

BASIS OF PLAN

THIS SITE PLAN IS BASED ON THE ALTA LAND TITLE SURVEY PREPARED BY BARGHAUSEN CONSULTING ENGINEERS, INC. (DATED AUGUST 9, 2022). PROPOSED SITE IMPROVEMENTS WERE PROVIDED BY MACKENZIE ARCHITECTS DATE 6-21-2023.

THE EXISTING CULTURAL AND TOPOGRAPHIC DATA SHOWN ON THESE DRAWINGS HAS BEEN PREPARED, IN PART, BASED UPON INFORMATION FURNISHED BY OTHERS. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, BCE, INC. CANNOT ENSURE ACCURACY AND THUS IS NOT RESPONSIBLE FOR THE ACCURACY OF THAT INFORMATION OR FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER TO HAVE ALL IMPROVEMENTS FIELD VERIFIED PRIOR TO CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BARGHAUSEN CONSULTING ENGINEERS, INC. PRIOR TO WORK.

SURVEY INFORMATION

TITLE REPORT INFORMATION

TITLE COMMITMENT:  
ALL TITLE INFORMATION SHOWN ON THIS MAP, INCLUDING APPURTENANT EASEMENTS AND ADJOINING DEEDS FOR UNPLATTED LOTS, IF ANY, HAS BEEN EXTRACTED FROM FIRST AMERICAN TITLE INSURANCE COMPANY ALTA COMMITMENT NO. NCS-1133990-CH2, DATED JUNE 3, 2022 AT 7:30 AM. IN PREPARING THIS MAP, BARGHAUSEN CONSULTING ENGINEERS, INC. HAS CONDUCTED NO INDEPENDENT TITLE SEARCH NOR IS BARGHAUSEN CONSULTING ENGINEERS, INC. AWARE OF ANY TITLE ISSUES AFFECTING THE SURVEYED PROPERTY OTHER THAN THOSE SHOWN ON THE MAP AND DISCLOSED BY SAID COMMITMENT. BARGHAUSEN CONSULTING ENGINEERS, INC. HAS RELIED WHOLLY ON SAID TITLE COMPANY'S REPRESENTATIONS OF THE TITLE'S CONDITION TO PREPARE THIS SURVEY AND THEREFORE BARGHAUSEN CONSULTING ENGINEERS, INC. QUALIFIES THE MAP'S ACCURACY AND COMPLETENESS TO THAT EXTENT.

LEGAL DESCRIPTION (PER ABOVE REFERENCED TITLE REPORT)

PARCEL "A"  
THAT PORTION OF BLOCKS 34 TO 37, INCLUSIVE, OF REPLAT OF A PART OF FRANK R. SPINNING'S FIRST ADDITION TO THE TOWN OF PUYALLUP, PIERCE COUNTY, WASHINGTON, ACCORDING TO PLAT RECORDED IN BOOK 6 OF PLATS AT PAGE(S) 91, LYING NORTHERLY OF THE NORTHERN PACIFIC RAILWAY COMPANY RIGHT OF WAY, IN PUYALLUP, PIERCE COUNTY, WASHINGTON.

TOGETHER WITH THE SOUTH 30 FEET OF VACATED PIONEER AVENUE ABUTTING BLOCKS 34 AND 35 AS VACATED BY CITY OF PUYALLUP ORDINANCE NO. 211 RECORDED FEBRUARY 14, 1902 UNDER AUDITOR'S NO. 146161.

PARCEL "B"  
A PARCEL OF LAND SITUATED WITHIN THE SOUTHEAST QUARTER OF SECTION 27, TOWNSHIP 20 NORTH, RANGE 4 EAST OF THE WILLAMETTE MERIDIAN, IN PIERCE COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF BLOCK 33 OF REPLAT OF A PART OF FRANK R. SPINNING'S FIRST ADDITION TO THE TOWN OF PUYALLUP, PIERCE COUNTY, WASHINGTON, ACCORDING TO PLAT RECORDED IN BOOK 6 OF PLATS AT PAGE 91;  
THENCE NORTH 00°50' WEST 28.58 FEET ALONG THE EAST LINE OF SAID BLOCK 33;  
THENCE SOUTH 14°18'45" WEST 27.61 FEET TO A POINT ON THE SOUTH LINE OF SAID BLOCK 33;  
THENCE SOUTH 75°49' EAST 7.74 FEET ALONG SAID SOUTH LINE TO THE POINT OF BEGINNING, IN PUYALLUP, PIERCE COUNTY, WASHINGTON.

PARCEL "C"  
THAT PORTION OF THE SOUTHEAST OF SECTION 27, TOWNSHIP 20 NORTH, RANGE 4 EAST OF THE WILLAMETTE MERIDIAN, IN PIERCE COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT THE SECTION CORNER COMMON TO SECTIONS 26, 27, 34 AND 35, ALL IN SAID TOWNSHIP 20 NORTH, RANGE 4 EAST;  
THENCE NORTHERLY ALONG THE SECTION LINE COMMON TO SAID SECTIONS 26 AND 27, A DISTANCE OF 1578.0 FEET, MORE OR LESS, TO THE POINT OF INTERSECTION WITH A LINE DRAWN PARALLEL WITH AND DISTANT 51.13 FEET NORTHERLY OF, AS MEASURED AT RIGHT ANGLES TO, BURLINGTON NORTHERN RAILROAD COMPANY'S MAIN TRACK CENTERLINE, AS NOW LOCATED AND CONSTRUCTED;  
THENCE NORTHWESTERLY DEFLECTING 74°59' TO THE LEFT FROM SAID SECTION LINE, ALONG SAID LINE LYING 51.13 FEET NORTHERLY OF AND PARALLEL WITH SAID MAIN TRACT CENTERLINE, A DISTANCE OF 493.0 FEET, MORE OR LESS, TO THE POINT OF INTERSECTION WITH THE WEST RIGHT OF WAY LINE OF FIFTEENTH STREET SOUTHEAST, AS NOW LOCATED IN THE CITY OF PUYALLUP, WASHINGTON SAID POINT BEING THE TRUE POINT OF BEGINNING OF THE PARCEL TO BE DESCRIBED;  
THENCE CONTINUING NORTHWESTERLY ALONG SAID PARALLEL LINE, 920.0 FEET, MORE OR LESS, TO THE POINT OF INTERSECTION WITH A LINE DRAWN PARALLEL WITH AND DISTANT 8.50 FEET NORTHERLY OF, AS MEASURED AT RIGHT ANGLES TO, THE MOST NORTHERLY SPUR TRACT OF SAID BURLINGTON NORTHERN RAILROAD COMPANY, AS NOW LOCATED AND CONSTRUCTED;  
THENCE NORTHERLY, PARALLEL WITH THE WEST LINE OF BLOCK 32 OF REPLAT OF A PART OF FRANK R. SPINNING'S FIRST ADDITION TO THE TOWN OF PUYALLUP, ACCORDING TO PLAT RECORDED IN BOOK 6 OF PLATS AT PAGE 91, A DISTANCE OF 148.0 FEET;  
THENCE NORTHWESTERLY, PARALLEL WITH SAID LINE LYING 51.13 FEET NORTHERLY OF SAID RAILROAD COMPANY'S MAIN TRACT CENTERLINE, A DISTANCE OF 40.0 FEET;  
THENCE NORTHERLY, PARALLEL WITH SAID WEST LINE OF BLOCK 32, 106.0 FEET TO THE POINT OF INTERSECTION WITH A LINE DRAWN PARALLEL WITH AND DISTANT 300.0 FEET NORTHERLY OF, AS MEASURED AT RIGHT ANGLES TO, SAID MAIN TRACT CENTERLINE;  
THENCE EASTERLY ALONG SAID PARALLEL LINE, 946.0 FEET, MORE OR LESS, TO THE POINT OF INTERSECTION WITH THE WEST RIGHT OF WAY LINE OF FIFTEENTH STREET SOUTHEAST;  
THENCE SOUTHERLY ALONG SAID WEST RIGHT OF WAY LINE TO THE TRUE POINT OF BEGINNING, IN PIERCE COUNTY, WASHINGTON.

HORIZONTAL DATUM:  
NAD 83/11  
PER WSDOT PUBLISHED MONUMENTS. WSDOT CONTROL POINT "GP 27512-100" WAS HELD FOR POSITION, AND A LINE BETWEEN SAID POINT "GP 27512-100" AND CONTROL POINT "GP27512-18AZ" WAS HELD FOR ROTATION, BEING SOUTH 38°23'07" WEST.

VERTICAL DATUM:  
NAVD88  
VERTICAL CONTROL PUBLISHED BY WSDOT, POINT "GP 27512-100" WAS HELD FOR ELEVATION. BENCHMARK ELEVATION = 81.27'

SITE BENCHMARK:  
SET MAGNAIL & WASHER #49 IN THE SIDEWALK ON THE WEST SIDE OF 15TH STREET S.E. ELEVATION =55.16" (NAVD 88)

PROJECT INFO:  
TOTAL SITE AREA= 346,555 SF  
TOTAL IMPERVIOUS AREA= 289,069 SF (83.4%)  
TOTAL PERVIOUS AREA= 57,486 SF (16.6%)

UTILITIES/SERVICES

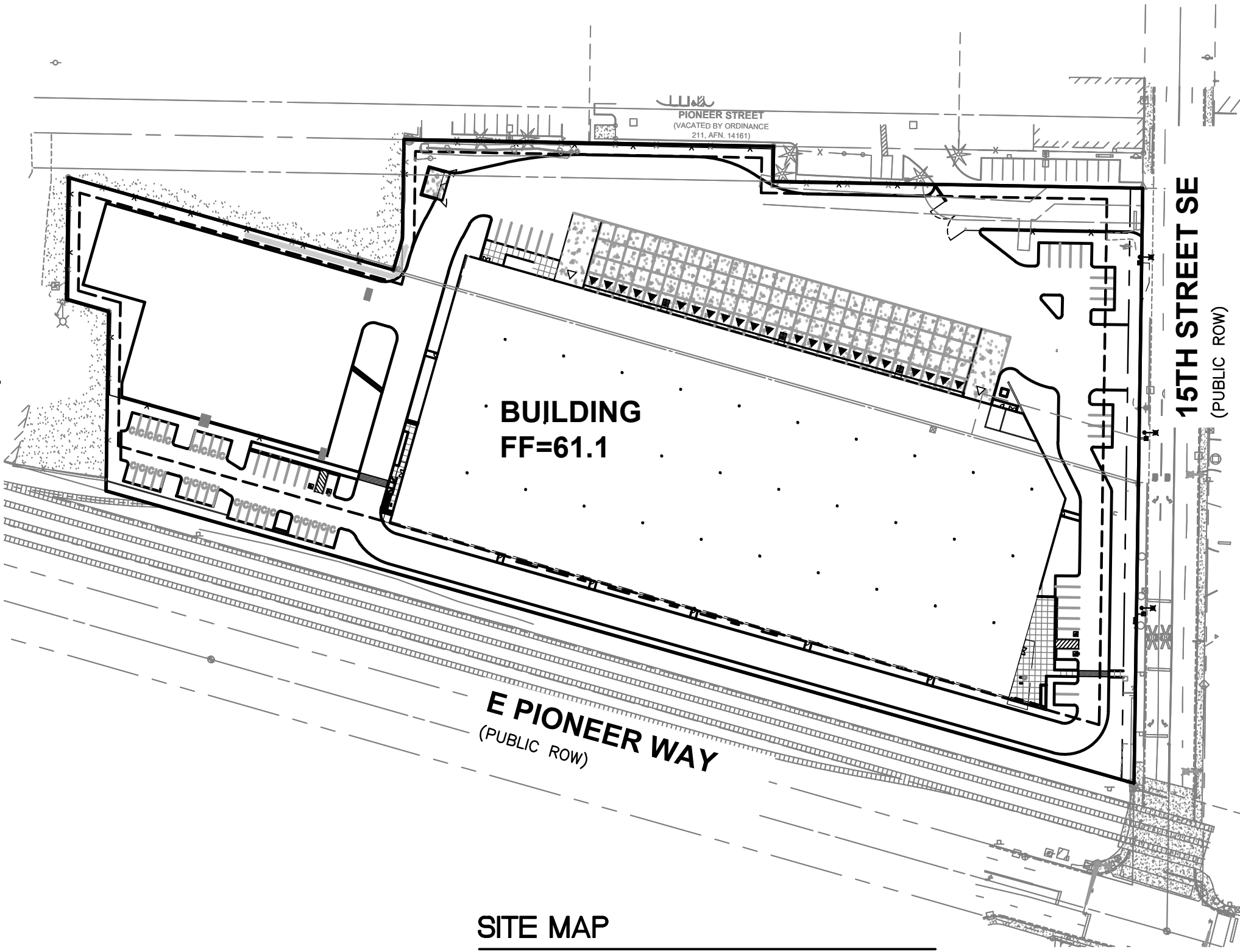
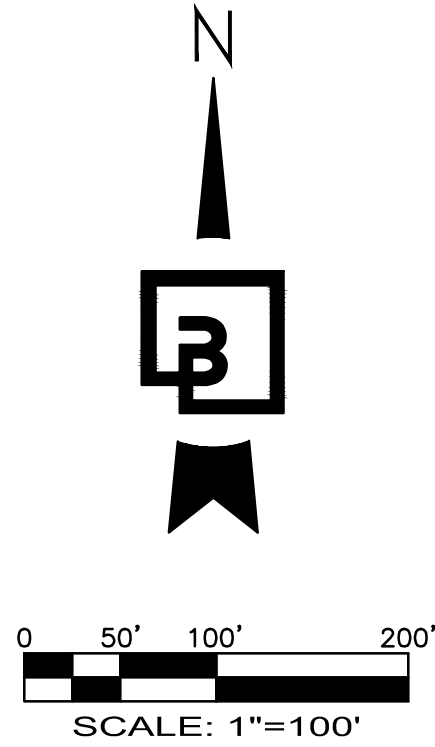
WATER:  
CITY OF PUYALLUP WATER DIVISION  
1100 39TH AVE. SE  
PUYALLUP, WA 98374  
(253) 841-5505

GAS:  
PUGET SOUND ENERGY  
8001 SOUTH 212TH STREET  
KENT, WA 98032  
(253) 395-7065

POWER:  
PUGET SOUND ENERGY  
8001 SOUTH 212TH STREET  
KENT, WA 98032  
(253) 395-7065

PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

COVER SHEET  
CIVIL PLANS



SITE MAP

1"=100'

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ESTIMATED EARTHWORK VOLUMES:

(FOR PERMITTING ONLY. NOT FOR BID PURPOSES)  
EARTHWORK, STRIPPING EXPORT = 0  
ON-SITE CUT/FILL = 6,000 CY  
EARTHWORK, STRUCTURAL IMPORT = 0

Separate the amount of on-site cut/fill. Is the site cutting or filling? [civils, pg 1]

HORIZONTAL CONTROL / SURVEY NOTE:

- CONTRACTOR SHALL OBTAIN SERVICES OF A LICENSED LAND SURVEYOR TO STAKE HORIZONTAL AND VERTICAL CONTROL FOR ALL NEW IMPROVEMENTS. CONTRACTOR SHALL CONTACT BARGHAUSEN CONSULTING ENGINEERS, INC. TO OBTAIN ELECTRONIC CAD FILES FOR STAKING PURPOSES.
- UNDERGROUND UTILITIES AND FEATURES DEPICTED HEREON ARE BASED ON FIELD OBSERVATION, MARKINGS, DEVELOPMENT PLANS, AND/OR BEST AVAILABLE RECORD DOCUMENTS ONLY. CONTRACTOR SHALL FIELD VERIFY SIZE AND TYPE OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BARGHAUSEN CONSULTING ENGINEERS, INC. PRIOR TO WORK.

UTILITY CONFLICT NOTE:

CAUTION:  
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION, AND DEPTH OF ALL EXISTING UTILITIES WHETHER SHOWN ON THESE PLANS OR NOT BY POT-HOLING THE UTILITIES AND SURVEYING THE HORIZONTAL AND VERTICAL LOCATION PRIOR TO CONSTRUCTION. THIS SHALL INCLUDE CALLING UTILITY LOCATE @ 811 AND THEN POT-HOLING ALL OF THE EXISTING UTILITIES AT LOCATIONS OF NEW UTILITY CROSSINGS TO PHYSICALLY VERIFY WHETHER OR NOT CONFLICTS EXIST. LOCATIONS OF SAID UTILITIES AS SHOWN ON THESE PLANS ARE BASED UPON THE UNVERIFIED PUBLIC INFORMATION AND ARE SUBJECT TO VARIATION. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.

CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR OBTAINING PERMITS FROM THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES FOR REMOVING AND REPLACING ALL SURVEY MONUMENTATION THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITY, PURSUANT TO WAC 332-120. APPLICATIONS MUST BE COMPLETED BY A REGISTERED LAND SURVEYOR. APPLICATIONS FOR PERMITS TO REMOVE MONUMENTS MAY BE OBTAINED FROM THE WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES, OR BY CONTACTING THEIR OFFICE BY TELEPHONE AT (360) 902-1190.

WASHINGTON STATE DEPARTMENT OF NATURAL RESOURCES  
PUBLIC LAND SURVEY OFFICE  
801 88th AVE S.E.  
OLYMPIA, WASHINGTON 98501-7019

UPON COMPLETION OF CONSTRUCTION, ALL MONUMENTS DISPLACED, REMOVED, OR DESTROYED SHALL BE REPLACED BY A REGISTERED LAND SURVEYOR, AT THE COST AND AT THE DIRECTION OF THE CONTRACTOR, PURSUANT TO THESE REGULATIONS. THE APPROPRIATE FORMS FOR REPLACEMENT OF SAID MONUMENTATION SHALL ALSO BE THE RESPONSIBILITY OF THE CONTRACTOR.

TAX PARCEL NUMBERS

7845000161, 7845000170, 0420274126

ZONING

ML - LIMITED MANUFACTURING

OWNER/APPLICANT

CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD, 10TH FLOOR  
LOS ANGELES, CA 90049

CIVIL ENGINEERING CONSULTANT:

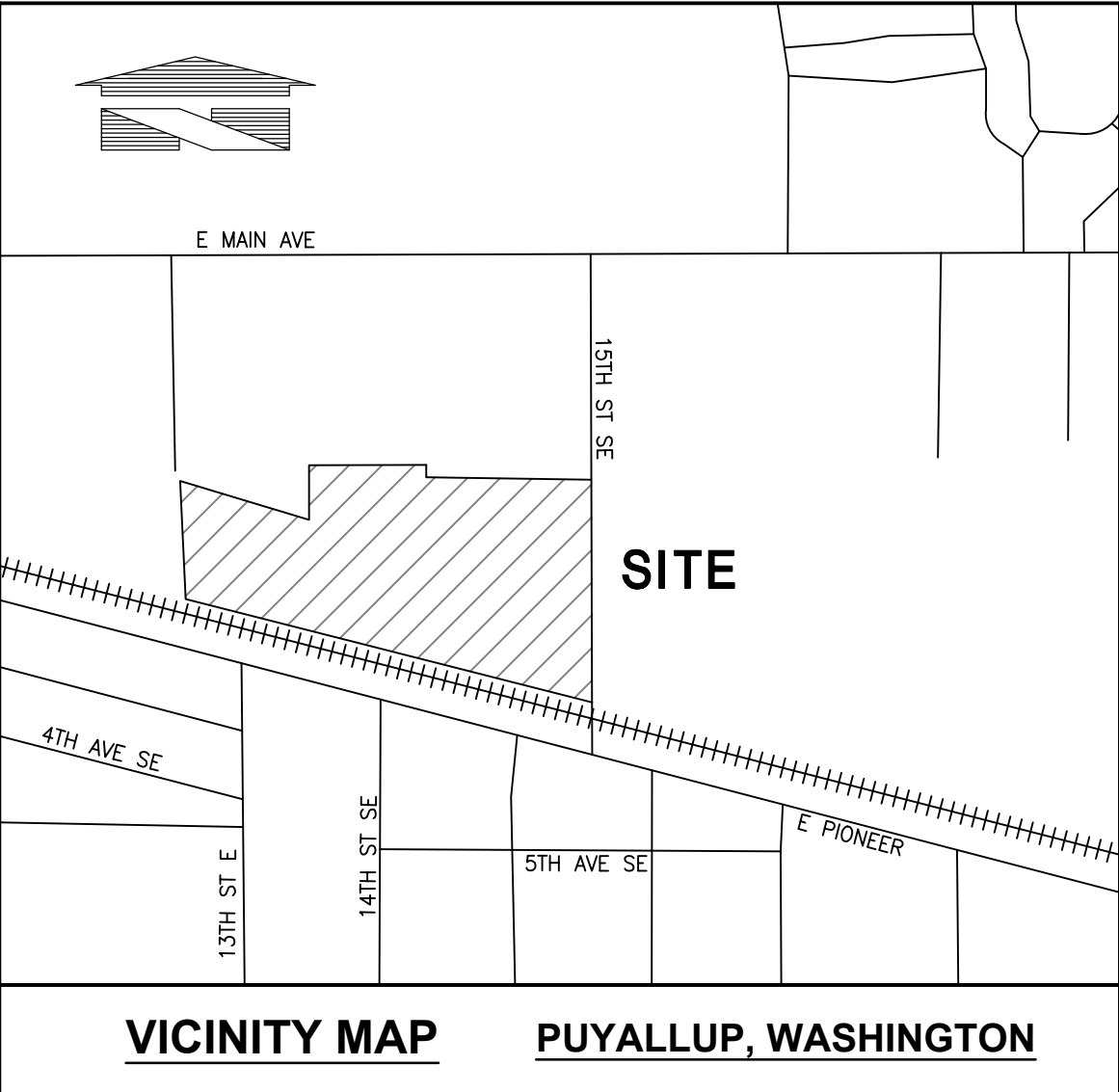
BARGHAUSEN CONSULTING ENGINEERS  
18215 72ND AVENUE SOUTH  
KENT, WA. 98032  
(425) 251-6222  
(425) 251-8782 (FAX)  
JASON HUBBELL  
EMAIL: jhubbell@barghausen.com

SITE SURVEY CONSULTANT:

BARGHAUSEN CONSULTING ENGINEERS  
18215 72ND AVENUE SOUTH  
KENT, WA. 98032  
(425) 251-6222  
(425) 251-8782 (FAX)  
RYAN LEE

SOILS REPORT NOTES

- THE FOLLOWING SOILS REPORTS/ASSESSMENTS WERE PREPARED FOR THE SITE: GEOTECHNICAL REPORT, PROJECT NO. T-8661 DATED: JAN 12TH 2022:  
  
240 - 15TH STREET SE INDUSTRIAL  
240 - 15TH STREET SE  
PUYALLUP, WASHINGTON  
  
PREPARED BY:  
TERRA ASSOCIATES, INC.  
12220 113TH AVENUE NE, STE. 130  
KIRKLAND, WASHINGTON 98034
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL PROVISIONS OF THE SOILS REPORT FOR THE SITE BE OBSERVED AND COMPLIED WITH DURING ALL PHASES OF THE SITE PREPARATION, GRADING OPERATIONS, AND PAVING CONSTRUCTION.
- ANY PROVISIONS OF THE SOILS REPORT WHICH CONFLICT WITH INFORMATION SHOWN ELSEWHERE ON THESE DRAWINGS, OR WHICH REQUIRE FURTHER CLARIFICATION, SHALL BE BROUGHT TO THE ATTENTION OF BARGHAUSEN ENGINEERS.
- A REPRESENTATIVE FOR THE SOILS ENGINEER SHALL BE AVAILABLE TO OBSERVE AND APPROVE THE EARTHWORK OPERATIONS AND TO VERIFY FIELD CONDITIONS AS WORK PROCEEDS. THE SOILS ENGINEER SHALL SUBMIT FIELD REPORTS CERTIFYING THAT THE METHODS AND MATERIALS OF THE EARTHWORK OPERATIONS WERE IN ACCORDANCE WITH THE RECOMMENDATION OF THE SOILS INVESTIGATION AND THAT THE WORK WAS PERFORMED TO THE SATISFACTION OF THE ENGINEER. THE CONTRACTOR SHALL MAKE ALL PROVISIONS FOR SOILS INSPECTIONS AS RECOMMENDED WITHIN SOILS REPORT AS A MINIMUM. THIS INCLUDES THE OBSERVATION OF THE FOLLOWING BY A SOILS ENGINEER: UTILITY TRENCH EXCAVATIONS, UTILITY PIPE BEDDING, SUBGRADE STABILITY, FOOTING SUBGRADE CONDITIONS, STRUCTURAL FILL OBSERVATIONS AND TESTING, SITE DRAINAGE MEASURES AND OBSERVATIONS, PAVEMENT SUBGRADE OBSERVATIONS, EROSION CONTROL, SITE STABILITY INCLUDING TEMPORARY AND PERMANENT SLOPES.
- THE SOILS ENGINEER SHOULD BE NOTIFIED AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY SITE CLEARING OR GRADING.



VICINITY MAP

PUYALLUP, WASHINGTON

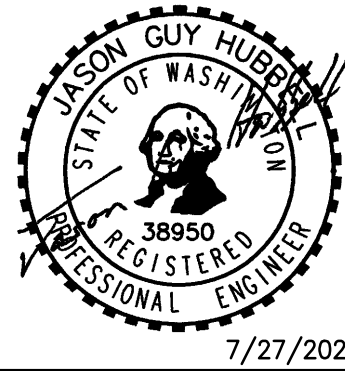
SITE ADDRESS

240 15TH STREET SE  
PUYALLUP, WA 98372

Title:

CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049

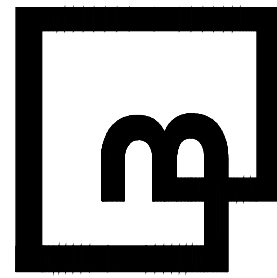
For:



Scale:  
Horizontal 1"=100'  
Vertical N/A

Designed: DL  
Drawn: RDC  
Checked: DL  
Approved: JGH  
Date: 6/23/23

Barghausen Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com



Job Number: 22085  
Sheet: C1 of 26



APPROVED

BY: CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE:

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.  
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.  
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.



GENERAL SITE NOTES:

- THE CONTRACTOR SHALL OBTAIN AND HAVE AVAILABLE COPIES OF THE APPLICABLE GOVERNING AGENCY STANDARDS AT THE JOB SITE DURING THE RELATED CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL ENSURE THAT ALL NECESSARY PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, DIMENSION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION WHETHER SHOWN ON THESE PLANS OR NOT. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE OR SHOWN ON RECORD DRAWING PROVIDED BY OTHERS ARE SHOWN HEREON. EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY AND ARE SUBJECT TO A DEGREE OF UNKNOWN VARIATION. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. BARGHAUSEN CONSULTING ENGINEERS, INC. ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS OR RECORDS OF OTHERS. IF CONFLICTS SHOULD OCCUR, THE CONTRACTOR SHALL CONSULT BARGHAUSEN CONSULTING ENGINEERS, INC. TO RESOLVE ALL PROBLEMS PRIOR TO PROCEEDING WITH CONSTRUCTION.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL REGULATIONS AND CODES.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE APPROPRIATE UTILITIES INVOLVED PRIOR TO CONSTRUCTION.
- INSPECTION OF SITE WORK WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE GOVERNING JURISDICTION. INSPECTION OF PRIVATE FACILITIES WILL BE ACCOMPLISHED BY A REPRESENTATIVE OF THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE INSPECTOR 24 HOURS IN ADVANCE OF BACKFILLING ALL CONSTRUCTION.
- PRIOR TO ANY CONSTRUCTION OR DEVELOPMENT ACTIVITY THE CONTRACTOR SHALL CONTACT THE AGENCY AND/OR UTILITY INSPECTION PERSONNEL AND ARRANGE ANY REQUIRED PRE-CONSTRUCTION MEETING(S). CONTRACTOR SHALL PROVIDE ONE WEEK MINIMUM ADVANCE NOTIFICATION TO OWNER, FIELD ENGINEER AND ENGINEER OF PRE-CONSTRUCTION MEETINGS.
- THE CONTRACTOR IS RESPONSIBLE FOR WORKER AND SITE SAFETY AND SHALL COMPLY WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- 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. ANY WORK WITHIN THE TRAVELED RIGHT-OF-WAY THAT MAY INTERRUPT NORMAL TRAFFIC FLOW SHALL REQUIRE AT LEAST ONE FLAGGER FOR EACH LANE OF TRAFFIC AFFECTED.
- PROTECTIVE MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT ALL ADJACENT PUBLIC AND PRIVATE PROPERTIES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITY SERVICES THAT ARE TO REMAIN OPERATIONAL WITHIN THE CONSTRUCTION AREA WHETHER SHOWN OR NOT SHOWN ON THE PLANS.
- TWO (2) COPIES OF THESE APPROVED PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS. ONE (1) SET WITH RECORDS OF AS-BUILT INFORMATION SHALL BE SUBMITTED TO BARGHAUSEN CONSULTING ENGINEERS, INC. AT COMPLETION OF PROJECT.
- CONTRACTOR SHALL OBTAIN SERVICES OF A LICENSED LAND SURVEYOR TO STAKE HORIZONTAL CONTROL FOR ALL NEW IMPROVEMENTS. STAKING CONTROL SHALL BE TAKEN FROM ELECTRONIC PLAN FILES PROVIDED BY BARGHAUSEN CONSULTING ENGINEERS, INC.
- CONTRACTOR SHALL REQUEST FROM BARGHAUSEN CONSULTING ENGINEERS, INC., PRIOR TO ANY CONSTRUCTION STAKING OR CONSTRUCTION WORK, A FORMAL CONSTRUCTION RELEASE PLAN SET OR SPECIFIC RELEASE IN WRITING. THE APPROVED AGENCY PERMIT DRAWINGS WILL NOT BE CONSIDERED CONSTRUCTION RELEASE PLANS BY BARGHAUSEN CONSULTING ENGINEERS, INC. UNLESS BARGHAUSEN CONSULTING ENGINEERS, INC. HAS GIVEN A FORMAL WRITTEN RELEASE OR ISSUED A CONSTRUCTION RELEASE PLAN SET.

LEGEND:

- EXISTING TYPE II CATCH BASIN
- EXISTING TYPE I CATCH BASIN
- PROPOSED TYPE II CATCH BASIN
- PROPOSED TYPE I CATCH BASIN
- EXISTING TYPE II CATCH BASIN
- EXISTING TYPE I CATCH BASIN
- PROPOSED STORM DRAINAGE LINE
- EXISTING STORM DRAINAGE LINE
- PROPOSED SANITARY SEWER LINE
- PROPOSED SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER LINE
- EXISTING WATERMAIN
- EXISTING FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATERMAIN
- PROPOSED FIRE HYDRANT
- PROPOSED WATER VALVE
- PROPOSED SPOT ELEVATIONS
- EXISTING SPOT ELEVATIONS
- EXISTING STREET LIGHT
- EXISTING SIGN
- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE

PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

NOTES AND LEGEND

STORMWATER NOTES:

- ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
- AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
- A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
- ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE ENGINEERING SERVICES STAFF PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRE REMOVAL OR RELOCATION RELATING TO THIS PROJECT, SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
- DURING CONSTRUCTION, ALL EXISTING AND NEWLY INSTALLED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM SEDIMENTS.
- ALL STORM MANHOLES SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.01. FLOW CONTROL MANHOLE/OIL WATER SEPARATOR SHALL CONFORM TO CITY STANDARD DETAIL NO. 02.01.06 AND 02.01.07.
- MANHOLE RING AND COVER SHALL CONFORM TO CITY STANDARD DETAIL 06.01.02 AND 06.01.03. THE COVER SHALL BE MARKED WITH "STORM" OR "DRAIN" IN 2-INCH RAISED LETTERS. MINIMUM WEIGHT OF THE FRAME SHALL BE 210 POUNDS. MINIMUM WEIGHT OF THE COVER SHALL BE 150 POUNDS.
- CATCH BASINS TYPE I SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.02 AND 02.01.03 AND SHALL BE USED ONLY FOR DEPTHS LESS THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.
- CATCH BASINS TYPE II SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.04 AND SHALL BE USED FOR DEPTHS GREATER THAN 5 FEET FROM TOP OF THE GRATE TO THE INVERT OF THE STORM PIPE.
- CAST IRON OR DUCTILE IRON FRAME AND GRATE SHALL CONFORM TO CITY STANDARD DETAIL NO.02.01.05. GRATE SHALL BE MARKED WITH "DRAINS TO STREAM". SOLID CATCH BASIN LIDS (SQUARE UNLESS NOTED, SHALL CONFORM TO WSDOT STANDARD PLAN B-2 (OLYMPIC FOUNDRY NO. SM60 OR EQUAL). VANED GRATES SHALL CONFORM TO WSDOT STANDARD PLAN B-2A (OLYMPIC FOUNDRY NO. SM60 OR EQUAL).
- STORMWATER PIPE SHALL BE ONLY PVC, CONCRETE OR DUCTILE IRON PIPE.
  - THE USE OF ANY OTHER TYPE SHALL BE REVIEWED AND APPROVED BY THE ENGINEERING SERVICES STAFF PRIOR TO INSTALLATION.
  - PVC PIPE SHALL BE PER ASTM D3034, SDR 35 FOR PIPE SIZE 15-INCH AND SMALLER AND F679 FOR PIPE SIZES 18 TO 27 INCH. MINIMUM COVER ON PVC PIPE SHALL BE 3.0 FEET.
  - CONCRETE PIPE SHALL CONFORM TO THE WSDOT STANDARD SPECIFICATIONS FOR CONCRETE UNDERDRAIN PIPE. MINIMUM COVER ON CONCRETE PIPE SHALL NOT LESS THAN 3.0 FEET.
  - DUCTILE IRON PIPE SHALL BE CLASS 50, CONFORMING TO AWWA C151. MINIMUM COVER ON DUCTILE IRON PIPE SHALL BE 1.0 FOOT.
  - POLYPROPYLENE PIPE (PP) SHALL BE DUAL WALLED, HAVE A SMOOTH INTERIOR AND EXTERIOR CORRUGATIONS AND MEET WSDOT 9-05.24(1). 12-INCH THROUGH 30-INCH PIPE SHALL MEET OR EXCEED ASTM F2736 AND AASHTO M330, TYPE S, OR TYPE D. 36-INCH THROUGH 60-INCH PIPE SHALL MEET OR EXCEED ASTM F2881 AND AASHTO M330, TYPE S, OR TYPE D. TESTING SHALL BE PER ASTM F1417. MINIMUM COVER OVER POLYPROPYLENE PIPE SHALL BE 3FEET.
- TRENCHING, BEDDING, AND BACKFILL FOR PIPE SHALL CONFORM TO CITY STANDARD DETAIL NO. 06.01.01.
- STORM PIPE SHALL BE A MINIMUM OF 10 FEET AWAY FROM BUILDING FOUNDATIONS AND/OR ROOF LINES.
- ALL STORM DRAIN MAINS SHALL BE VIDEO INSPECTED BY THE CITY OF PUYALLUP COLLECTIONS DIVISION PRIOR TO FINAL ACCEPTANCE BY THE CITY.
- AFTER ALL OTHER UTILITIES ARE INSTALLED AND PRIOR TO ASPHALT WORK, ALL STORM PIPE SHALL PASS A LOW PRESSURE AIR TEST IN ACCORDANCE WITH SECTION 7-04.3(4)D OF THE STANDARD SPECIFICATIONS. PRODUCTS USED TO SEAL THE INSIDE OF THE PIPE ARE NOT TO BE USED TO OBTAIN THE AIR TEST.
- ALL STORM DRAIN MAINS SHALL BE MANDRELLED.
- ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES, AND PROTECTIVE MEASURES FOR CRITICAL AREAS AND SIGNIFICANT TREES SHALL BE INSTALLED PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES.

GRADING, EROSION AND SEDIMENT CONTROL NOTES:

- ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
- AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
- A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
- ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE CITY ENGINEER PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS HOURS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- ALL LIMITS OF CLEARING AND AREAS OF VEGETATION PRESERVATION AS PRESCRIBED ON THE PLANS SHALL BE CLEARLY FLAGGED IN THE FIELD AND OBSERVED DURING CONSTRUCTION.
- ALL REQUIRED SEDIMENTATION AND EROSION CONTROL FACILITIES MUST BE CONSTRUCTED AND IN OPERATION PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION TO ENSURE THAT SEDIMENT LADEN WATER DOES NOT ENTER THE NATURAL DRAINAGE SYSTEM. THE CONTRACTOR SHALL SCHEDULE AN INSPECTION OF THE EROSION CONTROL FACILITIES PRIOR TO ANY LAND CLEARING AND/OR OTHER CONSTRUCTION. ALL EROSION AND SEDIMENT FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION AS DETERMINED BY THE CITY, UNTIL SUCH TIME THAT CLEARING AND/OR CONSTRUCTION IS COMPLETED AND THE POTENTIAL FOR ONSITE EROSION HAS PASSED. THE IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE EROSION AND SEDIMENTATION CONTROL SYSTEMS SHALL BE THE RESPONSIBILITY OF THE PERMITTEE.
- THE EROSION AND SEDIMENTATION CONTROL SYSTEM FACILITIES DEPICTED ON THESE PLANS ARE INTENDED TO BE MINIMUM REQUIREMENTS TO MEET ANTICIPATED SITE CONDITIONS. AS CONSTRUCTION PROGRESSES AND UNEXPECTED OR SEASONAL CONDITIONS DICTATE, FACILITIES WILL BE NECESSARY TO ENSURE COMPLETE SILTATION CONTROL ON THE SITE. DURING THE COURSE OF CONSTRUCTION, IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE PERMITTEE TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY HIS ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES, OVER AND ABOVE THE MINIMUM REQUIREMENTS, AS MAY BE NEEDED TO PROTECT ADJACENT PROPERTIES, SENSITIVE AREAS, NATURAL WATER COURSES, AND/OR STORM DRAINAGE SYSTEMS.
- APPROVAL OF THESE PLANS IS FOR GRADING, TEMPORARY DRAINAGE, EROSION AND SEDIMENTATION CONTROL ONLY. IT DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT STORM DRAINAGE DESIGN, SIZE OR LOCATION OF PIPES, RESTRICTORS, CHANNELS, OR RETENTION FACILITIES.
- ANY DISTURBED AREA WHICH HAS BEEN STRIPPED OF VEGETATION AND WHERE NO FURTHER WORK IS ANTICIPATED FOR A PERIOD OF 30 DAYS OR MORE, MUST BE IMMEDIATELY STABILIZED WITH MULCHING, GRASS PLANTING, OR OTHER APPROVED EROSION CONTROL TREATMENT APPLICABLE TO THE TIME OF YEAR IN QUESTION. GRASS SEEDING ALONE WILL BE ACCEPTABLE ONLY DURING THE MONTHS OF APRIL THROUGH SEPTEMBER INCLUSIVE. SEEDING MAY PROCEED OUTSIDE THE SPECIFIED TIME PERIOD WHENEVER IT IS IN THE INTEREST OF THE PERMITTEE, BUT MUST BE AUGMENTED WITH MULCHING, NETTING, OR OTHER TREATMENT APPROVED BY THE CITY.
- IN CASE EROSION OR SEDIMENTATION OCCURS TO ADJACENT PROPERTIES, ALL CONSTRUCTION WORK WITHIN THE DEVELOPMENT THAT WILL FURTHER AGGRAVATE THE SITUATION MUST CEASE, AND THE OWNER/CONTRACTOR WILL IMMEDIATELY COMMENCE RESTORATION METHODS. RESTORATION ACTIVITY WILL CONTINUE UNTIL SUCH TIME AS THE AFFECTED PROPERTY OWNER IS SATISFIED.
- NO TEMPORARY OR PERMANENT STOCKPILING OF MATERIALS OR EQUIPMENT SHALL OCCUR WITHIN CRITICAL AREAS OR ASSOCIATED BUFFERS, OR THE CRITICAL ROOT ZONE FOR VEGETATION PROPOSED FOR RETENTION.

WALL NOTES:

- PROPOSED WALL IS DESIGN/BUILD BY THE CONTRACTOR (OR PER STRUCTURAL DRAWINGS) AND IS SHOWN CONCEPTUALLY.
- WALL DESIGN NEEDS TO BE SUBMITTED TO THE OWNER AND THE ENGINEER/CITY FOR REVIEW AND APPROVAL.
  - WALL DESIGNS OVER 4- FEET HIGH REQUIRE A SEPARATE BUILDING PERMIT AND ENGINEERING DESIGN.
  - WALLS OVER 30-INCHES HIGH, WHERE TOP OF WALL IS ADJACENT TO PEDESTRIAN OR VEHICULAR PATHWAY(S), NEED TO INCLUDE PEDESTRIAN AND/OR VEHICULAR FALL PROTECTION. THE FALL PROTECTION SHALL BE DESIGNED, PERMITTED, PROVIDED BY, AND INSTALLED BY CONTRACTOR.
  - THE DIMENSIONS SHOWN ON THE PLAN ARE THE BASIS OF WALL PLACEMENT. DIMENSIONS ARE SHOWN TO THE FACE OF WALL AT THE EXPOSED GRADE. CONTRACTOR SHALL USE A CURRENT CAD FILE FROM BARGHAUSEN CONSULTING ENGINEERS, INC. TO STAKE THE FACE OF WALL LOCATION.
  - THE TYPE OF WALL CHOSEN WILL DETERMINE THE WALL WIDTH, BATTER, AND IF GEOGRID IS NECESSARY.
  - THE WALL HEIGHT SHOWN ON THE PLANS IS AN ESTIMATED MAXIMUM HEIGHT. TOP OF WALL ELEVATIONS PROVIDED ARE TO THE TOP OF EXPOSED FACE OF WALL, NOT INCLUDING ANY PEDESTRIAN OR VEHICULAR BARRIER IF NECESSARY. BOTTOM OF WALL ELEVATIONS PROVIDED ARE TO THE BOTTOM OF THE EXPOSED FACE OF WALL (AND NOT TO WALL FOOTING). THE WALL ELEVATIONS PROVIDED ON THE PLANS ARE PROVIDED AT UNIFORM LOCATIONS AND DO NOT NECESSARILY REPRESENT ALL OF THE WALL ELEVATION CHANGES. WALL PROFILES ARE REQUIRED TO BE PART OF THE DESIGN/BUILD OR STRUCTURAL DESIGN PLANS. WALL PROFILES MAY RESULT IN HIGHER OVERALL WALL HEIGHTS.
  - COORDINATION BETWEEN WALL DESIGN AND THE CONSTRUCTION DRAWINGS NEEDS TO OCCUR PRIOR TO CONSTRUCTION TO CONFIRM WALL LOCATION IN PLAN VIEW, DRAINAGE REQUIREMENTS, ETC.

