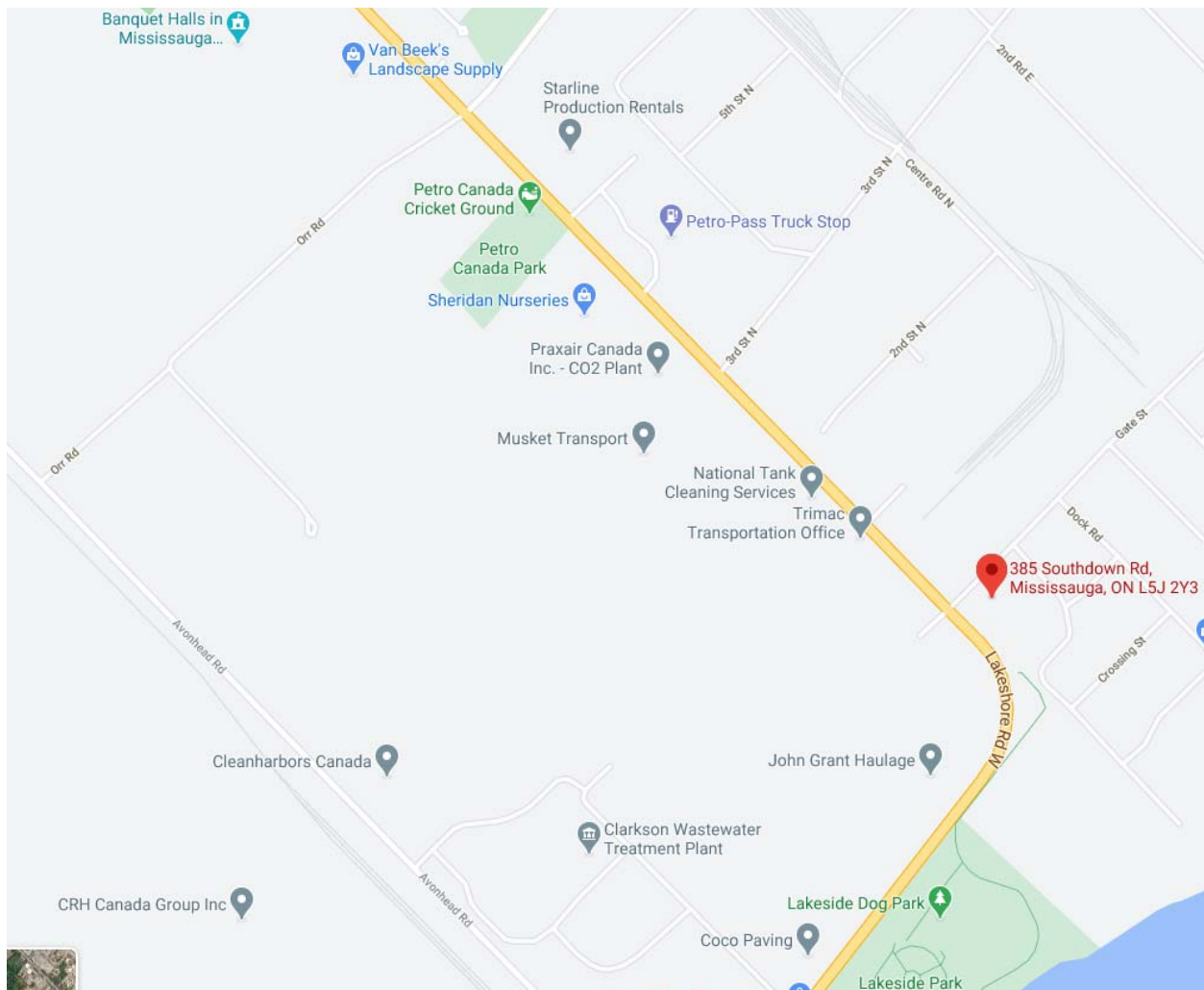
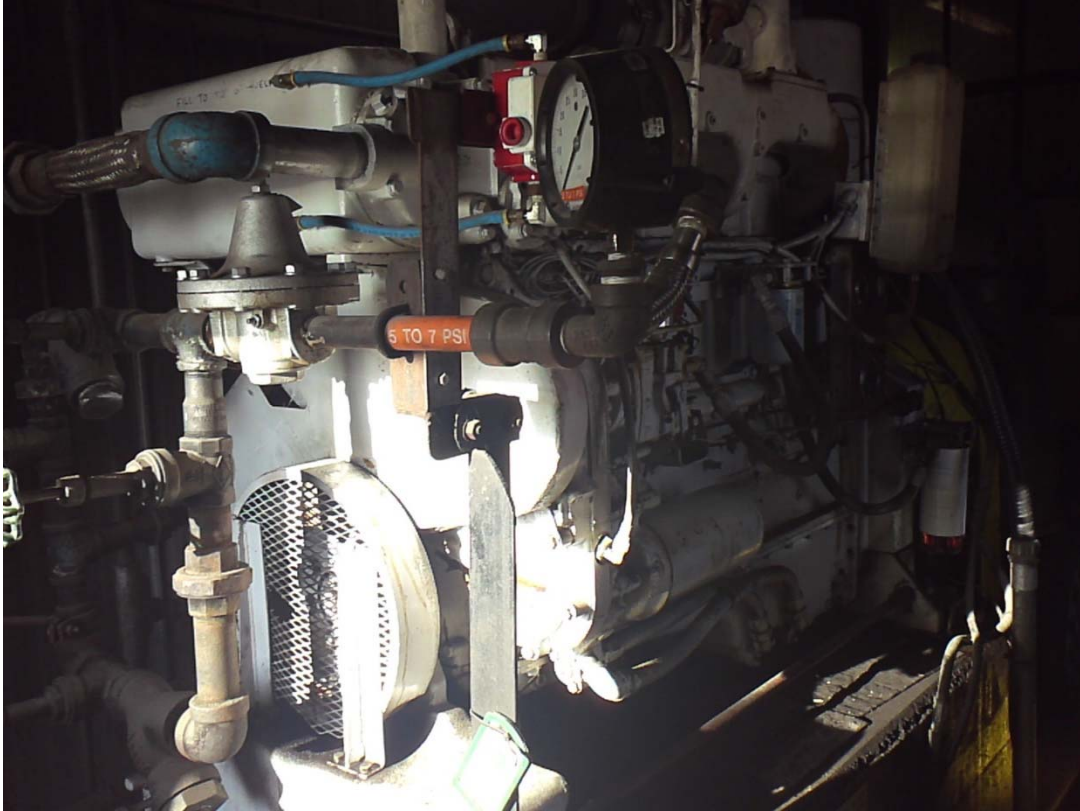


