

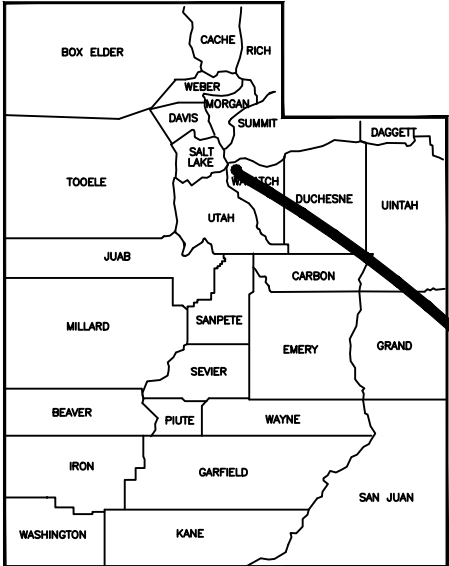
BIDDING DRAWINGS FOR

UVU SEWER LIFT STATION

PREPARED FOR

NORTH VILLAGE SPECIAL SERVICE DISTRICT

WASATCH COUNTY , UTAH



VICINITY MAP

Prepared for:

NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032

Prepared by:

BT ENGINEERING  
ENGINEER  
Contact: Jason Bradford, P.E.  
801-633-1048



LOCATION MAP

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CIVIL DESIGN BY BT ENGINEERING  
STRUCTURAL DESIGN BY EPIC ENGINEERING  
ELECTRICAL DESIGN BY SKM ENGINEERING

This project shall comply with all provisions of  
the Heber City Municipal Code

BT ENGINEERING

FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032  
CONTACT:  
DAVE FULLER  
(435) 654-9233

NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
COVER SHEET

NO.	DATE	REVISION	BY

PROJECT NO.:  
09.01.003

DATE:  
FEBRUARY 2026

DRAWN BY:  
JB

CHECKED BY:  
TT

PROJECT MANAGER:  
T. TIMOTHY

COVER SHEET

G-1



FILE DATE: 2-4-2026 15:25:29 (JEB)

GENERAL NOTES:

THE CONTRACTOR SHALL CAREFULLY READ ALL OF THE NOTES AND SPECIFICATIONS, THE CONTRACTOR SHALL BE SATISFIED AS TO THEIR TRUE MEANING AND INTENT AND SHALL BE RESPONSIBLE FOR COMPLYING WITH EACH.

1. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING: PROJECT PLANS AND SPECIFICATIONS, JORDANELLE SPECIAL SERVICE DISTRICT STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS, AND THE HEBER CITY STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS, WHERE APPLICABLE.

2. PRIOR TO PERFORMING ANY WORK, THE CONTRACTOR SHALL CONTACT CONSTRUCTION MANAGER FOR A PRE-CONSTRUCTION CONFERENCE.

A. OWNER:

NORTH VILLAGE SPECIAL SERVICE DISTRICT  
5780 N. OLD HWY 40  
HEBER CITY, UT 84032  
(435) 654-9233  
CONTACT: DAVE FULLER, ASSISTANT GENERAL MANAGER

B. ENGINEER:

BT ENGINEERING  
CONTACT: JASON BRADFORD  
PHONE: (801) 633-1048
3. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND CONTRACTOR PROVIDED MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE CONSTRUCTION MANAGER'S INTERPRETATION THEREOF SHALL BE CONCLUSIVE.

4. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

5. THE CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR, IT SHALL BE EXPECTED THAT PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND CONTRACTOR PROVIDED MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS ON THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES, WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR PECULIAR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT, AND SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS AND CONDITIONS OF ALL PERMITS AND APPROVALS APPLICABLE TO THIS PROJECT. THE CONTRACTOR SHALL ENSURE THAT THE NECESSARY RIGHTS-OF-WAY, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION.

7. CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT WHERE APPLICABLE FOR ANY WORK DONE WITHIN RIGHTS-OF-WAY OR EASEMENTS FROM HEBER CITY, WASATCH COUNTY, AND/OR UDOT. CONTRACTOR SHALL NOTIFY CITY, COUNTY, AND/OR STATE, 24 HOURS IN ADVANCE OF COMMENCING THE WORK, OR AS REQUIRED BY SAID PERMITS.

8. THE CONTRACTOR SHALL, AT THE TIME OF BIDDING, AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.

9. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY THEMSELVES BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS THEY MAY PREFER, OF THE LOCATION OF THE PROPOSED WORK, AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK. IF, DURING THE COURSE OF THEIR EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO THEM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, THEY SHALL CONTACT THE CONSTRUCTION MANAGER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.

10. SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, THEY HAVE RELIED AND ARE RELYING ON THEIR OWN EXAMINATION OF: (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON THEIR OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK TO BE CONSTRUCTED UNDER THIS CONTRACT.

11. THE INFORMATION PROVIDED BY THE OWNER OR THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT THEY HAVE NOT RELIED SOLELY UPON OWNER OR ENGINEER FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING THEIR BID.

12. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.

13. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTORS USE DURING CONSTRUCTION.

14. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE CONSTRUCTION MANAGER.

15. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.

16. THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACH PHASE OF WORK.

B. THEY SHALL BE RESPONSIBLE TO REMOVE AND DISPOSE OF ALL TRASH, SCRAP AND UNUSED MATERIAL AT THEIR OWN EXPENSE IN A TIMELY MANNER.

C. THEY SHALL BE RESPONSIBLE TO MAINTAIN THE SITE IN A NEAT, SAFE AND ORDERLY MANNER AT ALL TIMES.

D. THEY SHALL BE RESPONSIBLE TO KEEP MATERIALS, EQUIPMENT, AND TRASH OUT OF THE WAY OF OTHER CONTRACTORS SO AS NOT TO DELAY THE JOB. FAILURE TO DO SO WILL RESULT IN A DEDUCTION FOR THE COST OF CLEAN UP FROM THE FINAL PAYMENT.

E. THEY SHALL BE RESPONSIBLE FOR THEIR OWN SAFETY, TRAFFIC CONTROL, PERMITS, RETESTING AND RE-INSPECTIONS AT THEIR OWN EXPENSE.

F. UNLESS OTHERWISE NOTED ALL EXCESS SOILS AND MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF SITE AT THE CONTRACTOR'S EXPENSE.

G. MAINTAIN EROSION CONTROL MEASURES ASSOCIATED WITH THE JOBS SITE AS DESIGNATED IN SWPPP.

H. COMPLY WITH APPLICABLE OSHA AND RSHS STANDARDS.

16. THE CONTRACTOR SHALL PROVIDE PROOF OF INSURANCE WITH NVSSD AND BT ENGINEERING IDENTIFIED "ADDITIONAL INSURED".

17. DUST TO BE CONTROLLED 24 HOURS PER DAY, 7 DAYS PER WEEK, AS CONDITIONS DICTATE.

18. CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING.

19. FOR ALL WORK WITHIN PUBLIC RIGHTS-OF-WAY OR EASEMENTS, THE CONTRACTOR SHALL PRESERVE THE INTEGRITY AND LOCATION OF ANY AND ALL PUBLIC UTILITIES AND PROVIDE THE NECESSARY CONSTRUCTION PROTECTIVE CONTROL. CONTRACTOR SHALL, THROUGH THE ENCROACHMENT PERMIT PROCESS, VERIFY WITH THE NECESSARY REGULATORY AGENCIES, THE NEED FOR ANY TRAFFIC ROUTING PLAN. IF A PLAN IS REQUIRED, CONTRACTOR SHALL PROVIDE A PLAN AND RECEIVE PROPER APPROVALS PRIOR TO BEGINNING CONSTRUCTION.

20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR; ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

21. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT OF EXISTING IMPROVEMENTS. THERE WILL BE NO EXTRA COST DUE THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.

FILE NAME: \\USERS\BRAD\PROJECT\UUVI LIFT STATION\CAD\G2 - NOTES.DWG JSSD\_SEWER\_PROJECT\UUVI LIFT STATION\CAD\G2 - NOTES.DWG

GENERAL NOTES (CONT):

22. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE CONSTRUCTION MANAGER, AND THE RESPECTIVE REGULATORY AGENCY.
23. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF PIPING, STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE CONSTRUCTION MANAGER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
24. WORK IN EASEMENTS AND/OR RIGHTS-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID EASEMENTS AND/OR RIGHTS-OF-WAY.

CLEARING AND GRADING NOTES

1. THE EXISTING TOPOGRAPHY SHOWN ON THESE PLANS IS BASED ON TOPOGRAPHIC SURVEY PREPARED BY BT ENGINEERING.
2. CONTRACTOR SHALL PROVIDE A TEMPORARY EROSION CONTROL PLAN AND SUBMIT REQUEST FOR SWPPP PERMIT. OWNER REQUIRED TO OBTAIN OTHER PERMITS FROM WASATCH COUNTY AND THE STATE OF UTAH FOR TEMPORARY EROSION CONTROL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ALL TEMPORARY EROSION CONTROL AND MAINTENANCE, AND SHALL PROVIDE EROSION AND SEDIMENT CONTROL FORMS TO THE COUNTY.

PIPING INSTALLATION NOTES:

1. CONTRACTOR SHALL SLOPE ALL EXCAVATION TO AN ANGLE OF REPOSE OF MATERIAL BEING EXCAVATED OR USE BRACING OR SHORING, CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH OSHA REGULATIONS AND GUIDELINES.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FLAGGING, CAUTION SIGNS AND PUBLIC SAFETY ON ALL ADJACENT STREETS AND CONSTRUCTION SITE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PUBLIC SAFETY AND OSHA SAFETY STANDARDS.
4. NATIVE BACK FILL SHALL BE COMPACTED TO JSSD SPECIFICATIONS.
5. CONTRACTOR TO SPACE UTILITIES TO PROVIDE MINIMUM DISTANCES AS REQUIRED BY LOCAL, COUNTY, STATE AND INDIVIDUAL UTILITY CODES.
6. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE JSSD STANDARD SPECIFICATIONS
7. CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFILL OF UTILITY TRENCHES TO LEVEL OF FINISHED GRADE.
8. ADJUST PIPE LINE ALIGNMENT IN FIELD (PER ENGINEER) TO ACCOMMODATE EXISTING UTILITIES AND TERRAIN.
9. RESTORE ROAD SURFACE TO EXISTING CONDITIONS AT ALL ROAD CROSSINGS.

UDOT NOTES

1. EXCEPT FOR EMERGENCIES, NO EXCAVATION SHALL BE MADE WITHIN UDOT ROW WITHOUT AGREEMENT OR AUTHORIZATION FROM UDOT.
2. TURN LANES AT ALL SIGNALIZED INTERSECTIONS MUST BE MAINTAINED.
3. ALL EXCAVATIONS IN THE ASPHALT WITHIN UDOT RIGHT-OF-WAY SHALL BE BACKFILLED WITH FLOWABLE FILL (UDOT SPEC) AND 7-INCHES MINIMUM OF ASPHALT OR MATCH EXISTING DEPTH, WHICHEVER IS GREATER. ASPHALT SHALL COMPLY WITH UDOT SPECIFICATIONS.
4. ALL EXCAVATIONS WITHIN UDOT RIGHT-OF-WAY GREATER THAN 10' AWAY FROM THE EDGE OF ASPHALT MAY BE BACKFILLED WITH NATIVE BACKFILL (90% COMPACTION)
5. ALL EXCAVATIONS WITHIN UDOT RIGHT-OF-WAY CLOSER THAN 10' TO THE EDGE OF ASPHALT MAY BE BACKFILLED WITH NATIVE BACKFILL (97% COMPACTION)
6. ALL STEEL PLATES IN TRAVEL LANES SHALL BE MILLED IN.
7. ANY POTHoles IN ASPHALT SHALL REQUIRE CORING WITH CORES BEING REINSTALLED WITH UTILIBOND.
8. ANY NEW PAVEMENT MARKINGS OR PAVEMENT MARKINGS THAT ARE REMOVED FROM THE HIGHWAY ARE TO BE REPLACED WITH IN KIND MATERIALS SUCH AS 3M TAPE, THERMOPLASTIC, ETC. ALL PAINT LINES ARE TO BE INSTALLED WITH PERMANENT PAINT APPLICATION BEFORE COMPLETION OF THE PERMIT AND MUST HAVE AT LEAST 6 MONTHS LIFE AS DETERMINED BY UDOT PERMITS OFFICER. LANE STRIPPING MUST BE KEPT CURRENT AT ALL TIMES.
9. ALL SIGNS INSTALLED ON THE UDOT RIGHT-OF-WAY SHALL BE HIGH INTENSITY GRADE PER UDOT STANDARD DRAWING SN 11. BASE IS SLB1 AND POSTS MUST MEET THE SN 10 AND FOR INTERSTATE SIGNING, REFER TO THE SN SERIES.
10. BEFORE COMMENCING WORK ON THE STATE HIGHWAY, THE CONTRACTOR SHALL HAVE A PERFORMANCE BOND ON FILE WITH UDOT, OBTAIN AN ENCROACHMENT PERMIT FROM THE REGION THREE PERMITS OFFICE, AND PROVIDE PROOF OF LIABILITY INSURANCE IN THE UTAH DEPARTMENT OF TRANSPORTATION'S NAME. THE MINIMUM AMOUNT IS \$1,000,000 PER OCCURRENCE AND \$2,000,000 IN AGGREGATE.

