mud and construction debris from entering the existing sanitary sewer system.
- 6. All sanitary sewer flowlines and tops built without elevations furnished by 24. Landscape Requirements: the engineer will be the responsibility of the sewer contractor.
- 7. Easements shall be provided for all sanitary sewers, storm sewers and all utilities on the record plat.
- 8. All construction and materials shall conform to the current construction standards of the Duckett Creek Sanitary District.
- 9. The Duckett Creek Sanitary District shall be notified at least 48 hours prior to construction for coordination of inspection.
- 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.
- 11. All sanitary sewer manholes shall be waterproofed on the exterior in accordance with Missourl Department of Natural Resources specification 10 CSR-8.120(7)(E).
- 12. 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 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.
- 13. All sanitary and storm sewer trench backfills shall be water jetted Granular backfill will be used under pavement areas.
- 14. All pipes shall have positive drainage through manholes. No flat invert structures are allowed
- 15. All creek crossings shall be grouted rip-rap as directed by District inspectors (All grout shall be high slump ready-mix concrete.)
- 16. Brick shall not be used on sanitary sewer manholes.
- 17. Existing sanitary sewer service shall not be interrupted

Maintain access to existing residential driveways and streets.

- 19. Pre-manufactured adapters shall be used at all PVC to DIP connections.
- Rubber boot/Mission-type couplings will not be allowed. 20. Any permits, licenses, easements or approvals to work on public or
- private properties or roadways are the responsibility of the developer.

21. All sanitary sewer laterals shall be a minimum of 4" in diameter.

Existing Zoning: Single Family Homes Proposed Use: 43 Lots (Phase One) 4. Number of Lots Proposed: The proposed height and lot setbacks are as follows. Minimum Front Yard: 25 feet 6 feet Minimum Side Yard: 25 feet Minimum Rear Yard: Minimum Lot Area:

Legacy Development Group, L.L.C. 6. Current Owner/Developer: 841 Dunbarton Drive

> St. Charles Gas Company St. Charles County Public Water District No. 2 GTE of Missouri Telephone Company Fort Zumwalt School District O'Fallon Fire Protection District

8. The entirety of this tract lies within Zone X, "areas determined to be outside 500-year floodplain", per F.I.R.M. No. 29183C0243E, dated

9. Topographic information is per Walker Associates Topo on U.S.G.S.

Columbia, Missouri, June 1999. 11. All lots shall have one (1) tree (deciduous) planted in front yard for

Streets will consist of 26 foot wide concrete pavement, except Debra Ann Drive, which shall consist of 36 foot wide concrete povement, with integral rolled curb centered in a 50 foot right-of-way. Minimum

All cul-de-sacs and bubbles will have pavement radii of 42 feet with right-of-way radii of 54 feet. Street intersections shall have a minimum rounding radius of 25 feet with pavement radii of 37 feet.

14. Minimum street grades shall be 1%.

15. A 4 foot wide concrete sidewalk shall be constructed on one side

with 2-car garages All utilities must be located underground.

18. The developer realizes that they will comply with current Tree Preservation Ordinance Number 1689 and provide landscaping as set forth in Article 23 of the City of O'Fallon Zoning Ordinances. 19. Existing tree masses shall be identified during the topographic

89, 103, 104, 106, 107, 108, 109, 110, 116, 117, 118, 120, 121, 124, 125 and 126 are susceptible to street creep. 22. The smallest lots, Lots 103 and 116, are 10,000 square feet.

23. The smallest lots will require very close individual lot site plan reviews and inspection during construction to ensure required separation of structures and any required fire separation walls.

2671 LF. x 2 = 5342 LF. 5342 L.F. / 50 L.F. = 107 Trees

diameter and a height of 8'. Trees to be planted on the individual lots shall be planted after home construction and yard finish grading by the homeowner, as required by the covenants and restrictions.

