

Exhibit A.33

60% SUBMITTAL



NOT TO SCALE



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DRAWING NO:

C1

1 OF 37

DESIGNED BY:	JP/CI
DRAWN BY:	CI/TS
REV BY:	JV

ONE INCH	 0 1"
ONE INCH AT FULL SCALE.	
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LEGEND

EXISTING	PROPOSED

PRELIMINARY

DATE

BY

REVISION

NO.

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REV BY

JP/CI

C/TS

JV

ONE INCH

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1"

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wallis

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PROJECT NO:

1544D

DATE:

10/2024

Metro

OXBOW PARK WATER DISTRIBUTION

SYSTEM REPLACEMENT

DRAWING NO:

C2

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GENERAL NOTES

1.

ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE PLANS, CONTRACT DOCUMENTS, AND DETAILS.
2.

THE CONTRACTOR SHALL BE RESPONSIBLE TO PROCURE ALL PERMITS, LICENSES, AND CERTIFICATES APPLICABLE TO TRADES REQUIRED TO COMPLETE THE PROJECT AND FOR THE USE OF SUCH WORK WHEN COMPLETED. COMPLIANCE SHALL BE AT ALL JURISDICTIONAL LEVELS, INCLUDING FEDERAL, STATE, COUNTY, AND LOCAL AS RELATED TO THE PERFORMANCE OF THIS WORK.
3.

THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS, ELEVATIONS, SLOPES, AND LENGTHS PRIOR TO CONSTRUCTION. EXISTING UNDERGROUND UTILITY LOCATIONS ARE COMPILED FROM THE BEST AVAILABLE RECORDS. THE ENGINEER AND UTILITY OWNERS DO NOT GUARANTEE THE ACCURACY OR THE COMPLETENESS OF SUCH RECORDS. ADDITIONAL UTILITIES MAY EXIST WITHIN THE WORK AREA. DEPTHS ARE APPROXIMATE AND MAY VARY FROM THOSE INDICATED ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES. NO DELAYS WILL BE ALLOWED DUE TO NEGLIGENCE OF COORDINATION WITH UTILITY OWNERS. THE CONTRACTOR SHALL POTHOLE ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION AND SHALL COORDINATE WITH UTILITY OWNERS TO RELOCATE FACILITIES AS REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
4.

OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER AS SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. COPIES OF THE RULES MAY BE OBTAINED BY CALLING THE CENTER (ONE CALL UTILITY LOCATE NUMBER 503-246-6699). ALL EXCAVATION MUST COMPLY WITH ALL PROVISIONS OF ORS 757.541 THROUGH 757.751, INCLUDING REQUIRED NOTIFICATION OF ALL UNDERGROUND FACILITY OWNERS AT LEAST 48 BUSINESS HOURS BUT NOT MORE THAN 10 BUSINESS DAYS BEFORE COMMENCING ANY EXCAVATION.
5.

THE CONTRACTOR SHALL MAKE PROVISIONS TO KEEP SPECIFIED EXISTING UTILITIES IN SERVICE AND TO PROTECT ALL UTILITIES DURING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY DAMAGED UTILITIES USING MATERIALS AND METHODS APPROVED BY THE UTILITY OWNER. NO SERVICE INTERRUPTIONS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN PERMISSION FROM THE UTILITY PROVIDER.
6.

THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH METRO PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TWO WEEKS NOTICE TO SCHEDULE A PRECONSTRUCTION MEETING.
7.

THE CONTRACTOR SHALL NOTIFY METRO 48 HOURS IN ADVANCE OF STARTING CONSTRUCTION AND 24 HOURS BEFORE RESUMING WORK AFTER SHUTDOWNS EXCEPT FOR NORMAL RESUMPTION OF WORK FOLLOWING SATURDAYS, SUNDAYS, OR HOLIDAYS.
8.

HOURS OF CONSTRUCTION AND DAYS WHERE CONSTRUCTION IS PROHIBITED SHALL BE AS SET FORTH IN THE SPECIFICATIONS.
9.

THE CONTRACTOR SHALL SWEEP ALL PAVED SURFACES AFFECTED BY CONSTRUCTION ACTIVITIES AT THE END OF EVERY WORK DAY AND PERIODICALLY THROUGHOUT EACH DAY SUCH THAT VEHICLES ACCESSING THE SITE AND PERMANENT PAVEMENT ARE NOT AFFECTED.
10.

THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE SET OF CURRENT, APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
11.

THE CONTRACTOR SHALL PERFORM ALL WORK NECESSARY TO COMPLETE THE PROJECT IN A MANNER ACCEPTABLE TO THE OWNER AND IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS, INCLUDING INCIDENTAL WORK AS MAY BE NECESSARY TO MEET THE INTENT OF THE PROJECT CONTRACT DOCUMENTS, PLANS, AND APPLICABLE AGENCY REQUIREMENTS.
12.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PERFORM ALL NECESSARY FIELD MEASUREMENT, INCLUDING BUT NOT LIMITED TO MEASUREMENTS REQUIRED TO VERIFY DIMENSIONS AND EXISTING CONSTRUCTION CONDITIONS INDICATED AND/OR SHOWN ON THE PLANS. SHOULD ANY ERROR OR INCONSISTENCY EXIST, THE CONTRACTOR SHALL NOT PROCEED WITH THE WORK AFFECTED UNTIL REPORTED TO THE PROJECT ENGINEER FOR CLARIFICATION AND/OR CORRECTION.
13.

ANY INSPECTION BY THE CITY, COUNTY, STATE, FEDERAL AGENCY OR PROJECT ENGINEER SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF ANY OBLIGATION TO PERFORM THE WORK IN COMPLIANCE WITH THE APPLICABLE CODES, REGULATIONS, PROJECT CONTRACT DOCUMENTS, AND CITY, COUNTY, AND STATE STANDARDS.
14.

THE CONTRACTOR SHALL TAKE NO ADVANTAGE OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES IN THE PLANS. WHEN ERRORS, OMISSIONS, OR DISCREPANCIES ARE FOUND, THE ENGINEER AND METRO SHALL BE NOTIFIED IMMEDIATELY UPON DISCOVERY. WORK PERFORMED BY THE CONTRACTOR AS A RESULT OF AN ERROR, OMISSION, OR DISCREPANCY IN THE PLANS SHALL BE AT CONTRACTOR'S RISK AND EXPENSE WHERE SUCH ERROR, OMISSION, OR DISCREPANCY HAS NOT BEEN BROUGHT TO THE ATTENTION OF THE ENGINEER AND METRO.

WATER CONSTRUCTION NOTES

1.

THE EXISTING ON-SITE WATER DISTRIBUTION MAIN WILL BE OUT OF SERVICE BOTH DURING AND AFTER CONSTRUCTION AND WILL BE ABANDONED AFTER COMPLETION OF THE NEW MAIN.
2.

THE CONTRACTOR SHALL REMOVE OR ABANDON ANY SECTIONS OF EXISTING WATER LINES AS INDICATED IN THE PLANS ACCORDING TO THE PROCEDURES AND PROTOCOLS SET FORTH IN THE PLANS, SPECIFICATIONS, AND PERMITS.
3.

A PLUMBING PERMIT WILL BE REQUIRED FOR ALL WATER SERVICE WORK. PER THIS PERMIT, A LICENSED PLUMBER IS REQUIRED TO INSTALL SERVICE CONNECTIONS TO BUILDINGS.
4.

THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS AND WATER MAIN CONNECTION LOCATIONS A MINIMUM OF 400 FEET AHEAD OF WATER LINE CONSTRUCTION. REPORT ALL CONFLICTS TO THE ENGINEER IMMEDIATELY AND ALLOW TWO (2) WORKING DAYS TO RESOLVE CONFLICTS.
5.

UPON COMPLETION OF INSTALLATION OF THE WATER SYSTEM AND COMPLETION OF PRESSURE TESTING, ALL LINES SHALL BE FLUSHED AND DISINFECTED IN CONFORMANCE WITH OREGON HEALTH DIVISION GUIDELINES AND THE REQUIREMENTS OF THE OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY.
6.

THE CONTRACTOR SHALL PROTECT OPEN ENDS OF THE WATER PIPE UNDER CONSTRUCTION FROM CONTAMINATED WATER AND DEBRIS AT ALL TIMES. CONTRACTOR SHALL CAP AND/OR COVER OPEN PIPE ENDS AT THE END OF EACH WORK DAY.
7.

THE CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18 INCHES FROM SANITARY SEWERS IN ACCORDANCE WITH OAR 333-061. IF THIS SEPARATION CANNOT BE MAINTAINED, THE EXISTING SANITARY SEWER SHALL BE EXPOSED AND INSPECTED BETWEEN THE ADJACENT JOINTS ON EACH SIDE OF THE WATER MAIN AND REPLACED IF LEAKS ARE PRESENT. THE CONTRACTOR SHALL ALSO MAINTAIN A MINIMUM OF 12" OF VERTICAL SEPARATION FROM STORM SEWERS AND 6" MINIMUM VERTICAL SEPARATION FROM ALL REMAINING EXISTING UTILITIES UNLESS OTHERWISE SPECIFIED. NOTIFY ENGINEER IMMEDIATELY IF MINIMUM SEPARATION CANNOT BE MAINTAINED.

TREE PROTECTION NOTES

1.

PROTECT ALL EXISTING TREES, SHRUBS, LANDSCAPING, AND ASSOCIATED ROOT SYSTEMS TO THE GREATEST PRACTICAL EXTENT. SEE SPECIFICATIONS FOR ADDITIONAL ROOT PRUNING REQUIREMENTS.
2.

COORDINATE WITH METRO'S ARBORIST A MINIMUM OF ONE WEEK IN ADVANCE OF ANY REQUESTED OVERHEAD BRANCH TRIMMING.
3.

DEVIATIONS FROM ALIGNMENTS AND INSTALLATION DEPTHS SHOWN WHICH MAY INCREASE IMPACTS TO EXISTING TREES SHALL BE PROPOSED IN WRITING BY THE CONTRACTOR AT LEAST TWO WEEKS PRIOR TO IMPLEMENTATION, WITH SUCH DEVIATIONS SUBJECT TO REVIEW AND ACCEPTANCE BY AN ISA CERTIFIED ARBORIST AND THE ENGINEER.
4.

TREE ROOTS LARGER THAN 2 INCHES IN DIAMETER SHALL BE TRIMMED IN THE PRESENCE OF METRO'S ARBORIST. TRIM TREE ROOTS WITH A PRUNING SAW TO ENSURE A CLEAN CUT; DO NOT PULL OR TEAR AT ROOT SYSTEMS WITH EXCAVATOR OR OTHER EQUIPMENT.

PAVING NOTES

1.

THE CONTRACTOR SHALL ADJUST ALL VALVES BOXES AND VAULTS TO FINISHED GRADE.
2.

THE CONTRACTOR SHALL SAWCUT STRAIGHT MATCHLINES TO CREATE A CLEAN BUTT JOINT BETWEEN EXISTING AND NEW PAVEMENT. ALL NEW PAVEMENT JOINTS SHALL BE SEALED WITH RUBBERIZED SEALANT.
3.

AGGREGATE BASE AND ASPHALT CONCRETE PAVEMENT SHALL BE COMPACTED PER THE CURRENT OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S INDEPENDENT TESTING FIRM COMPACTION TESTING.
4.

ALL EXCAVATIONS WITHIN PAVED ROADWAYS SHALL BE TEMPORARILY RESURFACED OR PLATED AT THE END OF EACH WORK DAY AND PRIOR TO ALLOWING VEHICULAR TRAFFIC ONTO EXCAVATED AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING, MAINTAINING, AND REMOVING TEMPORARY SURFACING PER THE SPECIFICATIONS.

