



Oregon State University

MALHEUR EXPERIMENT STATION IRRIGATION SYSTEM RENEWAL

INVITATION TO BID (ITB) # 2026-019692

ADDENDUM NO. 2

ISSUE DATE: September 16, 2025

CONTRACT ADMINISTRATOR:

Shoshana Shabazz, Purchasing Analyst

Construction Contracts Administration

Email: ConstructionContracts@oregonstate.edu

This Addendum is hereby issued to inform you of the following revisions and or clarifications to the above-referenced ITB and/or the Contract Documents for the Project, to the extent they have been modified herein. Any conflict or inconsistency between this Addendum and the Solicitation Document or any previous addenda will be resolved in favor of this Addendum. ITB responses shall conform to this Addendum. Unless specifically changed by this Addendum, all other requirements, terms and conditions of the Solicitation Document and or Contract Documents, and any previous addenda, remain unchanged and can be modified only in writing by OSU. The following changes are hereby made:

Drawings

- | | |
|--------|--|
| Item 1 | DELETE Sheet Number C501 in its entirety.
REPLACE with Sheet Number C501 attached to this addendum.
(Revision Date: 9/10/25) |
| Item 2 | DELETE Sheet Number C200 in its entirety.
REPLACE with Sheet Number C200 attached to this addendum.
(Revision Date: 9/10/25) |
| Item 3 | DELETE Sheet Number C502 in its entirety.
REPLACE with Sheet Number C502 attached to this addendum.
(Revision Date: 9/10/25) |
| Item 4 | DELETE Sheet Number C504 in its entirety.
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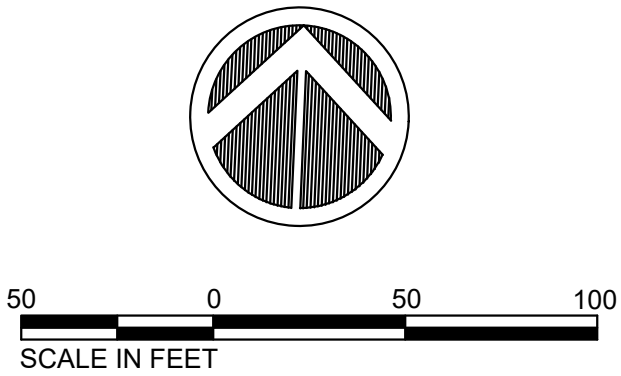
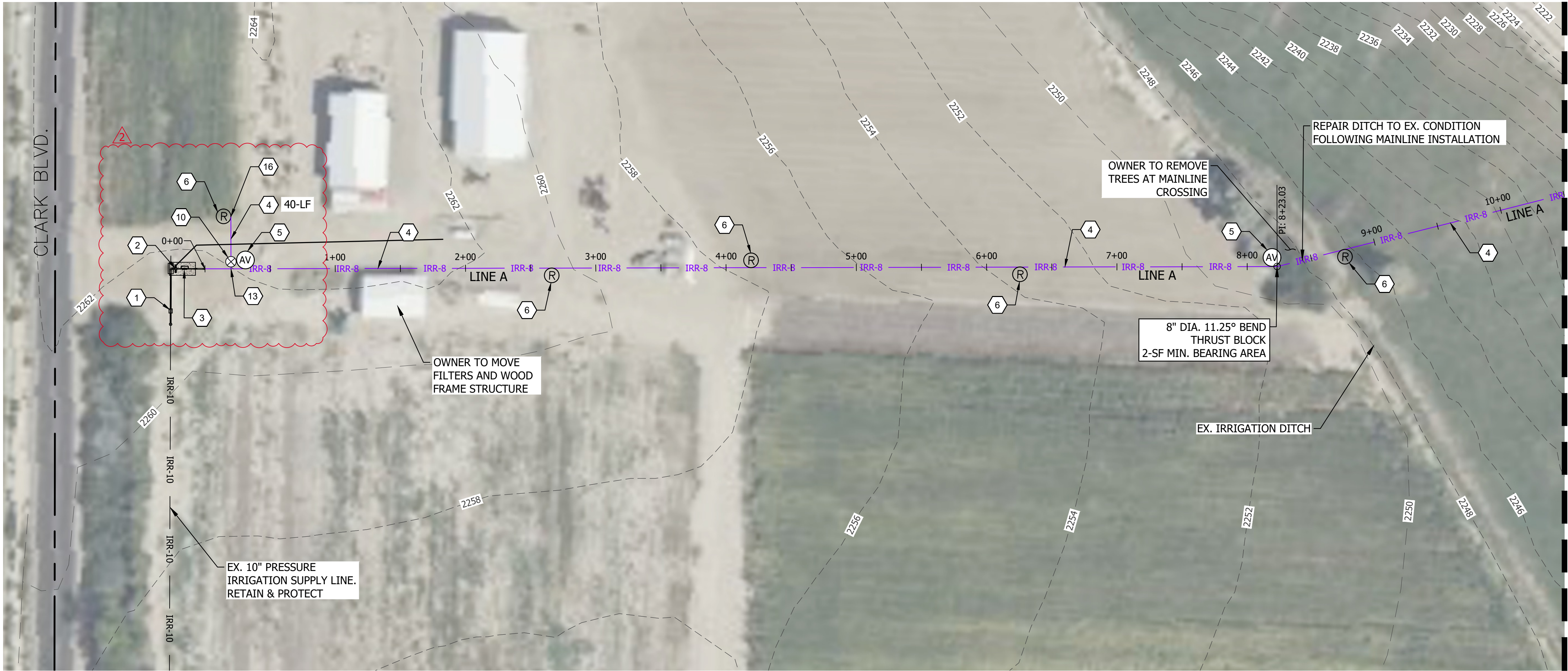
Questions

- Item 5 **Question:** Please provide the substantial completion date and final completion date for the project. (October 13, 2025 through December 13, 2025 is the estimated window for site work) This is unrealistic with the scope and complexity of the project with material lead times.
- Answer:** Project shall be Final Completion by March 31, 2026. Substantial Completion shall be achieved earlier, no later than March 1, 2026, and is the date OSU accepts the irrigation system as usable for its intended purpose; because the project includes operating systems, Substantial Completion occurs only after thirty (30) continuous days of successful trouble free operation.

Substitutions/Modification

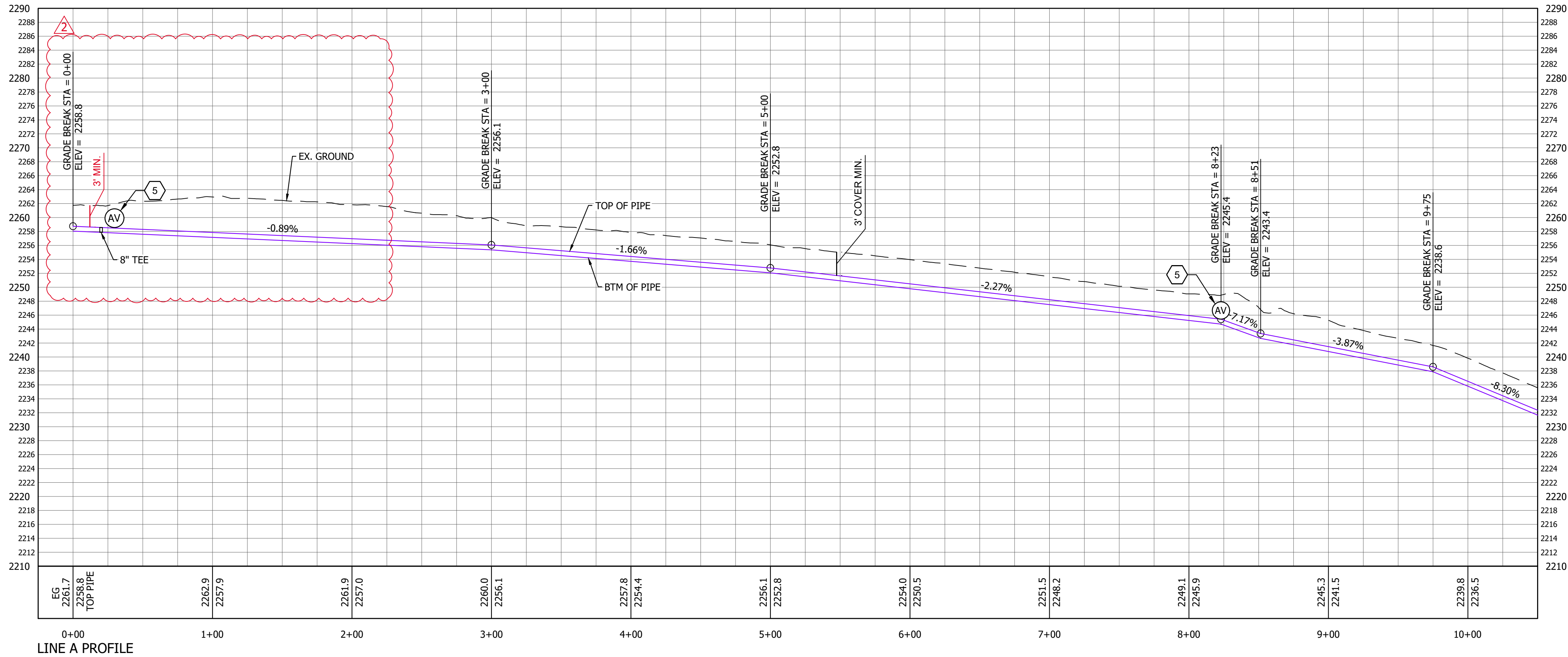
- Item 6 Install two pressure filters (instead of 1) In discussions with the manufacturer the cleanliness of the water entering the system will require two filters instead of one for the flow required.
Modification request accepted. See Sheet C501 attached to this addendum.
- Item 7 Put pressure reducing valves and filters on a concrete pad with a sheet metal roof. Eliminate buried vault. Using the same Cla-Val reducing valves and airvents as specified in original vault and install on concrete pad with filters. This will eliminate need for sump pump
Modification request not accepted.
- Item 8 Eliminate PRVs and CAV's at each riser, we have them on the ends of the pipeline and will be sufficient.
Modification request not accepted.
- Item 9 Run filter flush water into existing irrigation pipeline that drains to the east, it can be used for flood or it can dump into lower pond.
Modification request accepted. See Sheets C200 and C501 attached to this addendum.

END OF ADDENDUM NO. 2



KEYNOTES

1. RAISE EXISTING 10" DIA. FLOWMETER MANIFOLD PER DETAIL 1, SHEET C500.
2. INSTALL PRESSURE FILTERS PER DETAIL 4, SHEET C501.
3. INSTALL PRV STATION PER DETAIL 4, SHEET C501.
4. CONSTRUCT 8-INCH DIA. IRRIGATION MAINLINE, 125# PIP, PER PROFILE THIS SHEET AND TRENCH DETAIL 2, SHEET C500.
5. INSTALL CONTINUOUS ACTING AIR RELEASE AND VACUUM RELIEF VALVE PER DETAIL 3, SHEET C500. AIR VALVES TO BE NELSON ACV200 OR APPROVED EQUAL.
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14. INSTALL 8"x6" TEE, THRUST BLOCK, 2-SF MIN. BEARING AREA.
15. INSTALL 6" CAP AT END OF 6" IRR. SPUR.
16. INSTALL 8" CAP AT END OF 8" IRR. STUB.



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MALHEUR EXPERIMENT STATION
IRRIGATION DISTRIBUTION
IMPROVEMENTS

REVISIONS

NO.	DATE	BY	DESCRIPTION
0	12/11/24	JPL	ISSUED FOR BIDDING & CONSTRUCTION
1	3/10/25	JPL	ADDENDUM 1 REVISIONS
2	9/10/25	JPL	ADDENDUM 2 REVISIONS

PROJECT NO.	DATE
240406	9/10/2025
SCALE	DESIGNED
AS SHOWN	JPL
	EH

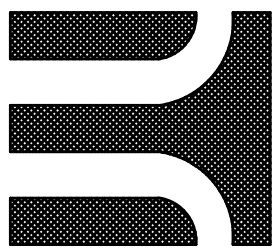
LINE A
PLAN & PROFILE

C200

2

THIS SHEET NOT USED, SEE SHEET C501 FOR PRV STATION DETAILS

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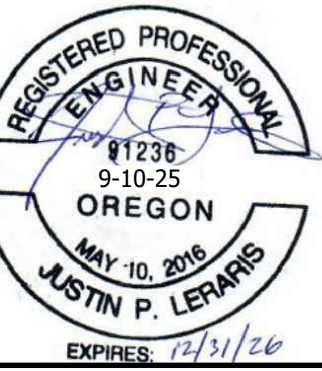


