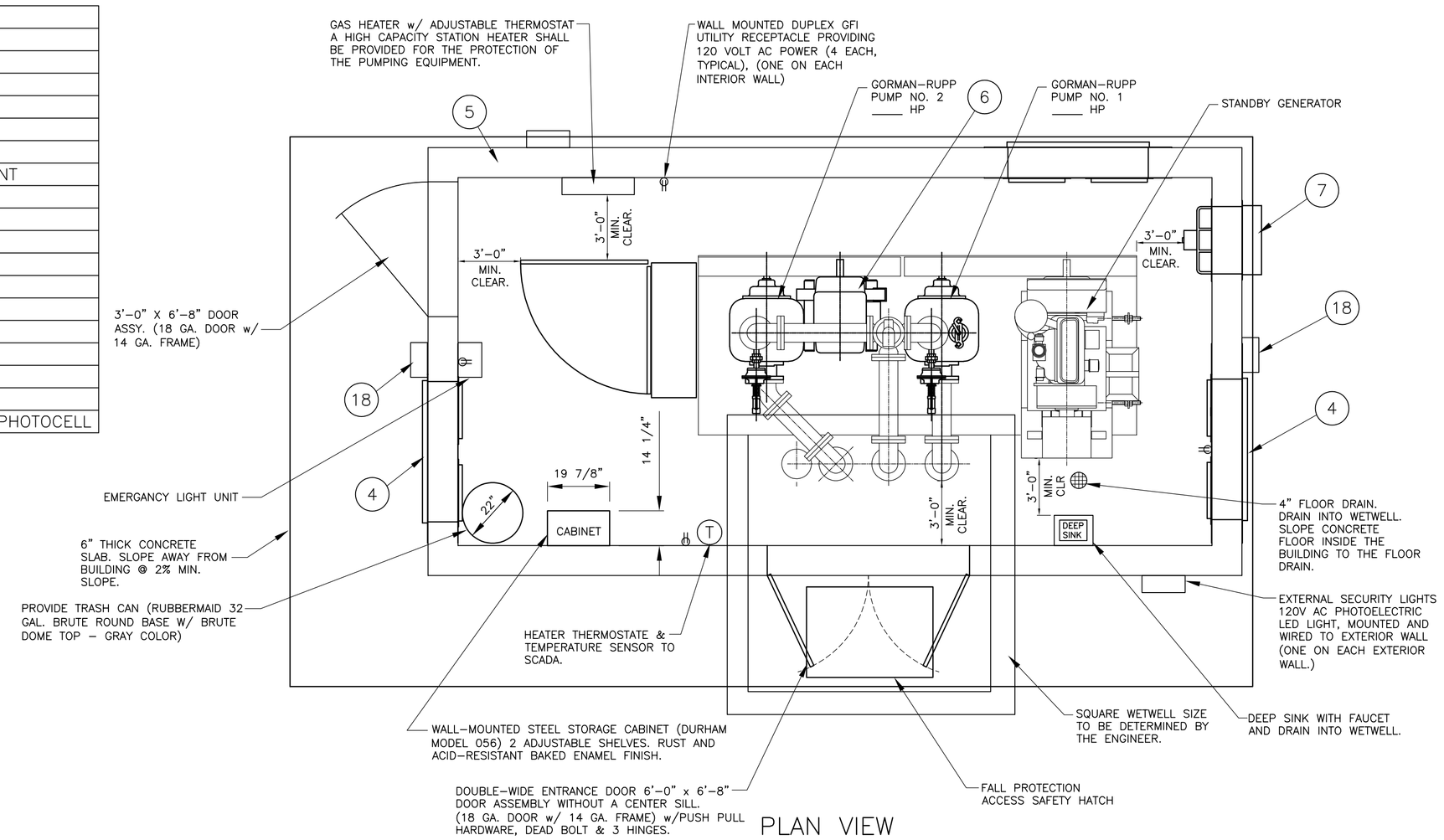
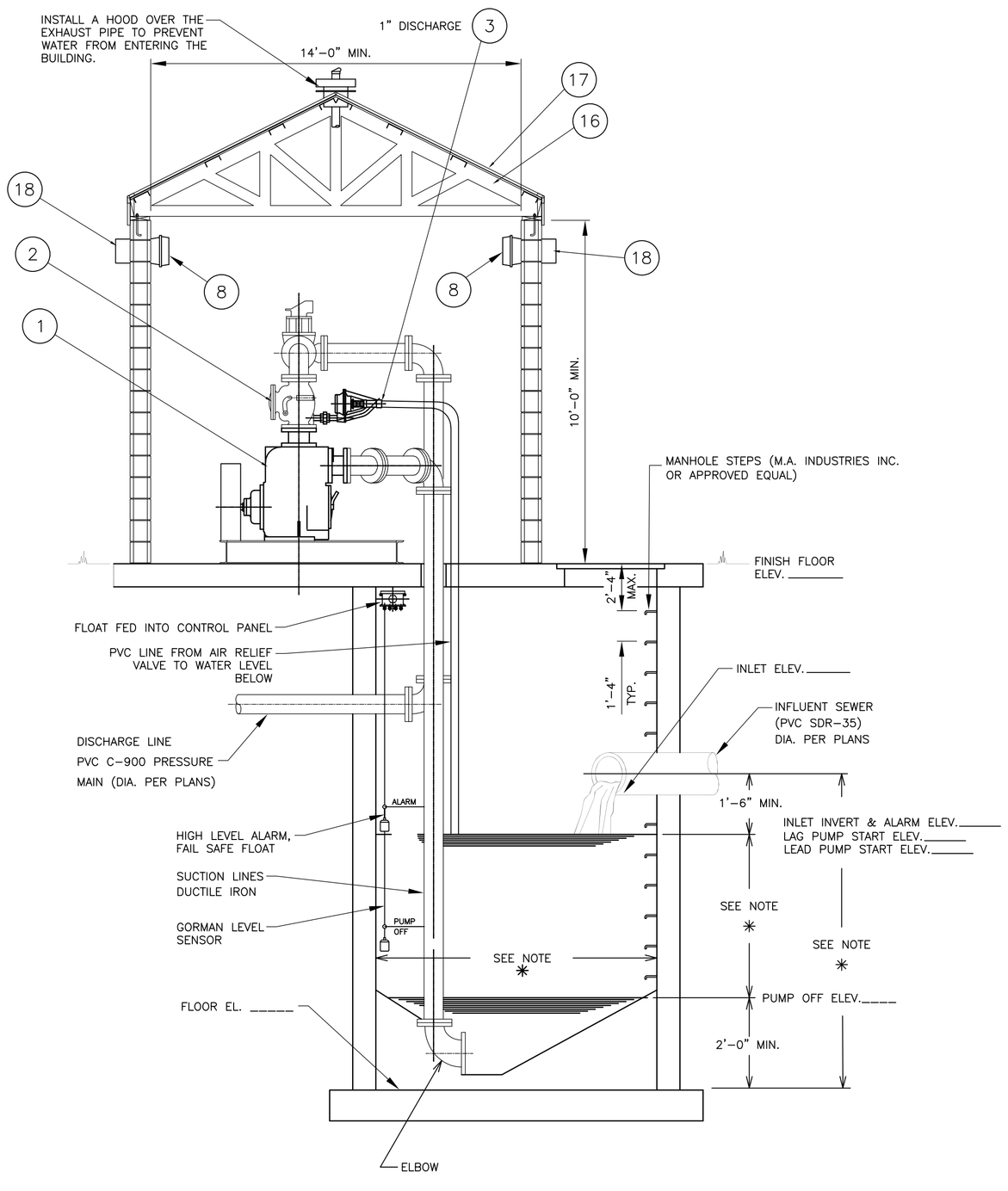
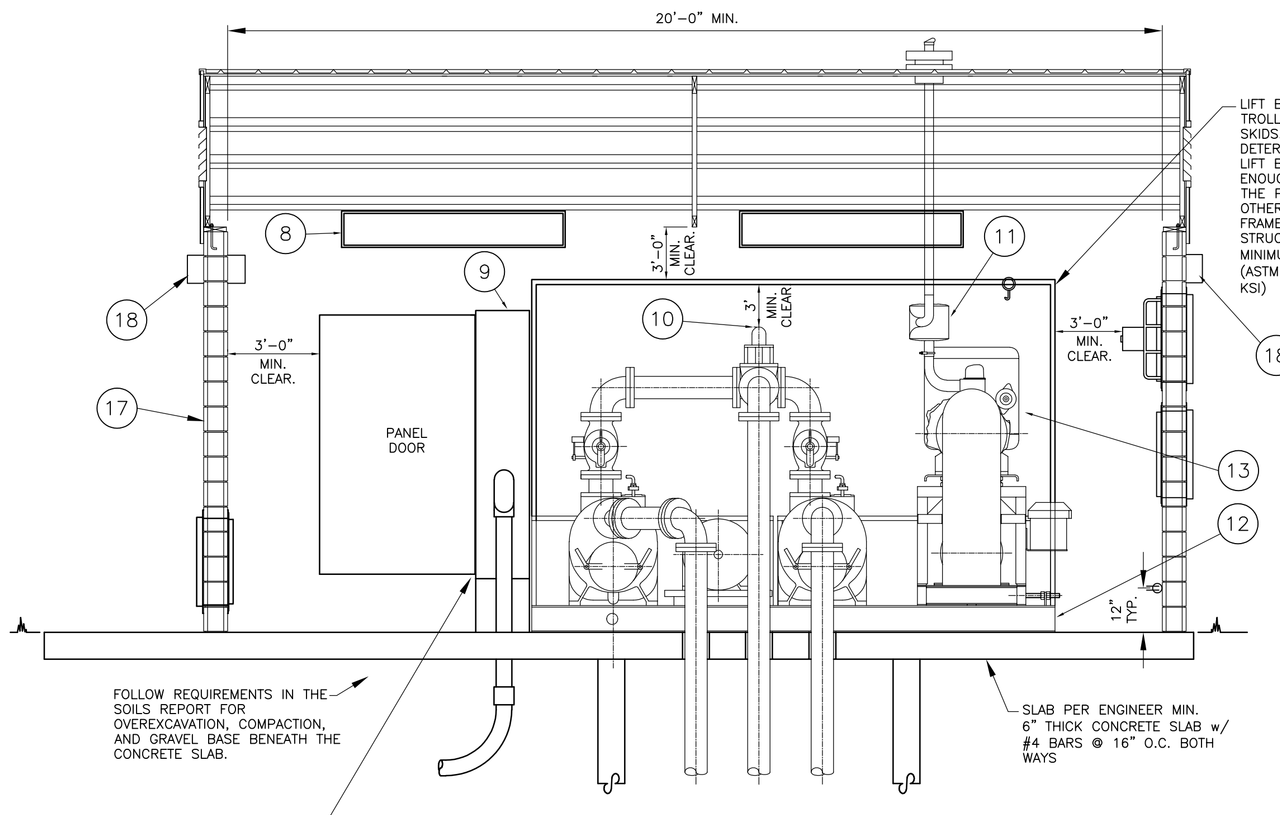
| ITEM | DESCRIPTION | MATERIAL & SIZE |
|---|---|---|
| 1 | PUMP | CAST IRON T4A-B |
| 2 | DISCHARGE CHECK VALVE | CAST IRON |
| 3 | AIR RELEASE VALVE | CAST IRON |
| 4 | INTAKE VENT ASSY | ALUMINUM (4 SHUTTERS) |
| 5 | STATION ENCLOSURE | MASONRY BLOCK |
| 6 | MOTOR | CAST IRON |
| 7 | EXHAUST FAN ASSY | OUTDOOR RATED, CORROSION RESISTANT |
| 8 | LED LIGHT FIXTURE | VAPOR TIGHT 8000 LM 4000-5000K |
| 9 | CONTROL PANEL | STEEL |
| 10 | DISCHARGE ISOLATION VALVE | CAST IRON |
| 11 | EXHAUST SILENCER | STAINLESS STEEL |
| 12 | PUMP & MOTOR BASE ASSY | STEEL |
| 13 | STANDBY GENERATOR SET | NATURAL GAS CUMMINS O.A.E. |
| 14 | EXHAUST VENT ASSY | ALUMINUM (4 SHUTTERS) |
| 15 | BELT GUARD ASSY | STEEL |
| 16 | ROOF TRUSSES | STEEL |
| 17 | METAL INSULATED ROOF w/ FLASHING | STEEL |
| 18 | LED LIGHT FIXTURE | WEATHERPROOF 4500 LM 3000K w/ PHOTOCELL |




