Change Order (CO) No. 002

Owner: City of Snoqualmie
Project: WRF Phase 3 Improvements
Project No: SNQ 22-0040
Engineer: **RH2 Engineering, Inc.**
Contractor: Prospect Construction, Inc.

You are directed to make the following changes in the contract documents.
Description: Provide the changes outlined in documents PCO #31.

Document(s) Support Changes: PCO #31.

Original Contract Price (w/o sales tax):	**Original Contract Time:**
$10,173,950.00	460 working days
Previously Approved Change Order(s):	**Net Change Approved from Previous Change Orders:**
$99,519.50	0 working days
Total Price of Previous Change Orders:	**Contract Time including Previous Change Orders:**
$99,519.50	460 working days
Total Price of Change Order(s) Approved this Form:	**Net Increase (Decrease) of This Change Order:**
$59,998.00	0 working days
Contract Price with all Approved Change Orders:	**Contract Time with all Approved Change Orders**
$10,333,467.50	460 working days

RECOMMENDED:

By _____
Engineer

APPROVED:

By _____
Contractor

APPROVED:

By _____
Owner

No.	Proposed Change	Cost
1	Digester 1 SST Air Gap Pipe	$ 28,611
2	Digester 2 SST Air Gap Pipe	$ 20,705
3	Digester 2 Temporary Pumping	$ 7,842
4	Basin 1 Bubble Mixer	$ 2,840
	Change Order 2 Subtotal	$ 59,998

1/27/2025
RH2 Engineering
22722 29th Drive, Suite 210
Bothell, WA 98021

Attn: Marine Behr, PE

Re: Snoqualmie WRF Phase 3
      PCO 31 - RFI N - RFI N Digester Aeration Piping Mods Pricing
      PCO 31 – additional Work Request T&M

Dear Ms. Behr,

Please find attached costs associated with PCO 031.

Per 00 07 00-5.1.A.2.a; RH2 RFI N was sent on 10/22/2024 and required new routing for air piping in digesters 1 & 2

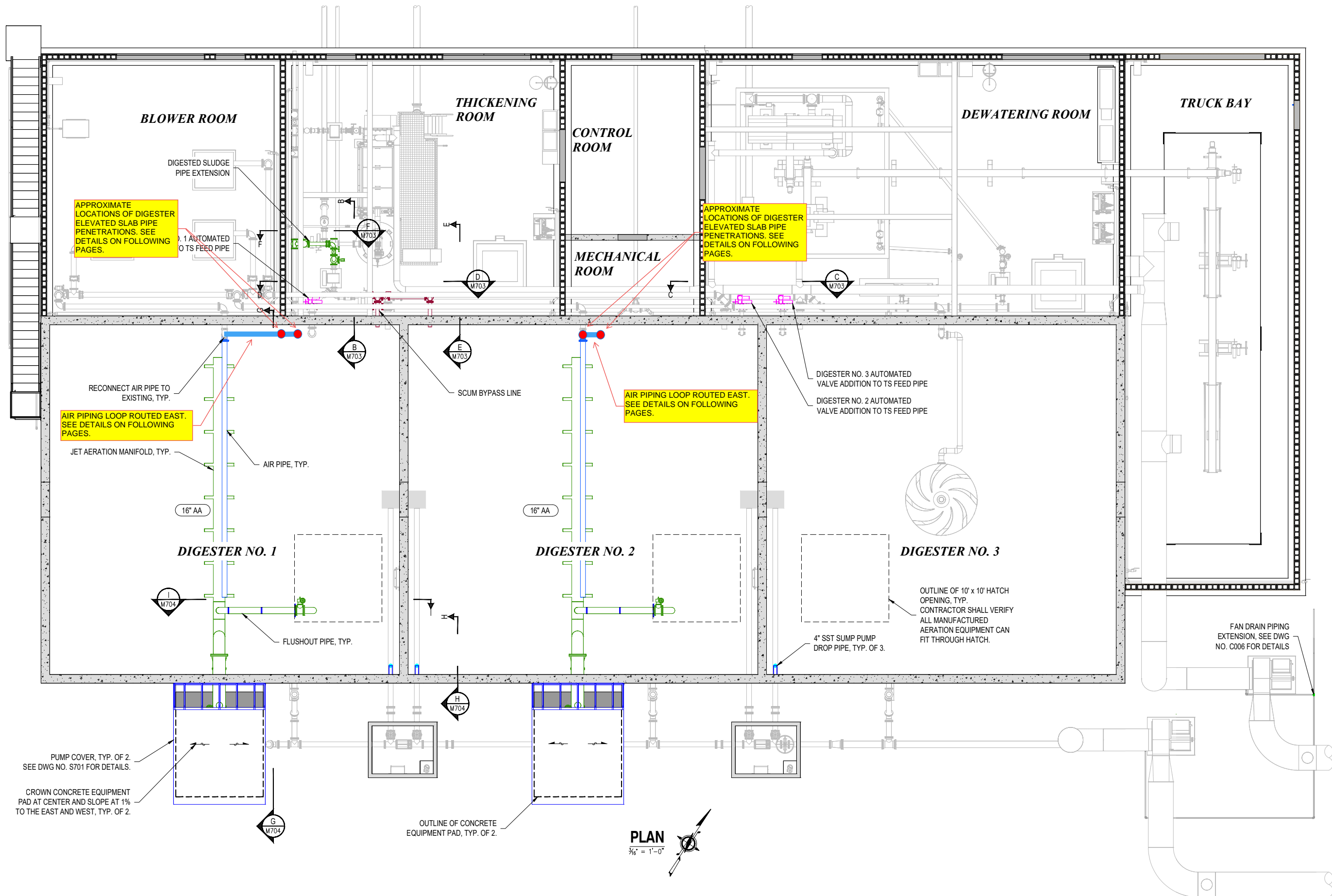Per 00 07 00-5.1.A.2.c; PCI anticipates No Time impact

