



File No. EA2023-119

CITY OF RICHLAND
Determination of Non-Significance

Description of Proposal: The project involves installing a new in-kind boiler within the existing Richland Wastewater Treatment anaerobic digester building and the installation of a new waste gas burner flare. There will be piping from the gas handling room to the location of the new flare. The existing waste gas burner and conduit, above ground compressed gas storage tankage and piping, and various pipe and appurtenances will be removed. .

Proponent: Marc La Vanway
625 Swift Blvd MS#26
Richland, WA 99352

Location of Proposal: The location is at 555 Lacy Road, Richland Washington , at the Wastewater Treatment Plant. Work will take place in and around the existing anaerobic digester building.

Lead Agency: City of Richland

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

() There is no comment for the DNS.

(X) This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen days from the date of issuance.

() This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS.

Responsible Official: Mike Stevens

Position/Title: Planning Manager

Address: 625 Swift Blvd., MS #35, Richland, WA 99352

Date: June 19, 2023

Comments Due: July 5, 2023

Signature 

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use “not applicable” or “does not apply” only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal**, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the [Supplemental Sheet for Nonproject Actions \(Part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in “Part B: Environmental Elements” that do not contribute meaningfully to the analysis of the proposal.

A. Background [Find help answering background questions](#)

1. Name of proposed project, if applicable:

WWTP Digester Boiler & Flare Replacement

2. Name of applicant:

Marc La Vanway

3. Address and phone number of applicant and contact person:

625 Swift Blvd MS#26

Richland WA, 99352

4. Date checklist prepared:

May 15, 2023

5. Agency requesting checklist:

Benton County Clear Air Agency

6. Proposed timing or schedule (including phasing, if applicable):

Construction is expected to occur in summer 2024

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

A new in-kind boiler will be installed within the existing Richland Wastewater Treatment Facility digester building and a new above ground waste gas burner will be installed.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No

10. List any government approvals or permits that will be needed for your proposal, if known.

Benton County Clean Air Agency requires a Notice of Construction (NOC) and application for approval for installation/modification of an pollution source.

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

The project involves installing a new in-kind boiler within the existing Richland Wastewater Treatment anaerobic digester building and the installation of a new waste gas burner flare.

There will be piping from the from the gas handling room to the location of the new flare.

The existing waste gas burner and conduit, above ground compressed gas storage tankage and piping, and various pipe and appurtenances will be removed.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The location is at 555 Lacy Road, Richland, WA 99352 at the City of Richland Wastewater Treatment Plant. The work will take place in and around the existing anaerobic digester building.

B. Environmental Elements

1. Earth [Find help answering earth questions](#)

a. General description of the site:

The existing site is a municipal wastewater treatment plant.

Circle or highlight one: Flat, rolling, hilly, steep slopes, mountainous, other:

b. What is the steepest slope on the site (approximate percent slope)?

2%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

None known

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

No filling will take place. Excavation of existing will be replaced to match existing.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

No

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Approximately 5,000 square feet of new impervious surfaces (asphalt) will be covered after project is completed.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

Temporary BMPs will be implemented to stabilize the site during construction.

2. Air [Find help answering air questions](#)

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Vehicle and equipment use.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any.

Measures to reduce or control emissions will be the responsibility of the contractor.

3. Water [Find help answering water questions](#)

a. Surface Water: [Find help answering surface water questions](#)

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. Yakima River.

2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

No.

3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None

4. Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.

No.

5. Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

6. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No.

b. Ground Water: [Find help answering ground water questions](#)

- 1. Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.**

No.

- 2. Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

N/A.

c. Water Runoff (including stormwater):

- a) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Stormwater collection and disposal will be the same as prior to construction and not be altered by this project.

- b) Could waste materials enter ground or surface waters? If so, generally describe.**

No.

- c) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No.

- d) Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any.**

Water runoff generated during construction will be controlled through the implementation of standard best management practices.

4. Plants [Find help answering plants questions](#)

a. Check the types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- orchards, vineyards, or other permanent crops.
- wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Existing grass will be removed for the new waste gas burner. Grass will be removed for the new asphalt path.

c. List threatened and endangered species known to be on or near the site.

None.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

None.

e. List all noxious weeds and invasive species known to be on or near the site.

None known.

5. Animals [Find help answering animal questions](#)

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site.

Examples include:

- **Birds:** hawk, heron, eagle, songbirds, other:
- **Mammals:** deer, bear, elk, beaver, other:
- **Fish:** bass, salmon, trout, herring, shellfish, other:

b. List any threatened and endangered species known to be on or near the site.

None known.

c. Is the site part of a migration route? If so, explain.

None known.

d. Proposed measures to preserve or enhance wildlife, if any.

None.

e. List any invasive animal species known to be on or near the site.

None.

6. Energy and Natural Resources [Find help answering energy and natural resource questions](#)

1. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

None.

2. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

None.

3. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

None.

7. Environmental Health [Find help with answering environmental health questions](#)

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

No.

1. Describe any known or possible contamination at the site from present or past uses.

None known.

2. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

There is an existing underground digester waste gas burner line from the digester building to the existing waste gas burner.

3. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

At the end of the project there will be methane waste gas burner open flare.

4. Describe special emergency services that might be required.

None.

5. Proposed measures to reduce or control environmental health hazards, if any.

The contractor will be required to provide all personnel with personal protective equipment (PPE) and comply with all work-site safety requirements.

b. Noise

1. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

There is typical wastewater treatment operations and light to heavy duty truck traffic occurring in the area.

2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?

The construction of the project will generate temporary noise through the use of heavy equipment. Noise will be generated from construction noise during work hours, typically Monday through Friday from 7:00 am to 6:00 pm.

3. Proposed measures to reduce or control noise impacts, if any.

None.

8. Land and Shoreline Use [Find help answering land and shoreline use questions](#)

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.

The current use of the site is for the City's wastewater treatment plant. The proposal will not affect current land uses on nearby or adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?

No.

1. Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?

No.

c. Describe any structures on the site.

There are various wastewater treatment structures on the site.

d. Will any structures be demolished? If so, what?

The existing waste gas burner and conduit, above ground compressed gas storage tankage and piping, and various pipe and appurtenances will be removed.

e. What is the current zoning classification of the site?

I-M Medium Industrial

f. What is the current comprehensive plan designation of the site?

Public Facility

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes. Aquifer Recharge – 10 Year

i. Approximately how many people would reside or work in the completed project?

None.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any.

None.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.

None.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any.

None.

9. Housing [Find help answering housing questions](#)

- a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

None.

- b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

None.

- c. **Proposed measures to reduce or control housing impacts, if any.**

None.

10. Aesthetics [Find help answering aesthetics questions](#)

- a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

A 15 ft tall waste gas burner will be installed.

- b. **What views in the immediate vicinity would be altered or obstructed?**

None.

- c. **Proposed measures to reduce or control aesthetic impacts, if any.**

None.

11. Light and Glare [Find help answering light and glare questions](#)

- a. **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

None.

- b. **Could light or glare from the finished project be a safety hazard or interfere with views?**

No.

- c. **What existing off-site sources of light or glare may affect your proposal?**

None.

- d. **Proposed measures to reduce or control light and glare impacts, if any.**

None.

12. Recreation [Find help answering recreation questions](#)

- a. **What designated and informal recreational opportunities are in the immediate vicinity?**

None.

b. Would the proposed project displace any existing recreational uses? If so, describe.

None.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

None.

13. Historic and Cultural Preservation [Find help answering historic and cultural preservation questions](#)

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

No.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

No.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

GIS data and as-built drawings of the wastewater treatment plant.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

None.

14. Transportation [Find help with answering transportation questions](#)

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.

Lacy Road.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?

No.

c. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).

No.

d. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air

transportation? If so, generally describe.

No.

- e. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?

None.

- f. Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

- g. Proposed measures to reduce or control transportation impacts, if any.

None.

15. Public Services [Find help answering public service questions](#)

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

None.

16. Utilities [Find help answering utilities questions](#)

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Gas from the digester will installed from the existing digester building to the new waste gas burner.

C. Signature [Find help about who should sign](#)

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X



Marc La Vanway

Type name of signee: Marc La Vanway

Position and agency/organization: Civil Engineer II/City of Richland

Date submitted: 5/15/2023



CITY OF RICHLAND

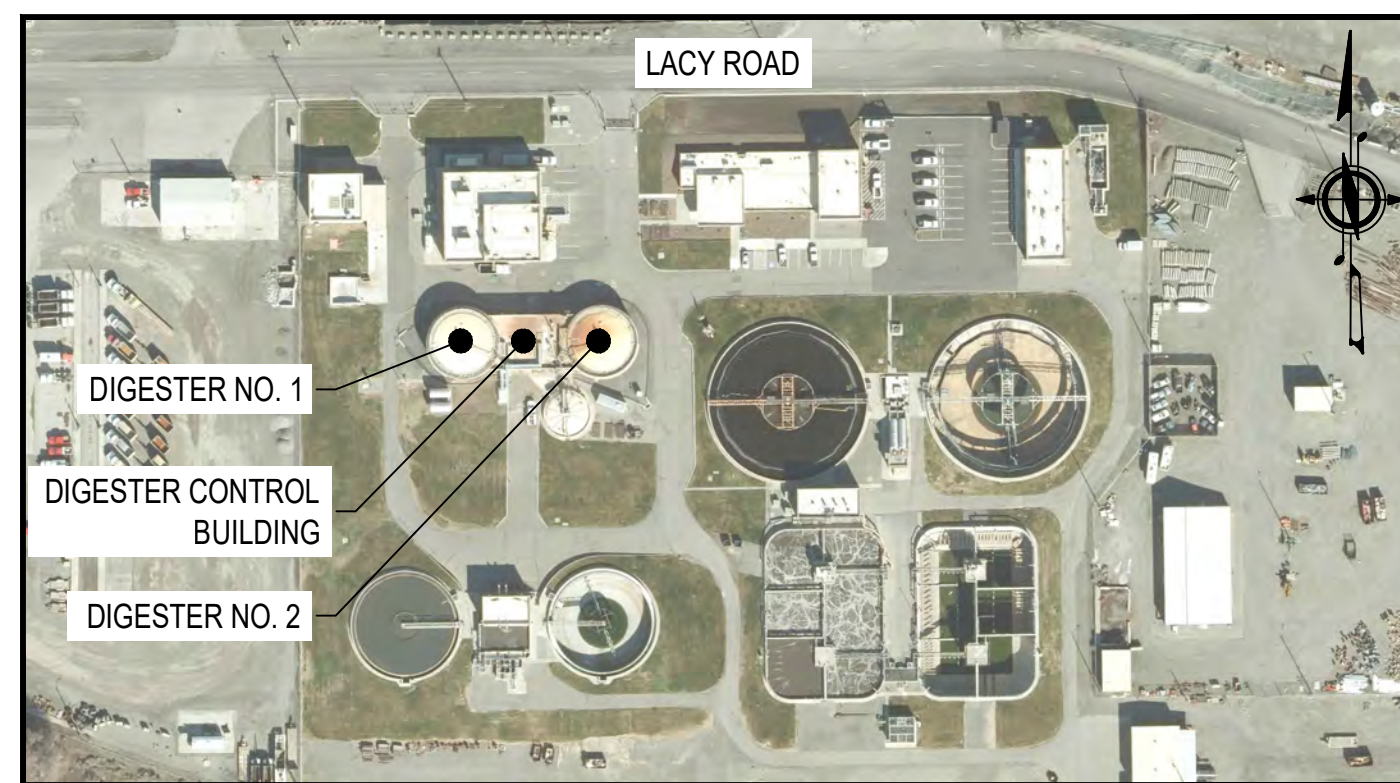
WWTP WASTE GAS BURNER AND BOILER REPLACEMENT

SPRING 2023

PROJECT VICINITY MAP



PROJECT LOCATION MAP



**CALL 48 HOURS BEFORE YOU DIG
ONE CALL 811**

**REPORT ALL SPILLS
DEPT. OF ECOLOGY 1-800-258-5990**

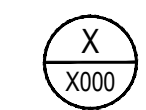
DRAWING INDEX

SHEET NO.	SHEET TITLE	Dwg No
1	COVER	COV
2	SITE PLAN	C01
3	WWTP PHOTOS 1	D01
4	WWTP PHOTOS 2	D02
5	DIGESTER CONTROL BUILDING MECHANICAL OVERVIEW	M01
6	GAS HANDLING ROOM MECHANICAL IMPROVEMENTS	M02
7	BASEMENT GAS PIPE AND WASTE BURNER MECHANICAL IMPROVEMENTS	M03
8	EXTERIOR WASTE GAS PIPING SECTIONS	M04
9	BOILER ROOM MECHANICAL IMPROVEMENTS	M05
10	WASTE GAS BURNER STRUCTURAL DETAILS	S01

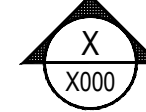
SECTION AND DETAIL REFERENCES

THE FOLLOWING CONVENTIONS HAVE BEEN USED WITHIN THESE DRAWINGS TO REFER THE READER BETWEEN THE SECTION/DETAIL AND THE PLAN FROM WHICH IT IS REFERENCED.

REFERENCE BUBBLES



PLAN REFERENCE BUBBLE - REFERS READER BACK TO THE PLAN FROM WHICH THE DETAIL OR SECTION ORIGINATED.



DETAIL/SECTION REFERENCE BUBBLE - REFERS READER TO THE DRAWING ON WHICH THE DETAIL OR SECTION IS LOCATED.

WHERE: ID = SECTION/DETAIL REFERENCE NUMBER
= DRAWING NUMBER ON WHICH DETAIL ORIGINATED OR RESIDES.

SECTION/DETAIL REFERENCE NUMBER CONVENTIONS:
SECTIONS OR ELEVATIONS SHOULD HAVE A LETTER REFERENCE NUMBER (A THROUGH ZZ).

ABBREVIATIONS

CB	CATCH BASIN	LF	LINEAR FEET
CONC	CONCRETE	MCC	MOTOR CONTROL CENTER
CL	CENTERLINE	N	NORTHING
CPEP	CORRUGATED POLYETHYLENE	PE	POLYETHYLENE
CSBC	CRUSHED SURFACING BASE COURSE	PROP	PROPOSED
CSTC	CRUSHED SURFACING TOP COURSE	R	RIGHT
DIAM	DIAMETER	RT	RIGHT
DI	DUCTILE IRON	ROW	RIGHT-OF-WAY
DWG	DRAWING	SPEC	SPECIFICATIONS
E	EASTING	SS	SANITARY SEWER
ELEV	ELEVATION	SSMH	SANITARY SEWER MANHOLE
EOP	EDGE OF PAVEMENT	ST	STORM
EX	EXISTING	STD	STANDARD
HMA	HOT MIXED ASPHALT	SY	SQUARE YARDS
HVAC	HEATING, VENTILATION & AIR CONDITIONING	TYP	TYPICAL
L	LEFT	W	WATER
LT	LEFT	WWTP	WASTEWATER TREATMENT PLANT

DESIGN CRITERIA

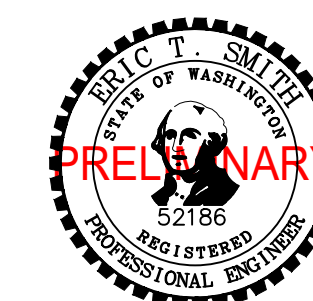
PARAMETER	PERMITTED MAXIMUM MONTH
INFLUENT BOD (LB/D)	17,250
INFLUENT TSS (LB/D)	21,200
SLUDGE YIELD (PRIMARY + WAS) (LB/D TS)	18,600
AVERAGE VOLATILE SOLIDS CONTENT (%)	87
SLUDGE YIELD (PRIMARY + WAS) (LB/D VS)	16,200
AVERAGE DIGESTER VOLATILE SOLIDS DESTRUCTION (%)	50
VOLATILE SOLIDS DESTROYED (LB/D)	8,100
AVERAGE DIGESTER GAS YIELD (CF PER 1.0 LB VS DESTROYED)	15
AVERAGE GAS PRODUCTION (CFH)	5,400
PEAK GAS PRODUCTION (CFH)	12,600
WASTE GAS BURNER CONFIGURATION	CANDLE-STICK
WASTE GAS BURNER SIZE (IN)	8
BOILER SIZE (MMBTU)	2,100
BOILER SIZE (HP)	60

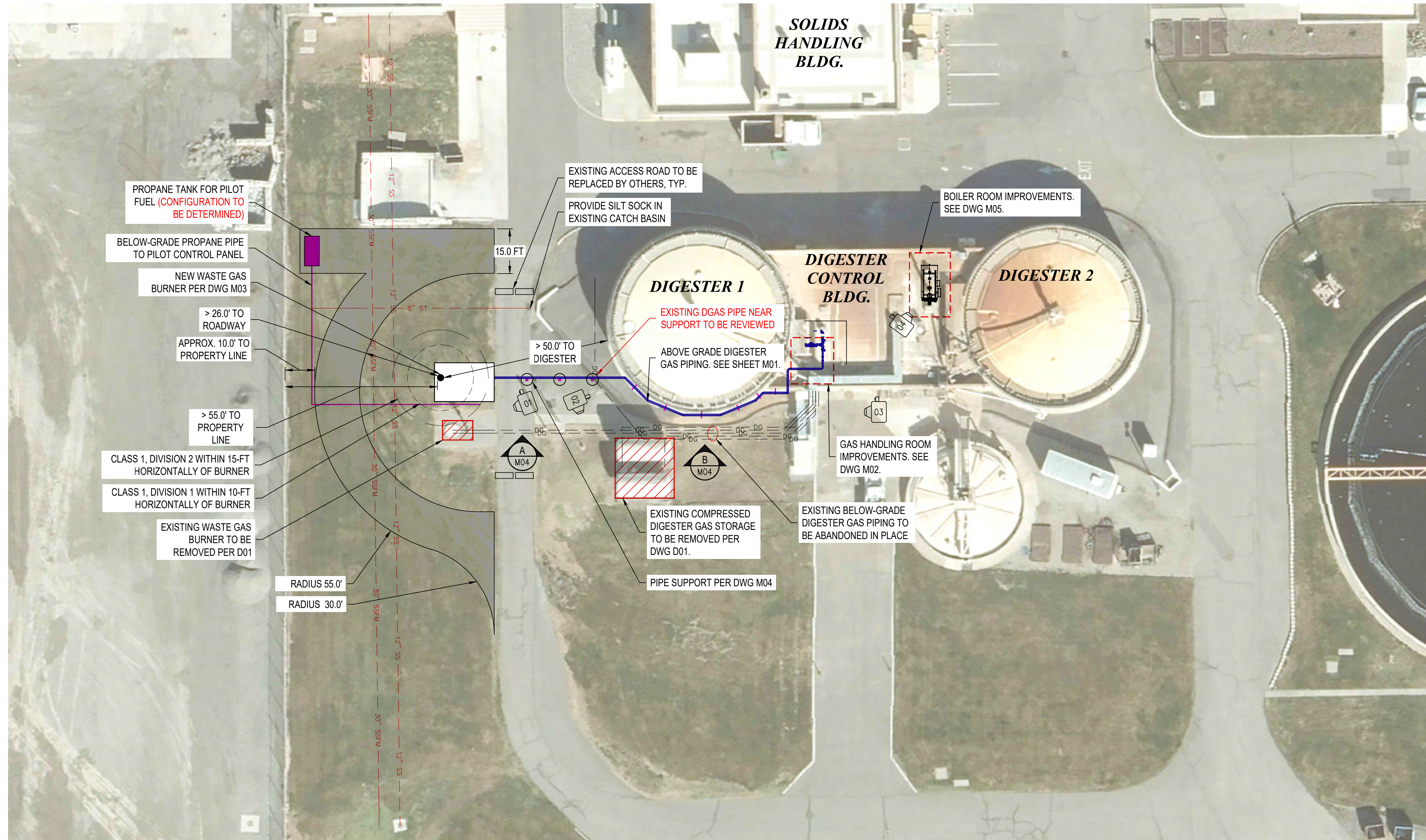
CONTACT PERSONNEL

CONTACT	AGENCY	PHONE (509)
ERIC SMITH, P.E. (PROJECT MANAGER)	RH2 ENGINEERING	886-6784
CLAYTON ANDERSON, P.E. (ELECTRICAL ENGINEER)	RH2 ENGINEERING	886-6781
MARC LA VANWAY (PROJECT MANAGER)	CITY OF RICHLAND	942-7791
HECTOR MORENO (LEAD OPERATOR)	CITY OF RICHLAND	942-7483

REVIEW/DISCUSS WITH OWNER

PRELIMINARY



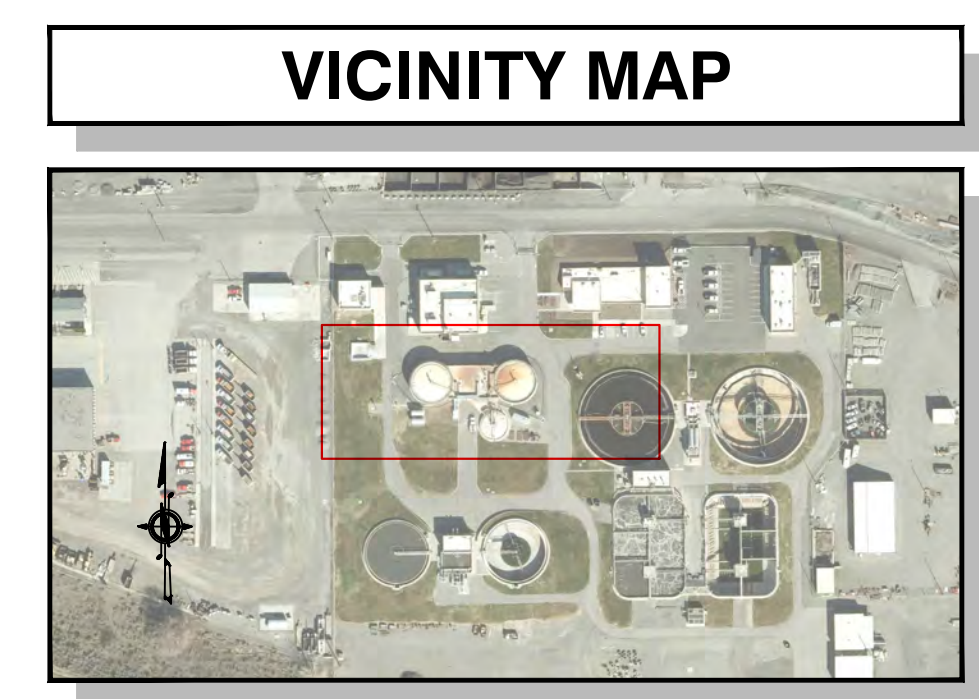


PLAN
1" = 20'