5.

SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SUBGRADE AND REPAIRED AT NO COST TO METRO AND IN A MANNER ACCEPTABLE TO METRO.

HORIZONTAL DIRECTIONAL DRILLING NOTES

1.

THE CONTRACTOR SHALL MAINTAIN A PHYSICAL COPY OF THE CURRENT, APPROVED HYDROFRACTURE CONTINGENCY PLAN ON SITE AT ALL TIMES DURING DRILLING OPERATIONS.
2.

THE CONTRACTOR SHALL INSTALL AND CONTINUALLY MAINTAIN FENCING AROUND THE FULL PERIMETER OF DRILLING AREAS FOR THE DURATION OF DRILLING OPERATIONS.
3.

THE CONTRACTOR SHALL INSTALL AND MAINTAIN TREE PROTECTION FENCING PRIOR TO COMMENCING WORK AND SHALL PROTECT ALL EXISTING TREES FROM DAMAGE DURING WORK, MAINTAINING SEPARATION BETWEEN TREES AND PIPE DURING LAYDOWN, ASSEMBLY, AND PULLBACK.
4.

ALL HDPE PIPE MANUFACTURER'S PUBLISHED RECOMMENDATIONS, INCLUDING BUT NOT LIMITED TO MINIMUM BENDING RADII, FUSION PRACTICES, AND HANDLING SHALL BE OBSERVED DURING PIPE LAYDOWN, ASSEMBLY, AND PULLBACK.
5.

THE INTERIOR OF ALL BUTT FUSED HDPE PIPE JOINTS SHALL BE COMPLETELY DEBEADED.
6.

ALL DRILLING FLUID MANAGEMENT MEASURES, INCLUDING BUT NOT LIMITED TO SECONDARY CONTAINMENT, SHALL BE IN PLACE AND CONFIRMED AS OPERATIONAL PRIOR TO DRILLING COMMENCEMENT.

SURVEY NOTES

THE HORIZONTAL DATUM FOR THIS SURVEY IS BASED UPON OREGON STATE PLANE NORTH ZONE (3601). THE VERTICAL DATUM FOR THIS SURVEY IS BASED UPON THE CITY OF PORTLAND BENCHMARK NO. 4283, ELEVATION=654.72, COP. DATUM.

TRIMBLE R10, R12, S5, S7, TSC 3 & TSC 7 ROBOTIC INSTRUMENTS WERE USED TO COMPLETE THIS SURVEY.

THE UNDERGROUND UTILITIES AS SHOWN ON THIS MAP HAVE BEEN LOCATED FROM FIELD SURVEY OF ABOVE GROUND STRUCTURES AND AS MARKED BY OTHERS. UTILITIES WERE LOCATED 4/18/22 THROUGH 5/09/22 BY APPLIED PROFESSIONAL SERVICES, INC. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. SUBSURFACE AND ENVIRONMENTAL CONDITIONS WERE NOT EXAMINED OR CONSIDERED AS A PART OF THIS SURVEY. NO STATEMENT IS MADE CONCERNING THE EXISTENCE OF UNDERGROUND OR OVERHEAD CONTAINERS OR FACILITIES THAT MAY AFFECT THE USE OR DEVELOPMENT OF THIS TRACT. THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY SURVEYOR.

EXISTING CONDITIONS MAP PREPARED BY SES 5/18/2022.

ADDITIONAL TOPO ADDED BY AT 11/29/2022.

ADDITIONAL TOPO ADDED BY SV 06/20/2023.

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JPC/I

DRAWN BY: CJ/TS

REV BY: JV

0

ONE INCH

1"

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST
SCALE ACCORDINGLY

GENERAL NOTES

wallis*engineering

PROJECT NO: 1544D

DATE: 10/2024

Metro

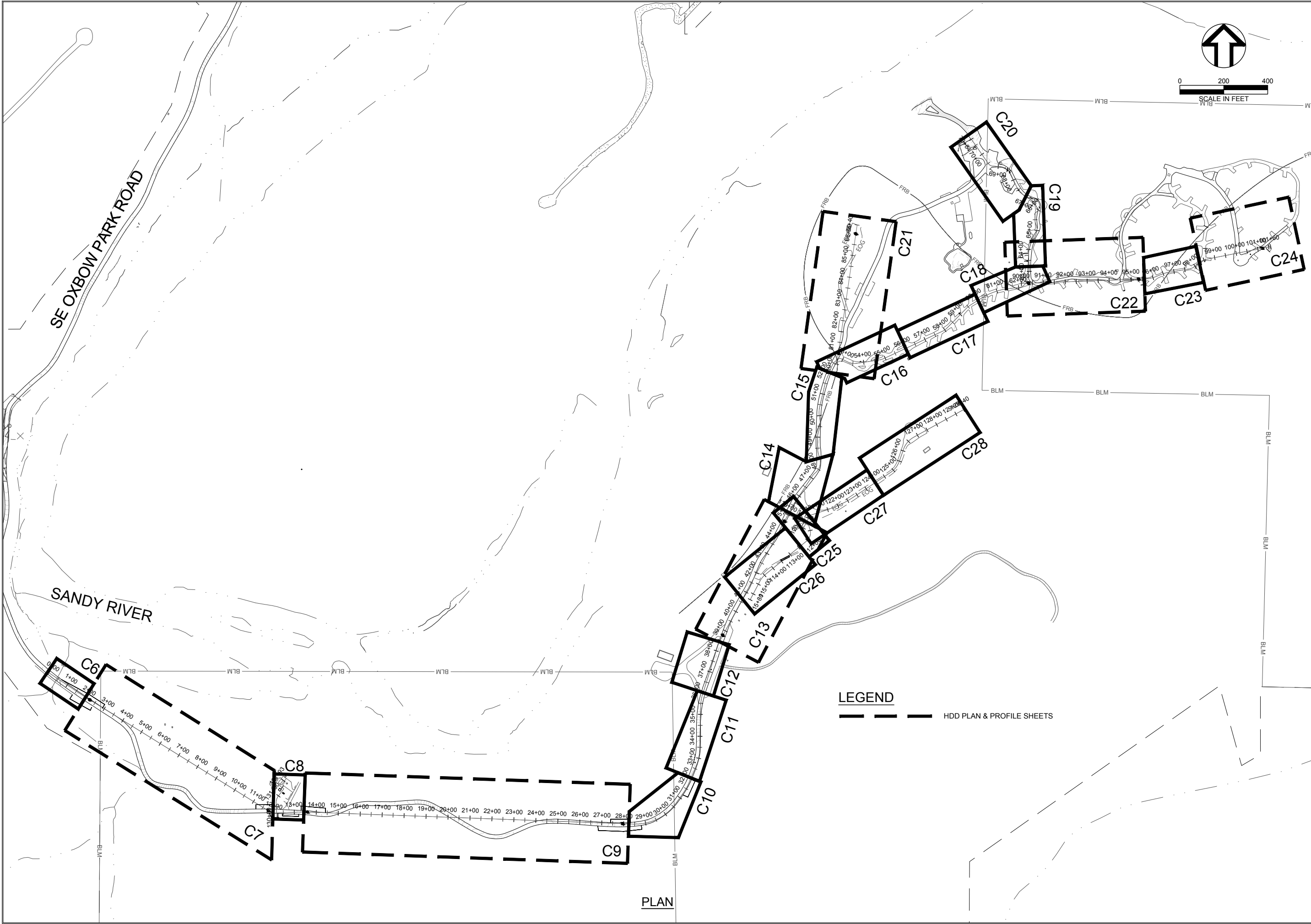
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:

C3

3 OF 37

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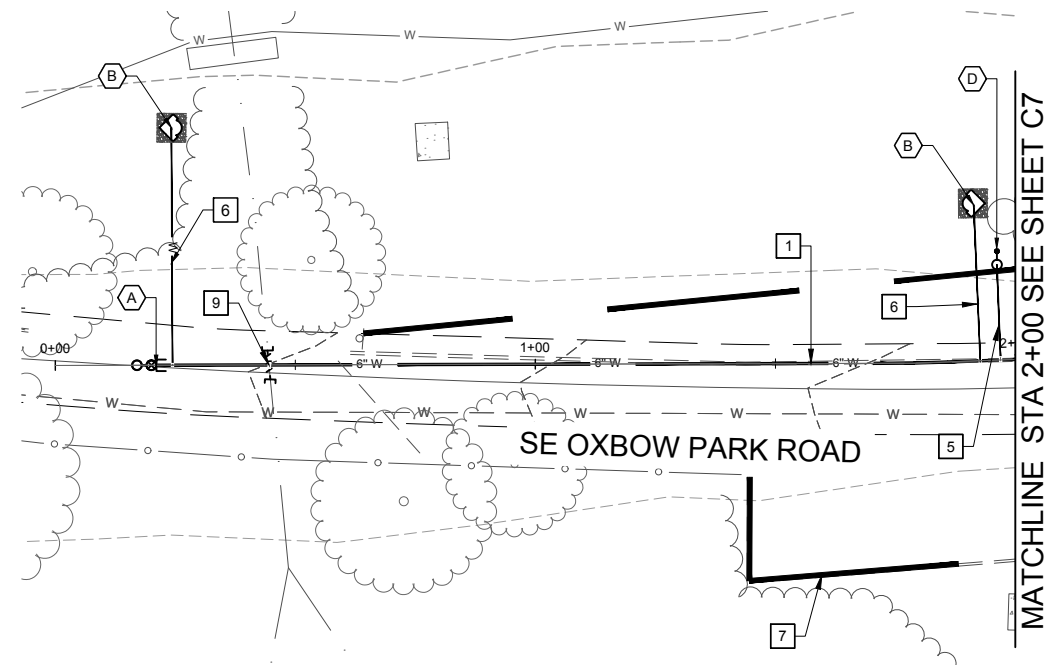


