

**DEPARTMENT OF PUBLIC UTILITIES  
IFB26-20  
QUEMAZON AND EAST GATE LIFT STATION  
LOS ALAMOS COUNTY - NEW MEXICO**



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APPROVED BY: \_\_\_\_\_ DATE \_\_\_\_\_  
 PUBLIC UTILITIES PROJECT MANAGER

\_\_\_\_\_  
 PUBLIC UTILITIES ENGINEER DATE 7/17/25



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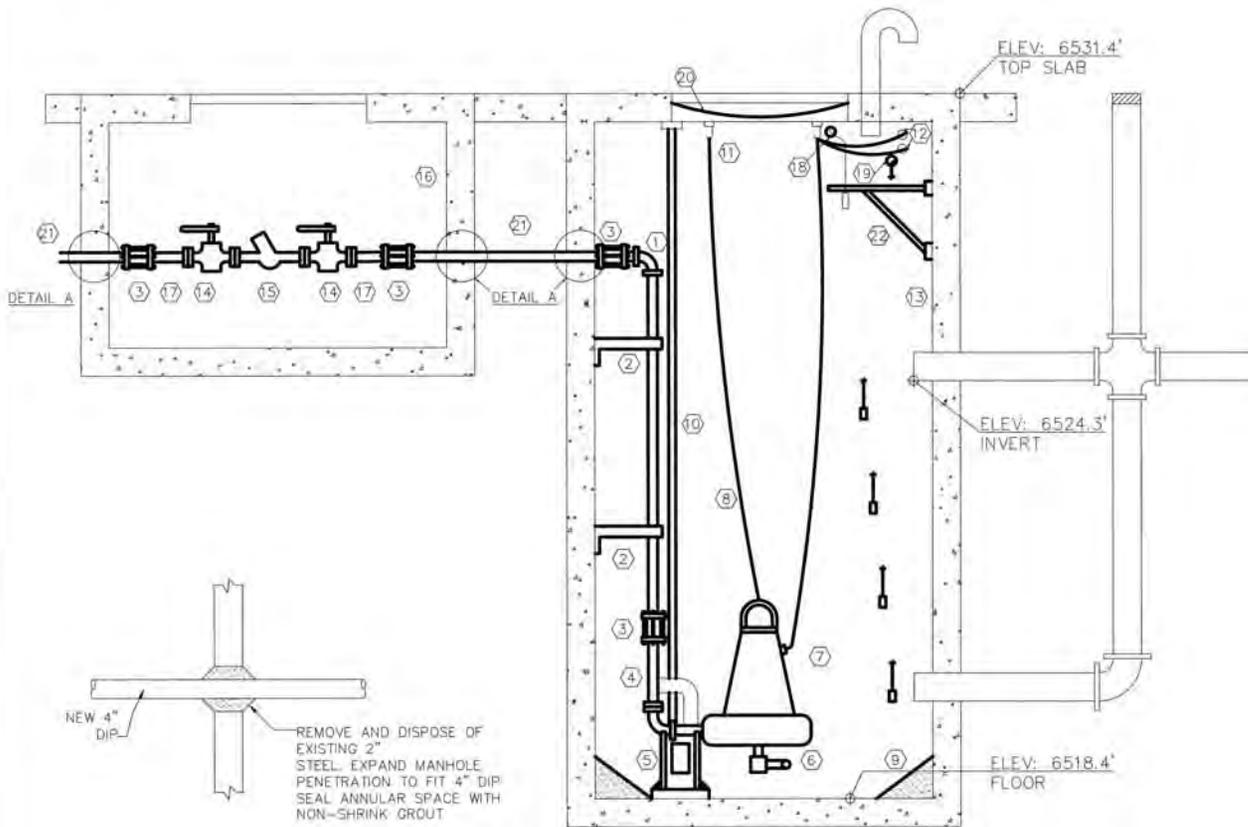
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APPROVED BY:	
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QUEMAZON AND EAST GATE LIFT STATION REHABILITATION PROJECT  
 IFB26-20  
 COVER SHEET



INCORPORATED COUNTY OF LOS ALAMOS  
 DEPARTMENT OF PUBLIC UTILITIES  
 1000 CENTRAL AVE., SUITE 100  
 LOS ALAMOS, NEW MEXICO 87504  
 (505) 862-8833 FAX: (505) 862-8005

