

LOCATION MAP

GRADING NOTES

- A Geotechnical Engineer shall be employed by the owner and be on site during grading operations. All soils tests shall be verified by the Geotechnical Engineer concurrent with the grading and backfilling operations.
- 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 Engineer.
- The Contractor shall notify the Soils Engineer at least two days in advance of the start of the grading operation.
- All areas shall be allowed to drain. All low points shall be provided with temporary ditches.
- 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 over the winter without being seeded and mulched. Care should be exercised to prevent soil from damaging adjacent property and silting up existing downstream storm drainage system.
- Soft soil in the bottom and banks of any existing or former pond sites or tributaries should be removed, spread out and permitted to dry sufficiently to be used as fill. None of this material should be placed in proposed right-of-way locations or on 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 unsuitable 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.
- 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 layers.
- 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.
- 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.
- 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.
- 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.

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

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.

NOTE: Trash and debris shall be disposed of in the detention basin area and other designated areas. All debris shall be buried a minimum of 3 feet below finished grade.

GENERAL NOTES

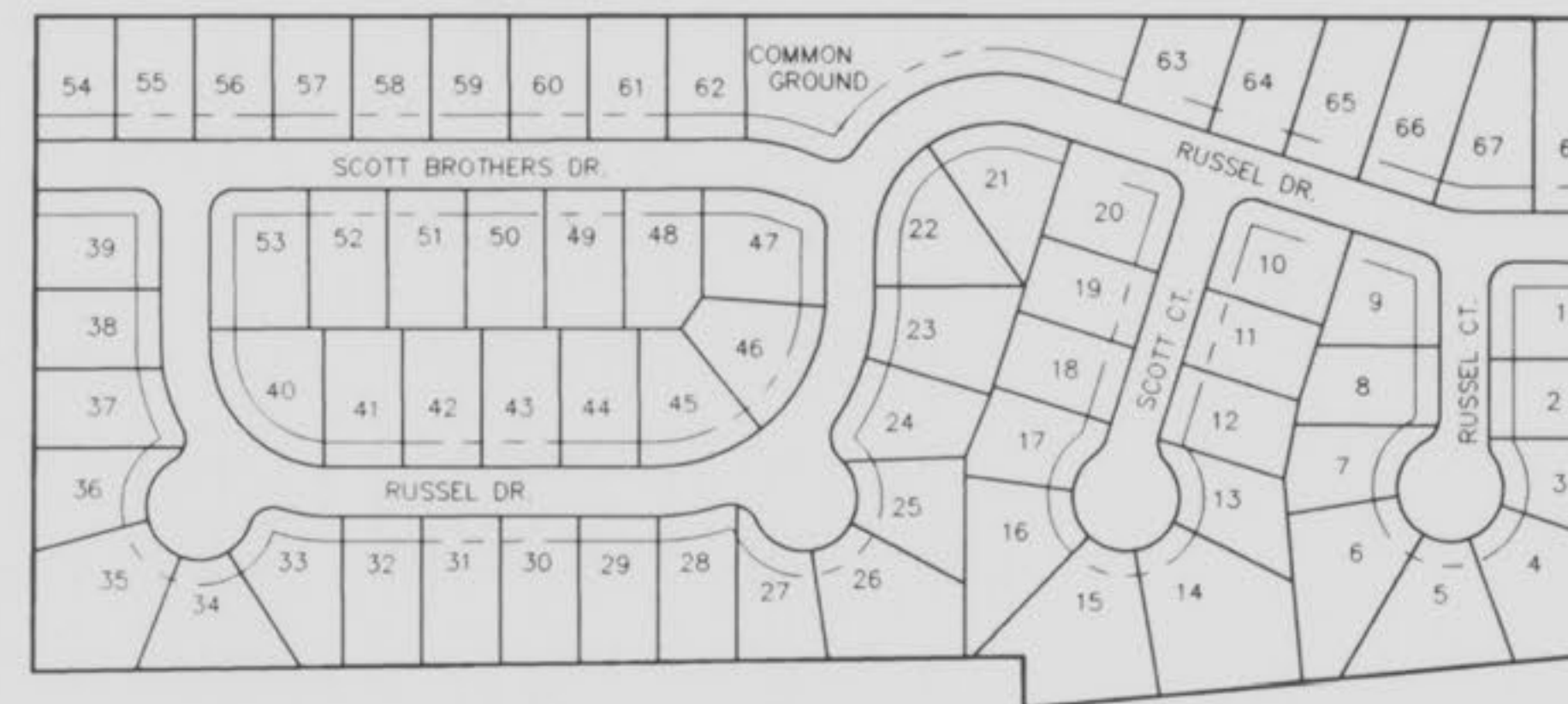
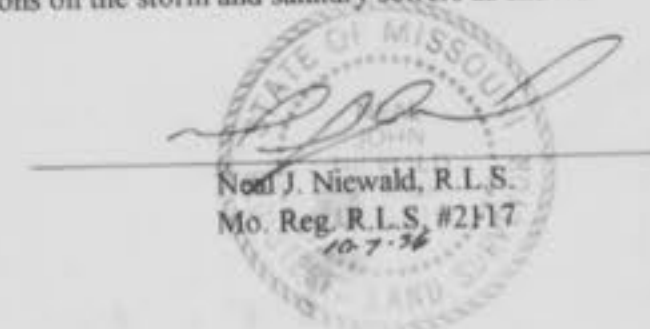
- Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.
