

Alton Maintenance Facility Reclaim Water Addition

Project Address

805 2ND AVENUE
ALTON, IOWA 51003

CONSTRUCTION PLANS

Project: BG-4A20(004)-80-84

INDEX OF DRAWINGS:

SHEET NO.	SHEET NAME
01	SP-1 SITE PLAN AND UTILITIES
02	A-1 RECLAIM WATER ADDITION-PLANS, ELEVATIONS, SECTION
03	A-2 RECLAIM WATER ADDITION DETAILS
04	MP-1 MECHANICAL AND PLUMBING PLAN
05	E-1 ELECTRIC AND LIGHTING PLAN



OFFICE OF FACILITIES SUPPORT

800 LINCOLN WAY, AMES, IOWA 50010

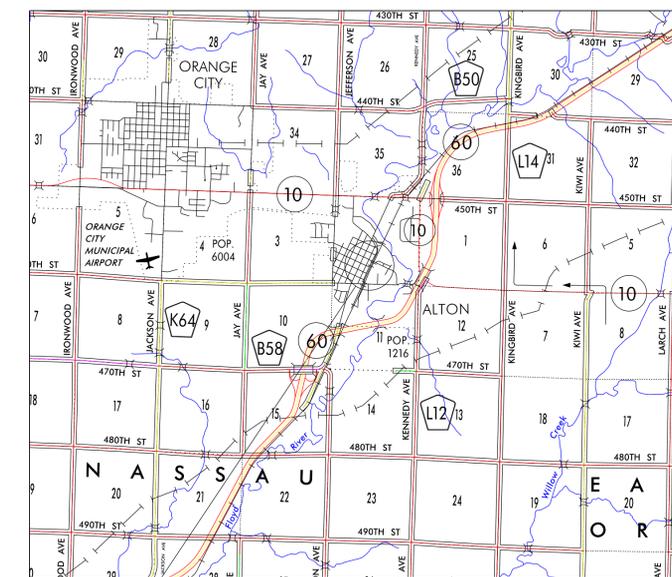
I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly registered architect under the laws of the state of Iowa.

Jerry L. Burnes
Printed or typed name

Signature _____ Date _____
30 Jun 2016 30 Aug 2010
Registration expires _____ Date issued _____

Pages or sheets covered by this seal: _____

REVISED:
ADDENDUM #1, 03/23/16



PROJECT LOCATION

SCALE:

N.T.S.