NOTES

TBD



PRELIMINARY

CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT

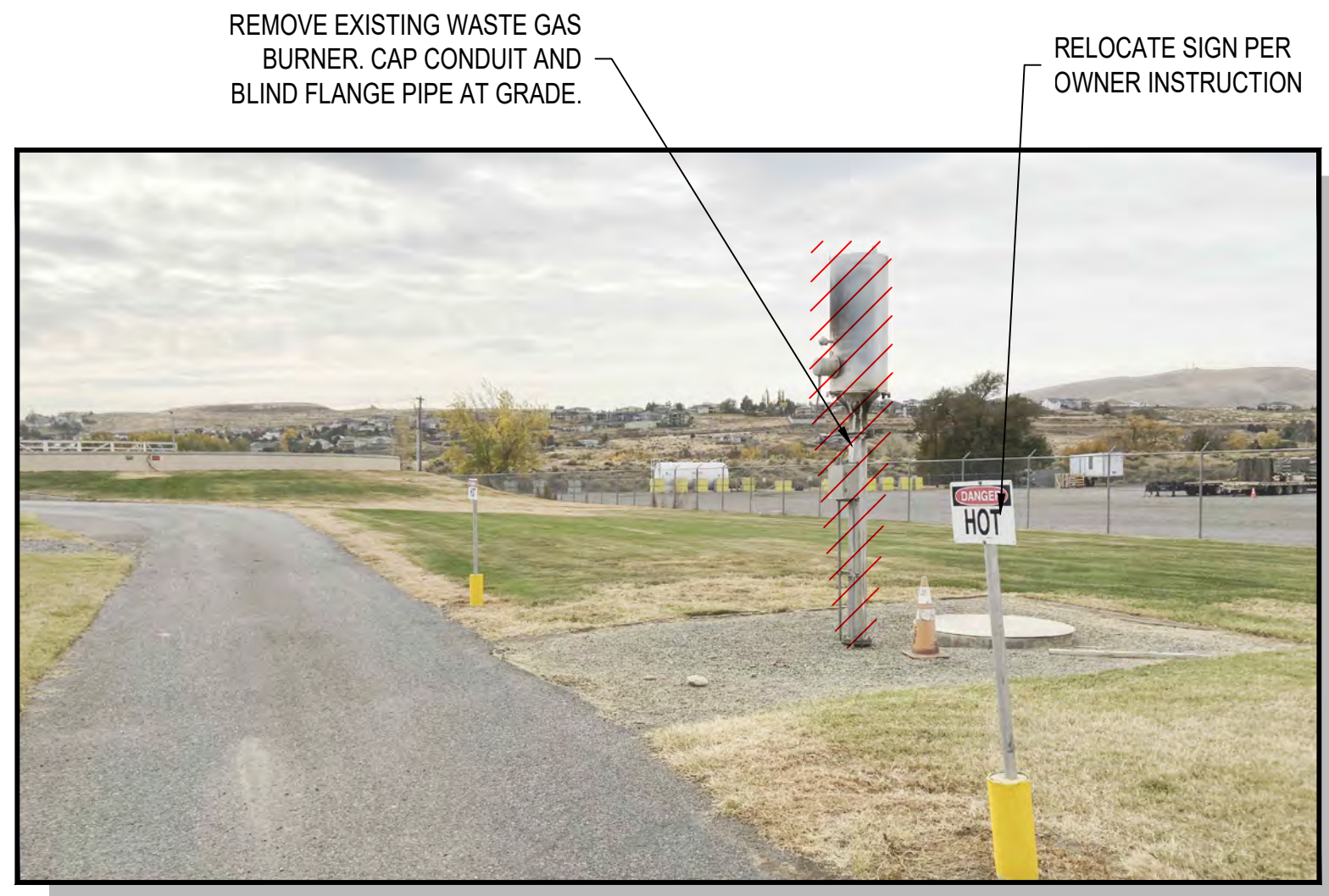
SITE PLAN

ENGINEER: JG REVIEWED: ETS	SWF/DRAW: May 1, 2023 PLOT/DATE: May 1, 2023	JOB NO.: 23-0044.02 CLIENT: RIC FILENAME: RGE-P-QW/DWG
REVISIONS		
NO.	DATE	DESCRIPTION

SCALE: SHOWN	BY: REVIEW
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"	
DWG NO.: C01	SHEET NO.: 2

NO.	DATE	DESCRIPTION	BY	REVIEW

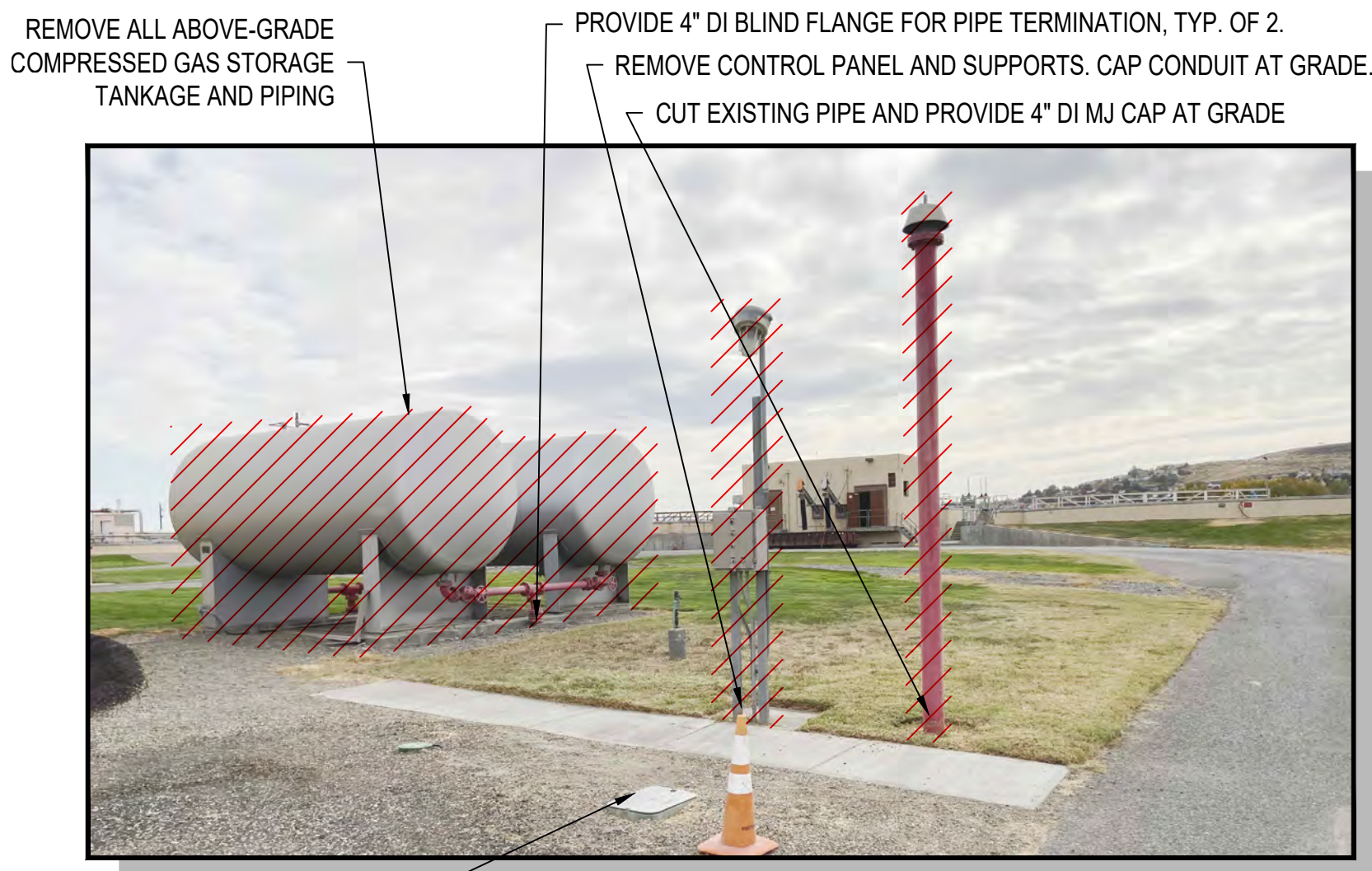
ENGINEER: JG	SWF DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 23-0044.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGED-DET.DWG	
REVISIONS			
DWG NO.: D01	SHEET NO.: 3	SCALE: SHOWN	



REMOVE EXISTING WASTE GAS BURNER. CAP CONDUIT AND BLIND FLANGE PIPE AT GRADE.

RELOCATE SIGN PER OWNER INSTRUCTION

01 SEE DWG C01

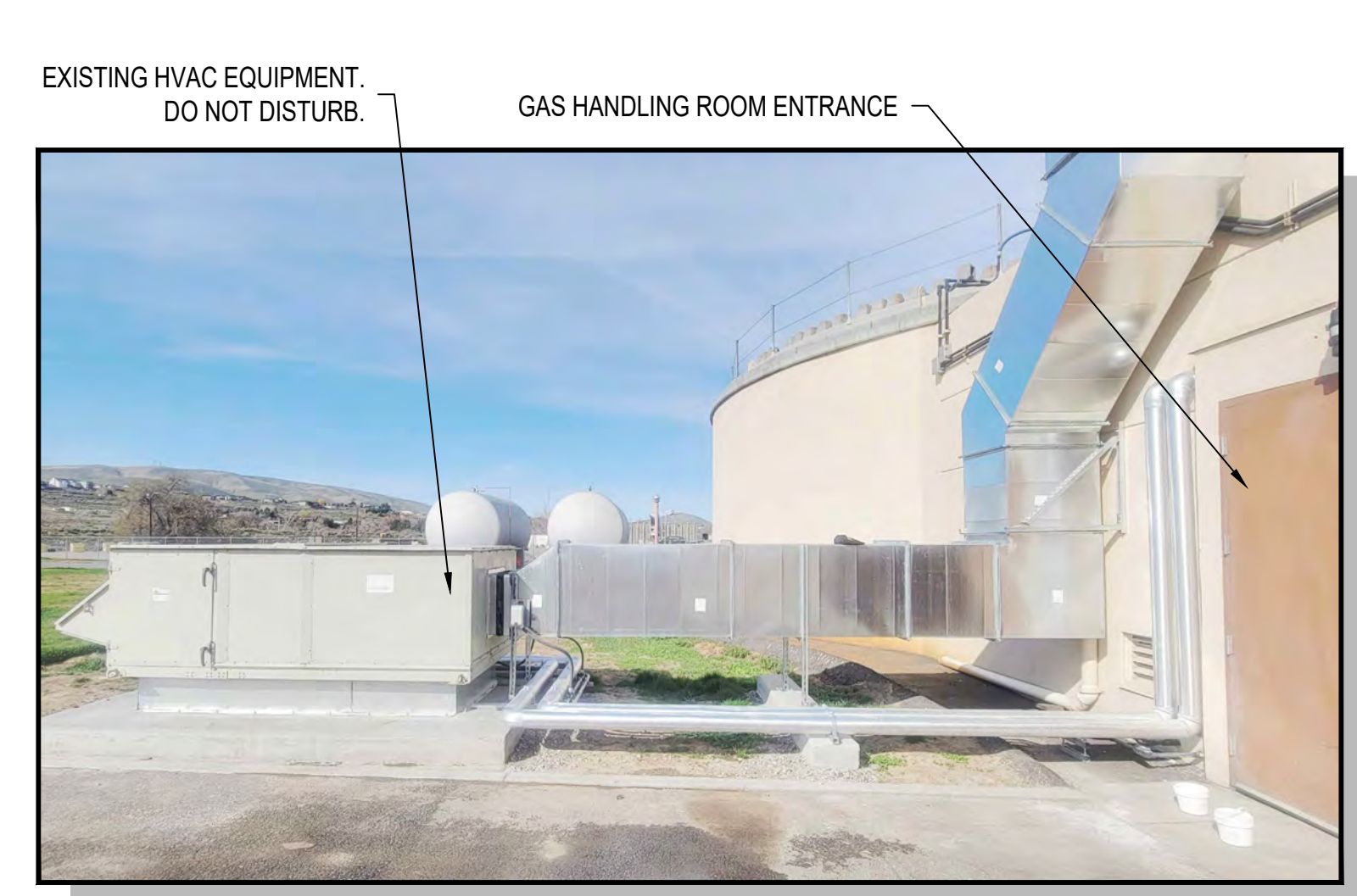


REMOVE ALL ABOVE-GRADE COMPRESSED GAS STORAGE TANKAGE AND PIPING

PROVIDE 4" DI BLIND FLANGE FOR PIPE TERMINATION, TYP. OF 2.
REMOVE CONTROL PANEL AND SUPPORTS. CAP CONDUIT AT GRADE.
CUT EXISTING PIPE AND PROVIDE 4" DI MJ CAP AT GRADE

DO NOT DISTURB EXISTING IRRIGATION THIS AREA

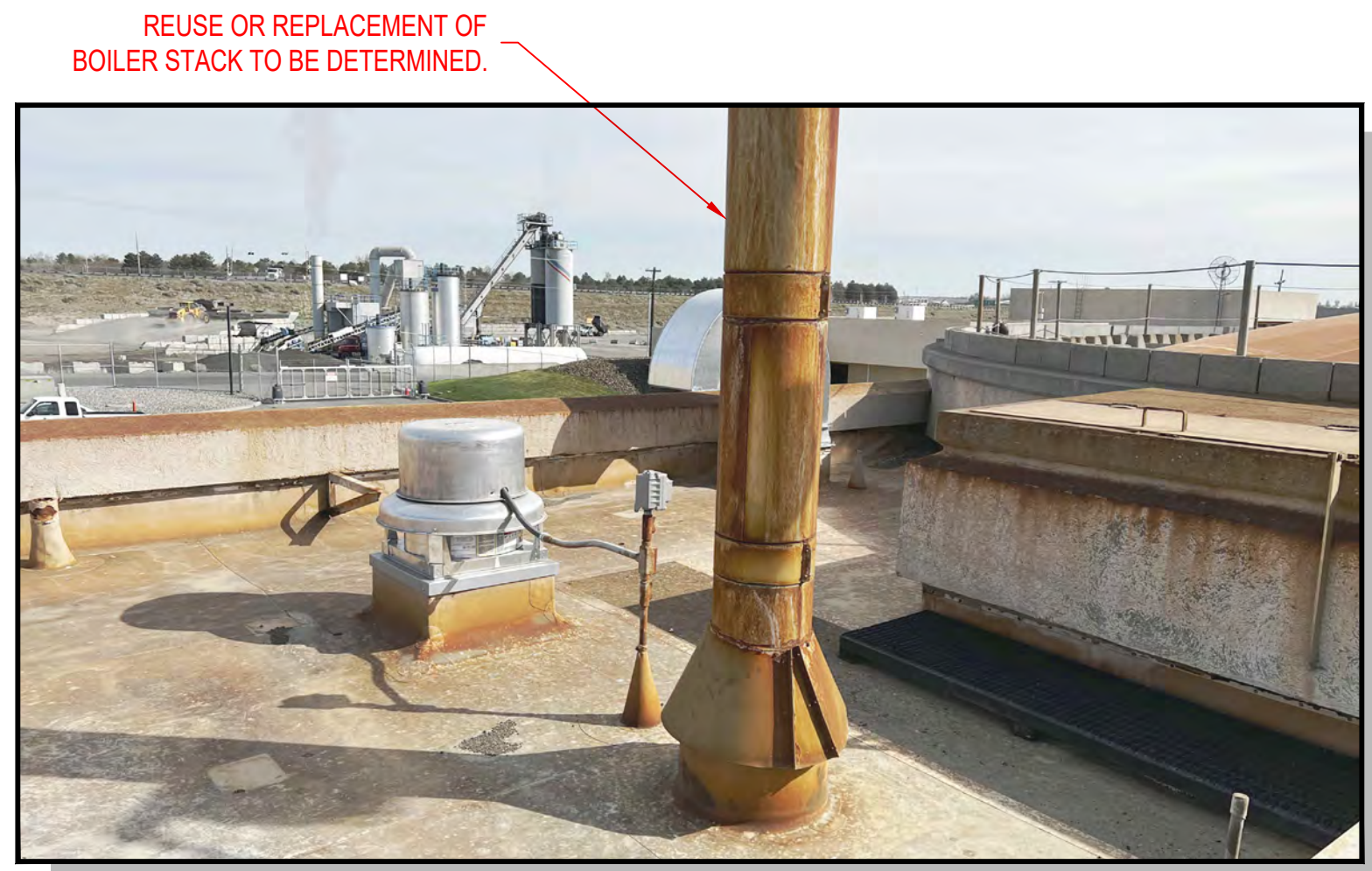
02 SEE DWG C01



EXISTING HVAC EQUIPMENT. DO NOT DISTURB.

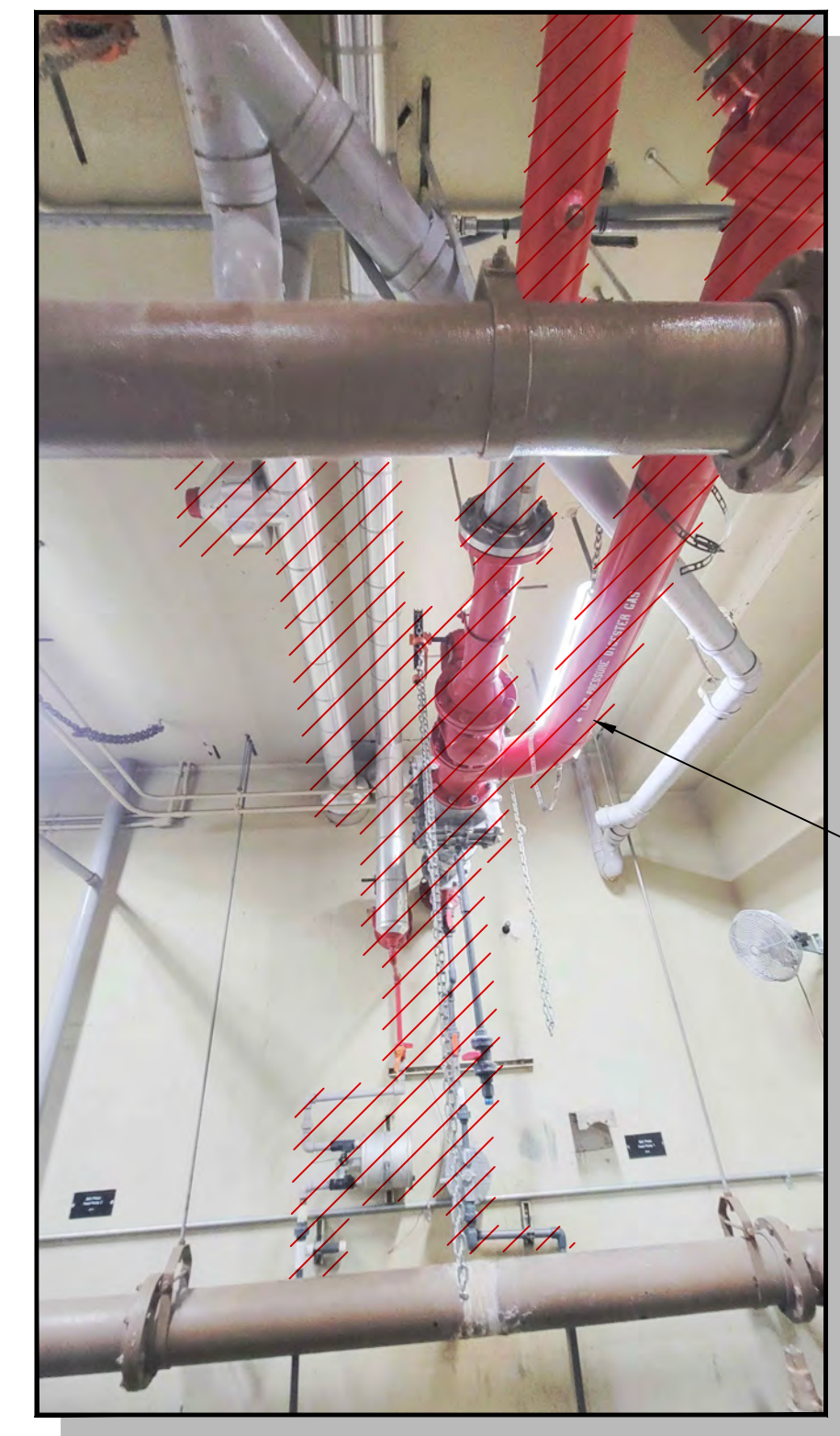
GAS HANDLING ROOM ENTRANCE

03 SEE DWG C01



REUSE OR REPLACEMENT OF BOILER STACK TO BE DETERMINED.