- All manhole tops built without elevations furnished by the Engineer will be the responsibility of the sewer contractor.
- 8" P.V.C. sanitary sewer pipe shall meet the following standards. A.S.T.M.-D-3034 SDR-35, with wall thickness compression joint A.S.T.M.-D-3212. An appropriate rubber seal waterstop as approved by the sewer district shall be installed between P.V.C. pipe and masonry structures.
- 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).
- 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.
- All sanitary house connections have been designed so that the minimum vertical distance from the low point of the basement to the flow line of a sanitary sewer at the corresponding house connection is not less than the diameter of the pipe plus the vertical distance of 2 1/2 feet.
- No area shall be cleared without the permission of the Project Engineer.
- All grades shall be within 0.2 feet of those shown on the grading plan.
- No slope shall be steeper than 3:1 or as called for in the soils report for the project. All slopes shall be sodded or seeded and mulched.
- All construction and materials used shall conform to current City of O'Fallon Standards.
- All P.V.C. sanitary sewer is to be SDR-35 or equal with clean 1/2" to 1" granular stone bedding uniformly graded. This bedding shall extend from 4" below the pipe to the springline of the pipe. Immediate backfill over pipe shall consist of same size "clean" or minus stone from springline of pipe to 6" above the top of pipe.
- All soils test shall be verified by a Soils Engineer concurrent with the grading and backfilling operations.
- Easements shall be provided for sanitary sewers, and all utilities on the Record Plat. See Record Plat for location and size of easements.
- Maintenance and upkeep of the common ground area shall be the responsibility of the developer and/or successors.
- A 25' building line shall be established along all Public Right-Of-Way.

