GENERAL NOTES

DISCOVERY.

- 1. SURVEY PROVIDED BY CHASE JONES AND ASSOCIATES INC. DATED FEBRUARY 13TH, 2023 AND UPDATED MAY 13TH, 2024. VERTICAL ELEVATIONS ARE BASED ON NAVD 88 VERTICAL DATUM. HORIZONTAL CONTROL IS RELATIVE TO AN UNKNOWN LOCATION. COORDINATE WITH SURVEY OR RECORD TO ESTABLISH SITE CONTROL.
- 2. CONSTRUCTION LAYOUT (ALL ACTUAL LINES AND GRADES) SHALL BE STAKED BY A PROFESSIONAL SURVEYOR, REGISTERED IN THE STATE OF OREGON, BASED ON COORDINATES, DIMENSIONS, BEARINGS, AND ELEVATIONS, AS SHOWN, ON THE PLANS.
- PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE HORIZONTAL POSITION PRIOR TO BEGINNING CONSTRUCTION LAYOUT
- 4. PROJECT CONTROL SHALL BE FIELD VERIFIED AND CHECKED FOR RELATIVE VERTICAL POSITION BASED ON THE BENCHMARK STATED HEREON, PRIOR TO BEGINNING CONSTRUCTION LAYOUT.
- 5. WHEN DIMENSIONS AND COORDINATE LOCATIONS ARE REPRESENTED DIMENSIONS SHALL HOLD OVER COORDINATE LOCATION. NOTIFY THE CIVIL ENGINEER OF RECORD IMMEDIATELY UPON
- BUILDING SETBACK DIMENSIONS FROM PROPERTY LINES SHALL HOLD OVER ALL OTHER CALLOUTS. PROPERTY LINES AND ASSOCIATED BUILDING SETBACKS SHALL BE VERIFIED PRIOR TO CONSTRUCTION LAYOUT.
- 7. CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING MONUMENTATION DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT OF ANY MONUMENTS DAMAGED OR REMOVED DURING CONSTRUCTION. NEW MONUMENTS SHALL BE REESTABLISHED BY A LICENSED SURVEYOR.
- 8. SOME SITE DEMOLITION AND UTILITY RELOCATION HAS BEEN PERFORMED. SURVEY MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR TO VERIFY EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO BEGINNING CONSTRUCTION.
- 9. CONTRACTOR TO REFERENCE GEOTECHNICAL ENGINEERING REPORT PREPARED BY COLUMBIA WEST DATED MARCH 29TH, 2024, AND ADDENDUM DATED JANUARY 5TH, 2025 FOR THE SITE SOILS RECOMMENDATIONS.
- 10. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THESE PLANS, THE PROJECT SPECIFICATIONS AND THE APPLICABLE REQUIREMENTS OF THE 2024 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2023 OREGON PLUMBING SPECIALTY CODE AND REQUIREMENTS OF MULTNOMAH COUNTY.
- 11. THE COMPLETED INSTALLATION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES, ORDINANCES AND REGULATIONS. ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITIES FOR THE EXECUTION AND COMPLETION OF WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
- 12. ATTENTION: OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. YOU MAY OBTAIN COPIES OF THE RULES BY CALLING THE CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS (503) 232-1987). EXCAVATORS MUST NOTIFY ALL PERTINENT COMPANIES OR AGENCIES WITH UNDERGROUND UTILITIES IN THE PROJECT AREA AT LEAST 48 BUSINESS-DAY HOURS, BUT NOT MORE THAN 10 BUSINESS DAYS PRIOR TO COMMENCING AN EXCAVATION, SO UTILITIES MAY BE ACCURATELY
- 13. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED TO BE COMPLETE OR ACCURATE. CONTRACTOR SHALL VERIFY ELEVATIONS, PIPE SIZE, AND MATERIAL TYPES OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WITH CONSTRUCTION AND SHALL BRING ANY DISCREPANCIES TO THE ATTENTION OF FROELICH ENGINEERS, 72 HOURS PRIOR TO START OF CONSTRUCTION TO PREVENT GRADE AND ALIGNMENT CONFLICTS.
- 14. THE ENGINEER OR OWNER IS NOT RESPONSIBLE FOR THE SAFETY OF THE CONTRACTOR OR HIS CREW. ALL O.S.H.A. REGULATIONS SHALL BE STRICTLY ADHERED TO IN THE PERFORMANCE OF THE WORK.
- 15. TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE IMPLEMENTED. THE CONTRACTOR SHALL ADHERE TO MULTNOMAH COUNTY FOR MINIMUM EROSION CONTROL MEASURES. THE ESC FACILITIES SHOWN IN THESE PLANS ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.
- 16. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL ROADWAYS, KEEPING THEM CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS, AND PROVIDING DUST CONTROL AS REQUIRED.
- 17. TRAFFIC CONTROL SHALL BE PROVIDED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN TO MULTNOMAH COUNTY FOR REVIEW AND APPROVAL PRIOR TO COMMENCING CONSTRUCTION.
- 18. CONTRACTOR SHALL MAINTAIN ALL UTILITIES TO EXISTING BUILDINGS AT ALL TIMES DURING
- 19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND SCHEDULING ALL WORK WITH
- 20. A PRECONSTRUCTION MEETING WITH THE OWNER, THE OWNER'S ENGINEER, CONTRACTOR AND THE MULTNOMAH COUNTY REPRESENTATIVE SHALL BE REQUIRED.

MATERIAL NOTES

Plotted: 1/13/25 at 12:00pm By: atomlinson

- GENERAL: MATERIALS SHALL BE NEW. THE USE OF MANUFACTURER'S NAMES, MODELS, AND NUMBERS IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, AND USEFULNESS. PROPOSED SUBSTITUTIONS WILL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER OF RECORD
- STORM AND SANITARY SEWER PIPING SHALL BE PVC PIPE, DUCTILE IRON PIPE, OR HIGH DENSITY POLYETHYLENE (HDPE) PIPE CONFORMING TO THE PROJECT SPECIFICATIONS; AS INDICATED IN
- PRIVATE WATER MAINS 4-INCH DIAMETER AND LARGER SHALL BE DUCTILE IRON PIPE OR PVC PIPE CONFORMING TO THE PROJECT SPECIFICATIONS; AS INDICATED IN THE PLANS.
- PRIVATE WATER LINES 3-INCH DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING OR SCHEDULE 40 PVC CONFORMING TO THE PROJECT SPECIFICATIONS; AS INDICATED IN THE PLANS.
- CONCRETE FOR CURBS, SIDEWALK AND DRIVEWAYS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,300 PSI AT 28 DAYS.