SHEET  
**1**



DETAIL A

KEYED NOTES

- ① INSTALL 4" 90 DEGREE FLANGE FITTING WITH STAINLESS STEEL BOLTS (2 EACH)
- ② INSTALL NEW 4" DISCHARGE PIPE SUPPORT ANCHORED TO THE WALL (4 EACH)
- ③ INSTALL 4" COMPRESSION COUPLING WITH STAINLESS STEEL BOLTS AND NUTS (4 EACH)
- ④ INSTALL 24" LONG 4" FLANGE X PLAIN END SPOOL (2 EACH)
- ⑤ INSTALL PUMP MOUNTING SYSTEM ANCHORED TO THE FLOOR PER PUMP MANUFACTURERS RECOMMENDATION (2 EACH)
- ⑥ INSTALL MIX-FLUSH VALVE ON ONE PUMP
- ⑦ NEW FLYGT SUBMERSIBLE PUMP PER SPECIFICATIONS (2 EACH)
- ⑧ PUMP LIFTING CHAIN PER MANUFACTURERS RECOMMENDATION (2 EACH)
- ⑨ INSTALL NON-SHRINK GROUT SLOPED TO CENTER, ALONG FULL PERIMETER OF FLOOR
- ⑩ INSTALL PUMP LIFTING RAIL, TWO RAIL SYSTEM PER MANUFACTURERS RECOMMENDATION
- ⑪ INSTALL CHAIN AND CABLE HANGERS, TWO FOR CHAINS, TWO FOR PUMP CABLES, ONE FOR FLOATS, AND ONE FOR LEVEL TRANSMITTER (6 EACH)
- ⑫ NEW PUMP CABLES TO CONTROL PANEL THROUGH EXISTING WALL PENETRATIONS
- ⑬ EXISTING WET WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED, SURFACE PREPARATION FOR NEW COATING AND ZEBRON COATING SHALL BE PER ZEBRON MANUFACTURERS RECOMMENDATIONS
- ⑭ INSTALL NEW 4" FLANGED PLUG VALVE (4 EACH)
- ⑮ INSTALL NEW 4" FLANGED BALL CHECK VALVE (4 EACH)
- ⑯ EXISTING DRY WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED AND CLEANED
- ⑰ INSTALL 12" LONG 4" FLANGE X PLAIN END SPOOL (4 EACH)
- ⑱ RE USE EXISTING RADAR LEVEL TRANSMITTER, NEW RMC FROM CONTROL PANEL INTO WET WELL. NEW WET WELL PENETRATION
- ⑲ NEW 2" RMC FROM CONTROL PANEL FOR FLOAT WIRES INTO WET WELL. NEW WET WELL PENETRATION
- ⑳ FURNISH AND INSTALL OSHA APPROVED SAFETY NET FOR FALL PROTECTION
- ㉑ NEW 4" DIP
- ㉒ NEW RADAR MOUNTING BRACKET. CONSTRUCT WITH STAINLESS STEEL UNISTRUT WITH STAINLESS STEEL HARDWARE AND ANCHOR BOLTS

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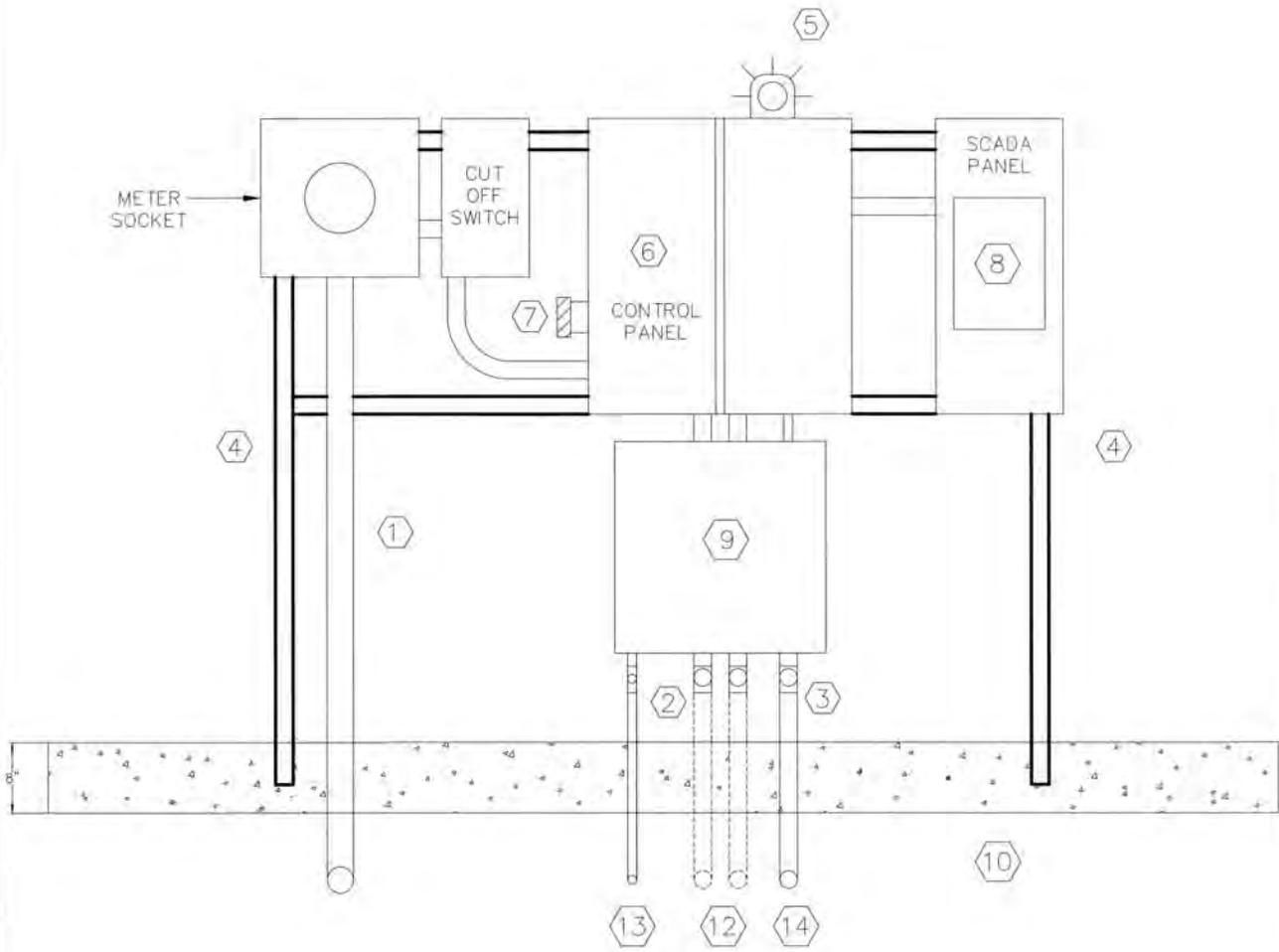
DESIGNED BY: J.R.	J.R.
DRAWN BY: J.J.A.	J.J.A.
APPROVED BY: J.J.A.	J.J.A.
DATE: 7/16/2025	
SCALE: N/A	

EAST GATE LIFT STATION  
IFB26-20  
WET WELL AND DRY WELL  
EQUIPMENT UPGRADES



INCORPORATED COUNTY  
OF LOS ALAMOS  
DEPARTMENT OF PUBLIC  
UTILITIES

Professional Engineer Seal for J.J.A. No. 14891, State of New Mexico, dated 7/17/25.



