

PACIFIC FERN BUSINESS PARK - LOT 1

LOT 1 - SITE AND UTILITY IMPROVEMENTS

GENERAL NOTES:

GENERAL REQUIREMENTS

- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND TO THE REQUIREMENTS OF THE CURRENT EDITION OF THE "STATE OF WASHINGTON, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION" (WSDOT SPECS.), THE CITY OF FERNDALE DEVELOPMENT STANDARDS (COFDS) AND THE 2005 VERSION OF THE DEPARTMENT OF ECOLOGY STORM WATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON (DOE MANUAL). IN CASE OF A CONFLICT BETWEEN PLANS, REGULATORY STANDARDS OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER CONSTRUCTION DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES. THROUGHOUT THE PERIOD OF CONSTRUCTION, CONTRACTOR SHALL COMPLY WITH THE TERMS OF ALL PERMITS.
- THE CONTRACTOR MUST HAVE A FULL SET OF CITY CONTRACT DOCUMENTS ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- CONSTRUCTION NOISE SHALL BE LIMITED TO BETWEEN 7 a.m. TO 8 p.m., MONDAY THROUGH FRIDAY.
- THE CONTRACTOR SHALL CONTACT THE UTILITIES UNDERGROUND LOCATION CENTER AT LEAST 72 HOURS PRIOR TO STARTING CONSTRUCTION. PHONE: 1-800-424-5555. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL OF THE VARIOUS UTILITY COMPANIES TO ARRANGE FOR FIELD LOCATIONS OF ALL EXISTING UTILITY FACILITIES PRIOR TO STARTING CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COSTS INCURRED BECAUSE OF DAMAGE DONE TO EXISTING FACILITIES BY THE CONTRACTOR'S WORK FORCE, INCLUDING COSTS FOR REPAIRS, WHICH WILL BE CONTRACTOR'S SOLE RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF ALL EXISTING UTILITIES AND TO NOTIFY THE ENGINEER PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE LOCATION OF ANY EXISTING UTILITIES.
- THE CONTRACTOR SHALL PROTECT ALL PRIVATE AND PUBLIC UTILITIES FROM DAMAGE RESULTING FROM THE WORK. CONTRACTOR SHALL RESTORE ALL PRIVATE AND PUBLIC PROPERTY DISRUPTED BY THE PROJECT IMMEDIATELY AFTER CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CLEARING OR GRADING. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE ONSITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
- SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT.
- THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDALE AND/OR WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN THE PUBLIC RIGHTS-OF-WAY.
- THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT AND THE ENGINEER OF RECORD A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CITY WILL SCHEDULE THE MEETING.
- ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT, REPRESENTATIVES FROM THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT MUST INSPECT ALL WORK IDENTIFIED ON THE PLANS, BOTH PUBLIC AND PRIVATE. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS AS FOLLOWS:
 - PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.
 - CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.
 - PLACEMENT OF WATER MAIN AND BACKFILLING OF WATER MAIN TRENCH WITHIN ROAD RIGHTS-OF-WAY OR IN WATERLINE EASEMENT TO BE DEDICATED TO THE CITY OF FERNDALE.
 - PLACEMENT AND BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY, IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDALE, OR OTHER PUBLICLY SHARED FACILITIES.
 - GRADING OF PUBLIC OR PRIVATE ROADWAY AT:
 - COMPLETION OF EXCAVATION TO SUBGRADE.
 - COMPLETION OF BALLAST COURSE PLACEMENT.
 - COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT.
 - POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC OR PRIVATE ROADWAY.
 - ASPHALT PAVING IN PROGRESS IN PUBLIC OR PRIVATE ROADWAY.
 - OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.
 - END OF MAINTENANCE PERIOD.
- 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. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO PERFORMING THE WORK. ALL SECTIONS OF THE WSDOT SPECS., 1-07.23- TRAFFIC CONTROL, SHALL APPLY.
- THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF ANY PROPOSED DEVIATION FROM THE APPROVED PLANS PRIOR TO CONSTRUCTION OF THE REVISED IMPROVEMENTS. THE CONTRACTOR SHALL KEEP RECORDS OF ALL DEVIATIONS AND SHALL FORWARD THEM TO THE ENGINEER AND TO THE CITY OF FERNDALE PUBLIC WORKS DEPARTMENT.
- AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDALE UPON COMPLETION OF CONSTRUCTION AND PROVIDED IN CITY OF FERNDALE DATUM - VERTICAL (NGVD 29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON SUBMITTAL REQUIREMENTS.
- ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- ALL DISTURBED AREAS SHALL BE COVERED WITH MULCH OR WOOD CHIPS WHILE NOT UNDER CONSTRUCTION.
- AN APPROVED COPY OF THESE PLANS MUST BE ON-SITE WHENEVER CONSTRUCTION IS IN PROGRESS.

SEWER NOTES:

- SEWER PIPE SHALL BE IN ACCORDANCE WITH WSDOT 9-05.12. BEDDING AND BACKFILL FOR SEWER PIPE SHALL BE IN ACCORDANCE WITH CITY OF FERNDALE SS-15 AND SS-1
- CONNECTIONS TO EXISTING SEWER SHALL BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE CITY OF FERNDALE.
- SANITARY SEWER SERVICES SHALL BE PVC PIPE CONFORMING TO ASTM D3034 SDR 35 AND IN IN ACCORDANCE WITH CITY OF FERNDALE STANDARD PLAN SS-6. BEDDING AND BACK FILL SHALL BE AS SHOWN IN THE STANDARD DETAILS. ALL SIDE SEWERS SHALL BE INSTALLED AT A MINIMUM 2.0% SLOPE.

STORM NOTES:

- TYPE 1 CATCH BASINS SHALL BE PER WS-DOT STANDARD PLAN B-1. TYPE 2 CATCH BASINS SHALL BE PER WS-DOT STANDARD PLAN B-1E. CONCRETE INLETS SHALL BE PER WS-DOT STANDARD PLAN B-26. WHERE LOCATED IN CURB GUTTER LINE CATCH BASIN SHALL BE THRU-CURB INLET FRAME AND GRATE IN ACCORDANCE WITH CITY OF FERNDALE STD. DRAWING R-8. VANED GRATES SHALL BE USED IN ACCORDANCE WITH WSDOT STD PLAN B-2b.
- STORM DRAINAGE PIPE SHALL CONFORM TO WSDOT SECTION 7-01, AND CITY OF FERNDALE STANDARDS, SECTION 619.

UNDERGROUND UTILITIES CONSTRUCTION

- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER OF RECORD TO ASSURE ACCURATE AND TIMELY COLLECTION OF ALL REQUIRED AS-BUILT DATA. THIS DATA MUST ACCURATELY REFLECT THE LOCATIONS OF ALL UNDERGROUND UTILITIES, BOTTOM OF PIPE ELEVATIONS, INVERT ELEVATIONS, MANHOLE LOCATIONS, WATER SERVICE TAPS, BLOW-OFF LOCATIONS AND INVERTS OF SERVICE CONNECTIONS (BOTH AT PIPE AND AT PROPERTY LINE), VERTICAL AND HORIZONTAL BENDS, SERVICE BOXES AND METERS, VALVES AND HYDRANTS. CALL THE ENGINEER OF RECORD AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED AS-BUILT SURVEY.
- THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:
 - NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.
 - WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF DITCHES.
 - TRENCH DEWATERING DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT PONDS.
 - WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.
- UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.

- TESTING OF NEW WATER AND SANITARY SEWER MAINS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.
- OPEN CUTTING OF EXISTING ROADWAYS IS ONLY ALLOWED AS APPROVED AND NOTED ON THESE APPROVED PLANS. ANY OPEN CUT SHALL BE RESTORED IN ACCORDANCE WITH THE COF STANDARD TRENCH DETAIL.

BASE COURSES & CRUSHED SURFACING

- GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET THE CURRENT EDITION OF WSDOT STANDARD SPECIFICATIONS.
- BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.
- THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN 1/8 INCH OF FINISHED GRADE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIAL AND COMPACTION TESTING. PRIOR TO IMPORTING OF MATERIAL FOR BASE AND CRUSHED SURFACING TOP COURSE THE CONTRACTOR SHALL PROVIDE EVIDENCE OF SATISFACTORY PASSING GRADING AND DEGRADATION TEST RESULTS TO THE ENGINEER.

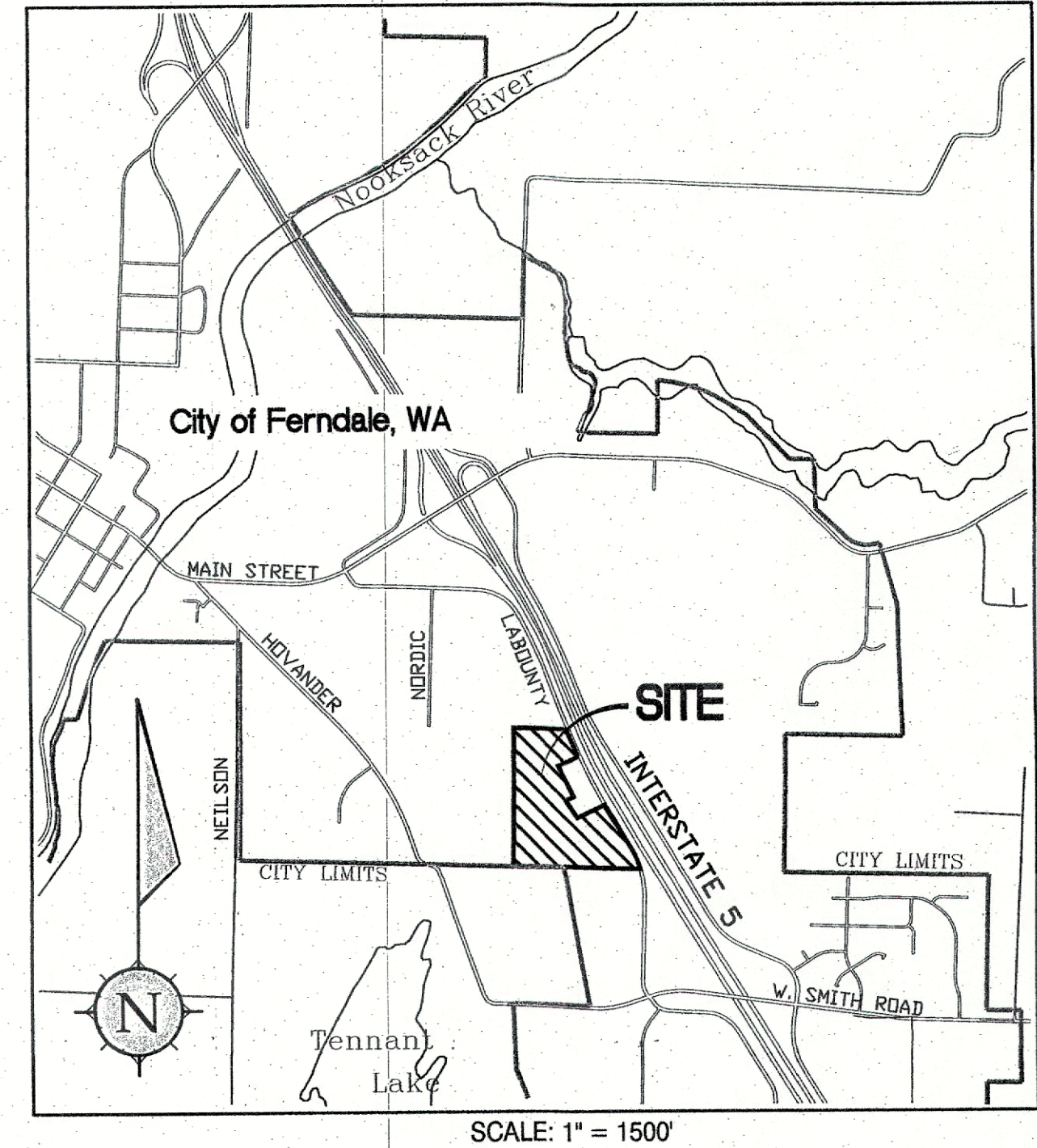
WATER

- THE FOLLOWING STANDARD DETAILS SHALL BE USED IN CONSTRUCTING WATER SUPPLY SYSTEM IMPROVEMENTS:

PIPE BEDDING	COFSD W-11
TRENCH BACKFILL	COFSD W-11
FIRE HYDRANT ASSEMBLY	COFSD W-1
THRUST BLOCKING	COFSD W-2, W-3 & W-4
WATER SERVICE	COFSD W-5
- ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS, SECTIONS 702 AND 705 AND THE CURRENT EDITION OF THE WSDOT STANDARD SPECIFICATIONS.
- ALL WATER MAIN PIPE SHALL BE DUCTILE IRON PER SECTION 9-30.1(1) OF THE WSDOT SPECS., UNLESS OTHERWISE APPROVED BY THE PUBLIC WORKS DIRECTOR.
- MATERIAL FOR FITTINGS SUCH AS CROSSES, TEES, BENDS, REDUCERS AND SLEEVES SHALL BE DUCTILE IRON. JOINTS SHALL BE M.J., FLANGED OR PUSH-ON JOINTS AND SHALL CONFORM TO SECTION 9-30.2(1) OF THE WSDOT SPECS.
- CONCRETE BLOCKING SHALL BE AS SPECIFIED IN CITY OF FERNDALE STANDARD DETAILS W-2, W-3 AND W-4, OR AS DIRECTED BY THE ENGINEER OF RECORD. BLOCKS SHALL BE INSTALLED AS SPECIFIED IN SECTION 7-09.3(21) OF THE WSDOT SPECS. NO PRE-CAST BLOCKS ARE ALLOWED.
- CONNECTIONS TO EXISTING WATER MAINS - THE CONTRACTOR MUST NOTIFY THE CITY OF FERNDALE PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR WORKING DAYS IN ADVANCE.
- ALL HYDROSTATIC TESTING AND DISINFECTION OF WATER MAINS SHALL CONFORM TO SECTION 7-09.3(23) AND SECTION 7-09.3(24) OF THE WSDOT SPECS. HYDROSTATIC TEST PRESSURE FOR WATER MAIN ACCEPTANCE SHALL BE 250 PSI AND SHALL BE DONE ACCORDING TO CITY OF FERNDALE REQUIREMENTS. THE CITY OF FERNDALE LABORATORY SHALL CONDUCT ALL DISINFECTION AND BACTERIOLOGICAL TESTS. THE PIPE WILL NOT PASS TESTING UNLESS A ZERO BACTERIAL COUNT IS MEASURED ON TWO CONSECUTIVE TESTS, CONDUCTED 24 HOURS APART. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE TESTING.
- BACKFILL SHALL BE GRAVEL BASE, CLASS B, IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% OPTIMUM DENSITY. IN UNIMPROVED AREAS, MINIMUM COMPACTION SHALL BE 90% OF OPTIMUM DENSITY.
- ALL PIPES SHALL HAVE A MINIMUM COVER OF 36" AND A MAXIMUM OF 42".
- ALL VALVES SHALL BE EITHER GATE OR BUTTERFLY TYPE VALVES AND SHALL BE INSTALLED WITH SLIP TYPE CAST IRON VALVE BOXES. GATE VALVES SHALL BE USED FOR LINES 2 INCHES THROUGH 10 INCHES IN DIAMETER. SHORT-BODY VALVES SUITABLE FOR A NON-SHOCK SHUT-OFF PRESSURE OF 130 PSI AND SUITABLE FOR DIRECT BURIAL ARE SPECIFIED. GATE VALVES SHALL BE RESILIENT SEATED IRON-BODY, FULL-BRONZE MOUNTED VALVES CONFORMING TO ANWWA C509 AND SUITABLE FOR SERVICE WITH THE TYPE AND CLASS OF PIPE USED. ALL VALVES SHALL HAVE NON-RISING STEMS AND SHALL OPEN COUNTERCLOCKWISE AND SHALL BE EQUIPPED WITH A 2 INCH SQUARE OPERATING NUT. VALVES WILL BE FLANGE OR M.J. JOINTS. VALVE MARKERS SHALL BE LOCATED OUTSIDE OF PAVEMENT SECTIONS.
- WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE CITY OF FERNDALE DEVELOPMENT STANDARDS.
- FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFSD W-1 AND THE FOLLOWING STANDARDS:
 - FIRE HYDRANTS SHALL HAVE TWO INDIVIDUALLY VALVED 2-1/2" PORTS AND ONE 5-1/4" MAIN VALVE OPENING. A 4-1/2" NST PUMPER NOZZLE AND A 5" STORZ PORT WITH CAP AND AIRCRAFT CABLE SHALL BE SUPPLIED. HYDRANTS SHALL BE MAH 129 HYDRANTS.
 - FIRE HYDRANTS SHALL HAVE THE STORZ PORT FACING THE REQUIRED ACCESS AND THE BASE FLANGE OF THE HYDRANT MUST NOT VARY MORE THAN 1 FOOT IN ELEVATION FROM THE GRADE LEVEL OF THE REQUIRED ACCESS. THE LOWEST STEM SHALL BE A MINIMUM OF 14" ABOVE THE GROUND.
 - IF THE PUBLIC WORKS DIRECTOR DETERMINES THAT FIRE HYDRANTS ARE VULNERABLE TO VEHICULAR DAMAGE, APPROPRIATE HYDRANT GUARD POSTS SHALL BE PROVIDED. NO OBSTRUCTIONS SHALL EXIST WITHIN A 3-FOOT WORKING AREA OF EACH REQUIRED ACCESS. HYDRANT SHUTOFF VALVES SHALL BE LOCATED BETWEEN 5' AND 20' FROM THE HYDRANT.
 - UNDERGROUND SUPPLIES TO FIRE HYDRANTS MUST BE INSPECTED. SUCH INSPECTION SHALL INCLUDE VISUAL INSPECTION OF PIPING AND HYDROSTATIC PRESSURE TESTING TO A MIN. OF 250 PSI. A FLOW TEST WILL BE REQUIRED WHEN INSTALLATION IS COMPLETE.
 - FIRE HYDRANTS MUST BE MAINTAINED IN AN OPERABLE CONDITION AT ALL TIMES AND MUST BE REPAIRED OR REPLACED WHEN DEFECTIVE. HYDRANTS SHALL BE FULLY OPERABLE BEFORE CONSTRUCTION COMMENCES ABOVE GRADE LEVEL.

MAP NOTES

BASIS OF ELEVATION/PROJECT BENCHMARK:	CITY OF FERNDALE (83/91) BEARING N43°14'31"E BETWEEN FERN 12 (C.O.F) AND FERN 11
VERTICAL DATUM:	CITY OF FERNDALE (NGVD 29)
SOURCE OF BOUNDARY:	FERN 12 - SURFACE MONUMENT ELEV: 31.27
SOURCE OF CONTOURS:	TOPOGRAPHIC SURVEY FROM POWERTEK SURVEYING
CONTOUR INTERVAL:	1' CONTOURS CONTOURS ACCURATE TO ONE HALF THE CONTOUR INTERVAL UNLESS OTHERWISE NOTED.
SOURCE AND ACCURACY OF UTILITY INFORMATION:	EXISTING UTILITIES ARE SHOWN BASED ON UTILITY COMPANY PAINTED LOCATION MARKS AND CITY RECORD DRAWINGS; AND MAY NOT REPRESENT ALL UNDERGROUND OR ABOVE-GROUND UTILITIES OR SITE FEATURES. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE; THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
SCOPE OF WORK:	THE SCOPE OF WORK FOR PREPARATION OF THIS MAP AND ALL EXISTING AND PROPOSED FEATURES IS LIMITED IN THE EXTENT OF FIELD INVESTIGATIONS OF ABOVE AND BELOW GROUND FEATURES AND/OR UTILITIES, AND RELIES ON THE WORK OF OTHERS, INCLUDING SURVEYS, MAPS, RECORD DRAWINGS, AND OTHER INFORMATION SOURCES AS NOTED HEREON.



VICINITY MAP CITY OF FERNDAL, WA

OWNER:
FABER CONSTRUCTION
(360) 354-0335

SURVEYOR:
POWERTEK SURVEYING
(360)746-8801

ENGINEER:
APC ENGINEERS
(360)671-1146

SHEET INDEX

- COVER SHEET AND GENERAL NOTES
- SITE PLAN
- SWPPP AND TESC
- GRADING AND UTILITIES
- DETAILS

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THE IMPROVEMENTS FOR PACIFIC FERN BUSINESS PARK - LOT 1 HAVE BEEN INSPECTED BY APC ENGINEERS AND TO THE BEST OF MY KNOWLEDGE, HAVE BEEN CONSTRUCTED IN GENERAL CONFORMANCE WITH THE CITY OF FERNDALE DEVELOPMENT STANDARDS, THE CITY OF FERNDALE MUNICIPAL CODE, SUBSEQUENT STANDARDS ADOPTED BY REFERENCE THEREIN, AND STANDARD ENGINEERING PRACTICE.

Nathan G. Row, P.E.
NATHAN G. ROW, P.E. DATE 11/5/2020

SURVEYORS CERTIFICATION

I CERTIFY THAT THE LOCATIONS, ELEVATIONS, DEPTHS, AND AS-BUILT COMMENTS REFLECTING MATERIALS ACTUALLY USED DURING CONSTRUCTION ACCURATELY REFLECT EXISTING FIELD CONDITIONS AS DETERMINED BY ME OR UNDER MY DIRECT SUPERVISION ON THIS DATE: 11-4-2020

Jeremy Disch, PLS
JEREMY DISCH, PLS DATE 11.5.2020

APPROVED

Jeffrey Lee Harris
JEFFREY LEE HARRIS
PUBLIC WORKS DEPARTMENT

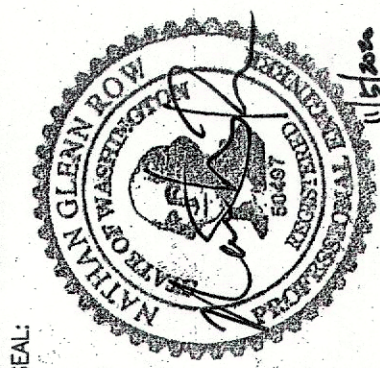
SITE LOCATION MAP

SCALE: 1" = 200'

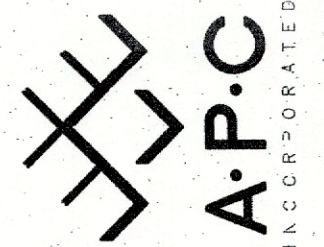
RECORD DRAWING NOTE:
INFORMATION VERIFIED BY SURVEYOR/INSPECTORS MARKED "ASB." RECORD DRAWINGS PREPARED TO INCORPORATE AVAILABLE INFORMATION FROM AS-BUILT SURVEY/CONTRACTOR AS-BUILT/INSPECTOR COMMENTS

AS-BUILT - RECORD DRAWINGS
NOVEMBER 2020

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PROFESSIONAL CONSULTING ENGINEERS - LAND USE - CONSTRUCTION AND DEVELOPMENT CONSULTANTS
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PHONE (360) 671-1146 FAX (360) 671-1169



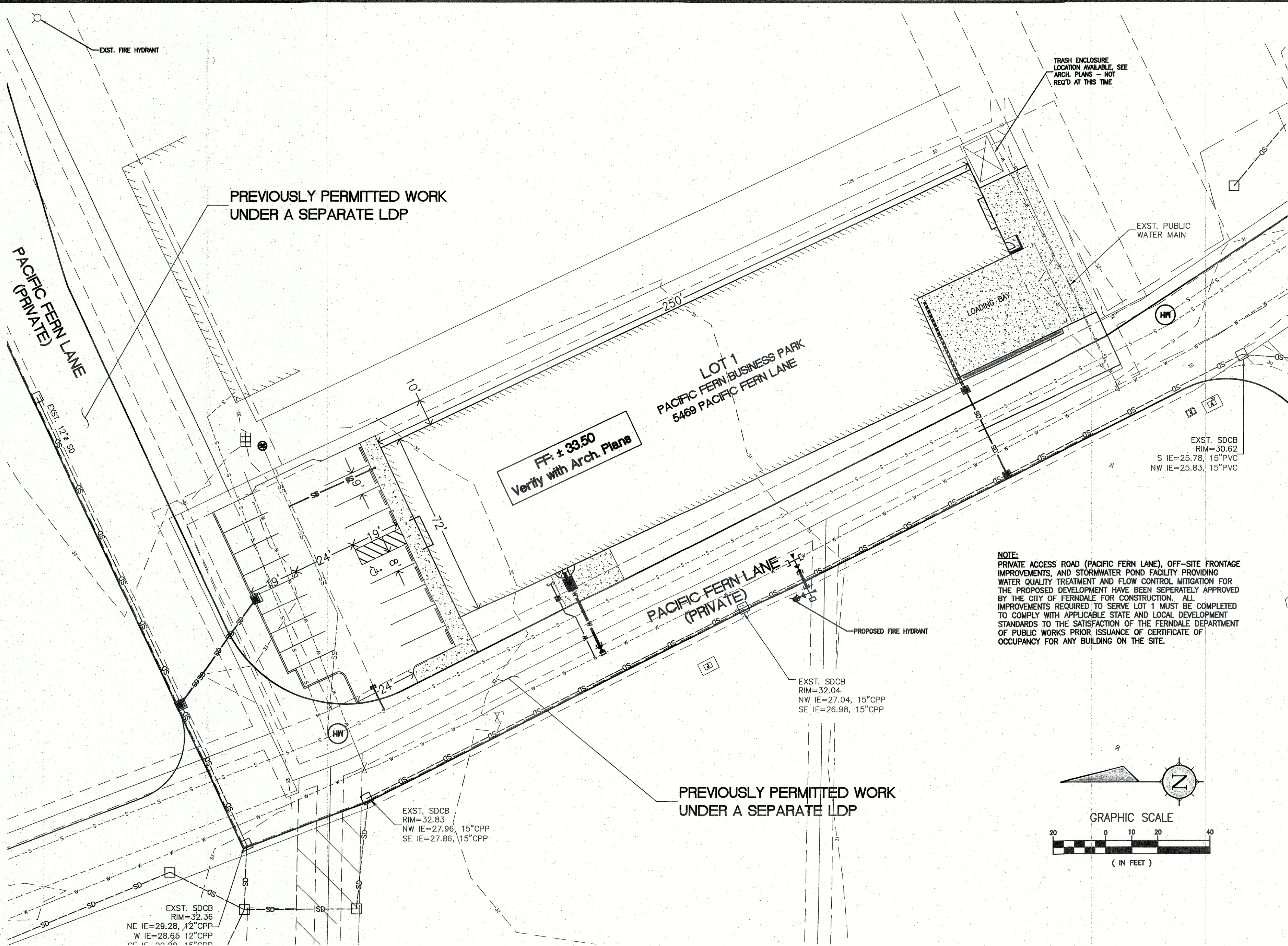
REVISIONS		DESCRIPTION	BY	DATE
NO.	DATE			

FABER CONSTRUCTION

PACIFIC FERN - LOT 1

COVER SHEET AND GENERAL NOTES

JOB NO. 15-1072	CLIENT: FABER CONSTRUCTION	PROJECT: PACIFIC FERN - LOT 1	SHEET TITLE: COVER SHEET AND GENERAL NOTES
DESIGNED: NGR	DATE: 11/5/2020	DRAWN: JPLS	DATE: 11/5/2020
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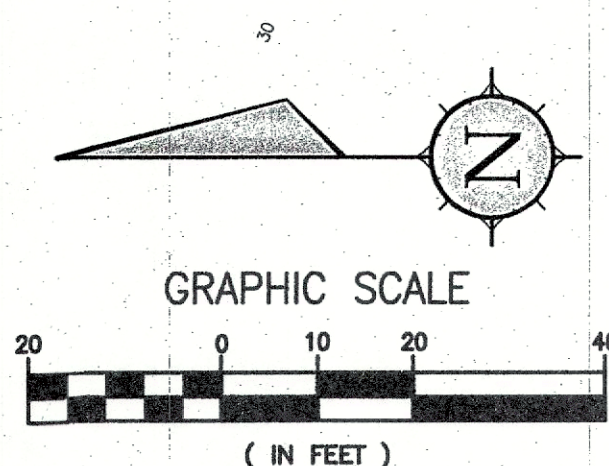


