

**CITY OF FERNDALE
WASTEWATER TREATMENT PLANT UPGRADE**

**ADDENDUM NO. 4 (9 pages total)
Issue Date: January 3, 2020**

General: Recitations of each and every section of the bid documents impacted by this addendum are not given. The described changes impact all relevant portions of the bid documents whether specifically cited below or not.

PART 1 BIDDING REQUIREMENTS

- **QUESTION:** Is the Contractor required to obtain a City Business License?
- **ANSWER:** Yes, Contractor is to obtain a City of Ferndale Business License prior to mobilizing on-site. In addition, Contractor is to keep the business license current throughout the entire project duration.

PART 3 – TECHNICAL SPECIFICATIONS:

SECTION 09 91 00 – MISC. PLANT PAINTING

- **ADD 3.06.** Inspection hold points include:
 - a. After surface preparation.
 - b. After final coating.

SECTION 09 91 10 – REPAINTING HEADWORKS MACHINERY, 3.02, D

- **ADD:** All steel shall be sandblast cleaned in conformance with SSPC-SP5/NACE 1 “White Metal Blast Cleaning” with a minimum angular anchor profile of 3.0 mil.

SECTION 09 91 10 – REPAINTING HEADWORKS MACHINERY, 3.01

- **ADD:** C. Inspection hold points include:
 - a. After surface preparation.
 - b. After screw pump repairs.
 - c. After final coating.

SECTION 09 91 10 – REPAINTING HEADWORKS MACHINERY

- **ADD 3.06:** Inspection
 - A. High voltage holiday detection for coating systems installed in corrosive environments, when it can be safely and effectively employed, shall be performed to ensure monolithic protection of the substrate. After the coating product(s) have cured in accordance with manufacturer recommendations, all surfaces shall be inspected for holidays in accordance with ASTM D5126 Standard Practice for

Discontinuity Testing of Nonconductive Protective Coatings on Metallic Substrates. All detected holidays shall be marked and repaired according to the coating product(s) manufacturer's recommendations.

1. Test voltage shall be a minimum of 100 volts per mil of coating system thickness.
2. Detection of a known or induced holiday in the coating product shall be confirmed to ensure proper operation of the test unit.
3. All areas repaired shall be retested following cure of the repair material(s).
4. In instances where high voltage holiday detection is not feasible a close visual inspection shall be conducted and all possible holidays shall be marked and repaired as described above.
5. Documentation of areas tested, equipment employed, results, and repairs made shall be submitted to the Owner/Engineer by Contractor.

SECTION 09 97 23 – CONCRETE PROTECTIVE COATING, 3.03, E

- **REPLACE** part E with. Surface preparation method(s) should be based upon the conditions of the substrate and the requirements of the epoxy protective coating to be applied. At a minimum, surfaces to receive protective coating shall be cleaned and abraded to produce a sound concrete surface with adequate profile and porosity to provide a strong bond between the protective coating and the substrate. Contractor shall sandblast surfaces to be coated to between a CSP 3 and CSP 5 level. Detergent water cleaning and hot water blasting may be necessary to remove oils, grease, or other hydrocarbon residues from the concrete.

CLARIFICATION: All coatings described in sections 099000, 099100, 099110, and 099723 will be inspected by a third party NACE inspector provided by the Owner.

SECTION 26 13 29 – MEDIUM-VOLTAGE, PAD-MOUNTED SWITCHGEAR

- **CHANGE** Section 261329.2.06.A to read "Source Switch Ways: Non-fused, hotstick operated, ganged switches." No vacuum fault interrupters are required for the pad mounted switch source switch ways.
- **CHANGE** Section 261329.2.06.B to read "Fault Interrupting Switched Ways: Fused, hotstick operated, ganged switches." No vacuum fault interrupters are required for the pad mounted switch fused switched ways.

SECTION 26 80 00 – INSTRUMENTATION AND CONTROL

- **ADD** Section 268000.2.04.G as follows:
 - " G. Hydrogen Sulfide Sensor
 - 1. Hydrogen Sulfide Sensors shall be of the Electrochemical type with a range of 0-100 PPM, accuracy of +/- 1 PPM and a resolution of 0.1 PPM.
 - 2. Sensor housing shall be 316 stainless steel and rated for the environment it is to be installed in.
 - 3. Hydrogen Sulfide Sensors shall be Sierra Monitor Corporation Model #5100-05-IT, or Engineer approved equal."

SECTION 33 31 00 – WASTEWATER PIPING, 2.01, E, AERATION PIPING, Exposed:

- **REPLACE** SECTION 2.01, E, 1 with:
 - 1. Exposed:
 - a. Unless otherwise specified, stainless steel pipe **4** inches and smaller shall be Type 316L, seamless, threaded joints conforming to ASTM A312. The minimum wall thickness shall be Schedule 40S.
 - b. Unless otherwise specified, stainless steel piping **larger than 4 inches** shall be manufactured from ASTM A240 annealed and pickled sheets and plates, Type 316L, in accordance with ASTM A778 or ASTM A409 HT-0. Only extra-low carbon (ELC) materials with 0.030 percent maximum carbon shall be used. Pipe shall be manufactured to nominal pipe sizes as listed in ANSI B36.19 and shall have the following nominal wall thickness:
 - c. Nominal Pipe Size: **5** – 18 inches Schedule Gage: Schedule 10S

DRAWINGS:

- **REPLACE** Drawing A0.01 with attached.
- **REPLACE** Drawing A2.02 with attached.
- **REPLACE** Drawing C5.01 with attached.
- **REPLACE** Drawing M2.03 with attached.

DRAWING C9.02, DETAIL 7- STOP GATE:

- **ADD:** Concrete walls and slab shall be reinforced with #4 @ 12" OCEW.

DRAWING A0.01

- **CLARIFICATION:** Roofing section R2 shall also include the joists, hangers, and hardboard ceiling shown on S5.04. Hardboard shall be James Hardie Commercial HardiePanel. Dimensions: 4'x8'. Thickness: 5/16". Weight: 2.3 lbs/sqft. Texture: Smooth. Finish/Color: Primed.

DRAWING C2.02, C2.03

- **ADD:** All penetrations and trenches of existing west lagoon liner shall be patched with patches or pipe collars to match existing liner material. The existing liner of the west lagoon is 30 mil PVC. This changes details 1, and 3 on sheets C6.04.
- **ADD:** All exposed PVC liner shall be covered with rip rap after patching to match existing.

