

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

CAUTION! THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT 1-800-538-7858 A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

COMPACTION NOTE:

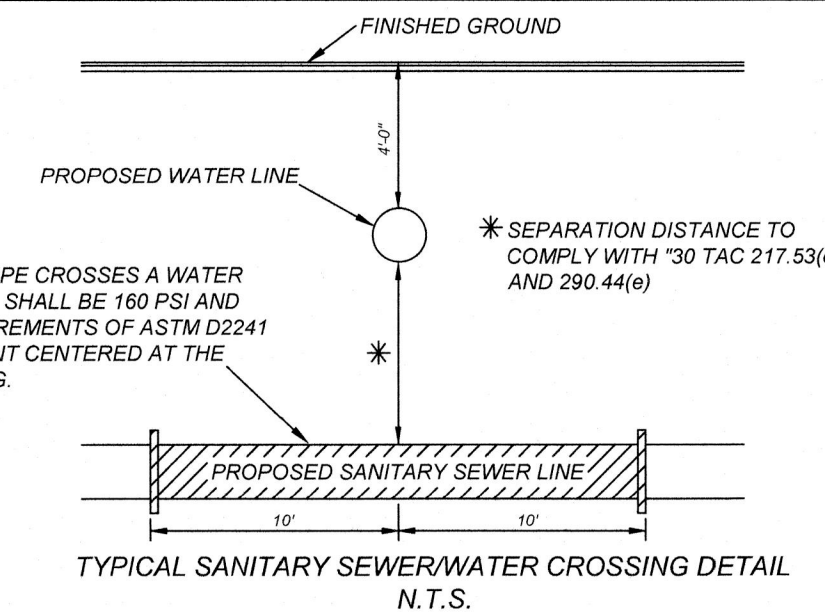
THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING 98% COMPACTION ON ALL TRENCH BACKFILL AND PAYING FOR THE TESTS TO BE PERFORMED BY A THIRD PARTY. COMPACTION TESTS WILL BE DONE AT ONE LOCATION POINT RANDOMLY SELECTED OR AS INDICATED BY THE SAWS INSPECTOR/TEST ADMINISTRATOR, PER EACH 12 INCH LOOSE LIFT PER 400 LINEAR FEET AT A MINIMUM. PERMITS AND/OR WILL NOT BE ACCEPTED AND FINALIZED BY SAWS WITHOUT THIS REQUIREMENT BEING MET AND VERIFIED BY PROVIDING ALL NECESSARY DOCUMENTED TEST RESULTS.

MANHOLE NOTE:
ALL MANHOLES MUST BE WATERTIGHT, WITH WATERTIGHT RINGS AND COVERS. THESE MANHOLES MUST BE VENTED PER SAWS DETAIL DD852-02.

NOTE:

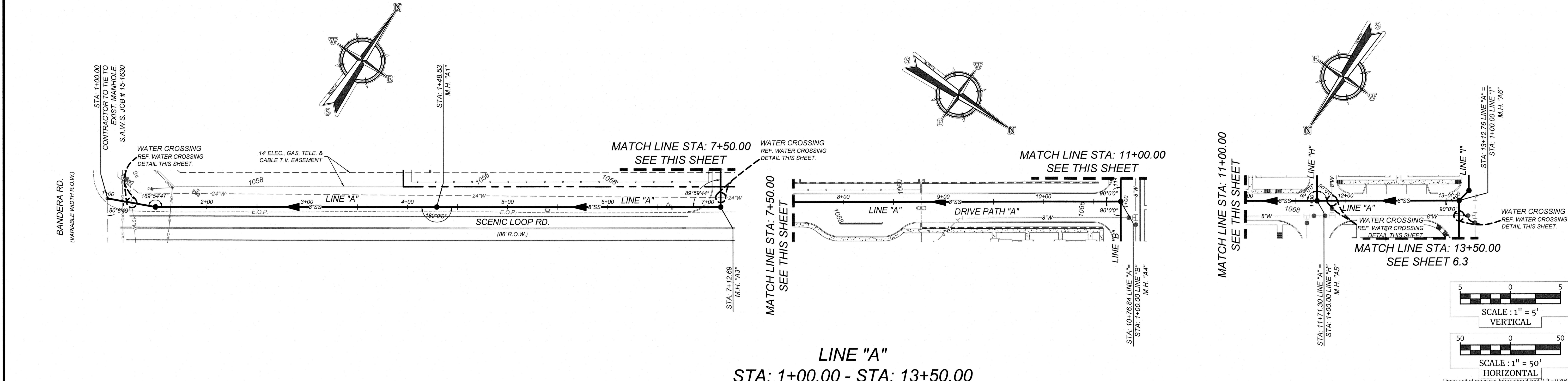
- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE SAN ANTONIO WATER SYSTEM (S.A.W.S.) STANDARD SPECIFICATION.
- SEWER PIPE WHERE WATER LINE CROSSES SHALL MEET THE REQUIREMENTS OF ASTM D2241. CONTRACTOR SHALL CENTER A 20 FOOT JOINT OF 160 P.S.I. PRESSURE RATED P.V.C. AT THE PROPOSED WATER CROSSING (NO SEPARATE PAY ITEM). REFERENCE SHEET 6.1, SANITARY SEWER GENERAL NOTES, S.A.W.S. CRITERIA FOR SEWER MAIN CONSTRUCTION IN THE VICINITY OF WATER MAINS.
- SEE THIS SHEET FOR BENCHMARK INFORMATION.
- PIPE TYPE DESIGNATIONS ARE SDR 26.
- SEE THIS SHEET FOR TYPICAL SANITARY SEWER / WATER CROSSING DETAIL.
- ALL MANHOLES SHALL HAVE CONCRETE RING ENCASMENT AND A WATER TIGHT RING AND COVER.

WHERE SEWER PIPE CROSSES A WATER LINE, THE SEWER SHALL BE 160 PSI AND MEET THE REQUIREMENTS OF ASTM D2241 WITH ONE 20' JOINT CENTERED AT THE WATER CROSSING.