MATERIAL NOTES

- GENERAL: MATERIALS SHALL BE NEW. THE USE OF MANUFACTURER'S NAMES, MODELS, AND NUMBERS IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, AND USEFULNESS. PROPOSED SUBSTITUTIONS WILL REQUIRE WRITTEN APPROVAL FROM ARCHITECT PRIOR TO INSTALLATION.
- 2. STORM AND SANITARY SEWER PIPING SHALL BE PVC PIPE, DUCTILE IRON OR HIGH DENSITY POLYETHYLENE (HDPE) PIPE; SHOWN BELOW OR AS INDICATED IN THE PLANS.
- 2.1. PVC SEWER PIPE NPS 4 TO NPS 15:
- 2.1.1. PIPE: ASTM D 3034, SDR 35, PVC TYPE PSM SEWER PIPE WITH BELL-AND-SPIGOT ENDS FOR GASKETED JOINTS.
- 2.1.2. FITTINGS: ASTM D 3034, PVC WITH BELL ENDS.
- 2.1.3. GASKETS: ASTM F 477, ELASTOMERIC SEALS
- 2.2. DUCTILE IRON, GRAVITY SEWER PIPE AND FITTINGS (REQUIRED WITHIN 1:1 ZONE OF INFLUENCE OF THE BUILDING FOUNDATION)
- 2.1.1. PIPE: ASTM A 746, FOR PUSH ON JOINTS
- STANDARD FITTINGS: ASTM C110, DUCTILE OR GRAY IRON, FOR PUSH ON JOINTS.
- 2.1.3. COMPACT FITTINGS: ASTM C153, FOR PUSH-ON JOINTS
- 2.1.4. GASKETS: AWWA C111, RUBBER
- 2.2. PE PIPE AND FITTINGS
- CORRUGATED PE DRAINAGE PIPE AND FITTINGS NPS 3 TO NPS 10: AASHTO M 252M, TYPE 2.2.1. S. WITH SMOOTH WATERWAY FOR COUPLING JOINTS.
- SOILTIGHT COUPLINGS: AASHTO M 252M, CORRUGATED, MATCHING TUBE AND **FITTINGS**
- CORRUGATED PE PIPE AND FITTINGS NPS 12 TO NPS 60: AASHTO M 294M, TYPE S, WITH SMOOTH WATERWAY FOR COUPLING JOINTS.
- SOILTIGHT COUPLINGS: AASHTO M 294M, CORRUGATED, MATCHING PIPE AND **FITTINGS**
- 3. PRIVATE FIRE MAINS 4-INCH DIAMETER AND LARGER SHALL BE DUCTILE IRON PIPE OR PVC C900 PIPE AS INDICATED BELOW.
- 3.1. MECHANICAL-JOINT, DUCTILE-IRON PIPE: AWWA C151, WITH MECHANICAL-JOINT BELL AND PLAIN SPIGOT END UNLESS GROOVED OR FLANGED ENDS ARE INDICATED.
- MECHANICAL-JOINT, DUCTILE-IRON FITTINGS: AWWA C110, DUCTILE- OR GRAY-IRON 3.1.1. STANDARD PATTERN OR AWWA C153, DUCTILE-IRON COMPACT PATTERN.
- 3.1.2. GLANDS, GASKETS, AND BOLTS: AWWA C111, DUCTILE- OR GRAY-IRON GLANDS, RUBBER GASKETS, AND STEEL BOLTS.
- 3.2. PVC AWWA PIPE: AWWA C900, CLASS 150, WITH BELL END WITH GASKET, AND WITH SPIGOT
- COMPLY WITH UL 1285 FOR FIRE-SERVICE MAINS IF INDICATED.
- 3.2.2. PVC FABRICATED FITTINGS: AWWA C900, CLASS 150, WITH BELL-AND-SPIGOT OR DOUBLE-BELL ENDS. INCLUDE ELASTOMERIC GASKET IN EACH BELL.
- PVC MOLDED FITTINGS: AWWA C907, CLASS 150, WITH BELL-AND-SPIGOT OR DOUBLE-BELL ENDS. INCLUDE ELASTOMERIC GASKET IN EACH BELL.
- 3.2.4. PUSH-ON-JOINT, DUCTILE-IRON FITTINGS: AWWA C110, DUCTILE- OR GRAY-IRON STANDARD PATTERN OR AWWA C153. DUCTILE-IRON COMPACT PATTERN.
- GASKETS: AWWA C111, RUBBER.
- MECHANICAL-JOINT, DUCTILE-IRON FITTINGS: AWWA C110, DUCTILE- OR GRAY-IRON STANDARD PATTERN OR AWWA C153, DUCTILE-IRON COMPACT PATTERN.
- GLANDS, GASKETS, AND BOLTS; AWWA C111, DUCTILE- OR GRAY-IRON GLANDS. RUBBER GASKETS, AND STEEL BOLTS.
- PRIVATE WATER LINES 3-INCH DIAMETER AND SMALLER SHALL BE COPPER OR DUCTILE IRON PIPE AS INDICATED BELOW.
- 4.1. SOFT COPPER TUBE: ASTM B 88, TYPE K WATER TUBE, ANNEALED TEMPER.
- COPPER, SOLDER-JOINT FITTINGS: ASME B16.18, CAST-COPPER-ALLOY OR ASME B16.22, WROUGHT-COPPER, SOLDER-JOINT PRESSURE TYPE. FURNISH ONLY WROUGHT-COPPER FITTINGS IF INDICATED.
- HARD COPPER TUBE: ASTM B 88, TYPE K, WATER TUBE, DRAWN TEMPER.
- COPPER, SOLDER-JOINT FITTINGS: ASME B16.18, CAST-COPPER-ALLOY OR ASME B16.22, WROUGHT-COPPER, SOLDER-JOINT PRESSURE TYPE. FURNISH ONLY WROUGHT-COPPER FITTINGS IF INDICATED.
- 4.2. MECHANICAL-JOINT, DUCTILE-IRON PIPE: AWWA C151, WITH MECHANICAL-JOINT BELL AND PLAIN SPIGOT END UNLESS GROOVED OR FLANGED ENDS ARE INDICATED.
- MECHANICAL-JOINT, DUCTILE-IRON FITTINGS: AWWA C110, DUCTILE- OR GRAY-IRON STANDARD PATTERN OR AWWA C153, DUCTILE-IRON COMPACT PATTERN.
- 4.2.2. GLANDS, GASKETS, AND BOLTS: AWWA C111, DUCTILE- OR GRAY-IRON GLANDS, RUBBER GASKETS, AND STEEL BOLTS.
- CONCRETE FOR CURBS, SIDEWALK AND DRIVEWAYS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,300 PSI AT 28 DAYS. CONSTRUCT PER CITY OF PORTLAND SPECIFICATIONS.
- 5.1. CONCRETE AGGREGATE SHALL CONFORM TO ASTM C33 REQUIREMENTS
- 6. CONCRETE MANHOLES AND UTILITY VAULTS: HANSON OR APPROVED EQUAL. INSTALL PER MANUFACTURER RECOMMENDATIONS.
- 7. CONCRETE DRYWELL AND UTILITY VAULTS: OLD CASTLE OR APPROVED EQUAL. INSTALL PER MANUFACTURER RECOMMENDATIONS.
- 8. SUBMITTAL: CONTRACTOR SHALL PROVIDE PRODUCT DATA FOR EACH PRODUCT:
- 8.1. AGGREGATE
- 8.2. PAVEMENT MATERIAL AND MIX DESIGN (ASPHALT, CONCRETE, PAVERS...) 8.3. STORMWATER AND SANITARY SEWER STRUCTURES (AREA DRAINS, CLEANOUTS, DRYWELLS)
- 8.4. PIPES AND FITTINGS
- WATER AND FIRE PIPES, FITTINGS, AND STRUCTURES (METER, BACKFLOW, DOUBLE CHECK, FIRE DEPARTMENT CONNECTIONS...)

CONSTRUCTION NOTES

GENERAL

- SUBGRADE AND TRENCH BACKFILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER IS NOT PERMITTED.
- 2. SPECIAL INSPECTION REQUIRED FOR ALL COMPACTION TESTING.

DEMOLITION

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEMOLITION AND DISPOSAL OF EXISTING AC, CURBS. SIDEWALKS AND OTHER SITE ELEMENTS WITHIN THE SITE AREA IDENTIFIED IN THE PLANS. DISPOSE OF DEMOLISHED ITEMS OFF-SITE IN A LEGAL MANNER.
- EXCEPT FOR MATERIALS INDICATED TO BE STOCKPILED OR TO REMAIN ON OWNER'S PROPERTY, CLEARED MATERIALS SHALL BECOME CONTRACTOR'S PROPERTY, REMOVED FROM THE SITE, AND DISPOSED OF PROPERLY.
- 3. ITEMS INDICATED TO BE SALVAGED SHALL BE CAREFULLY REMOVED AND DELIVERED STORED AT THE PROJECT SITE AS DIRECTED BY THE OWNER.
- 4. ALL LANDSCAPING, PAVEMENT, CURBS AND SIDEWALKS, BEYOND THE IDENTIFIED SITE AREA, DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED TO THEIR ORIGINAL CONDITION OR BETTER.
- CONCRETE SIDEWALKS SHOWN FOR DEMOLITION SHALL BE REMOVED TO THE NEAREST EXISTING CONSTRUCTION JOINT.
- SAWCUT STRAIGHT MATCHLINES TO CREATE A BUTT JOINT BETWEEN THE EXISTING AND NEW PAVEMENT.