Per 00 07 00-5.1.A.2.d; The request adds additional work which is not required by the plans/specs.

Per 00 07 00-5.1.B; and per 6.2.E.1&3 The total cost for this change is $59,998.

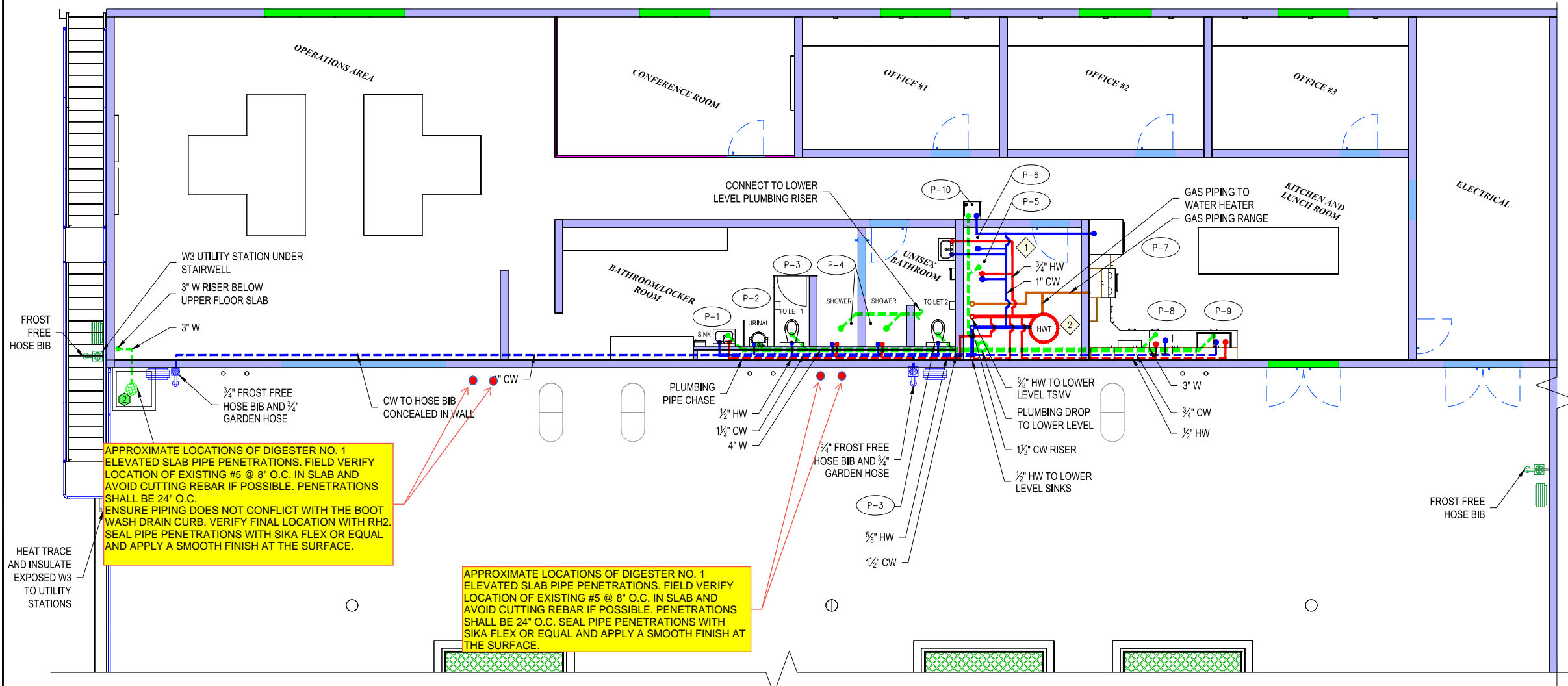Please find associated backup attached as required per 00 07 00-6.2.E.2.