ROADWAY NOTES:

- ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES TO SCHEDULE THE MEETING (253) 841-5568. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN APPROVED SET OF PLANS AT THE MEETING.
- AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS"), WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND AMERICAN PUBLIC WORKS ASSOCIATION, WASHINGTON STATE CHAPTER, LATEST EDITION, UNLESS SUPERSEDED OR AMENDED BY THE CITY OF PUYALLUP CITY STANDARDS FOR PUBLIC WORKS ENGINEERING AND CONSTRUCTION (HEREINAFTER REFERRED TO AS THE "CITY STANDARDS").
- A COPY OF THESE APPROVED PLANS AND APPLICABLE CITY DEVELOPER SPECIFICATIONS AND DETAILS SHALL BE ON SITE DURING CONSTRUCTION.
- ANY REVISIONS MADE TO THESE PLANS MUST BE REVIEWED AND APPROVED BY THE DEVELOPER'S ENGINEER AND THE ENGINEERING SERVICES STAFF PRIOR TO ANY IMPLEMENTATION IN THE FIELD. THE CITY SHALL NOT BE RESPONSIBLE FOR ANY ERRORS AND/OR OMISSIONS ON THESE PLANS.
- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811) AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- ANY STRUCTURE AND/OR OBSTRUCTION WHICH REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT, SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
- MONUMENTS SHALL BE INSTALLED AT ALL STREET INTERSECTIONS, AT ANGLE POINTS, AND POINTS OF CURVATURE IN EACH STREET. ALL BOUNDARY MONUMENTS MUST BE INSTALLED ACCORDING TO THE WASHINGTON STATE SUBDIVISION LAWS.
- CURB AND GUTTER INSTALLATION SHALL CONFORM TO CITY STANDARD DETAIL 01.02.09.
- SIDEWALKS AND DRIVEWAYS SHALL BE INSTALLED AS LOTS ARE BUILT ON. SIDEWALKS AND DRIVEWAYS SHALL CONFORM TO CITY STANDARD DETAIL 01.02.01, 01.02.02 AND 01.02.12. IF ASPHALT IS DAMAGED DURING REPLACEMENT OF CURB AND GUTTER, THE REPAIR SHALL CONFORM TO CITY STANDARD DETAIL 01.02.10.
- THE SURROUNDING GROUND (5 FEET BEYOND THE BASE) FOR ALL POWER TRANSFORMERS, TELEPHONE/TV PEDESTALS, AND STREET LIGHT MAIN DISCONNECTS SHALL BE GRADED TO A POSITIVE 2 PERCENT SLOPE FROM TOP OF CURB.
- SIGNAGE AND TRAFFIC CONTROL DEVICES ARE SAFETY ITEMS AND SHALL BE INSTALLED PRIOR TO ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY OR PLAT APPROVAL. HOWEVER, IN LARGER DEVELOPMENTS, EXACT LOCATIONS OF STOP AND YIELD SIGNS MAY NEED TO BE DETERMINED AFTER FULL BUILDOUT WHEN TRAFFIC PATTERNS HAVE BEEN ESTABLISHED. IN THIS CASE, CONTRACTOR SHALL PROVIDE INDICATED "CITY-PLACED" SIGNS, SIGNPOSTS, AND BRACKETS TO THE CITY SIGN SPECIALIST (253) 841-5471 FOR LATER INSTALLATION BY THE CITY. ALL SIGNAGE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- PRIOR TO ANY SIGN OR STRIPING INSTALLATION OR REMOVAL THE CONTRACTOR SHALL CONTACT THE CITY SIGN SPECIALIST (253) 841-5471 TO ARRANGE FOR AN ON-SITE MEETING TO DISCUSS PLACEMENT AND UNIFORMITY.
- NEW OR REVISED STOP SIGNS OR YIELD SIGNS SHALL BE ADVANCE WARNED USING THE PROCEDURE OUTLINED IN THE MUTCD. ADVANCE WARNING SIGNS AND FLAGS SHALL BE MAINTAINED BY INSTALLER FOR 30 DAYS AND THEN REMOVED.

GENERAL NOTES:

- ALL WORK IN CITY RIGHT-OF-WAY REQUIRES A PERMIT FROM THE CITY OF PUYALLUP. PRIOR TO ANY WORK COMMENCING, THE GENERAL CONTRACTOR SHALL ARRANGE FOR A PRECONSTRUCTION MEETING AT THE DEVELOPMENT SERVICES CENTER TO BE ATTENDED BY ALL CONTRACTORS THAT WILL PERFORM WORK SHOWN ON THE APPROVED ENGINEERING PLANS, REPRESENTATIVES FROM ALL APPLICABLE UTILITY COMPANIES, THE PROJECT OWNER AND APPROPRIATE CITY STAFF. CONTACT ENGINEERING SERVICES AT (253)-841-5568) TO SCHEDULE THE MEETING. THE CONTRACTOR IS RESPONSIBLE TO HAVE THEIR OWN SET OF APPROVED PLANS AT THE MEETING.
- AFTER COMPLETION OF ALL ITEMS SHOWN ON THESE PLANS AND BEFORE ACCEPTANCE OF THE PROJECT THE CONTRACTOR SHALL OBTAIN A "PUNCH LIST" PREPARED BY THE CITY'S INSPECTOR DETAILING REMAINING ITEMS OF WORK TO BE COMPLETED. ALL ITEMS OF WORK SHOWN ON THESE PLANS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY PRIOR TO ACCEPTANCE OF THE WATER SYSTEM AND PROVISION OF SANITARY SEWER SERVICE.
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- THE CONTRACTOR SHALL HAVE ALL UTILITIES VERIFIED ON THE GROUND PRIOR TO ANY CONSTRUCTION. CALL (811)AT LEAST TWO WORKING DAYS IN ADVANCE. THE OWNER AND HIS/HER ENGINEER SHALL BE CONTACTED IMMEDIATELY IF A CONFLICT EXISTS.
- ANY STRUCTURE AND/OR OBSTRUCTION THAT REQUIRES REMOVAL OR RELOCATION RELATING TO THIS PROJECT SHALL BE DONE SO AT THE DEVELOPER'S EXPENSE.
- LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE TRUE ELEVATIONS AND LOCATIONS OF HIDDEN UTILITIES. ALL VISIBLE ITEMS SHALL BE THE ENGINEER'S RESPONSIBILITY.
- THE CONTRACTOR SHALL INSTALL, REPLACE, OR RELOCATE ALL SIGNS, AS SHOWN ON THE PLANS OR AS AFFECTED BY CONSTRUCTION, PER CITY STANDARDS.
- POWER, STREET LIGHT, CABLE, AND TELEPHONE LINES SHALL BE IN A TRENCH LOCATED WITHIN A 10-FOOT UTILITY EASEMENT ADJACENT TO PUBLIC RIGHT-OF-WAY. RIGHT-OF-WAY CROSSLINGS SHALL HAVE A MINIMUM HORIZONTAL SEPARATION FROM OTHER UTILITIES (SEWER, WATER, AND STORM) OF 5 FEET.
- ALL CONSTRUCTION SURVEYING FOR EXTENSIONS OF PUBLIC FACILITIES SHALL BE DONE UNDER THE DIRECTION OF A WASHINGTON STATE LICENSED LAND SURVEYOR OR A WASHINGTON STATE LICENSED PROFESSIONAL CIVIL ENGINEER.
- DURING CONSTRUCTION, ALL PUBLIC STREETS ADJACENT TO THIS PROJECT SHALL BE KEPT CLEAN OF ALL MATERIAL DEPOSITS RESULTING FROM ON-SITE CONSTRUCTION, AND EXISTING STRUCTURES SHALL BE PROTECTED AS DIRECTED BY THE CITY.
- CERTIFIED RECORD DRAWINGS ARE REQUIRED PRIOR TO PROJECT ACCEPTANCE.
- A NPDES STORMWATER GENERAL PERMIT MAY BE REQUIRED BY THE DEPARTMENT OF ECOLOGY FOR THIS PROJECT. FOR INFORMATION CONTACT THE DEPARTMENT OF ECOLOGY, SOUTHWEST REGION OFFICE AT (360)407-6300.
- ANY DISTURBANCE OR DAMAGE TO CRITICAL AREAS AND ASSOCIATED BUFFERS, OR SIGNIFICANT TREES DESIGNATED FOR PRESERVATION AND PROTECTION SHALL BE MITIGATED IN ACCORDANCE WITH A MITIGATION PLAN REVIEWED AND APPROVED BY THE CITY'S PLANNING DIVISION. PREPARATION AND IMPLEMENTATION OF THE MITIGATION PLAN SHALL BE AT THE DEVELOPER'S EXPENSE.

Revision

Notes and Legend

For:

Scale:

Designed \_\_\_\_\_

Drawn \_\_\_\_\_

Checked \_\_\_\_\_

Approved \_\_\_\_\_

Date \_\_\_\_\_

Job Number

Sheet

C2 of 26

NOTES AND LEGEND

FORTRESS - PUYALLUP

CREF3 PUYALLUP OWNER LLC

11611 SAN VICENTE BLVD

10TH FLOOR

LOS ANGELES, CA 90049

7/27/2023

Barghausen Consulting Engineers, Inc.

1825 72nd Avenue South

Kent WA 98032

425.251.6222

barghausen.com

APPROVED

BY \_\_\_\_\_

CITY OF PUYALLUP

DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

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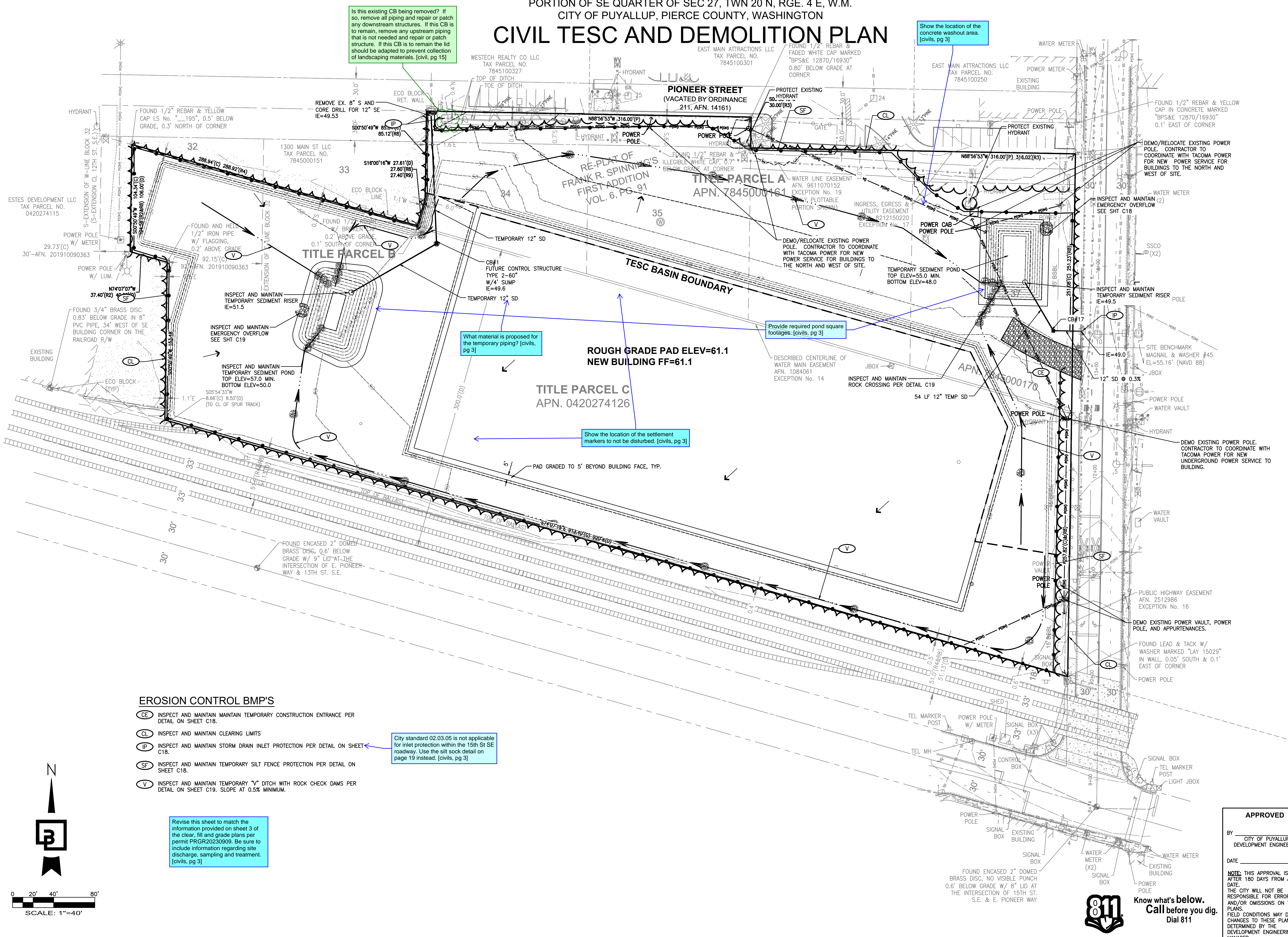
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RCOX



PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

# CIVIL TESC AND DEMOLITION PLAN



## EROSION CONTROL BMP'S

- (CE) INSPECT AND MAINTAIN TEMPORARY CONSTRUCTION ENTRANCE PER DETAIL ON SHEET C18.
- (CL) INSPECT AND MAINTAIN CLEARING LIMITS
- (IP) INSPECT AND MAINTAIN STORM DRAIN INLET PROTECTION PER DETAIL ON SHEET C18.
- (SF) INSPECT AND MAINTAIN TEMPORARY SILT FENCE PROTECTION PER DETAIL ON SHEET C18.
- (V) INSPECT AND MAINTAIN TEMPORARY "V" DITCH WITH ROCK CHECK DAMS PER DETAIL ON SHEET C19. SLOPE AT 0.5% MINIMUM.

City standard 02.03.05 is not applicable for inlet protection within the 15th St SE roadway. Use the silt sock detail on page 19 instead. [civils, pg 3]

Revise this sheet to match the information provided on sheet 3 of the clear, fill and grade plans per permit PRGR20230909. Be sure to include information regarding site discharge, sampling and treatment. [civils, pg 3]

**APPROVED**

BY: CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE: \_\_\_\_\_

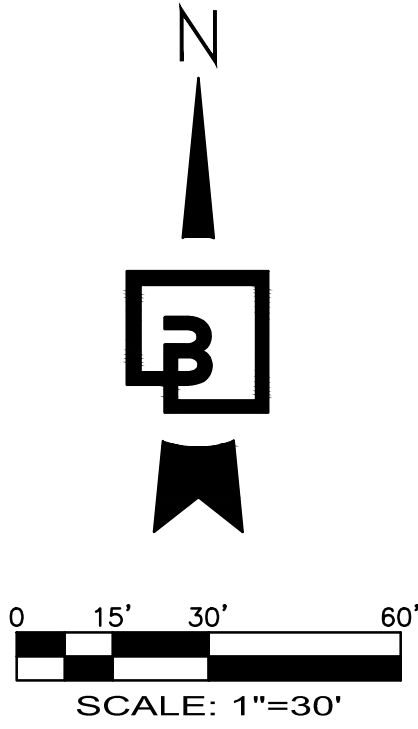
**NOTE:** THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

Title: CIVIL TESC AND DEMOLITION PLAN	
For: CREF3 PUYALLUP OWNER LLC 11611 SAN VICENTE BLVD 10TH FLOOR LOS ANGELES, CA 90049	
Scale:	Horizontal 1"=40' Vertical N/A
Designed: DL	Drawn: RDC
Checked: DL	Approved: JGH
Date: 6/23/23	
Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com	
Job Number: 22085	Sheet: C3 of 26



PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

SITE PLAN



PAVING NOTES:

1. PROVIDE BID ALTERNATE FOR THE ENTIRE TRUCK YARD TO BE CONCRETE - CONSISTING OF 7" THICK, 3,000 PSI NON-REINFORCED CONCRETE WITH 3/4" DIAMETER, 18" LONG SMOOTH DOWELS AT 12" O.C. AT CONSTRUCTION JOINTS FOR THE ENTIRE TRUCK YARD.

PAVING PLAN SCHEDULE:

- 1 EXTRUDED CONCRETE CURB PER DETAIL SHT C21
- 2 LIGHT DUTY HMA PAVING PER SECTION SHT C21
- 3 HEAVY DUTY HMA PAVING PER SECTION SHT C21
- 4 CONCRETE SIDEWALK PER DETAIL SHT C21
- 5 HEAVY DUTY CONCRETE STRUCTURAL PAVEMENT PER H.D. PAVING SECTION, SHT C21. SEE PAVING NOTE 1.
- 6 INSTALL TRANSFORMER PAD PER TACOMA POWER REQUIREMENTS. COORDINATE SIZE WITH TACOMA POWER DESIGN.
- 7 CAST IN PLACE VERTICAL CONCRETE CURB IN TRUCK AREAS PER DETAIL SHT C21
- 8 LANDSCAPE. SEE LANDSCAPE PLANS (SEPARATE BUILDING PERMIT)
- 9 EXTENDED HEIGHT CURB 2.4' MAX HEIGHT PER DETAIL SHT C21. SEE GRADING PLAN FOR EXTENTS.
- 10 DESIGN/BUILD RETAINING WALL WITH PEDESTRIAN FALL PROTECTION. (WALLS OVER 4' REQUIRE SEPARATE BUILDING PERMIT). SEE WALL NOTES, SHEET C2.
- 11 EMERGENCY ACCESS CONCRETE LANDING (5'x5') WITH STEPS WHERE NECESSARY, TYPICAL. SEE GRADING PLANS FOR STEP LOCATION
- 12 FLUSH CONCRETE WALK PER DETAIL SHT C21
- 13 THRU-CURB CONCRETE DRAIN PER DETAIL SHT C21
- 14 CONCRETE WHEELSTOP PER DETAIL SHT C21
- 15 LANDSCAPE/ARCHITECTUAL WALL. SEE LANDSCAPE PLANS (SEPARATE BUILDING PERMIT).
- 16 12" EXPOSED HEIGHT CAST-IN-PLACE CONCRETE TRUCK CURB.
- 17 HEAVY DUTY CONCRETE DOLLY PAD PAVEMENT PER H.D. PAVING SECTION SHT C21

PAVEMENT MARKING SCHEDULE:

- 1 4" WHITE PAINTED PARKING STRIPE, TYPICAL.
- 2 ADA PAINTED PARKING AND ACCESS STALL PER DETAIL SHT C21
- 3 WHITE PAINTED "COMPACT" VEHICLE PARKING STALL MARKINGS, TYPICAL.

APPROVED

BY \_\_\_\_\_  
CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.  
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.  
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.



Know what's below.  
Call before you dig.  
Dial 811

Revision

No. Date By Ckd. Appr.

SITE PLAN

FORTRESS - PUYALLUP

Title:

CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049

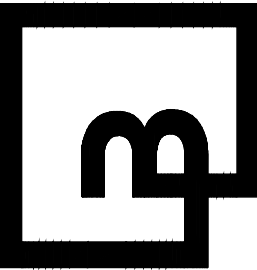
For:



Scale:  
Horizontal 1"=30'  
Vertical N/A

Designed \_\_\_\_\_  
Drawn \_\_\_\_\_  
Checked \_\_\_\_\_  
Approved \_\_\_\_\_  
Date 6/23/23

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

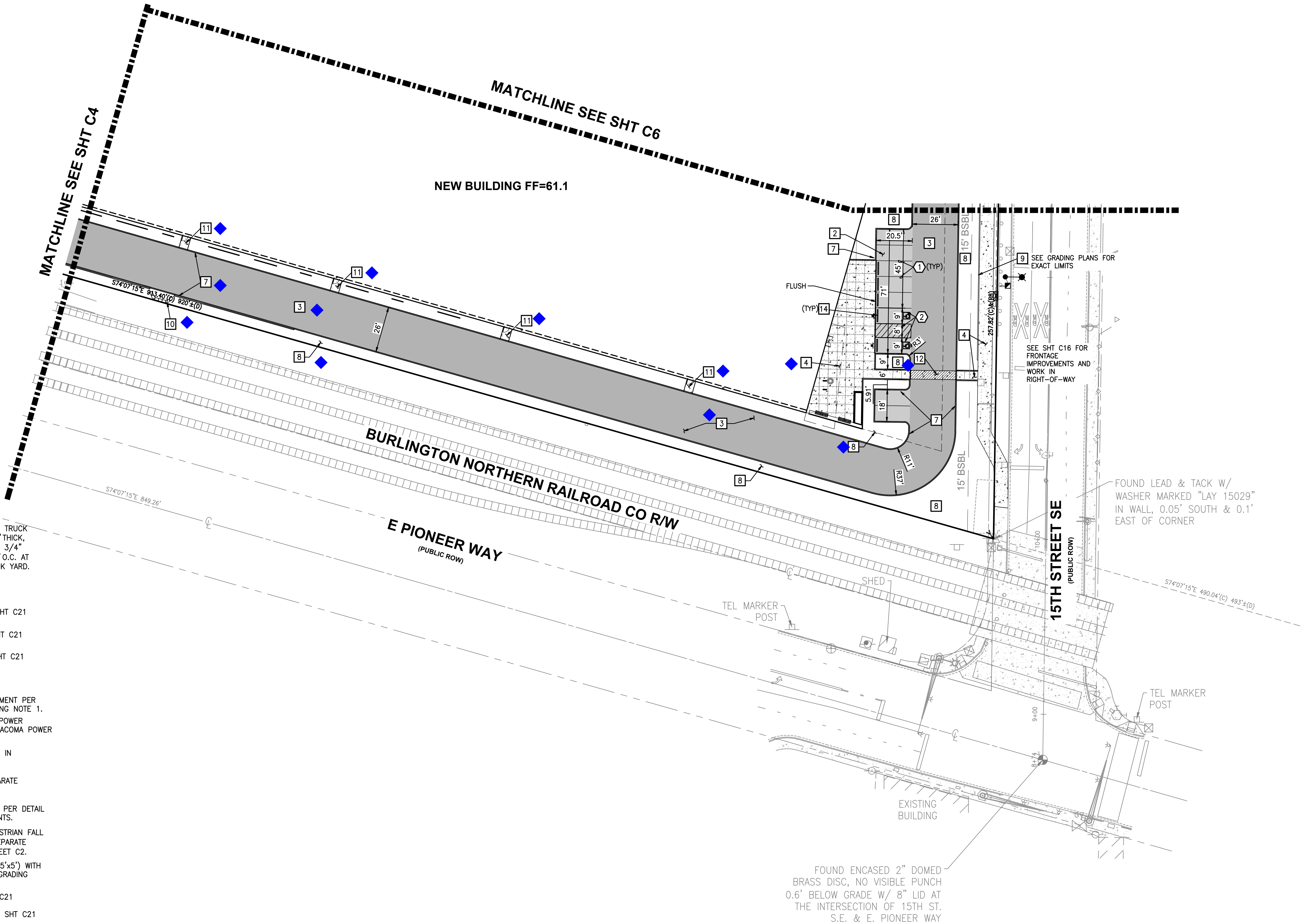
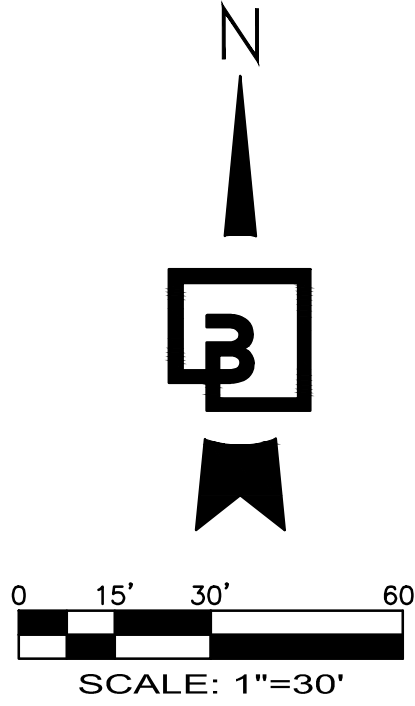


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22085  
Sheet  
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PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

SITE PLAN



PAVING NOTES:

1. PROVIDE BID ALTERNATE FOR THE ENTIRE TRUCK YARD TO BE CONCRETE - CONSISTING OF 7" THICK, 3,000 PSI NON-REINFORCED CONCRETE WITH 3/4" DIAMETER, 18" LONG SMOOTH DOWELS AT 12" O.C. AT CONSTRUCTION JOINTS FOR THE ENTIRE TRUCK YARD.

PAVING PLAN SCHEDULE:

- 1 EXTRUDED CONCRETE CURB PER DETAIL SHT C21
- 2 LIGHT DUTY HMA PAVING PER SECTION SHT C21
- 3 HEAVY DUTY HMA PAVING PER SECTION SHT C21
- 4 CONCRETE SIDEWALK PER DETAIL SHT C21
- 5 HEAVY DUTY CONCRETE STRUCTURAL PAVEMENT PER H.D. PAVING SECTION, SHT C21. SEE PAVING NOTE 1.
- 6 INSTALL TRANSFORMER PAD PER TACOMA POWER REQUIREMENTS. COORDINATE SIZE WITH TACOMA POWER DESIGN.
- 7 CAST IN PLACE VERTICAL CONCRETE CURB IN TRUCK AREAS PER DETAIL SHT C21
- 8 LANDSCAPE. SEE LANDSCAPE PLANS (SEPARATE BUILDING PERMIT)
- 9 EXTENDED HEIGHT CURB 2.4' MAX HEIGHT PER DETAIL SHT C21. SEE GRADING PLAN FOR EXTENTS.
- 10 DESIGN/BUILD RETAINING WALL WITH PEDESTRIAN FALL PROTECTION. (WALLS OVER 4' REQUIRE SEPARATE BUILDING PERMIT). SEE WALL NOTES, SHEET C2.
- 11 EMERGENCY ACCESS CONCRETE LANDING (5'x5') WITH STEPS WHERE NECESSARY, TYPICAL. SEE GRADING PLANS FOR STEP LOCATION
- 12 FLUSH CONCRETE WALK PER DETAIL SHT C21
- 13 THRU-CURB CONCRETE DRAIN PER DETAIL SHT C21
- 14 CONCRETE WHEELSTOP PER DETAIL SHT C21
- 15 LANDSCAPE/ARCHITECTUAL WALL. SEE LANDSCAPE PLANS (SEPARATE BUILDING PERMIT).
- 16 12" EXPOSED HEIGHT CAST-IN-PLACE CONCRETE TRUCK CURB.
- 17 HEAVY DUTY CONCRETE DOLLY PAD PAVEMENT PER H.D. PAVING SECTION SHT C21

PAVEMENT MARKING SCHEDULE:

- ① 4" WHITE PAINTED PARKING STRIPE, TYPICAL.
- ② ADA PAINTED PARKING AND ACCESS STALL PER DETAIL SHT C21
- ③ WHITE PAINTED "COMPACT" VEHICLE PARKING STALL MARKINGS, TYPICAL.

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BY \_\_\_\_\_  
CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

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No.

Title:

SITE PLAN

FORTRESS - PUYALLUP

CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049

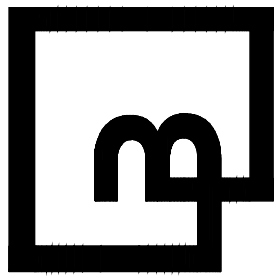
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Vertical N/A

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Drawn \_\_\_\_\_  
Checked \_\_\_\_\_  
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Date 6/23/23

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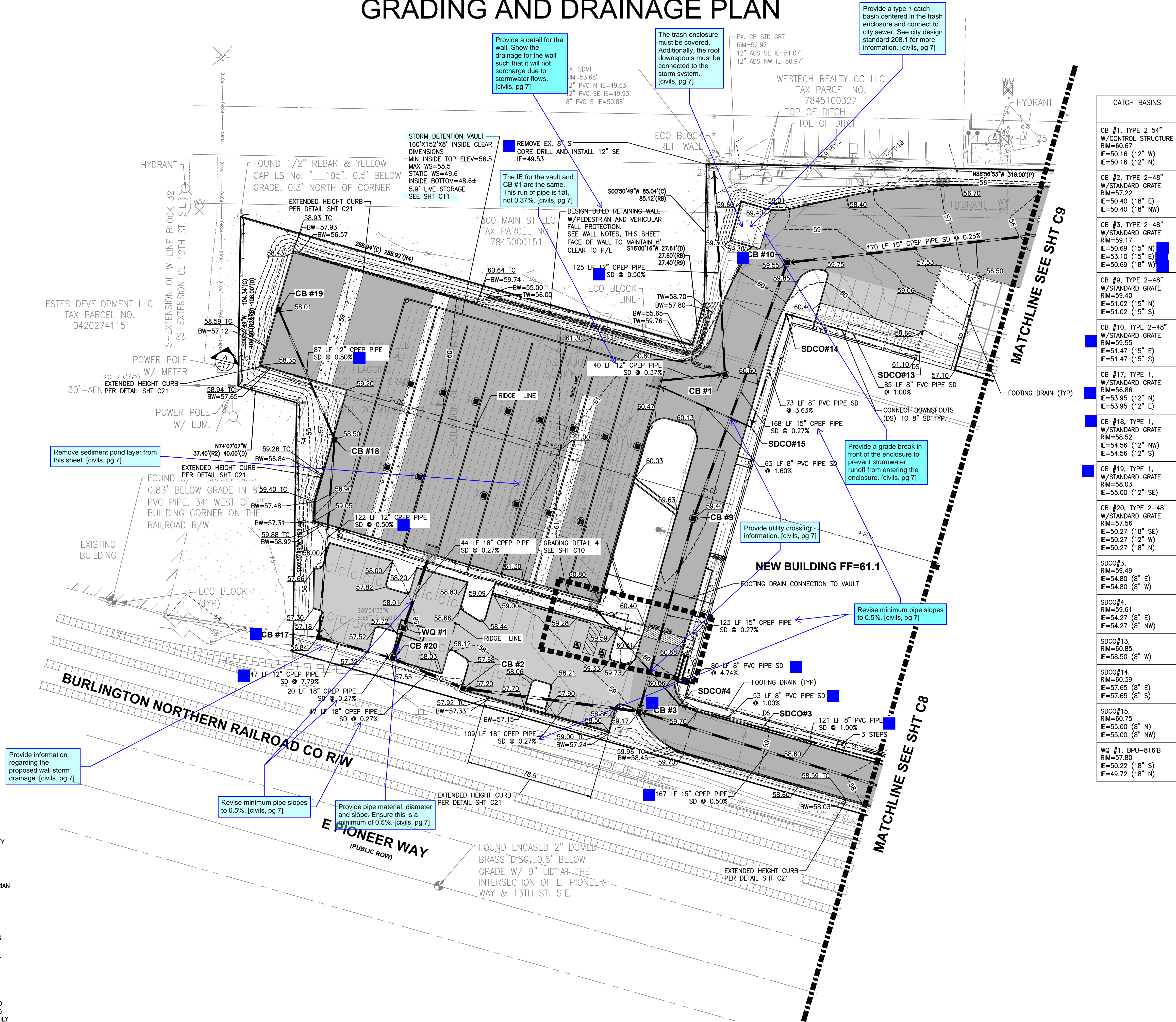
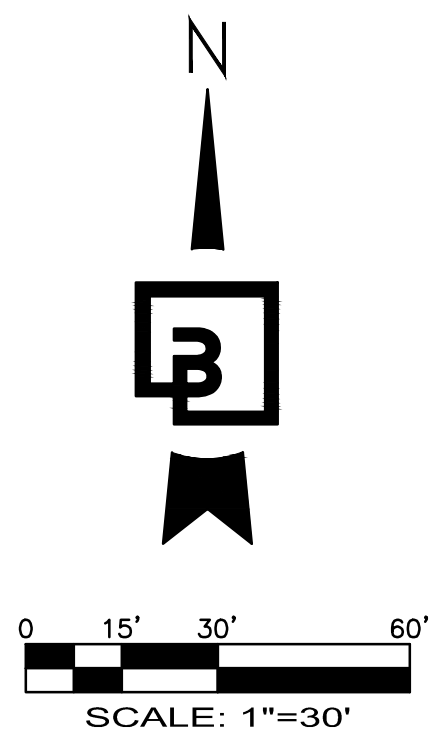
**FORTRESS - PUYALLUP**

Job Number  
**22085**



PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

# GRADING AND DRAINAGE PLAN



## WALL NOTES:

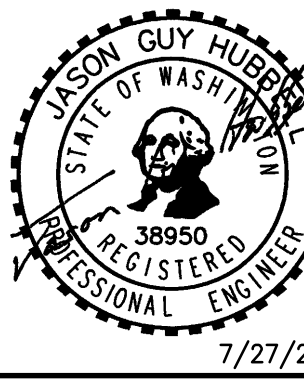
- PROPOSED WALL IS DESIGN/BUILD BY THE CONTRACTOR (OR PER STRUCTURAL DRAWINGS) AND IS SHOWN CONCEPTUALLY.
1. WALL DESIGN NEEDS TO BE SUBMITTED TO THE OWNER AND THE ENGINEER/CITY FOR REVIEW AND APPROVAL.
  2. WALL DESIGNS OVER 4-FEET HIGH REQUIRE A SEPARATE BUILDING PERMIT AND ENGINEERING DESIGN.
  3. WALLS OVER 30-INCHES HIGH, WHERE TOP OF WALL IS ADJACENT TO PEDESTRIAN OR VEHICULAR PATHWAY(S), NEED TO INCLUDE PEDESTRIAN AND/OR VEHICULAR FALL PROTECTION. THE FALL PROTECTION SHALL BE DESIGNED, PERMITTED, PROVIDED BY, AND INSTALLED BY CONTRACTOR.
  4. THE DIMENSIONS SHOWN ON THE PLAN ARE THE BASIS OF WALL PLACEMENT. DIMENSIONS ARE SHOWN TO THE FACE OF WALL AT THE EXPOSED GRADE. CONTRACTOR SHALL USE A CURRENT CAD FILE FROM BARGHAUSEN CONSULTING ENGINEERS, INC. TO STAKE THE FACE OF WALL LOCATION.
  5. THE TYPE OF WALL CHOSEN WILL DETERMINE THE WALL WIDTH, BATTER, AND IF GEOGRID IS NECESSARY.
  6. THE WALL HEIGHT SHOWN ON THE PLANS IS AN ESTIMATED MAXIMUM HEIGHT. TOP OF WALL ELEVATIONS PROVIDED ARE TO THE TOP OF EXPOSED FACE OF WALL, NOT INCLUDING ANY PEDESTRIAN OR VEHICULAR BARRIER IF NECESSARY. BOTTOM OF WALL ELEVATIONS PROVIDED ARE TO THE BOTTOM OF THE EXPOSED FACE OF WALL (AND NOT TO WALL FOOTINGS). THE WALL ELEVATIONS PROVIDED ON THE PLANS ARE PROVIDED AT UNIFORM LOCATIONS AND DO NOT NECESSARILY REPRESENT ALL OF THE WALL ELEVATION CHANGES. WALL PROFILES ARE REQUIRED TO BE PART OF THE DESIGN/BUILD OR STRUCTURAL DESIGN PLANS. WALL PROFILES MAY RESULT IN HIGHER OVERALL WALL HEIGHTS.
  7. COORDINATION BETWEEN WALL DESIGN AND THE CONSTRUCTION DRAWINGS NEEDS TO OCCUR PRIOR TO CONSTRUCTION TO CONFIRM WALL LOCATION IN PLAN VIEW, DRAINAGE REQUIREMENTS, ETC.

CATCH BASINS	
CB #1, TYPE 2-54" W/CONTROL STRUCTURE RIM=60.67 IE=50.16 (12" W) IE=50.16 (12" N)	
CB #2, TYPE 2-48" W/STANDARD GRATE RIM=57.22 IE=50.40 (18" E) IE=50.40 (18" NW)	
CB #3, TYPE 2-48" W/STANDARD GRATE RIM=59.17 IE=50.69 (15" N) IE=53.10 (15" E) IE=50.69 (18" W)	
CB #9, TYPE 2-48" W/STANDARD GRATE RIM=59.40 IE=51.02 (15" N) IE=51.02 (15" S)	
CB #10, TYPE 2-48" W/STANDARD GRATE RIM=59.55 IE=51.47 (15" E) IE=51.47 (15" S)	
CB #17, TYPE 1, W/STANDARD GRATE RIM=56.85 IE=53.95 (12" N) IE=53.95 (12" E)	
CB #18, TYPE 1, W/STANDARD GRATE RIM=58.52 IE=54.56 (12" NW) IE=54.56 (12" S)	
CB #19, TYPE 1, W/STANDARD GRATE RIM=58.03 IE=55.00 (12" SE)	
CB #20, TYPE 2-48" W/STANDARD GRATE RIM=57.56 IE=50.27 (18" SE) IE=50.27 (12" W) IE=50.27 (18" N)	
SDCO#3, RIM=59.49 IE=54.80 (8" E) IE=54.80 (8" W)	
SDCO#4, RIM=59.81 IE=54.27 (8" E) IE=54.27 (8" NW)	
SDCO#13, RIM=60.85 IE=58.50 (8" W)	
SDCO#14, RIM=60.39 IE=57.65 (8" E) IE=57.65 (8" S)	
SDCO#15, RIM=60.75 IE=55.00 (8" N) IE=55.00 (8" NW)	
WQ #1, BPU-816B RIM=57.80 IE=50.22 (18" S) IE=49.72 (18" N)	

Revision  
No. Date By Ckd. Appr.