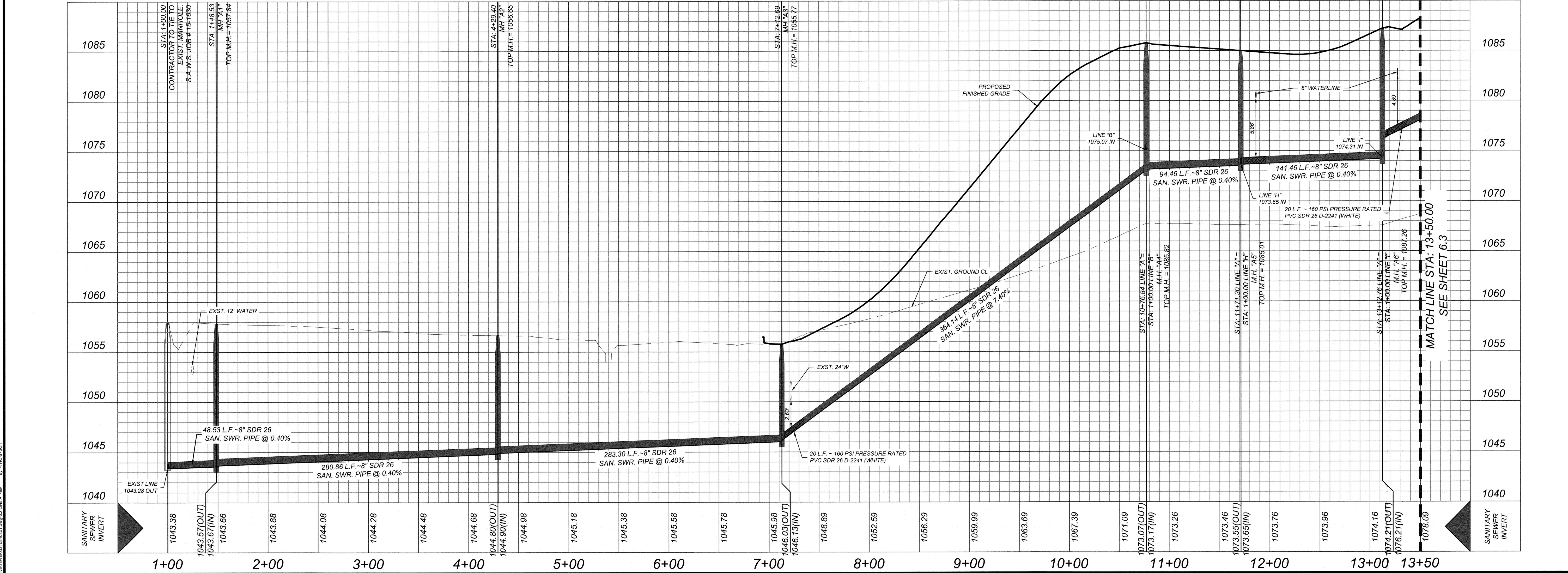


DEVELOPER'S NAME: HELOTES BANDERA RANCH, L.P.
DEVELOPER'S ADDRESS: 1509 OLD W. 38TH ST., SUITE 3
CITY: AUSTIN STATE: TEXAS ZIP: 78731
PHONE: FAX: TOTAL ACREAGE: 31.463 AC.
SAWS BLOCK MAP#: 096634, 096636, 096634, 096636 TOTAL EDU'S:
TOTAL LINEAR FOOTAGE OF PIPE: 6,888.36 L.F. = 8 SDR 26 PVC PLAT NO.:
NUMBER OF LOTS: 1 SAWS JOB#:

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Engineering & Design
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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM



LINE "A"
STA: 1+00.00 - STA: 13+50.00



STATE OF TEXAS
MICHAEL B. RICHARDS
121665
LICENSED PROFESSIONAL ENGINEER
12/1/23
MICHAEL B. RICHARDS
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 121665
COLLIERS ENGINEERING & DESIGN, INC.
TBE Firm#: F-14909 TPLS Firm#: 10194550

BANDERA RANCH
WATER, SEWER, STREETS &
UTILITY IMPROVEMENTS
FOR
HELOTES BANDERA
RANCH, L.P.

CITY OF HELOTES
BEXAR COUNTY
TEXAS

Colliers
Engineering & Design
SAN ANTONIO (KFW)
3421 Pacesanos Parkway
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBE Firm#: F-14909 TPLS Firm#: 10194550

SCALE: AS SHOWN	DATE: 08/2023	DRAWN BY: JA	CHECKED BY: MR
PROJECT NUMBER: 1084-02-01	DRAWING NAME: SS10840201		

SHEET TITLE:
LINE "A" PLAN AND PROFILE
(SHEET 1 OF 2)