CONSTRUCTION NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SURVEY BENCHMARK, STAKING AND CONTROL PER SPECIFICATIONS. OWNER SHALL PROVIDE AVAILABLE SURVEY CONTROL USED FOR DESIGN..
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS TESTING WITHIN THE TRENCH ZONE. TESTING SHALL FOLLOW SPECIFICATION AT A MINIMUM OF 100 FOOT INTERVALS.
3. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL MATERIAL TESTING OF CONCRETE STRUCTURES.

SPECIAL INSPECTION NOTES:

1. SPECIAL INSPECTION REQUIRED OF WATER STOP AT WALL TO FOOTING CONNECTION PRIOR TO CONCRETE PLACEMENT.

BT ENGINEERING

FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
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CONTACT:  
DAVE FULLER  
(435) 654-9233

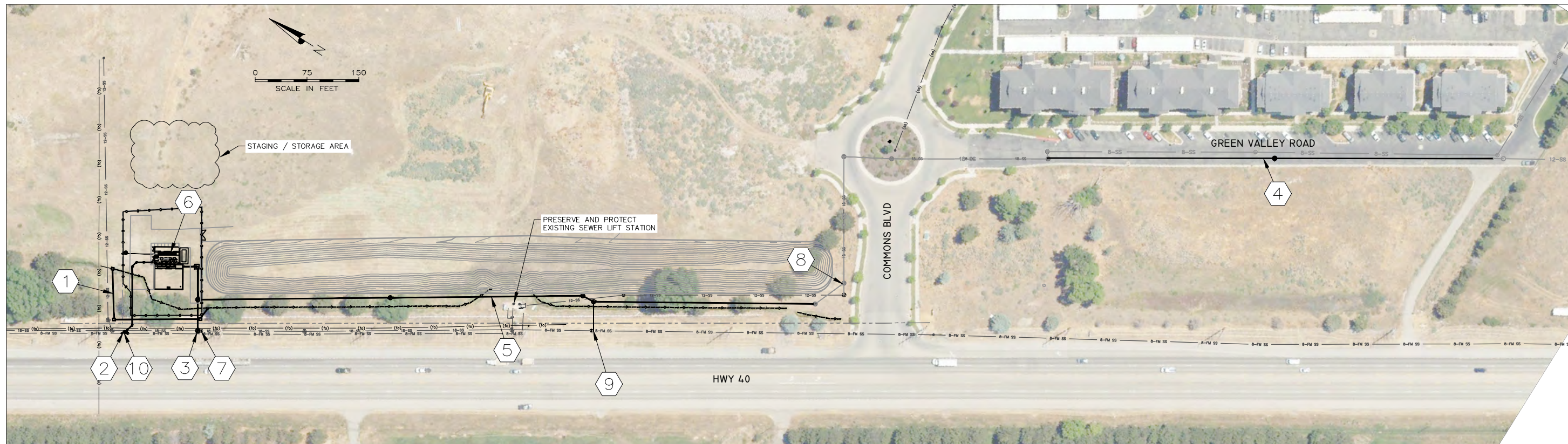
NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UUV SEWER LIFT STATION REPLACEMENT  
GENERAL NOTES



NO.	DATE	REVISION	BY

PROJECT NO.:	DATE:
09.01.003	FEBRUARY 2026
DRAWN BY:	CHECKED BY:
JB	TT
PROJECT MANAGER:	
T. TIMOTHY	

GENERAL NOTES



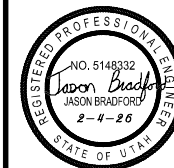
- ① INSTALL 15" RCP TO PIPE EXISTING DITCH (SEE SHEET C-1 AND C-2)  
(THIS NEEDS TO BE COMPLETED PRIOR TO EXCAVATION FOR THE NEW LIFT STATION)
- ② CONNECT TO EXISTING 8" PVC FORCE MAIN PER DETAIL 1, SHEET C-2  
(THIS CONNECTION TO BE DONE WITHIN 3 HOURS, WHICH IS THE AMOUNT OF TIME THAT THE EXISTING LIFT STATION CAN BE DOWN)  
(18" VALVE TO THE EAST TO BE CLOSED, 8" VALVE TO THE SOUTH TO BE OPEN)
- ③ INSTALL NEW 5' DIA. MANHOLE ON EXISTING 18" SEWER (SEE SHEET C-1)  
(PLUG NEW 18" LINE TO THE NORTHEAST, FLOW CONTINUES TO THE SOUTHEAST)
- ④ INSTALL 15" GRAVITY SEWER ALONG GREEN VALLEY ROAD (SEE SHEET C-4)  
TO BE COMPLETED BY OCT 1, 2026 IF BID SCHEDULE C IS AWARDED SEPARATELY.  
  
INSTALL 18" GRAVITY SEWER FROM COMMONS BLVD TO NEW LIFT STATION (SEE SHEET C-3).  
TO BE COMPLETED WHEN NORTH FIELDS DITCH IS NOT ACTIVE (OCT 15 TO APRIL 1)  
⑤ COMPLETION BY JANUARY 15, 2027 IF SCHEDULE B IS AWARDED SEPARATELY.  
(THIS PIPE WILL REMAIN DRY UNTIL #8 IS COMPLETED)
- ⑥ CONSTRUCT AND COMMISSION NEW SEWER LIFT STATION
- ⑦ PLUG EXISTING 18" SEWER LINE TO THE SOUTHEAST
- ⑧ REMOVE PLUG IN EXISTING SEWER MANHOLE TO DIVERT FLOWS INTO NEW 18" GRAVITY LINE TO THE WEST  
AND PLUG EXISTING 18" LINE TO THE SOUTHWEST
- ⑨ CONNECT TO EXISTING 8" FORCE MAIN
- ⑩ CAP/ABANDON EXISTING 8" FORCE MAIN TO THE SOUTHEAST

# BT ENGINEERING

FOR:  
NORTH VILLAGE  
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CONTACT:  
DAVE FULLER  
(435) 654-9233

**NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
OVERALL LOCATION AND SEQUENCE PHASING**



<b>PROJECT NO.:</b>		<b>DATE:</b>
09-01-003		FEBRUARY 2026
<b>DRAWN BY:</b>		<b>CHECKED BY:</b>
JB		TT
<b>PROJECT MANAGER:</b>		
T. TIMOTHY		

## OVERALL LOCATION AND SEQUENCE PHASING

G-3







FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032  
CONTACT:  
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(435) 654-9233

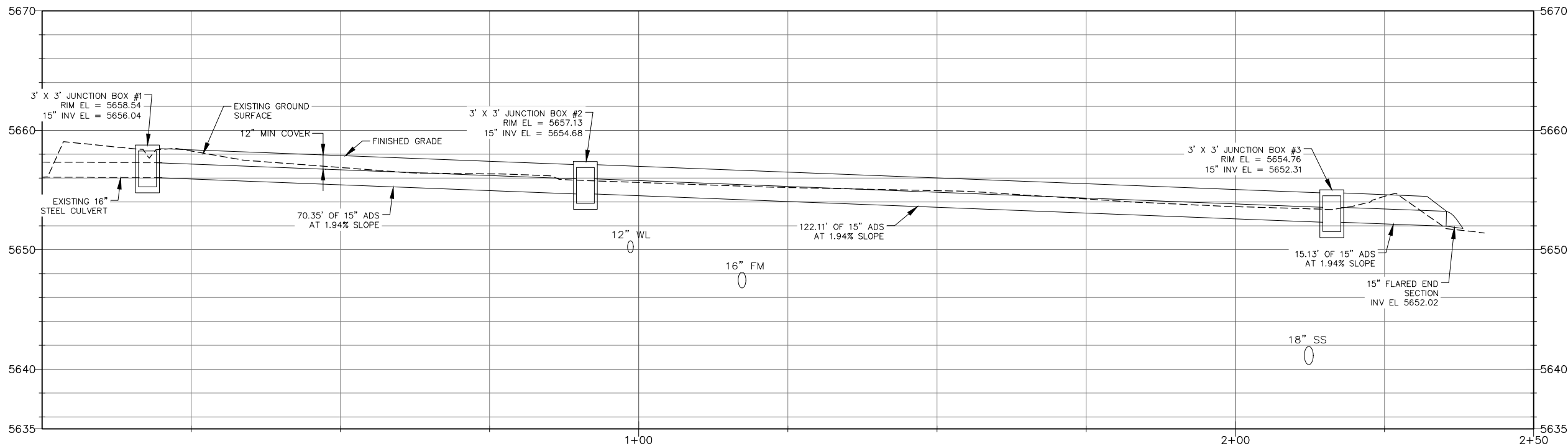
NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
PIPELINE PROFILES



NO.	DATE	REVISION	BY

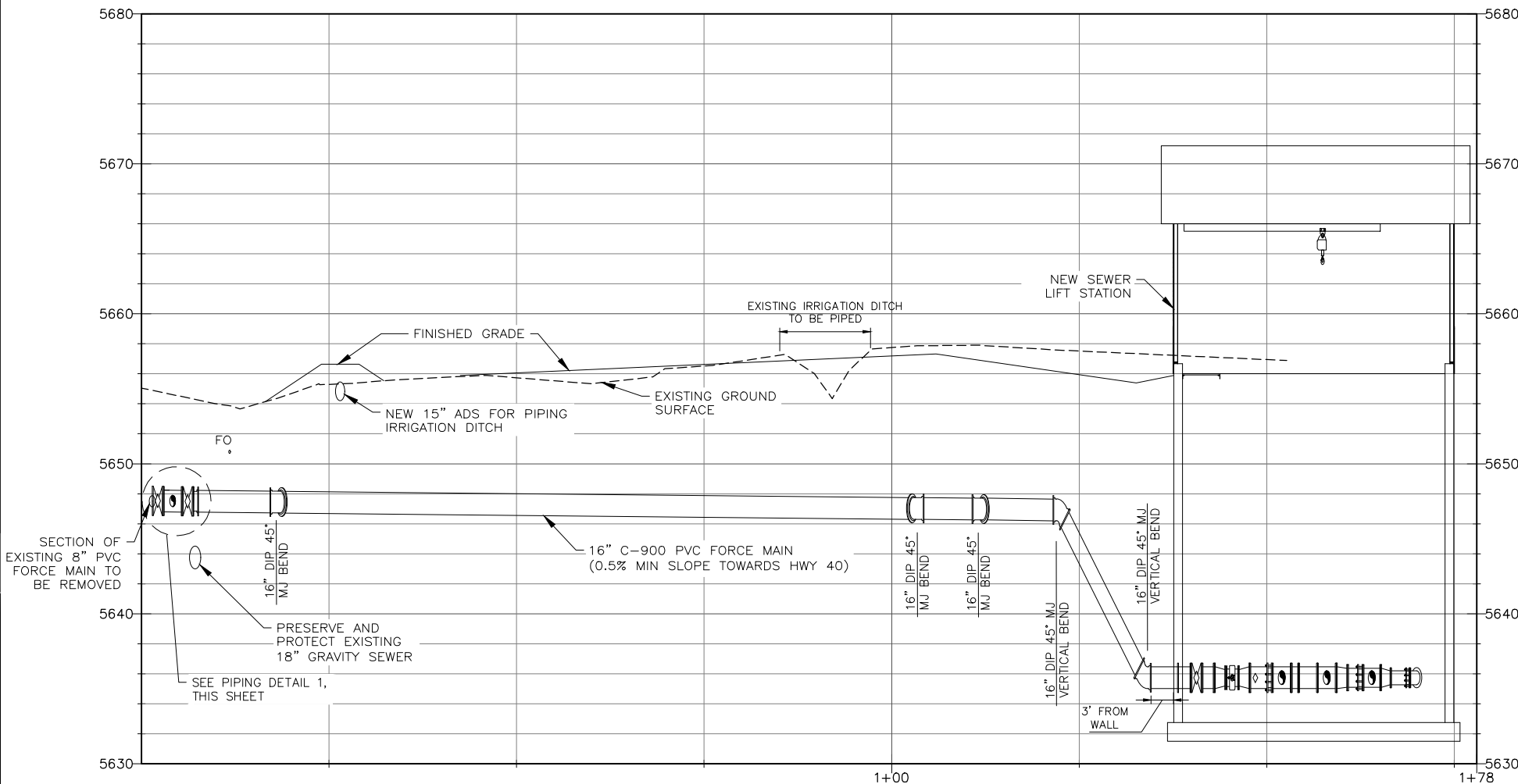
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DRAWN BY:	CHECKED BY:
JB	TT
PROJECT MANAGER:	
T. TIMOTHY	