25. Lots 1, 128 and 129 shall not have direct access onto Knaust Road. 26. Lots 129, 4, 8, 9, 12 and 120 shall not have direct access onto Debra

08-02-00 CITY OF D'FALLON COMMENTS: ADD SHEET 12A 09-26-00 REVISE FES 124A TO CF 124 10-06-00 REVISE FES 124A TO CI 124 (RADIUS PIPE); ADD FORCE MAIN SLEEVE 12-06-00 REMOVE TEMP. TURNAROUND

THIS IS TO CERTIFY THAT WE HAVE DURING THE MONTH OF JANUARY, 2001, BY ORDER OF LEGACY DEVELOPMENT GROUP, L.L.C. EXECUTED AN AS-BUILT SURVEY OF EXISITING SANITARY SEWERS, STORM SEWERS, FIRE HYDRANTS AND WATER VALVES WITHIN "ESTATES AT LEGACY POINTE, PHASE ONE", A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 37, PAGE 219 & 220 OF THE ST. CHARLES COUNTY RECORDS. ALL SEWERS SHOWN LIE WITHIN THE EASEMENTS AS SHOWN ON SAID RECORDED SUBDIVISION PLAT UNLESS OTHERWISE NOTED. THE RESULTS OF THIS AS-BUILT SURVEY ARE SHOWN ON THIS PLAT TO THE BEST OF MY KNOWLEDGE AND BELIEF 1-13-01

> BAX ENGINEERING CO., INC. MO. PRO. L.S. #2197

DEVELOPMENT NOTES

10,000 square feet Maximum Height of Building: 2 1/2 stories or 35 feet

Weldon Spring, Missouri 63304

7. Site is served by: Duckett Creek Sewer District AmerenUE

10 Boundary information from survey by Trabue, Hansen and Hinshaw, Inc.,

every fifty (50) of street frontage, as required by City code. 12. All streets will be constructed to City of O'Fallon standards.

radius shall be 150 feet.

of streets where indicated. All homes shall have a minimum of 2 off-street parking places

survey. An overall landscape plan shal be submitted prior to any grading operation. Additional lighting may be required by the City of O'fallon. The following lots are susceptible to street movement: 4, 9, 12,

Length of Centerline of Streets = 2671 L.F.

Note: Proposed trees shall be hardwood varieties with a 2" minimum

ENGINEERING

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GROUP

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DISCLAMER OF RESPONSEBILITY

I horsely opecify that the documents intended to be outhenticated by my seek are limited to the abeet, and I hersely disclaim usy responsibility for all other Drowings, Specifications, Estimates, Reports or other documents or

instruments relating to or intended to be us for any part or parts of the architectural or emphaseing project or survey.