DRAWING C4.03

- **ADJUST:** Proposed finish floor elevation of the UV/Maintenance Bldg is 26.83 (not 26.85).

DRAWING C9.06

- **CHANGE** note: "96" I.D. MANHOLE STRUCTURE" to "60" I.D. MANHOLE STRUCTURE"

DRAWING M1.03

- **ADD:** Note: Contractor shall cut and cap or plug existing 24" and 36" piping to allow room for new connection to the existing headworks. Cap or plugging method shall be submitted for approval. Existing 24" and 36" piping will be full of wastewater and will need to be plugged prior to cutting. Contractor shall submit a tie in plan 30 days prior to tie-in with a complete description of the tie-in method, including schedule, personnel, pumping plan, and emergency spill response plan.

DRAWING E10.01

- **CLARIFICATION** The fuses shown in the new pad mount switch are rated for 50 amps.

DRAWING E10.03

- **ADD** KEY NOTE 3 TO READ "THE MAIN ELECTRICAL ROOM SWITCHBOARD IS A CUTLER-HAMMER WESTINGHOUSE POW-R-LINE SWITCHBOARD WITH SERIES C BREAKERS INSTALLED."

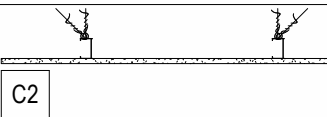
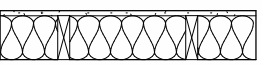
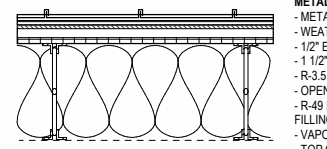
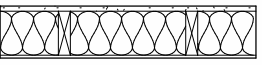
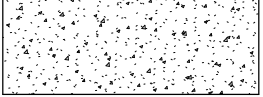
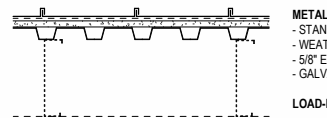
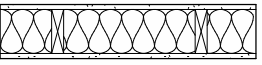
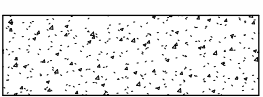
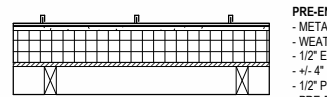
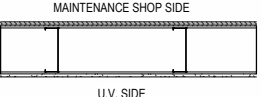
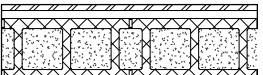
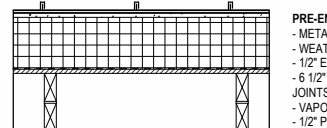
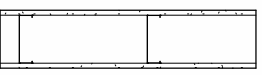
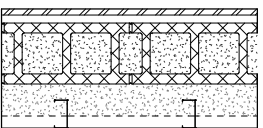
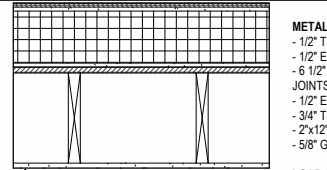
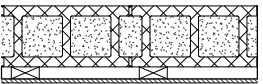
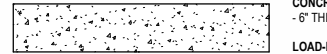
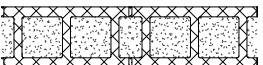
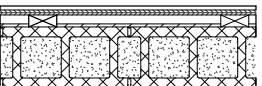
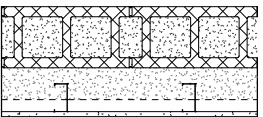
DRAWING E10.05

- **CLARIFICATION** the 30KVAR capacitors are a component of the new MCC2 and shall be provided with the MCC by the System Integrator.
- **REMOVE** the motor starter and thermal overload relay from the 15 amp circuit feeding SG-6, SG-7, and SG-8. This circuit is only a 15 amp breaker in the MCC serving SG-6, SG-7, and SG-8.

DRAWING E11.06

- **CHANGE** the bus and main circuit breaker ratings for panel MDP-4 from 400A to 200A.

PLOT SETTINGS: Bluebeam PDF, ANSI_D (22.00...x34.00 Inches), Landscape, 1:1, WF, APWA_UNSCREENED.dwg
Z:\ACTIVE PROJECTS\1656 FERNDALE TREATMENT PLANT\1656 DRAWINGS\DWG BACKGROUNDS\2019-11-18 BID SET\DWG TILEBLOCKS\A0.01 TILEBLOCK.dwg, 11/18/2019 1:28 PM, mrcarchitects