PIPELINE PROFILES



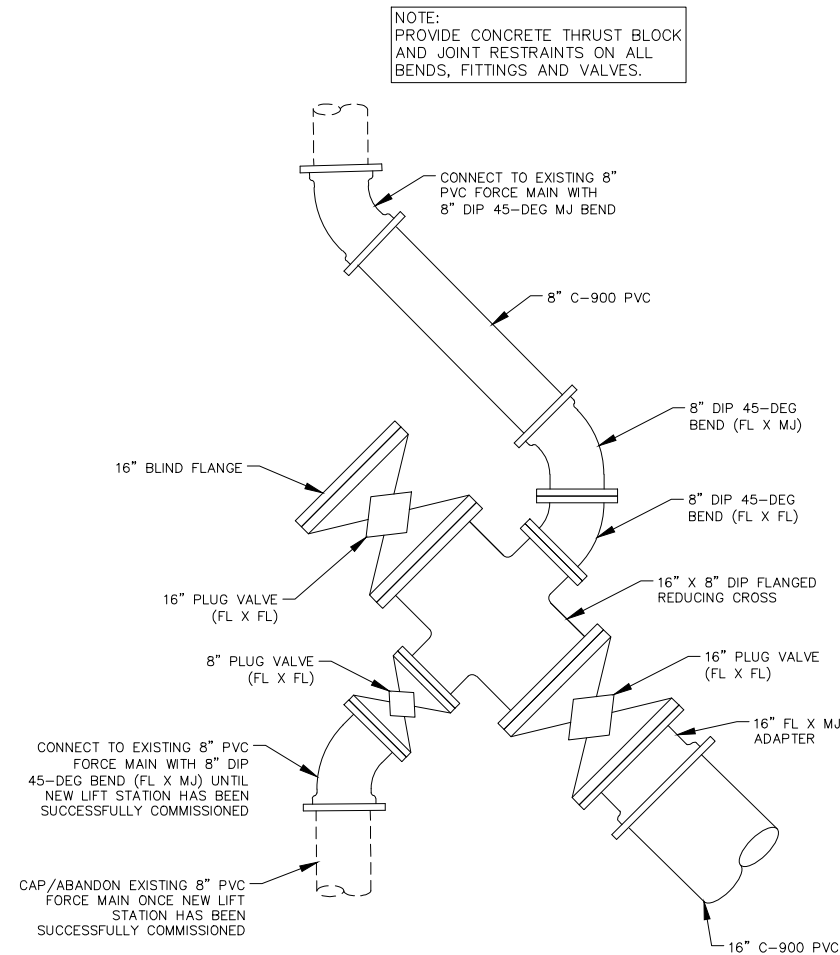
IRRIGATION DITCH PIPING PROFILE

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SCALE IN FEET  
2:1 VERTICAL EXAGGERATION



FORCE MAIN PIPING PROFILE

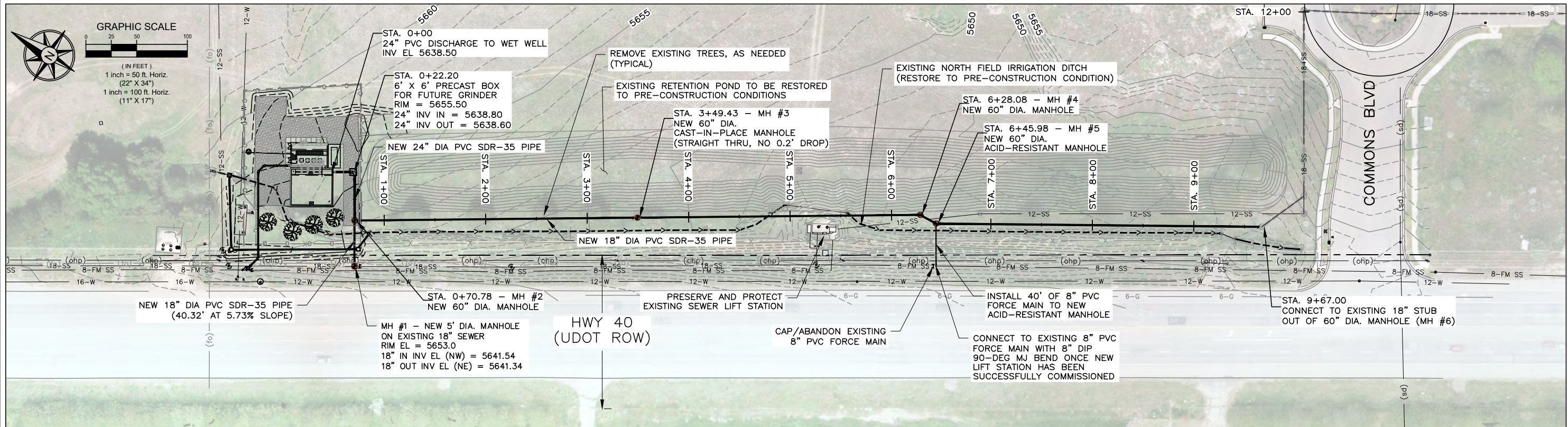
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SCALE IN FEET  
2:1 VERTICAL EXAGGERATION



PIPING DETAIL - PLAN VIEW  
NTS

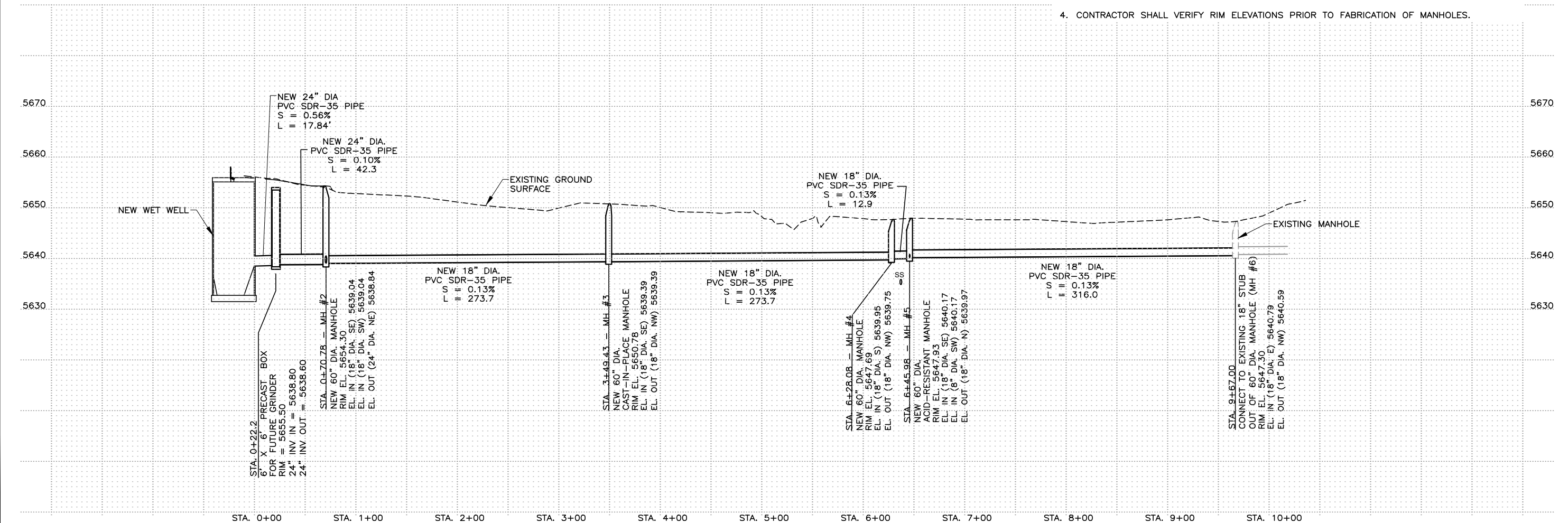


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FILE DATE: 2-4-2026 16:53:43 (JEB)



NOTES:

1. CONSTRUCTION SHALL COMPLY WITH ALL JSSD STANDARDS.
2. CONTRACTOR SHALL POT HOLE UTILITIES AT ALL CROSSINGS SUFFICIENTLY IN ADVANCE OF LAYING PIPE TO ALLOW FOR ADJUSTMENTS OF NEW PIPELINE GRADE TO AVOID CONFLICTS.
3. ELEVATIONS ARE GIVEN AT THE CENTER OF THE MANHOLE.
4. CONTRACTOR SHALL VERIFY RIM ELEVATIONS PRIOR TO FABRICATION OF MANHOLES.



**BT ENGINEERING**

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CONTACT:  
DAVE FULLER  
(435) 654-9233

**NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
18" GRAVITY SEWER - PLAN & PROFILE**

NO.	DATE	REVISION	BY

PROJECT NO.: 09.01.003

DATE: FEBRUARY 2026

DRAWN BY: JEB

CHECKED BY: TT

PROJECT MANAGER: T. TIMOTHY

18" GRAVITY SEWER

C-3





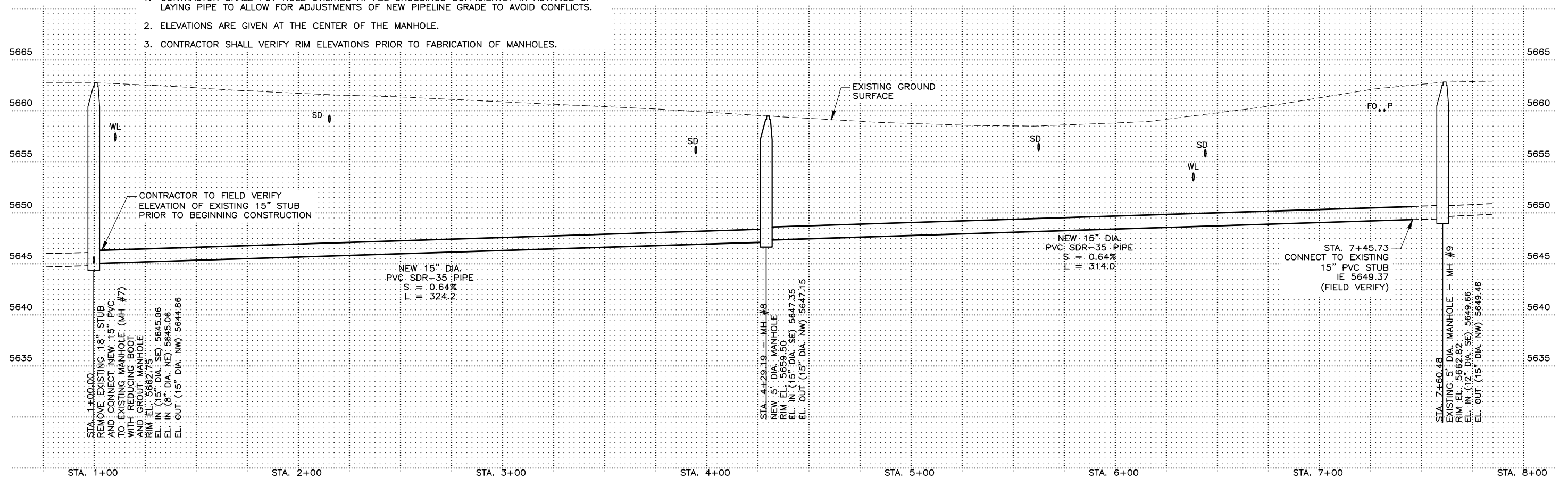
UVU SEWER LIFT STATION REPLACEMENT  
GREEN VALLEY ROAD GRAVITY SEWER  
PLAN AND PROFILE - STA. 4+00 TO STA. 9+00

DATE	REVISION	BY

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01.003	JANUARY 2026
DRAWN BY:	CHECKED BY:
	TT
PROJECT MANAGER:	
TIMOTHY	

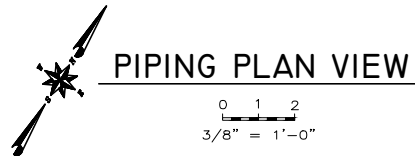
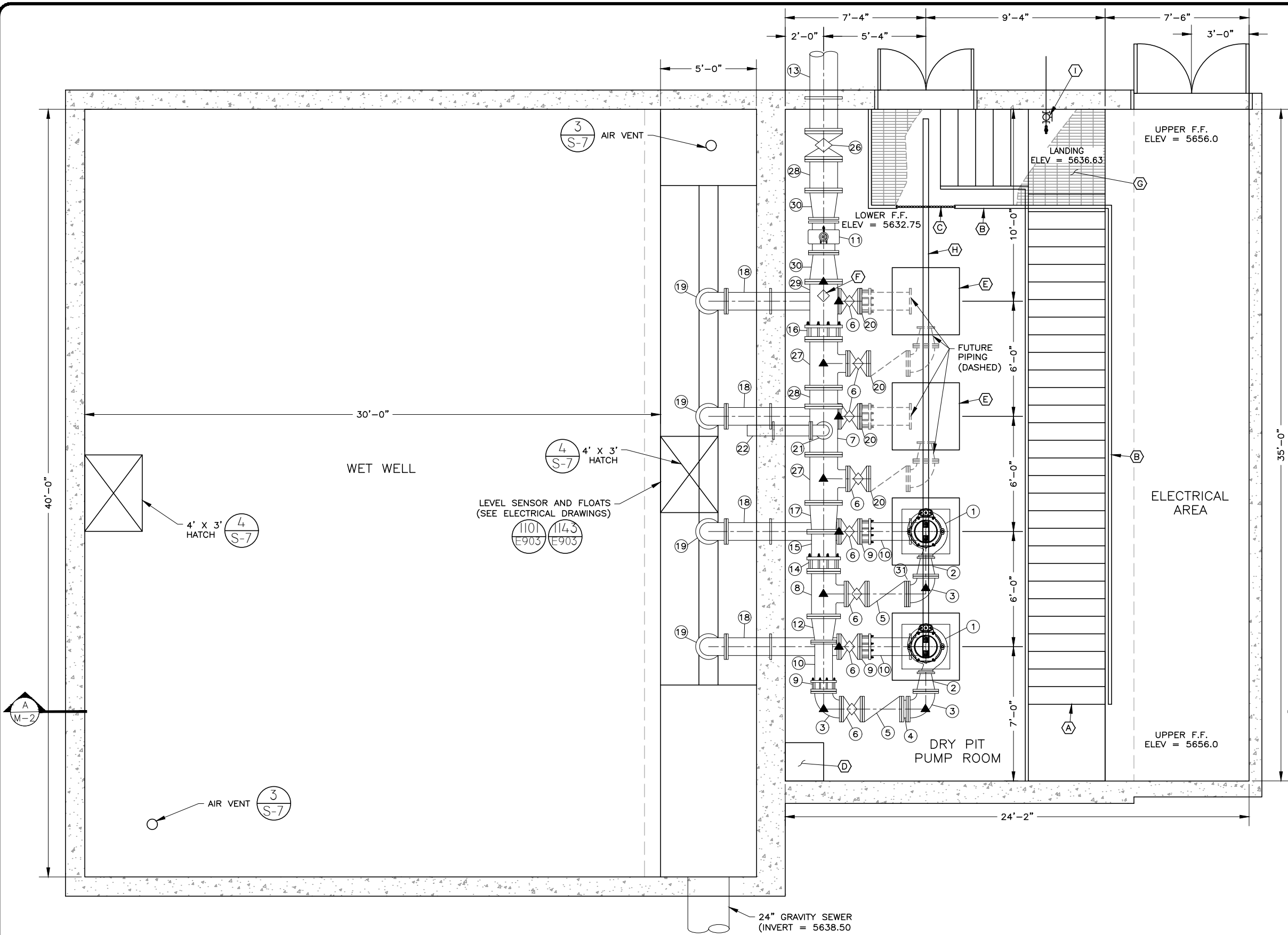
NOTES:

1. CONTRACTOR SHALL POT HOLE UTILITIES AT ALL CROSSINGS SUFFICIENTLY IN ADVANCE OF LAYING PIPE TO ALLOW FOR ADJUSTMENTS OF NEW PIPELINE GRADE TO AVOID CONFLICTS.
2. ELEVATIONS ARE GIVEN AT THE CENTER OF THE MANHOLE.
3. CONTRACTOR SHALL VERIFY RIM ELEVATIONS PRIOR TO FABRICATION OF MANHOLES.