ELECTRICAL NOTES:

- 1: CONTROL PANEL TO BE NEMA 4 RATED WITH EXTERNAL CONNECTION FOR GENERATOR DURING EMERGENCY OPERATION.
- 2: LIFT STATION SERVICE WILL BE 208V/3-PHASE/60 HTZ.
- 3: CONTROL PANEL FRONT BLANK. LOCAL DEPTH GAUGE, PUMP RUN STATUS LIGHTS, HOA SWITCHES, AMPMETER AND RUN TIME METERS FOR EACH PUMP MOUNTED ON INNER DOOR.
- 4: PUMP CONTROLS TO HAVE LEAD/LAG ALTERNATOR, TIME DELAY ON RESTART AFTER POWER FAILURE.
- 5: ANTI-CONDENSATION HEATER INSIDE PANEL, THERMOSTAT CONTROLLED.
- 6: PANEL MOUNTED 15 AMP, 110V CONVENIENCE GFI OUTLET WITH 20 AMP CIRCUIT BREAKER/DRY TRANSFORMER 110V.
- 7: CONTRACTOR TO INSTALL 3" RMC CONDUIT AND WIRING AS NECESSARY TO CONNECT CONTROL PANEL TO NEW ELECTRIC SERVICE METER SOCKET.
- 8: NEW STATION ELECTRIC SERVICE MUST BE PERMITTED, INSPECTED AND APPROVED BY NEW MEXICO CONSTRUCTION INDUSTRIES.

⬡ ELECTRIC KEYED NOTES ⬡

- Ⓛ1 3" STATION POWER SUPPLY RMC CONDUIT
- Ⓛ2 - 2" PUMP CABLE RMC CONDUIT
- Ⓛ3 2" RMC CONDUIT FOR PUMP CONTROL WIRE FOR FLOATS
- Ⓛ4 NEW UNISTRUT FRAME STAINLESS STEEL
- Ⓛ5 HIGH-LEVEL WATER ALARM LIGHT
- Ⓛ6 CONTROL PANEL
- Ⓛ7 BRYANT STANDBY GENERATOR POWER CONNECTOR IEC 309 SERIES I + II RECEPTACLE
- Ⓛ8 SCADA PANEL-BY OWNER
- Ⓛ9 24" x 24" NEMA TYPE 4 PANEL, PUMPS AND FLOATS TERMINAL BOX
- Ⓛ10 INSTALL 8" CONCRETE SLAB W/ 3" WELDED WIRE MESH REINFORCEMENT. LENGTH 10' x WIDTH 3'
- Ⓛ11 RADAR CABLE FOR CONTROLS DEPTH MONITORING
- Ⓛ12 INTERCEPT EXISTING PUMP CONDUITS THAT ENTER WET WELL. RE-USE EXISTING CONDUIT THAT ENTERS WET WELL
- Ⓛ13 INSTALL 1" RMC FROM NEMA 4 PANEL TO WET WELL. NEW PENETRATION TO WET WELL FOR RADAR
- Ⓛ14 INSTALL 2" RMC FROM NEMA 4 PANEL TO WET WELL. NEW PENETRATION TO WET WELL FOR FLOATS



*JJA*  
7/17/25

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DESIGNED BY: J.R.	J.R.	APPROVED BY: J.J.A.	DATE: 7/17/2025
DRAWN BY:		SCALE:	N/A

EAST GATE LIFT STATION IFB26-20 CONTROL PANEL
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 LOS ALAMOS
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INCORPORATED COUNTY OF LOS ALAMOS DEPARTMENT OF PUBLIC UTILITIES
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SHEET 3
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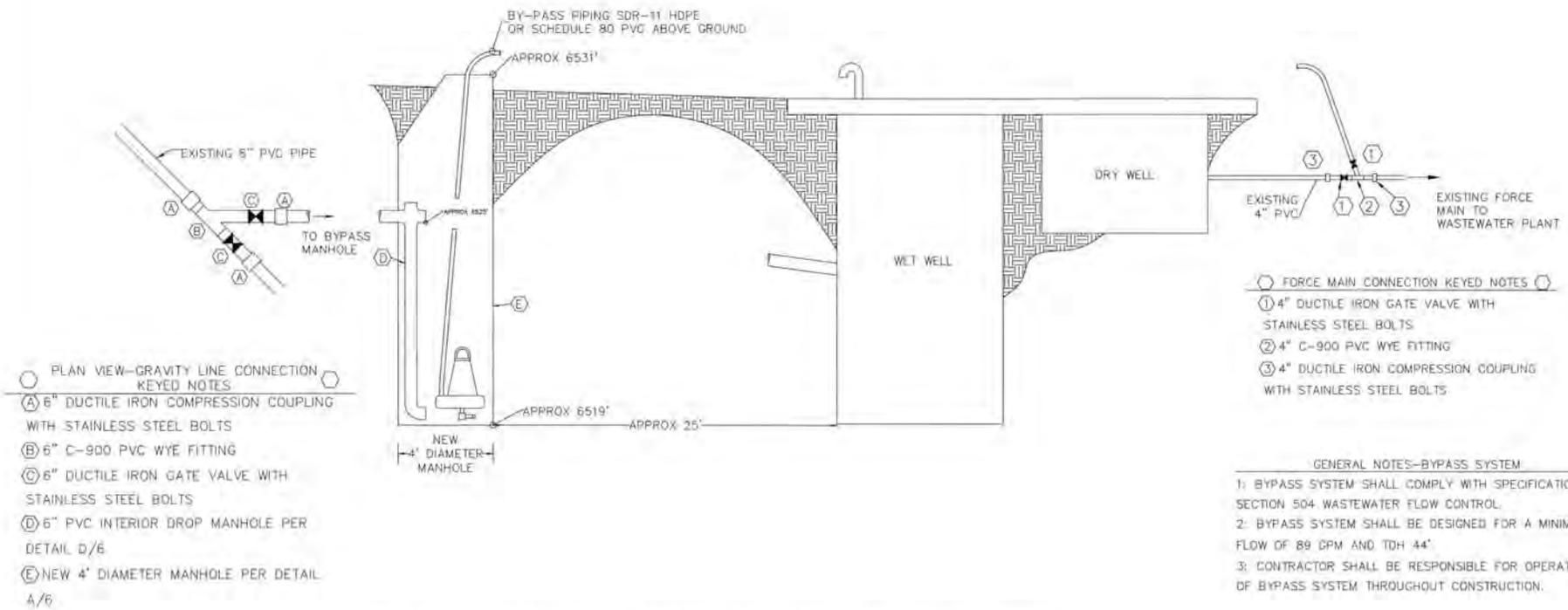
DESIGNED BY: J.R.	J.R.
DRAWN BY: J.J.A.	J.J.A.
APPROVED BY: J.J.A.	J.J.A.
DATE: 7/16/2025	
SCALE: N/A	