Title: **GRADING AND DRAINAGE PLAN**

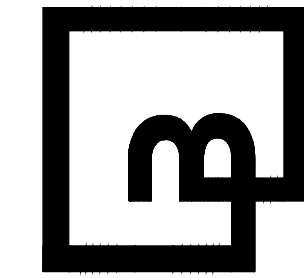
For: **CREF3 PUYALLUP OWNER LLC**  
**11611 SAN VICENTE BLVD**  
**10TH FLOOR**  
**LOS ANGELES, CA 90049**



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Horizontal 1"=30'  
Vertical N/A

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DEVELOPMENT ENGINEERING

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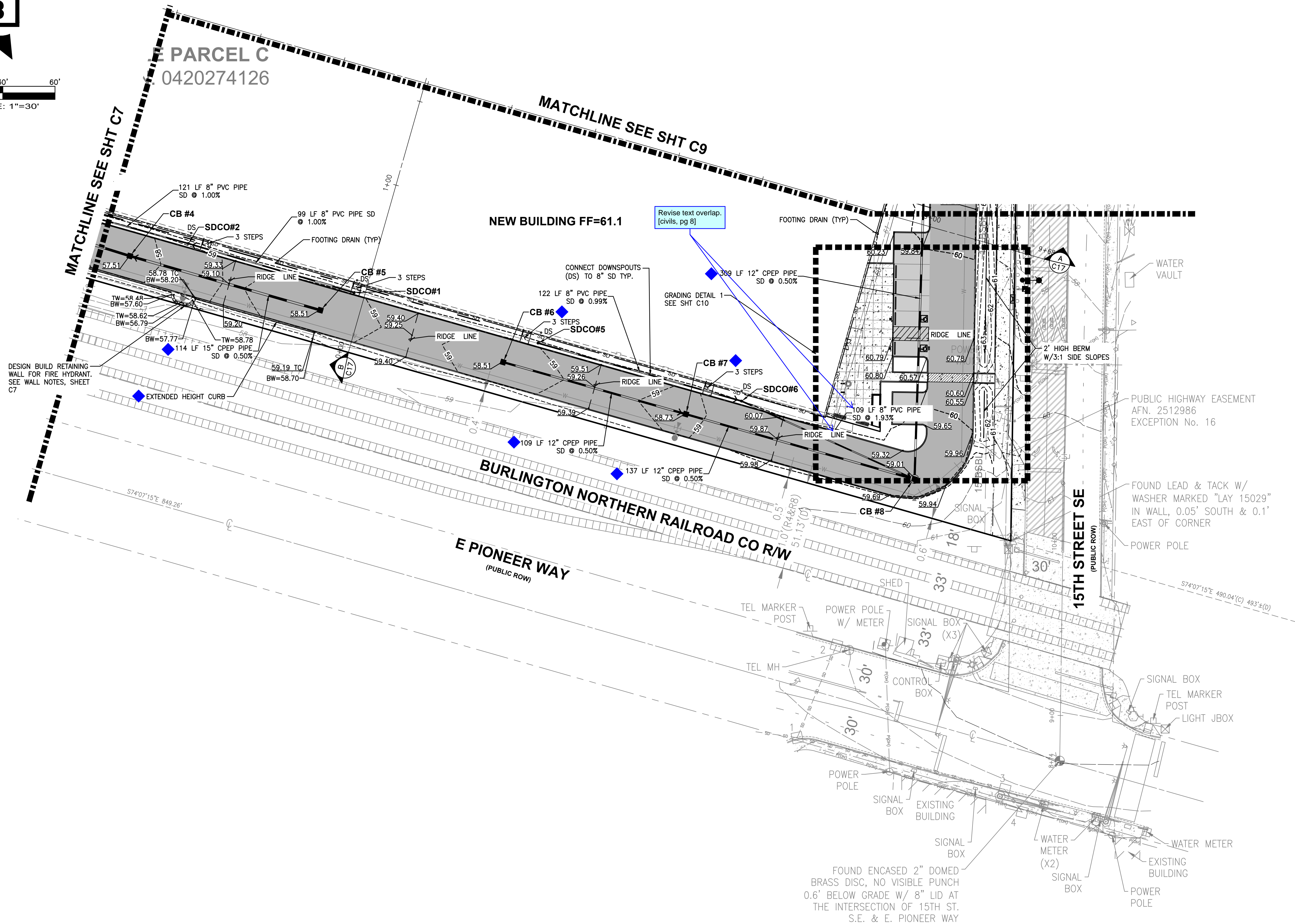
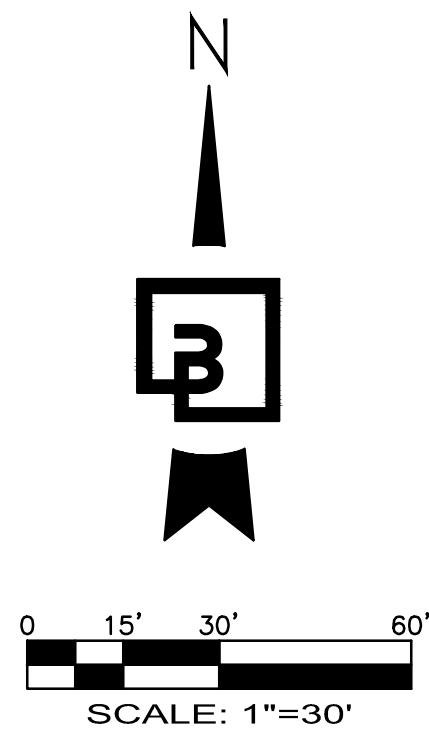
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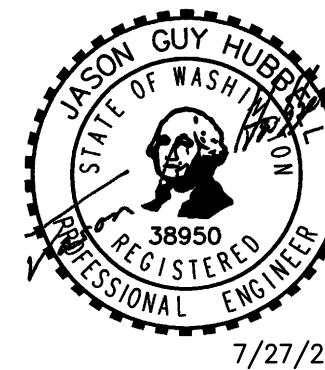
PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON  
**GRADING AND DRAINAGE PLAN**



CATCH BASINS	
◆ CB #4, TYPE 1, W/STANDARD GRATE RIM=57.50 IE=53.93 (15" E) IE=53.93 (15" W)	
◆ CB #5, TYPE 1, W/STANDARD GRATE RIM=58.50 IE=54.50 (15" W)	
◆ CB #6, TYPE 1, W/STANDARD GRATE RIM=58.50 IE=54.50 (12" E)	
◆ CB #7, TYPE 1, W/STANDARD GRATE RIM=58.73 IE=53.95 (12" W) IE=53.95 (12" E)	◆
◆ CB #8, TYPE 2-48" W/STANDARD GRATE RIM=59.00 IE=53.27 (12" W) IE=55.50 (8" NW) IE=53.27 (12" N)	◆
SDCO#1, RIM=59.34 IE=57.00 (8" W)	
SDCO#2, RIM=59.40 IE=56.01 (8" E) IE=56.01 (8" W)	
SDCO#5, RIM=59.67 IE=58.80 (8" E)	
SDCO#6, RIM=60.01 IE=57.60 (8" W) IE=57.60 (8" SE)	

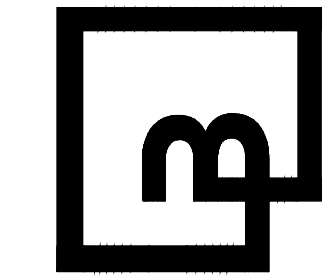
Revision  
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**Title:**  
**GRADING AND DRAINAGE PLAN**  
**FORTRESS - PUYALLUP**

**For:**  
**CREF3 PUYALLUP OWNER LLC**  
**11611 SAN VICENTE BLVD**  
**10TH FLOOR**  
**LOS ANGELES, CA 90049**



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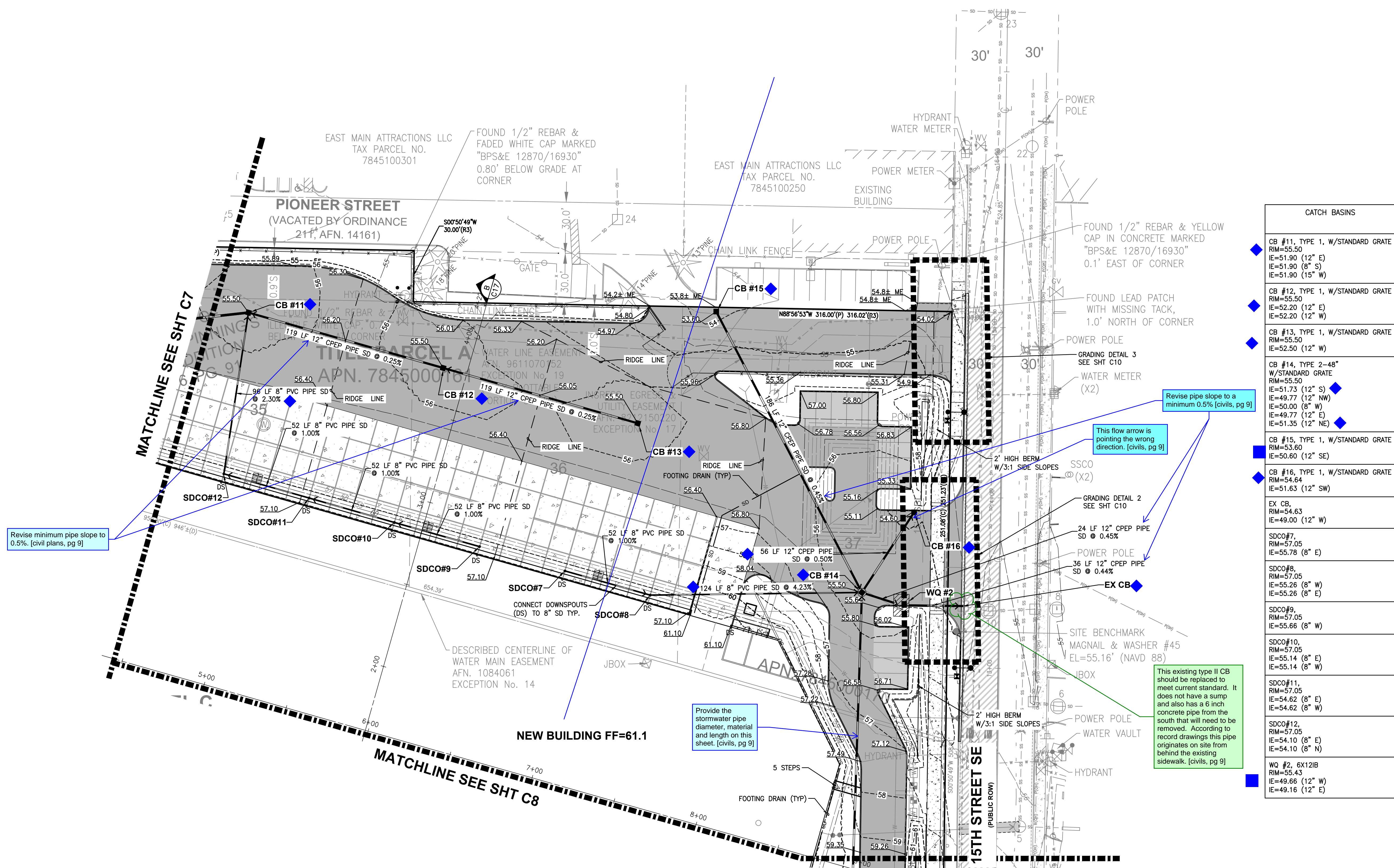
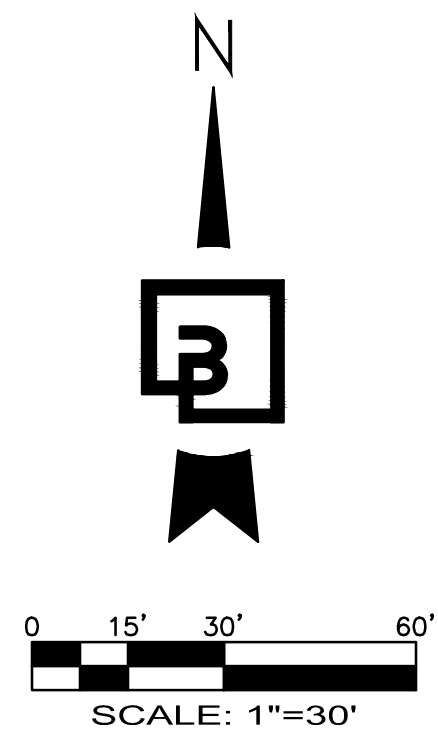
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CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON  
**GRADING AND DRAINAGE PLAN**



CATCH BASINS	
◆	CB #11, TYPE 1, W/STANDARD GRATE RIM=55.50 IE=51.90 (12" E) IE=51.90 (8" S) IE=51.90 (15" W)
◆	CB #12, TYPE 1, W/STANDARD GRATE RIM=55.50 IE=52.20 (12" E) IE=52.20 (12" W)
◆	CB #13, TYPE 1, W/STANDARD GRATE RIM=55.50 IE=52.50 (12" W)
◆	CB #14, TYPE 2-48" W/STANDARD GRATE RIM=55.50 IE=51.73 (12" S) IE=49.77 (12" NW) IE=50.00 (8" W) IE=49.77 (12" E) IE=51.35 (12" NE)
◆	CB #15, TYPE 1, W/STANDARD GRATE RIM=53.60 IE=50.60 (12" SE)
◆	CB #16, TYPE 1, W/STANDARD GRATE RIM=54.64 IE=51.63 (12" SW)
◆	EX CB RIM=54.63 IE=49.00 (12" W)
◆	SDCO#7, RIM=57.05 IE=55.78 (8" E)
◆	SDCO#8, RIM=57.05 IE=55.26 (8" W) IE=55.26 (8" E)
◆	SDCO#9, RIM=57.05 IE=55.66 (8" W)
◆	SDCO#10, RIM=57.05 IE=55.14 (8" E) IE=55.14 (8" W)
◆	SDCO#11, RIM=57.05 IE=54.62 (8" E) IE=54.62 (8" W)
◆	SDCO#12, RIM=57.05 IE=54.10 (8" E) IE=54.10 (8" N)
◆	WQ #2, 6X12IB RIM=55.43 IE=49.66 (12" W) IE=49.16 (12" E)

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No.

Date

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Title:

GRADING AND DRAINAGE PLAN

For:

CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049

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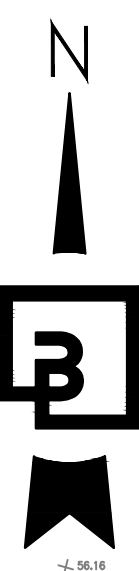
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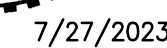
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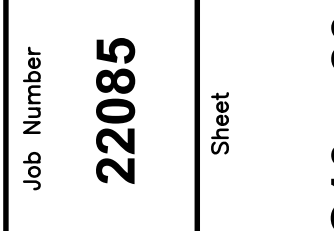
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Drawn	RDC
Checked	DL
Approved	JGH
Date	6/23/23

10



BY \_\_\_\_\_ CITY OF PUYALLUP  
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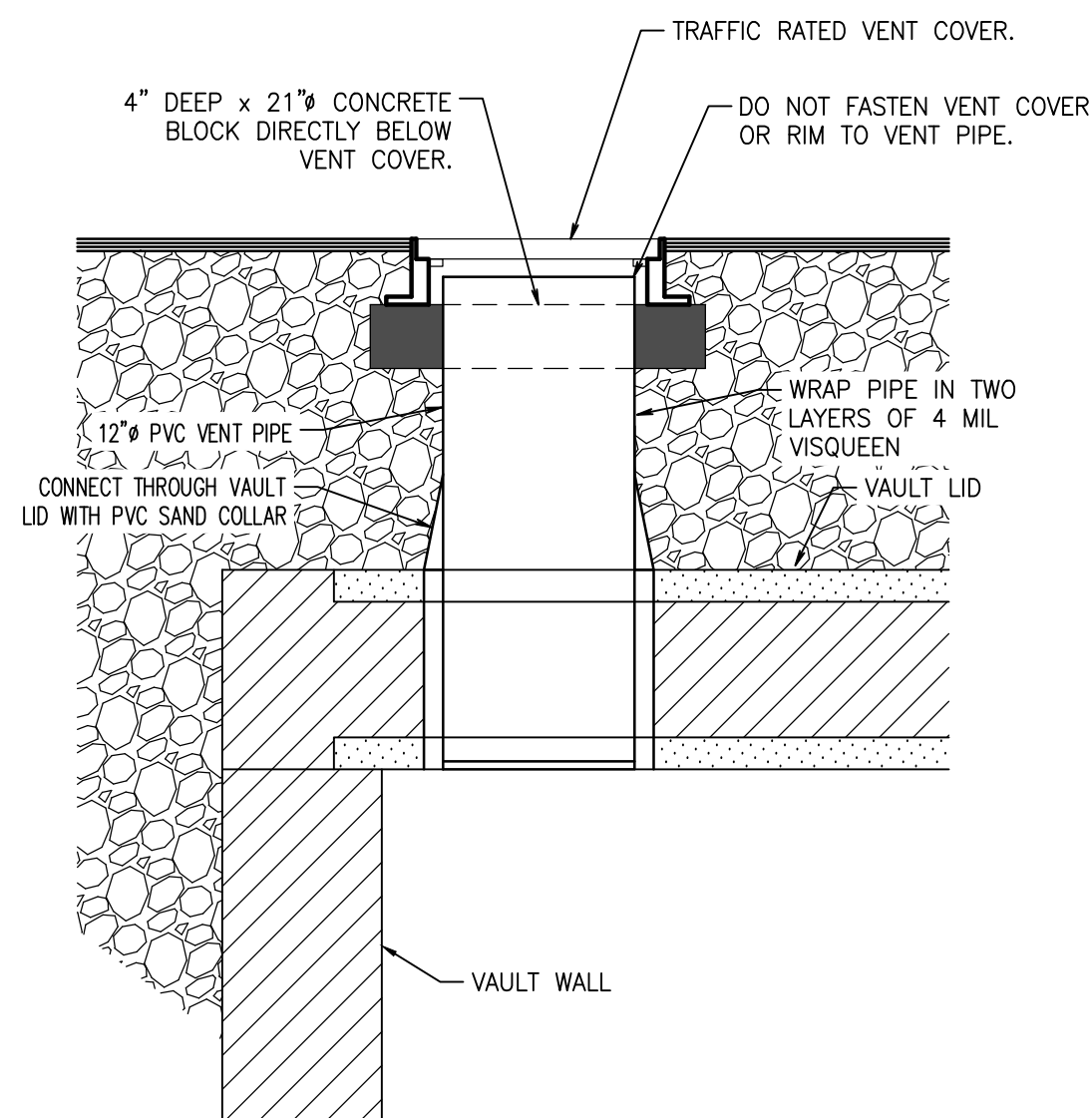
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NOT TO SCALE

1. VENTILATION PIPES (MIN. 12" DIAMETER OR EQUIVALENT) SHALL BE PROVIDED IN ALL CORNERS OF THE VAULT TO ALLOW FOR VENTILATION PRIOR TO ENTRY OF MAINTENANCE PERSONNEL INTO VAULT. VENTILATION PIPES ENTER THROUGH THE VAULT LID. PROVIDE LOCKING LIDS FLUSH WITH FINISH GRADE USING CLEANOUT.
2. WHERE PIPES ENTER AND LEAVE THE VAULT BELOW THE DESIGNED MAX WATER SURFACE, THEY SHALL BE SEALED USING A NON-POROUS, NON-SHRINKING GROUT.
3. ACCESS LOCATIONS, VAULT DESIGN AND WALL OPENINGS ARE PER THE STRUCTURAL DRAWING AND THE LOCATIONS ARE SHOWN FOR REFERENCE ONLY..
4. INSTALL CONFINED SPACE PLACARD AT ALL ACCESS POINTS TO THE VAULT.

1. PROVIDE H-20 (MIN) TRAFFIC RATED 5'X10' LOCKING, PERSONAL 2-DOOR SLOD ACCESS HATCH.
2. FRAME AND HATCH COVER SHALL BE DESIGNED FOR 150 PSF LIVE LOAD.
3. A SPRING-ASSISTED LIFT WITH HOLD-OPEN FEATURE TORSION BARS SHALL BE INSTALLED. AUTOMATIC HOLD-OPEN ARM WITH GRIP HANDLE RELEASE SHALL BE ADDED.
4. POLYPROPYLENE RUNGS OR LADDER SHALL BE INSTALLED EXTENDING FROM THE HATCH TO THE BOTTOM OF THE VAULT.
5. A LADDER-UP MECHANISM SHALL BE INSTALLED CENTERED OVER THE RUNGS OR LADDER BELOW THE HATCH.
6. ALL HARDWARE SHALL BE ZINC-COATED.

1. IN ADDITION TO THE HATCHES SHOWN, VAULT ACCESS OPENINGS MUST BE PROVIDED SUCH THAT NO LOCATION WITHIN THE VAULT IS MORE THAN 50 FEET FROM AN ACCESS OPENING. ACCESS TO EACH "V" ON THE VAULT FLOOR MUST BE PROVIDED.
2. ACCESS OPENINGS MUST HAVE ROUND, SOLID LOCKING LIDS, OR 3 FOOT SQUARE, LOCKING DIAMOND PLATE COVERS.

**DETENTION VAULT DATA:**

MIN INSIDE TOP OF VAULT ELEV= 56.5  
 MAX W.S. ELEV= 55.5  
 STATIC W.S. ELEV= 49.6

SEE THIS SHEET AND C12 FOR DETAILS.

DETENTION VAULT:  
 LIVE STORAGE VOLUME REQUIRED= 143,488 C.F.  
 LIVE STORAGE VOLUME PROVIDED= 143,488 C.F.

AS-BUILT DETENTION VOLUME CONSTRUCTED= \_\_\_\_\_ C.F.

BY \_\_\_\_\_ CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

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# FORTRESS - PUYALLUP

**Title:**

**CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049**

**For:**

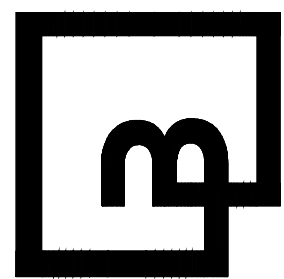


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Scale:  
Horizontal  
1"=10'  
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Drawn RDC  
Checked DL  
Approved JGH  
Date 6/23/23

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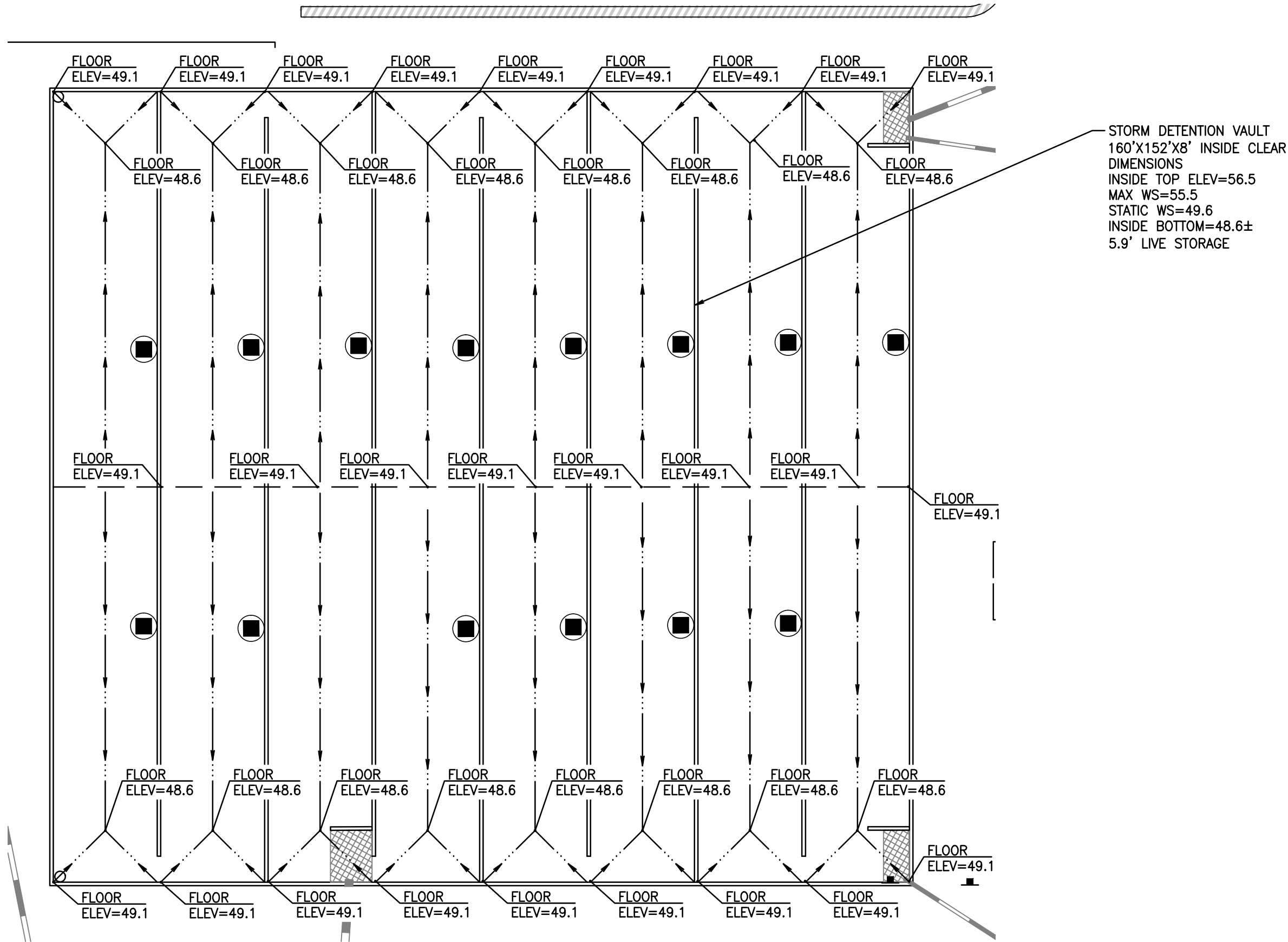
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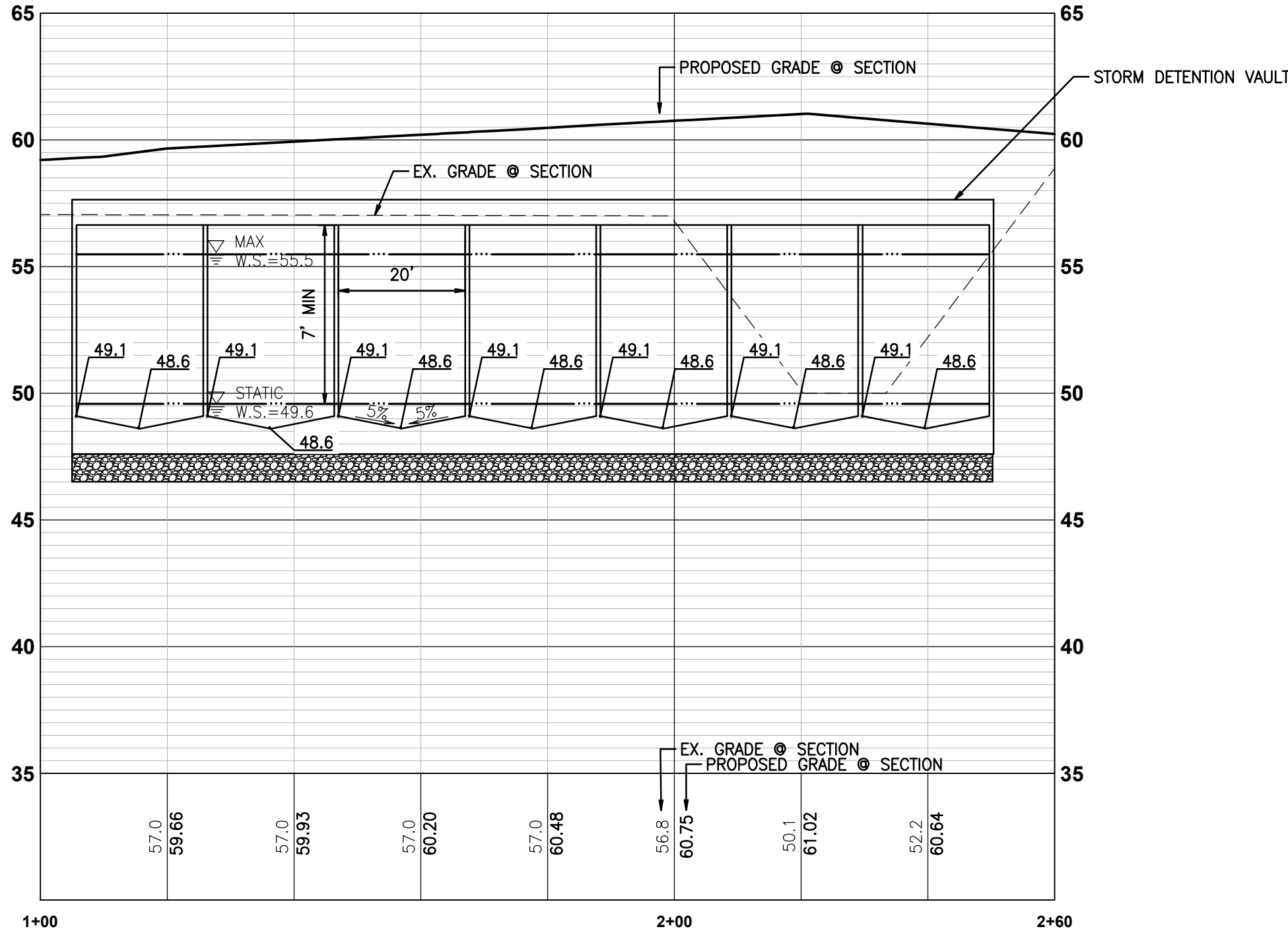


VAULT DETAILS



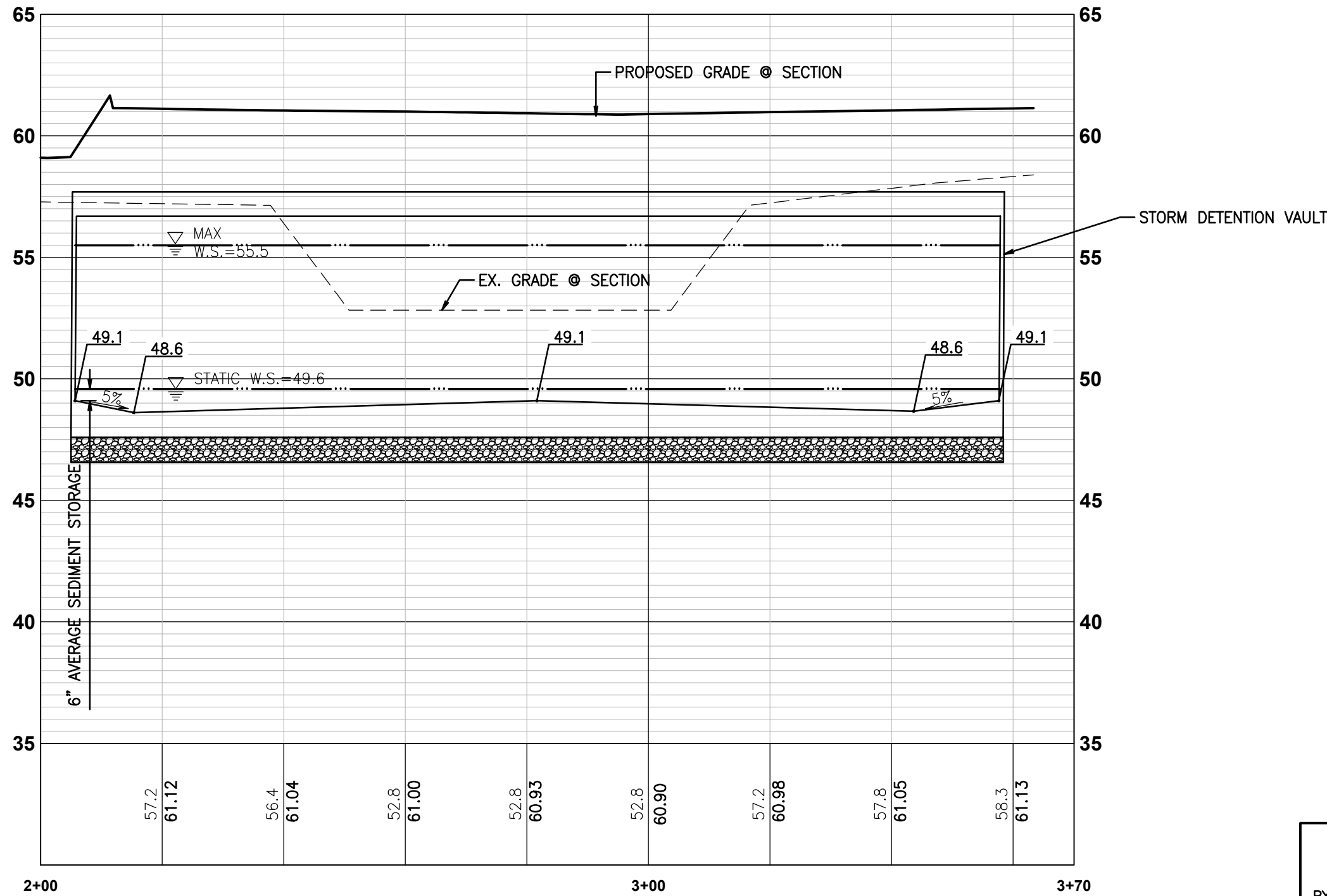
STORM VAULT FLOOR PLAN

1"=20'



VAULT SECTION V1-V1

1"=20' HORIZ, 1"=5' VERT



VAULT SECTION V2-V2

1"=20' HORIZ, 1"=5' VERT

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CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

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VAULT DETAILS

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10TH FLOOR  
LOS ANGELES, CA 90049

For:

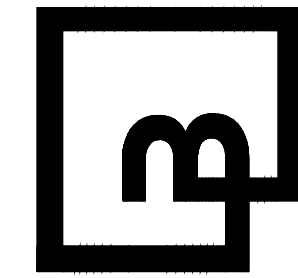


7/27/2023

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Vertical N/A

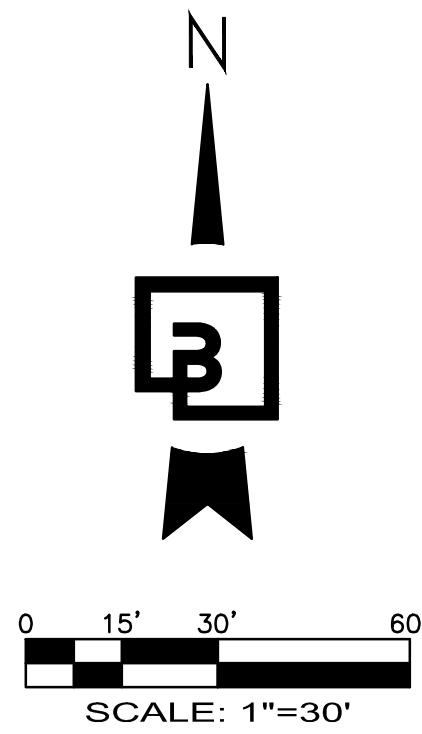
Designed \_\_\_\_\_  
Drawn \_\_\_\_\_  
Checked \_\_\_\_\_  
Approved \_\_\_\_\_  
Date 6/23/23

Barghausen  
Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com



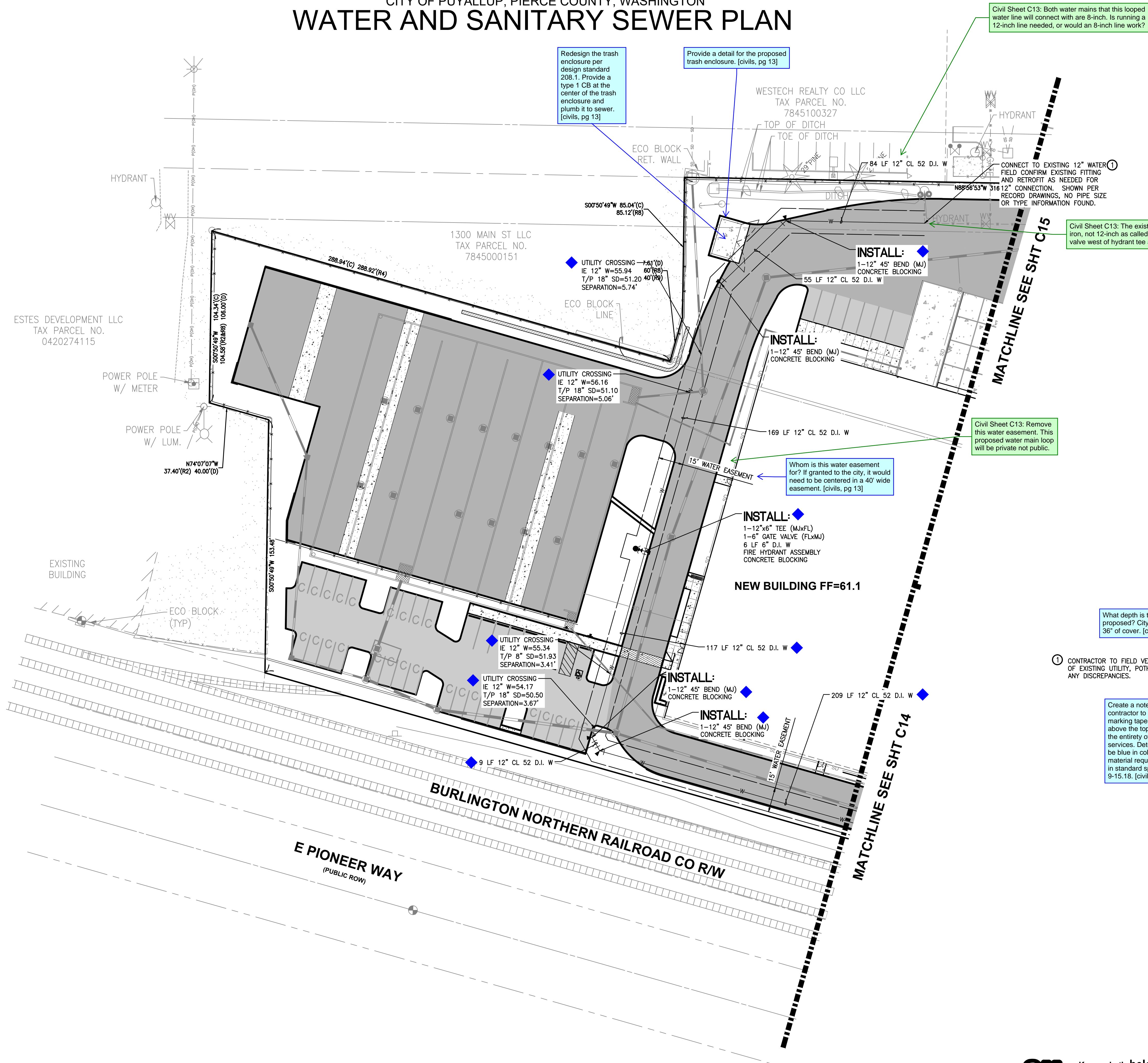
Job Number  
22085  
Sheet  
C12 of 26





PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

# WATER AND SANITARY SEWER PLAN



Redesign the trash enclosure per design standard 208.1. Provide a type 1 CB at the center of the trash enclosure and plumb it to sewer. [civils, pg 13]

Provide a detail for the proposed trash enclosure. [civils, pg 13]

Civil Sheet C13: Both water mains that this looped water line will connect with are 8-inch. Is running a 12-inch line needed, or would an 8-inch line work?

CONNECT TO EXISTING 12" WATER ①  
FIELD CONFIRM EXISTING FITTING AND RETROFIT AS NEEDED FOR 12" CONNECTION. SHOWN PER RECORD DRAWINGS, NO PIPE SIZE OR TYPE INFORMATION FOUND.

Civil Sheet C13: The existing water main is 8-inch ductile iron, not 12-inch as called out. Install a new 8-inch gate valve west of hydrant tee at connection point.

Provide a draft easement for the water main per the following link: <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.cityofpuyallup.org/DocumentCenter/View/7331/Appendix-C-7bid> [civils, pg 13]

Civil Sheet C13: Remove this water easement. This proposed water main loop will be private not public.

Whom is this water easement for? If granted to the city, it would need to be centered in a 40' wide easement. [civils, pg 13]

What depth is the water main proposed? City standards required 36" of cover. [civils, pg 13]

① CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITY, POTHOLE AS NECESSARY. NOTIFY ENGINEER OF ANY DISCREPANCIES.

Create a note that informs the contractor to install detectable marking tape approximately 1.5' above the top of the pipe along the entirety of the main and services. Detectable table shall be blue in color and meet the material requirements specified in standard specification 9-15.18. [civils, pg 13]

#### APPROVED

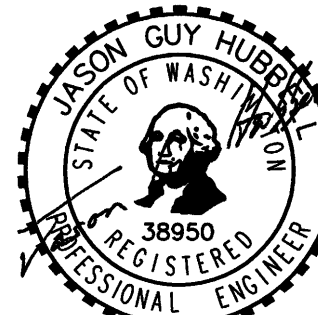
BY CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.  
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.  
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

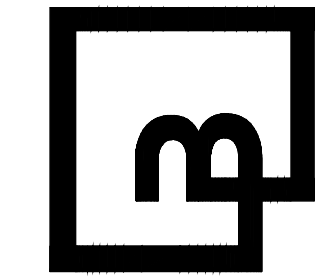
Title: **WATER AND SANITARY SEWER PLAN**

For: **CREF3 PUYALLUP OWNER LLC**  
**11611 SAN VICENTE BLVD**  
**10TH FLOOR**  
**LOS ANGELES, CA 90049**



Scale: Horizontal 1"=30' Vertical N/A  
Designed DL Drawn RDC Checked DL Approved JGH Date 6/23/23

**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222 [barghausen.com](http://barghausen.com)

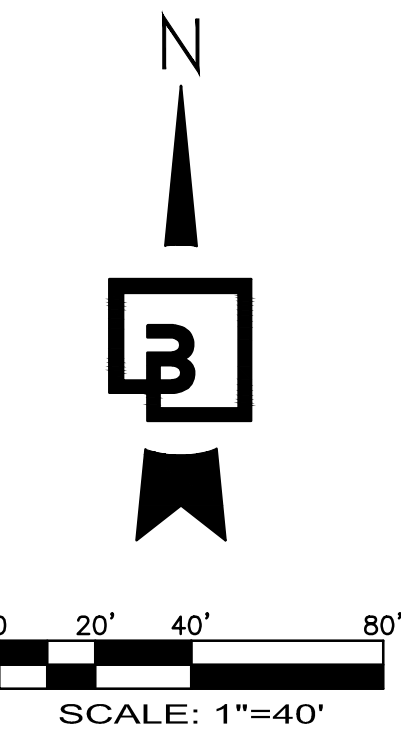


Job Number **22085** Sheet **C13** of **26**



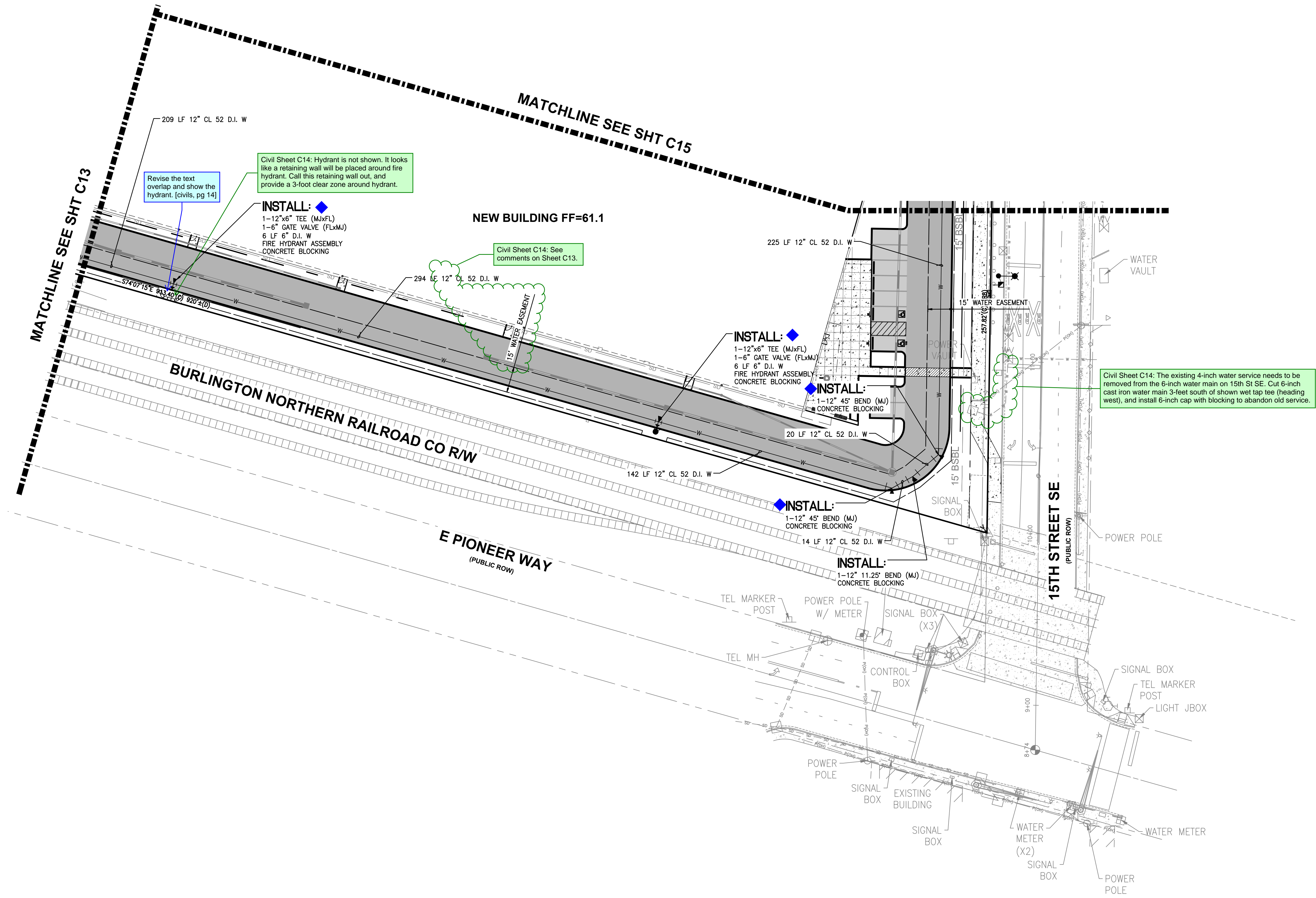
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PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

# WATER AND SANITARY SEWER PLAN



**APPROVED**

BY \_\_\_\_\_  
CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

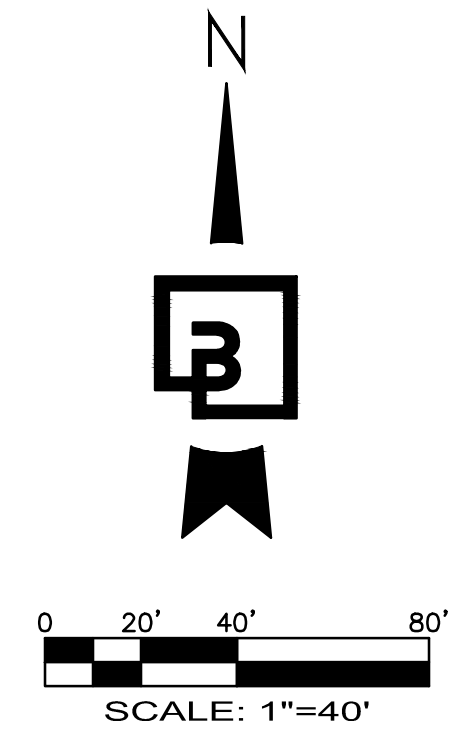
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.  
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.  
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.