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DATE	BY	REVISION	NO.
DESIGNED BY: JP/CI		DRAWN BY: C/TS	
REV BY: JV			

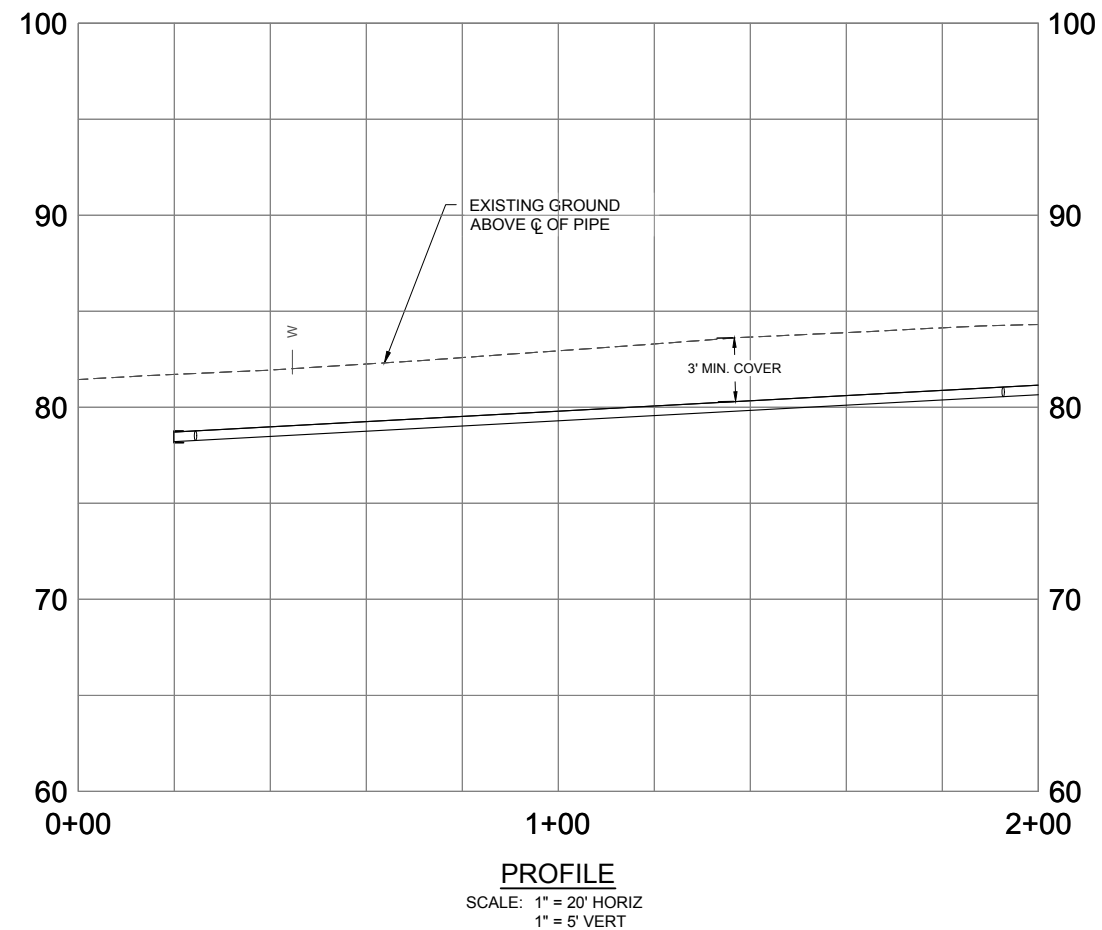
wallis *engineering	
PROJECT NO: 1544D	DATE: 10/2024

Metro
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:
C5
5 OF 37



PLAN



0 20 40

SCALE IN FEET

VALVE & FITTING SCHEDULE

- A** INSTALL:
1 ~ 2" BLOWOFF ASSEMBLY PER DETAIL
[FORTHCOMING]
- B** INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]
- D** INSTALL:
1 ~ 2" CARV ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

1. INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
5. INSTALL 2" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
6. INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
7. WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
9. REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

[illegible]

PLAN & PROFILE BEGIN
TO STA 2+00



PROJECT NO: 1544D DATE: 10/2024



OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

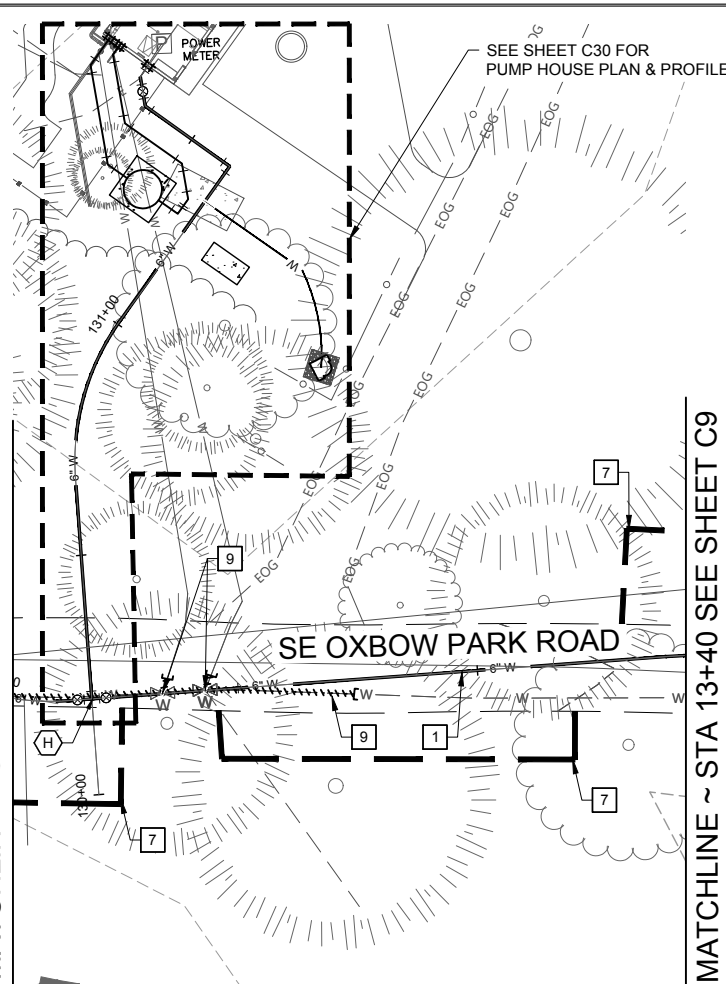
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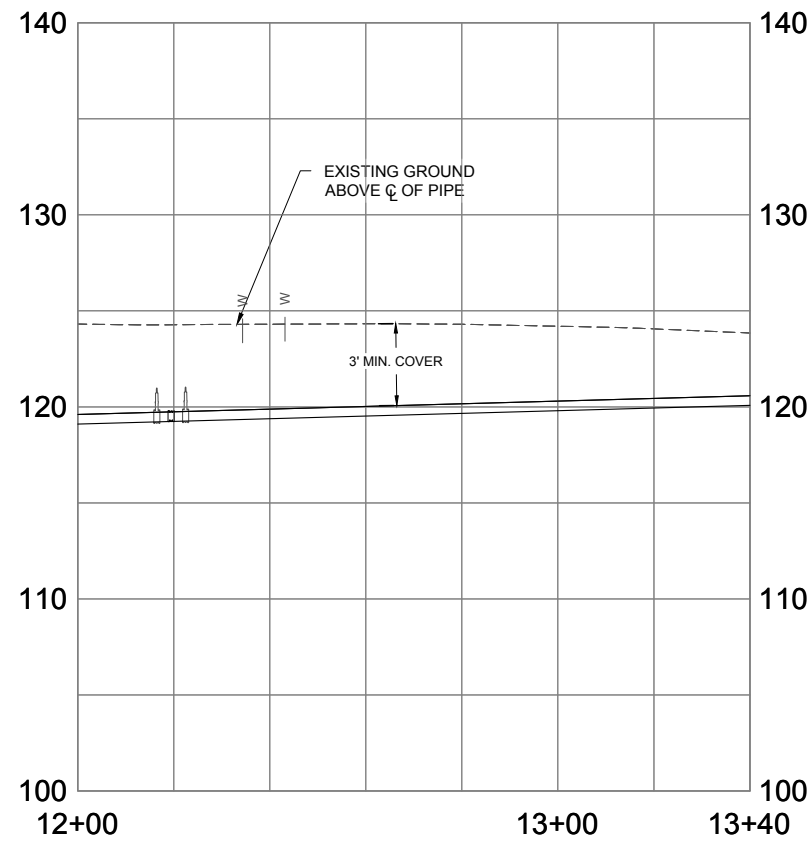
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MATCHLINE ~ STA 12+00 SEE SHEET C7

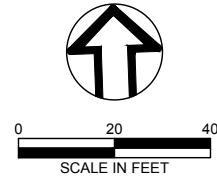


PLAN



PROFILE

SCALE: 1" = 20' HORIZ
1" = 5' VERT



VALVE & FITTING SCHEDULE

INSTALL:
1 ~ 6" X 6" HDPE DR9 TEE
2~ 6" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 7 WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

PRELIMINARY

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REV BY: JV

ONE INCH
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ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST
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PLAN & PROFILE STA
12+00 TO STA 13+40

wallis*engineering

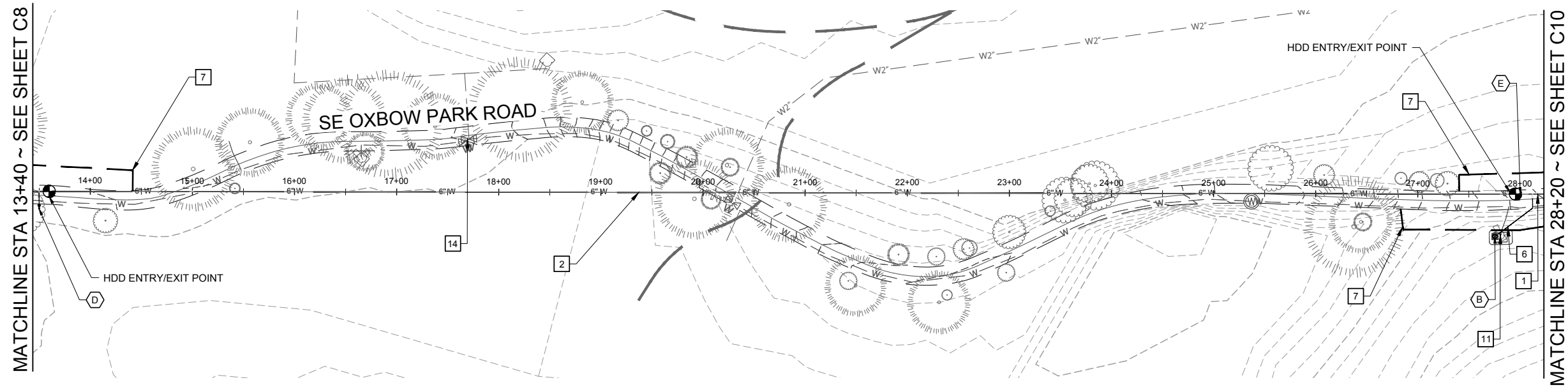
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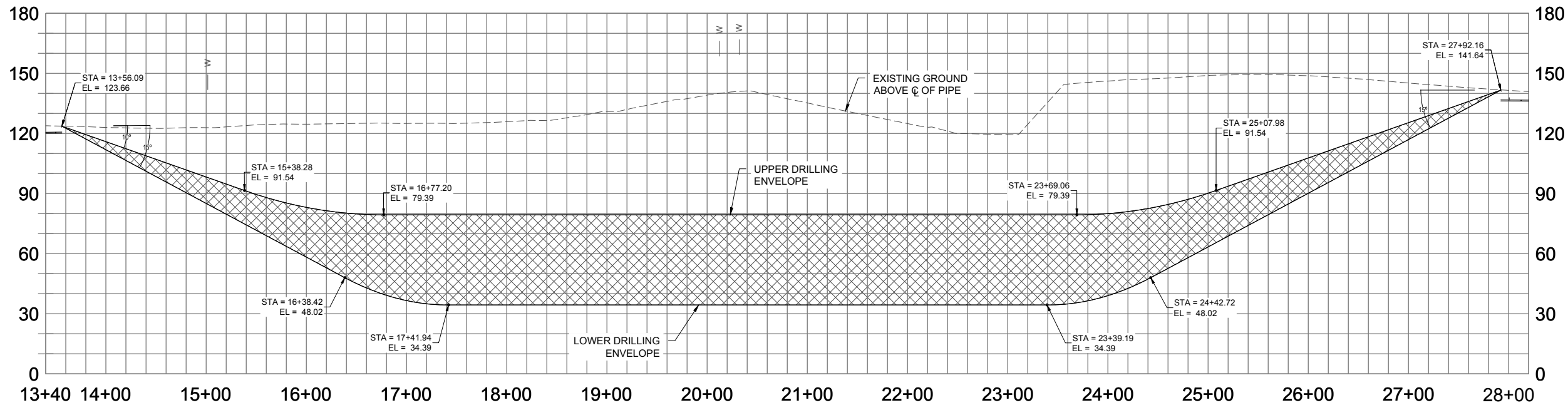
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C8
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PLAN



PROFILE

SCALE: 1" = 60' HORIZ
1" = 30' VERT

VALVE & FITTING SCHEDULE

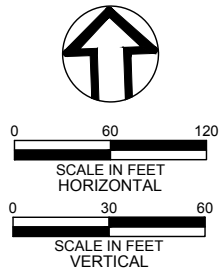
- B** INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL [FORTHCOMING]
- D** INSTALL:
1 ~ 2" CARV ASSEMBLY PER DETAIL [FORTHCOMING]
- E** INSTALL:
1 ~ 6" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 2** INSTALL FUSED 6" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].
- 6** INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 7** WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
- 11** ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- 14** ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

HDD NOTES

- 1** REFER TO HORIZONTAL DIRECTIONAL DRILLING NOTES, SHEET C3.
- 2** HDD PROFILE SHOWN REPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND APPROVED.
- 3** CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX.