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IRRIGATION
DETAILS

C502



MALHEUR EXPERIMENT STATION

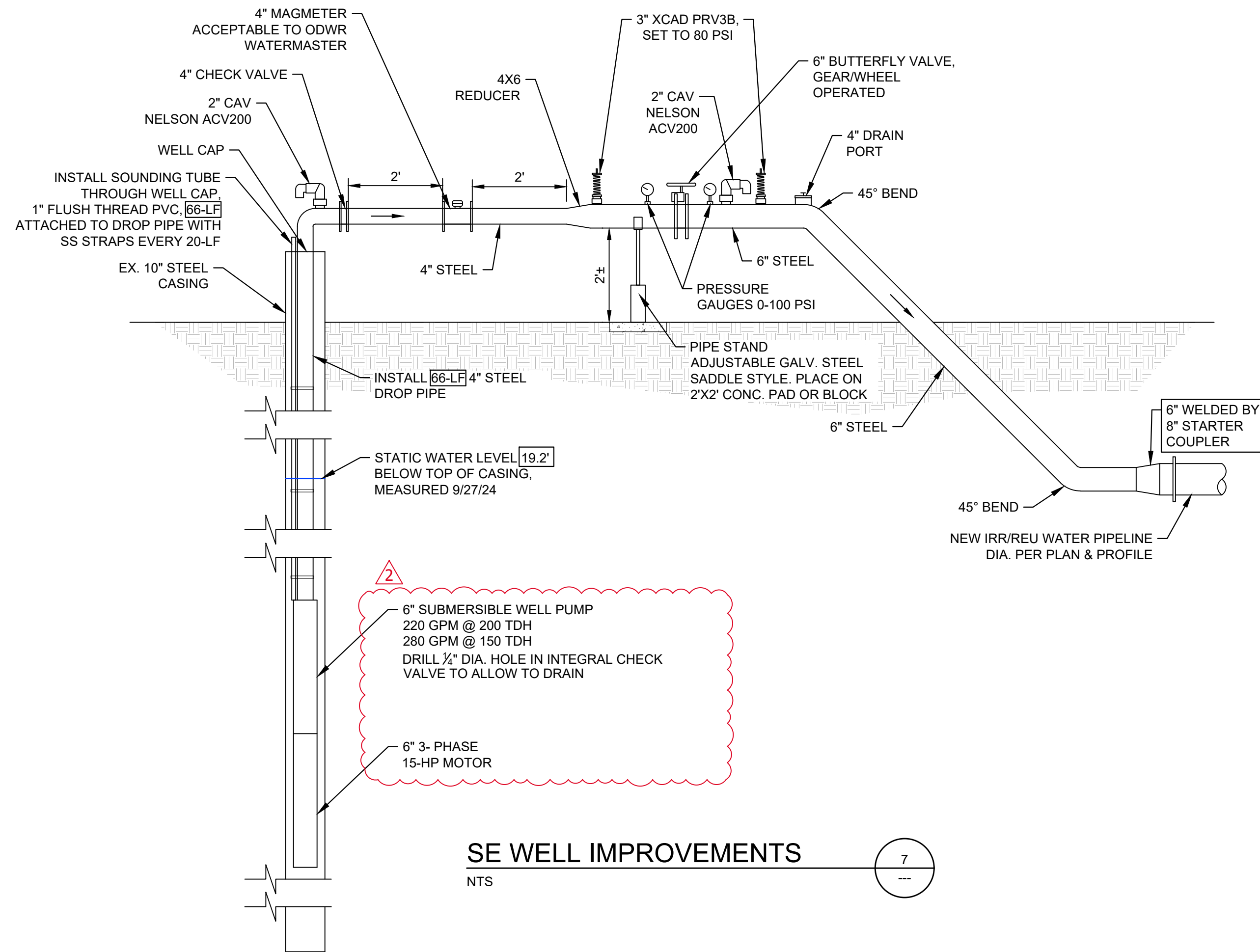
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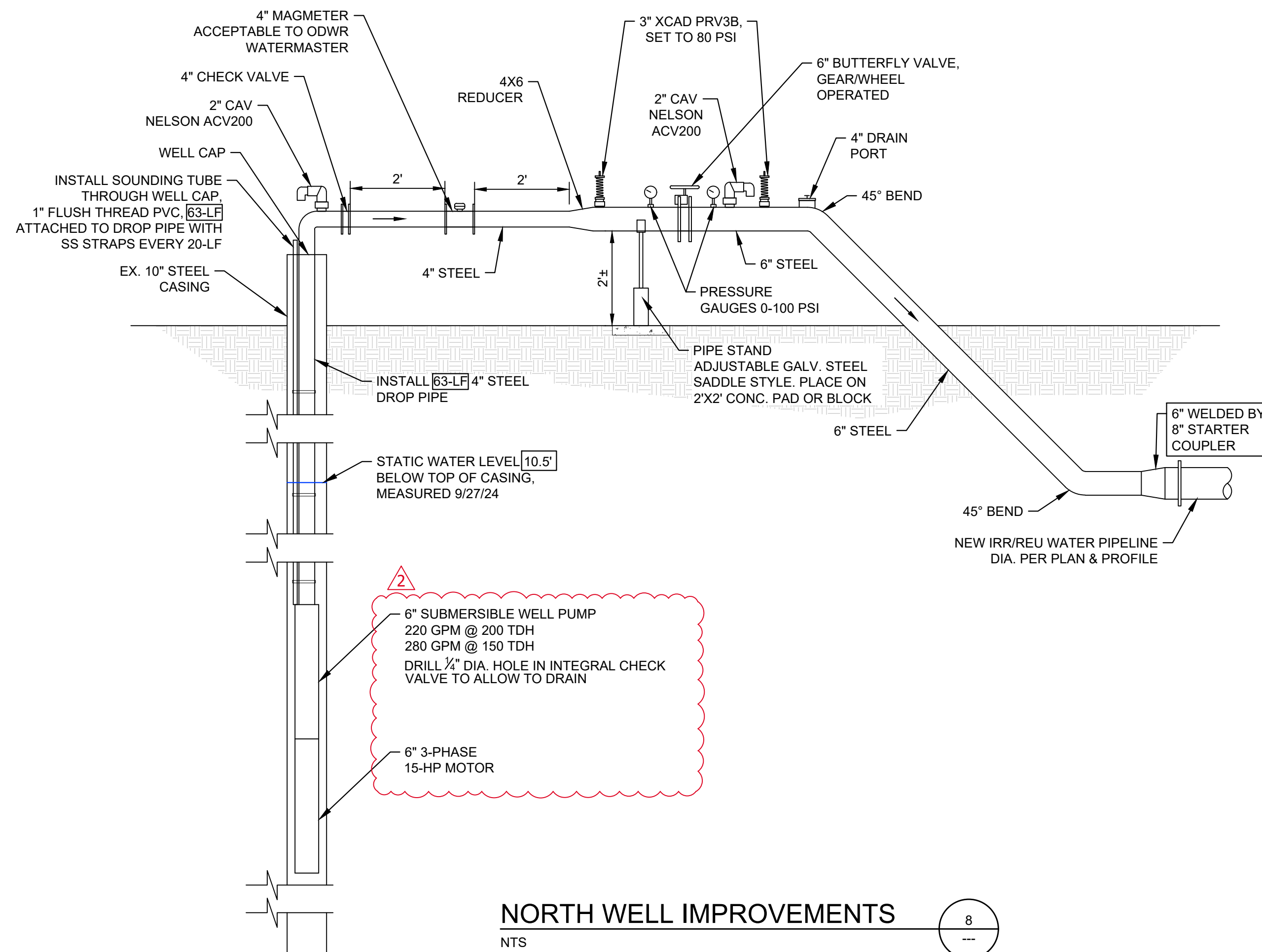
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WELL IMPROVEMENT DETAILS

C504



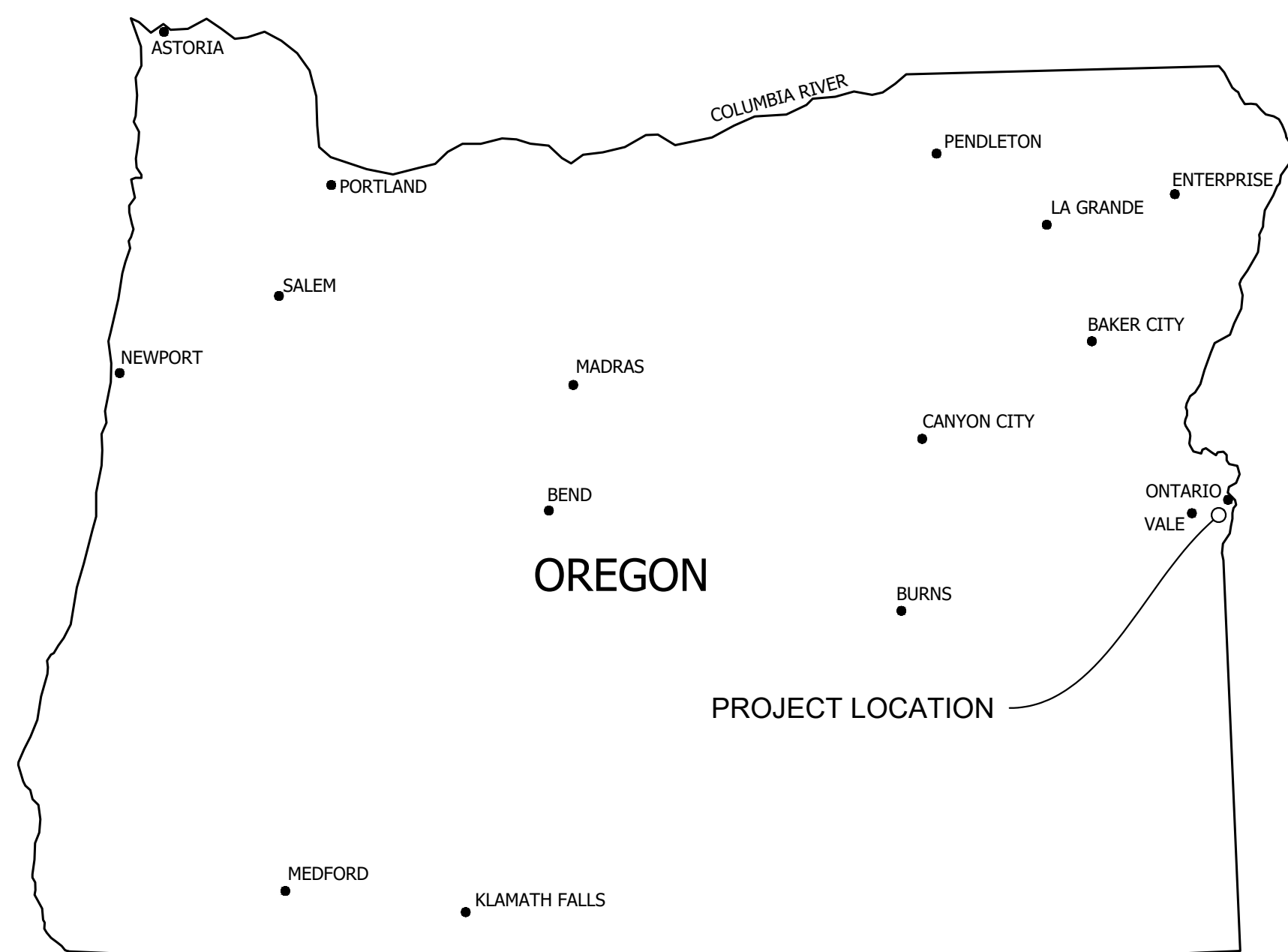
1. CONTRACTOR TO SUBMIT ALL EQUIPMENT SPECIFICATIONS TO OWNER/ENGINEER FOR APPROVAL PRIOR TO PROCUREMENT.
2. CONTRACTOR TO HIRE A QUALIFIED ELECTRICAL CONTRACTOR TO PROVIDE PUMP PANELS & POWER CONNECTION TO NEW EQUIPMENT.
3. THE CONTRACTOR SHALL PROVIDE 30-HP MINIMUM VARIABLE SPEED DRIVES (VFD) ON BOTH WELLS TO PROVIDE SINGLE PHASE TO 3-PHASE CONVERSION. COORDINATE WITH OWNER (MES) FOR PREFERENCE. THE PRESSURE SET POINT WILL BE DETERMINED AT START-UP AND IS EXPECTED TO BE 65 PSI±.
4. STEEL PIPE ABOVE GROUND SHALL BE PAINTED BLUE WITH INDUSTRIAL GRADE PAINT. STEEL PIPE BELOW GROUND SHALL BE WRAPPED WITH ANTI-CORROSION TAPE (EXCEPT FOR DROP PIPE).
5. AT PUMP TESTING, THE NORTH WELL WAS DETERMINED TO BE THE LEAST PRODUCTIVE WELL OF THE EXISTING WELLS WITH A SUSTAINABLE OUTPUT OF 175 GPM. THE OWNER SHOULD SUPPLEMENT IRRIGATION WITH THE SE WELL FIRST AND THE NORTH WELL AS NEEDED. THE NORTH WELL VFD SHOULD BE PROGRAMMED TO AVOID DRAWING THE WELL DOWN BELOW A SAFE PUMPING LEVEL.



MES IRRIGATION SYSTEM & MAINLINE RENEWAL DESIGN

MALHEUR COUNTY, 2024

#2025-016066



STATE SITE MAP

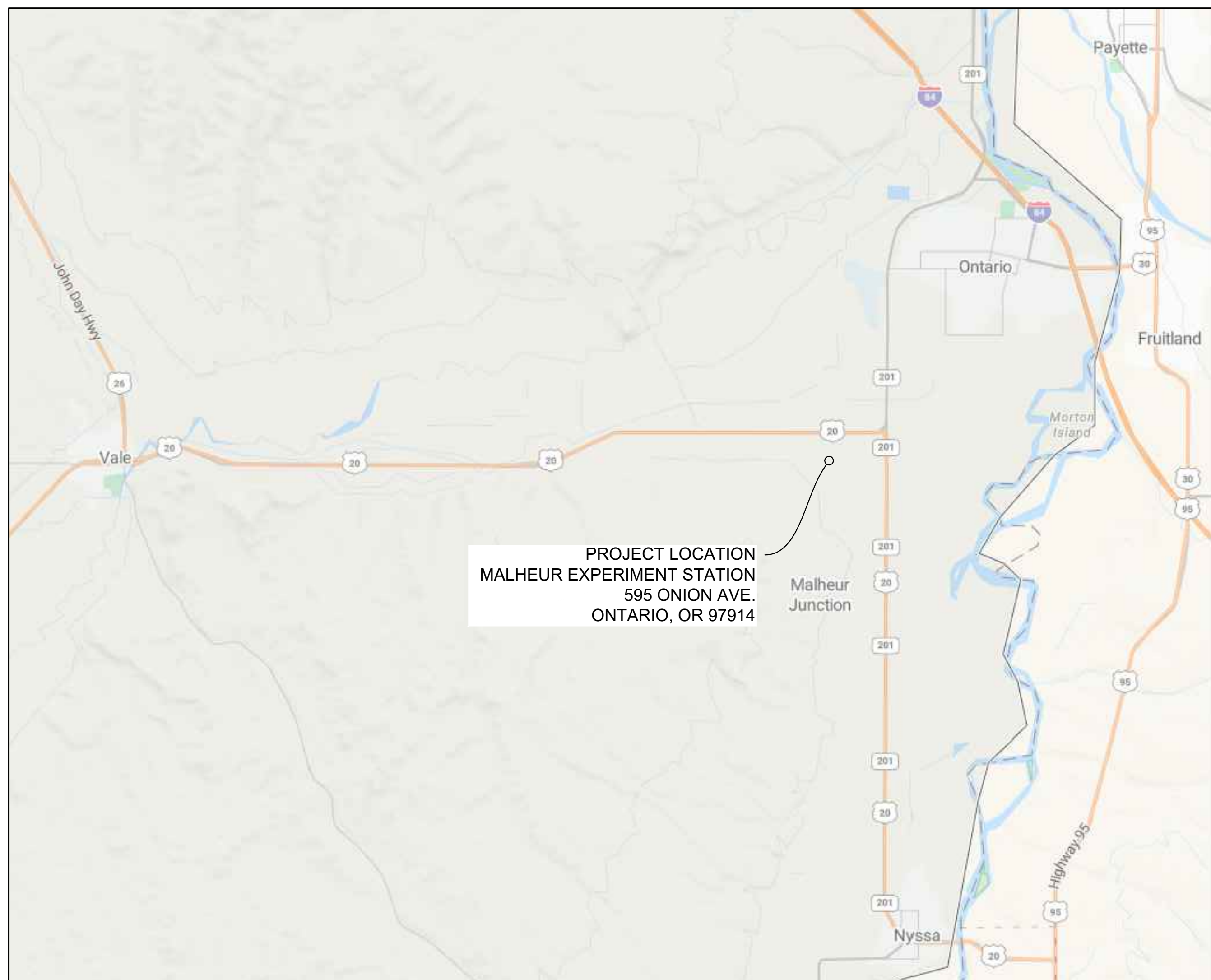
PROJECT TEAM

OWNER
OREGON STATE UNIVERSITY
MALHEUR EXPERIMENT STATION
PHONE: (541) 889-2174

CIVIL ENGINEER
JJ HOWARD ENGINEERING & SURVEYING
JUSTIN LERARIS, PE
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 phone: (208) 846-8937
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SHEET INDEX