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- KEY NOTES**
- (A) STAIRS, RAILING AND LANDING CONSTRUCTION TO COMPLY WITH GOVERNING BUILDING CODES. STAIR STRINGERS AND SUPPORT POSTS TO BE GALVANIZED STEEL. RISER HEIGHTS, LANDING SIZES, ETC TO COMPLY WITH ALL APPLICABLE PROVISIONS OF IBC SECTION 1011. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO FABRICATION.
  - (B) RAILING ALONG LENGTH OF UPPER ROOM AND GRATED LANDING (LENGTH = 40'-6") GALVANIZED RAILING CONSTRUCTION TO COMPLY WITH GOVERNING BUILDING CODES. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO FABRICATION. HEIGHTS TO COMPLY WITH GOVERNING BUILDING CODES.
  - (C) 3' WIDE GAP IN RAILING WITH SAFETY CHAINS
  - (D) 2' X 2' X 2' DEEP CATCH BASIN WITH FRAME AND GRATE FOR SUMP PUMP
  - (E) FUTURE CONCRETE PEDESTAL FOR FUTURE PUMPS (BY OTHERS)
  - (F) PRESSURE TRANSMITTER ASSEMBLY (SEE DETAIL 1201 ON SHEET E902)
  - (G) GRATED LANDING (5'-0" X 12'-2") TO SUPPORT 2 TON LOAD
  - (H) 28'-0" STEEL BEAM (END 6" INSIDE DOOR) AND 2 TON HOIST/TROLLEY
  - (I) BRING 2" PIPING INTO BUILDING IN LOWER DRY PIT AREA AND TRANSITION TO SCH 80. INSIDE BUILDING INSTALL 2" BALL VALVE AND 3/4" HOSE BIBB WITH VACUUM BREAKER. (BELOW STAIRS)

**DESIGN INFORMATION**

**INITIAL PUMP DESIGN CONDITIONS**

Q PER PUMP = 1,150 GPM (1 DUTY, 1 SPARE)  
(TOTAL CAPACITY = 1,150 GPM)  
PUMP ELEVATION = 5636'  
HIGH POINT = 5803'  
FORCED MAIN  
8" PVC (LIFT STATION TO HWY 32) = 6,268' (C=120)  
14" HDPE, DR-17 (HWY 32 TO OLD HWY 40) = 2550' (C=140)  
12" HDPE, DR-17 (OLD HWY 40 TO WRF) = 5200' (C=140)  
TDH = 352'  
DISCHARGE PRESSURE = 152 PSI  
STATIC PRESSURE = 72 PSI

**FUTURE BUILDOUT PUMP DESIGN CONDITIONS**

Q PER PUMP = 1,167 GPM (3 DUTY, 1 SPARE)  
(TOTAL CAPACITY = 3,500 GPM)  
PUMP ELEVATION = 5636'  
HIGH POINT = 5803'  
FORCED MAIN  
18" HDPE, DR-11 (LIFT STATION TO HWY 32) = 8,500'  
14" HDPE, DR-17 (HWY 32 TO OLD HWY 40) = 700'  
12" HDPE, DR-17 (OLD HWY 40 TO WRF) = 5,200'  
TDH = (C=140) = 339'  
(Q FOR ONLY 1 PUMP = 1,485 GPM @ 240' TDH)

**BT ENGINEERING**

FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032

CONTACT:  
DAVE FULLER  
(435) 654-9233

**NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
PIPING - PLAN VIEW**

REGISTERED PROFESSIONAL ENGINEER  
NO. 5148332  
Jason Bradford  
JASON BRADFORD  
2-4-26  
STATE OF UTAH

NO.	DATE	REVISION	BY

PROJECT NO.: 09.01.003  
DATE: FEBRUARY 2026

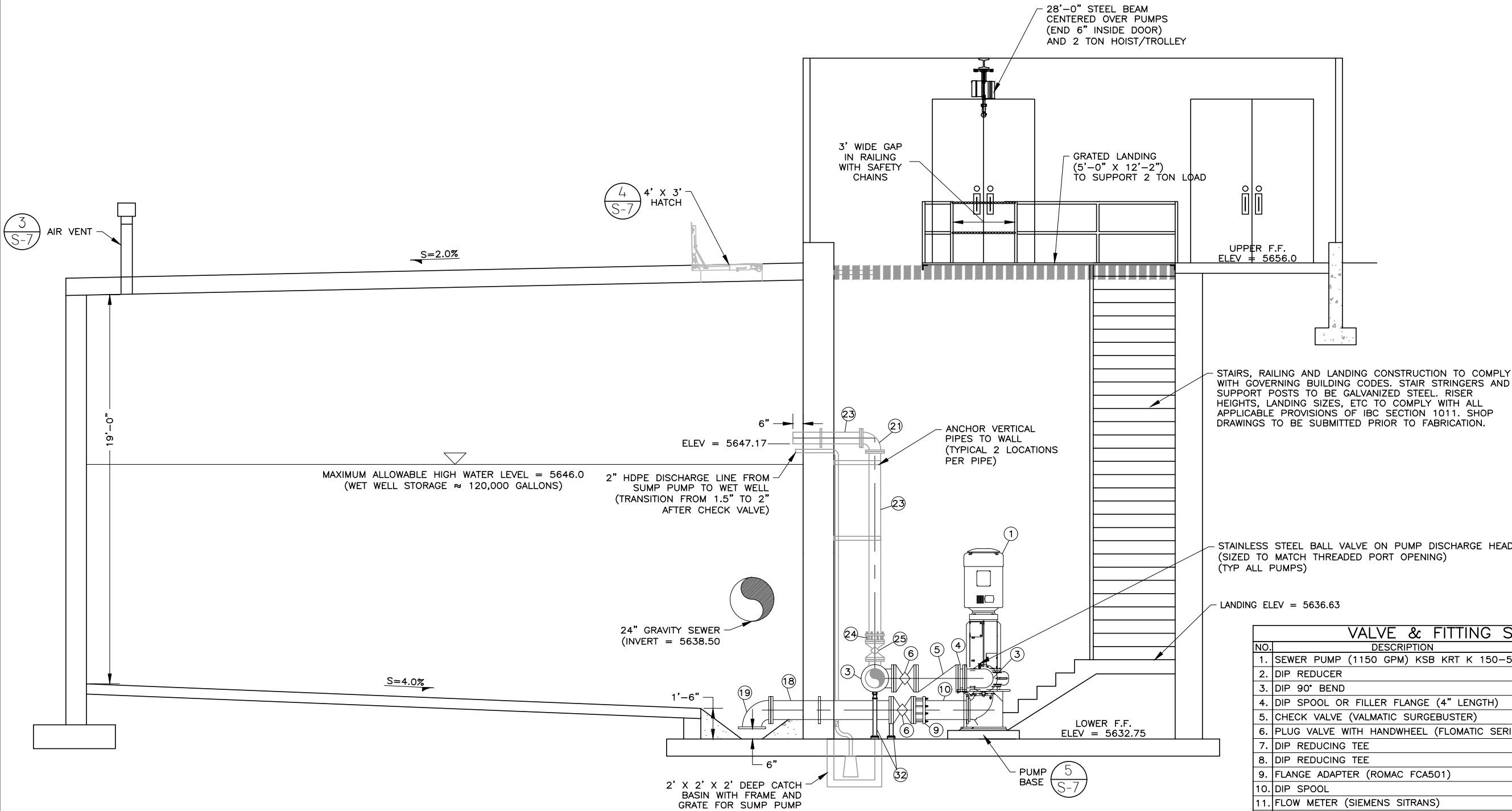
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PROJECT MANAGER:  
T. TIMOTHY

PIPING - PLAN VIEW  
**M-1**



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FILE DATE: 2-4-2026 10:58:59 (JEB)



## GENERAL MECHANICAL NOTES

- ALL PIPES PASSING THROUGH CONCRETE FLOORS OR WALLS TO BE AWWA C151 CL D.I.P. W/ THRUST COLLARS. FLANGES TO BE ANSI/AWWA C115/A21.15, RATED FOR 250 PSI, DRILLED TO ASME/ANSI B15.1 CLASS 125.
- ALL C.I. FLANGES WITHIN THE LIFT STATION SHALL BE 125 LB. ANSI B16.1 FLANGES. ALL C.S. FLANGES WITHIN THE LIFT STATION SHALL BE 150 LB ANSI B18.5 FLANGES.
- ALL GASKETS BETWEEN FLANGES SHALL BE RED RUBBER.
- ALL PIPING, FITTINGS AND VALVES SHALL BE ABLE TO OPERATE AT A WORKING PRESSURE OF 150 PSI. ALL PIPING SUITABLE FOR TEST PRESSURE OF 200 PSI.
- ALL DISSIMILAR METAL FLANGE TRANSITIONS SHALL HAVE FULL FACE RUBBER GASKETS AND BE COUPLED TOGETHER WITH INSULATING BOLT PACKS. ALL DISSIMILAR METAL THREAD TRANSITIONS SHALL HAVE DIALECTRIC COUPLERS.
- CONTRACTOR TO COORDINATE PUMP PEDESTAL HEIGHT AND WALL PENETRATIONS TO MAINTAIN PUMP SUCTION INTAKE 6" ABOVE FINISHED WET WELL FLOOR.
- CONTRACTOR TO VERIFY ALL EQUIPMENT AND LAYOUT DIMENSIONS PRIOR TO CONSTRUCTION.
- ALL PIPE FLANGES, VALVES, FITTINGS, METERS AND APPURTENANCES TO MATCH.
- COATING: ALL BUILDING INTERIOR PIPING, VALVES, FITTINGS AND METERS SHALL BE PAINTED WITH APPROVED EPOXY. COLORS TO BE APPROVED BY OWNER.
- FLANGED ADAPTERS SHALL BE USED TO ENABLE THE FUTURE REMOVAL OF ANY EQUIPMENT. THE CONTRACTOR SHALL SUBMIT A PIPE FIT-UP DIAGRAM FROM THE FABRICATOR PRIOR TO FABRICATION. THE DIAGRAM SHALL IDENTIFY ADAPTER LOCATIONS.
- PIPE STANDS SHALL BE INSTALLED TO SUPPORT ALL PIPING RUNS AND ALLOW FOR REMOVAL OF PIPING ELEMENTS SUCH AS FLOW METERS, VALVES, ETC. PIPE STAND DIAGRAM MUST BE SUBMITTED AND APPROVED BY THE OWNER AND ENGINEER PRIOR TO PIPE INSTALLATION. TOTAL OF 11 PIPE STANDS.

## A PIPING SECTION VIEW

0 1 2  
1/2" = 1'-0"

STAIRS, RAILING AND LANDING CONSTRUCTION TO COMPLY WITH GOVERNING BUILDING CODES. STAIR STRINGERS AND SUPPORT POSTS TO BE GALVANIZED STEEL. RISER HEIGHTS, LANDING SIZES, ETC TO COMPLY WITH ALL APPLICABLE PROVISIONS OF IBC SECTION 1011. SHOP DRAWINGS TO BE SUBMITTED PRIOR TO FABRICATION.