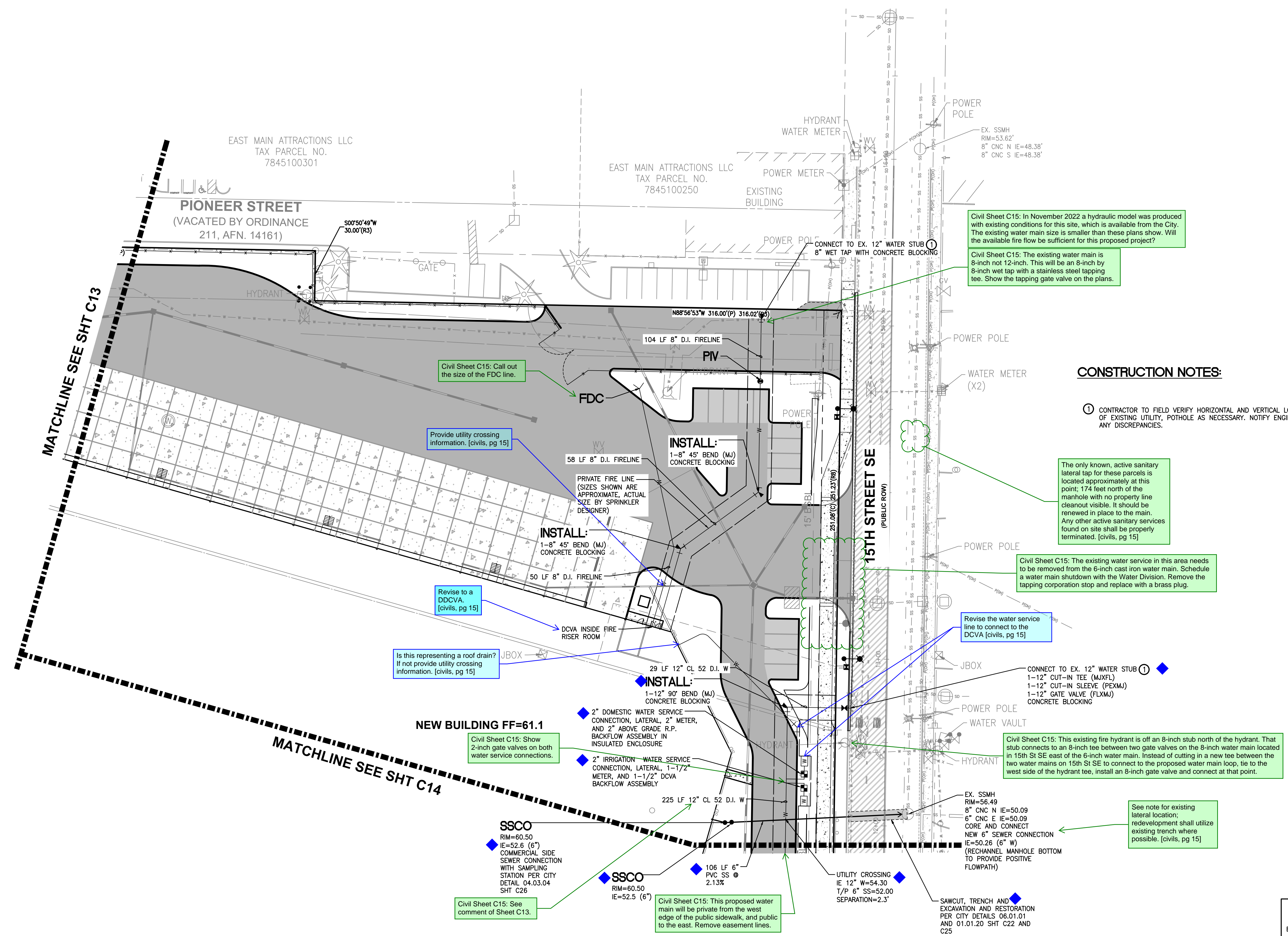
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Revision		Title: WATER AND SANITARY SEWER PLAN	
No.	Date	By	Appr.
For: CREF3 PUYALLUP OWNER LLC 11611 SAN VICENTE BLVD 10TH FLOOR LOS ANGELES, CA 90049		Job Number: 22085 Sheet: C14 of 26	
Scale: Horizontal 1"=30' Vertical N/A		Barghausen Consulting Engineers, Inc. 18215 72nd Avenue South Kent, WA 98032 425.251.6222 barghausen.com	
Designed _____ Drawn _____ Checked _____ Approved _____ Date 6/23/23		Professional Engineer Seal: JASON GUY HUBBARD, No. 38850, State of Washington, Registered Professional Engineer, 7/27/2023	





PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON  
**WATER AND SANITARY SEWER PLAN**



**CONSTRUCTION NOTES:**

① CONTRACTOR TO FIELD VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITY, POT HOLE AS NECESSARY. NOTIFY ENGINEER OF ANY DISCREPANCIES.

The only known, active sanitary lateral tap for these parcels is located approximately at this point; 174 feet north of the manhole with no property line cleanout visible. It should be renewed in place to the main. Any other active sanitary services found on site shall be properly terminated. [civils, pg 15]

Civil Sheet C15: The existing water service in this area needs to be removed from the 6-inch cast iron water main. Schedule a water main shutdown with the Water Division. Remove the tapping corporation stop and replace with a brass plug.

Revise the water service line to connect to the DCVA [civils, pg 15]

Civil Sheet C15: This existing fire hydrant is off an 8-inch stub north of the hydrant. That stub connects to an 8-inch tee between two gate valves on the 8-inch water main located in 15th St SE east of the 6-inch water main. Instead of cutting in a new tee between the two water mains on 15th St SE to connect to the proposed water main loop, tie to the west side of the hydrant tee, install an 8-inch gate valve and connect at that point.

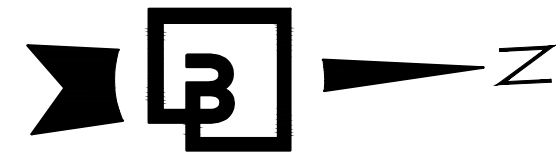
See note for existing lateral location; redevelopment shall utilize existing trench where possible. [civils, pg 15]

**APPROVED**  
BY \_\_\_\_\_  
CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING  
DATE \_\_\_\_\_  
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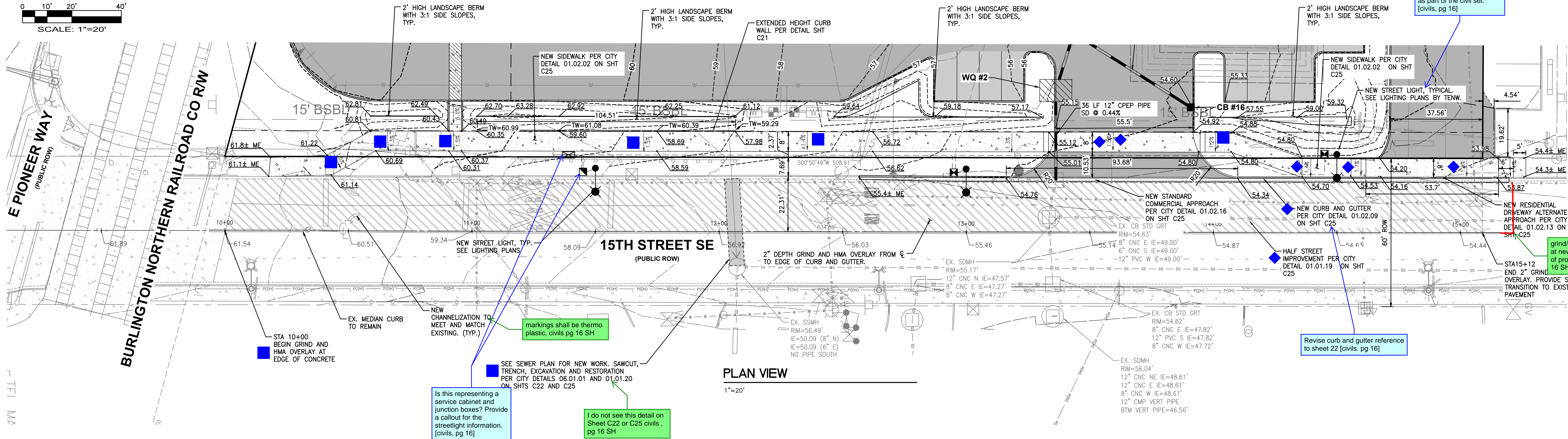
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No.	Date	By	Appr.
For: <b>CREF3 PUYALLUP OWNER LLC</b> 11611 SAN VICENTE BLVD 10TH FLOOR LOS ANGELES, CA 90049		Title: <b>FORTRESS - PUYALLUP</b>	
Scale:	Horizontal 1"=30'	Vertical N/A	
Designed	Drawn	Checked	Approved
DL	RDC	DL	JGH
Date	6/23/23		
<b>Barghausen Consulting Engineers, Inc.</b> 18215 72nd Avenue South Kent, WA 98032 425.251.6222 <a href="http://barghausen.com">barghausen.com</a>			
Job Number	22085	Sheet	C15 of 26





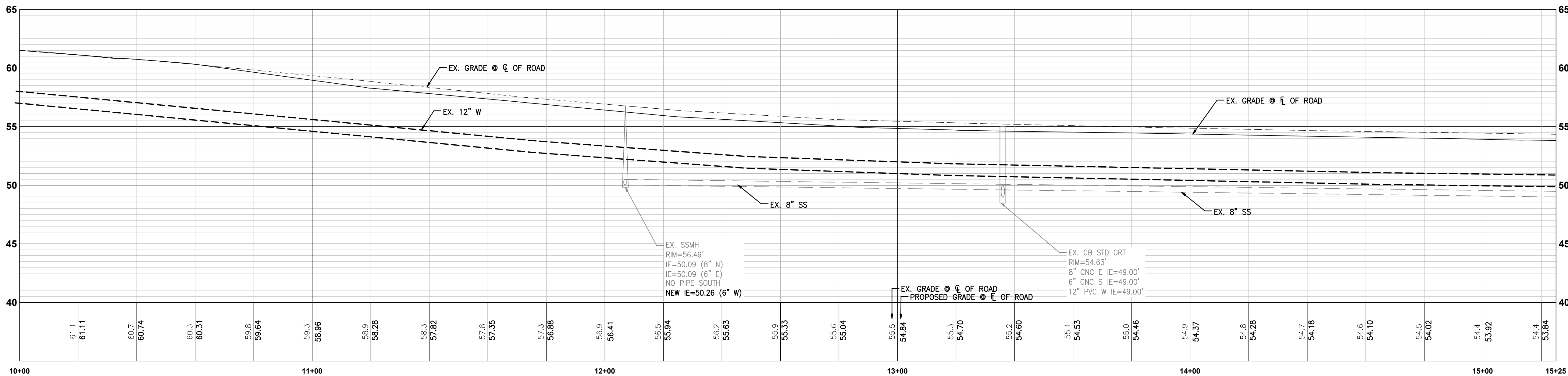
0 10' 20' 40'  
SCALE: 1"=20'

PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON  
**FRONTAGE IMPROVEMENT PLAN**



**PLAN VIEW**

1"=20'



**PROFILE VIEW**

1"=20' HORIZ, 1"=5' VERT

Additional street lighting plan information was not submitted. Include a complete street light design for the next round of review as part of the civil set. [civils, pg 16]

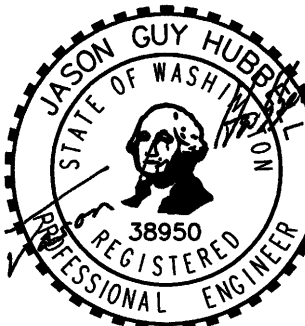
Revise curb and gutter reference to sheet 22 [civils, pg 16]

grind/overlay should end at new curb/gutter or end of project limits, civils pg 16 SH

**FRONTAGE IMPROVEMENT PLAN**

**FORTRESS - PUYALLUP**

**For:**  
CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049



Scale: Horizontal 1"=20' Vertical N/A  
Designed: DL Drawn: RDC Checked: DL Approved: JGH Date: 6/23/23

**Barghausen Consulting Engineers, Inc.**  
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Kent, WA 98032  
425.251.6222 [barghausen.com](http://barghausen.com)



Job Number: 22085  
Sheet: C16 of 26

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DEVELOPMENT ENGINEERING  
DATE: \_\_\_\_\_  
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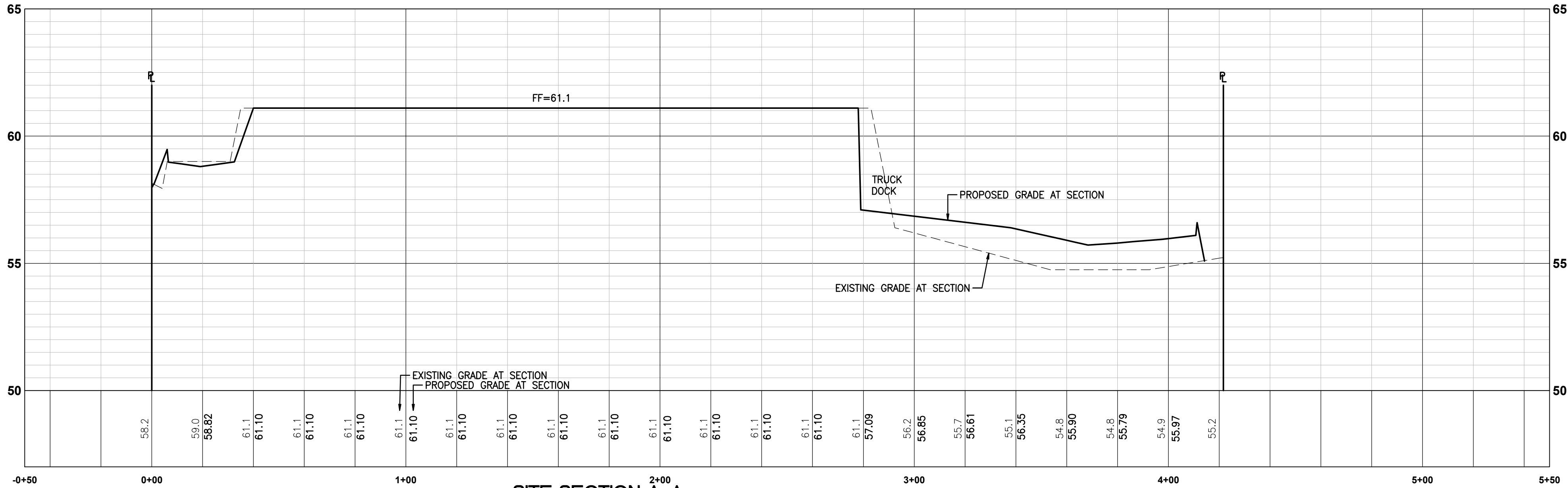


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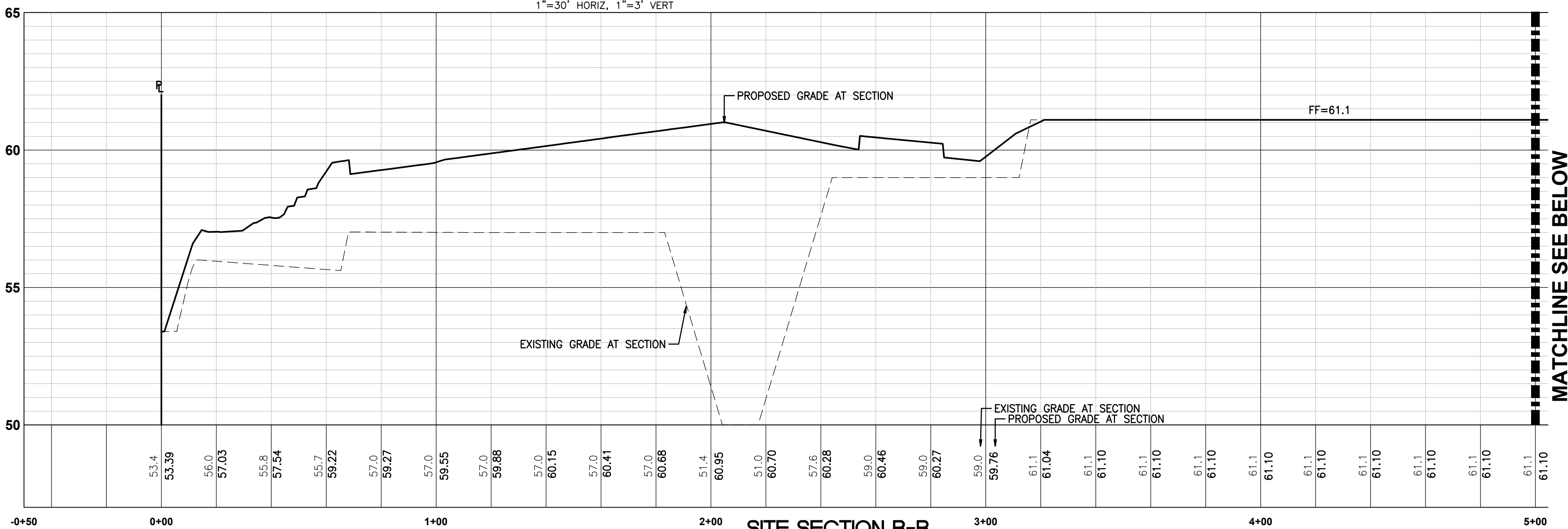
PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON

# SITE SECTIONS



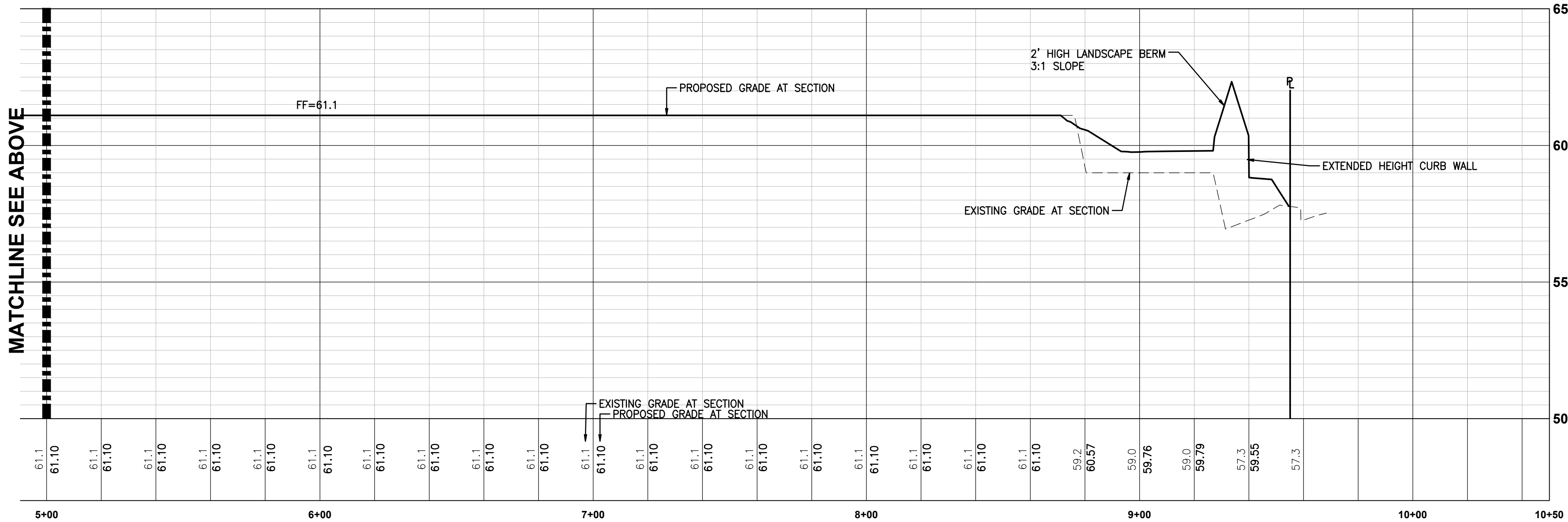
SITE SECTION A-A

1"=30' HORIZ, 1"=3' VERT



SITE SECTION B-B

1"=30' HORIZ, 1"=3' VERT



SITE SECTION B-B

1"=30' HORIZ, 1"=3' VERT

Revision  
No. Date By Cld. Appr.  
Title:  
SITE SECTIONS  
FORTRESS - PUYALLUP

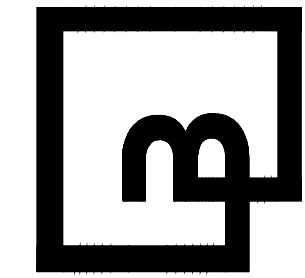
For:  
CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049



7/27/2023

Scale:  
Horizontal 1"=30'  
Vertical 1"=3'  
Designed \_DL\_ Drawn \_RDC\_ Checked \_DL\_ Approved \_JGH\_ Date 6/23/23

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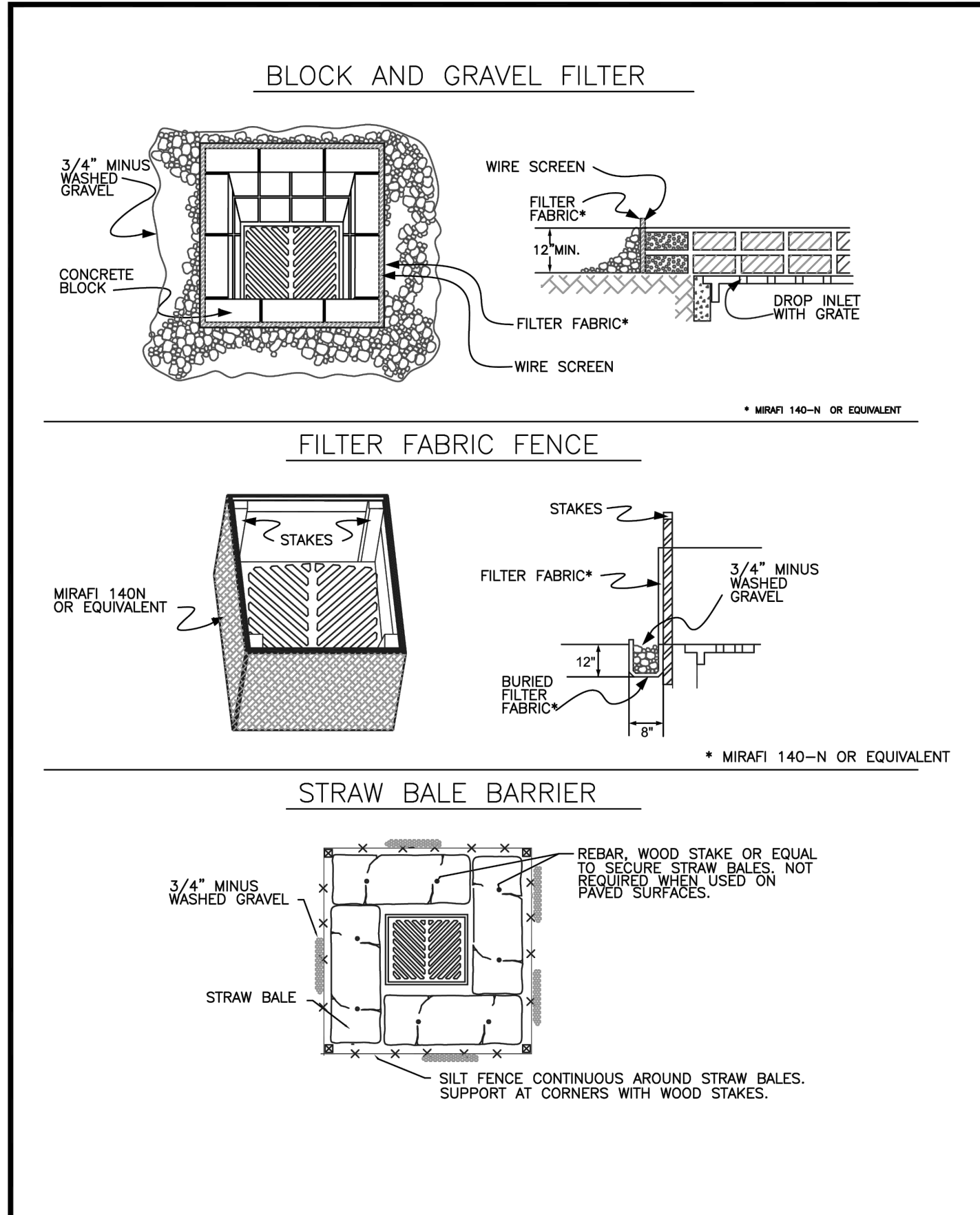


Job Number 22085  
Sheet C17 of 26

APPROVED  
BY: CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING  
DATE:  
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.  
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PORTION OF SE QUARTER OF SEC 27, TWN 20 N, RGE. 4 E, W.M.  
CITY OF PUYALLUP, PIERCE COUNTY, WASHINGTON  
**CONSTRUCTION NOTES AND DETAILS**



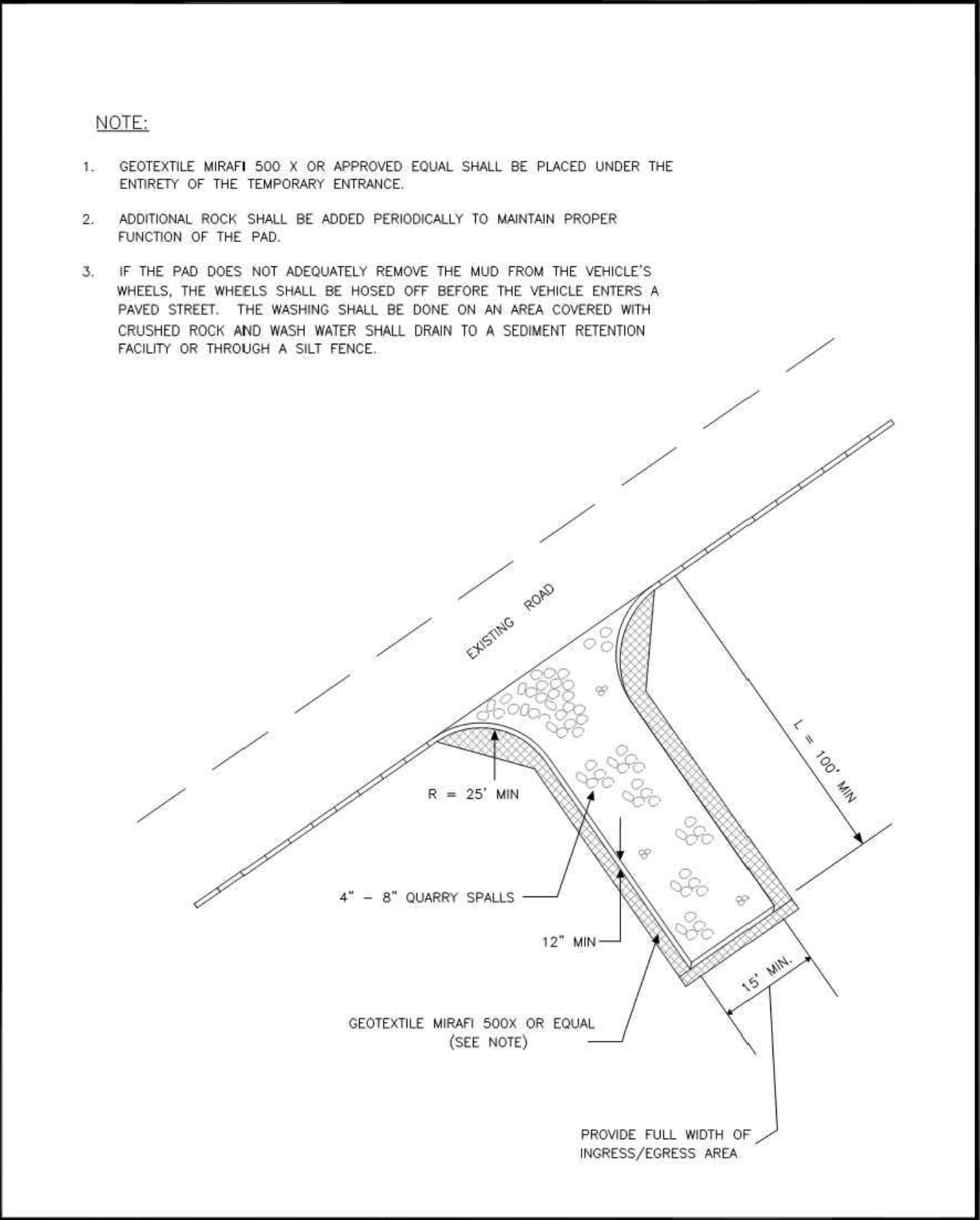
	<b>CITY OF PUYALLUP</b>		<b>STORM DRAIN BARRIERS</b>		
	DRAWN BY	CHECKED BY	APPROVED BY	REVIEWED BY	
	LINDA LANSING	LINDA LIAN	COLLEEN HARRIS	XXXX	
	FILE NAME	DATE APPROVED	DATE REVISION	SCALE	

20090402	02.03.05	02.03.05	02.03.05	02.03.05	02.03.05
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- CONDITIONS WHERE PRACTICE APPLIES
- BLOCK AND GRAVEL FILTER - APPLICABLE FOR AREAS GREATER THAN 5% SLOPE.
  - FILTER FABRIC FENCE - APPLICABLE WHERE THE INLET DRAINS A RELATIVELY SMALL (ONE ACRE OR LESS) AND FLAT AREA (LESS THAN 5% SLOPE).
  - STRAW BALE BARRIER - APPLICABLE WHERE INLET DRAINS A RELATIVELY FLAT DISTURBED AREA (LESS THAN 5% SLOPE) IN WHICH SHEET FLOW (NOT EXCEEDING 0.3 FT/SEC.) OCCURS. BARRIERS OF THIS TYPE SHOULD NOT BE PLACED AROUND INLETS RECEIVING CONCENTRATED FLOWS SUCH AS THOSE ALONG MAJOR STREETS AND HIGHWAYS.
- 1. BLOCK AND GRAVEL FILTER - INSTALLATION PROCEDURE**
- PLACE WIRE MESH OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF ONE FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. USE WIRE SCREEN WITH 1/2-INCH OPENINGS. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, OVERLAP THE STRIPS. PLACE FILTER FABRIC OVER WIRE MESH.
  - PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, SO THAT THE OPEN ENDS FACE OUTWARD, NOT UPWARD. THE ENDS OF ADJACENT BLOCKS SHOULD ABUT. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF BLOCKS THAT ARE 4-INCH, 8-INCH AND 12-INCH WIDE. THE ROW OF BLOCKS SHOULD BE AT LEAST 12-INCHES BUT NO GREATER THAN 24-INCHES HIGH.
  - PLACE WIRE SCREEN OVER THE OVERSIDE VERTICAL FACE (OPEN END) OF THE CONCRETE BLOCKS TO PREVENT STONES FROM BEING WASHED THROUGH THE BLOCKS. USE WIRE SCREEN WITH 1/2-INCH OPENINGS.
  - PILE STONES AGAINST THE WIRE MESH TO THE TOP OF THE BLOCKS. USE 3/4" MINUS WASHED GRAVEL.
- 2. FILTER FABRIC FENCE - INSTALLATION PROCEDURE**
- PLACE 2-INCH BY 2-INCH WOODEN STAKES AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3 FEET APART AND DRIVE THEM AT LEAST 8-INCHES INTO THE GROUND. THE STAKES MUST BE AT LEAST 3 FEET LONG.
  - EXCAVATE A TRENCH APPROXIMATELY 8-INCHES WIDE AND 12-INCHES DEEP AROUND THE OUTSIDE PERIMETER OF THE STAKES.
  - STAPLE THE FILTER FABRIC\* TO THE WOODEN STAKES SO THAT 32-INCHES OF THE FABRIC EXTENDS AND CAN BE FORMED INTO THE TRENCH, AND USE HEAVY-DUTY WIRE STAPLES AT LEAST 1/2-INCHES LONG.
  - BACKFILL THE TRENCH WITH 3/4-INCH MINUS WASHED GRAVEL ALL THE WAY AROUND.
- 3. STRAW BALE BARRIER - INSTALLATION PROCEDURE**
- EXCAVATE A 4-INCH DEEP TRENCH AROUND THE INLET. MAKE THE TRENCH AS WIDE AS A STRAW BALE.
  - ORIENT STRAW BALES WITH THE BINDINGS AROUND THE SIDES OF THE BALES RATHER THAN OVER AND UNDER THE BALES.
  - PLACE BALES LENGTHWISE AROUND THE INLET AND PRESS THE ENDS OF ADJACENT BALES SECURELY IN PLACE.
  - DRIVE TWO 2-INCH BY 2-INCH STAKES THROUGH EACH BALE TO ANCHOR THE BALE SECURELY IN PLACE.
  - BACKFILL THE EXCAVATED SOIL AND COMPACT IT AGAINST THE BALE.
  - WEDGE LOOSE STRAW BETWEEN BALES TO PREVENT WATER FROM FLOWING BETWEEN BALES.

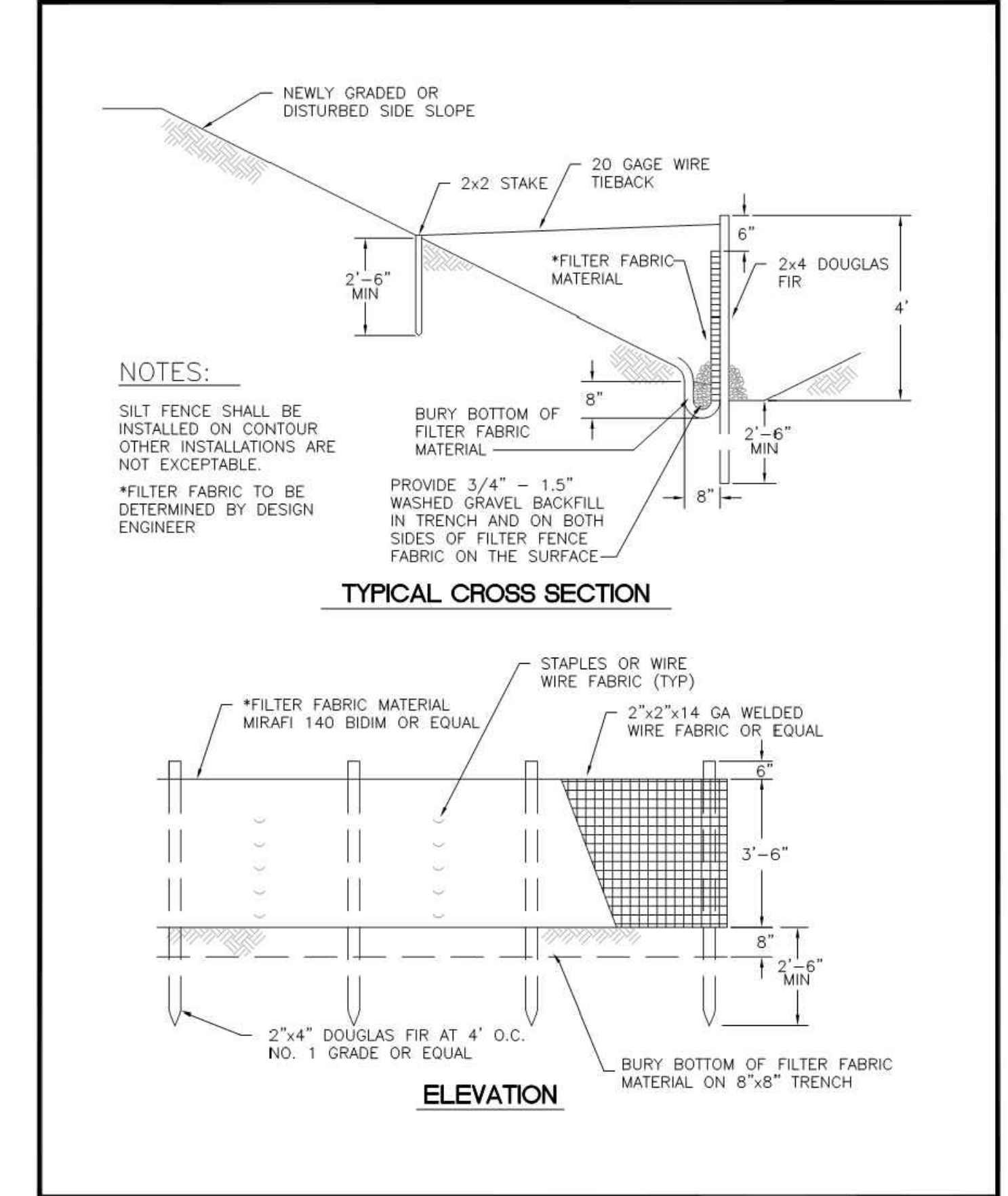
	<b>CITY OF PUYALLUP</b>		<b>STORM DRAIN BARRIERS NOTES</b>		
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	LINDA LANSING	LINDA LIAN	COLLEEN HARRIS	XXXX	
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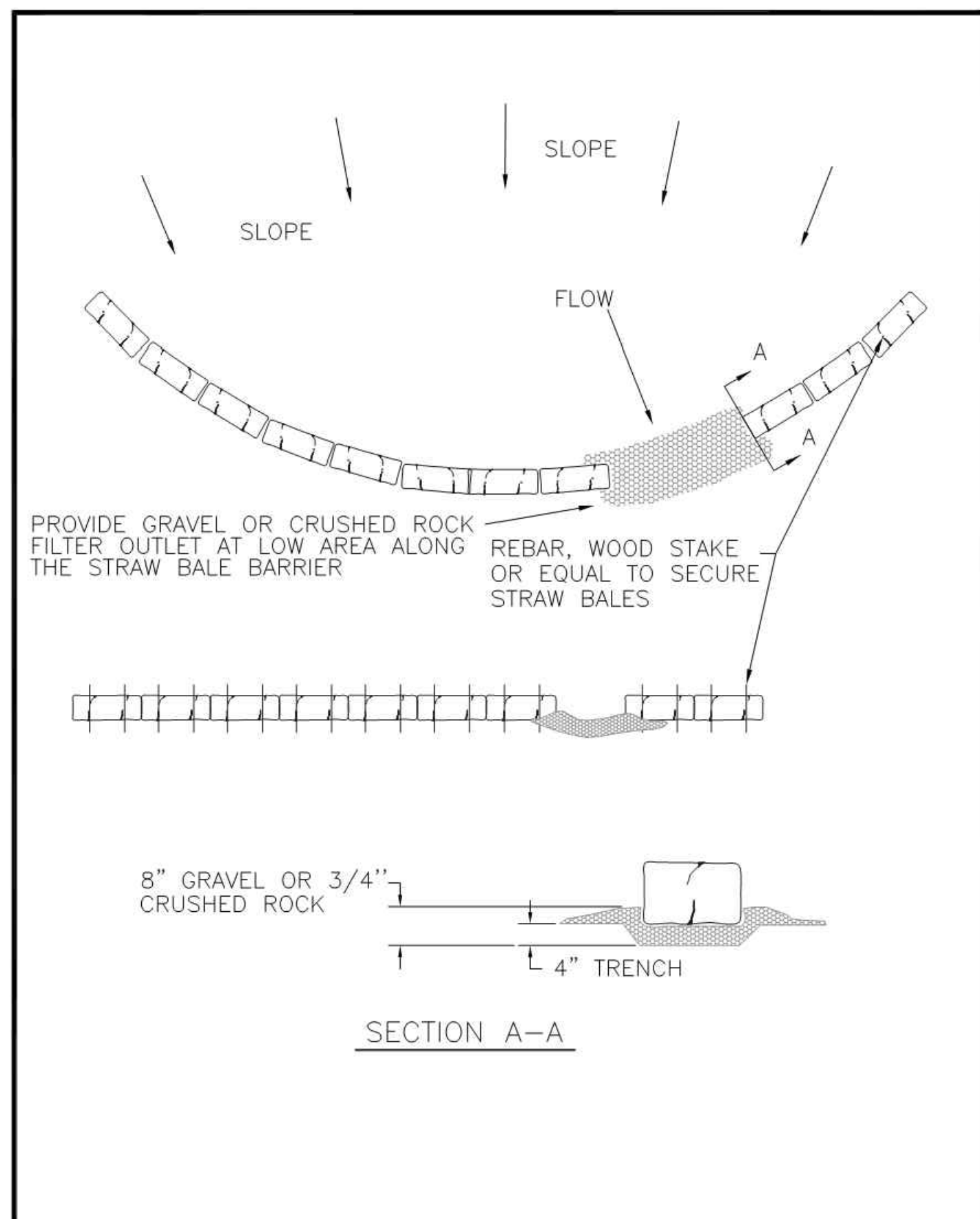
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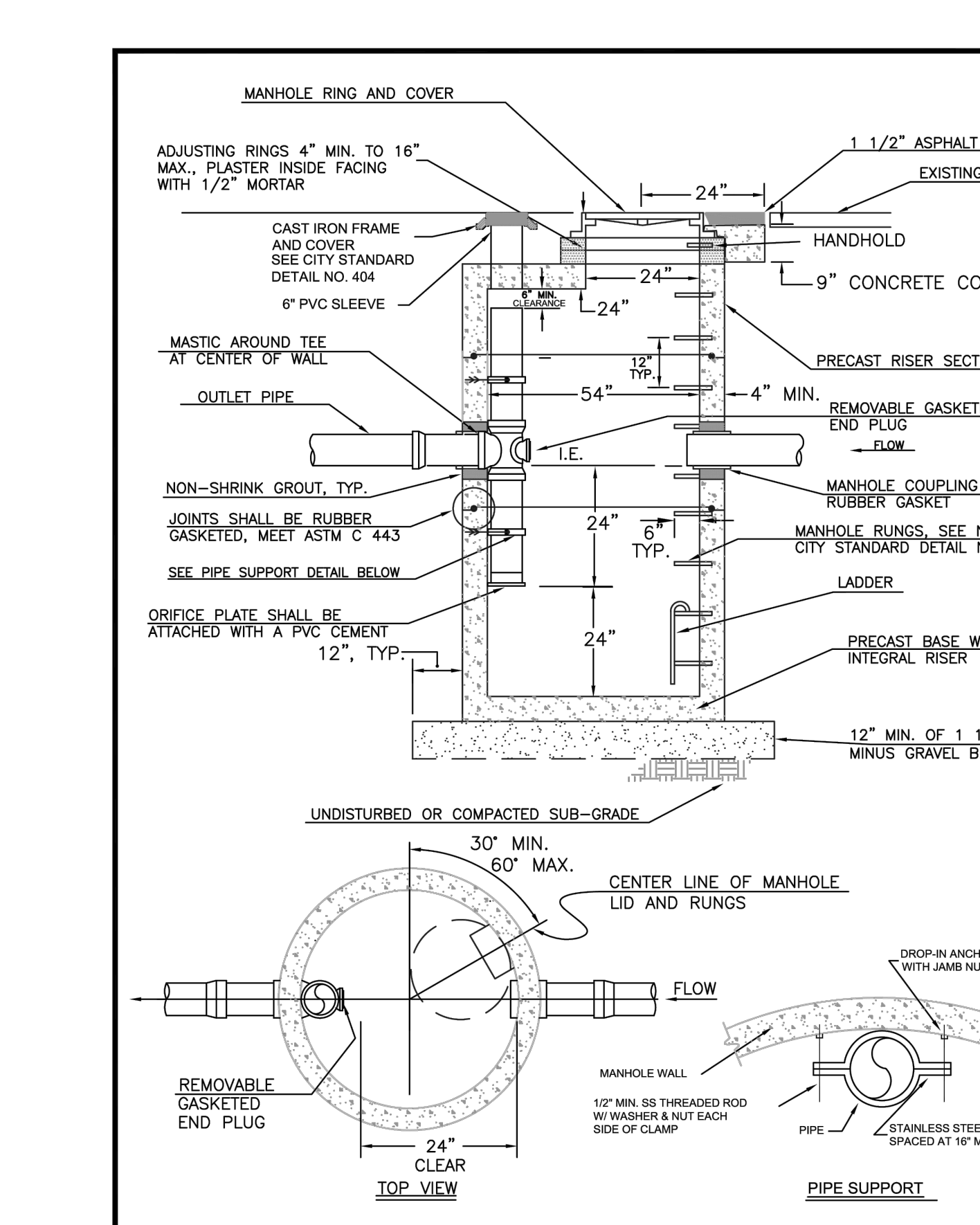
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	FILE NAME	DATE APPROVED	DATE REVISION	SCALE	

