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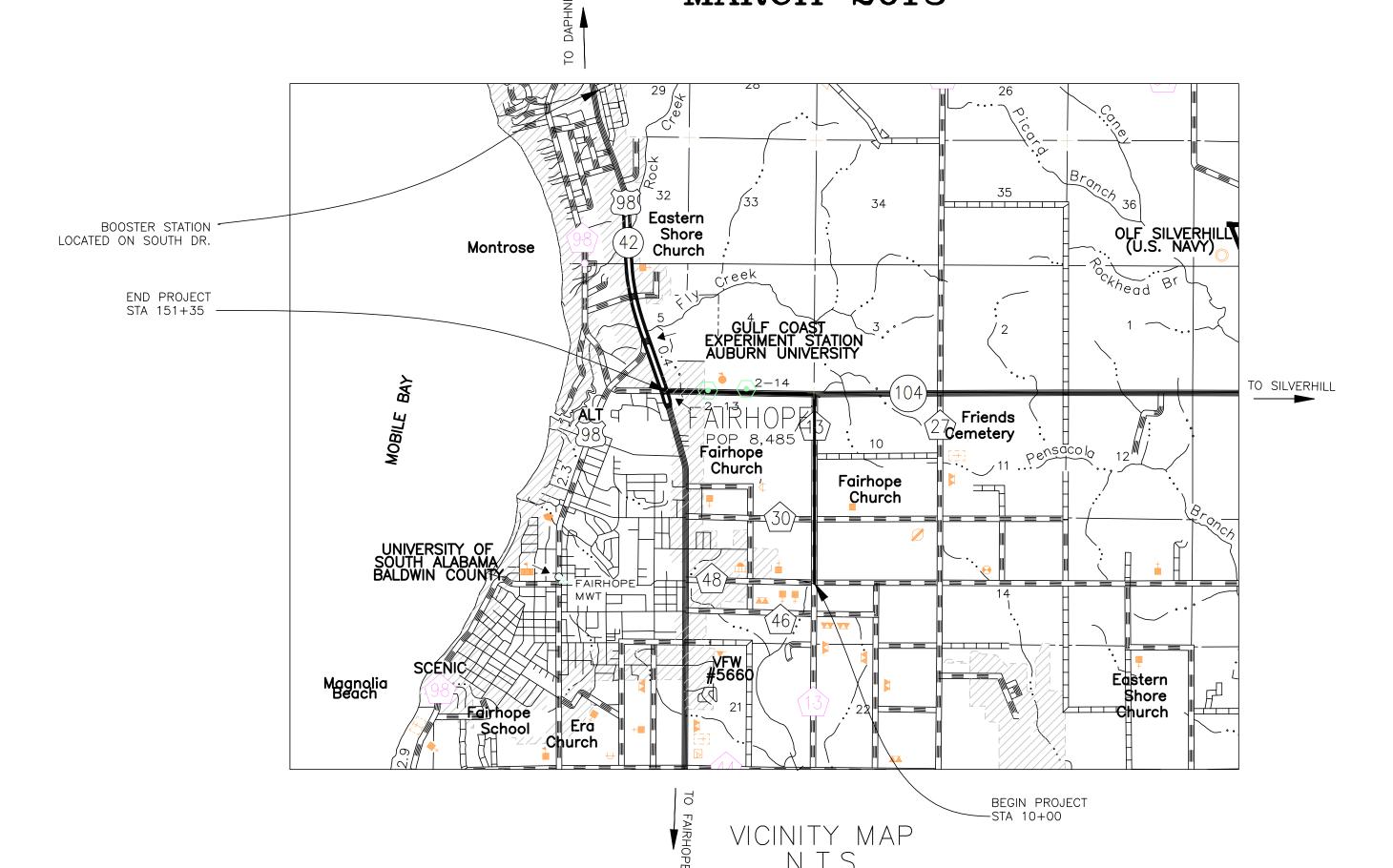
CONSTRUCTION PLANS FOR

FAIRHOPE PUBLIC UTILITIES

FAIRHOPE, ALABAMA

COUNTY ROAD 13 AND HWY 104 WATER MAIN IMPROVEMENTS AND SOUTH DR. BOOSTER STATION UPGRADE THOMPSON PROJECT NO. 12-2111-0072

MARCH 2013



	DRAWING INDEX
DRAWING NO.	DESCRIPTION
C0.0	COVER SHEET
C1.0	GENERAL NOTES
C2.0	KEY SHEET
C3.0	PROPOSED UTILITY PLAN STA 10+00 TO STA 34+00
C3.1	PROPOSED UTILITY PLAN STA 34+00 TO STA 58+00
C3.2	PROPOSED UTILITY PLAN STA 58+00 TO STA 82+00
C3.3	PROPOSED UTILITY PLAN 82+00 TO STA 104+00
C3.4	PROPOSED UTILITY PLAN 104+00 TO STA 128+00
C3.5	PROPOSED UTILITY PLAN 128+00 TO STA 151+35
C3.6	DIRECTIONAL BORE #1
C3.7	DIRECTIONAL BORE #2
C3.8	JACK AND BORE CROSS SECTION
C3.9	PRESSURE SUSTAINING/AIR RELIEF VALVE
C3.10	BOOSTER STATION SITE PLAN
C4.0	UTILITY DETAILS
C4.1	UTILITY DETAILS
C4.2	CONSTRUCTION DETAILS
C5.0	TRAFFIC CONTROL PLAN
BS-1	BOOSTER STATION — EXISTING FLOOR PLAN
BS-2	BOOSTER STATION — EXISTING BUILDING ELEVATIONS
BS-3	BOOSTER STATION — REVISED BUILDING ELVATIONS
BS-4	BOOSTER STATION - NEW FLOOR PLAN
E-01	SOUTH DR. BOOSTER STATION ELECTRICAL LAYOUT AND RISER DIAGRAM
E-02	SOUTH DR. BOOSTER STATION LIGHTING AND HEATING PLAN





2970 COTTAGE HILL ROAD MOBILE, ALABAMA 36606 TEL: (251) 666-2443

GENERAL NOTES

- 1. THE EXACT LOCATION OF EXISTING STRUCTURES, UTILITIES AND PIPING SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR BEFORE CONSTRUCTION BEGINS. THE DRAWINGS DO NOT PURPORT TO SHOW IN COMPLETE DETAIL ALL EXISTING STRUCTURES. UTILITIES OR PIPING. THE CONTRACTOR SHALL EXAMINE ALL AVAILABLE RECORDS AND MAKE EXPLORATIONS AND EXCAVATIONS AS REQUIRED TO DETERMINE THE LOCATION OF EXISTING STRUCTURES, UTILITIES AND PIPES WHENEVER NECESSARY. THE OWNER RESERVES THE RIGHT TO CHANGE LOCATIONS OF THE SEWER LINE TO AVOID CONFLICT WITH EXISTING STRUCTURES, UTILITIES OR PIPING. ANY SIGNIFICANT CHANGES SHALL BE APPROVED BY THE OWNER OR HIS REPRESENTATIVES PRIOR TO PLACEMENT.
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE BY HIS EQUIPMENT TO EXISTING UTILITIES, CROSS-DRAIN PIPES AND HEADWALLS AND SHALL REPAIR DAMAGE AT NO COST TO THE OWNER.
- 3. ALL PROPERTY LINE MARKERS (IRON PINS, CONCRETE MONUMENTS, ETC.) DESTROYED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF ALABAMA TO RESET PROPERTY MARKERS.
- 4. ALL ROADWAY SHOULDERS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO AS GOOD OR BETTER CONDITION IN ACCORDANCE WITH THE SPECIFICATIONS IMMEDIATELY AFTER PIPE IS IN PLACE.
- 5. ALL WATER MAINS AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS. CONTRACTOR SHALL TAKE EVERY NECESSARY PRECAUTION TO PROTECT EXISTING UTILITIES DURING CONSTRUCTION OPERATIONS. ALL EXCAVATION, SHORING, AND BRACING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXPLORE AHEAD AT LEAST 50 FEET SO THAT CONFLICTS CAN BE IDENTIFIED AND ADDRESSED IN A TIMELY MANNER. DOWN TIME WILL ONLY BE PAID IF THE ENGINEER AND THE OWNER CONCLUDE THAT THE CONTRACTOR WAS PROACTIVE IN HIS ATTEMPTS TO IDENTIFY POTENTIAL CONFLICTS AND THAT THE CONFLICT WAS DUE TO UNFORESEEN CONDITIONS.
- 7. ALL EXCESS MATERIAL FROM EXCAVATIONS SHALL BE DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER AND IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL STANDARD REGULATIONS.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOWS THROUGH EXISTING PIPING AND STRUCTURES AND DIVERSION OF FLOWS AS NECESSARY DURING CONSTRUCTION UNDER THIS CONTRACT. THE CONTRACTOR SHALL PROVIDE, AT NO ADDITIONAL COST TO THE OWNER ALL NECESSARY LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS AS REQUIRED TO ACCOMPLISH THE INTENT OF WORK SHOWN ON THE DRAWINGS AND AS SPECIFIED.
- 9. DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL TAKE MEASURES TO PREVENT SOIL FROM ERODING INTO CREEKS. BRANCHES, STREAMS, STORM DRAINS OR ON PRIVATE PROPERTY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DIVERSION OF STORMWATER RUN-OFF ONTO PRIVATE PROPERTY BY USE OF TEMPORARY EROSION CONTROL MEASURES, SUCH AS SILT FENCES AND HAYBALES. THE CONTRACTOR SHALL NOT DEPOSIT ANY MATERIAL ON PRIVATE PROPERTY ADJACENT TO THE PROJECT. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGES CAUSED BY SEDIMENT OR ANY OTHER ERODIBLE MATERIALS BEING DEPOSITED ONTO ADJACENT PROPERTY.
- 10. ALL WATER RELATED WORK SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. WATER REPRESENTATIVES WILL REGULARLY VISIT THE SITE TO REVIEW WORK UNDERWAY. ANY COMMENTS OR INSTRUCTIONS FROM THE REPRESENTATIVE WILL BE ISSUED THROUGH THE ENGINEER TO THE CONTRACTOR.
- 11. THE CONTRACTOR SHALL PROVIDE, IF NEEDED A DEWATERING SYSTEM. COST FOR DEWATERING SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 12. CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING PIPE FROM FLOATING. IF THE PIPE FLOATS DURING CONSTRUCTION, CONTRACTOR SHALL RELAY PIPE TO GRADE AT HIS EXPENSE.
- 13. A PROPERTY RESTORATION CREW, EMPLOYED BY THE CONTRACTOR, SHALL PROCEED IMMEDIATELY BEHIND THE PIPE LAYING CREW TO RESTORE PRIVATE PROPERTY AND/OR PUBLIC RIGHT-OF-WAY TO A PRE-CONSTRUCTION CONDITION. NO EXTRA PAY FOR THIS
- 14. THE CONTRACTOR SHALL MAINTAIN TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. A MINIMUM OF ONE (1) LANE SHALL REMAIN OPEN AT ALL TIMES. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL HOMES OR BUSINESSES DURING CONSTRUCTION. NO OPEN EXCAVATIONS SHALL BE LEFT UNATTENDED WITHIN ANY STREET, ROAD OR HIGHWAY RIGHT-OF-WAY. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).
- 15. NO WORK SHALL BE COMPLETED WITHIN THE COUNTY RIGHT-OF-WAY WITH OUT A COUNTY RIGHT-OF-WAY PERMIT. OBTAINING SUCH PERMIT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALATION/REPLACEMENT OF ALL SIGNAGE, MAIL BOXES, AND OTHER OBSTRUCTIONS ASSOCIATED WITH INSTALLATION OF THE WATER MAIN. ALL REMOVAL AND REINSTALLATION/REPLACEMENT OF OBSTRUCTIONS DESCRIBED IN THIS NOTE SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 17. THE CONTRACTOR SHALL CONTACT ALABAMA ONE-CALL PRIOR TO ANY UNDERGROUND UTILITY WORK TO VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES. IN THE EVENT A CONFLICT EXISTS THE ENGINEER WILL MAKE THE NECESSARY ADJUSTMENTS IN ALIGNMENT.
- 18. CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVATION AND/OR REPLACEMENT OF VEGETATION WITH LIKE SPECIES (I.E. BUSHES, TREES, ETC.) AND THE RESTORATION OF ANY GROUND COVER WITH LIKE SPECIES DISTURBED DURING CONSTRUCTION.
- 19. CONTRACTOR MAY OPEN OR CLOSE VALVES ONLY IN THE PRESENCE OF AN AUTHORIZED FAIRHOPE UTILITIES REPRESENTATIVE.
- 20. WATER SERVICE INTERRUPTIONS MUST BE PLANNED TO MINIMIZE THE IMPACT ON FAIRHOPE UTILITIES CUSTOMERS AND TIME OUT OF SERVICE.
- 21. WATER SHUTDOWNS SHALL BE SCHEDULED TUESDAY-THURSDAY FROM 9-4. EXCEPTIONS MAY BE CONSIDERED ON A CASE-BY-CASE BASIS.
- 22. THE CONTRACTOR IS REQUIRED TO NOTIFY FAIRHOPE UTILITIES SUPERINTENDENT AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO A PLANNED SHUTDOWN.
- 23. A FAIRHOPE UTILITIES INSPECTOR OR AUTHORIZED REPRESENTATIVE SHALL OBSERVE ALL SHUTDOWNS.
- 24. THE CONTRACTOR IS REQUIRED TO PROVIDE 72 HOURS (3 WORKING DAYS) NOTICE TO THE FAIRHOPE UTILITIES INSPECTOR FOR A WET TAP ON A PRESSURIZED LINE. AN AUTHORIZED FAIRHOPE UTILITIES REPRESENTATIVE SHALL OBSERVE ALL WET TAPS.
- 25. THE CONTRACTOR IS RESPONSIBLE FOR OPENING ALL NEW VALVES.
- 26. THE INDIVIDUAL WHO CLOSES A VALVE IS RESPONSIBLE FOR MAKING SURE THAT THE VALVE IS REOPENED. THE VALVE LOCATION, NAME(S) OF THE INDIVIDUAL WHO OPERATED THE VALVE, DATE, AND TIME THAT THE VALVE WAS OPENED AND CLOSED MUST BE RECORDED.
- 30. THE CONTRACTOR SHALL FLUSH ALL NEW LINES UNTIL A FAIRHOPE UTILITIES REPRESENTATIVE DETERMINES THAT THE LINE IS CLEAN AND FLUSHING MAY END. THE CONTRACTOR WILL BE PAID FOR FLUSHING AS SPECIFIED ON THE BID SHEET.
- 27. THE CONTRACTOR SHALL PLACE AND MAINTAIN ADEQUATE BARRICADES, CONSTRUCTION SIGNS, FLASHING LIGHTS, RED LANTERNS AND GUARDS DURING PROGRESS OF CONSTRUCTION WORK AND UNTIL IT IS SAFE FOR BOTH PEDESTRIAN AND VEHICULAR TRAFFIC.
- 28. PROPERTY OBSTRUCTIONS WHICH ARE TO REMAIN IN PLACE, SUCH AS BUILDINGS, SEWER, STORM DRAINS, WATER OR GAS PIPES, ELECTRICAL CONDUITS, POLES, WALLS, POSTS, ETC., ARE TO BE CAREFULLY PROTECTED AND ARE NOT TO BE DISPLACED, UNLESS NOTED.
- 29. THE CONTRACTOR SHALL NOTIFY THE SUPERINTENDENTS OF THE WATER, GAS, SEWER, TELEPHONE AND POWER COMPANIES 10 DAYS IN ADVANCE THAT HE INTENDS TO START WORK IN A SPECIFIC AREA. THE OWNER DISCLAIMS ANY RESPONSIBILITY FOR THE SUPPORT AND PROTECTION OF SEWERS, DRAINS, WATER PIPES, GAS PIPES, CONDUITS OF ANY KIND, UTILITIES OR OTHER STRUCTURES OWNED BY THE CITY, COUNTY, STATE OR BY PRIVATE OR PUBLIC UTILITIES LEGALLY OCCUPYING ANY STREET, ALLEY, PUBLIC PLACE OR RIGHT-OF-WAY.
- 30. CONTRACTOR SHALL DISPOSE OF BY HAULING AWAY ALL EXCESS MATERIAL
- 31. P.V.C. PIPE FOR WATER SHALL BE AWWA C-900/C-905, MIN. PRESSURE CLASS OF 150 PSI AND 160 PSI, RESPECTIVELY, STEEL CASING PIPE SHALL BE MINIMUM ASTM A-139 GRADE B. POLYETHYLENE PIPE SHALL BE DR11. MIN. PRESSURE CLASS 160 PSI. OPERATING PRESSURES IN THE RANGE OF 65-70 PSI.
- 32. WATER SUPPLY FACILITIES, INCLUDING MAINS, SHALL BE INSTALLED, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST APPLICABLE AWWA STANDARDS AND COORDINATED WITH FAIRHIOPE INSPECTOR AND QUALITY CONTROL SUPERVISOR.
- 33. CONTRACTOR SHALL BE RESPONSIBLE FOR AND COMPLY WITH ANY TESTING REQUIRED BY THE LOCAL GOVERNING AGENCY IN ADDITION TO THE TESTING REQUIREMENTS OUTLINED IN THE SPECIFICATIONS.
- 34. GRADING AROUND TREES WHICH ARE TO REMAIN SHALL BE AWAY FROM THE TREE IN A MANNER TO CAUSE NO DAMAGE TO THE TREE.
- 35. A MINIMUM SEPARATION OF 10 FEET HORIZONTALLY OR 18 INCHES VERTICALLY SHALL BE MAINTAINED BETWEEN WATER AND SEWER LINES. IF THIS SEPARATION IS NOT POSSIBLE, THE SEWER LINE MUST BE ENCASED IN CONCRETE.
- 36. WATERLINE ENCASEMENTS SHALL EXTEND A MINIMUM OF THREE FEET BEYOND EDGE OF PAVEMENT OR BACK OF CURB.
- 40. UNCLASSIFIED EXCAVATION AND BORROW EXCAVATION REQUIRED FOR PIPELINE INSTALLATION SHALL BE PROVIDED IN ACCORDANCE WITH CURRENT ALDOT SPECIFICATIONS. UNCLASSIFIED EXCAVATION SHALL BE A SUBSIDIARY OBLIGATION OF PIPELINE INSTALLATION. BORROW EXCAVATION HAS BEEN PROVIDED AS A CONTINGENCY ON THE BID SHEET SHOULD UNSUITABLE SOILS BE ENCOUNTERED. PLACEMENT OF BORROW SHALL BE AT THE DIRECTION OF THE ENGINEER OR HIS/HER REPRESENTATIVE.