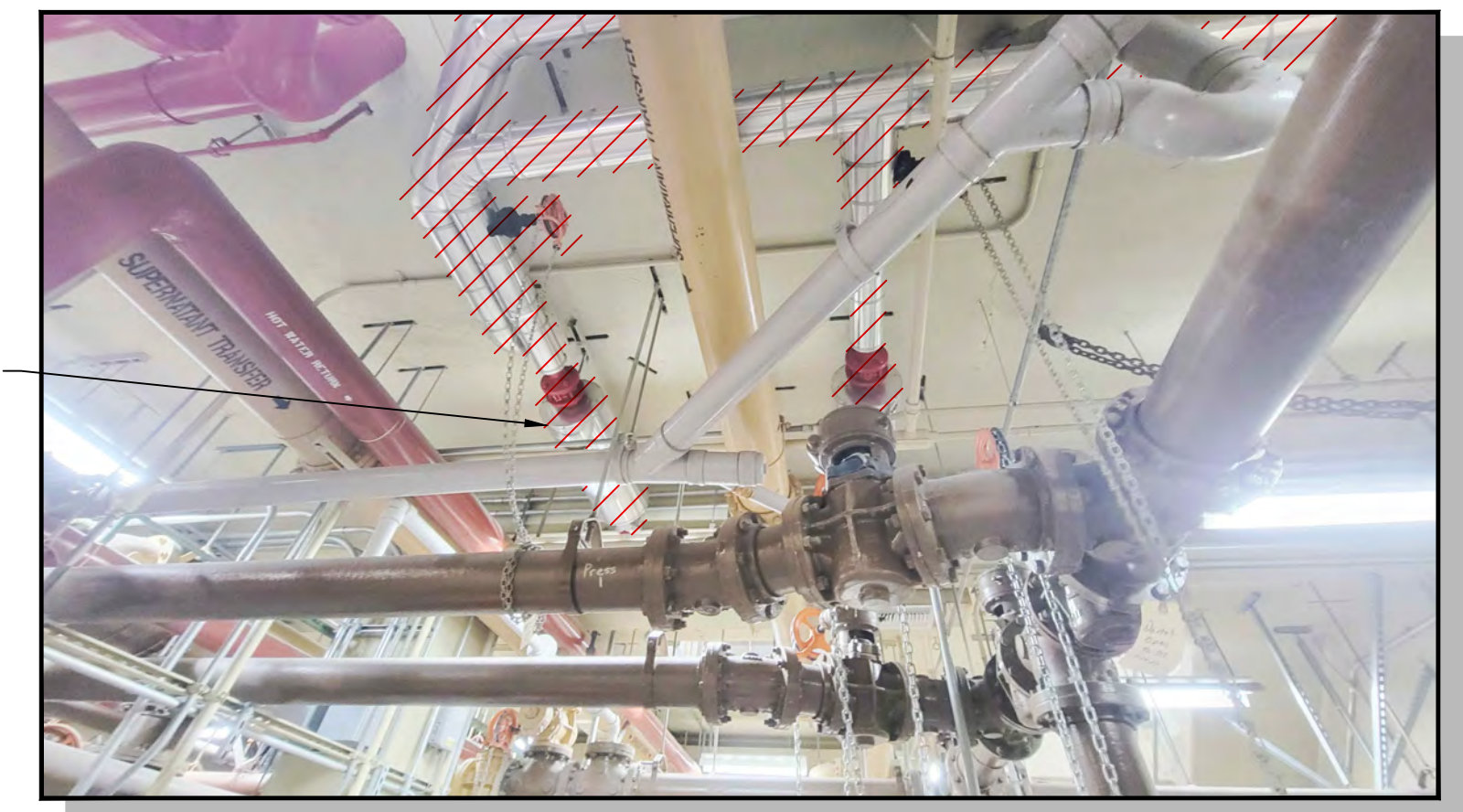
04 SEE DWG C01



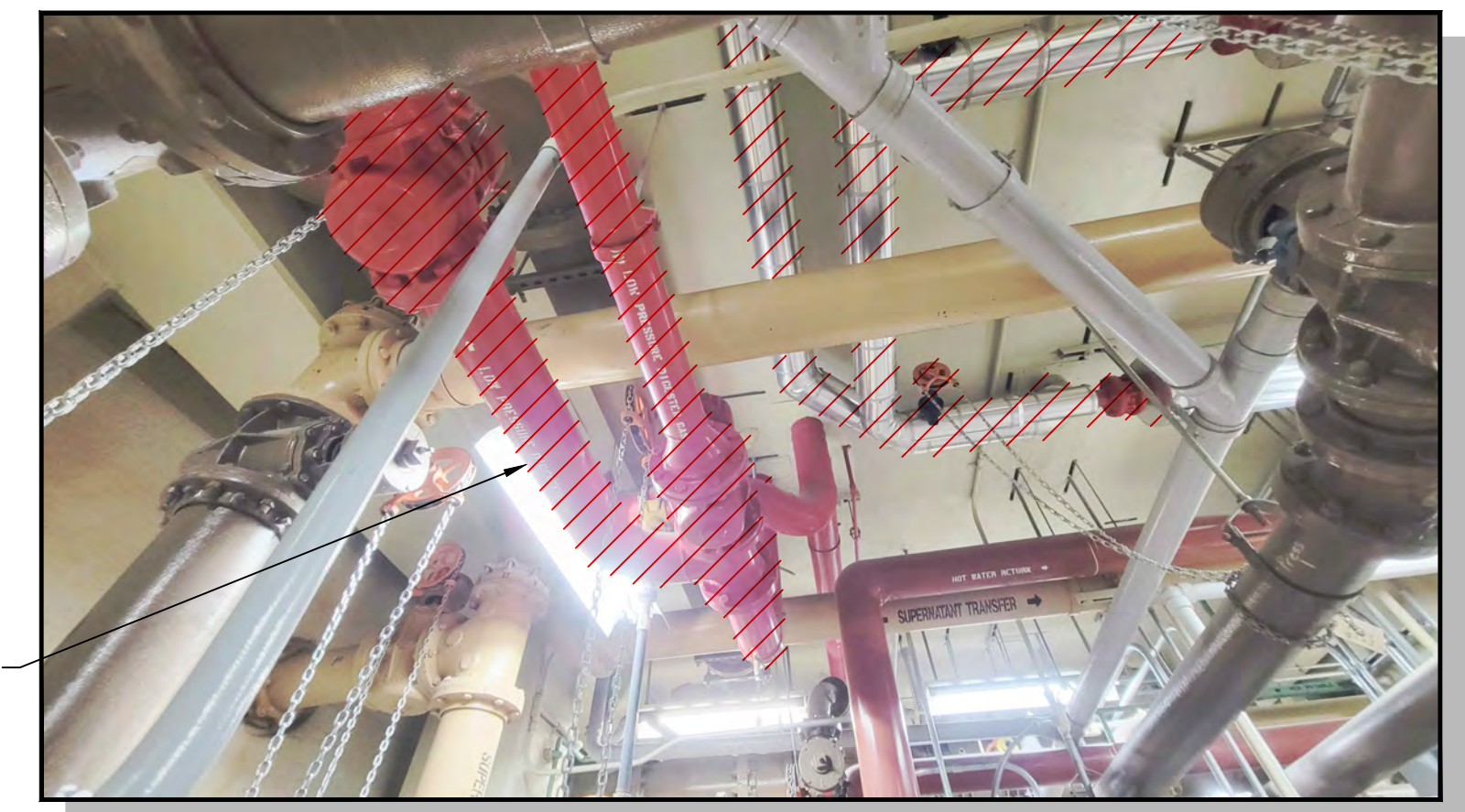
REMOVE DISCHARGE SILENCER AND ASSOCIATED PIPE AND APPURTENANCES TO THE EXTENTS SHOWN, TYP. OF 2

REMOVE PIPE AND ASSOCIATED APPURTENANCES TO THE EXTENTS SHOWN

05 SEE DWG M03



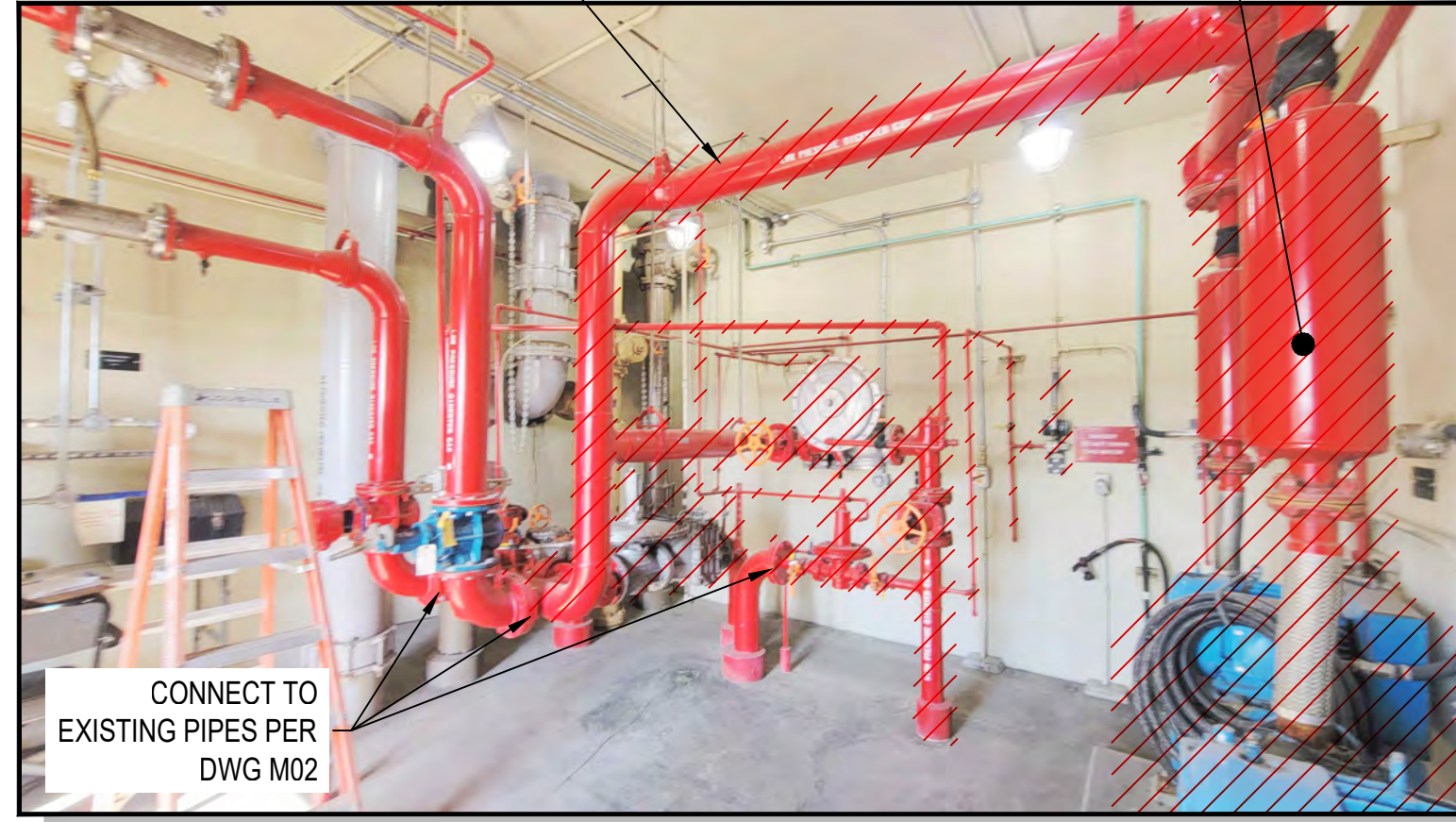
06 SEE DWG M03



REMOVE PIPE AND ASSOCIATED APPURTENANCES TO THE EXTENTS SHOWN

07 SEE DWG M03

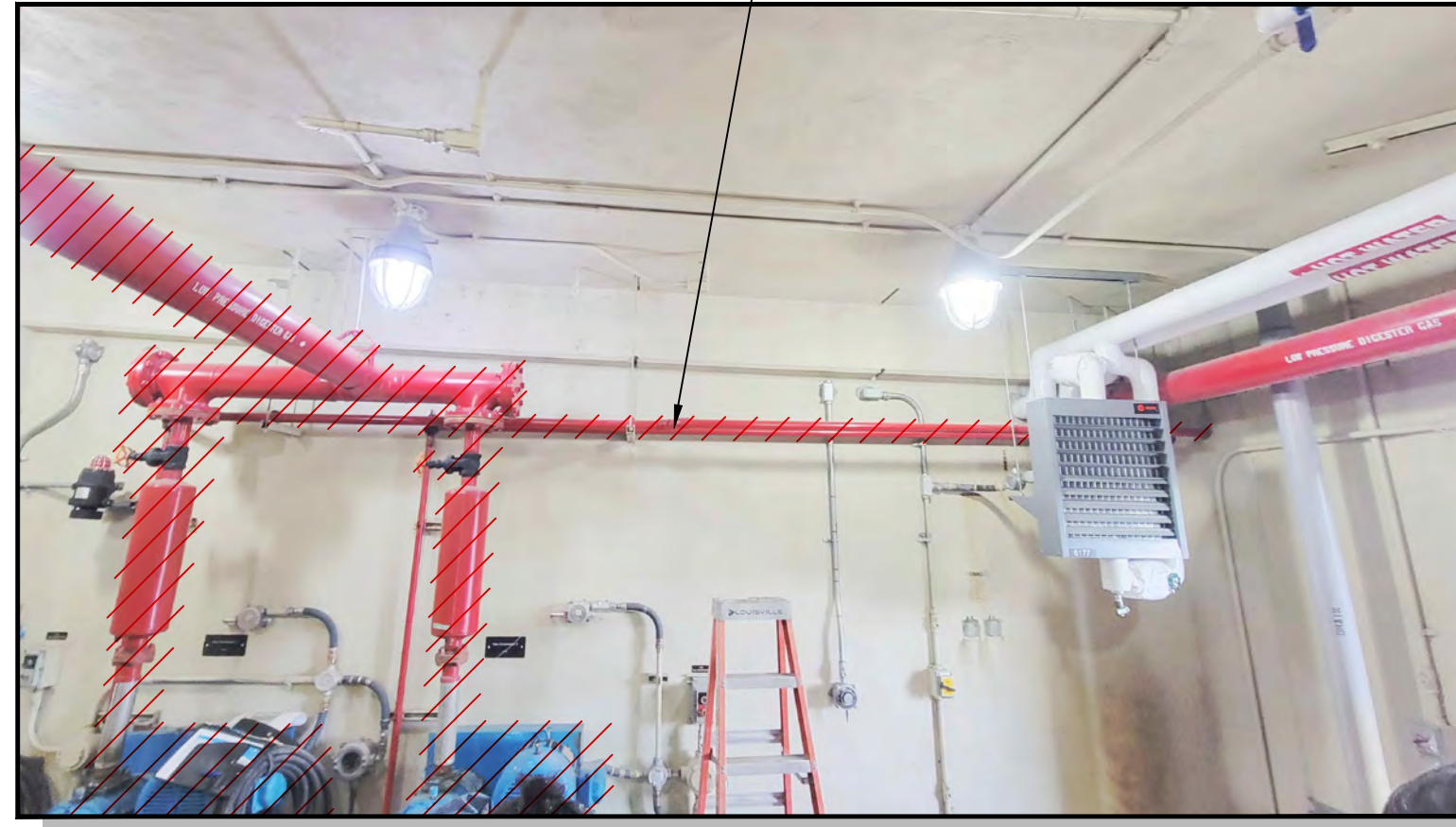
REMOVE LOW PRESSURE
DIGESTER GAS PIPE AND
ASSOCIATED APPURTENANCES
TO THE EXTENTS SHOWN



CONNECT TO
EXISTING PIPES PER
DWG M02

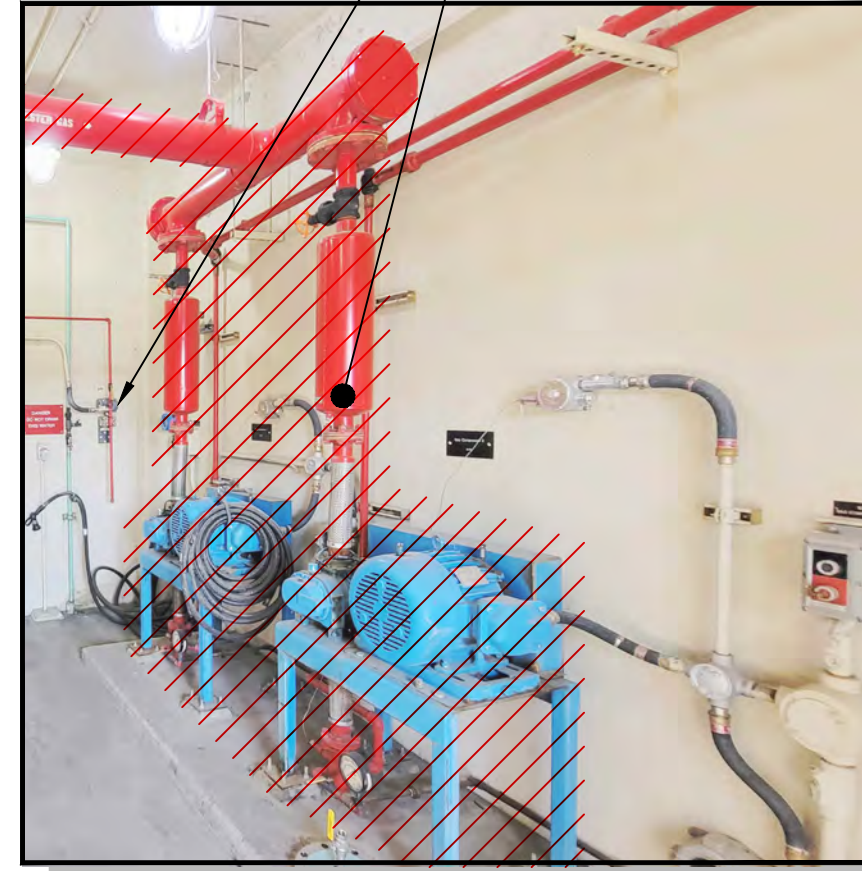
8 SEE DWG M01

REMOVE PIPE AND ASSOCIATED
APPURTENANCES TO THE
EXTENTS SHOWN



10 SEE DWG M01

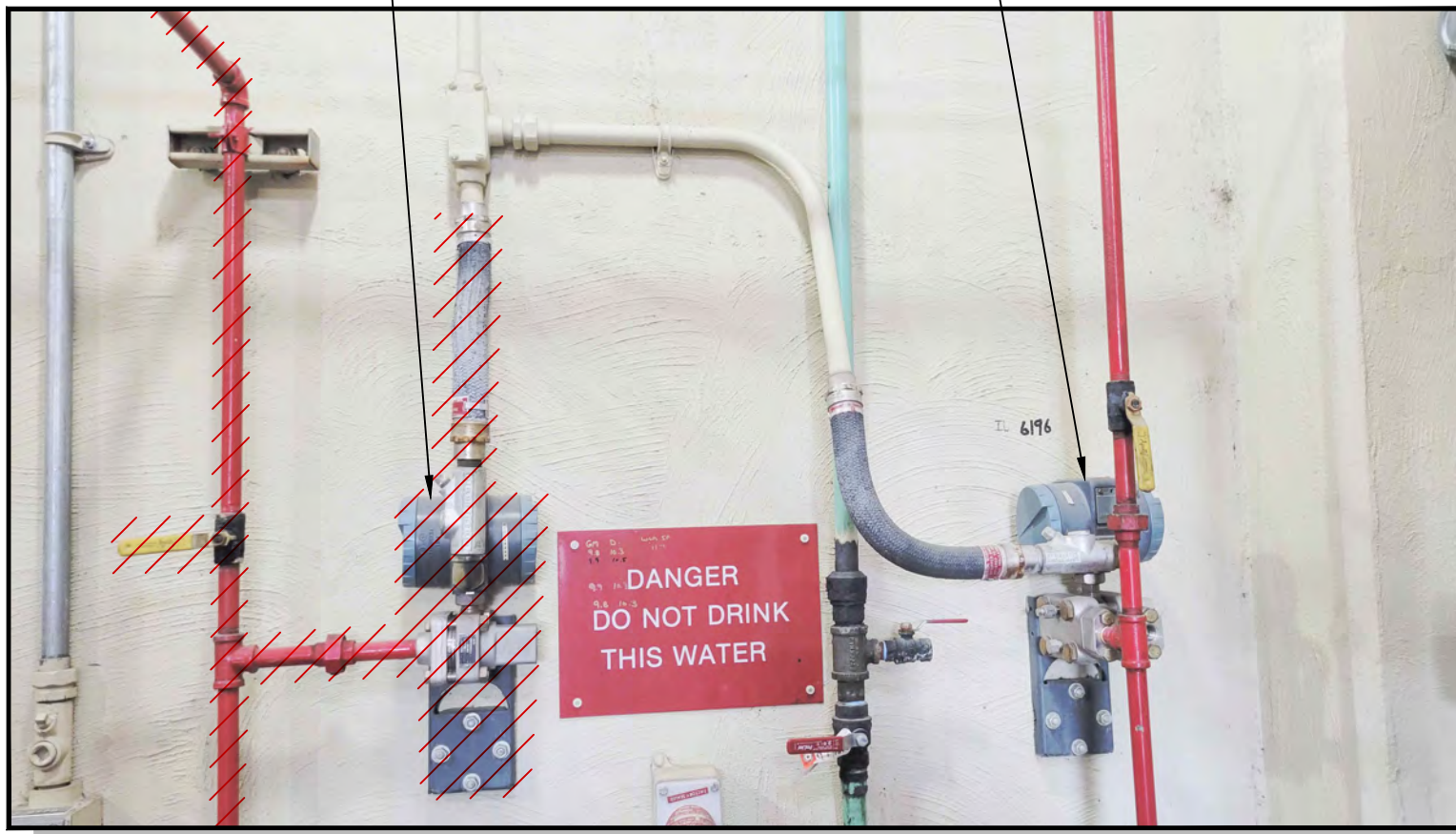
9 REMOVE COMPRESSOR
PER PHOTO



9 SEE DWG M01

11 REPLACE PRESSURE
TRANSMITTER PER PHOTO

REMOVE COMPRESSOR AND ASSOCIATED PIPE AND APPURTENANCES
TO THE EXTENTS SHOWN. CAP EXISTING CONDUITS.



11 SEE DWG M01

REMOVE PRESSURE
TRANSMITTER AND
ASSOCIATED PIPE TO THE
EXTENTS SHOWN

REPLACE PRESSURE
TRANSMITTER



12 SEE DWG M01



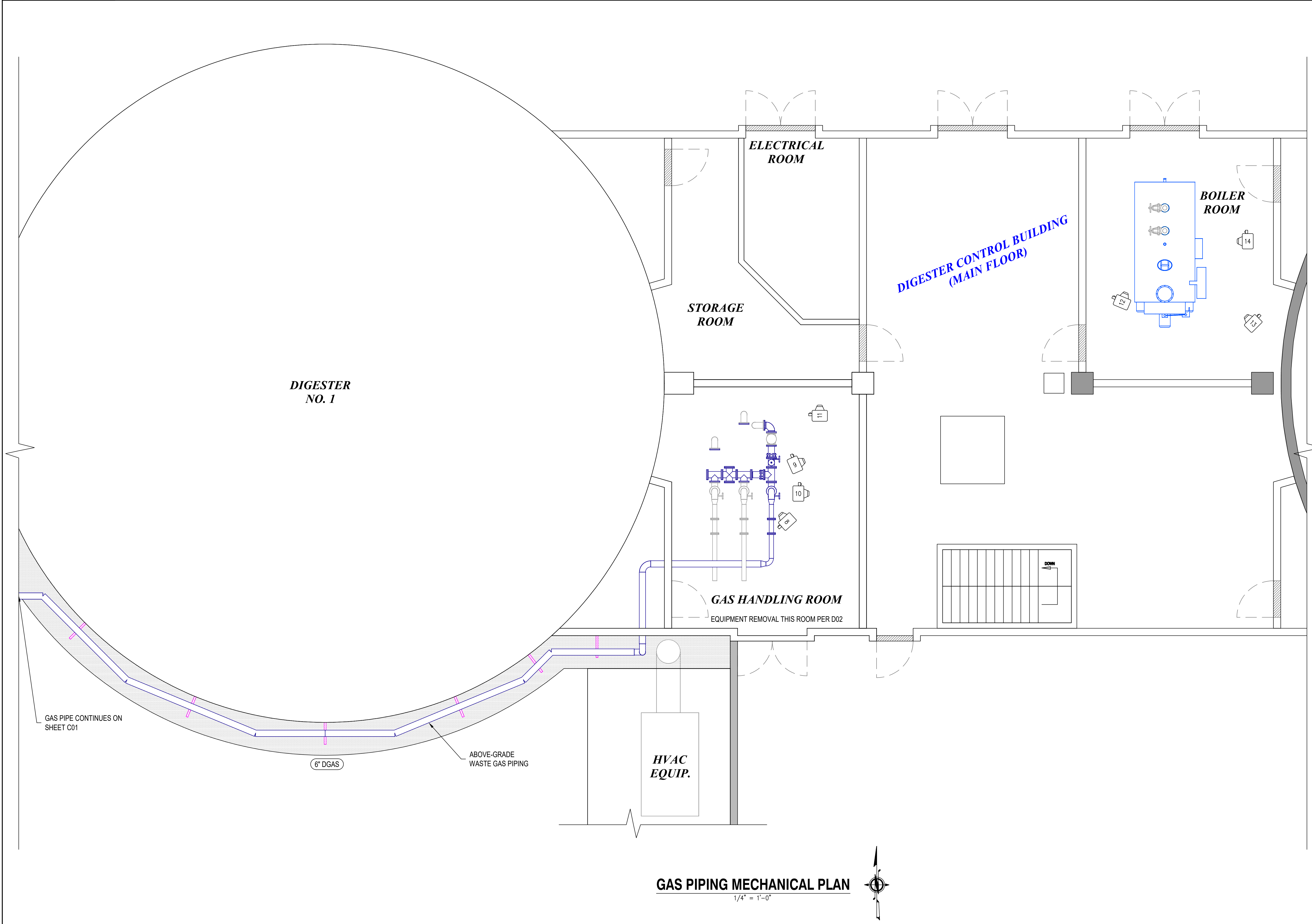
13 SEE DWG M01



14 SEE DWG M01

NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: KSO	DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 25-004.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGED-DET.DWG	
REVISIONS			
SCALE: SHOWN			
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"			
DWG NO.: D02	SHEET NO.: 4	10	



GAS PIPE CONTINUES ON SHEET C01

6" DGAS

ABOVE-GRADE WASTE GAS PIPING

HVAC EQUIP.