 C2	CEILING ASSEMBLY - GYPSUM CEILING & SOFFIT - 2 1/2" METAL STUDS AT 24" O.C. MAXIMUM, FASTEN TO STRUCTURE ABOVE - 5/8" GYPSUM WALL BOARD	 W3C OCCURS AT: - UV MAINTENANCE BUILDING	INTERIOR PRESSURE TREATED WOOD STUD WALL - NON RATED - 5/8" GYPSUM WALL BOARD - 2X6 PRESSURE TREATED WOOD STUDS AT 16" O.C., PER STRUCTURAL - R-21 BATT INSULATION	 E5 OCCURS AT: - OPERATIONS LAB BUILDING	EXTERIOR METAL CLAD WALL WITH INTERIOR FURRING - NON RATED - VERTICAL METAL CLADDING - WEATHER BARRIER - 1/2" EXTERIOR PLYWOOD SHEATHING - 4" DEPTH OF CONTINUOUS CLOSED-CELL SPRAY INSULATION (CCSPF) APPLIED TO INSIDE FACE OF PLYWOOD - BLOCKING, AS REQUIRED, AT TRUSS BAYS
	CEILING ASSEMBLY - LAY-IN ACOUSTIC CEILING TILE - LAY-IN ACOUSTIC CEILING TILE GRID AND SUPPORT SYSTEM - ACOUSTIC CEILING TILE C1 = TYPICAL CEILING TILE C1A = CLEAN ROOM CEILING TILE		LOAD-BEARING, INSULATED		LOAD-BEARING, INSULATED
 R3 OCCURS AT: - UV MAINTENANCE BUILDING	METAL JOIST ROOF - NON RATED - METAL ROOFING - WEATHER BARRIER - 1/2" EXTERIOR GLASS MATT GYPSUM COVERBOARD - 1 1/2" GALVANIZED ROOF DECKING - R-3.5 MIN THERMAL SPACER BLOCK - OPEN WEB STEEL JOISTS (OWSJ) AT 6' O.C., PER STRUCTURAL - R-49 BATT BAGGED INSULATION AT JOIST BAYS, UN-VENTED FILLING CAVITY - VAPOR MEMBRANE SCRM, FULLY SEALED - TOP CORD AND JOIST SUBSTITUTE EXTENSIONS AT EAVES PER STRUCTURAL - 3 1/2" METAL STUD DROPPED SOFFIT FRAMING - PAINTED CEMENTITIOUS PANEL SOFFIT CLADDING	 W3B OCCURS AT: - UV MAINTENANCE BUILDING	INTERIOR PRESSURE TREATED WOOD STUD WALL - NON RATED - 5/8" GYPSUM WALL BOARD - 2X6 PRESSURE TREATED WOOD STUDS AT 16" O.C., PER STRUCTURAL - R-21 BATT INSULATION - 3/8" x 4" WIDE VERTICAL CEMENTIOUS PANEL BOARD IN U.V. MAINTENANCE BLDG. AT U.V.TREATMENT SIDE OF WALL	 E4 OCCURS AT: - UV MAINTENANCE BUILDING	EXTERIOR CONCRETE WALL - NON RATED - 12" THICK (EXISTING) CONCRETE WALL, PER STRUCTURAL
	LOAD-BEARING, INSULATED		LOAD-BEARING, INSULATED		LOAD-BEARING, NON INSULATED
 R2 OCCURS AT: - HEADWORKS SHELTER	METAL FRAMED ROOF - NON RATED - STANDING SEAM PREFINISHED ALUMINUM ROOFING - WEATHER BARRIER / ROOF UNDERLAYMENT - 5/8" EXTERIOR GLASS MAT GYPSUM BOARD UNDERLAYMENT - GALVANIZED ROOF DECKING PER STRUCTURAL	 W3A OCCURS AT: - UV MAINTENANCE BUILDING	INTERIOR PRESSURE TREATED WOOD STUD WALL - NON RATED - 5/8" GYPSUM WALL BOARD - 2x6 PRESSURE TREATED WOOD STUDS AT 16" O.C., PER STRUCTURAL - R-21 BATT INSULATION - 5/8" GYPSUM WALL BOARD	 E3 OCCURS AT: - OPERATIONS LAB BUILDING	EXTERIOR CONCRETE WALL - NON RATED - 10" THICK CONCRETE FOUNDATION WALL, PER STRUCTURAL
	LOAD-BEARING, NON-INSULATED		LOAD-BEARING, INSULATED		LOAD-BEARING, NON INSULATED
 R1A OCCURS AT: - BLOWER BUILDING (E)	PRE-ENGINEERED WOOD TRUSS ROOF - NON RATED - METAL ROOFING (E) - WEATHER BARRIER / ROOF UNDERLAYMENT (E) - 1/2" EXTERIOR GLASS MAT GYPSUM BOARD (E) - 4" RIGID INSULATION AT ROOF SLOPE (E) - 1/2" PLYWOOD SHEATHING (E) - PRE-ENGINEERED WOOD TRUSSES, PER STRUCTURAL (E) - VAPOR BARRIER (E) - PRE-ENGINEERED TRUSS TAIL EXTENSIONS AND OUTLOOKERS AT EAVES, TYPICAL (E) - PAINTED PLYWOOD SOFFIT CLADDING (E)	 W3 OCCURS AT: - UV MAINTENANCE BUILDING	INTERIOR GALVANIZED METAL STUD WALL - NON RATED - 1/2" EXTERIOR CDX PLYWOOD IN U.V. MAINTENANCE BLDG. AT MAINTENANCE SHOP SIDE OF WALL - 5 1/2" GALVANIZED METAL STUDS AT 12" O.C., PER STRUCTURAL - 3/8" x 4" WIDE VERTICAL CEMENTIOUS PANEL BOARD IN U.V. MAINTENANCE BLDG. AT U.V.TREATMENT SIDE OF WALL	 E2A OCCURS AT: - UV MAINTENANCE BUILDING	EXTERIOR CLAD CMU WALL - NON RATED - VERTICAL METAL SIDING - 1" GALVANIZED VERTICAL "Z" FURRING STRIPS AS REQUIRED FOR SIDING - CLEAR WATER-REPELLENT AT INTERIOR SIDE OF UV TREATMENT AND SHOP - PAINT COATING/SEALER AT ABOVE GRADE EXTERIOR LOCATIONS - SINGLE-WYTH 8" THICK CONCRETE MASONRY UNIT, FULLY GROUTED, WITH WATER-REPELLENT ADMIXTURE
	LOAD-BEARING, INSULATED		NON LOAD-BEARING, NON INSULATED		LOAD-BEARING, INSULATED