UTILITY NOTES

- 1. PROPOSED WATER MAIN SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT AWWA SPECIFICATIONS.
- 2. CONTRACTOR TO MAINTAIN 36" MIN. COVER OVER PROPOSED WATER MAIN.
- 3. ALL WATER MAIN FITTINGS ARE MECHANICAL JOINT DUCTILE IRON W/MEGALUGS.
- 4. 18 L.F. OF CLASS 51 DUCTILE IRON SHALL BE REQUIRED AT EVERY BEND ON PROPOSED WATER MAIN.
- 5. SEE SHEETS C4.0-C4.1 FOR ALL UTILITY AND CONSTRUCTION DETAILS
- 6. FIRE HYDRANTS, IN-LINE GATE VALVES AND AIR RELIEF VALVES SHALL BE REQUIRED AS SHOWN ON PLANS.
- 7. THRUST BLOCKS SHALL BE CONSTRUCTED AT EVERY BEND, VALVE AND HYDRANT ASSEMBLY. SEE DETAIL SHEETS FOR CONSTRUCTION INFORMATION.
- 8. PROPOSED AIR RELIEF VALVES SHOWN ON PLANS SHALL BE APCO 4" MODEL NO. 149C COMBINATION AIR VALVES.
- 9. CHLORINE SHALL BE SUPPLIED BY THE CONTRACTOR. BACTERIOLOGICAL TESTS WILL BE PERFORMED BY THE OWNER. CHLORINE CONCENTRATIONS SHALL BE BETWEEN 50 AND 100 PPM SUCH THAT A MINIMUM RESIDUAL CONCENTRATION OF 25MG/L WILL BE LEFT AFTER A 24 HOUR RETENTION PERIOD. OPERATION SHALL BE REPEATED AS NECESSARY TO PROVIDE COMPLETE DISINFECTION. AFTER RETENTION PERIOD, CHLORINATED WATER SHALL BE FLUSHED.

ALDOT NOTES

- 1. ALL METERS ARE TO BE INSTALLED OFF OF ALDOT RIGHT-OF WAY.
- 2.ALL MANHOLES, VALVE BOXES, AND HAND HOLES SHOULD BE FLUSH WITH EXISTING GROUND.
- 3.CONTACT DISTRICT MANAGER 48 HOURS PRIOR TO BEGINNING WORK ON ALDOT RIGHT-OF-WAY. THE DISTRICT ENGINEERS FOR THE NINTH DIVISION ARE AS FOLLOWS:
- (1) MOBILE COUNTY CHARLY D. JONES JR., (251) 470-8209
- (2) BALDWIN COUNTY FRANKIE SMITH, (251) 937-2086
- (3) ESCAMBIA AND CONECUH COUNTIES BRENT MADDOX, (251) 578-7553
- 4.WRITE LETTER REQUESTING TO MEET WITH DISTRICT MANAGER UPON COMPLETION OF PERMITTED WORK TO EVALUATE PUNCH LIST FOR COMPLETION OF PROJECT.
- 5.IF APPLICABLE, THE BOND ASSOCIATED WITH THE PERMIT WILL BE GOOD FOR ONE FULL YEAR AFTER THE WORK IS ACCEPTED BY THE DEPARTMENT.
- 6.ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION. (IF PROJECT NECESSITATES LANE CLOSURE, LANE CLOSURE MUST BE MADE PART OF THE PERMIT.)
- 7.ONSITE REPRESENTATIVES & CONTACT INFORMATION (TBD UPON CONTRACTOR SELECTION)
- 8.ONSITE REPRESENTATIVES WILL HAVE ON HAND, AT ALL TIMES:
- (1) APPROVED PERMIT AND PLANS STAMPED BY THE DIVISION ENGINEER
- (2) TRAFFIC CONTROL PLANS (IN ACCORDANCE WITH APPLICABLE ALDOT INDEX NUMBER)
- (3) EROSION CONTROL PLANS
- 9.ALL DISTURBED AREAS WILL BE RESODDED OR SEEDED AS DIRECTED BY THE DEPARTMENT OF TRANSPORTATION'S DISTRICT ENGINEER
- 10. ALL WORK WILL MEET OR EXCEED ALDOT SPECIFICATIONS.
- 11. ALL WORK ON THE ROW WILL BE IN CONFORMANCE WITH THE LATEST EDITION OF ALDOT STANDARD SPECIFICATIONS.
- 12. ELECTRIC POWER AND COMMUNICATION FACILITIES WILL CONFORM WITH THE CURRENT APPLICABLE NATIONAL ELECTRICAL SAFETY CODE
- 13. A BEST MANAGEMENT PLAN SHALL AT MINIMUM RETURN ALL EXPOSED AREAS TO ORIGINAL OR BETTER CONDITION WITH A GOOD STAND OF GRASS AND/OR SOD. SILT FENCE, HAY BALES, AND ANY OTHER EROSION CONTROL ITEMS NEEDED SHALL BE USED TO PREVENT EROSION.
- 14. ALL TREES OVER 4" SHALL NOT BE CUT/REMOVED WITHOUT WRITTEN PERMISSION FROM ALDOT.
- 15. ALL INSTALLATIONS THAT REQUIRE BORE PITS MUST STATE/DEPICT BORE PIT DIMENSIONS.
- 16. ABSOLUTELY NO BORE PITS SHALL BE ALLOWED TO BE UNFILLED AND/OR UNCOVERED OVERNIGHT UNLESS PROTECTED.
- 17. UPON COMPLETION & ANY TIME THEREAFTER, ALDOT RETAINS THE RIGHT TO REQUEST AN AS-BUILT PROFILE ON ANY BURIED UTILITIES IN SAID DEPARTMENT'S ROW.
- 18. WARNING: DO NOT DISTURB SURVEY MARKERS LOCATED ON ALDOT RIGHT-OF-WAY.
- 19. THE AMOUNT OF AREA TO BE DISTURBED DURING CONSTRUCTION OF THIS PERMIT IS 0.50 ACRE(S).
- 20. WATER LINES WILL CONFORM WITH THE CURRENTLY APPLICABLE STANDARDS OF THE AMERICAN WATER WORKS ASSOCIATION
- 21. PRESSURE PIPE LINES WILL CONFORM WITH THE CURRENTLY APPLICABLE SECTIONS OF AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- 22. AS REQUIRED BY ALABAMA ACT 94-487: CALL TWO WORKING DAYS BEFORE EXCAVATION 1-800-292-8525, ALABAMA LINE LOCATION CENTER, INC.
- 23. POSTED SPEED LIMIT WITHIN PROJECT BOUNDARIES IS 45 MPH.

8 N. ALSTON ST.

AS NOTED

LEGEND

 \bowtie

—— SS ——

—— OHUT ——

—— UNGC ——

-PROPOSED 12" DOMESTIC WATER MAINPROPOSED 16" DOMESTIC WATER MAIN
-PROPOSED GATE VALVE
-PROPOSED FIRE HYDRANT ASSEMBLY
-PROPOSED AIR RELIEF VALVE
-EXISTING SANITARY SEWER
-EXISTING OVERHEAD UTILITY
-EXISTING UNDERGROUND COMMUNICATION

CONTACT INFORMATION

FAIRHOPE UTILITIES CONTACT INFORMATION:

CITY OF FAIRHOPE PUBLIC UTILITIES 555 S. SECTION ST FAIRHOPE, AL 36533 (251) 928-8003 CONTACT: DAN McCRORY (WATER AND SEWER) CONTACT: SCOTT SLIGH (GAS & ELECTRIC)

THOMPSON ENGINEERING CONTACT INFORMATION:

C10

MICAH JONES, P.E. 6706-C PLANTATION BLVD. PENSACOLA, FL 32504 (850) 202-3030

12-2111-0072

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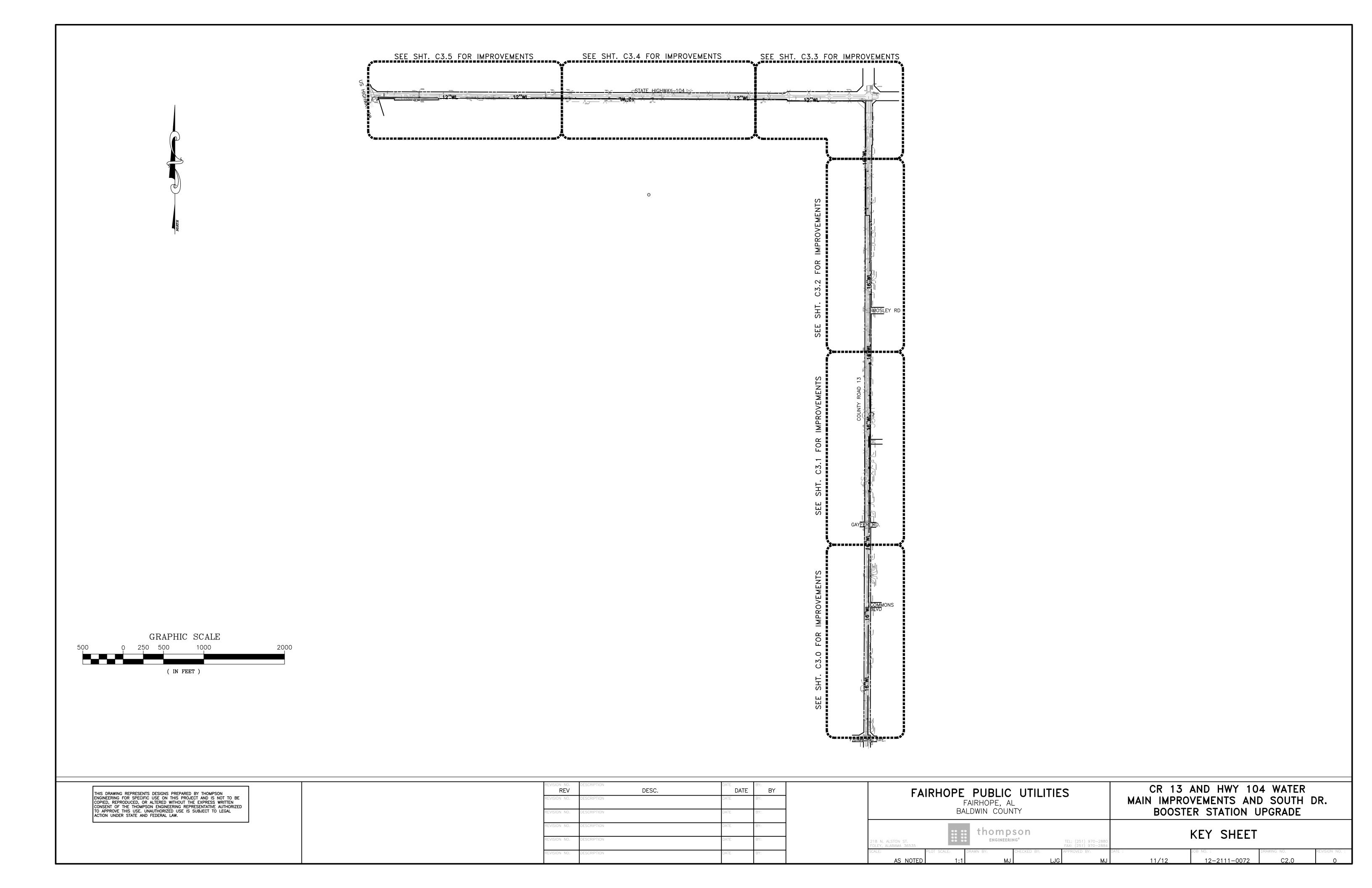
FAIRHOPE PUBLIC UTILITIES FAIRHOPE, AL BALDWIN COUNTY