GAS HANDLING ROOM

EQUIPMENT REMOVAL THIS ROOM PER D02

STORAGE ROOM

ELECTRICAL ROOM

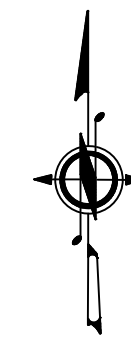
DIGESTER CONTROL BUILDING (MAIN FLOOR)

BOILER ROOM

DIGESTER NO. 1

GAS PIPING MECHANICAL PLAN

1/4" = 1'-0"



CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT

DIGESTER CONTROL BUILDING
MECHANICAL OVERVIEW



NO.	DATE	DESCRIPTION	BY	REVIEW

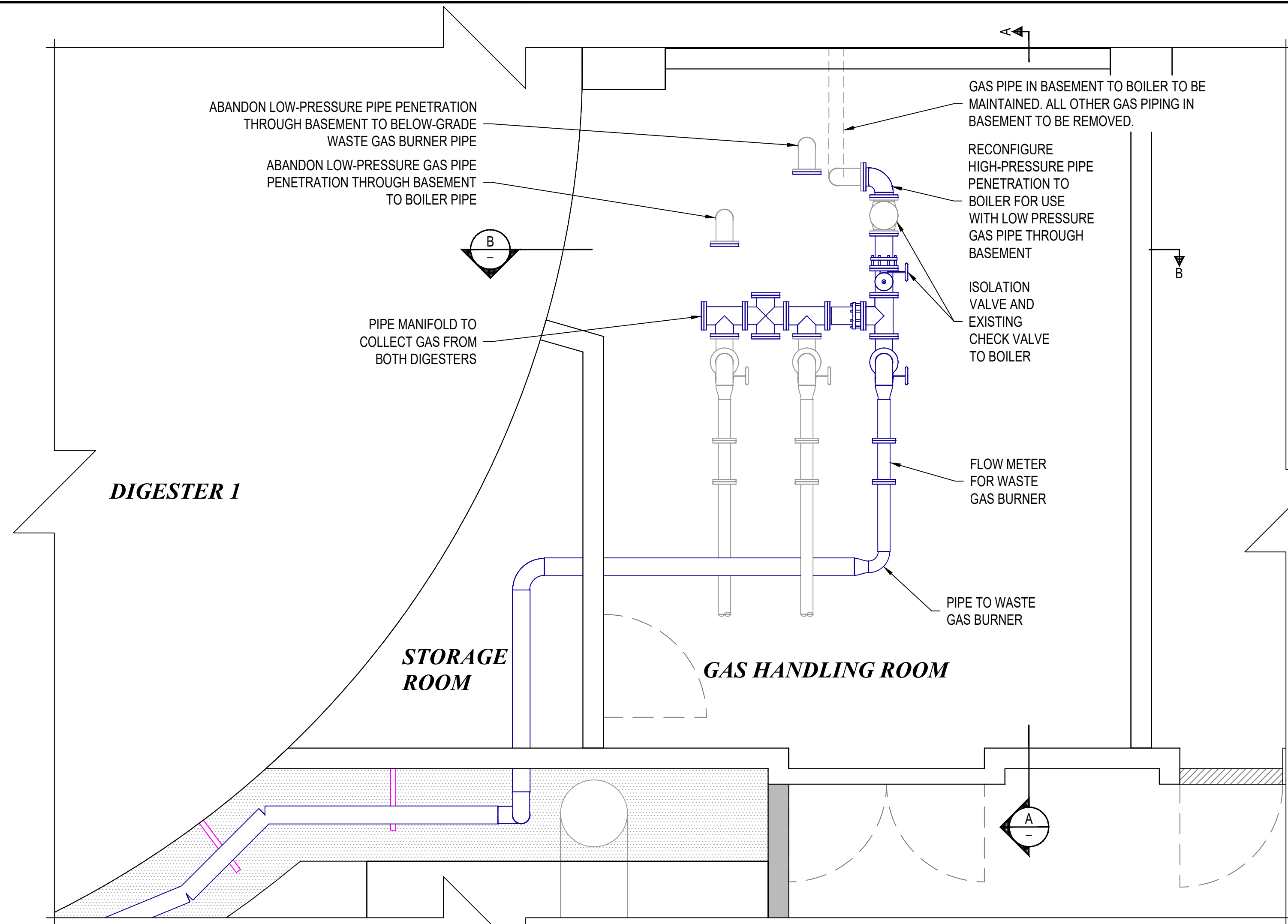
ENGINEER: JG	SWF DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 25-0044.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGE-P-MECH.DWG	
REVISIONS			

SCALE: SHOWN

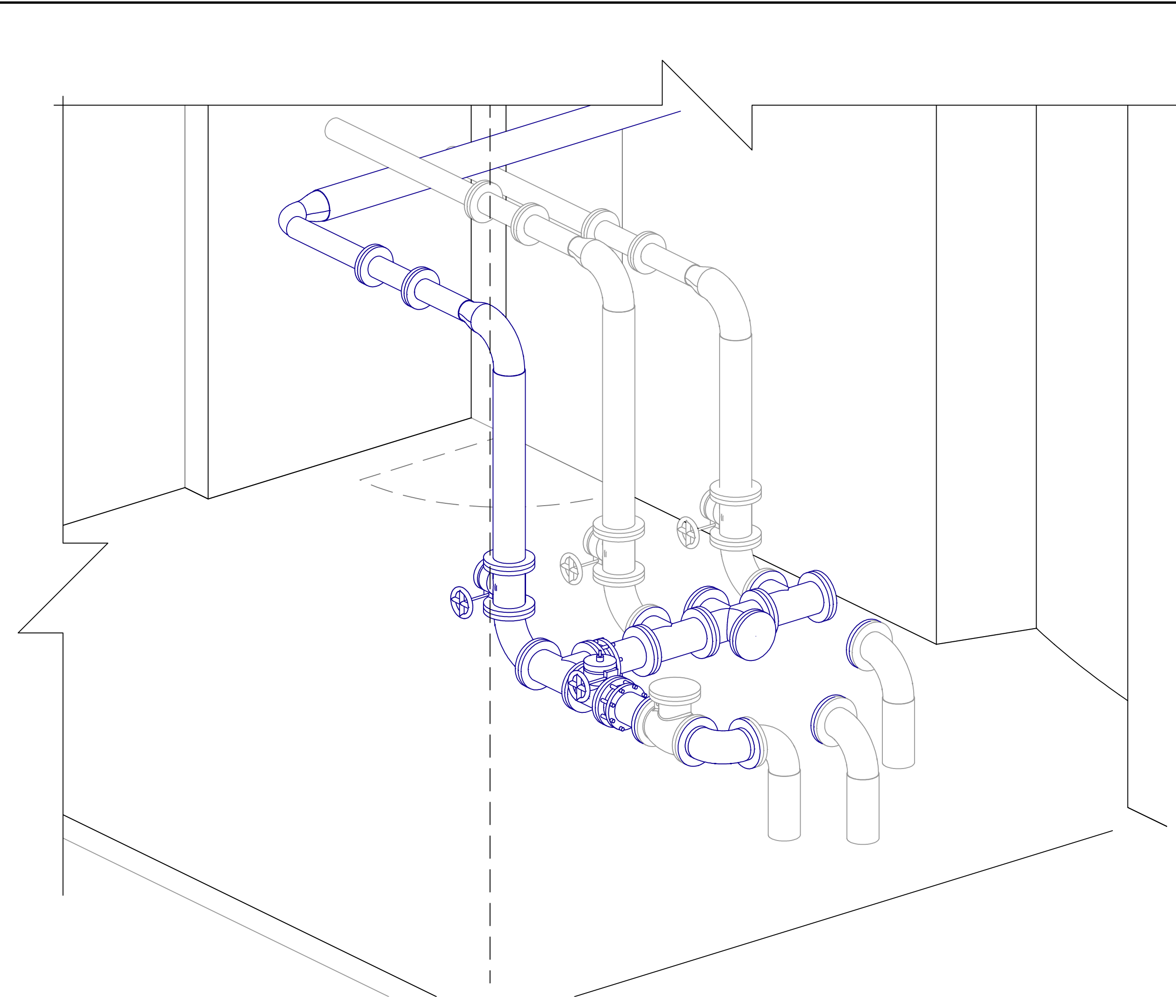
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO.: M01 SHEET NO.: 5 10

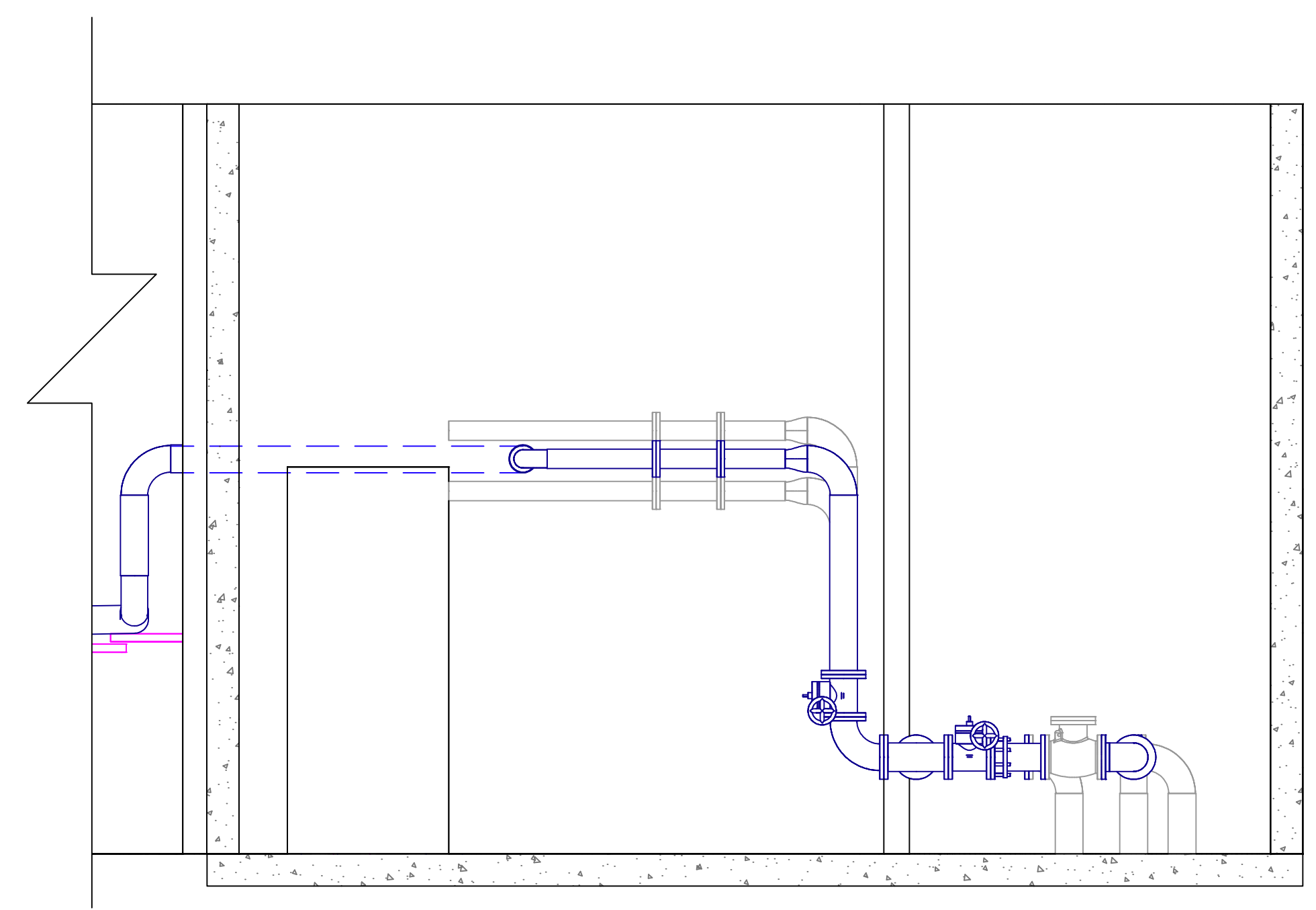
CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT
GAS HANDLING ROOM MECHANICAL
IMPROVEMENTS



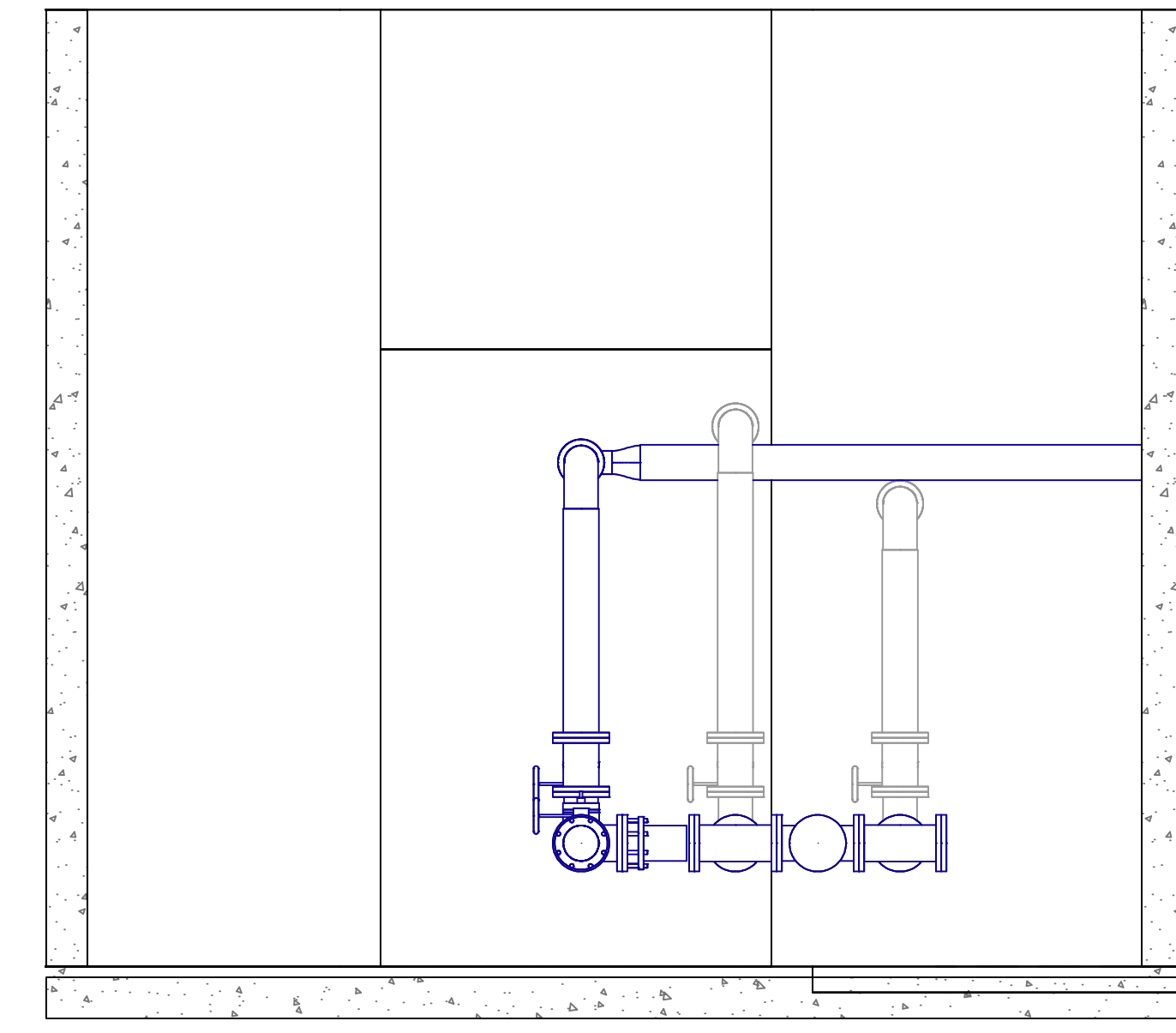
GAS HANDLING ROOM PLAN
3/8" = 1'-0"



GAS HANDLING ROOM ISOMETRIC
NTS



SECTION A-A
3/8" = 1'-0"



SECTION B-B
3/8" = 1'-0"

NOTE: EXISTING PIPE SHOWN IN GRAY. PROPOSED IMPROVEMENTS SHOWN IN COLOR.

NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: KSO	DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 25-0044.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGEP-MECH2.DWG	
REVISIONS			
DWG NO.:	SHEET NO.:		
M02	6	10	

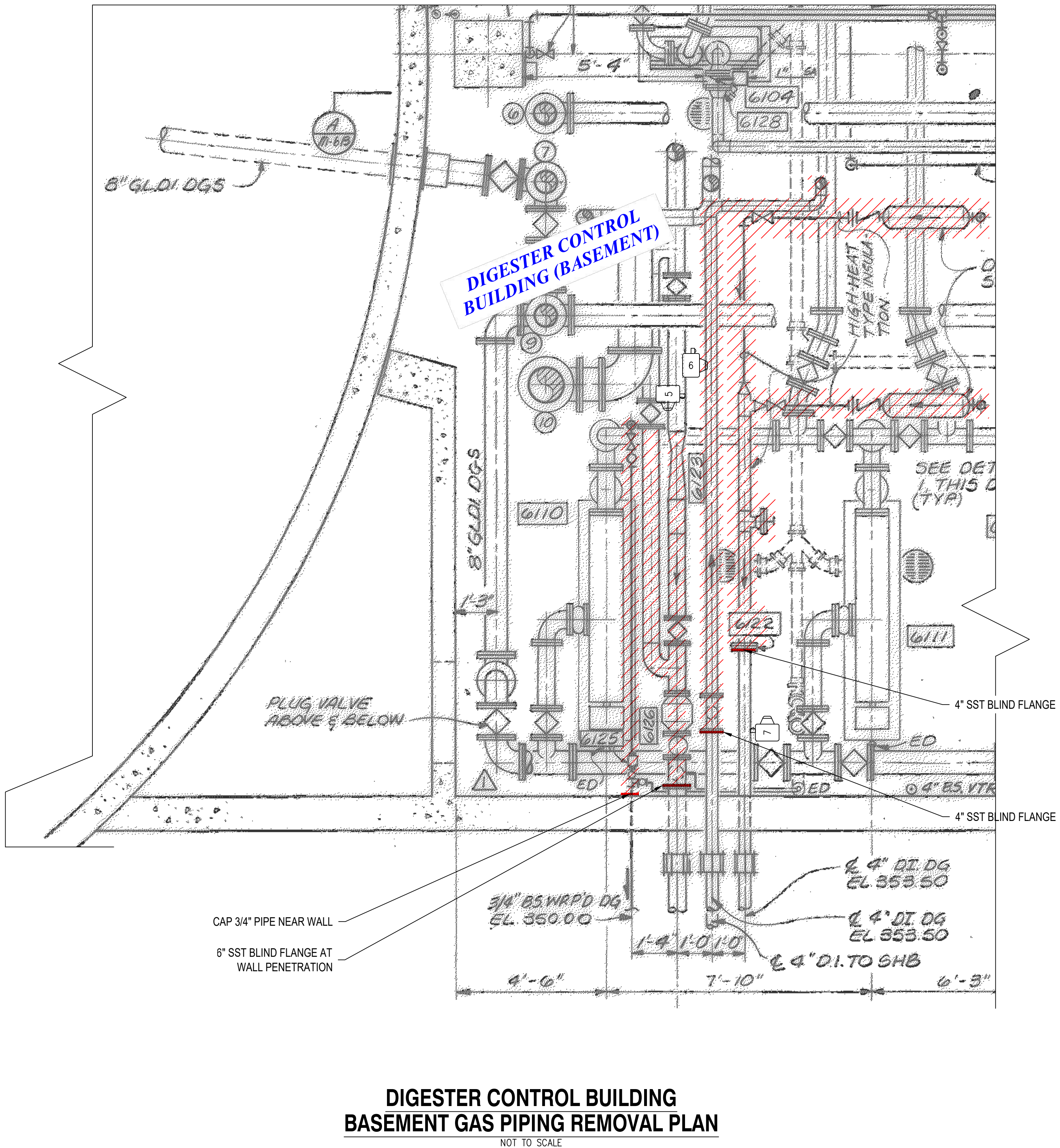
SCALE: SHOWN

0' 1' 2'

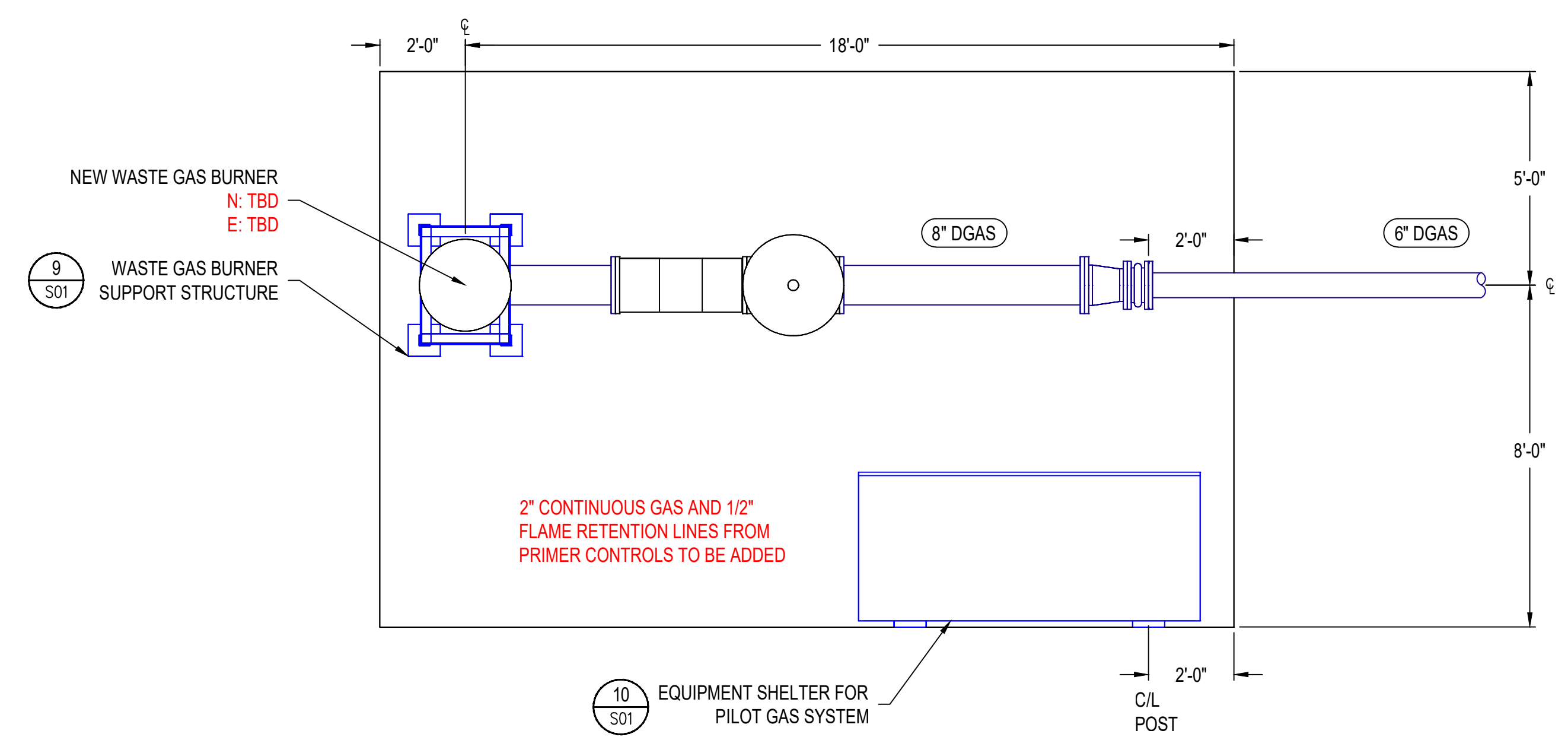
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"