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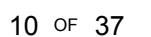
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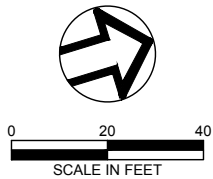
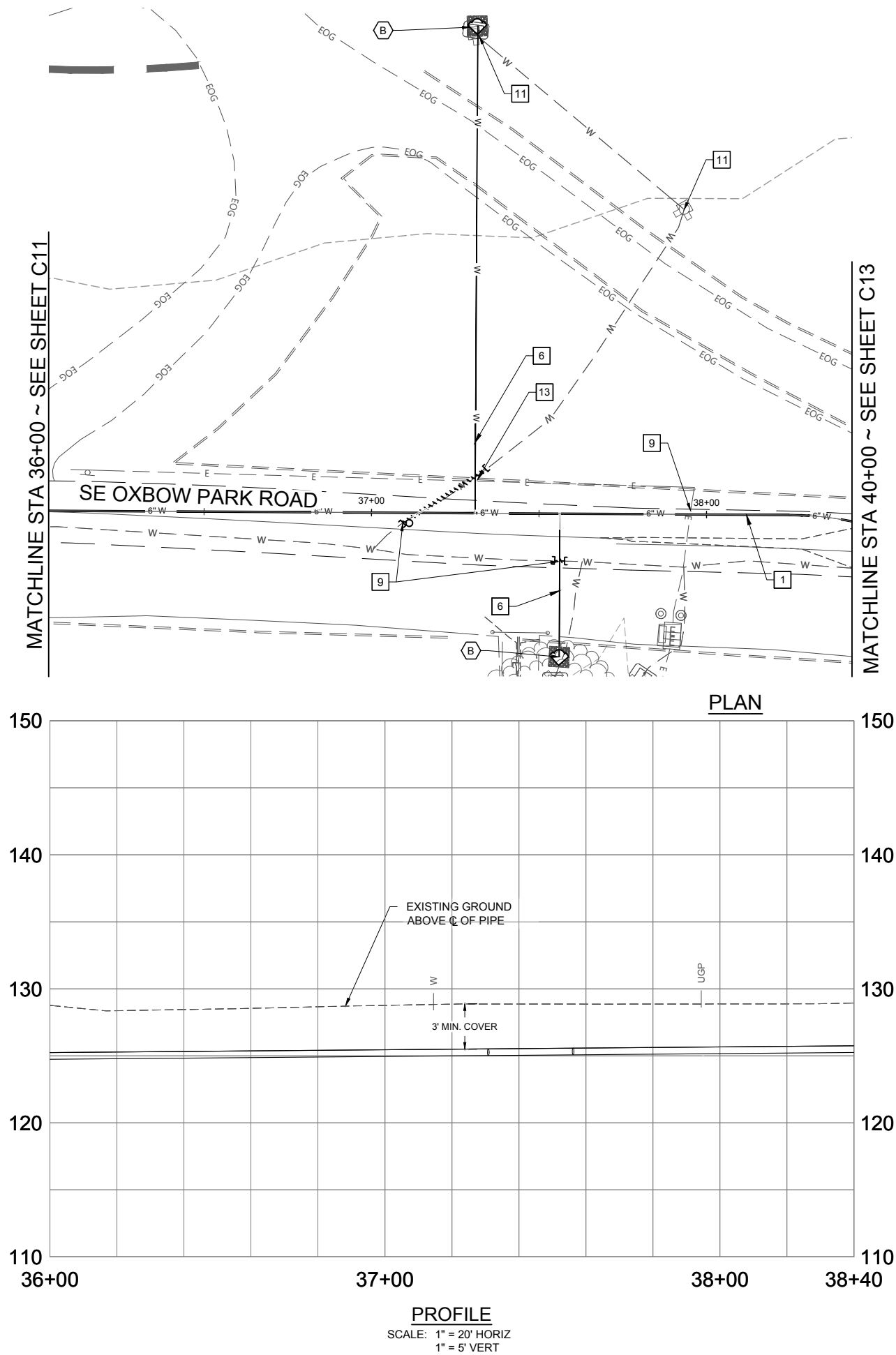
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OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C9
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VALVE & FITTING SCHEDULE

- B** INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL [FORTHCOMING]

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 6** INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 7** WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
- 9** REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
- 11** ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- 13** POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND.

PRELIMINARY

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PLAN & PROFILE STA 36+00 TO STA 38+40

wallis*engineering

PROJECT NO: 1544D

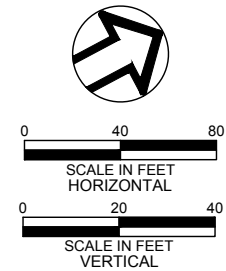
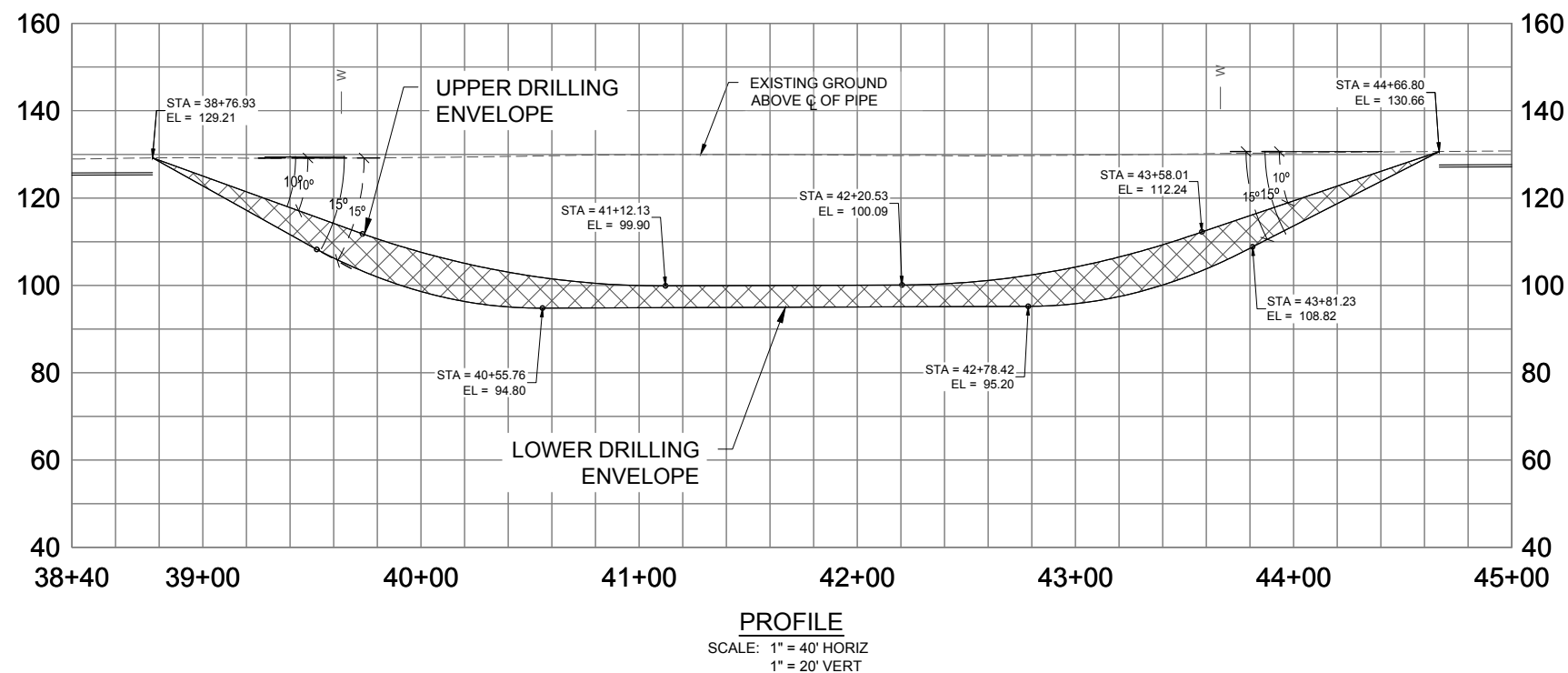
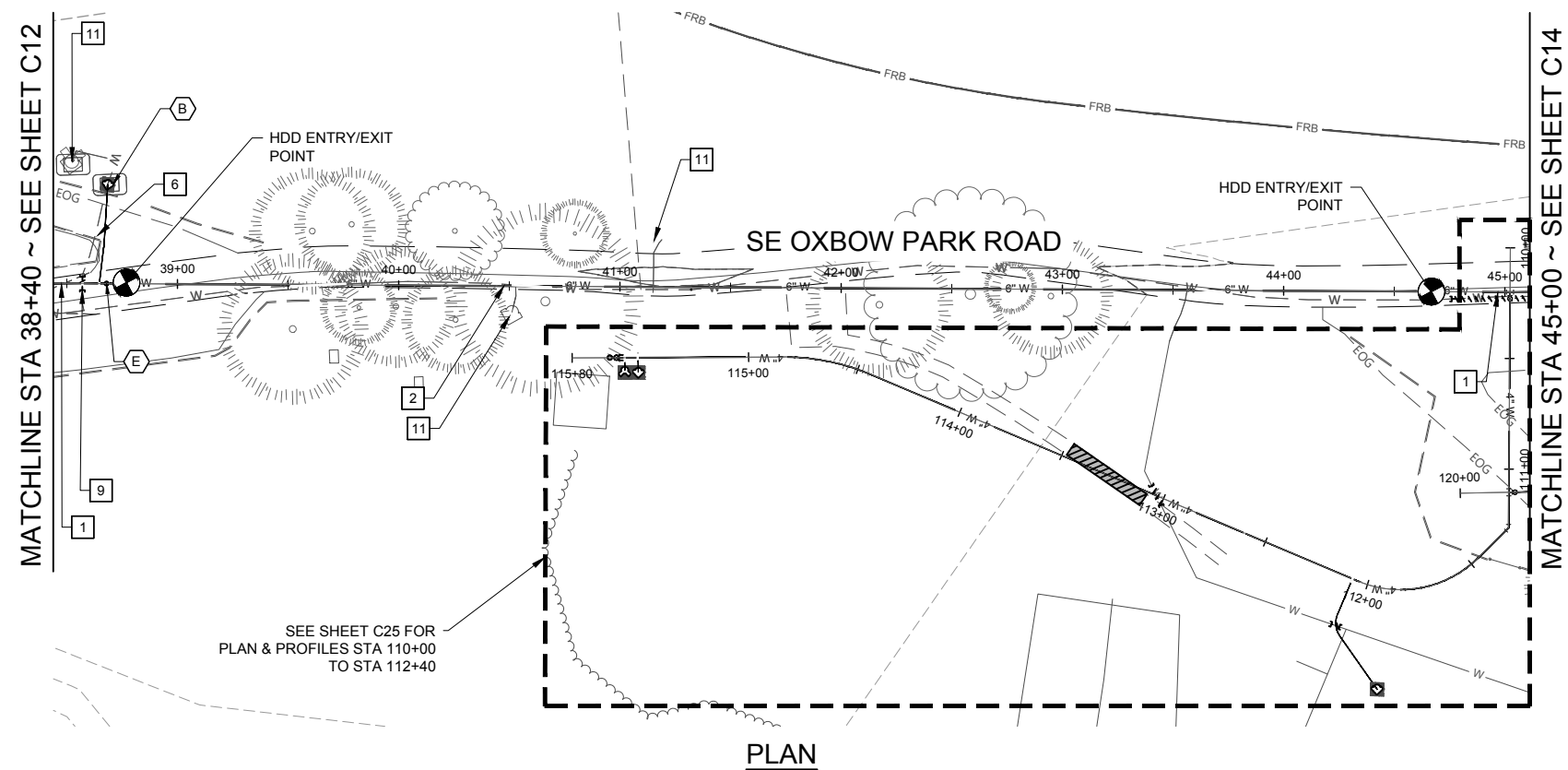
DATE: 10/2024