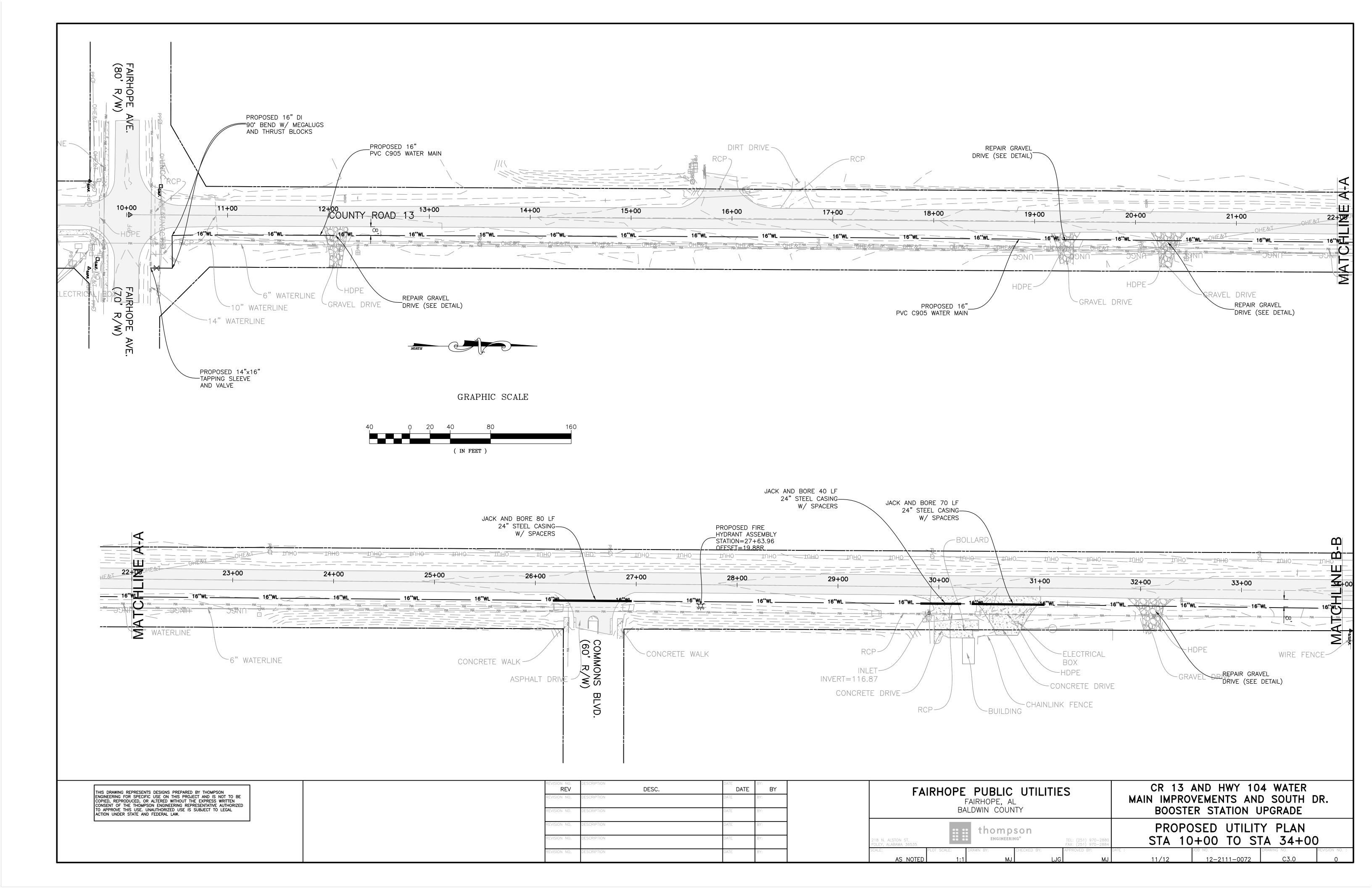
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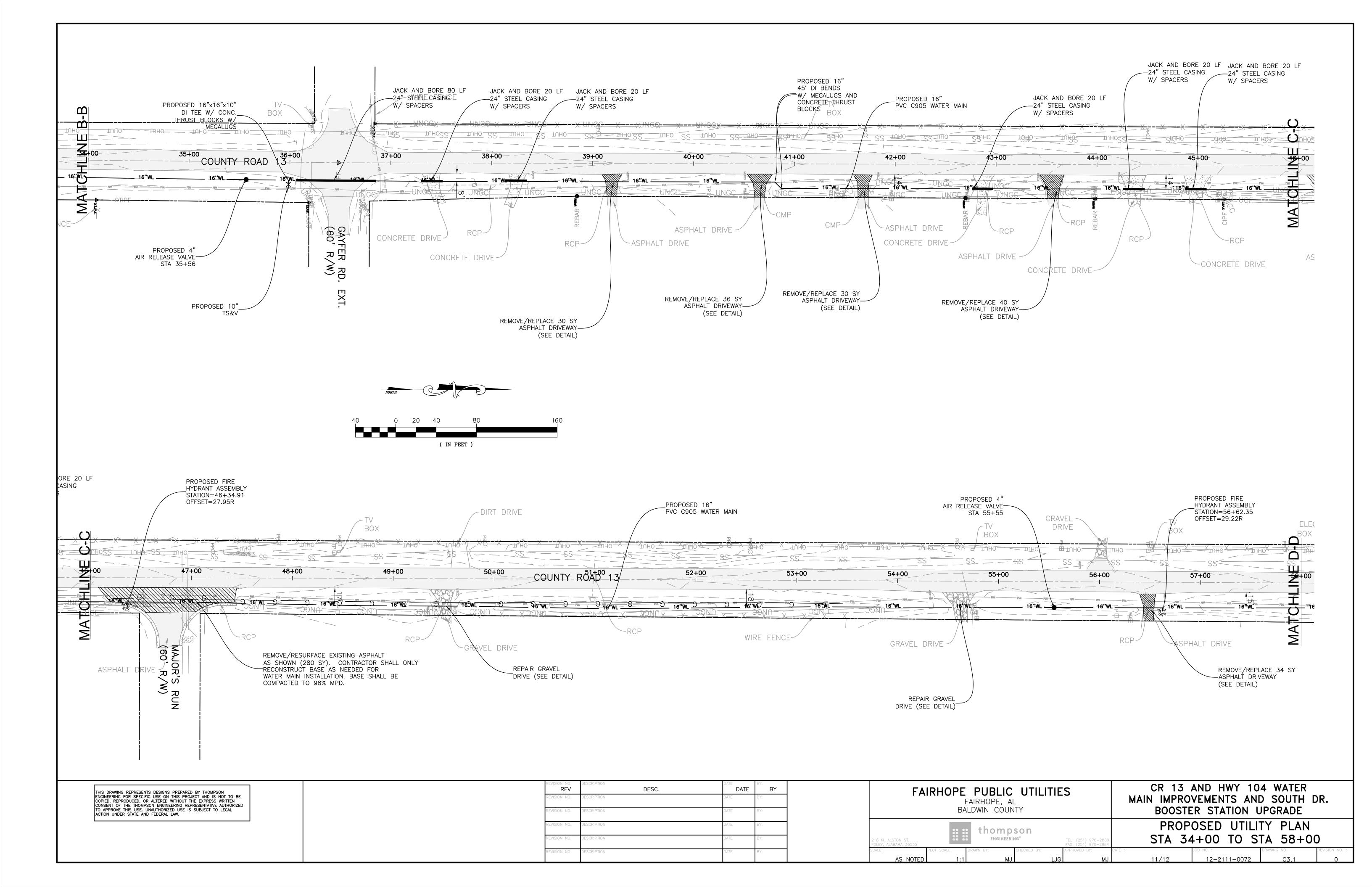
CR 13 AND HWY 104 WATER MAIN IMPROVEMENTS AND SOUTH DR. **BOOSTER STATION UPGRADE**

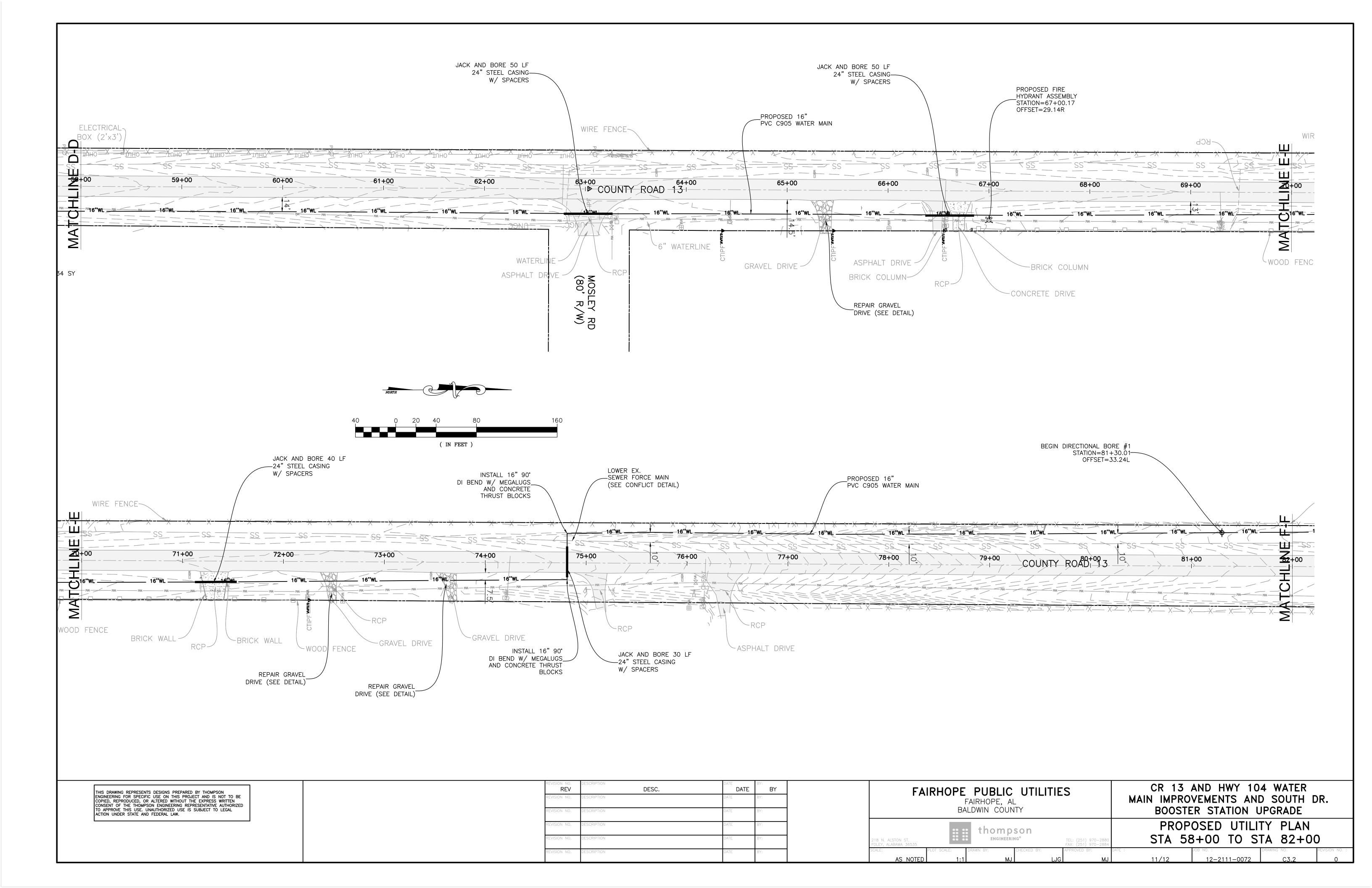
chompson GENERAL NOTES TEL: (251) 970-2

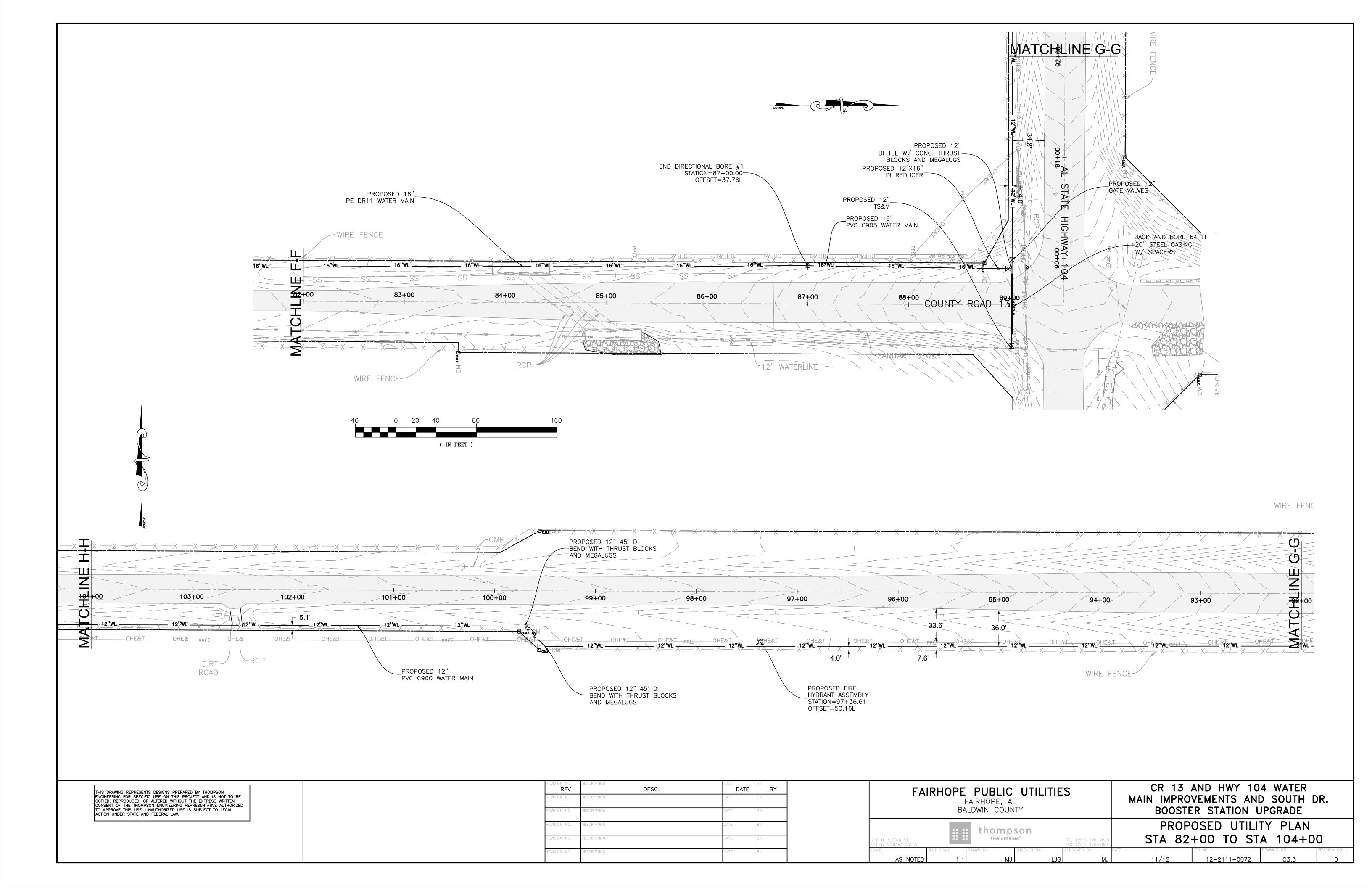
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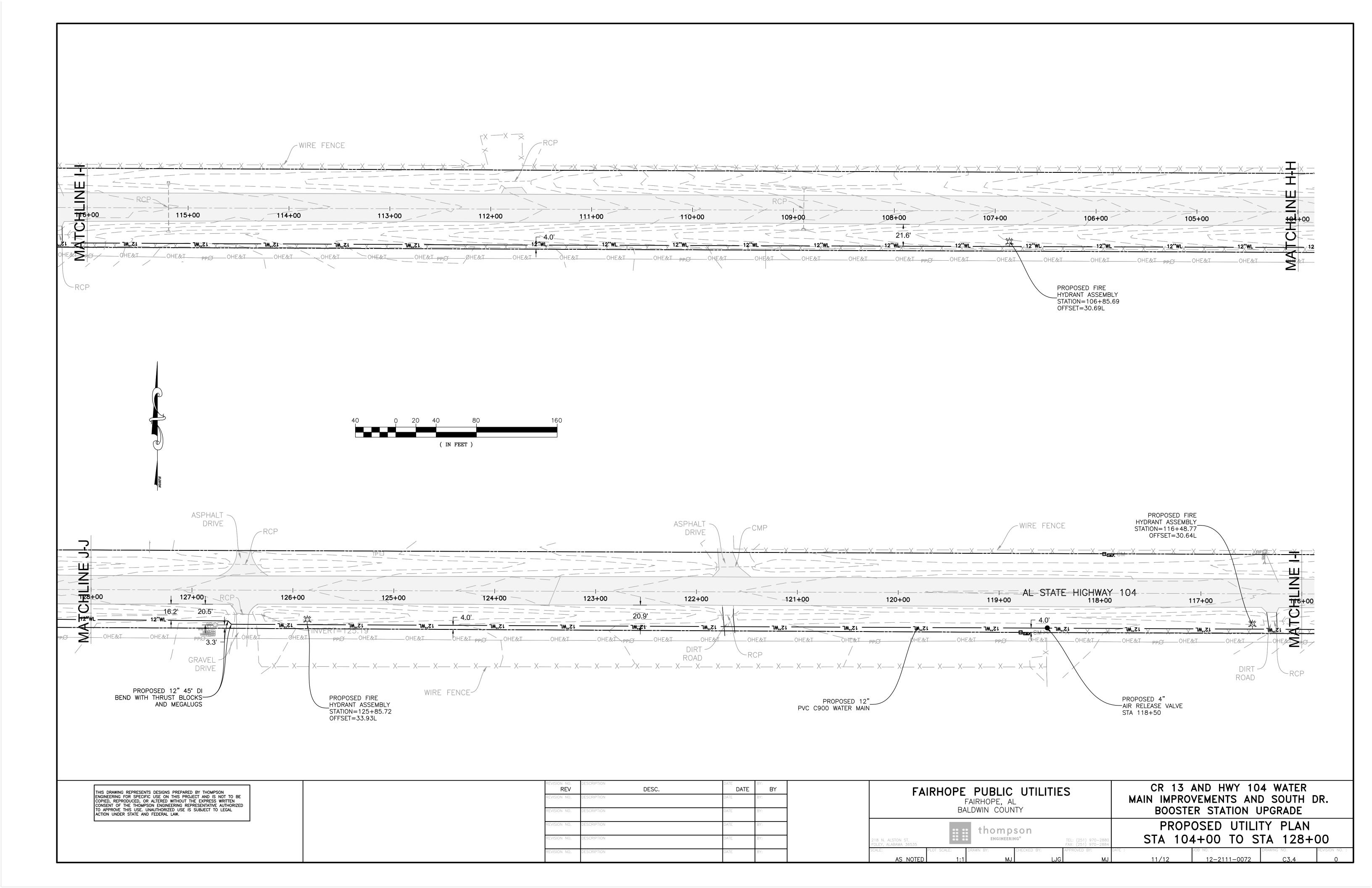