STAINLESS STEEL BALL VALVE ON PUMP DISCHARGE HEADER (SIZED TO MATCH THREADED PORT OPENING) (TYP ALL PUMPS)

LANDING ELEV = 5636.63

### VALVE & FITTING SCHEDULE

NO.	DESCRIPTION	SIZE	JOINT
1.	SEWER PUMP (1150 GPM) KSB KRT K 150-503	10" X 6"	FL
2.	DIP REDUCER	10" X 6"	FL
3.	DIP 90° BEND	10"	FL
4.	DIP SPOOL OR FILLER FLANGE (4" LENGTH)	10"	FL
5.	CHECK VALVE (VALMATIC SURGEBUSTER)	10"	FL
6.	PLUG VALVE WITH HANDWHEEL (FLOMATIC SERIES 5400)	10"	FL
7.	DIP REDUCING TEE	16" X 6"	FL
8.	DIP REDUCING TEE	14" X 10"	FL
9.	FLANGE ADAPTER (ROMAC FCA501)	10"	FL
10.	DIP SPOOL	10"	FL X PE
11.	FLOW METER (SIEMENS SITRANS)	12"	FL
12.	DIP REDUCER	14" X 10"	FL
13.	DIP SPOOL WITH WALL FLANGE	16"	FL X PE
14.	FLANGE ADAPTER (ROMAC FCA501)	14"	FL
15.	DIP SPOOL	14"	FL X PE
16.	FLANGE ADAPTER (ROMAC FCA501)	16"	FL
17.	DIP REDUCER	16" X 14"	FL
18.	DIP SPOOL WITH WALL FLANGE	10"	FL
19.	DIP 90° BEND	10"	FL
20.	DIP BLIND FLANGE	10"	FL
21.	DIP 90° BEND	6"	FL
22.	DIP SPOOL WITH WALL FLANGE	6"	FL X PE
23.	DIP SPOOL	6"	FL X PE
24.	FLANGE ADAPTER (ROMAC FCA501)	6"	FL
25.	PLUG VALVE WITH HANDWHEEL (FLOMATIC SERIES 5400)	6"	FL
26.	PLUG VALVE WITH HANDWHEEL (FLOMATIC SERIES 5400)	16"	FL
27.	DIP REDUCING TEE	16" X 10"	FL
28.	DIP SPOOL	16"	FL
29.	DIP SPOOL WITH 1/2" TAP	16"	FL X PE
30.	DIP REDUCER	16" X 12"	FL
31.	DIP FILLER FLANGE (1")	10"	FL
32.	PIPE SUPPORT (ANVIL FIG 264) WITH 1" GROUT PAD	-	-

NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
PIPING - SECTION VIEW



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JTB	TT
PROJECT MANAGER:	
T. TIMOTHY	

PIPING - SECTION VIEW  
M-2

BT ENGINEERING

FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032  
CONTACT:  
DAVE FULLER  
(435) 654-9233



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PROJECT MANAGER:	
T. TIMOTHY	

S-1

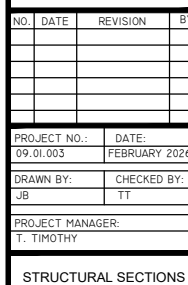


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STRUCTURAL PLAN

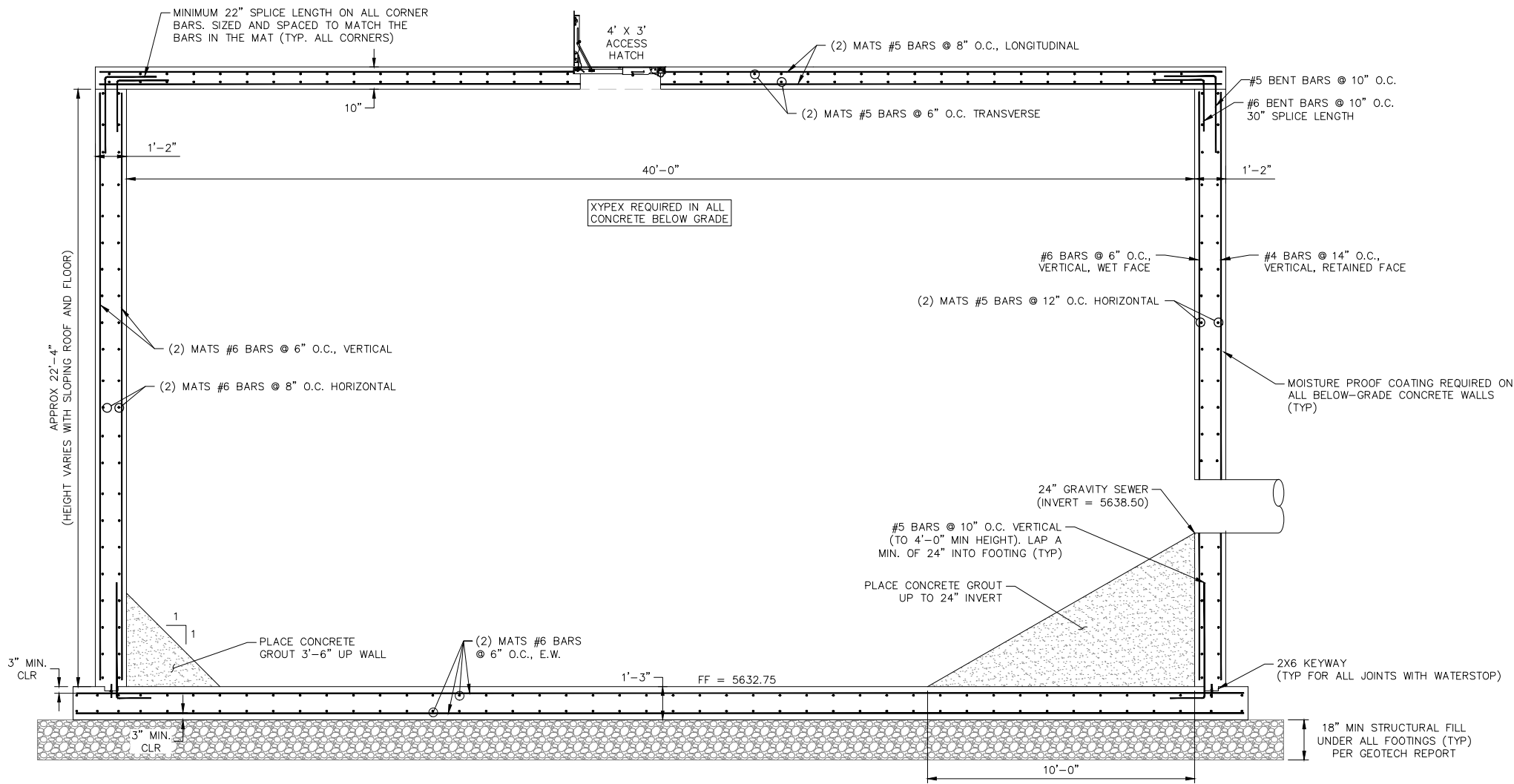
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3/8" = 1'-0"





**B**  
**S-2** **SECTION**  
SCALE:  $3/8" = 1'-0"$

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**C**  
**S-2** SECTION  
SCALE: 3/8" = 1'-0"

FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032  
CONTACT:  
DAVE FULLER  
(435) 654-9233

NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
STRUCTURAL SECTIONS - SHEET 2



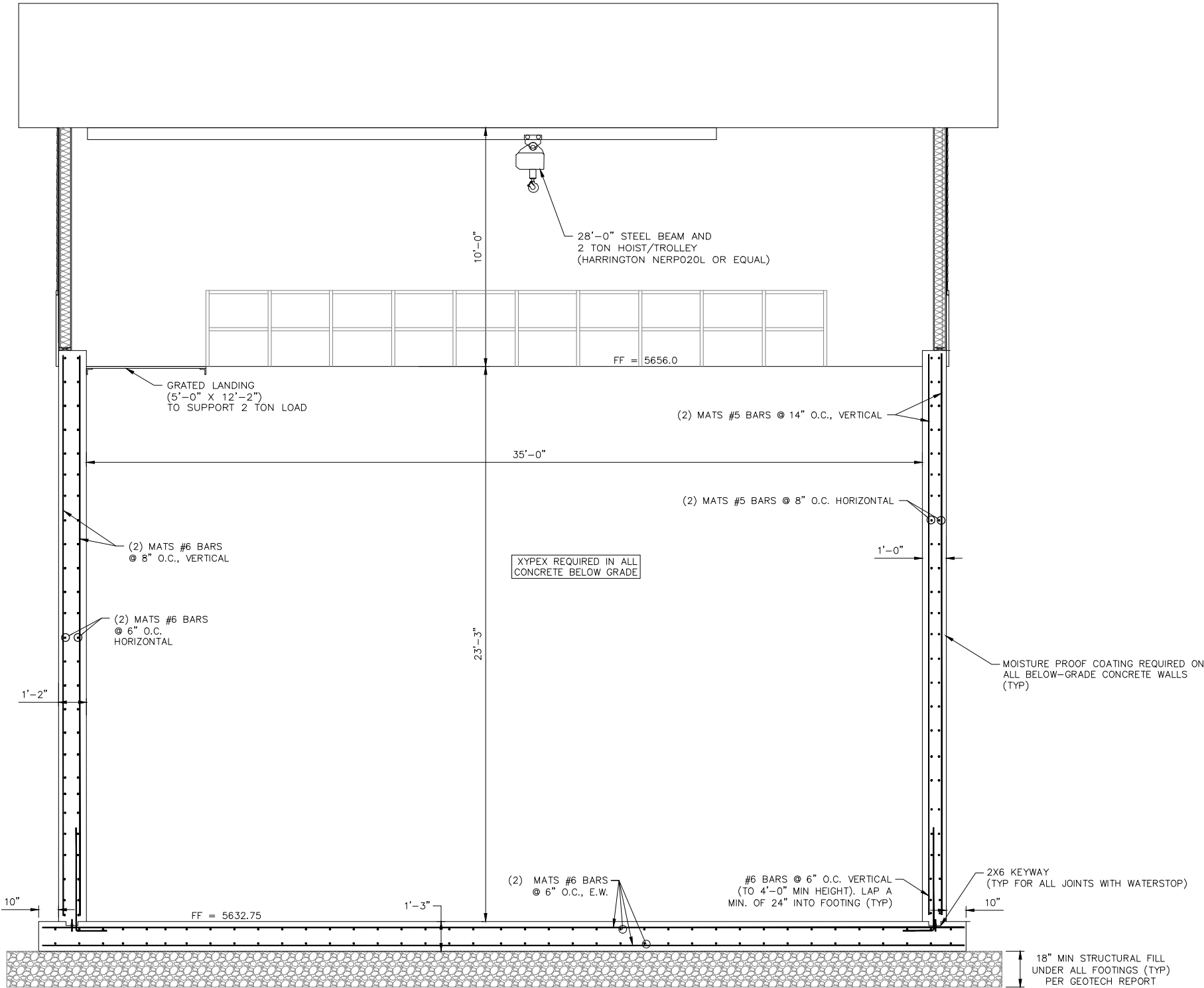
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PROJECT MANAGER: T. TIMOTHY	

STRUCTURAL SECTIONS



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**D**  
**S-2** SECTION  
SCALE: 3/8" = 1'-0"

FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032  
CONTACT:  
DAVE FULLER  
(435) 654-9233

NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
STRUCTURAL SECTIONS - SHEET 3



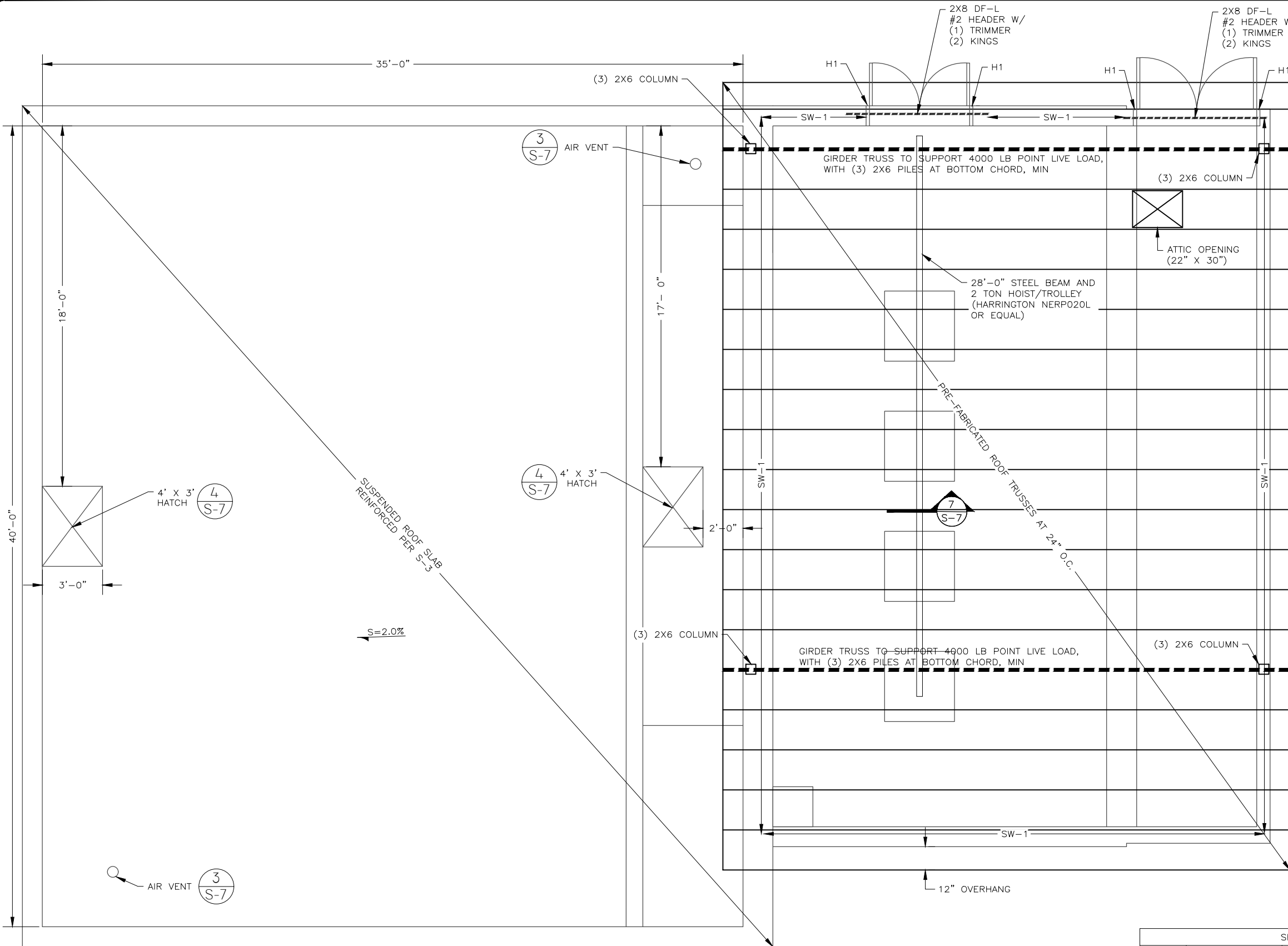
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PROJECT MANAGER:	
T. TIMOTHY	

STRUCTURAL SECTIONS



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FILE: NAME: \USERS\BRAD\DROPBOX\2017\_JSSD\_SEWER\_PROJECT\UVU\_LIFT\_STATION\CAD\S6 - UVU SEWER LS - ROOF FRAMING PLAN.DWG



ANCHOR BOLT SCHEDULE				
MARK	TYPE/SPACING		COMMENTS	
AB-1	5/8" DIA X 10" AT 32" O.C.		3" X 3" X 1/4" PLATE WASHERS, TYP., U.N.O.	
NOTE: ALL ANCHORS TO BE TYPE "AB-1", TYP, U.N.O.				