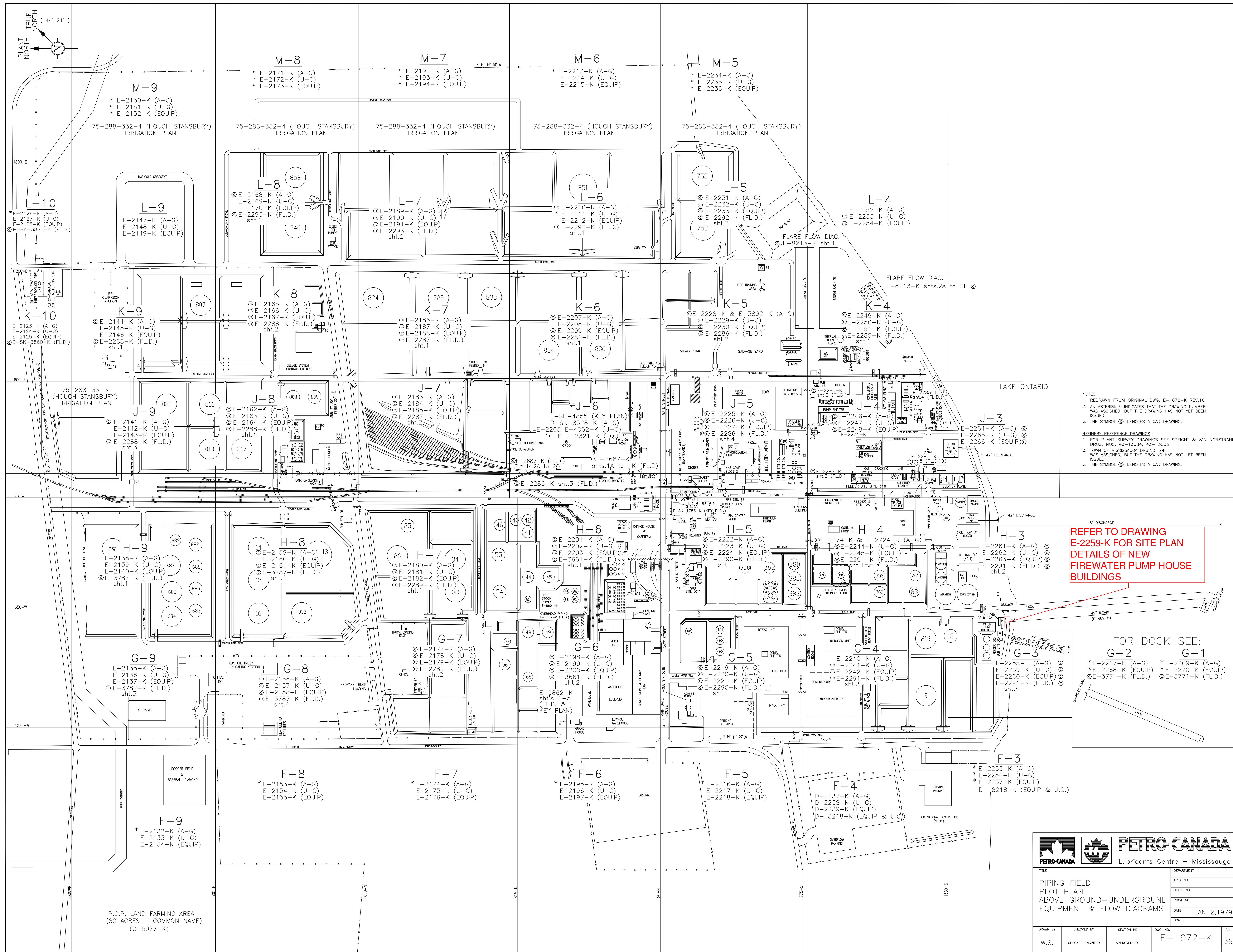
Appendix 1

Location Map (Google)









