# ENGINEERING PLANS

# FOR E HARRISON WATER LINE REPLACEMENT CANNON BEACH, OR 97110

PREPARED FOR:

**CITY OF CANNON BEACH** 

163 E. GOWER AVE.

CANNON BEACH, OR, 97110 CONTACT: KAREN LA BONTE

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PREPARED BY:



Ridgefield, WA

Duluth + Minneapolis, MN

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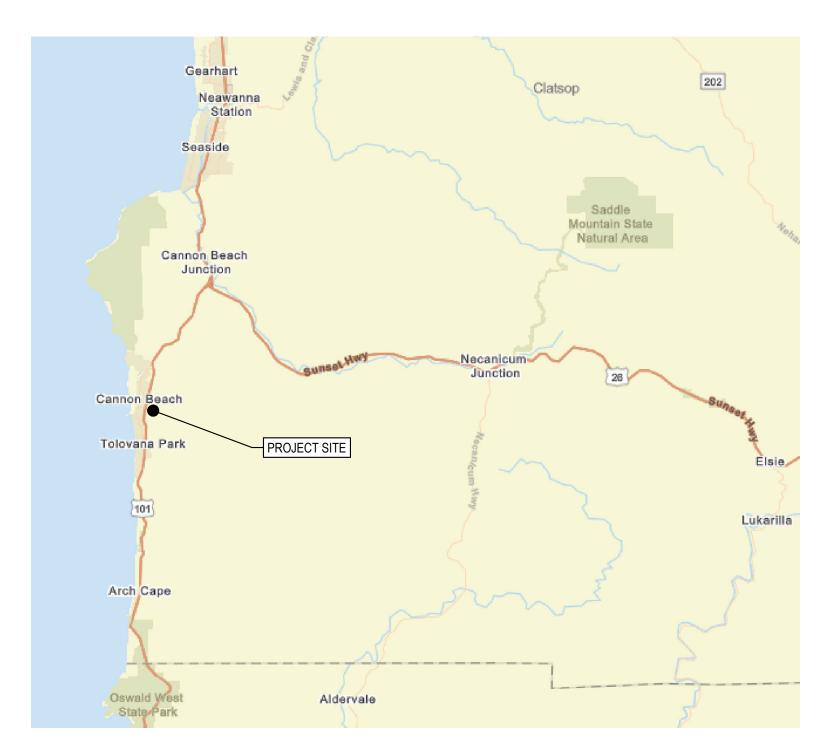
PROJECT NUMBER: 22033.2



CONTACT: CHUCK MCDONALD PHONE: (360) 903-9281 EMAIL: CMCDONALD@WINDSORENGINEERS.COM







VICINITY MAP

NOT TO SCALE

# **SHEET INDEX**

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C200 TRAFFIC CONTROL

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C590 WATERMAIN DETAILS

REVISIONS:

#### NOTES

THIS MAP DOES NOT CONSTITUTE A RIGHT-OF-WAY SURVEY OF THE STREETS SHOWN HEREON. THE RIGHT-OF-WAYS AND TAX LOT BOUNDARIES SHOWN HEREON WERE LAID OUT FROM LOCAL SUBDIVISION MONUMENTS PER SURROUNDING SURVEYS.
THE PURPOSE OF THIS MAP IS TO SHOW UTILITY FEATURES WITHIN THE

PORTIONS OF THE RIGHT-OF-WAYS SHOWN ON THIS MAP. THE UNDERGROUND UTILITY LINES SHOWN HEREON ARE BASED UPON ABOVE GROUND FEATURES, ASBUILTS AND UTILITY LOCATE PAINT MARKS PLACED BY THE CORRESPONDING UTILITY COMPANIES. SAID UTILITY COMPANIES DO NOT GUARANTEE THEIR LOCATES TO BE FREE OF ERRORS OR OMMISSIONS. THEREFORE, ONION PEAK DESIGN RESERVES THE SAME LIMITATIONS.

# CONTROL POINTS

POINT #	NORTH	EAST	ELEV.	DESC.
8	829699.83	7321860.08	41.60	PUNCH MARK MANHOLE
9	829933.80	7321874.71	43.31	MAG NAIL

# GRAPHIC SCALE ( IN FEET ) 1 inch = 20 ft.

# LEGEND

INDICATES CONTROL POINT AS NOTED.

INDICATES WATER METER.

INDICATES POWER POLE.

INDICATES SIGN.

INDICATES SANITARY SEWER MANHOLE.

INDICATES WATER VALVE.

INDICATES FIRE HYDRANT.

INDICATES WATERLINE.

INDICATES STORM DRAIN LINE.

---- INDICATES OVERHEAD POWER LINE.

----- P ----- INDICATES UNDERGROUND POWER LINE.

INDICATES SEWER LINE.

INDICATES SEWER FORCE MAIN.

INDICATES NATURAL GAS LINE.

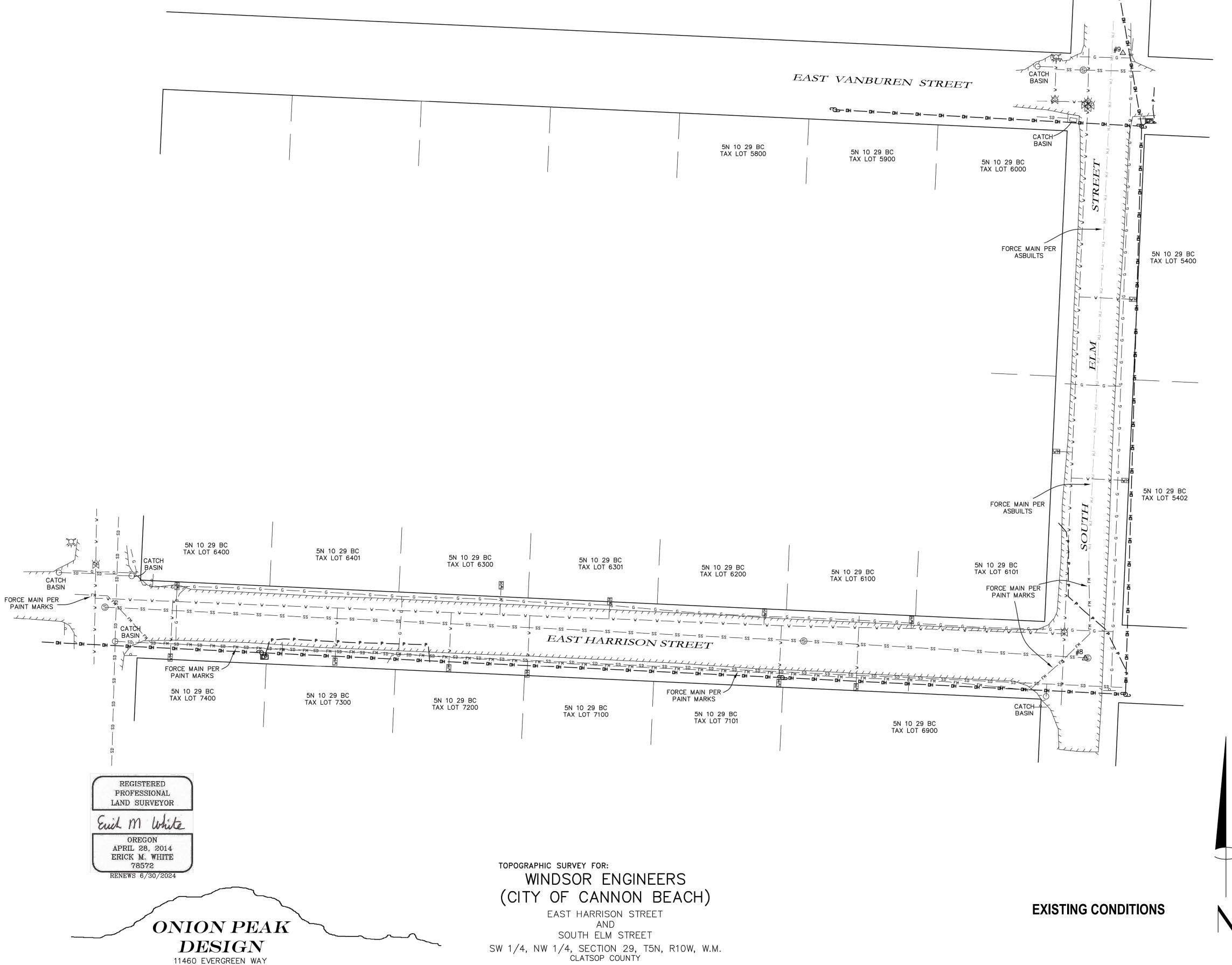
///// INDICATES EDGE OF ASPHALT.

DESIGN 11460 EVERGREEN WAY NEHALEM, OR 97131

(503) 440-4403

"HARRISON" #A2023 WINDSOR2302-EX.DWG

EAST HARRISON STREET SOUTH ELM STREET CLATSOP COUNTY MARCH 1, 2023



G002

**ONION PEAK** 

ERICK WHITE (503 440-4403

ERICK.OPD@GMAIL.COM

CONTACT:

SITE ADDRESS: VARIES - CITY OF CANNON BEACH

QUARTER SECTION: VARIES - CITY OF CANNON BEACH

COUNTY: CLATSOP

CRITICAL AREAS:

1. NO CRITICAL AREAS ARE WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT.

#### **CONTACT INFORMATION**

APPLICANT / PROPERTY OWNER
CITY OF CANNON BEACH
CONTACT:
TREVOR MOUNT (503) 436-8066
MOUNT@CI.CANNON-BEACH.OR.US

REPRESENTATIVE / CONTACT
WINDSOR ENGINEERS, LLC
27300 NE 10TH AVE.
RIDGEFIELD, WA 68642
CONTACT:
TRAVIS TORMANEN (320) 903-9281
TTORMANEN@WINDSORENGINEERS.COM

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GENERAL PLAN NOTES

1. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION. A MINIMUM OF TWO FULL BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL CALL 811 (UTILITY NOTIFICATION CENTER) FOR LOCATION MARK-UP OF EXISTING UTILITIES

2. ALL CONSTRUCTION, MATERIALS, AND WORKMANSHIP SHALL CONFORM TO THE LATEST STANDARDS AND PRACTICES OF CLATSOP COUNTY AND THE LATEST EDITION OF THE "OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION" PREPARED BY ODOT

3. IN CASE OF A CONFLICT BETWEEN THE REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.

4. ANY CHANGES TO THE DESIGN AND/OR CONSTRUCTION SHALL BE APPROVED BY THE OWNER OR ENGINEER.

5. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE AN APPROVAL OF ANY OTHER CONSTRUCTION NOT SPECIFICALLY SHOWN ON THE PLANS. PLANS FOR STRUCTURES SUCH AS BRIDGES, BUILDINGS, TANKS, VAULTS, ROCKERIES, AND RETAINING WALLS MAY REQUIRE A SEPARATE REVIEW AND APPROVAL BY THE BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.

6. A COPY OF THESE APPROVED PLANS SHALL BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL CONSTRUCTION EASEMENTS AND PERMITS NECESSARY TO PERFORM THE WORK.

8. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.

9. PUBLIC AND PRIVATE DRAINAGE WAYS SHALL BE PROTECTED FROM POLLUTION. NO MATERIAL IS TO BE DISCHARGED TO OR DEPOSITED IN STORMWATER SYSTEMS THAT MAY RESULT IN VIOLATION OF STATE OR FEDERAL WATER QUALITY STANDARDS.

10. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL HAVE AN APPROVED PUBLIC RIGHT-OF-WAY WORK PERMIT PRIOR TO ANY CONSTRUCTION ACTIVITY WITHIN THE RIGHT-OF- WAY.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST ADOPTED EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION. TWO-WAY TRAFFIC MUST BE MAINTAINED AT ALL TIMES ON THE ADJACENT PUBLIC STREETS.

12. ANY PUBLIC OR PRIVATE CURB, GUTTER, SIDEWALK, OR ASPHALT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO CITY/COUNTY STANDARDS AND PRACTICES.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ADJACENT UTILITIES WHICH MAY INCLUDE, BUT ARE NOT LIMITED TO, WATER, SANITARY SEWER, STORMWATER, POWER, TELEPHONE, CABLE TV, GAS, IRRIGATION, AND STREET LIGHTING. THE CONTRACTOR SHALL NOTIFY RESIDENTS AND BUSINESSES 48 HOURS IN ADVANCE OF ANY WORK AFFECTING ACCESS OR SERVICE AND SHALL MINIMIZE INTERRUPTIONS TO DRIVEWAYS FOR RESIDENTS AND BUSINESSES ADJACENT TO THE PROJECT.