G001	COVER
G002	GENERAL NOTES, LEGENDS & ABBREVIATIONS
C100	SITE OVERVIEW & SHEET INDEX
C200	LINE A PLAN & PROFILE
C201	LINE A PLAN & PROFILE
C202	LINE A PLAN & PROFILE
C203	LINE C PLAN & PROFILE
C204	LINE B PLAN & PROFILE
C205	LINE B PLAN & PROFILE
C206	LINE B PLAN & PROFILE
C207	LINE D PLAN & PROFILE
C500	IRRIGATION DETAILS
C501	IRRIGATION DETAILS
C502	IRRIGATION DETAILS
C503	IRRIGATION DETAILS
C504	WELL IMPROVEMENT DETAILS



PROJECT VICINITY MAP

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MALHEUR EXPERIMENT STATION

IRRIGATION DISTRIBUTION IMPROVEMENTS

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240406			3/10/2025		
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COVER

G001

GENERAL CONSTRUCTION NOTES

1. UNLESS SPECIFIED OTHERWISE IN THESE PLANS, ALL WORK SHALL BE PERFORMED PER THE CURRENT EDITION OF THE OREGON STANDARD SPECIFICATION FOR CONSTRUCTION (OSSC).
2. CONTRACTOR SHALL FURNISH AND INSTALL EVERYTHING REQUIRED TO PROVIDE COMPLETE AND OPERABLE FACILITIES AS SHOWN HEREON. IF THERE IS AN OMISSION ON THE PLANS, SUCH OMISSION SHALL NOT BE CONSTRUED TO MEAN THAT THE CONTRACTOR IS NOT REQUIRED TO FURNISH OR PROVIDE EVERYTHING THAT IS NECESSARY TO PROVIDE COMPLETE AND OPERABLE FACILITIES.
3. ANY CHANGES TO THE DESIGN AS SHOWN IN THESE CONSTRUCTION DRAWINGS MUST BE REVIEWED AND APPROVED BY THE ENGINEER BEFORE CHANGES ARE MADE. THIS INCLUDES CHANGES REQUESTED BY THE OWNER'S REPRESENTATIVE AND SUBCONTRACTORS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS, OTHER SURVEY MARKERS, UTILITIES AND IRRIGATION LINES. ALL COSTS ASSOCIATED WITH REPAIRS OR REPLACEMENT RESULTING FROM DAMAGE TO THE ABOVE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE TOTAL BID PRICE.
5. CONTRACTOR SHALL CONTACT OREGON 811 TO MARK AND IDENTIFY UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
6. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL EXCESS MATERIAL.
7. ALL "OR EQUAL" ITEMS ARE SUBJECT TO REVIEW AND APPROVAL OF THE ENGINEER.
8. CONTRACTOR SHALL PROVIDE, MAINTAIN, AND BE RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROL STRUCTURES AND PRACTICES AND MEET THE REQUIREMENTS OF ANY AGENCY HAVING JURISDICTION.
9. UPON THE COMPLETION OF WORK, THE CONTRACTOR SHALL SUBMIT A SET OF "RED-LINED" RECORD DRAWINGS TO THE ENGINEER, WHICH ACCURATELY DEPICT ALL CHANGES FROM THE CONSTRUCTION DRAWINGS.
10. CONTRACTOR SHALL VERIFY EXISTING LOCATIONS, ELEVATIONS, AND MATERIAL TYPES OF ALL UTILITIES AND FEATURES WHERE PROPOSED IMPROVEMENTS CONNECT.
11. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY.
12. THE CONTRACTOR SHALL INCLUDE IN HIS BID ALL COSTS REQUIRED FOR PERMITTING AND BONDING THE REQUIRED IMPROVEMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS REQUIRED TO LEGALLY CONSTRUCT THE PROJECT.

IRRIGATION PIPELINE CONSTRUCTION NOTES

1. PIPELINES SHALL BE CONSTRUCTED WITH UNIFORM SLOPES AND STRAIGHT ALIGNMENTS WHERE POSSIBLE. LOCAL HIGH POINTS SHALL BE AVOIDED TO PREVENT AIR ACCUMULATION.
2. ALL BURIED IRRIGATION MAINS SHALL BE RINGTITE, 125# P.I.P. (SDR-32.5) UNLESS SPECIFIED OTHERWISE.
3. ABOVE GROUND PIPE AND CONNECTIONS TO BURIED MAINS SHALL BE STANDARD WALL STEEL.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE EXAMINATION AND PROPER HANDLING OF ALL PIPE MATERIALS.
5. THE CONTRACTOR IS RESPONSIBLE FOR HYDROSTATIC TESTING OF ALL INSTALLED PIPELINES AND ENSURING THEY ARE FREE OF LEAKS. PIPELINE TESTING SHALL CONSIST OF A MINIMUM OF THE FOLLOWING:

5.1. CONTACT THE ENGINEER A MINIMUM OF 48-HOURS PRIOR TO TESTING. THE ENGINEER SHALL BE PRESENT FOR PIPELINE TESTING.

5.2. FILL COMPLETED PIPELINES WITH WATER FROM EITHER THE SURFACE WATER SUPPLY OR THE WELLS.

5.3. PRESSURIZE PIPELINES TO 100 PSI MAX AS MEASURED AT THE MIDDLE WELL.

5.4. HOLD PRESSURE FOR A MINIMUM OF 1-HR AND MEASURE PRESSURE DROP.

5.5. IF PRESSURE HAS DROPPED LESS THAN 5 PSI AFTER ONE OUR AND THERE ARE NO VISIBLE LEAKS. THE TEST WILL BE CONSIDERED A PASS.

5.6. IF THE PRESSURE HAS DROPPED 5 PSI OR MORE AFTER ONE HOUR, HOLD PRESSURE FOR AN ADDITIONAL HOUR AND MEASURE PRESSURE DROP. IF PRESSURE IS STEADILY DECLINING DURING SECOND HOUR OF TESTING AND DROPS MORE THAN AN ADDITIONAL 3 PSI, THE TEST IS A FAIL.

5.7. FOLLOWING A FAILED PRESSURE TEST, THE CONTRACTOR SHALL IDENTIFY THE SOURCE OF THE LEAK, MAKE THE NECESSARY REPAIRS AND RETEST THE PIPELINE.

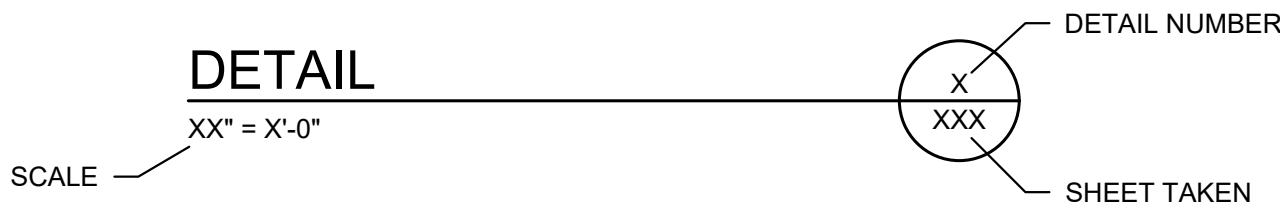
5.8. THE ABOVE STEP WILL REPEAT UNTIL ALL TESTED PIPELINES HAVE PASSED HYDROSTATIC TESTING.

ABBREVIATIONS

BFV	BUTTERFLY VALVE
DIA.	DIAMETER
EL	ELEVATION
EX.	EXISTING
FG	FINISHED GRADE
FL	FLOWLINE
FT	FEET
GPM	GALLONS PER MINUTE
GV	GATE VALVE
HW	HIGH WATER
IRR	IRRIGATION
MAX	MAXIMUM
MIN	MINIMUM
OSSC	OREGON STANDARD SPECIFICATION FOR CONSTRUCTION
P.I.P.	PLASTIC IRRIGATION PIPE
VPI	VERTICAL POINT OF INTERSECTION

LEGEND

	APROXIMATE PROPERTY LINE
	PROPOSED 8" IRR MAIN
	PROPOSED 6" IRR SPUR
	EX. 10" IRR SUPPLY LINE
	EX. DRAIN
	EX. IRRIGATION WELL - ON SYSTEM
	EX. WELL - OFFLINE
	PROPOSED MAINLINE DRAIN
	FILTRATION
	PRESSURE REDUCING VALVE STATION
	RISER / DELIVERY POINT
	VACUUM RELIEF / AIR RELEASE VALVE
	PRESSURE RELIEF VALVE
	ISOLATION VALVE



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MALHEUR EXPERIMENT STATION

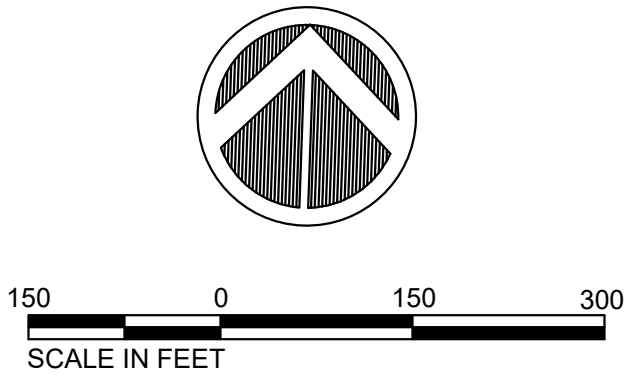
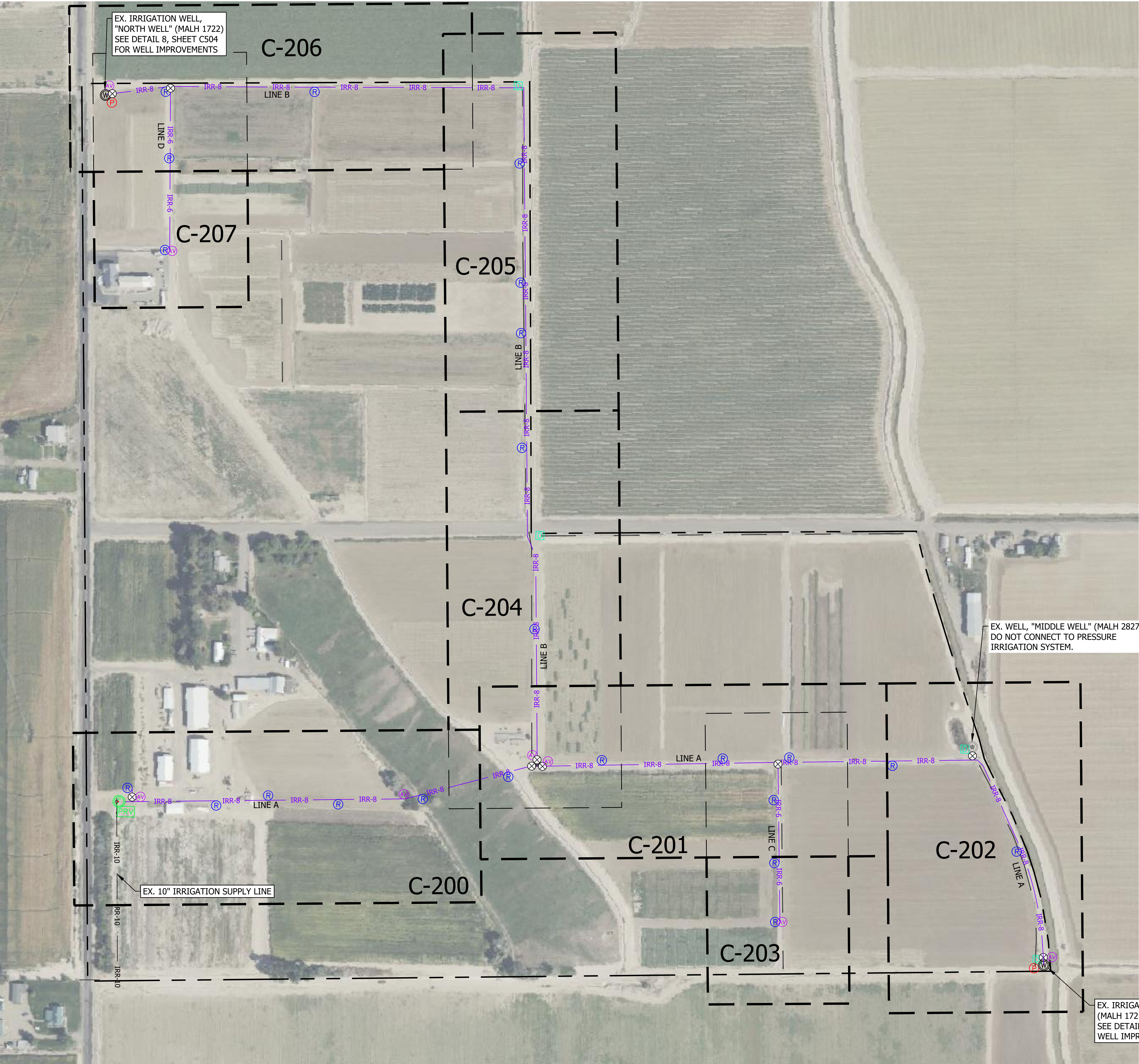
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GENERAL NOTES,
LEGENDS &
ABBREVIATIONS

