

No.	REVISIONS/ SUBMISSIONS	DATE
	REVISED PER CITY COMMENTS	17.11.06
	REVISED PER CITY COMMENTS	17.10.23
	REVIEWED : E/JW	DRAWN : KLS
	CAD FILE :	PROJECT NO. : 1702-01

PROJECT TITLE  
HEMPLER WASTE WATER TREATMENT PLANT

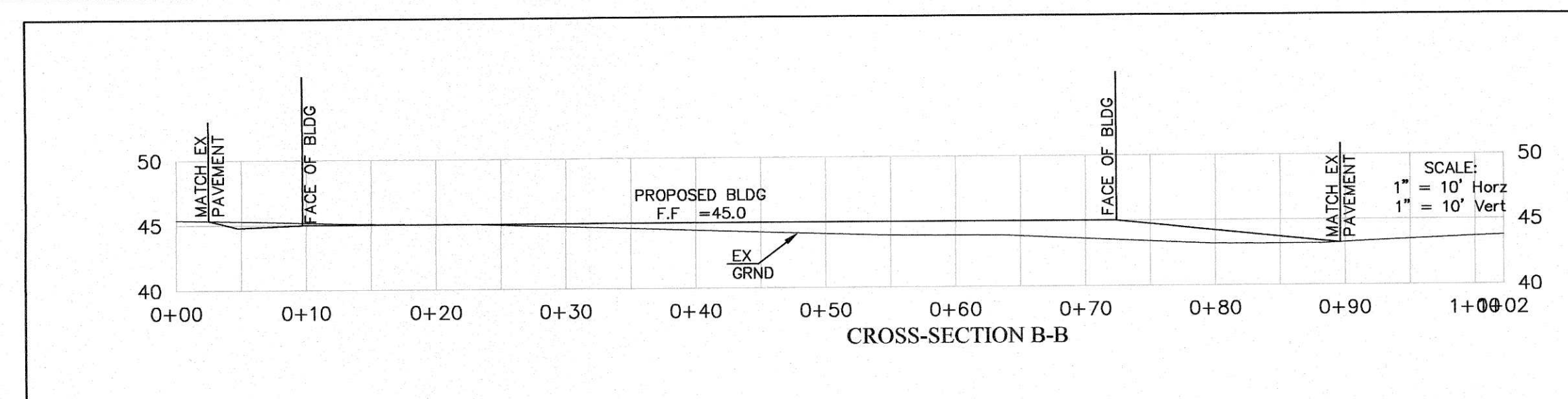
5470 NIESEN AVENUE  
FERNDALE, WA

DRAWING TITLE  
SITE & EROSION CONTROL PLAN

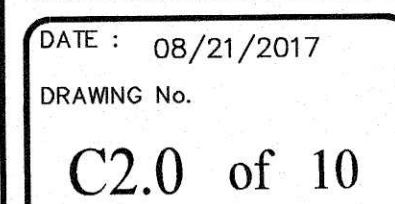
DATE : 08/21/2017  
DRAWING No.  
C1.0 of 10







POTHOLING REQUIRED TO FINAL DESIGN APPROVAL TO  
CONFIRM FEASIBILITY  
ENCHROCHMENT PERMIT SHALL BE REQUIRED TO POTHOLE  
CITY UTILITIES.





# UTILITY GENERAL NOTES:

- 1) NO FIELD SURVEY HAS BEEN PERFORMED FOR THIS PROJECT
- 2) CONTRACTOR HAS VERIFIED EXISTING INVERTS AND ELEVATIONS PRIOR TO UTILITY INSTALLATION. POTHOLE INFORMATION HAS BEEN PROVIDED TO ENGINEER.
- 3) CONTRACTOR TO VERIFY ALL BLDG CONNECTION WITH ARCH. PLANS PRIOR TO INSTALLATION.
- 4) CONTRACTOR TO PROVIDE CONDUIT OR CONNECTION FOR ELECTRIC, COMMUNICATIONS, NATURAL GAS, WATER, & AIR FROM EXISTING BUILDING, COORDINATE WITH ARCH AND CLIENT
- 5) CONTRACTOR SHALL INSTALL CLEAN-OUT ASSEMBLY AT VERTICAL & HORIZONTAL BENDS ON SANITARY AND STORM LINES
- 6) CONTRACTOR SHALL KEEP AND OR MAINTAIN EXISTING GREASE TRAP IN OPERATION DURING CONSTRUCTION.
- 7) AIR GAP, CROSS CONNECTION PROTECTION IS LOCATED IN PROPOSED WWTP BLDG., SEE MECH PLANS, SHEET P-101.
- 8) EXISTING MONITORING STATION SHALL BE USED FOR FUTURE MONITORING

CONTRACTOR TO PROVIDE MARKED-UP PLANS WITH ALL INSTALLED AS-BUILT INFORMATION, LOCATION, RIMS, AND INVERTS OF ALL INSTALLED STRUCTURES TO ENGINEER FOR GENERATING AS-BUILT PLANS.

**1" WATER SERVICE**  
CONTRACTOR SHALL PROVIDE A 1" WATER SERVICE FROM THE EXISTING 8" WATER MAIN. TAP EXISTING 8" WATER MAIN BEFORE THE HYDRANT VALVE WITH 1" CORP STOP, INSTALL 1" COPPER LINE TO 1" WATER METER AND RPBA WITH "HOT BOX", SEE DETAIL. PLACED IN EX LANDSCAPE ISLAND AS SHOWN AND INSTALL 2" WATER SERVICE LINE TO WWTP BLDG, SEE MECH PLANS, SHEET P-100, FOR BLDG CONNECT LOCATION  
CONTRACTOR SHALL PROVIDE ELECTRICAL SERVICE TO "HOT BOX"

**6" SANITARY SEWER SERVICE (FUTURE)**  
PROPOSED 6" SS TO PASS UNDER EXISTING WATERMAIN MAIN SERVICING FIRE HYDRANT. CONTRACTOR SHALL REPLACE ANY/ALL WL THRUST BLOCKING THAT IS DISTURBED DURING THE INSTALLATION OF THE 6" SS SERVICE.  
PLACE 6" CLEAN-OUT ON 6" FUTURE SERVICE AT 100'± O/C.

## 5470 NIELSEN AVENUE SECTION 29, TOWNSHIP 39N, RANGE 2 E, WM

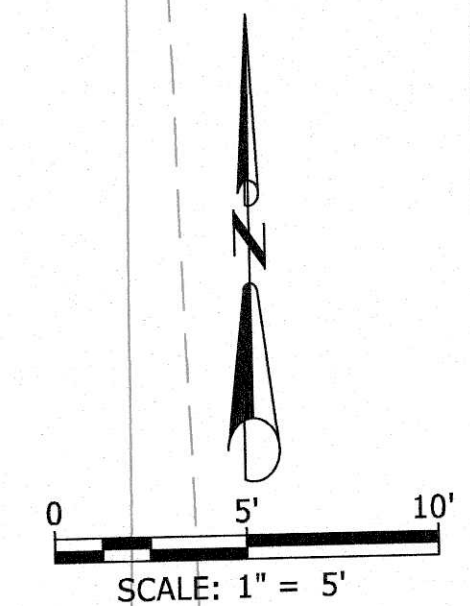
PROPOSED  
TANK  
ELEV.=46.67

AIR GAP LOCATED IN THE  
WWT, SEE MECH PLAN  
SHEETS, P-101 & P-501,  
REVISED 10/02/17

PROPOSED BLDG  
42'x62'  
F.F.=45.0

4" SD CONNECT TO  
ROOF DOWNSPOUT,  
TYP

SDCO-1.0, 6" CLEAN-OUT  
ASSEMBLY  
RIM=44.74  
INV=42.41  
RIM= 44.76



6" SS CONNECT TO 8" SS TO  
GREASE TRAP  
INV=40.80(OUTFLOW)

SDCO-2.0  
RIM=44.44  
INV=41.74  
RIM= 44.53

7 LF  
5 LF 6" SS PVC @ 1.0%  
PROVIDE 6"x6" WYE  
FOR 6" FUTURE STUB

6" SS CONNECT (RAW)  
FROM BLDG  
INV 38.37

6" CONNECT TO  
OVERFLOW BYPASS  
INV 41.00

SSCO-5.0  
RIM=44.18  
INV=38.42  
RIM= 44.76

SDCO-3.0,  
RIM=44.14  
INV=41.11  
RIM= 44.29  
SSCO-6.0  
RIM=44.44  
INV=40.58  
RIM= 44.32

10 LF 6" SS PVC  
9 LF

SSCO-4.0  
RIM=43.95  
INV=38.45  
RIM= 43.99

SSCO 8.0 NOT  
INSTALLED

SSCO-8.0  
8"x6" TEE  
RIM=44.10  
INV=40.31

SSCO-7.0  
RIM=44.34  
INV=40.38  
RIM= 44.15

24 LF @ 1.2%  
14 LF 6" SD  
@ 2.4%

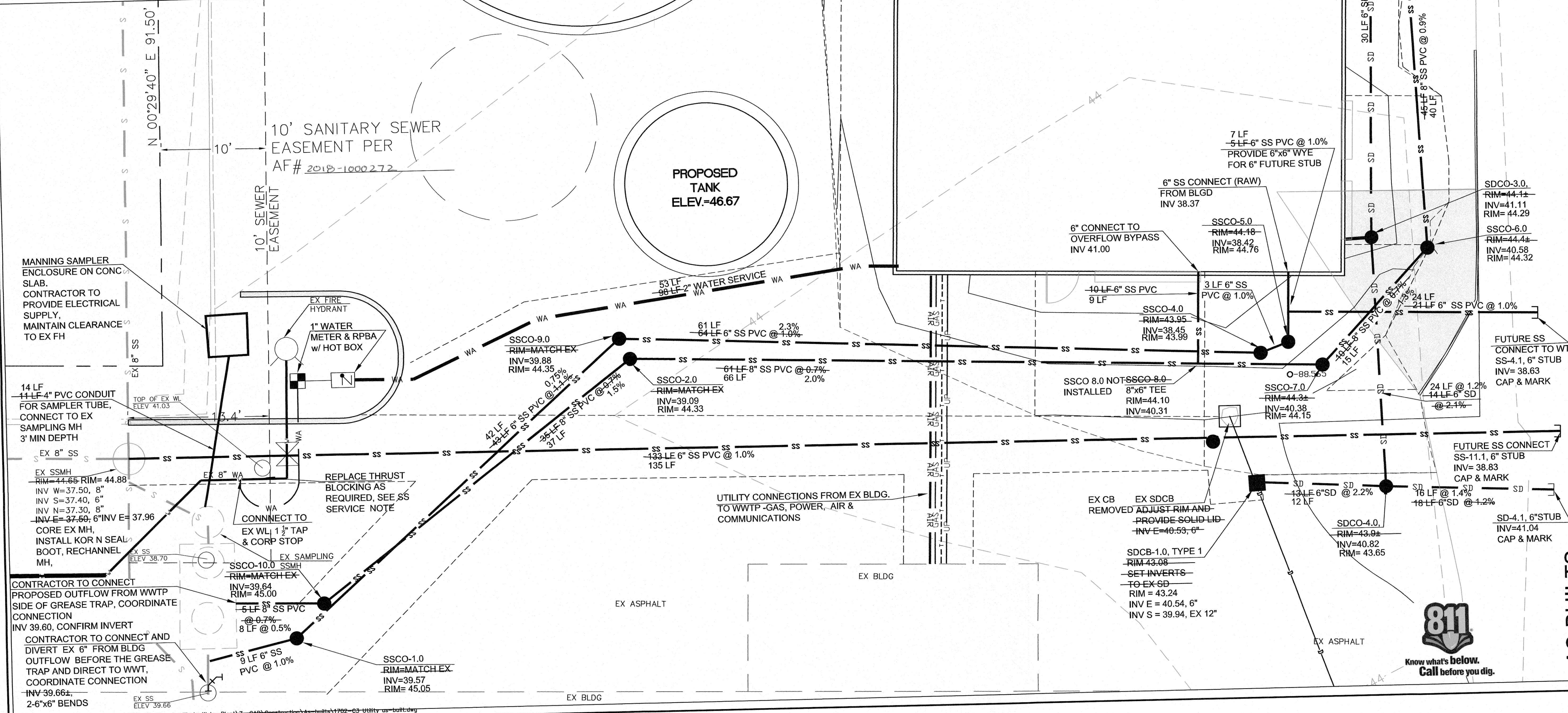
FUTURE SS CONNECT  
SS-11.1, 6" STUB  
INV= 38.83  
CAP & MARK