14. ALL LAWN AND VEGETATED AREAS DISTURBED WILL BE RESTORED TO ORIGINAL CONDITION. ANY DISTURBANCE OR DAMAGE TO OTHER PROPERTY ON ADJACENT PARCELS OR IN THE PUBLIC RIGHT OF WAY SHALL ALSO BE REPAIRED OR RESTORED TO ORIGINAL CONDITION.

15. ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR WATER, SANITARY SEWER, AND STORM FACILITIES SHALL CONFORM TO THE CITY OF CANNON BEACH DESIGN GUIDELINES. CONSTRUCTION SHALL BE AS PER THE MOST CURRENT STANDARD DETAIL CONTAINED THEREIN.

16. THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS, AND DEPTHS OF UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION OF AND PROVIDE PROTECTION FOR ALL UTILITIES AND STRUCTURES.

17. EXISTING UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR OR BY THE UTILITY.

19. ALL OPEN TRENCHES THAT IMPACT PUBLIC ACCESS OR OTHER PROJECT WORK ACCESS OUTSIDE OF THIS

18. WHERE THE CONTRACTOR MUST RELOCATE WATER AND GAS UTILITIES, SHUTDOWN SHALL ONLY BE ACCOMPLISHED BY THE CITY OR UTILITY PURVEYOR.

PROJECTS SITE, MUST BE STEEL PLATED OR BACKFILLED AND PAVED WITH AT LEAST 2" OF COLD MIX TO ADJACENT EXISTING GRADE AT THE END OF EACH WORKDAY.

20. NOTIFY ADJACENT RESIDENCES AT LEAST ONE DAY PRIOR TO COMMENCING WORK ADJACENT TO THEIR

RESIDENCES.

21. SAWCUT ALL PAVEMENT JOINT LINES. WHERE THERE IS A PREVIOUS PAVING EDGE OR CRACK WITHIN 5' OF

22. THE CONTRACTOR SHALL COMPLY WITH OREGON REQUIREMENTS FOR TRENCH SAFETY.

THE SAWCUT EDGE, REMOVE THE PAVEMENT TO THE PREVIOUS PAVING EDGE.

23. THE CONTRACTOR SHALL REPLACE ALL SURVEY MONUMENTS THAT ARE DESTROYED BY THE CONSTRUCTION.

24. ALL WATER PIPING SHALL BE CONSTRUCTED WITH 3' MINIMUM COVER, 1' VERTICAL SEPARATION BETWEEN UTILITIES, AND A MINIMUM OF 10' HORIZONTAL SEPARATION AND 18" ABOVE SEWER LINES, UNLESS OTHERWISE NOTED.

25. THE CONTRACTOR SHALL RESTORE PAVEMENT AND LANDSCAPING DISTURBED BY THE CONSTRUCTION TO THE PREVIOUSLY UNDISTURBED CONDITION.

26. CONTRACTOR TO DISPOSE OF TREES, SHRUBS, SOD AND OTHER DEBRIS IN A PROPER MANNER OF THE CONTRACTOR'S CHOOSING.

#### GENERAL CIVIL NOTES

TOPOGRAPHIC SURVEY BY: ONION PEAK
HORIZONTAL DATUM: OREGON STATE PLANES NORTH ZONE

STORM DRAINAGE:

**ELEVATION DATUM: NAD 83** 

ON-SITE STORM SEWER IMPROVEMENTS SHALL CONFORM TO THE LATEST VERSION OF THE DEQ, AND CONFORM TO ODOT SPECIFICATIONS WHERE NOTED.

THE CONTRACTOR SHALL MAINTAIN 6" MINIMUM VERTICAL AND 3' MINIMUM HORIZONTAL CLEARANCE (OUTSIDE SURFACES) BETWEEN STORM DRAIN PIPES AND OTHER UTILITY PIPES AND CONDUITS. FOR CROSSINGS OF SANITARY SEWER LINES, THE OREGON HEALTH AUTHORITY CRITERIA APPLY.

STORM DRAIN PIPE, BENDS, AND FITTINGS SHALL BE PVC, ASTM D 3034, SDR 35, OR SMOOTH INTERIOR, HIGH DENSITY POLYETHYLENE CORRUGATED PIPE AASHTO M252 OR M294, TYPE S AS PRODUCED AND SPECIFIED BY ADS, PRODUCT NAME N12, OR APPROVED EQUAL. ALL STORM SEWER FITTINGS AND PIPE JOINTS SHALL BE GASKETED.

PERFORATED PIPE SHALL BE ADS SINGLE WALL PERFORATED PIPE WITH SOCK OR APPROVED EQUAL.

ALL STORM SEWER PIPE SHALL HAVE A MINIMUM 12" DIAMETER WITHIN ROADWAY

ALL ON-SITE STORMWATER FACILITIES SHALL BE PRIVATELY MAINTAINED BY THE CURRENT OR FUTURE PROPERTY OWNER(S).

ALL VAULT, UTILITY BOX, INLET, MANHOLE AND CLEANOUT RIMS SHALL BE ADJUSTED TO FINISH GRADE UNLESS OTHERWISE NOTED.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN ANY STORM SYSTEM PIPING TO EXISTING DRAINAGE APPURTENANCES TO REMAIN.

SANITARY SEWER

ON-SITE (PRIVATE) SANITARY SEWER IMPROVEMENTS SHALL CONFORM TO THE LATEST VERSION OF THE DEQ, AND ODOT SPECIFICATIONS WHERE NOTED AND THE CITY OF CANNON BEACH GENERAL REQUIREMENTS.

SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) AND CONFORM TO ASTM D3034, SDR35.

CONTRACTOR SHALL COORDINATE ALL BUILDING SANITARY CONNECTIONS WITH PLUMBING PLAN PRIOR TO CONSTRUCTION

CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND INSPECTIONS.

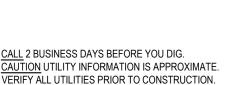
WATER:

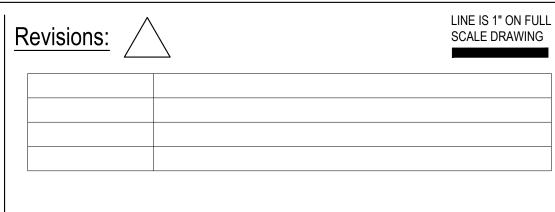
ALL WATERMAIN INSTALLATION, DISINFECTION AND TESTING SHALL COMPLY WITH ODOT STANDARD SPECIFICATIONS. UNIFORM PLUMBING CODE, AND CITY OF CANNON BEACH WATER DESIGN AND CONSTRUCTION STANDARDS.

STANDARD DETAIL STATEMENT

ALL MATERIALS AND METHODS OF CONSTRUCTION AND INSTALLATION FOR WATER, SEWER, STORM WATER FACILITIES, AND EROSION CONTROL MEASURES, SHALL CONFORM TO "OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION." CONSTRUCTION SHALL BE AS PER THE MOST CURRENT STANDARD DETAIL CONTAINED THEREIN.









Ridgefield, WA

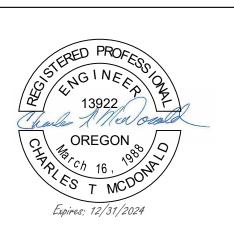
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E HARRISON WATER LINE REPLACEMENT

CANNON BEACH, OR 97110

**ENGINEERING PLANS** 

Issue Date: 6/16/2023

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Drawn by CKJ
Checked by TWT

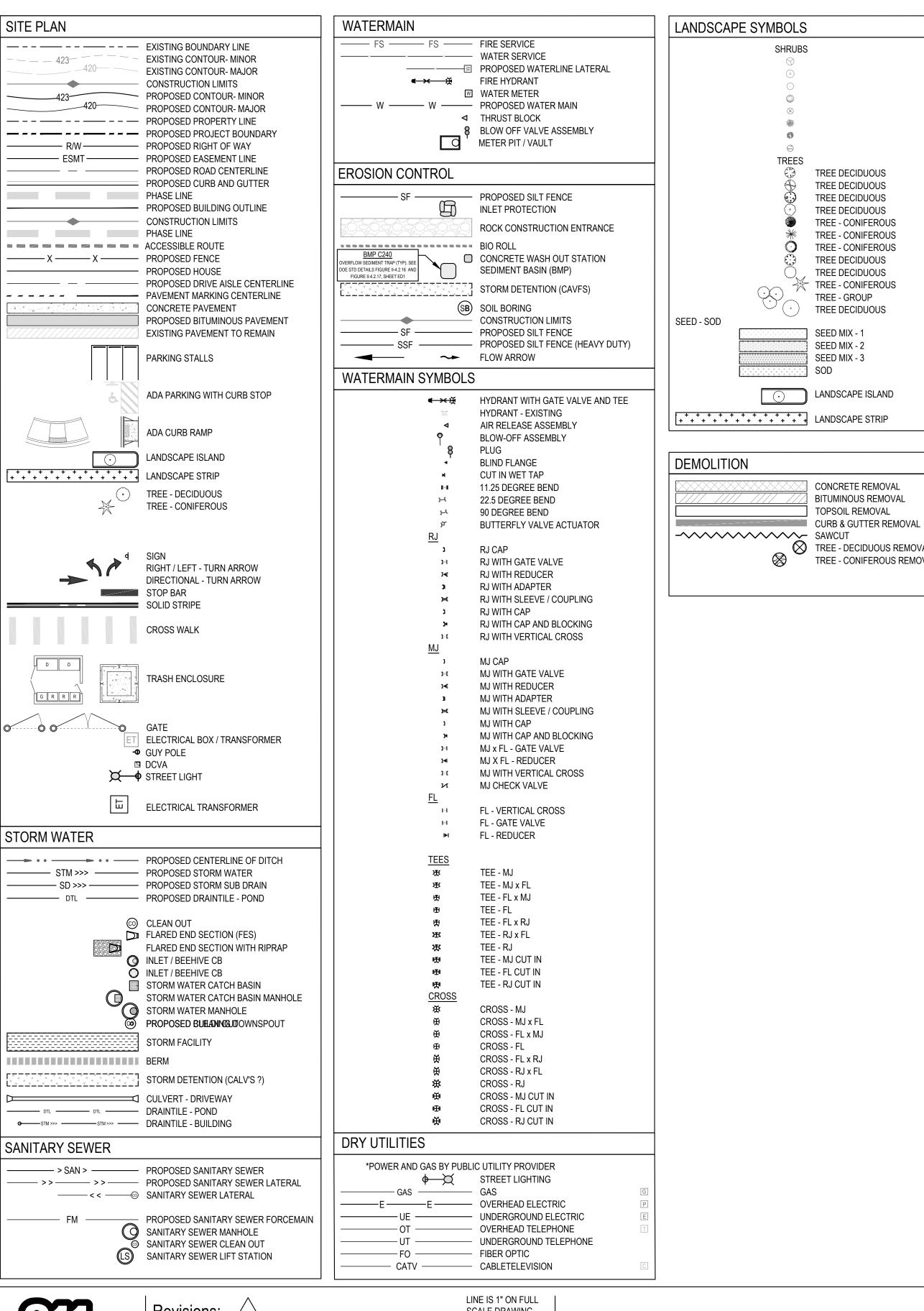
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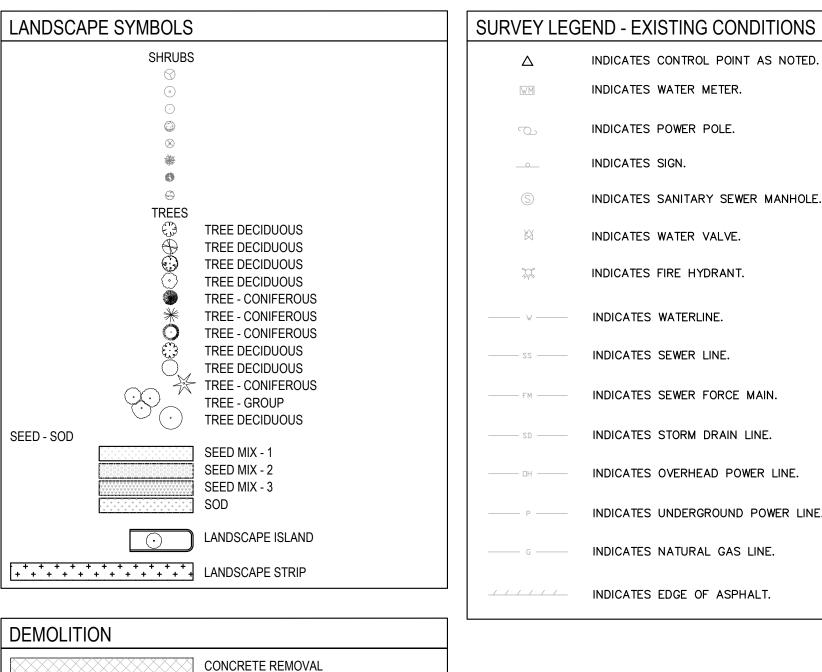
**CIVIL NOTES** 