HOLD DOWN SCHEDULE				
MARK	SIMPSON DESIGNATION	TYPE	ANCHOR BOLT	NOTES
H-1	LSTHD8	EMBEDDED HOLD DOWN	N/A	(2) 2X POST, MIN

SHEAR WALL SCHEDULE						
MARK	NAILING		NOTES	SHEAR, ALLOWABLE		SOLE PLATE NAILING
	EDGE	FIELD		EDGE	FIELD	
SW-1	6" O.C.	12" O.C.	1,2,3,4,5,6	260 PLF	365 PLF	16d NAILS AT 6" O.C.

- NOTES:
- 16" O.C. MAX STUD SPACING (AWC SDPWS-2015, NOTE 2)
  - 7/16" APA RATED OSB PANEL PER GENERAL NOTES
  - 8d COMMON OR GALVANIZED BOX NAILING, SILICON BRONZE OR COPPER NAILS AT PERSERVATIVE-TREATED AND FIRE RETARDANT-TREATED WOOD LOCATIONS.
  - BLOCK ALL EDGES
  - ALL ANCHOR BOLTS TO HAVE 3" X 1/4" PLATE WASHERS, TYP, UNLESS NOTED OTHERWISE.
  - ALL EXTERIOR WALLS TO BE SHEATHED AS TYPE "SW-1", TYP, U.N.O.

BT ENGINEERING

FOR:  
NORTH VILLAGE  
SPECIAL SERVICE DISTRICT  
P.O. BOX 519  
HEBER CITY, UT 84032  
CONTACT:  
DAVE FULLER  
(435) 654-9233

NORTH VILLAGE SPECIAL SERVICE DISTRICT  
UVU SEWER LIFT STATION REPLACEMENT  
STRUCTURAL ROOF PLAN

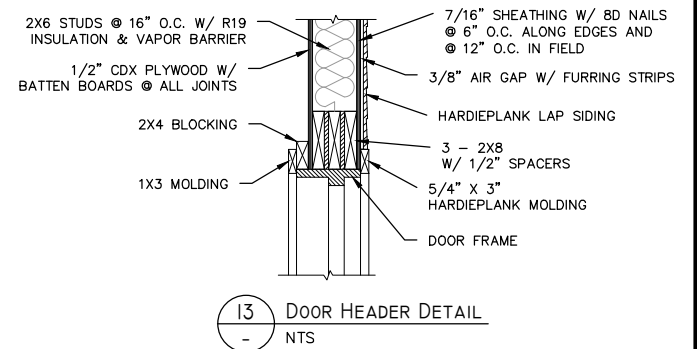
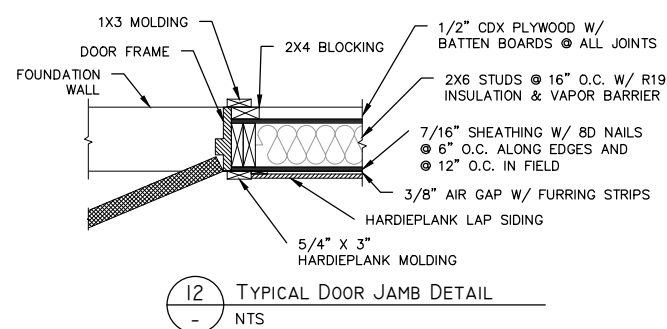
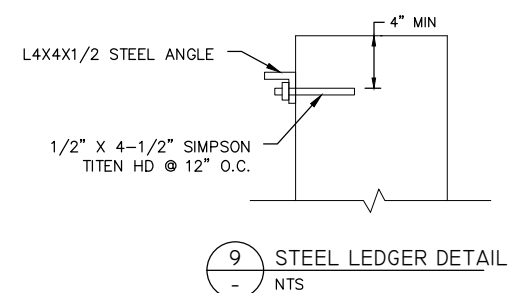
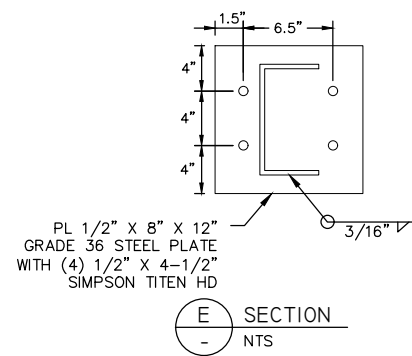
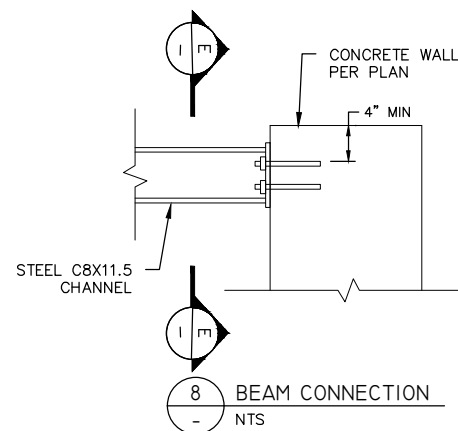
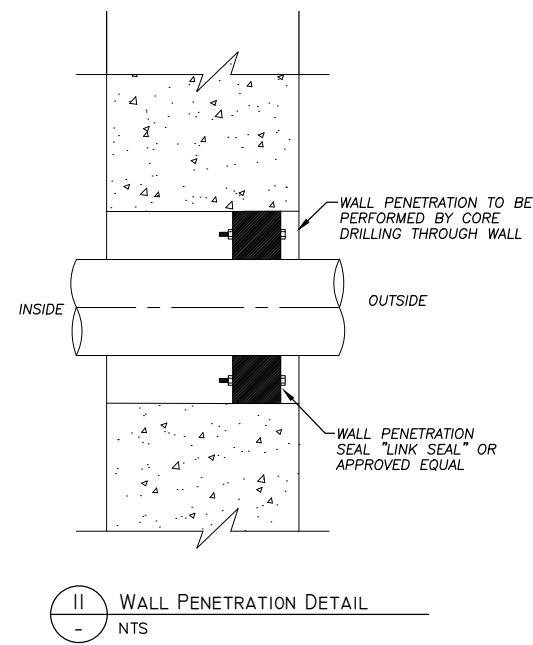
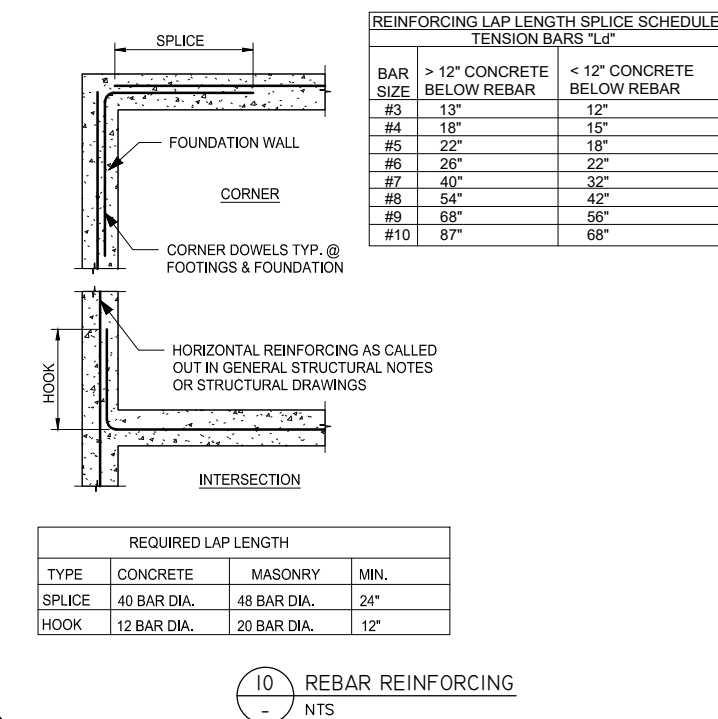
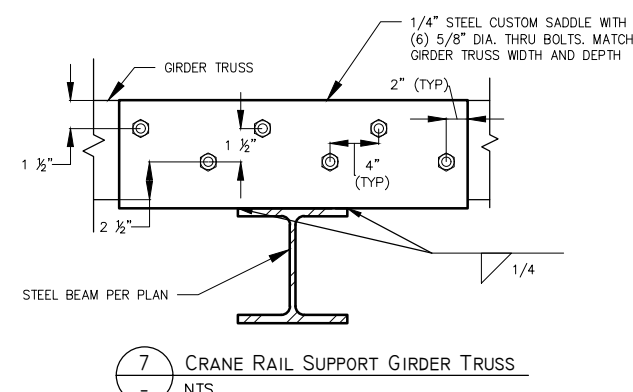
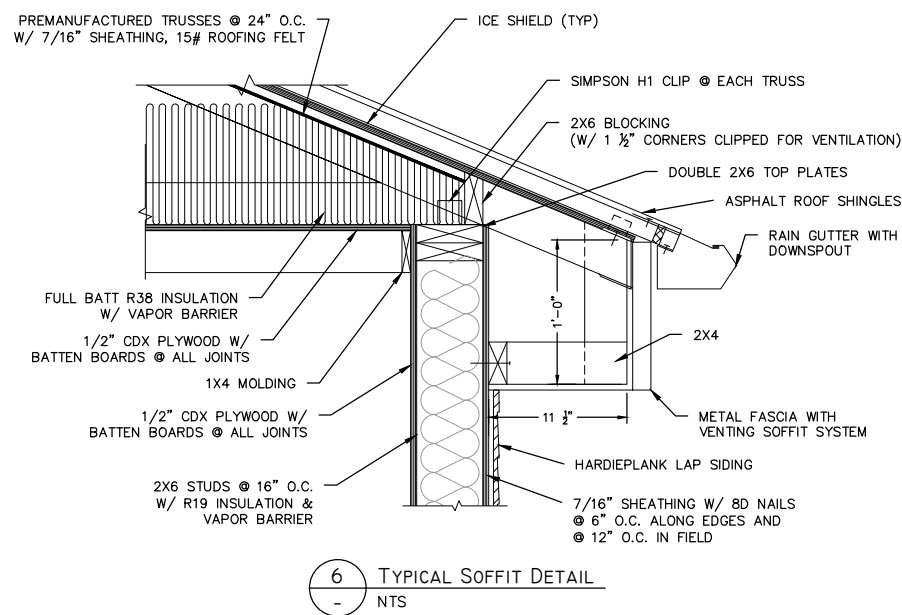
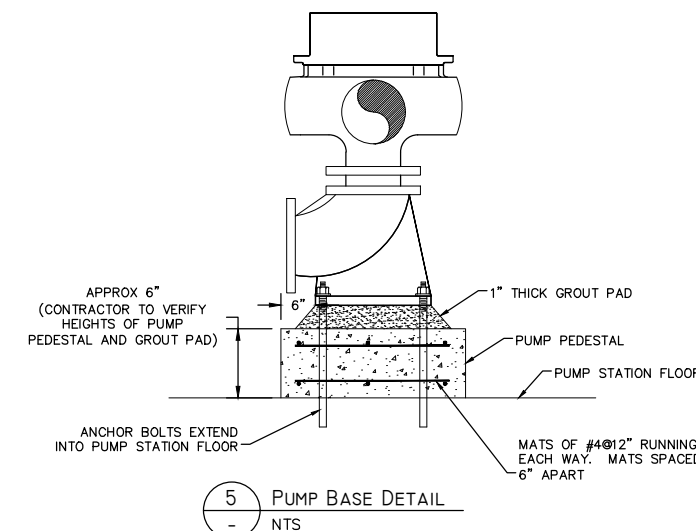
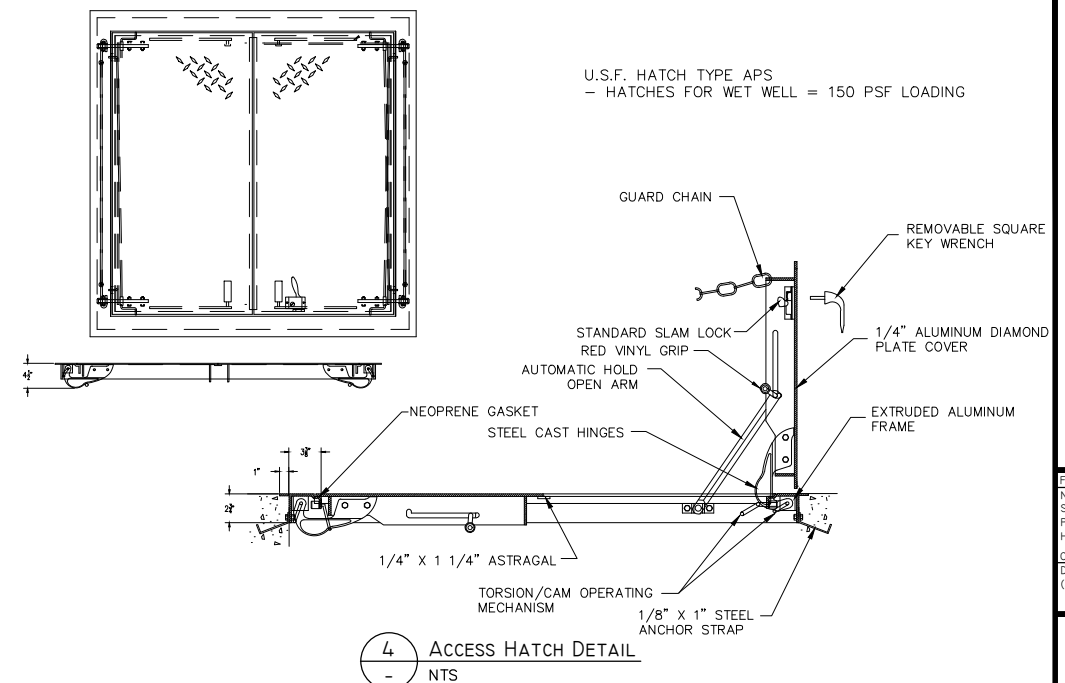
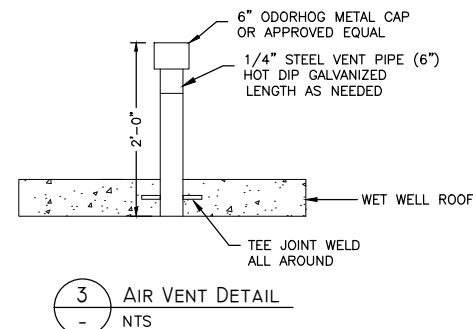
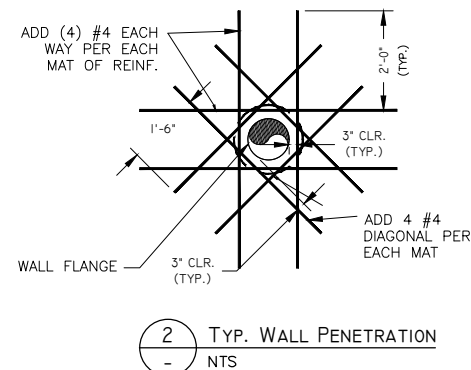
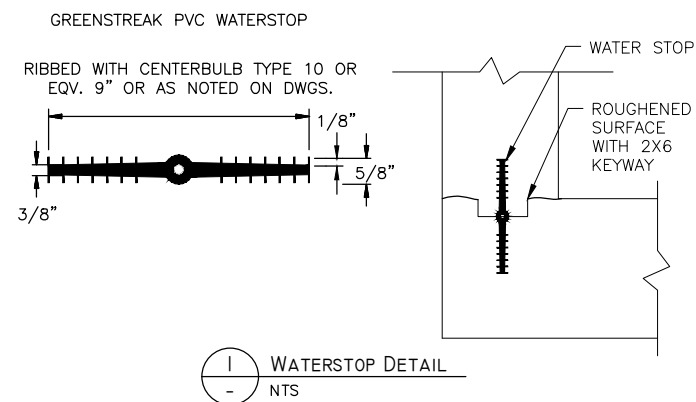