SITE PLAN NOTES

1. ALL DRIVING, PARKING, AND VEHICLE LOADING AREAS SHALL BE PAVED WITH AN ALL-WEATHER DRIVING SURFACE ACCEPTABLE TO THE COMMUNITY DEVELOPMENT AND PUBLIC WORKS DEPARTMENTS.
2. ALL PARKING AND ACCESS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
3. BUILDING LIGHTING TO BE IN ACCORDANCE WITH THE ARCHITECTURAL PLANS AND BUILDING PERMIT DESIGN. PARKING LIGHTING LOCATIONS AS SHOWN ON THE SITE PLAN.
4. TRASH RECYCLING AREA LOCATION, DIMENSION, ACCESS, AND DETAILS TO BE IN ACCORDANCE WITH SANITARY SEWER CO. (SSC) REQUIREMENTS.
5. MAILBOX AND POSTAL SERVICE LOCATION SHALL BE APPROVED BY THE FERNDALE POST OFFICE.
6. THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR, SEE GENERAL NOTES, THIS PLAN SET.
7. SITE PLAN INCLUDING PARKING LAYOUT, ACCESS LANES, AND TRUCK ACCESS TO BE VERIFIED AND APPROVED BY OWNER AND FABER BROTHERS CONSTRUCTION PRIOR TO CONSTRUCTION. SEE PROJECT ARCHITECTURAL PLANS FOR PARKING LAYOUT, LANDSCAPING REQUIREMENTS, LIGHTING, TRASH ENCLOSURE AND FENCING INCLUDING GATE DETAILS, ADA ACCESSIBILITY REQUIREMENTS, AND SIGNAGE.
8. FIRE HYDRANT LOCATIONS AND EMERGENCY ACCESS AND SAFETY PROVISIONS PENDING WHATCOM COUNTY FIRE DISTRICT #7 REVIEW. FIRE DISTRICT APPROVAL IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
9. ALL PARKING DIMENSIONS IN ACCORDANCE WITH CITY OF FERNDALE ZONING AND DEVELOPMENT STANDARDS, AND REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
10. EXISTING SITE CONDITIONS, TOPOGRAPHY, EXISTING AND PROPOSED LOT LINE, EXISTING UTILITIES AND FEATURES SHOWN PER SURVEY PROVIDED BY POWERTEK SURVEYING.
BASIS OF BEARINGS: CITY OF FERNDALE (83/91) BEARING N43°14'31"E BETWEEN FERN12 (C.O.F.) AND FERN 360
VERTICAL DATUM: CITY OF FERNDALE (NGVD29)
FERN 12 - SURFACE MONUMENT IN THE NW CORNER OF THE INTERSECTION OF SMITH & LABOUNTY ELEVATION = 341.27
POWERTEK #10 (NAIL/SHINER) ELEVATION = 34.82
11. IT IS THE APPLICANT'S SOLE RESPONSIBILITY TO COMPLY WITH ALL APPLICABLE FEDERAL AND STATE REGULATIONS, AND TO OBTAIN ANY NECESSARY PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

LOT 1 TOTAL AREA: 38,543 SF
IMPERVIOUS AREA: ±31,446 SF

NOTE:
PRIVATE ACCESS ROAD (PACIFIC FERN LANE), OFF-SITE FRONTAGE IMPROVEMENTS, AND STORMWATER POND FACILITY PROVIDING WATER QUALITY TREATMENT AND FLOW CONTROL MITIGATION FOR THE PROPOSED DEVELOPMENT HAVE BEEN SEPARATELY APPROVED BY THE CITY OF FERNDALE FOR CONSTRUCTION. ALL IMPROVEMENTS REQUIRED TO SERVE LOT 1 MUST BE COMPLETED TO COMPLY WITH APPLICABLE STATE AND LOCAL DEVELOPMENT STANDARDS TO THE SATISFACTION OF THE FERNDALE DEPARTMENT OF PUBLIC WORKS PRIOR ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR ANY BUILDING ON THE SITE.



MAP NOTES	
BASIS OF ELEVATION/ PROJECT BENCHMARK:	CITY OF FERNDALE (83/91) BEARING N43°14'31"E BETWEEN FERN 12 (C.O.F.) AND FERN 11
VERTICAL DATUM:	CITY OF FERNDALE (NGVD 29) FERN12 - SURFACE MONUMENT ELEV: 31.27
SOURCE OF BOUNDARY:	PACIFIC FERN BUSINESS PARK GENERAL AND SPECIFIC BINDING SITE PLAN BY POWERTEK DATED 1/18/2019
SOURCE OF CONTOURS:	TOPOGRAPHIC SURVEY FROM POWERTEK SURVEYING
CONTOUR INTERVAL:	1' CONTOURS CONTOURS ACCURATE TO ONE HALF THE CONTOUR INTERVAL UNLESS OTHERWISE NOTED.
SOURCE AND ACCURACY OF UTILITY INFORMATION:	EXISTING UTILITIES ARE SHOWN BASED ON UTILITY COMPANY PAINTED LOCATION MARKS AND CITY RECORD DRAWINGS, AND MAY NOT REPRESENT ALL UNDERGROUND OR ABOVE-GROUND UTILITIES OR SITE FEATURES. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE; THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
SCOPE OF WORK:	THE SCOPE OF WORK FOR PREPARATION OF THIS MAP AND ALL EXISTING AND PROPOSED FEATURES IS LIMITED IN THE EXTENT OF FIELD INVESTIGATIONS OF ABOVE AND BELOW GROUND FEATURES AND/OR UTILITIES, AND RELIES ON THE WORK OF OTHERS, INCLUDING SURVEYS, MAPS, RECORD DRAWINGS, AND OTHER INFORMATION SOURCES AS NOTED HEREON.

LEGEND

	EXISTING	PROPOSED
LOT LINE	---	---
STREET CENTERLINE	---	---
RIGHT-OF-WAY LINE	---	---
UNDERGROUND POWER	---	---
UNDERGROUND TV	---	---
FIBER OPTICS	---	---
UNDERGROUND TELEPHONE	---	---
OVERHEAD POWER	---	---
OVERHEAD TELEPHONE	---	---
GAS MAIN	---	---
WATER MAIN	---	---
SANITARY SEWER MAIN	---	---
STORM DRAIN	---	---
DITCH/FLOW LINE	---	---
EDGE OF PAVEMENT	---	---
CURB AND GUTTER	---	---
BUILDING WALL	---	---
FENCE	---	---
ROCKERY WALL	---	---
ELEV. CONTOUR	---	---
TREES/VEGETATION	---	---
STORM DRAIN CATCH BASIN	---	---
UTILITY POLE	---	---
STREET/TRAFFIC SIGN	---	---
SAN. SEWER MANHOLE	---	---
SAN. SEWER CLEAN-OUT	---	---
WATER SERVICE METER	---	---
FIRE HYDRANT	---	---

APPROVED

NOV 10 2020
PUBLIC WORKS DEPARTMENT

AS-BUILT - RECORD DRAWINGS
NOVEMBER 2020

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1401 ASTOR STREET, BELLINGHAM, WA 98225
PHONE (360) 671-1148 FAX (360) 671-1189

CLIENT: 15-107C	DESIGNED: NRP	PROJECT: PACIFIC FERN - LOT 1	SHEET TITLE: SITE PLAN
DRAWN: NRP	CHECKED: NRP	SHEET: 2	OF: 5

Nov 04, 2020 - 4:22pm
15-107C Lot 1 - Record Drawing.dwg
SHEET 003 OF 003 / REVISED SHEET 003 OF 003

CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

Element #1 - Mark Clearing Limits

To protect adjacent properties and to reduce the area of soil exposed to construction, the limits of construction will be clearly marked before land-disturbing activities begin. All WORK shall be staked for line and grade in accordance with City of Ferndale Development Standards. In general, natural vegetation and native topsoil adjacent to work areas shall not be disturbed.

Element #2 - Establish Construction Access

Construction access or activities occurring on unpaved areas shall be minimized, yet where necessary, access points shall be stabilized to minimize the tracking of sediment onto public roads, and wheel washing, street sweeping, and street cleaning shall be employed when needed to prevent sediment from entering state waters.

Element #3 - Control Flow Rates

This project is not anticipated to impact downstream flow rates either during or after construction. However, the Contractor shall be responsible for minimizing the tracking of sediment runoff in and around the work area during construction, and taking measures as needed to prevent accumulation of runoff as a result of the work that could cause on-site erosion or impact surrounding or downstream properties and drainage conveyances.

Element #4 - Install Sediment Controls

All stormwater runoff from disturbed areas shall pass through an appropriate sediment removal BMP before leaving the construction site or entering a storm drainage conveyance. All existing drainage inlets that could accept runoff from the work area shall be protected with Storm Drain Inlet Protection (BMP C220). Where needed or as directed by the Engineer, Silt Fence (BMP C233) and/or Straw Wattles (BMP C235) may be implemented along the work area.

Sediment will be removed from paved areas in and adjacent to construction work areas manually or using mechanical sweepers, as needed, to minimize tracking of sediments on vehicle tires away from the site and to minimize washoff of sediments from adjacent streets in runoff.

Element #5 - Stabilize Soils

Exposed and unworked soils shall be stabilized with the application of effective BMPs to prevent erosion throughout the life of the project. In general, any slopes will be stabilized as soon as possible and soil stockpiles will be temporarily provided with Plastic Covering (BMP C123). All stockpiled soils shall be stabilized from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.

All disturbed areas along the sanitary sewer route shall be stabilized with Temporary and Permanent Seeding (BMP C120) or Mulching (BMP C121).

Element #6 - Protect Slopes

No cut and fill slopes are anticipated as part of this project.

Element #7 - Protect Drain Inlets

All storm drain inlets and culverts made operable during construction shall be protected to prevent unfiltered or untreated water from entering the drainage conveyance system. However, the first priority is to keep all access roads clean of sediment and keep street wash water separate from entering storm drains until treatment can be provided. Storm Drain Inlet Protection (BMP C220) will be implemented for all drainage inlets and culverts that could potentially be impacted by sediment-laden runoff on and near the project site.

Element #8 - Stabilize Channels and Outlets

Where site runoff is to be conveyed in channels, or discharged to a stream or some other natural drainage point, efforts will be taken to prevent downstream erosion. Where silt-laden runoff is conveyed from the work area in an open conveyance channel or ditch, the Contractor shall install Check Dams (BMP C207) as directed by the Engineer, at a typical spacing of 50-feet O.C.

Element #9 - Control Pollutants

All pollutants, including waste materials and demolition debris, that occur onsite shall be handled and disposed of in a manner that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well organized, and free of debris. If required, BMPs to be implemented to control specific sources of pollutants are discussed below.

- All vehicles, equipment, and petroleum product storage/dispensing areas will be inspected regularly to detect any leaks or spills, and to identify maintenance needs to prevent leaks or spills.
- On-site fueling tanks and petroleum product storage containers shall include secondary containment.
- Spill prevention measures, such as drip pans, will be used when conducting maintenance and repair of vehicles or equipment.
- In order to perform emergency repairs on site, temporary plastic will be placed beneath and, if raining, over the vehicle.
- Contaminated surfaces shall be cleaned immediately following any discharge or spill incident.
- Any chemicals stored in the construction areas will conform to the appropriate source control BMPs listed in Volume IV of the Ecology stormwater manual. In Western WA, all chemicals shall have cover, containment, and protection provided on site, per BMP C153 for Material Delivery, Storage and Containment.
- Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations for application procedures and rates shall be followed.
- Dust released from demolished sidewalks, buildings, or structures will be controlled using Dust Control measures (BMP C140).
- Storm drain inlets vulnerable to stormwater discharge carrying dust, soil, or debris will be protected using Storm Drain Inlet Protection (BMP C220 as described above for Element 7).
- Process water and slurry resulting from sawcutting and surfacing operations will be prevented from entering the waters of the State by implementing Sawcutting and Surfacing Pollution Prevention measures (BMP C152).
- Process water and slurry resulting from concrete work will be prevented from entering the waters of the State by implementing Concrete Handling measures (BMP C151).

Element #10 - Control Dewatering

All dewatering water from open cut excavation, tunneling, foundation work, trench, or underground vaults shall be discharged into a controlled conveyance system prior to discharge to a sediment trap or sediment pond. Channels will be stabilized, per Element #8. Clean, non-turbid dewatering water will not be routed through stormwater sediment ponds, and will be discharged to systems tributary to the receiving waters of the State in a manner that does not cause erosion, flooding, or a violation of State water quality standards in the receiving water. Highly turbid dewatering water from soils known or suspected to be contaminated, or from use of construction equipment, will require additional monitoring and treatment as required for the specific pollutants based on the receiving waters into which the discharge is occurring. Such monitoring is the responsibility of the contractor.

However, the dewatering of soils known to be free of contamination will trigger BMPs to trap sediment and reduce turbidity. At a minimum, geotextile fabric socks/bags/cells will be used to filter this material. Other BMPs to be used for sediment trapping and turbidity reduction include the following:

- Concrete Handling (BMP C151)
- Use of a sedimentation bag, with outfall to a ditch or swale for small volumes of localized dewatering.

Element #11 - Maintain BMPs

All temporary and permanent erosion and sediment control BMPs shall be maintained and repaired as needed to assure continued performance of their intended function. Maintenance and repair shall be conducted in accordance with each particular BMP's specifications. Visual monitoring of the BMPs will be conducted at least once every calendar week and within 24 hours of any rainfall event that causes a discharge from the site. If the site becomes inactive, and is temporarily stabilized, the inspection frequency will be reduced to once every month.

All temporary erosion and sediment control BMPs shall be removed within 30 days after the final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment shall be removed or stabilized on site. Disturbed soil resulting from removal of BMPs or vegetation shall be permanently stabilized.

Element #12 - Manage the Project

Project management by the Contractor shall incorporate the key components listed below:

Phasing of Construction

The construction work shall be phased to the extent practicable to limit the length of open trenches and disturbed areas at one time, in order to prevent soil erosion, and, to the maximum extent possible, the transport of sediment from the site during construction.