FOR ENGINEERING APPROVAL ONLY

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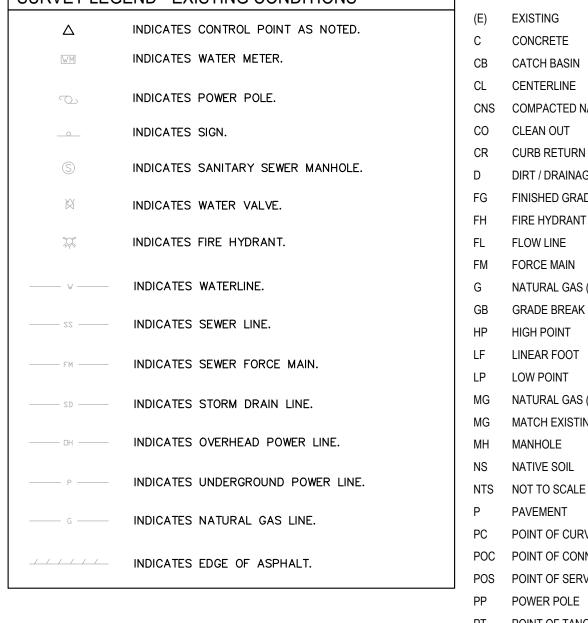


BITUMINOUS REMOVAL

TREE - DECIDUOUS REMOVAL

TREE - CONIFEROUS REMOVAL

TOPSOIL REMOVAL



# **GENERAL ABBREVIATIONS**

- C CONCRETE CB CATCH BASIN CL CENTERLINE CNS COMPACTED NATIVE SOIL CO CLEAN OUT
- CR CURB RETURN D DIRT / DRAINAGE
- FG FINISHED GRADE FH FIRE HYDRANT FL FLOW LINE
- FM FORCE MAIN G NATURAL GAS (LOW PRESSURE)
- GB GRADE BREAK
- LF LINEAR FOOT LP LOW POINT
  - MG NATURAL GAS (MEDIUM PRESSURE)
  - MG MATCH EXISTING GRADE MH MANHOLE
  - P PAVEMENT PC POINT OF CURVATURE
  - POC POINT OF CONNECTION POS POINT OF SERVICE
  - PP POWER POLE PT POINT OF TANGENCY
  - R RADIUS ROW RIGHT OF WAY
  - S SLOPE / SANITARY SAN SEWER SEWER
  - SSMH SANITARY MANHOLE STA STATION STM STORM DRAIN
  - STMH STORM MANHOLE TBD TO BE DETERMINED
  - TBL TO BE RELOCATED BY RESPECTIVE UTILITY TBR TO BE REMOVED BY CONTRACTOR
  - TC TOP OF CURB TOE TOE OF BANK
  - TOP TOP OF BANK TP TELEPHONE POLE
  - U UNDERGROUND VIP VERIFY IN FIELD PRIOR TO CONSTRUCTION
  - W WATER MAIN

## SITE - ABBREVIATIONS

FFE - FIRST FLOOR FINISH ELEVATION LLE - LOWER LEVEL FINISH ELEVATION WO - WALKOUT LO - LOOKOUT

# GRADING LEGEND / ABBREVIATIONS

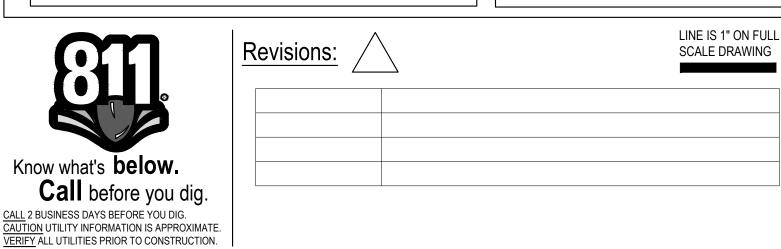
TC: 391.49 FL: 390.99

TW: 391.49 BW: 380.99

GB: GRADE BREAK LP: LOW POINT HP: HIGH POINT FC: FLUSH CURB MG: MATCH GRADE FL: FLOWLINE

SW: SIDEWALK

TC: TOP OF CURB FG: FINISH GRADE (DEFAULT- IF NOT LABELED)





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E HARRISON WATER LINE REPLACEMENT CANNON BEACH, OR 97110

**LEGENDS AND ABBREVIATIONS** 

**ENGINEERING PLANS** 

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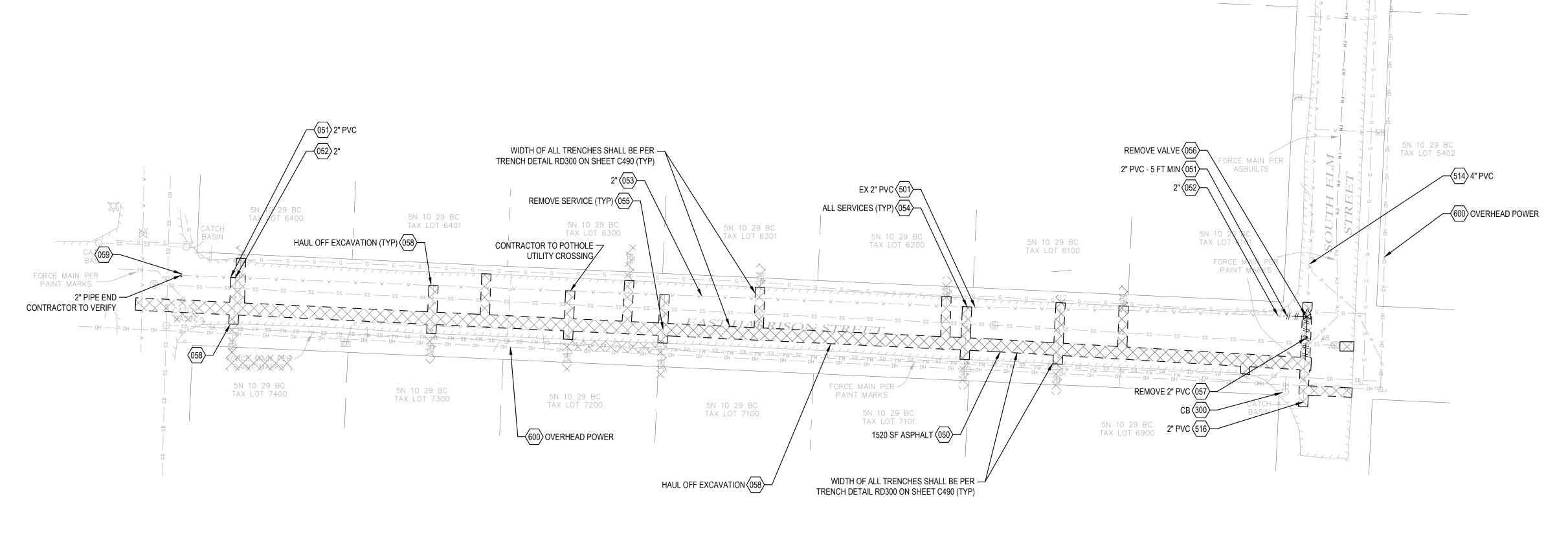
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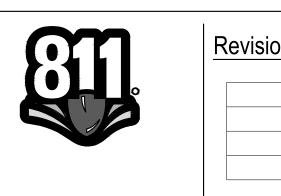
050 DEMOLITION

050 SAWCUTFULL DEPTH AND REMOVE PAVING

051 REMOVE SECTION OF EXISTING PVC WATER MAIN.



**PLAN VIEW** SCALE: 1" = 20'



LINE IS 1" ON FULL SCALE DRAWING Revisions: CALL 2 BUSINESS DAYS BEFORE YOU DIG.
CAUTION UTILITY INFORMATION IS APPROXIMATE.
VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.



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# E HARRISON WATER LINE REPLACEMENT CANNON BEACH, OR 97110

5N 10 29 BC TAX LOT 5400

**ENGINEERING PLANS** Issue Date: 6/16/2023

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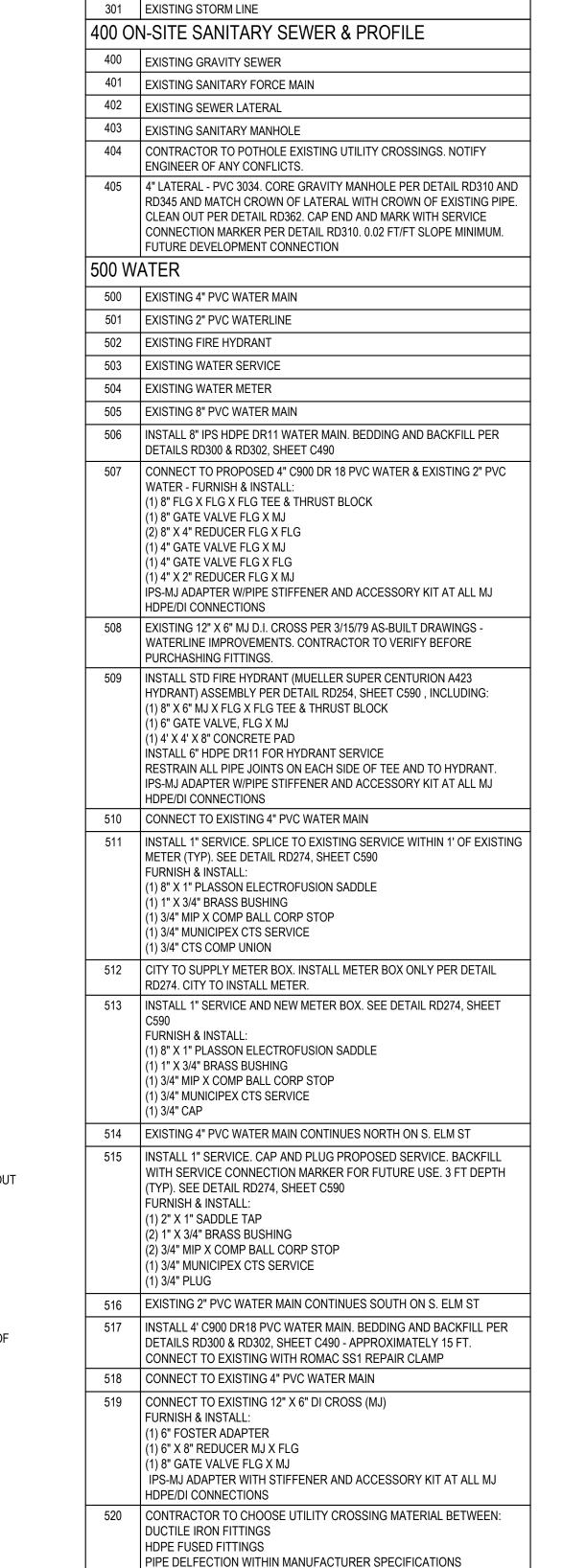
ASBUILTS