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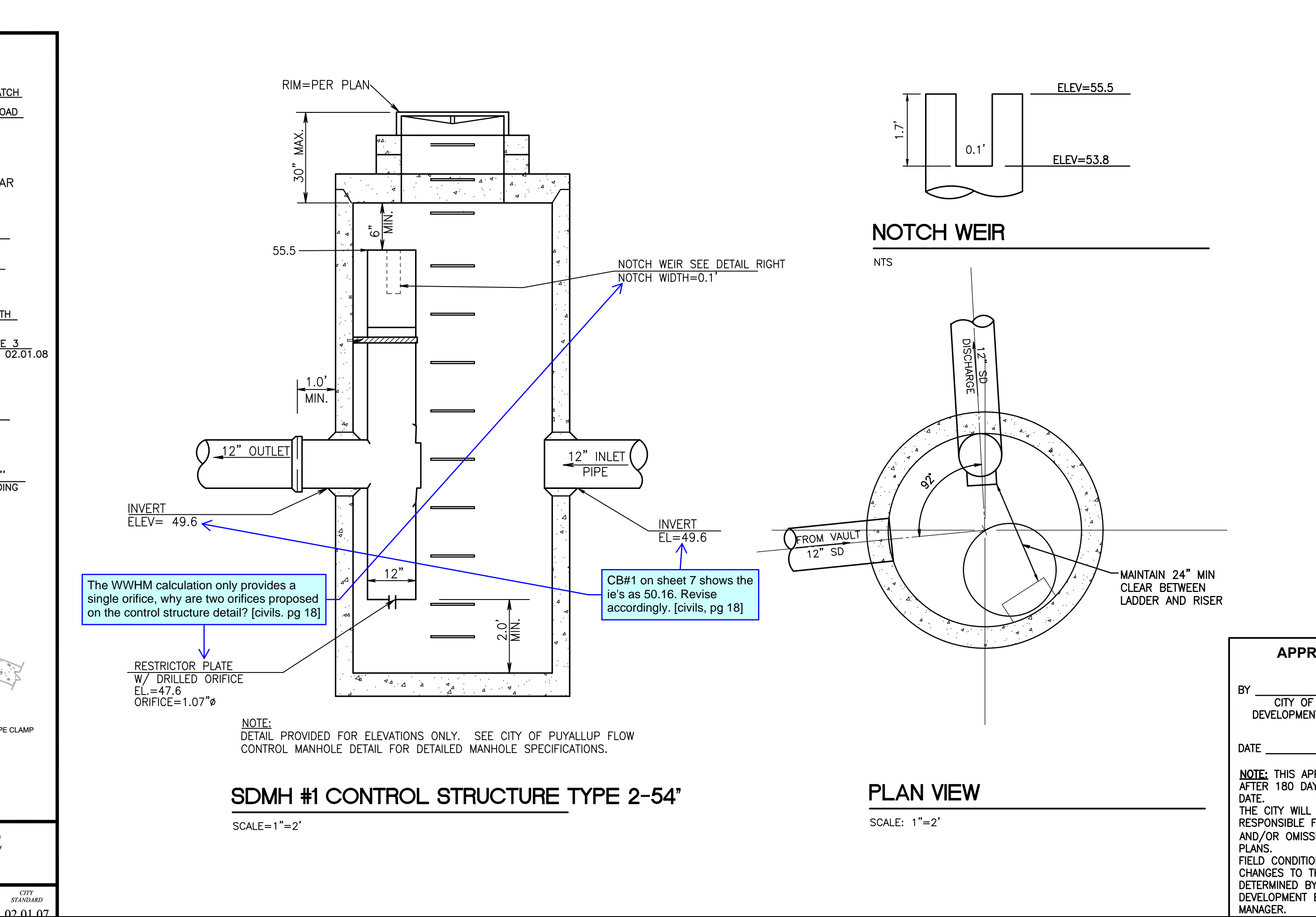
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	DRAWN BY	CHECKED BY	APPROVED BY	REVIEWED BY	
	LINDA LANSING	LINDA LIAN	COLLEEN HARRIS	XXXX	
	FILE NAME	DATE APPROVED	DATE REVISION	SCALE	

20090402	02.03.04	02.03.04	02.03.04	02.03.04	02.03.04
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	<b>CITY OF PUYALLUP</b>		<b>FLOW CONTROL MANHOLE WITH FLAT TOP</b>		
	DRAWN BY	CHECKED BY	APPROVED BY	REVIEWED BY	
	LINDA LANSING	LINDA LIAN	COLLEEN HARRIS	XXXX	
	FILE NAME	DATE APPROVED	DATE REVISION	SCALE	

20090402	02.01.07	02.01.07	02.01.07	02.01.07	02.01.07
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**APPROVED**

BY: CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE: \_\_\_\_\_

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

Revision  
No. Date By Cld. Appr.

Title: **CONSTRUCTION NOTES AND DETAILS**

For: **CREF3 PUYALLUP OWNER LLC**  
**11611 SAN VICENTE BLVD**  
**10TH FLOOR**  
**LOS ANGELES, CA 90049**

Scale: Horizontal Vertical  
Designed: DL  
Drawn: RDC  
Checked: DL  
Approved: JGH  
Date: 6/23/23

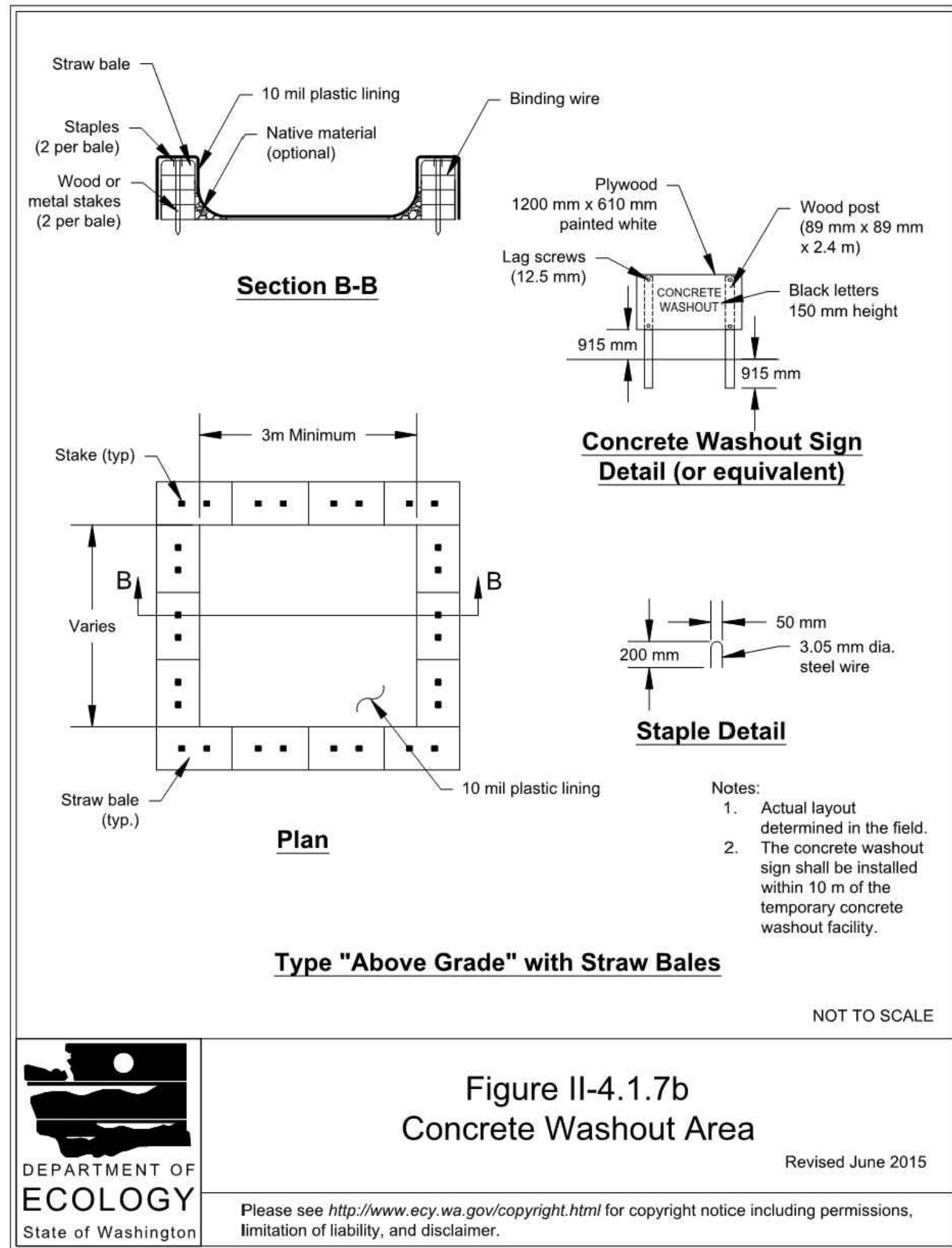
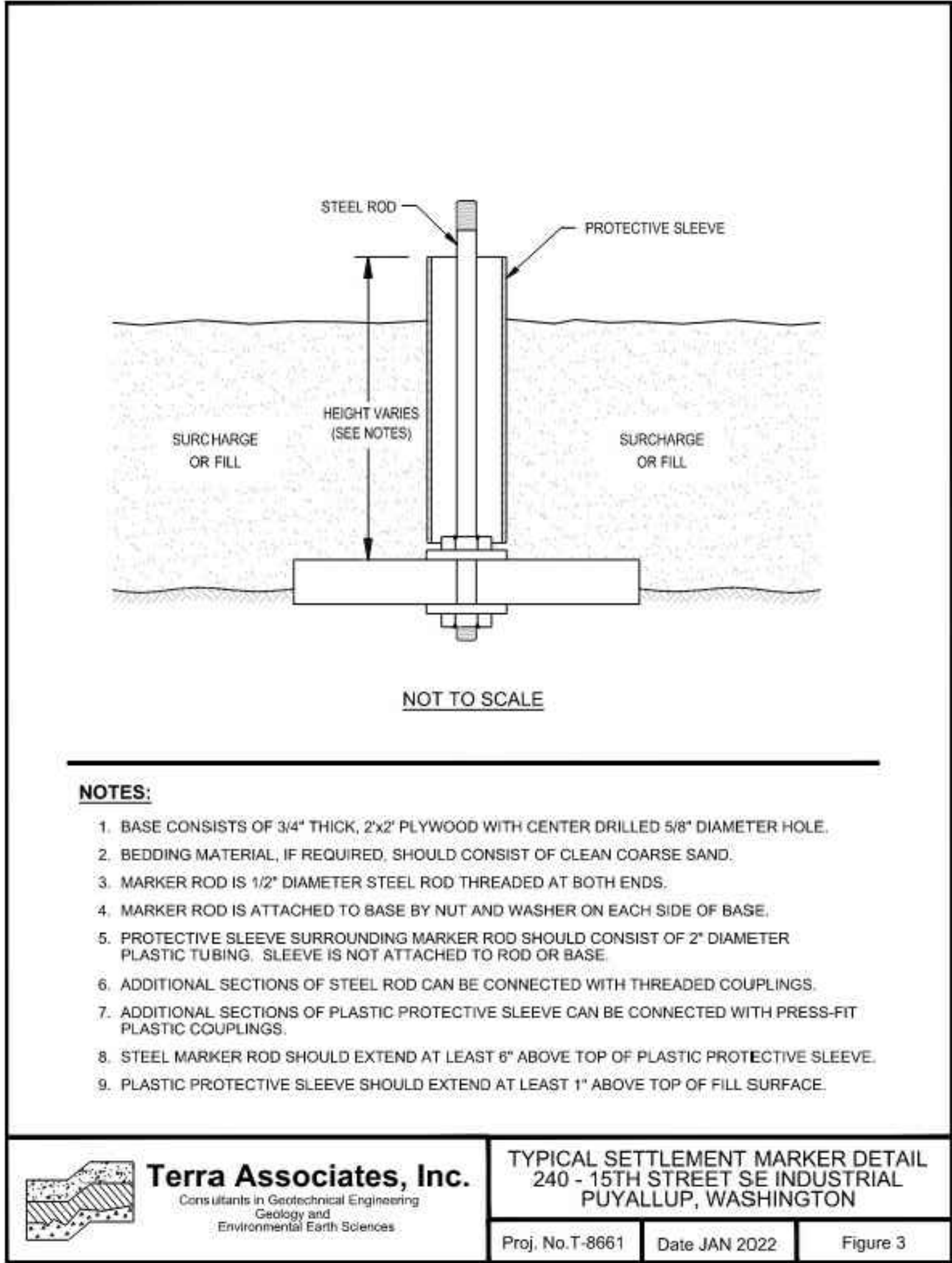
**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent, WA 98032  
425.251.6222  
barghausen.com

Job Number: **22085**  
Sheet: **C18** of **26**

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# CONSTRUCTION DETAILS



## MATERIALS OF CONSTRUCTION

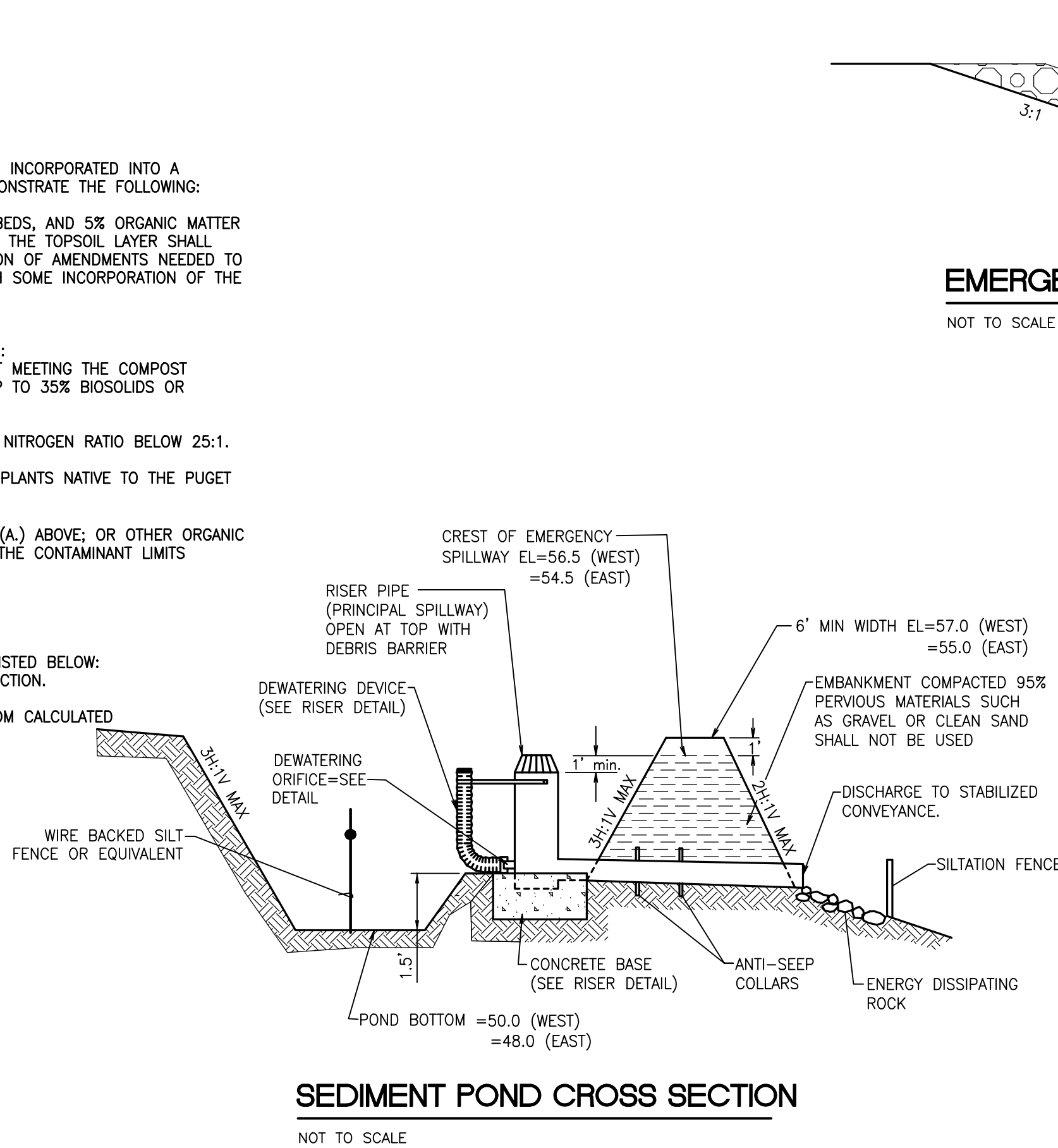
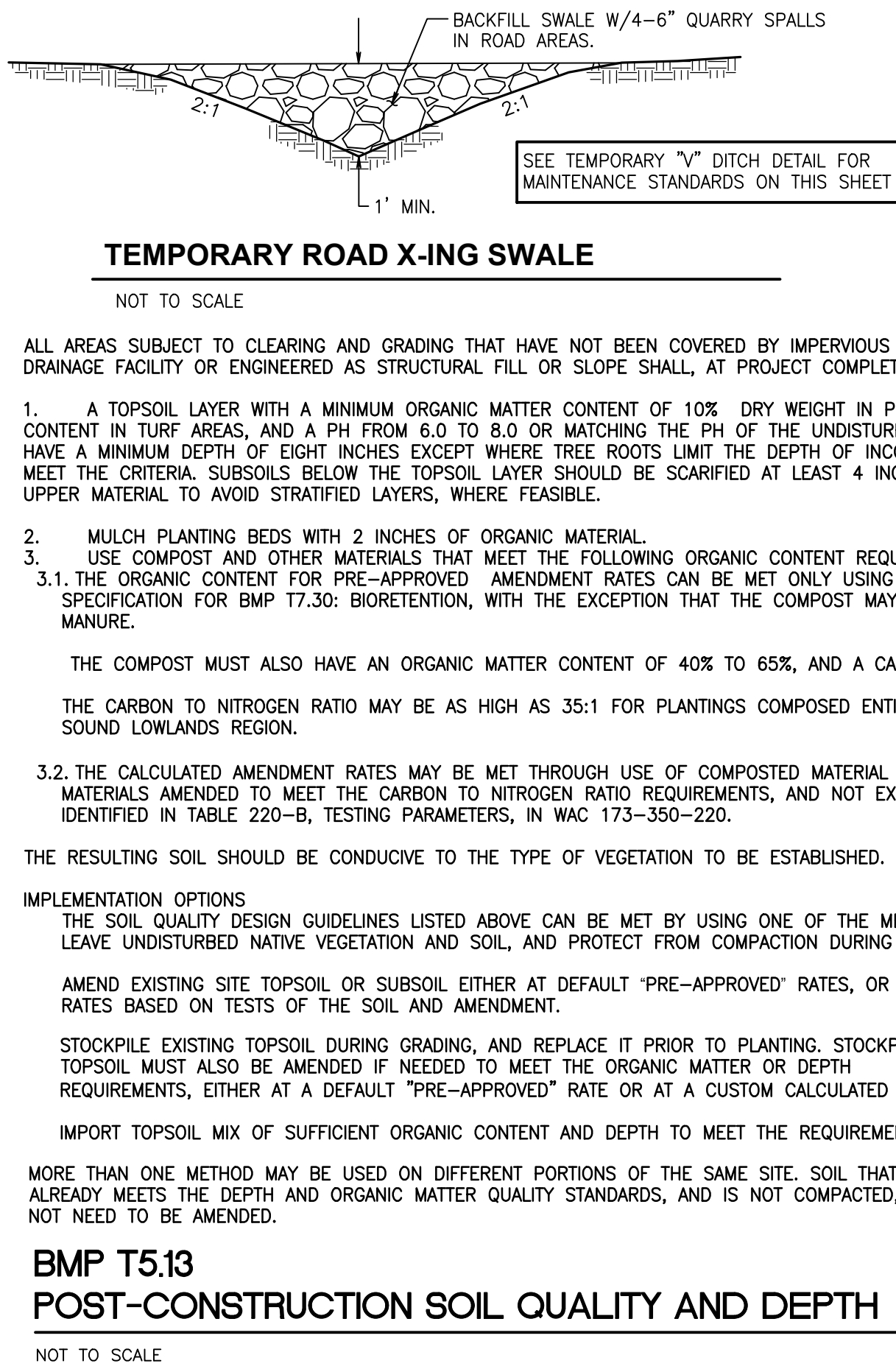
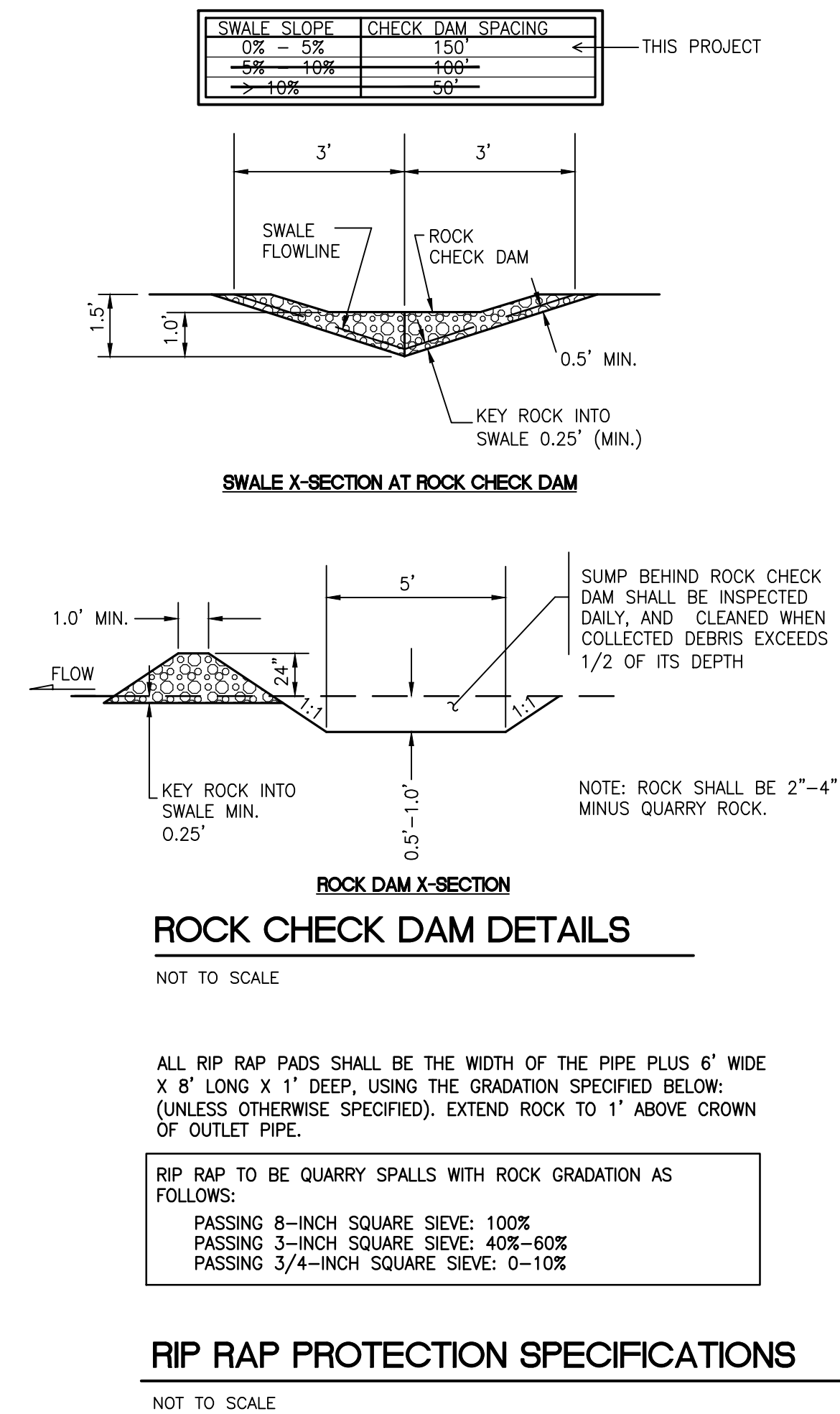
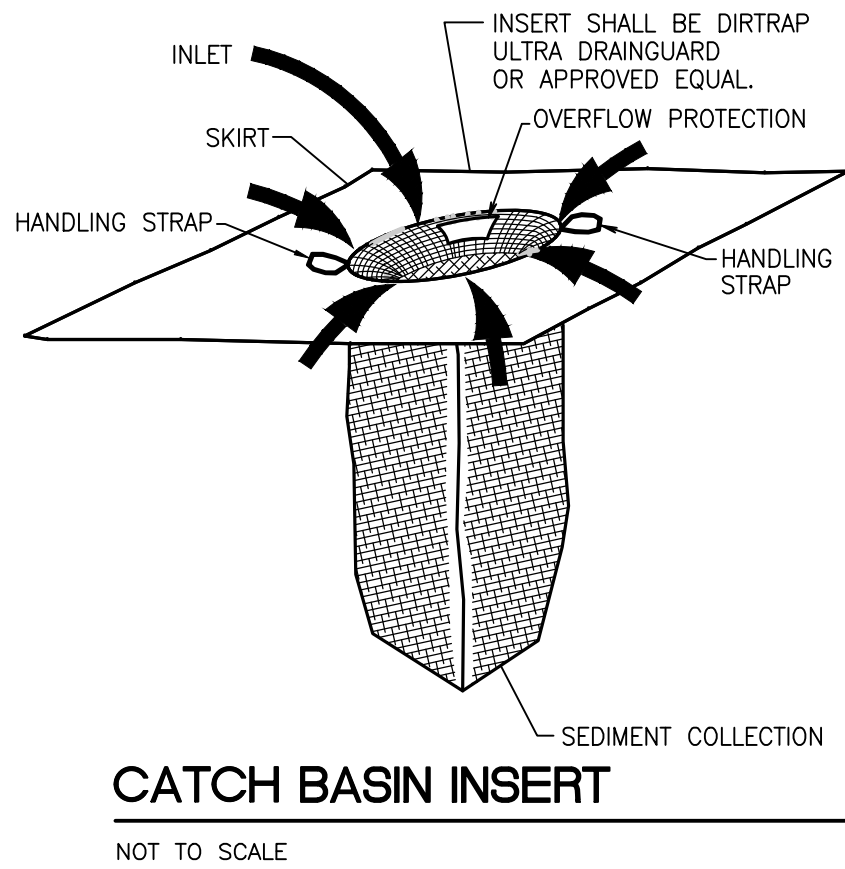
FABRIC:	NEEDLE PUNCHED NON-WOVEN GEOTEXTILE MATERIAL. FABRIC IS RESISTANT TO ULTRAVIOLET AND BIOLOGICAL DEGRADATION AND A BROAD RANGE OF CHEMICALS.
APPARENT OPENING SIZE (AOS):	80 US STANDARD SIEVE (0.180 MM)
GRAB TENSILE STRENGTH:	200 LBS
PUNCTURE STRENGTH:	130 LBS
MULLEN BURST:	400 PSI
TRAPEZOIDAL TEAR:	85 LBS
WATER FLOW RATE:	110 GPM/FT2
PERMEABILITY:	0.38 CM/SECOND

## DIMENSIONS:

SKIRT:	24"x36"
SOCK FILTER/SEPARATOR:	10" D x 24" L

## DISPOSAL REQUIREMENTS:

CONSULT FEDERAL, STATE, AND LOCAL REGULATIONS FOR DISPOSAL OF INSERTS



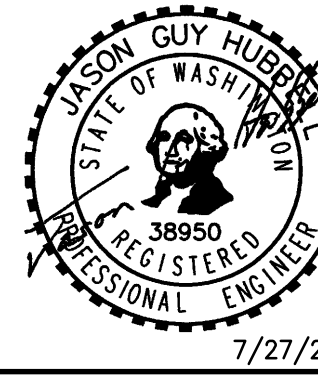
**CONSTRUCTION DETAILS**

**FORTRESS - PUYALLUP**

Title:

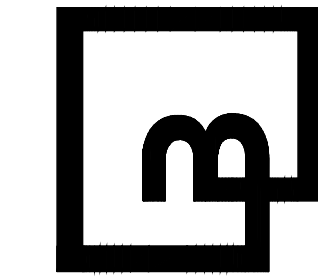
**CREF3 PUYALLUP OWNER LLC**  
**11611 SAN VICENTE BLVD**  
**10TH FLOOR**  
**LOS ANGELES, CA 90049**

For:



Scale:	Horizontal	Vertical
Designed	DL	RDC
Drawn	DL	RDC
Checked	DL	RDC
Approved	DL	RDC
Date	6/23/23	

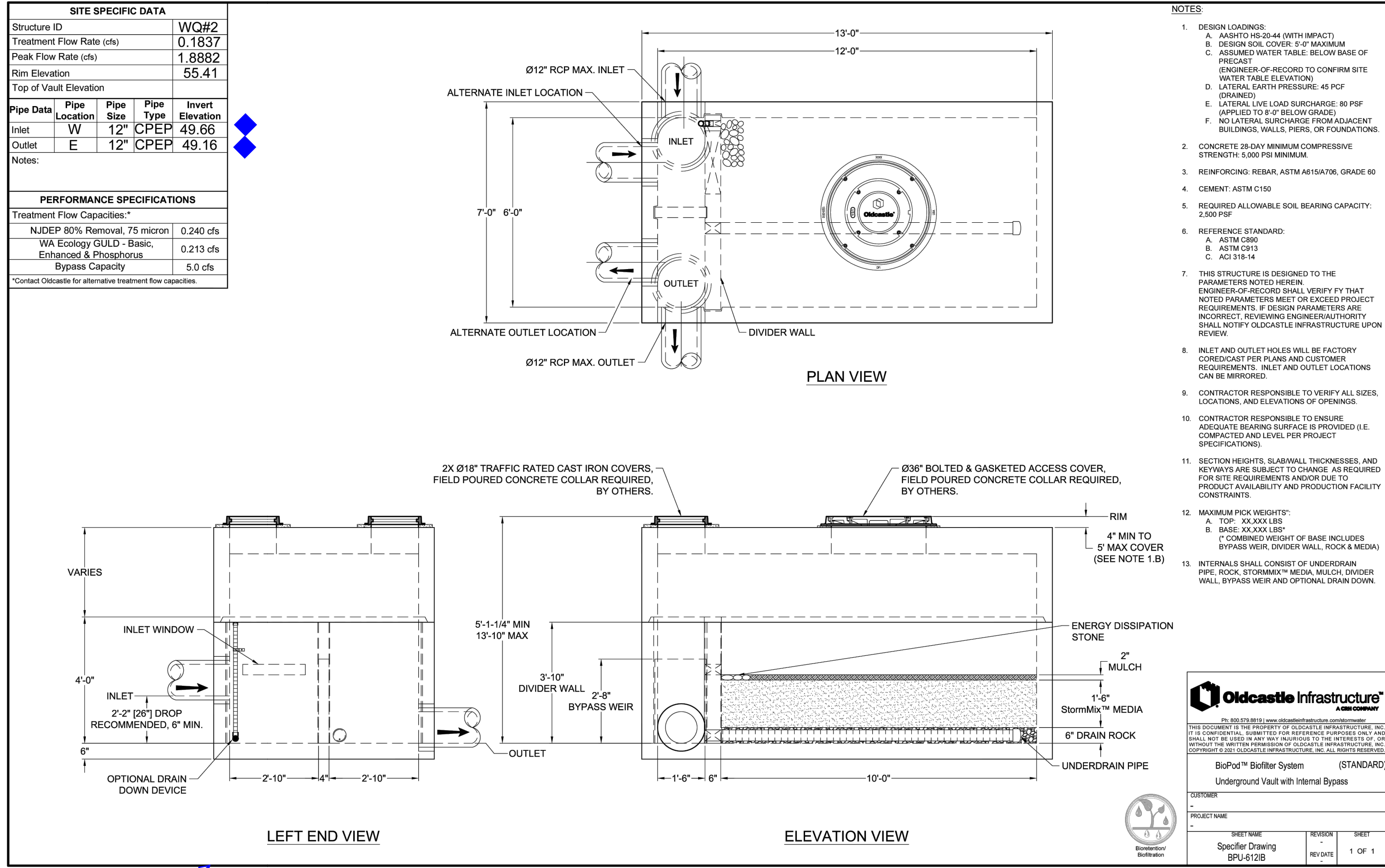
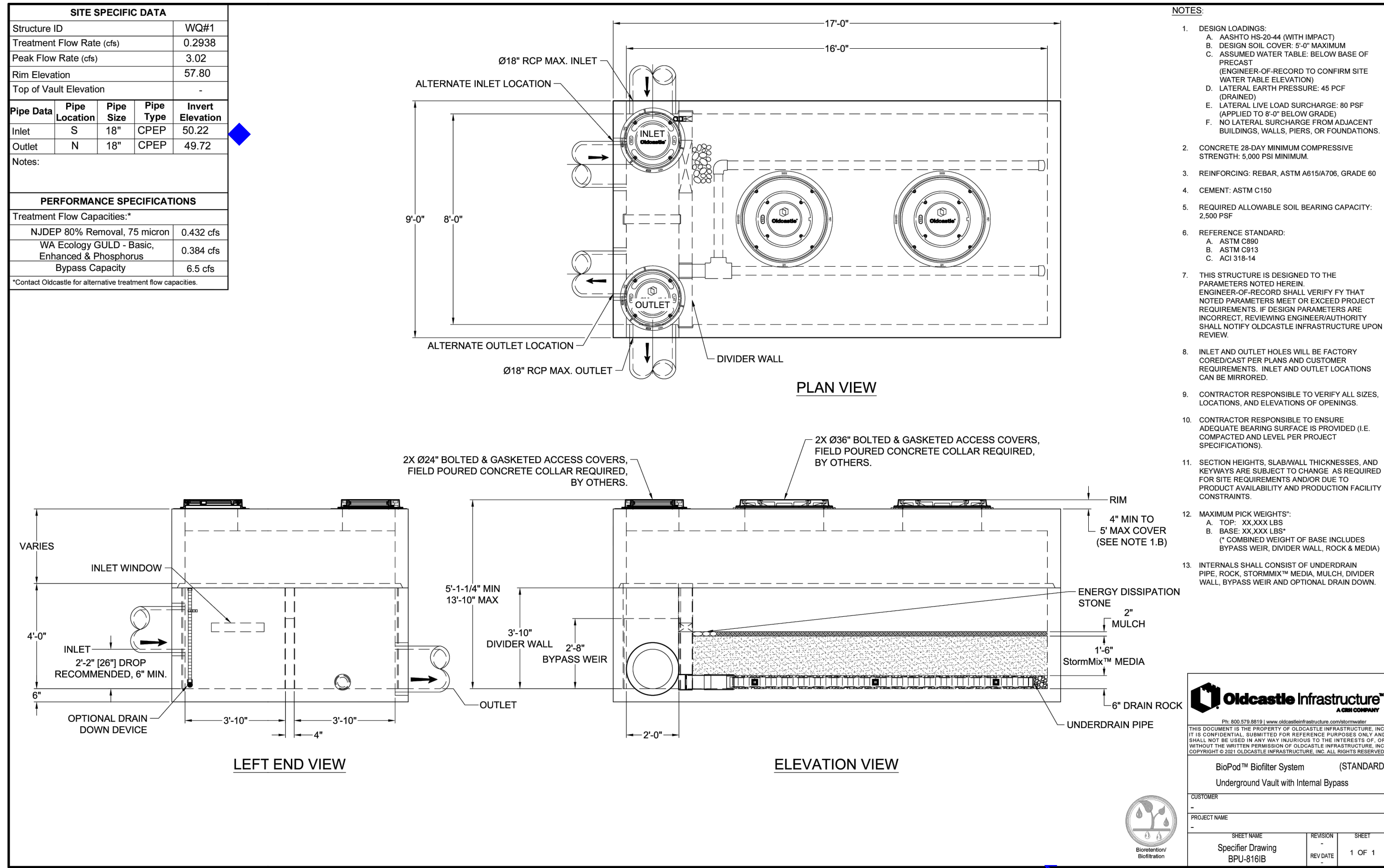
**Barghausen Consulting Engineers, Inc.**  
**18215 72nd Avenue South**  
**Kent WA 98032**  
**425.251.6222**  
**barghausen.com**



**22085**  
**C19**  
**26**



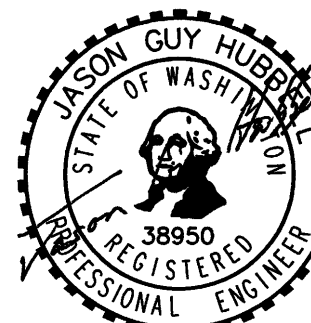
# CONSTRUCTION DETAILS



Denote WQ1 vs WQ2 details [civils, pg 20]

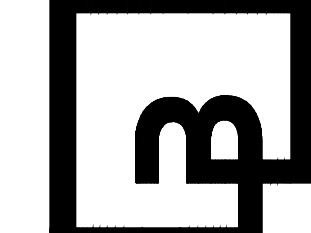
CONSTRUCTION DETAILS  
FORTRESS - PUYALLUP

CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049



Scale: Horizontal NA Vertical N/A  
Designed: DL RDC  
Drawn: DL RDC  
Checked: DL RDC  
Approved: JGH  
Date: 6/23/23

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Kent, WA 98032  
425.251.6222  
barghausen.com