 R1 OCCURS AT: - OPERATIONS LAB BUILDING	PRE-ENGINEERED WOOD TRUSS ROOF - NON RATED - METAL ROOFING - WEATHER BARRIER / ROOF UNDERLAYMENT - 1/2" EXTERIOR GLASS MAT GYPSUM BOARD - 6 1/2" RIGID INSULATION AT ROOF SLOPE, R-38. STAGGER LAYER JOINTS. - VAPOR BARRIER - 1/2" PLYWOOD SHEATHING - PRE-ENGINEERED WOOD TRUSSES, PER STRUCTURAL - CLOSED CELL SPRAY FOAM INSULATION, COMPLETE FILL AT SOFFITS - 1/2" PAINTED PLYWOOD SOFFIT AT TRUSS TAIL EXTENSIONS	 W2 OCCURS AT: - OPERATIONS LAB BUILDING	INTERIOR METAL STUD WALL - NON RATED - 5/8" GYPSUM WALL BOARD - 6" METAL STUDS AT 16" O.C. - 5/8" GYPSUM WALL BOARD	 E2 OCCURS AT: - OPERATIONS LAB BUILDING	EXTERIOR CLAD CMU WALL WITH INTERIOR FURRING - NON RATED - VERTICAL METAL SIDING - 1" GALVANIZED VERTICAL "Z" FURRING STRIPS AS REQUIRED FOR SIDING - PAINT COATING/SEALER AT ABOVE GRADE EXTERIOR LOCATIONS - SINGLE-WYTH 8" THICK CONCRETE MASONRY UNIT, FULLY GROUTED, WITH WATER-REPELLENT ADMIXTURE - 4" DEPTH OF CONTINUOUS CLOSED-CELL SPRAY INSULATION (CCSPF) APPLIED TO INSIDE FACE OF CMU (2" OF THIS DEPTH WILL BE IN AND AROUND METAL WALL STUDS) - 3-1/2" METAL STUDS AT 16" O.C. - 5/8" GYPSUM WALL BOARD
	LOAD-BEARING, INSULATED		NON LOAD-BEARING, NON INSULATED		LOAD-BEARING, INSULATED
 F2 OCCURS AT: - UV MAINTENANCE BUILDING	METAL FRAMED FLOOR - NON RATED - 1/2" T&G PLYWOOD SHEATHING, PER STRUCTURAL - 1/2" EXTERIOR GLASS MAT GYPSUM BOARD - 6 1/2" RIGID INSULATION, R-38. LAYERS TO HAVE STAGGERED JOINTS. - 1/2" EXTERIOR GLASS MAT GYPSUM BOARD - 3/4" T&G PLYWOOD SHEATHING, PER STRUCTURAL - 2x12" WOOD JOISTS AT 16" O.C., PER STRUCTURAL - 5/8" GYPSUM WALL BOARD	 W1 OCCURS AT: - OPERATIONS LAB BUILDING	INTERIOR METAL STUD WALL - NON RATED - 5/8" GYPSUM WALL BOARD - 3 1/2" METAL STUDS AT 16" O.C. - 5/8" GYPSUM WALL BOARD	 E1B OCCURS AT: - BLOWER BUILDING (E)	EXTERIOR CMU WALL - NON RATED - CONCRETE 8" THICK MASONRY UNIT, FULLY GROUTED - PAINT COATING/SEALER AT ABOVE GRADE EXTERIOR LOCATIONS - SEALER AT INTERIOR LOCATIONS - 2X P.T. WOOD FURRING - 1/2" RE-PAINTED PLYWOOD SHEATHING AT INTERIOR
	LOAD-BEARING, INSULATED		NON LOAD-BEARING, NON INSULATED		LOAD-BEARING, UN-INSULATED
 F1 OCCURS AT: - UV MAINTENANCE BUILDING, - BLOWER BUILDING (E), - OPERATIONS LAB BUILDING	CONCRETE FLOOR - NON RATED - 6" THICK REINFORCED CONCRETE SLAB, PER STRUCTURAL	 E7 OCCURS AT: - BLOWER BUILDING E7A OCCURS AT: - OPERATIONS LAB BUILDING	EXTERIOR BREAK METAL CLAD WALL - NON RATED - PRE-FINISHED BREAK METAL FLASHING - WEATHER BARRIER - 1/2" EXTERIOR CDX PLYWOOD SHEATHING, PER STRUCTURAL - PRESSURE TREATED 2X WOOD STUDS, TO SUIT ADJACENT ASSEMBLY - BATT INSULATION, R-21 MIN, ALIGN WITH ADJACENT INSULATION - 1/2" EXTERIOR CDX PAINTED PLYWOOD SHEATHING. SUBSTITUTE 5/8" GYPSUM WALL BOARD AT E7A	 E1C 10" OCCURS AT: - HEADWORKS SHELTER E1A 8" OCCURS AT: - UV MAINTENANCE BUILDING	EXTERIOR CMU WALL - NON RATED - PAINT COATING AT ABOVE GRADE EXTERIOR LOCATIONS - SEALER AT INTERIOR LOCATIONS - SINGLE-WYTH CONCRETE MASONRY UNIT, FULLY GROUTED, WITH WATER-REPELLENT ADMIXTURE. 8" THICK AT WALL TYPE E1A, 10" THICK AT WALL TYPE E1C
	LOAD-BEARING, NON INSULATED		LOAD-BEARING, E7 UN-INSULATED, E7A INSULATED		LOAD-BEARING, UN-INSULATED
 W4 OCCURS AT: - UV MAINTENANCE BUILDING	INTERIOR CONCRETE WALL - NON RATED - 6" THICK CONCRETE WALL, PER STRUCTURAL	 E6 OCCURS AT: - BLOWER BUILDING (E)	EXTERIOR WOOD CLAD WALL - NON RATED - (E) VERTICAL PAINTED WOOD BOARD AND BATTEN CLADDING - (E) WEATHER BARRIER - (E) 5/8" PLYWOOD SHEATHING, PER STRUCTURAL - (E) 2X4 WOOD STUD FURRING - (E) SINGLE WYTH 8" THICK CONCRETE MASONRY UNIT, FULLY GROUTED	 E1 OCCURS AT: - OPERATION LAB BUILDING	EXTERIOR CMU WALL WITH INTERIOR FURRING - NON RATED - PAINT COATING/SEALER AT ABOVE GRADE EXTERIOR LOCATIONS - SINGLE-WYTH 8" THICK CONCRETE MASONRY UNIT, FULLY GROUTED, WITH WATER-REPELLENT ADMIXTURE - 4" DEPTH OF CONTINUOUS CLOSED-CELL SPRAY INSULATION (CCSPF) APPLIED TO INSIDE FACE OF CMU (2" OF THIS DEPTH WILL BE IN AND AROUND METAL WALL STUDS) - 3-1/2" METAL STUDS AT 16" O.C. - 5/8" GYPSUM WALL BOARD
	LOAD-BEARING, NON INSULATED		LOAD-BEARING, UN-INSULATED		LOAD-BEARING, INSULATED