AS-BUILTS FOR STORM AND SANITARY SEWERS  
PLANS FOR THE CONSTRUCTION OF SANITARY SEWERS,  
STORM SEWERS, GRADING, PAVING, AND WATER MAINS FOR

CIVIC PARK MANOR AUTUMNI OAKS

A TRACT OF LAND IN THE SOUTHWEST QUARTER OF SECTION 20,  
T.47 N., R.3 E., ST. CHARLES COUNTY, MISSOURI

This is to certify that we have during October, 1996, we have taken field measurements for the locations and elevations on the storm and sanitary sewers as shown.



KEY MAP

DEVELOPMENT NOTES

- Area of Tract: 24.20 Acres
- Existing Zoning: R-1
- Proposed Use: Single Family Homes
- Number of Lots Proposed: 68 Lots
- Area in Common Ground: 0.93 Acres
- Area in Right-of-Way: 4.61 Acres
- Area in Lots: 18.66 Acres
- Minimum Lots Area: 10,000 Square Feet
- Average Lot Area (not including common ground): 11,953 Square Feet
- Average Lot Area including Common Ground: 12,549 Square Feet
- The proposed height and lot setbacks are as follows:  
Minimum Front Yard: 25 feet  
Minimum Side Yard: 6 feet  
Minimum Rear Yard: 25 feet  
Minimum Lot Area: 10,000 square feet  
Maximum Height of Building: 2 1/2 stories or 35 feet
- Current Owner of Property: Robert and Marilyn Scott ETAL, 909 Highway Y, O'Fallon, MO 63366
- Owner Under Contract and Developer: Commonwealth Dev. Corp., P.O. Box 176, St. Peters, MO 63376, 314-928-4988
- Site is served by:  
City of O'Fallon Sewers  
Union Electric Company  
St. Charles Gas Company  
City of O'Fallon Water  
GTE Telephone Company  
Fort Zumwalt School District  
O'Fallon Fire Protection District
- No Flood Plain exists on this tract per F.I.R.M. #29183 C0110 D.
- All streets will be constructed to City of O'Fallon standards. Streets will consist of 26 foot wide concrete pavement with integral rolled curb centered in a 50 foot right-of-way. Minimum radius shall be 150 feet.
- 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.
- Minimum street grades shall be 1%.
- A 4 foot wide concrete sidewalk shall be constructed on one side of streets where indicated.
- All homes shall have a minimum of 2 off-street parking places with 2-car garages.
- All utilities must be located underground.
- The developer shall 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.
- U.S.G.S. BENCHMARK: Elevation = 501.91  
Top headwall of north side of box culvert located at Southwest corner of "Sigmund Auto Service" site on West Second Street (Civic Park Drive)
- Upon final engineering design, any proposed streets in excess of 6% grade will have pavement lugs installed as directed by the City Engineer.

SHEET INDEX

- 1 OF 17 - COVER SHEET
- 2 OF 17 - FLAT PLAN
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- 4 OF 17 - WATER PLAN
- 5 OF 17 - STREET PROFILES
- 6 OF 17 - STREET PROFILES
- 7 OF 17 - SANITARY SEWER PROFILES
- 8 OF 17 - SANITARY SEWER PROFILES
- 9 OF 17 - STORM SEWER PROFILES
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- 11 OF 17 - DRAINAGE AREA MAP
- 12 OF 17 - CONSTRUCTION DETAILS
- 13 OF 17 - CONSTRUCTION DETAILS
- 14 OF 17 - CONSTRUCTION DETAILS
- 15 OF 17 - CONSTRUCTION DETAILS
- 16 OF 17 - CONSTRUCTION DETAILS
- 17 OF 17 - CONSTRUCTION DETAILS

LEGEND

- C.I. CURB INLET
- D.C.I. DOUBLE CURB INLET
- A.I. AREA INLET
- M.H. MANHOLE
- F.E. 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. POLY VINYL CHLORIDE (PLASTIC)
- C.O. CLEAN OUT
- F.H. FIRE HYDRANT
- S.S. STORM SEWER
- S.S. SANITARY SEWER
- S.L. STREET LIGHT
- E.C. EXISTING CONTOUR
- P.C. PROPOSED CONTOUR
- S.S. STREET SIGN
- W.V. WATER VALVE
- B.O. BLOW OFF ASSEMBLY
- F.E. FLOWLINE ELEVATION OF HOUSE CONNECTION
- F.S. FLOWLINE ELEVATION OF SEWER MAIN
- S.A. STREET ADDRESS

PREPARED FOR:  
**COMMONWEALTH DEV. CORP.**  
ST. PETERS, MO 63376  
P.O. BOX 176  
314-928-4988

DISCLAIMER OF RESPONSIBILITY  
I hereby certify that the documents bearing this seal and signature are those of the undersigned and that I am duly licensed and qualified to practice as a Professional Engineer in the State of Missouri.

REVISIONS
2-8-96 DEV. REQUEST
3-5-96 DEV. REQUEST
5-21-96 REVISE CMP

**BAT**  
ENGINEERING  
PLANNING  
SURVEYING  
1052 South Cloverleaf Drive  
St. Peters, MO 63376-6445  
314-928-5652  
FAX 928-1718

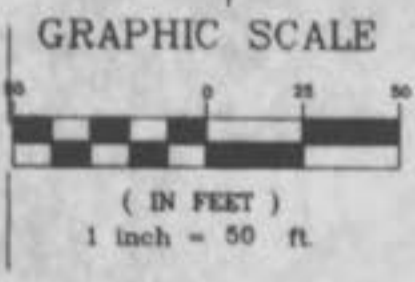
OCT. 17, 1995  
DATE  
95-6277  
PROJECT NUMBER  
1 176  
SHEET OF  
6277CON.DWG  
FILE NAME  
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DRAWN CHECKED