Legend

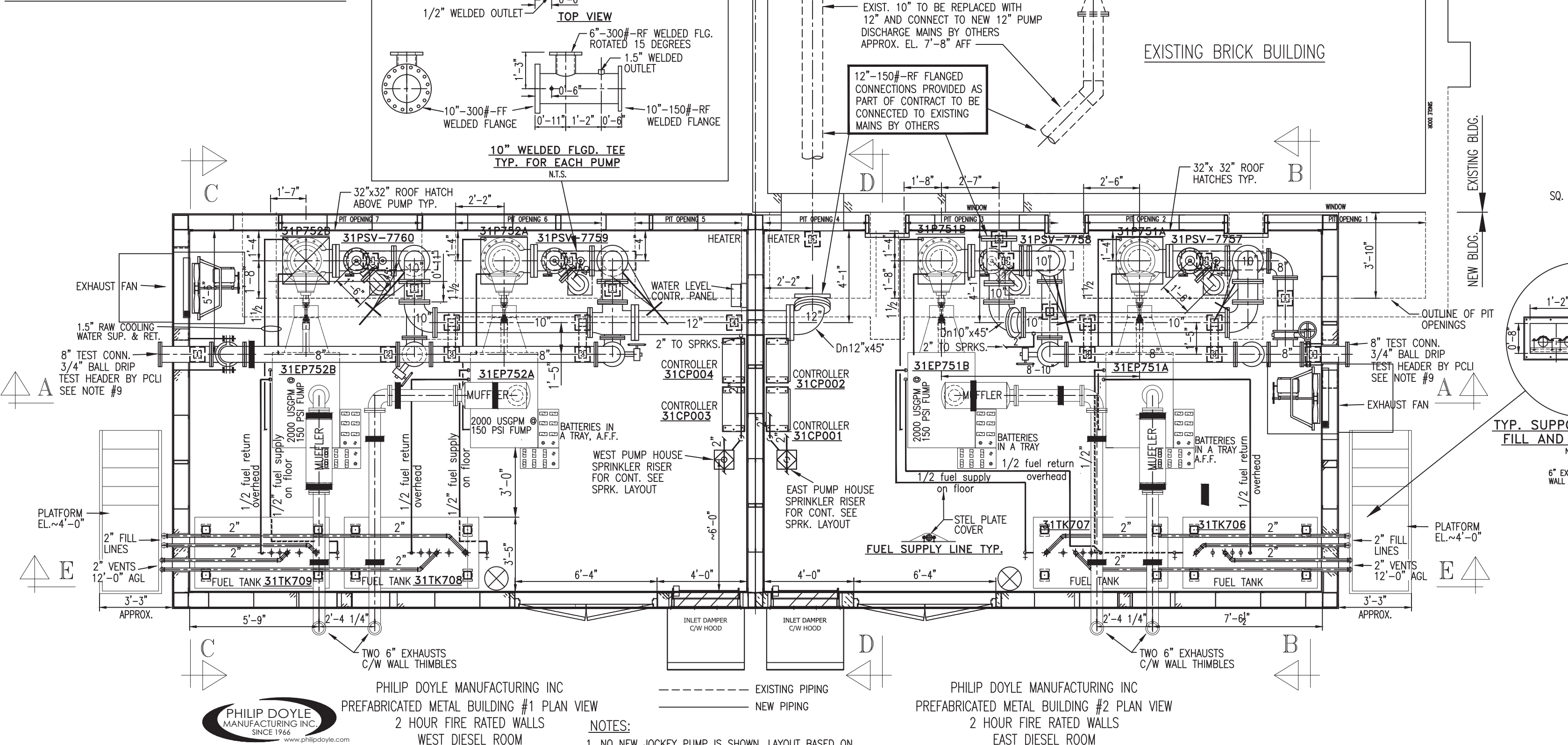
- | | | | |
|---|--|---|-----------------------------|
|  | PUBLIC HYDRANT
(WITH 4") |  | FIRE DEPARTMENT
BUILDING |
|  | PRIVATE HYDRANT
(WITH 4") |  | FOAM
HOUSE |
|  | FIRE HYDRANT
C/W MONITOR |  | HIGH VOLUME
MANIFOLDS |
|  | FIRE WATER
MONITOR |  | SIAMESE CONN.
(WALL MTG) |
|  | FIRE DEPARTMENT
PRIMARY BLDG ACCESS |  | FOAM
CONNECTION |
|  | FIRE DEPARTMENT
PRIMARY SITE ACCESS | | |
|  | FIRE DEPARTMENT
SECONDARY SITE ACCESS | | |