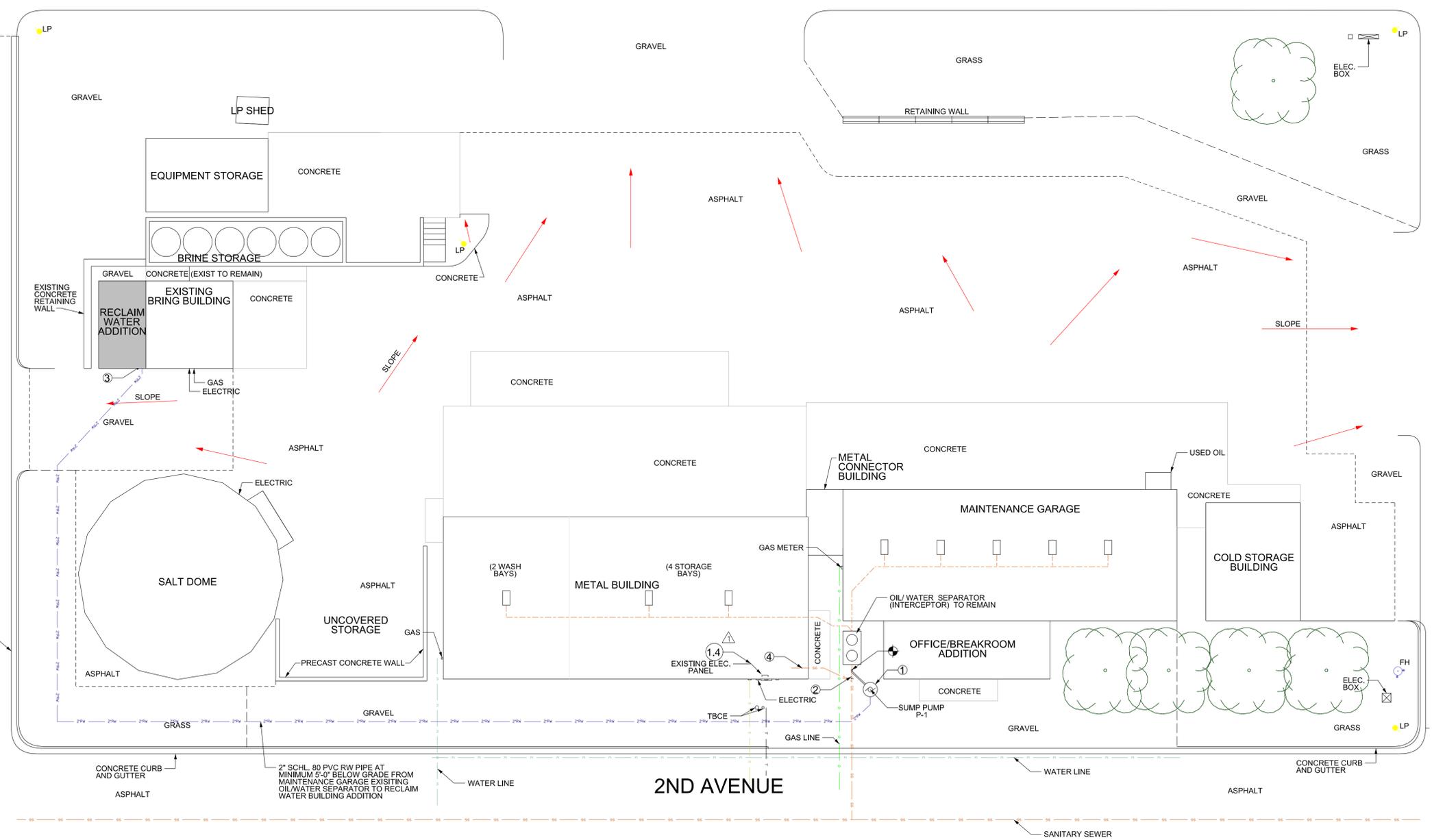


1ST AVENUE

9TH STREET

8TH STREET

2ND AVENUE



KEYED NOTES

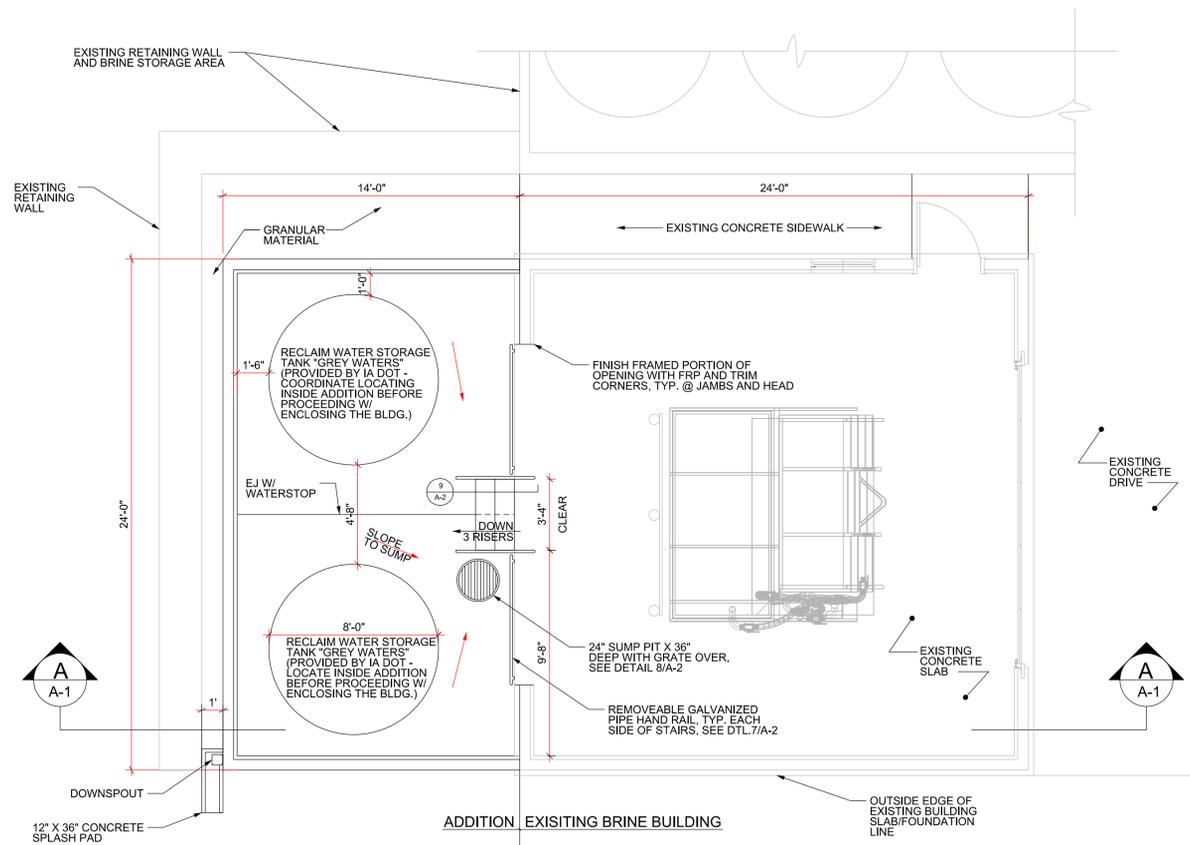
- | | | |
|---|---|--|
| <p>① 1. DUPLEX SUMP PUMP P-1. HYDRAMATIC SHEF 100. 50 GPM AT 65 FEET OF HEAD, 1HP, 230V SINGLE PHASE; SEE SPEC. SECTION 22 3000.</p> <p>2. EXTEND NEW 2" RECLAIM WATER PIPING FROM BASIN TO CONNECT TO POINT INDICATED ON PLAN SHEET MP-1.</p> <p>3. 48" DIAMETER BY 9 FEET DEEP FIBERGLASS MANHOLE WITH NEENAH R-1792-KL MANHOLE FRAME AND SOLID COVER SET IN 60" SQUARE X 6" THICK CONCRETE PAD.</p> <p>4. SUMP PUMP P-1 CIRCUIT. (2) #12 & #12 GRND. IN 1" CONDUIT. PROVIDE NEW IP-20A GROUND FAULT PROTECTION CURCUIT BREAKER IN EXISTING PANELBOARD (IN METAL BLDG. STORAGE BAY)</p> <p>5. CONTRACTOR TO CONTACT IOWA ONE CALL BEFORE STARTING EXCAVATION - AT 811 OR 1-800-292-8989</p> | <p>② 1. DISCONNECT OUTLET PIPING FROM OIL/WATER SEPARATOR TO SANITARY SEWER TO ALLOW FOR NEW CONNECTION TO NEW SUMP/PIT P-1.</p> <p>2. REMOVE EXISTING INACTIVE PIPING SECTION AND CAP.</p> | <p>③ 1. 2" RW PIPING INTO RECLAIM WATER BUILDING ADDITION.</p> <p>④ 1. REMOVE EXISTING URINAL, SCREEN, AND CAP WATER PIPING.</p> |
|---|---|--|