Revegetation of disturbed areas and maintenance of that vegetation shall be an integral part of the work during each stage of construction, per the Scheduling BMP (C 162).

Inspection and Monitoring

All BMPs shall be inspected, maintained, and repaired as needed to assure continued performance of their intended function. A Certified Erosion and Sediment Control Lead shall be on-site or on-call at all times. Whenever inspection and/or monitoring reveals that the BMPs identified in this SWPPP are inadequate, due to the actual or potential discharge of a significant amount of any pollutant, appropriate BMPs or design changes shall be implemented as soon as possible.

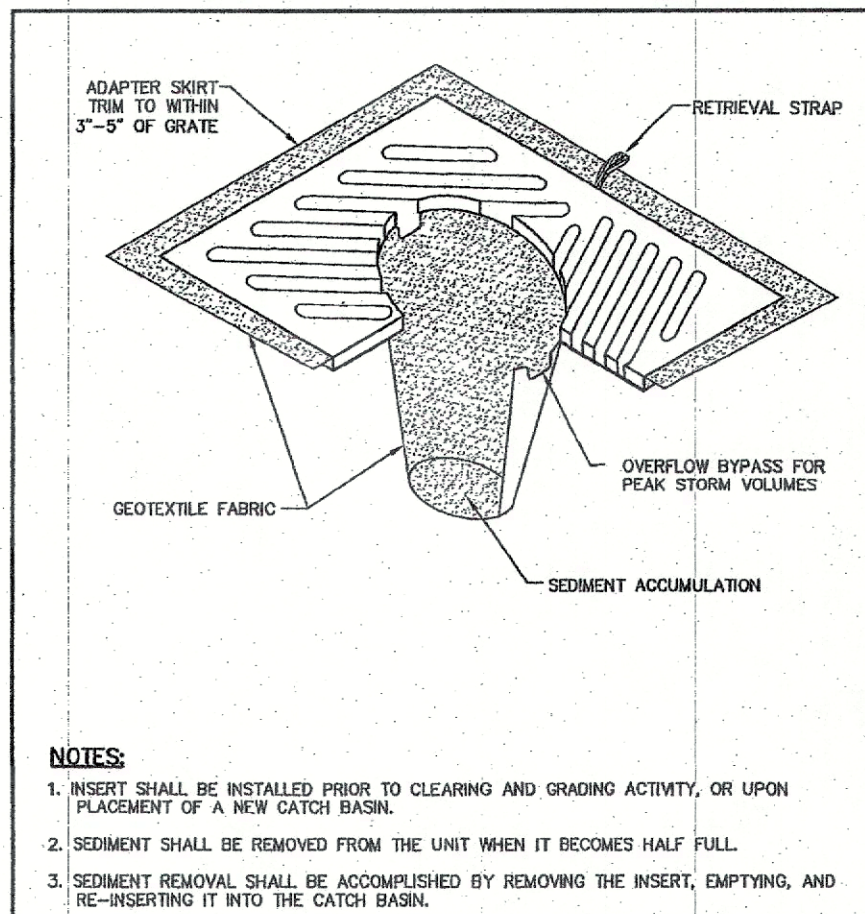
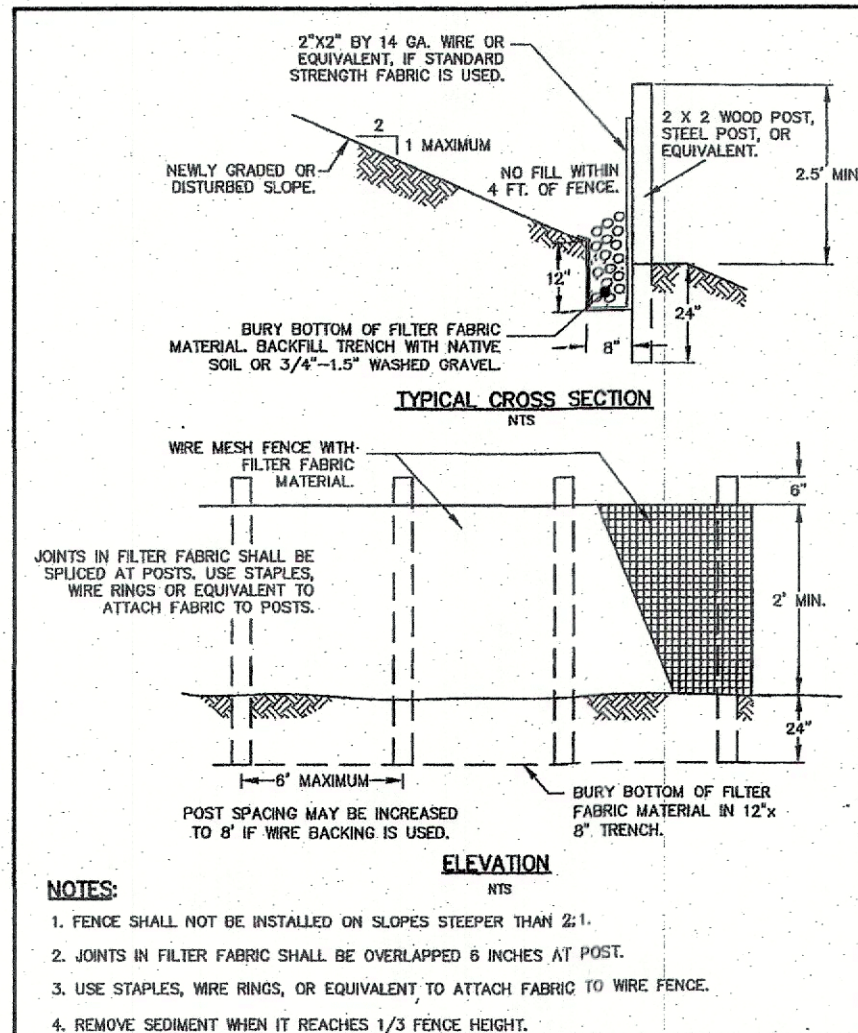
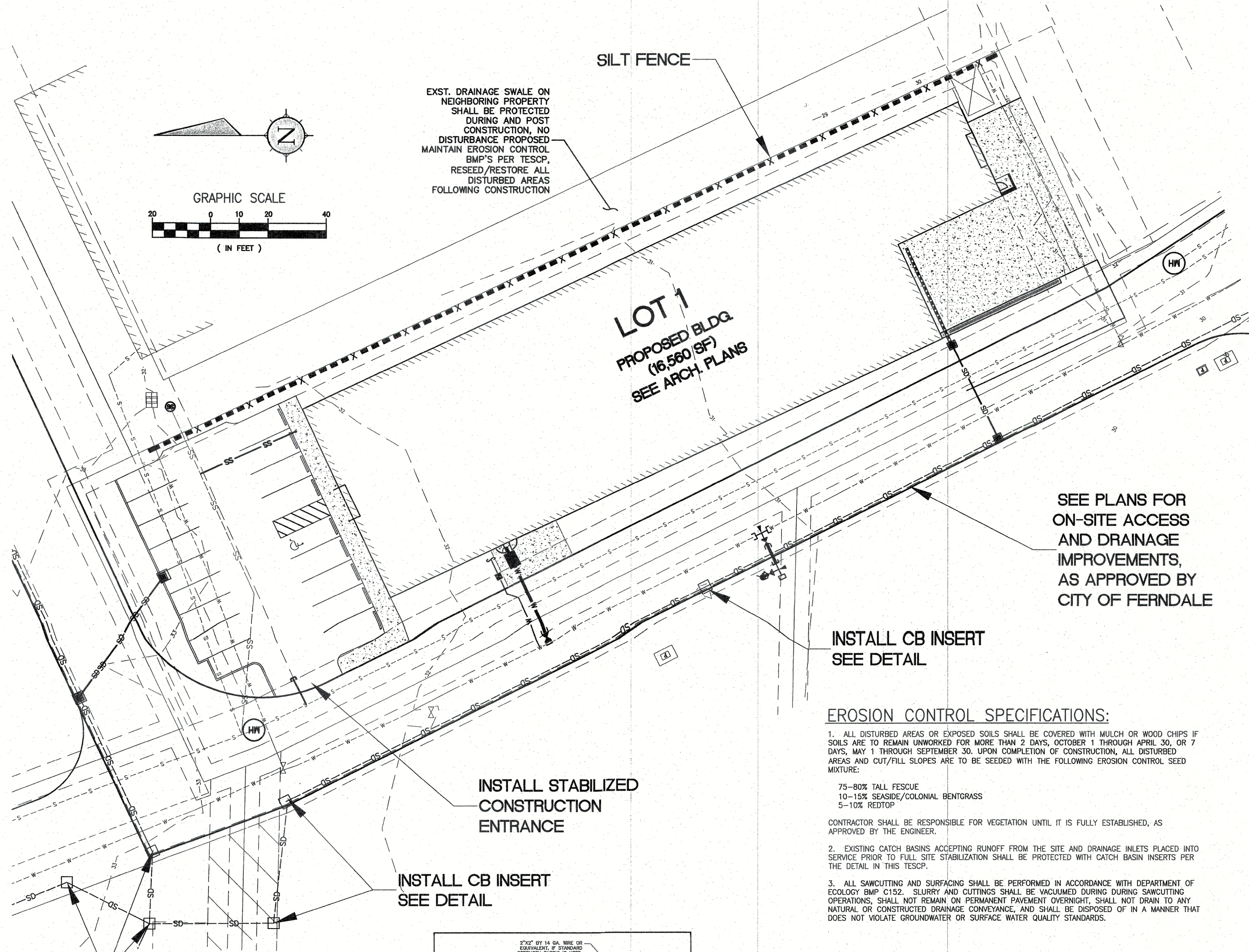
Maintaining an Updated Construction SWPPP

This SWPPP shall be retained on-site or within reasonable access to the site.

The SWPPP shall be modified whenever there is a change in the design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the state.

Element #13 - Protect L.I.D. Features

Stormwater runoff for this site is managed in the Pacific Fern Business Park GBSP stormwater pond facility. No L.I.D. facilities are included in this site improvement.



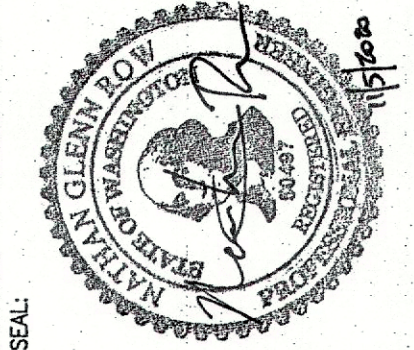
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CONSTRUCTION ENTRANCE
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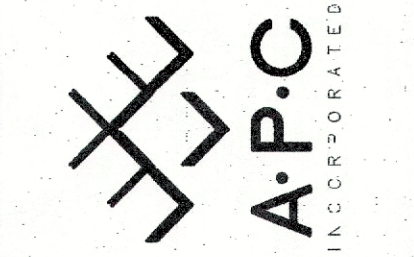
SILT FENCE
NOT TO SCALE

CATCH BASIN INSERT
NOT TO SCALE

EROSION CONTROL NOT AS-BUILT



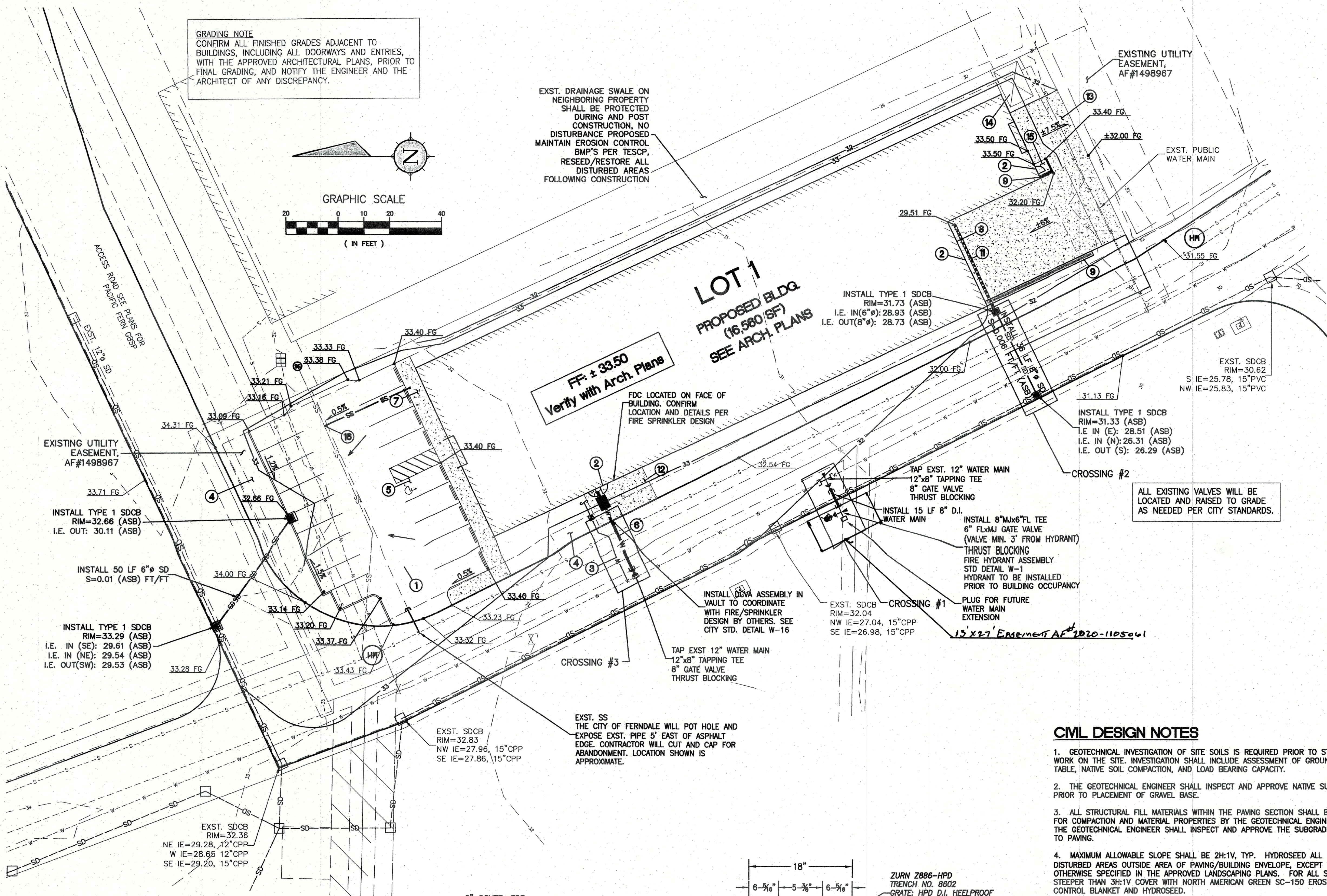
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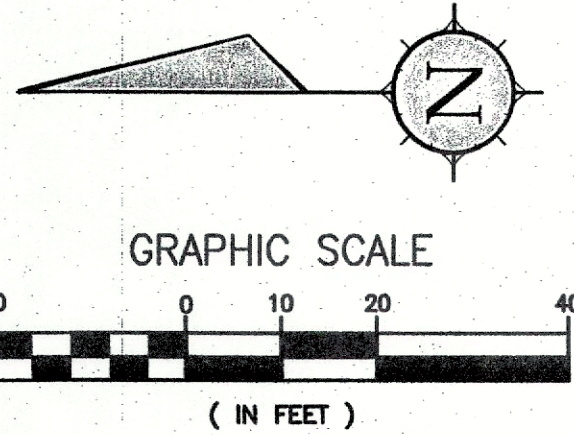
NO.	DATE	REVISIONS	
		DESCRIPTION	BY