NOTES:
1. ALL REPAIRED PIPING REPLACED
WITH 12" HDPE
2. NEW 1000 GPM HYDRANT MONITORS
TO BE PROVIDED AT HAZARD AREAS



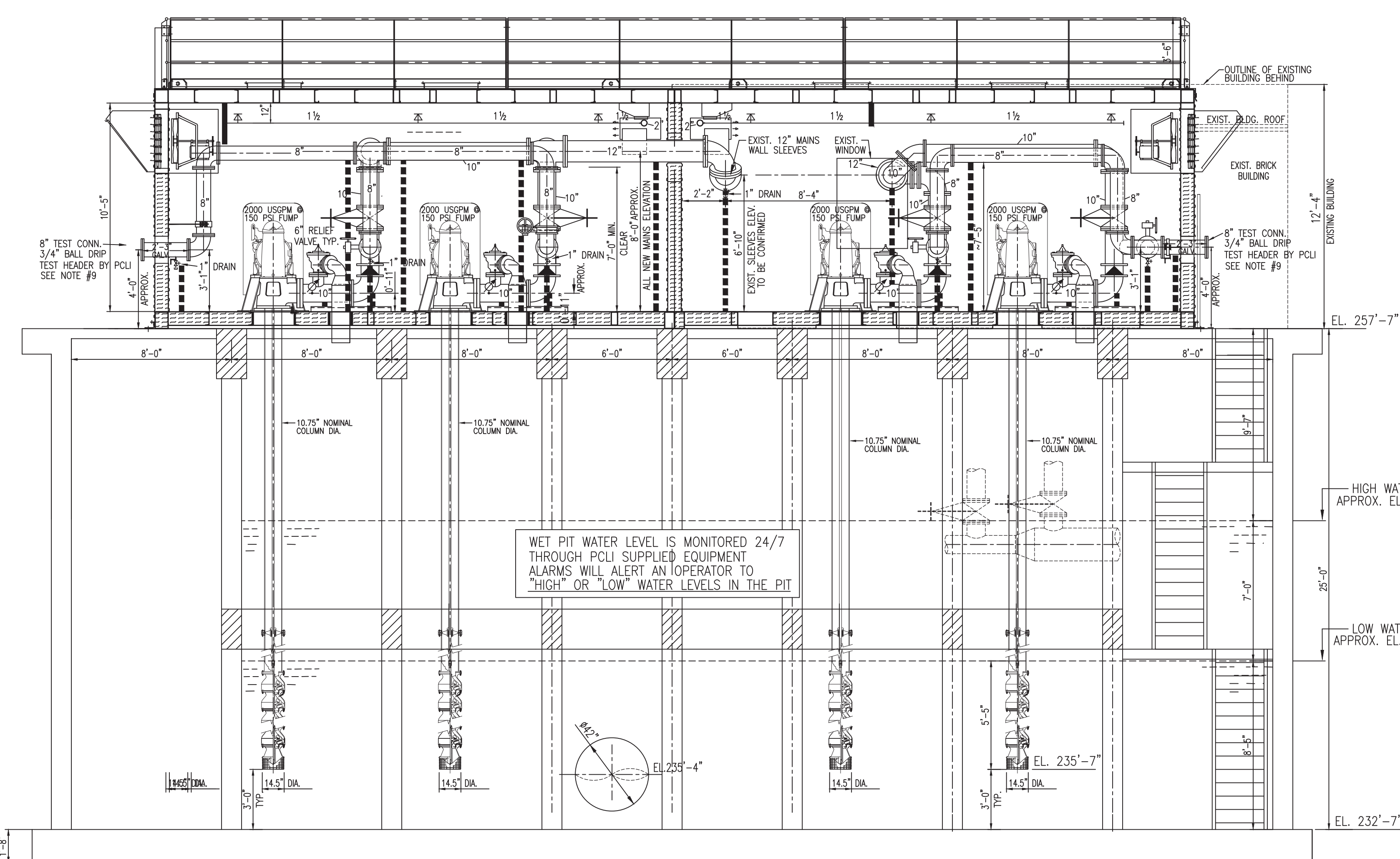
LEGEND

- 6" PILOT CONTROLLED, CLA-VAL 2050B-4KG1KO ANGLE PRESSURE RELIEF VALVE
- 10" AOSY-FF, ALEUM OS&Y GATE VALVE, MECHANICALLY SUPERVISED (CHAINED & LOCKED OPEN)
- LD-3510-8" LUG TYPE BUTTERFLY VALVE, MECHANICALLY SUPERVISED (CHAINED & LOCKED CLOSED)
- CLA-VAL 10" MODEL-582W CHECK VALVE
- PIPE STAND
- CEILING HANGERS
- 10lb CO2 FIRE EXTINGUISHER
- 1" GLOBE VALVE (DRAIN)
- 0-300 PSI WATER PRESSURE GAUGE



EAST & WEST PUMP ROOM LAYOUTS

1/4" = 1'-0"



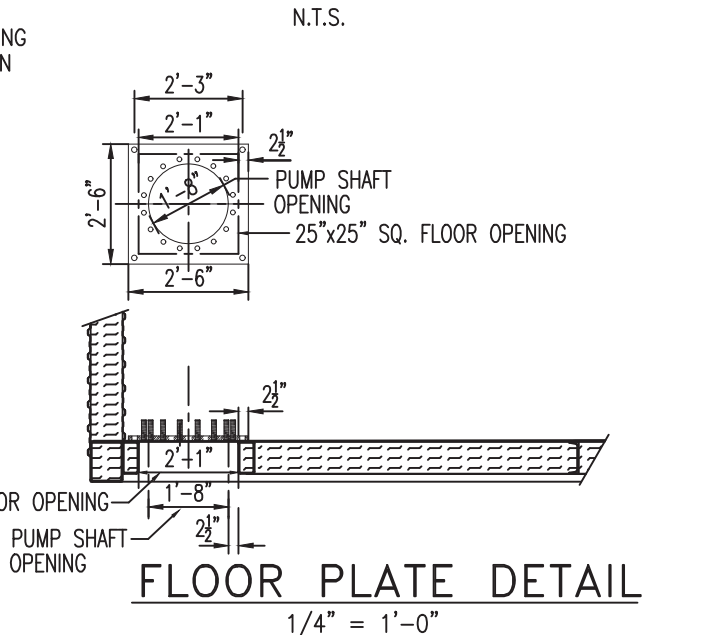
EAST & WEST PUMP ROOMS SECTION A-A

1/4" = 1'-0"

NOTE:
DESIGN IS BASED ON PETRO CANADA
Drawing # D-3468-K-5
Dated: NOV. 15, 1972, Rev. #5

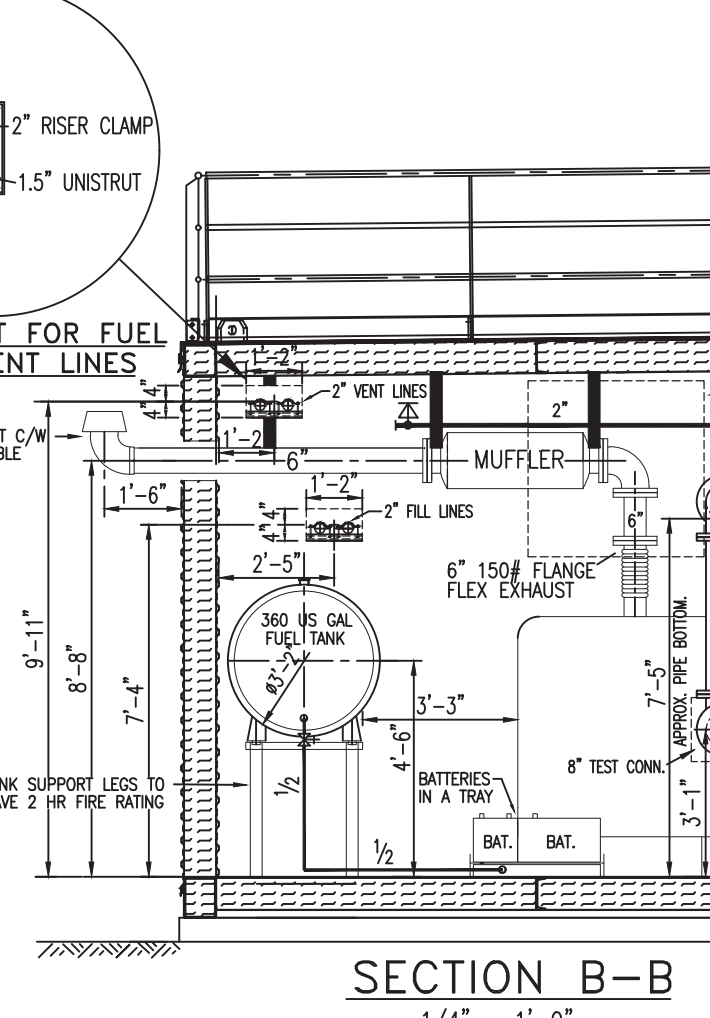
SCHEMATIC LEGEND:

- 10" AOSY-FF, ALEUM OS&Y GATE VALVE, MECHANICALLY SUPERVISED (CHAINED & LOCKED OPEN)
- 6" PILOT CONTROLLED CLA-VAL 2050B-4KG1KO ANGLE PRESSURE RELIEF VALVE
- CLA-VAL 10" MODEL-582W CHECK VALVE
- LD-3510-8" LUG TYPE BUTTERFLY VALVE, MECHANICALLY SUPERVISED (CHAINED & LOCKED CLOSED)
- 1" GLOBE VALVE (AUX. DRAINS)
- 0-300 PSI WATER PRESSURE GAUGE
- 1.5" AUTOMATIC AIR RELEASE VALVE

EAST & WEST PUMP ROOM
SPRINKLER RISER SCHEMATIC

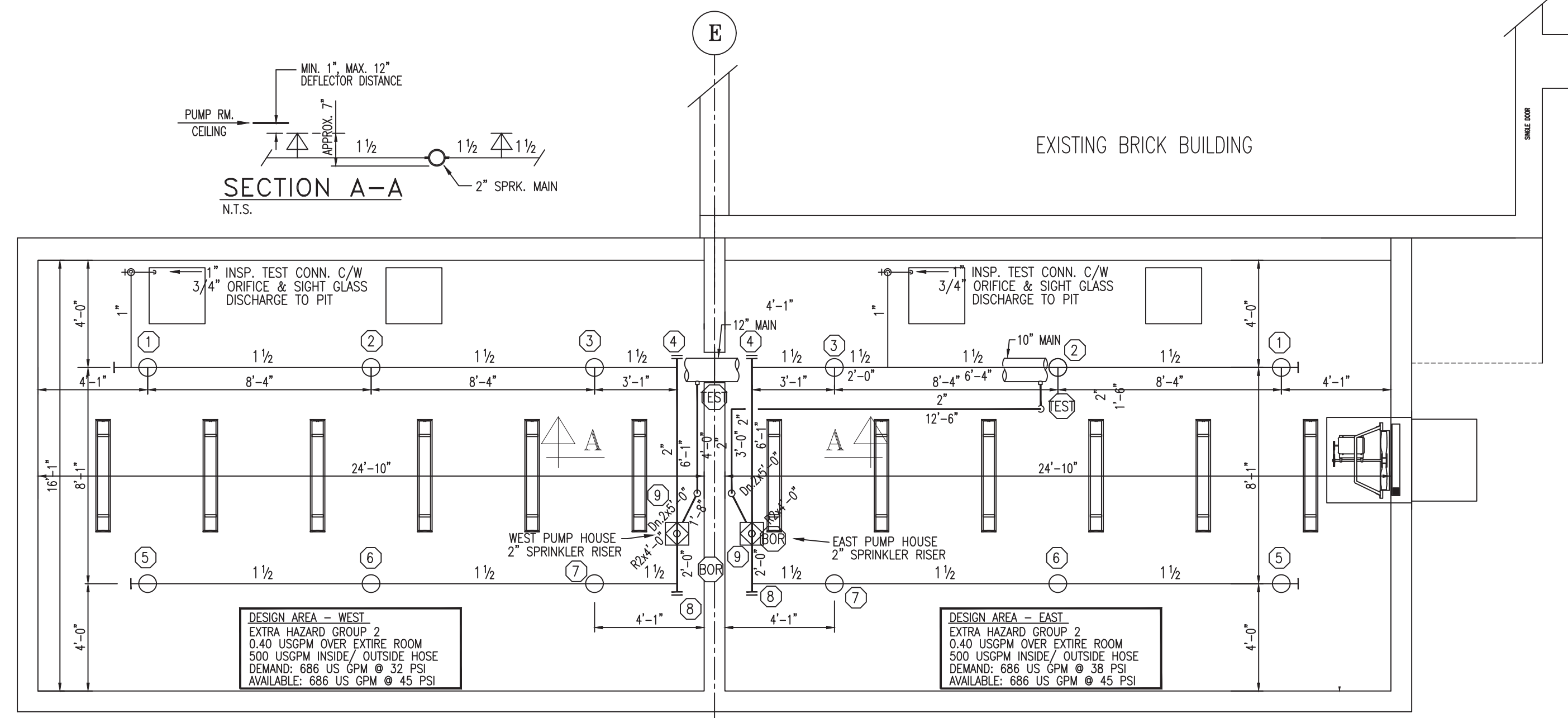
FLOOR PLATE DETAIL

1/4" = 1'-0"