LEGEND

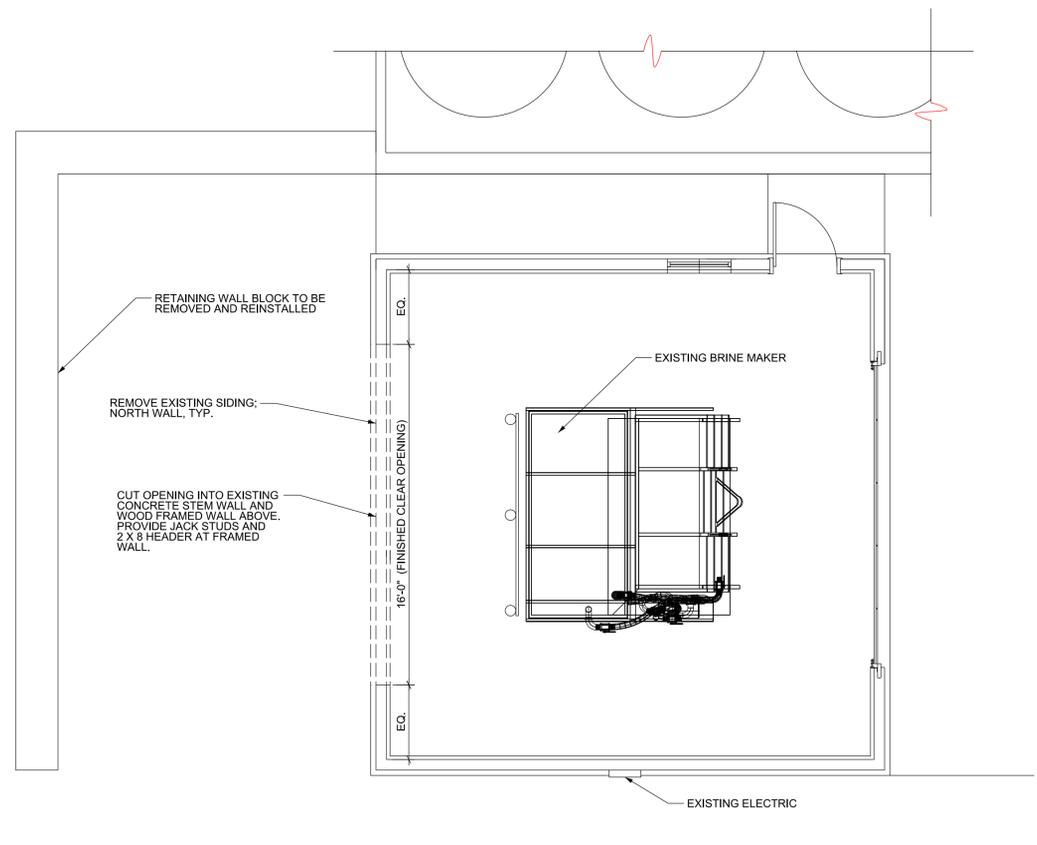
- ① KEYED NOTE REFERENCE
- RECLAIM WASTE WATER PIPING
- EXISTING WATER PIPING
- EXISTING TELEPHONE (UNDERGROUND)
- EXISTING ELECTRIC (UNDERGROUND)
- EXISTING GAS PIPING
- EXISTING SANITARY SEWER PIPING
- SUMP PUMP



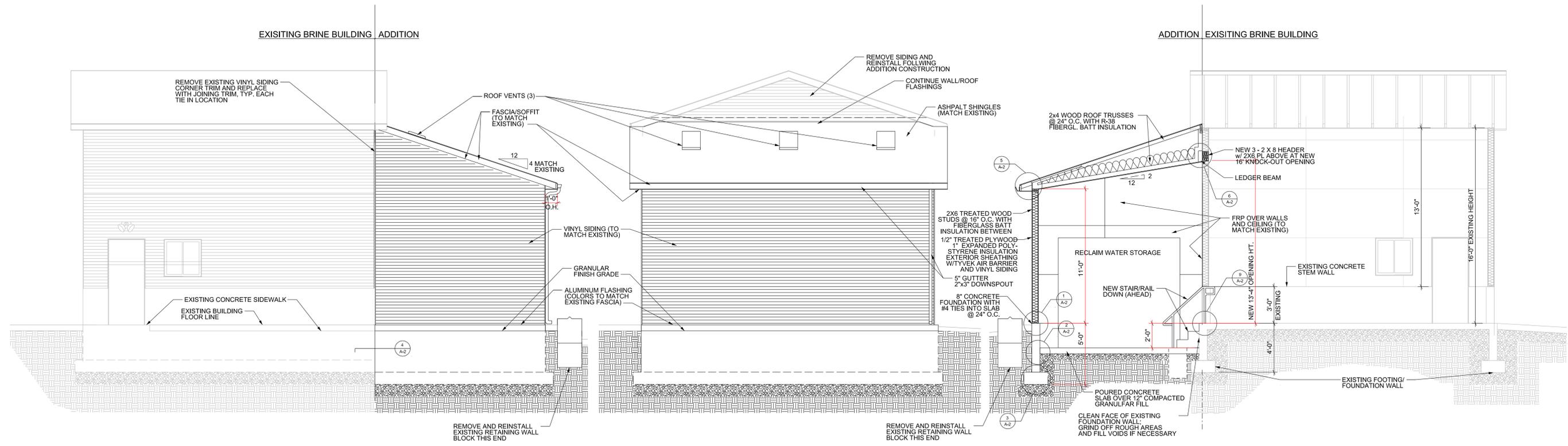
SHEET SIZE: 24" X 36"



FLOOR PLAN
SCALE: 1/4" = 1'-0"



DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

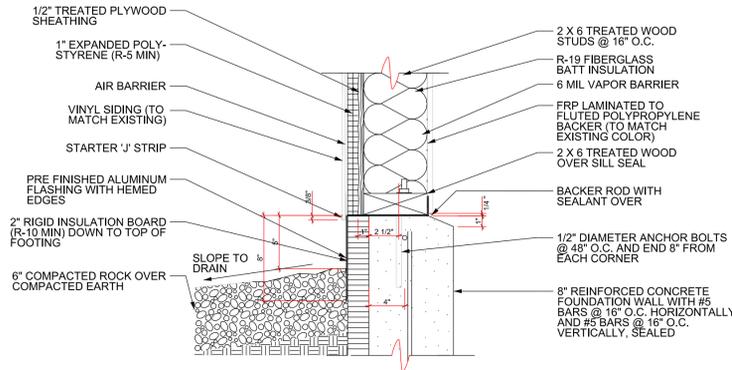


EAST ELEVATION
SCALE: 1/4" = 1'-0"

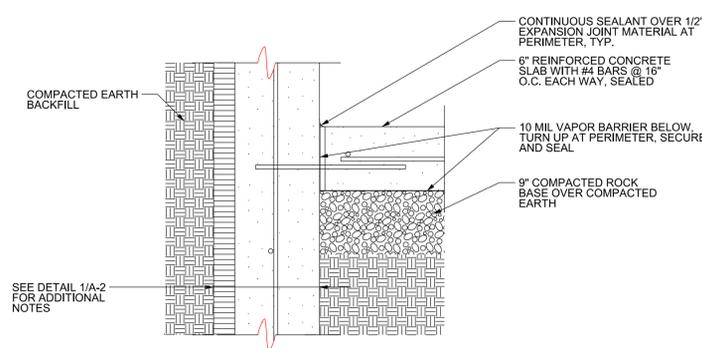
NORTH ELEVATION
SCALE: 1/4" = 1'-0"

SECTION
SCALE: 1/4" = 1'-0"