CLIENT:	FABER CONSTRUCTION	
	PACIFIC FERN - LOT 1	
JOB NO. 15-107C	DESIGNED: NFR	PROJECT:
		SHEET: 3
DRAWN:	SHEET: 3	SHEET TITLE:
		OF: 5

Nov 05, 2020 - 9:08am 15-107C Lot 1 - Record Drawing.dwg 15-107C Lot 1 - Record Drawing.dwg



GRADING NOTE
CONFIRM ALL FINISHED GRADES ADJACENT TO BUILDINGS, INCLUDING ALL DOORWAYS AND ENTRIES, WITH THE APPROVED ARCHITECTURAL PLANS, PRIOR TO FINAL GRADING, AND NOTIFY THE ENGINEER AND THE ARCHITECT OF ANY DISCREPANCY.



EXST. DRAINAGE SWALE ON NEIGHBORING PROPERTY SHALL BE PROTECTED DURING AND POST CONSTRUCTION, NO DISTURBANCE PROPOSED MAINTAIN EROSION CONTROL BMP'S PER TESCOP, RESEED/RESTORE ALL DISTURBED AREAS FOLLOWING CONSTRUCTION

LOT 1
PROPOSED BLDG.
(16,560 SF)
SEE ARCH. PLANS

FF: ± 33.50
Verify with Arch. Plans

EXISTING UTILITY
EASEMENT,
AF#1498967

EXIST. PUBLIC
WATER MAIN

EXISTING UTILITY
EASEMENT,
AF#1498967

INSTALL TYPE 1 SDCB
RIM=32.66 (ASB)
I.E. OUT: 30.11 (ASB)

INSTALL 50 LF 8" SD
S=0.01 (ASB) FT/FT

INSTALL TYPE 1 SDCB
RIM=33.29 (ASB)
I.E. IN (SE): 29.61 (ASB)
I.E. IN (NE): 29.54 (ASB)
I.E. OUT(SW): 29.53 (ASB)

EXST. SDCB
RIM=32.36
NE IE=29.28, 12"CPP
W IE=28.65 12"CPP
SE IE=29.20, 15"CPP

INSTALL TYPE 1 SDCB
RIM=31.73 (ASB)
I.E. IN(6"Ø): 28.93 (ASB)
I.E. OUT(8"Ø): 28.73 (ASB)

INSTALL TYPE 1 SDCB
RIM=31.33 (ASB)
I.E. IN (E): 28.51 (ASB)
I.E. IN (N): 26.31 (ASB)
I.E. OUT (S): 26.29 (ASB)

ALL EXISTING VALVES WILL BE
LOCATED AND RAISED TO GRADE
AS NEEDED PER CITY STANDARDS.

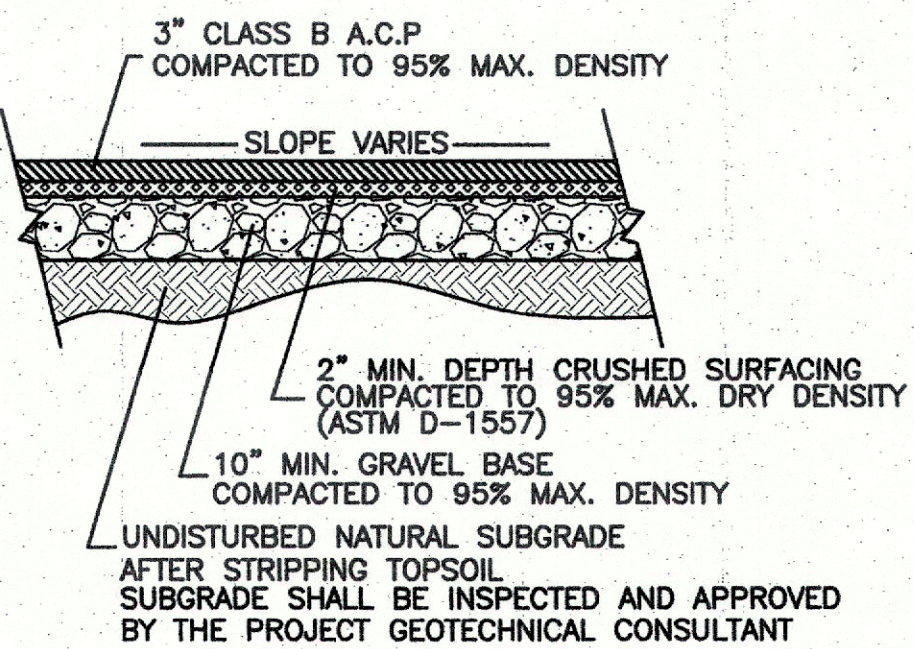
TAP EXST. 12" WATER MAIN
12"x8" TAPPING TEE
8" GATE VALVE
THRUST BLOCKING
INSTALL 15 LF 8" D.I.
WATER MAIN
INSTALL 8" M&B FL TEE
6" FL&M GATE VALVE
(VALVE MIN. 3' FROM HYDRANT)
THRUST BLOCKING
FIRE HYDRANT ASSEMBLY
STD DETAIL W-1
HYDRANT TO BE INSTALLED
PRIOR TO BUILDING OCCUPANCY

INSTALL DCVA ASSEMBLY IN
VAULT TO COORDINATE
WITH FIRE/SPRINKLER
DESIGN BY OTHERS. SEE
CITY STD. DETAIL W-16

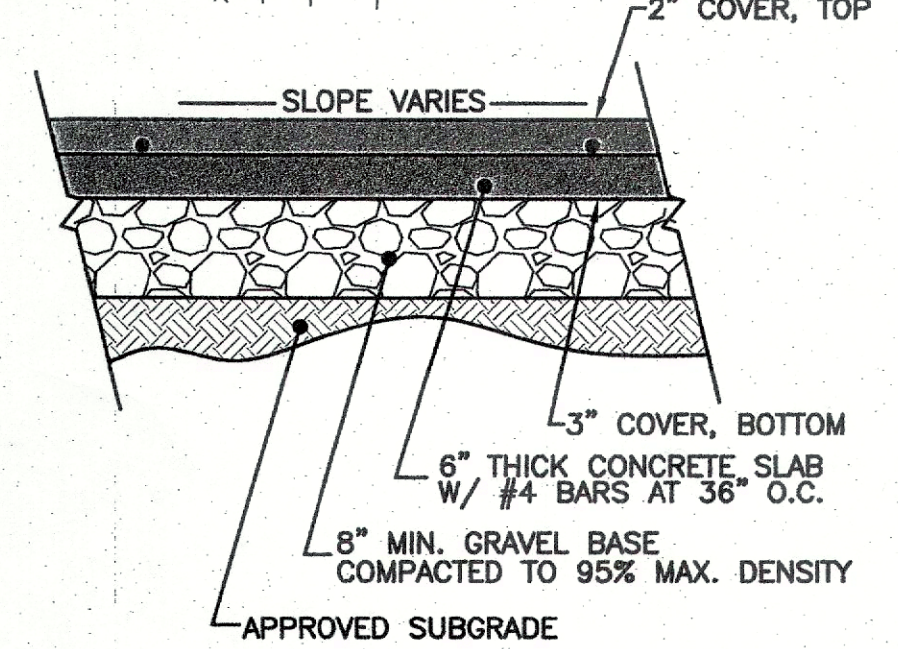
TAP EXST. 12" WATER MAIN
12"x8" TAPPING TEE
8" GATE VALVE
THRUST BLOCKING

EXST. SDCB
RIM=32.83
NW IE=27.96, 15"CPP
SE IE=27.86, 15"CPP

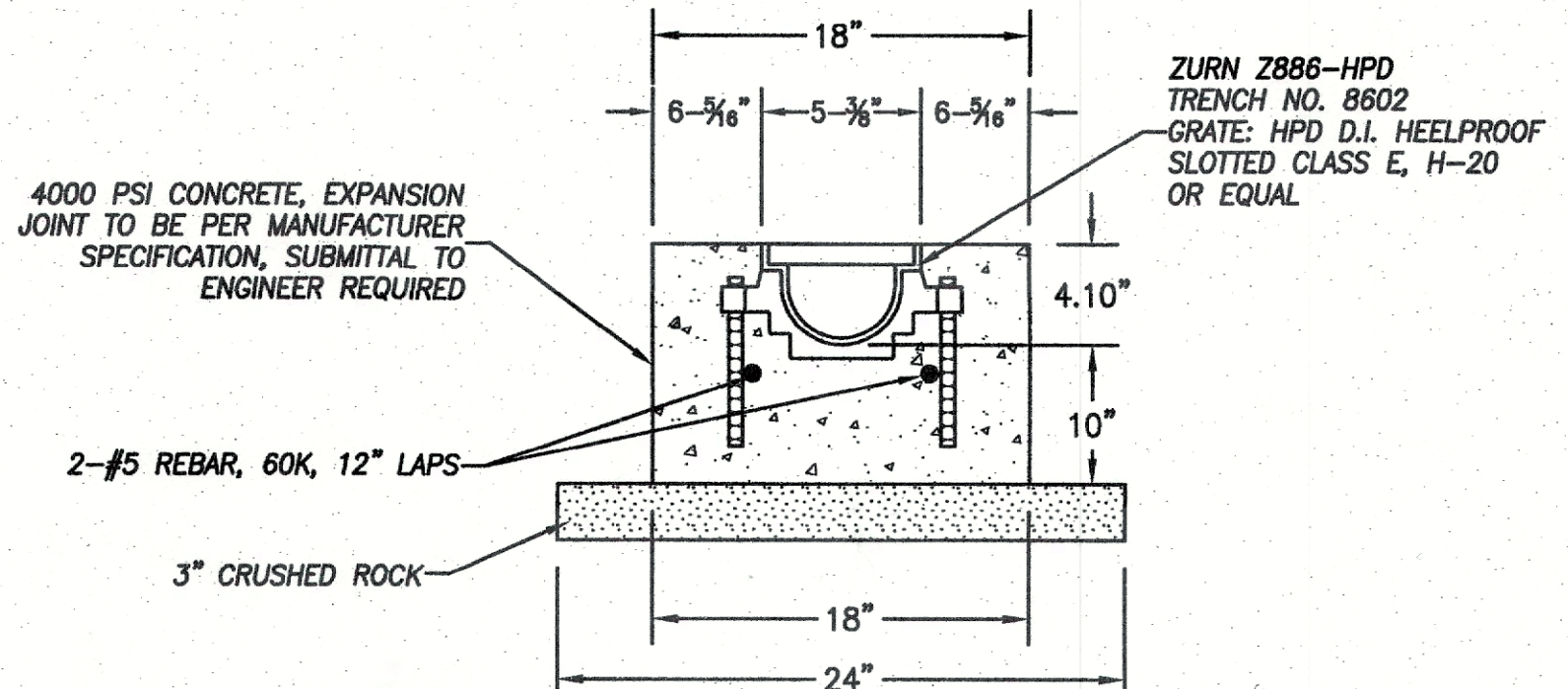
EXST. SS
THE CITY OF FERNDALE WILL POT HOLE AND
EXPOSE EXST. PIPE 5' EAST OF ASPHALT
EDGE. CONTRACTOR WILL CUT AND CAP FOR
ABANDONMENT. LOCATION SHOWN IS
APPROXIMATE.



TYPICAL PAVING SECTION
N.T.S.



TYPICAL CONCRETE ACCESS SECTION
N.T.S.



TRENCH DRAIN DETAIL
N.T.S.