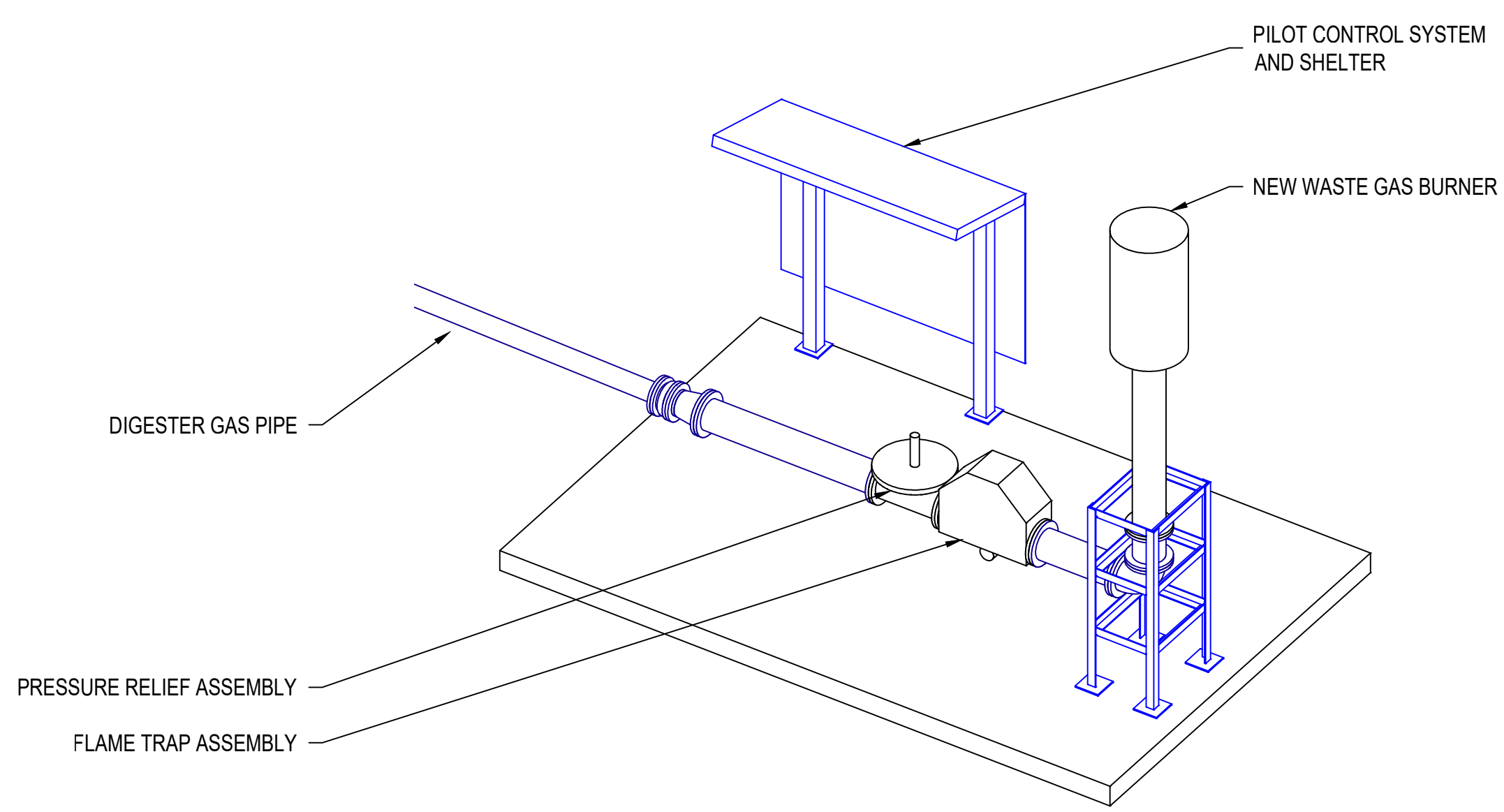
NO.	DATE	DESCRIPTION	BY	REVIEW



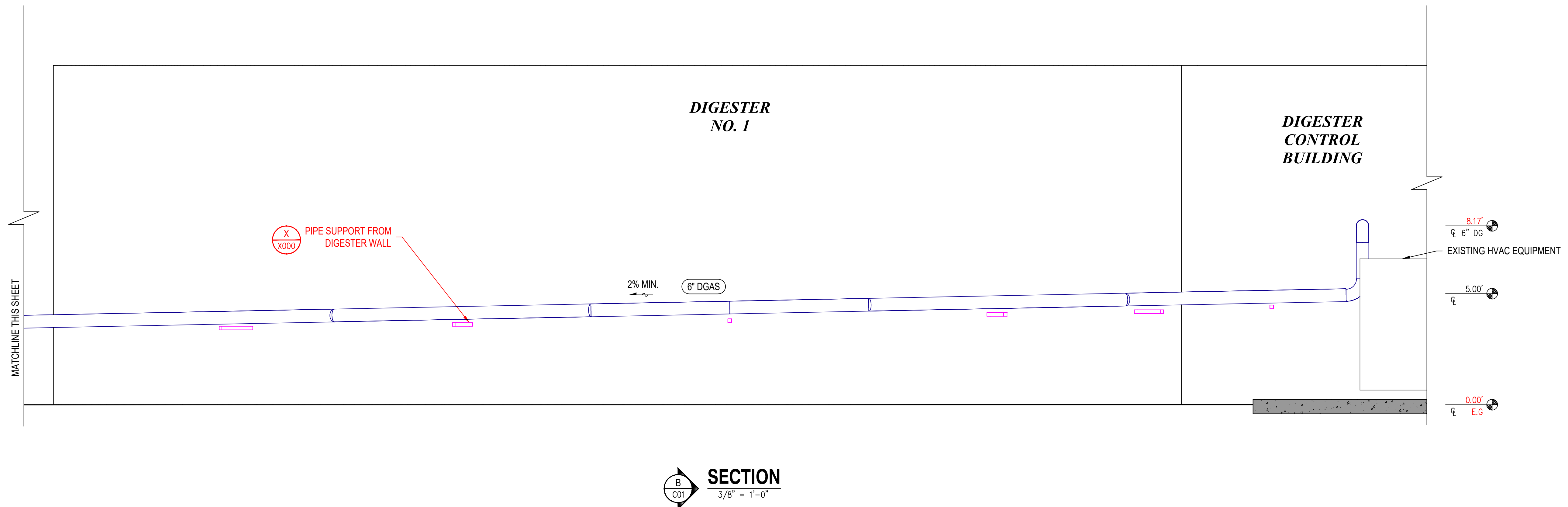
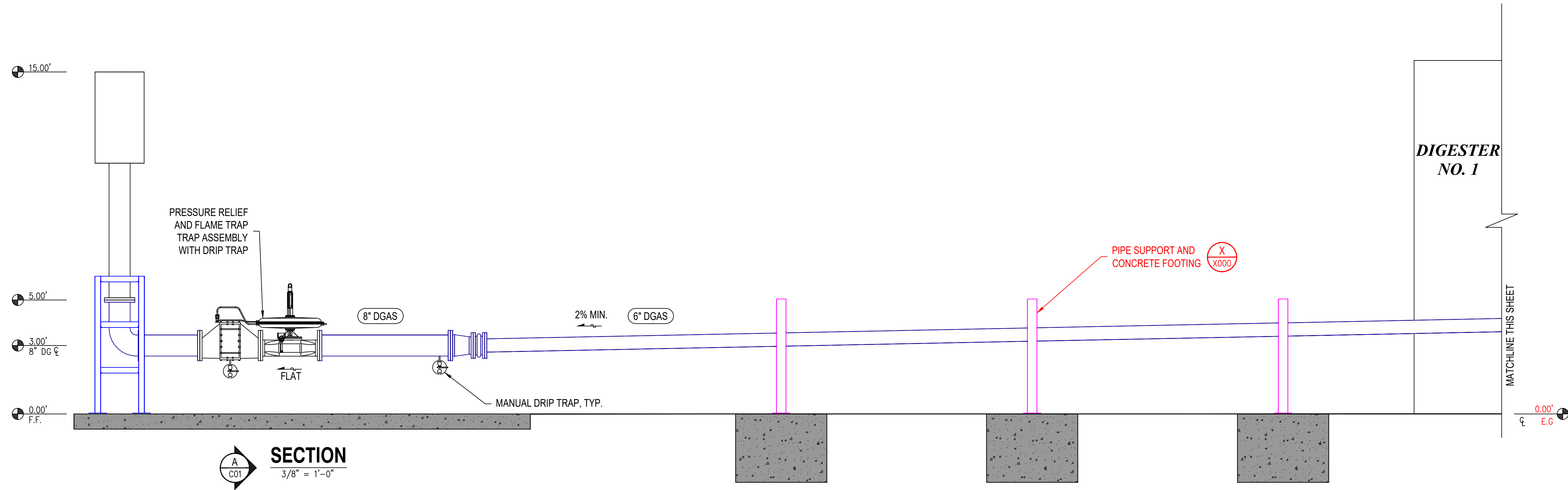
DIGESTER CONTROL BUILDING
BASEMENT GAS PIPING REMOVAL PLAN
 NOT TO SCALE



NEW WASTE GAS BURNER PLAN
 3/8" = 1'-0"

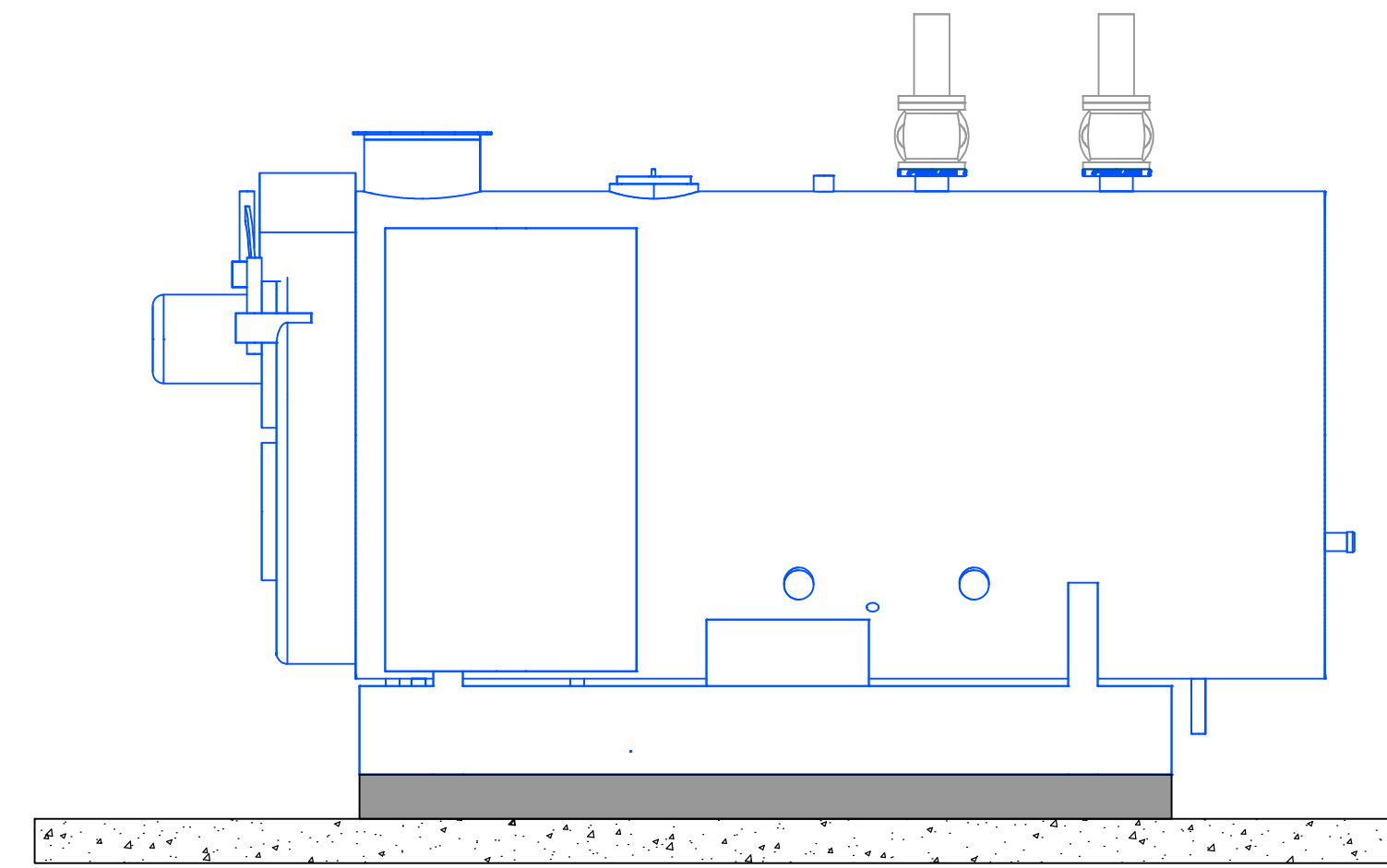
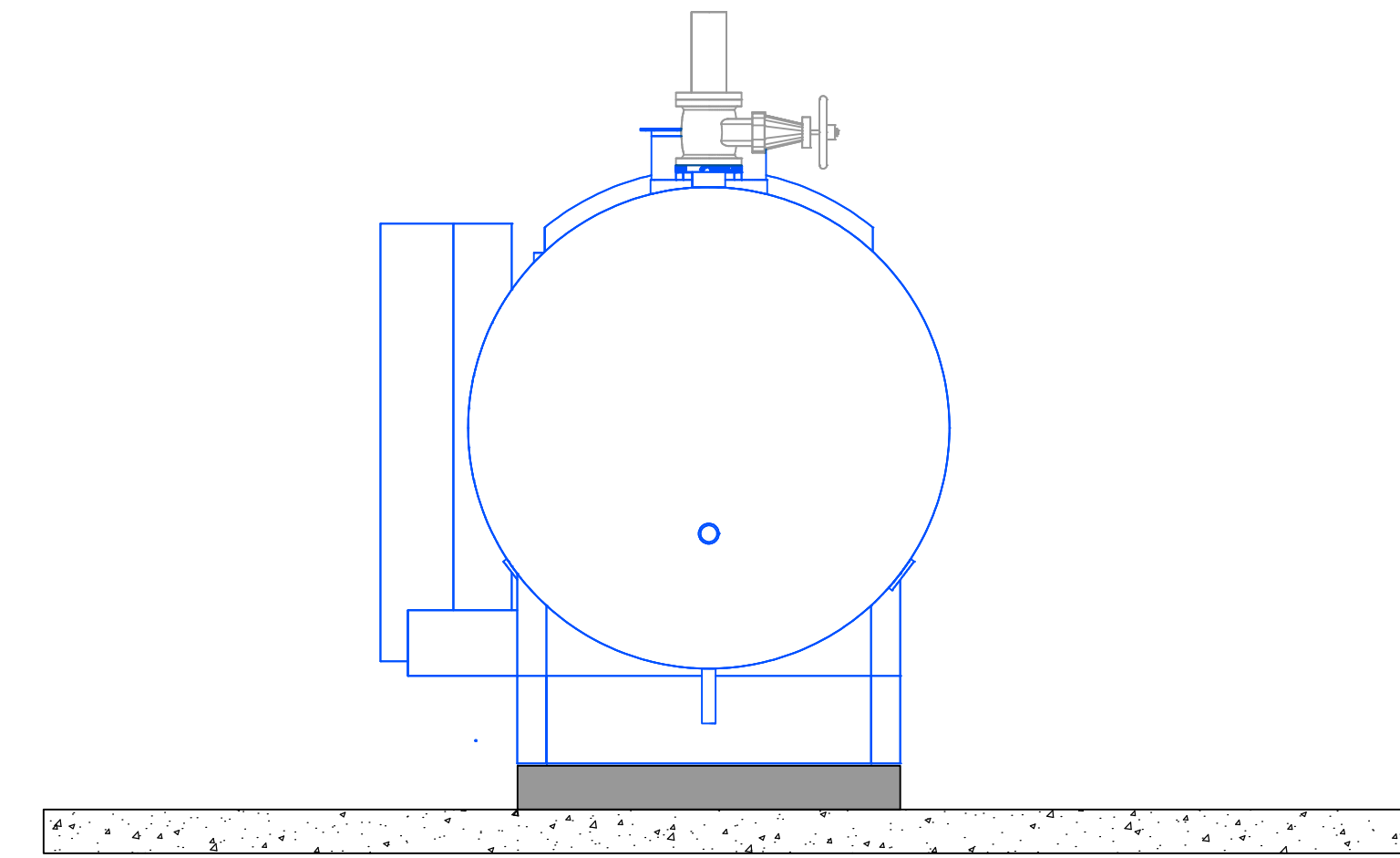
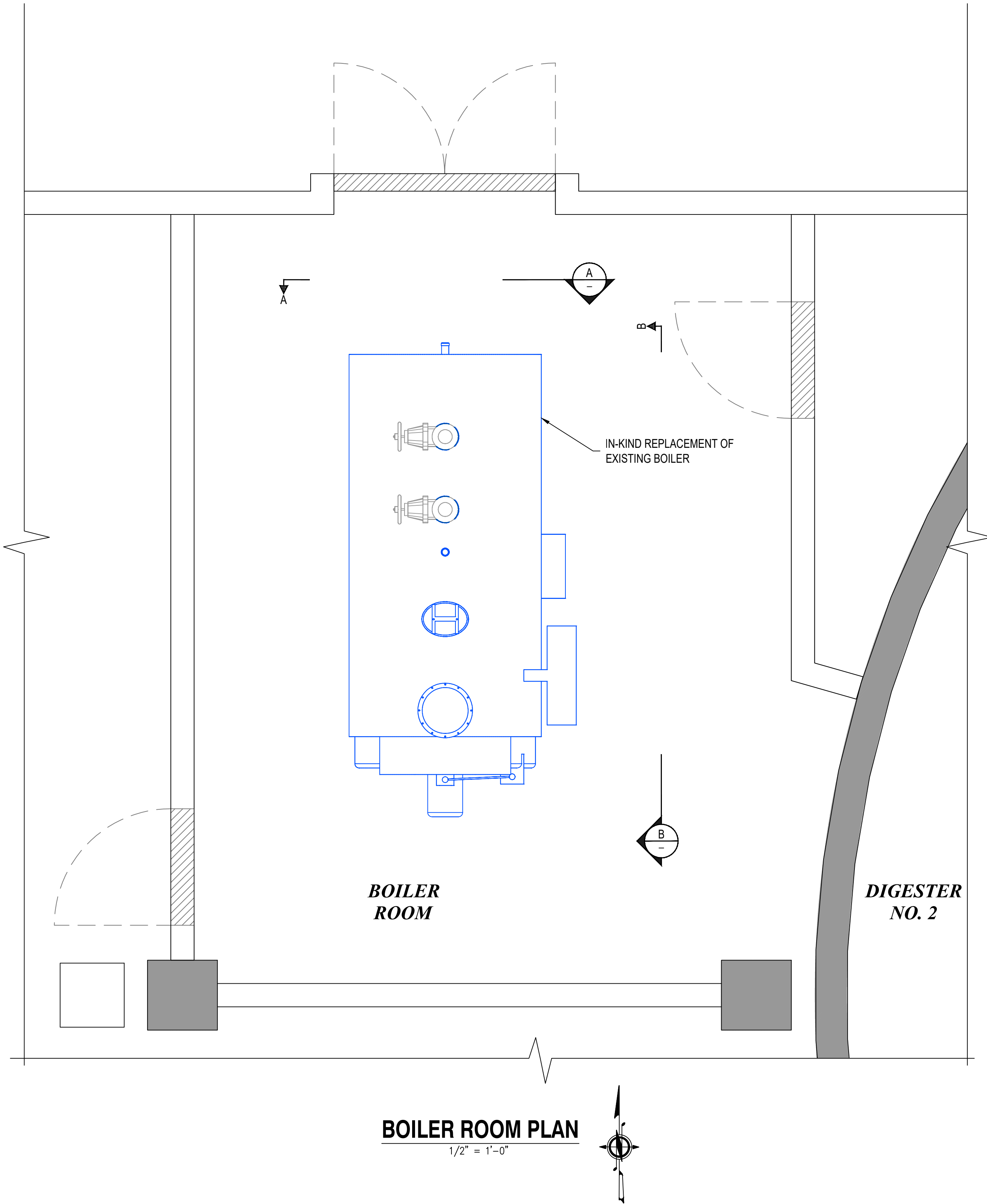


NEW WASTE GAS BURNER PERSPECTIVE
 NOT TO SCALE



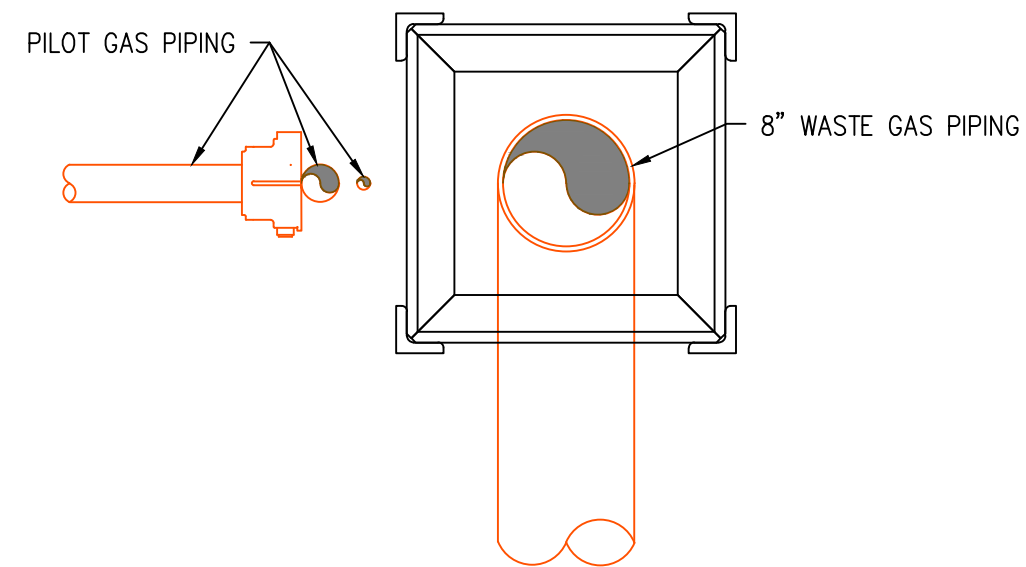
NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: JG	DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 25-0044.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGE-P-MECH.DWG	