**DEMOLITION PLAN** 

C001

ISSUED FOR ENGINEERING APPROVAL



**APPROVAL** 

ENGINEERING

FOR

ISSUED

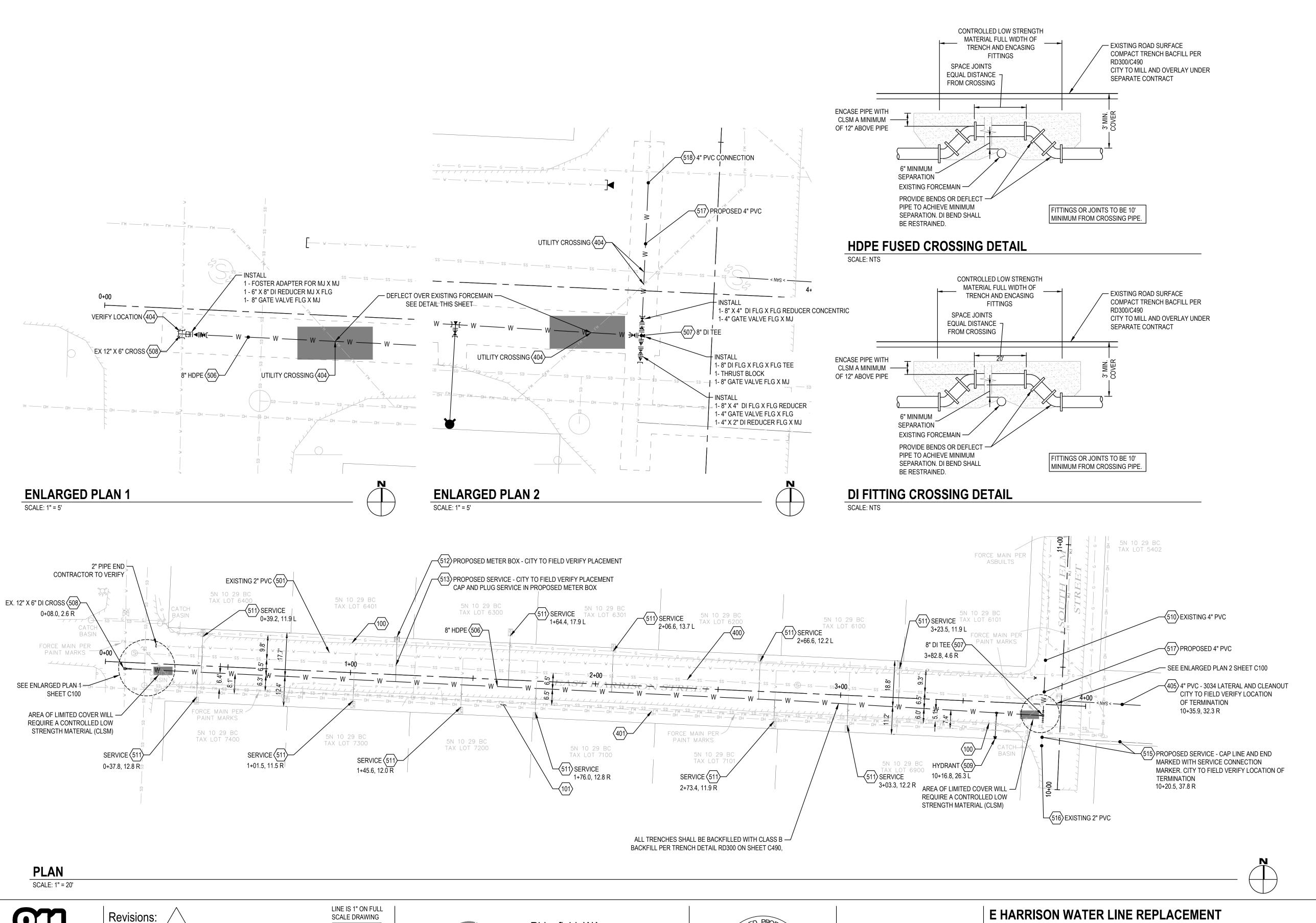
100 SITE PLAN NOTES

300 STORMWATER

100 EXISTING PAVEMENT EDGE

300 EXISTING CATCH BASIN

101 SEED AND BLANKET DISTURBED AREAS



CALL 2 BUSINESS DAYS BEFORE YOU DIG.

CAUTION UTILITY INFORMATION IS APPROXIMATE.

VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.



**WINDSOR** ENGINEERS

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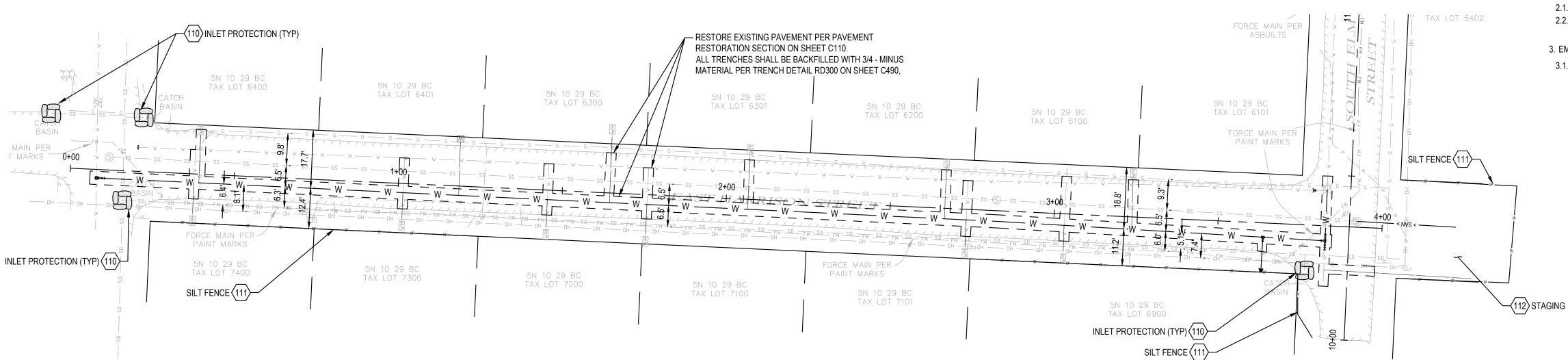
CANNON BEACH, OR 97110

**ENGINEERING PLANS** Issue Date: 6/16/2023

Project Manager DCK
Drawn by CKJ
Checked by TWT

SITE PLAN

# **PAVEMENT RESTORATION SECTION**



110 EROSION CONTROL / OVERALL GRADING 110 INSTALL INLET PROTECTION PER INLET PROTECTION DETAIL ON SHEET 111 INSTALL SEDIMENT FENCE PER DETAIL ON SHEET C190

# **EROSION CONTROL NOTES**

112 MATERIAL STAGING AREA

- 1. LESS THAN 1 ACRE OF DISTURBANCE FOR ENTIRE PROJECT, THEREFORE, A 1200-C PERMIT IS NOT REQUIRED. THE EROSION CONTROL PLAN OBSERVES THE ELEMENTS OF THE 1200-C PERMIT DURING CONSTRUCTION.
- 2. SURFACE ROUGHEN SLOPES AND SURFACES PRIOR TO PLANTING BY TRACK-WALKING OR THE USE OF OTHER APPROVED METHODS. SURFACE ROUGHENING REDUCES RUNOFF VELOCITY AND IMPROVES SEED BEDDING.
- 3. SEED MIX SHALL BE A LOCAL YARD SEED MIX DESIGN. SUBMIT TO ENGINEER FOR REVIEW.
- 4. IF SEED & MULCH AND/OR HYDROSEEDING FAILS TO STABILIZE EXISTING BARE SOILS, TOPSOIL AND/OR COMPOST SHALL BE USED TO ESTABLISH A GROWING SURFACE. EROSION CONTROL BLANKETS OR MATS, MID-SLOPE SEDIMENT FENCES OR OTHER APPROPRIATE MEASURES MAY BE REQUIRED TO STABILIZE SOILS. STEEP SLOPES MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES.
- 5. DUST CONTROL SHALL BE IMPLEMENTED IF NECESSARY.
- 6. ACTIVE INLETS TO STORM WATER SHALL BE PROTECTED THROUGH THE USE OF APPROVED INLET PROTECTION MEASURES. ALL INLET AND INLET PROTECTION MEASURES ARE TO BE ROUTINELY INSPECTED AND MAINTAINED AS NEEDED.
- 7. ON SLOPES GREATER THAN 1:1.5, OR WHERE THE MULCH IS SUSCEPTIBLE TO MOVEMENT BY WIND AND WATER, THE MULCH MATERIAL SHOULD BE HYDRAULICALLY APPLIED WITH A TACKIFIER OR THE STRAW MULCH SHOULD BE ANCHORED MECHANICALLY.
- 8. MULCH SHALL FOLLOW BE OF THE FOLLOWING STANDARD:
- 8.1. SHALL BE FREE OF ALL WEED AND PLANT SEEDS AND CONTAIN NO SUBSTANCES DETRIMENTAL TO PLANT LIFE
- 8.2. CELLULOSE MULCH SHALL BE PRODUCED FROM VIRGIN WOOD, STRAW, OR PAPER FIBER.
- 8.3. STRAW MULCH USED FOR NON-HYDRO SEEDING APPLICATIONS SHALL BE FROM BENT GRASS, BLUEGRASS, FESCUE, OR RYEGRASS SINGLY OR IN COMBINATION.
- 8.4. STRAW SHALL NOT BE MOLDY, CAKED, DECAYED, OR OF OTHERWISE LOW QUALITY.
- 9. STREET SWEEPING SHALL BE IMPLEMENTED TO CONTROL TRACKING

#### PERMANENT SEEDING

1. SEED MIX SHALL BE A LOCAL YARD SEED MIX DESIGN. SUBMIT TO ENGINEER FOR REVIEW.

#### SPILL REQUIREMENTS

#### 1. GENERAL CONDITIONS

- 1.1. LOCATE ACTIVITIES AWAY FROM WATERS OF THE STATE AND STORMWATER INLETS OR CONVEYANCES SO THAT STORMWATER COMING INTO CONTACT WITH THESE ACTIVITIES CANNOT REACH WATERS OF THE STATE
- 1.2. ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO HANDLE SPILLS, LEAKS, AND DISPOSAL OF LIQUIDS, AND PROVIDE
- 1.3. HAVE A SPILL KIT AVAILABLE ON SITE AND ENSURE PERSONNEL ARE AVAILABLE TO RESPOND EXPEDITIOUSLY IN THE EVENT OF A
- 1.4. CLEAN UP SPILLS OR CONTAMINATED SURFACES IMMEDIATELY USING DRY CLEAN UP MEASURES, AND ELIMINATE THE SOURCE OF THE SPILL TO PREVENT A DISCHARGE OR A CONTINUATION OF AN ONGOING DISCHARGE
- 1.5. STORE MATERIALS IN A COVERED AREA OR IN SECONDARY CONTAINMENT TO PREVENT THE EXPOSURE OF THESE CONTAINERS TO PRECIPITATION OR STORMWATER RUNOFF, OR A SIMILARLY EFFECTIVE MEANS DESIGNED TO PREVENT THE DISCHARGE OF POLLUTANTS FROM THESE AREAS.

## 2. EQUIPMENT AND VEHICLE FUELING AND MAINTENANCE

- 2.1. USE DRIP PANS AND ABSORBENTS UNDER OR AROUND VEHICLES
- 2.2. DISPOSE OF OR RECYCLE OIL AND OILY WASTES IN ACCORDANCE WITH OTHER FEDERAL, STATE, TRIBAL, OR LOCAL REQUIREMENTS.

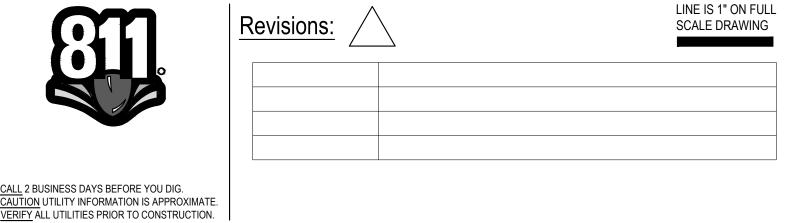
## 3. EMERGENCY SPILL NOTIFICATION

3.1. DISCHARGE OF TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE ARE PROHIBITED CONSISTENT WITH SECTION 1.5 (OF THE 1200 C PERMIT). WHERE A LEAK, SPILL, OR OTHER RELEASE CONTAINING A HAZARDOUS SUBSTANCE OR OIL OCCURS DURING A 24-HOUR PERIOD, THE REGISTRANT MUST NOTIFY THE OREGON EMERGENCY RESPONSE SYSTEM AT (800)452-0311 AS SOON AS THE REGISTRANT HAS KNOWLEDGE OF THE RELEASE. CONTACT INFORMATION MUST BE IN LOCATIONS THAT ARE READILY ACCESSIBLE AND AVAILABLE TO ALL EMPLOYEES.

**PLAN VIEW** SCALE: 1" = 20'



CALL 2 BUSINESS DAYS BEFORE YOU DIG.