Sincerely,

Kevin Yoakum, PE
PROSPECT CONSTRUCTION, INC.

BLOWER ROOM

THICKENING ROOM

CONTROL ROOM

MECHANICAL ROOM

DEWATERING ROOM

TRUCK BAY

DIGESTED SLUDGE PIPE EXTENSION

NO. 1 AUTOMATED TO TS FEED PIPE

DIGESTER NO. 3 AUTOMATED VALVE ADDITION TO TS FEED PIPE

DIGESTER NO. 2 AUTOMATED VALVE ADDITION TO TS FEED PIPE

RECONNECT AIR PIPE TO EXISTING, TYP.

SCUM BYPASS LINE

AIR PIPING LOOP ROUTED EAST. SEE DETAILS ON FOLLOWING PAGES.

AIR PIPING LOOP ROUTED EAST. SEE DETAILS ON FOLLOWING PAGES.

JET AERATION MANIFOLD, TYP.

AIR PIPE, TYP.

16" AA

16" AA

DIGESTER NO. 1

DIGESTER NO. 2

DIGESTER NO. 3

OUTLINE OF 10' x 10' HATCH OPENING, TYP. CONTRACTOR SHALL VERIFY ALL MANUFACTURED AERATION EQUIPMENT CAN FIT THROUGH HATCH.

FLUSHOUT PIPE, TYP.

4" SST SUMP PUMP DROP PIPE, TYP. OF 3.

FAN DRAIN PIPING EXTENSION, SEE DWG NO. C006 FOR DETAILS

PUMP COVER, TYP. OF 2. SEE DWG NO. S701 FOR DETAILS.

CROWN CONCRETE EQUIPMENT PAD AT CENTER AND SLOPE AT 1% TO THE EAST AND WEST, TYP. OF 2.

OUTLINE OF CONCRETE EQUIPMENT PAD, TYP. OF 2.

PLAN
3/16" = 1'-0"

RH2

SIGNED: 04/19/2023

CITY OF SNOQUALMIE
WATER RECLAMATION FACILITY
PHASE 3 IMPROVEMENTS

DIGESTER MECHANICAL RETROFIT PLAN

REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW
⚠	06/27/2023	CONFORMED FOR CONSTRUCTION	SJW	BMS

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.:	SHEET NO.:	
M702	**70**	133

SOLIDS HANDLING BUILDING SECOND FLOOR PLUMBING PLAN
3/16" = 1'-0"