**EAST GATE LIFT STATION  
IFB26-20  
BY-PASS PLAN**



INCORPORATED COUNTY  
OF LOS ALAMOS  
DEPARTMENT OF PUBLIC  
UTILITIES

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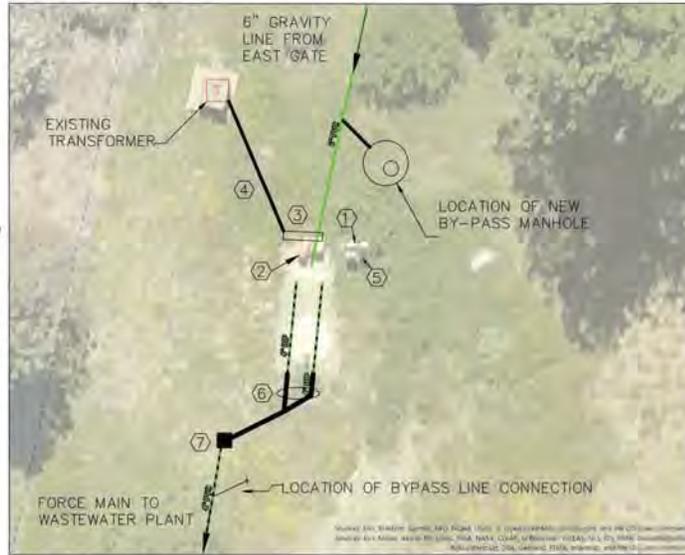
## SCHEMATIC OF TEMPORARY PUMPING SYSTEM

JAMES I. ALAMOS  
JULY 1963  
INCORPORATED  
COUNTY OF LOS ALAMOS  
DEPARTMENT OF PUBLIC UTILITIES

*J.J.A.*  
7/17/25

○ KEYED NOTES ○

- ① REMOVE & DISPOSE EXISTING CONTROL RACK, PANELS, SLAB, AND CONDUITS. EXISTING CONTROL PANEL TO BE SALVAGED BY OWNER.
- ② REMOVE & DISPOSE OF 2 PANELS AND MOUNTING HARDWARE. CUT EXISTING CONDUITS 6" ABOVE GROUND, THEY WILL BE REUSED.
- ③ NEW CONTROL PANEL AND STATION SERVICE PER SHEET 3.
- ④ NEW 3" PVC ELECTRIC CONDUIT FOR NEW STATION SERVICE.
- ⑤ EXISTING SCADA PANEL TO BE SALVAGED AND INSTALLED ON NEW CONTROL RACK.
- ⑥ REMOVE AND DISPOSE OF 2" STEEL PIPING. REPLACE WITH NEW 4" DUCTILE IRON PIPING.
- ⑦ CONNECTION FROM NEW 4" DIP TO EXISTING 4" PVC. MJ SOLID SLEEVE WITH MEGALUG JOINT RESTRAINT.



EXISTING PANELS



EXISTING CONTROL PANEL AND STATION SERVICE



7/17/25

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DESIGNED BY:	J.R.
DRAWN BY:	J.R.
APPROVED BY:	J.J.A.
DATE:	7/16/2025
SCALE:	N/A