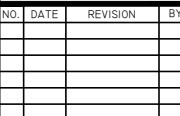
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PROJECT NO.: 09.01.003	DATE: FEBRUARY 2026
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PROJECT MANAGER: T. TIMOTHY	

STRUCTURAL ROOF PLAN







## SPECIAL INSPECTIONS

ITEM		DETAILED INSTRUCTIONS AND FREQUENCIES	
<b>OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-16; Tables J8-1 &amp; J10-1, AISC 341-16):</b>			
Structural steel details	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	All fabricated steel or steel frames shall be inspected to verify compliance with the details shown in the construction documents, such as braces, stiffeners, member locations, and proper application of joint details at each connection.
Anchor rods and other embedments supporting structural steel	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Shall be on the premises during the placement of anchor rods and other embedments supporting structural steel for compliance with construction documents. Verify the diameter, grade, type, and length of the anchor rod or embedded item, and the extent or depth of embedment prior to placement ...
Reduced beam sections (RBS)	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify contour and finish as well as dimensional tolerances (see Table J8-1 of AISC 341-10).
Protected zones	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that no holes or unapproved attachments are made within the protected zone (see Table J8-1 of AISC 341-10).
H-piles	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that no holes or unapproved attachments occur within the protected zones of piling (see Table J10-1 of AISC 341-10).
<b>STEEL ELEMENTS OF COMPOSITE CONSTRUCTION (TABLE N6.1, AISC 360-16; TABLES J9-1 thru J9-3, AISC 341-16):</b>			
Placement and installation of steel deck	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Placement and installation of steel headed stud anchors	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Document acceptance or rejection of steel elements	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Reinforcing steel	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify appropriate reinforcement size, spacing, and orientation; that it has not been re-bent in field; that it is correctly tied and supported; and that required steel clearances have been provided.
Composite member size	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that composite member is the required size.

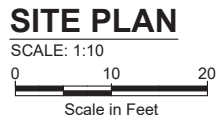
- | 2021 IBC CODE INFORMATION                 |   |  |
|---|---|--|
| CODE ITEM REFERENCE                       | CODE REQUIREMENTS   | ACTUAL BUILDING DESIGN   |
| OCCUPANCY SECTION 304                     | U   | U  |
| OCCUPANCY SEPARATION TABLE 508.3.3        | NO SEPARATION REQUIRED  | N/A  |
| CONSTRUCTION TYPE CHAPTER 6               | TYPE V-B  | TYPE V-B   |
| ALLOWABLE FLOOR AREA TABLE 506.2          | 9,000 SQ. FT.   | 2,300 SQ. FT. GROSS  |
| AREA MODIFICATIONS SECTION 506            | $A = [A + [A \times 1]] + [A \times 1]]$<br>$A = [9,000 + [9,000 \times .75]] + [9,000 \times 0]] = 15,750$ SQUARE FEET | 2,300 SQ. FT. GROSS  |
| MAXIMUM HEIGHT TABLE 504.3                | 40'-0"  | 16'-0"   |
| MAXIMUM STORIES TABLE 504.4               | 1 STORY   | 1 STORY  |
| OCCUPANT LOAD TABLE 1004.5                | 300 GROSS SF / OCCUPANT (MECHANICAL EQUIPMENT ROOM)   | 1 OCCUPANT   |
| ROOF COVERING TABLE-1505.1                | CLASS A FIRE-RESISTANCE   | CLASS B SHINGLE ROOF   |
| DRAFT STOPS SECTION 717.4                 | NOT REQ'D   | N/A  |
| FIRE-PROTECTION SYSTEMS SECTION 903.2.1.1 | NOT REQ'D   | N/A  |
| EXITS SECTION 1022                        | MIN. OF ONE   | ONE PROVIDED   |
| EXITS FROM FLOORS SECTION 1015.1/1018     | ONE EXITS FROM FLOORS W/ OCCUPANT LOAD $\leq 49$  | ONE PROVIDED   |
| EXIT ACCESS SECTION 1014                  | N/A   | N/A  |
| OPENING PROTECTIVES SECTION 716           | NOT REQUIRED  | NOT PROVIDED   |
| FACILITY ACCESSIBILITY SECTION 1104       | NOT REQUIRED  | NOT REQUIRED   |
| PLUMBING FIXTURES TABLE 2902.1            | N/A   | NOT REQUIRED - STRUCTURE IS NOT OPEN TO PUBLIC. THIS IS A UTILITY BUILDING. ALSO 2902.3 EXCEPTION 2 MAY APPLY. |

STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (IBC 1705.2.2)			DETAILED INSTRUCTIONS AND FREQUENCIES
ITEM			
<b>STEEL ROOF AND FLOOR DECKS (IBC TABLE 1705.2.2):</b>			
Material verification of cold-formed steel deck	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Confirm that identification markings are provided to conform to ASTM standards specified on construction documents.
Floor and roof deck welds	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Visual inspection is required to confirm that weld meets acceptance criteria of AWS D1.3. Welder qualifications should also be verified.
<b>WELDING OF REINFORCING STEEL (IBC TABLE 1705.2.2):</b>			
Verification of weldability	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify weldability of reinforcing steel based upon carbon equivalent and in accordance with AWS D1.4.
Reinforcing steel in intermediate or special moment frames, and boundary elements of...	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Shear reinforcement	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Periodic	
Other reinforcing steel	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Visually inspect all welds in accordance with AWS D1.4.
<b>COLD-FORMED STEEL CONSTRUCTION (IBC 1705.2.2.1.1, 1705.10.3, and 1705.11.3):</b>			
Trusses spanning > 60-feet	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Verify that temporary and permanent truss bracing is installed in accordance with approved truss package. Performed by code inspection firm.
Wind-force-resisting systems or seismic-force-resisting systems	<input type="checkbox"/> Continuous	<input checked="" type="checkbox"/> Periodic	Periodic inspections of welding operations. If fastener spacing is < 4" o.c.: Verify that proper screw attachment, bolting, anchoring and other fastening of shear walls, diaphragms, drag struts, braces, shear panels and holdowns has occurred. Performed by code inspection firm.

- a) ASTM A706, Grade 60, 80, or 100 for special structural walls and Grade 60 and 80 for special moment frames.
- b) ASTM A615 Grade 60 if (1) through (4) are satisfied. ASTM A615 Grade 80 and Grade 100 are not permitted in special seismic systems.
  - 1) Actual yield strength based on mill tests does not exceed  $f_y$  by more than 18,000 psi.
  - 2) Ratio of the actual tensile strength to the actual yield strength is at least 1.25
  - 3) Minimum fracture elongation in 8 in. shall be at least 14 percent for bar sizes No. 3 through No. 6, at least 12 percent for bar sizes No. 7 through No. 11, and at least 10 percent for bar sizes No. 14 and No. 18.
  - 4) Minimum uniform elongation shall be at least 9 percent for bar sizes No. 3 through No. 10, and at least 6 percent for bar sizes No. 11, No. 14, and No. 18.







1. CONDUIT SHALL ONLY RUN EXPOSED WHERE NECESSARY. ALL EXPOSED CONDUIT SHALL BE PVC COATED. PANELS SHALL BE STAINLESS STEEL NEMA 4X.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONDUIT DETAILS AND A CONDUIT ROUTING PLAN TO THE ELECTRICAL ENGINEER FOR APPROVAL.
3. LIMIT EXPOSED CONDUITS, 90° BENDS AND WALL PENETRATIONS. MAINTAIN SEPARATION BETWEEN SIGNAL AND POWER-CARRYING CONDUITS.
4. CONTRACTOR TO COORDINATE WITH UTILITY

1. -

[illegible]

## UVU LIFT STATION

# ELECTRICAL - SITE SITE PLAN

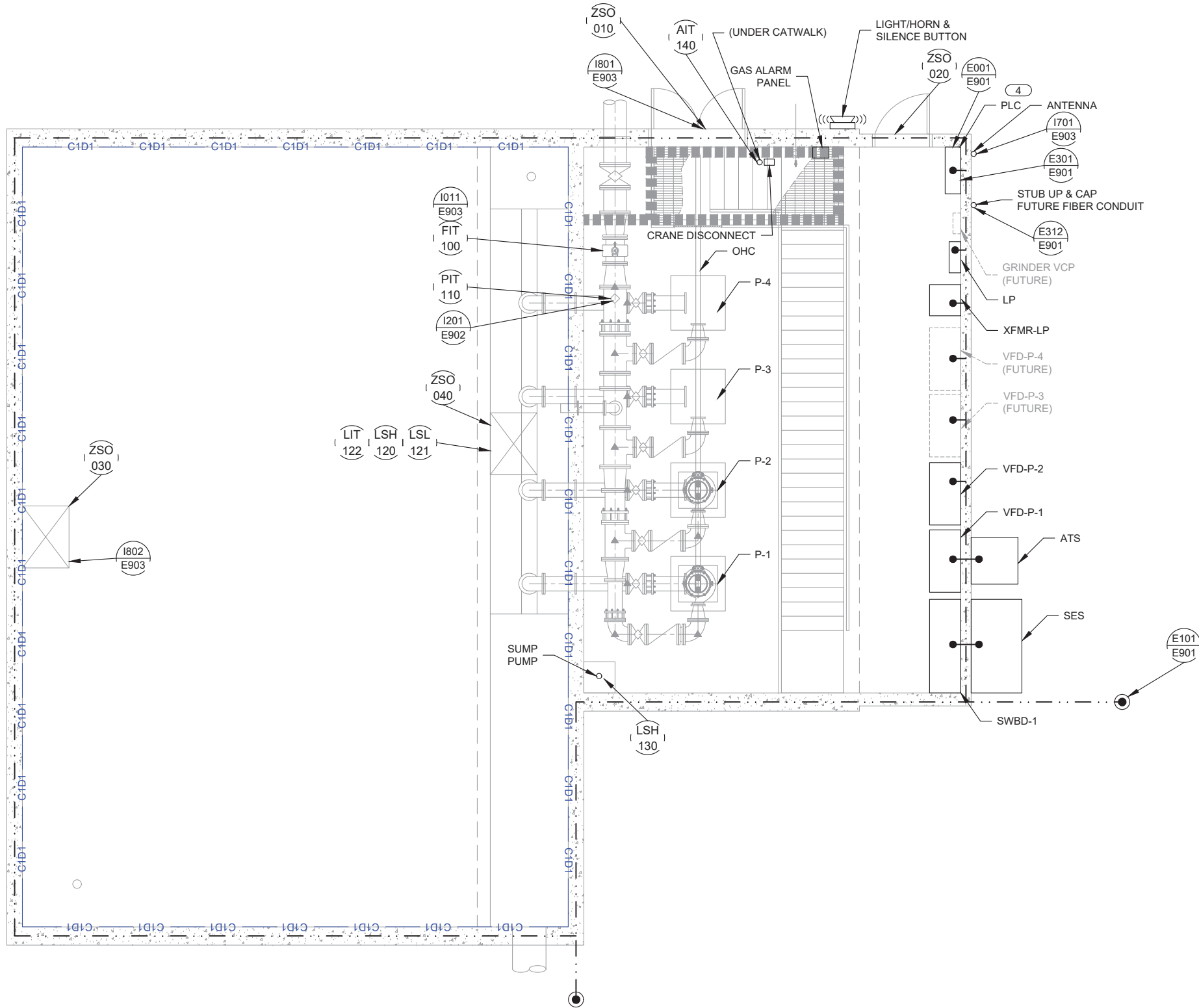
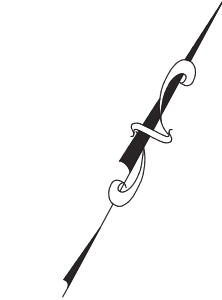
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DRAWING NO.