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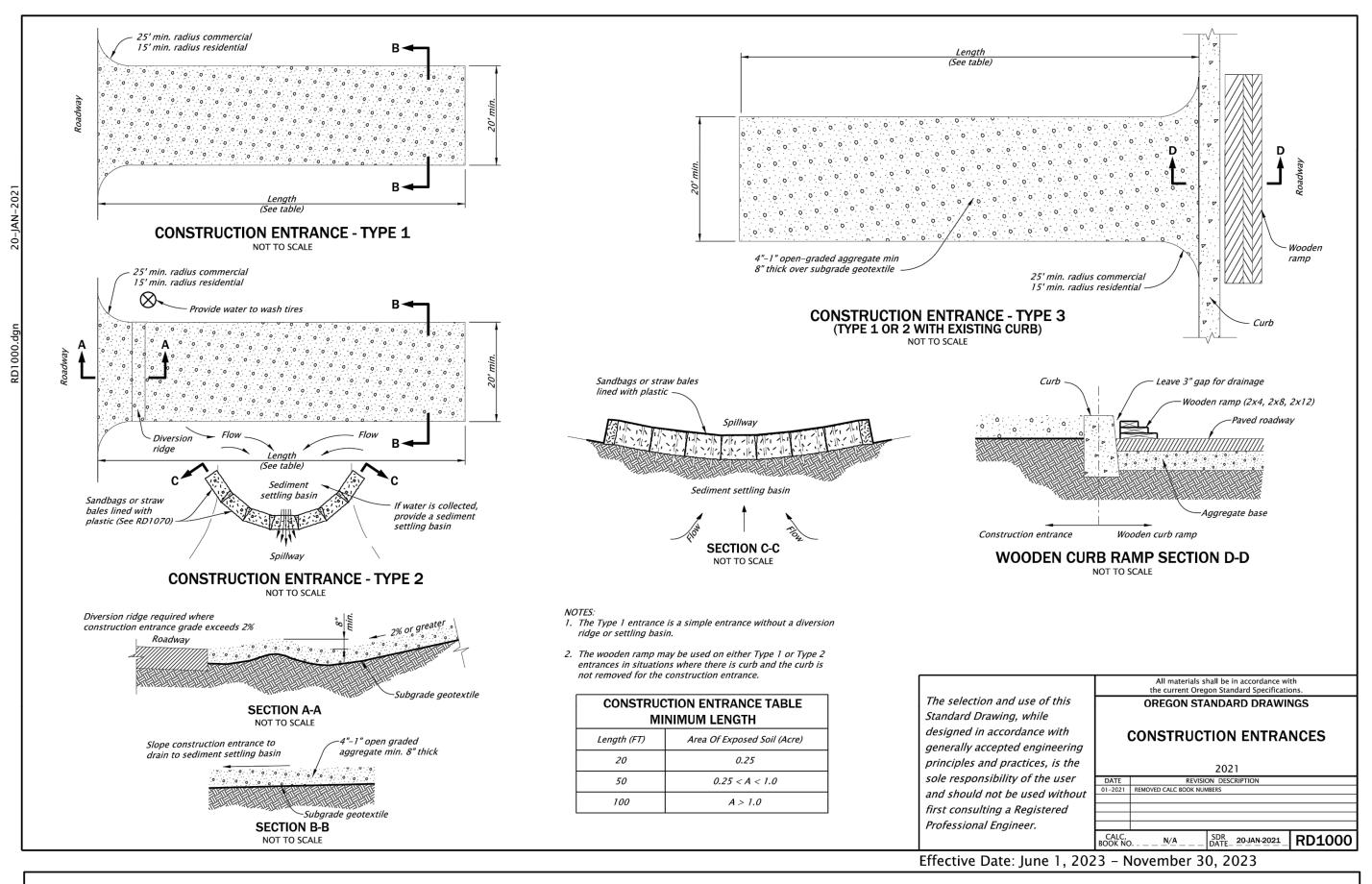
**EROSION CONTROL PLAN** 

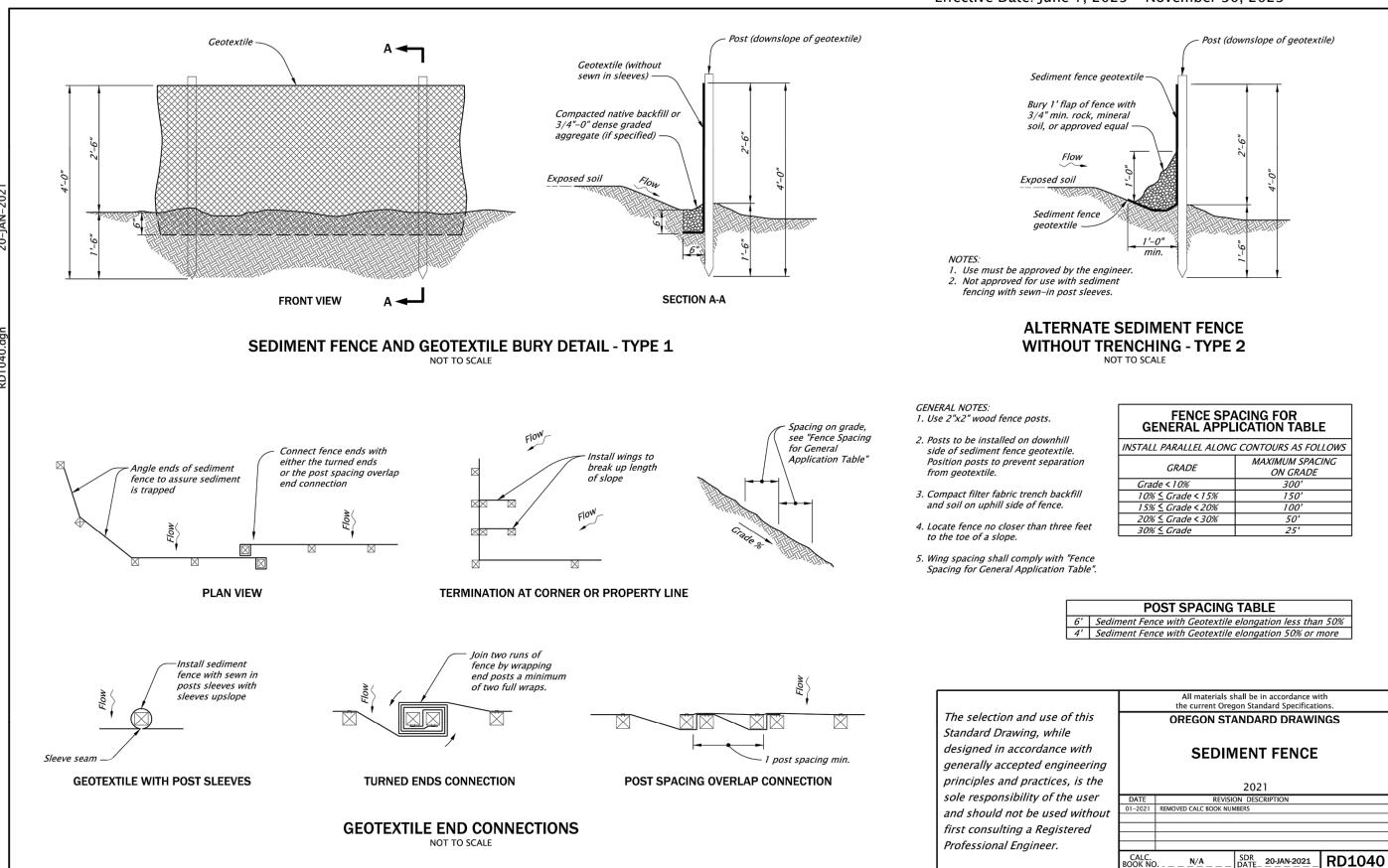
**ENGINEERING PLANS** 

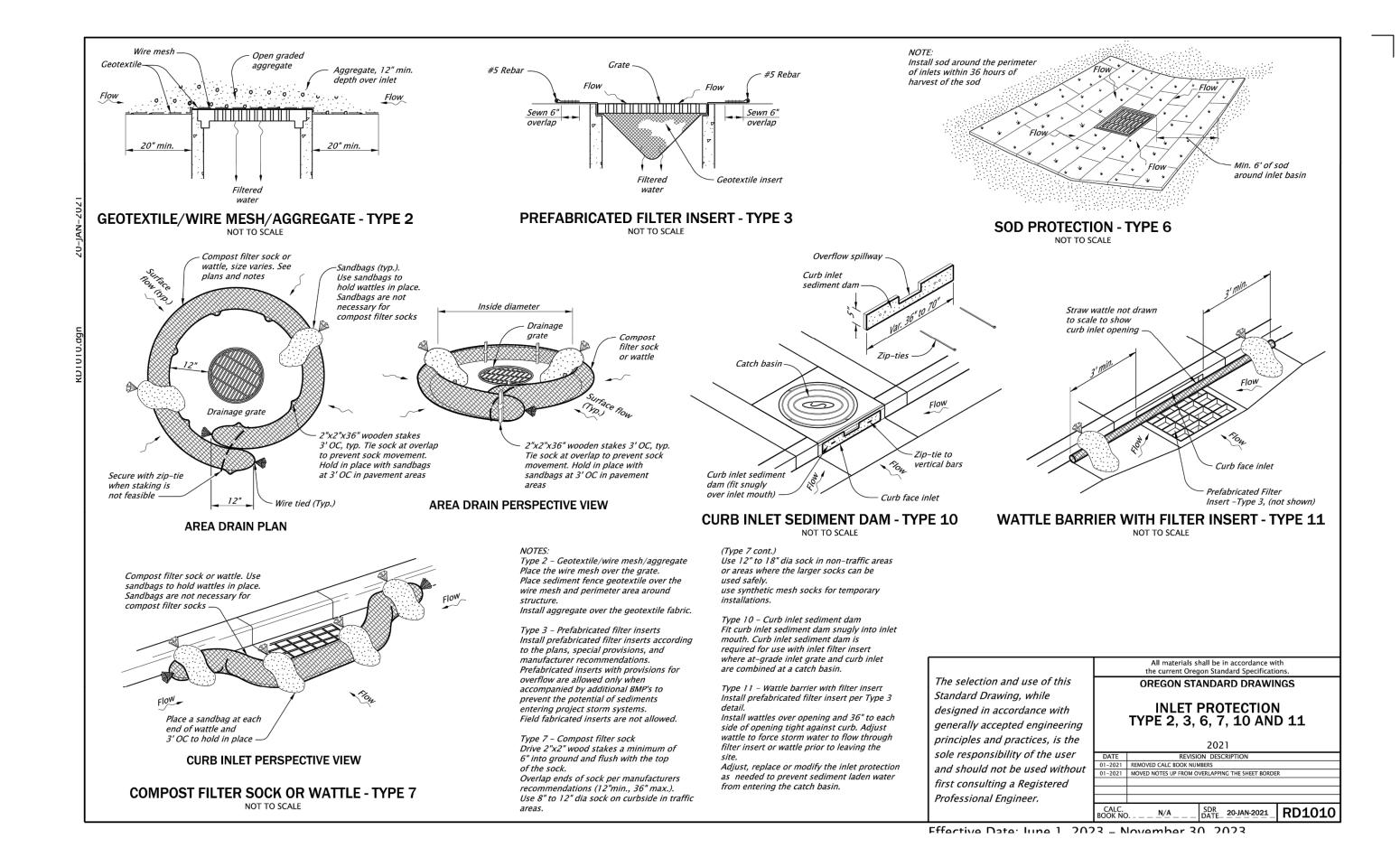
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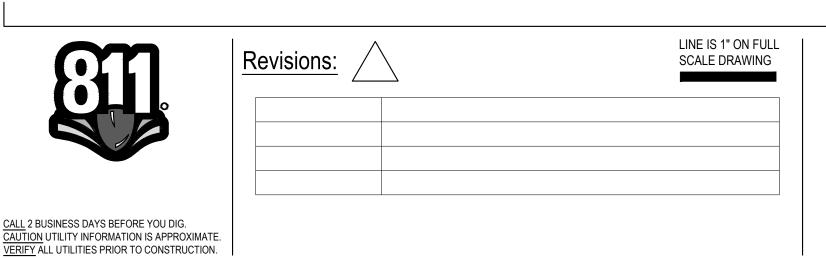
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Effective Date: June 1, 2023 - November 30, 2023

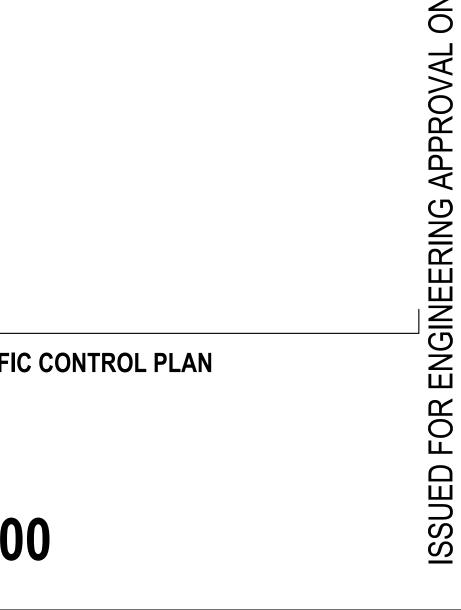
**E HARRISON WATER LINE REPLACEMENT**CANNON BEACH, OR 97110