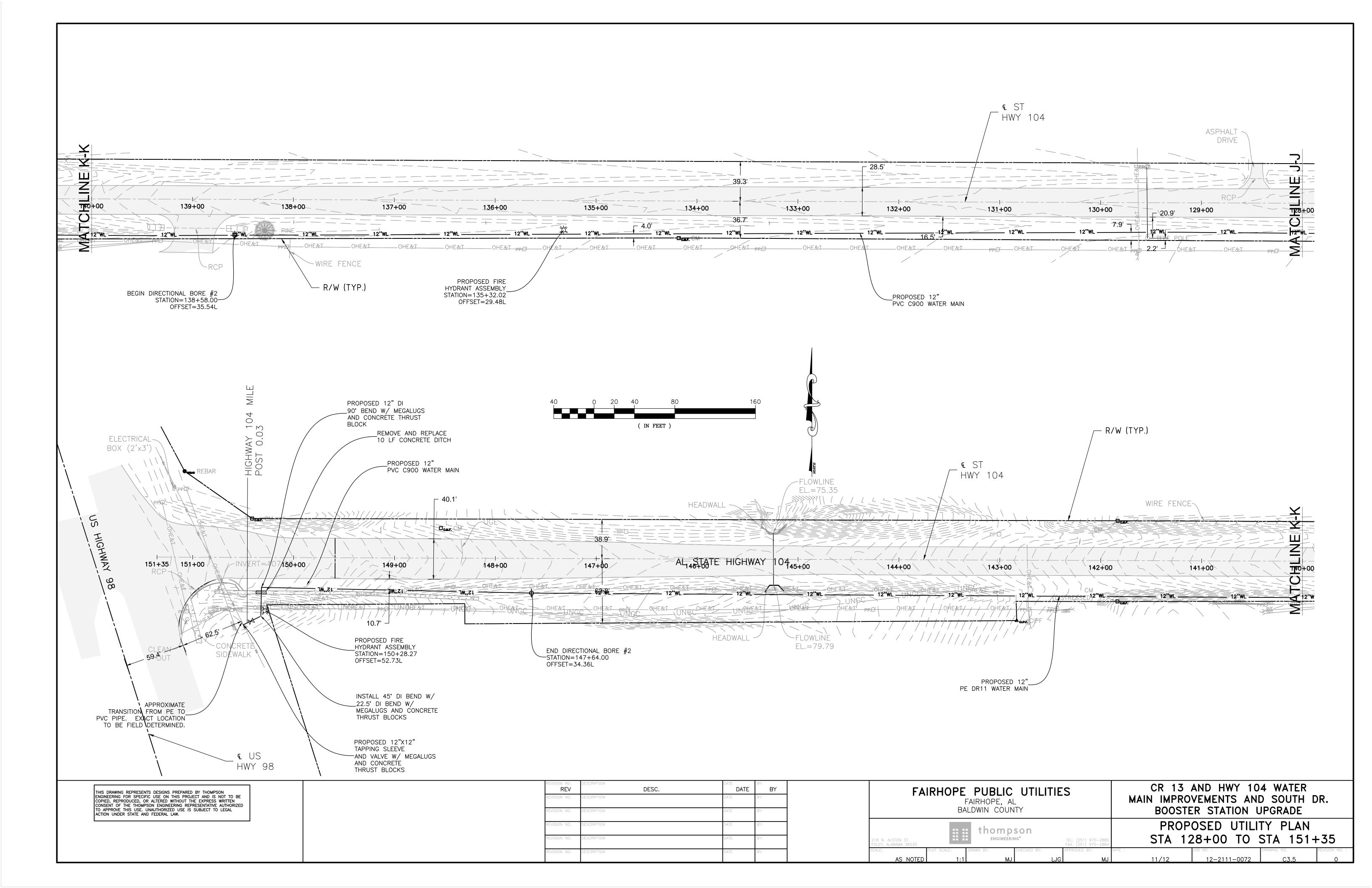


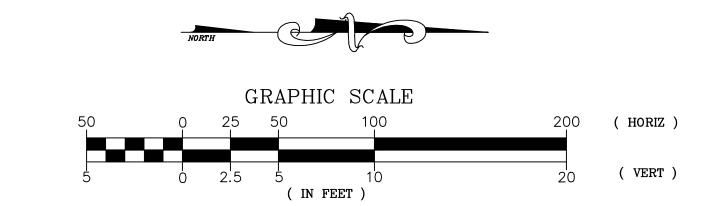












FAIRHOPE PUBLIC UTILITIES

FAIRHOPE, AL
BALDWIN COUNTY

218 N. ALSTON ST. FOLEY, ALABAMA 36535 thompson ENGINEERING®

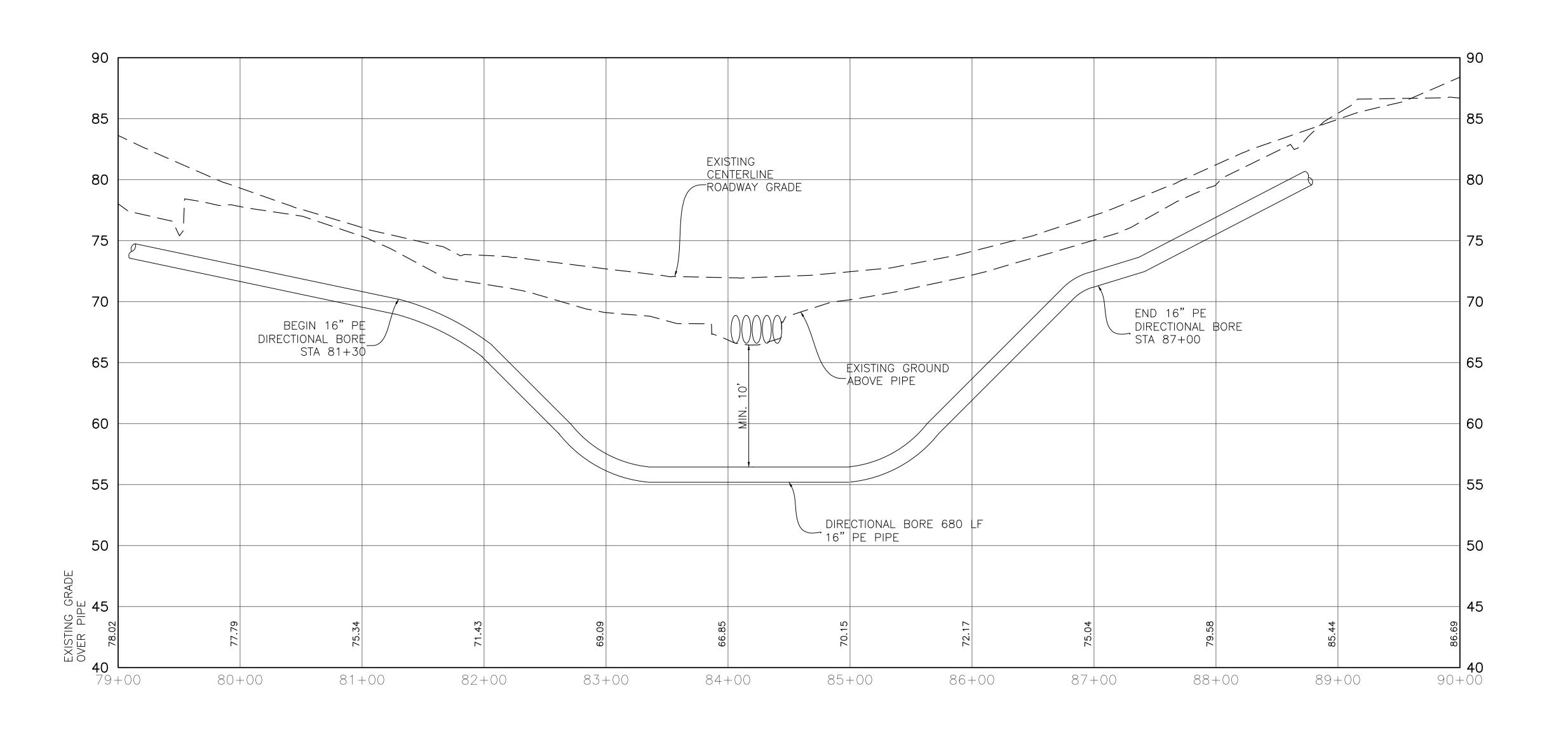
TEL: (251) 970-288 FAX: (251) 970-288 CR 13 AND HWY 104 WATER

MAIN IMPROVEMENTS AND SOUTH DR. BOOSTER STATION UPGRADE

DIRECTIONAL BORE #1

12-2111-0072

C3.6



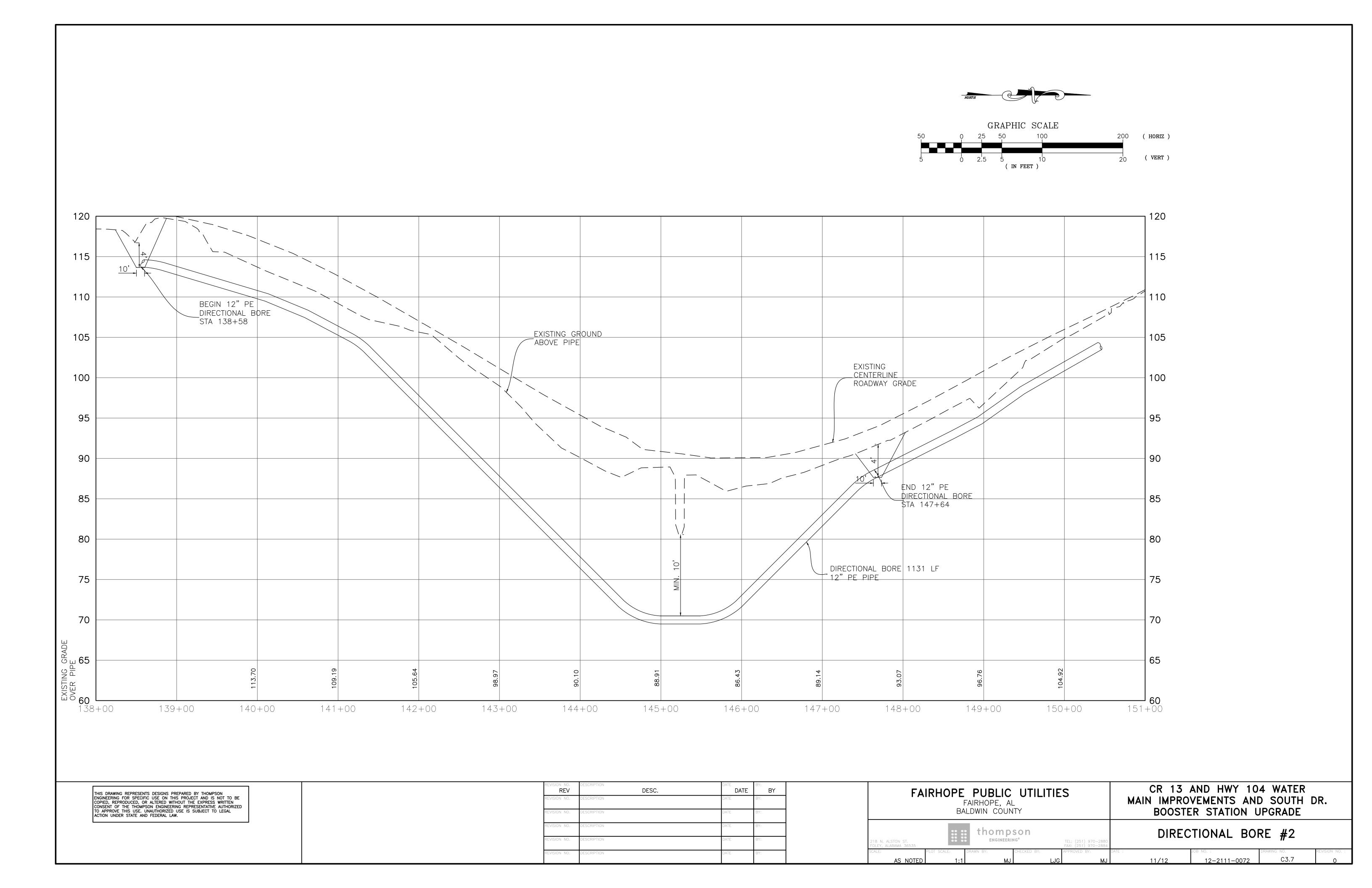
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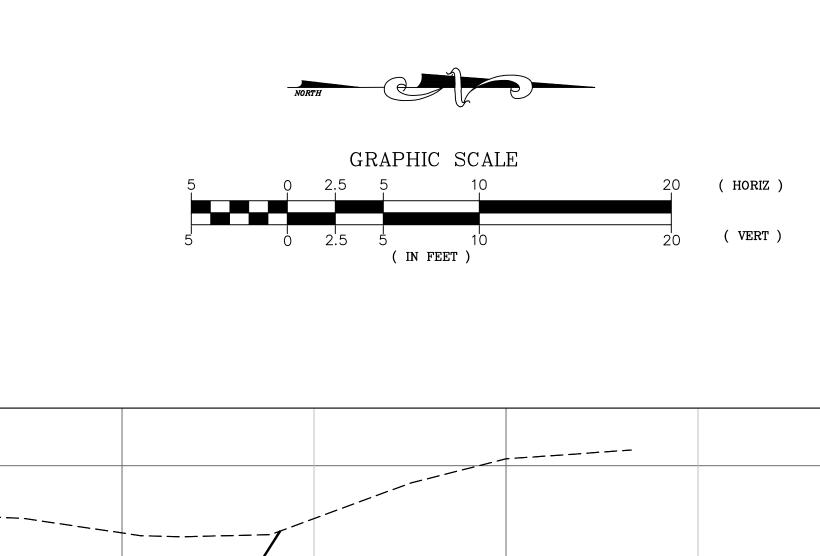
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DATE