Job Number: 22085  
Sheet: C20 of 26

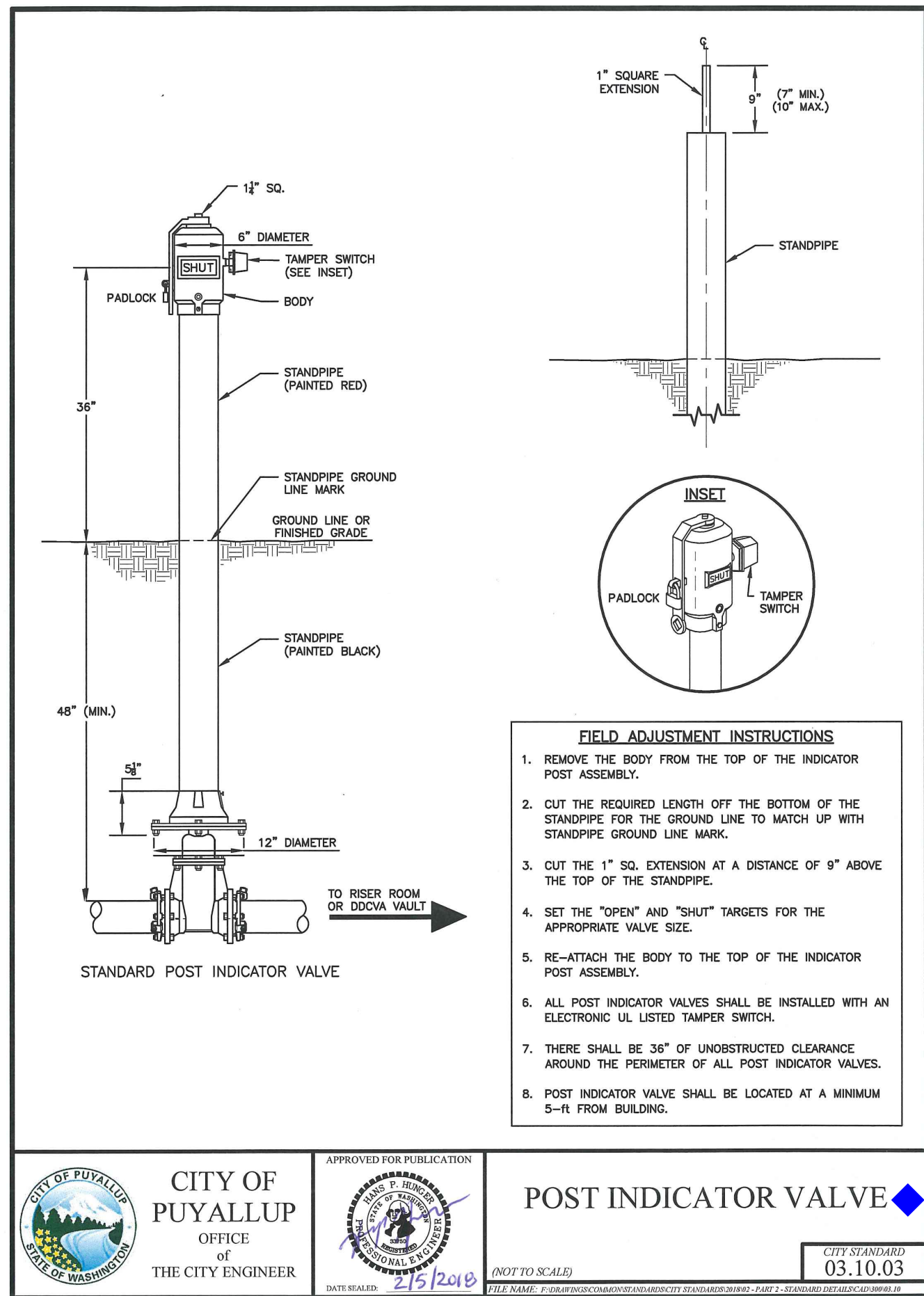
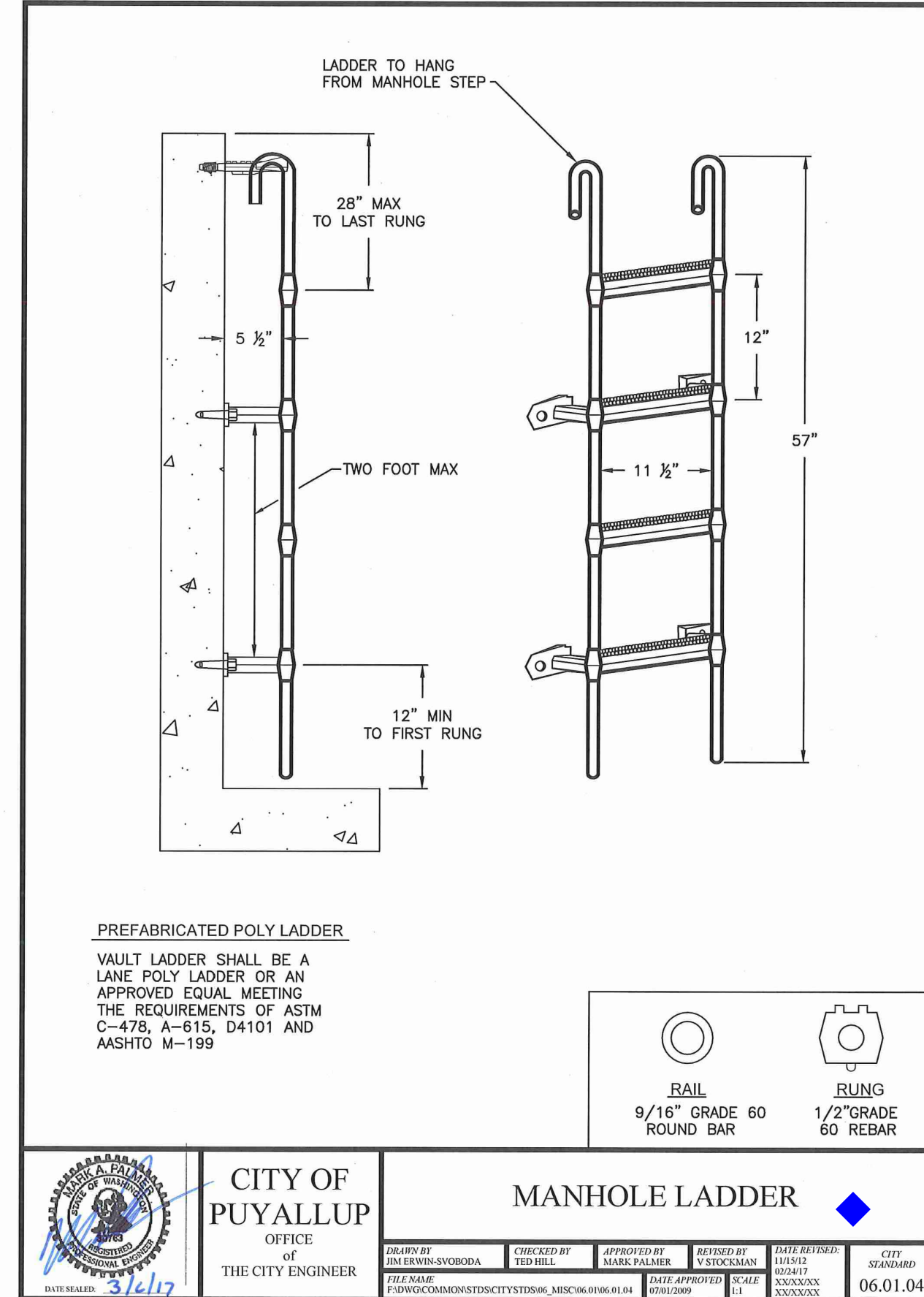
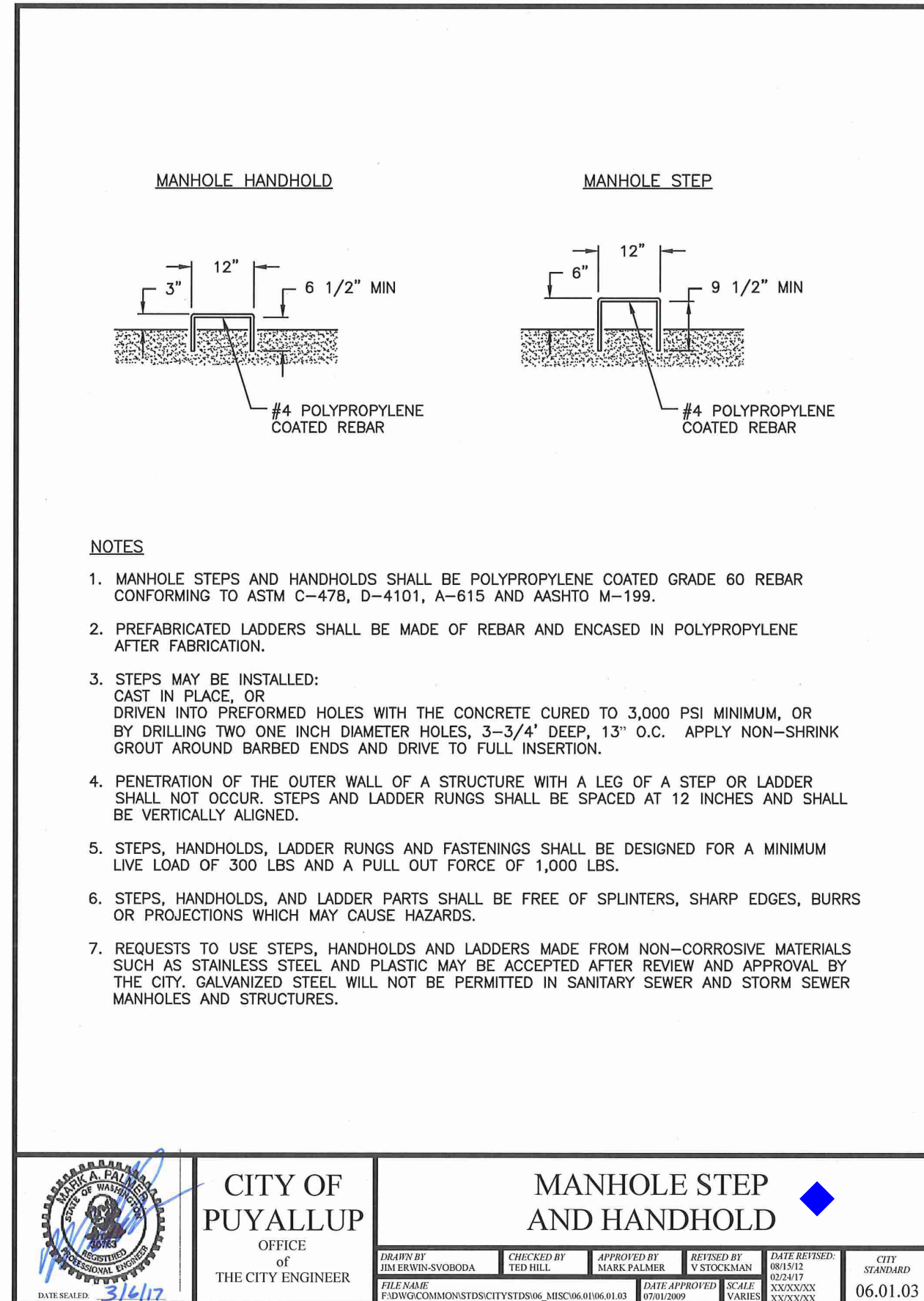
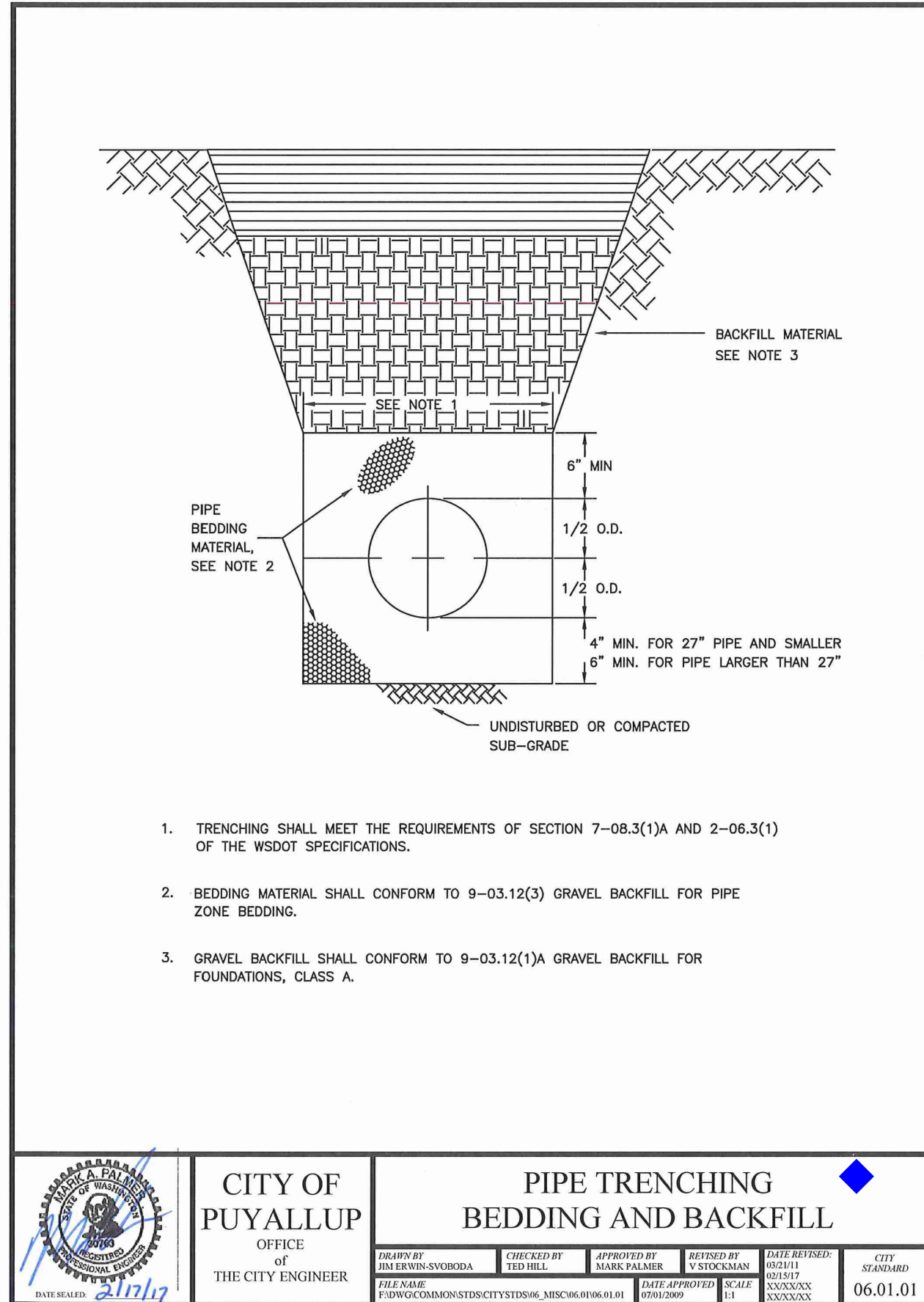
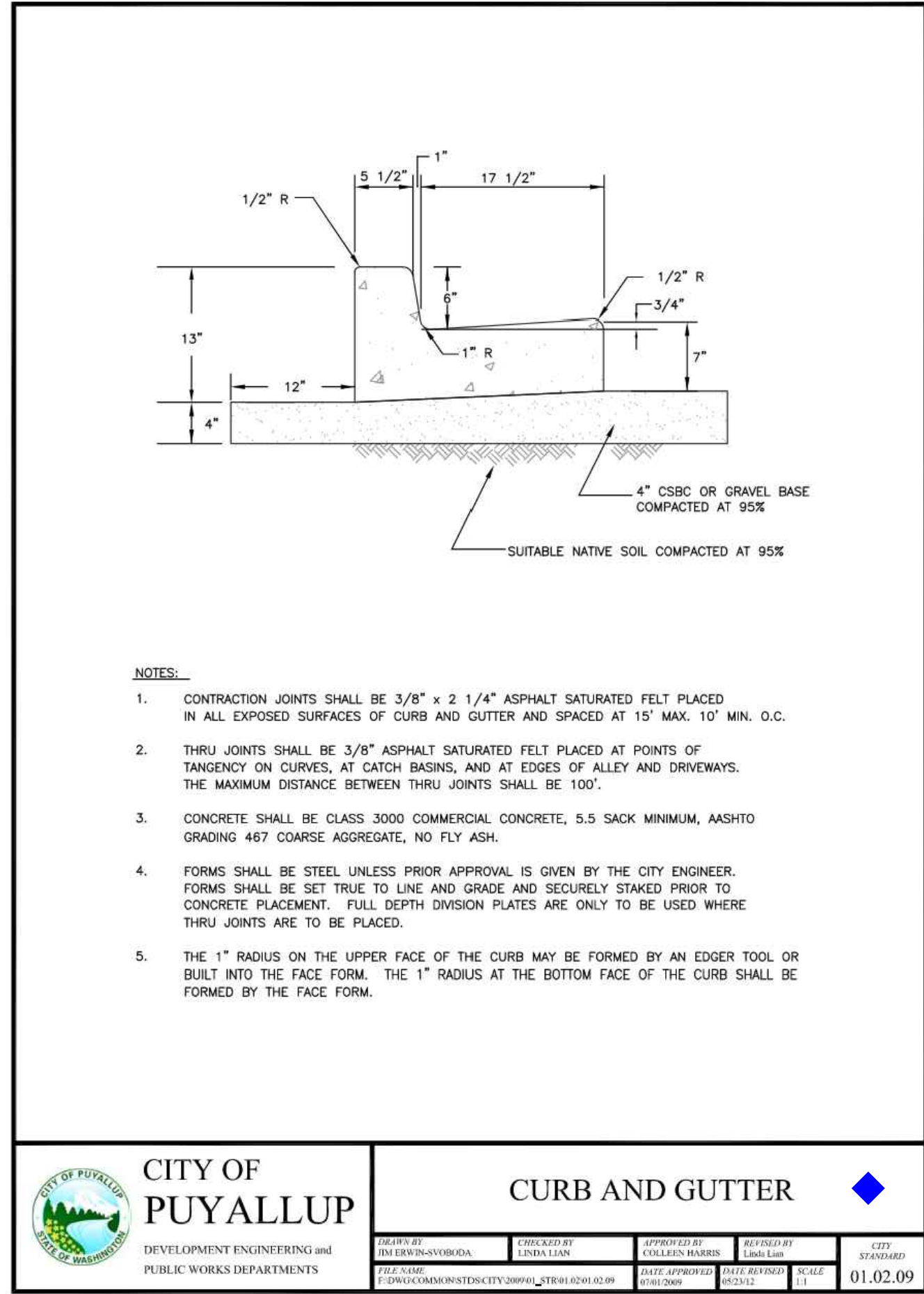
APPROVED  
BY: CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING  
DATE:   
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL.  
DATE:   
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.  
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.



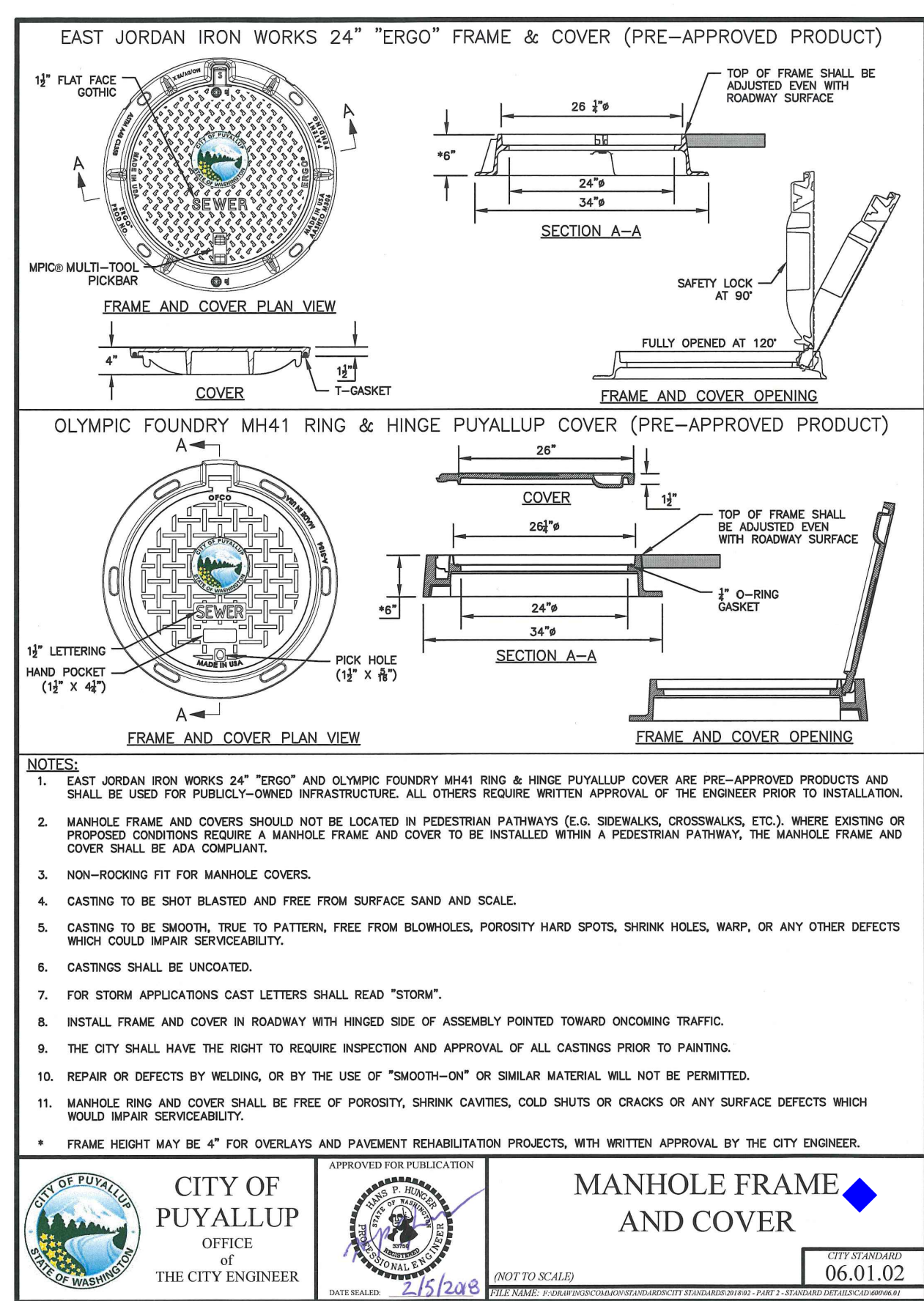
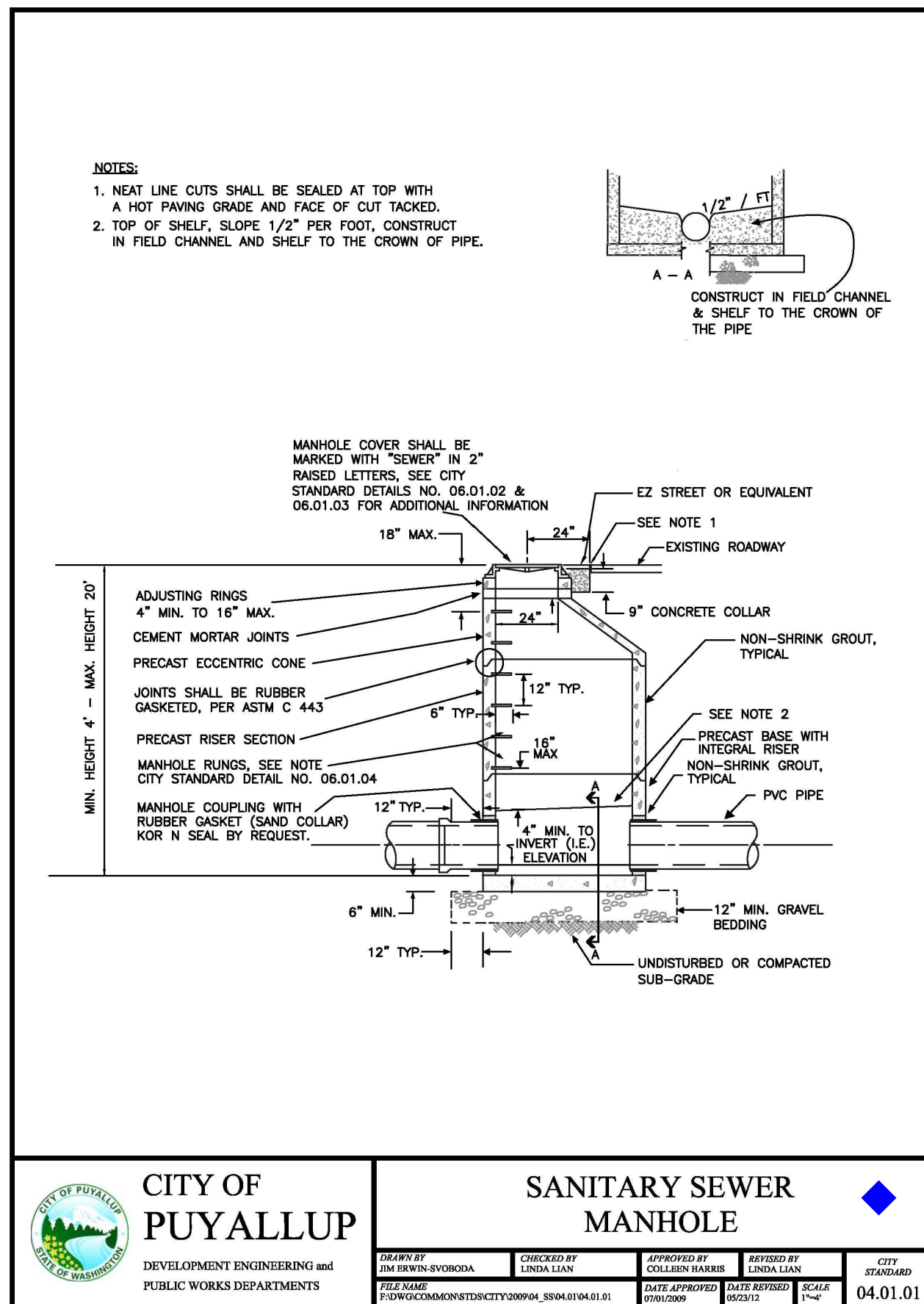




# CONSTRUCTION DETAILS

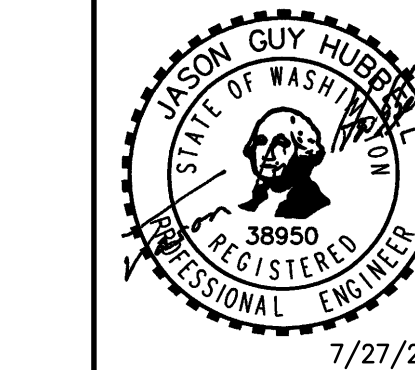


Civil Sheet C22: This water standard detail should be moved with the other water details on Sheet C24.



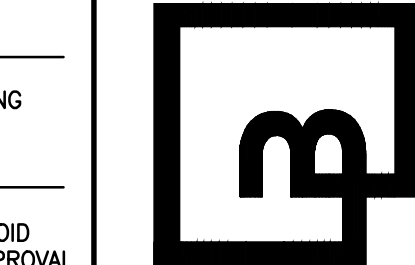
Revision  
No. Date By Ckd. Appr.  
Title:  
**CONSTRUCTION DETAILS**  
**FORTRESS - PUYALLUP**

For:  
**CREF3 PUYALLUP OWNER LLC**  
**11611 SAN VICENTE BLVD**  
**10TH FLOOR**  
**LOS ANGELES, CA 90049**



Scale:  
Horizontal NA  
Vertical N/A  
Designed DL  
Drawn RDC  
Checked DL  
Approved JGH  
Date 6/23/23

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Kent WA 98032  
425.251.6222  
**barghausen.com**

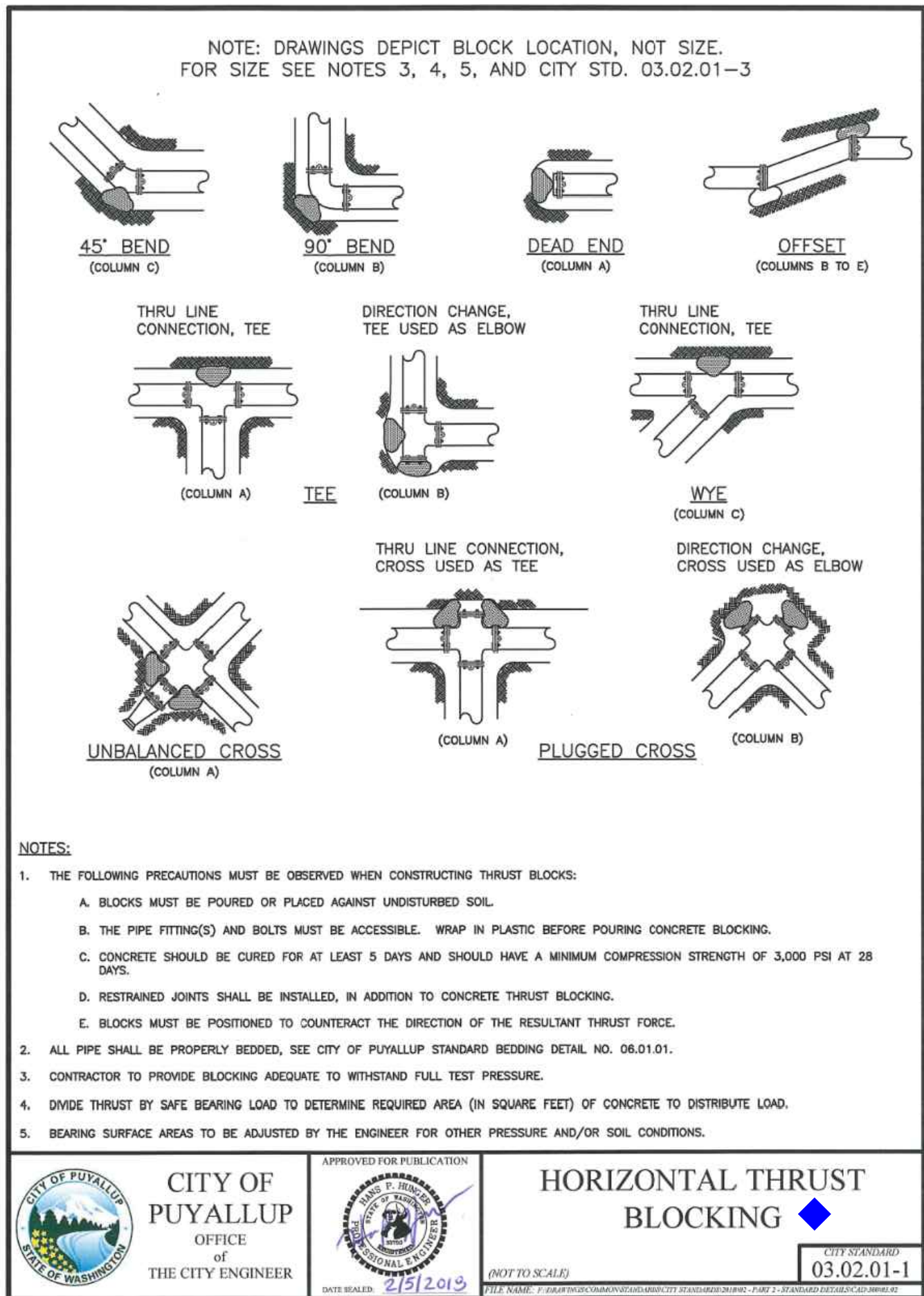
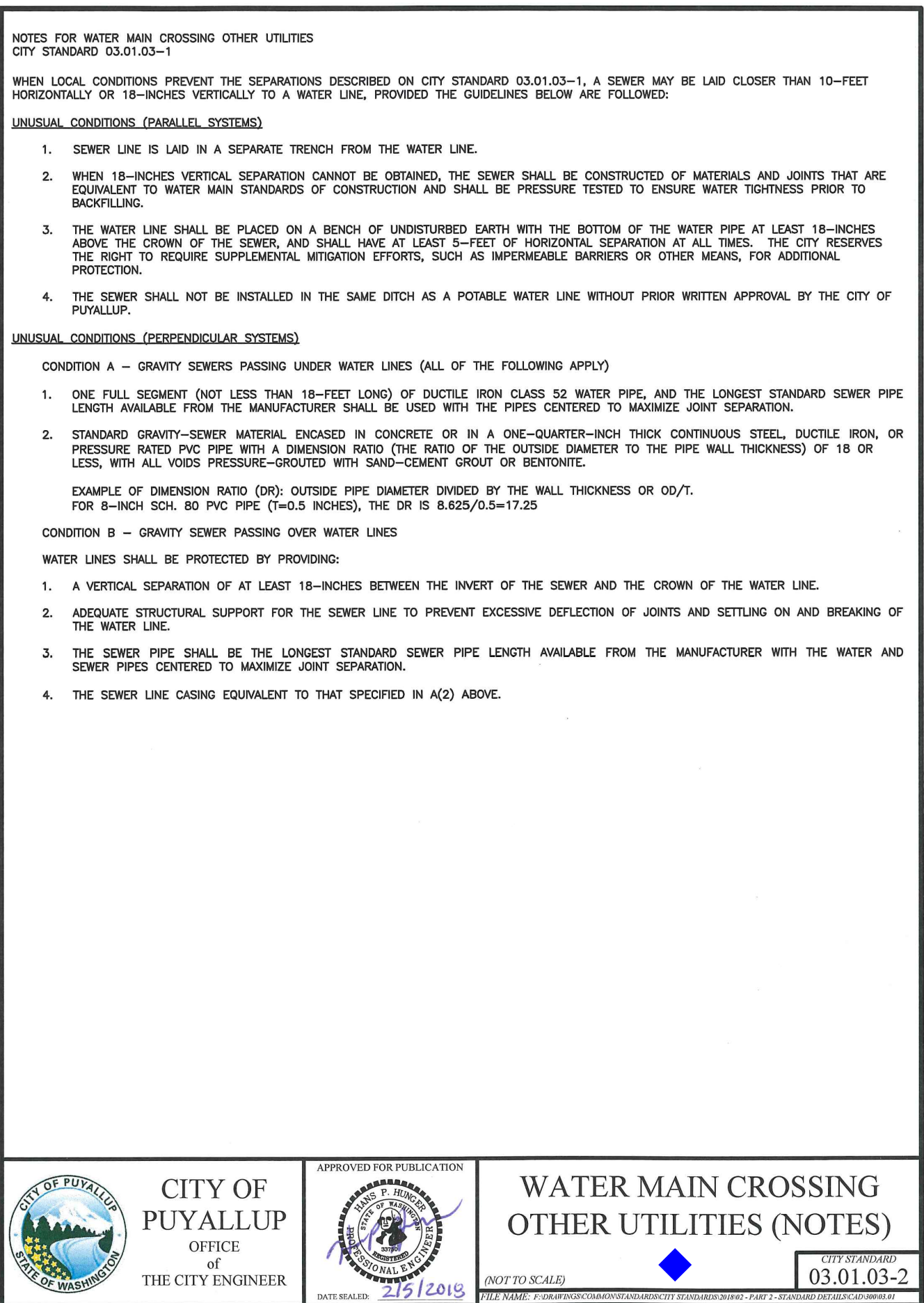
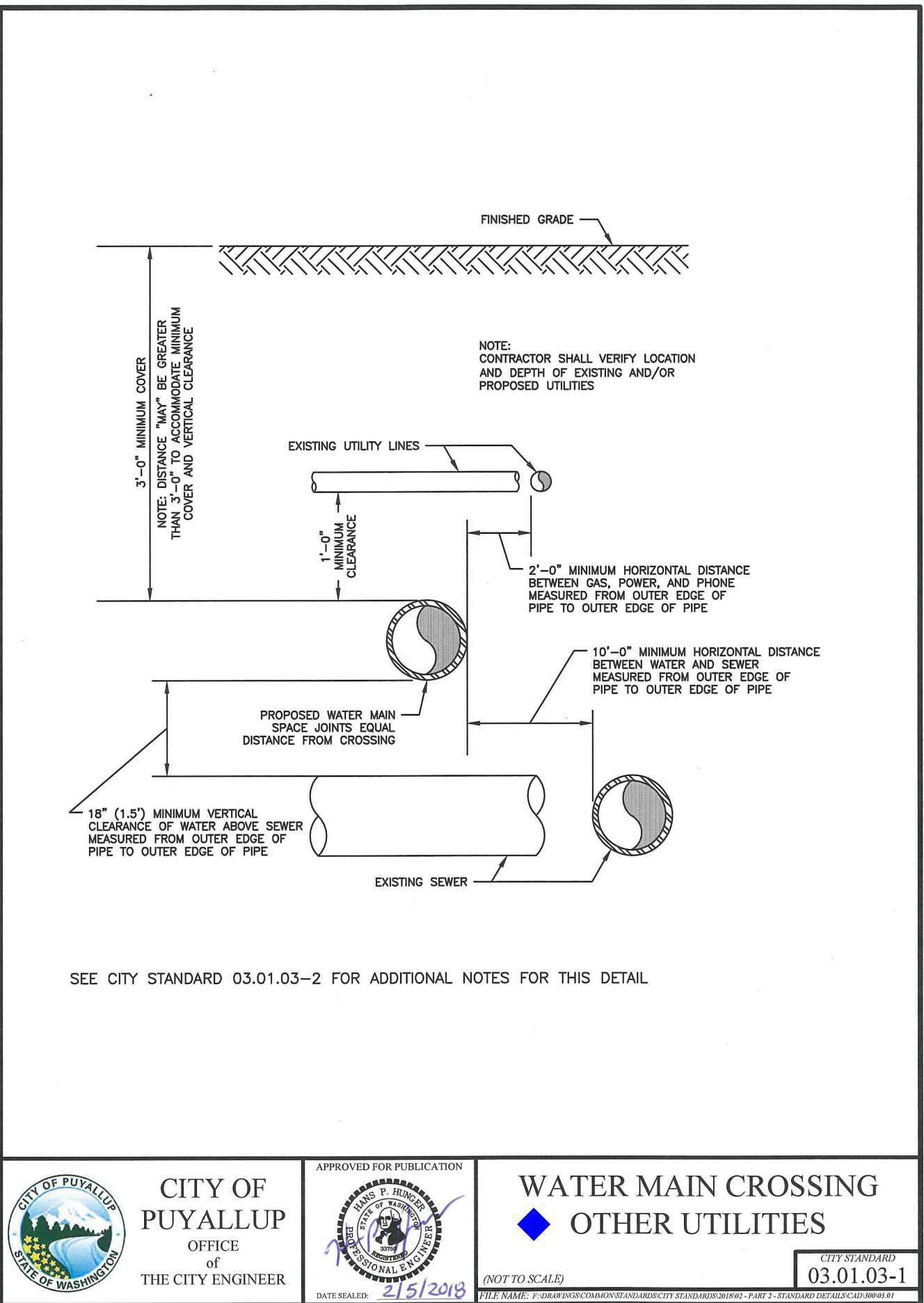
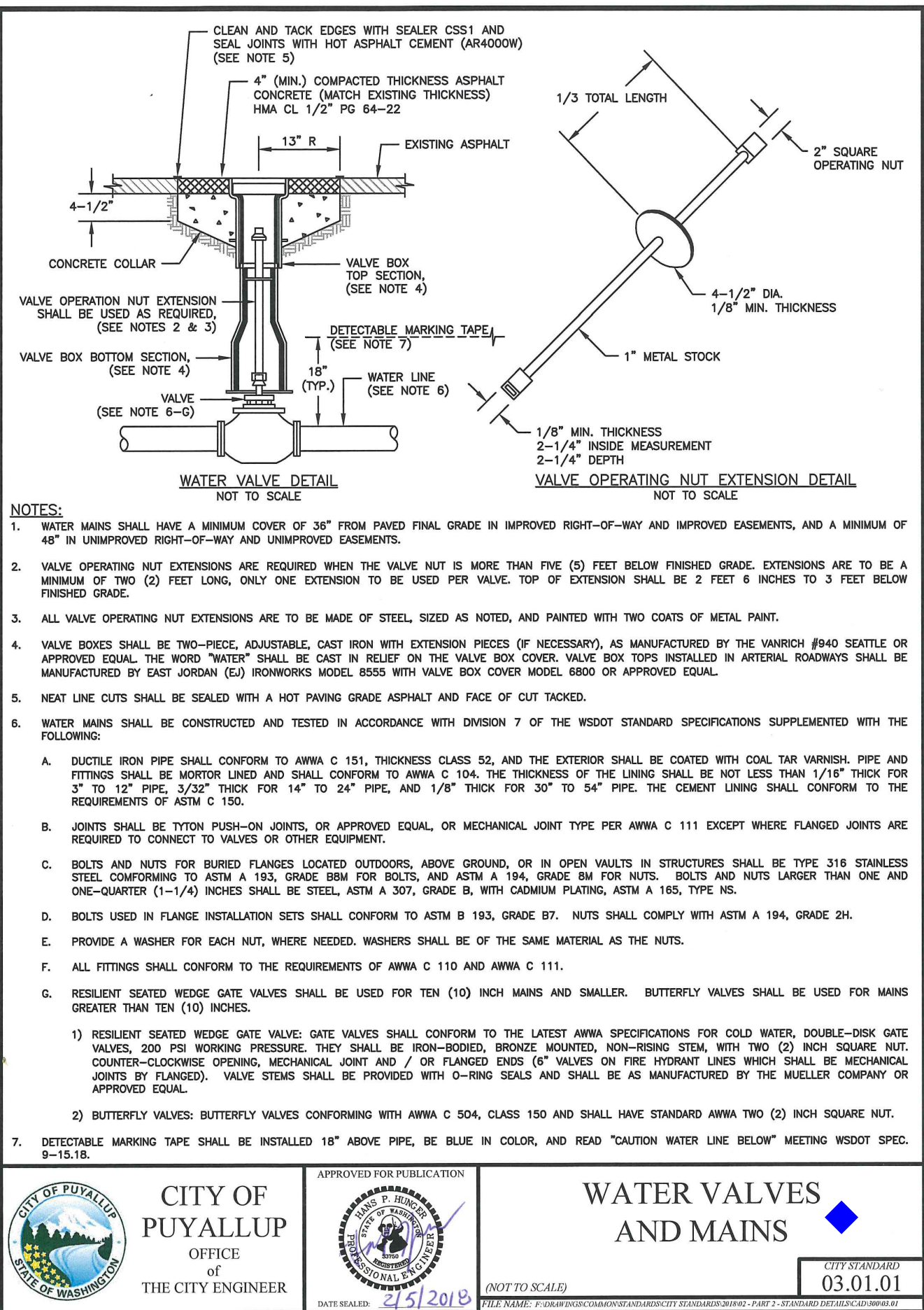


Job Number  
**22085**  
Sheet  
**C22** of **26**

**APPROVED**  
BY  
CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING  
DATE  
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.  
THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.  
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.