- ALL SURFACES SHALL HAVE MINIMUM 1.5% SLOPE UNLESS OTHERWISE NOTED ON PLANS, ALL SURFACES SHALL MEET EXISTING GRADES SMOOTHLY AND EVENLY AND MAINTAIN CONSTANT SLOPES UNLESS OTHERWISE NOTES ON PLANS.
- 2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EXISTING SITE AND DRAINAGE PATTERNS AND PROTECTION OF EXISTING ENGINEERED DRAINAGE FACILITIES.
- 3. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN WORKING IN AREAS ADJACENT TO EXISTING TREES IN ORDER TO MINIMIZE DISTURBANCE TO TREE ROOTS. CONTRACT SHALL INSTALL TREE PROTECTION FENCING AS INDICATED ON PLANS OR DRIP-LINE OF EXISTING TREES. NO PARKING VEHICLES UNDER TREES.

- ADJUST ALL INCIDENTAL STRUCTURES, MANHOLES, VALVE BOXES, CATCH BASINS, FRAMES AND COVERS, ETC. TO FINISHED GRADE.
- CONTRACTOR SHALL ADJUST ALL EXISTING AND/OR NEW FLEXIBLE UTILITIES (WATER, TV, TELEPHONE, ELEC., ETC.) TO CLEAR ANY EXISTING OR NEW GRAVITY DRAIN UTILITIES (STORM DRAIN, SANITARY SEWER, ETC.) IF CONFLICT OCCURS.
- CONTRACTOR SHALL COORDINATE WITH PRIVATE UTILITY COMPANIES FOR THE INSTALLATION OF OR ADJUSTMENT TO GAS, ELECTRICAL, POWER AND TELEPHONE SERVICE.
- 4. BEFORE BACKFILLING ANY SUBGRADE UTILITY IMPROVEMENTS CONTRACTOR SHALL SURVEY AND RECORD MEASUREMENTS OF EXACT LOCATION AND DEPTH AND SUBMIT TO ENGINEER AND OWNER.

STORM AND SANITARY

- 1. CONNECTIONS TO EXISTING STORM AND SANITARY SEWERS SHALL CONFORM TO THE 2018 OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 00490, "WORK ON EXISTING SEWERS AND STRUCTURES".
- BEGIN LAYING STORM DRAIN AND SANITARY SEWER PIPE AT THE LOW POINT OF THE SYSTEM. TRUE TO GRADE AND ALIGNMENT INDICATED WITH UNBROKEN CONTINUITY OF INVERT. THE CONTRACTOR SHALL ESTABLISH LINE AND GRADE FOR THE STORM AND SANITARY SEWER PIPE
- 3. ALL ROOF DRAIN AND CATCH BASIN LEADERS SHALL HAVE A MINIMUM SLOPE OF 2 PERCENT UNLESS NOTED OTHERWISE IN THE PLANS.

- 1. ALL WATER AND FIRE PROTECTION PIPE SHALL HAVE A MINIMUM 36-INCH COVER TO THE FINISH
- 2. ALL WATER AND FIRE PRESSURE FITTINGS SHALL BE FULLY RESTRAINED.
- ALL WATER MAIN / SANITARY SEWER CROSSINGS SHALL CONFORM TO THE OREGON STATE HEALTH DEPARTMENT REGULATIONS, CHAPTER 333.
- 4. CONTRACTOR TO MAINTAIN A MINIMUM 10' HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN ALL EXISTING AND PROPOSED WATER AND SEWER LINES.
- ALL WATER LINES SHALL BE THOROUGHLY FLUSHED, CHLORINATED AND TESTED IN ACCORDANCE WITH OREGON STATE HEALTH DEPARTMENT PRIOR TO ANY METER HOOK UP

EARTHWORK

- CONTRACTOR SHALL PREVENT SEDIMENTS AND SEDIMENT LADEN WATER FROM ENTERING THE STORM DRAINAGE SYSTEM.
- 2. FLOODING OR JETTING THE BACKFILLED TRENCHES WITH WATER WILL NOT BE PERMITTED.
- TRENCH BACKFILL: SHALL MEET ODOT 3/4"-0 CRUSHED ROCK AS INDICATED IN THE PROJECT
- 4. BASE COURSE: SHALL MEET ODOT 3/4"-0 CRUSHED ROCK.
- 5. DRAINAGE ROCK: SHALL BE 3/4" TO 2-1/2" WASHED DRAIN ROCK.
- COMPACTION AND LIFTS: REFERENCE THE PROJECT SOILS REPORT.
- NONWOVER GEOTEXTILE MIRAFI 140N, OR APPROVED EQUIVALENT

SEPARATION STATEMENT

ALL WATER MAIN CROSSINGS SHALL CONFORM TO THE OREGON STATE HEALTH DEPARTMENT, CHAPTER 333. WATER MAINS SHALL CROSS OVER SANITARY SEWERS WITH A 18" MINIMUM CLEARANCE BETWEEN OUTSIDE DIAMETERS OF PIPE WITH ALL PIPE JOINTS EQUIDISTANT FROM CROSSING. HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS IN PARALLEL INSTALLATIONS SHALL BE 10'. MAINTAIN 12" MINIMUM VERTICAL DISTANCE FOR ALL OTHER UTILITY CROSSINGS AND 12" HORIZONTAL PARALLEL DISTANCE. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN THE MINIMUM 10' HORIZONTAL SEPARATION, THE WATER MAIN SHALL BE LAID ON A SEPARATE SHELF IN THE TRENCH 18" INCHES ABOVE THE SEWER.

ABBREVIATIONS

AC AD APPROX B BLDG BOW BS	ASPHALT CONCRETE AREA DRAIN APPROXIMATE BOLLARD BUILDING BACK OF WALK BOTTOM OF SWALE BOTTOM OF STAIR	OVH/OH P/L PC PCC PCR PED PIV PM	OVERHEAD PROPERTY LINE POINT OF CURVATURE POINT OF COMPOUND CURVATURE POINT OF CURB RETURN PEDESTRIAN POST INDICATOR VALVE PARKING METER
BW	BOTTOM OF WALL	POC	POINT ON CURVE
СВ	CATCH BASIN	PP	POWER POLE
CL	CENTERLINE	PRC	POINT OF REVERSE CURVATURE
CMP	CORRUGATED METAL PIPE	PT	POINT OF TANGENT
CMU	CONCRETE MASONRY UNIT	P.U.E	PUBLIC UTILITY EASEMENT
CO	CLEANOUT	PVC	POLYVINYL CHLORIDE
CONC. COTG	CONCRETE CLEANOUT TO GRADE	PVMT PVT	PAVEMENT PRIVATE
CP	CONTROL POINT	R	RIM
Δ	DELTA	RD	ROOF DRAIN
D/W	DRIVEWAY	R.O.W	RIGHT-OF-WAY
DIA.,Ø	DIAMETER	S	SLOPE (FT/FT)
DIP	DUCTILE IRON PIPE	SD	STORM DRAIN
E.	EASTING	SDMH	STORM DRAIN MANHOLE
EXIST./EX	EXISTING	SHT	SHEET
FDC	FIRE DEPARTMENT CONNECTION	SS	SANITARY SEWER
FF	FINISH FLOOR ELEVATION	SSMH	SANITARY SEWER MANHOLE
FG	FINISH GRADE	ST	STREET
FH	FIRE HYDRANT	STA	STATION
FL	FLOWLINE	STD	STANDARD
FND	FOUNDATION	S/W	SIDEWALK
G	GUTTER	TC	TOP OF CURB
GB	GRADE BREAK	TD	TRENCH DRAIN
GL	GAS LINE	TG	TOP OF GROUND
GV	GATE VALVE	TP	TOP OF PAVEMENT
Н	HEIGHT	TRANS.	TRANSFORMER
HCP	HANDICAP PARKING SPACE	TS	TOP OF STAIR
HP	HIGH POINT	TW	TOP OF WALK
ID IE	INSIDE DIAMETER INVERT ELEVATION	TYP	TOP OF WALK TYPICAL
INV	INVERT	UG	UNDERGROUND
IRR.	IRRIGATION	UGE	UNDERGROUND ELECTRIC
LP	LIGHT POLE	W	WATER
MH	MANHOLE	W/	WITH
MIN	MINIMUM	WCR	WHEEL CHAIR RAMP
N	NORTHING	WM	WATER METER
O.D	OUTSIDE DIAMETER	WV	WATER VALVE
OF	OUTFALL		

SHEET INDEX

Sheet Number	Sheet Title
C1.00	GENERAL NOTES
C1.01	EXISTING CONDITIONS
C1.02	DEMOLITION PLAN
C2.00	SITE PLAN
C3.00	GRADING PLAN
C4.00	UTILITY PLAN
C5.00	DETAILS
C6.00	EROSION CONTROL PLAN AND DETAILS

NOTICE TO EXCAVATORS

THE CENTER.