PLAN VIEW




PUMP SIDE ELEVATION



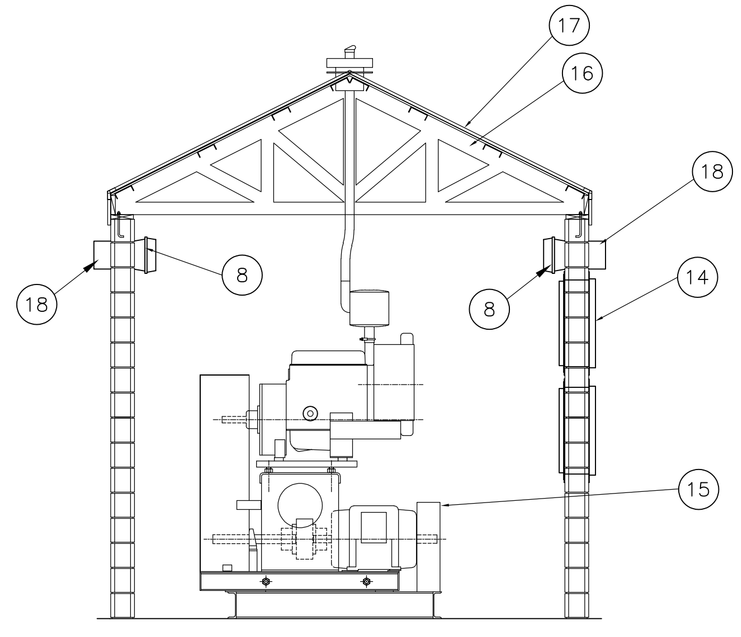

FRONT ELEVATION

## GENERAL NOTES:

1. NEED 3 PHASE POWER. 480-VOLT w/ CONNECTION FOR AUXILIARY GENERATOR.
2. BETWEEN PUMP SKIDS AND BUILDING FLOOR, VIBRATION ISOLATION PADS SHALL BE INSTALLED. SKIDS SHALL BE ANCHORED TO CONCRETE FLOOR AND VIBRATION ISOLATION PADS SHALL BE INSTALLED IN SMALL ENOUGH PIECES TO FIT UNDER RAILS.
3. THE PUMP STATION SHALL BE TIED TO THE CEDAR CITY SCADA SYSTEM. PROVIDE SUBMITTALS ON ALL EQUIPMENT TO BE USED. THE SCADA SYSTEM MUST INCLUDE AN INTRUSION ALARM ON THE WETWELL ACCESS HATCH LID AND ON THE DOORS INTO THE LIFT STATION BUILDING, BUILDING TEMPERATURE SENSOR, HIGH LEVEL ALARM, MOTOR RUN, MOTOR FAIL ALARM, AND WET WELL LEVEL AND FLOW METER AND MAIN POWER METER.
4. ALL CONDUITS AND UTILITIES COMING INTO THE BUILDING MUST COME IN THROUGH THE CONCRETE FLOOR SLAB. NO CONDUITS OR UTILITIES MAY ENTER THE BUILDING THROUGH THE WALLS. A SPARE 2" CONDUIT MUST BE STUBBED INTO THE BUILDING THROUGH THE FLOOR SLAB FOR FUTURE USE.
5. THE WET WELL MUST BE LOCATED FACING THE STREET OR ACCESS ROAD SO THAT IT CAN BE EASILY ACCESSED BY THE CITY'S SEWER CLEANING TRUCK.
6. THE SOIL UNDERNEATH ALL CONCRETE SLABS MUST BE OVER EXCAVATED AND RE-COMPACTED PER THE RECOMMENDATIONS GIVEN IN THE SOILS REPORT.
7. THE CONCRETE SLAB MUST BE DOWELED INTO THE WETWELL WITH #4 REBAR @ 16" O.C. TO PREVENT DIFFERENTIAL SETTLEMENT OF THE SLABS.
8. CULINARY WATER SERVICE MUST BE PROVIDED TO THE LIFT STATION SITE. INSTALL A FROST PROOF YARD HYDRANT ON THE SITE WITH 3 FEET BURY DEPTH. (SIMMONS BRAND) RUN CULINARY WATER INTO THE LIFT STATION BUILDING TO THE DEEP SINK. REFER TO THE LIFT STATION SITE PLAN STANDARD DETAIL S7.
9. SLOPE THE ENTIRE SITE AWAY FROM THE LIFT STATION BUILDING AT A MINIMUM 2% SLOPE TO PREVENT WATER FROM PONDING ON THE SITE.
10. MINIMUM LIFT STATION AREA IS 60' x 60', FENCED PER UDOT DETAIL NO. FG-6 w/ A 16' WIDE DOUBLE SWING GATE. REFER TO THE LIFT STATION SITE PLAN STANDARD DETAIL S7.
11. SEAL ALL OPENINGS THRU CONCRETE PAD INTO STATION ENCLOSURE GAS TIGHT.
12. A GAS TIGHT FLOOR DRAIN IS REQUIRED IN THE BUILDING. SLOPE THE CONCRETE FLOOR TO THE FLOOR DRAIN. DRAIN INTO THE WETWELL.