G002



LEGEND	
	EXIST. DRAIN
	EX. IRRIGATION WELL - ON SYSTEM
	EX. WELL - OFFLINE
	PROPOSED IRRIGATION MAIN
	PROPOSED MAINLINE DRAIN
	FILTRATION
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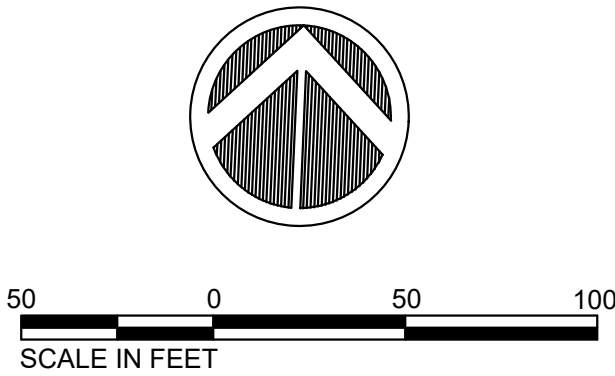
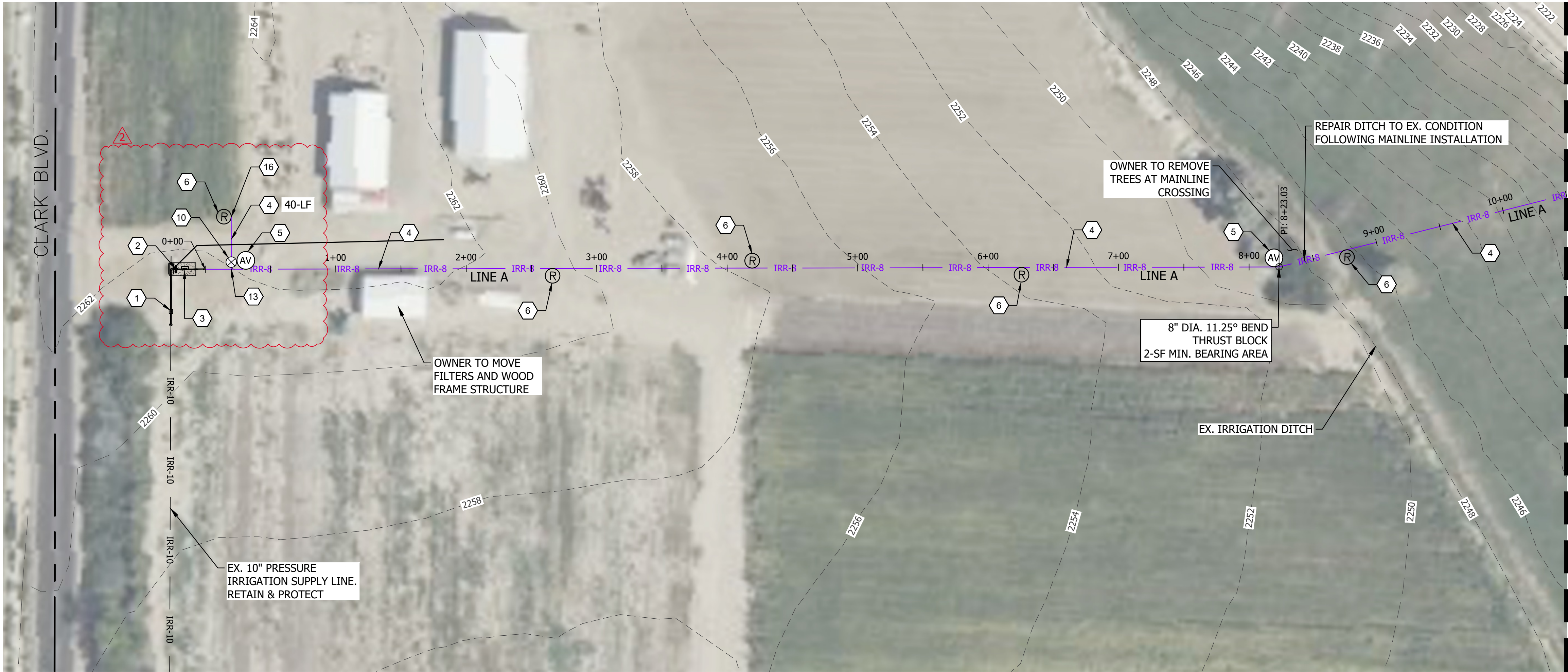


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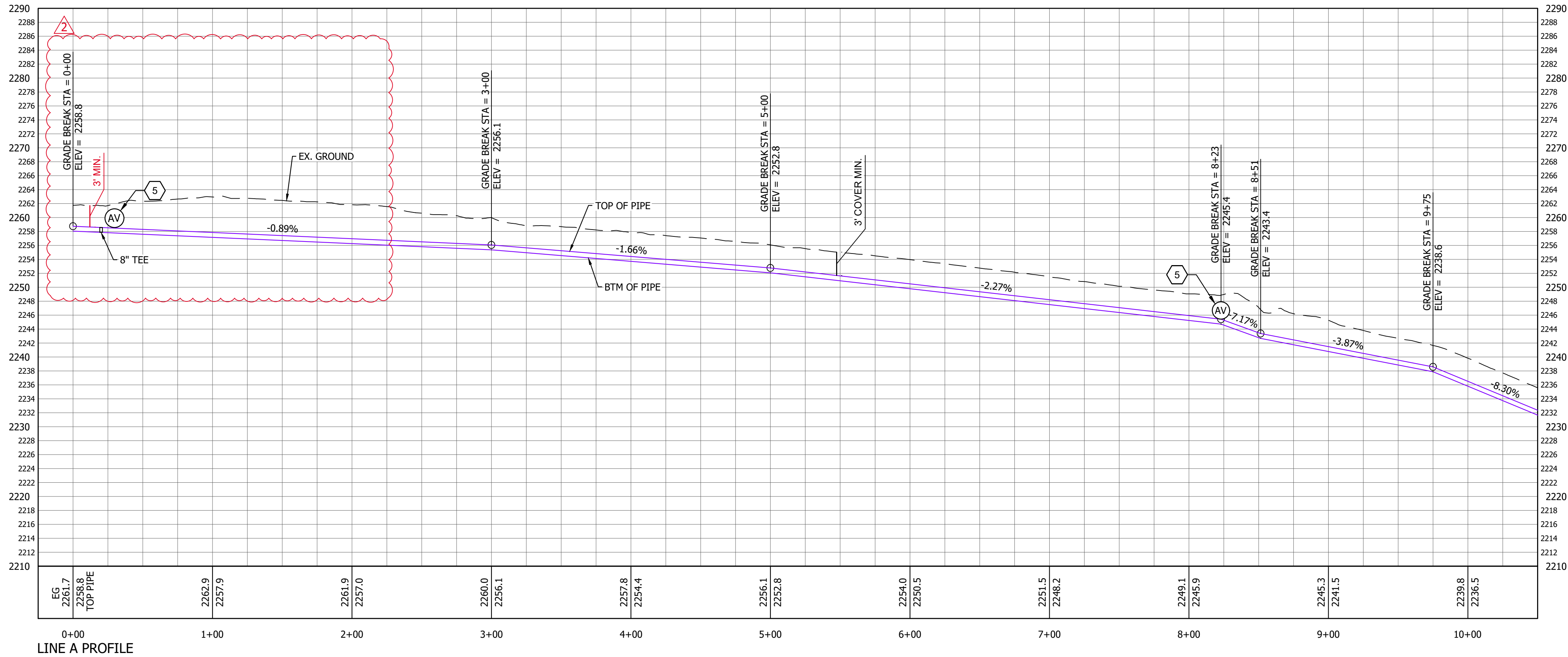
SITE OVERVIEW
& SHEET INDEX

C100



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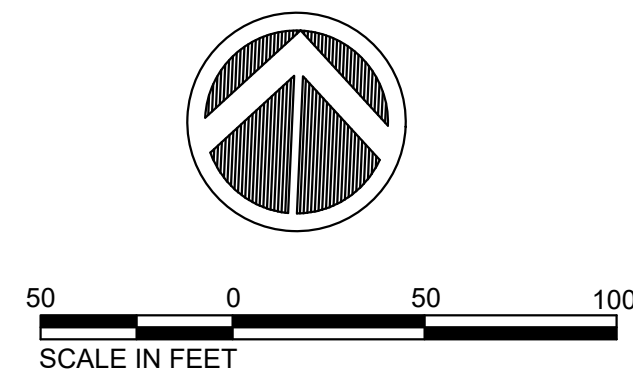
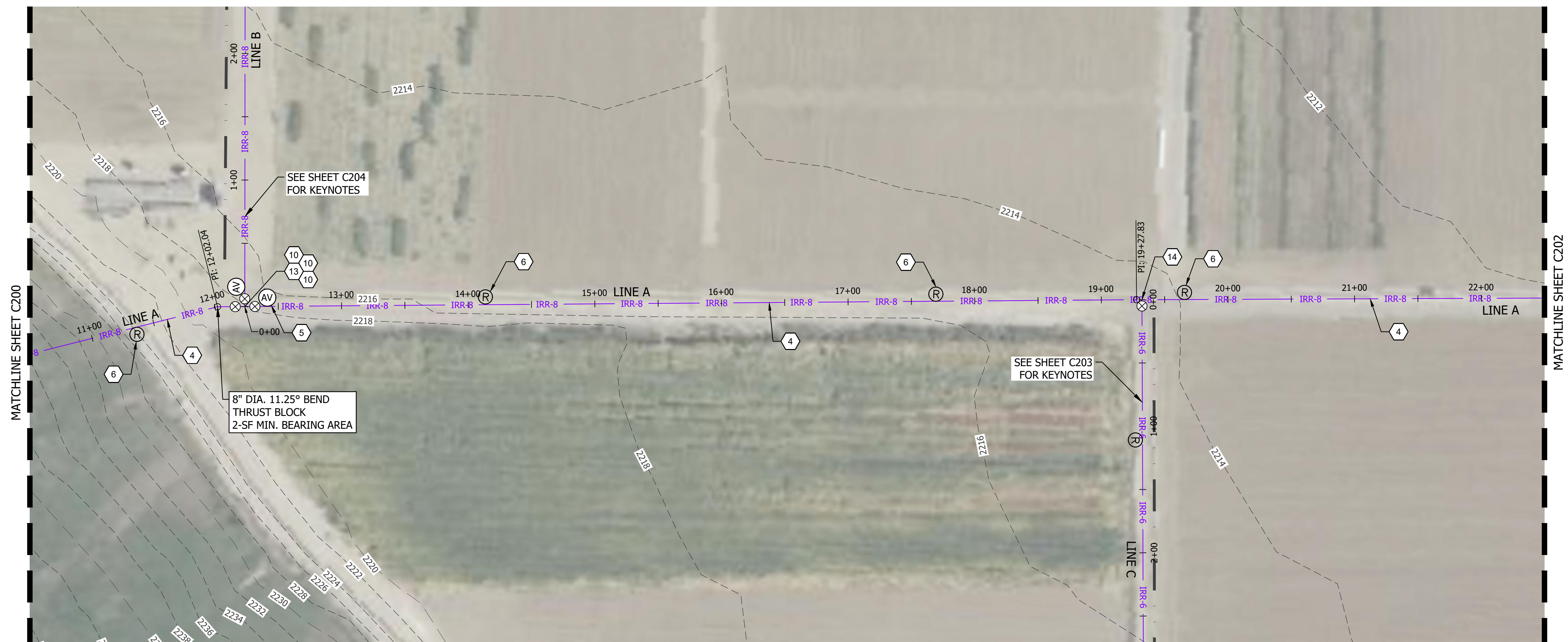
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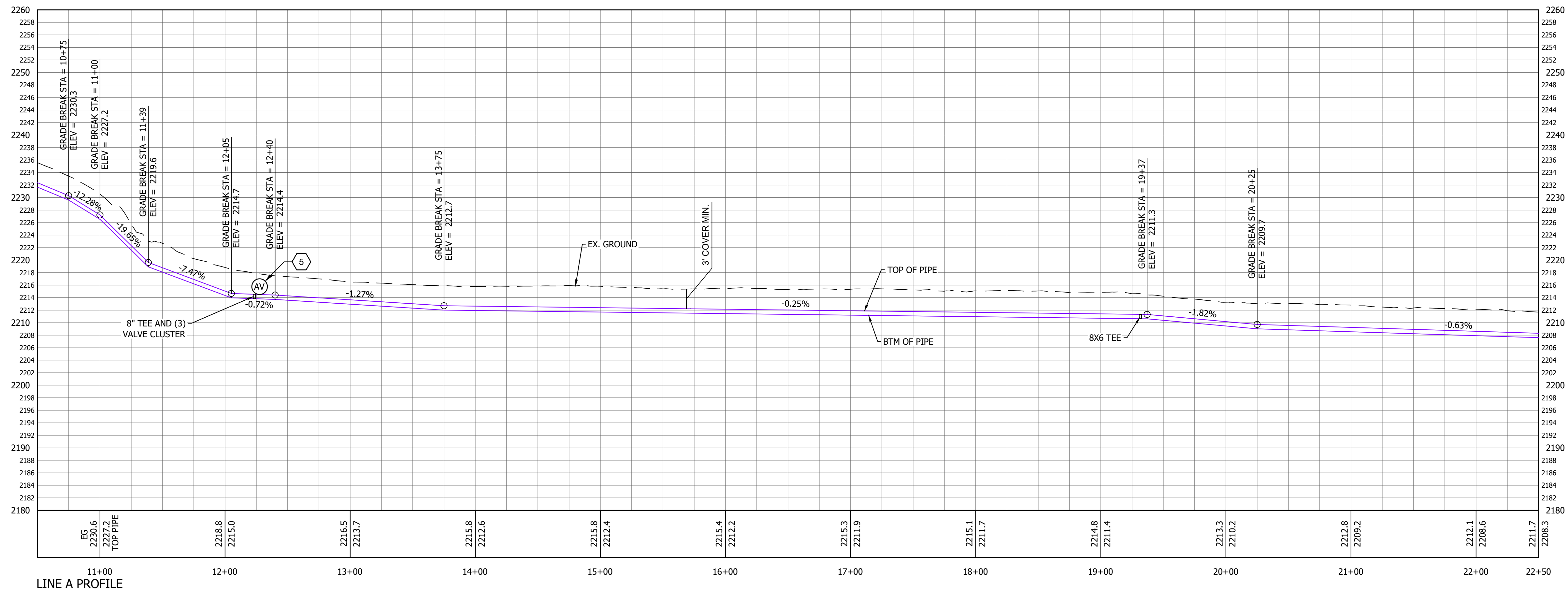
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C200



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16. INSTALL 8" CAP AT END OF 8" IRR STUB.