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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO: C12

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VALVE & FITTING SCHEDULE

- B** INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]
- E** INSTALL:
1 ~ 6" FJ X MJ GATE VALVE

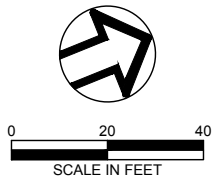
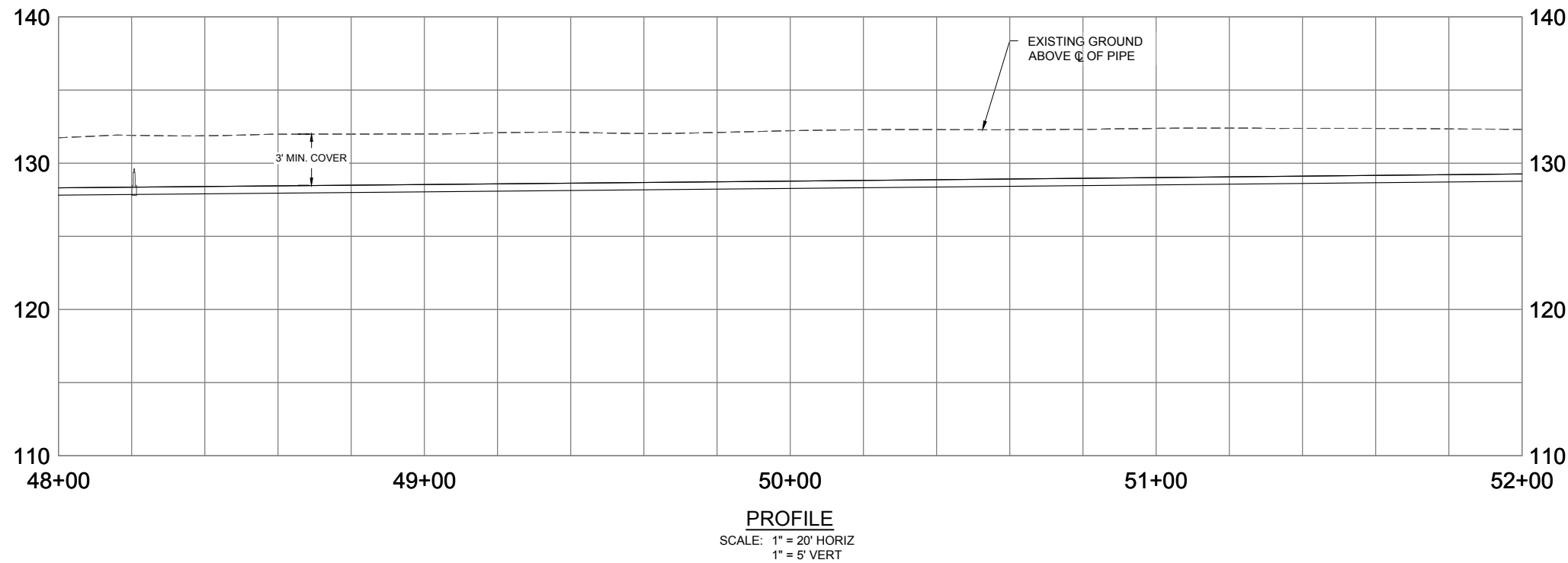
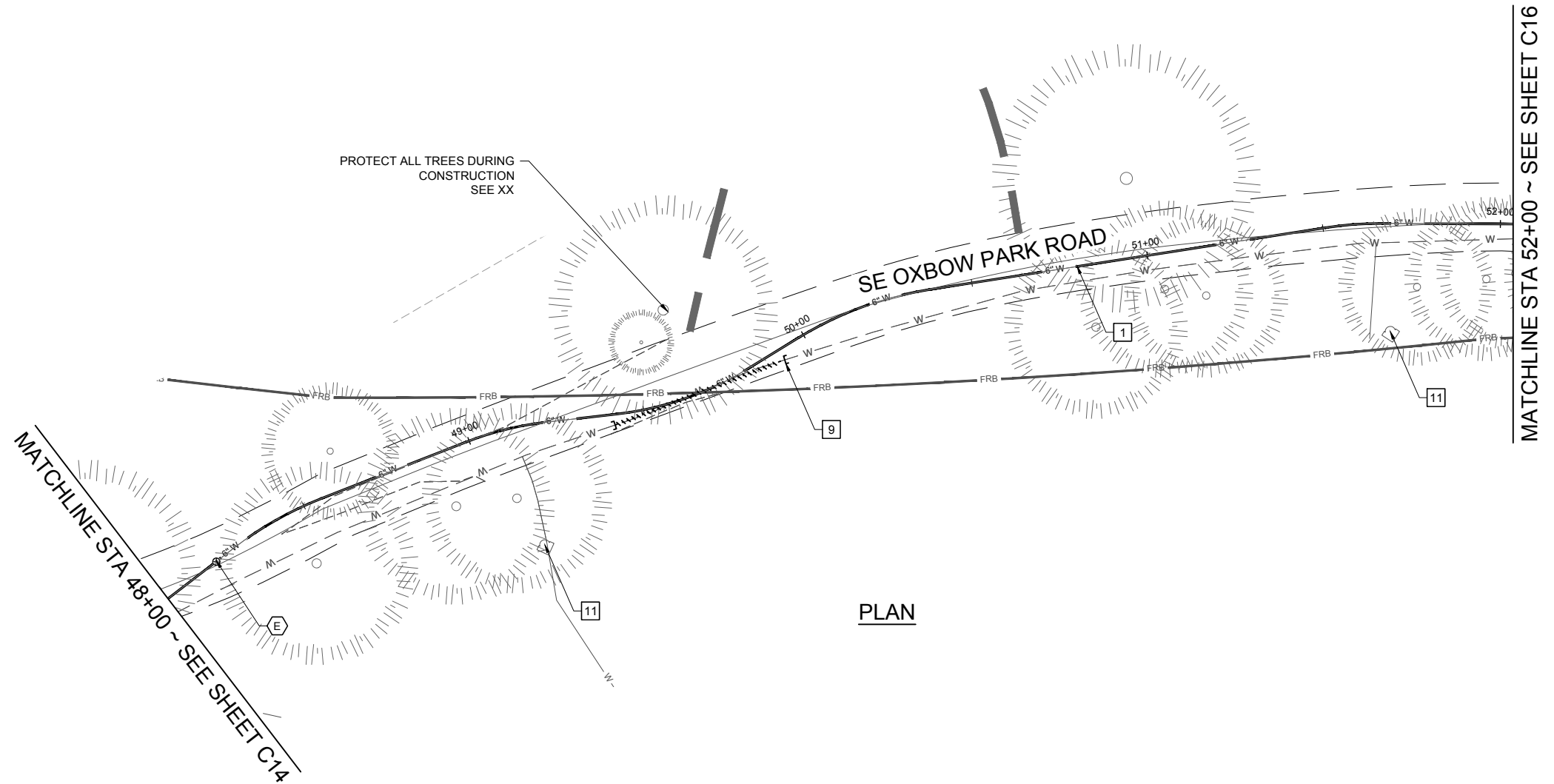
WATER CONSTRUCTION NOTES

1. INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
2. INSTALL FUSED 6" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].
6. INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
9. REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
11. ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.

HDD NOTES

- ① REFER TO HORIZONTAL DIRECTIONAL DRILLING NOTES, SHEET C3.
- ② HDD PROFILE SHOWN REPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND APPROVED.
- ③ CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/ EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX.

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VALVE & FITTING SCHEDULE

E INSTALL:
1 ~ 6" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- 1 INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.
- 11 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JP/CI
DRAWN BY: C/TS
REV BY: JV

ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST
SCALE ACCORDINGLY

wallis*engineering

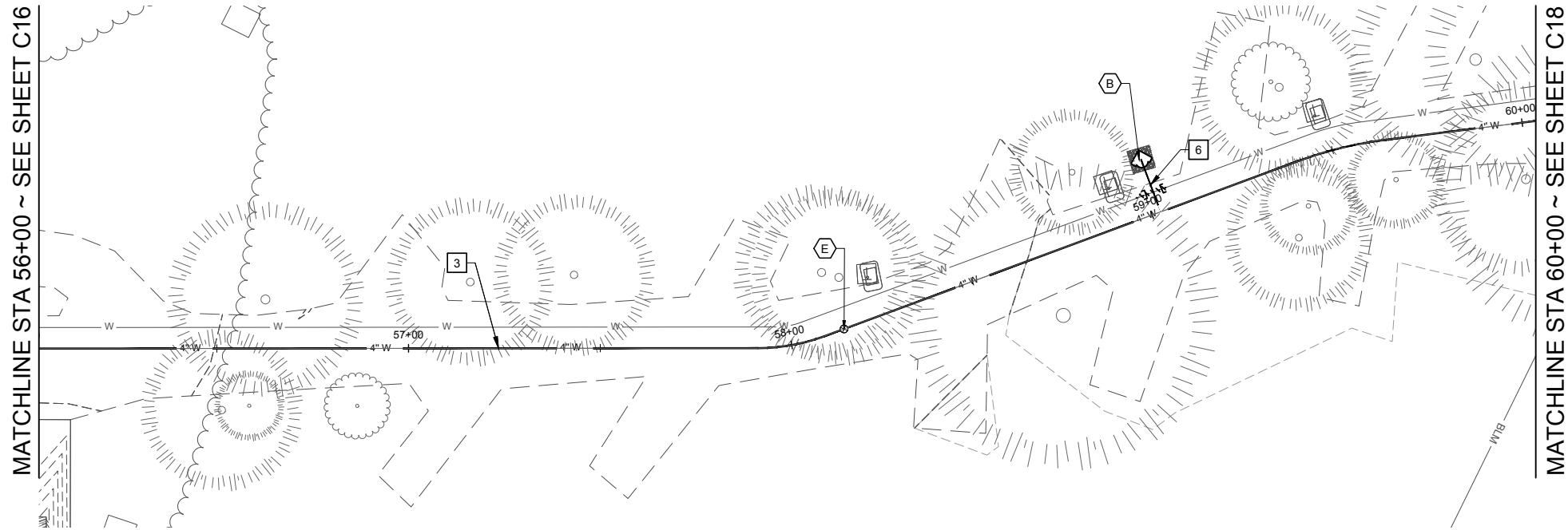
PROJECT NO: 1544D
DATE: 10/2024

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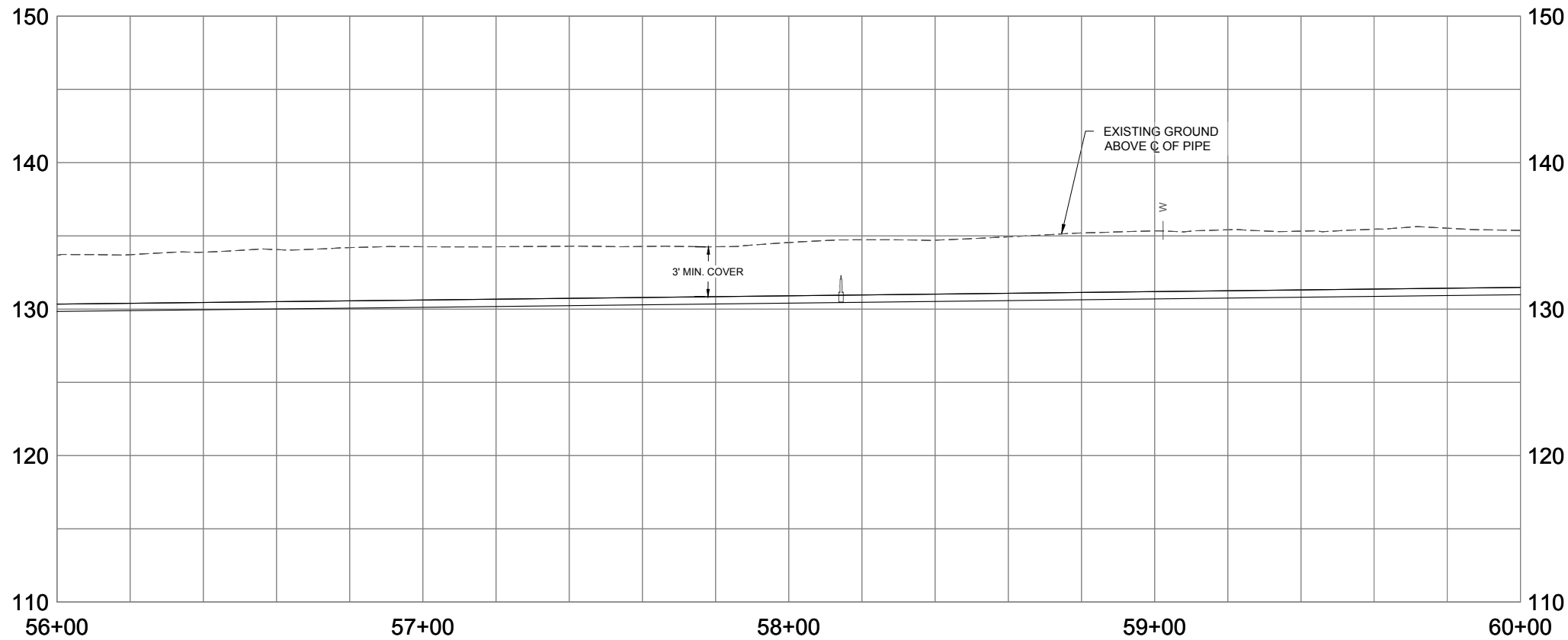
OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C15
15 OF 37

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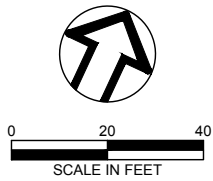


PLAN



PROFILE

SCALE: 1" = 20' HORIZ
1" = 5' VERT



VALVE & FITTING SCHEDULE

B INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL [FORTHCOMING]

E INSTALL:
1 ~ 6" FJ X MJ GATE VALVE

WATER CONSTRUCTION NOTES

- 3** INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 6** INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY
JP/CI

DRAWN BY
C/TS

REV BY
JV

PLAN & PROFILE STA
56+00 TO STA 60+00

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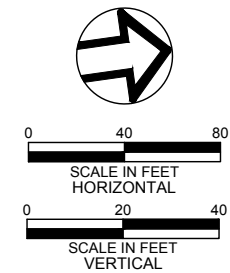
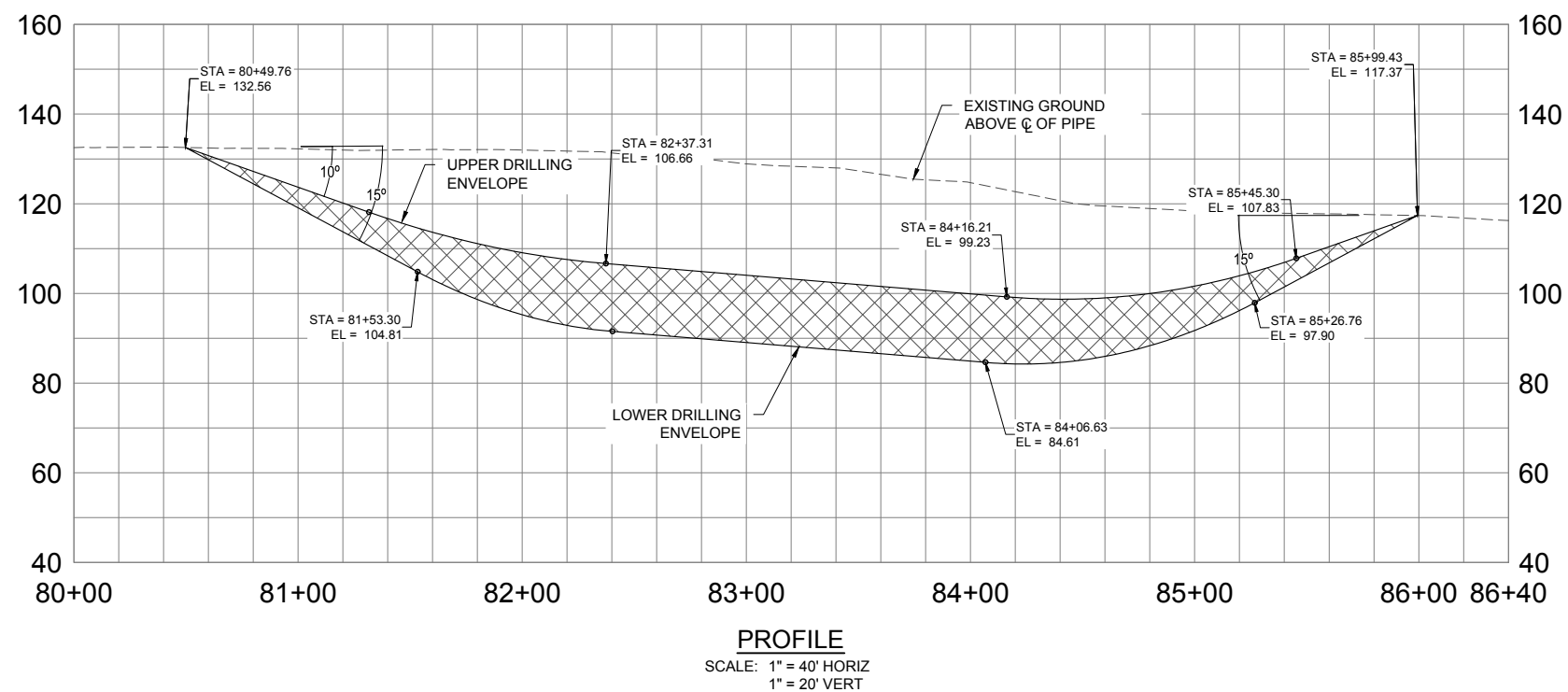
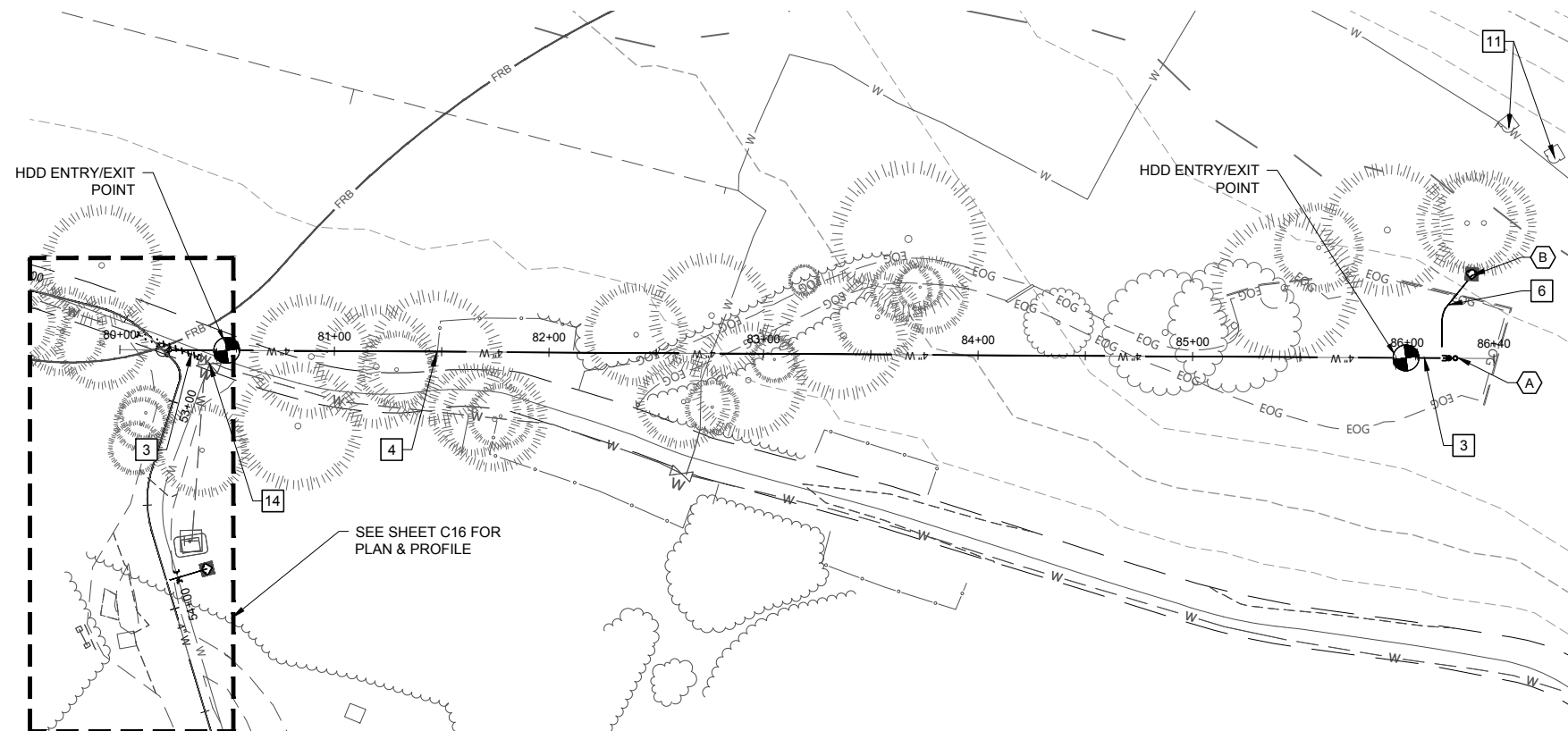
PROJECT NO:
1544D

DATE:
10/2024

OXBOW PARK WATER DISTRIBUTION
SYSTEM REPLACEMENT

DRAWING NO:
C17

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VALVE & FITTING SCHEDULE

- A** **INSTALL:**
1 - 2" BLOWOFF ASSEMBLY PER DETAIL
[FORTHCOMING]
- B** **INSTALL:**
1 - YARD HYDRANT PER DETAIL [FORTHCOMING]
1 - 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

- 3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 4 INSTALL FUSED 4" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].
- 6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 7 WORK AREA LIMITS. NO HEAVY EQUIPMENT PERMITTED OUTSIDE LIMITS SHOWN.
- 11 ABANDON EXISTING HYDRANT OR STANDPIPE ABOVE GRADE. REMOVE ALL ASSOCIATED VALVES AND VALVE BOXES AND RESTORE SURFACE IN KIND.
- 14 ABANDON EXISTING VALVE IN PLACE. REMOVE VALVE CAN AND LID AND RESTORE SURFACING.