Copyright 2000 Bax Engineering Company, Inc. All Rights Received

REVISIONS

COMMENTS

CHARLES

COUNTY COMMENTS

07-03-00 CITY OF O'FALLON,

7-11-00 ADD SHEET 3A

7-27-00 CITY OF O'FALLON

COMMENTS

06-29-00 DUCKETT CREEK

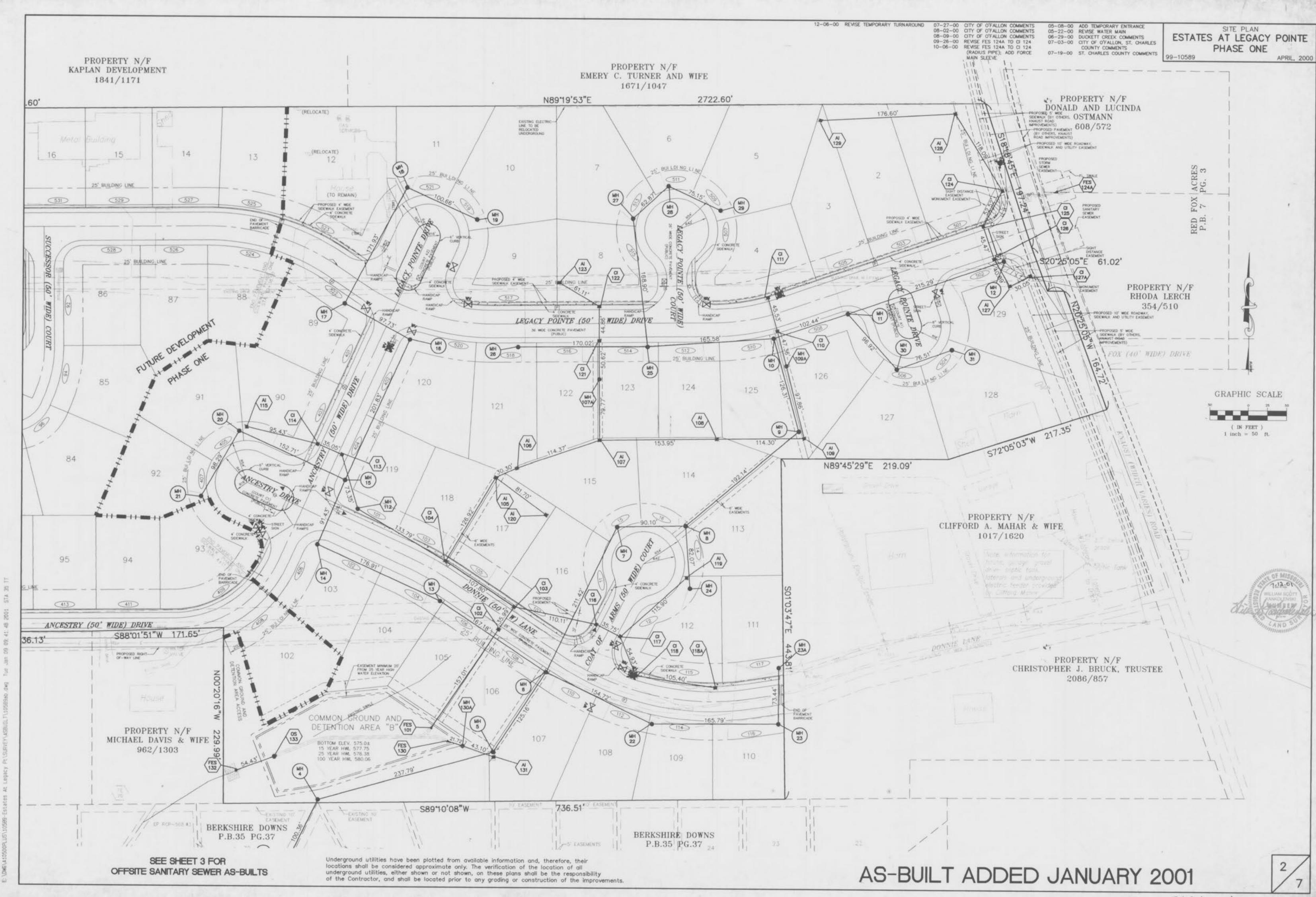
1 PAE

PLANNING SURVEYING

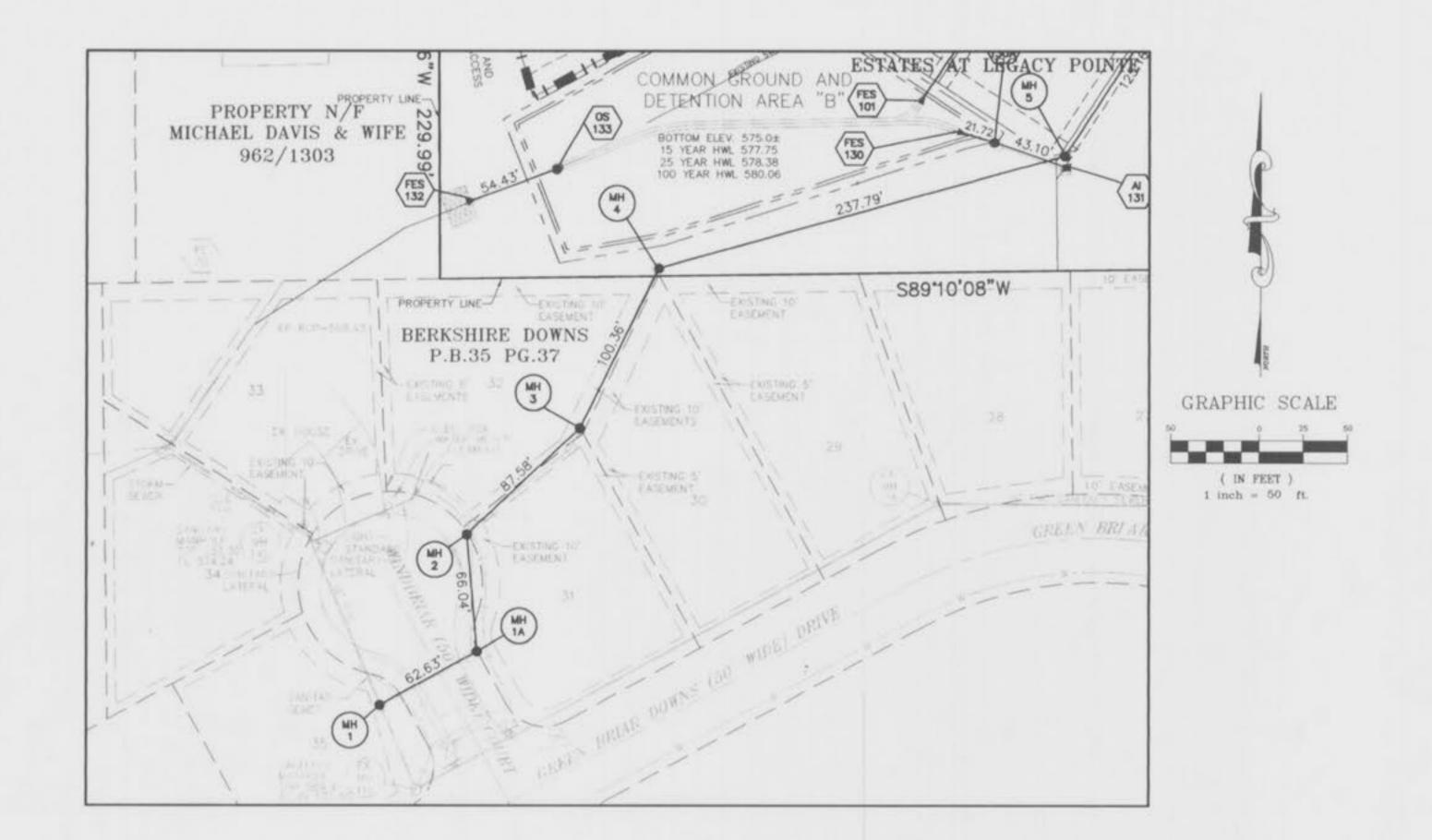
1052 South Cloverleaf Drive St. Peters, MO. 63376-6445 314-928-5552 FAX 928-1718