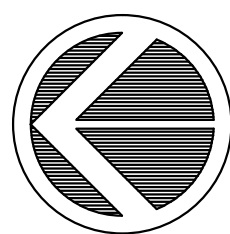
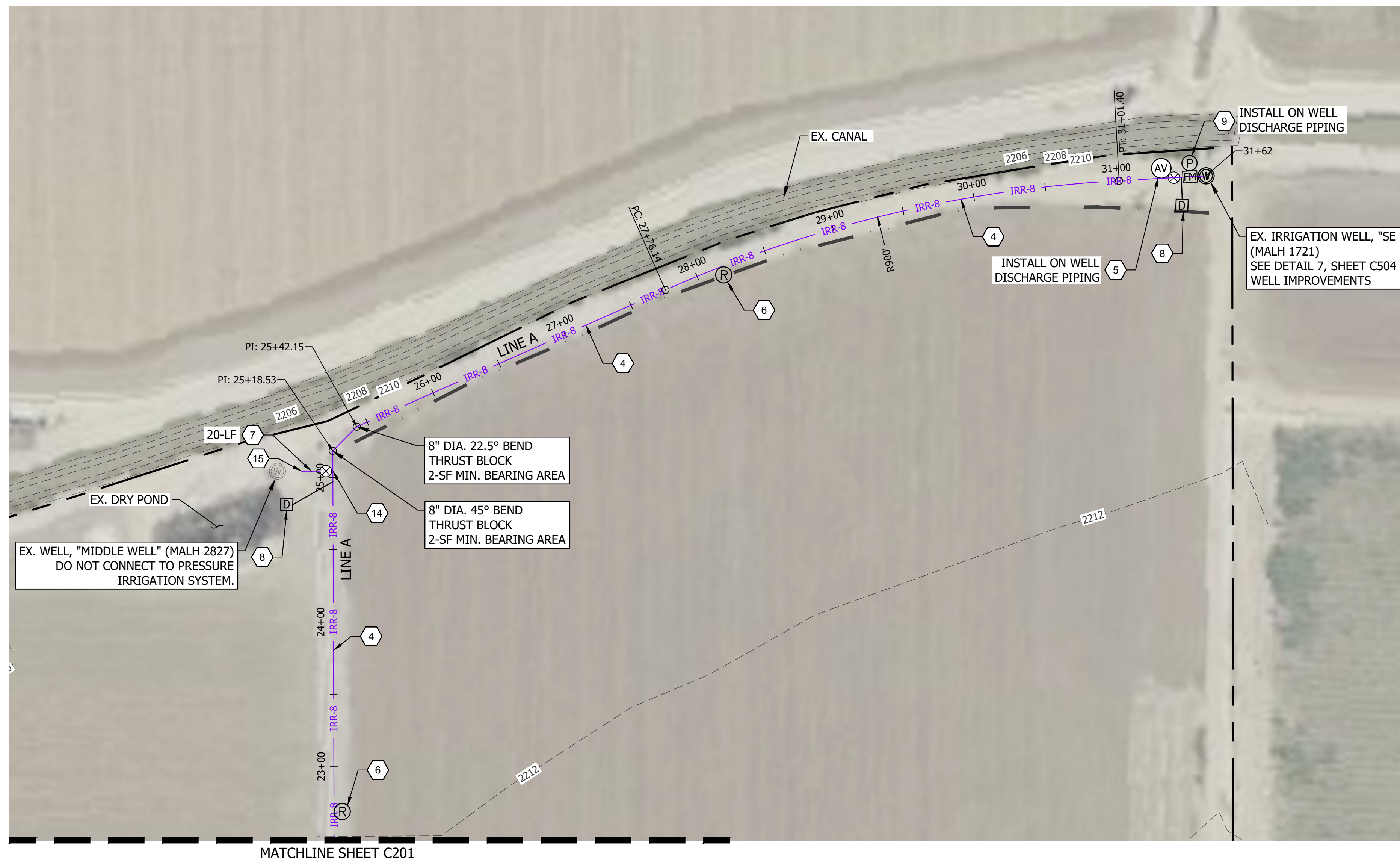
REVISIONS

NO.	DATE	BY	DESCRIPTION
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1	3/10/25	JPL	ADDENDUM 1 REVISIONS

PROJECT NO.		DATE
240406		3/10/2025
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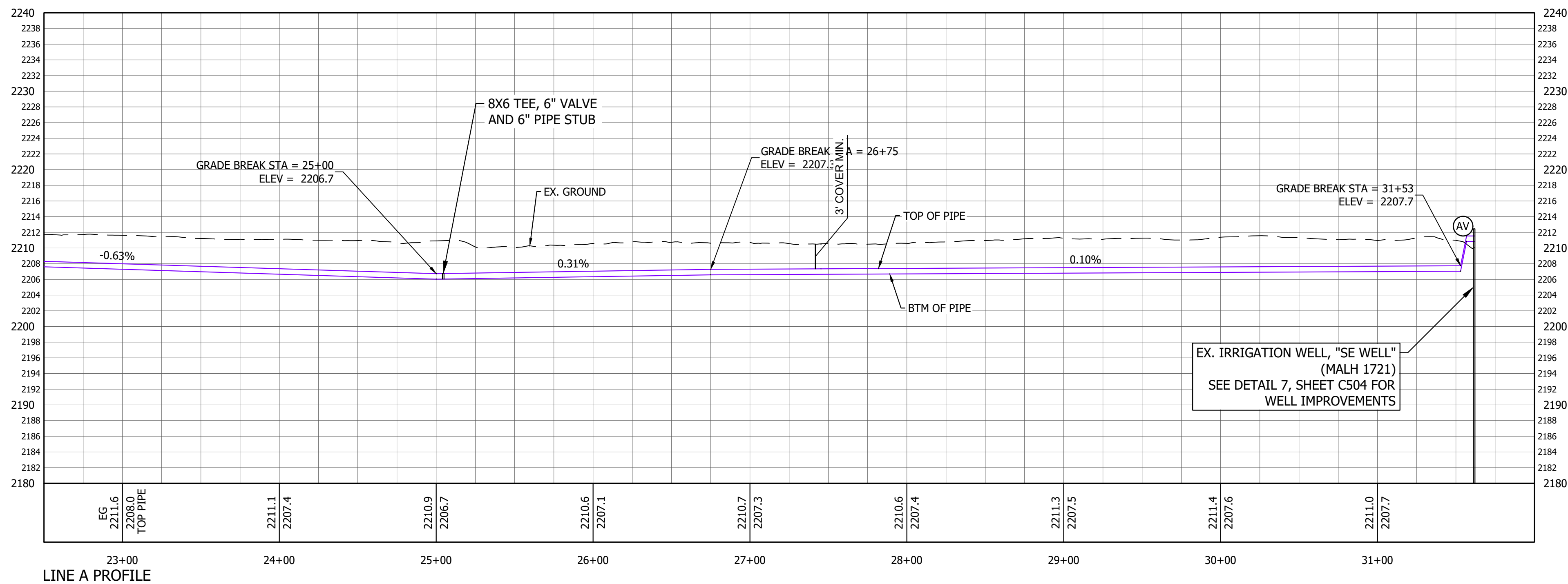
LINE A PLAN & PROFILE

C201



KEYNOTES

1. RAISE EXISTING 10" DIA. FLOWMETER MANIFOLD PER DETAIL 1, SHEET C500.
2. INSTALL PRESSURE FILTER PER DETAIL 4, SHEETS C501-C502.
3. INSTALL PRV STATION PER DETAIL 4, SHEETS C501-C502.
4. CONSTRUCT 8-INCH DIA. IRRIGATION MAINLINE, 125# PIP, PER PROFILE THIS SHEET AND TRENCH DETAIL 2, SHEET C500.
5. INSTALL CONTINUOUS ACTING AIR RELEASE AND VACUUM RELIEF VALVE PER DETAIL 3, SHEET C500. AIR VALVES TO BE NELSON ACV200 OR APPROVED EQUAL.
6. CONSTRUCT 4" RISER W/ 4" VALVE STUB FOR CONNECTION TO 4" RINGLOCK VALVE OPENER.
7. CONSTRUCT 6-INCH DIA. IRRIGATION SPUR LINE, 125# PIP, PER PROFILE THIS SHEET AND TRENCH DETAIL 2, SHEET C500.
8. CONSTRUCT MAINLINE DRAIN PER DETAIL 5, SHEET C503.
9. INSTALL PRESSURE RELIEF VALVE, 3" XCAD PRV3B, OR APPROVED EQUAL. SET TO 80 PSI.
10. INSTALL 8-INCH GATE VALVE. VALVE SHALL BE COMPATIBLE WITH 125# P.I.P. BURIED VALVES SHALL HAVE A 2" OPERATING NUT & VALVE BOX TO FINISHED GRADE.
11. ONION AVE. CROSSING. REPAIR PER SURFACE REPAIR DETAIL 6, SHEET C503. OWNER/CONTRACTOR TO SECURE UTILITY CROSSING PERMIT IF REQUIRED FROM HIGHWAY DISTRICT.
12. INSTALL 6-INCH GATE VALVE, VALVE SHALL BE COMPATIBLE WITH 125# P.I.P. BURIED VALVES SHALL HAVE A 2" OPERATING NUT & VALVE BOX TO FINISHED GRADE.
13. INSTALL 8"x8" TEE, THRUST BLOCK, 3-SF MIN. BEARING AREA.
14. INSTALL 8"x6" TEE, THRUST BLOCK, 2-SF MIN. BEARING AREA.
15. INSTALL 6" CAP AT END OF 6" IRR. SPUR.
16. INSTALL 8" CAP AT END OF 8" IRR STUB.



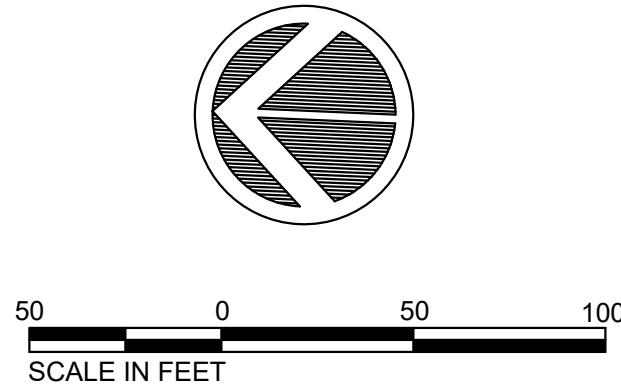
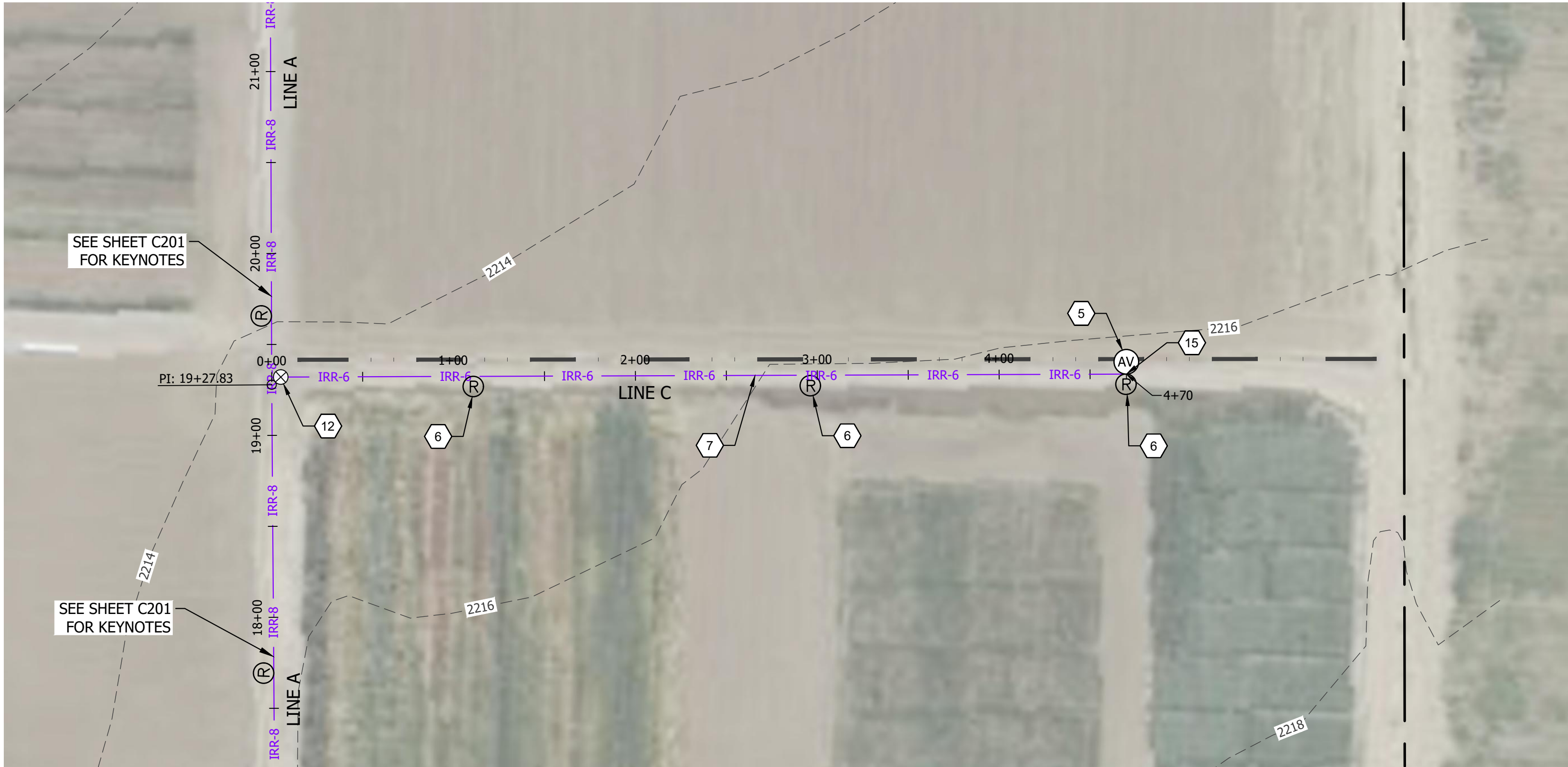
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LINE A
PLAN & PROFILE