SD-4.1, 6" STUB  
CAP & MARK

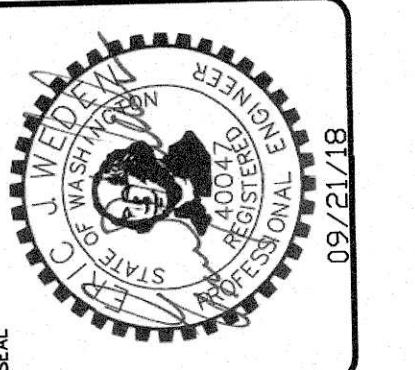
EX CB  
REMOVED  
ADJUST RIM AND  
PROVIDE SOLID LID  
INV=40.53, 6"

SDCB-1.0, TYPE 1  
RIM 43.08  
SET INVERTS  
TO EX SD  
RIM = 43.24  
INV E = 40.54, 6"  
INV S = 39.94, EX 12"

SDCO-4.0,  
RIM=43.94  
INV=40.82  
RIM= 43.65



AS-BUILTS



**WEDEN ENGINEERING, LLC**  
Civil Engineering • Planning • Project Management  
2636 Nubsgard Rd, Ferndale, WA 98248  
(360) 380-1363 (360) 384-3615 Fax  
email: info@wedenengineering.com

APPROVED  
OCT 09 2018  
BY: [Signature]  
CITY OF FERDALE  
PUBLIC WORKS DEPARTMENT

NO.	REVISIONS / SUBMISSIONS	DATE
1	REVISED PER CITY COMMENTS	17.11.06
2	REVISED PER CITY COMMENTS	17.10.23
3	REVIEWED: E.J.W.	DRAWN: KLS
CAD FILE: 1702-01		PROJECT NO.:

PROJECT TITLE  
HEMPLE WASTE WATER TREATMENT PLANT  
5470 NIELSEN AVENUE  
FERNDAL, WA  
DRAWING TITLE  
UTILITY PLAN

DATE: 08/21/2017  
DRAWING No.  
C3.0 of 10

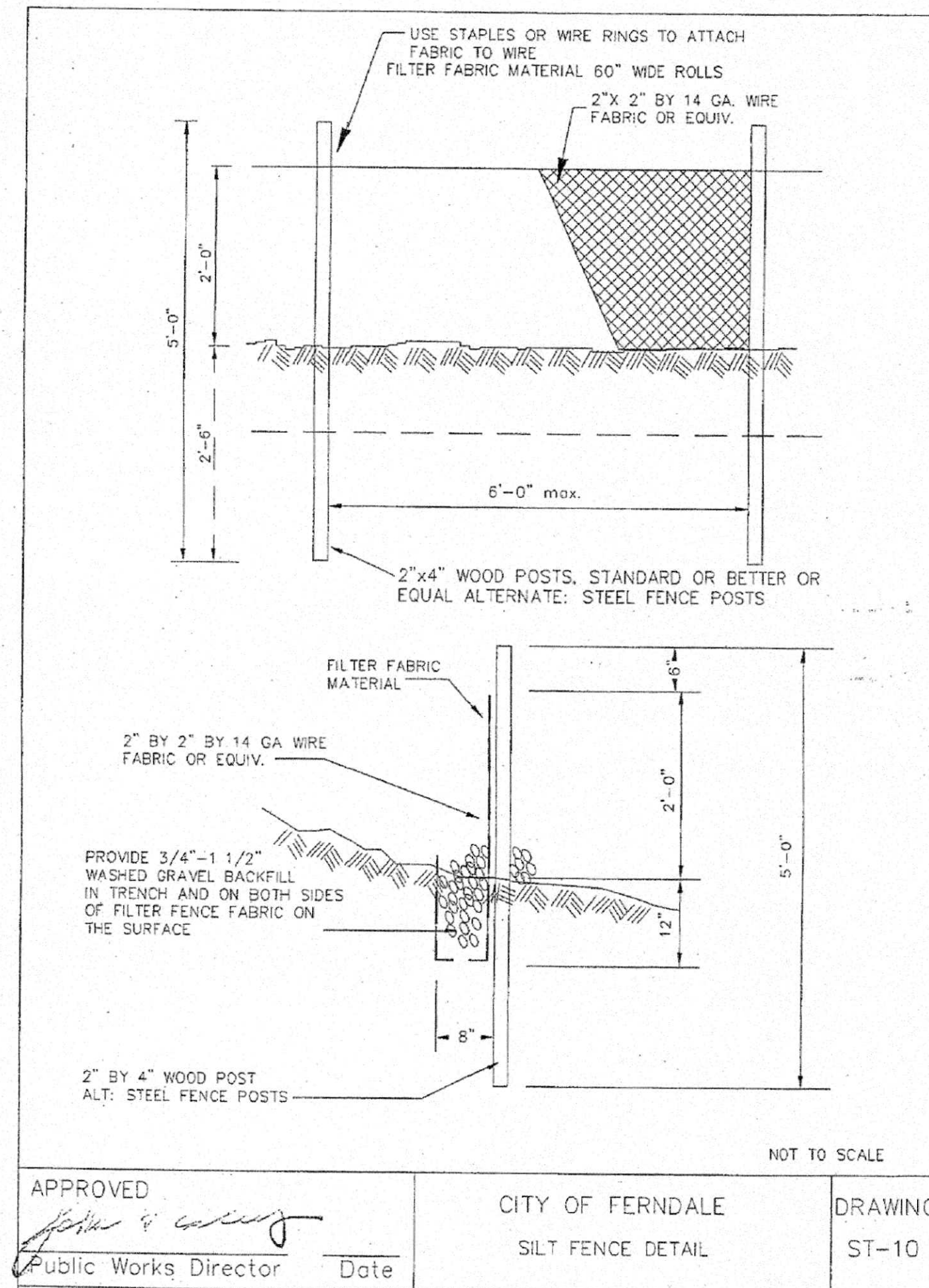


ISOMETRIC VIEW

Diagram illustrating the components of a drainage grate assembly:

- ~ RECTANGULAR GRATE SHOWN
- DRAINAGE GRATE
- RETRIEVAL SYSTEM (TYP.)
- BELOW INLET GRATE DEVICE
- OVERFLOW BYPASS (TYP.)

- 
- 5" MAX.
- TRIM
- DRAINAGE GRATE
- GRATE FRAME
- SEDIMENT AND DEBRIS
- OVERFLOW BYPASS
- BELOW INLET GRATE DEVICE
- FILTERED WATER
- SECTION VIEW
- NOT TO SCALE
- STORM DRAIN INLET PROTECTION



## AS-BUILTS

PROJECT TITLE  
HEMPLER WASTE WATER TREATMENT PLANT

5470 NIESEN AVENUE  
FERNDALE, WA

DRAWING TITLE  
SWPPP NOTES & DETAILS

DATE : 08/21/2017  
DRAWING No.  
C4.0 of 10



**WEDEN ENGINEERING, LLC**  
Civil Engineering • Planning • Project Management

2636 Nubgard Rd. Ferndale, WA 98248  
(360) 380-1363 (360) 384-3615 Fx  
email: [info@wedenengineering.com](mailto:info@wedenengineering.com)

APPROVED  
OCT 03 2018  
BY  CITY CLERK  
CITY OF CERRILLO  
PUBLIC WORKS DEPARTMENT

[illegible]



5470 NIELSEN AVENUE  
SECTION 29, TOWNSHIP 39N, RANGE 2 E, WM

GENERAL REQUIREMENTS:

1. 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, AND ITS AMENDMENTS"(WSDOT SPECS.) AND STANDARD PLANS, THE CITY OF FERNDAL E 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.
2. 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.
3. THE CONTRACTOR MUST HAVE A FULL SET OF CITY CONTRACT DOCUMENTS ON THE SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
4. CONSTRUCTION NOISE SHALL BE LIMITED TO BETWEEN 7 a.m. TO 8 p.m., MONDAY THROUGH SATURDAY.
5. 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. 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 PROJECT ENGINEER OF RECORD (ENGINEER) PROMPTLY OF ANY CONFLICT BETWEEN THE APPROVED PLANS AND THE LOCATION OF ANY EXISTING UTILITIES.
6. 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.
7. 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 IN CONFORMANCE WITH THE EROSION & SEDIMENTATION CONTROL PLAN AND THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL BE ONSITE AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
8. SITE CLEARING SHALL INCLUDE THE LOCATION AND REMOVAL OF ALL ABOVE GROUND AND BURIED DEBRIS AND WASTE THAT MAY BE PRESENT.
9. THE CONTRACTOR SHALL OBTAIN REVOCABLE ENCROACHMENT PERMITS FROM THE CITY OF FERNDAL E AND/OR WHATCOM COUNTY PRIOR TO COMMENCING WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
10. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH REPRESENTATIVES OF THE CITY OF FERNDAL E PUBLIC WORKS DEPARTMENT AND THE ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION. THE CITY WILL SCHEDULE THE MEETING.
11. ALL WORK AND MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE CITY OF FERNDAL E PUBLIC WORKS DEPARTMENT, REPRESENTATIVES FROM THE CITY OF FERNDAL E 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 FOLLOW:  
A. PLACEMENT OF TEMPORARY EROSION CONTROL MEASURES.  
B. CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES.  
C. 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 FERNDAL E.  
D. PLACING OR BACKFILLING OF UNDERGROUND UTILITIES, STORM SEWER AND SANITARY SEWER WITHIN ROAD RIGHTS-OF-WAY, IN EASEMENTS TO BE DEDICATED TO THE CITY OF FERNDAL E.  
OR OTHER PUBLICLY SHARED FACILITIES.  
E. GRADING OF PUBLIC OR PRIVATE ROADWAY AT:  
1. COMPLETION OF EXCAVATION TO SUBGRADE.  
2. COMPLETION OF BALLAST COURSE PLACEMENT  
3. COMPLETION OF CRUSHED SURFACING COURSE PLACEMENT  
F. POURING OF CURB AND GUTTER AND SIDEWALK IN PUBLIC ROADWAY.  
G. ASPHALT PAVING IN PROGRESS IN PUBLIC ROADWAY.  
H. OVERALL INSPECTION FOR FINISHED SHOULDERS, DITCHES, PERMANENT SEEDING AND MONUMENT PLACEMENT.  
I. END OF MAINTENANCE PERIOD
12. 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.
13. THE CONTRACTOR SHALL INFORM THE ENGINEER AND OBTAIN APPROVAL FROM THE CITY OF FERNDAL E 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 FERNDAL E PUBLIC WORKS DEPARTMENT.
14. AS-BUILT DATA SHALL BE PROVIDED TO THE CITY OF FERNDAL E UPON COMPLETION OF CONSTRUCTION AND PROVIDED IN CITY OF FERNDAL E DATUM - VERTICAL (NGVD 29) AND HORIZONTAL (NAD 83/91). CONTACT THE CITY FOR MORE INFORMATION ON SUBMITTAL REQUIREMENTS.