EAST GATE LIFT STATION  
IFB26-20  
SITE PLAN



INCORPORATED COUNTY  
OF LOS ALAMOS  
DEPARTMENT OF PUBLIC  
UTILITIES

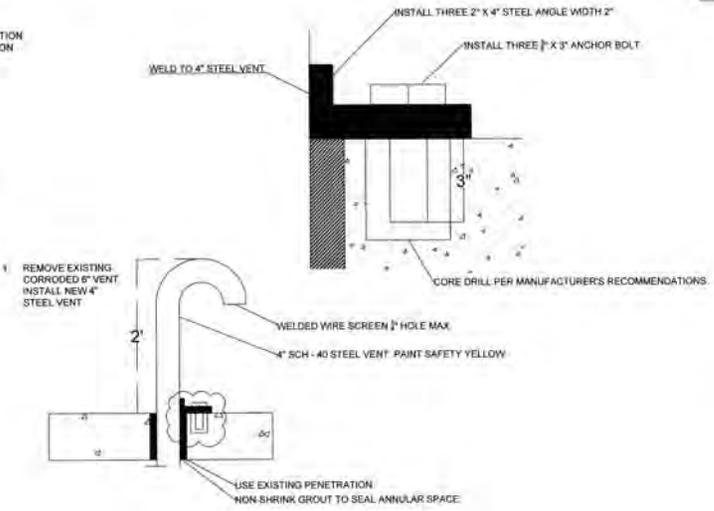
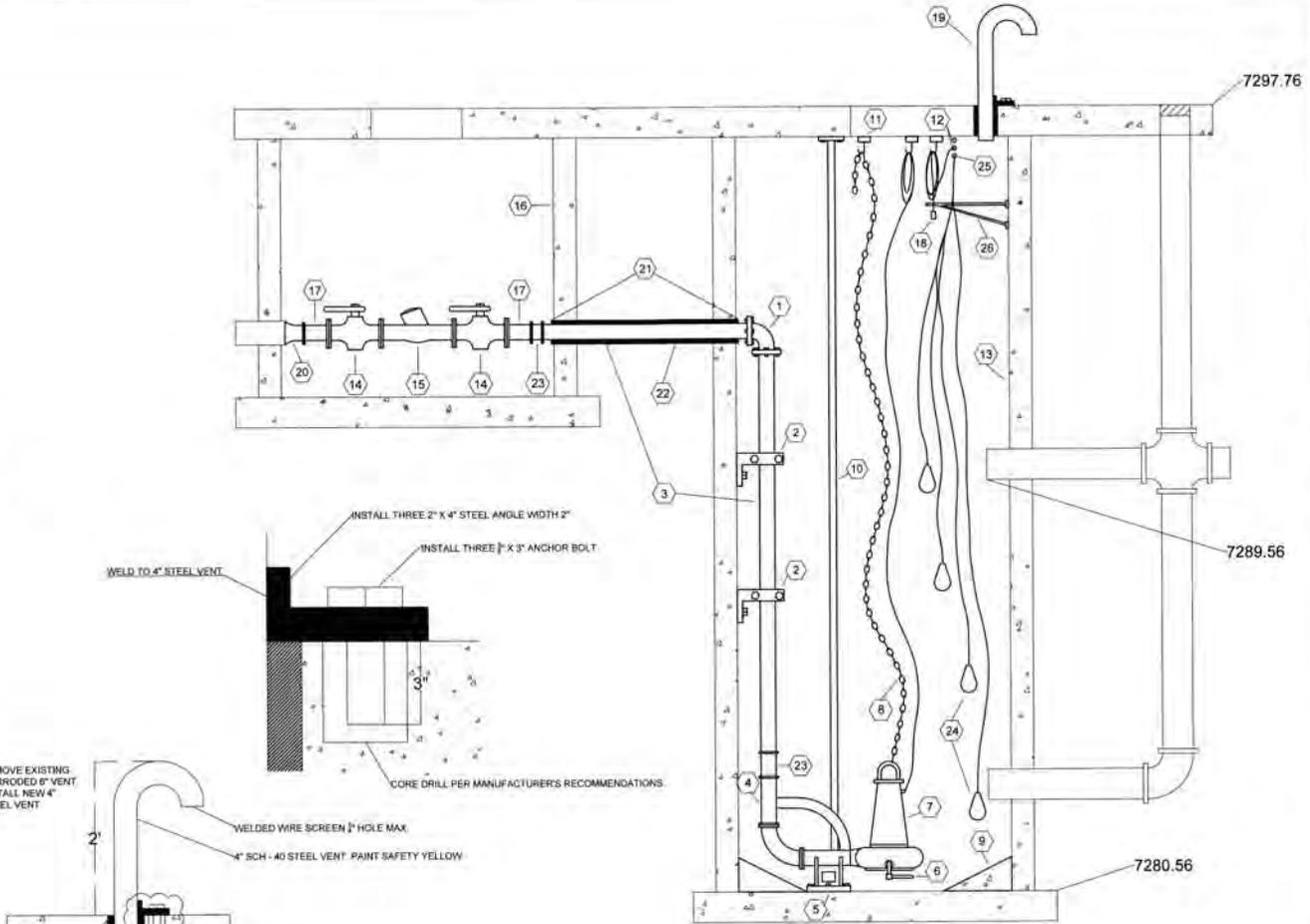
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**KEYED NOTES**