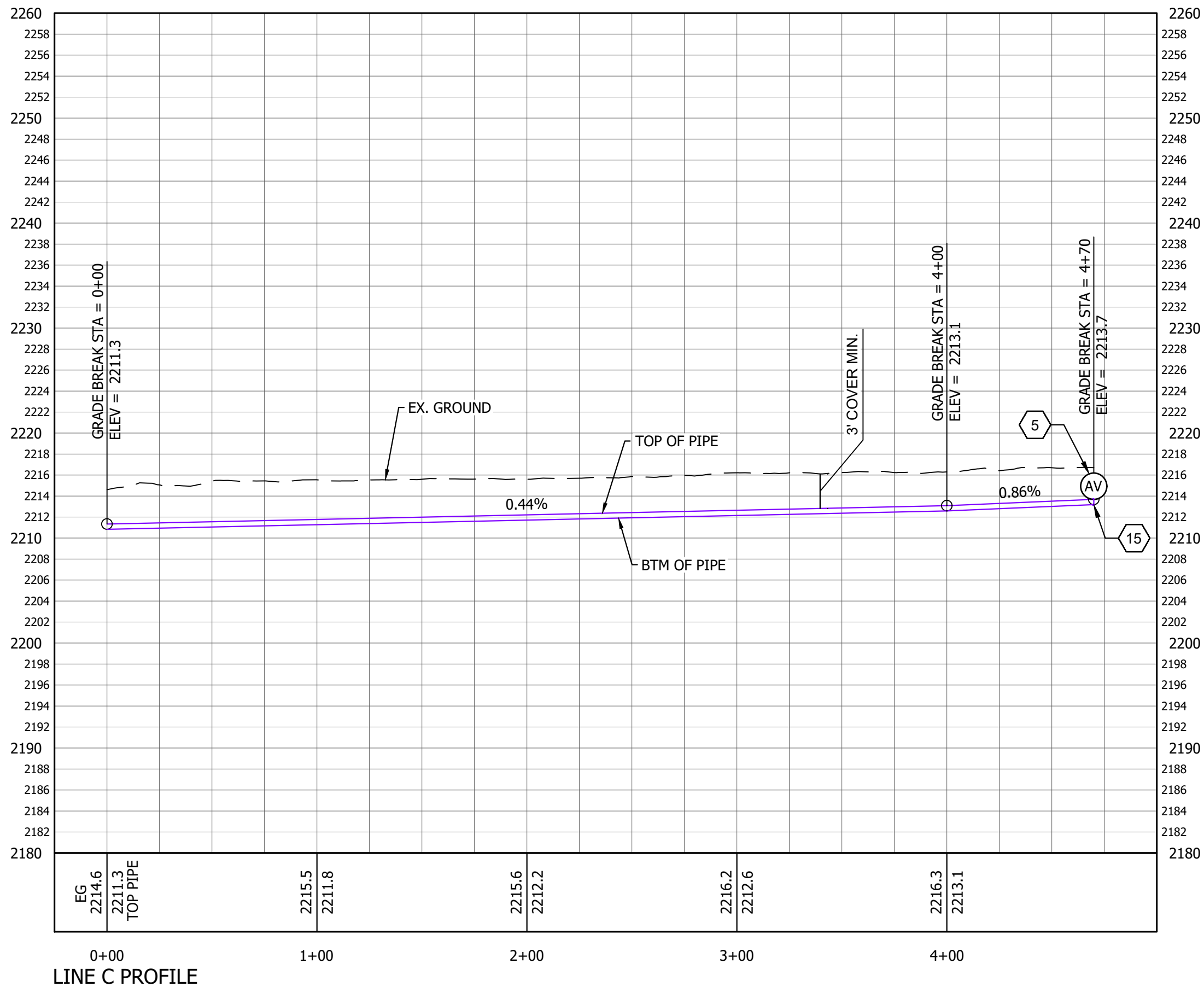
LINE A
PLAN & PROFILE

C202



KEYNOTES

1. RAISE EXISTING 10" DIA. FLOWMETER MANIFOLD PER DETAIL 1, SHEET C500.
2. INSTALL PRESSURE FILTER PER DETAIL 4, SHEETS C501-C502.
3. INSTALL PRV STATION PER DETAIL 4, SHEETS C501-C502.
4. CONSTRUCT 8-INCH DIA. IRRIGATION MAINLINE, 125# PIP, PER PROFILE THIS SHEET AND TRENCH DETAIL 2, SHEET C500.
5. INSTALL CONTINUOUS ACTING AIR RELEASE AND VACUUM RELIEF VALVE PER DETAIL 3, SHEET C500. AIR VALVES TO BE NELSON ACV200 OR APPROVED EQUAL.
6. CONSTRUCT 4" RISER W/ 4" VALVE STUB FOR CONNECTION TO 4" RINGLOCK VALVE OPENER.
7. CONSTRUCT 6-INCH DIA. IRRIGATION SPUR LINE, 125# PIP, PER PROFILE THIS SHEET AND TRENCH DETAIL 2, SHEET C500.
8. CONSTRUCT MAINLINE DRAIN PER DETAIL 5, SHEET C503.
9. INSTALL PRESSURE RELIEF VALVE, 3" XCAD PRV3B, OR APPROVED EQUAL. SET TO 80 PSI.
10. INSTALL 8-INCH GATE VALVE. VALVE SHALL BE COMPATIBLE WITH 125# P.I.P. BURIED VALVES SHALL HAVE A 2" OPERATING NUT & VALVE BOX TO FINISHED GRADE.
11. ONION AVE. CROSSING. REPAIR PER SURFACE REPAIR DETAIL 6, SHEET C503. OWNER/CONTRACTOR TO SECURE UTILITY CROSSING PERMIT IF REQUIRED FROM HIGHWAY DISTRICT.
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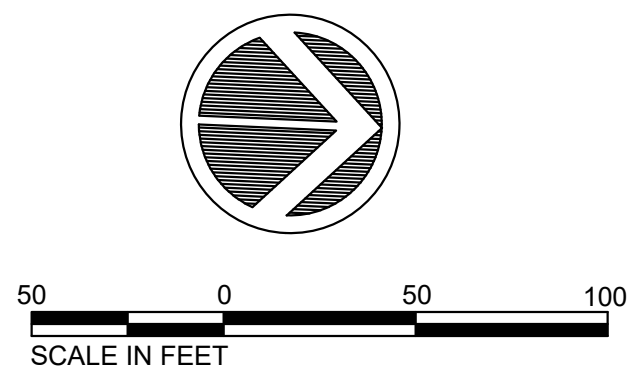
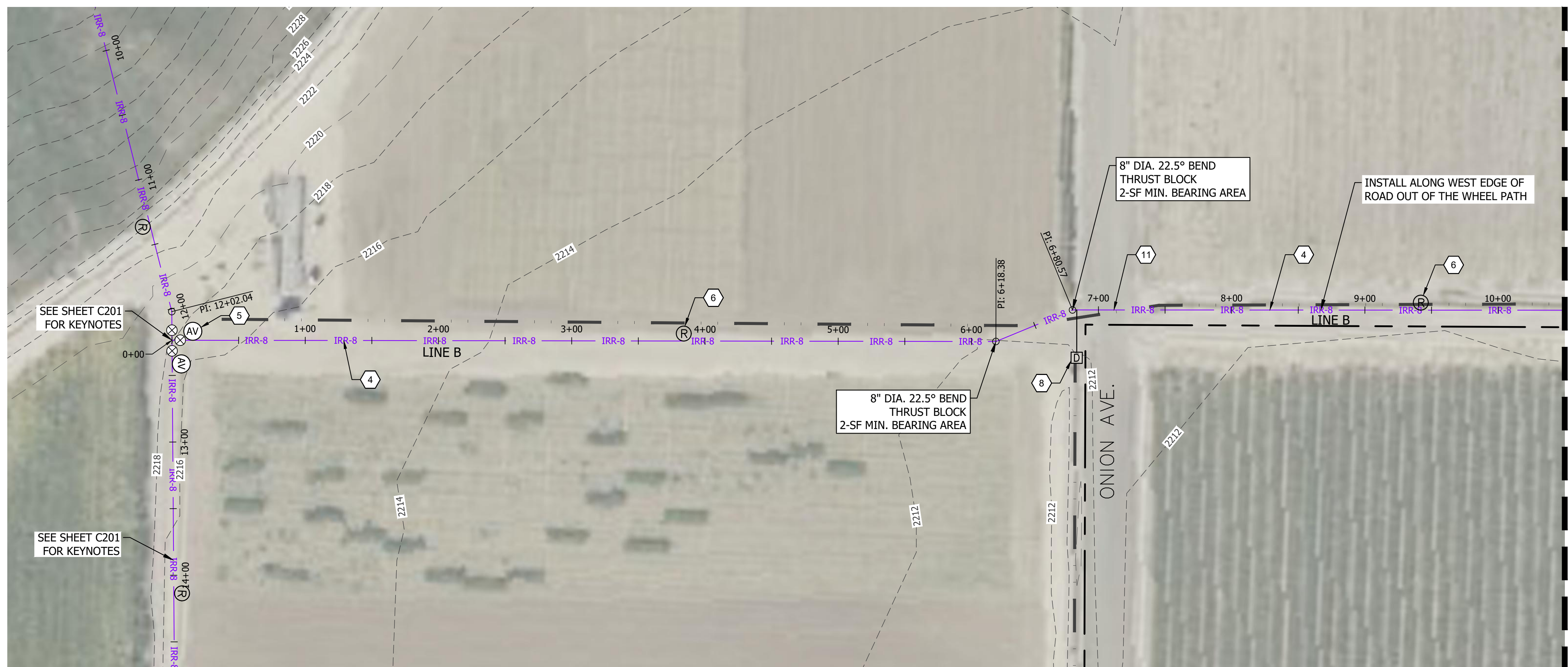
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SCALE	DESIGNED	CHECKED
AS SHOWN	JPL	EH