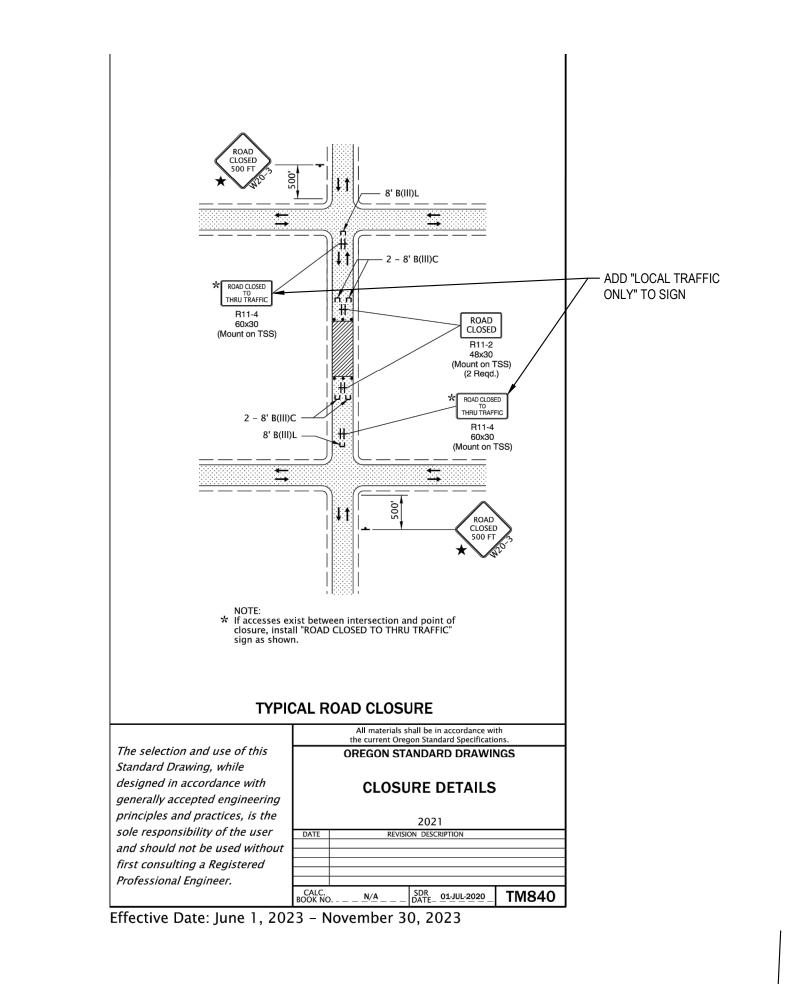
Issue Date: 6/16/2023

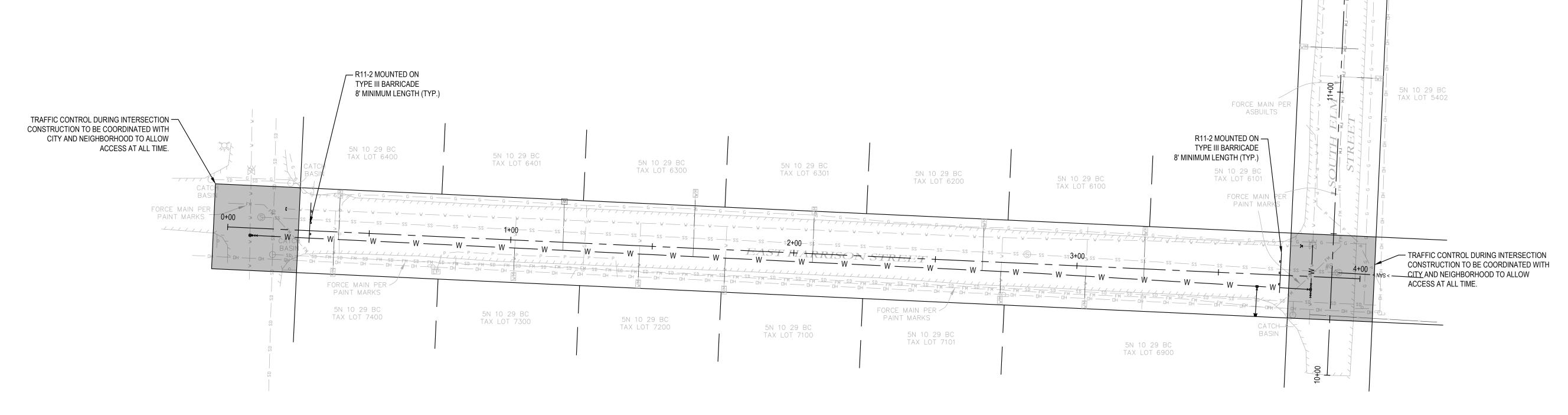
Project Manager DCK
Drawn by CKJ
Checked by TWT

EROSION CONTROL DETAILS

C190







**PLAN VIEW** 

SCALE: 1" = 20'



LINE IS 1" ON FULL Revisions: SCALE DRAWING CALL 2 BUSINESS DAYS BEFORE YOU DIG.
CAUTION UTILITY INFORMATION IS APPROXIMATE.
VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.



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# E HARRISON WATER LINE REPLACEMENT

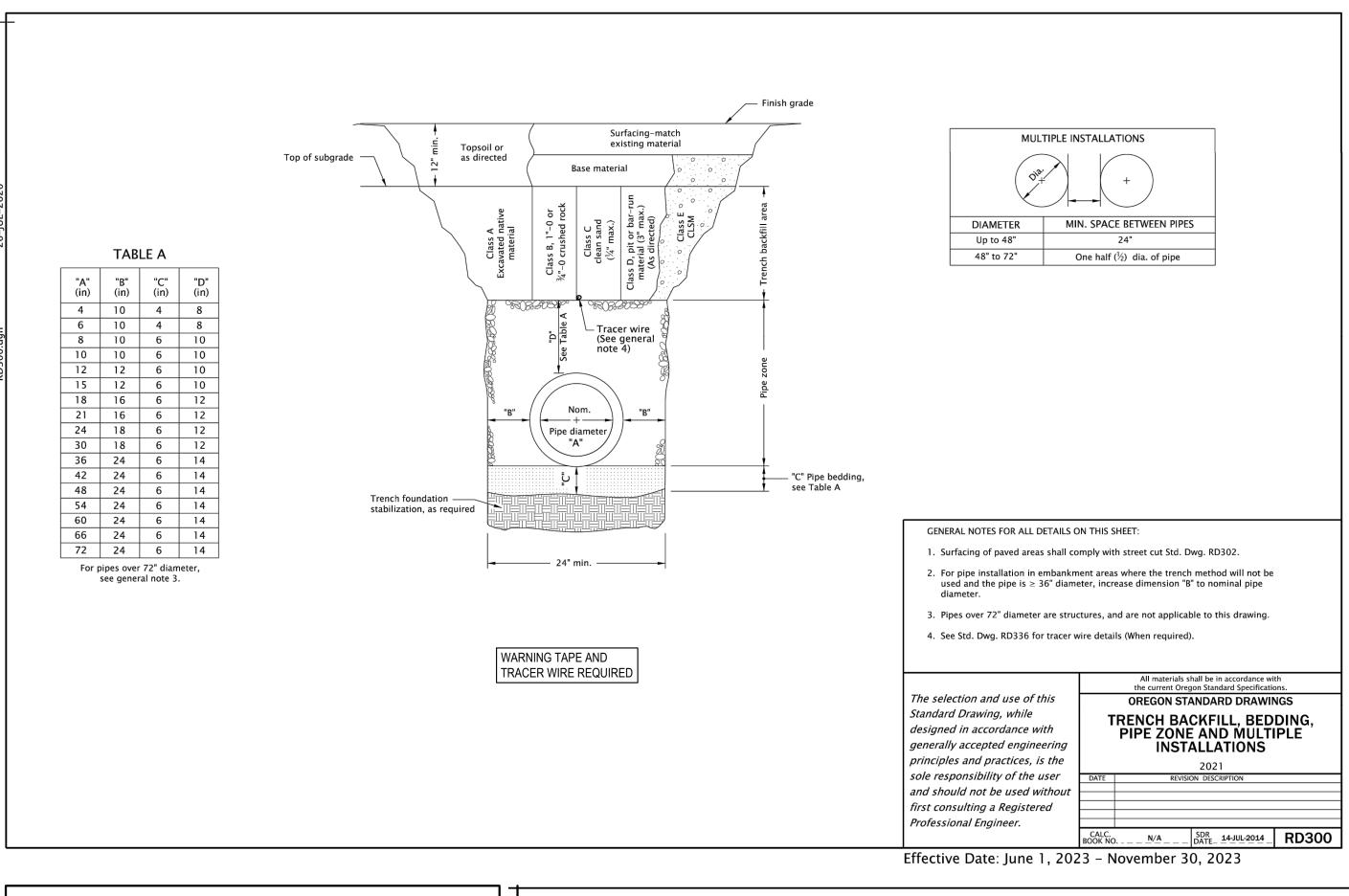
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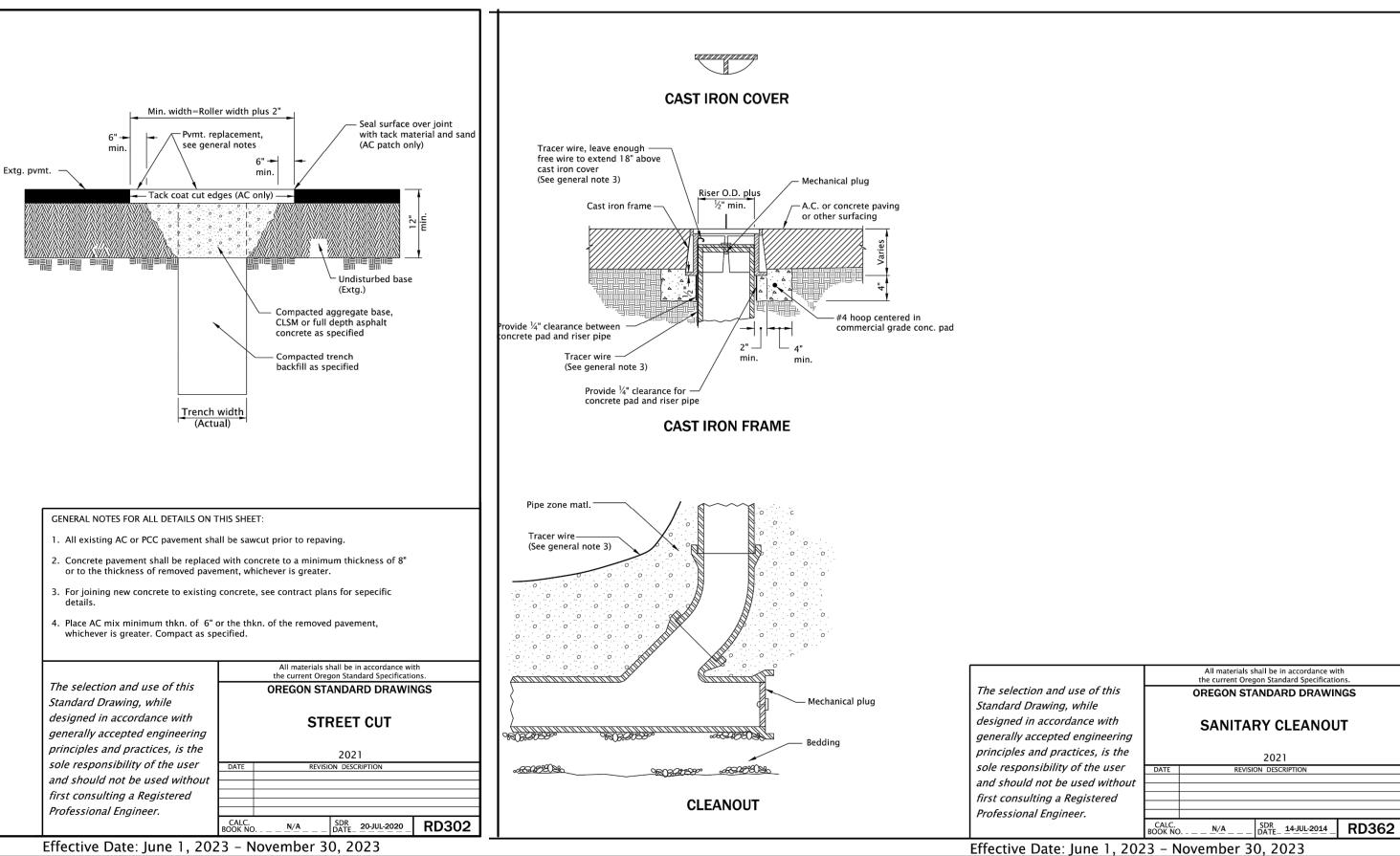
**ENGINEERING PLANS** Issue Date: 6/16/2023