CONSTRUCTION NOTES

- INSTALL 6" SANITARY SEWER SERVICE LATERAL WITH CLEAN-OUTS PER CITY OF FERNDALE STANDARDS. SEE DETAIL SS-14 FOR CONNECTION DETAIL. FIELD VERIFY LOCATION, DEPTH, AND SIZE OF EXST. SEWER. SEE ARCHITECTURAL AND BUILDING MECHANICAL PLANS FOR SEWER/WASTE PIPE SIZES, LOCATIONS, AND CONNECTION TO BUILDING.
- ALL DOORWAY TRANSITIONS AND FLOOR ELEVATIONS SHALL BE PER ARCHITECTURAL DESIGN. CONTRACTOR SHALL VERIFY AND NOTIFY THE ENGINEER AND ARCHITECT OF ANY CONFLICTS.
- INSTALL POTABLE WATER SERVICE AND INSTALL POTABLE WATER SERVICE PIPING TO BUILDING. 1" DCVA REQUIRED ON DOMESTIC WATERLINE. SEE CITY STD. DETAIL W-18. SEE MECHANICAL PLANS FOR PIPE SIZE AND TYPE, LOCATION OF CONNECTION TO BUILDING, AND DETAILS.
- RESTORE WITH LAWN/LANDSCAPE PER ARCHITECTURAL SITE PLAN.
- ADA PARKING AND LOADING AREA
- INSTALL FIRELINE TO BUILDING SPRINKLER SYSTEM. PIV TO BE LOCATED ON FACE OF BUILDING PER SPRINKLER DESIGN. APPROVED BACKFLOW PREVENTION DEVICE REQUIRED. PER FIRE SUPPRESSION DESIGN AND CITY STANDARDS. ALL PIPE JOINTS SHALL HAVE LOCKING GASKETS, MEGA LUG MJ RESTRAINTS ON ALL FITTINGS. SEE FIRE SUPPRESSION SYSTEM DESIGN, BY OTHERS, FOR SIZING AND DETAILS.
- CITY INSPECTIONS ARE REQUIRED TO VERIFY INSTALLATION METHODS AND RECORDING THRUST BLOCKS PRIOR TO BACKFILL. PRESSURE AND BACTERIOLOGICAL TESTING REQUIRED PER CITY OF FERNDALE STANDARDS. SEPARATION IS REQUIRED BETWEEN THE PROPOSED FIRELINE AND CITY'S WATER MAIN UNTIL PRESSURE TEST AND BACTERIOLOGICAL ANALYSIS IS SATISFACTORY. CONTRACTOR SHALL MAKE FINAL CONNECTION WITH CITY INSPECTOR PRESENT. INSPECTIONS SHALL BE SCHEDULED 24-HOURS IN ADVANCE.
- FIRE HYDRANT AND FDC LOCATIONS AND ADEQUACY TO BE AS DETERMINED BY WHATCOM COUNTY FIRE DIST. #7 (WCDF #7) REVIEW.
- INSTALL STOVEPIPE AS NEEDED FOR 18" MIN. SEPARATION FROM EXST. SAN. SEWER FORCE MAIN REQUIRED PER CITY STANDARDS.
- INSTALL 6" CONCRETE SIDEWALK
- 48-INCH HEIGHT LOADING DOCK, SEE ARCHITECTURAL PLANS AND DETAILS FOR DESIGN.
- RETAINING WALL AT TRUCK RAMP. DESIGN BY OTHERS. SEE ARCHITECTURAL AND STRUCTURAL PLANS. PROVIDE HANDRAIL WHERE REQUIRED.
- INSTALL IRRIGATION SERVICE LINE, METER, AND DOUBLE CHECK VALVE ASSEMBLY (DCVA). SIZING OF PIPING AND DCVA PER APPROVED LANDSCAPE IRRIGATION DESIGN. AT A MINIMUM IN ACCORDANCE WITH CITY OF FERNDALE CROSS CONNECTION CONTROL ORDINANCE, AN APPROVED DOUBLE CHECK VALVE ASSEMBLY (DCVA) MUST BE INSTALLED WITHIN THREE FEET OF THE IRRIGATION METER ON THE OWNER'S SIDE OF THE METER.
- INSTALL TRENCH DRAIN PER MANUFACTURE RECOMMENDATIONS RATED FOR MIN. H-20 LOAD. SUBMITTAL TO ENGINEER REQUIRED. SEE DETAIL, THIS SHEET
- 6" CONCRETE DRIVE. SEE CONCRETE ACCESS SECTION.
- 6" CONCRETE RAMP. SEE CONCRETE ACCESS SECTION.
- LOCATION FOR POTENTIAL FUTURE GARBAGE ENCLOSURE.
- 5'x5' LANDING, 2% MAX SLOPE FROM DOORWAY.
- CONNECT TO EXST. CITY SEWER, CUT IN 8x6 TEE AND DOUBLE BELL COUPLER CONNECTION FOR SERVICE. COORDINATE ANY SERVICE DISRUPTIONS WITH CITY AND OTHER PROPERTY OWNERS. LOCATION OF EXST. SEWER TO BE FIELD VERIFIED DURING CONSTRUCTION, SHOWN AS APPROXIMATE.

CIVIL DESIGN NOTES

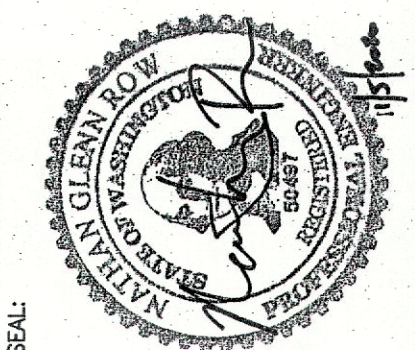
- GEOTECHNICAL INVESTIGATION OF SITE SOILS IS REQUIRED PRIOR TO STARTING WORK ON THE SITE. INVESTIGATION SHALL INCLUDE ASSESSMENT OF GROUND WATER TABLE, NATIVE SOIL COMPACTION, AND LOAD BEARING CAPACITY.
- THE GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE NATIVE SUBGRADE PRIOR TO PLACEMENT OF GRAVEL BASE.
- ALL STRUCTURAL FILL MATERIALS WITHIN THE PAVING SECTION SHALL BE TESTED FOR COMPACTION AND MATERIAL PROPERTIES BY THE GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE THE SUBGRADE PRIOR TO PAVING.
- MAXIMUM ALLOWABLE SLOPE SHALL BE 2H:1V, TYP. HYDROSEED ALL DISTURBED AREAS OUTSIDE AREA OF PAVING/BUILDING ENVELOPE, EXCEPT WHERE OTHERWISE SPECIFIED IN THE APPROVED LANDSCAPING PLANS. FOR ALL SLOPES STEEPER THAN 3H:1V COVER WITH NORTH AMERICAN GREEN SC-150 EROSION CONTROL BLANKET AND HYDROSEED.
- ALL EXISTING ON-SITE OVERHEAD AND UNDERGROUND UTILITIES, POLES, RISERS, AND OTHER EQUIPMENT WITHIN 5'-FEET OF THE BUILDING FOUNDATION SHALL BE RELOCATED OR REMOVED AND MATERIALS DISPOSED OF OFF-SITE, UNLESS OTHERWISE APPROVED BY THE ENGINEER IN ACCORDANCE WITH A PLAN OR RECOMMENDATION FROM THE UTILITY PURVEYOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE REMOVAL OR RELOCATION OF ALL EXISTING UTILITIES WITH THE UTILITY COMPANIES, AND COMPLYING WITH APPLICABLE REGULATIONS AND REQUIREMENTS. ALL EXISTING UNDERGROUND UTILITY LIDS SHALL BE ADJUSTED TO FINISHED GRADE AS NEEDED.
- THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR, SEE GENERAL NOTES, THIS PLAN SET.
- SITE PLAN INCLUDING PARKING LAYOUT, ACCESS LANES, AND TRUCK ACCESS TO BE VERIFIED AND APPROVED BY OWNER AND FABER BROTHERS CONSTRUCTION PRIOR TO CONSTRUCTION. SEE PROJECT ARCHITECTURAL PLANS FOR PARKING LAYOUT, LANDSCAPING REQUIREMENTS, LIGHTING, TRASH ENCLOSURE AND FENCING INCLUDING GATE DETAILS, ADA ACCESSIBILITY REQUIREMENTS, AND SIGNAGE.
- ALL REQUIRED CIVIL WORK ASSOCIATED WITH THIS PLAN SET MUST BE INSPECTED AND APPROVED BY PUBLIC WORKS PRIOR TO FINAL BUILDING OCCUPANCY.