NO. REVISIONS BY DATE

811 Call 811
two business days
before you dig

BID SET

DATE 11-19-19

SCALE

AS SHOWN

JOB NUMBER 2016-145

SHEET A0.01

PAGE 189 of 310

WILSON
ENGINEERING

WWW.WILSONENGINEERING.COM

6979 REGISTERED ARCHITECT
BRADLEY P. CORNWELL
STATE OF WASHINGTON

DESIGNED BY BPC, PN
DRAWN BY PN
CHECKED BY BPC

CITY OF FERNDAL, WA
WASHINGTON
FERNDAL
FERNDAL WASTEWATER TREATMENT PLANT UPGRADE
ASSEMBLIES, LAB, UV MAINTENANCE,
HEADWORKS, & BLOWER

11

10

9

8

7

6

5

4

3

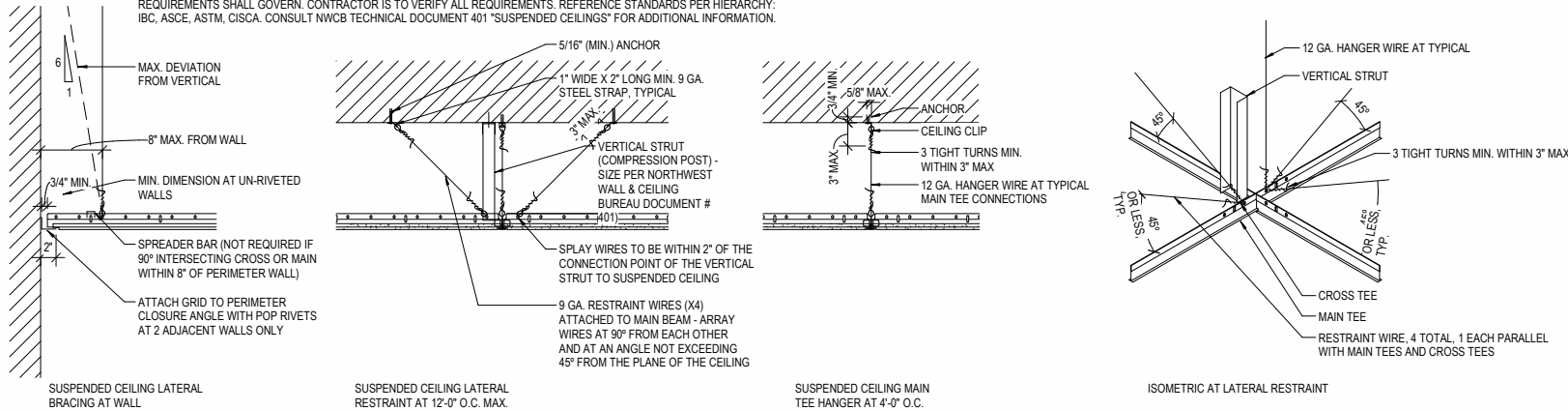
2

1

1
2
3
4
5
6
7
8
9
10
11

PLT SETTINGS: Bluebeam PDF, ANSI_D (22.00...x...34.00...inches), Landscape, 1:1, WF, APWA_UNSCREENED.dwg
Z:\ACTIVE PROJECTS\1656 FERDALE TREATMENT PLANT\1656 DRAWINGS\DWG BACKGROUNDS\2016-11-18 BID SET\DWG TITELBLOCKS\A2.02 TITELBLOCK.dwg - 11/18/2019 1:53 PM - mworkslg104

NOTE:
ALL NEW SUSPENDED CEILINGS ARE TO BE CONSTRUCTED PER IBC VERTICAL AND LATERAL RESTRAINT REQUIREMENTS AND ASCE 7-10 13.5.6.2.2 AND THE APPLICABLE ASTM (ASTM C 635, ASTM C 636, ASTM E 580/E 580M) AND CISCA STANDARDS. WHERE IBC, ASCE, ASTM, AND CISCA STANDARDS AND REQUIREMENTS CONFLICT WITH THE DRAWINGS THE NOTED STANDARDS AND REQUIREMENTS SHALL GOVERN. CONTRACTOR IS TO VERIFY ALL REQUIREMENTS. REFERENCE STANDARDS PER HIERARCHY: IBC, ASCE, ASTM, CISCA. CONSULT NWCB TECHNICAL DOCUMENT 401 "SUSPENDED CEILINGS" FOR ADDITIONAL INFORMATION.