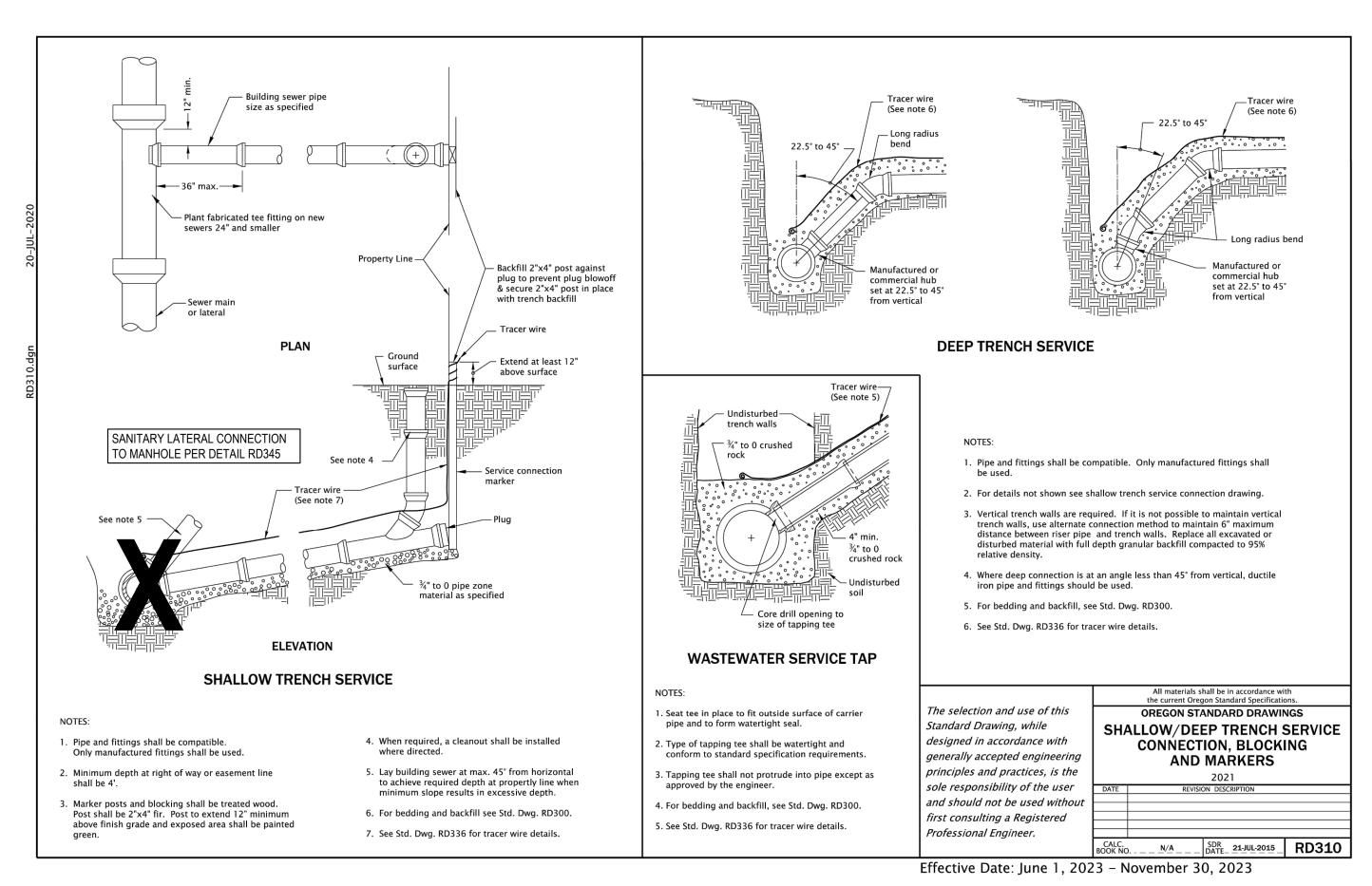
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Drawn by CKJ
Checked by TWT

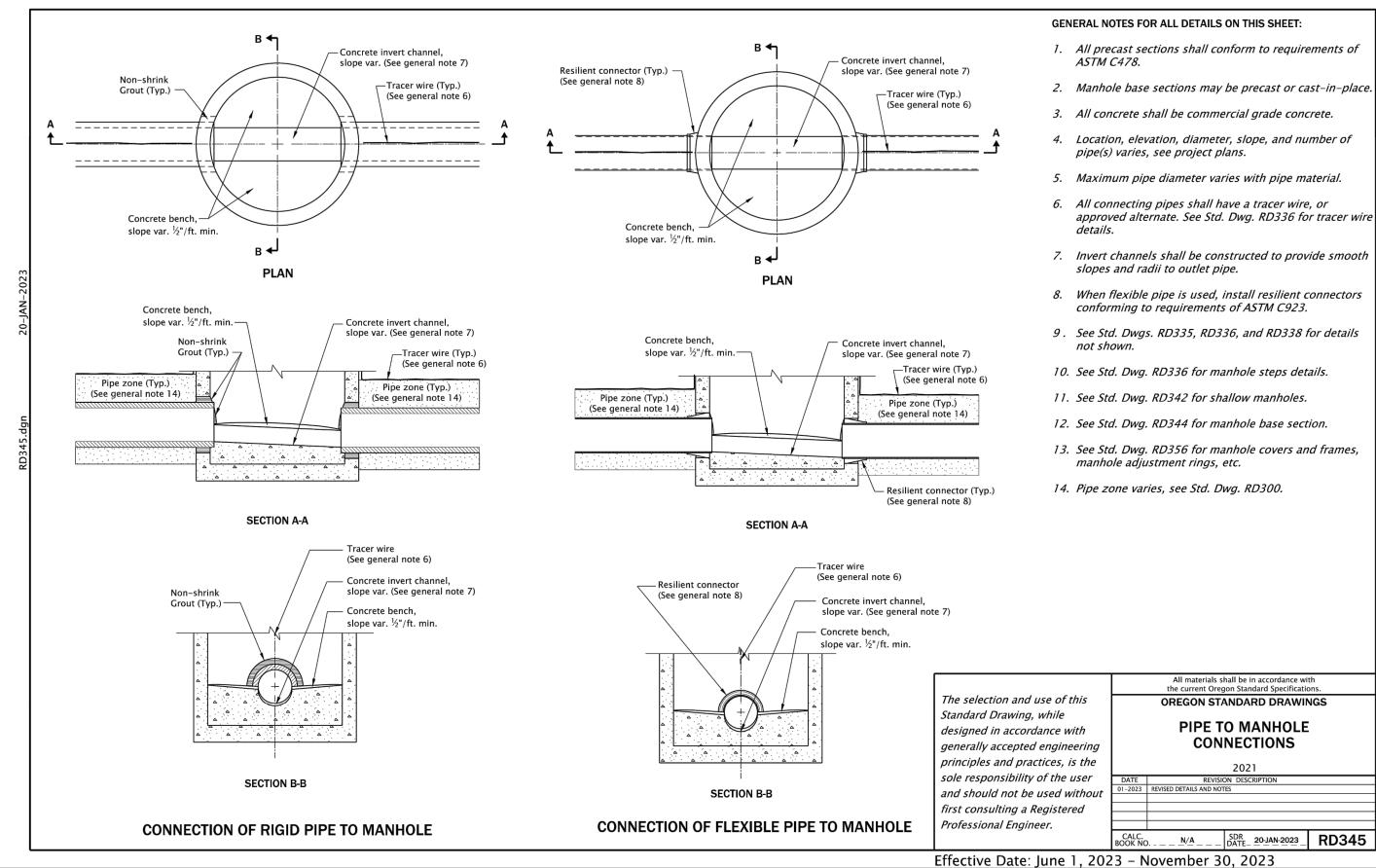
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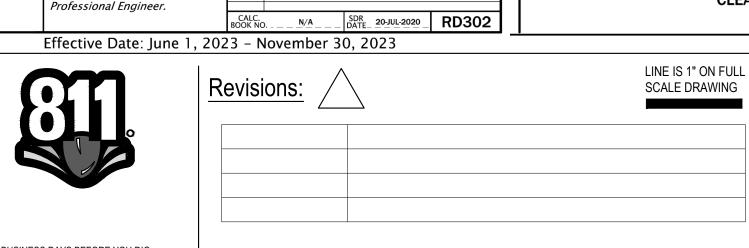