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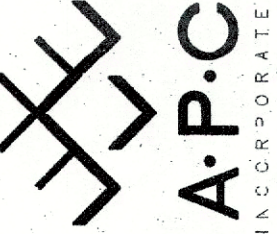
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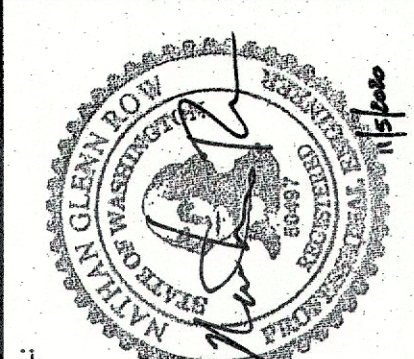
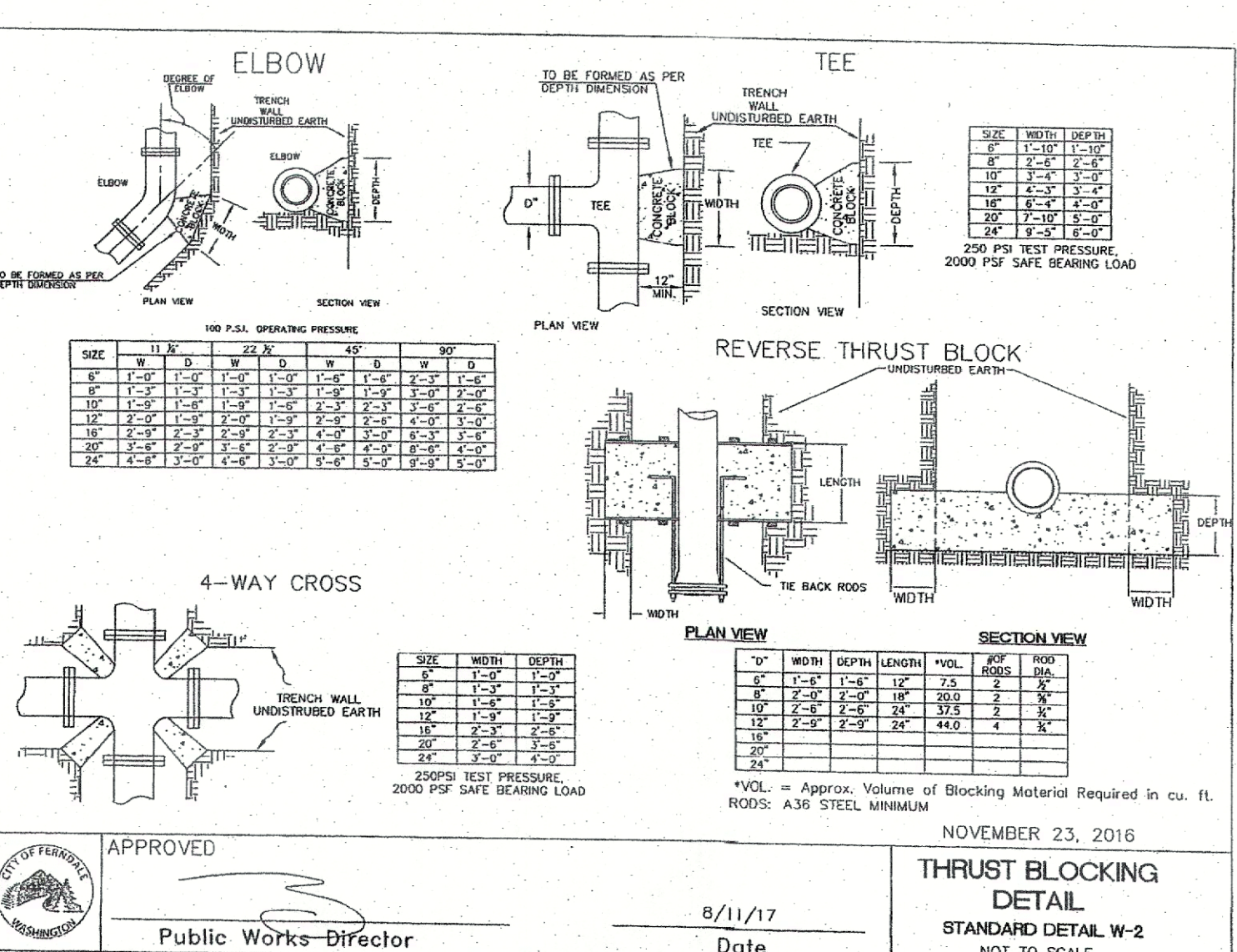
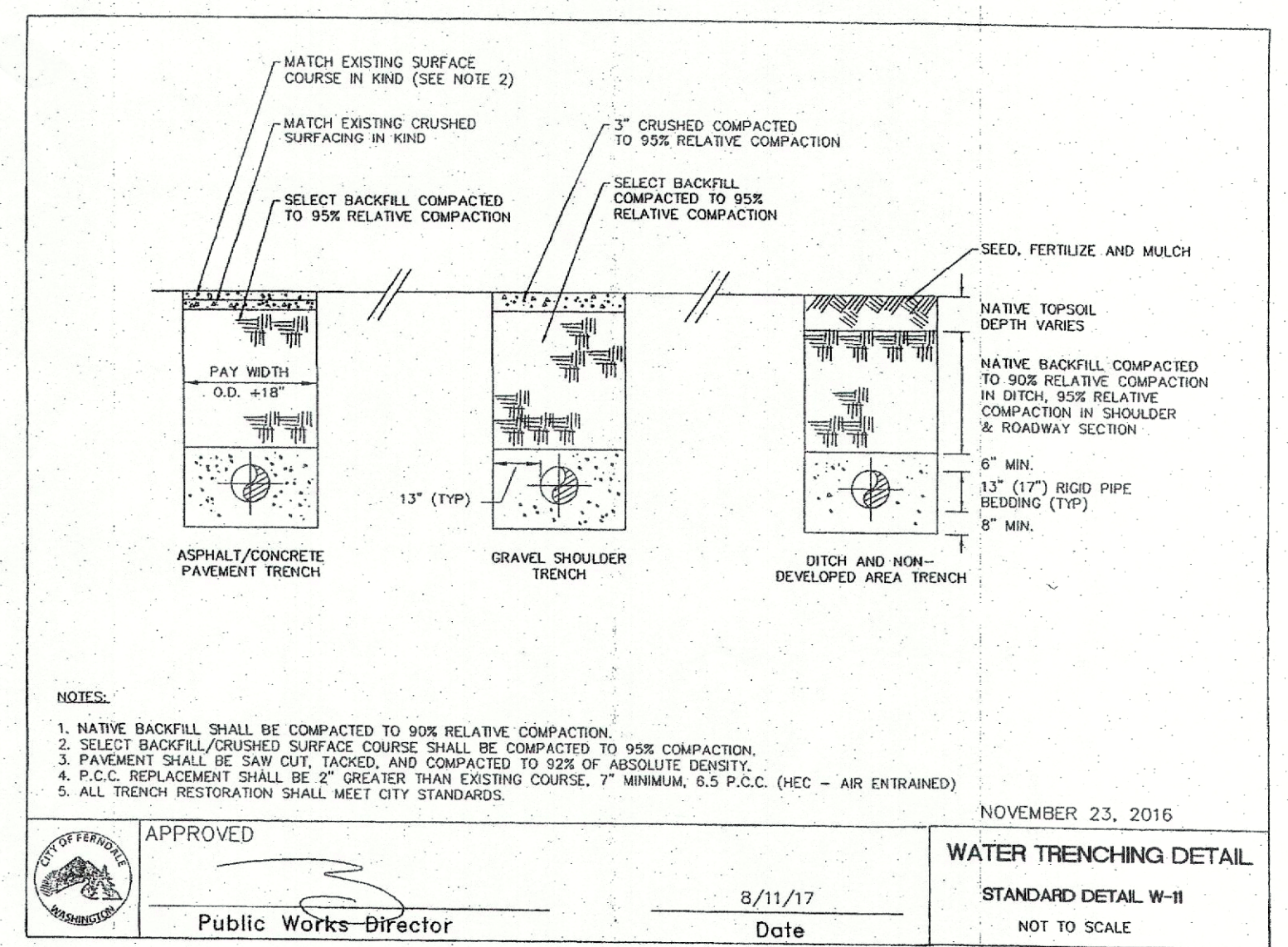
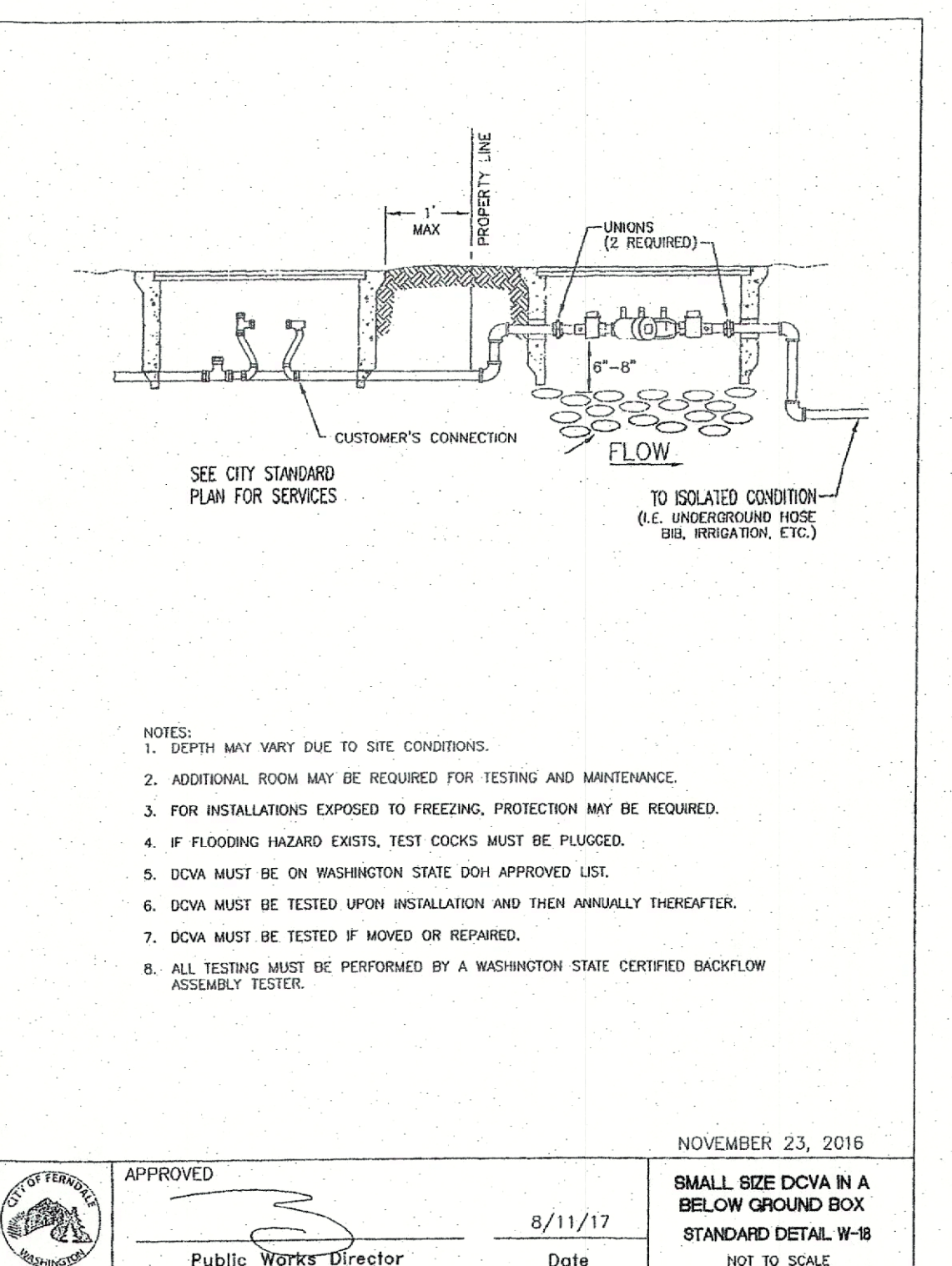
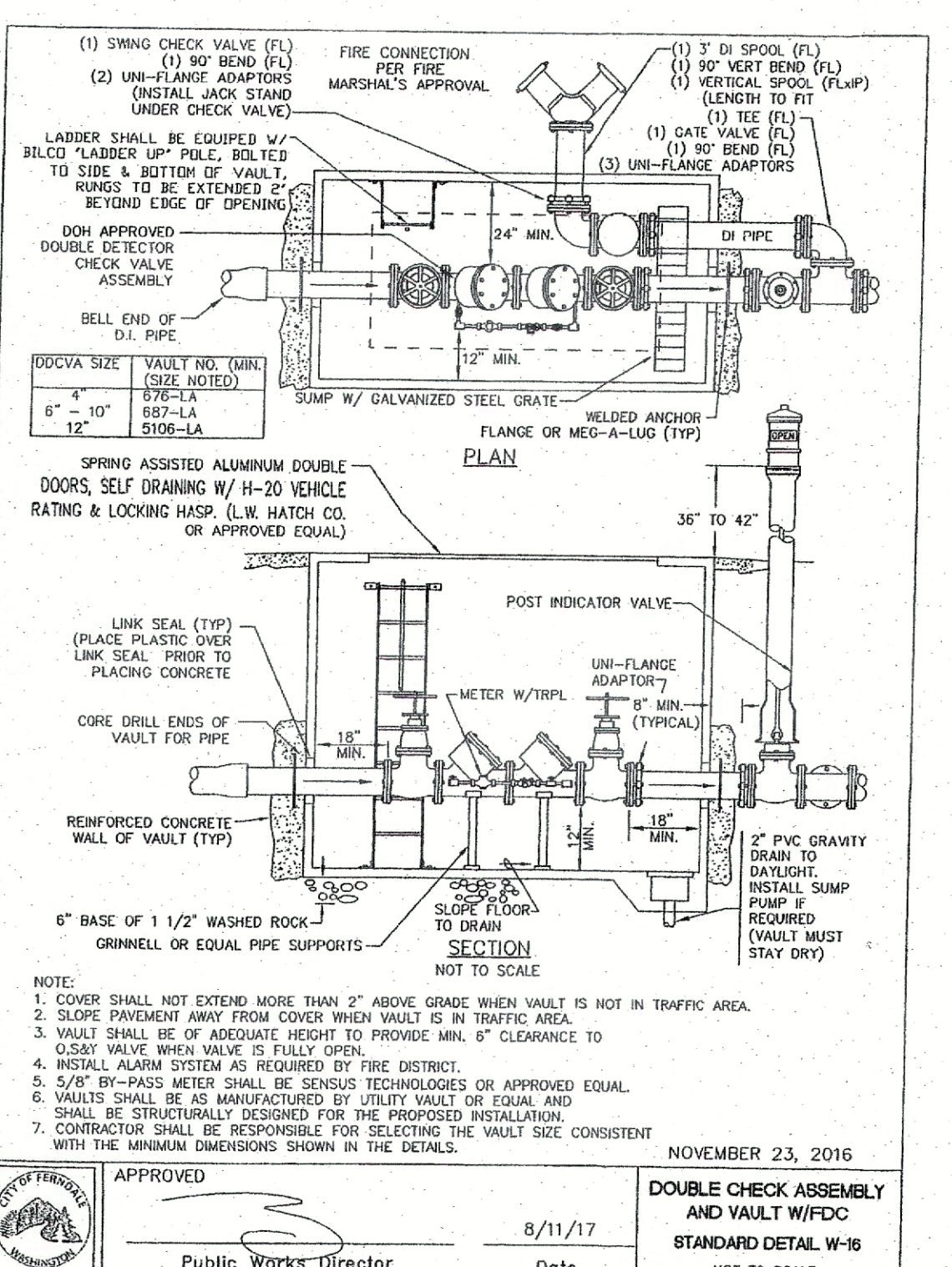
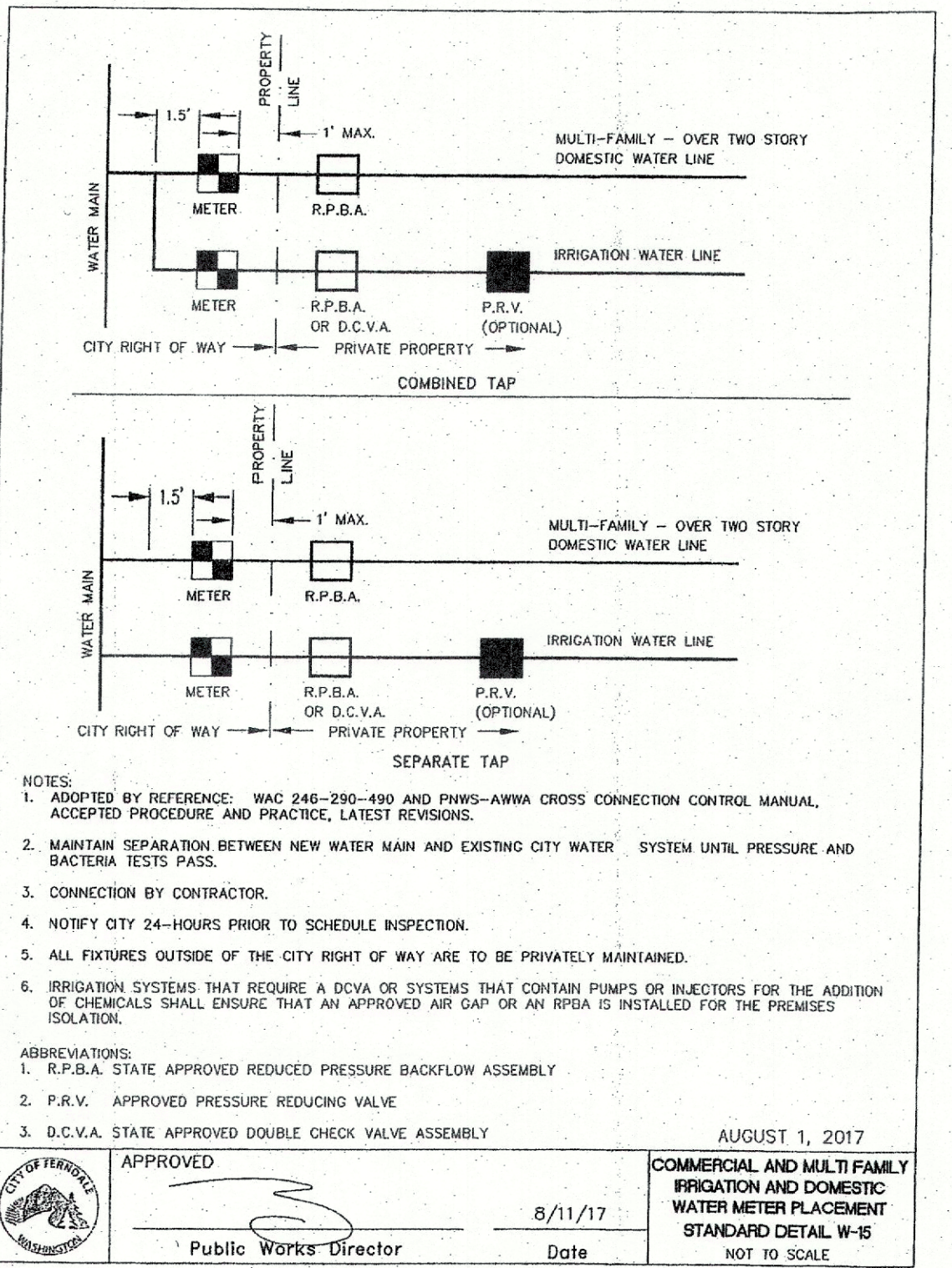
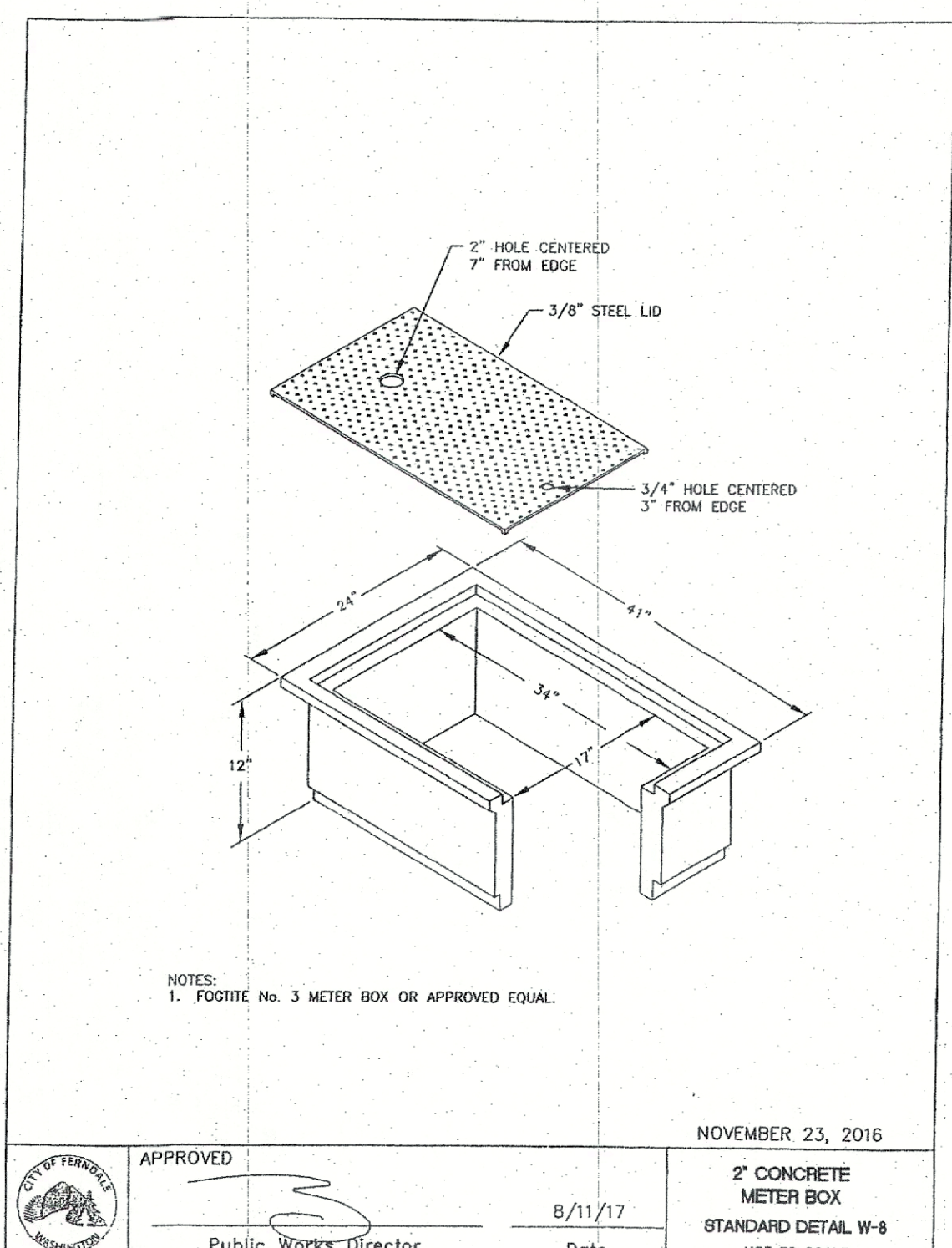