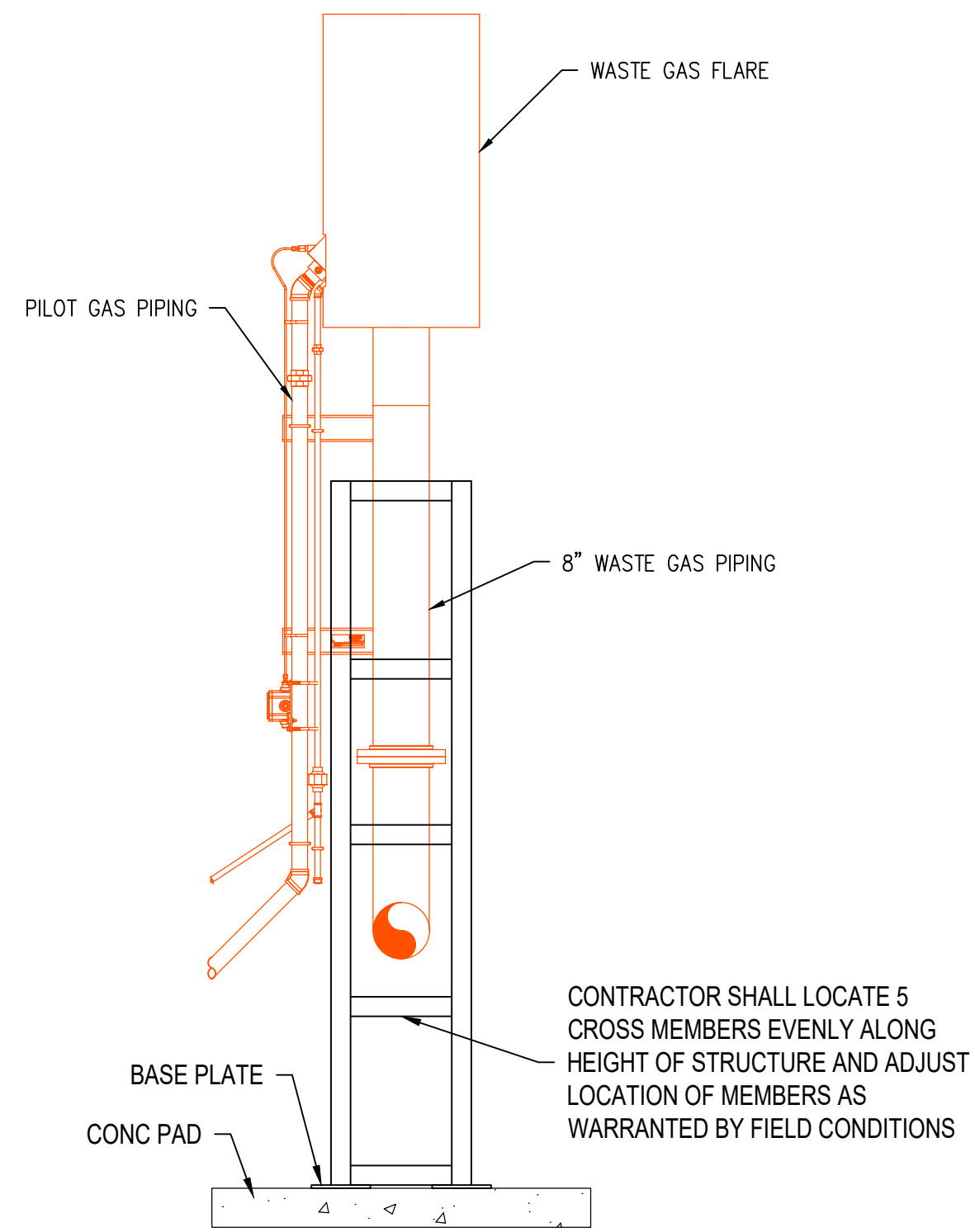


NO.	DATE	DESCRIPTION	BY	REVIEW

ENGINEER: JG	SWF/DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 25-0044.02
REVIEWED: ETS	PLOT/DATE: May 1, 2023	FILENAME: RGEP-MECH.DWG	
REVISIONS			

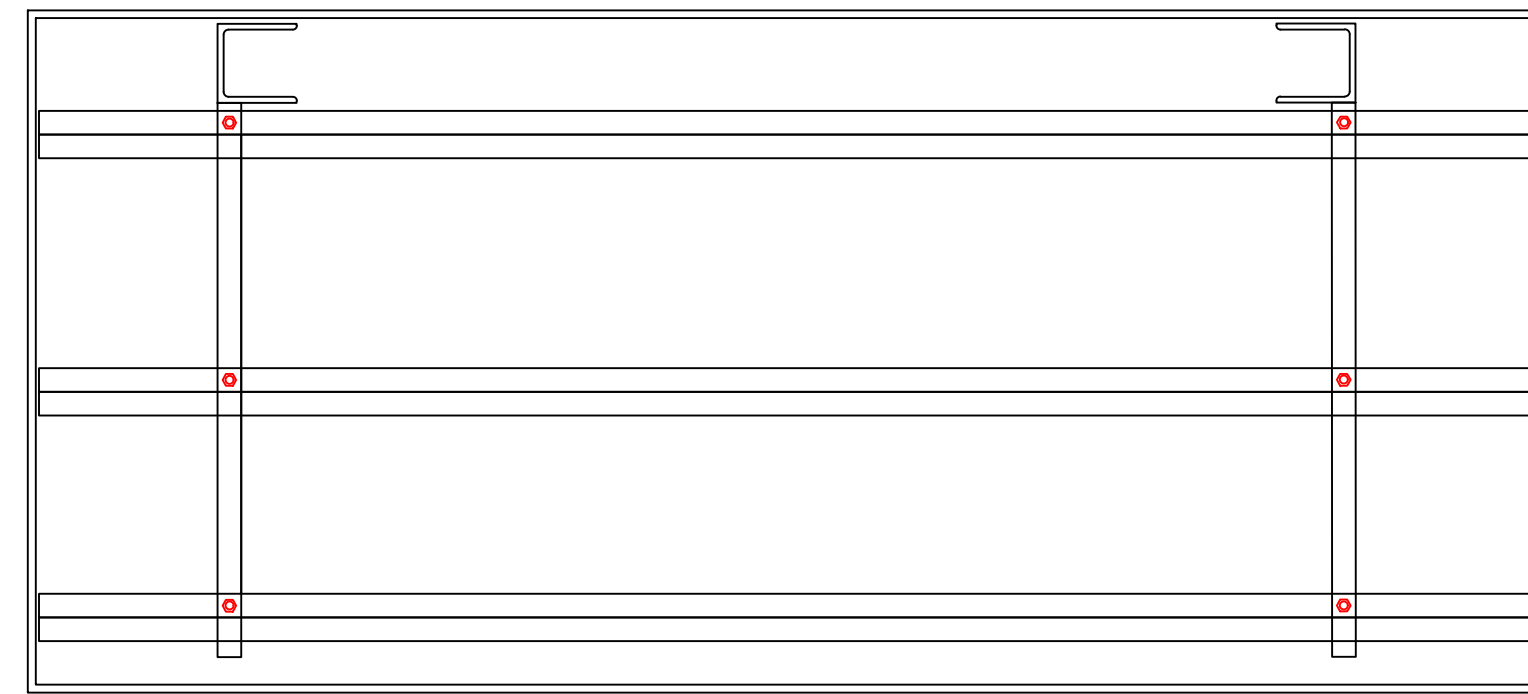


PLAN
1" = 1'-0"

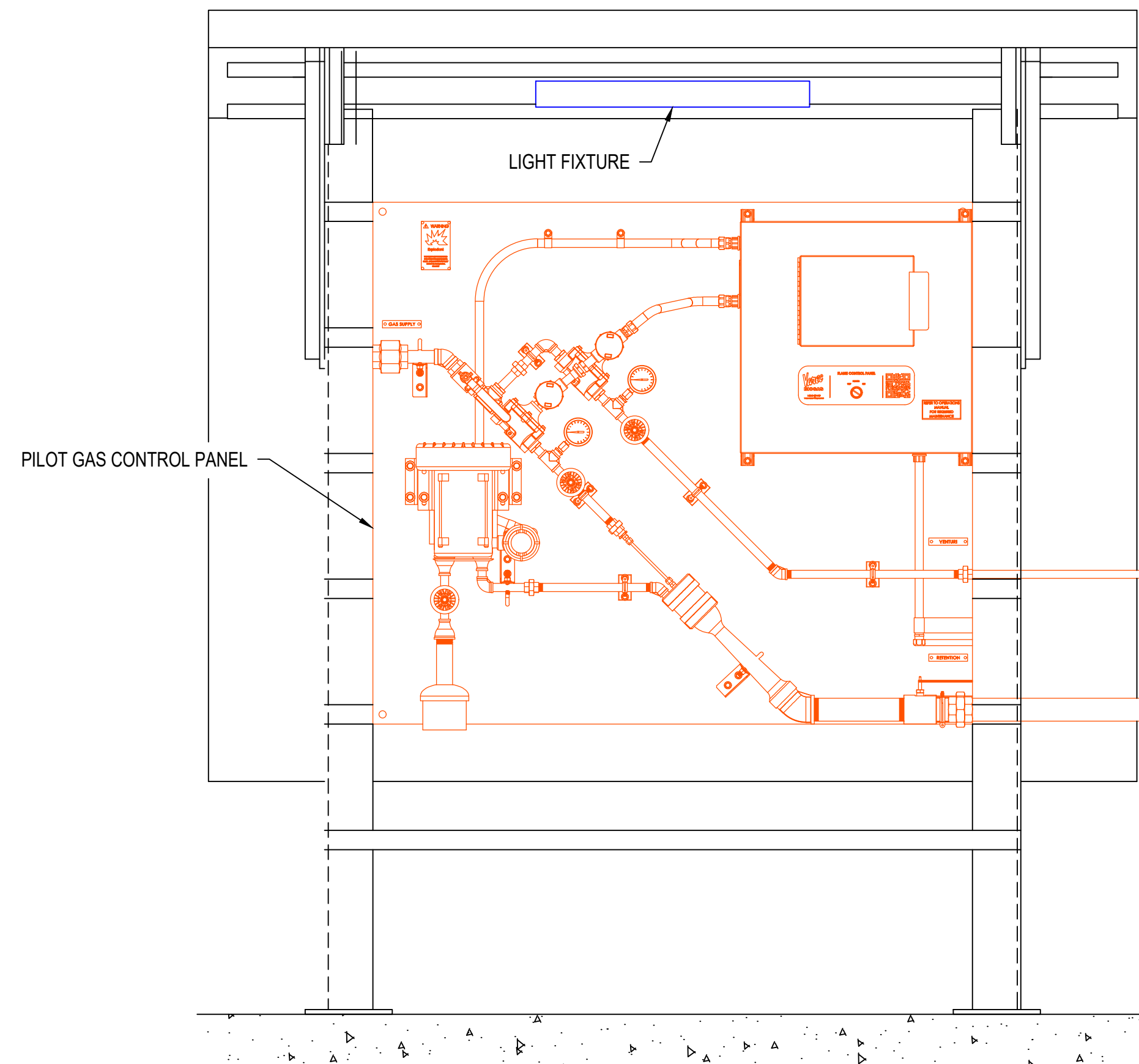


ELEVATION
1/2" = 1'-0"

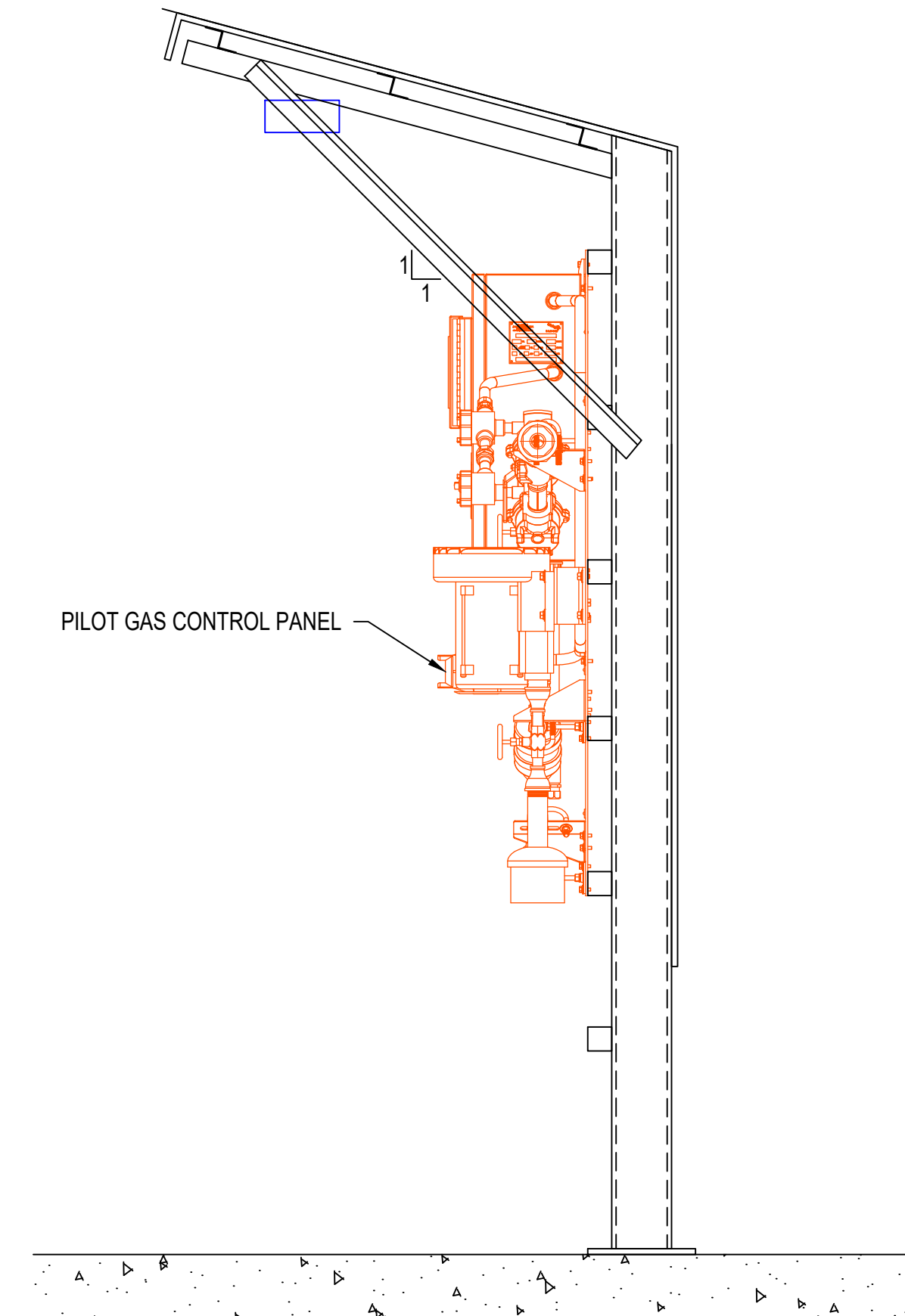
9 WASTE GAS BURNER SUPPORT DETAILS
M03 AS NOTED



PILOT GAS PANEL SHELTER
ROOF PLAN
1" = 1'-0"



FRONT ELEVATION
1" = 1'-0"



SIDE ELEVATION
1" = 1'-0"

10 PILOT GAS PANEL SHELTER
M03 AS NOTED



PRELIMINARY

CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT

WASTE GAS BURNER STRUCTURAL
DETAILS



NO.	DATE	DESCRIPTION	BY	REVIEW

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

ENGINEER: JG	DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 23-0044.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGEP-STR.DWG	

DWG NO.: S01 SHEET NO.: 10



CITY OF RICHLAND

WWTP WASTE GAS BURNER AND BOILER REPLACEMENT

SPRING 2023

PROJECT VICINITY MAP



PROJECT LOCATION MAP



**CALL 48 HOURS BEFORE YOU DIG
ONE CALL 811**

**REPORT ALL SPILLS
DEPT. OF ECOLOGY 1-800-258-5990**

DRAWING INDEX

SHEET NO.	SHEET TITLE	Dwg No
1	COVER	COV
2	SITE PLAN	C01
3	WWTP PHOTOS 1	D01
4	WWTP PHOTOS 2	D02
5	DIGESTER CONTROL BUILDING MECHANICAL OVERVIEW	M01
6	GAS HANDLING ROOM MECHANICAL IMPROVEMENTS	M02
7	BASEMENT GAS PIPE AND WASTE BURNER MECHANICAL IMPROVEMENTS	M03
8	EXTERIOR WASTE GAS PIPING SECTIONS	M04
9	BOILER ROOM MECHANICAL IMPROVEMENTS	M05
10	WASTE GAS BURNER STRUCTURAL DETAILS	S01

DESIGN CRITERIA

PARAMETER	PERMITTED MAXIMUM MONTH
INFLUENT BOD (LB/D)	17,250
INFLUENT TSS (LB/D)	21,200
SLUDGE YIELD (PRIMARY + WAS) (LB/D TS)	18,600
AVERAGE VOLATILE SOLIDS CONTENT (%)	87
SLUDGE YIELD (PRIMARY + WAS) (LB/D VS)	16,200
AVERAGE DIGESTER VOLATILE SOLIDS DESTRUCTION (%)	50
VOLATILE SOLIDS DESTROYED (LB/D)	8,100
AVERAGE DIGESTER GAS YIELD (CF PER 1.0 LB VS DESTROYED)	15
AVERAGE GAS PRODUCTION (CFH)	5,400
PEAK GAS PRODUCTION (CFH)	12,600
WASTE GAS BURNER CONFIGURATION	CANDLE-STICK
WASTE GAS BURNER SIZE (IN)	8
BOILER SIZE (MMBTU)	2,100
BOILER SIZE (HP)	60

CONTACT PERSONNEL

CONTACT	AGENCY	PHONE (509)
ERIC SMITH, P.E. (PROJECT MANAGER)	RH2 ENGINEERING	886-6784
CLAYTON ANDERSON, P.E. (ELECTRICAL ENGINEER)	RH2 ENGINEERING	886-6781
MARC LA VANWAY (PROJECT MANAGER)	CITY OF RICHLAND	942-7791
HECTOR MORENO (LEAD OPERATOR)	CITY OF RICHLAND	942-7483

REVIEW/DISCUSS WITH OWNER

SECTION AND DETAIL REFERENCES

THE FOLLOWING CONVENTIONS HAVE BEEN USED WITHIN THESE DRAWINGS TO REFER THE READER BETWEEN THE SECTION/DETAIL AND THE PLAN FROM WHICH IT IS REFERENCED.

REFERENCE BUBBLES



PLAN REFERENCE BUBBLE - REFERS READER BACK TO THE PLAN FROM WHICH THE DETAIL OR SECTION ORIGINATED.



DETAIL/SECTION REFERENCE BUBBLE - REFERS READER TO THE DRAWING ON WHICH THE DETAIL OR SECTION IS LOCATED.

WHERE, ID = SECTION/DETAIL REFERENCE NUMBER
= DRAWING NUMBER ON WHICH DETAIL ORIGINATED OR RESIDES.

SECTION/DETAIL REFERENCE NUMBER CONVENTIONS:
SECTIONS OR ELEVATIONS SHOULD HAVE A LETTER REFERENCE NUMBER (A THROUGH ZZ).

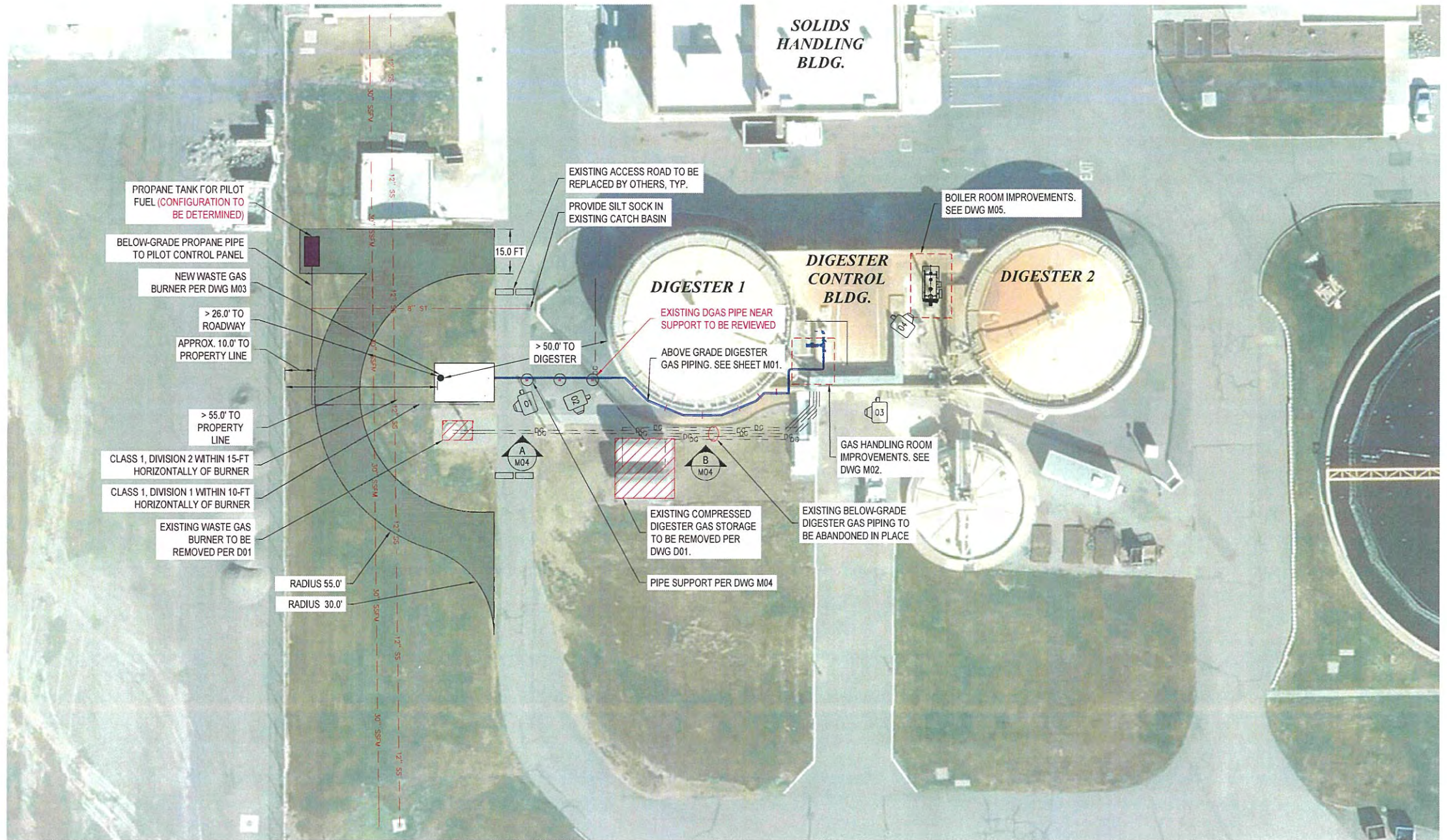
ABBREVIATIONS

CB	CATCH BASIN	LF	LINEAR FEET
CONC	CONCRETE	MCC	MOTOR CONTROL CENTER
CL	CENTERLINE	N	NORTHING
CPEP	CORRUGATED POLYETHYLENE	PE	POLYETHYLENE
CSBC	CRUSHED SURFACING BASE COURSE	PROP	PROPOSED
CSTC	CRUSHED SURFACING TOP COURSE	R	RIGHT
DIAM	DIAMETER	RT	RIGHT
DI	DUCTILE IRON	ROW	RIGHT-OF-WAY
DWG	DRAWING	SPEC	SPECIFICATIONS
E	EASTING	SS	SANITARY SEWER
ELEV	ELEVATION	SSMH	SANITARY SEWER MANHOLE
EOP	EDGE OF PAVEMENT	ST	STORM
EX	EXISTING	STD	STANDARD
HMA	HOT MIXED ASPHALT	SY	SQUARE YARDS
HVAC	HEATING, VENTILATION & AIR CONDITIONING	TYP	TYPICAL
L	LEFT	W	WATER
LT	LEFT	WWTP	WASTEWATER TREATMENT PLANT