LINE C
PLAN & PROFILE

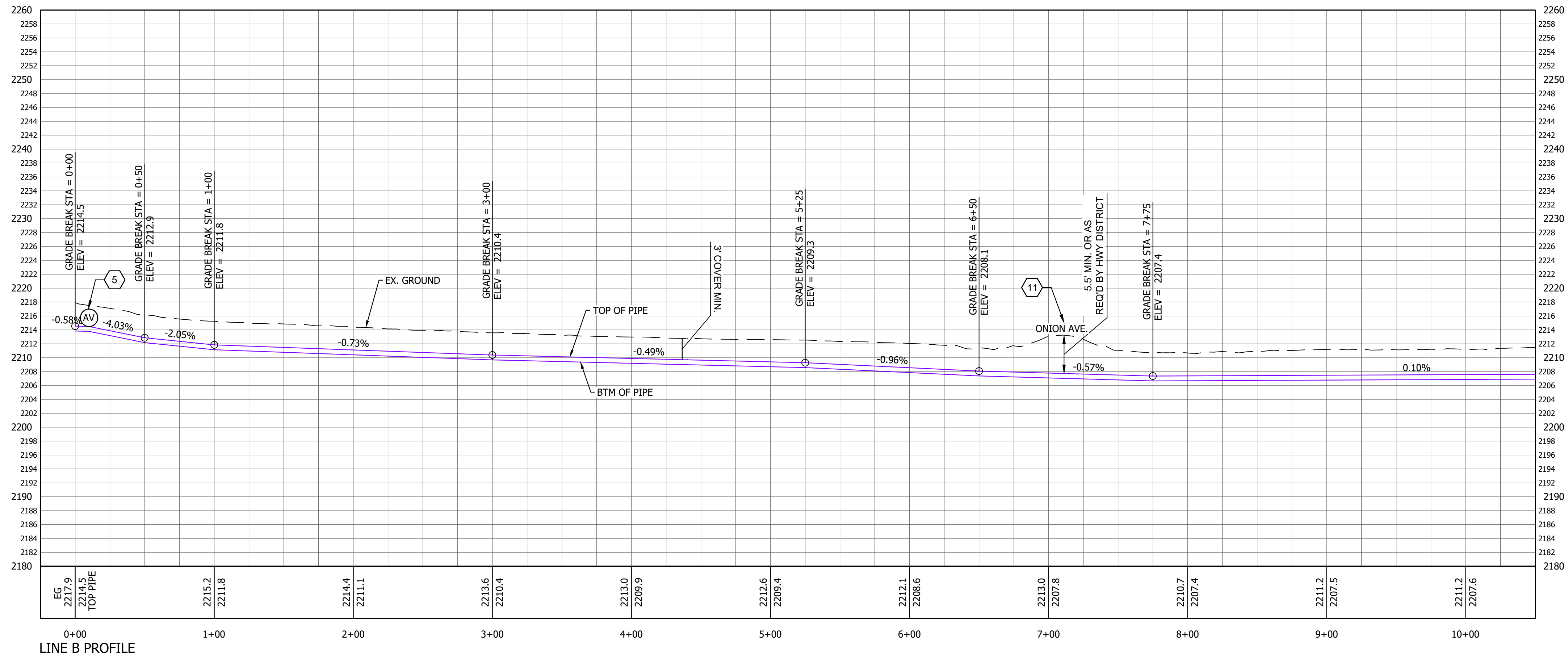
C203

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KEYNOTES

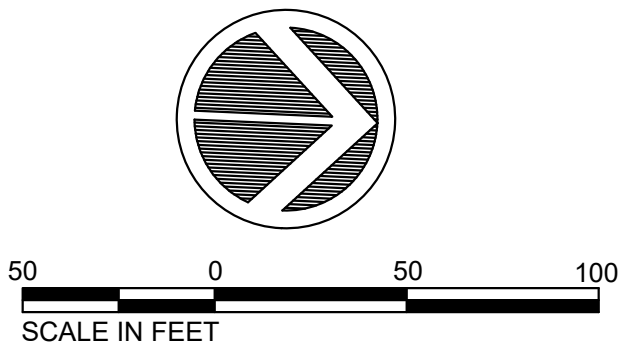
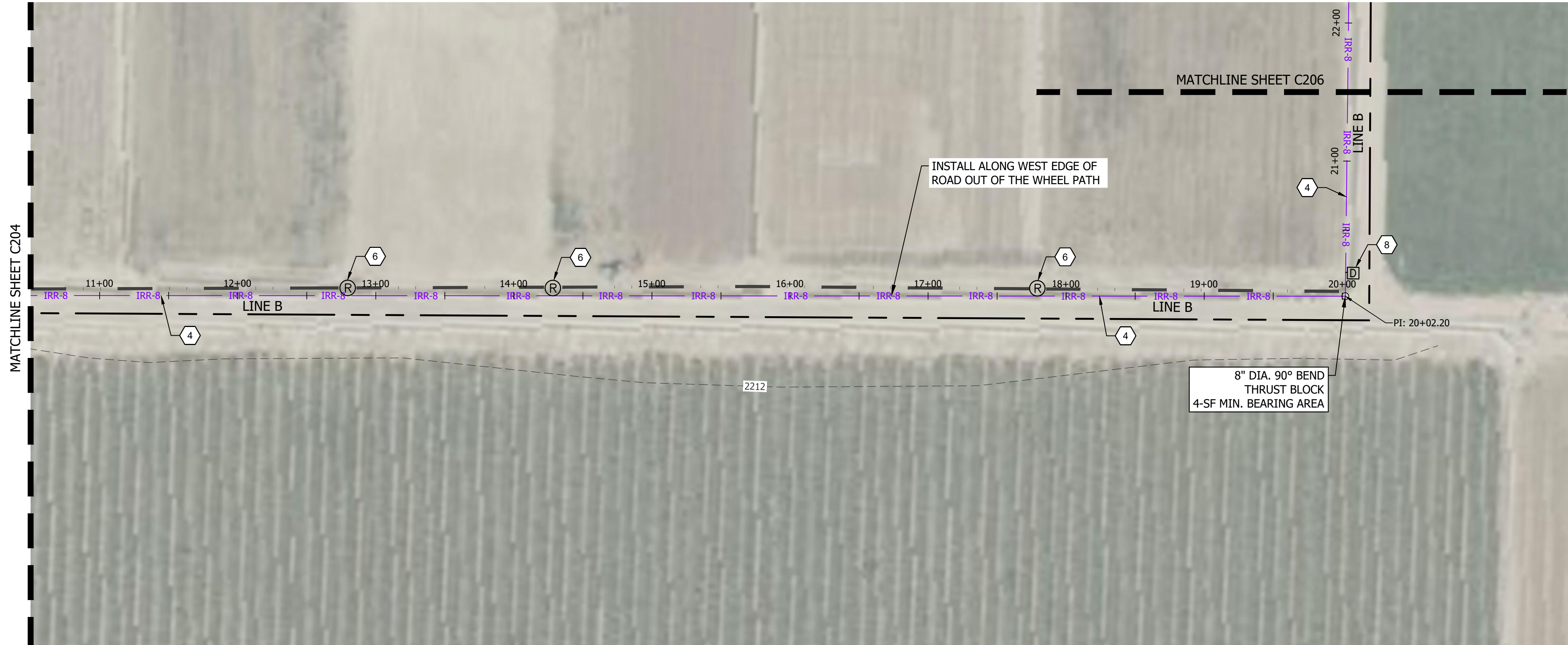
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9. INSTALL PRESSURE RELIEF VALVE, 3" XCAD PRVB3, OR APPROVED EQUAL. SET TO 80 PSI.
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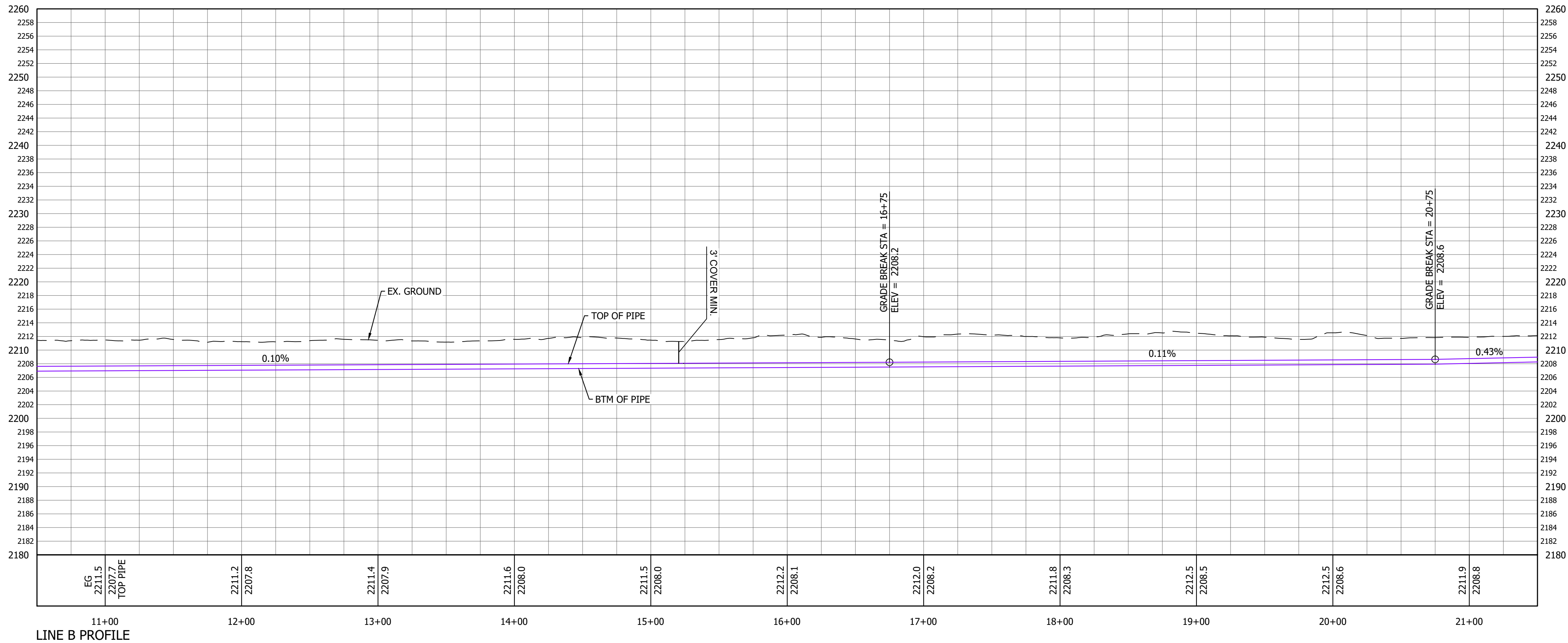
LINE B
PLAN & PROFILE

C204



KEYNOTES

1. RAISE EXISTING 10" DIA. FLOWMETER MANIFOLD PER DETAIL 1, SHEET C500.
2. INSTALL PRESSURE FILTER PER DETAIL 4, SHEETS C501-C502.
3. INSTALL PRV STATION PER DETAIL 4, SHEETS C501-C502.
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LINE B
PLAN & PROFILE

C205



1. RAISE EXISTING 10" DIA. FLOWMETER MANIFOLD PER DETAIL 1, SHEET C500.
2. INSTALL PRESSURE FILTER PER DETAIL 4, SHEETS C501-C502.
3. INSTALL PRV STATION PER DETAIL 4, SHEETS C501-C502.
4. CONSTRUCT 8-INCH DIA. IRRIGATION MAINLINE, 125# PIP, PER PROFILE THIS SHEET AND TRENCH DETAIL 2, SHEET C500.
5. INSTALL CONTINUOUS ACTING AIR RELEASE AND VACUUM RELIEF VALVE PER DETAIL 3, SHEET C500. AIR VALVES TO BE NELSON ACV200 OR APPROVED EQUAL.
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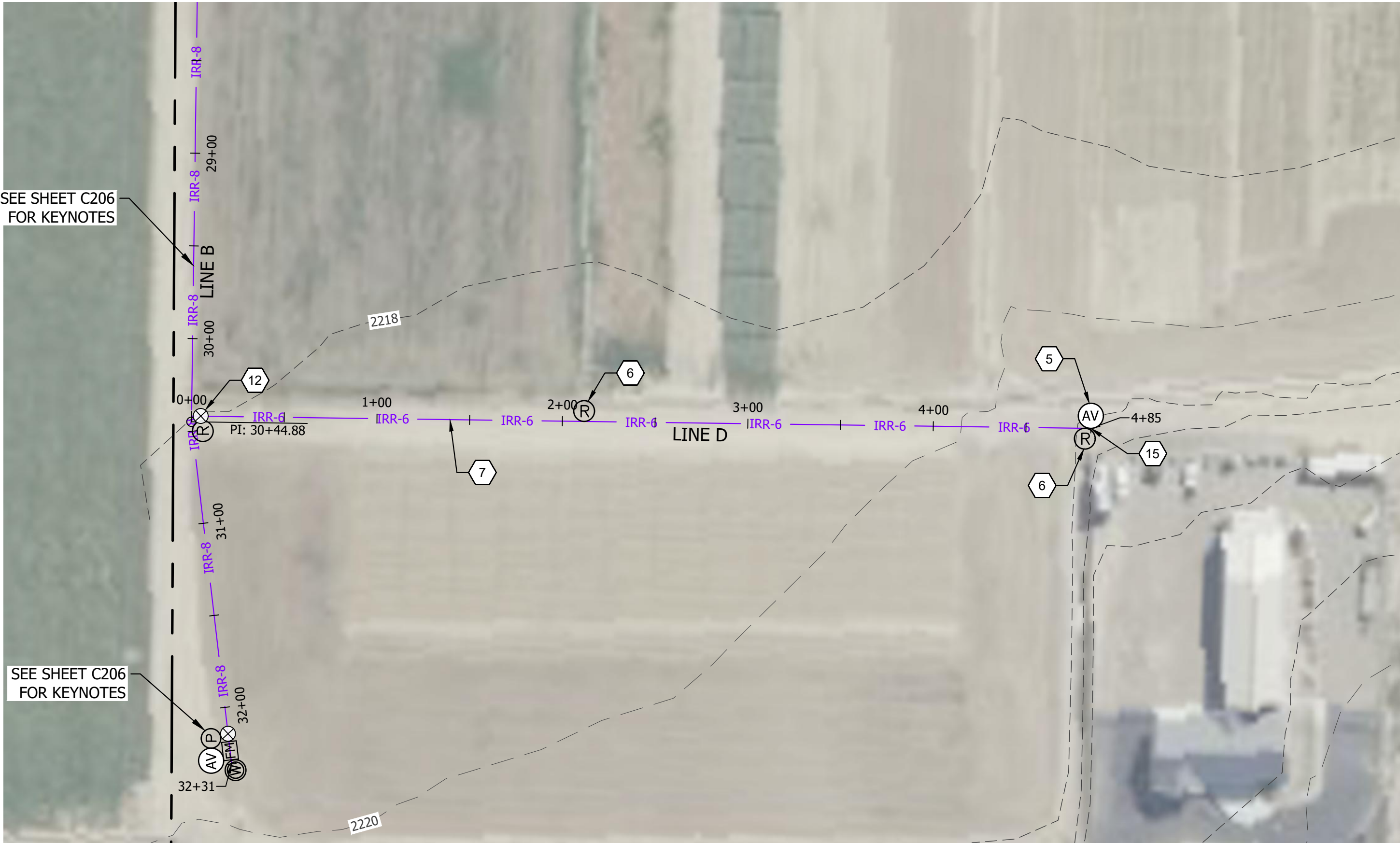
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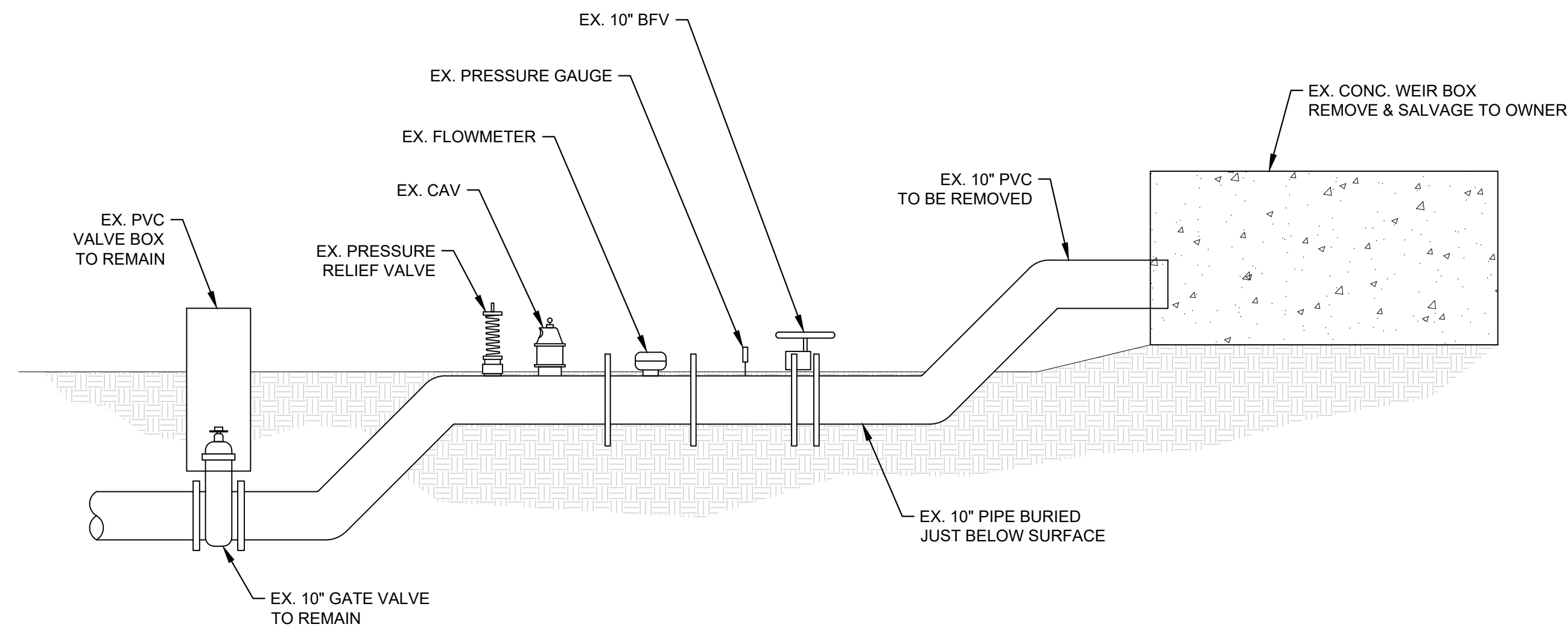
IRRIGATION DISTRIBUTION IMPROVEMENTS

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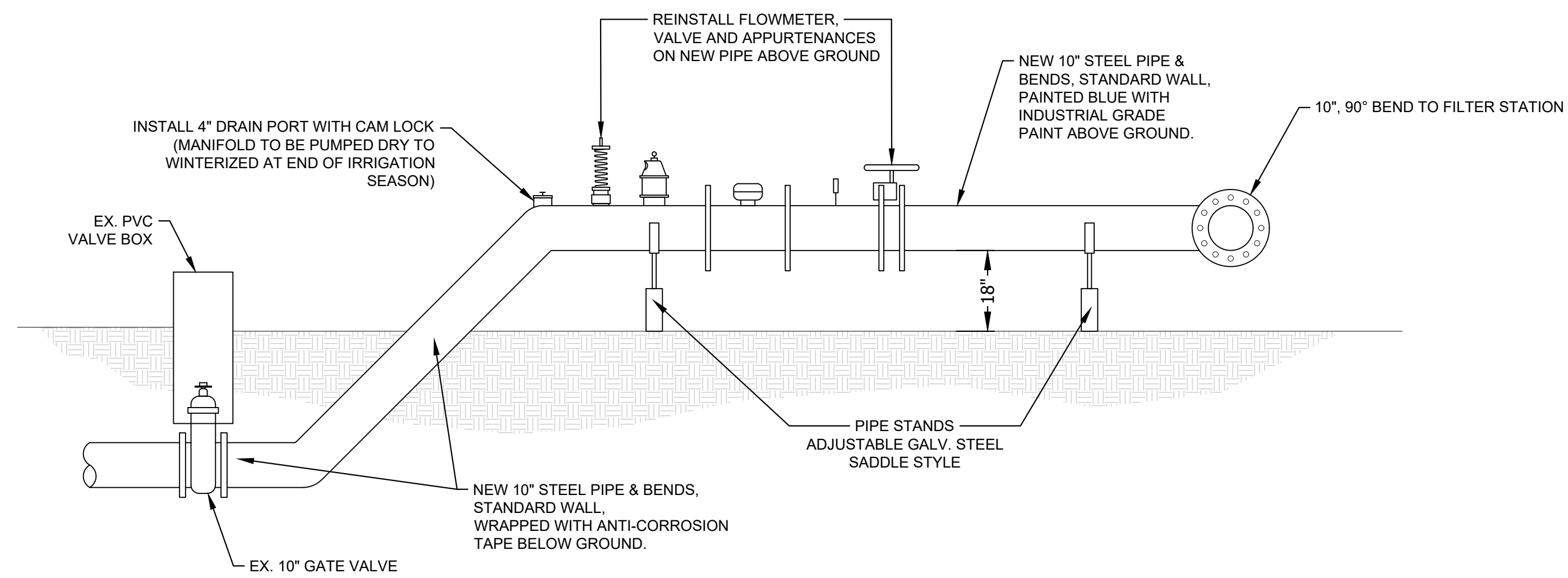
LINE B
PLAN & PROFILE