(503)-232-1987).

ATTENTION: OREGON LAW REQUIRES YOU TO

FOLLOW RULES ADOPTED BY THE OREGON

RULES ARE SET FORTH IN OAR 952-001-0010

OBTAIN COPIES OF THE RULES BY CALLING

(NOTE: THE TELEPHONE NUMBER FOR THE

OREGON UTILITY NOTIFICATION CENTER IS

POTENTIAL UNDERGROUND FACILITY OWNERS

Dig Safely.

Call the Oregon One-Call Center 1-800-332-2344

UTILITY NOTIFICATION CENTER. THOSE

THROUGH OAR 952-001-0090. YOU MAY

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PRELIMINARY

NOT FOR

CONSTRUCTION

1001 SE SANDY BLVD

PORTLAND. OR. 92714

ISSUE TITLE REV DATE PROJECT MANAGER: DESIGNER DRAWN BY: **ATOMLINSON** PROJECT NO: 24-C012 DATE: 01/10/2025

SCALE:

SHEET TITLE: **GENERAL**

AS SHOWN

Exhibit A.6

Plotted: 1/13/25 at 12:01pm By: atomlinson



1001 SE SANDY BLVD, PORTLAND, OR, 92714

CORBETT FIRESTATION 62 ADDITION

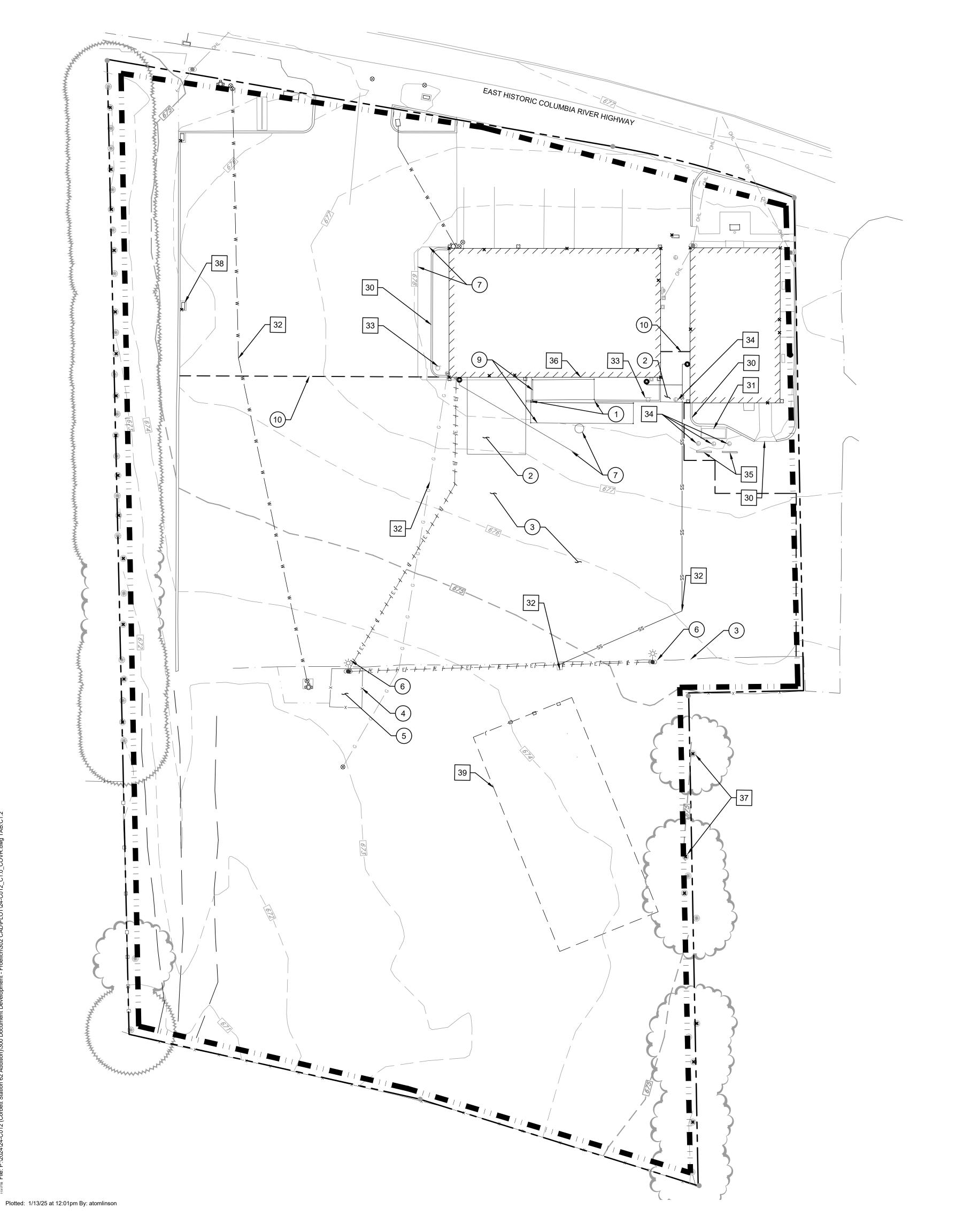
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SHEET TITLE:
EXISTING
CONDITIONS

SHEET NUMBER:

31.1



SHEET NOTES

- 1. CONTRACTOR MAY STAGE WITHIN LIMITS OF DEMOLITION.
- 2. REMOVE ALL SITE COMPONENTS AND RECYCLE COMPONENTS
- 3. GENERAL DEMOLITION PERMIT SHALL BE SECURED BY THE
- 4. ALL TRADE LICENSES AND PERMITS NECESSARY FOR THE PROCUREMENT AND COMPLETION OF THE WORK SHALL BE SECURED BY THE CONTRACTOR PRIOR TO COMMENCING
- 5. THE CONTRACTOR SHALL PRESERVE AND PROTECT FROM DAMAGE ALL EXISTING RIGHT-OF-WAY SURVEY MONUMENTATION DURING DEMOLITION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND PAYING FOR THE REPLACEMENT BY A LICENSED SURVEYOR OF ANY DAMAGED OR REMOVED MONUMENTS.
- PROTECT STRUCTURES, UTILITIES, SIDEWALKS, AND OTHER FACILITIES IMMEDIATELY ADJACENT TO EXCAVATIONS FROM DAMAGES CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS.
- 8. SAWCUT STRAIGHT LINES IN SIDEWALK, AS NECESSARY.
- 9. CONTRACTOR IS RESPONSIBLE TO CONTROL DUST AND MUD DURING THE DEMOLITION PERIOD, AND DURING TRANSPORTATION OF DEMOLITION DEBRIS. ALL STREET SURFACES OUTSIDE THE CONSTRUCTION ZONE MUST BE KEPT
- REMOVE CONCRETE CURB
- REMOVE ASPHALT PAVEMENT AND
- 4 REMOVE FENCE
- 5 REMOVE CONCRETE PAD
- 8 REMOVE EXISTING UNDERGROUND ELECTRICAL SERVICE.
- 10 SAWCUT

PROTECTION KEY NOTES

- 32 PROTECT UNDERGROUND UTILITIES.
- 33 PROTECT SIGN
- 34 PROTECT BOLLARD
- 35 PROTECT WHEEL STOP
- 38 PROTECT CATCH BASIN

REMOVE OR ABANDON UTILITY LINE IN PLACE REMOVE TREE



— — — — EXISTING GRADE CONTOUR PROPOSED CURB LINE SHOWN FOR REFERENCE

- AS REQUIRED IN THE SPECIFICATIONS.

FROELICH

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CONSTRUCTION

1001 SE SANDY BLVD,

PORTLAND, OR, 92714

62

- CONTRACTOR.
- DEMOLITION.
- 6. PROTECT ALL ITEMS ON ADJACENT PROPERTIES AND IN THE RIGHT OF WAY INCLUDING BUT NOT LIMITED TO SIGNAL EQUIPMENT, PARKING METERS, SIDEWALKS, STREET TREES, STREET LIGHTS, CURBS, PAVEMENT AND SIGNS. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ANY DAMAGED ITEMS TO ORIGINAL CONDITION.