10 11 12

O'FALLON GARDENS  
P.B. 5 PG. 8

CORONATION ESTATES  
P.B. 30 PG. 82

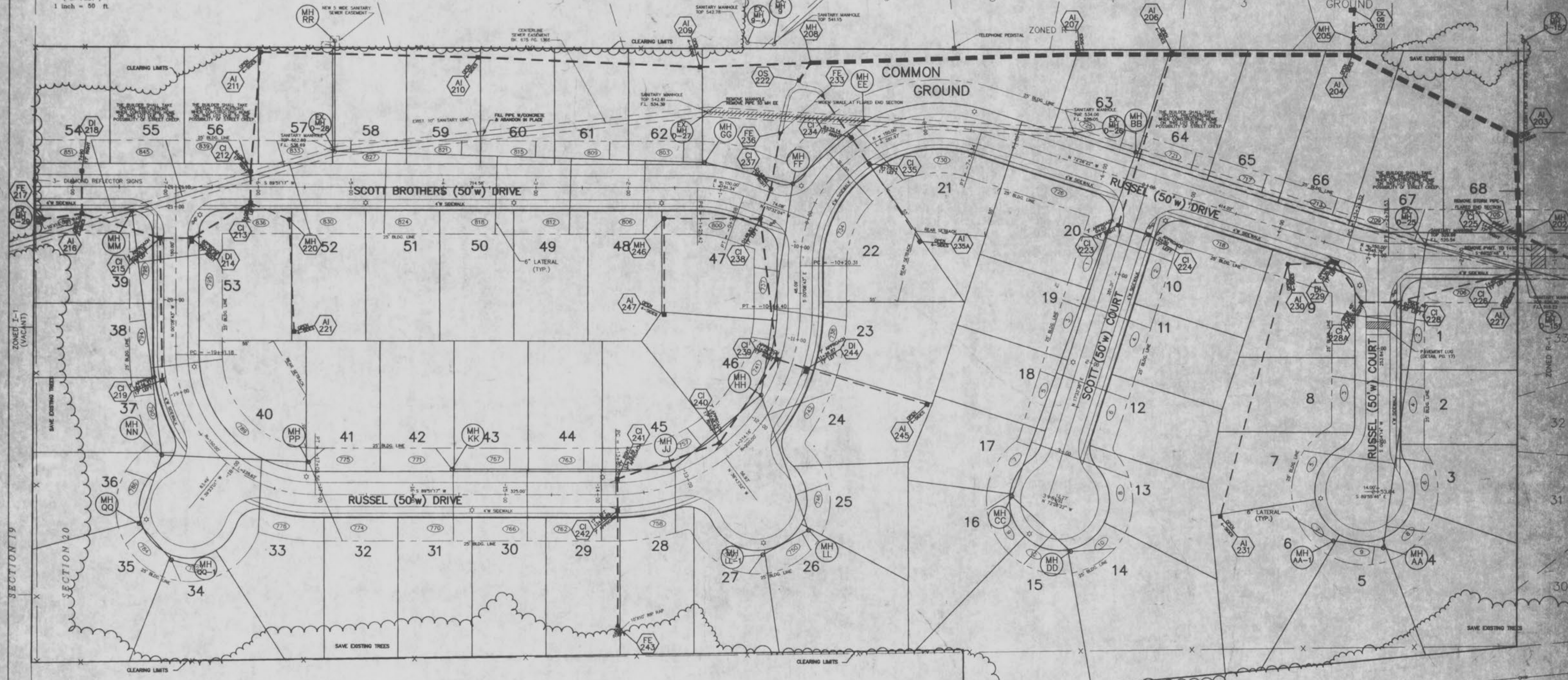
LORETTA DRIVE  
(50' WIDE)