OPERATIONS AREA

CONFERENCE ROOM

OFFICE #1

OFFICE #2

OFFICE #3

ELECTRICAL

KITCHEN AND LUNCH ROOM

BATHROOM/LOCKER ROOM

UNISEX BATHROOM

CONNECT TO LOWER LEVEL PLUMBING RISER

GAS PIPING TO WATER HEATER
GAS PIPING RANGE

P-10
P-6
P-5
P-7
P-8
P-9
P-3
P-4
P-2
P-1

3/4" HW
1" CW
HWT

SINK
URINAL
TOILET 1
SHOWER
SHOWER
TOILET 2

W3 UTILITY STATION UNDER STAIRWELL
3" W RISER BELOW UPPER FLOOR SLAB
3" W

FROST FREE HOSE BIB

3/4" FROST FREE HOSE BIB AND 3/4" GARDEN HOSE

CW TO HOSE BIB CONCEALED IN WALL

4" CW

PLUMBING PIPE CHASE

1/2" HW
1 1/2" CW
4" W

3/4" FROST FREE HOSE BIB AND 3/4" GARDEN HOSE

P-3
5/8" HW
1 1/2" CW

5/8" HW TO LOWER LEVEL TSMV
PLUMBING DROP TO LOWER LEVEL
1 1/2" CW RISER
1/2" HW TO LOWER LEVEL SINKS

3" W
3/4" CW
1/2" HW

FROST FREE HOSE BIB

HEAT TRACE AND INSULATE EXPOSED W3 TO UTILITY STATIONS

APPROXIMATE LOCATIONS OF DIGESTER NO. 1 ELEVATED SLAB PIPE PENETRATIONS. FIELD VERIFY LOCATION OF EXISTING #5 @ 8" O.C. IN SLAB AND AVOID CUTTING REBAR IF POSSIBLE. PENETRATIONS SHALL BE 24" O.C. ENSURE PIPING DOES NOT CONFLICT WITH THE BOOT WASH DRAIN CURB. VERIFY FINAL LOCATION WITH RH2. SEAL PIPE PENETRATIONS WITH SIKA FLEX OR EQUAL AND APPLY A SMOOTH FINISH AT THE SURFACE.

APPROXIMATE LOCATIONS OF DIGESTER NO. 1 ELEVATED SLAB PIPE PENETRATIONS. FIELD VERIFY LOCATION OF EXISTING #5 @ 8" O.C. IN SLAB AND AVOID CUTTING REBAR IF POSSIBLE. PENETRATIONS SHALL BE 24" O.C. SEAL PIPE PENETRATIONS WITH SIKA FLEX OR EQUAL AND APPLY A SMOOTH FINISH AT THE SURFACE.

FIXTURE SCHEDULE

P-#	FIXTURE	COLD WATER	HOT WATER	DRAIN
1	LAVATORY	1/2"	1/2"	1-1/2"
2	URINAL	3/4"	—	2"
3	TOILET	1-1/2"	—	3"
4	SHOWER	1/2"	1/2"	2"
5	CLOTHES WASHER	3/4"	3/4"	2"
6	CLOTHES DRYER	1/2"	—	—
7	REFRIGERATOR	1/4"	—	—
8	DISH WASHER	1/2"	1/2"	1-1/2"
9	KITCHEN SINK	1/2"	1/2"	1-1/2"
10	DRINKING FOUNTAIN	1/2"	—	1-1/2"

NOTES

1. THIS DRAWING IS SCHEMATIC IN NATURE IN ORDER TO SHOW THE GENERAL ROUTING OF PLUMBING PIPING. ALL PLUMBING PIPE SHALL BE REROUTED AS NECESSARY TO AVOID CONFLICT WITH MECHANICAL PIPING, EQUIPMENT, HVAC ITEMS, ETC. ALL PLUMBING INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE UPC. ON THE UPPER LEVEL OF THE SOLIDS HANDLING FACILITY, ALL PLUMBING PIPES AND ITEMS SHALL BE ROUTED CONCEALED WITHIN THE NEAREST WALL TO LOCATIONS SHOWN HERE EXCEPT WITHIN THE MECHANICAL ROOM. THE CONTRACTOR SHALL PROVIDE FITTINGS AS NECESSARY TO TRANSITION AND CONNECT TO EQUIPMENT AND PLUMBING ITEMS. ROUTE ALL PIPES NEATLY PARALLEL OR PERPENDICULAR TO WALLS, CEILING, AND FLOOR. SEE DRAWING M001 FOR ADDITIONAL INFORMATION.