- 10. ALL EXPOSED PORTIONS OF UNDERGROUND UTILITIES TO BE ABANDONED SHALL BE PLUGGED PER DETAIL X/CXXX.

DEMOLITION KEY NOTES

- REMOVE CONCRETE
- CRUSHED ROCK SUBGRADE

- 6 REMOVE UTILITY POLE
- 7 REMOVE PAINT/STRIPING
- 9 RELOCATE SHIPPING/STORAGE CONTAINER
- 30 PROTECT CURB AND SIDEWALK.
- 31 PROTECT ELECTRICAL EQUIPMENT

- 36 PROTECT BUILDING
- 37 PROTECT TREE
- 39 PROTECT EXISTING DRAIN FIELD

SHEET LEGEND

DEMOLITION/WORK LIMITS



DEMOLITION PLAN

SHEET TITLE:

LAND USE SET

REV DATE

PROJECT MANAGER:

DESIGNER:

SCALE:

DRAWN BY:

PROJECT NO:

ISSUE TITLE

ATOMLINSON

24-C012

01/10/2025

AS SHOWN



SHEET NOTES

- 1. ALL DIMENSIONS ARE TO FACE OF CURB OR FACE OF WALL.
- 2. ALL SIDEWALK PAVEMENT JOINTS SHALL BE CONSTRUCTED PER DETAIL X/C5.X.

PRELIMINARY NOT FOR CONSTRUCTION

KEY NOTES

- 1 STRIPING
- 2 STANDARD CURB
- 3 ASPHALT PAVEMENT
- 4 WHEEL STOP
- 5 HEAVY CONCRETE
- 6 CONCRETE SIDEWALK
- 7 ADA PARKING SIGN
- 8 ADA PARKING STALLS
- 9 CONCRETE PAD
- 10 RETAINING WALL
- 11 CURB ENDING
- 12 SAWCUT

1001 SE SANDY BLVD, PORTLAND, OR, 92714

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SHEET LEGEND

PROPERTY LINE

CONCRETE SIDEWALK

HEAVY CONCRETE

 $-\frac{X}{XXX}$ STANDARD ASPHALT PAVEMENT

- $\stackrel{\times}{\times}$ $\stackrel{\times}{\times}$







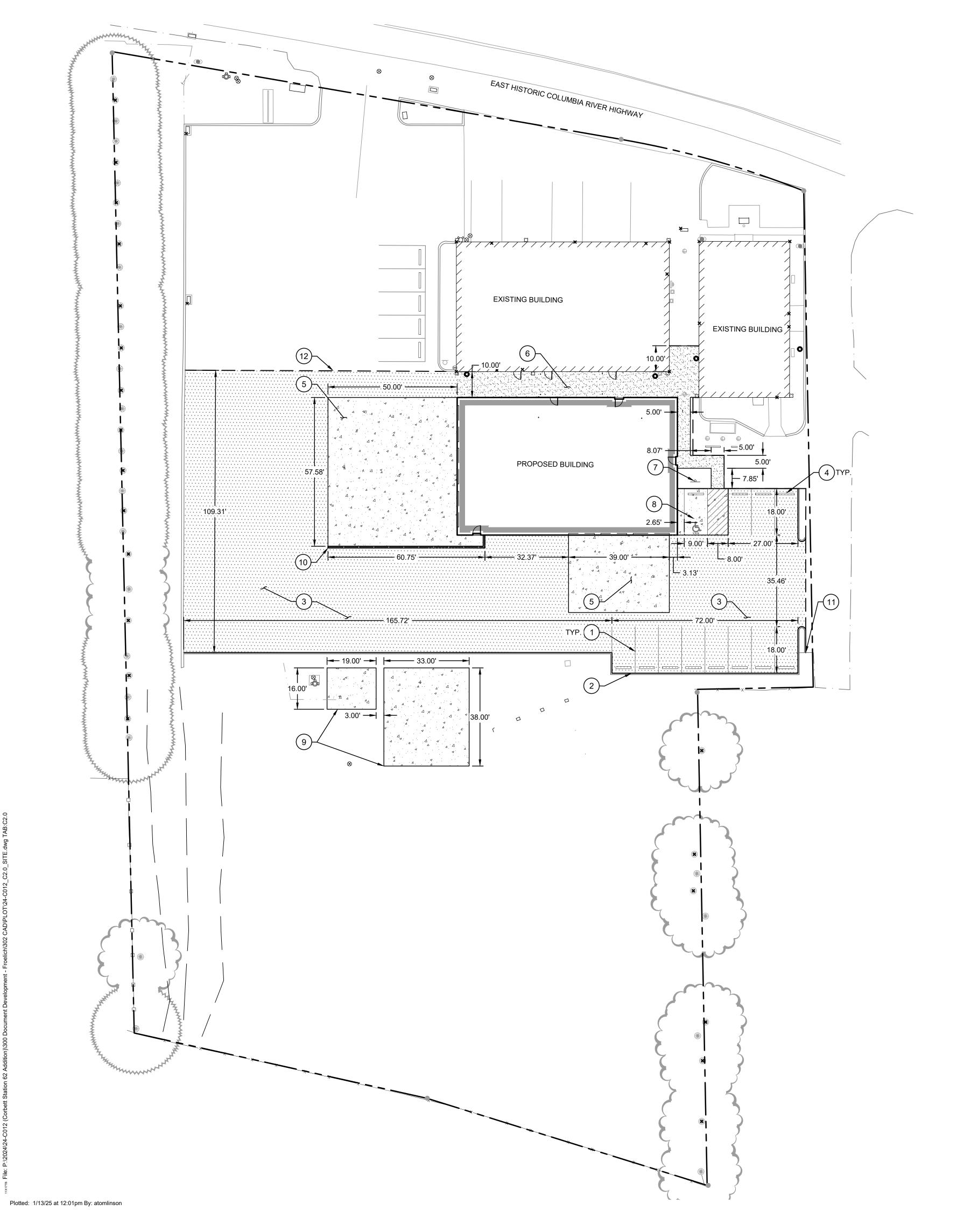


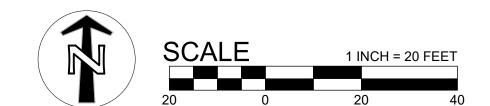
PROJECT MANAGER: DESIGNER: DRAWN BY: ATOMLINSON

LAND USE SET

PROJECT NO: 24-C012 01/10/2025 AS SHOWN

> SHEET TITLE: SITE PLAN







PRELIMINARY

NOT FOR

CONSTRUCTION

SHEET NOTES

- SLOPES PROVIDED ON SLOPE ARROW ARE FOR REFERENCE ONLY.
- 2. LANDINGS ON ACCESSIBLE ROUTES SHALL NOT EXCEED 1.5% IN ANY DIRECTION.
- 3. ALL ACCESSIBLE ROUTES SHALL COMPLY WITH CURRENT ADA ACCESSIBILITY GUIDELINES FOR BUILDING AND FACILITIES (ADAAG).
- 4. ALL WALKWAYS FROM ACCESSIBLE UNITS ARE DESIGNED TO NOT REQUIRE HANDRAILS. THEREFORE, RAMPS WITH SLOPES STEEPER THAN 5.0% AND LESS THAN 8.33% SHALL NOT EXCEED 0.5' RISE OR 6.0' LENGTH.
- 5. TOP OF CONCRETE OUTSIDE DOOR = FF ELEV. MINUS 0.02' SLOPE LANDING 1.5% AWAY FROM BLDG.

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KEY NOTES

1 XXXXXXXXXX

GRADING LABEL LEGEND

CALLOUT DESCRIPTION

X.X%

GRADING SLOPE AND DIRECTION (DOWNHILL)

SPOT ELEVATION
DESCRIPTION LISTED BELOW.