PRELIMINARY



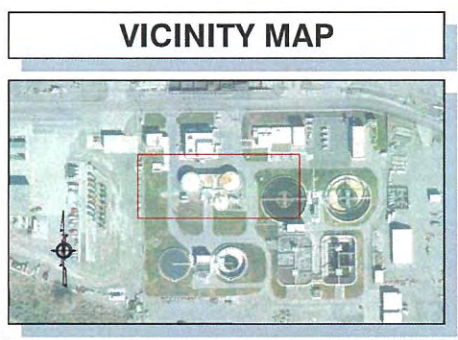


PLAN
1" = 20'



NOTES

TBD



PRELIMINARY

CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT

SITE PLAN



PROJECT NO. 23-0044.02	CLIENT RIC	DATE: May 1, 2023	SCALE: SHOWN	NO.	DATE	DESCRIPTION	BY	REVIEW
DESIGNED ETS	PROJECT DATE: May 1, 2023	FILENAME: RGBB-P-QW/DWG	DRAWING IS FULL SCALE WHEN BAR MEASURES 2"					
REVISIONS								
DWG NO. C01	SHEET NO. 2							

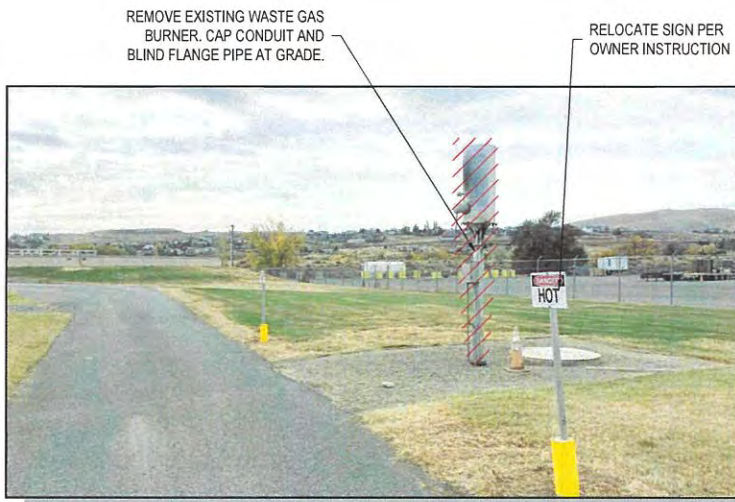


JOB NO. 23-0044.02

CLIENT RICHLAND

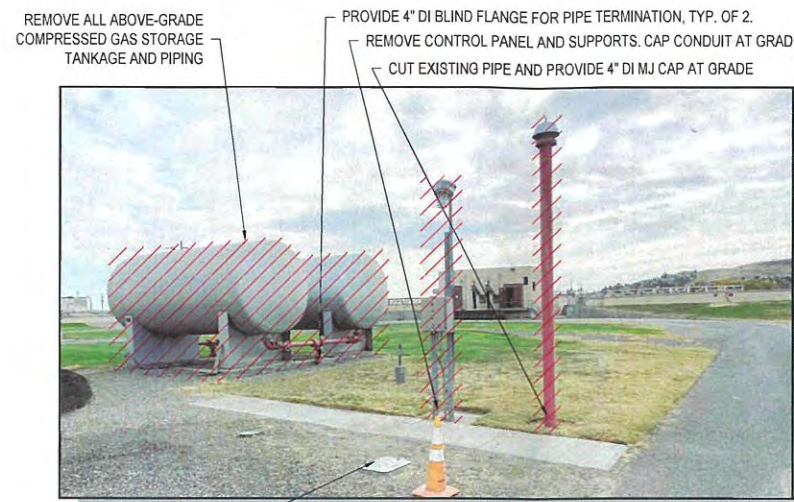
ENGINEER JS

DWG NO. D01



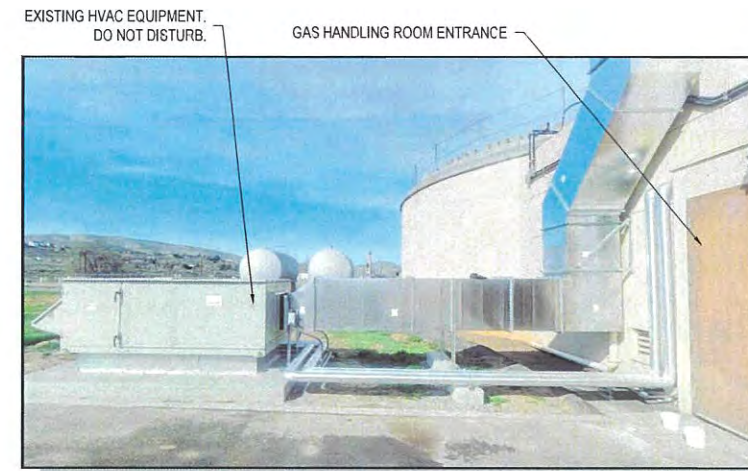
REMOVE EXISTING WASTE GAS BURNER. CAP CONDUIT AND BLIND FLANGE PIPE AT GRADE.
RELOCATE SIGN PER OWNER INSTRUCTION

01 SEE DWG C01



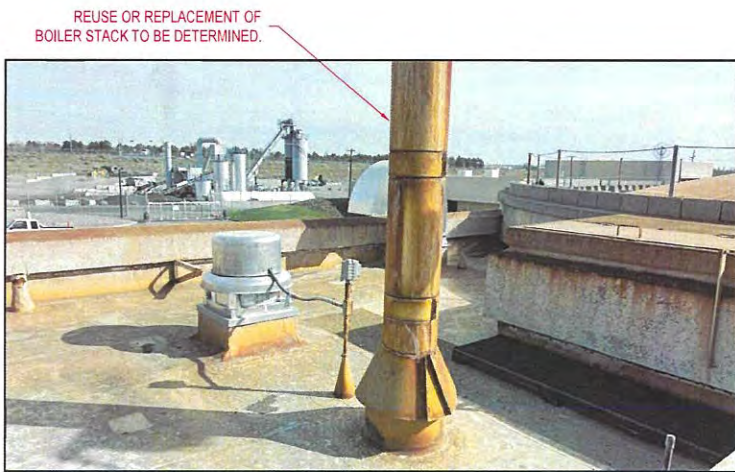
REMOVE ALL ABOVE-GRADE COMPRESSED GAS STORAGE TANKAGE AND PIPING
PROVIDE 4" DI BLIND FLANGE FOR PIPE TERMINATION, TYP. OF 2.
REMOVE CONTROL PANEL AND SUPPORTS. CAP CONDUIT AT GRADE.
CUT EXISTING PIPE AND PROVIDE 4" DI MJ CAP AT GRADE

02 SEE DWG C01



EXISTING HVAC EQUIPMENT. DO NOT DISTURB.
GAS HANDLING ROOM ENTRANCE

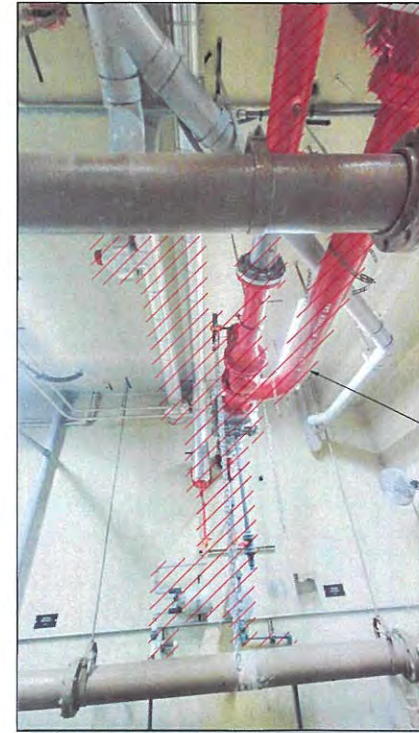
03 SEE DWG C01



REUSE OR REPLACEMENT OF BOILER STACK TO BE DETERMINED.

04 SEE DWG C01

DO NOT DISTURB EXISTING IRRIGATION THIS AREA



REMOVE PIPE AND ASSOCIATED APPURTENANCES TO THE EXTENTS SHOWN

05 SEE DWG M03



REMOVE DISCHARGE SILENCER AND ASSOCIATED PIPE AND APPURTENANCES TO THE EXTENTS SHOWN, TYP. OF 2

06 SEE DWG M03



REMOVE PIPE AND ASSOCIATED APPURTENANCES TO THE EXTENTS SHOWN

07 SEE DWG M03

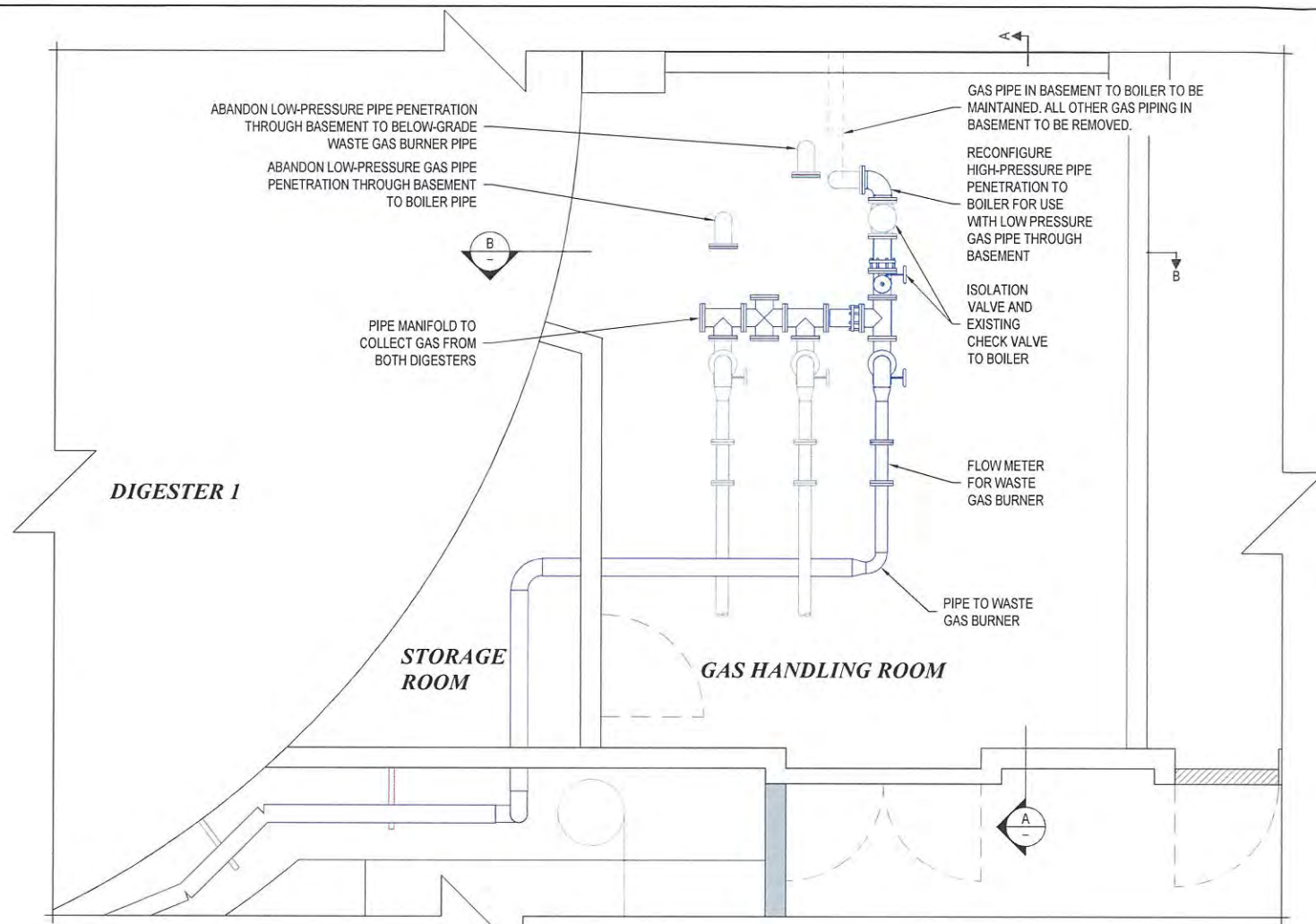
NO.	DATE	DESCRIPTION	BY	REVIEW

SCALE SHOWN

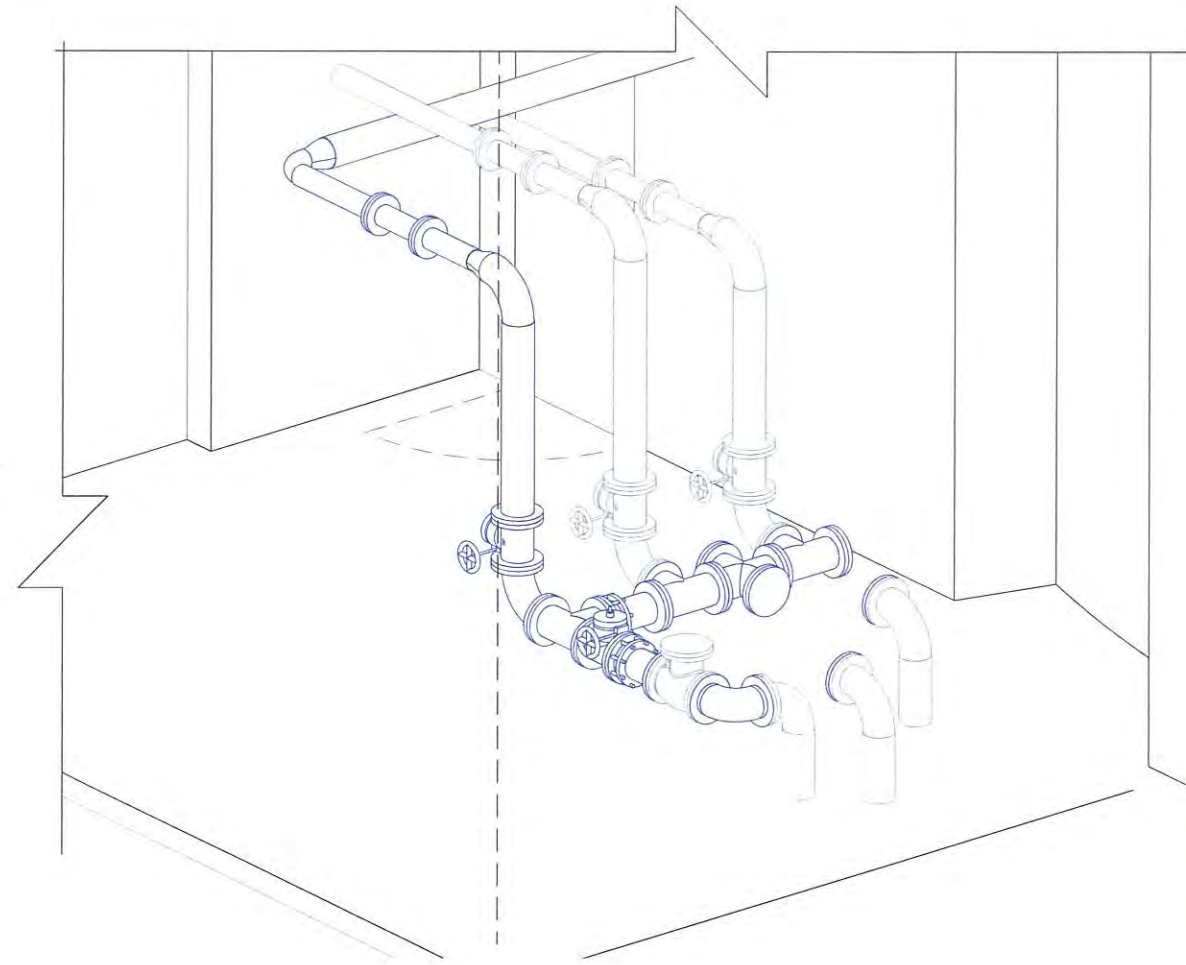
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

SHEET NO. 3

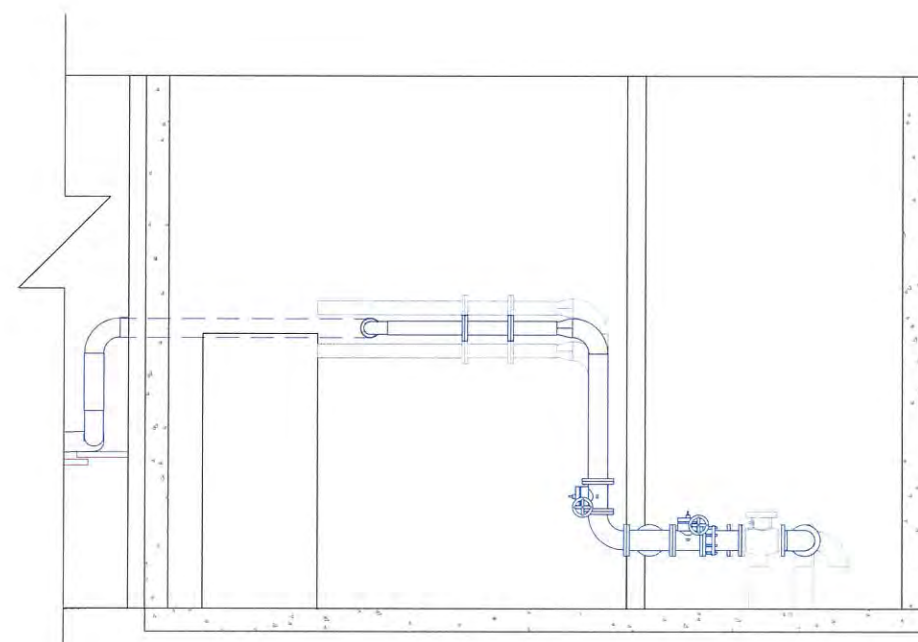
CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT
GAS HANDLING ROOM MECHANICAL
IMPROVEMENTS



GAS HANDLING ROOM PLAN
3/8" = 1'-0"

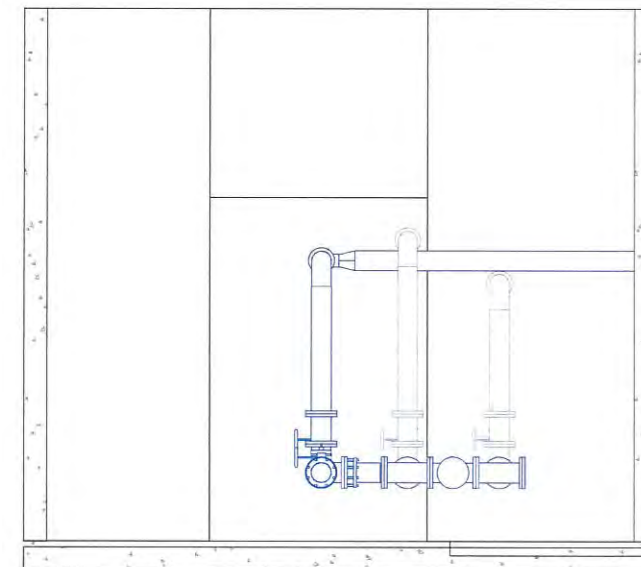


GAS HANDLING ROOM ISOMETRIC
NTS



SECTION A-A
3/8" = 1'-0"

NOTE: EXISTING PIPE SHOWN IN GRAY. PROPOSED IMPROVEMENTS SHOWN IN COLOR.



SECTION B-B
3/8" = 1'-0"

PROJECT NO. 23-0044.02
CLIENT: RIC
FILENAME: RGB-P-MECH2.DWG

REVISIONS

NO	DATE	DESCRIPTION	BY	REVIEW

SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

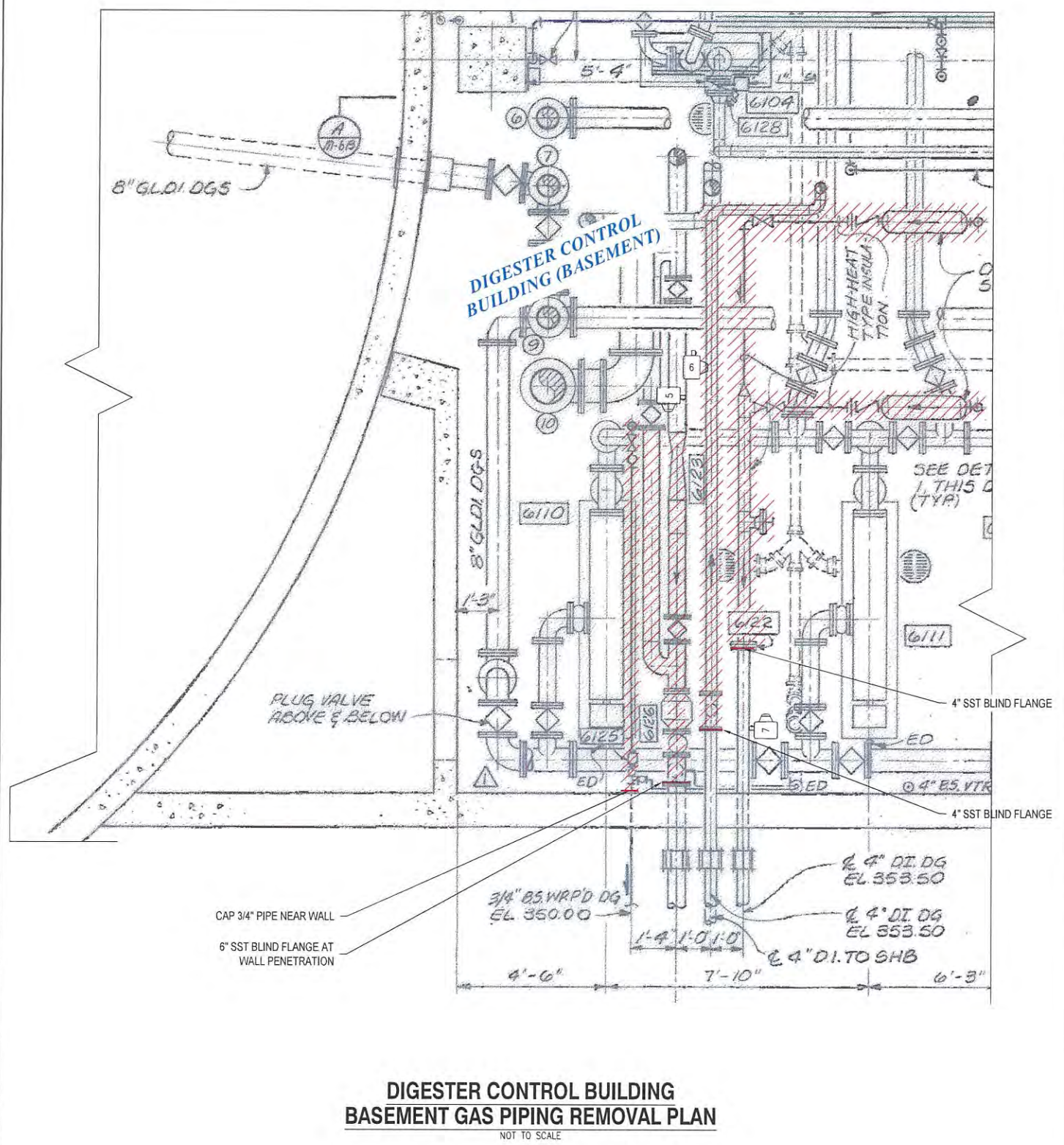
DWG NO.: M02	SHEET NO.: 6	10
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NO.	DATE	DESCRIPTION	BY	REVIEW
REVISIONS				