UNDERGROUND UTILITIES CONSTRUCTION

- A. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ENGINEER 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 AT LEAST 48-HOURS BEFORE BURYING UNDERGROUND PIPE TO ASSURE AND FACILITATE REQUIRED AS-BUILT SURVEY.
- B. THE CONSTRUCTION OF UNDERGROUND UTILITY LINES SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:  
i. NO MORE THAN 500 FEET OF TRENCH SHALL BE OPENED AT ONE TIME.  
ii. WHERE CONSISTENT WITH SAFETY AND SPACE CONSIDERATIONS, EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF DITCHES.  
iii. TRENCH DEWATERING DEVICES SHALL DISCHARGE INTO SEDIMENT TRAPS OR SEDIMENT PONDS.  
iv. WHERE PRACTICAL, INSTALL GRAVITY PIPE UTILITIES PRIOR TO INSTALLATION OF OTHER UTILITIES.
- C. UTILITY CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE COFDS.
- D. ALL UTILITY TRENCHES IN THE RIGHT OF WAY SHALL BE BACKFILLED WITH BALLAST PER SECTION 9-03.9(1) WSDOT SPECS.
- E. TESTING OF NEW WATER LINES, STORM SEWER SYSTEMS SHALL NOT BE PERFORMED UNTIL ALL OTHER ADJACENT UTILITIES HAVE BEEN INSTALLED.
- F. ALL UTILITY TRENCHES SHALL BE BACKFILLED AND COMPACTED TO 95% RELATIVE COMPACTION OR 95% MODIFIED PROCTOR PER TRENCHING DETAIL COFSD SS-15.
- G. 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 CITY OF FERNDAL E STANDARD DETAIL (COFSD) R-11 AND SS-15.
- H. NO PART OF THE DRAINAGE SYSTEM MAY BE COVERED, CONCEALED, OR PUT INTO USE UNTIL IT HAS BEEN INSPECTED, TESTED, AND ACCEPTED BY THE CITY INSPECTOR.
- EARTHWORK  
A. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL EXISTING UN-COMPACTED OR POORLY COMPACTED FILL SOILS WITHIN THE ROAD PRISM AT THE DIRECTION OF THE ENGINEER.  
B. THE CONTRACTOR SHALL EXCAVATE AND GRADE TO THE ALIGNMENT, GRADE AND CROSS-SECTIONS SHOWN IN THE PLANS OR ESTABLISHED BY THE PROJECT ENGINEER OF RECORD.  
C. UNSUITABLE MATERIAL FOUND AND NOT FIT FOR USE AS A SUB-GRADE SHALL BE EXCAVATED TO THE BOUNDARIES SET BY THE ENGINEER AND REPLACED WITH A SUITABLE BACKFILL MATERIAL.  
D. THE ENGINEER IS REQUIRED TO CERTIFY SUBGRADE, IN WRITING, PRIOR TO PAVING.

BASE COURSES & CRUSHED SURFACING

- A. GRAVEL BASES AND BALLAST MATERIAL GRADATION SHALL MEET THE CURRENT EDITION OF WSDOT SPECS.  
B. BALLAST, GRAVEL BASE AND CRUSHED SURFACING SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY.  
C. THE GRADED AND COMPACTED SURFACE OF THE CRUSHED SURFACING TOP COURSE SHALL BE WITHIN 1/2 INCH OF STAKED ELEVATION PROVIDED THE MINIMUM MATERIAL SECTION THICKNESS CONSTRUCTED ARE IN CONFORMANCE WITH CITY OF FERNDAL E STANDARD DETAIL R-1 AND R-4 AS SHOWN ON PLAN SHEET 33 OF 39.  
D. 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

1. 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
2. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF FERNDAL E DEVELOPMENT STANDARDS, SECTIONS 702 AND 705 AND THE MOST RECENT VERSION OF THE WSDOT STANDARD PLANS.
3. 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.
4. 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.
5. CONCRETE BLOCKING SHALL BE AS SPECIFIED IN CITY OF FERNDAL E STANDARD DETAILS W-2, W-3 AND W-4, OR AS DIRECTED BY THE PROJECT ENGINEER. BLOCKS SHALL BE INSTALLED AS SPECIFIED IN SECTION 7-09.3(21) OF THE WSDOT SPECS. NO PRE-CAST BLOCKS ARE ALLOWED.
- 6.CONNECTIONS TO EXISTING WATER MAINS - THE CONTRACTOR MUST NOTIFY THE CITY OF FERNDAL E PUBLIC WORKS DIRECTOR OF A PROPOSED CONNECTION AT LEAST FOUR WORKING DAYS IN ADVANCE.
7. 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 150 PSI IN EXCESS OF 100 PSI OPERATING PRESSURE FOR THE CITY OF FERNDAL E OR 250 PSI. THE HYDROSTATIC TESTING IS TO BE INSPECTED BY THE CITY. THE CONTRACTOR SHALL CALL AT LEAST 24 HOURS IN ADVANCE TO SCHEDULE INSPECTIONS. THE CITY OF FERNDAL E LABORATORY SHALL CONDUCT ALL DISINFECTION TESTS AND BACTERIOLOGICAL TESTS. THE PIPE WILL NOT PASS TESTING UNLESS A RESULT OF ZERO BACTERIAL COUNT IS MEASURED 24 HOURS AFTER THE PIPE PASSED HYDROSTATIC TEST AND FLUSHED.
8. BACKFILL SHALL BE BALLAST PER SECTION 9-03.9(1) WSDOT SPECS. IN ALL STREET RIGHTS-OF-WAY, COMPACTED TO MINIMUM 95% RELATIVE COMPACTION. IN UNIMPROVED AREAS, MINIMUM COMPACTION SHALL BE 90% OF RELATIVE COMPACTION.
9. ALL PIPES SHALL HAVE A MINIMUM COVER OF 36".
10. 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. GATE VALVE MAY BE USED IN LIEU OF BUTTERFLY VALVE FOR 12" LINES IF APPROVED BY THE CITY. 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 AWWA 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.
11. WATER SERVICE TAP INSTALLATIONS SHALL MEET THE REQUIREMENTS OF THE COFSD W-5.
12. FIRE HYDRANTS AND FIRE MAINS MUST CONFORM TO COFDS (COFSD W-1, WSDOT B-19) AND THE FOLLOWING STANDARDS:  
A.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 M.H. 9291 HYDRANTS.  
B. 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.  
C. 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. CRASH POSTS SHALL BE 4" CEMENT-FILLED PIPE A MIN. OF 3' IN HEIGHT WITH A MIN. OF 2' OF PIPE BELOW GRADE. HYDRANT SHUTOFF VALVES SHALL BE LOCATED BETWEEN 5' AND 20' FROM THE HYDRANT.  
D. 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.  
E. 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.

SANITARY SEWER SYSTEMS

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH COFDS, COFSD, A.P.W.A. STANDARD SPECIFICATIONS, AND WSDOT SPECS. SANITARY SEWER SYSTEM INSTALLATION, BOTH PUBLIC AND PRIVATE, IS SUBJECT TO CITY REVIEW AND APPROVAL.
2. ALL WORK MUST BE INSPECTED TO THE SATISFACTION OF THE CITY OF FERNDAL E. 24 HOUR NOTICE MUST BE GIVEN PRIOR TO STARTING WORK. TESTING OF THE SEWER SYSTEM AND ALL CONNECTIONS TO EXISTING MAINS SHALL BE PERFORMED IN THE PRESENCE AND UNDER THE SUPERVISION OF A CITY OF FERNDAL E REPRESENTATIVE.
3. SANITARY SEWER MAINS SHALL BE A MINIMUM 8 INCH DIAMETER PVC PIPE CONFORMING TO WSDOT SPECS. 9-05.12(1) AND INSTALLED PER COFDS.
4. SANITARY SEWER PIPE BEDDING SHALL BE PEA GRAVEL PER COFSD SS-1. ALL TRENCHES SHALL BE BACKFILLED WITH BALLAST WITHIN CITY RIGHT OF WAY AND TRAVELED WAYS OUTSIDE OF RIGHT OF WAY (ACCESS EASEMENTS) AND SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% MODIFIED PROCTOR. USE OF SUITABLE NATIVE BACKFILL OUTSIDE OF TRAVELED WAY SHALL BE SUBJECT TO APPROVAL BY THE CITY.
5. ALL MANHOLES SHALL BE INSTALLED PER WSDOT STANDARD PLAN B-15.20-01 AND SHALL BE PRE-CHANNELED. MANHOLE CONES ARE TO BE OFFSET SUCH THAT LADDER RUNGS ARE PARALLEL TO THE FLOW.
6. ALL SIDE SEWERS SHALL BE INSTALLED PER COFSD SS-6, SS-8 OR SS-13, EXCEPT THAT SINGLE SIDE SEWERS SHALL HAVE A MINIMUM DIAMETER OF 4".
7. CONTRACTOR SHALL EXTEND SEWER STUBS 5 FT BEYOND UTILITY CORRIDOR OR 15 FEET BEYOND RIGHT-OF-WAY LINE.
8. EACH SIDE SEWER STUB SHALL BE CAPPED WITH A WATERTIGHT PLUG. EACH STUB SHALL BE MARKED FOR LOCATION WITH A 2"DIA. WHITE PVC PIPE (MIN. SCHEDULE 40) WITH THE TOP 18" PAINTED GREEN AND STENCILED WITH THE WORD "SEWER" AND THE PIPE INVERT INDICATED. THE LOCATION MARKER SHALL BE CONNECTED TO THE SERVICE STUB BY A #12 COPPER WIRE.

AS-BUILTS

PROJECT TITLE  
HEMPLE WASTE WATER TREATMENT PLANT

5470 NIESEN AVENUE  
FERNDAL E, WA

DRAWING TITLE  
GENERAL NOTES

DATE : 08/21/2017

DRAWING No.