ZONED A-1

CORONATION ESTATES  
P.B. 30 PG. 82

COMMON GROUND



SECTION 19  
SECTION 20  
SECTION 29  
SECTION 30

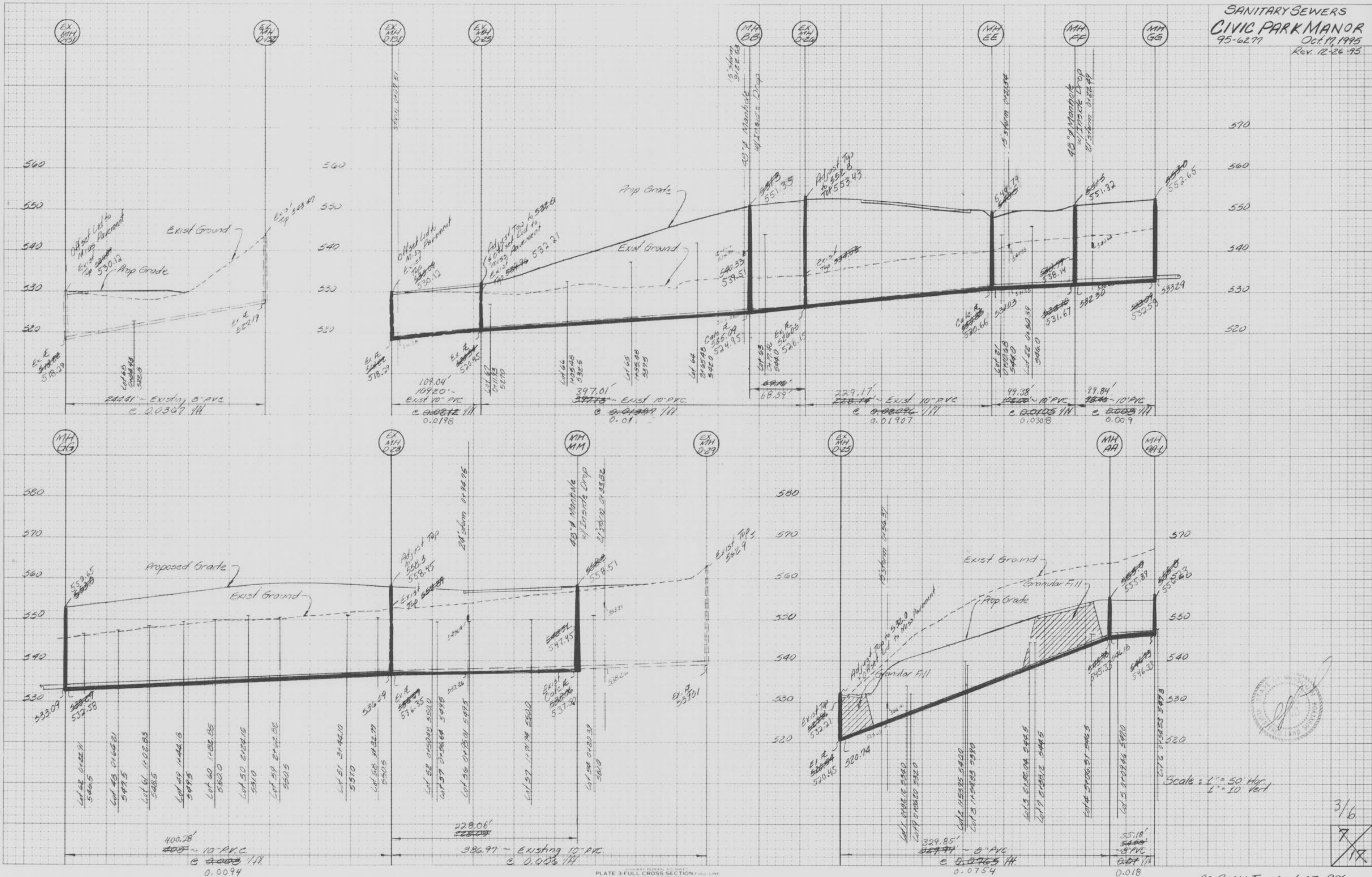
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(VACANT)

NORFOLK AND SOUTHERN RAILROAD



FINAL SURVEY  
 ORIGINAL SURVEY  
 PLATING  
 3/16

ORIGINAL SURVEY  
 PLATING  
 3/16



Scale: 1" = 50' Hor.  
 1" = 10' Vert.