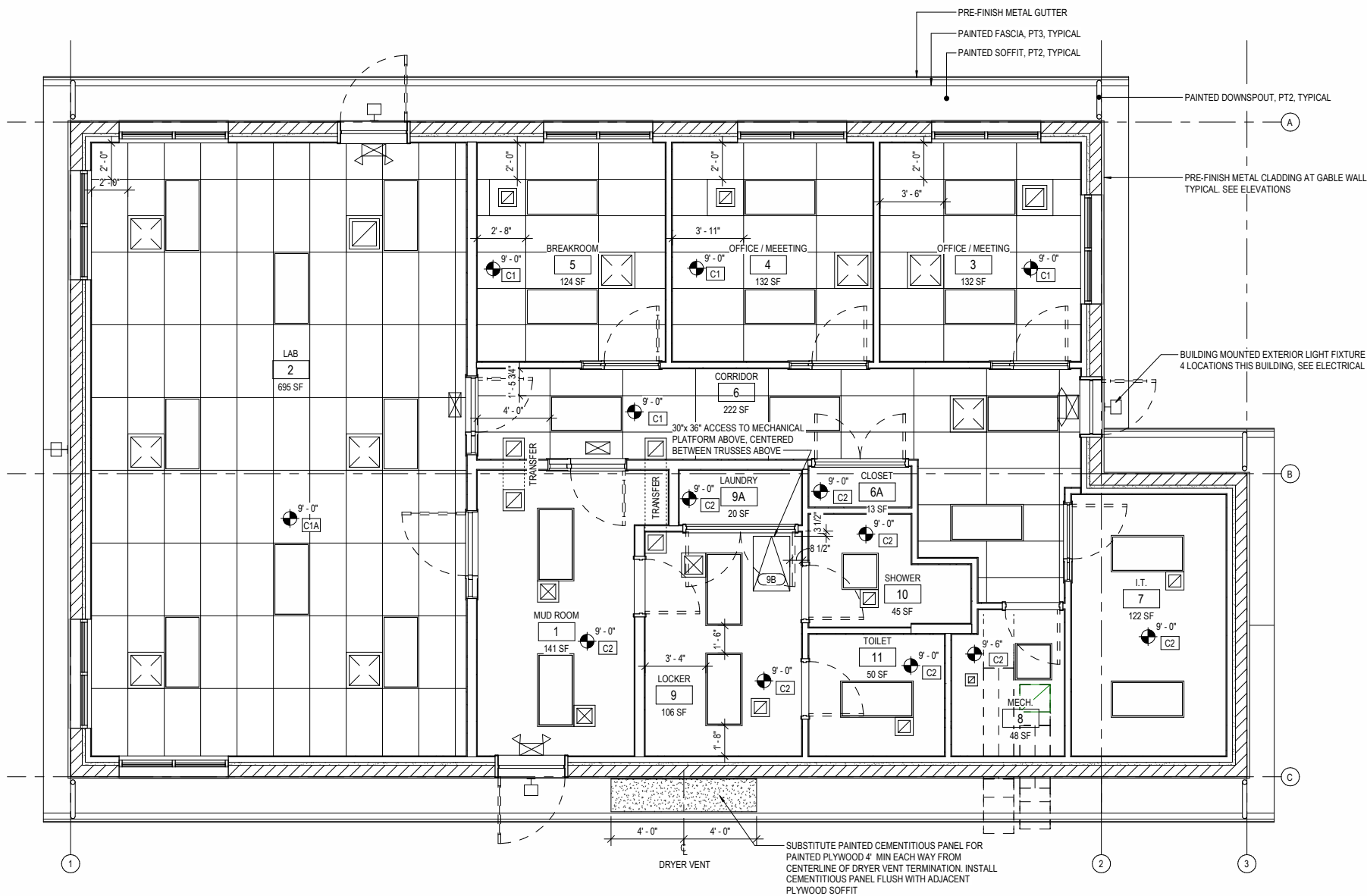


2 Lateral Support of Suspended Ceiling



RCP Legend

- HVAC RETURN SIZE VARIES
- HVAC SUPPLY SIZE VARIES
- EXIT SIGN, ILLUMINATED
- EXIT SIGN, ILLUMINATED WITH EMERGENCY LIGHTS
- WALL MOUNTED LIGHT FIXTURE
- 2 x 4 RECESSED LIGHT FIXTURE
- 2 x 2 RECESSED LIGHT FIXTURE



1 Operations Lab Reflected Ceiling Plan



SHEET NOTES

- COORDINATE DEMOLITION AND PROPOSED WORK WITH HAZARDOUS MATERIALS, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS. NOTIFY OWNER/ENGINEER OF ANY DISCREPANCIES AND / OR UNKNOWN EXISTING CONDITIONS PRIOR TO WORK.
- PROVIDE STRUCTURAL BACKING FOR ALL WALL MOUNTED ITEMS AT NEW WALLS. ALIGN WORK WITH STRUCTURE BEYOND AT EXISTING WALLS. PROVIDE ADEQUATE ANCHORAGE. NOTIFY ARCHITECT OF ANY NON-COMPLIANT CONDITIONS.
- PATCH, REPAIR, AND PAINT AT THE LOCATION OF ALL NEW WALL MOUNTED ITEMS.
- FIELD LOCATE EXACT LOCATIONS OF ALL CORE DRILLING, IN CONSULTATION WITH THE OWNER/ENGINEER.
- LATERAL SUPPORT OF NEW SUSPENDED ACOUSTICAL CEILINGS IN OPERATIONS LAB BUILDING SEE DRAWING 2/A202.
- PATCH AND REPAIR APPLIES TO ALL AREAS AFFECTED BY THE PROJECT INCLUDING ELECTRICAL AND MECHANICAL WORK. THIS INCLUDES AREAS NOT INDICATED ON THE ARCHITECTURAL DRAWINGS.
- PROVIDE FIRE CAULKING AND FIRE STOPPING AT PENETRATIONS IN FIRE RESISTANCE RATED ASSEMBLIES. MAINTAIN INTEGRITY OF EXISTING FIRE RESISTANCE RATED ASSEMBLIES.
- DIMENSIONS SHOWN ARE FROM FACE OF STRUCTURE, TYPICAL, UNLESS NOTED OTHERWISE. SEE ASSEMBLIES FOR ADDITIONAL INFORMATION.
- SEE CIVIL DRAWINGS FOR ALL EXTERIOR PAVING, WALKS, LANDSCAPING, CURBS, APRONS, AND GRADING.
- SEE SPECIFICATIONS FOR FOIO ITEMS, TYPICAL.