BY





-BORE PIT

FAIRHOPE PUBLIC UTILITIES

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BALDWIN COUNTY

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CR 13 AND HWY 104 WATER

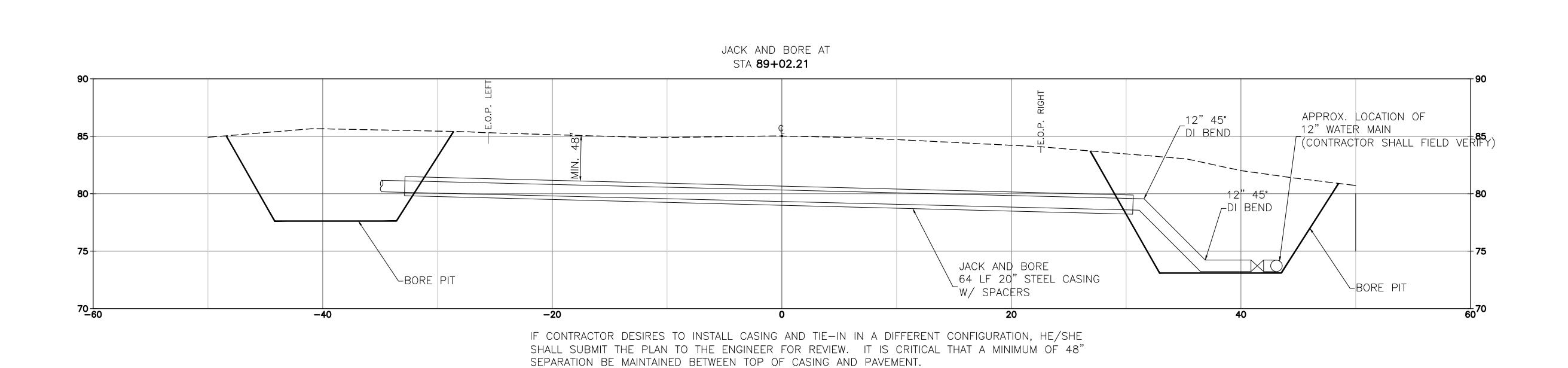
MAIN IMPROVEMENTS AND SOUTH DR.

BOOSTER STATION UPGRADE

JACK AND BORE CROSS SECTION

12-2111-0072

C3.8



DATE

BY

JACK AND BORE AT STA **74+81.16**

JACK AND BORE

W/ SPACERS

30 LF 24" STEEL CASING

EX. FORCE

BE LOWERED

~BORE PIT

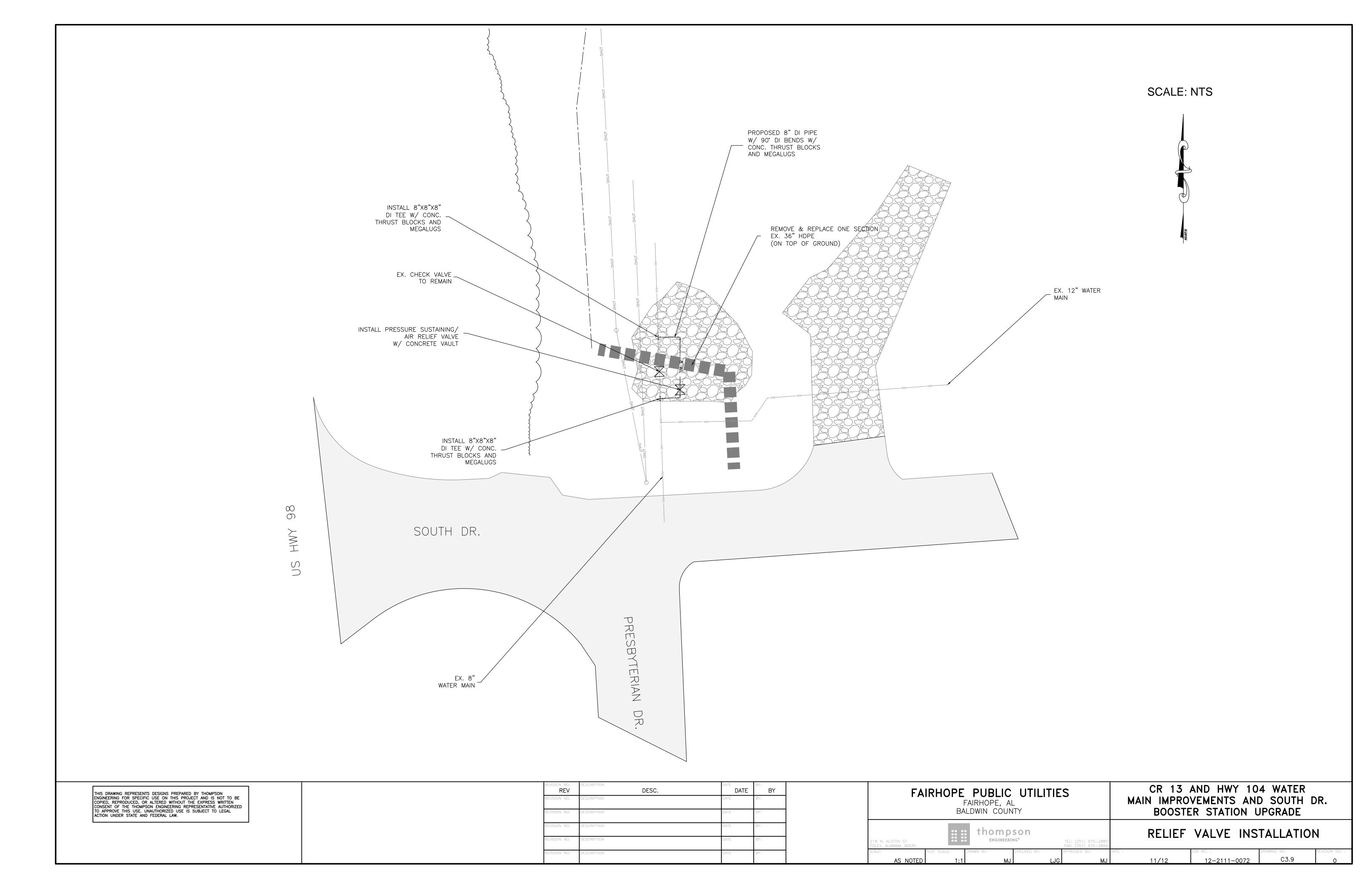
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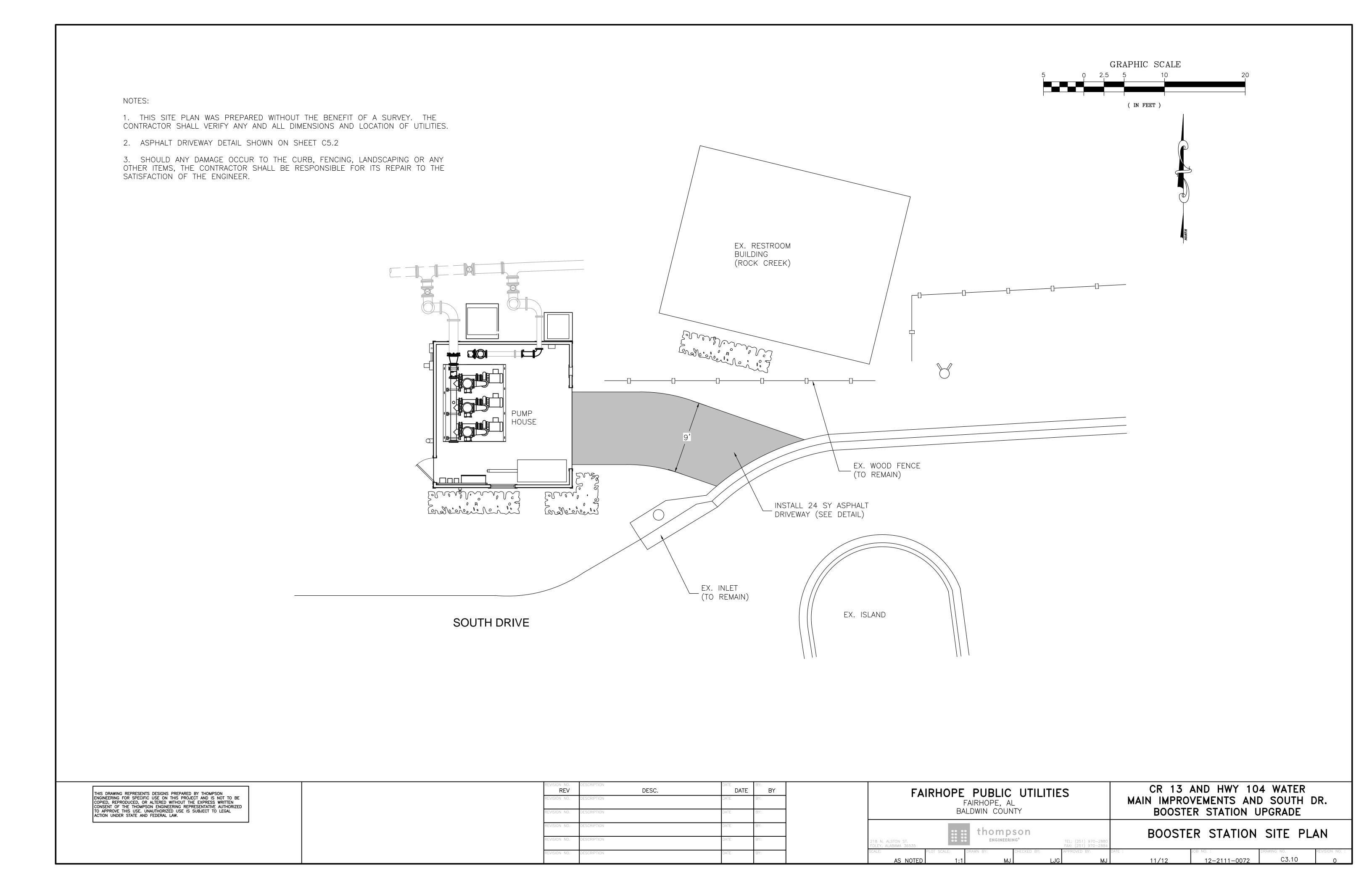
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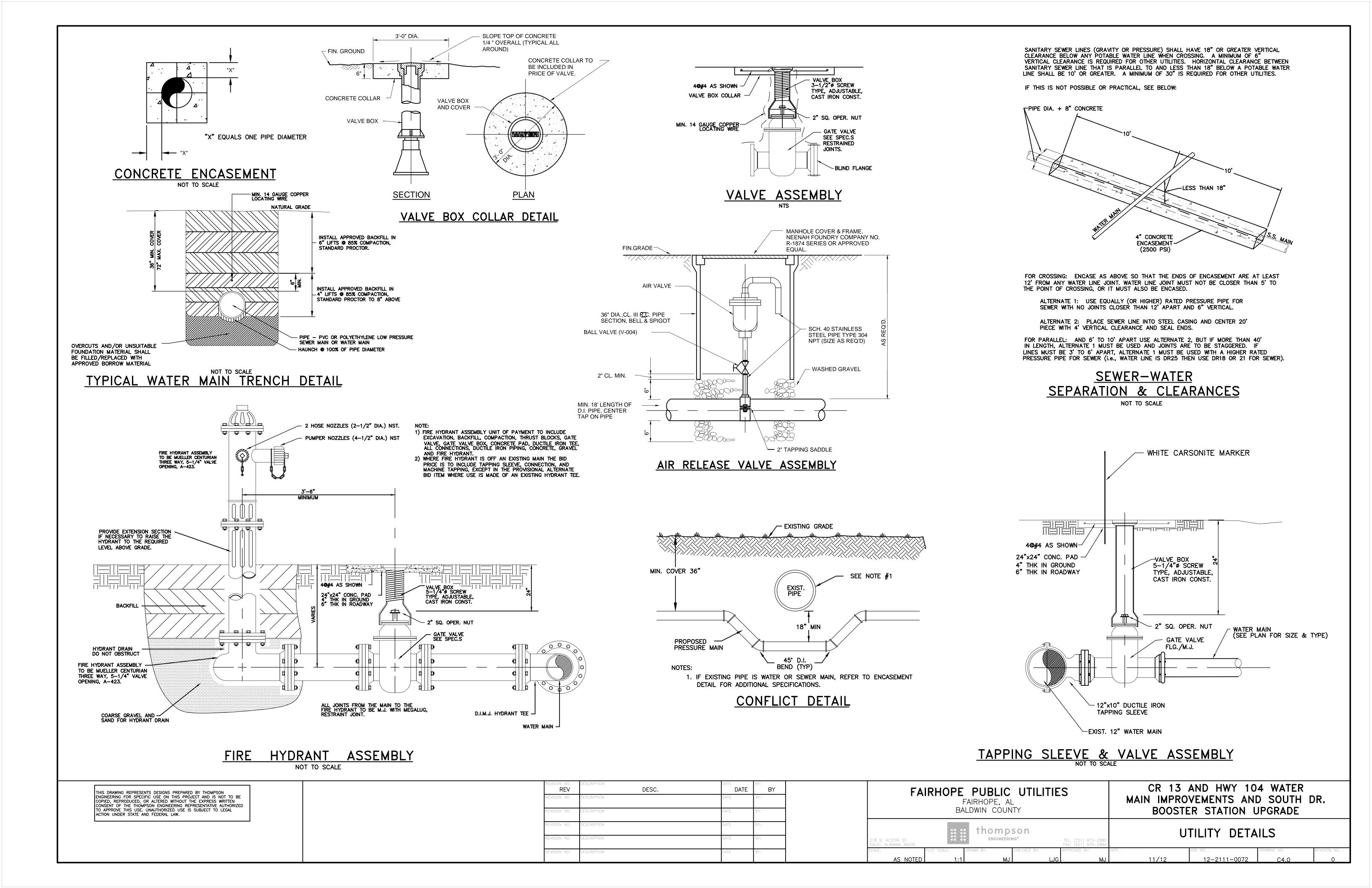
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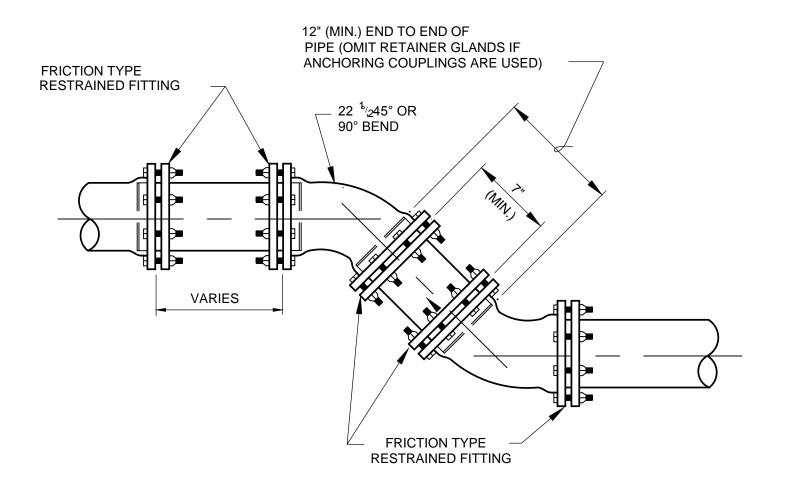
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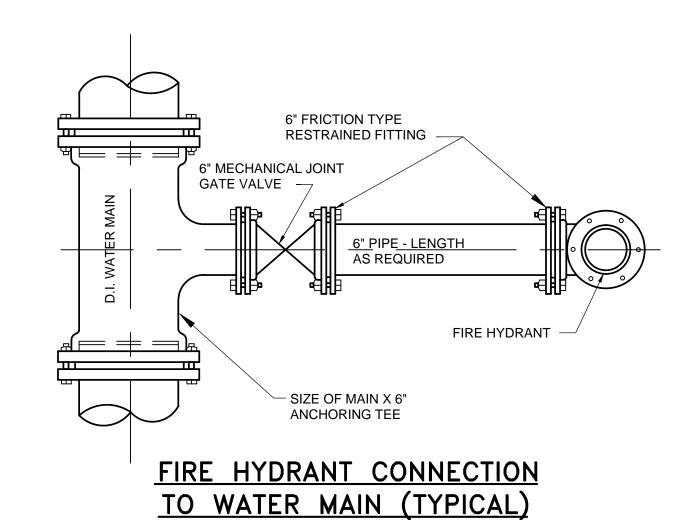