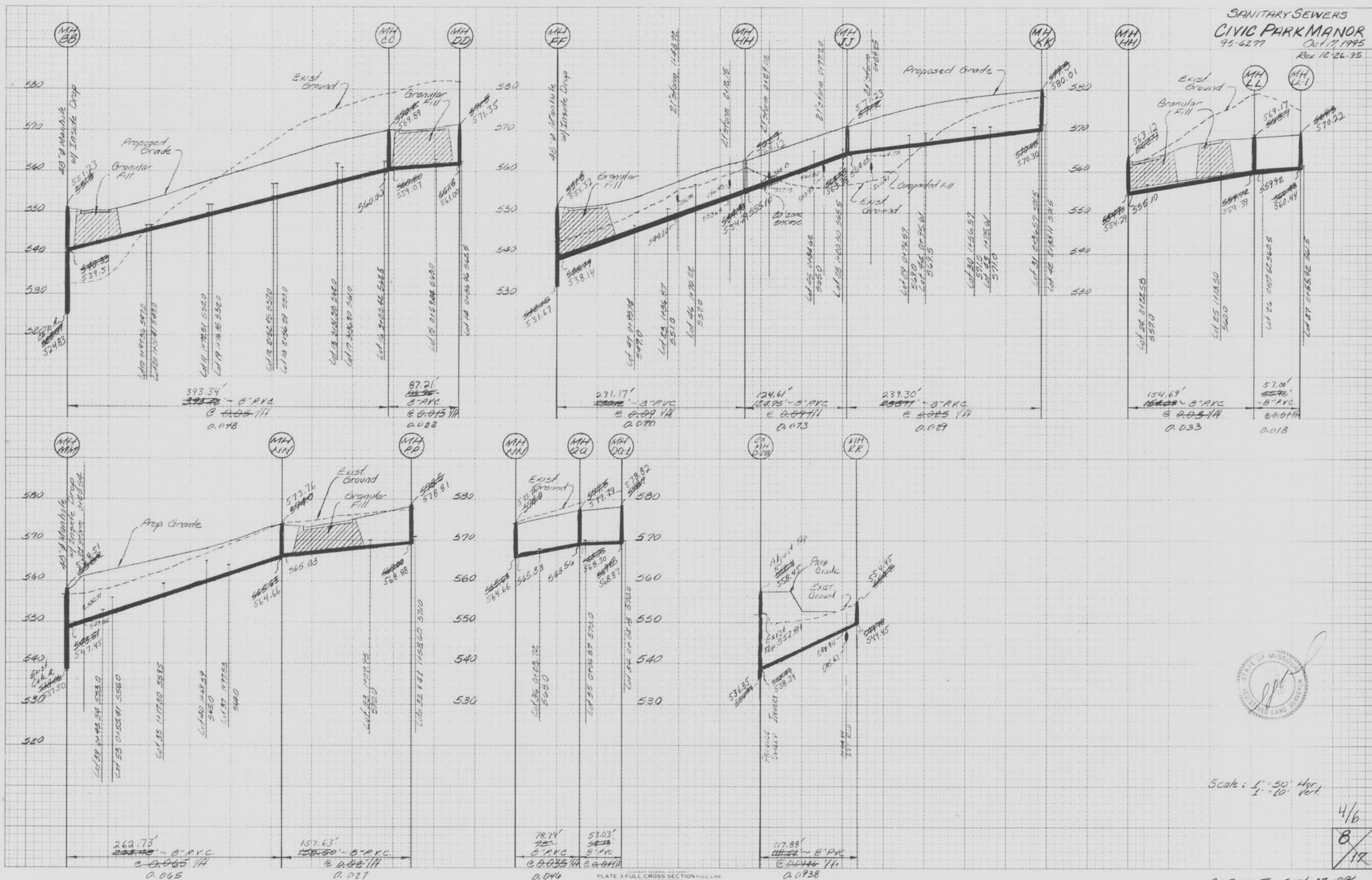


PLATE 3 FULL CROSS SECTION FULL LINE  
 NATIONAL PRINTFAST  
 PRINTED IN U.S.A.

AS BUILT Sept 27, 1996

FINAL SURVEY  
 1" = 40' HOR.  
 1" = 10' VERT.

ORIGINAL SURVEY  
 1" = 40' HOR.  
 1" = 10' VERT.



Scale: 1" = 50' Hor.  
 1" = 10' Vert.