RMC ARCHITECTS

811 Call 811
two business days
before you dig

BID SET

WILSON
ENGINEERING

WWW.WILSONENGINEERING.COM

6979 REGISTERED ARCHITECT
Bradley P. Cornwell
BRADLEY P. CORNWELL
STATE OF WASHINGTON

DESIGNED BY BPC, PN
DRAWN BY PN
CHECKED BY BPC

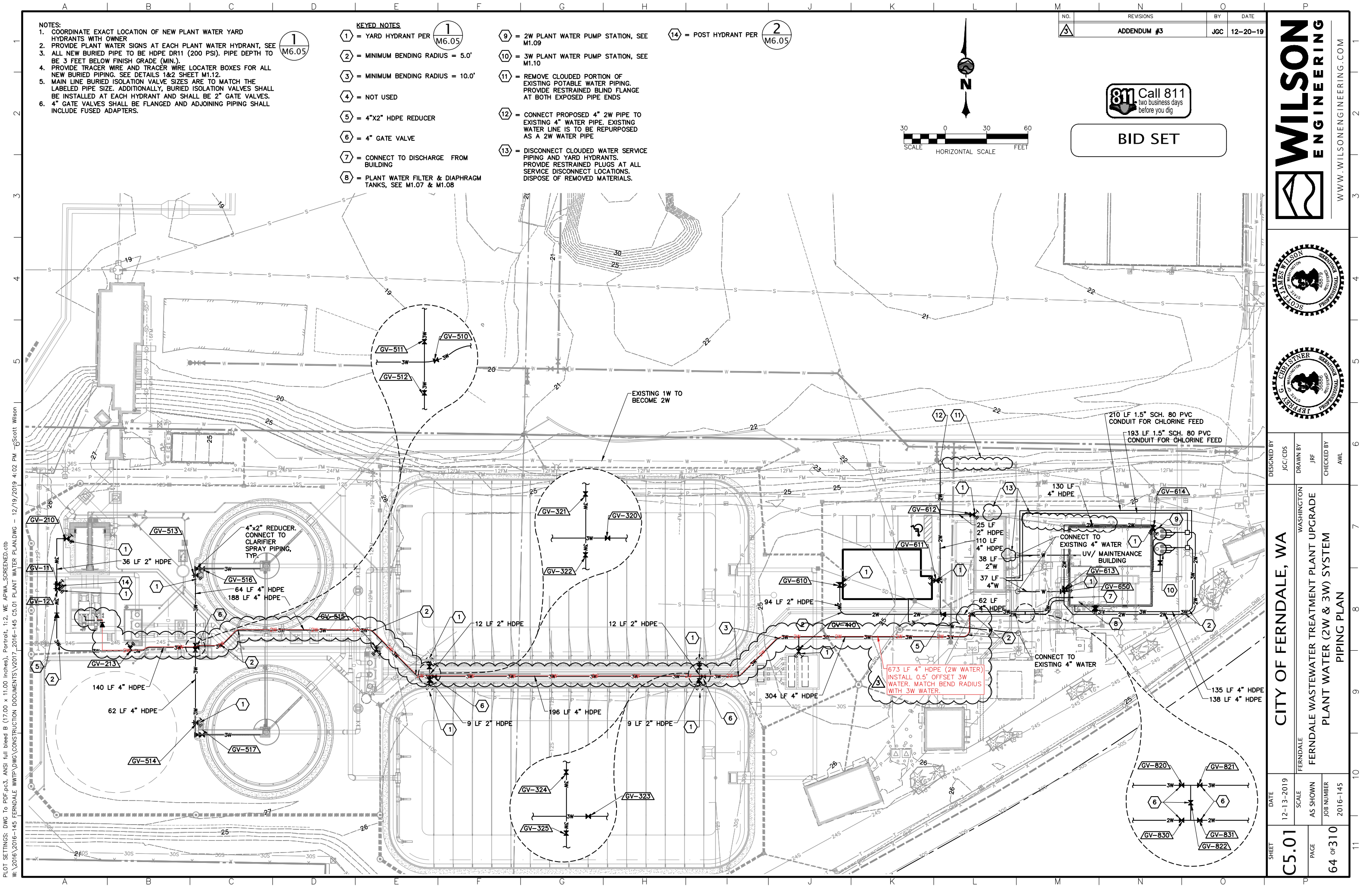
CITY OF FERDALE, WA

WASHINGTON
FERDALE
FERDALE WASTEWATER TREATMENT PLANT UPGRADE
OPERATIONS LAB REFLECTED CEILING PLAN

DATE 11-19-19
SCALE AS SHOWN
JOB NUMBER 2016-145

SHEET A2.02

PAGE 195 of 310



- NOTES:
- COORDINATE EXACT LOCATION OF NEW PLANT WATER YARD HYDRANTS WITH OWNER
 - PROVIDE PLANT WATER SIGNS AT EACH PLANT WATER HYDRANT. SEE
 - ALL NEW BURIED PIPE TO BE HDPE DR11 (200 PSI). PIPE DEPTH TO BE 3 FEET BELOW FINISH GRADE (MIN.)
 - PROVIDE TRACER WIRE AND TRACER WIRE LOCATOR BOXES FOR ALL NEW BURIED PIPING. SEE DETAILS 1&2 SHEET M1.12.
 - MAIN LINE BURIED ISOLATION VALVE SIZES ARE TO MATCH THE LABELED PIPE SIZE. ADDITIONALLY, BURIED ISOLATION VALVES SHALL BE INSTALLED AT EACH HYDRANT AND SHALL BE 2" GATE VALVES.
 - 4" GATE VALVES SHALL BE FLANGED AND ADJOINING PIPING SHALL INCLUDE FUSED ADAPTERS.

- KEYED NOTES
- 1

M6.05

1 = YARD HYDRANT PER
- 2

2 = MINIMUM BENDING RADIUS = 5.0'
- 3

3 = MINIMUM BENDING RADIUS = 10.0'
- 4

4 = NOT USED
- 5

5 = 4"x2" HDPE REDUCER
- 6

6 = 4" GATE VALVE
- 7

7 = CONNECT TO DISCHARGE FROM BUILDING
- 8

8 = PLANT WATER FILTER & DIAPHRAGM TANKS, SEE M1.07 & M1.08
- 9

9 = 2W PLANT WATER PUMP STATION, SEE M1.09
- 10

10 = 3W PLANT WATER PUMP STATION, SEE M1.10
- 11

11 = REMOVE CLOUDED PORTION OF EXISTING POTABLE WATER PIPING. PROVIDE RESTRAINED BLIND FLANGE AT BOTH EXPOSED PIPE ENDS
- 12

12 = CONNECT PROPOSED 4" 2W PIPE TO EXISTING 4" WATER PIPE. EXISTING WATER LINE IS TO BE REPURPOSED AS A 2W WATER PIPE
- 13

13 = DISCONNECT CLOUDED WATER SERVICE PIPING AND YARD HYDRANTS. PROVIDE RESTRAINED PLUGS AT ALL SERVICE DISCONNECT LOCATIONS. DISPOSE OF REMOVED MATERIALS.
- 14

2

14 = POST HYDRANT PER M6.05

NO.	REVISIONS	BY	DATE
3	ADDENDUM #3	JGC	12-20-19

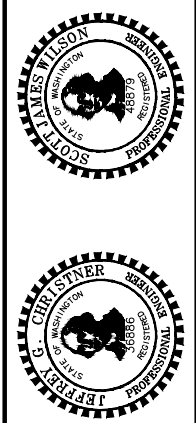
811 Call 811
two business days
before you dig