## CONSTRUCTION DETAILS



BY \_\_\_\_\_  
CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

**NOTE:** THIS APPROVAL IS VOID  
AFTER 180 DAYS FROM APPROVAL  
DATE.  
THE CITY WILL NOT BE  
RESPONSIBLE FOR ERRORS  
AND/OR OMISSIONS ON THESE  
PLANS.  
FIELD CONDITIONS MAY DICTATE  
CHANGES TO THESE PLANS AS  
DETERMINED BY THE  
DEVELOPMENT ENGINEERING  
MANAGER.



# CONSTRUCTION DETAILS




TABLE 2: THRUST AT FITTINGS AT 200 PSI						
SIZE	TEST PRESSURE (PSI)	THRUST FITTINGS AT 200 PSI				
		A	B	C	D	E
4"	200	3,140	4,440	2,405	1,225	815
6"	200	7,070	9,995	5,410	2,760	1,385
8"	200	12,565	17,770	9,620	4,905	2,465
10"	200	19,635	27,770	15,030	7,660	3,850
12"	200	28,275	39,965	21,840	11,030	5,545
14"	200	38,485	54,425	29,495	15,015	7,545
16"	200	50,265	71,085	38,470	19,815	9,895

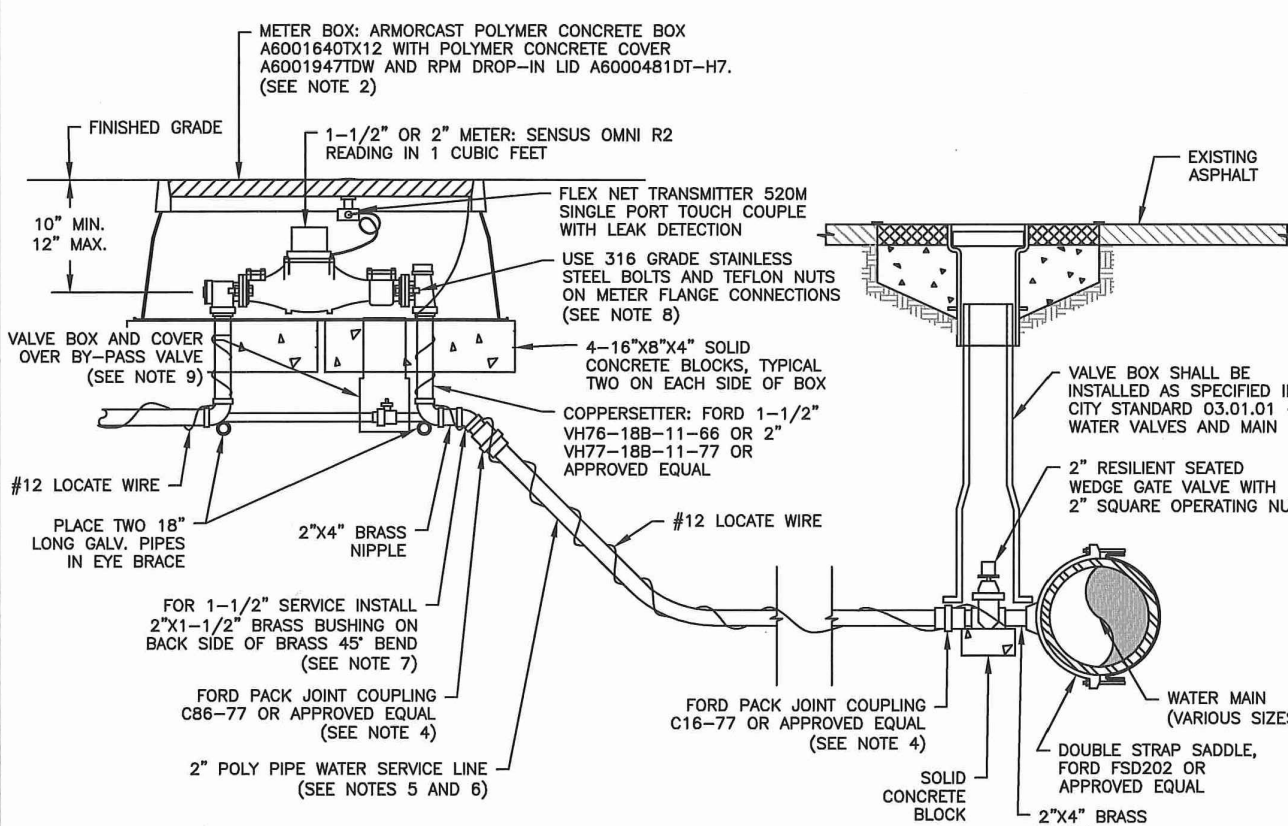
TABLE 3: BEARING VALUE OF SOIL	
SOIL TYPE	SAFE BEARING LOAD LBS/SF
MUCK, PEAT, ETC.	0
SOFT CLAY/ALLUVIAL SOIL	1,000
SAND	2,000
SAND AND GRAVEL	3,000
SAND AND GRAVEL CEMENTED WITH CLAY	4,000
HARD SHALE	10,000

SEE CITY STANDARDS 03.02.01-1 AND 03.02.01-2 FOR ADDITIONAL INFORMATION.

## NOTES:




- TO DETERMINE THRUST AT PRESSURES OTHER THAN PSI SHOWN, MULTIPLY THE THRUST OBTAINED IN TABLE 2 BY THE RATIO OF THE PRESSURE TO 200 PSI.  
EXAMPLE:  
THE THRUST ON A 12 INCH, 90° BEND AT 300 PSI:  
 $300 \text{ PSI} \times \frac{5,545}{200} = 59,978 \text{ LBS}$
- TO DETERMINE THE BEARING AREA OF THE THRUST BLOCK IN SQUARE FEET (SF):  
SEE TABLE 3, BEARING VALUE OF SOIL.  
EXAMPLE:  
FOR SAND AND GRAVEL BEARING VALUE FROM TABLE 3 IS 3,000 LBS/SF  
 $59,978 \text{ LBS} \div 3,000 \text{ LBS/SF} = 20 \text{ SF}$  OF AREA
- CONTRACTOR TO PROVIDE BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE
- AREAS SHALL BE ADJUSTED FOR OTHER PRESSURE CONDITIONS.
- NO WATER MAIN SHALL DEAD END AGAINST A MAIN LINE VALVE. DEAD END WATER MAINS SHALL BE BLOCKED AGAINST A RESTRAINED MECHANICAL JOINT (M.J.) FLUG OR CAP.

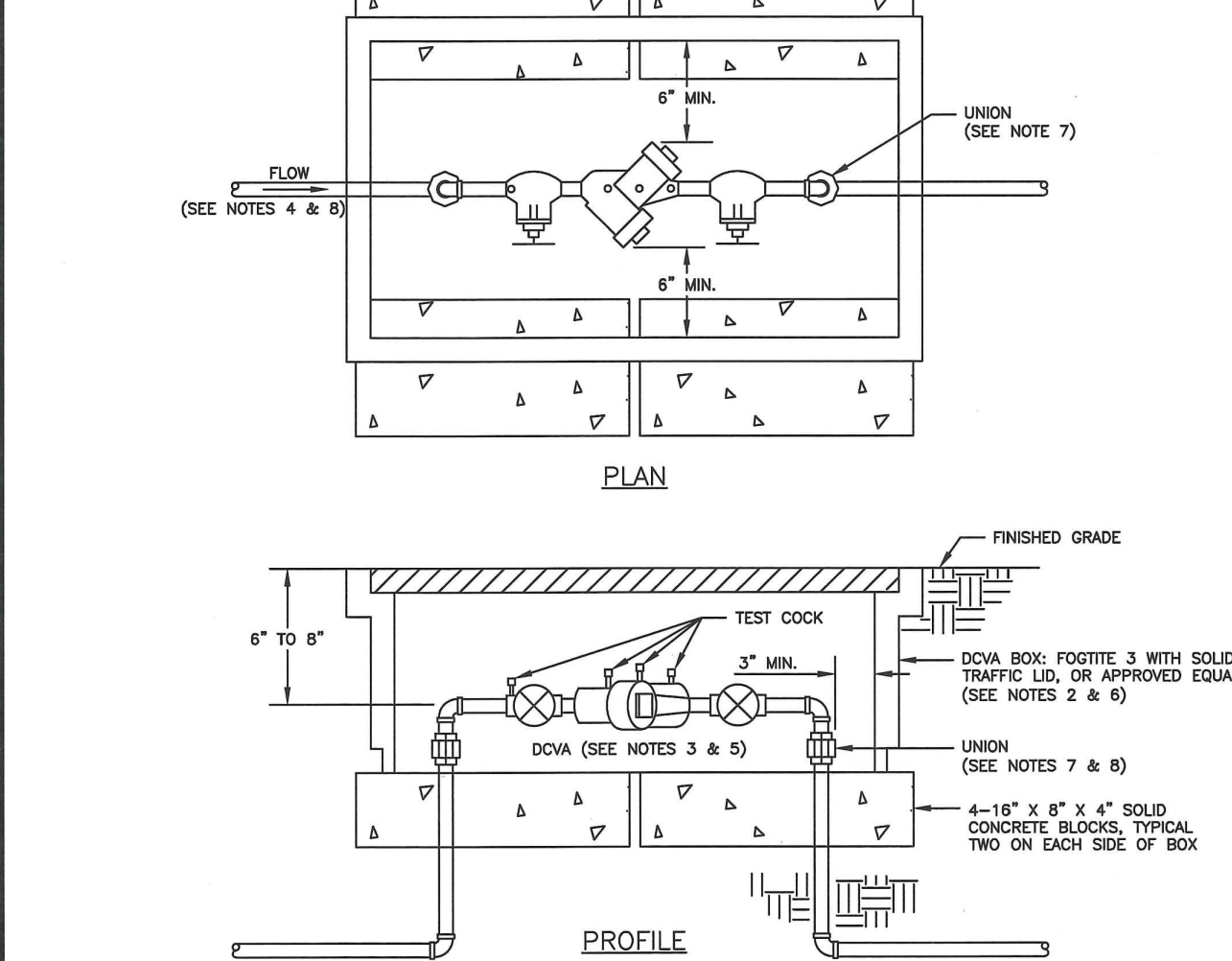
	<b>CITY OF PUYALLUP</b> OFFICE OF THE CITY ENGINEER		<b>THRUST BLOCKING TABLE</b>		<b>CITY STANDARD</b> 03.02.01-3 (NOT TO SCALE) DATE: 2/5/2019
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## NOTES:


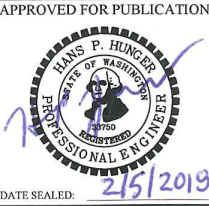

- ALL MATERIALS AND FITTINGS SHALL BE AS SPECIFIED OR AN APPROVED EQUAL.
- NORMALLY THE WATER METER BOX SHOULD BE LOCATED IN THE PLANTING STRIP. IF SIDEWALK IS AGAINST THE CURB, PLACE METER BOX DIRECTLY BEHIND THE SIDEWALK. THE WATER METER BOX SHALL NOT BE LOCATED IN HARD SURFACES. WHEN UNAVOIDABLE, EXCEPTIONS CAN BE MADE AT END OF CUL-DE-SACS OR PAN HANDLED LOTS.
- WATER MAINS SHALL HAVE A MINIMUM COVER OF 36" IN IMPROVED RIGHT-OF-WAY AND IMPROVED EASEMENTS, AND A MINIMUM OF 48" IN UNIMPROVED RIGHT-OF-WAY AND UNIMPROVED EASEMENTS.
- ALL POLY PIPE COUPLINGS SHALL USE PIPE INSERT STIFFENERS.
- THE WATER SERVICE LINE SHALL BE BEDDED IN WASHED SAND WITH 36" OF COVER BELOW FINISHED GRADE WITHIN THE RIGHT-OF-WAY. THE WATER SERVICE LINE SHALL BE ONE CONTINUOUS PIECE WITH NO SPLICES.
- ALL POLY PIPE SHALL BE HIGH DENSITY POLY (HDPE) MEETING ASTM D-2238-SDR 7, BLUE IN COLOR, 200 PSI MINIMUM.
- FOR A 1-1/2" WATER SERVICE, ALL MATERIAL SHALL BE 2" FROM THE WATER MAIN TO THE COPPERSETTER. REDUCE FROM 2" TO 1-1/2" IMMEDIATELY BEFORE COPPERSETTER.
- THE STAINLESS STEEL METER FLANGE BOLTS SHALL BE 5/8" DIAMETER FOR THE 1-1/2" METER, AND 3/4" DIAMETER FOR THE 2" METER.
- PROVIDE A 6" CIRCULAR VALVE BOX WITH COVER (APPLIED ENGINEERING PRODUCT MODEL 708 WITH GREEN LID OR AN APPROVED EQUAL) OVER 8" ASS VALVE.

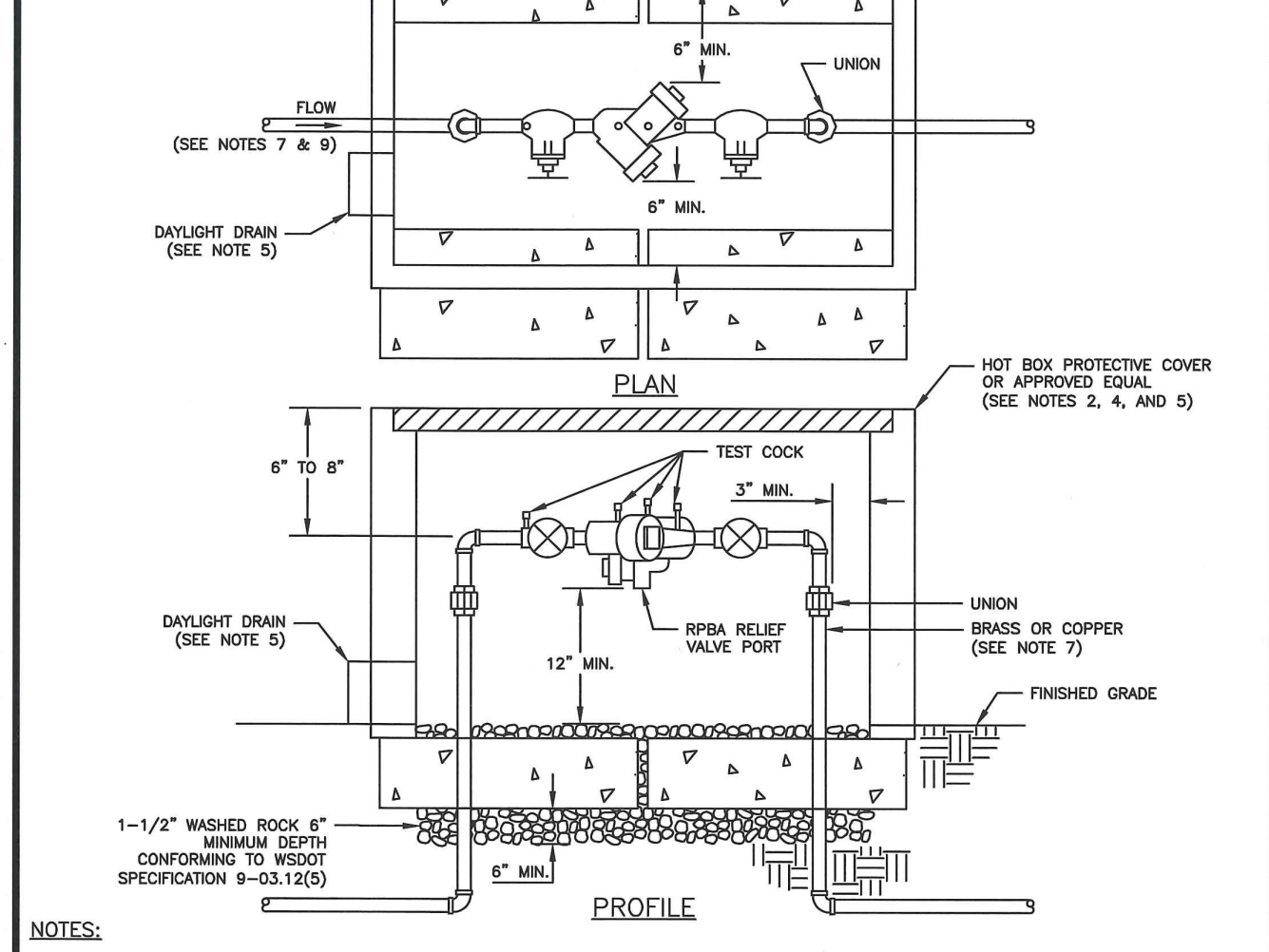
	<b>CITY OF PUYALLUP</b> OFFICE OF THE CITY ENGINEER		<b>1-1/2" AND 2" WATER SERVICE CONNECTION</b>		<b>CITY STANDARD</b> 03.03.02 (NOT TO SCALE) DATE: 10/15/2019
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## NOTES:


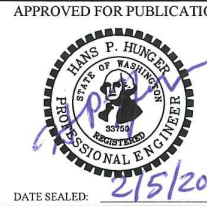

- BACKFLOW ASSEMBLY MUST BE SELECTED FROM WASHINGTON STATE DEPARTMENT OF HEALTH'S LIST OF BACKFLOW PREVENTION ASSEMBLIES APPROVED FOR INSTALLATION IN WASHINGTON STATE, LATEST EDITION.
- THE DOWA SHALL BE INSTALLED WITH ADEQUATE SPACE TO FACILITATE MAINTENANCE AND TESTING. IT SHALL BE TESTED AFTER INSTALLATION, BY A WASHINGTON STATE CERTIFIED BACK-FLOW ASSEMBLY TESTER, TO INSURE ITS SATISFACTORY OPERATION BEFORE OCCUPANCY AND ANNUALLY THEREAFTER. SEND TEST RESULTS TO: CITY OF PUYALLUP, WATER QUALITY OPERATIONS, 1100 39TH AVE SE, PUYALLUP, WA 98374.
- DOWA MUST BE PURCHASED AS A UNIT. NO MODIFICATIONS TO THE ASSEMBLY ARE ALLOWED.
- DOWA SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF WATER METER. WHEN IRRIGATION SYSTEM IS CONNECTED OFF DOMESTIC WATER LINE, IRRIGATION DOWA SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF THE BRANCH CONNECTION.
- DOWA SHALL BE SIZED EQUAL OR COMPARABLE TO METER SIZE.
- METER BOX SHALL BE LARGE ENOUGH TO ALLOW THE MINIMUM SETBACKS ILLUSTRATED ABOVE. METER BOX LID SHALL BE A TRAFFIC LID WITH A 1/2-20 LANDING.
- DIELECTRIC UNIONS MUST BE USED TO SEPARATE DISSIMILAR MATERIALS.
- USE ONLY BRASS OR COPPER BETWEEN THE METER AND THE UNION ON THE CUSTOMER'S SIDE OF THE DOWA.

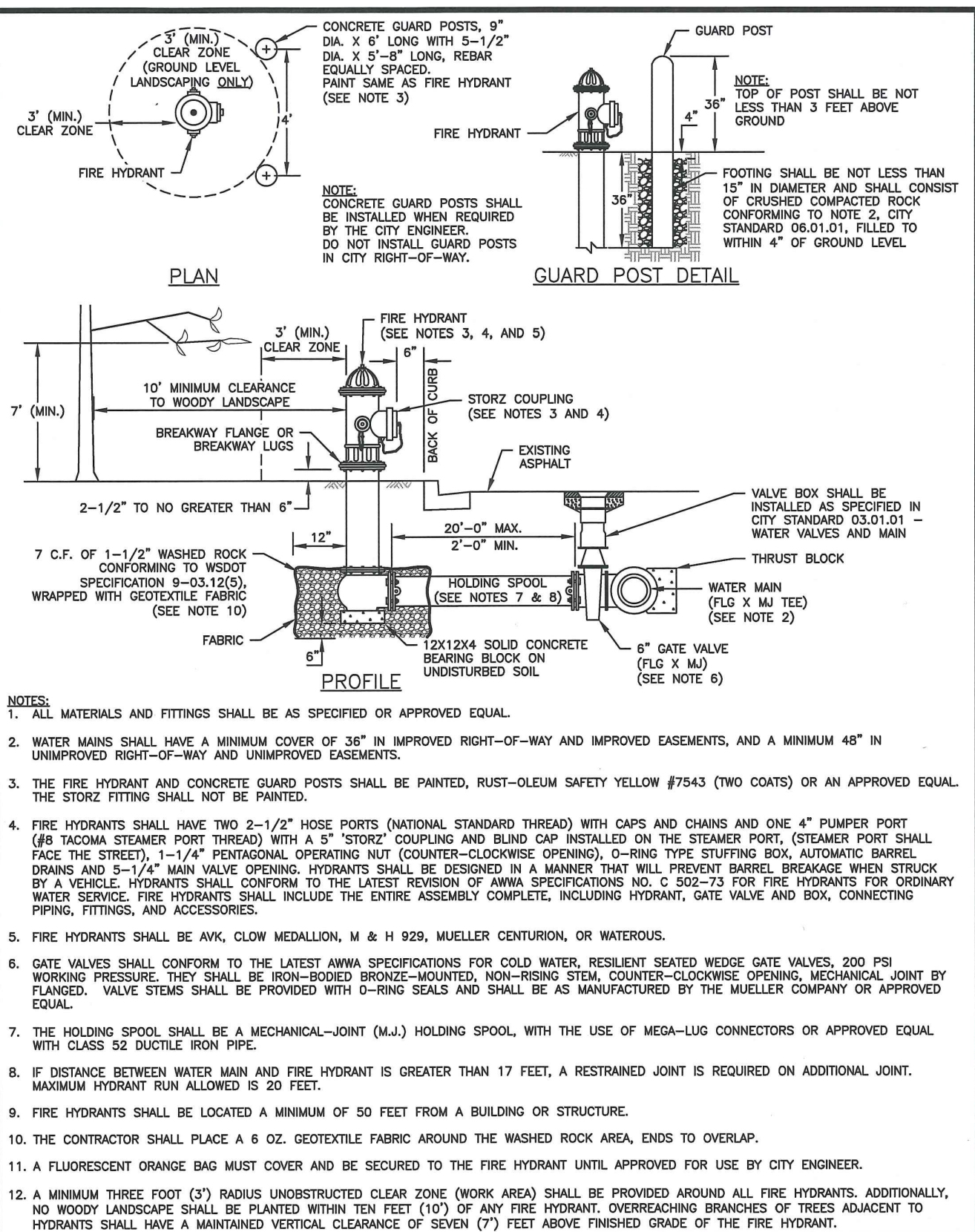
	<b>CITY OF PUYALLUP</b> OFFICE OF THE CITY ENGINEER		<b>2" AND SMALLER DOUBLE CHECK VALVE ASSEMBLY INSTALLATION</b>		<b>CITY STANDARD</b> 03.04.01 (NOT TO SCALE) DATE: 2/5/2019
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## NOTES:


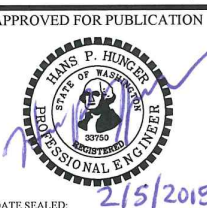

- BACKFLOW ASSEMBLY MUST BE SELECTED FROM WASHINGTON STATE DEPARTMENT OF HEALTH'S LIST OF BACKFLOW PREVENTION ASSEMBLIES APPROVED FOR INSTALLATION IN WASHINGTON STATE, LATEST EDITION.
- THE RPBA SHALL BE INSTALLED WITH ADEQUATE SPACE TO FACILITATE MAINTENANCE AND TESTING. IT SHALL BE TESTED AFTER INSTALLATION, BY A WASHINGTON STATE CERTIFIED BACK-FLOW ASSEMBLY TESTER, TO INSURE ITS SATISFACTORY OPERATION BEFORE OCCUPANCY AND ANNUALLY THEREAFTER. SEND TEST RESULTS TO: CITY OF PUYALLUP, WATER QUALITY OPERATIONS, 1100 39TH AVE SE, PUYALLUP, WA 98374.
- THE RPBA MUST BE PURCHASED AS A UNIT. NO MODIFICATIONS TO THE ASSEMBLY ARE ALLOWED.
- THE RPBA SHALL NOT BE INSTALLED IN A PIT BELOW GROUND LEVEL.
- THE PROTECTIVE COVERING FOR THE RPBA, WHICH PROTECTS THE ASSEMBLY FROM FREEZING, MUST INCLUDE A DAYLIGHT DRAIN. THE DRAIN MUST BE INSTALLED ABOVE GROUND OR ABOVE THE MAXIMUM FLOOD LEVEL, WHICHEVER IS HIGHER. THE DRAIN MUST BE A MINIMUM OF TWICE THE SIZE OF THE RPBA. TO BE ABLE TO HANDLE THE VOLUME OF WATER THAT POTENTIALLY COULD BE DISCHARGED FROM THE RELIEF VALVE PORT.
- THE RPBA SHALL BE SIZED EQUAL OR COMPARABLE TO THE METER SIZE.
- USE ONLY BRASS OR COPPER BETWEEN THE METER AND THE BOTTOM VERTICAL 90 DEGREE BEND ON THE CUSTOMER'S SIDE OF THE RPBA.
- DIELECTRIC UNIONS MUST BE USED TO SEPARATE DISSIMILAR MATERIALS.
- THE RPBA SHOULD BE LOCATED IMMEDIATELY DOWN STREAM OF THE METER, AND SHOULD NOT BE INSTALLED INSIDE A BUILDING.
- AN RPBA INSTALLED MORE THAN FIVE (5) FEET ABOVE FLOOR LEVEL MUST HAVE A PLATFORM UNDER IT FOR THE TESTER OR MAINTENANCE PERSON TO STAND ON. THE PLATFORM MUST BE OSHA APPROVED AND MEET ALL APPLICABLE SAFETY STANDARDS AND CODES.

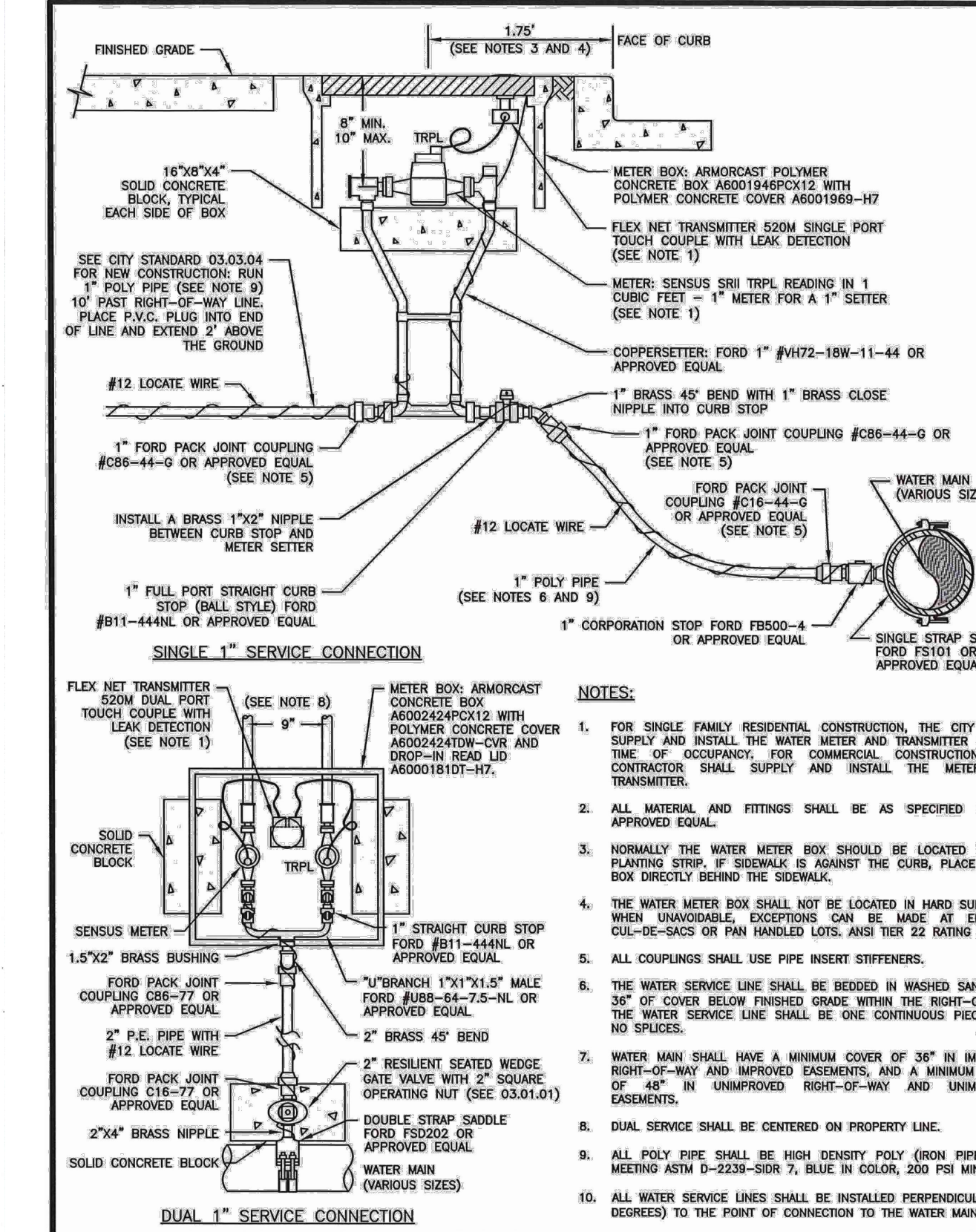
	<b>CITY OF PUYALLUP</b> OFFICE OF THE CITY ENGINEER		<b>2" AND SMALLER REDUCED PRESSURE BACKFLOW ASSEMBLY INSTALLATION</b>		<b>CITY STANDARD</b> 03.04.02 (NOT TO SCALE) DATE: 2/5/2019
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## NOTES:


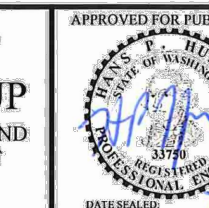
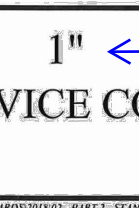
- ALL MATERIALS AND FITTINGS SHALL BE AS SPECIFIED OR APPROVED EQUAL.
- WATER MAINS SHALL HAVE A MINIMUM COVER OF 36" IN IMPROVED RIGHT-OF-WAY AND IMPROVED EASEMENTS, AND A MINIMUM 48" IN UNIMPROVED RIGHT-OF-WAY AND UNIMPROVED EASEMENTS.
- THE FIRE HYDRANT AND CONCRETE GUARD POSTS SHALL BE PAINTED, RUST-OLEUM SAFETY YELLOW #7543 (20 COATS) OR AN APPROVED EQUAL. THE STORZ FITTING SHALL NOT BE PAINTED.
- FIRE HYDRANTS SHALL HAVE TWO 2-1/2" HOSE PORTS (NATIONAL STANDARD THREAD) WITH CAPS AND CHAINS AND ONE 4" PUMPER PORT (60 TONN STEAMER PORT THREAD) WITH A 5" STORZ COUPLING AND BLIND CAP INSTALLED ON THE STEAMER PORT. (STEAMER PORT SHALL FACE THE STREET). 1-1/4" PENTAGONAL OPERATING NUT (COUNTER-CLOCKWISE OPENING), O-RING TYPE STUFFING BOX, AUTOMATIC BARREL DRAIN AND 5-1/4" MAIN WATER OPENING. HYDRANTS SHALL BE DESIGNED IN A MANNER THAT WILL PREVENT BARREL BREAKAGE WHEN STRUCK BY A VEHICLE. HYDRANTS SHALL CONFORM TO THE LATEST REVISION OF ANSII SPECIFICATIONS NO. C 502-73 FOR FIRE HYDRANTS FOR ORDINARY WATER SERVICE. FIRE HYDRANTS SHALL INCLUDE THE ENTIRE ASSEMBLY COMPLETE, INCLUDING HYDRANT, GATE VALVE AND BOX, CONNECTING PIPING, FITTINGS, AND ACCESSORIES.
- FIRE HYDRANTS SHALL BE ANK, CLOW MEDALLION, M & H 920, MUELLER CENTURION, OR WATEROUS.
- GATE VALVES SHALL CONFORM TO THE LATEST ANSII SPECIFICATIONS FOR COLD WATER, RESILIENT SEATED WEDGE GATE VALVES, 200 PSI WORKING PRESSURE. THEY SHALL BE IRON-BORED BRONZE-BORED, NON-REISING STEEL, COUNTER-CLOCKWISE OPENING, MECHANICAL JOINT BY FLANGED. VALVE STEMS SHALL BE PROVIDED WITH O-RING SEALS AND SHALL BE AS MANUFACTURED BY THE MUELLER COMPANY OR APPROVED EQUAL.
- THE HOLDING SPOOL SHALL BE A MECHANICAL-JOINT (M.J.) HOLDING SPOOL, WITH THE USE OF MEDA-LUG CONNECTORS OR APPROVED EQUAL, WITH CLASS 52 DUCTILE IRON PIPE.
- IF DISTANCE BETWEEN WATER MAIN AND FIRE HYDRANT IS GREATER THAN 17 FEET, A RESTRAINED JOINT IS REQUIRED ON ADDITIONAL JOINT.
- FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 50 FEET FROM A BUILDING OR STRUCTURE.
- THE CONTRACTOR SHALL PLACE A 6 OZ. GEXTEXTILE FABRIC AROUND THE WASHED ROCK AREA, ENDS TO OVERLAP.
- A FLUORESCENT ORANGE BING MUST COVER AND BE SECURED TO THE FIRE HYDRANT UNTIL APPROVED FOR USE BY CITY ENGINEER.
- A MINIMUM THREE FOOT (3') RADIUS UNSTRUCTURED CLEAR ZONE (WORK AREA) SHALL BE PROVIDED AROUND ALL FIRE HYDRANTS. ADDITIONALLY, NO WOODY LANDSCAPE SHALL BE PLANTED WITHIN TEN FEET (10') OF ANY FIRE HYDRANT. OVERHANGING BRANCHES OF TREES ADJACENT TO HYDRANTS SHALL HAVE A MAINTAINED VERTICAL CLEARANCE OF SEVEN (7) FEET ABOVE FINISHED GRADE OF THE FIRE HYDRANT.

	<b>CITY OF PUYALLUP</b> OFFICE OF THE CITY ENGINEER		<b>FIRE HYDRANT ASSEMBLY</b>		<b>CITY STANDARD</b> 03.05.01 (NOT TO SCALE) DATE: 2/5/2019
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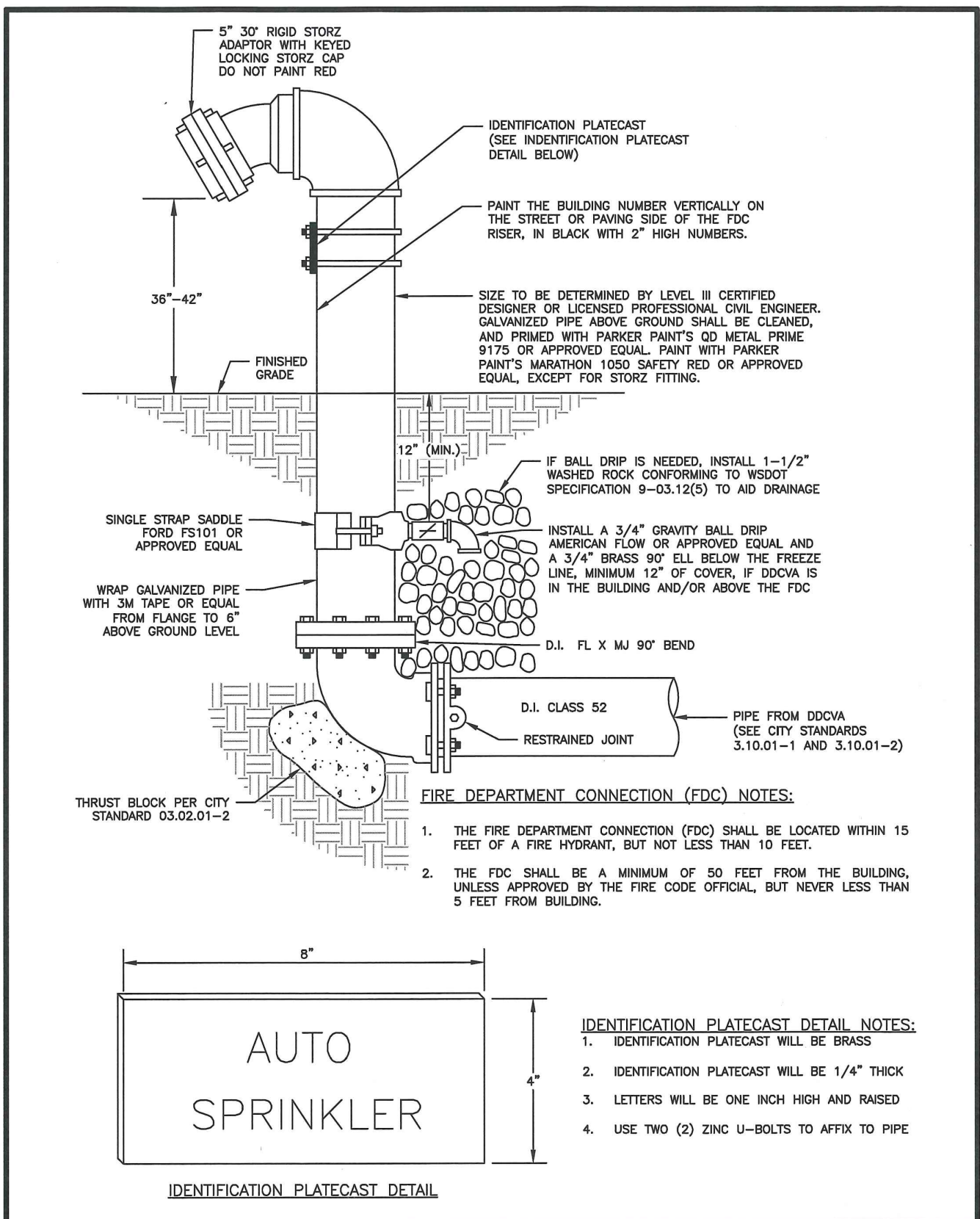


## NOTES:

- FOR SINGLE FAMILY RESIDENTIAL CONSTRUCTION, THE CITY SHALL SUPPLY AND INSTALL THE WATER METER AND TRANSMITTER AT THE TIME OF OCCUPANCY FOR COMMERCIAL CONSTRUCTION, THE CONTRACTOR SHALL SUPPLY AND INSTALL THE METER AND TRANSMITTER.
- ALL MATERIALS AND FITTINGS SHALL BE AS SPECIFIED OR AN APPROVED EQUAL.
- NORMALLY THE WATER METER BOX SHOULD BE LOCATED IN THE PLANTING STRIP. IF SIDEWALK IS AGAINST THE CURB, PLACE METER BOX DIRECTLY BEHIND THE SIDEWALK.
- THE WATER METER BOX SHALL NOT BE LOCATED IN HARD SURFACES. WHEN UNAVOIDABLE, EXCEPTIONS CAN BE MADE AT END OF CUL-DE-SACS OR PAN HANDLED LOTS. ANSI TIER 22 RATING REQ.
- ALL COUPLINGS SHALL USE PIPE INSERT STIFFENERS.
- THE WATER SERVICE LINE SHALL BE BEDDED IN WASHED SAND WITH 36" OF COVER BELOW FINISHED GRADE WITHIN THE RIGHT-OF-WAY. THE WATER SERVICE LINE SHALL BE ONE CONTINUOUS PIECE WITH NO SPLICES.
- WATER MAIN SHALL HAVE A MINIMUM COVER OF 36" IN IMPROVED RIGHT-OF-WAY AND IMPROVED EASEMENTS, AND A MINIMUM COVER OF 48" IN UNIMPROVED RIGHT-OF-WAY AND UNIMPROVED EASEMENTS.
- DUAL SERVICE SHALL BE CENTERED ON PROPERTY LINE.
- ALL POLY PIPE SHALL BE HIGH DENSITY POLY (HDPE) MEETING ASTM D-2238-SDR 7, BLUE IN COLOR, 200 PSI MINIMUM.
- ALL WATER SERVICE LINES SHALL BE INSTALLED PERPENDICULAR (90 DEGREES) TO THE POINT OF CONNECTION TO THE WATER MAIN.


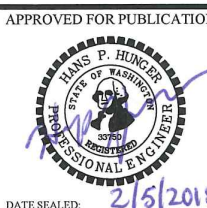

	<b>CITY OF PUYALLUP</b> PUBLIC WORKS AND DEVELOPMENT ENGINEERING		<b>1" WATER SERVICE CONNECTION</b>		<b>CITY STANDARD</b> 03.03.01-2 (NOT TO SCALE) DATE: 10/13/2019
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It doesn't appear that a 1" water service is proposed on the plans. Revise page 15 or remove this detail. [civils, pg 24]



## NOTES:

- THE FIRE DEPARTMENT CONNECTION (FDC) SHALL BE LOCATED WITHIN 15 FEET OF A FIRE HYDRANT, BUT NOT LESS THAN 10 FEET.
- THE FDC SHALL BE A MINIMUM OF 50 FEET FROM THE BUILDING, UNLESS APPROVED BY THE FIRE CODE OFFICIAL, BUT NEVER LESS THAN 5 FEET FROM BUILDING.