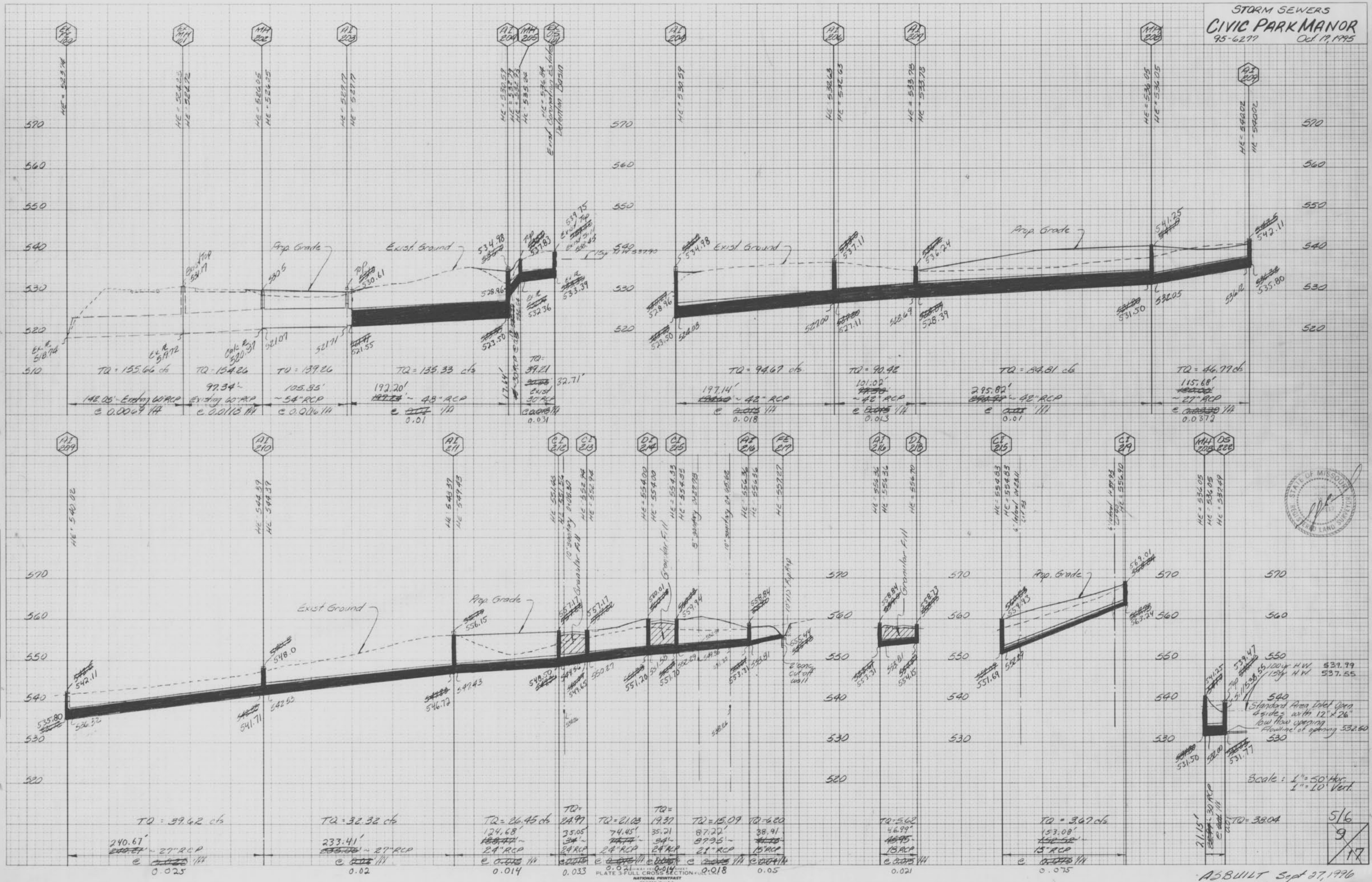
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 17

AS BUILT Sept. 27, 1996

STORM SEWERS  
CIVIC PARK MANOR  
95-6277 Oct 19, 1995

FINAL SURVEY  
PLATTED  
SCOTT COUNTY, MISSOURI

ORIGINAL SURVEY  
PLATTED  
SCOTT COUNTY, MISSOURI



Scale: 1" = 50' Hor.  
1" = 10' Vert.