BID SET

WILSON

ENGINEERING

WWW.WILSONENGINEERING.COM

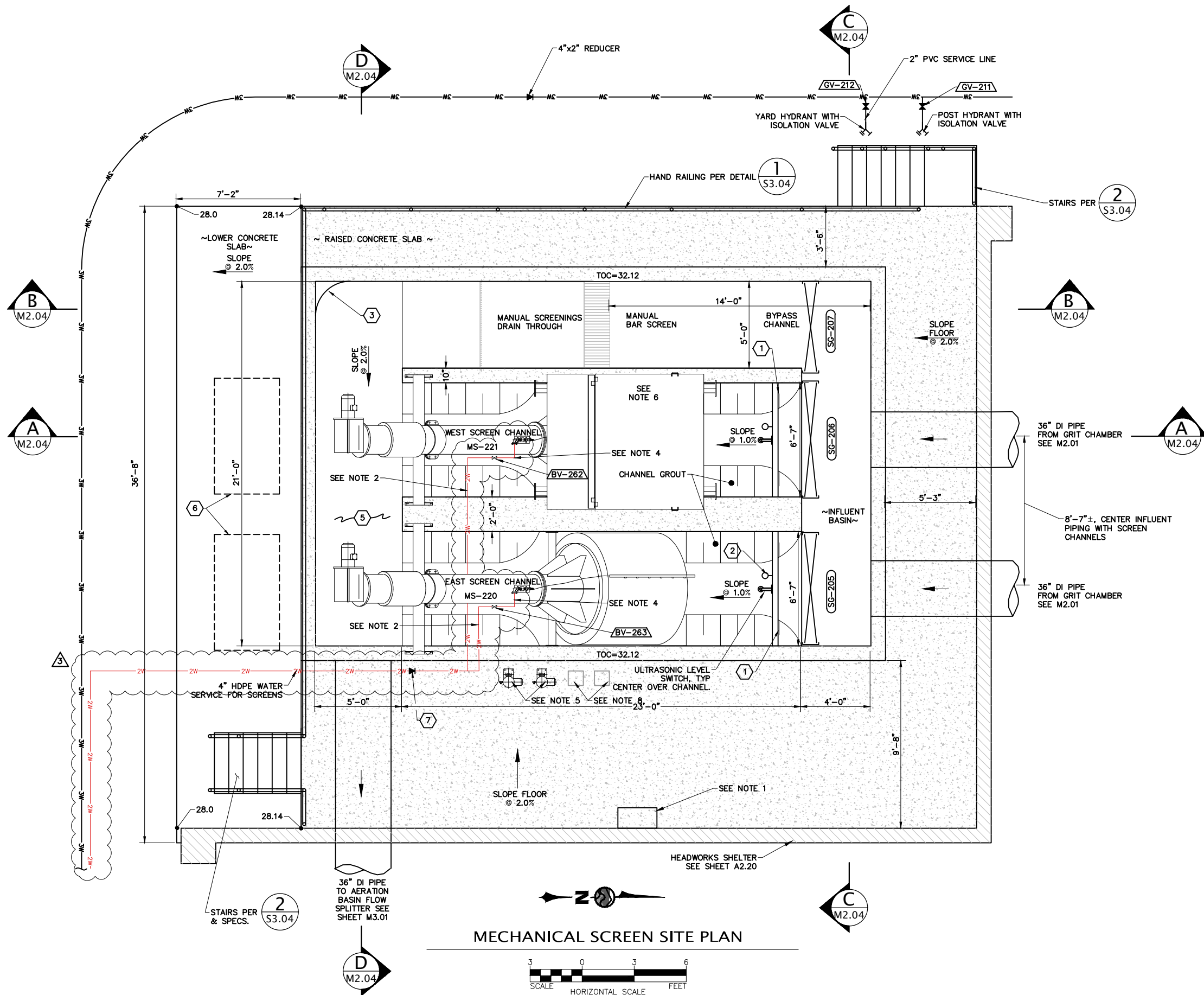


DESIGNED BY JCC/CDS
DRAWN BY JRF
CHECKED BY AVL

CITY OF FERNDALE, WA
FERNDALE
FERNDALE WASTEWATER TREATMENT PLANT UPGRADE
PLANT WATER (2W & 3W) SYSTEM
PIPING PLAN

DATE 12-13-2019
SCALE AS SHOWN
JOB NUMBER 2016-145
SHEET C5.01
PAGE 64 OF 310

PLOT SETTINGS: DWG To Pdf.pc3, ANSI full bleed B (17.00 x 11.00 inches), Portrait, 1:2, WE APWA_SCREENED.ctb
W:\2016\2016-145 FERNDALE WTP\DWG\CONSTRUCTION DOCUMENTS\2017_2016-145 CS-01 PLANT WATER PLAN.DWG - 12/19/2019 4:02 PM - Scott Wilson



- NOTES:**
1. INSTALL H2S SENSOR IN SHELTER. MOUNT H2S SENSOR NEAR CONTROL PANELS. COORDINATE LOCATION WITH OWNER.
 2. 1-1/2 INCH STAINLESS STEEL PIPE (SCH. 40) WITH EXPOSED 1-1/2 INCH BALL VALVE FOR ISOLATION OF MECHANICAL SCREEN SUPPLY. INSULATE AND HEAT TRACE EXPOSED PIPE AND VALVES. SUPPORT PIPE AS NEEDED FOR ELEVATION WITH STAINLESS STEEL HARDWARE.
 3. ALL HARDWARE & FASTENERS AT HEADWORKS SHALL BE 316 STAINLESS STEEL.
 4. PROVIDE 2-FT OF 1-1/2 INCH FLEXIBLE HOSE AT CONNECTION TO MECHANICAL SCREEN. HOSE SHALL BE UNISOURE SERIES 2612 OR EQUAL. PROVIDE STAINLESS STEEL FITTINGS AS NECESSARY FOR CONNECTIONS.
 5. AUTOMATIC GREASE PUMP PER MECHANICAL SCREEN SPEC. MOUNT TO FLOOR PER MANUF. RECOMMENDATIONS WITH STAINLESS STEEL HARDWARE AND TUBING. COORDINATE LOCATION WITH OWNER.
 6. MECHANICAL SCREEN DRUM COVER PER MECH. SCREEN SPECS. DRUM COVER NOT SHOWN ON EAST SCREEN FOR CLARITY.
 7. ALL INTERIOR CONCRETE SURFACES TO BE PROTECTED WITH COATING. SEE CONCRETE PROTECTIVE COATING SPECIFICATION.
 8. MECHANICAL SCREEN SLURRY PUMPS. MOUNT TO CONCRETE SLAB PER MANUFACTURERS RECOMMENDATIONS AND PROVIDE ALL CONNECTIONS TO MECHANICAL SCREENS. COORDINATE LOCATION WITH OWNER.

- ### KEYED NOTES
- ① = SS UNISTRUT SUPPORT. MOUNT TO SIDEWALL WITH STAINLESS STEEL HARDWARE
 - ② = HIGH ALARM FLOAT, TYP
 - ③ = GROUT CHANNEL CORNER WITH 2" RADIUS FILLET TOP TO BOTTOM
 - ④ = EXPOSED 1.5" ISOLATION VALVE. INSULATE AND HEAT TRACE EXPOSED PIPE AND VALVES.
 - ⑤ = ALUMINUM GRATING OVER ALL CHANNELS. TYP. ALL GRATING SHALL BE REMOVABLE. CUT OPENINGS FOR EQUIPMENT PENETRATIONS
 - ⑥ = 3 YARD DUMPSTER, TYP.
 - ⑦ = ABOVE GROUND 4" HDPE TO 1.5" SST REDUCER. PROVIDE FITTINGS AS NECESSARY.

811 Call 811
two business days
before you dig

BID SET