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# E HARRISON WATER LINE REPLACEMENT CANNON BEACH, OR 97110

**ENGINEERING PLANS** 

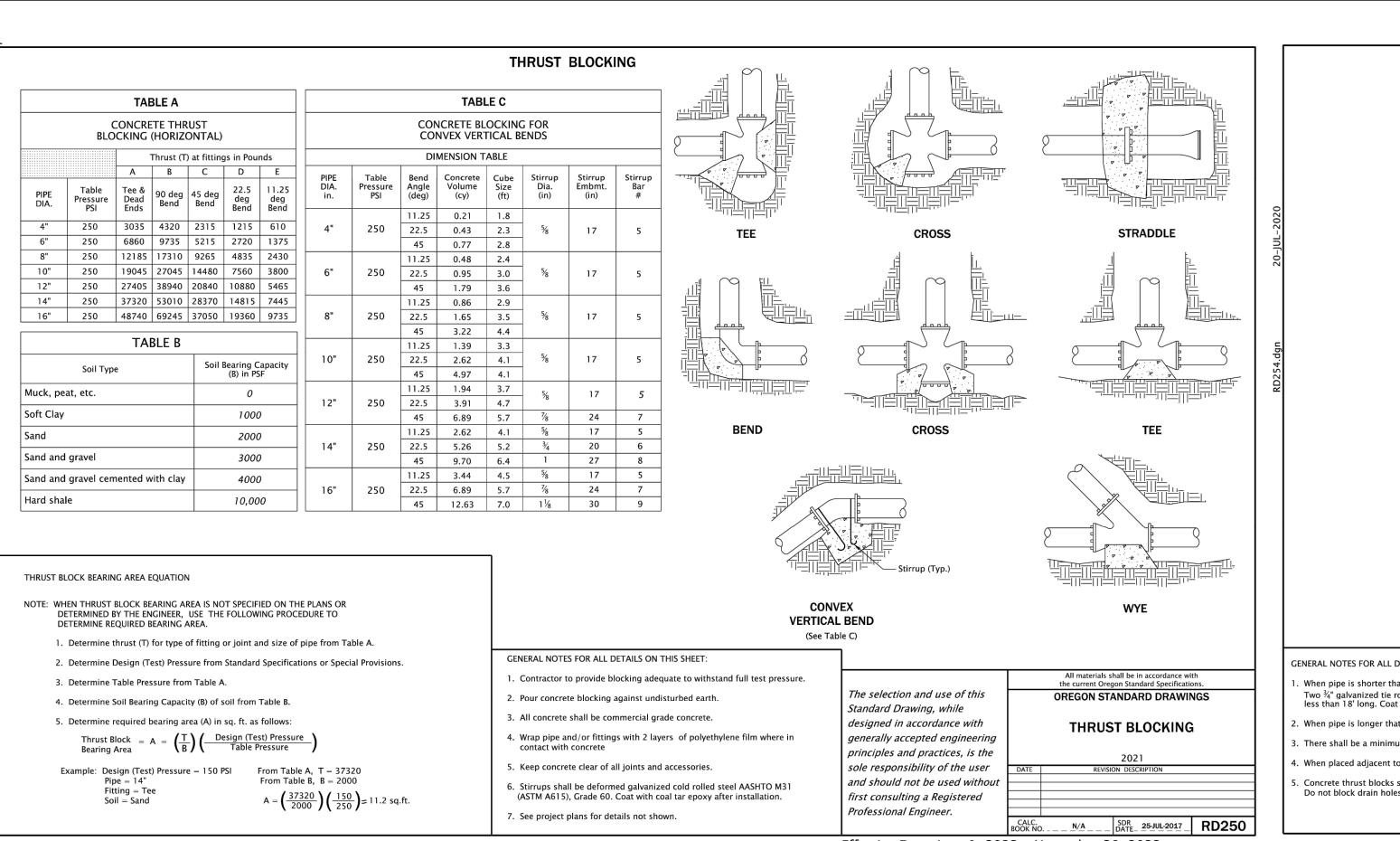
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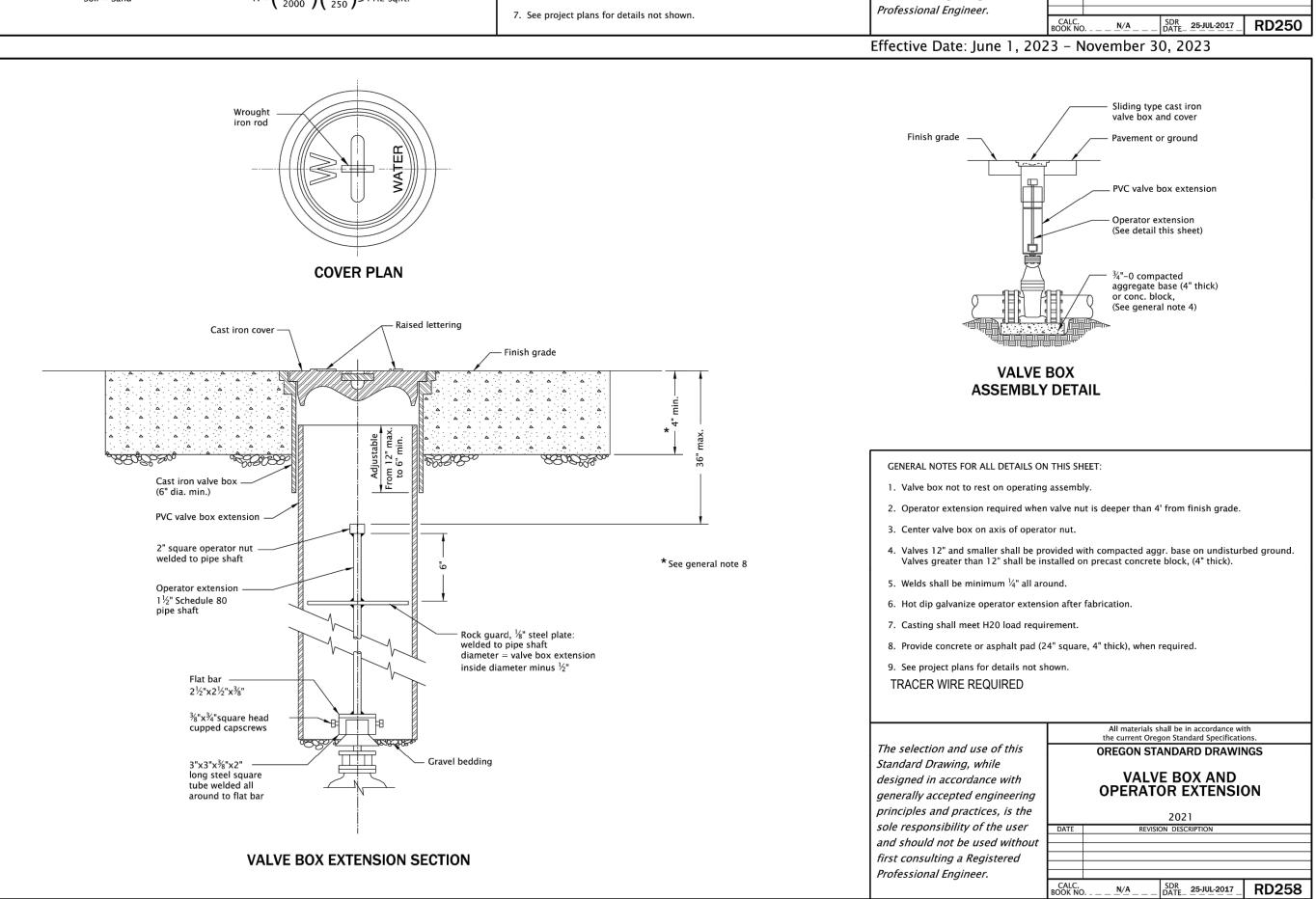
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Checked by TWT Checked by

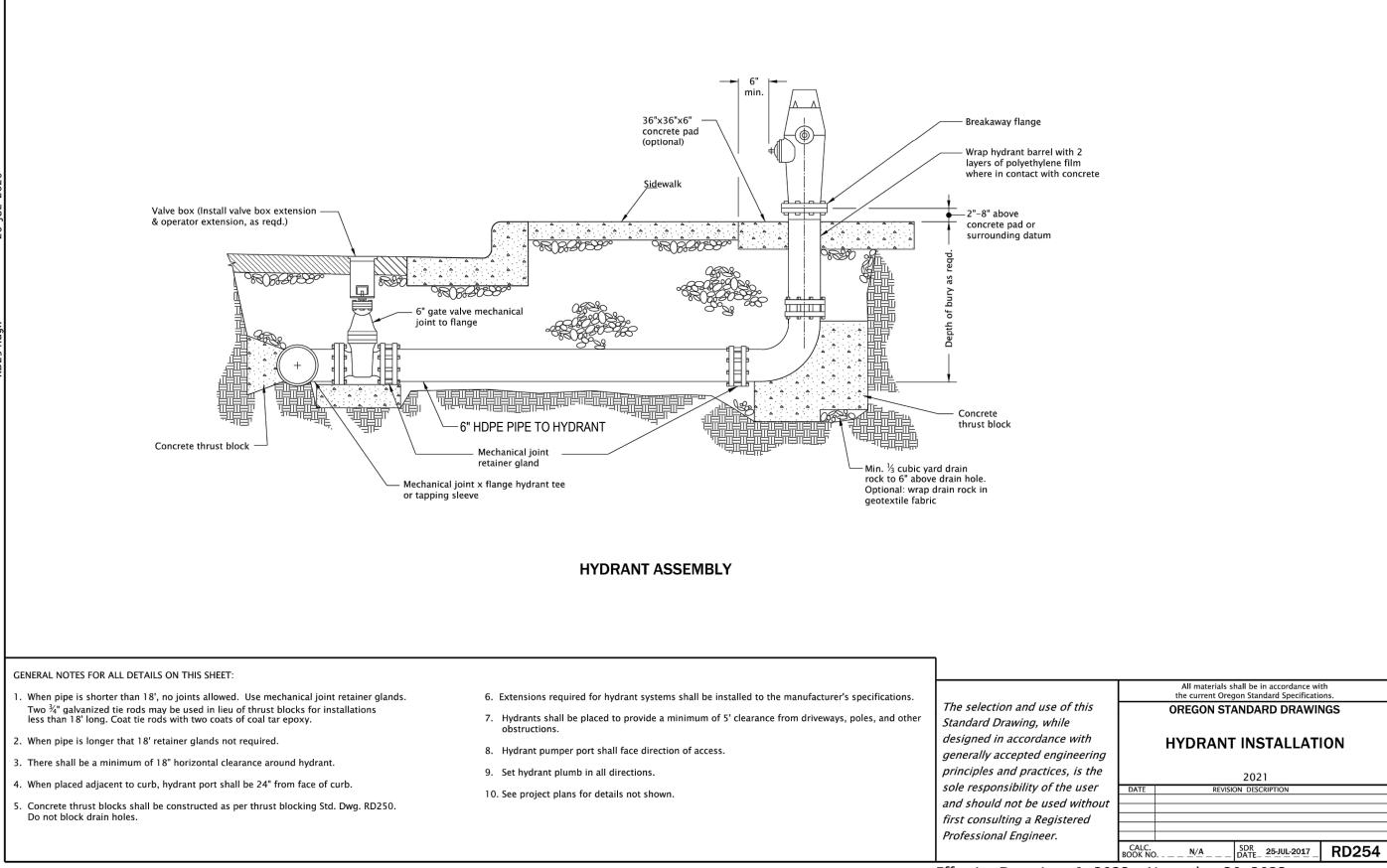
CALL 2 BUSINESS DAYS BEFORE YOU DIG. CAUTION UTILITY INFORMATION IS APPROXIMATE.

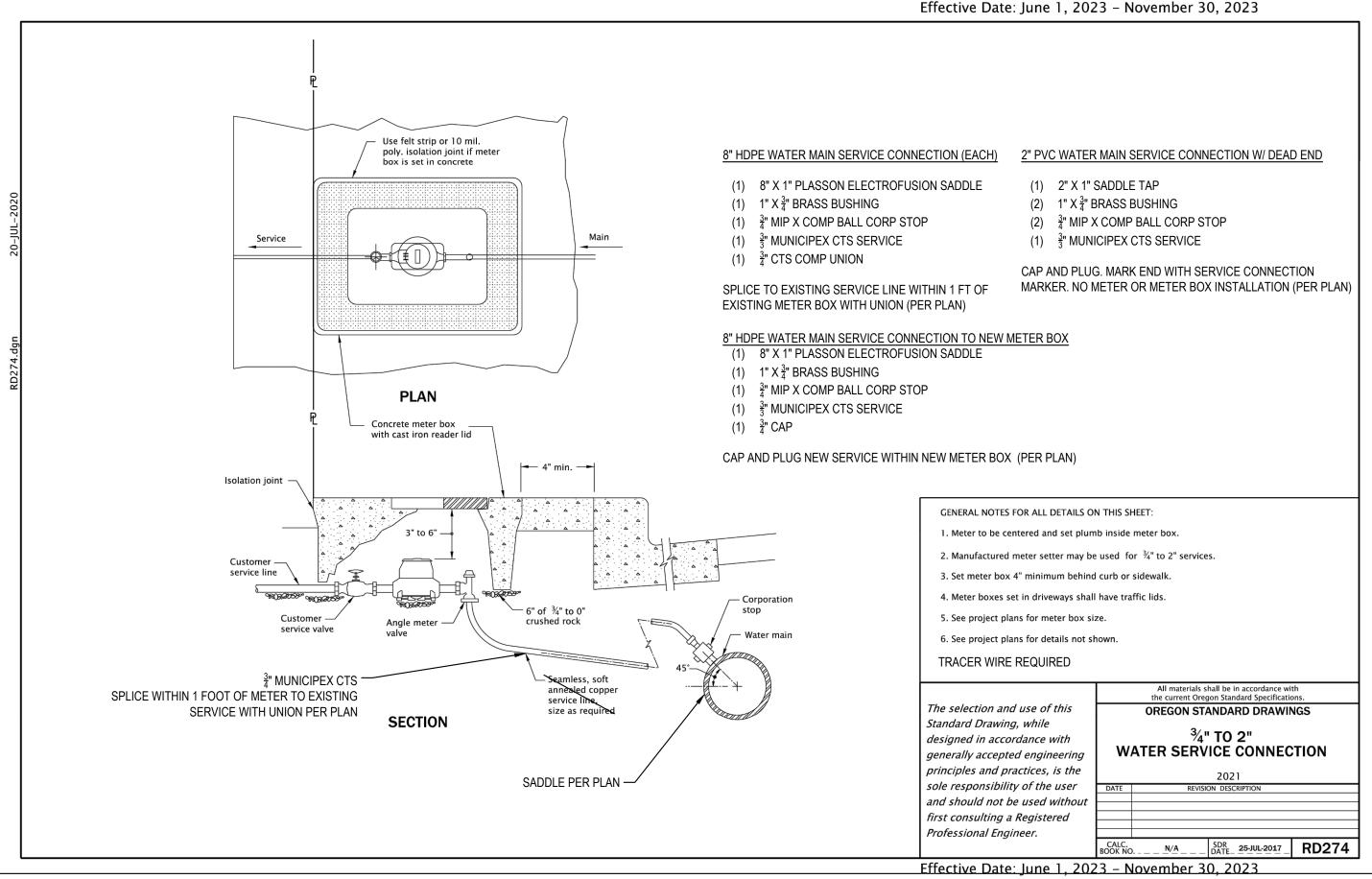
VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.

Issue Date: 6/16/2023











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CAUTION UTILITY INFORMATION IS APPROXIMATE.

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Revisions:

LINE IS 1" ON FULL SCALE DRAWING



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**E HARRISON WATER LINE REPLACEMENT**CANNON BEACH, OR 97110

CANNON BEACH, OR 97110

ENGINEERING PLANS
Issue Date: 6/16/2023

Project Manager DCK
Drawn by CKJ
Checked by TWT

C590

**WATERMAIN DETAILS**