SHEET NUMBER:
6.2 of XX

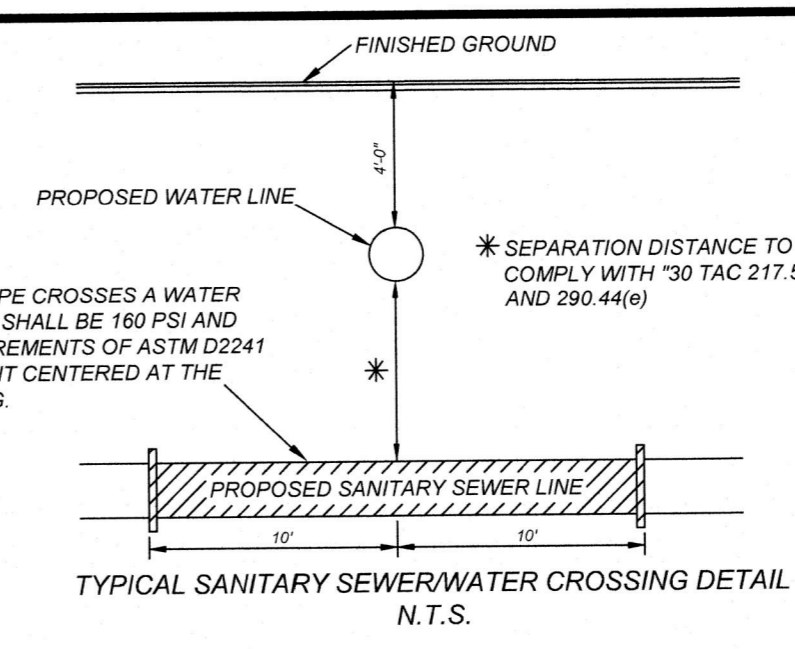
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