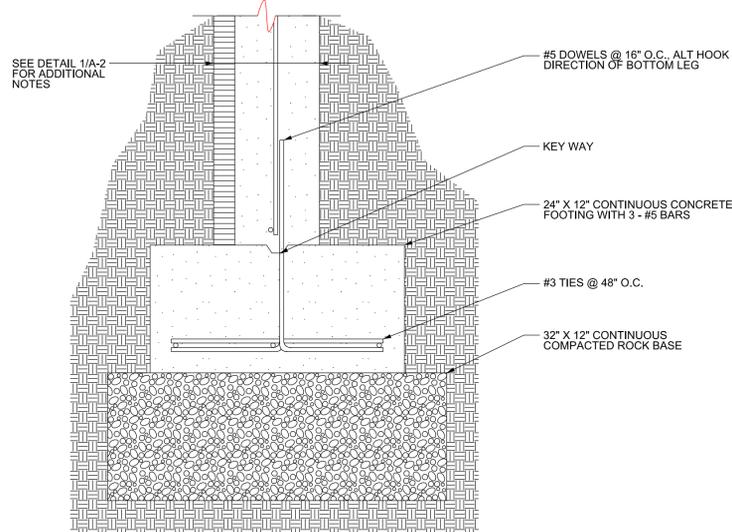
SHEET SIZE: 24" X 36"



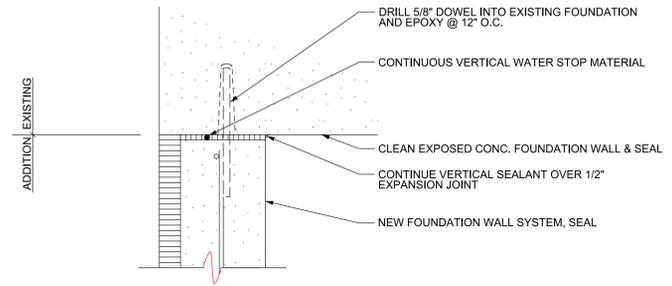
1 SILL DETAIL
 SCALE: 1/12" = 1'-0"



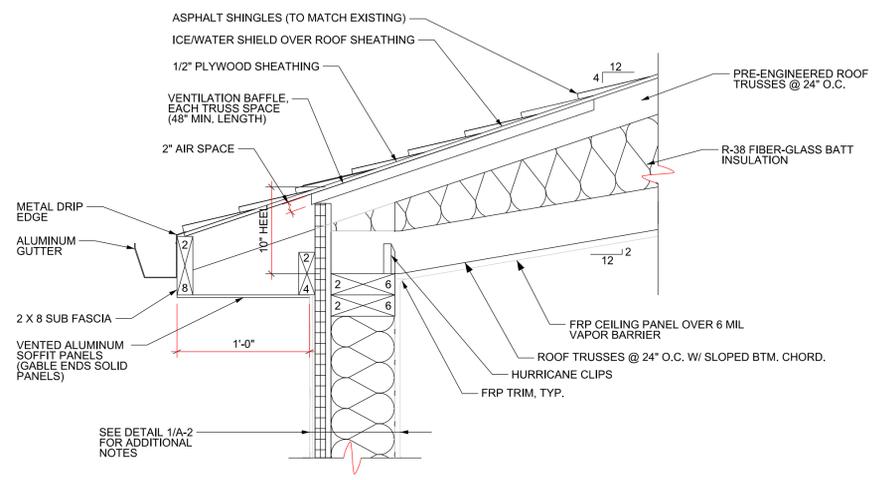
2 SLAB/WALL DETAIL
 SCALE: 1/12" = 1'-0"



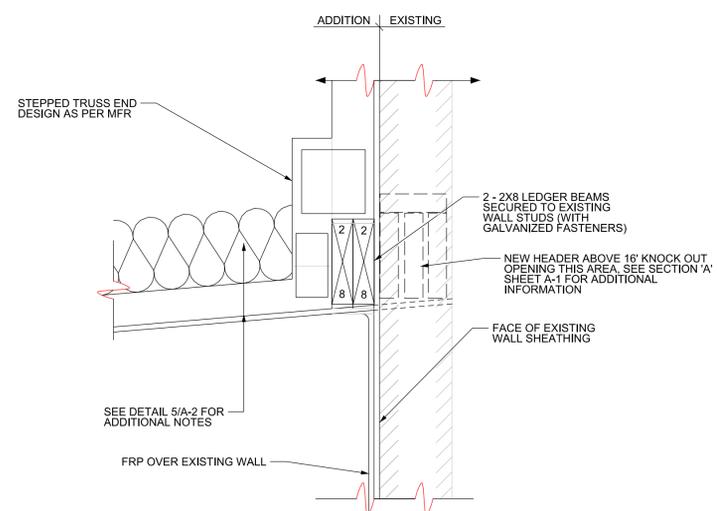
3 FOOTING DETAIL
 SCALE: 1/12" = 1'-0"



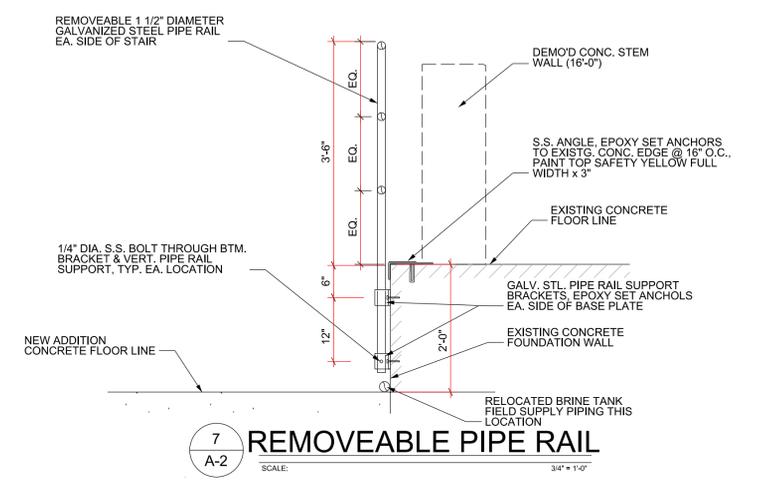
4 EXISTING/NEW TIE IN PLAN DETAIL
 SCALE: 1/12" = 1'-0"