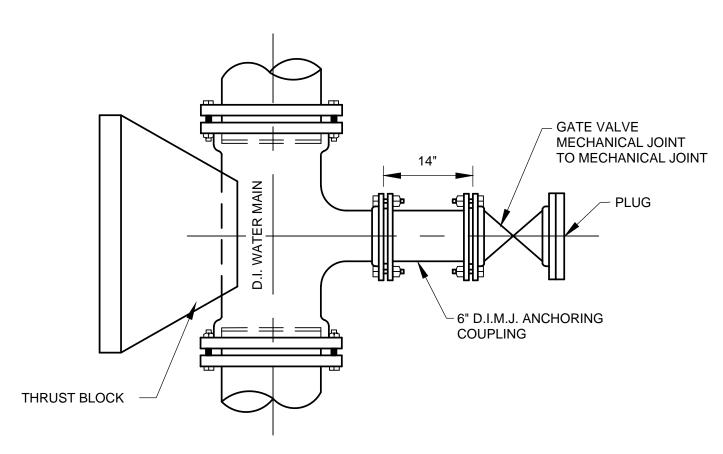




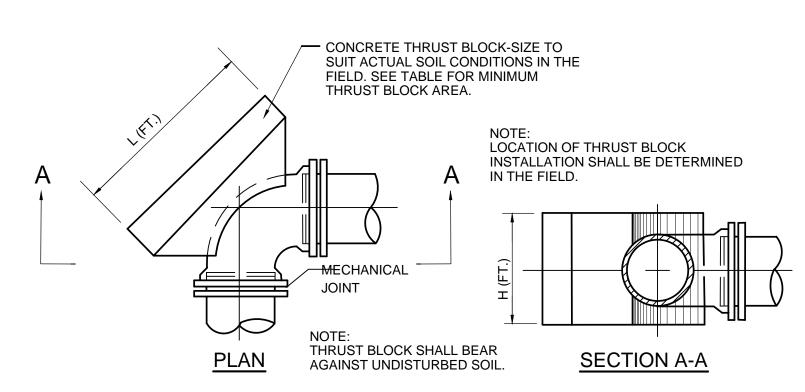


ANCHORING OF VERTICAL OR HORIZONTAL BENDS WHERE THRUST BLOCKS ARE NOT DESIRED

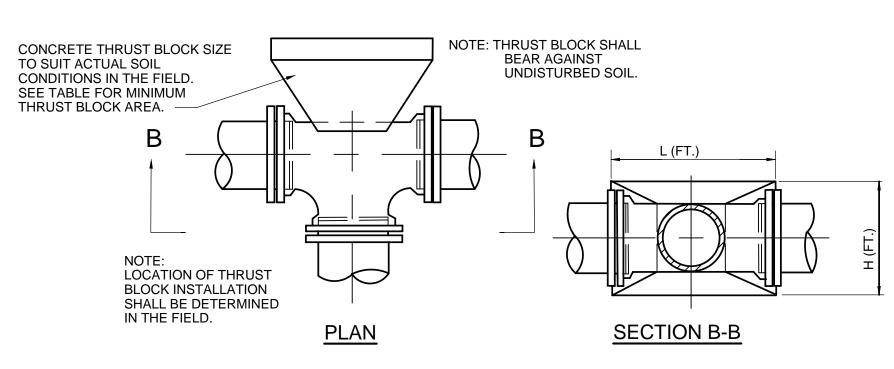




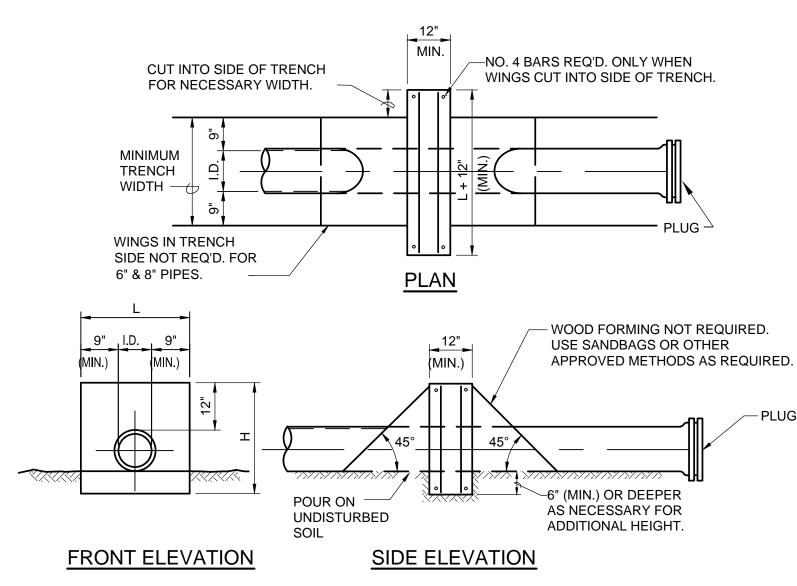
STUBOUT FOR FUTURE CONNECTION (TYPICAL)



TYPICAL THRUST BLOCK DETAIL FOR BENDS



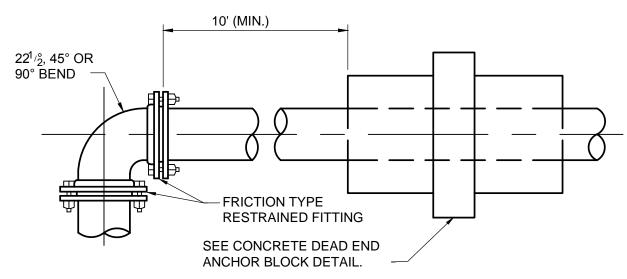
TYPICAL THRUST BLOCK DETAIL FOR TEES



CONCRETE DEAD END ANCHOR BLOCK DETAILS

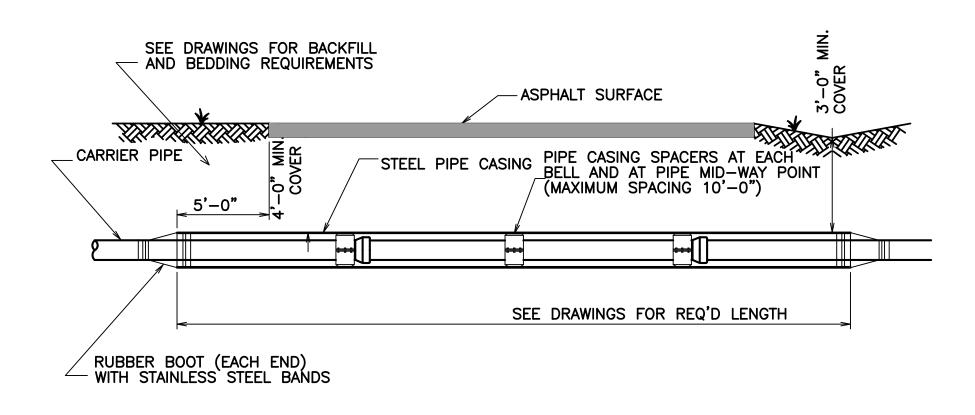
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BY



ANCHORAGE OF BENDS WHERE THRUST BLOCKS ARE NOT DESIRED — DEAD END ANCHORS

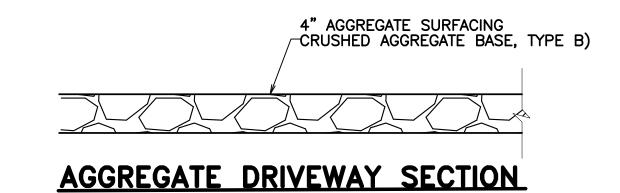
TYPICAL THRUST BLOCKS MINIMUM THRUST BLOCK AREA SQ. FT. L (FT.) X H (FT.)								
INSIDE DIA. PIPE LINE IN INCHES	90° BENDS	TEES, DEAD ENDS, OR 45° BENDS	22 ¹ / ₂ BENDS					
6" 8" 10" 12" 16" 18" 20" 24" 30"	3.0 5.5 8.5 12.0 22.0 27.0 34.0 48.0 75.0	2.2 4.0 6.0 9.0 16.0 20.0 24.0 34.0 53.0	1.0 1.5 2.5 3.5 6.0 8.0 10.0 14.0 21.0					

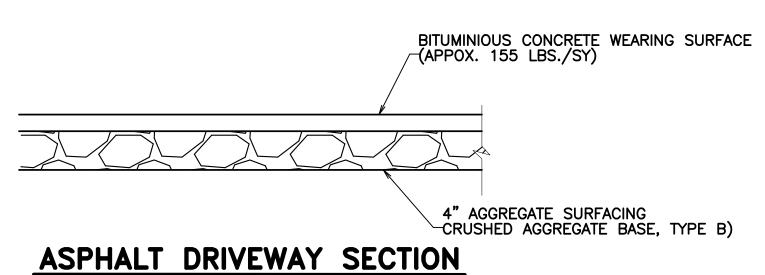


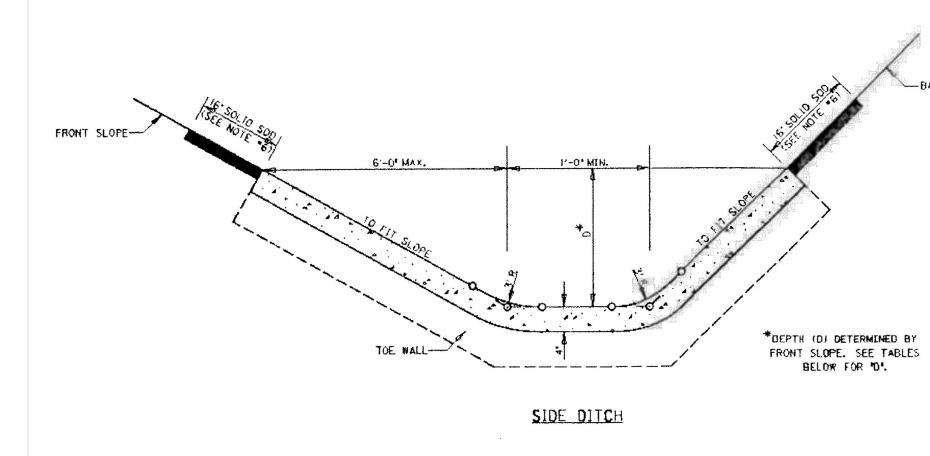
<u>DETAIL - TYPICAL UTILITY ENCASEMENT</u>

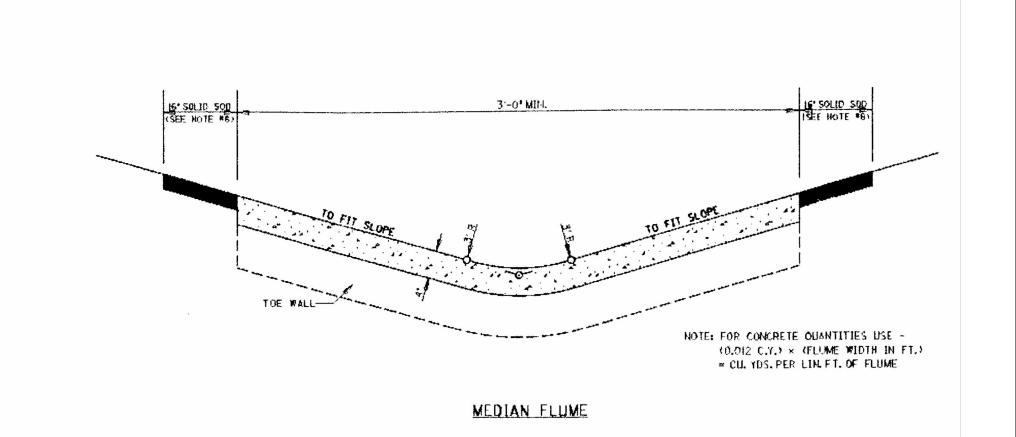
THIS DRAWING REPRESENTS DESIGNS PREPARED BY THOMPSON			REV	DESCRIPTION DES	SC.
ENGINEERING FOR SPECIFIC USE ON THIS PROJECT AND IS NOT TO BE COPIED, REPRODUCED, OR ALTERED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE THOMPSON ENGINEERING REPRESENTATIVE AUTHORIZED		REVISIO	SION NO.	DESCRIPTION	
TO APPROVE THIS USE. UNAUTHORIZED USE IS SUBJECT TO LEGAL ACTION UNDER STATE AND FEDERAL LAW.		REVISIO	SION NO.	ESCRIPTION	
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FAIRHOPE PUBLIC UTILITIES FAIRHOPE, AL BALDWIN COUNTY				MAIN	IMPROVEMENT	AND HWY 104 WATER COVEMENTS AND SOUTH TER STATION UPGRADE		
218 N. ALSTON ST. FOLEY, ALABAMA 36535		thompson ENGINEERING®	TEL: (251) 970–2880 FAX: (251) 970–2884		UTILITY	DET#	AILS	
SCALE:	PLOT SCALE: DRAWN	I BY: CHECKED BY:	APPROVED BY:	DATE :	JOB NO. :	DR	RAWING NO.	REVISION NO.
AS NOTED	l 1:1	MJ	LJG MJ MJ	11,	/12 12-2111	i-0072	C4.1	1 0