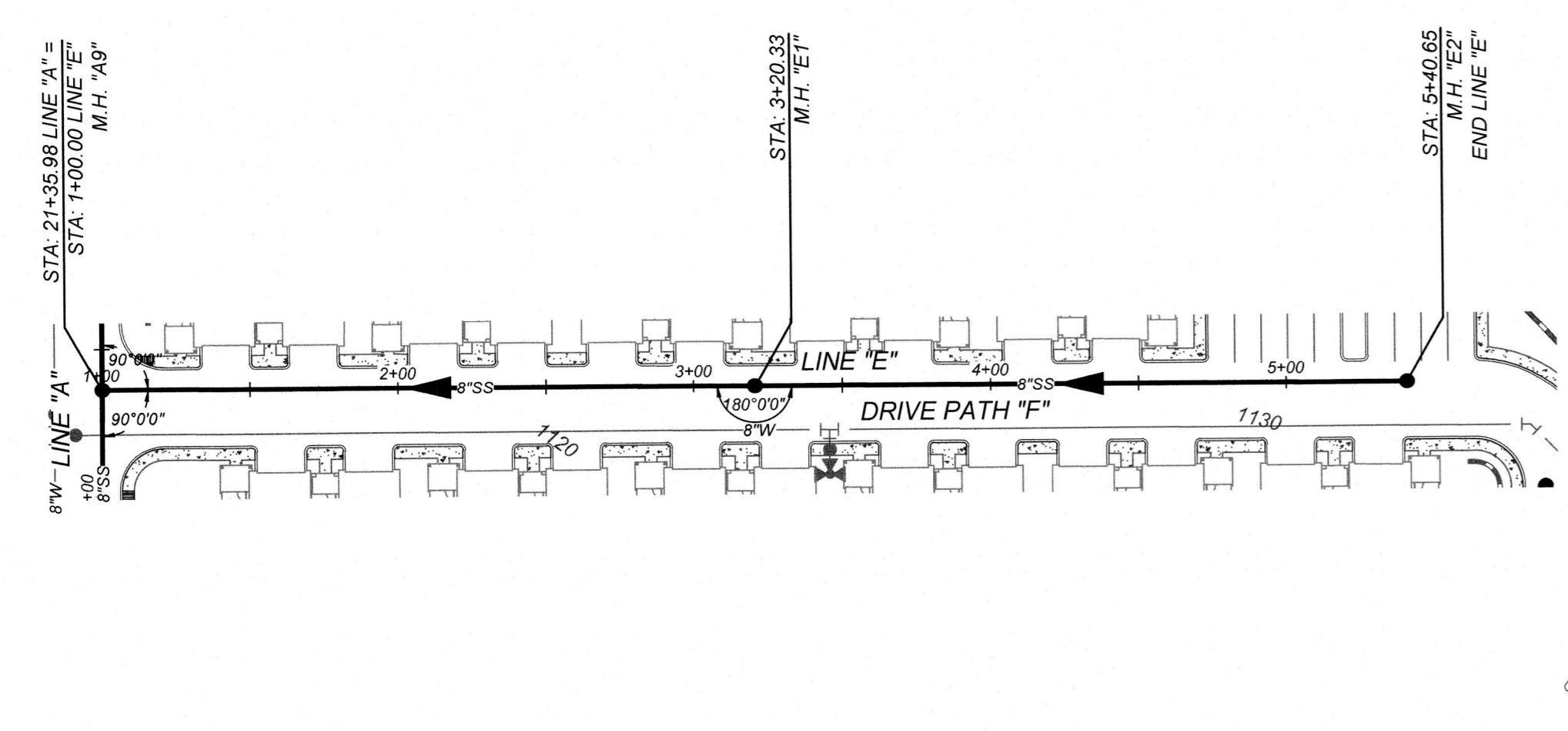
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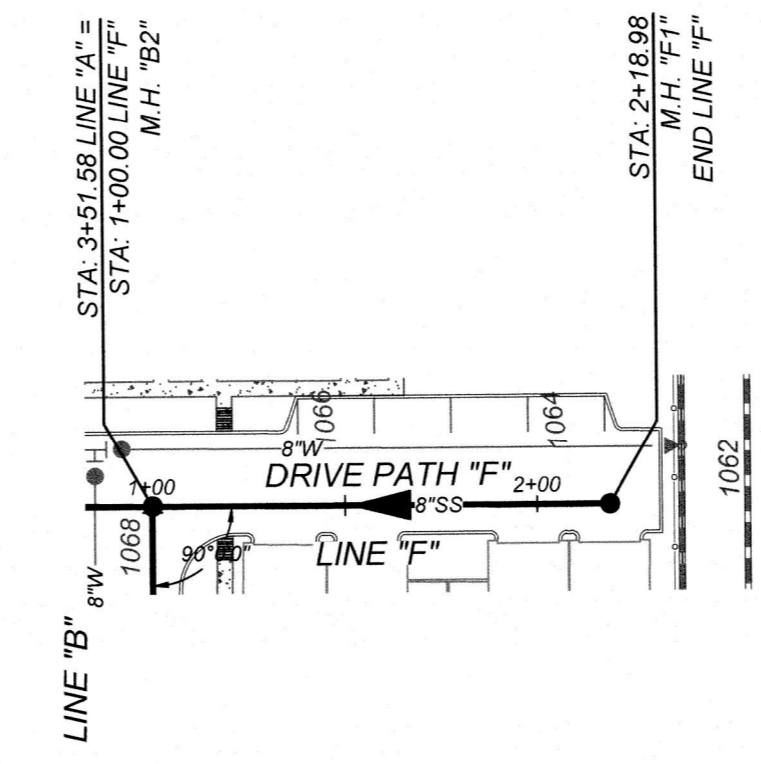