	<b>CITY OF PUYALLUP</b> OFFICE OF THE CITY ENGINEER		<b>FIRE DEPARTMENT CONNECTION (FDC)</b>		<b>CITY STANDARD</b> 03.10.02 (NOT TO SCALE) DATE: 2/5/2019
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## APPROVED

BY \_\_\_\_\_  
CITY OF PUYALLUP  
DEVELOPMENT ENGINEERING

DATE \_\_\_\_\_

NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE.

THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS.

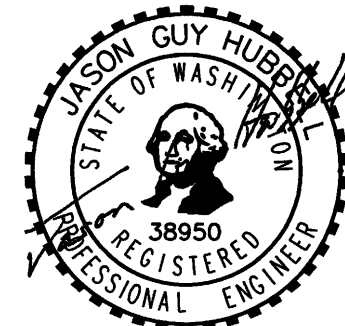
FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.

## CONSTRUCTION DETAILS

Title:

CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049

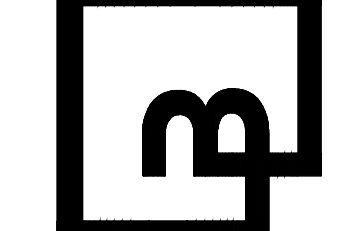
For:



Scale: Horizontal NA Vertical N/A

Designed \_\_\_\_\_  
Drawn \_\_\_\_\_  
Checked \_\_\_\_\_  
Approved \_\_\_\_\_  
Date 6/23/23

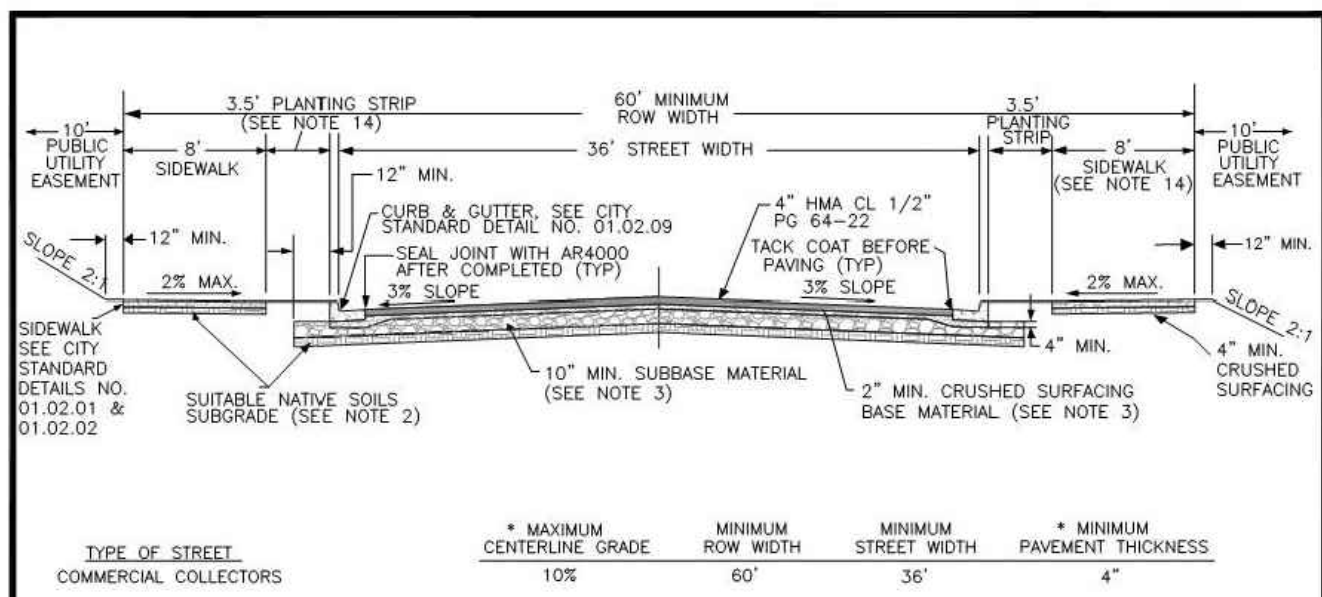
**Barghausen Consulting Engineers, Inc.**  
18215 72nd Avenue South  
Kent WA 98032  
425.251.6222  
barghausen.com



Job Number 22085  
Sheet 26  
C24 of 26

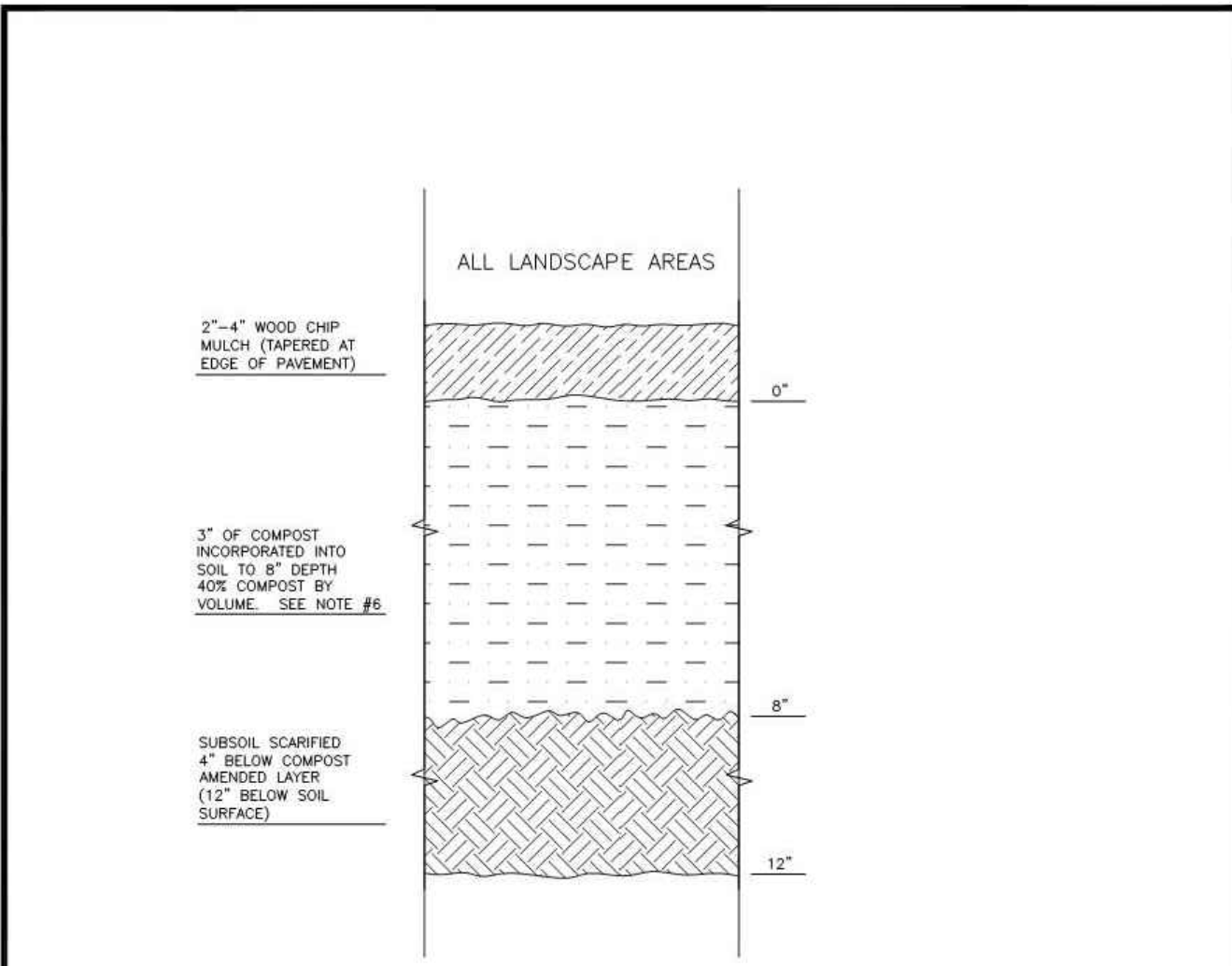


# CONSTRUCTION DETAILS



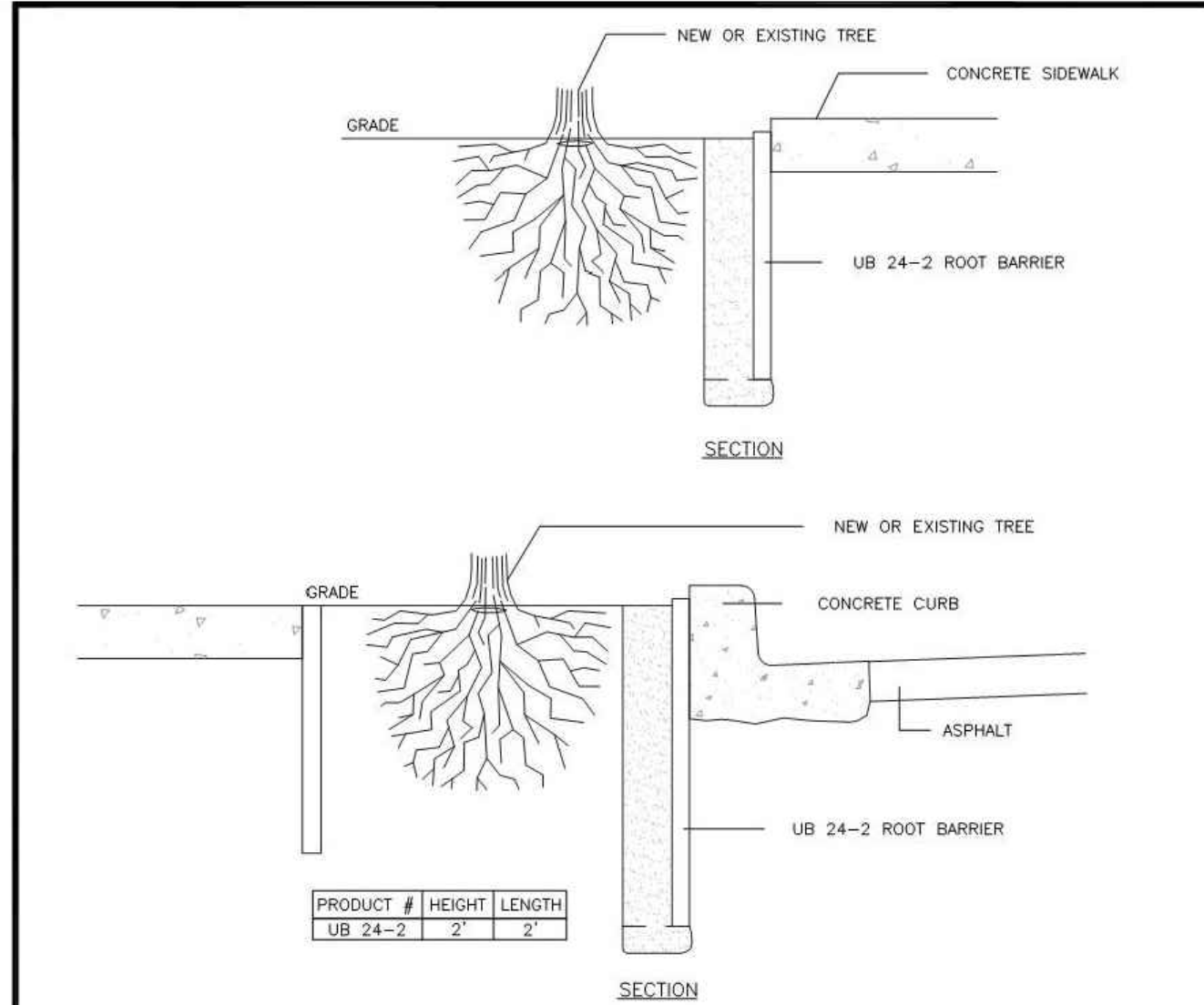
- NOTES:**
- ALL DEPTHS ARE MINIMUM COMPACTED DEPTHS.
  - SUBGRADE PREPARATION SHALL MEET THE REQUIREMENTS OF WSOT STANDARD SPEC. 2-06.3(1). IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MEET THE COMPACTION REQUIREMENTS AND CONTROL ALL WORK. THE CITY OF PUYALLUP RESERVES THE RIGHT TO REQUIRE COMPLIANCE TESTS AT THE CONTRACTOR'S EXPENSE.
  - SUBBASE MATERIAL SHALL BE GRAVEL BORROW 9-03.14(1) OF CRUSHED BALLAST MEETING THE REQUIREMENTS OF WSOT STANDARD SPEC. 9-03.1(1). CRUSHED SURFACING SHALL MEET THE GRADATION REQUIREMENTS OF WSOT STANDARD SPEC. 9-03.3(3). THE SUBBASE AND BASE MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH WSOT STANDARD SPEC. 4-04.
  - SOIL STABILIZATION FABRIC MAY BE REQUIRED BY THE DEVELOPMENT REVIEW ENGINEER TO BE INSTALLED PRIOR TO THE INSTALLATION OF THE BASE MATERIAL. WHEN REQUIRED, THE CONTRACTOR SHALL PLACE A GEOTEXTILE FABRIC OVER THE PREPARED SUBGRADE WITH A 2 FOOT MINIMUM OVERLAP. THE FABRIC SHALL BE INSTALLED PER MANUFACTURER SPECIFICATIONS.
  - ASPHALT CONCRETE PAVEMENT SHALL BE INSTALLED IN ACCORDANCE WITH WSOT STANDARD SPEC. 2-04. DESIGN ENGINEER SHALL SUBMIT A STATE APPROVED HMA MIX FOR APPROVAL.
  - TEMPERATURE SHALL NOT EXCEED 205°F AT LEAVING OF THE PLANT NOR BE LESS THAN 185°F DURING THE SPREADER BOX.
  - THE MAXIMUM COMPACTED THICKNESS OF ANY SINGLE LIFT SHALL MEET WSOT STANDARD SPEC. 2-04.3(3) TO A MINIMUM AVERAGE COMPACTED DRY DENSITY OF 91 PERCENT OF THE MAXIMUM DENSITY AS DETERMINED BY WSOT TEST METHOD SPECIFIED IN STANDARD SPEC. 5-04.3.10(B). PERIODIC COMPLIANCE TESTS SHALL BE MADE BY A CERTIFIED TESTING AGENCY AT THE EXPENSE OF THE CONTRACTOR.
  - THE FACE OF THE GUTTER LIP AND EDGES OF EXISTING ASPHALT MEET LINES SHALL BE TACK COATED PRIOR TO PAVEMENT PLACEMENT. WHEN SUCCESSIVE LIFTS OF ASPHALT ARE REQUIRED, A TACK COAT SHALL BE DISTRIBUTED UNIFORMLY OVER THE PREVIOUS LIFT AT A RATE OF 0.05-0.08 GALLONS PER SQUARE YARD AT A TEMPERATURE OF 100°F AND SHALL BE ALLOWED TO SET TO A TACKY STATE PRIOR TO THE PLACEMENT OF THE NEXT LIFT.
  - ALL MEET LINES BETWEEN LIFTS OF ASPHALT SHALL BE UNIFORM AND VERTICAL. THE MEET LINES SHALL BE CLEANED AND TACK COATED.
  - ANY CHANGES TO THE STANDARD PAVEMENT SECTION SHALL REQUIRE APPROVAL BY THE DEVELOPMENT REVIEW ENGINEER. A STRUCTURAL PAVEMENT CROSS SECTION DESIGN WITH CALCULATIONS SHALL BE REQUIRED.
  - ALL MANHOLE FRAMES, VALVE FRAMES AND MONUMENT COVERS SHALL BE INSTALLED AFTER PLACEMENT OF ASPHALT. IF MORE THAN ONE LIFT IS NECESSARY, FRAMES AND LIDS WILL BE ADJUSTED TO FINISH GRADE AT FIRST LIFT AS DIRECTED BY THE CITY.
  - ADDITIONAL BIKE LANES AND/OR ON-STREET PARKING MAY BE REQUIRED PER TRAFFIC ENGINEER.
  - A UTILITY EASEMENT OF 10' SHALL BE PROVIDED ON BOTH SIDES OF THE ROADWAY.
  - WHEN PLANTING STRIP IS 5' IN WIDTH OR LESS, STREET TREE PLANTER BOXES SHALL BE INSERTED AT LOCATIONS AS REQUIRED BY THE CITY (REFER TO CITY STANDARD DETAIL NO. 01.02.04).
  - PLANTING STRIP SHALL BE PLANTED AS DIRECTED BY CITY PLANNING DEPARTMENT.

	<b>CITY OF PUYALLUP</b>	<b>36' PUBLIC ROADWAY COMMERCIAL COLLECTOR CROSS SECTION</b>	
DESIGNED BY LINDA LIAN	CHECKED BY COLLEEN HARRIS	APPROVED BY LINDA LIAN	CITY STANDARD 01.01.04



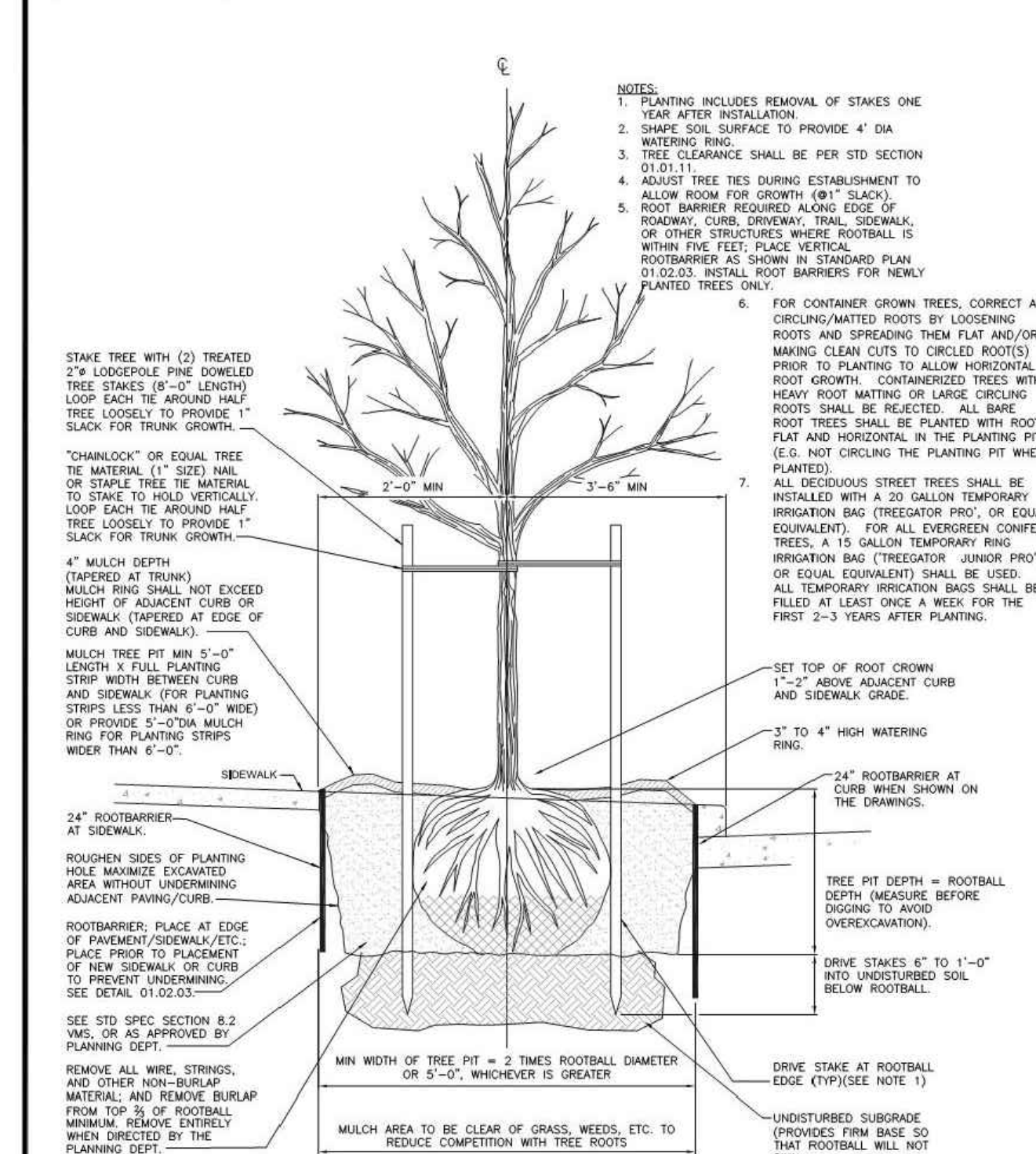
- NOTES:**
- ALL SOIL AREAS DISTURBED OR COMPACTED DURING CONSTRUCTION, AND NOT COVERED BY BUILDINGS OR PAVEMENT, SHALL BE AMENDED WITH COMPOST AS DESCRIBED BELOW.
  - SUBSOIL SHOULD BE SCARIFIED (LOOSENED) 4 INCHES BELOW AMENDED LAYER, TO PRODUCE 12-INCH DEPTH OF UN-COMPACTED SOIL, EXCEPT WHERE SCARIFICATION WOULD DAMAGE TREE ROOTS OR AS DETERMINED BY THE ENGINEER. SEE NOTE REGARDING PLANTING STEPS FOR STREET TREES.
  - COMPOST SHALL BE TILLED IN TO 8 INCH DEPTH INTO EXISTING SOIL, OR PLACE 8 INCHES OF COMPOST-AMENDED SOIL, PER SOIL SPECIFICATION.
  - PLANTING BEDS SHALL RECEIVE 3 INCHES OF COMPOST FILLED IN TO 8-INCH DEPTH, OR MAY SUBSTITUTE 8" OF IMPORTED SOIL CONTAINING 50-KOZ COMPOST BY VOLUME. MULCH AFTER PLANTING, WITH 4 INCHES OF ARBUSTOR WOOD CHIP MULCH OR APPROVED EQUIV. (OF LOOSE WOOD CHIPS AT THE TIME OF PLANTING TO ALLOW SETTLING TO 4").
  - SETBACKS: TO PREVENT UNEVEN SETTLING, DO NOT COMPOST-AMEND SOILS WITHIN 3 FEET OF UTILITY INFRASTRUCTURES (POLES, VAULTS, METERS ETC.). WITHIN ONE FOOT OF PAVEMENT EDGE, CURBS AND SIDEWALKS SOIL SHOULD BE COMPACTED TO APPROXIMATELY 95% PROCTOR TO ENSURE A FIRM SURFACE.
  - SEE SECTION 8.2(B) OF THE VMS FOR SOIL AMENDMENT AND INSTRUCTION PROCEDURES FOR STREET TREE PLANTER STRIPS. ALL STREET TREE PLANTER STRIPS SHALL RECEIVE 40% COMPOST AMENDED SOIL TO THE FULL DEPTH OF THE STREET TREE ROOTBALL.

	<b>CITY OF PUYALLUP</b>	<b>SOIL AMENDMENT AND DEPTH</b>	
DESIGNED BY LINDA LIAN	CHECKED BY COLLEEN HARRIS	APPROVED BY LINDA LIAN	CITY STANDARD 01.02.08a



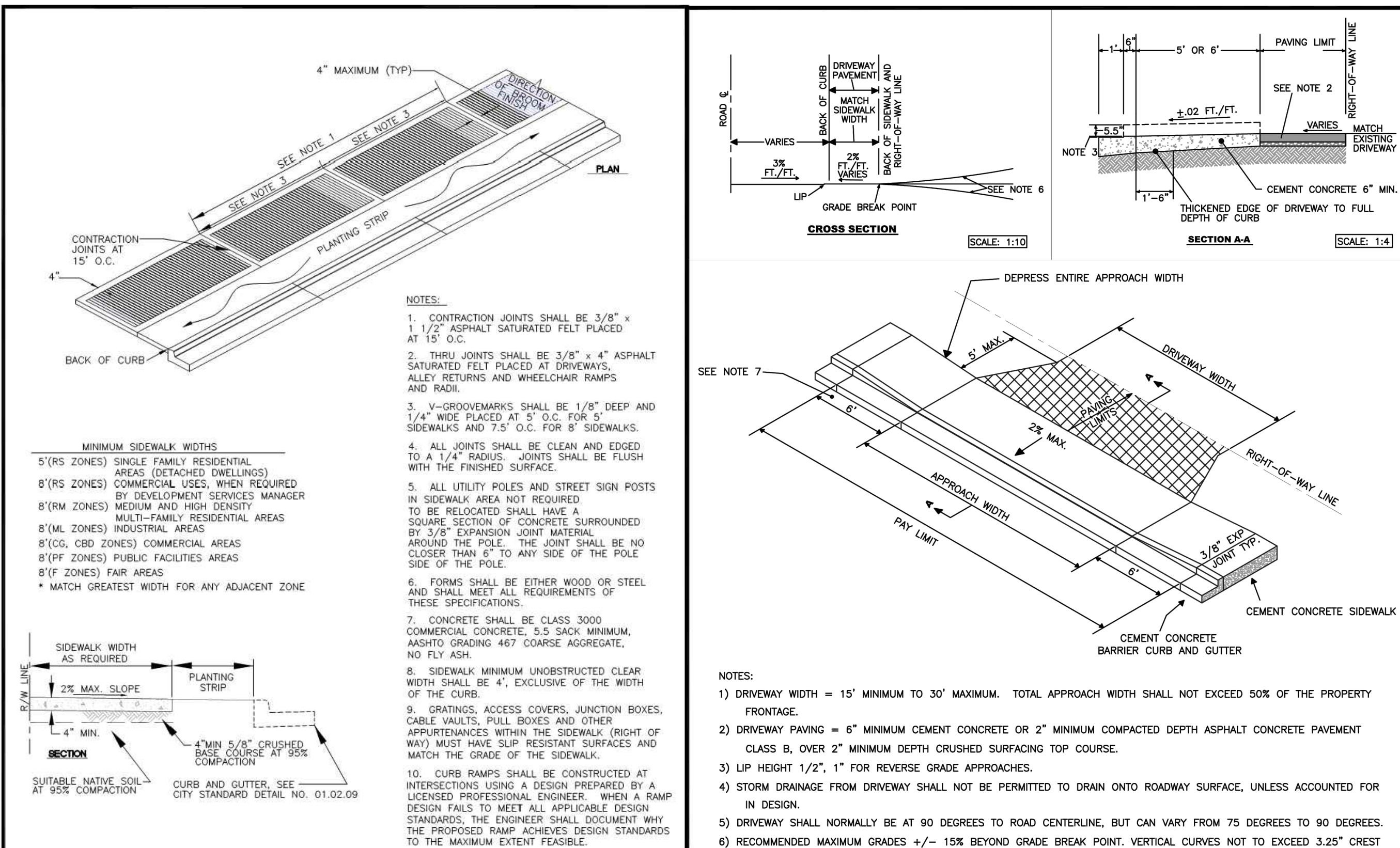
- NOTES:**
- ROOT BARRIERS SHALL BE REQUIRED IN ALL STREET TREE PLANTING INSTALLATIONS WHETHER NEW OR EXISTING, WHEN STREET TREES ARE INSTALLED IN RIGHT-OF-WAY OR IN A PLANTING EASEMENT.
  - ROOT BARRIERS USED SHALL BE DeepRoot ROOT BARRIERS OR EQUIVALENT.
  - UB - 24 SHALL BE USED.
  - ROOT BARRIERS SHALL BE INSTALLED IF REQUIRED BY THE CITY.
  - INSTALLATION OF ROOT BARRIERS TO BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
  - THE PANEL SHALL BE INSTALLED SO THE VERTICAL RIBS FACE THE ROOTS OF THE TREE. A MINIMUM OF FOUR (4) PANELS SHALL BE INSTALLED ON EACH SIDE OF ROOT BALL FOR 5' OF PROTECTION.
  - FOR PRODUCT INFORMATION VISIT:  
[http://www.deeproot.com/template.php?sec=products&nav=treeRoot&content=rb\\_app&sub=2&sel=1](http://www.deeproot.com/template.php?sec=products&nav=treeRoot&content=rb_app&sub=2&sel=1)
  - \*"PLANTING EASEMENT" SHALL MEAN THAT PORTION OF LAND MADE AVAILABLE AS A PUBLIC EASEMENT FOR THE PURPOSE OF PLANTING AND MAINTAINING CITY STREET TREES. ALL STREET TREES PLANTED WITHIN A PLANTING EASEMENT SHALL BE PLANTED WITHIN THREE FEET OF RIGHT-OF-WAY.

	<b>CITY OF PUYALLUP</b>	<b>ROOT BARRIER DETAIL</b>	
DESIGNED BY LINDA LIAN	CHECKED BY COLLEEN HARRIS	APPROVED BY LINDA LIAN	CITY STANDARD 01.02.03

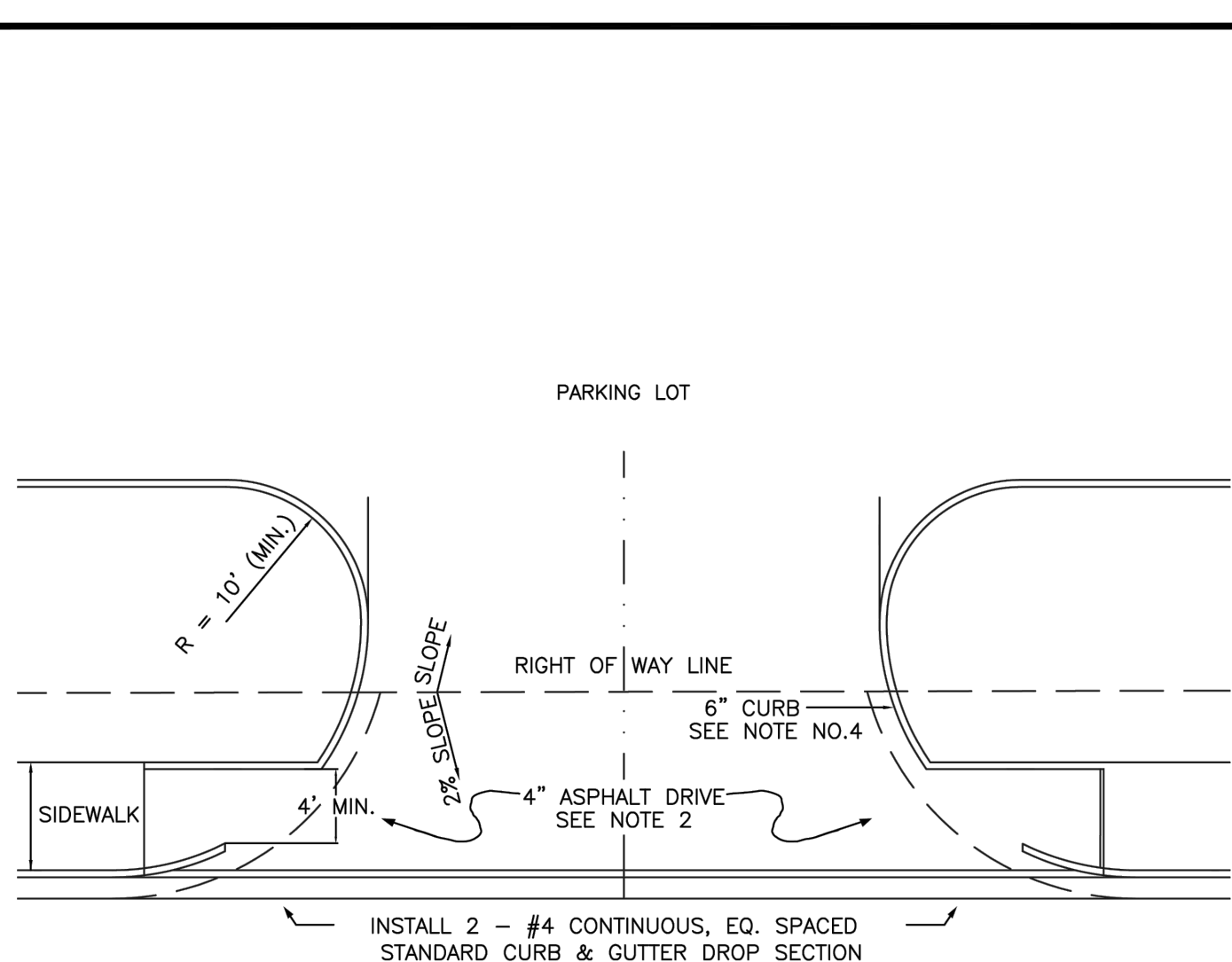


- NOTES:**
- PLANTING INCLUDES REMOVAL OF STAKES ONE YEAR AFTER INSTALLATION.
  - SHAPE SOIL SURFACE TO PROVIDE 4" DIA. WATERING RING.
  - TREE CLEARANCE SHALL BE PER STD SECTION 01.01.15.
  - ADJUST TREE TIES DURING ESTABLISHMENT TO ALLOW ROOM FOR GROWTH (8" SLACK).
  - ROOT BARRIER REQUIRED ALONG EDGE OF ROADWAY, CURB, DRIVEWAY, TRAIL, SIDEWALK, OR OTHER STRUCTURES WHERE ROOTBALL IS WITHIN THE TREE PLANTING STRIP. THE ROOTBALL SHALL BE PLANTED IN A PLANTING STRIP LOOSELY TO PROVIDE 1" SLACK FOR TRUNK GROWTH.
  - FOR CONTAINER GROWN TREES, CORRECT ALL CIRCLING/MATTED ROOTS BY LOOSENING ROOTS AND SPREADING THEM FLAT AND/OR MAKING CLEAN CUTS TO CIRCLED ROOTS) PRIOR TO PLANTING TO ALLOW HORIZONTAL ROOT GROWTH. CONTAINERIZED TREES WITH HEAVY ROOT MATTING OR LARGE CIRCLING ROOTS SHALL BE REJECTED. ALL BARE ROOT TREES SHALL BE PLANTED WITH ROOTS FLAT AND HORIZONTAL IN THE PLANTING PIT (E.G. NOT CIRCLING THE PLANTING PIT WHEN PLANTED).
  - ALL DECIDUOUS STREET TREES SHALL BE INSTALLED WITH A 20 GALLON TEMPORARY IRRIGATION BAG (TREGATOR JUNIOR PRO), OR EQUIVALENT, FOR ALL EVERGREEN CONIFER TREES, A 15 GALLON TEMPORARY IRRIGATION BAG (TREGATOR JUNIOR PRO), OR EQUIVALENT, SHALL BE USED. ALL TEMPORARY IRRIGATION BAGS SHALL BE FILLED AT LEAST ONCE A WEEK FOR THE FIRST 2-3 YEARS AFTER PLANTING.
  - SET TOP OF ROOT CROWN 1-2" ABOVE ADJACENT CURB AND SIDEWALK GRADE.
  - 24" ROOTBARRIER AT CURB WHEN SHOWN ON THE DRAWINGS.
  - TREE PIT DEPTH - ROOTBALL DEPTH (MEASURE BEFORE DIGGING TO AVOID OVEREXCAVATION).
  - DRIVE STAKES 6" TO 10" INTO UNDISTURBED SOIL BELOW ROOTBALL.
  - MIN WIDTH OF TREE PIT = 2 TIMES ROOTBALL DIAMETER OR 5'-0", WHICHEVER IS GREATER.
  - MULCH AREA TO BE CLEAR OF GRASS, WEEDS, ETC. TO REDUCE COMPETITION WITH TREE ROOTS.
  - UNDISTURBED SUBGRADE (PROVIDES FIRM BASE SO THAT ROOTBALL WILL NOT SHIM).
  - DRIVE STAKE AT ROOTBALL EDGE (TYPICALLY NOTE 1).

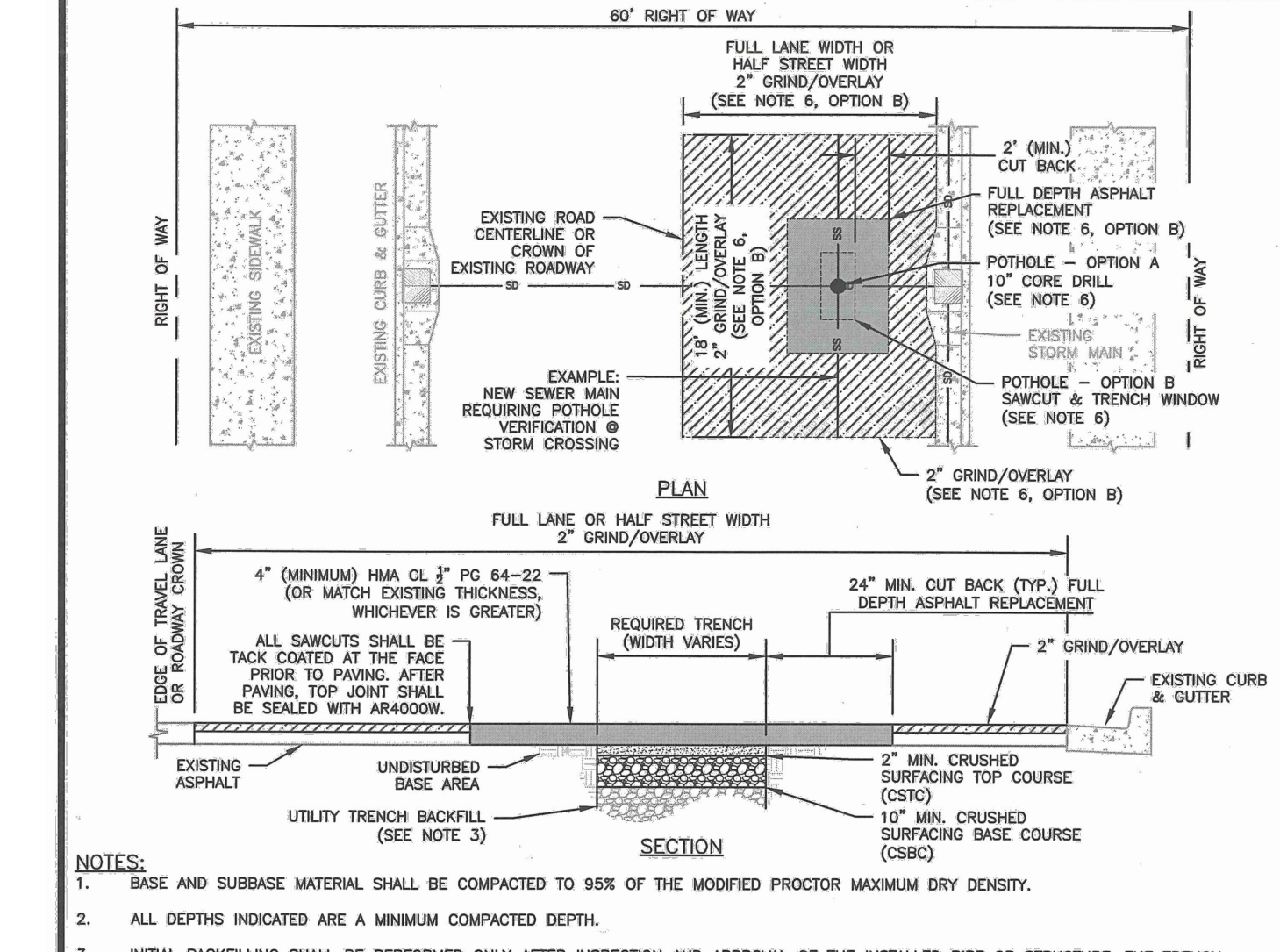
	<b>CITY OF PUYALLUP</b>	<b>STREET TREE PLANTING IN PLANTING STRIP</b>	
DESIGNED BY LINDA LIAN	CHECKED BY COLLEEN HARRIS	APPROVED BY LINDA LIAN	CITY STANDARD 01.02.07



	<b>CITY OF PUYALLUP</b>	<b>SIDEWALK WITH PLANTING STRIP</b>	
DESIGNED BY LINDA LIAN	CHECKED BY COLLEEN HARRIS	APPROVED BY LINDA LIAN	CITY STANDARD 01.02.02



	<b>CITY OF PUYALLUP</b>	<b>RESIDENTIAL DRIVEWAY ALTERNATE 1</b>	
DESIGNED BY LINDA LIAN	CHECKED BY COLLEEN HARRIS	APPROVED BY LINDA LIAN	CITY STANDARD 01.02.13



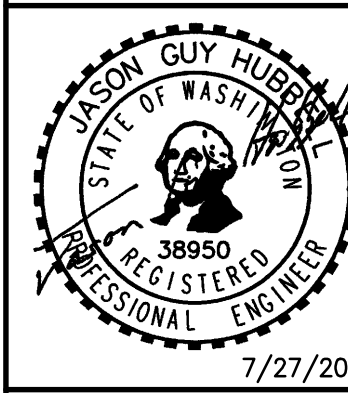
	<b>CITY OF PUYALLUP</b>	<b>STANDARD COMMERCIAL APPROACH</b>	
DESIGNED BY LINDA LIAN	CHECKED BY COLLEEN HARRIS	APPROVED BY LINDA LIAN	CITY STANDARD 01.02.16

<b>APPROVED</b>	
BY	CITY OF PUYALLUP DEVELOPMENT ENGINEERING
DATE	
NOTE: THIS APPROVAL IS VOID AFTER 180 DAYS FROM APPROVAL DATE. THE CITY WILL NOT BE RESPONSIBLE FOR ERRORS AND/OR OMISSIONS ON THESE PLANS. FIELD CONDITIONS MAY DICTATE CHANGES TO THESE PLANS AS DETERMINED BY THE DEVELOPMENT ENGINEERING MANAGER.	
Job Number	22085
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CREF3 PUYALLUP OWNER LLC  
11611 SAN VICENTE BLVD  
10TH FLOOR  
LOS ANGELES, CA 90049

CONSTRUCTION DETAILS

FORTRESS - PUYALLUP



Scale: Horizontal NA Vertical N/A

Designed: DL  
Drawn: RDC  
Checked: DL  
Approved: JGH  
Date: 6/23/23

Barghausen Consulting Engineers, Inc.  
18215 72nd Avenue South  
Kent WA 98032  
425.251.6222  
barghausen.com



22085  
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## CONSTRUCTION DETAILS

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