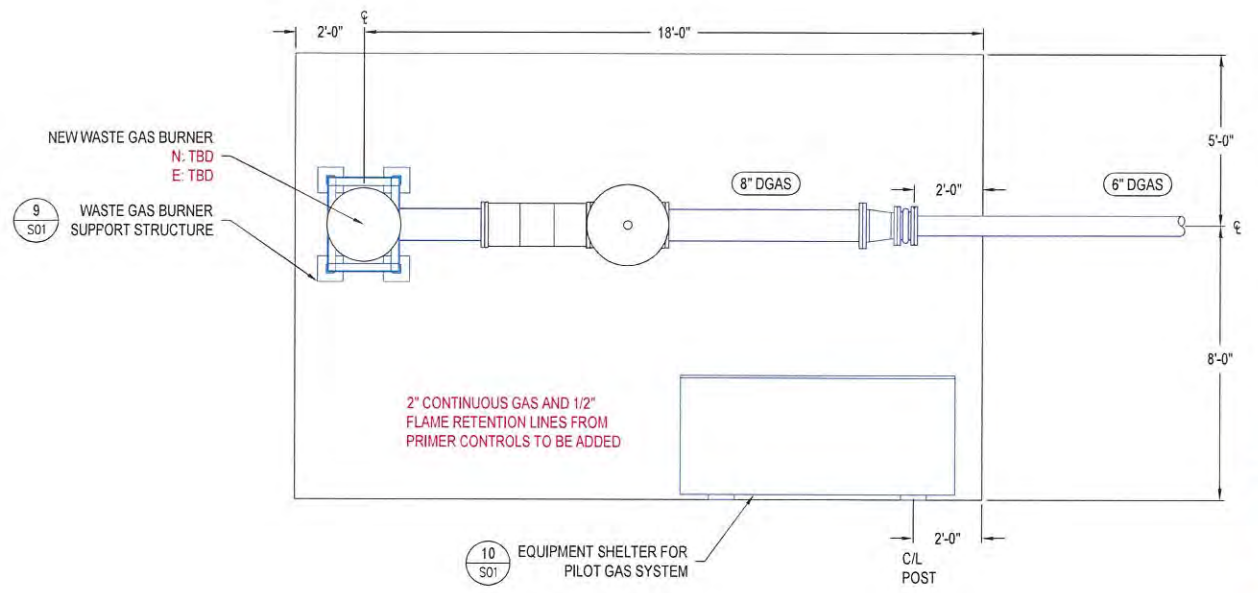
SCALE: SHOWN

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

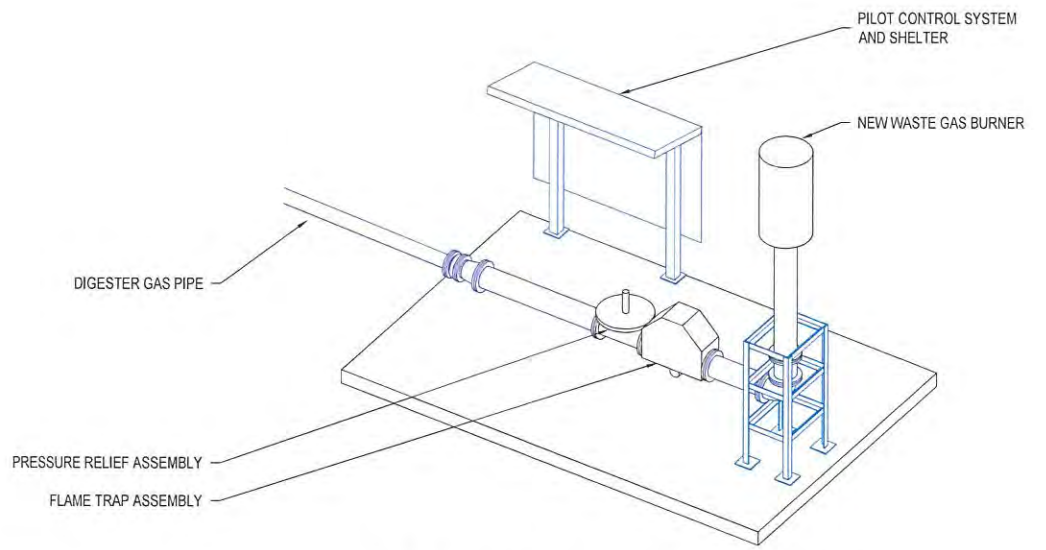
DWG NO.: M03 SHEET NO.: 7 OF 10



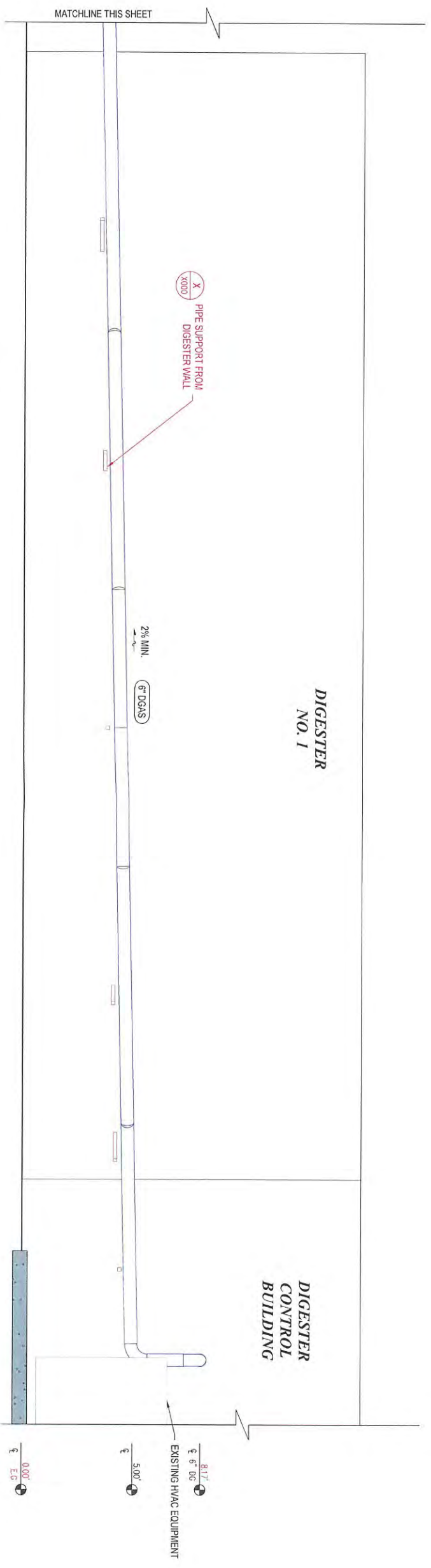
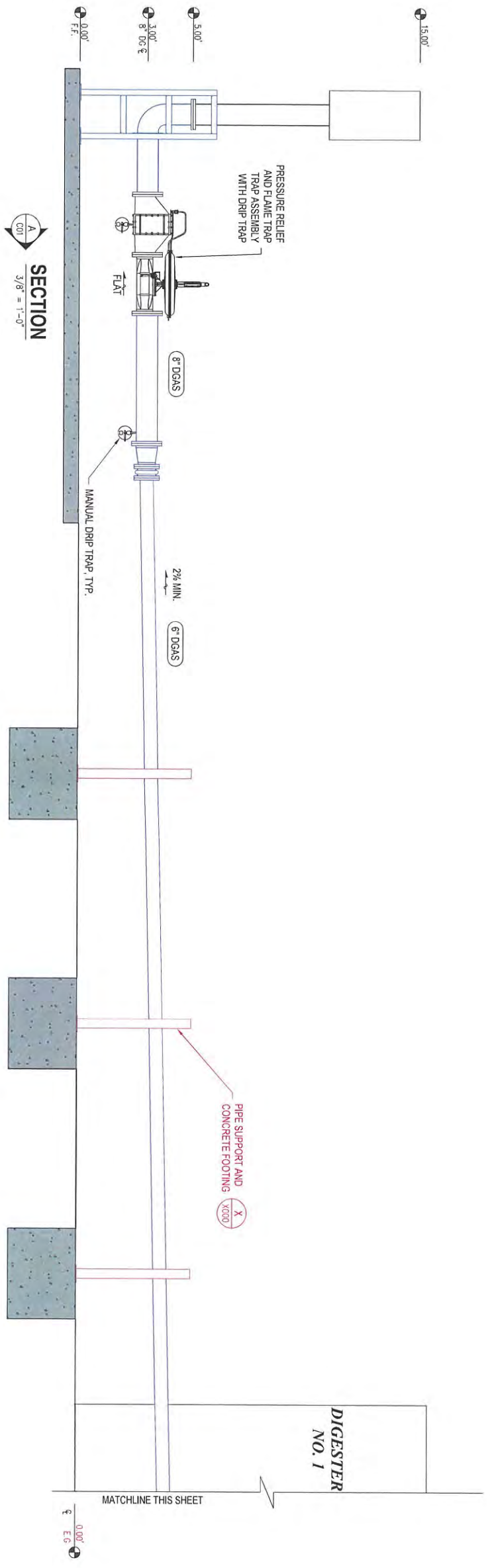
**DIGESTER CONTROL BUILDING
BASEMENT GAS PIPING REMOVAL PLAN**
NOT TO SCALE



NEW WASTE GAS BURNER PLAN
3/8" = 1'-0"



NEW WASTE GAS BURNER PERSPECTIVE
NOT TO SCALE



RH2

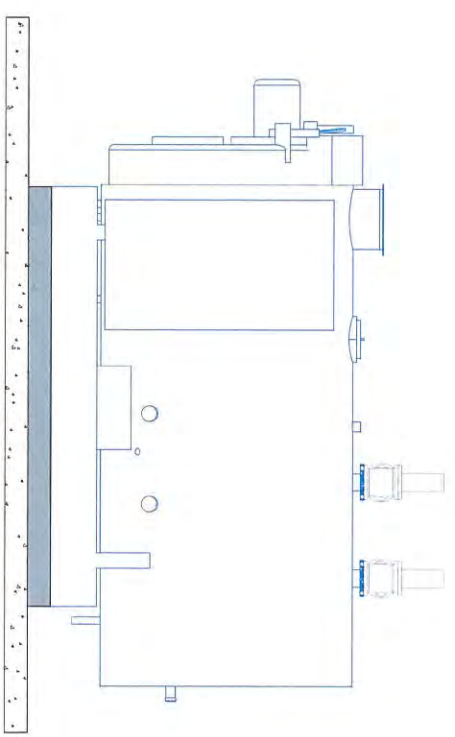
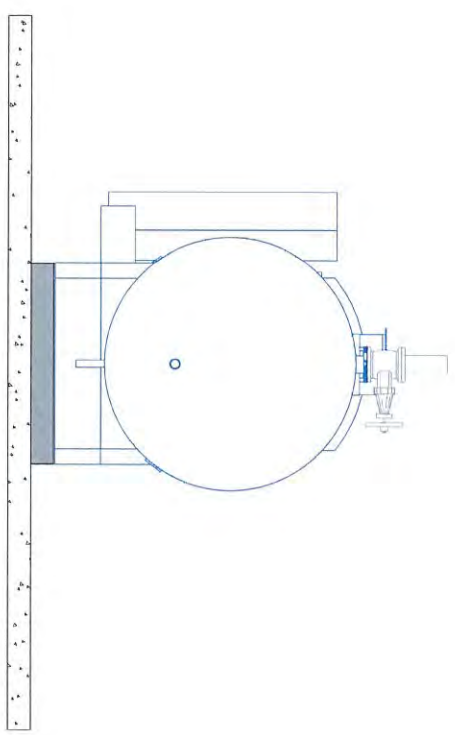
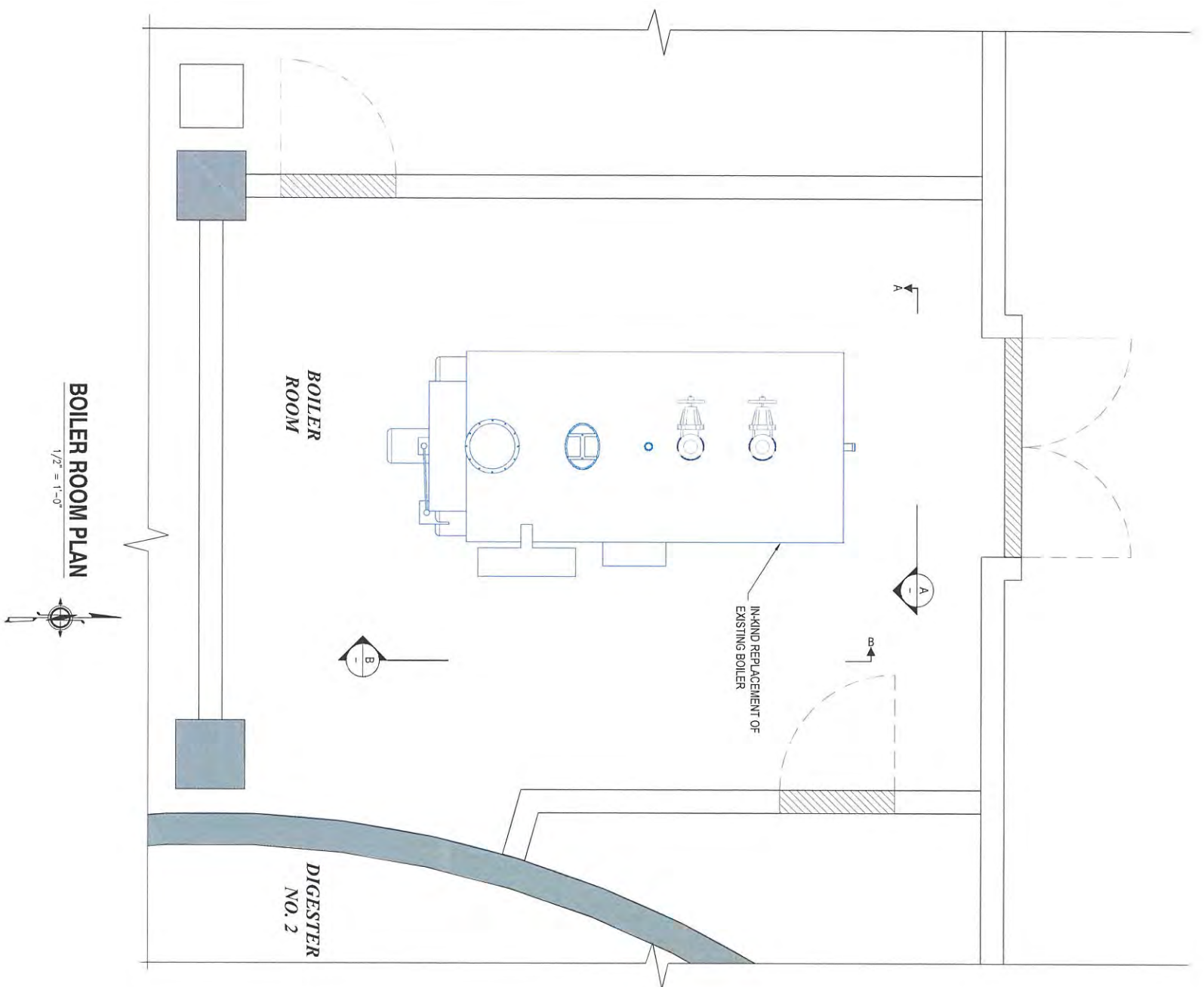
PRELIMINARY

CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT
EXTERIOR WASTE GAS PIPING
SECTIONS



ENGINEER: JG	SAVE DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 23-0044.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGB-P-MECH.DWG	
REVISIONS			
NO.	DATE	DESCRIPTION	BY

SCALE: SHOWN	
DWG NO.: M04	SHEET NO.: 8
DRAWING BY: BAR WENIGERS	
DATE: 5/1/2023	



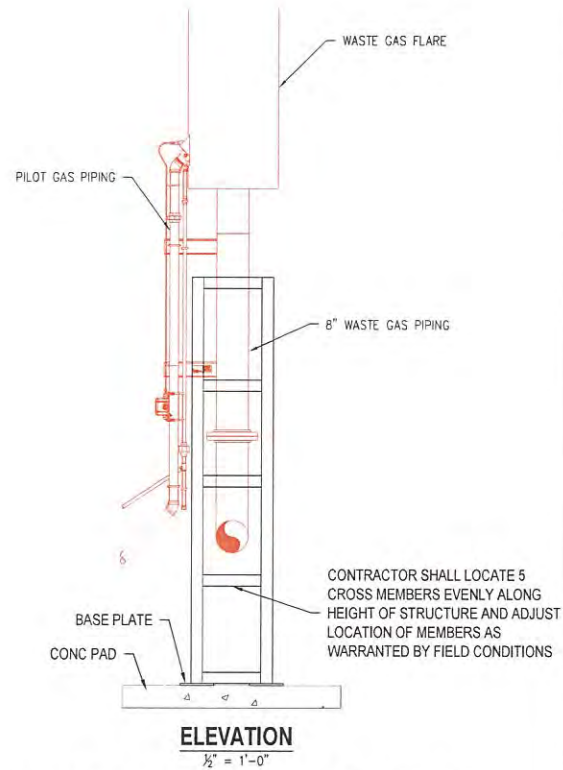
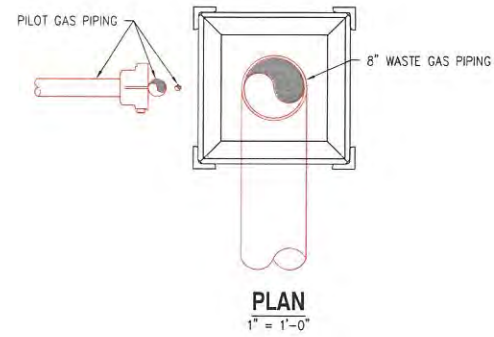
ENGINEER: JG	DATE: May 1, 2023	CLIENT: RIC	JOB NO.: 23-0044.02
REVIEWED: ETS	PLOT DATE: May 1, 2023	FILENAME: RGB-P-MECH.DWG	
REVISIONS			
NO.	DATE	DESCRIPTION	BY

CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT

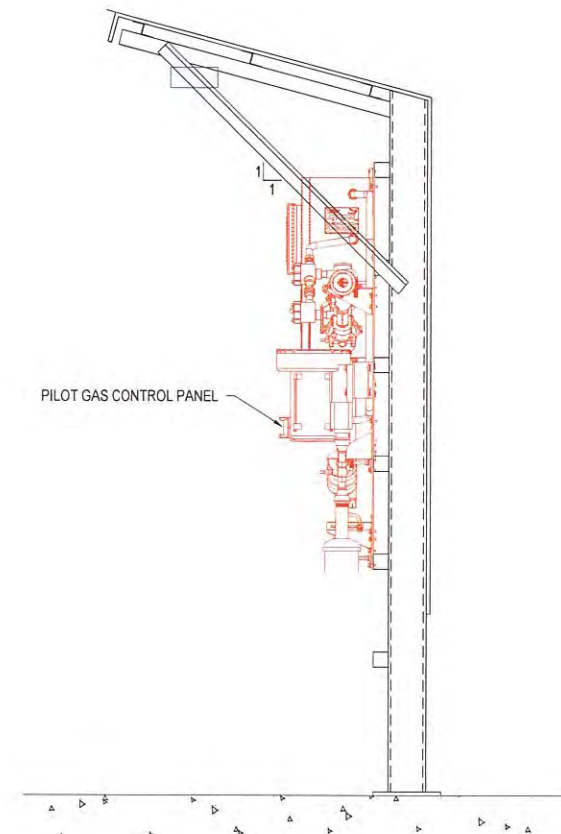
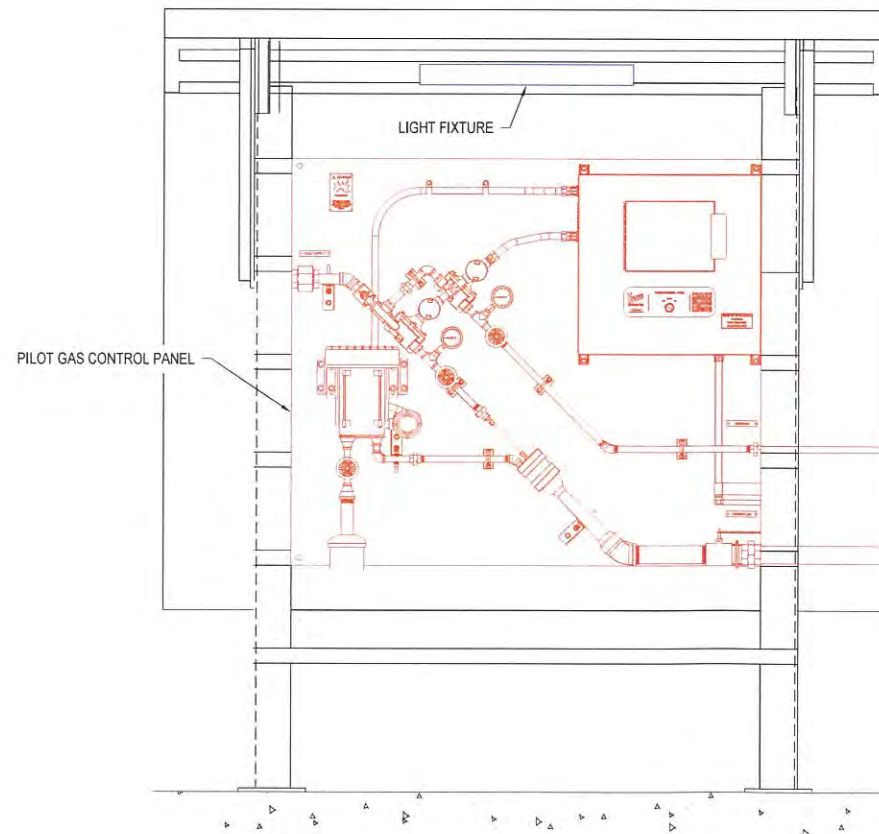
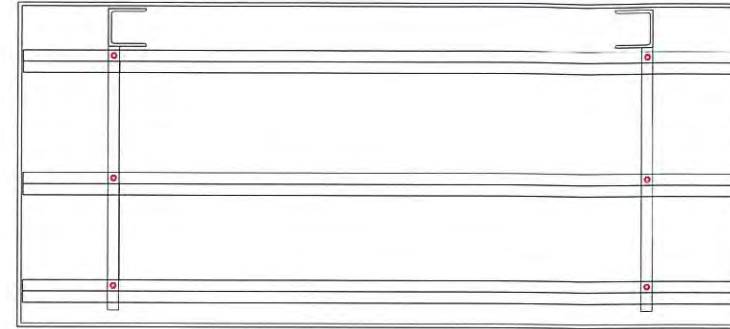
BOILER ROOM MECHANICAL IMPROVEMENTS

PRELIMINARY

DWG NO.: M05
SHEET NO.: 9
10



9 WASTE GAS BURNER SUPPORT DETAILS
M03 AS NOTED



10 PILOT GAS PANEL SHELTER
M03 AS NOTED



PRELIMINARY

CITY OF RICHLAND
WASTEWATER TREATMENT PLANT
WASTE GAS BURNER REPLACEMENT
WASTE GAS BURNER STRUCTURAL
DETAILS



NO.	DATE	DESCRIPTION	BY	REVIEW

SCALE: SHOWN	
DRAWING IS FULL SCALE WHEN BAR MEASURES 2"	
DWG NO.: S01	SHEET NO.: 10