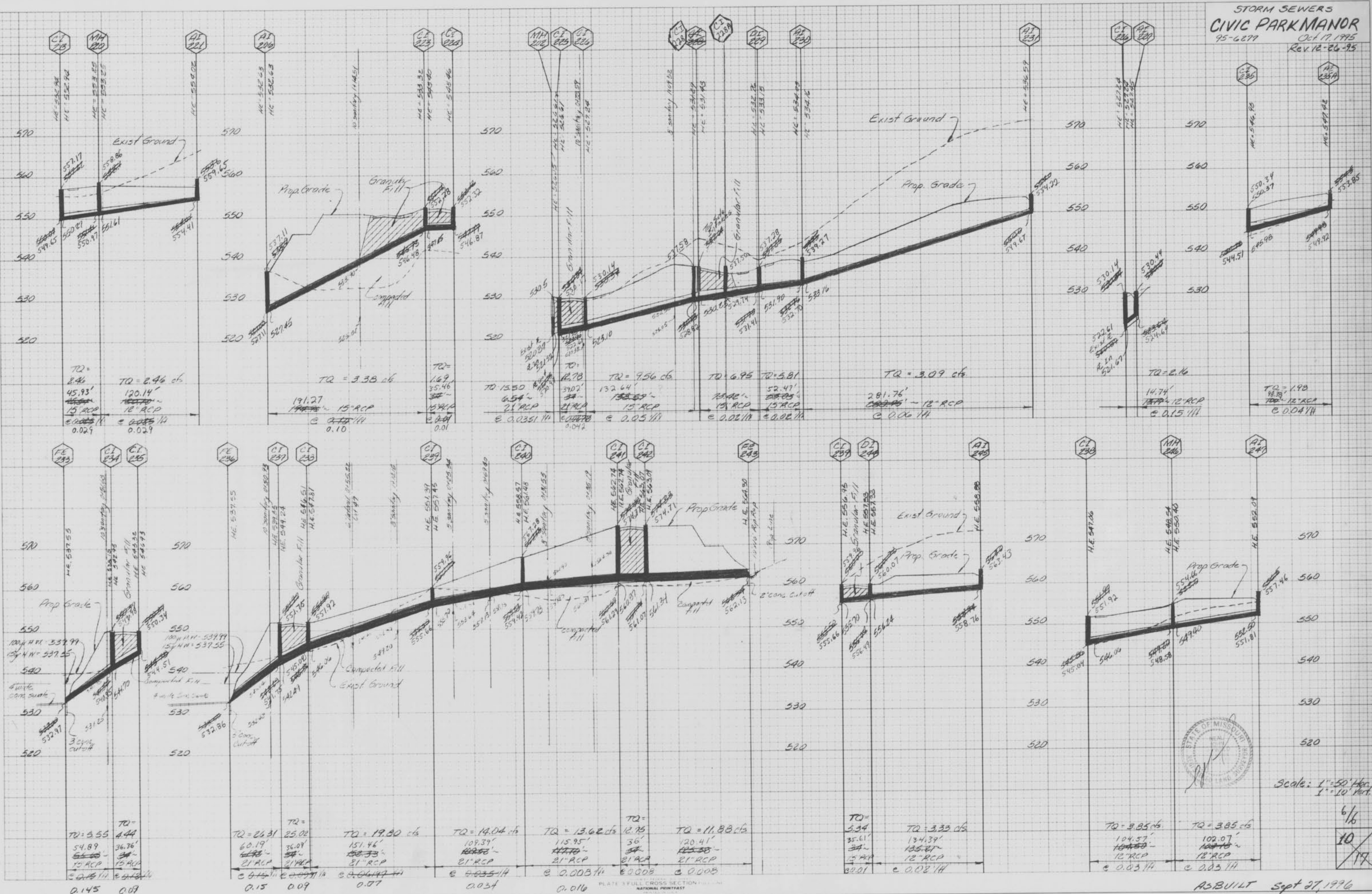
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AS-BUILT Sept 27, 1996

STORM SEWERS  
**CIVIC PARK MANOR**  
 95-6277  
 Oct 17, 1995  
 Rev. 12-26-95

FINAL SURVEY  
 DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_

ORIGINAL SURVEY  
 DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_



Scale: 1" = 50' Hor.  
 1" = 10' Vert.

6/10  
 17

AS-BUILT Sept 27, 1996