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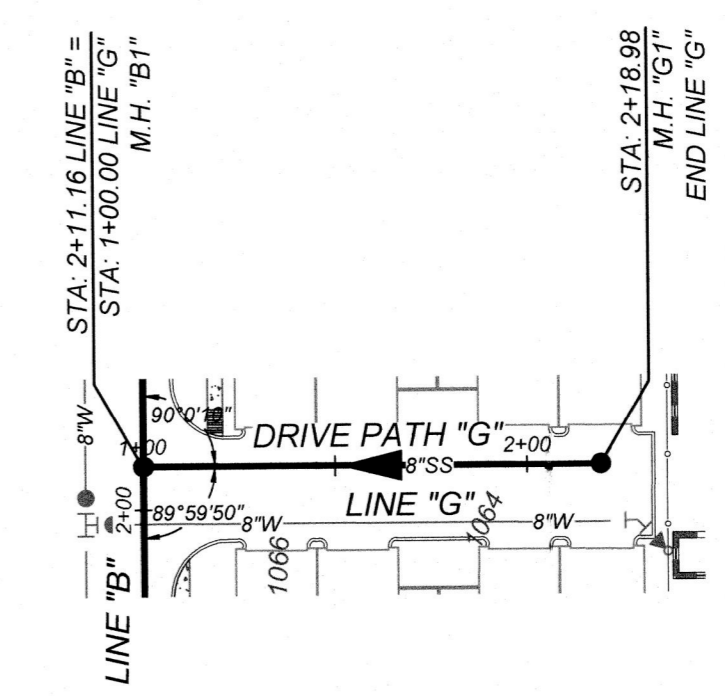
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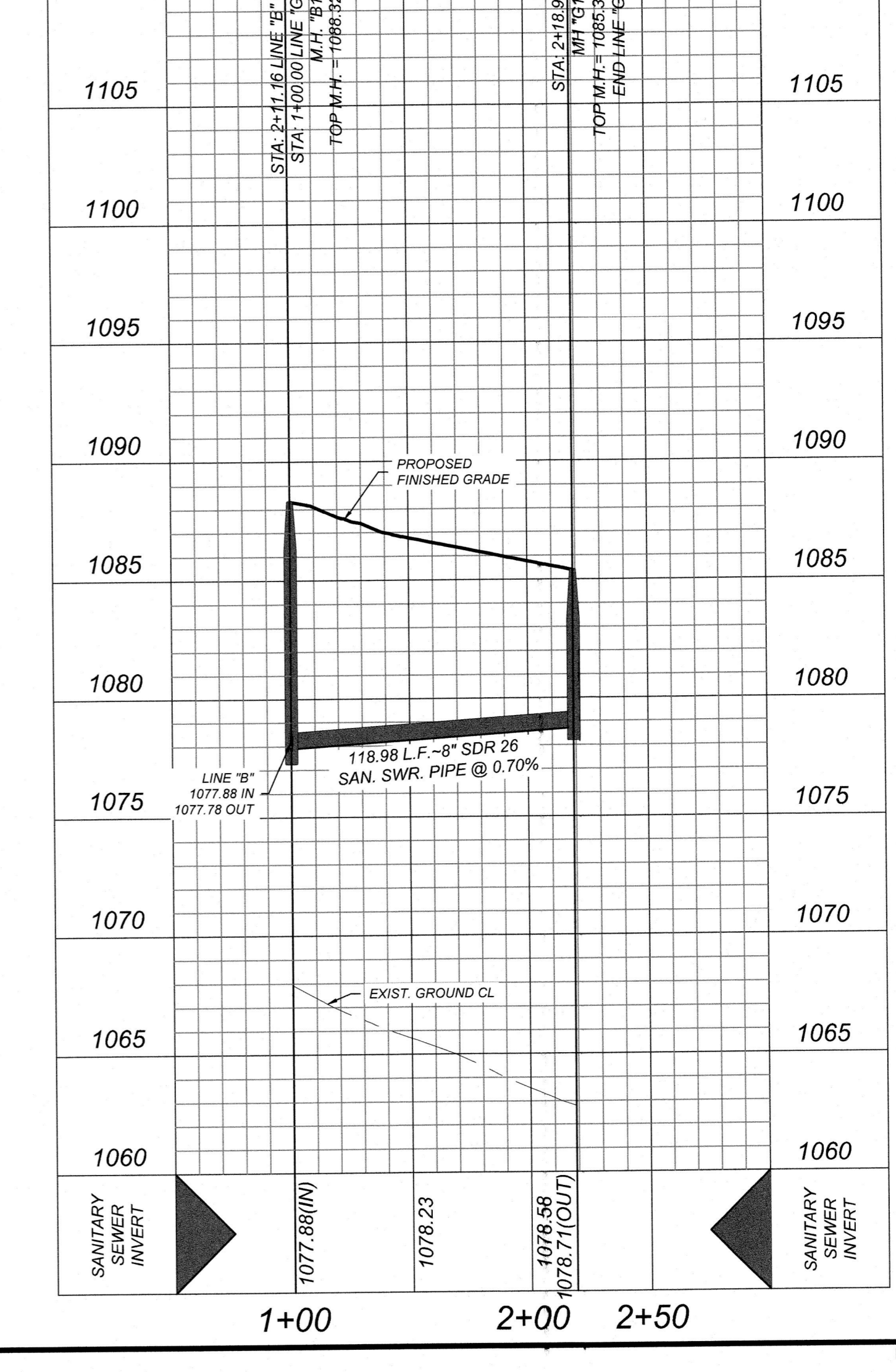
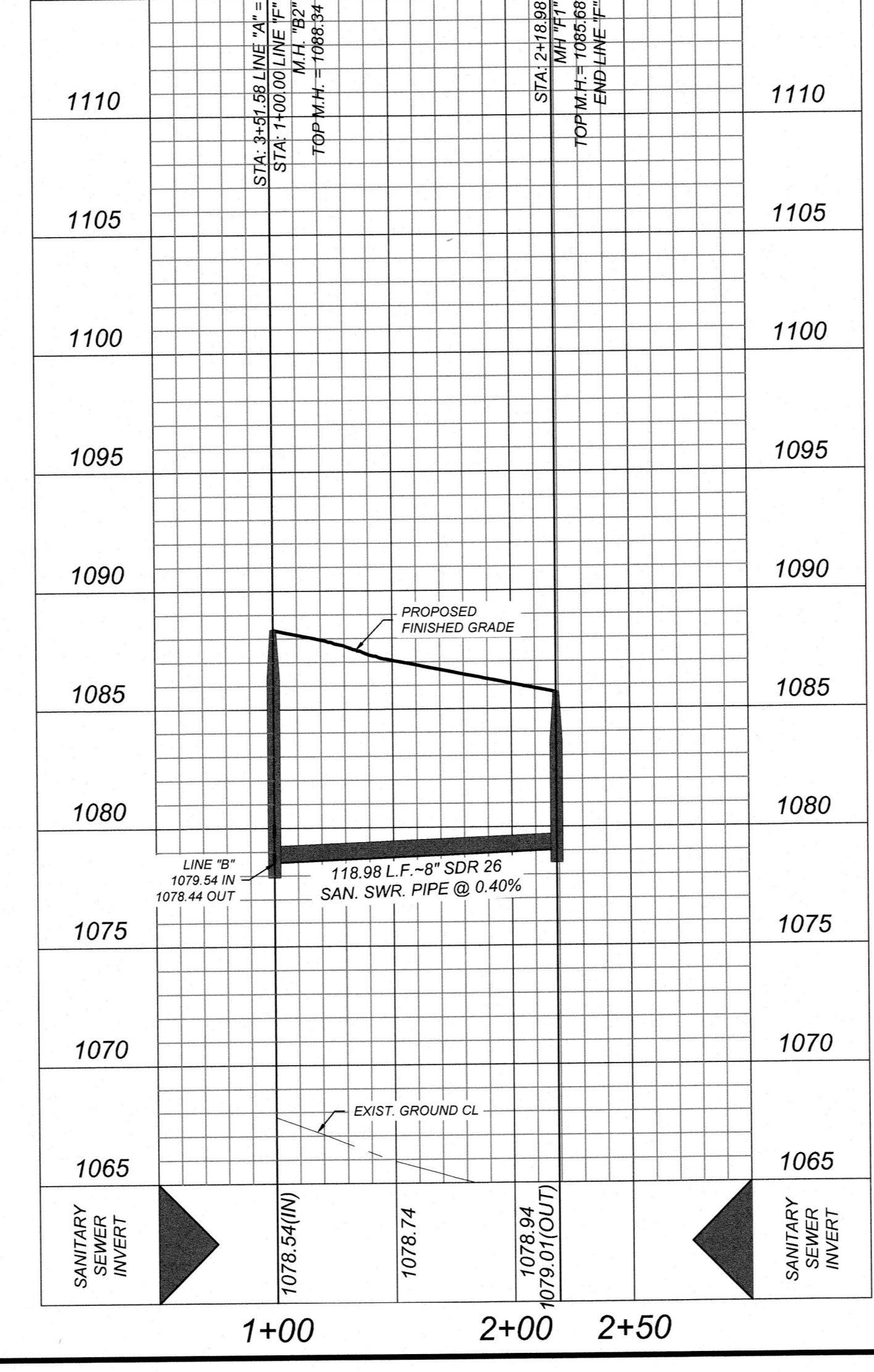
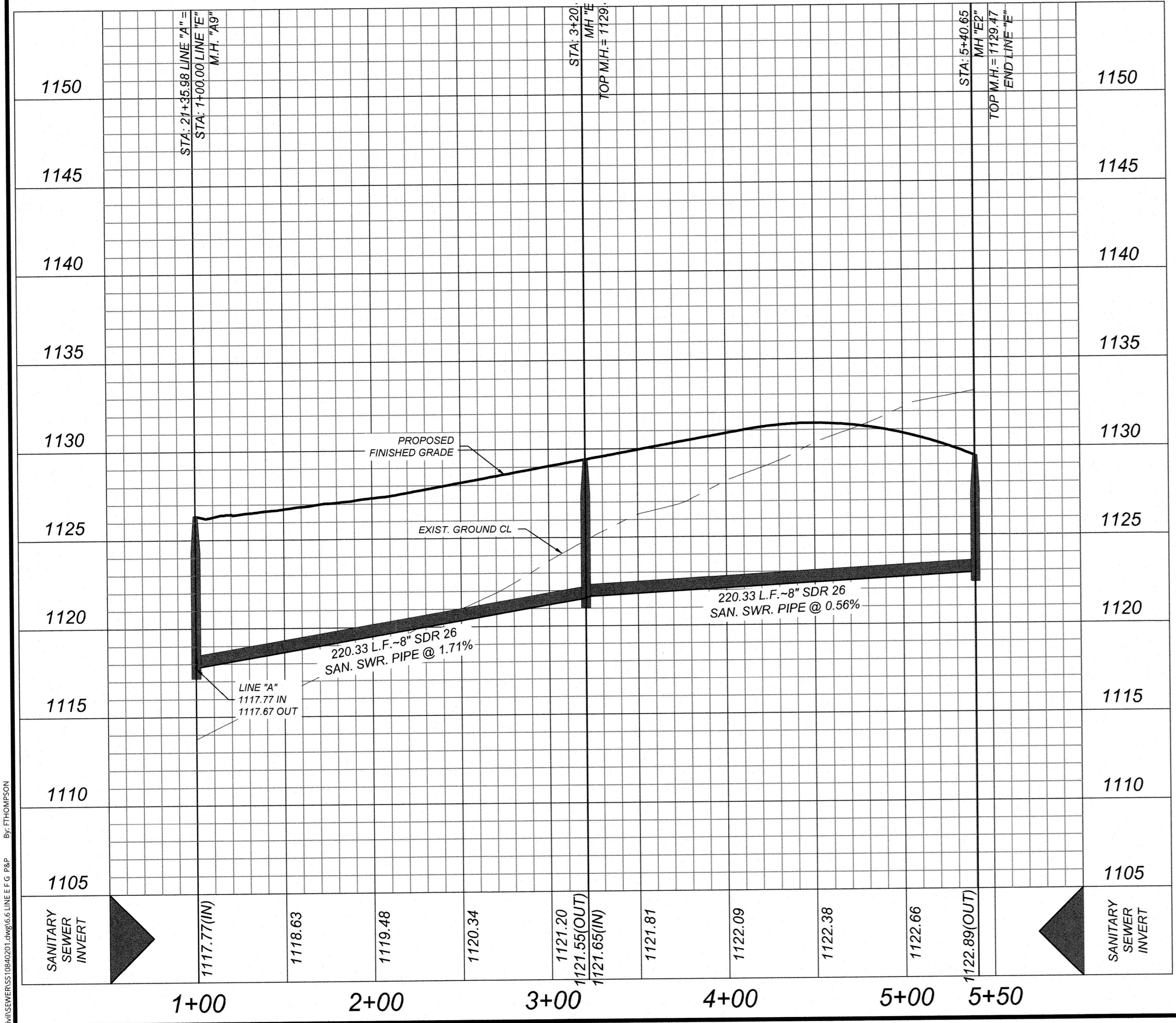
LINE "E"
 STA: 1+00.00 - END
 SCALE: 1" = 50'
 HORIZONTAL VERTICAL
 Line unit of measure: International Foot (1 ft = 0.3048 m)



LINE "F"
 STA: 1+00.00 - END
 SCALE: 1" = 50'
 HORIZONTAL VERTICAL
 Line unit of measure: International Foot (1 ft = 0.3048 m)



LINE "G"
 STA: 1+00.00 - END
 SCALE: 1" = 50'
 HORIZONTAL VERTICAL
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 12/1/23
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BANDERA RANCH
 WATER, SEWER, STREETS &
 UTILITY IMPROVEMENTS
 FOR
 HELOTES BANDERA
 RANCH, L.P.

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1084-02-01	5510840201		

SHEET TITLE:
PROFILES
 SHEET NUMBER:
 6.6 of XX

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