2. PLUMBING PIPE SUPPORTS TO BE IN ACCORDANCE WITH M003 AND APPLICABLE CODE REQUIREMENTS.

3. GAS PIPING SYSTEM SHALL BE CONTRACTOR-DESIGNED.

4. VENT PIPES SHALL BE LOCATED PER THE UPC AND ROUTED EXPOSED IN THE LOWER LEVEL AND CONCEALED IN WALLS WITHIN THE UPPER LEVEL.

5. PLUMBING PIPE PENETRATIONS 3" AND LARGER THROUGH SLAB PER 1546/M003.

6. PLUMBING PIPE PENETRATIONS SMALLER THAN 3" THROUGH SLAB PER 1542/M003.

1 WASHER AND DRYER, INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER APPLICABLE CODES. PROVIDE WALL VENT WITH SCREEN AND CAP, LOCATE 12" MIN ABOVE FINISH GRADE.

2 GAS-FIRED HOT WATER TANK WITH EXPANSION TANK. INSTALL HOT WATER TANK ON INCOMPRESSIBLE, INSULATED SURFACE WITH A MINIMUM THERMAL RESISTANCE OF R-10. INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PER APPLICABLE CODES. PROVIDE ISOLATION, FLOOR DRAIN, DRAIN PAN AND PRESSURE RELIEF VALVES AND ROUTE TO FLOOR DRAINS AS APPROPRIATE, SEE POTABLE WATER SCHEMATIC FOR ADDITIONAL INFO. SEE HVAC SHEET FOR VENTILATION PIPING SCHEMATIC.
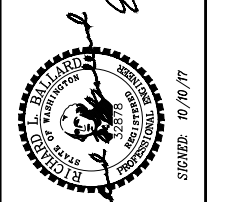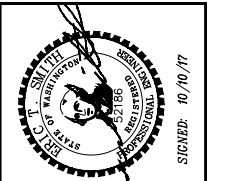
CITY OF SNOQUALMIE
WRF PHASE 2 IMPROVEMENTS

SOLIDS HANDLING AND DIGESTER PLUMBING AND VENTILATION PLAN 2

REVISIONS

NO.	DATE	DESCRIPTION	BY	REVIEW
1	11/16/17	CONFORMED FOR CONSTRUCTION	MCB	MRJF

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: M703
SHEET NO.: 76
158

AIR PIPE LOOP SCHEMATICS

APPROXIMATE LOCATION OF OUTLET ON WALL. VERIFY AIR PIPE DOES NOT CONFLICT WITH OUTLET OR WITH PROCESS PIPING INSIDE DIGESTER NO. 1.
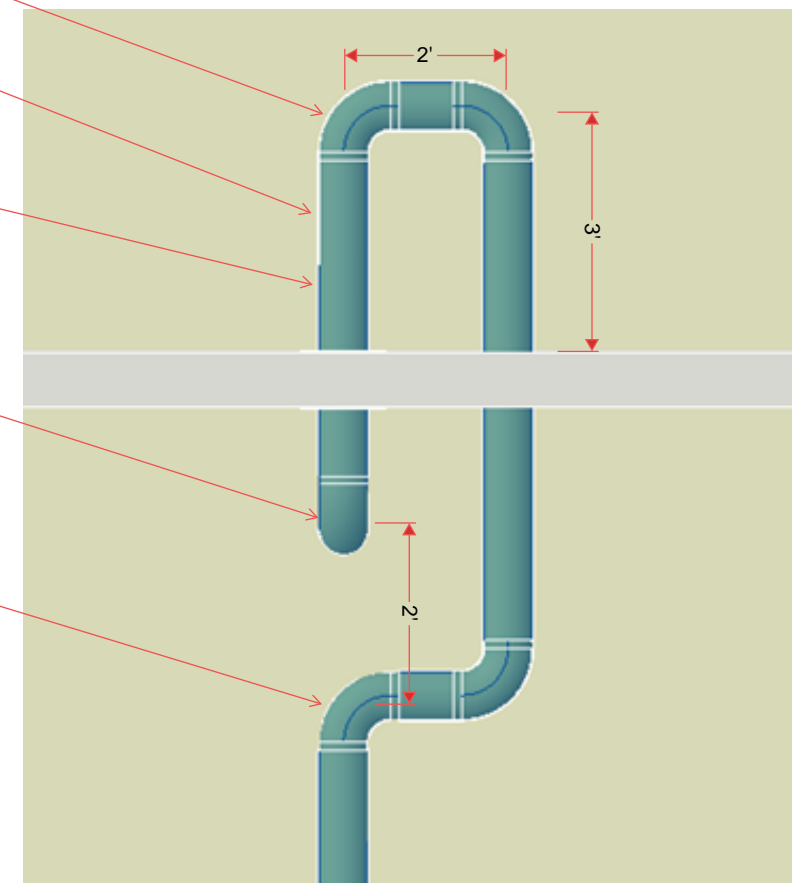
6" SST 90° BEND, TYP. OF 4.