SPOT ELEVATION

DESCRIPTION LISTED BELOW, NO DESCRIPTION MEANS TP OR TG

XX.XX XX

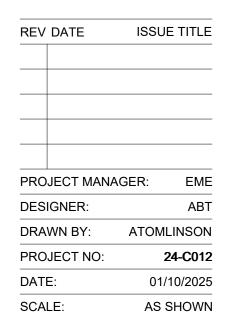
BOW BACK OF WALK
BW BOTTOM OF WALL
EG EXISTING GRADE
EF FINISHED FLOOR

BACK OF WALK
BOTTOM OF WALL
EXISTING GRADE
FINISHED FLOOR
FLOW LINE
GUTTER
RIM OF STRUCTURE
TOP OF CURB
TOP OF GROUND
TOP OF PAVEMENT
TOP WALL

LAND USE SET

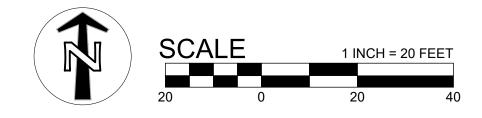
SHEET LEGEND

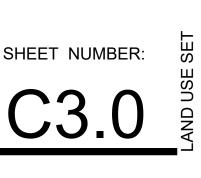
<u> </u>	
~	DRAINAGE FLOW DIRECTION
	GRADE BREAK
49	EX. CONTOUR MINOR
50	EX. CONTOUR MAJOR
49	CONTOUR MINOR (FG)
50	CONTOUR MAJOR (FG)
>	CONVEYANCE SWALE



SHEET TITLE:

GRADING PLAN





Tile: P:\2024\24-C012 (Corbett Station 62 Addition)\

Plotted: 1/13/25 at 12:01pm By: atomlinson

EAST HISTORIC COLUMBIA RIVER HIGHWAY

EXISTING BUILDING

TP=676.93

TP=676.93-/

TP=676.93

TP=676.07

_TP=673.29\

TP=678.28

4.5%

4.5%

TP=679.20

TP=679.20

TP=679.20 TP=678.80

PROPOSED BUILDING

TP=675.07~

_TP=674.69

TP=677.20

 \Box

EXISTING BUILDING

TP=677.15

TP=676.91⁻

∕-TP=677.00

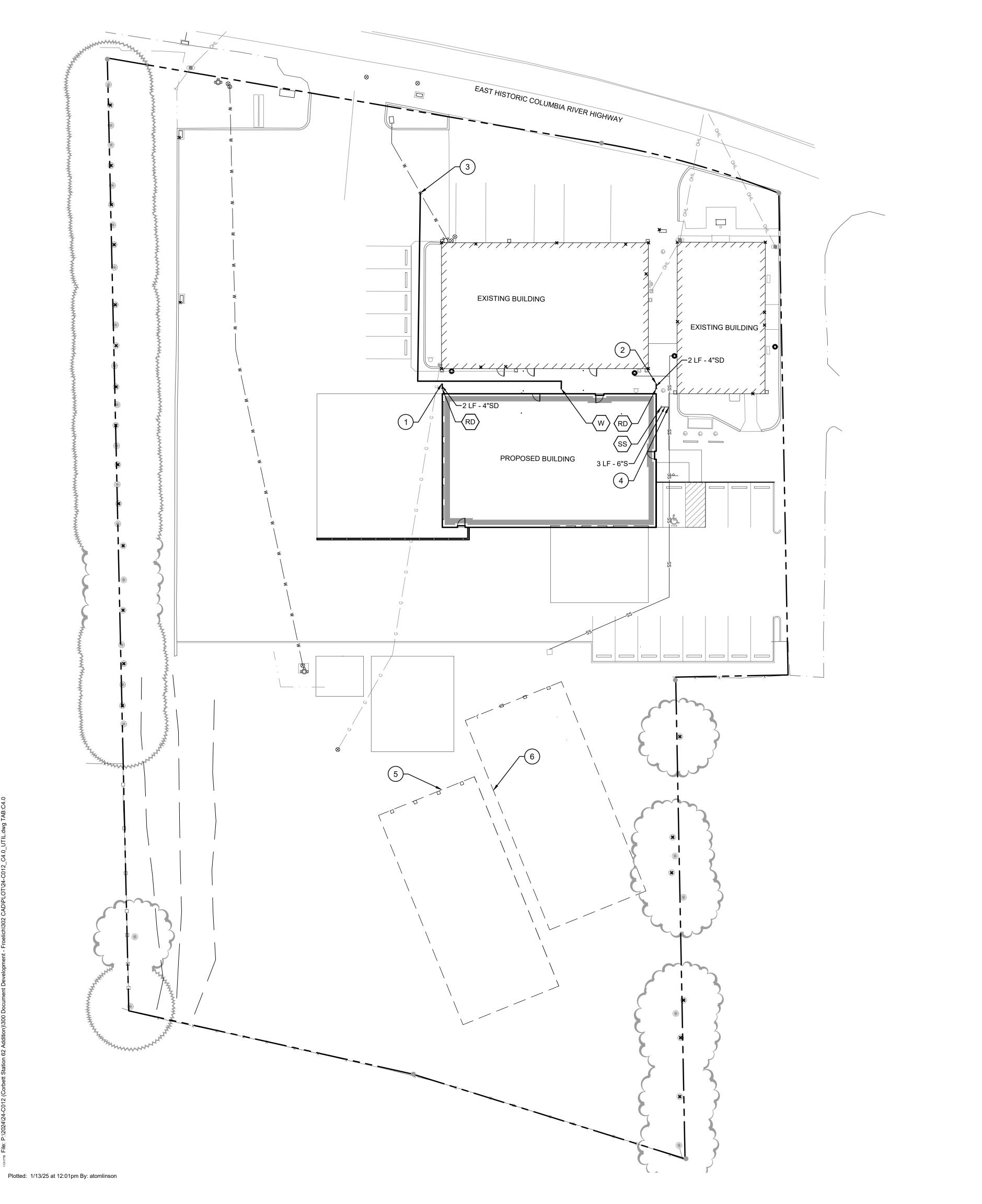
TP=676.67

TP=676.98

TP=675.91

TP=677.20-

TP=677.20-



SHEET NOTES

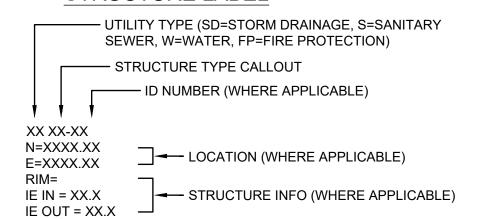
- PIPE BEDDING AND BACKFILL FOR ALL UTILITIES SHALL BE DONE PER DETAIL X/C5.X.
- 2. STRUCTURES LOCATIONS ARE BASED ON CENTER OF STRUCTURE.
- 3. INSTALL TRUST BLOCK ON FIRE AND WATER LINES PER DETAIL X & X/CX.X.

× KEY NOTES

- 1 CONNECT ROOF DRAIN INTO EXISTING STORMWATER LINE
- 2 DISCHARGE ROOF DRAINS ONTO SPLASH BLOCK
- 3 CONNECT TO EXISTING WATER LINE
- 4 CONNECT TO EXISTING SANITARY LINE
- 5 FUTURE DRAIN FIELD
- 6 EXISTING DRAIN FIELD

UTILITY LABEL LEGEND

STRUCTURE LABEL



PIPE LABEL

```
UTILITY LENGTH

UTILITY SIZE

UTILITY TYPE

XXLF - XX" XX

S=X.XX%

SLOPE (WHERE APPLICABLE)
```

STRUCTURE TYPE

CALLOUT	DESCRIPTION	DETAIL
BEND	BEND, USE FITTING IF APPLICAB	LE 🔽
BWV	BACKWATER VALVE	$\frac{(x)}{(x)}$
СВ	TRAPPED CATCH BASIN	
CO	CLEANOUT TO GRADE	
CONN	CONNECTION	
FD	FOUNDATION DRAINAGE POINT	OF CONN.
FDC	FIRE DEPARTMENT CONNECTION	N
FH	FIRE HYDRANT	

FIRE HYDRANT
GATE VALVE
TRENCH DRAIN
TEE CONNECTION
WYE CONNECTION

GV

TEE

LAND USE SET

FROELICH ENGINEERS CIVIL STRUCTURAL

Portland, OR. | Bend, OR. | Denver, CO.