C5.0 of 10



WEDEN ENGINEERING, LLC  
Civil Engineering • Planning • Project Management

2636 Hubbard Rd, Ferndale, WA 98248  
(360) 380-1363 (360) 384-3515 fx  
email: info@wedeneengineering.com



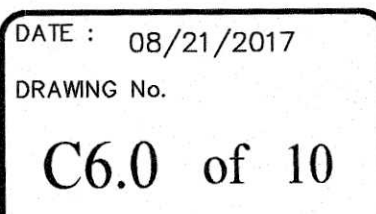
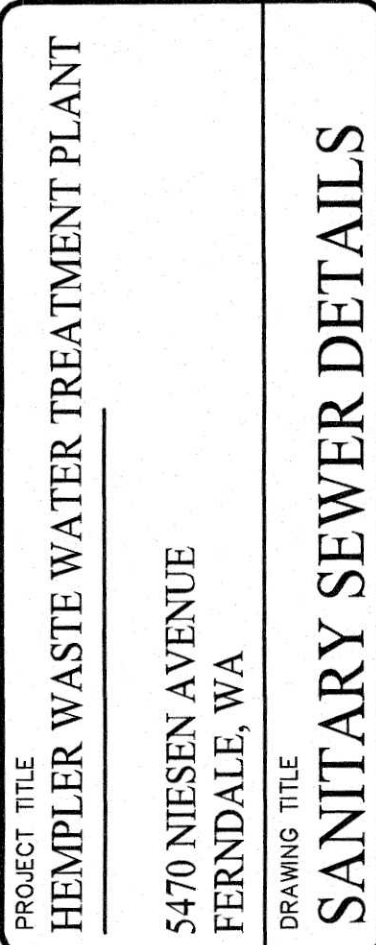
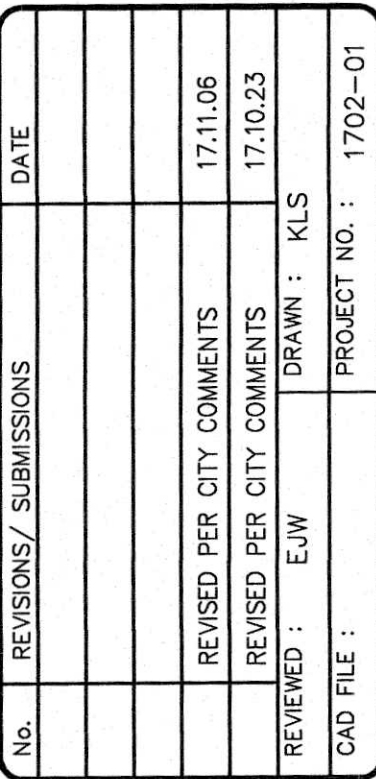
APPROVED  
OCT 09 2018

BY  
CITY OF FERNDAL E  
PUBLIC WORKS DEPARTMENT

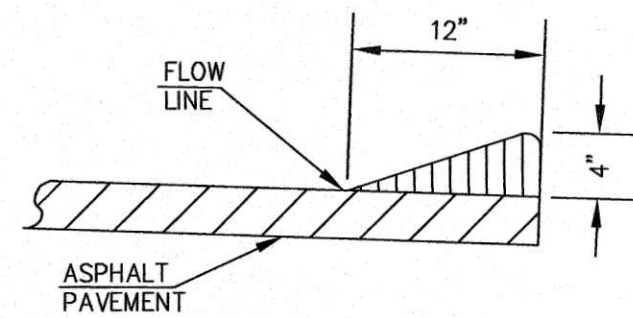
No.	REVISIONS/ SUBMISSIONS	DATE
	REVISED PER CITY COMMENTS	17.11.06
	REVISED PER CITY COMMENTS	17.10.23
	REVIEWED : ELW	DRAWN : KLS
	CAD FILE :	PROJECT NO. : 1702-01



Professional Engineer Seal for J. Weidner, State of Washington, License No. 40047, Mechanical Engineering.

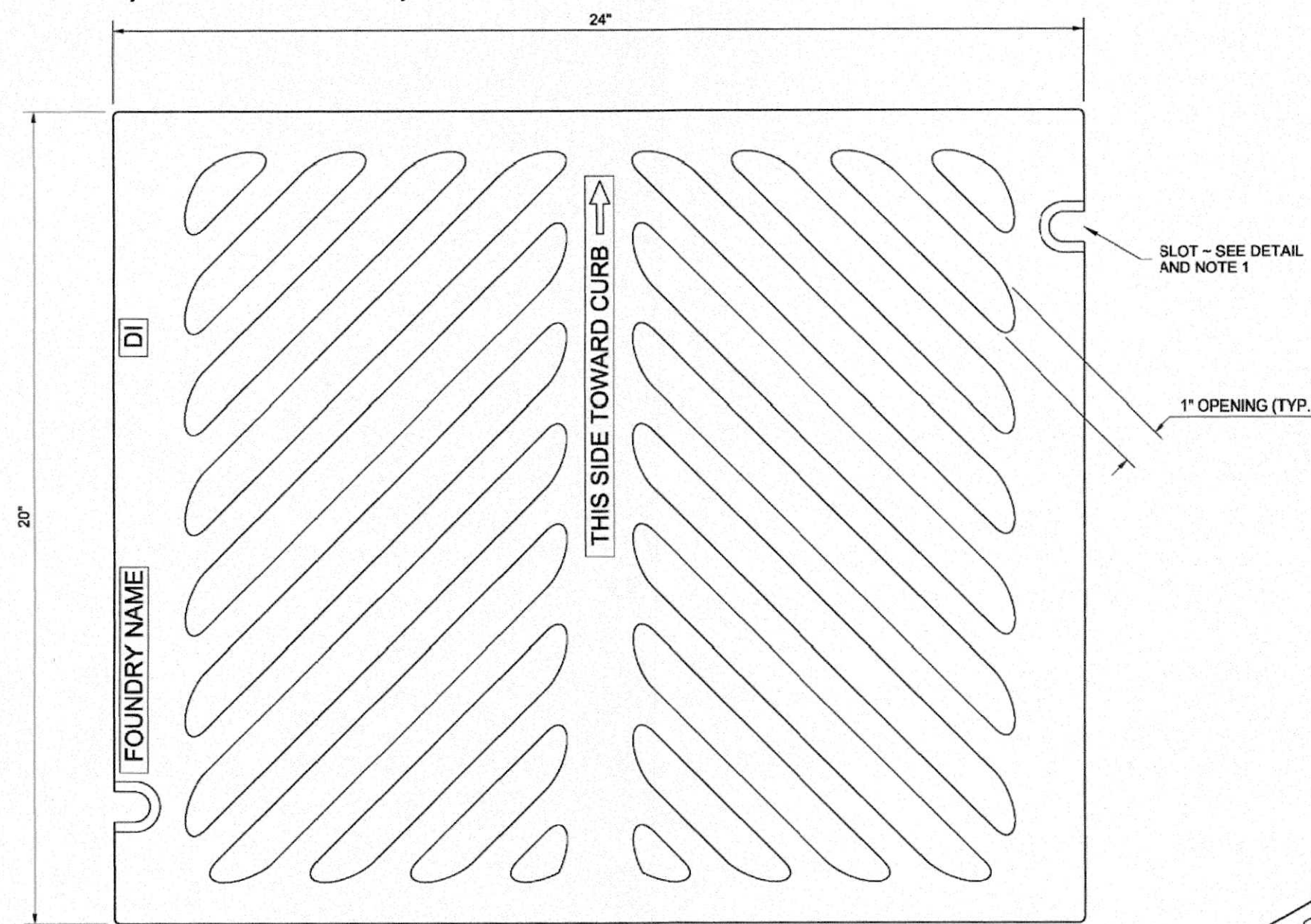




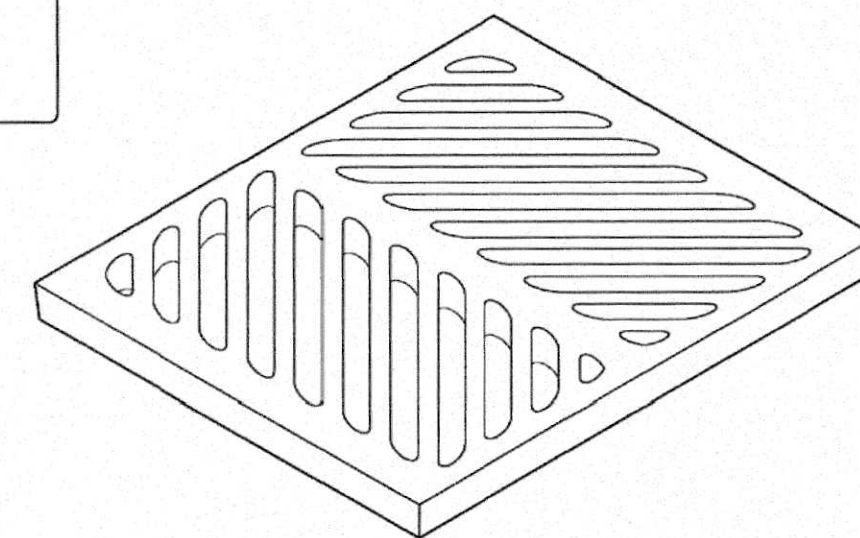


THICKENED EDGE ASPHALT CURB  
N.T.S.

5470 NIELSEN AVENUE  
SECTION 29, TOWNSHIP 39N, RANGE 2 E, WM

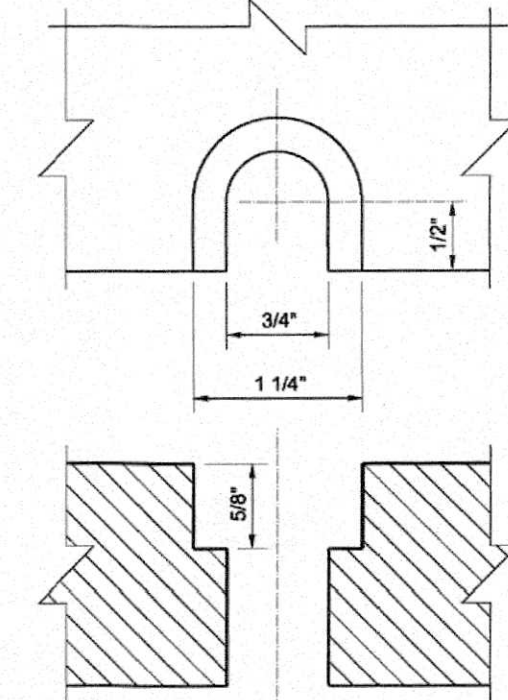


TOP



ISOMETRIC

- NOTES
1. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 5/8" - 11 NC x 2" Allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
  2. Refer to **Standard Specification 9-05.15(2)** for additional requirements.
  3. For frame details, see **Standard Plan B-30.10**.
  4. The thickness of the grate shall not exceed 1 5/8".