- 1 INSTALL NEW 4" 90 DEGREE ELBOW WITH STAINLESS STEEL BOLTS
- 2 INSTALL NEW 4" DISCHARGE PIPE SUPPORT ANCHORED TO THE WALL (4 EACH)
- 3 INSTALL 4" DUCTILE IRON PIPE
- 4 INSTALL 24" LONG 4" FLANGE X PLAIN END SPOOL (2 EACH)
- 5 INSTALL PUMP MOUNTING SYSTEM ANCHORED TO THE FLOOR PER PUMP MANUFACTURERS' RECOMMENDATION (2 EACH)
- 6 INSTALL MIX-FLUSH VALVE ON ONE PUMP
- 7 NEW FLYGHT SUBMERSIBLE PUMP PER SPECIFICATIONS (2 EACH)
- 8 PUMP LIFTING CHAIN PER MANUFACTURERS' RECOMMENDATION (2 EACH)
- 9 INSTALL NON-SHRINK GROUT SLOPED TO CENTER, ALONG FULL PERIMETER OF FLOOR.
- 10 INSTALL PUMP LIFTING RAIL, TWO RAIL SYSTEM PER MANUFACTURERS' RECOMMENDATION
- 11 INSTALL CHAIN AND CABLE HANGERS, TWO FOR CHAINS AND TWO FOR PUMP CABLES, ONE FOR FLOATS, TWO FOR LEVEL TRANSMITTER (6 EACH)
- 12 NEW PUMP CABLES TO NEMA 4 PANEL THROUGH EXISTING WALL PENETRATIONS
- 13 EXISTING WET WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED, SURFACE PREPARATION FOR NEW COATING AND NEW ZEBRON COATING APPLIED. SURFACE PREPARATION AND ZEBRON COATING SHALL BE PER ZEBRON MANUFACTURERS' RECOMMENDATIONS.
- 14 INSTALL NEW 4" FLANGED PLUG VALVE (4 EACH)
- 15 INSTALL NEW 4" FLANGED BALL CHECK VALVE (2 EACH)
- 16 EXISTING DRY WELL WALLS AND FLOORS SHALL BE PRESSURE WASHED AND CLEANED
- 17 INSTALL 12" LONG 4" FLANGED X PLAIN END SPOOL (2 EACH)
- 18 EXISTING RADAR LEVEL TRANSMITTER WILL BE RE-USED
- 19 REPLACE EXISTING 6" VENT WITH NEW 4" VENT PER DETAIL A
- 20 INSTALL 6" X 4" MJ REDUCER WITH STAINLESS STEEL BOLTS
- 21 CUT EXISTING 6" PIPE 2" FROM WALL OF VAULT INTERIOR - 4 - PLACES
- 22 SLEEVE NEW 4" DUCTILE IRON PIPE THROUGH 6" PIPE
- 23 4" MJ SOLID SLEEVE WITH STAINLESS STEEL BOLTS
- 24 4 FLOAT SWITCHES
- 25 NEW PENETRATION AND 2" CONDUIT TO NEMA 4 PANEL FOR FLOATS
- 26 INSTALL NEW RADAR MOUNTING BRACKET WITH STAINLESS STEEL UNISTRUT, WITH STAINLESS BOLTS AND HARDWARE ANCHORED TO WALL



- DEMOLITION NOTES**
1. REMOVE AND DISPOSE OF EXISTING PIPING IN BOTH THE WET WELL AND DRY WELL.
  2. REPAIR ANY VOIDS, CRACKS, OR BOLT HOLES WITH NON-SHRINK GROUT ON THE INTERIOR WALLS OF WET WELL.
  3. REMOVE AND DISPOSE OF ALL EXISTING PUMPS, CABLES, AND ACCESSORIES THAT WILL BE REPLACED.



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DESIGNED BY:	KVM
DRAWN BY:	KVM
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SCALE:	N/A

QUEMAGON AND EAST GATE LIFT STATION REHABILITATION PROJECT  
 IFB26-20  
 QUEMAGON DRY WELL - WET WELL EQUIPMENT



LOS ALAMOS

INCORPORATED COUNTY OF LOS ALAMOS  
 DEPARTMENT OF PUBLIC UTILITIES  
 1000 CENTRAL AVE., SUITE 130  
 LOS ALAMOS, NEW MEXICO 87544  
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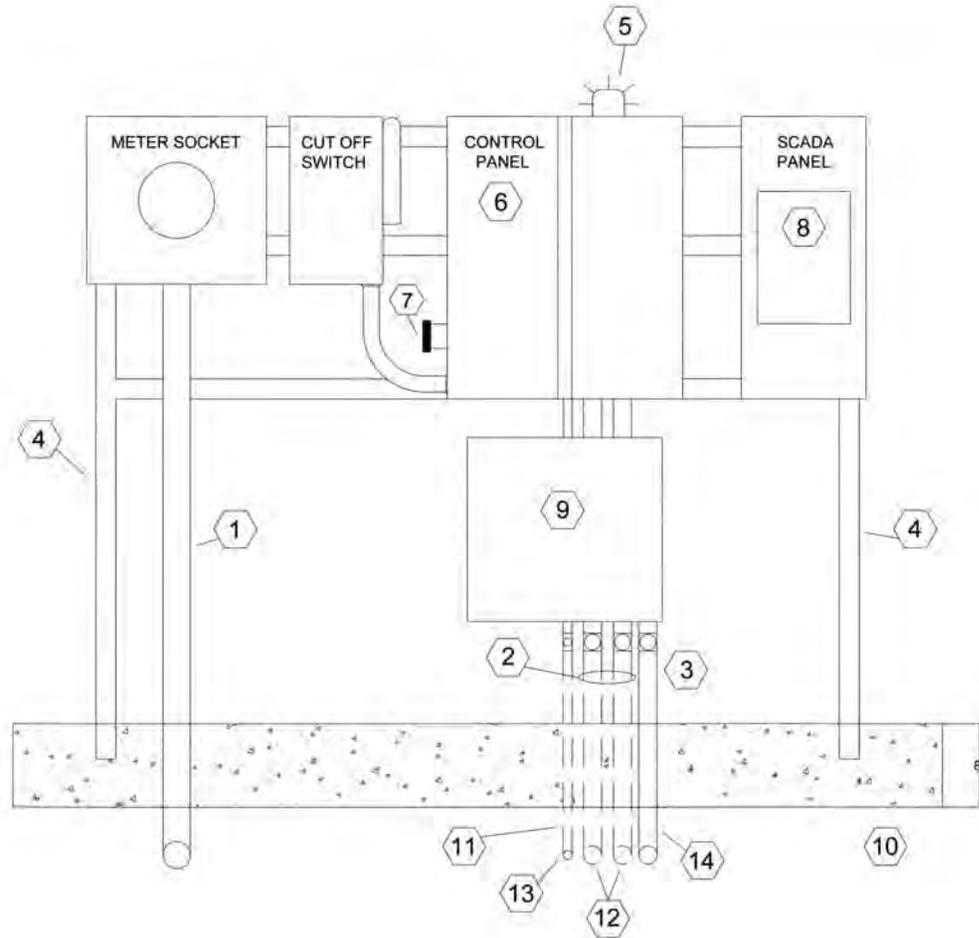
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**ELECTRICAL NOTES**