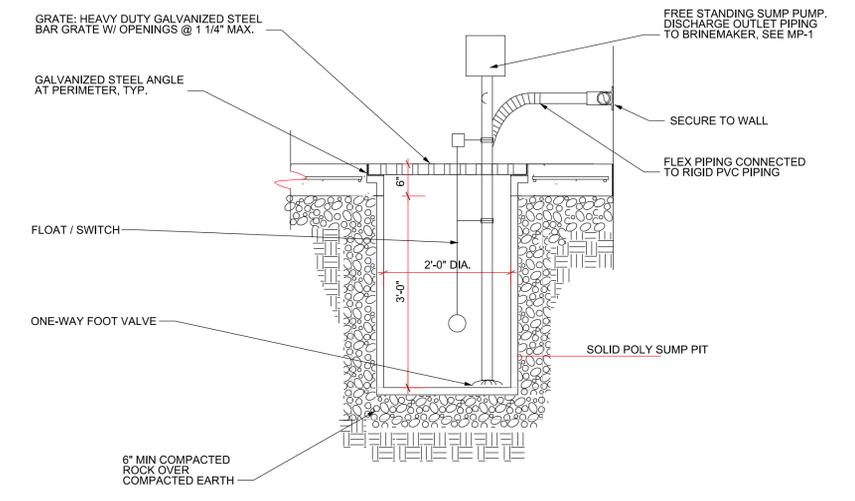
5 WALL TO ROOF CONNECTION
 SCALE: 1/12" = 1'-0"



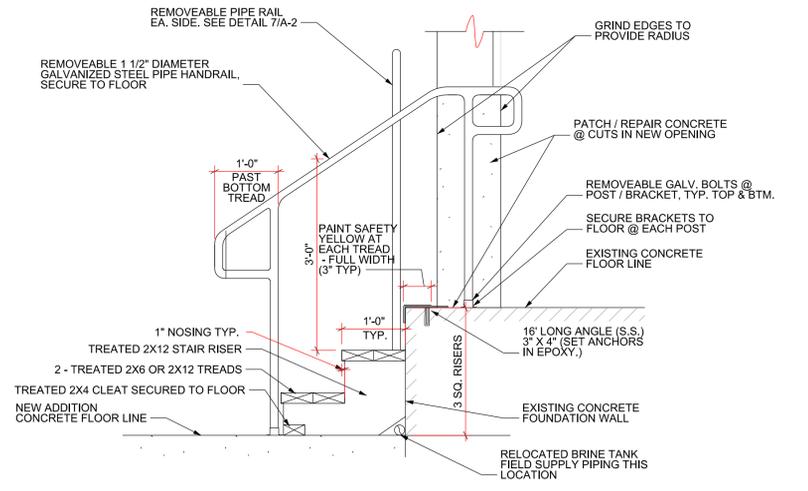
6 LEDGER BEAM DETAIL
 SCALE: 1/12" = 1'-0"



7 REMOVEABLE PIPE RAIL
 SCALE: 3/4" = 1'-0"



8 SUMP DRAIN DETAIL
 SCALE: 3/4" = 1'-0"



9 STAIR DETAIL
 SCALE: 3/4" = 1'-0"

SHEET SIZE: 24" X 36"