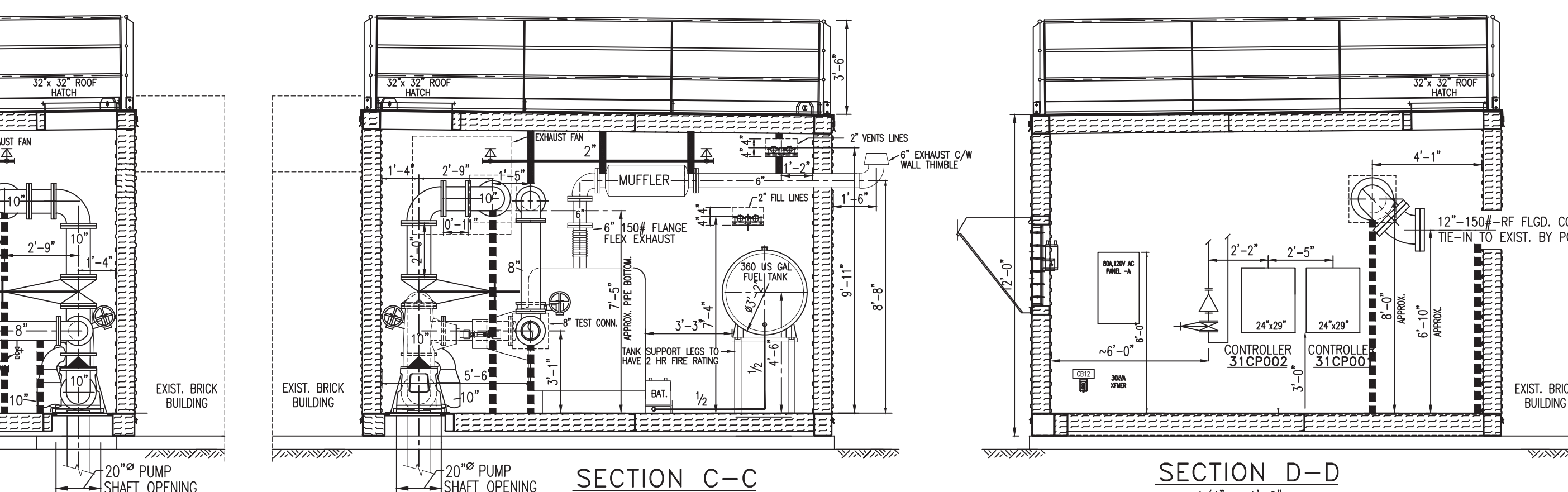
SECTION B-B

1/4" = 1'-0"



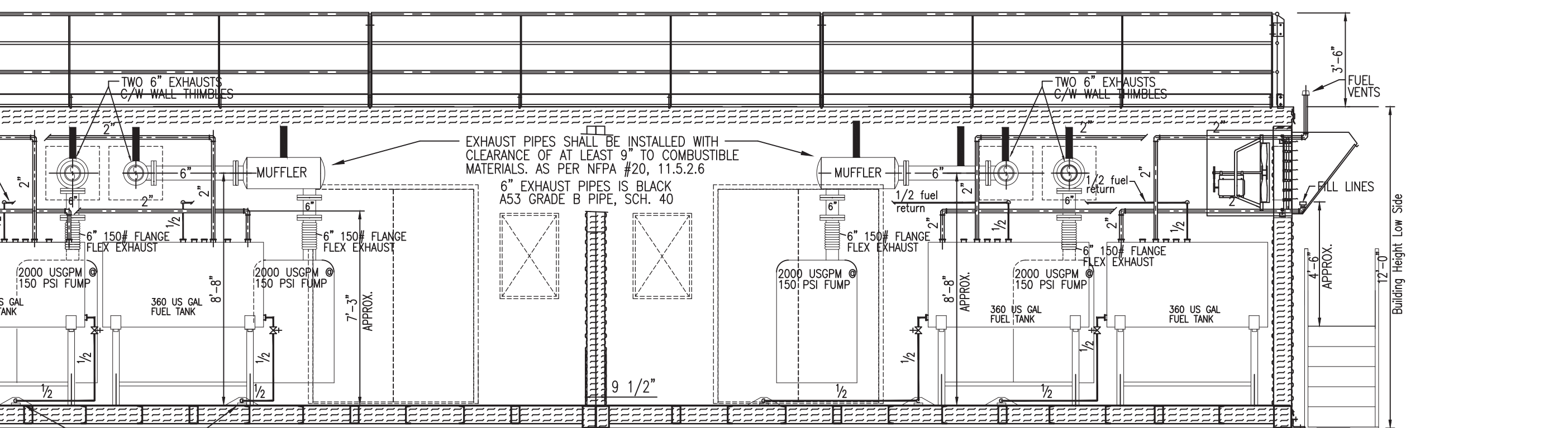
EAST & WEST PUMP ROOM SPRINKLER LAYOUT

1/4" = 1'-0"