HDD NOTES

- 1 REFER TO HORIZONTAL DIRECTIONAL DRILLING NOTES, SHEET C3.
- 2 HDD PROFILE SHOWN REPRESENTS A PRELIMINARY DESIGN ENVELOPE, INCLUSIVE OF POSSIBLE BORE PATHS. HDD CONTRACTOR SHALL ADJUST HDD GEOMETRY, INCLUDING ANGLES, DEPTHS AND ELEVATIONS, RADII, AND SLOPES AS REQUIRED AND APPROVED.
- 3 CONNECTIONS TO PROPOSED WATER LINE AT ENTRY/ EXIT POINTS SHALL BE MADE PER DETAIL, SHEET CXX.

[illegible]HDD PLAN & PROFILE
STA 80+00 TO STA 86+40

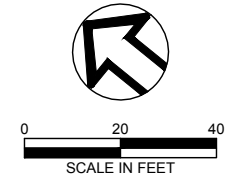
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OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:

C21

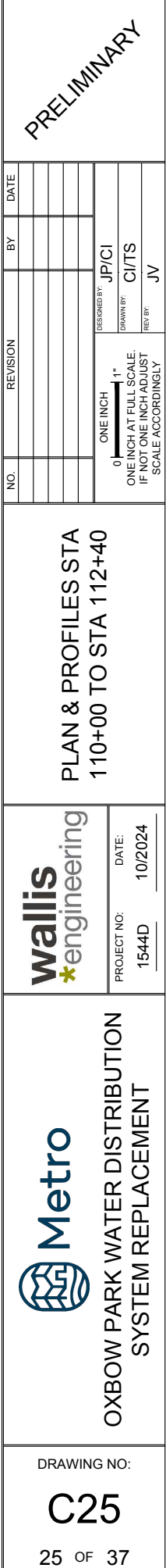


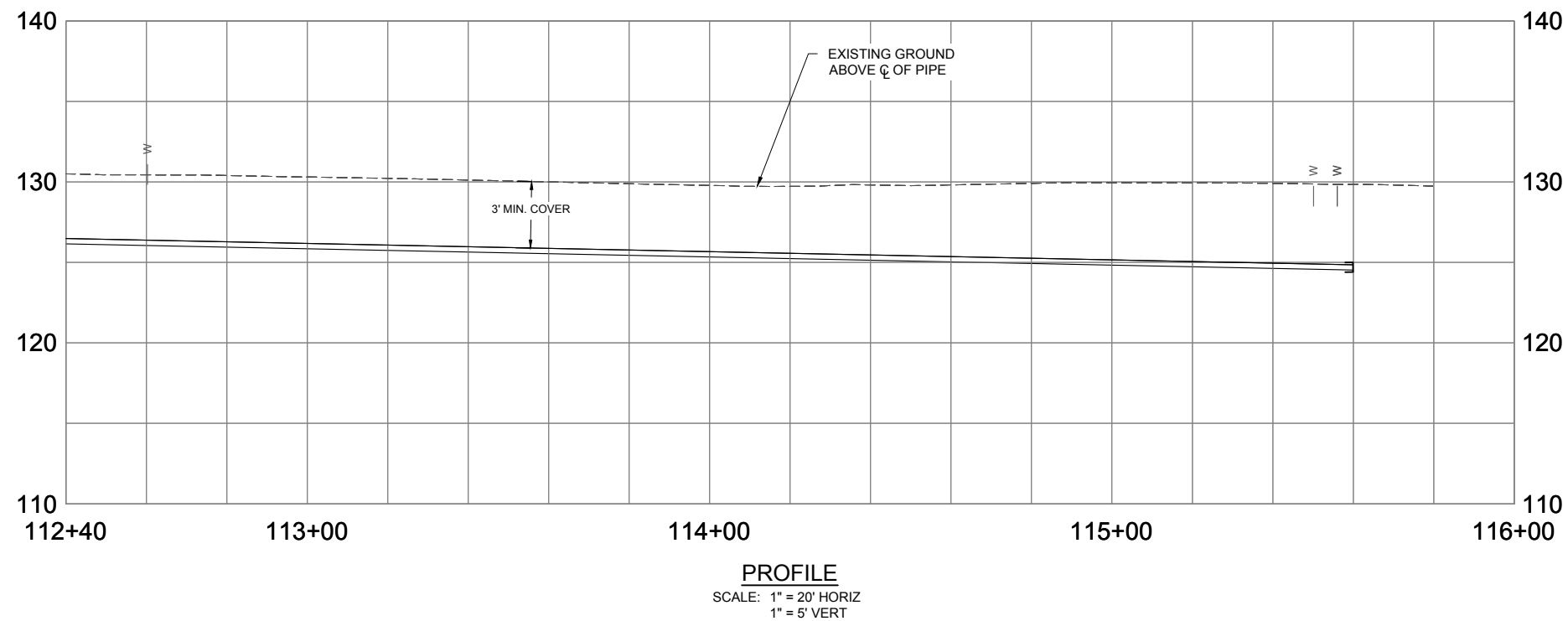
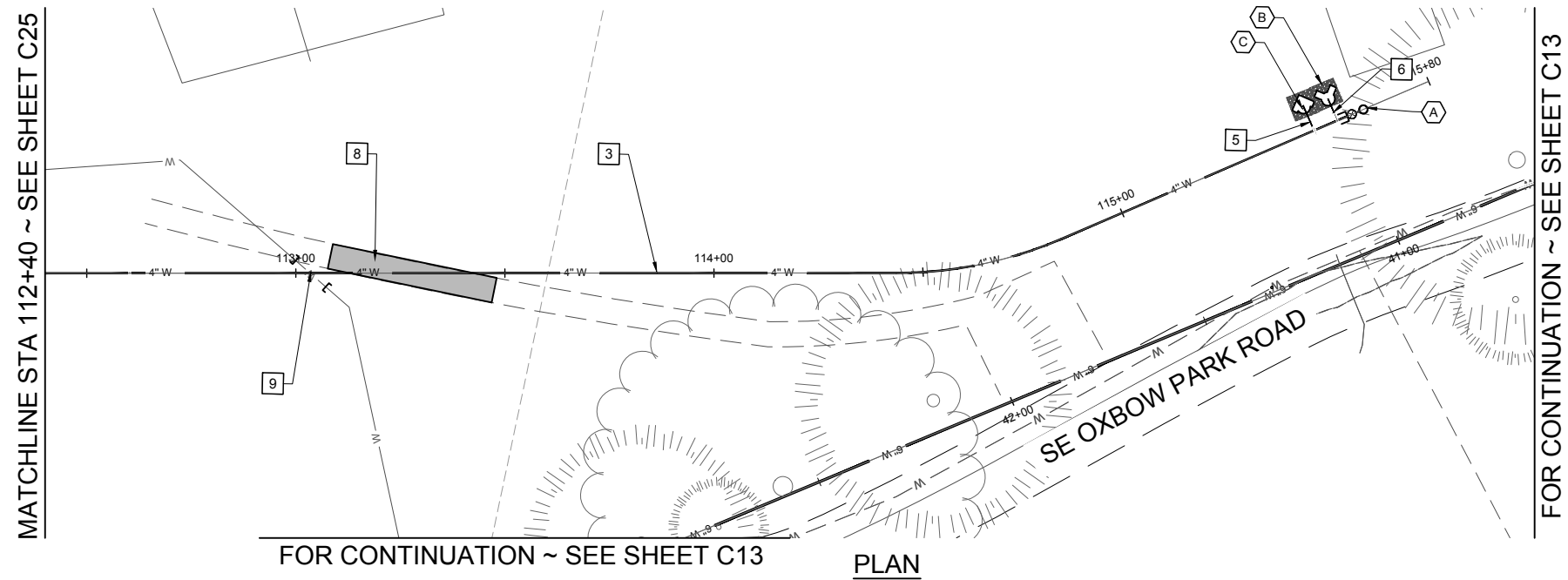
B INSTALL:
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

G INSTALL:
1 ~ 4" X 4" HDPE DR9 TEE
1 ~ 4" FJ X MJ GATE VALVE

4 INSTALL FUSED 4" DR9 HDPE PIPE BY HDD PER DETAIL [FORTHCOMING].

6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].





0 20 40

SCALE IN FEET

VALVE & FITTING SCHEDULE

- A** INSTALL: _____
1 ~ 2" BLOWOFF ASSEMBLY PER DETAIL
[FORTHCOMING]
- B** INSTALL: _____
1 ~ YARD HYDRANT PER DETAIL [FORTHCOMING]
1 ~ 3/4" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]
- C** INSTALL: _____
1 ~ STANDPIPE PER DETAIL [FORTHCOMING]
1 ~ BACKFLOW PREVENTION ASSEMBLY PER
DETAIL [FORTHCOMING]
1 ~ 2" SERVICE TAP ASSEMBLY PER DETAIL
[FORTHCOMING]

WATER CONSTRUCTION NOTES

- 3 INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, BY OPEN TRENCH METHODOLOGY PER DETAIL [FORTHCOMING].
- 5 INSTALL 2" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 6 INSTALL 3/4" WATER SERVICE TUBING, TYPE K PER DETAIL [FORTHCOMING].
- 8 REMOVE EXISTING SIDEWALK OVER TRENCH AT NEAREST JOINTS AND RECONSTRUCT PER DETAIL [FORTHCOMING].
- 9 REMOVE EXISTING ASBESTOS PIPE AS REQUIRED TO ACCOMMODATE PROPOSED WORK. CAP OPEN ENDS WITH MJ CAP AND DISPOSE OF PIPE REMOVED PER THE SPECIFICATIONS.