DISTRICT: 03
 COUNTY: SIOUX
 PROJECT NUMBER: BG-4A20(004)--80-84

ALTON MAINTENANCE FACILITY RECLAIM WATER ADDITION-ALTON, IA
 RECLAIM WATER ADDITION DETAILS

IOWADOT
 SMARTER. SIMPLER. CUSTOMER DRIVEN.
 OFFICE OF SUPPORT SERVICES
 800 LINCOLN WAY
 AMES, IOWA 50010 (515)235-1299

DATE: JAN 06 2016
 DRAWN BY: DESIGN TEAM
 APPROVED: J BURNES
 REVISIONS:
 03/23/16
 SHEET OF 05
 A-2

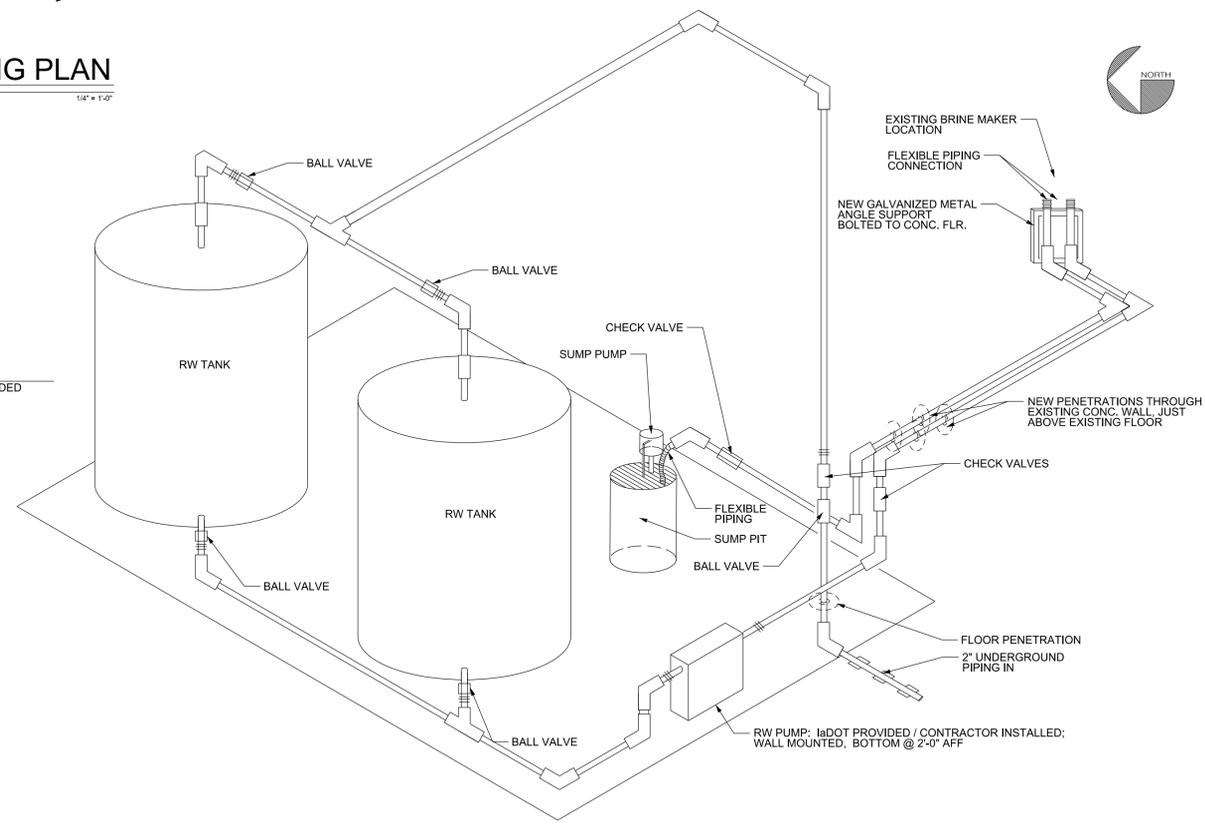
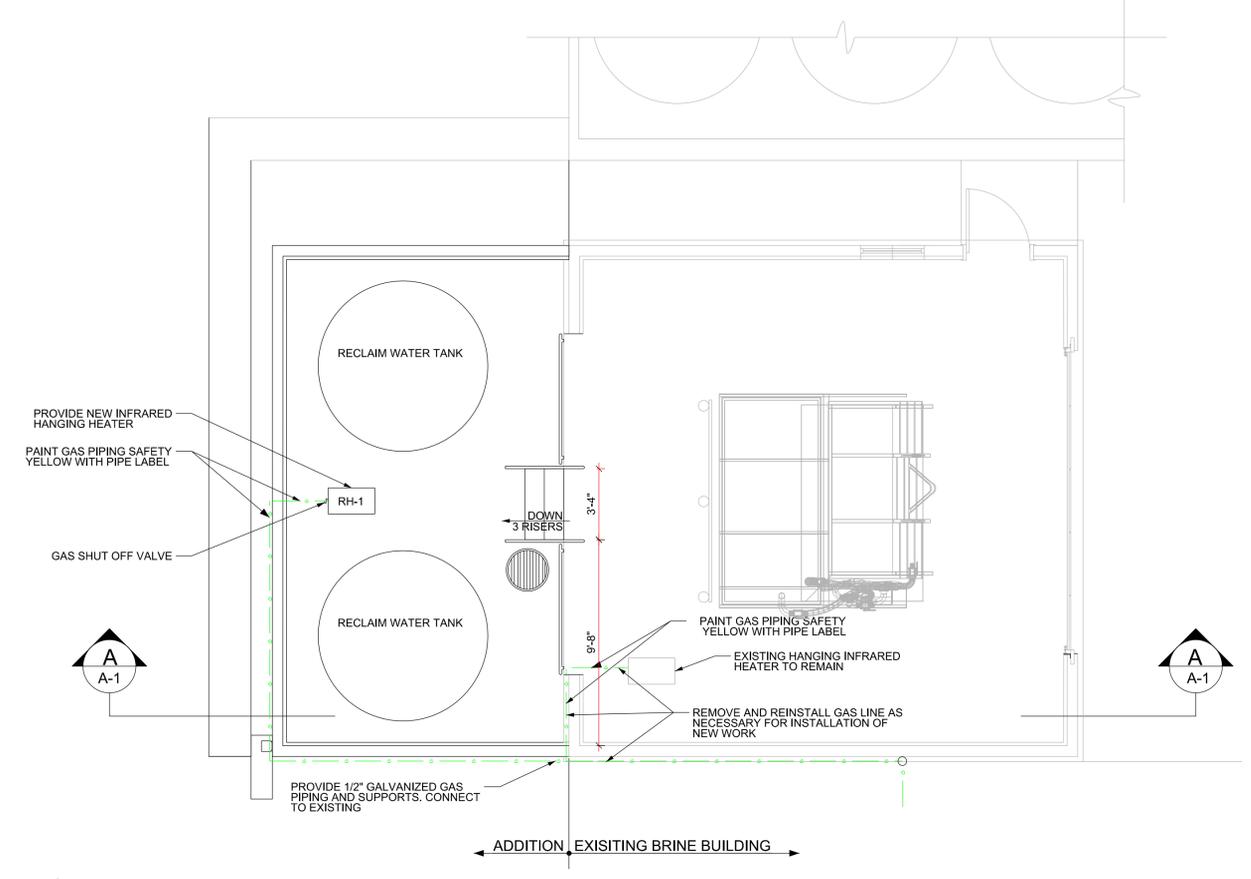
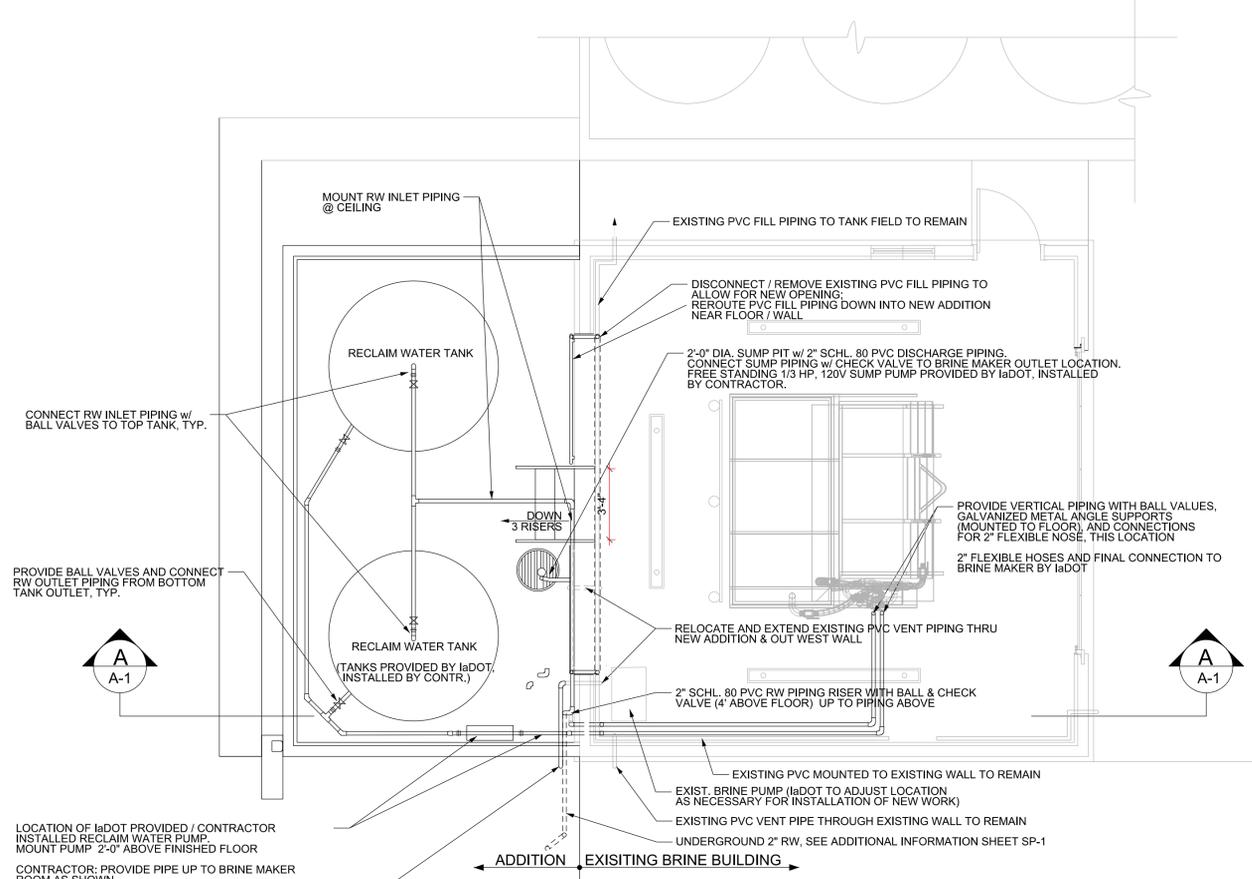
GAS FIRED RADIANT HEATER SCHEDULE								
DESIGNATION	MANUFACTURER	MODEL	LOCATION	OUTPUT (BTU/HR)	RADIANT SURFACE (IN ²)	VOLTAGE/PHASE	WATTS	REMARKS
RH-1	RE-VERBER-RAY	DR-30	RECLAIM ADTN	30,000	85	120/1	500	