BOLT-DOWN SLOT DETAIL  
SEE NOTE 1

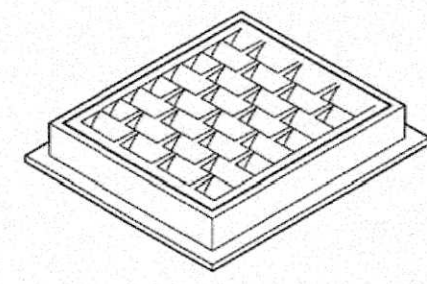


**RECTANGULAR  
HERRINGBONE GRATE**  
**STANDARD PLAN B-30.50-01**

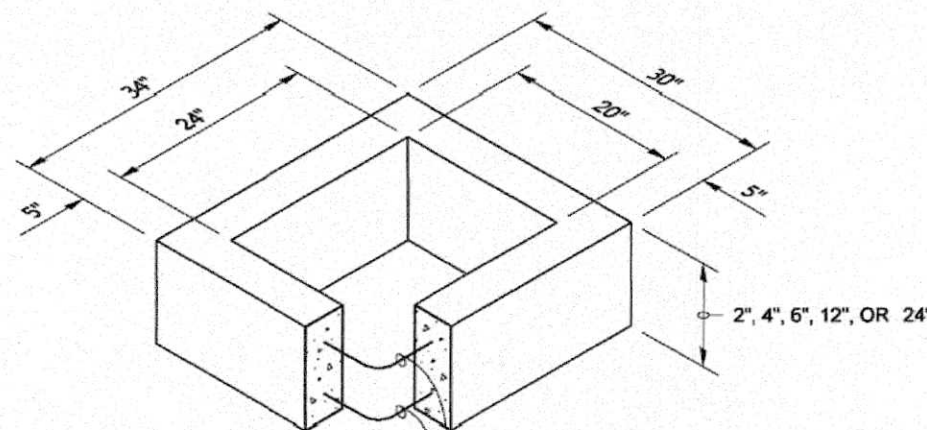
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
**Pasco Bakotich III** 04/26/12  
DATE  
Washington State Department of Transportation

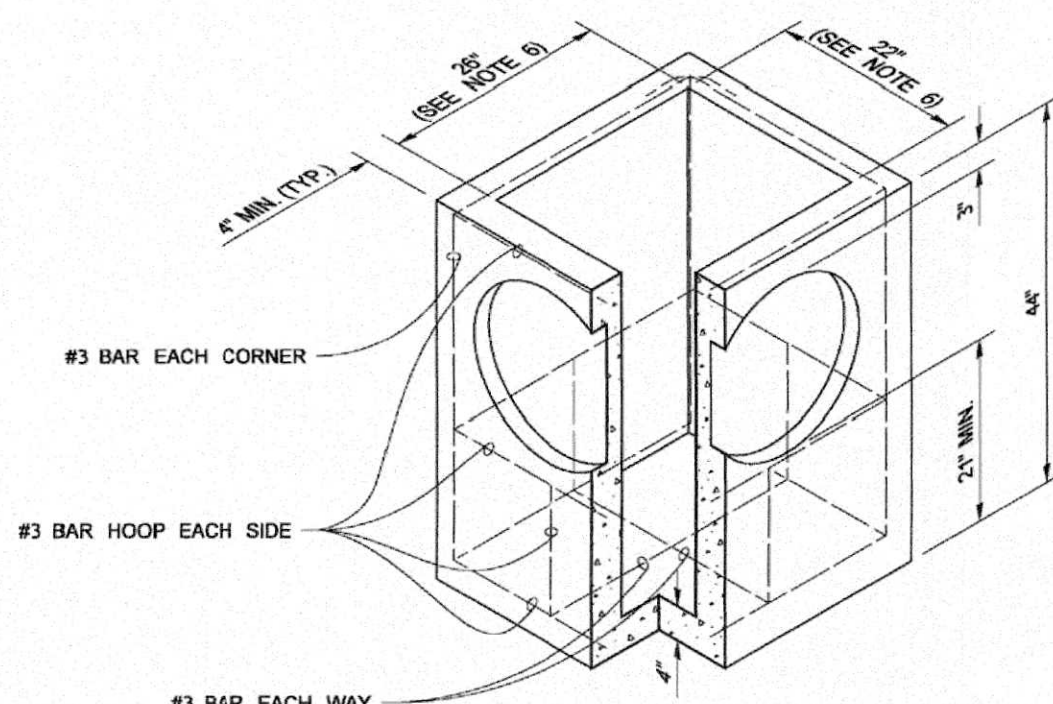
DRAWN BY: USA CYPFORD



FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSPF * (STD. SPEC. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. 9-05.12(2))	15"

\* CORRUGATED POLYETHYLENE STORM SEWER PIPE

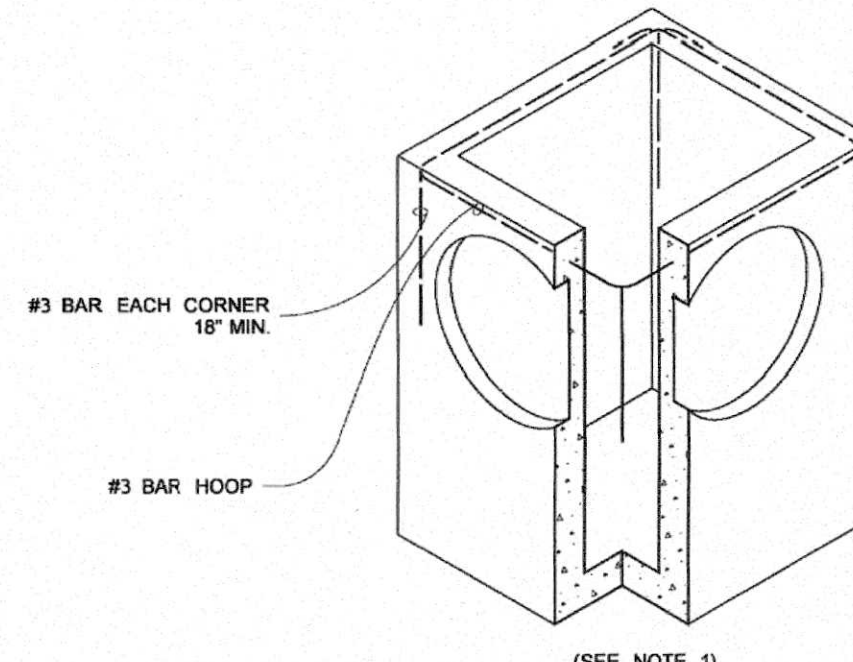
- NOTES
1. As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the ALTERNATIVE PRECAST BASE SECTION. Wire mesh shall not be placed in the knockouts.
  2. The knockout diameter shall not be greater than 20". Knockouts shall have a wall thickness of 2" minimum to 2.5" maximum. Provide a 1.5" minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification 9-04.3.
  3. The maximum depth from the finished grade to the lowest pipe invert shall be 5'.
  4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
  5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1:24 or steeper.
  6. The opening shall be measured at the top of the Precast Base Section.
  7. All pickup holes shall be grouted full after the basin has been placed.



**CATCH BASIN TYPE 1**  
**STANDARD PLAN B-5.20-01**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
**Pasco Bakotich III** 06-16-11  
DATE  
Washington State Department of Transportation



ALTERNATIVE PRECAST BASE SECTION

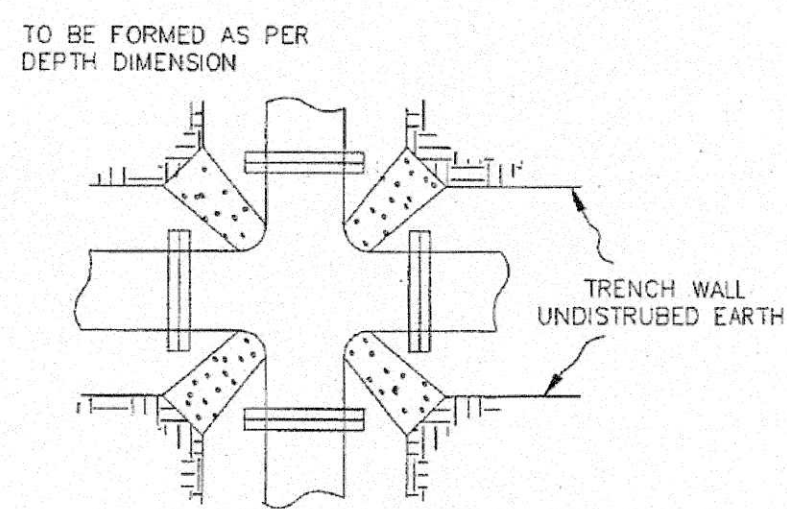


No.	REVISIONS / SUBMISSIONS	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

PROJECT TITLE HEMPLE WASTE WATER TREATMENT PLANT	DATE : 08/21/2017
DRAWING TITLE STORM DETAILS	DRAWING No.
5470 NIESEN AVENUE FERNDAL, WA	C7.0 of 10



5470 NIELSEN AVENUE  
SECTION 29, TOWNSHIP 39N, RANGE 2 E, WM



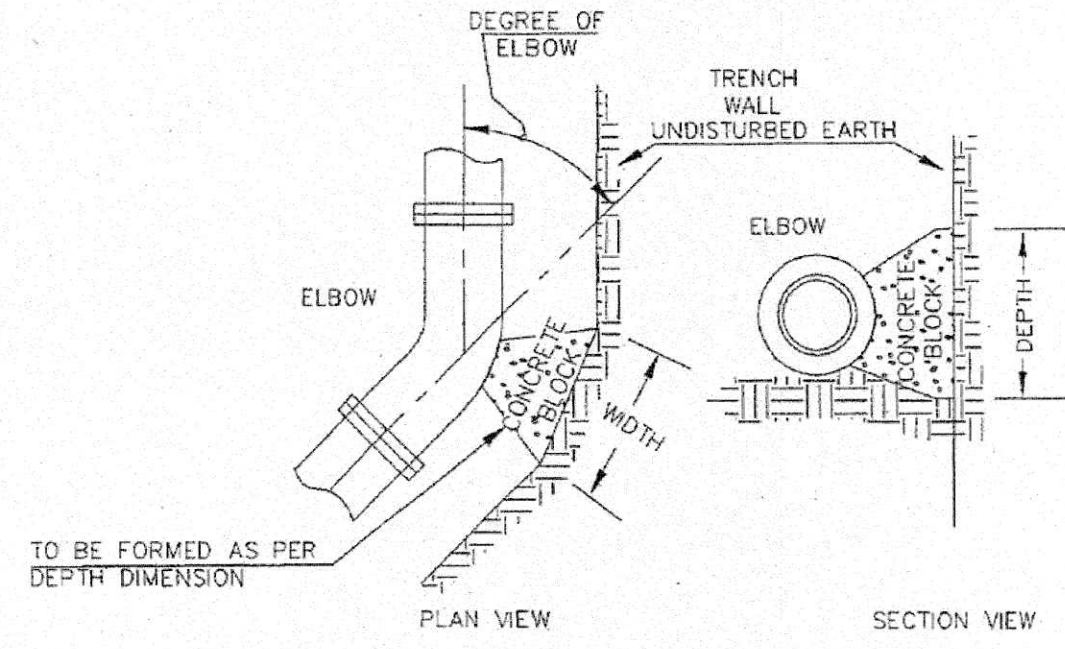
100 P.S.I. OPERATING PRESSURE		
SIZE	WIDTH	DEPTH
6"	1'-0"	1'-0"
8"	1'-0"	1'-3"
10"	1'-6"	1'-6"
12"	1'-9"	1'-8"
16"	2'-3"	2'-6"
20"	2'-6"	2'-8"
24"	3'-0"	4'-0"

NOTE:  
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIABLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

APPROVED <i>John &amp; Elly</i> Public Works Director	CITY OF FERDALE THRUST BLOCKING 4-WAY INTERSECTION	DRAWING W-4
---	--	----------------