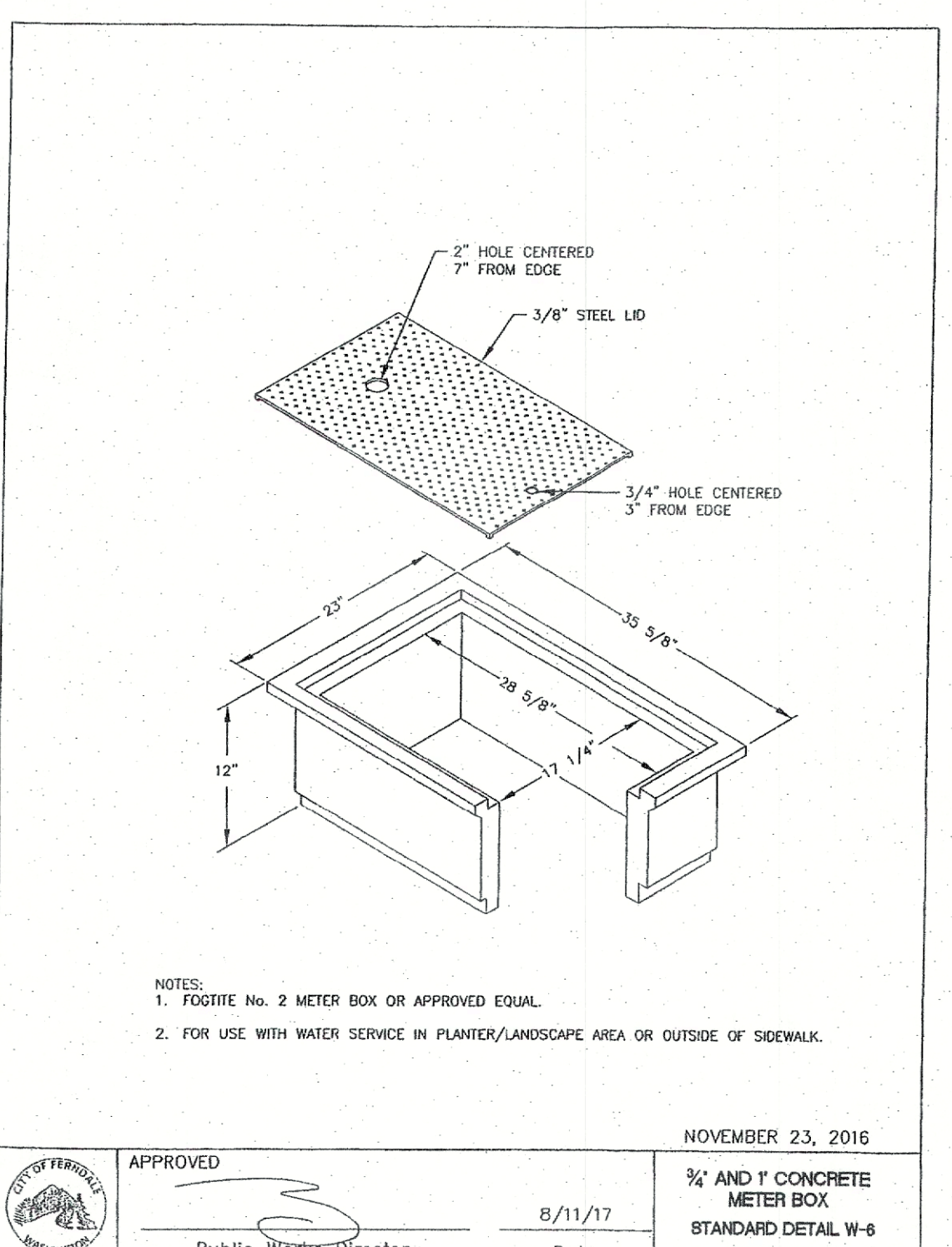
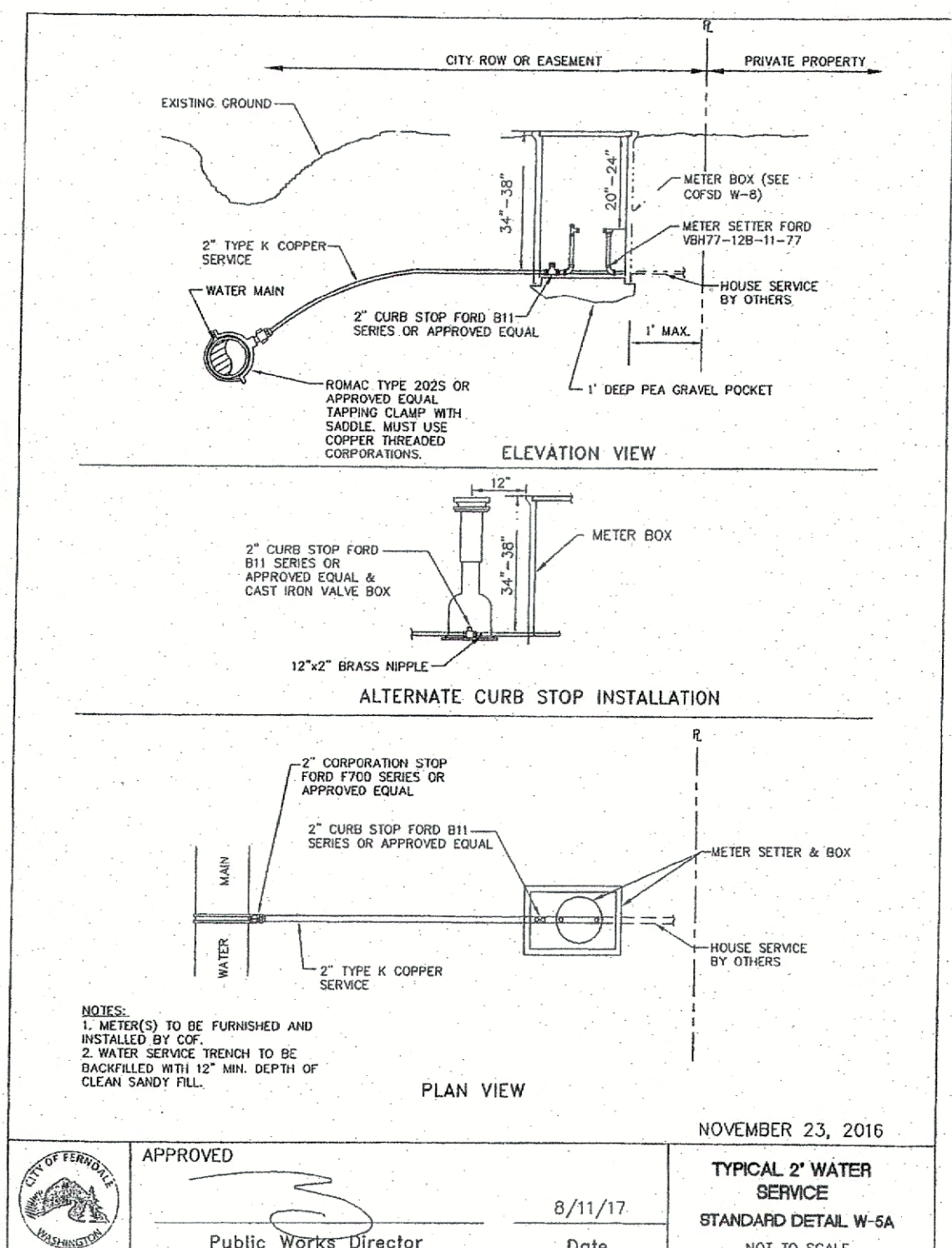
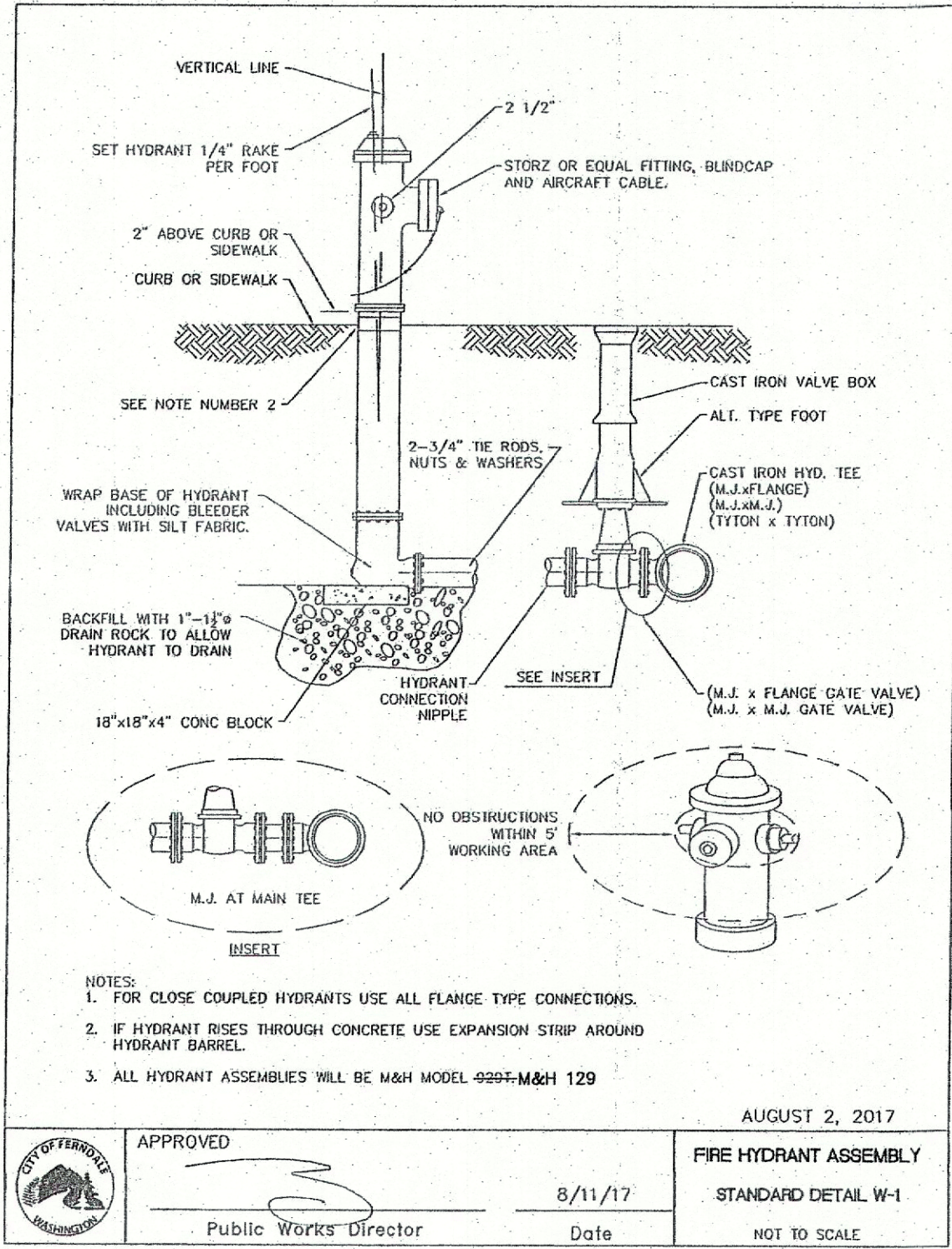
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		DESCRIPTION	BY

FABER CONSTRUCTION

PACIFIC FERN - LOT 1

GRADING AND UTILITIES

CLIENT:	DESIGNED: NWR	SHEET: 4	OF: 5
DRAWN:			



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NO.	DATE	REVISIONS	DESCRIPTION	BY

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