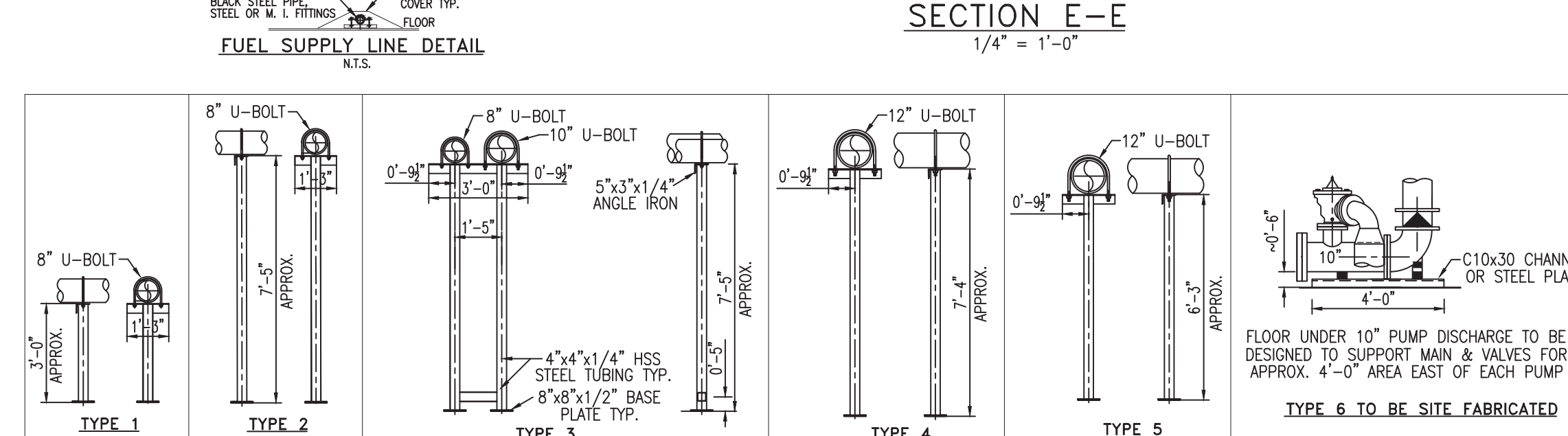
SECTION C-C

1/4" = 1'-0"



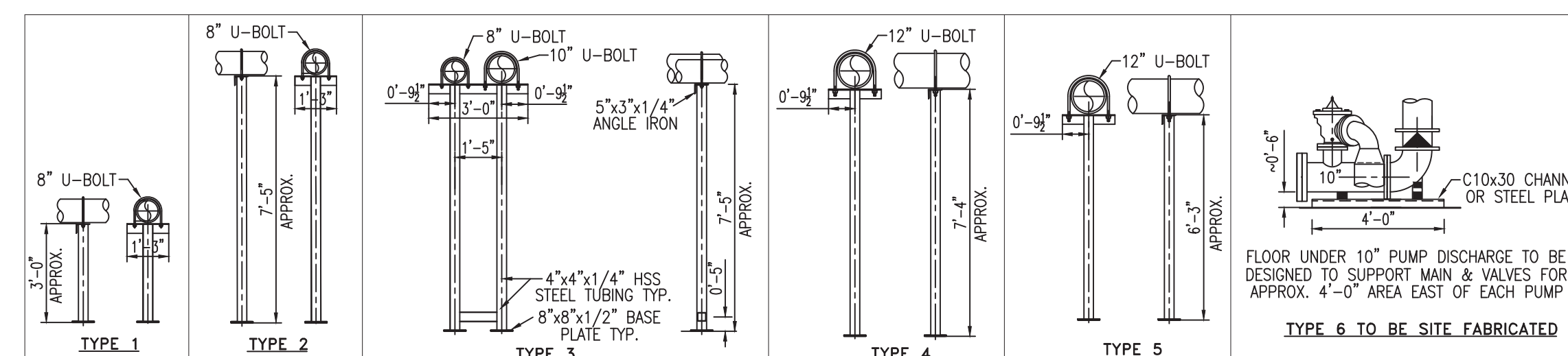
SECTION D-D

1/4" = 1'-0"



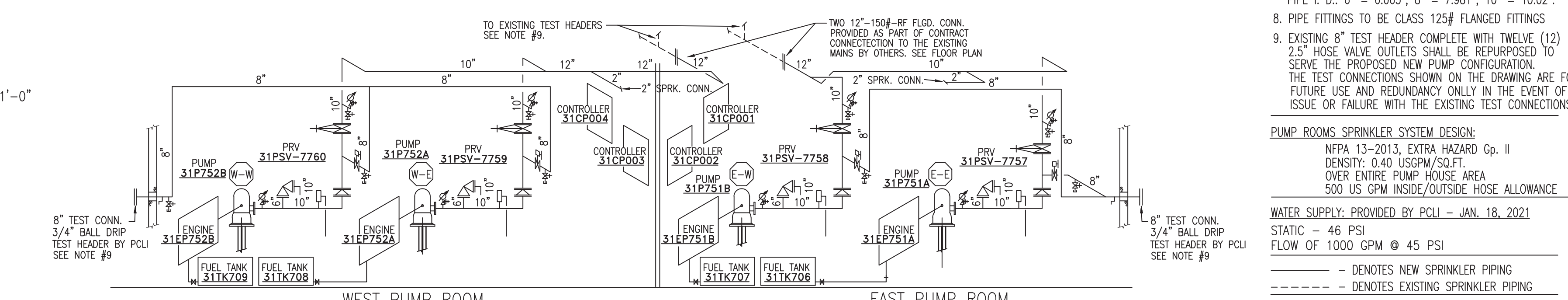
SECTION E-E

1/4" = 1'-0"



PIPE STANDS/SUPPORT DETAIL

N.T.S.



EAST & WEST PUMP ROOM SCHEMATIC

N.T.S.