JUNE 1995

2091WA2A/W-4



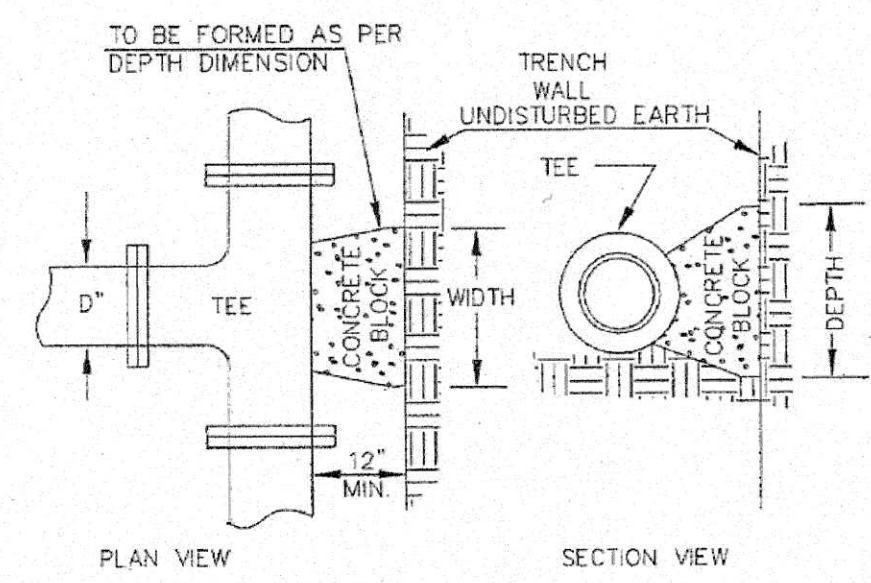
100 P.S.I. OPERATING PRESSURE			
SIZE	11 1/4"	22 1/2"	45"
6"	1'-0"	1'-0"	1'-6"
8"	1'-3"	1'-3"	1'-9"
10"	1'-9"	1'-9"	2'-3"
12"	2'-0"	2'-0"	2'-6"
16"	2'-9"	2'-9"	4'-0"
20"	3'-6"	3'-6"	4'-6"
24"	4'-6"	4'-6"	5'-0"

NOTE:  
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIABLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

APPROVED <i>John &amp; Elly</i> Public Works Director	CITY OF FERDALE THRUST BLOCKING ELBOWS	DRAWING W-2
---	--	----------------

JUNE 1995

2091WA2A/W-2



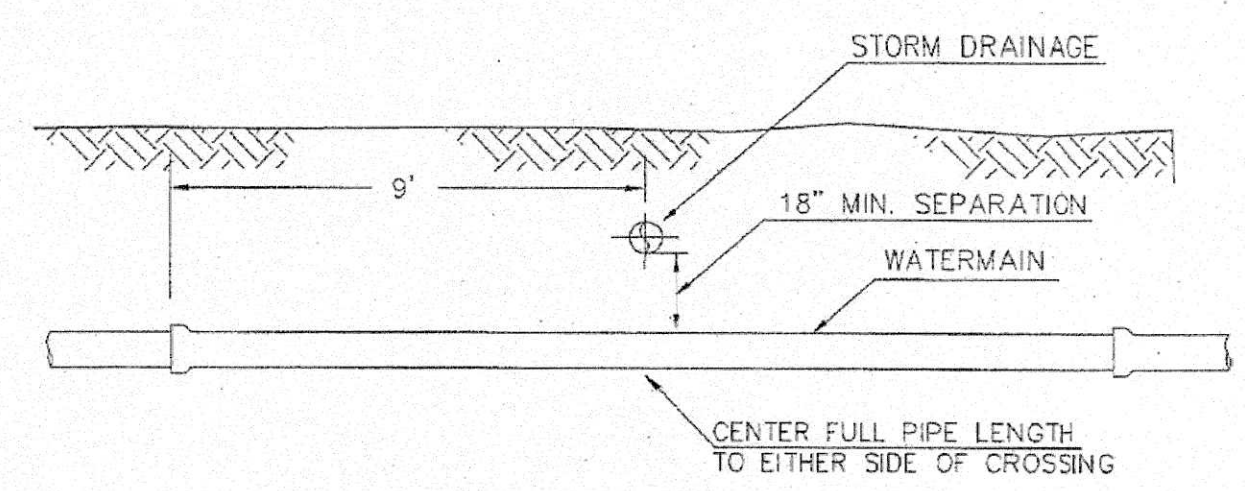
100 P.S.I. OPERATING PRESSURE		
SIZE	WIDTH	DEPTH
6"	1'-6"	1'-6"
8"	2'-0"	2'-0"
10"	2'-6"	2'-6"
12"	3'-0"	3'-0"
16"	4'-6"	3'-6"
20"	6'-0"	4'-0"
24"	7'-0"	5'-0"

NOTE:  
ALL ABOVE DIMENSIONS APPLY TO STABLE TRENCH WALLS, UNDER VARIABLE CONDITIONS SIZE OF THRUST BLOCK SHALL BE DETERMINED BY ENGINEER.

APPROVED <i>John &amp; Elly</i> Public Works Director	CITY OF FERDALE THRUST BLOCKING TEES	DRAWING W-3
---	--	----------------

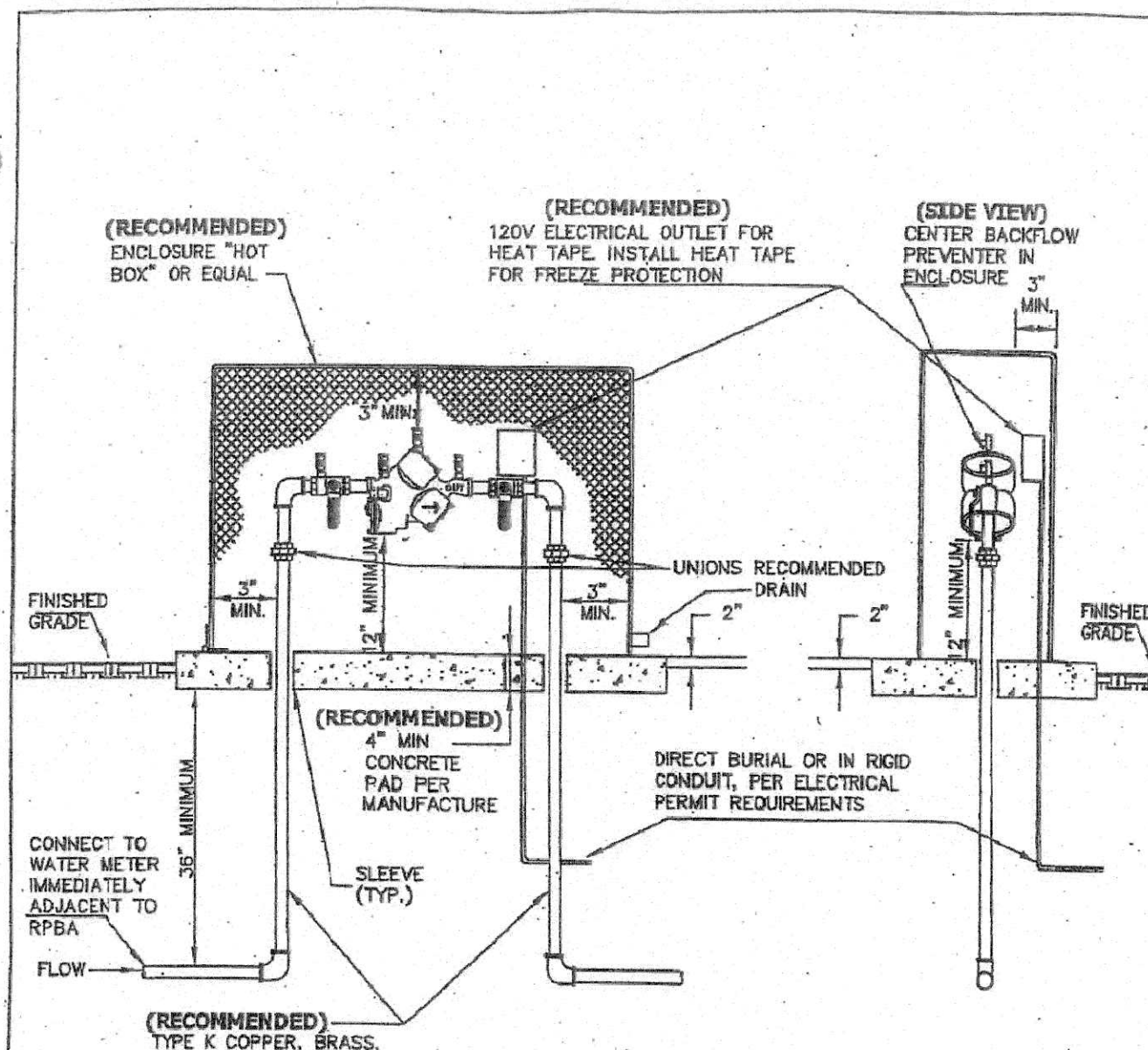
JUNE 1995

2091WA2A/W-3



NOT TO SCALE

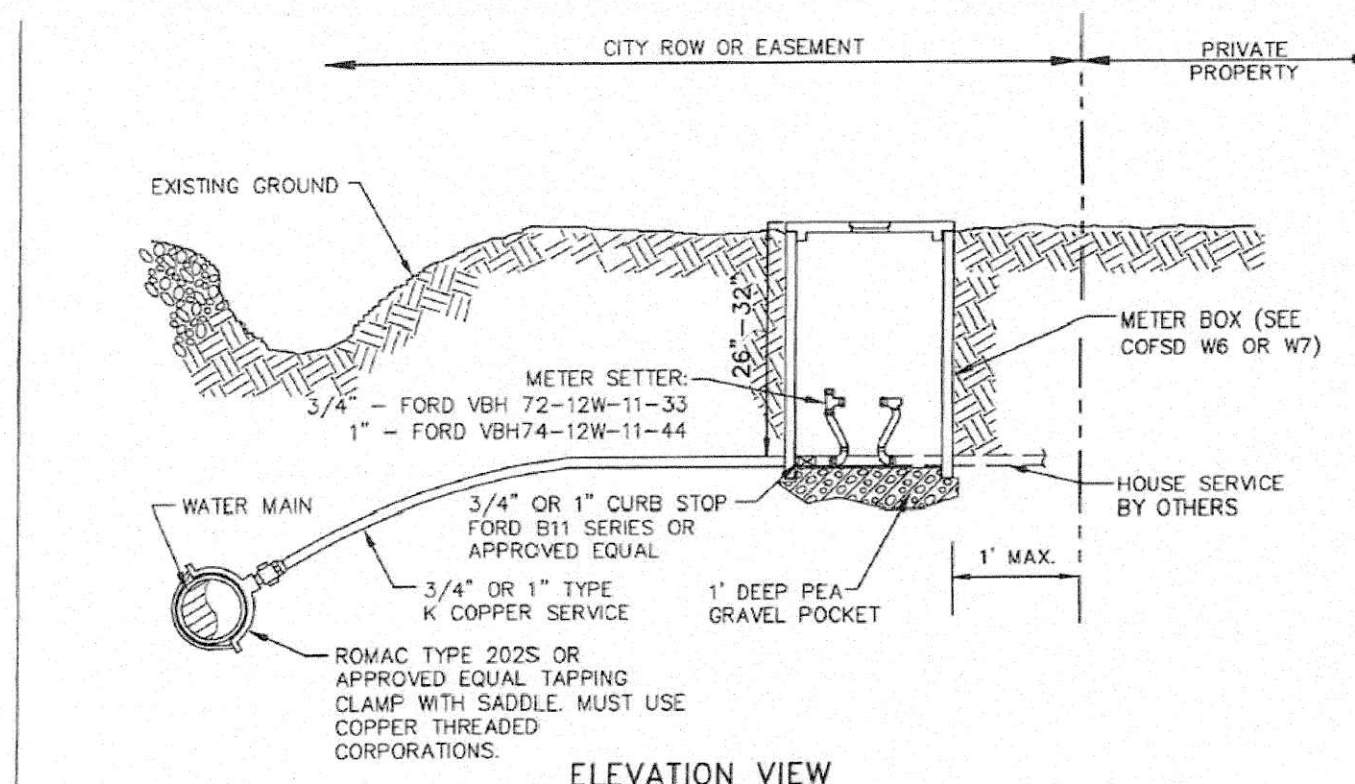
APPROVED <i>John &amp; Elly</i> Public Works Director	CITY OF FERDALE WATER CROSSING DETAIL	DRAWING W-12
---	--	-----------------