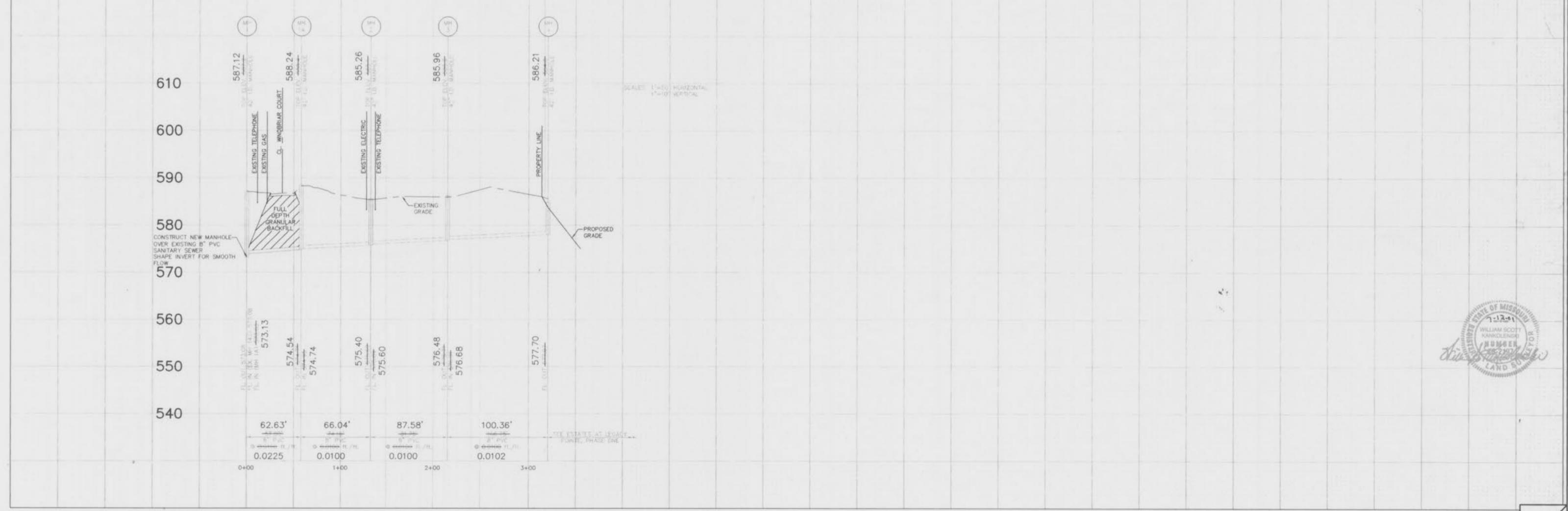
01-04-01

DATE 99-10589 PROJECT NUMBER SHEET OF 10589AB.dwg FILE NAME WSK DRAWN CHECKED



OFFSITE SANITARY SEWER
ESTATES AT
LEGACY POINTE
28 MARCH, 2000





Underground utilities have been plotted from available information and, therefore, their locations 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 the improvements.