C206





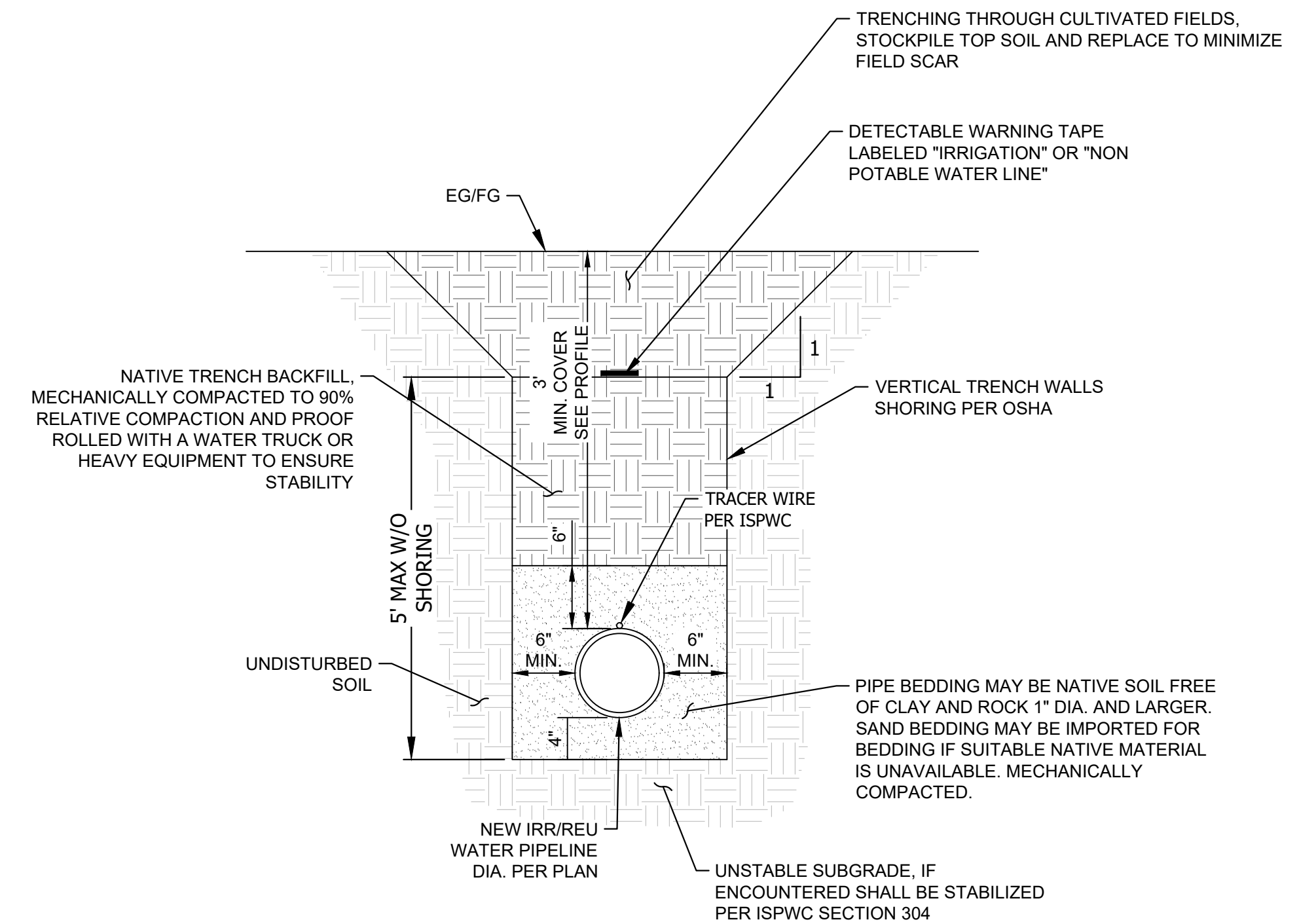
EXISTING CONDITION (PROFILE VIEW)



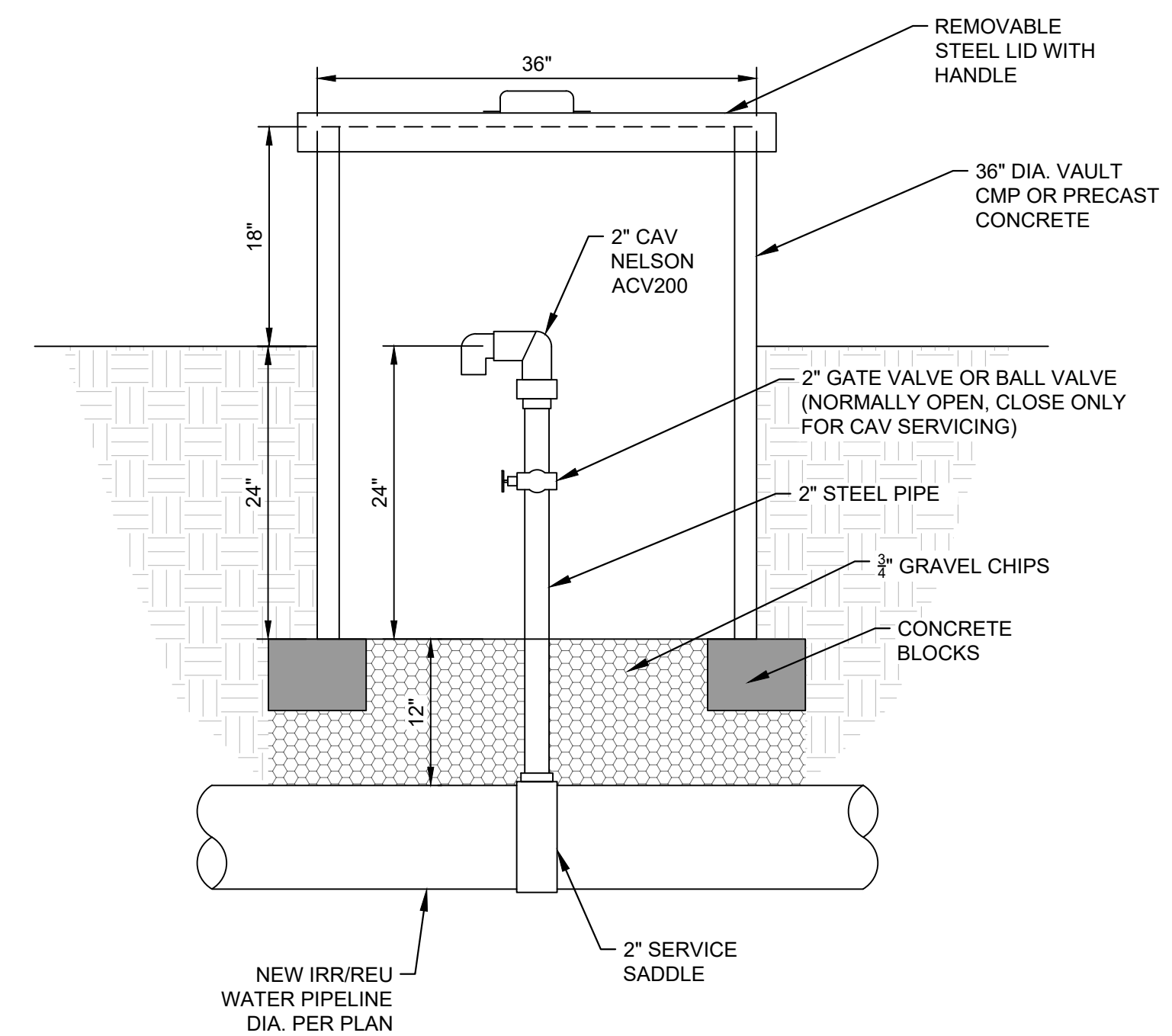
PROPOSED (PROFILE VIEW)

FLOWMETER MANIFOLD DETAIL

NOT SCALED, 1" = 2' APPROXIMATE



TYPICAL IRRIGATION MAINLINE TRENCH DETAIL

$$1'' = 1'$$


AIR VALVE & VAULT ON MAINLINE DETAIL

$$\overline{1'' = 1'}$$

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DOWN	JPL	EH	

IRRIGATION DETAILS

C500

2

THIS SHEET NOT USED, SEE SHEET C501 FOR PRV STATION DETAILS



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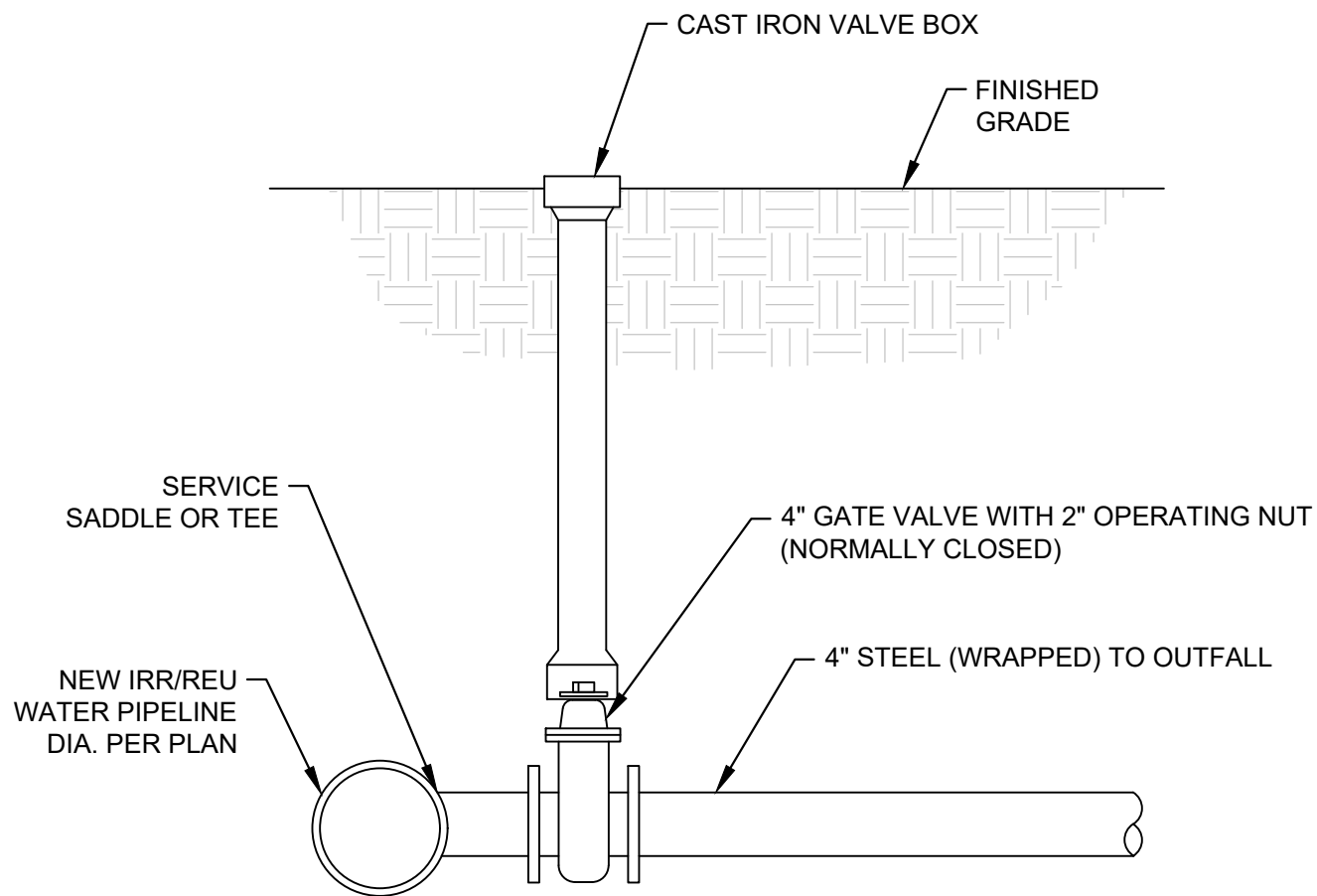
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IRRIGATION
DETAILS

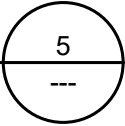
C502

NOTE: THIS DETAIL IS TO BE A MINIMUM STANDARD AND DEMONSTRATING CONCEPT. ALTERNATIVE DRAIN CONFIGURATIONS MAY BE APPROVED. CONTRACTOR TO SUBMIT DRAIN CONFIGURATIONS TO OWNER OR ENGINEER PRIOR TO CONSTRUCTION.

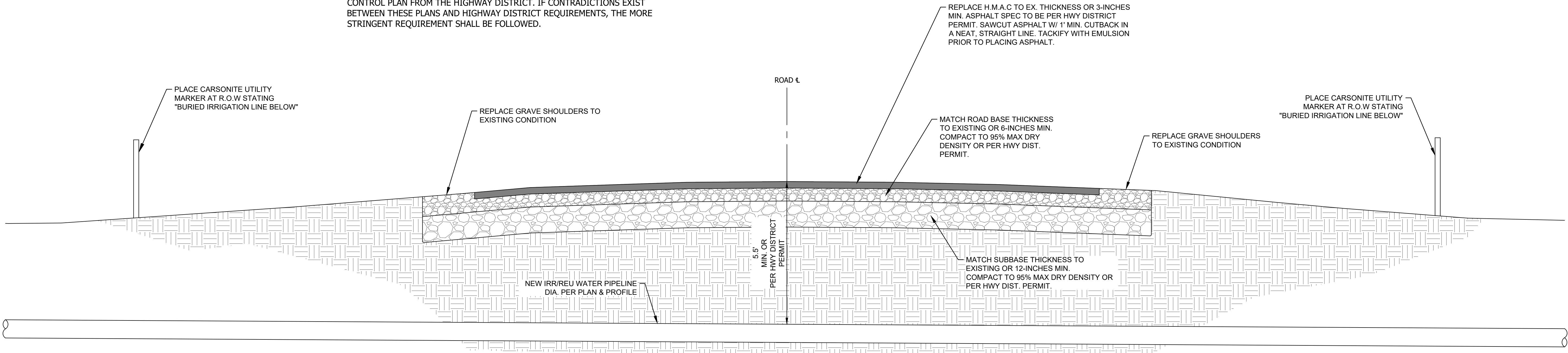


MAINLINE DRAIN DETAIL

NTS

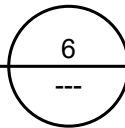


NOTE: THIS DETAIL IS TO BE A MINIMUM STANDARD. OWNER OR CONTRACTOR TO OBTAIN ANY NECESSARY PERMITS INCLUDING A TRAFFIC CONTROL PLAN FROM THE HIGHWAY DISTRICT. IF CONTRADICTIONS EXIST BETWEEN THESE PLANS AND HIGHWAY DISTRICT REQUIREMENTS, THE MORE STRINGENT REQUIREMENT SHALL BE FOLLOWED.



ONION AVE. CROSSING DETAIL

1" = 2'



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IRRIGATION
DETAILS

C503