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ALTON MAINTENANCE FACILITY RECLAIM WATER ADDITION-ALTON, IA
 MECHANICAL AND PLUMBING PLAN

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 SHEET OF 05
 MP-1

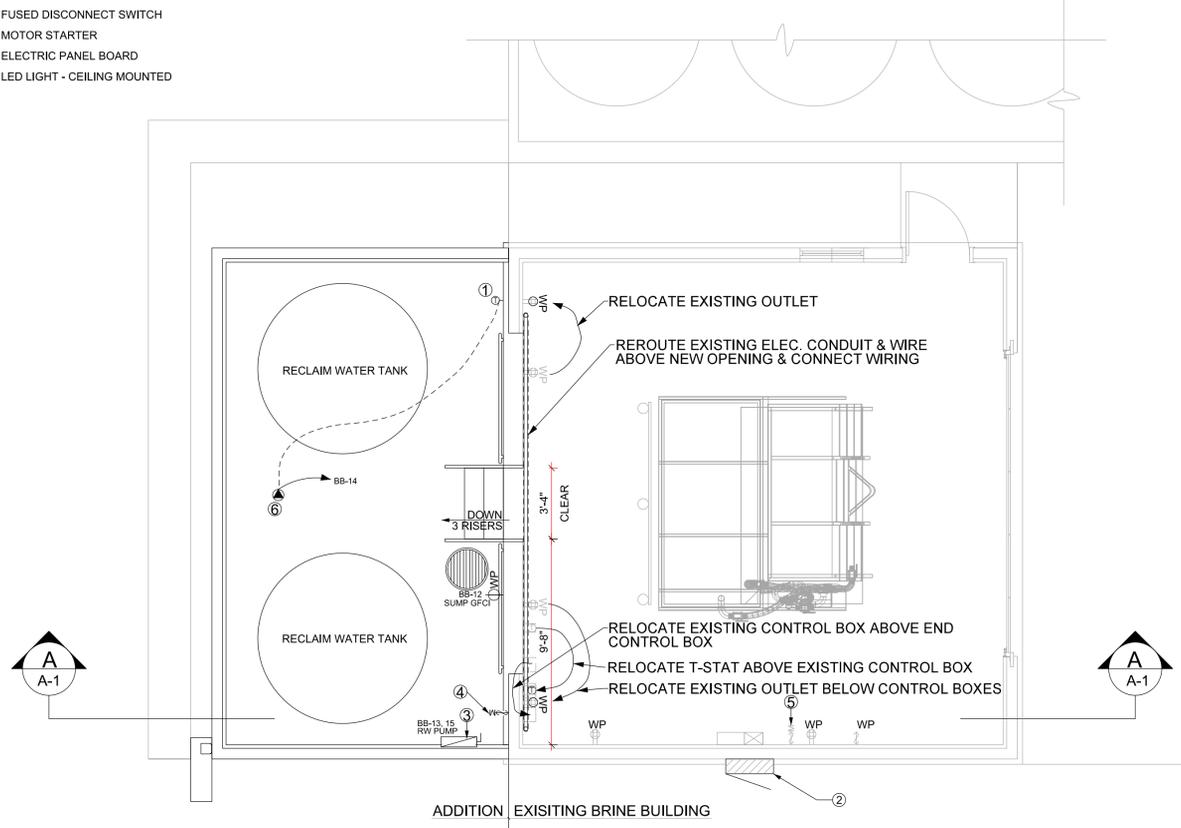


- GENERAL NOTES:**
- CONTRACTOR TO PAINT EXIST NATURAL GAS RIGID PIPING WHERE INDICATED. SHERWIN-WILLIAMS. COLOR SW4084; SYSTEM TYPE: ALKYD; SURFACE PREP: SSPC SP2/SP3; PAINT: 1 COAT PRIMER (KEM BOND HS), 2 COATS FINISH (INDUSTRIAL ENAMEL)
 - ALL PVC PIPING SHALL BE SCHEDULE 80

SHEET SIZE: 24" X 36"

ELECTRICAL LEGEND

- ⏏ WP SINGLE POLE SWITCH, WEATHERPROOF
- ⏏ MOTOR SWITCH
- ⏏ WP SIMPLEX RECEPTACLE - WALL MOUNTED, WEATHERPROOF
- ⏏ SPECIAL EQUIPMENT CONNECTION - CEILING MOUNTED
- ⏏ FUSED DISCONNECT SWITCH
- ⏏ MOTOR STARTER
- ⏏ ELECTRIC PANEL BOARD
- ⏏ LED LIGHT - CEILING MOUNTED