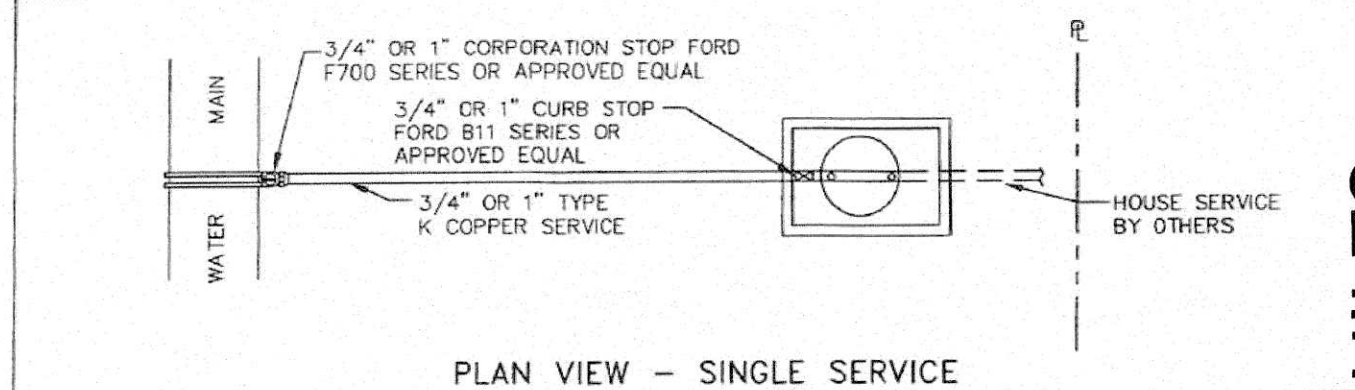
- NOTES
1. PROVIDE APPROVED SUPPORT FOR ASSEMBLIES LARGER THAN 2" DIAMETER.
  2. OWNER SHALL FURNISH, INSTALL AND MAINTAIN THE RPBA AND ALL PIPING AND APPURTENANCES SHOWN ON THIS PLAN.
  3. THE ASSEMBLY MUST BE PROTECTED FROM FREEZING, OTHER SEVERE WEATHER, AND FROM ACCIDENTAL DAMAGE.
  4. DRAIN SHALL BE SIZED IN ACCORDANCE WITH AWWA CROSS CONNECTION CONTROL MANUAL 6-B.
  5. RPBA MUST BE ON WASHINGTON STATE DOH APPROVED LIST, MUST BE TESTED UPON INSTALLATION BY A WASHINGTON STATE CERTIFIED BACKFLOW ASSEMBLY TESTER, AND MUST BE TESTED ANNUALLY THEREAFTER.
  6. RPBA MUST BE TESTED IF MOVED OR REPAIRED.

APPROVED <i>John &amp; Elly</i> Public Works Director	3/4" CONCRETE METER BOX STANDARD DETAIL W-6 NOT TO SCALE	Date
---	--	------

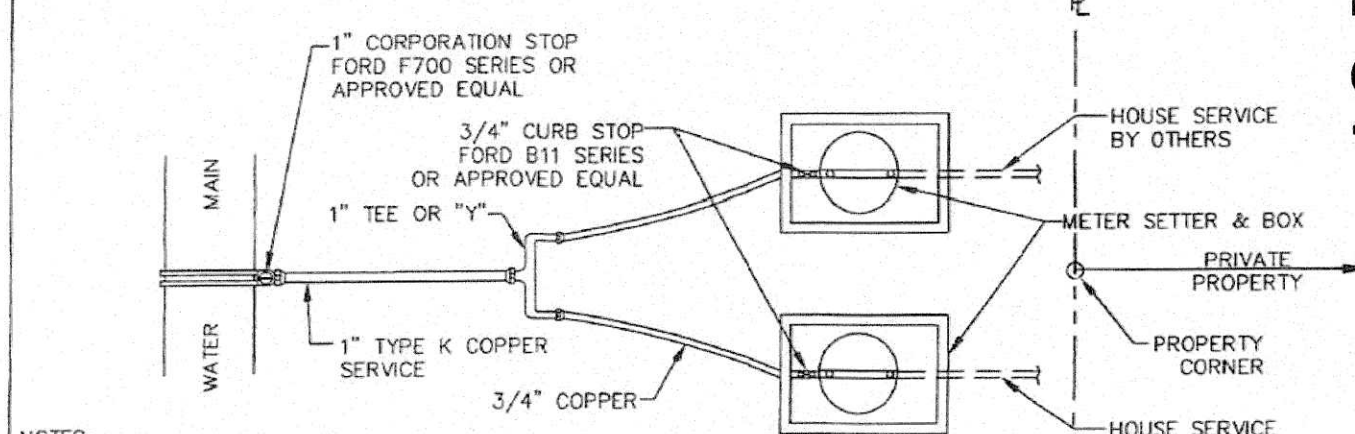
April 16, 2012



ELEVATION VIEW



PLAN VIEW - SINGLE SERVICE



PLAN VIEW - DOUBLE SERVICE

- NOTES
1. METER(S) TO BE FURNISHED AND INSTALLED BY COF.
  2. WATER SERVICE TRENCH TO BE BACKFILLED WITH 12" MIN. DEPTH OF CLEAN SANDY FILL.

August 16, 2012

APPROVED <i>John &amp; Elly</i> Public Works Director	TYPICAL 3/4" AND 1" WATER SERVICE STANDARD DETAIL W-5	Date
---	--	------

AS-BUILTS

PROJECT TITLE	HEMPLE WASTE WATER TREATMENT PLANT
DRAWING TITLE	WATER DETAILS
PROJECT NO.	1702-01
DATE	08/21/2017
DRAWING No.	C8.0 of 10



WEDEN ENGINEERING, LLC Civil Engineering • Planning • Project Management 2636 Nulgaard Rd. Ferndale, WA 98248 (360) 350-1363 (360) 354-3615 fax email: info@wedenengineering.com
--

APPROVED OCT 03 2018 BY CITY OF FERDALE PUBLIC WORKS DEPARTMENT
--

NO.	REVISIONS / SUBMISSIONS	DATE
1	REVISED PER CITY COMMENTS	17.11.06
2	REVISED PER CITY COMMENTS	17.10.23
3	REVISED : E.J.W.	DRAWN : KLS
4	CAD FILE :	PROJECT NO. : 1702-01



# AS-BUILTS

\* Patent # 5,125,801

*A slide-out bottle rack and swing-away distributor arm allow obstacle-free access to your samples.*

<b>Isco 4700 Refrigerated Sampler</b>	
Size (HxWxD):	52.2x 29.1x 72.4 cm
Weight (empty):	159 lb (72 kg)
Refrigerator body:	Linear low-density polyethylene (LLDPE)
Pump requirements:	120 VAC, 60 Hz; or 240 VAC, 50 Hz (acutely)
Operational temperature:	-20° to 120° F (-29° to 49° C)
<b>Pump</b>	
<b>Intake suction tubing</b>	
Length:	31.59 feet (1 to 30 m)
Material:	Vinyl or FEP tubing
Internal thread diameter:	3/8 inch (9.5 mm)
Pump tubing line:	Typically 1,000.000 pump counts
Maximum suction lift:	36 inches (91 cm)
Typical repeatability:	+5% or +5% of the average volume in a set, whichever is greater, all up to 25 L
Typical accuracy:	+10% or +10% of programmed value, whichever is greater
<b>Typical line velocity at head height</b>	
38 (9.14) m	3.0 L/s (9.91 m <sup>3</sup> /s)
108 (3.1) m	2.9 L/s (9.08 m <sup>3</sup> /s)
168 (4.6) m	2.7 L/s (8.35 m <sup>3</sup> /s)
Liquid presence detector:	Non-wettable, non-conductive sensor detects when liquid sample reaches the pump to initiate a purge (compensate for changes in head heights)

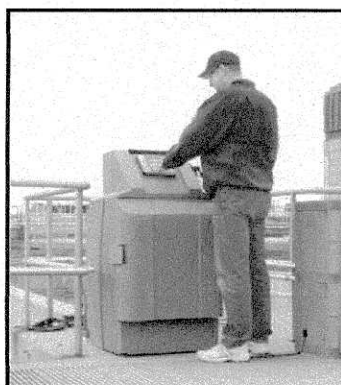
<b>Enclosure rating:</b>	NEMA-4X 6 (IP65)
<b>Program memory:</b>	Non-volatile ROM
<b>Flow meter signal inputs:</b>	15 to 150 ml OC pulse or 25 millisecond rectangular closure for NSC flowmeters; 4-20 mA input for NSC flowmeters
<b>Digital alarms:</b>	4 programmable outputs 5V, 100 mA
<b>Number of composite samples:</b>	Programmable from 1 to 999 samples
<b>Software</b>	
<b>Sample frequency:</b>	1 minute to 50 hours 55 minutes, 1 minute increments 10 to 9999 flow pulses
<b>Sampling modes:</b>	Constant time – constant volume, Constant time – variable volume, Variable time – constant volume (Flow meters are controlled by external flow meter signal)
<b>Programmable sample volume:</b>	10 to 9999 ml in 1 ml increments
<b>Sample retries:</b>	If sample is detected, up to 3 attempts; user selectable
<b>Rinse cycle:</b>	Automatic rinsing of action line up to 3 times for each sample collection
<b>Controller diagnostics:</b>	Tests for RAM, ROM, pump, display, and electrical components

Contact the factory or your Isco representative for complete ordering information.