GENERAL NOTES:

1. ALL SPRINKLER EQUIPMENT AND MATERIALS TO BE U.L. AND/OR U.L.C. LISTED.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH THE NFPA #13, NFPA #20, 2012 EDITION, AS AMENDED, MANUFACTURER'S SPECIFICATIONS AND THIS DRAWING.
3. ALL SPRINKLER VALVES TO BE MECHANICALLY SUPERVISED WITH LOCK & CHAIN IN ACCORDANCE WITH NFPA #13.
4. ALL ELECTRIC SUPERVISORY DEVICES SHALL BE INSTALLED C/W WIRING, PROGRAMMING, AND VERIFICATION IN ACCORDANCE WITH CAN/ULC-5524-14 & 5537-13.
5. IT IS OWNER'S RESPONSIBILITY TO PROVIDE HEAT THROUGHOUT WET PIPE SPRINKLER SYSTEM AREAS AND IN DRY PIPE AND OTHER TYPES OF VALVE ENCLOSURES.
6. THE TEMPERATURE IN THE PUMP ROOM WILL BE MONITORED BY THE FIRE PUMP CONTROLLERS.
7. ALL PIPE TO BE BLACK A53 GRADE B PIPE
PIPE L D: 1/2" = .822", 1" = 1.049", 1 1/2" = 1.61",
PIPE O D: 2" = 2.067", 3" = 3.068", 4" = 4.026",
PIPE L D: 6" = 6.065", 8" = 7.981", 10" = 10.022".
8. PIPE FITTINGS TO BE CLASS 125F FLANGED FITTINGS
9. EXISTING 8" TEST HEADER COMPLETE WITH TWELVE (12) 2 1/2" HOSE VALVE OUTLETS SHALL BE REPURPOSED TO SERVE THE PROPOSED NEW PUMP CONFIGURATION. THE TEST CONNECTIONS SHOWN ON THE DRAWING ARE FOR FUTURE USE AND REDUNDANCY ONLY IN THE EVENT OF AN ISSUE OR FAILURE WITH THE EXISTING TEST CONNECTIONS.

PUMP ROOMS SPRINKLER SYSTEM DESIGN:

NFPA 13-2013, EXTRA HAZARD Gp. II
DENSITY: 0.40 USGPM/SQ.FT.
OVER PUMP HOUSE AREA
500 US GPM INSIDE/OUTSIDE HOSE ALLOWANCE

WATER SUPPLY: PROVIDED BY PCU - JAN. 18, 2021

STATIC = 46 PSI
FLOW OF 1000 GPM @ 45 PSI

--- DENOTES NEW SPRINKLER PIPING
--- DENOTES EXISTING SPRINKLER PIPING

SCOPE OF WORK:

SUPPLY TWO NEW PUMP HOUSES WITH TWO FIRE PUMPS
IN EACH TO REPLACE EXISTING FIRE PUMPS AND DELIVER
TO THE SITE
PLACING, CONNECTION TO EXISTING PIPING, COMMISSIONING
AND TESTING IS OTHERS.



IMPORTANT
In facilities subject to freezing conditions, it is the owner's responsibility to provide heat throughout wet pipe sprinkler systems areas and in enclosures for dry pipe, deluge and other types of valves controlling water supplies to sprinkler systems.
This drawing and the information and design application herein contained is the property of Grinnell Fire Protection and/or its subsidiaries and is loaned upon express conditions that the same is returned to GFP upon request; all information herein contained shall be treated as secret, and confidential; no reproduction of this drawing or any part thereof shall be made without written consent of GFP.

CONTRACT RESPONSIBILITIES

ITEM	GRINNELL	OTHERS	MAKE	MODEL
STREET WATER CONNECTION	N/A			
UNDERGROUND WATER MAINS	N/A			
EXCAVATIONS	N/A			
BACKFILL	N/A			

FIRE PROTECTION HARDWARE

ITEM	GRINNELL	OTHERS	MAKE	MODEL
STREET WATER CONNECTION	N/A			
UNDERGROUND WATER MAINS	N/A			
EXCAVATIONS	N/A			
BACKFILL	N/A			

SPRINKLERS & SPRAYERS

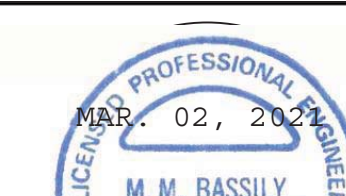
ITEM	GRINNELL	OTHERS	MAKE	MODEL
STREET WATER CONNECTION	N/A			
UNDERGROUND WATER MAINS	N/A			
EXCAVATIONS	N/A			
BACKFILL	N/A			

THESE PLANS PREPARED AT:

TORONTO ENGINEERING DEPARTMENT

SYSTEM TYPE

☒ WET	☐ DELUGE
☐ DRY	☐ PREACTION
☐ FOAM	☐ MANUAL



tyco Fire & Security
SimplexGrinnell

2400 Skymark Ave.
Mississauga, Ontario L4V 5K5
SALES: 905-212-4400
SERVICE: 905-212-4401
FAX: 905-212-4401

REVISION DESCRIPTION

NO.	DATE	REVISION DESCRIPTION
-----	------	----------------------

00	12/11/20	ISSUED FOR APPROVAL
----	----------	---------------------

01	01/19/21	REVISE AS PER PCU NOTES
----	----------	-------------------------

02	02/06/21	FAN RELOCATED & PIPE STANDS SHOWN
----	----------	-----------------------------------

03	02/23/21	REVISED AS PER ARECON COMMENTS
----	----------	--------------------------------

REVISION DESCRIPTION

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02	02/06/21	FAN RELOCATED & PIPE STANDS SHOWN
----	----------	-----------------------------------

03	02/23/21	REVISED AS PER ARECON COMMENTS
----	----------	--------------------------------

PROPOSED NEW PUMP HOUSE LAYOUT

00	12/11/20	ISSUED FOR APPROVAL
----	----------	---------------------

01	01/19/21	REVISE AS PER PCU NOTES
----	----------	-------------------------

02	02/06/21	FAN RELOCATED & PIPE STANDS SHOWN
----	----------	-----------------------------------

03	02/23/21	REVISED AS PER ARECON COMMENTS
----	----------	--------------------------------

PETRO CANADA
LUBRICANTS CENTRE
MISSISSAUGA, ONTARIO

DESIGNED BY:

S.G.

DATE:

07/02/20

CHECKED BY:

J.S.

DATE:

07/02/20

PROJECT NUMBER:

SP-1

SHEET TITLE:

PROPOSED

PUMP HOUSES

LAYOUT

SHEET NUMBER:

SP-1 OF 1