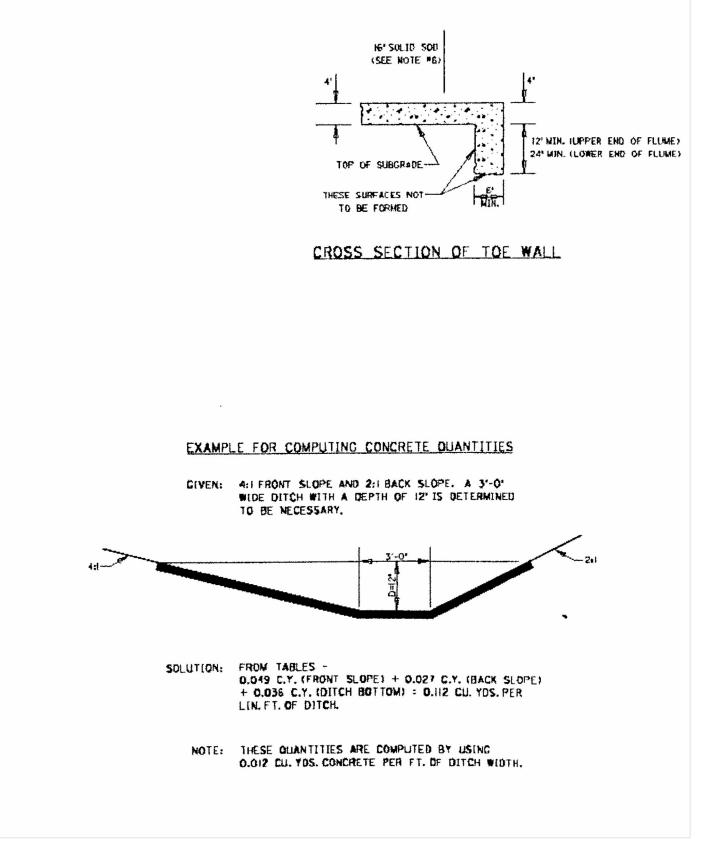
FILTER FABRIC PRE-ATTACHED TO POST	NOTE: SILT FENCE SHOULD BE INSPECTED AFTER EACH RAINFALL AND SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE REACH 1/4 THE HEIGHT OF THE FENCE.
HARDWOOD POST AT 8' C/C	
FILTER FABRIC MAX. 3', MIN. 2'	
12" MIN	— 4"
BE PLACE	OF FENCE AND FILTER FABRIC MUST ED IN A 4" x 4" TRENCH AND SECURED
	FILLING AND TAMPING SOIL MATERIAL
TYPE II SILT F	ENCE DETAIL

SLOPE	'0'	SLOPE LENGTH	C.Y. CONI
	12' MAX.	6.QB	.073
6:1	6'	3.04*	.036
	IE' MAX.	6.18*	.074
4:1	15.	4,12*	.049
	6.	2.06*	.025
	24" WAX.	6.32	.076
• .	18.	4.74"	.057
3:1	12'	3,16′	BEO.
	6,	1.58*	.019
	36' MAX.	8.71	.080
	30.	5.59'	.067
4	24'	4.47'	.054
2ri	18*	3.35′	.048
	12"	2.24"	.027
	8'	1.12	.013
	72' MAX.	6.491	.102
	66.	7.761	.093
	EO.	7.07	.085
	54'	6.36'	.076
	48'	5.66'	.068
1.1	42'	4,95′	.059
1:1	36'	4.24'	.051
	30'	3.54'	.042
	24.	2.831	.034
	18.	2.12"	.025
	15.	1.41*	.017
	6'	0.71	.COB

CLL YOS, CONCRETE PER FT. BOTTOM WIDTH BOTTOM WIDTH

1' Z' 3' 4' 5' 6' 7' 8'

.012 .024 .036 .048 .060 .072 .084 .096

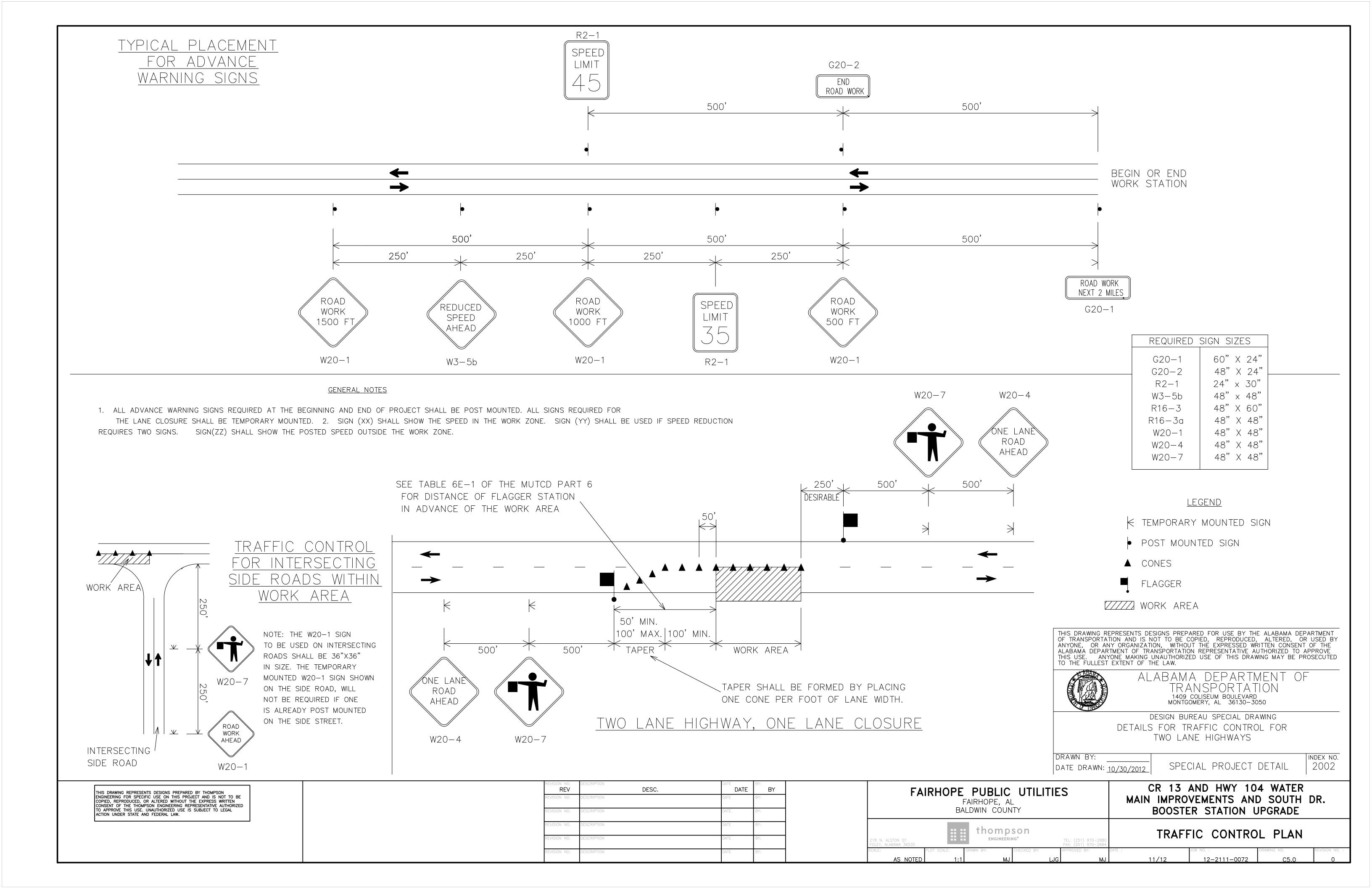


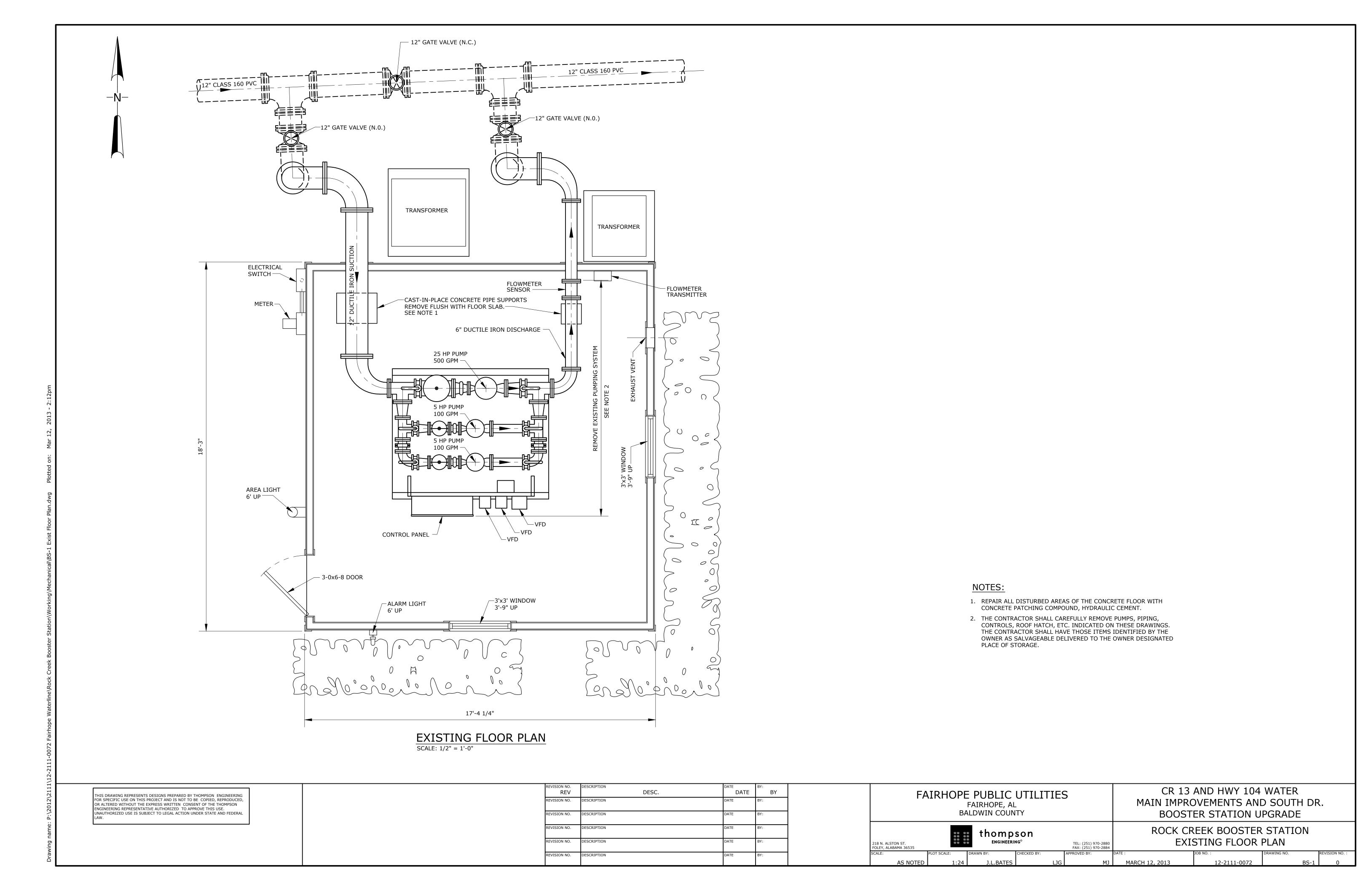
NOTES:

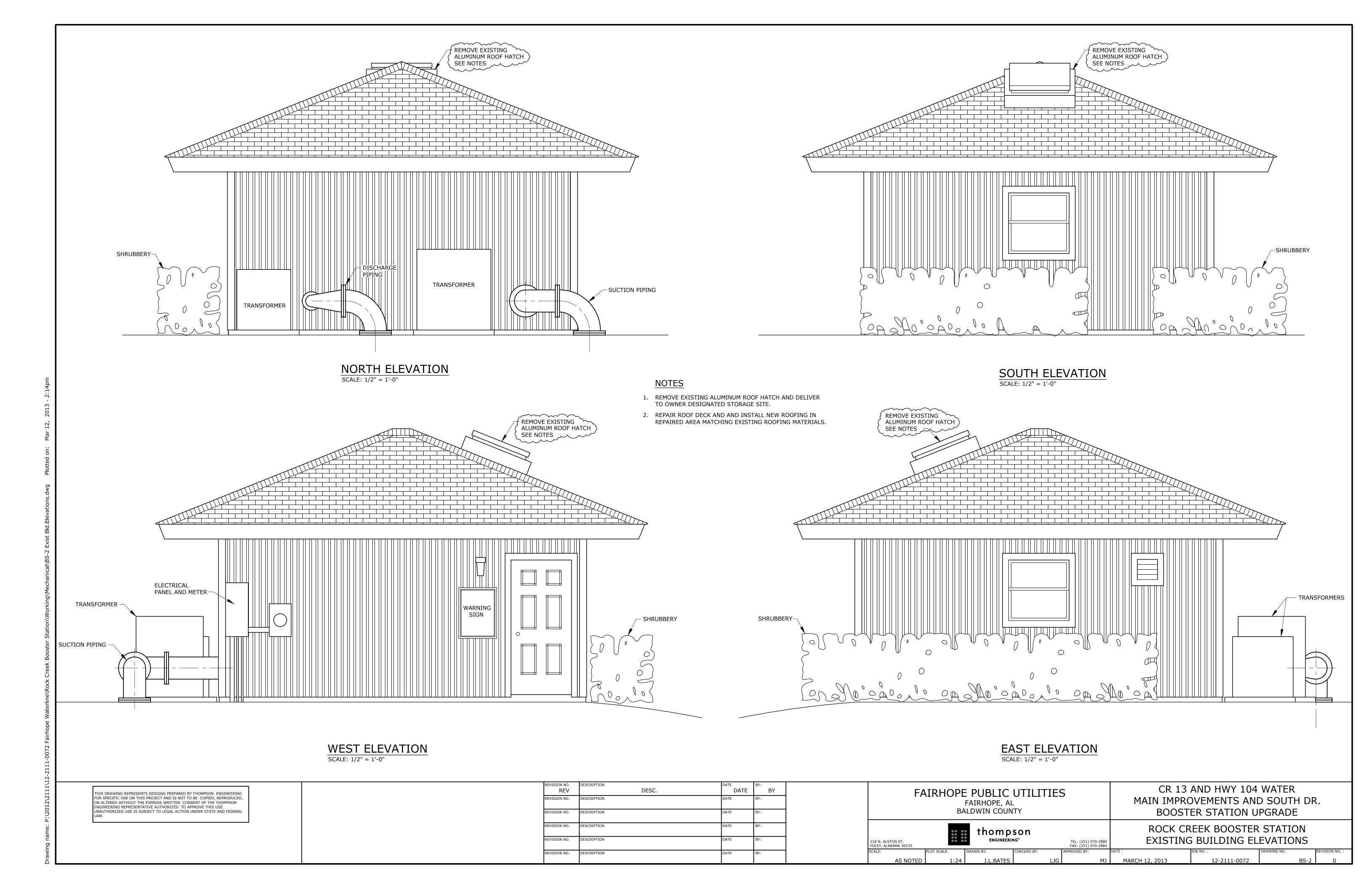
- 1. EXPANSION JOINT MATERIAL SHALL MEET THE REQUIREMENTS OF SECTION 832.01 ALDOT SPECS.
- 2. ON STEEP SLOPES ADDITIONAL TOE WALLS MAY BE REQUIRED IF DIRECTED BY THE ENGINEER.
- 3. SOLID SOD MAY BE PLACED AT SHOWN LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER FOR EROSION CONTROL WHEN PROVIDED IN PLAN QUANTITIES.