13. THE FOLLOWING UTILITIES MUST BE RUN TO THE LIFT STATION SITE. THERE ARE NO EXCEPTIONS TO THIS REQUIREMENT. ALL OF THESE UTILITIES MUST BE BROUGHT INTO THE LIFT STATION SITE. ALL METER AND PANEL LOCATIONS MUST BE REVIEWED AND APPROVED BY THE CITY ENGINEER PRIOR TO INSTALLATION:
    - NATURAL GAS
    - POWER
    - TELEPHONE
    - FIBER INTERNET, IF AVAILABLE
    - CULINARY WATER
14. THE CONTROL PANEL MUST BE ANCHORED TO THE CONCRETE PAD.
15. PROVIDE A DUPLEX OUTLET INSIDE THE CONTROL PANEL. SCADA EQUIPMENT MUST BE PLUGGED IN INSIDE THE CONTROL PANEL.
16. THE BUILDING SHALL COME EQUIPPED WITH A 12-VOLT DC EMERGENCY LIGHTING SYSTEM THAT WILL PROVIDE 50 WATTS OF ILLUMINATION FOR 1-1/2 HOURS IN THE EVENT OF AN EMERGENCY.
17. THE MINIMUM BUILDING DIMENSIONS ARE 12' WIDE x 20' LONG. THERE MUST BE AT LEAST 3' OF CLEARANCE ALL AROUND. HEIGHT CLEARANCE MUST ALLOW FOR THE LIFTING BEAM TO BE TALL ENOUGH TO LIFT THE PUMP EQUIPMENT UP AND OVER THE OTHER EQUIPMENT.
18. THIS DETAIL DRAWING DOES NOT TAKE THE PLACE OF STAMPED ENGINEERING DRAWINGS FOR THE LIFT STATION. STRUCTURAL DRAWINGS MUST BE PROVIDED FOR THE MASONRY BUILDING THAT ARE STAMPED BE A LICENSED STRUCTURAL ENGINEER. SUBMITTALS, SHOP DRAWINGS, ENGINEERING CALCULATIONS, AND STAMPED CONSTRUCTION DRAWINGS MUST BE SUBMITTED TO THE CITY ENGINEER FOR ALL PROPOSED PUMP EQUIPMENT AND FOR THE BUILDING. THE DIMENSIONS SHOWN ON THIS DRAWING ARE PROVIDED TO SHOW THE MINIMUM CLEARANCES THAT MUST BE MET.
19. 120-VOLT ELECTRICAL OUTLETS MUST BE LOCATED A MINIMUM OF 12" ABOVE THE FLOOR.
20. SUBMITTALS ARE REQUIRED FOR ALL LIGHTS, FANS, HEATER, ELECTRICAL EQUIPMENT, PUMPS, SCADA, ETC. AN OWNER'S MANUAL MUST BE PROVIDED TO THE CITY FOR ALL EQUIPMENT IN THE LIFT STATION PRIOR TO COMPLETION OF THE PROJECT.
21. THE CONTROL PANEL SHALL BE EQUIPED WITH AN DORSETT SCADA SYSTEM TO PROVIDE CONTACT WITH CITY PERSONNEL ON ALL ALARM POINTS.

NOTE:

* WETWELL. THE SIZE OF THE WETWELL AND THE DISTANCE FROM THE INVERT OF THE INFLUENT LINE TO THE CONCRETE PAD SHOULD BE PROPERLY DESIGNED TO ALLOW AT LEAST TEN MINUTES LAPSED TIME BETWEEN SUCCESSIVE STARTS OF A PUMP TO PREVENT SHORT CYCLING OF ELECTRIC MOTORS AND CONTROL.




NATURAL GAS GENERATOR SIDE ELEVATION

DATE: 8/2019
CHECKED: K.C.W.
SCALE: N.T.S.
DRAWN: T.B.M.

CEDAR CITY
10 NORTH MAIN STREET
CEDAR CITY, UTAH 84720
PH. (435) 586-2963

REVISIONS

| DESCRIPTION | DATE | BY |
|---|---|---|
| | | |

# SELF PRIMING SEWER LIFT STATION

SHEET NO. S5
FILE: S05.DWG