1. CONTROL PANEL TO BE NEMA 4 RATED WITH EXTERNAL CONNECTION FOR GENERATOR DURING EMERGENCY OPERATION. TO BE DETERMINED BY L.A.C.U. ENGINEERING. LOCATION IS SITE SPECIFIC.
2. STATION SERVICE WILL BE 208 V / 3-PHASE / 60 HTZ.
3. CONTROL PANEL FRONT BLANK. LOCAL DEPTH GAUGE, PUMP RUN STATUS LIGHTS, HOA POWER SWITCHES, AMPMETER AND RUN TIME METERS FOR EACH PUMP MOUNTED ON INNER DOOR.
4. PUMP CONTROLS TO HAVE LEAD / LAG ALTERNATOR, TIME DELAY ON RE-START AFTER POWER FAILURE, AND PHASE / LOW VOLTAGE MONITOR.
5. ANTI-CONDENSATION HEATER INSIDE PANEL, 100 WATT, THERMOSTAT CONTROLLED.
6. PANEL MOUNTED 15 AMP, 110V CONVENIENCE GFI OUTLET WITH 20 AMP CIRCUIT BREAKER / DRY TRANSFORMER 110V.
7. CONTRACTOR TO INSTALL 3" RMC CONDUIT AND WIRING AS NECESSARY TO CONNECT CONTROL PANEL TO NEW ELECTRIC SERVICE METER SOCKET.
8. NEW STATION ELECTRIC SERVICE MUST BE PERMITTED, INSPECTED AND APPROVED BY NEW MEXICO CONSTRUCTION INDUSTRIES.

**ELECTRIC KEYED NOTES**

- ① 3" STATION POWER SUPPLY RMC CONDUIT.
- ② 2 - 2" PUMP CABLE RMC CONDUIT.
- ③ 2" RMC CONDUIT FOR PUMP CONTROL WIRE FOR FLOATS.
- ④ NEW UNISTRUT FRAME STAINLESS STEEL.
- ⑤ HIGH-LEVEL WATER ALARM LIGHT.
- ⑥ CONTOL PANEL
- ⑦ BRYANT STANDBY GENERATOR POWER CONNECTOR IEC 309 SERIES I + II RECEPTACLE.
- ⑧ SCADA PANEL. RE-USE EXISTING SCADA PANEL.
- ⑨ 24" X 24" NEMA TYPE 4 PANEL. PUMPS, RADAR CABLE, AND FLOATS TERMINAL BOX.
- ⑩ INSTALL 8" CONCRETE SLAB W / 3" WELDED WIRE MESH REINFORCEMENT. LENGTH 10' X 3' WIDE.
- ⑪ RADAR CABLE FOR CONTROLS DEPTH MONITORING.
- ⑫ INTERCEPT EXISTING PUMP CONDUITS THAT ENTER WET WELL. RE-USE EXISTING CONDUIT THAT ENTERS WET WELL.
- ⑬ INTERCEPT EXISTING RADAR CABLE CONDUIT THAT ENTERS WET WELL. RE-USE EXISTING CONDUIT THAT ENTERS WET WELL.
- ⑭ INSTALL 2" RMC FROM NEMA 4 PANEL TO WET WELL. NEW PENETRATION TO WET WELL FOR FLOATS.



JAMES J. ARREDONDO  
 P.E.  
 24895  
 NEW MEXICO

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DRAWN BY:	KVM
APPROVED BY:	
DATE:	
SCALE:	N/A

QUEMAZON AND EAST GATE LIFT  
 STATION  
 REHABILITATION PROJECT  
 IFB26-20  
 QUEMAZON CONTROL PANEL



INCORPORATED COUNTY  
 OF LOS ALAMOS  
 DEPARTMENT OF PUBLIC  
 UTILITIES  
 1000 CENTRAL AVE., SUITE 130  
 LOS ALAMOS, NEW MEXICO 87544  
 (505) 862-8333 FAX: (505) 862-8005

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**KEYED NOTES**

- 1 EXISTING POWER SUPPLY AND CONTROL PANELS TO BE REMOVED AND DISPOSED.
- 2 EXISTING PANEL CONTAINS PUMP CABLES AND LEVEL CONTROL RADAR CABLE. PRESERVE AND RE-USE RMC FROM THIS PANEL INTO WET WELL.
- 3 EXISTING 6" STEEL VENT TO BE REPLACED PER SHEET 7, DETAIL A.
- 4 EXISTING 6" STEEL VENT TO REMAIN. RE-PAINT SAFETY YELLOW.
- 5 NEW CONTROL PANEL PER SHEET 8.
- 6 NEW 3" ELECTRIC CONDUIT FOR NEW ELECTRIC SERVICE.
- 7 APPROXIMATE LOCATION OF 1500 GALLON ABOVE GROUND POLYETHYLENE BY-PASS PUMPING SYSTEM TANK.
- 8 NEW TEMPORARY 8" HDPE OR SDR-35 PVC GRAVITY LINE TO BY-PASS TANK. THIS LINE SHALL HAVE A MINIMUM SLOPE OF 2% TO THE BY-PASS TANK. REFER TO SHEET 10 FOR BY-PASS SYSTEM.
- 9 NEW TEMPORARY BY-PASS FORCE MAIN: ABOVE GROUND. REFER TO SHEET 10.