PRELIMINARY

[illegible]

PLAN & PROFILE STA
112+40 TO END



PROJECT NO:	1544D	DATE:	10/2024
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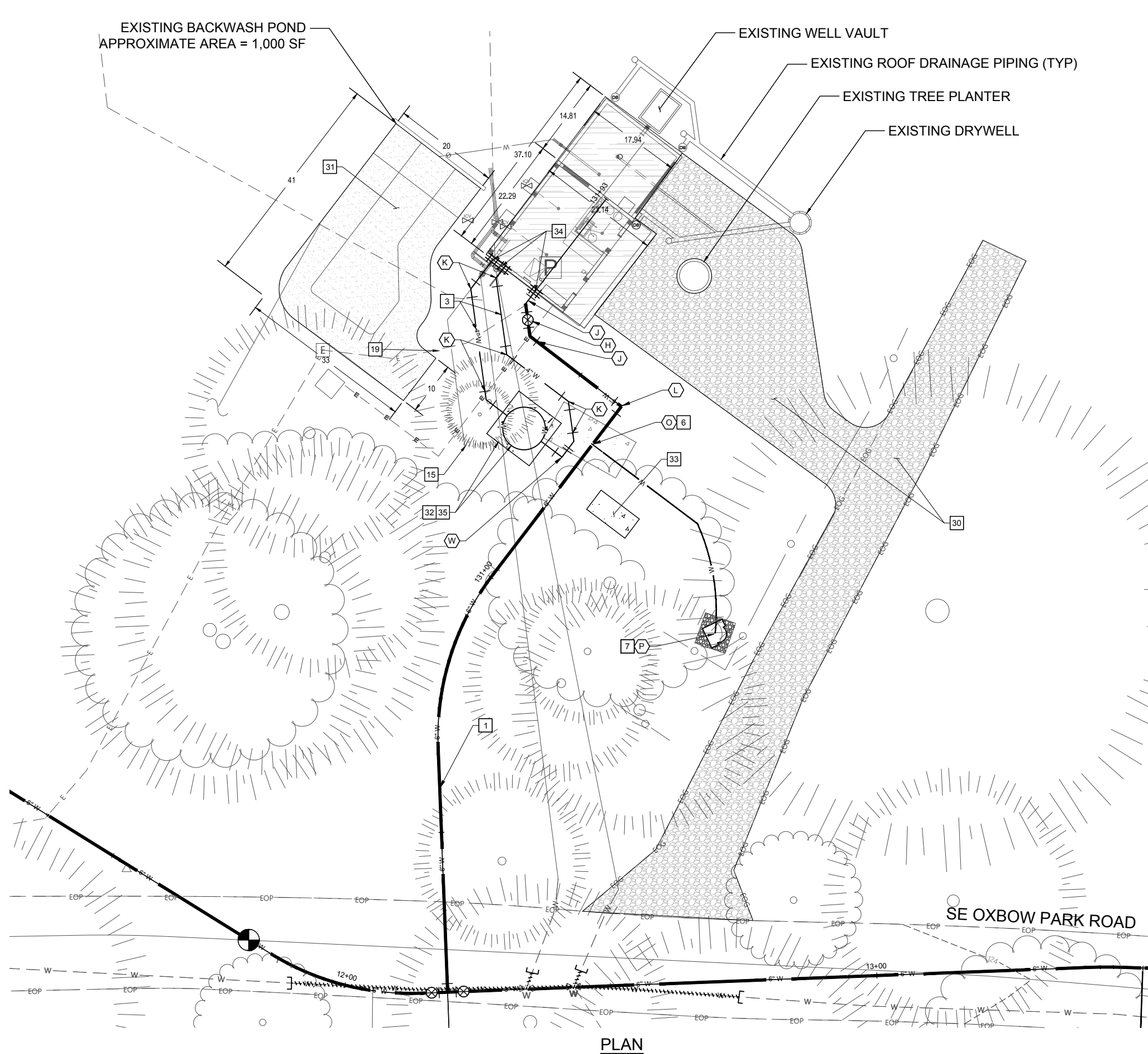
OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:

C26

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P:\151544D Oxbow Water Distribution System\500 DWG\501 Plan Sheets\PUMP HOUSE SITE PLAN.dwg, 10/11/2024 5:10:27 PM, Tonalyyn Silva



PLAN



0 10 20
SCALE IN FEET

VALVE & FITTING SCHEDULE

- H** INSTALL:
1 ~ 6" FJ X MJ GATE VALVE
- J** INSTALL:
1 ~ 6" HDPE DR9 45° BEND
- K** INSTALL:
1 ~ 4" HDPE DR9 45° BEND
- L** INSTALL:
1 ~ 6" HDPE DR9 90° BEND
- O** INSTALL:
1 ~ 3/4" SERVICE TAP ASSEMBLY SEE DETAIL ON SHEET XX
- P** INSTALL: (TYP 3)
1 ~ SPIGOT ASSEMBLY SEE DETAIL ON SHEET XX
- W** INSTALL:
1 ~ 4" HDPE DR9 90° BEND

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, INSTALLED BY OPEN TRENCH SEE SHEET XX
- 3** INSTALL 4" DR9 HDPE PIPE, BUTT-FUSED, INSTALLED BY OPEN TRENCH SEE SHEET XX
- 6** INSTALL 3/4" COPPER SERVICE TUBING, TYPE K SEE SHEET XX
- 7** INSTALL 6"X6" SPLASH PAD SEE SHEET XX
- 10** CONNECT NEW MAIN TO EXISTING SYSTEM WHERE SHOWN SEE DETAIL
- 15** CUT EXISTING 4" ASBESTOS MAIN PER XX AND CAP DEAD END WITH 4" MJ CAP AS ENCOUNTERED
- 19** POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND

SITE CONSTRUCTION NOTES

- 30** RESTORE EXISTING GRAVEL SURFACING PER SECTION [FORTHCOMING]
- 31** RESTORE EXISTING BACKWASH POND PER DETAIL [FORTHCOMING]
- 32** CONSTRUCT 10' x 10' CONCRETE PAD PER DETAILS [FORTHCOMING]
- 33** CONSTRUCT 4.5' x 9' CONCRETE PAD AND INSTALL STANDBY GENERATOR PER DETAILS [FORTHCOMING]
- 34** CONNECT TO PUMP HOUSE PIPING PER DETAILS [FORTHCOMING]
- 35** CONSTRUCT 8' DIAMETER, 6' TALL WATER STORAGE TANK PER DETAILS [FORTHCOMING]

PRELIMINARY

NO.	REVISION	BY	DATE

DESIGNED BY: JPC/I
DRAWN BY: C/TS
REV BY: JV

ONE INCH
ONE INCH AT FULL SCALE.
IF NOT ONE INCH ADJUST
SCALE ACCORDINGLY

PUMP HOUSE SITE PLAN



PROJECT NO: 1544D
DATE: 10/2024

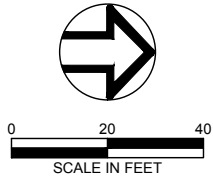
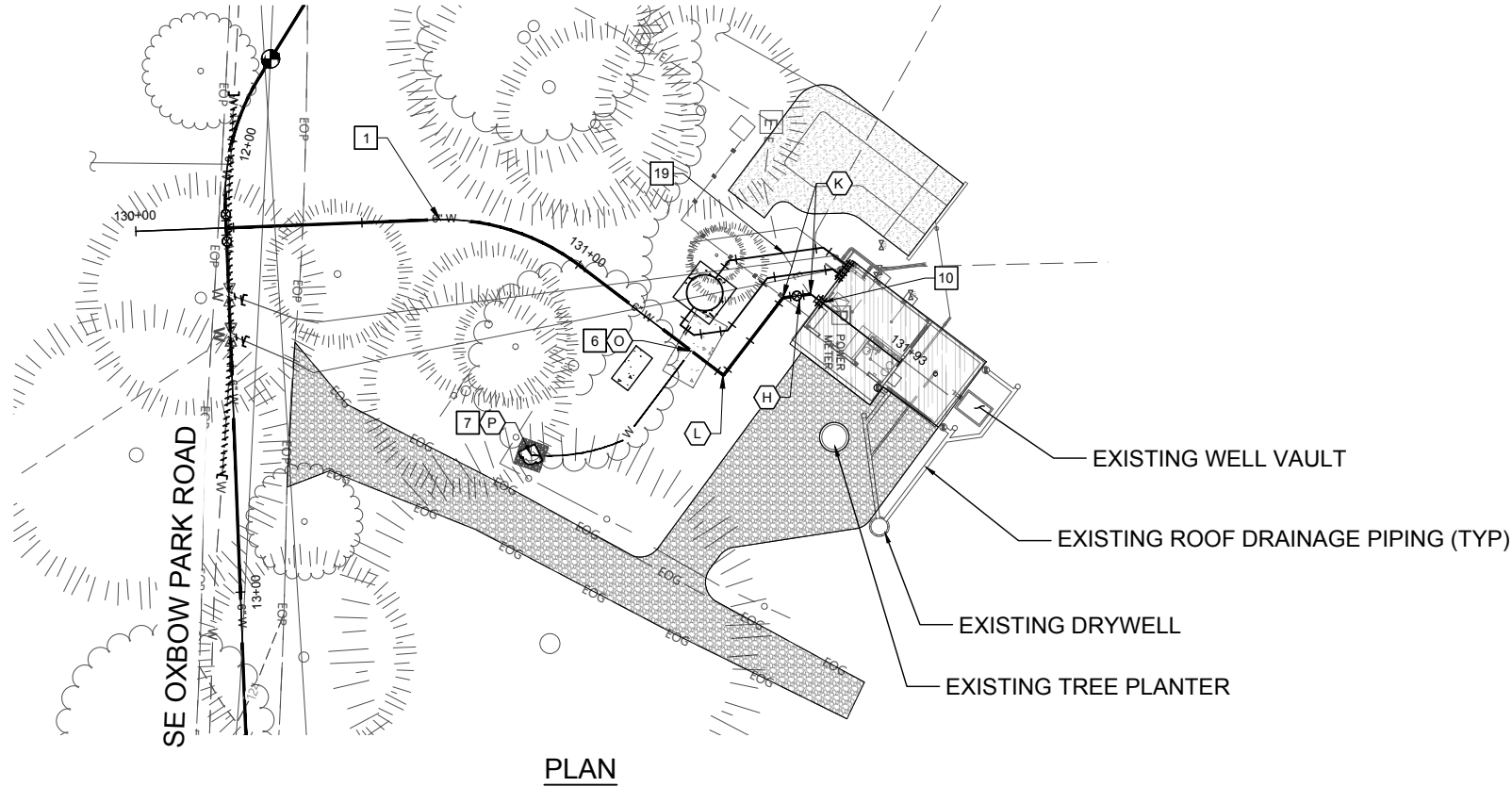


OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT

DRAWING NO:

C29

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VALVE & FITTING SCHEDULE

- K** INSTALL:
1 ~ 4" HDPE DR9 45° BEND
- H** INSTALL:
1 ~ 6" FJ X MJ GATE VALVE
- O** INSTALL:
1 ~ 3/4" SERVICE TAP ASSEMBLY SEE DETAIL ON SHEET XX
- P** INSTALL:
1 ~ SPIGOT ASSEMBLY SEE DETAIL ON SHEET XX

WATER CONSTRUCTION NOTES

- 1** INSTALL 6" DR9 HDPE PIPE, BUTT-FUSED, INSTALLED BY OPEN TRENCH SEE SHEET XX
- 6** INSTALL 3/4" COPPER SERVICE TUBING, TYPE K SEE SHEET XX
- 7** INSTALL 6"x6" SPLASH PAD SEE SHEET XX
- 10** CONNECT NEW MAIN TO EXISTING SYSTEM WHERE SHOWN SEE DETAIL
- 19** POTHOLE AHEAD OF INSTALLATION FOR EXISTING UNDERGROUND UTILITIES AND PROTECT EXISTING UTILITY IN PLACE. RESTORE SURFACING IN KIND

SITE CONSTRUCTION NOTES

- 22** CONNECT TO PUMP HOUSE PIPING PER DETAILS [FORTHCOMING]

	OXBOW PARK WATER DISTRIBUTION SYSTEM REPLACEMENT	DRAWING NO: C30 30 OF 37		
		PRELIMINARY		
		PUMP HOUSE PLAN & PROFILE		
	PROJECT NO: 1544D	DATE: 10/2024	DESIGNED BY: JP/CI	
			DRAWN BY: CJ/TS	
		REV BY: JV		