Description	Part Number
<b>Isco 4700 Refrigerated Sampler:</b> Suction line, drive, and bottle configuration not included, order separately.	58-4700-001
	58-4700-001
<b>As above with Pump Heater</b>	58-4700-102
	58-4700-103
<b>Bottle Configurations</b>	
Twenty-four 1-liter PEP bottles	58-4700-063
Twenty-four 20-liter glass bottles	58-4700-004
Four 10-liter round PEP bottles	58-4700-065
Four 10-liter round glass bottles	58-4700-066
Two 10-liter round PEP bottles	58-4700-067
Two 10-liter round glass bottles	58-4700-068
One 20-liter round PEP bottle	58-4700-011
One 10-liter round glass bottle	58-4700-012
One 10-liter round PEP bottle	58-4700-009
One 10-liter round glass bottle	58-4700-010
Twenty-four 1-liter Pro-Pak bottles	58-4700-017
One 10-liter Pro-Pak bottle	58-4700-018

*The 4700 is especially well suited for outdoor environments.*

*Its exclusive  
roto-molded cabinet  
provides a degree of  
durability and  
insulation that's  
unmatched in  
the industry.*



**ISCO®**  
Water is life. Protect it.

**Teledyne Isco, Inc.**  
4700 Superior Street  
Lincoln NE 68504 USA  
Phone: (402) 464-0231  
USA and Canada: (800) 228-4378  
Fax: (402) 465-3022  
E-Mail: [iscoinfo@teledynecom.com](mailto:iscoinfo@teledynecom.com)  
Internet: [www.isco.com](http://www.isco.com)

Isco reserves the right to change specifications without notice.  
©2010 Teledyne Isco, Inc. • L-1141 • Rev. 10/10

Full Enclosure - Small

- Double Doors, both weather proof.
- Lower door with a stainless steel continuous hinge on the right side to give access to the refrigeration unit.
- Upper door allows access to the sampler controller.
- Access holes for sampler intake hose (right side) and electrical power (left side)
- Two grounded duplex outlets for 110-VAC electrical power on left-side wall for convenient use with refrigerator, sampler and accessories

110 VAC 60 Hz, 106 CFM tube axial fan mounted on inside of left wall over air vent to exhaust air out of enclosure. Fan is In controlled by wall-mounted switch.

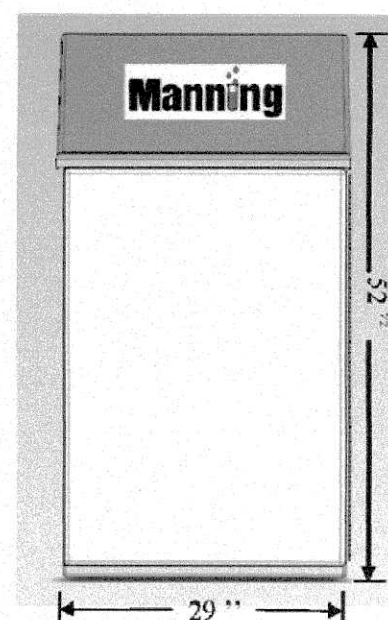
The enclosure is designed for use with the Manning Sampler models VSR and YB8

In order to provide adequate airflow for the refrigerator, Manning recommends the fan option for most installations.

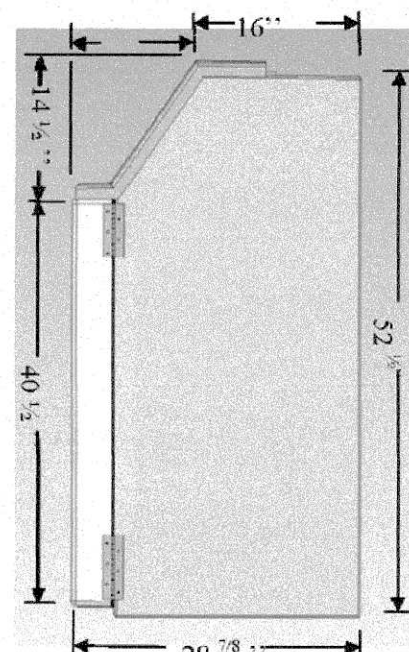
With both heater and fan options installed, the Small Sampler Enclosure can protect your sampler and samples within an ambient outside temperature range of -40-122° (-40-50° C°)

**Manning Environmental, Inc.**  
1968 S. Austin Ave., Suite 101  
Georgetown, Texas 78626 USA  
Office: (512) 863-9337  
Fax: (512) 863-4472  
E-Mail: [sales@manning-enviro.com](mailto:sales@manning-enviro.com)  
Web: <http://www.manning-enviro.com>

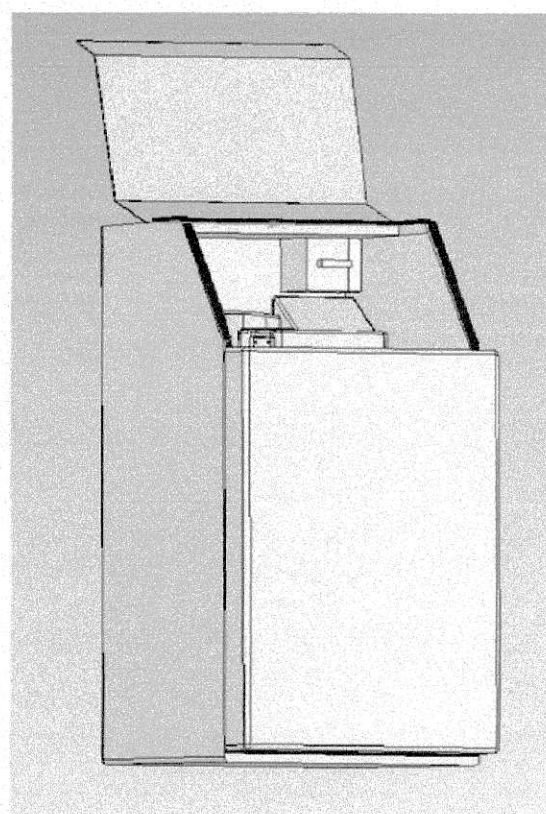
Small Enclosure with both front and upper doors open, showing a 4.9 cu ft refrigerator and a YB Sampler (both optional).



Front View



Side View



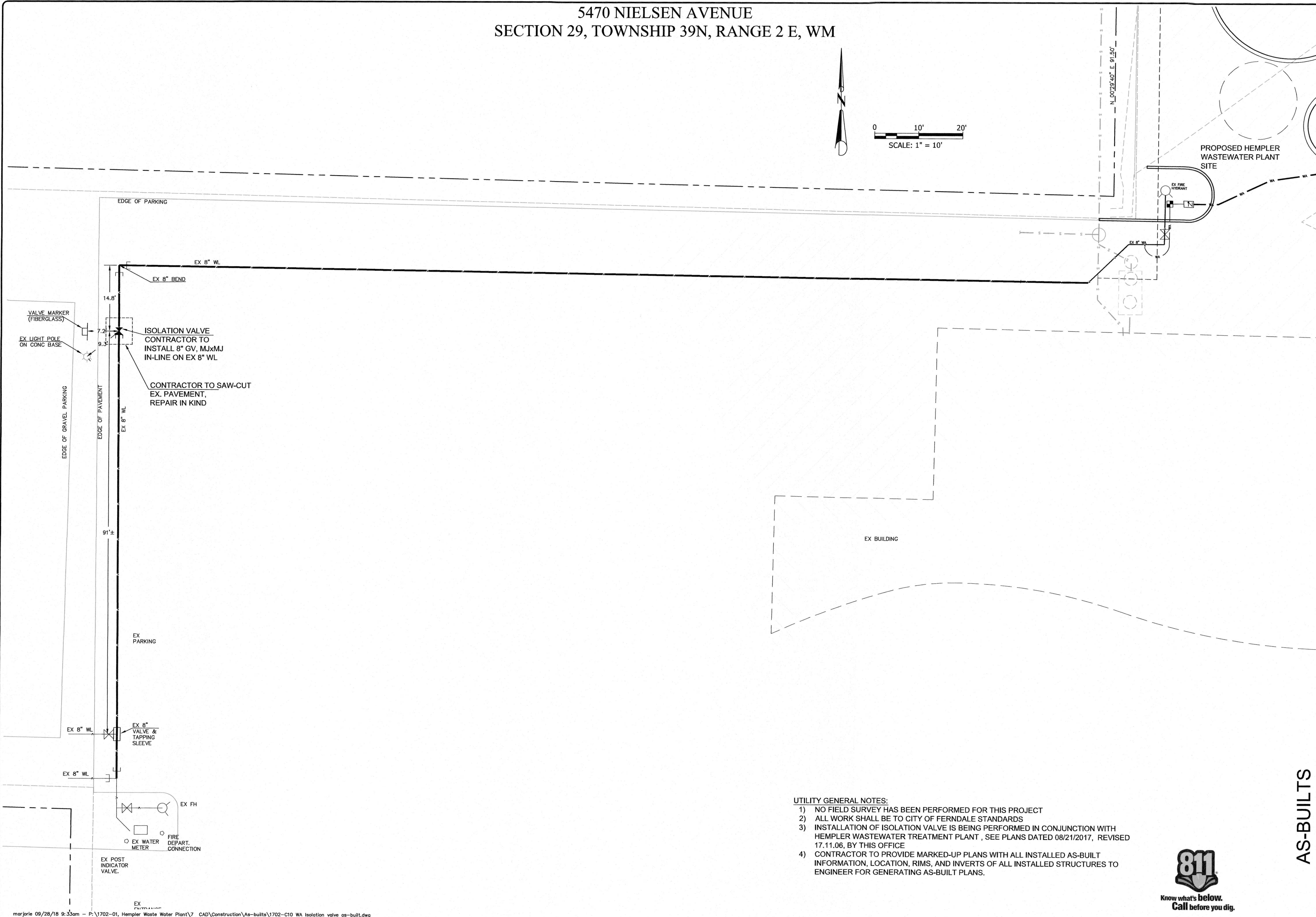
**Headquarters and Sales:**

Manning Environmental, Inc.  
South Austin Avenue  
101  
Georgetown, Texas 78626

Phone: (800) 863-9337  
Fax: (512) 863-4472  
Email: [sales@manning-enviro.com](mailto:sales@manning-enviro.com)  
Web: <http://www.manning-enviro.com>

In the interest of improving and updating its equipment, Manning reserves the right to alter specifications for equipment at any time.





- 1) NO FIELD SURVEY HAS BEEN PERFORMED FOR THIS PROJECT
- 2) ALL WORK SHALL BE TO CITY OF FERNDALE STANDARDS
- 3) INSTALLATION OF ISOLATION VALVE IS BEING PERFORMED IN CONJUNCTION WITH HEMPLER WASTEWATER TREATMENT PLANT , SEE PLANS DATED 08/21/2017, REVISED 17.11.06, BY THIS OFFICE
- 4) CONTRACTOR TO PROVIDE MARKED-UP PLANS WITH ALL INSTALLED AS-BUILT INFORMATION, LOCATION, RIMS, AND INVERTS OF ALL INSTALLED STRUCTURES TO ENGINEER FOR GENERATING AS-BUILT PLANS.



Know what's **below**.  
**Call** before you dig.

# AS-BUILTS

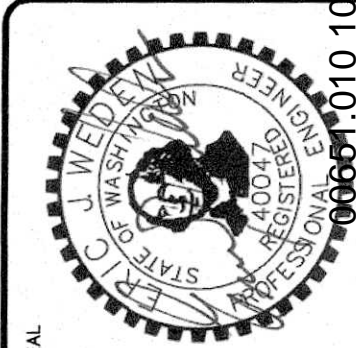
PROJECT TITLE	HEMPLER WASTE WATER TREATMENT PLANT
	5470 NIESEN AVENUE FERNDALE, WA
DRAWING TITLE	WATERLINE ISOLATION VALVE PLAN

[illegible]

**APPROVED**

OCT 03 2018

BY  CITY OF FRANKLIN  
PUBLIC WORKS DEPARTMENT



**WEDEN ENGINEERING, LLC**  
Civil Engineering • Planning • Project Management

636 Nubgaard Rd, Ferndale, WA 98248  
(360) 380-1363 (360) 384-3615 Fx  
email: [info@wedenengineering.com](mailto:info@wedenengineering.com)

00651010 10/9/18 KB