PRELIMINARY

NOT FOR

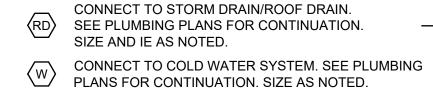
CONSTRUCTION

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PORTLAND, OR, 92714

SHEET LEGEND

(FP)	CONNECT TO FIRE PROTECTION SYSTEM. SIZE AS
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	NOTED. SEE PLUMBING PLANS FOR CONTINUATION.
	CONNECT TO STORM DRAIN/ROOF DRAIN



- FLANS FOR CONTINUATION. SIZE AS NOTED.
- CONNECT TO WASTE LINE. SEE PLUMBING PLANS FOR CONTINUATION. SIZE AS NOTED.
- UTILITY CROSSING. PROVIDE 12" MIN. CLEARANCE, U.N.O.

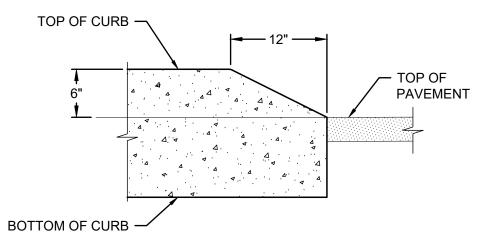
REV DATE	ISSUE TITL
PROJECT MANA	AGER: EM
PROJECT MANA	AGER: EM
DESIGNER:	AB

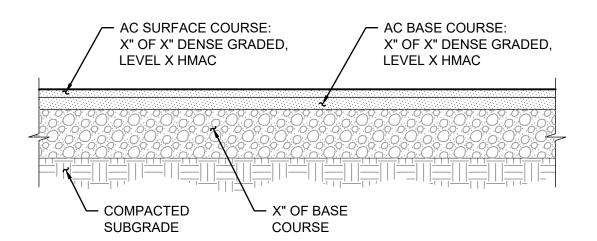
SHEET TITLE:
UTILITY PLAN

AS SHOWN

SCALE:







/ X" THICK PORTLAND CEMENT CONCRETE

► X" OF SUBBASE

X" THICK PORTLAND

CEMENT CONCRETE

─ X" OF SUBBASE

- CONCRETE SIDEWALK

4" MIN. THICKNESS

4 4 4 4 4 4 ...

COURSE

REINFORCED CONCRETE PAVEMENT SECTION

SEE PLAN ----

- 3" SUBBASE

COURSE

1. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS. CONSTRUCT

EXPANSION JOINTS AT 200' MAX SPACING, AT POINTS OF TANGENCY AND AT ENDS OF

r X"/2

COURSE

- CONSTRUCT EXPANSION JOINTS AT 200' MAX. SPACING AT POINTS OF TANGENCY AND AT

ASPHALT PAVEMENT SECTION

COMPACT

2. PROVIDE MEDIUM TO COARSE BROOM FINISH.

EACH WAY

ENDS OF EACH DRIVEWAY.

NOTES: 1. JOINTS:

SCALE: NTS

SCALE: NTS

SUBGRADE

- #4 REBAR AT 24" OC,

COMPACT

AND AT ENDS OF EACH DRIVEWAY.

2. PROVIDE MEDIUM TO COARSE BROOM FINISH.

SUBGRADE

1.5%

EACH DRIVEWAY, UNLESS NOTED OTHERWISE.

CONCRETE SIDEWALK

NOTES:

1. - CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS.

CONCRETE PAVEMENT SECTION

- CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS.

- CONSTRUCT EXPANSION JOINTS AT 200' MAX. SPACING AT POINTS OF TANGENCY

SCALE: NTS



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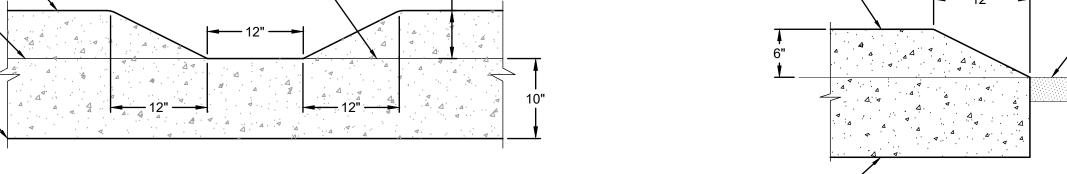
62 FIRE CORBETT I ADDITION

LAND USE SET

ISSUE TITLE **REV DATE** PROJECT MANAGER: DESIGNER: DRAWN BY: EEYKELBOSCH PROJECT NO: 24-C012 DATE: 01/10/2025 SCALE: AS SHOWN

> SHEET TITLE: **DETAILS**

SHEET NUMBER:



CURB SPILLWAY - TYPE 1 SCALE: NTS

← R=1½", TYP.

NOTES:

1. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS. CONSTRUCT

1. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS. CONSTRUCT

1. CONSTRUCT CONTRACTION JOINTS OF TANGENCY AND AT ENDS OF E

2. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM WITH CURB MACHINE AS

EXTRUDED CONCRETE CURB

DRIVEWAY.

SCALE: NTS

APPROVED BY THE ENGINEER.

EXPANSION JOINTS AT 200' MAX SPACING AT POINTS OF TANGENCY AND AT ENDS OF EACH

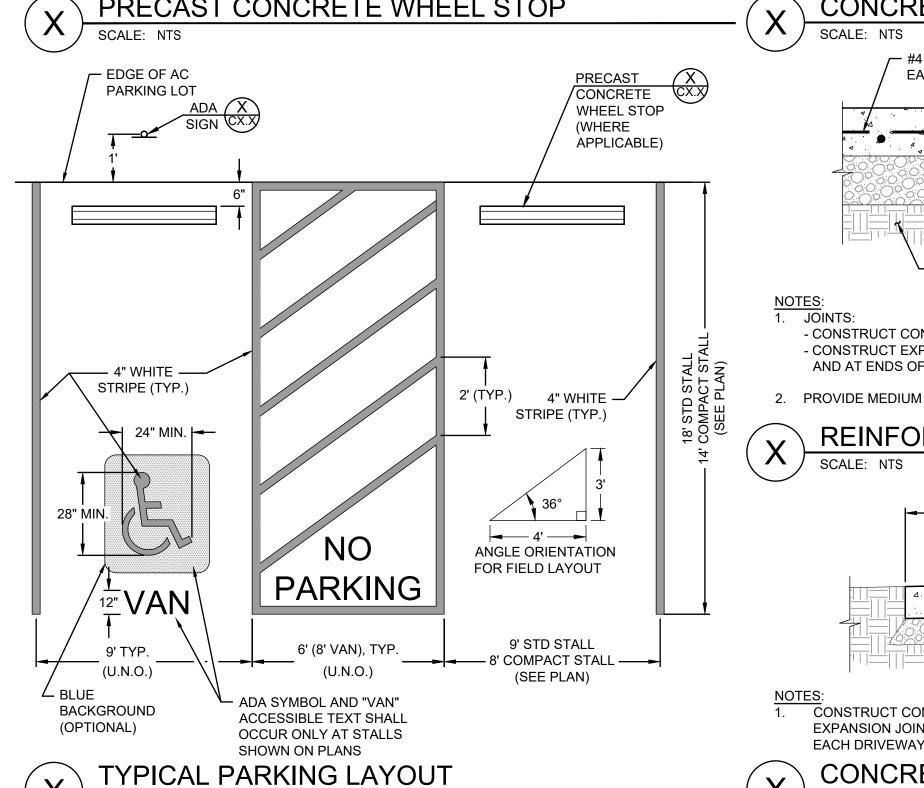
- EPOXY CEMENT BOND

- PAVEMENT

- ROOF DRAIN AND CLEANOUT BY OTHERS. BUILDING — - DOWN SPOUT 4" DUCTILE IRON — SPLASH BLOCK - FINISHED GRADE

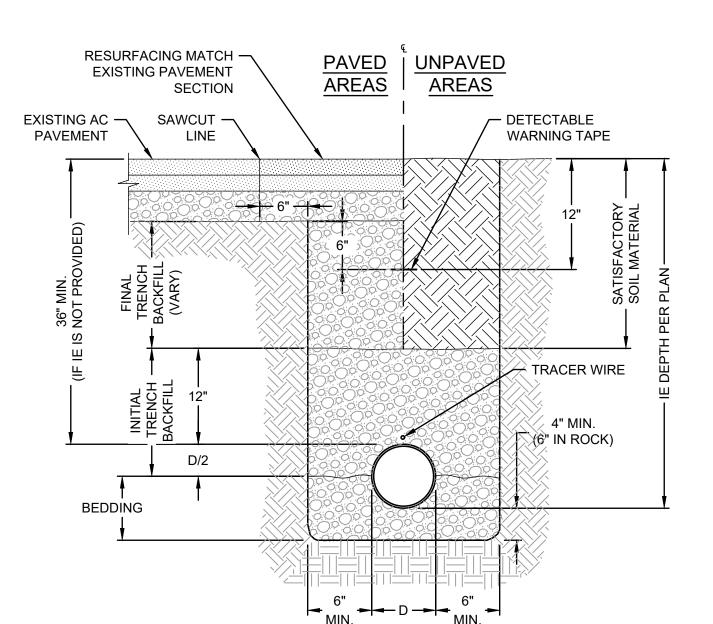
> NOTES:
>
> 1. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM TO MANUFACTURER'S PRODUCTS APPROVED BY ENGINEER.