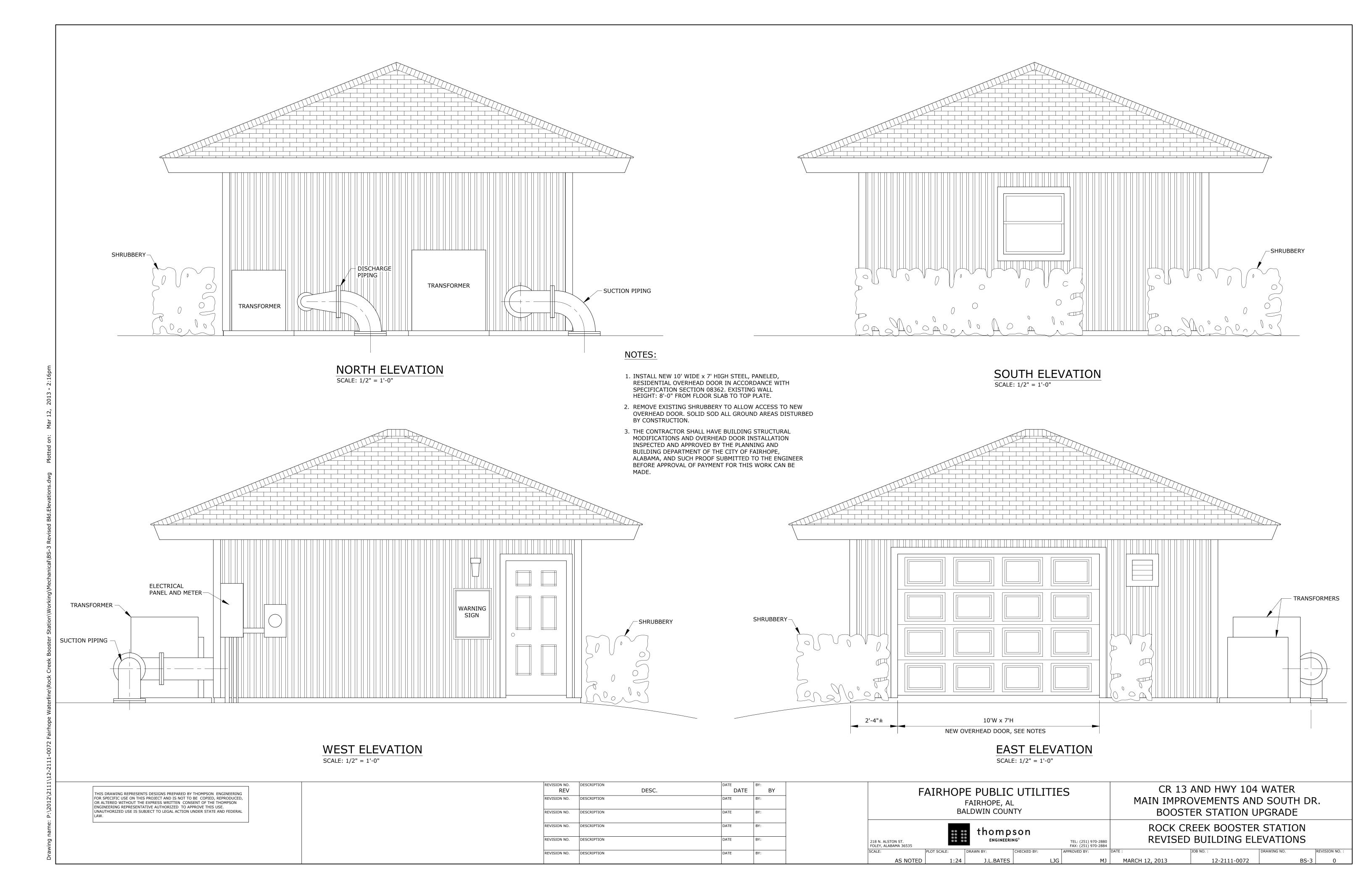
DETAILS OF PAVED DITCHES AND FLUMES N.T.S.

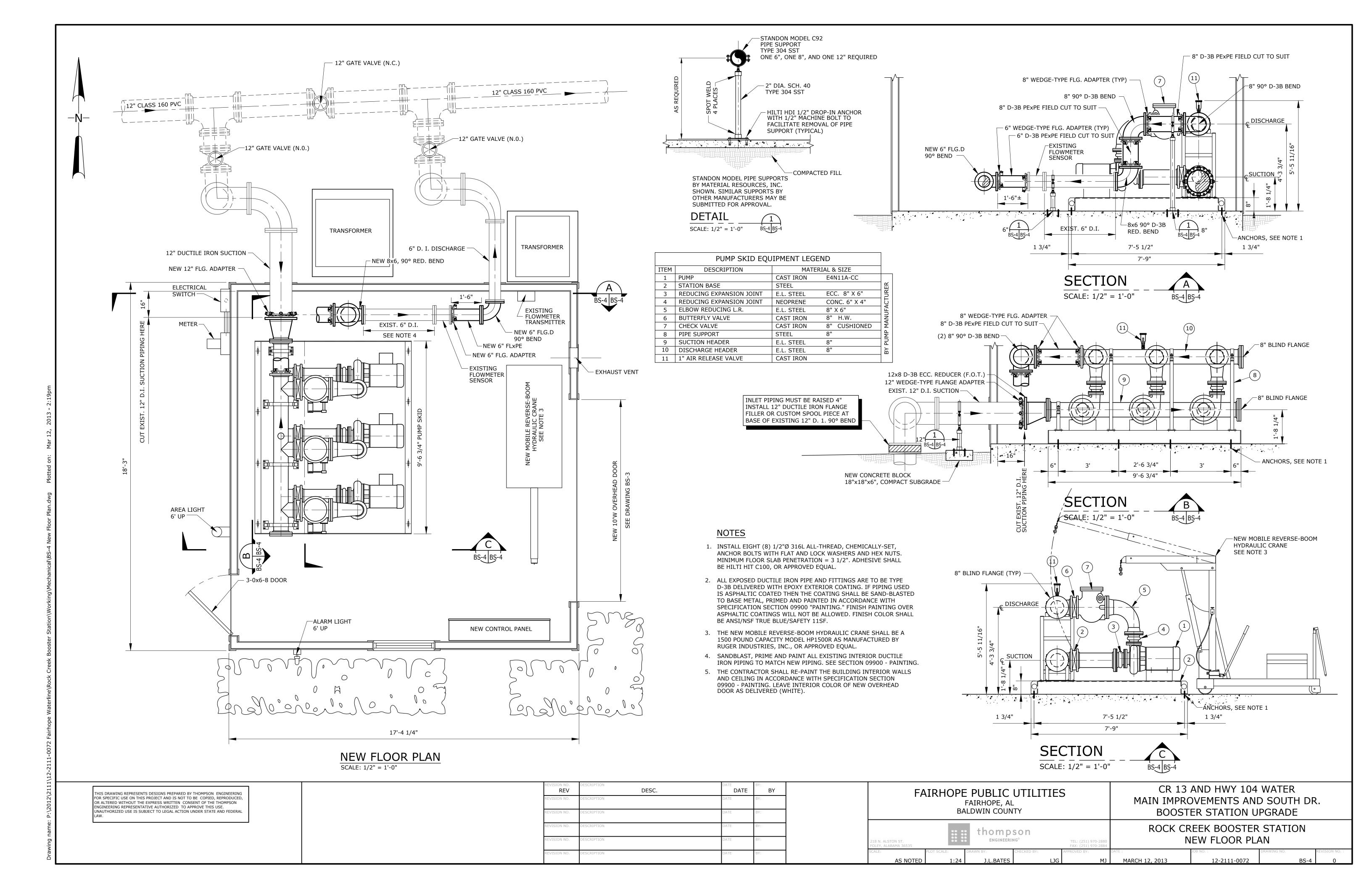
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	REVISION NO. DESCRIPTION		DATE	BY:	:::: thompson	CONSTRUCTION DETAILS	
	REVISION NO. DESCRIPTION REVISION NO. DESCRIPTION		DATE	BY:	218 N. ALSTON ST. FOLEY, ALABAMA 36535 ENGINEERING® TEL: (251) 970–2880 FAX: (251) 970–2884 SCALE: PLOT SCALE: DRAWN BY: CHECKED BY: APPROVED BY: AS NOTED 1:1 MJ LJG MJ	DATE : JOB NO. : DRAWING NO. REVISION NO. :	

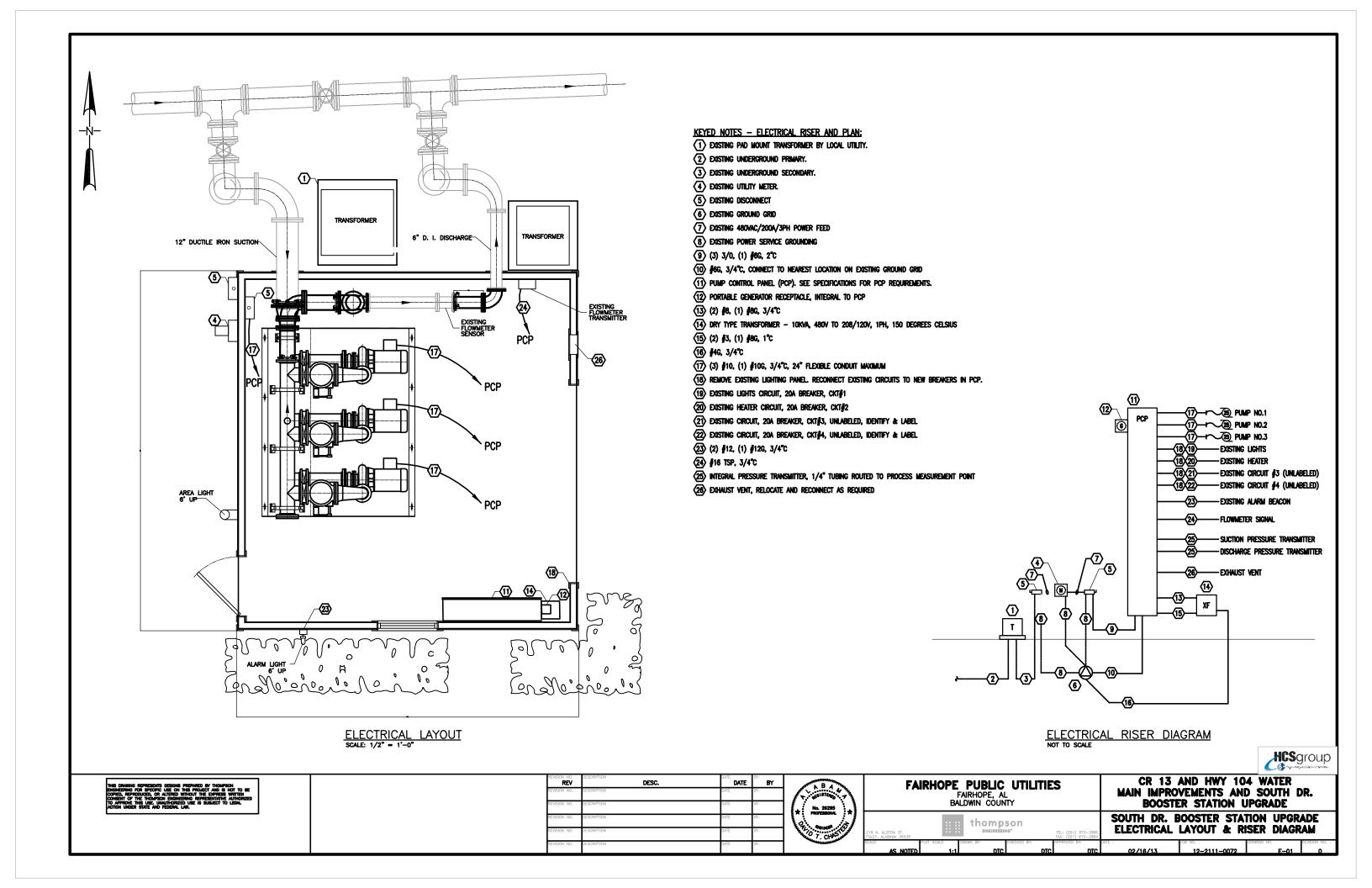


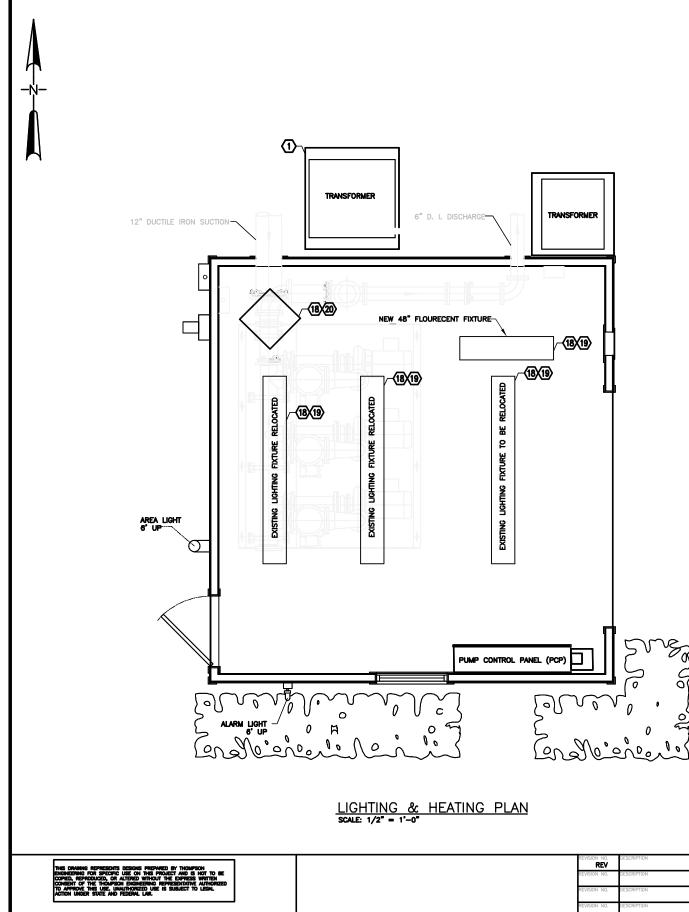












KEYED NOTES - ELECTRICAL RISER AND PLAN:

(1) EXISTING PAD MOUNT TRANSFORMER BY LOCAL UTILITY.

2 EQSTING UNDERGROUND PRIMARY.

3 EXISTING UNDERGROUND SECONDARY.

4 EXISTING UTILITY METER.

5 EQISTING DISCONNECT

6 EXISTING GROUND GRID

7 EXISTING 480VAC/200A/3PH POWER FEED

(8) EXISTING POWER SERVICE GROUNDING

(9) (3) 3/0, (1) #6G, 2°C

 \bigcirc #6G, 3/4°C, connect to nearest location on easing ground grid

11) PUMP CONTROL PANEL (PCP). SEE SPECIFICATIONS FOR PCP REQUIREMENTS.

12 PORTABLE GENERATOR RECEPTACLE, INTEGRAL TO PCP

(13) (2) #8, (1) #8G, 3/4°C

Type transformer - 10kWa, 480V to 208/120V, 1PH, 150 DEGREES CELSIUS

(15) (2) #3, (1) #8G, 1°C

(16) ∦4G, 3/4°C

(3) #10, (1) #10G, 3/4°C, 24" FLEXIBLE CONDUIT MAXIMUM

(18) REMOVE EXISTING LIGHTING PANEL. RECONNECT EXISTING CIRCUITS TO NEW BREAKERS IN PCP.

(19) EXISTING LIGHTS CIRCUIT, 20A BREAKER, CKT#1

20) EXISTING HEATER CIRCUIT, 20A BREAKER, CKT#2

(21) EXISTING CIRCUIT, 20A BREAKER, CKT#3, UNLABELED (FLOWMETER POWER?)

22) EXISTING CIRCUIT, 20A BREAKER, CKT 4, UNLABELED (RECEPTACLES?)

23 (2) \$12, (1) \$12G, 3/4°C

24) #16 TSP, 3/4°C

(25) INTEGRAL PRESSURE TRANSMITTER, 1/4" TUBING ROUTED TO PROCESS MEASUREMENT POINT

26 EXHAUST VENT, RELOCATE AND RECONNECT AS REQUIRED

FAIRHOPE PUBLIC UTILITIES
FAIRHOPE, AL
BALDWIN COUNTY

CR 13 AND HWY 104 WATER
MAIN IMPROVEMENTS AND SOUTH DR.
BOOSTER STATION UPGRADE

HCSgroup

thompson Business Plan (251) 970-2884 SOUTH DR. BOOSTER STATION UPGRADE LIGHTING AND HEATING PLAN