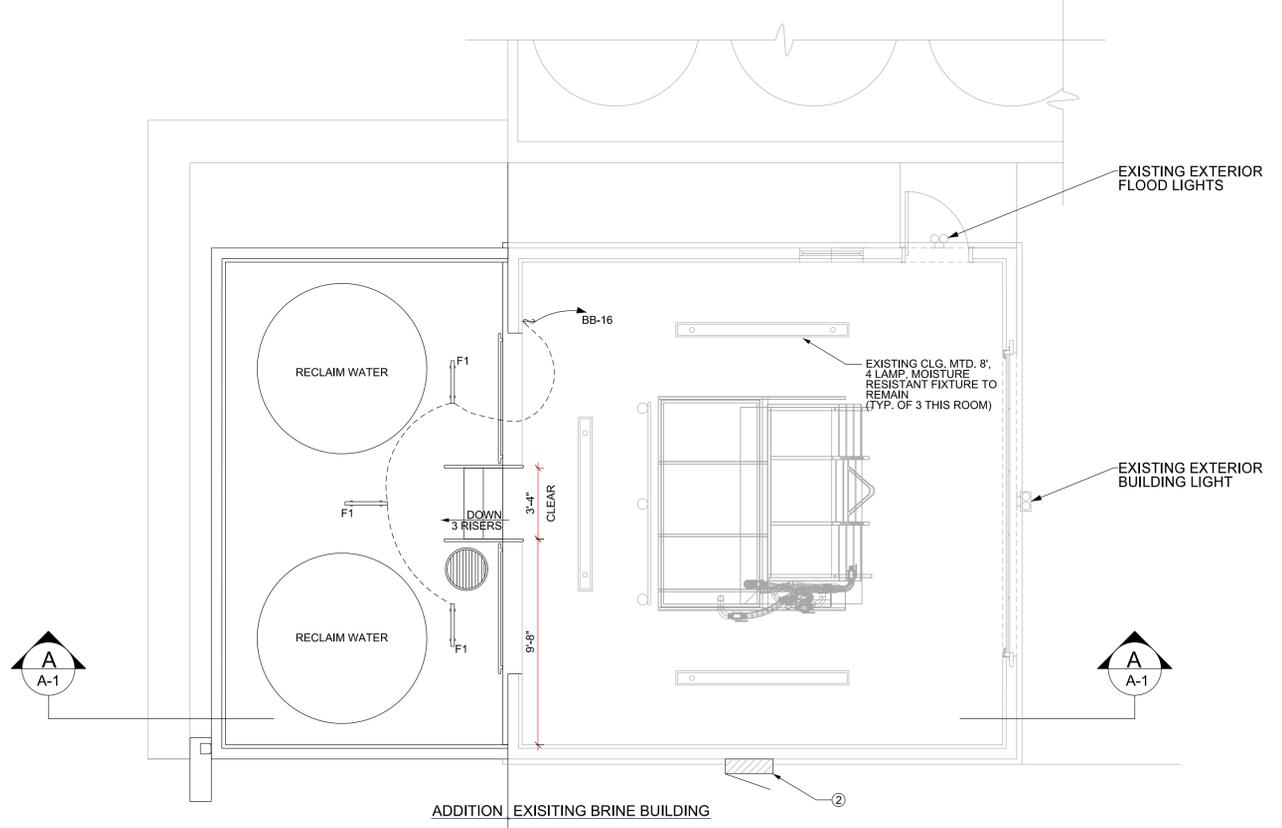
ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

ELEC. BOXES/EQUIP./CONDUIT (VERIFY LOCATIONS THIS WALL)

LIGHT FIXTURE SCHEDULE

TYPE	MFR/ MODEL NUMBER	DIMENSIONS	LAMP	VOLTAGE	DRIVER	POWER	DESCRIPTION	APPROVED EQUAL
F1	AZZ RIG-A-LITE MHD2-07-L2-4-U-35	4' LENGTH	3500 K 7796 LM	120 - 277	ELECTRONIC DRIVER	74W	INDUSTRIAL LED LUMINAIRE, CEILING MOUNTED, HIGH PRESSURE HOSE DOWN RATED, UL 1598 LISTED, NON-METALLIC THERMOPLASTIC HOUSING, ALL EXPOSED HARDWARE CONSTRUCTED OF STAINLESS STEEL, 50,000 HR. MIN. L70 RATING, 5 YR MANUFACTURER WARRANTY	NONE



LIGHTING PLAN

SCALE: 1/4" = 1'-0"

KEYED NOTES:

- ① LINE VOLTAGE THERMOSTAT FOR RADIANT HEATER, SIMILAR OR EQUAL TO PECO TF 115-001 WITH NEMA 4X ENCLOSURE AND STAINLESS STEEL SENSING ELEMENTS FOR WET AND CORROSIVE ENVIRONMENT
- ② REMOVE AND REPLACE EXISTING ELECTRIC PANEL WITH NEW PANEL COMPLETE WITH TYPE 2 SPD IN NEMA 4X CABINET
- ③ FUSED DISCONNECT SWITCH: 208VAC, 1 PHASE, 2 WIRE, NEMA 4X 60A, FUSED AT 35A, PROVIDE 3/4" SEALITE CONNECTION FROM DISCONNECT TO MOTOR.
- ④ RW PUMP PRIMING SWITCH, NEMA 4X SWITCH ENCLOSURE WITH 3/4" PVC CONDUIT TO PUMP CONTROLLER.
- ⑤ RW PUMP OUTPUT SWITCH, NEMA 4X SWITCH ENCLOSURE WITH 3/4" PVC CONDUIT TO PUMP CONTROLLER
- ⑥ RADIANT HEATING BURNER CONNECTION, CONNECT TO LINE VOLTAGE THERMOSTAT (NOTE 1), PROVIDE NEMA SL-20P CORD CAP AND WATERTIGHT NEMA 5L-20R RECEPTACLE

ELECTRIC PANEL SCHEDULE

PANEL: BB BRINE BUILDING
120 / 2240V, 1 PHASE
MAIN BREAKER:
200-AMP; 24 SPACE

SHORT CIRCUIT RATING: 22,000 AMPS
MOUNT: SURFACE, NEMA 4X

	DESCRIPTION	WIRE, CONDUIT	BREAKER	P H	BREAKER	WIRE, CONDUIT	DESCRIPTION	
1	EXISTING BRINE PUMP	EXISTING		A	1-20A	EXISTING	EXISTING	2
3	EXISTING BRINE PUMP	EXISTING	GF	B	1-20A	EXISTING	EXISTING	4
5	EXISTING BRINE PUMP	EXISTING		A	1-20A	EXISTING	EXISTING	6
7	EXISTING BRINE PUMP	EXISTING	GF	B	1-20A	EXISTING	EXISTING	8
9	EXISTING BRINE PUMP	EXISTING		A	1-20A	EXISTING	EXISTING	10
11			GF	B	1-20A, GF	2 - #12, #12, 3/4" C	NEW SUMP PUMP	12
13	NEW BRINE ADTN.	2 - #8, #8, 3/4" C	2-50A	A	1-20A	2 - #12, #12, 3/4" C	RADIANT HEATER RH-1	14
15	RW PUMP	3/4" C	GF	B	1-20A	2 - #12, #12, 3/4" C	RW ROOM LIGHTING	16
17	SPARE		1-20A	A	1-20A		SPARE	18
19	SPARE		1-20A	B	1-20A		SPARE	20
21	SPD	3 - #6, #8, 1-1/4" C	2-60A	A			BLANK	22
23				B			BLANK	24

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