PRECAST CONCRETE WHEEL STOP SCALE: NTS

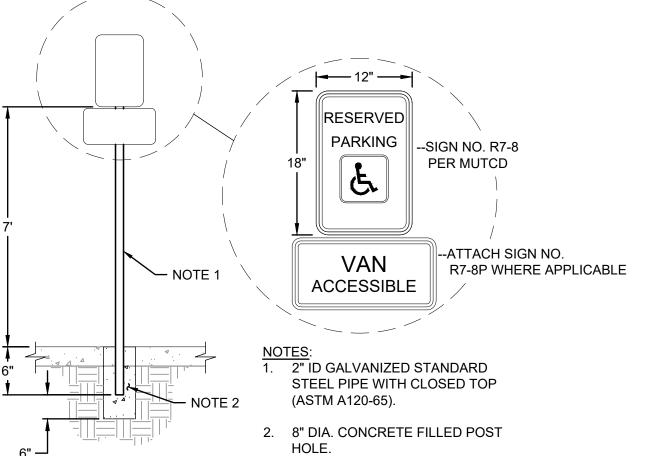


- PAVEMENT PER PLAN → TO STORM SYSTEM - ROOF DRAIN

ROOF DRAIN/DOWNSPOUT DRAIN CONNECTION



TYPICAL PIPE BEDDING AND BACKFILL SCALE: NTS



SCALE: NTS

- BACKFILL TO TOP OF CURB PAVEMENT - 4" OF SUBBASE COURSE COMPACTED SUBGRADE 1. CURB EXPOSURE 'E' = 6", TYP. VARY AS SHOWN ON PLANS OR AS DIRECTED.

2. CONSTRUCT CONTRACTION JOINTS AT 15' MAX. SPACING AND AT RAMPS. CONSTRUCT EXPANSION JOINTS AT 200' MAX SPACING AT POINTS OF TANGENCY AND AT ENDS OF EACH DRIVEWAY.

3. TOPS OF ALL CURBS SHALL SLOPE TOWARD THE ROADWAY AT 2% UNLESS OTHERWISE

4. DIMENSIONS ARE NOMINAL AND MAY VARY TO CONFORM WITH CURB MACHINE AS APPROVED BY THE ENGINEER.

CONCRETE CURB ENDING INSTALL 3/4" x 18" -DOWEL ANCHOR, TYP. DRAINAGE SLOT, TYP.

ADA PARKING SIGN - TYPE 1

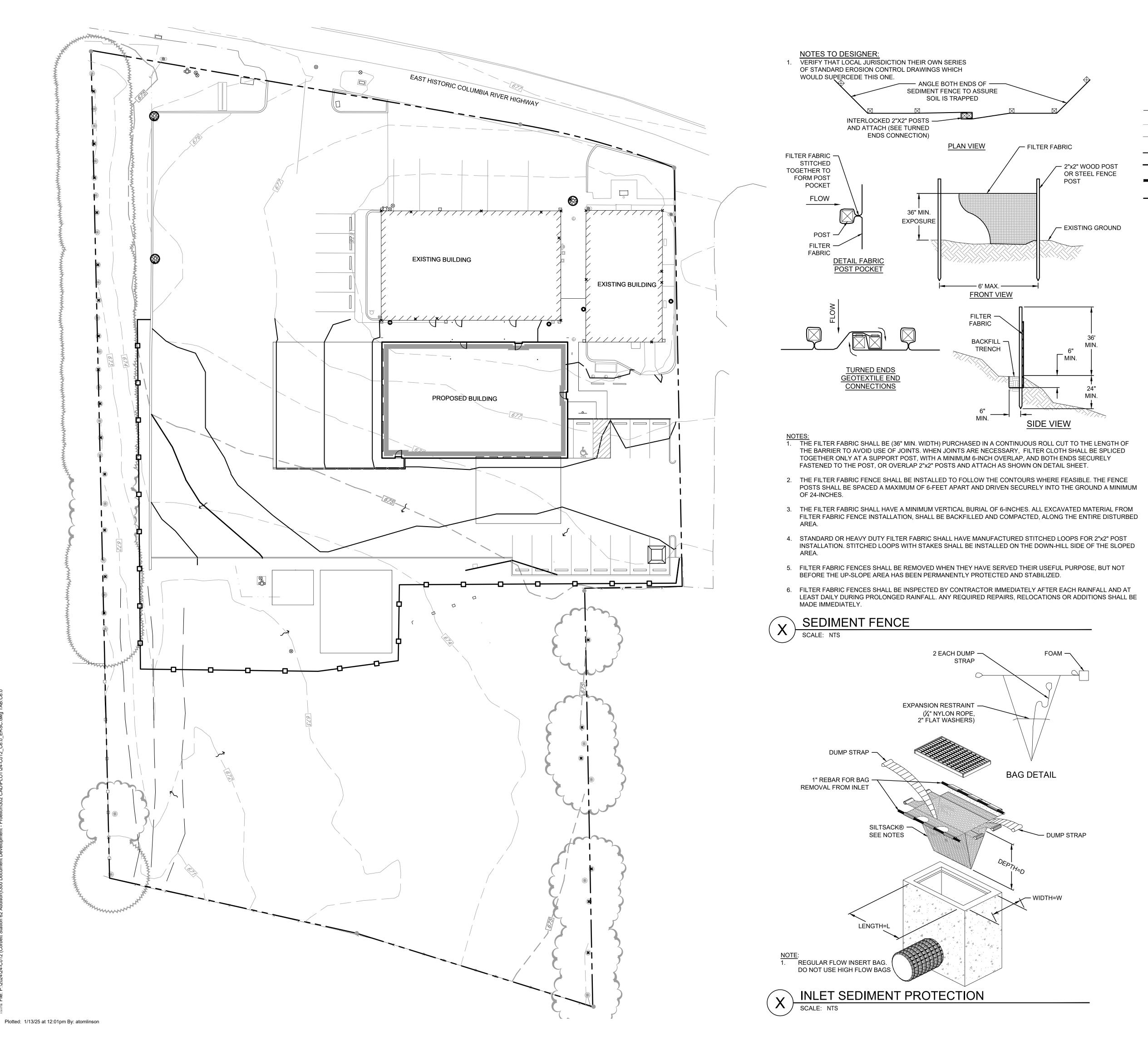
SCALE: NTS

Plotted: 1/13/25 at 12:01pm By: atomlinson

SCALE: NTS

SHOWN OR AS DIRECTED.

STANDARD CONCRETE CURB



SHEET LEGEND

PROPERTY LINE EX. CONTOUR MINOR — EX. CONTOUR MAJOR -49——— PROP. CONTOUR MINOR PROP. CONTOUR MAJOR EXTENT OF WORK SEDIMENT CONTROL FENCE.
PLACE AT PROPERTY LINES, UNO
(SHOWN OFFSET FOR CLARITY).

> INLET PROTECTION DRAINAGE FLOW DIRECTION

> > 7' X 7' - "ECOPAN" CONCRETE WASHOUT, CONTACT JAIME SHEARER (503) 209-3204

FROELICH ENGINEERS CIVIL·STRUCTURAL Portland, OR. | Bend, OR. | Denver, CO. (503) 624-7005

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LAND USE SET

REV DATE	ISSU	E TITLE
PROJECT MANA	AGER:	EME
PROJECT MANA DESIGNER:	AGER:	EME ABT
DESIGNER:	АТОМІ	ABT

SCALE:

SHEET TITLE: **EROSION AND** SOIL CONTROL PLAN

AS SHOWN