AS-BUILT ADDED JANUARY 2001

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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 the improvements.

exact location of all existing rock conditions.

If existing rack conditions are encountered during construction it shall be the responsibility of the developer and or his contractor to contact Bax Engineering Co., Inc. and the soils engineer for the project at the time of encounter to determine the best design to continue construction.

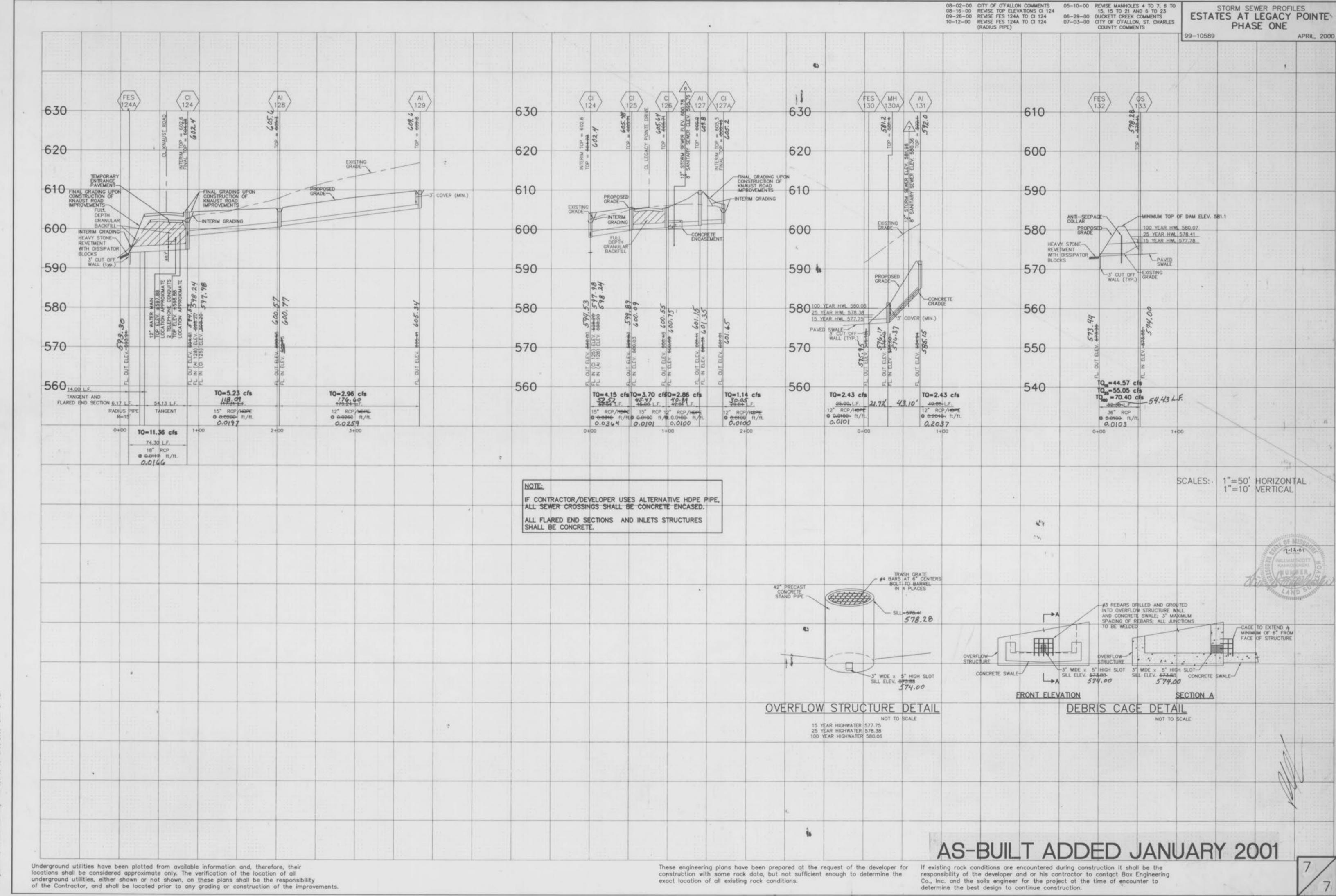
Est. @ Legacy Point

locations 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 the improvements. exact location of all existing rock conditions.

Co., Inc. and the soils engineer for the project at the time of encounter to determine the best design to continue construction.

05-10-00 REVISE MANHOLES 4 TO 7, 6 TO

STORM SEWER PROFILES



Est C Legacy Aint