OVERALL CONTROL PANEL AND ELECTRIC GEAR



PANEL CONNECTED TO WET WELL

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APPROVED BY:	
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SCALE:	N/A

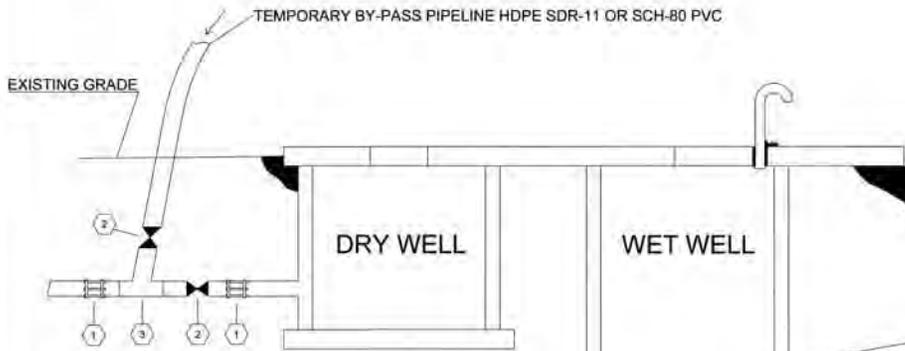
QUEMAGON AND EAST GATE LIFT STATION REHABILITATION PROJECT
IFB26-20
QUEMAGON SITE PLAN



INCORPORATED COUNTY OF LOS ALAMOS  
 DEPARTMENT OF PUBLIC UTILITIES, SUITE 130  
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 (505) 862-8333 FAX: (505) 862-8005

*2/17/25*

# BY-PASS CONNECTION TO FORCE MAIN



## KEYED NOTES

- 1 6" DUCTILE IRON COMPRESSION COUPLING  
STAINLESS STEEL BOLTS RATED AT 250 (PSI) MIN.
- 2 6" MJ GATE VALVE WITH MEGA-LUG RESTRAINTS.
- 3 6" MJ WYE WITH MEGA-LUG RESTRAINTS.

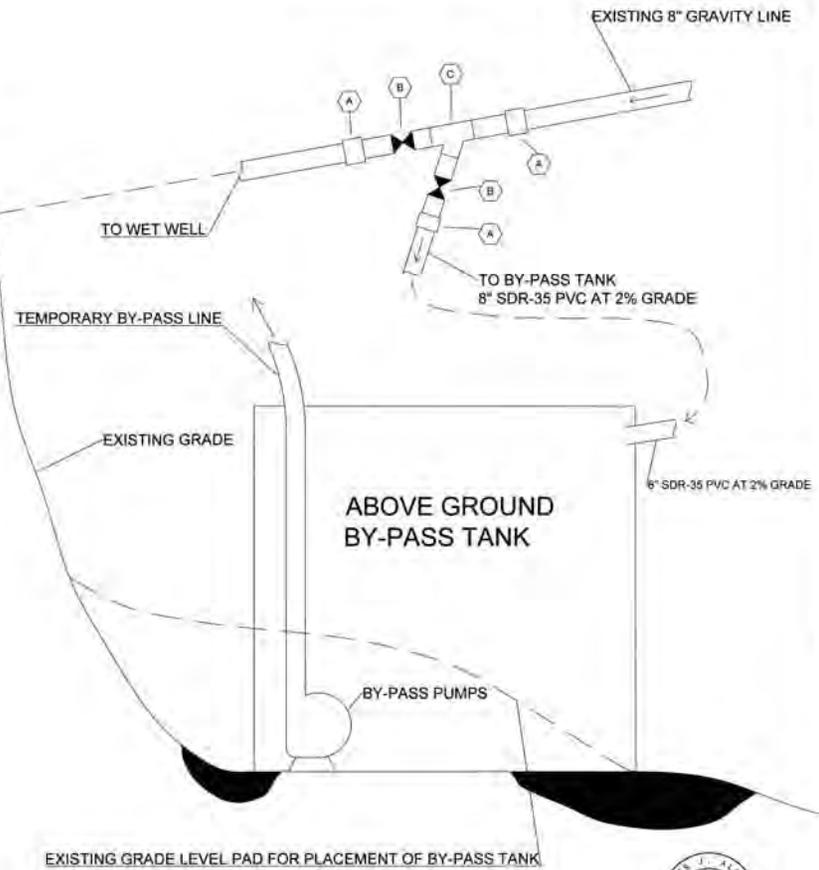
## GENERAL NOTES

- 1 BY-PASS SYSTEM SHALL COMPLY WITH SPECIFICATION 504 SEWER FLOW CONTROL.
- 2 BY-PASS PUMPS SHALL BE CAPABLE OF PUMPING A MINIMUM OF 130 (GPM) AT TOTAL DYNAMIC HEAD OF 44 (FEET).
- 3 CONTROLS SHALL MAINTAIN THE BY-PASS SYSTEM THROUGH THE DURATION OF CONSTRUCTION

## KEYED NOTES

- A 8" DUCTILE IRON COMPRESSION COUPLING  
STAINLESS STEEL BOLTS RATED AT 125 (PSI) MIN.
- B 8" GATE VALVE WITH MEGA-LUG RESTRAINT. WITH  
STAINLESS STEEL BOLTS.
- C 8" MJ WYE WITH MEGA-LUG RESTRAINTS. WITH  
STAINLESS STEEL BOLTS.

# BY-PASS CONNECTION TO GRAVITY INLET PLAN VIEW FOR CLARITY



NO.	REVISION DESCRIPTION

DESIGNED BY: KVM	APPROVED BY: KVM
DRAWN BY: KVM	DATE: N/A
SCALE: N/A	

QUEMAZON AND EAST GATE LIFT  
STATION  
REHABILITATION PROJECT  
FEB26-20  
QUEMAZON BY-PASS PLAN



INCORPORATED COUNTY  
OF LOS ALAMOS  
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SHEET  
10