NO PIPE SUPPORTS SHALL BE ATTACHED TO THE METAL WALLS OF THE SOLIDS HANDLING BUILDING ABOVE THE ELEVATED SLAB.

NO PIPE SUPPORTS SHALL BE ATTACHED TO THE METAL WALLS OF THE SOLIDS HANDLING BUILDING ABOVE THE ELEVATED SLAB.

WELD ALL NEW PIPES AND FITTINGS AND USE SAME MATERIAL AS EXISTING STEEL PIPE.

REMOVE EXTENTS OF EXISTING AIR PIPE NECESSARY TO ADD ADDITIONAL PIPING AND RECONNECT TO THE DOWNSTREAM AIR PIPE TOWARDS THE JET AERATION SYSTEM.

REUSE THE 90° BEND AT THE TOP OF THE DIGESTER AND ROTATE 90° AS SHOWN.

REMOVE EXTENTS OF EXISTING AIR PIPE NECESSARY TO ADD ADDITIONAL PIPING AND RECONNECT TO THE DOWNSTREAM AIR PIPE TOWARDS THE JET AERATION SYSTEM.

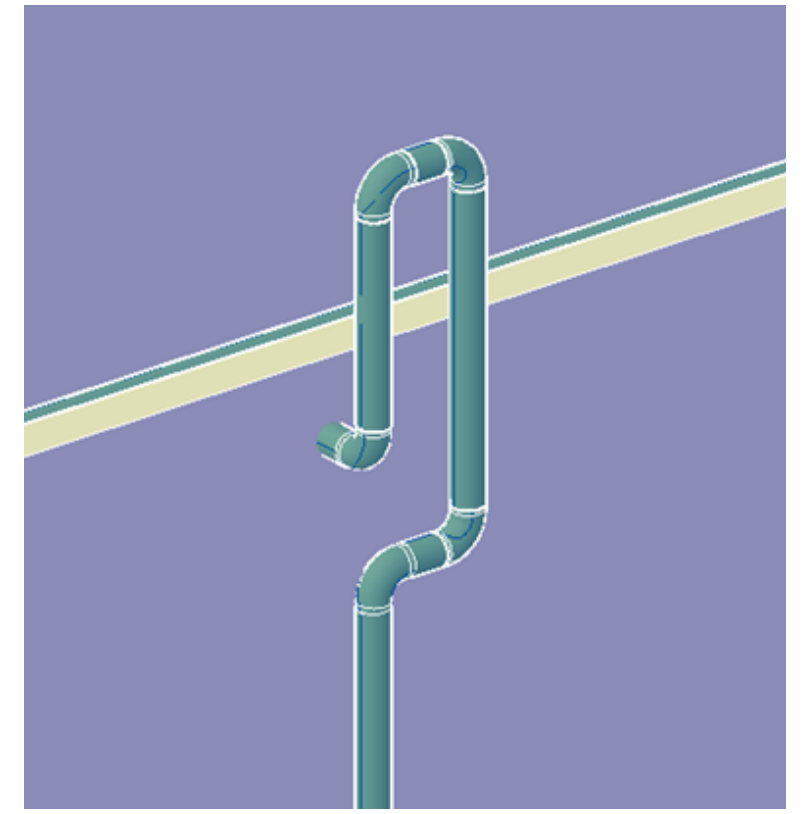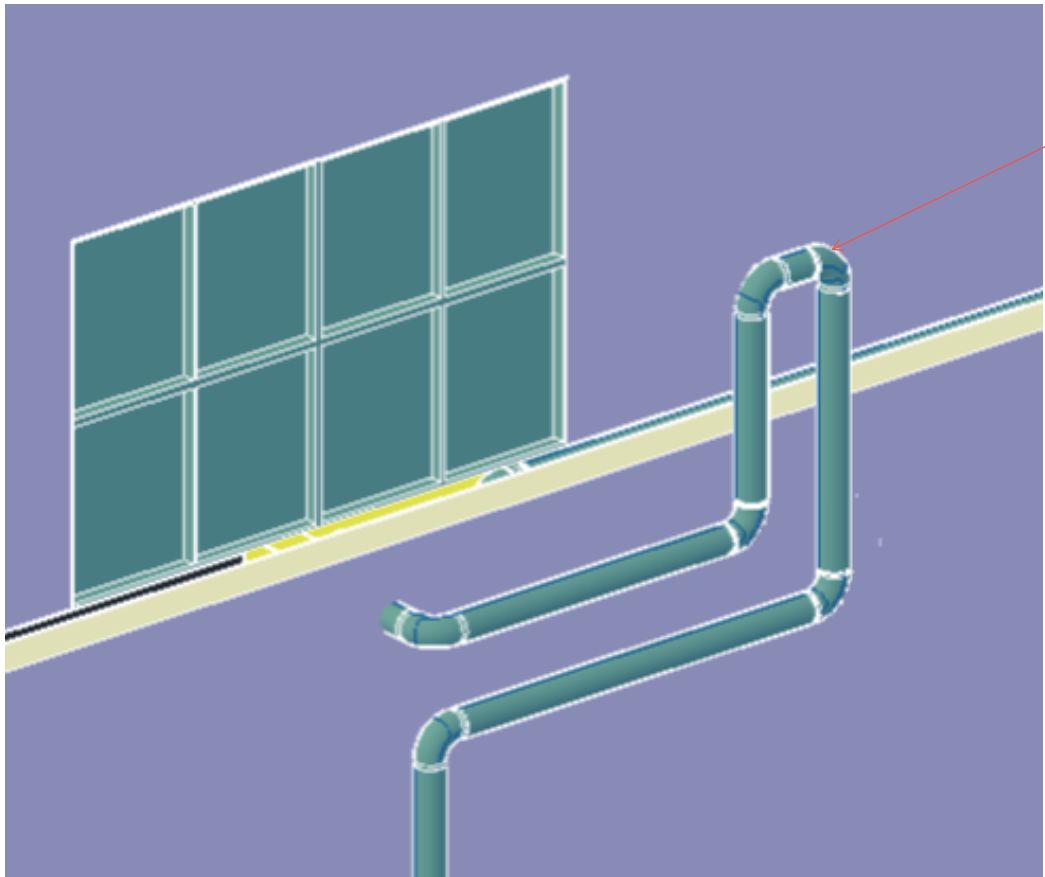REUSE THE 90° BEND AT THE TOP OF THE DIGESTER AND ROTATE 180° AS SHOWN.

WELD ALL NEW PIPES AND FITTINGS AND USE SAME MATERIAL AS EXISTING STEEL PIPE.

INSTALL PIPE SUPPORTS AS NEEDED TO PROVIDE A FULLY FUNCTIONAL, RIGID AND NON-SAGGING SYSTEM. PIPE SUPPORTS SHALL BE EPOXIED AND ANCHORED TO THE INTERIOR DIGESTER WALL.

INSTALL PIPE SUPPORTS AS NEEDED TO PROVIDE A FULLY FUNCTIONAL, RIGID AND NON-SAGGING SYSTEM. PIPE SUPPORTS SHALL BE EPOXIED AND ANCHORED TO THE INTERIOR DIGESTER WALL.

6" SST 90° BEND, TYP. OF 5.

DIGESTER NO. 1 SLAB PENETRATION LOCATIONS

DIGESTER NO. 2 SLAB PENETRATION LOCATIONS

DIGESTER NO. 1 SLAB PENETRATION LOCATIONS

DIGESTER NO. 2 SLAB PENETRATION LOCATIONS