E201

SHEET





### ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"  
0 4 8  
Scale in Feet

### GENERAL NOTES

1. CONDUIT SHALL ONLY RUN EXPOSED WHERE NECESSARY. ALL EXPOSED CONDUIT SHALL BE PVC COATED. PANELS SHALL BE STAINLESS STEEL NEMA 4X.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONDUIT DETAILS AND A CONDUIT ROUTING PLAN TO THE ELECTRICAL ENGINEER FOR APPROVAL.
3. LIMIT EXPOSED CONDUITS, 90° BENDS AND WALL PENETRATIONS. MAINTAIN SEPARATION BETWEEN SIGNAL AND POWER-CARRYING CONDUITS.
4. PROVIDED BY OWNER, INSTALLED AND WIRED BY CONTRACTOR.

### KEY NOTES

1. -

### ELECTRICAL LEGEND

ORIGINAL				REVISIONS			
NO.	DATE	DESIGN	DRAWN	CHECKED			
0	00/00/0000						

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UVU LIFT STATION

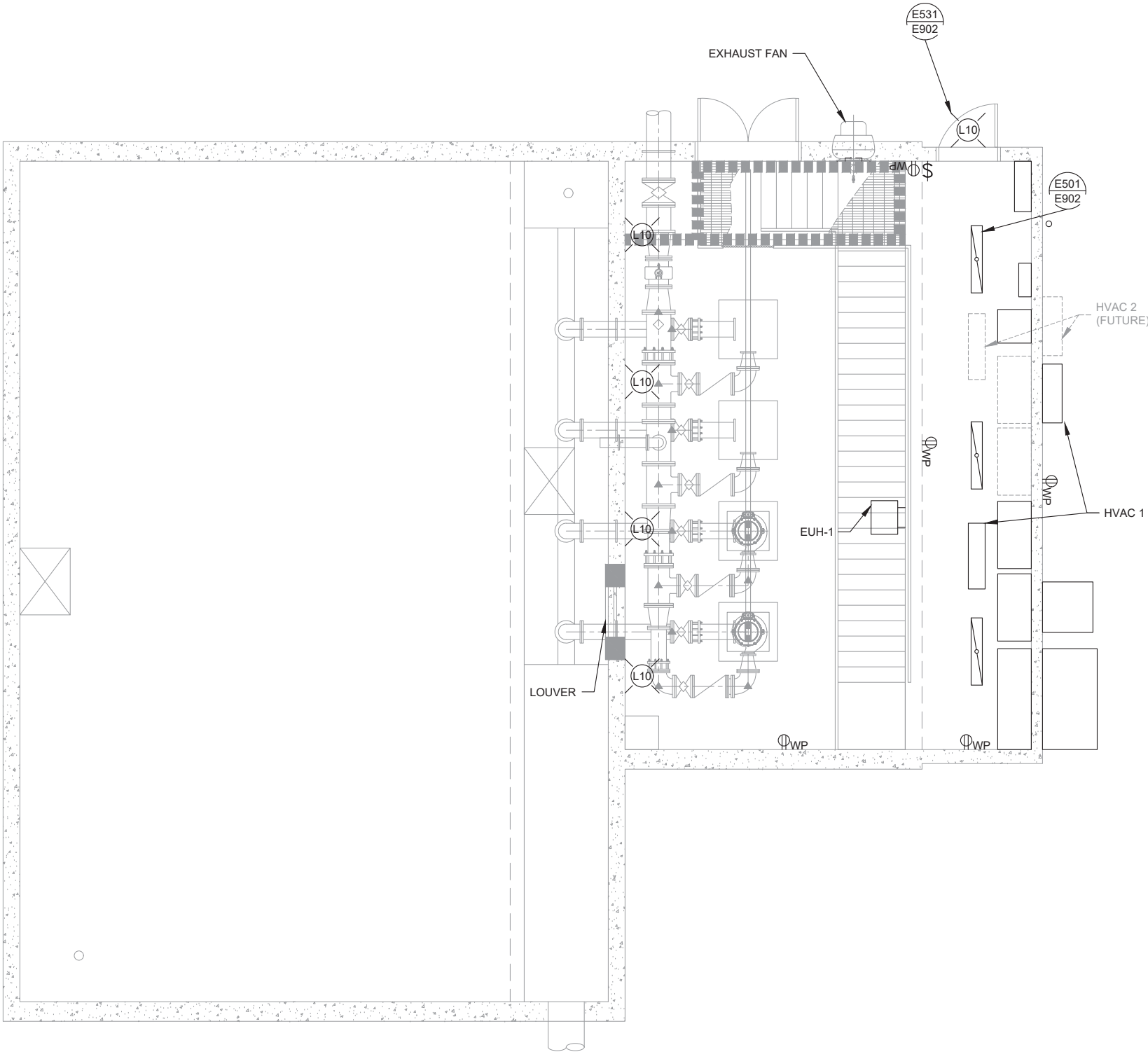
ELECTRICAL - LAYOUT  
ELECTRICAL PLAN

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E301

SHEET



**LIGHTING PLAN**  
SCALE: 1/4" = 1'-0"  
0 4 8  
Scale in Feet



**GENERAL NOTES**

1. CONDUIT SHALL ONLY RUN EXPOSED WHERE NECESSARY. ALL EXPOSED CONDUIT SHALL BE PVC COATED. PANELS SHALL BE STAINLESS STEEL NEMA 4X.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONDUIT DETAILS AND A CONDUIT ROUTING PLAN TO THE ELECTRICAL ENGINEER FOR APPROVAL.
3. LIMIT EXPOSED CONDUITS, 90° BENDS AND WALL PENETRATIONS. MAINTAIN SEPARATION BETWEEN SIGNAL AND POWER-CARRYING CONDUITS.

**KEY NOTES**

1. -

**ELECTRICAL LEGEND**

-  H.E. WILLIAMS 49W 1'X4' W LED FIXTURE W/ BATTERY BACKUP AND DIMMING DRIVERS. MODEL AT1-14-L50/835-D-EM/10WLP-DIM-UNV OR APPROVED EQUAL
-  GE CURRENT EVOLVE LED 36W WALL LIGHT (WALL PACK) WITH BATTERY BACKUP AND DARK SKY COMPLIANCE. MODEL EWAS-01-1-B3-AW-7-40-D-1-FM-DKBZ-EMBR OR APPROVED EQUAL.
- DUPLEX OUTLET  
G: GFCI PROTECTED OUTLET  
WP: WEATHER-PROOF OUTLET GFCI PROTECTED.
- \$ LIGHT SWITCH

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE			
ORIGINAL			
NO.	DATE	DESIGN	CHECKED
0	00/00/0000		
REVISIONS			

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ELECTRICAL - LAYOUT  
LIGHTING PLAN

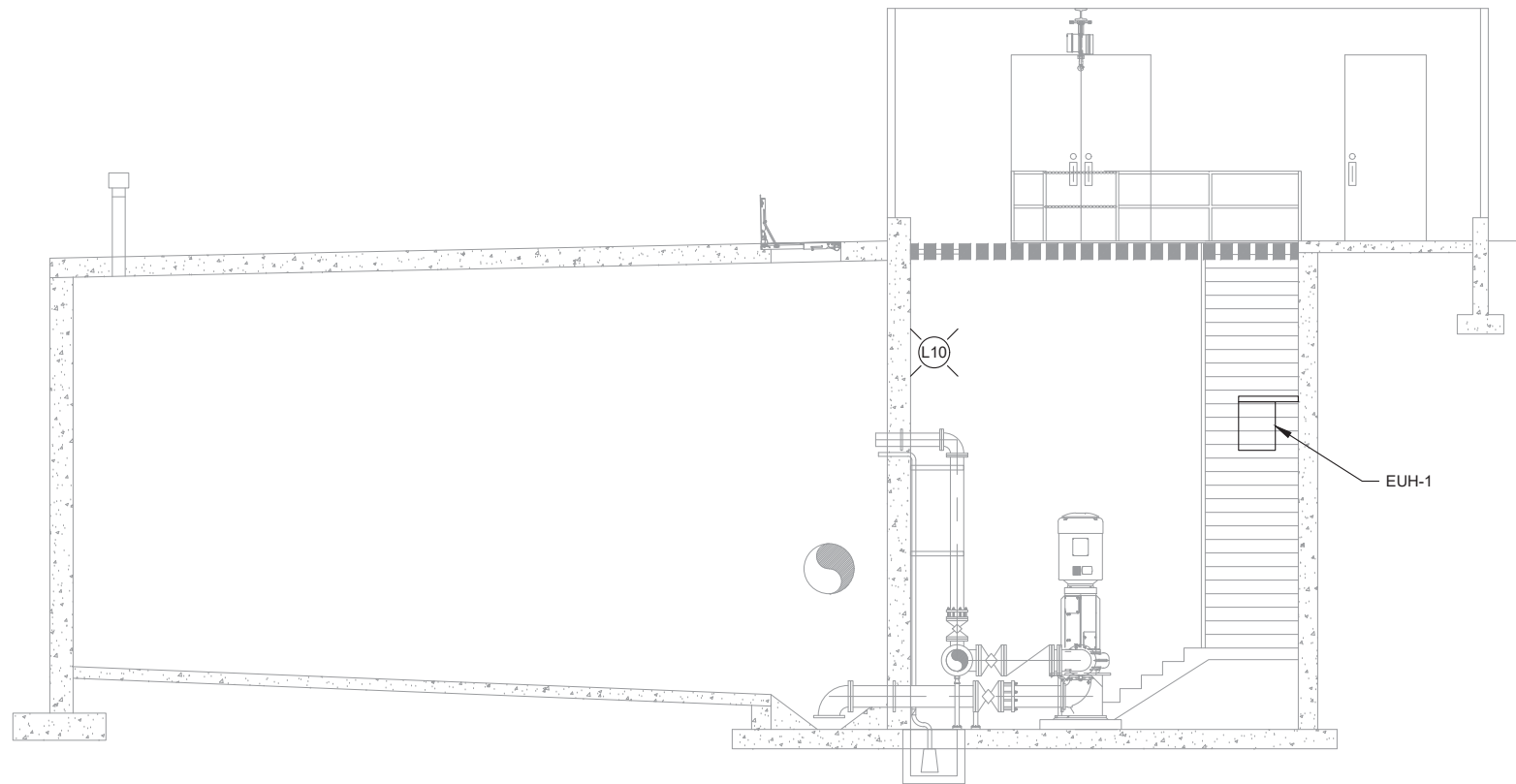
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DRAWING NO.

E302

SHEET





SCALE:  $\frac{1}{4}'' = 1'-0''$

0 4 8

Scale in Feet

1. CONDUIT SHALL ONLY RUN EXPOSED WHERE NECESSARY. ALL EXPOSED CONDUIT SHALL BE PVC COATED. PANELS SHALL BE STAINLESS STEEL NEMA 4X.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING CONDUIT DETAILS AND A CONDUIT ROUTING PLAN TO THE ELECTRICAL ENGINEER FOR APPROVAL.
3. LIMIT EXPOSED CONDUITS, 90° BENDS AND WALL PENETRATIONS. MAINTAIN SEPARATION BETWEEN SIGNAL AND POWER-CARRYING CONDUITS.



- 1.

L10

GE CURRENT EVOLVE LED 36W WALL LIGHT  
(WALL PACK) WITH BATTERY BACKUP AND  
DARK SKY COMPLIANCE. MODEL EWAS-01-1-  
B3-AW-7-40-D-1-FM-DKBZ-EMBR OR  
APPROVED EQUAL.

DRAWING IS TO SCALE  
IF BAR MEASURES:  
1" = FULL SCALE  
1/2" = HALF SCALE

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UVU LIFT STATION

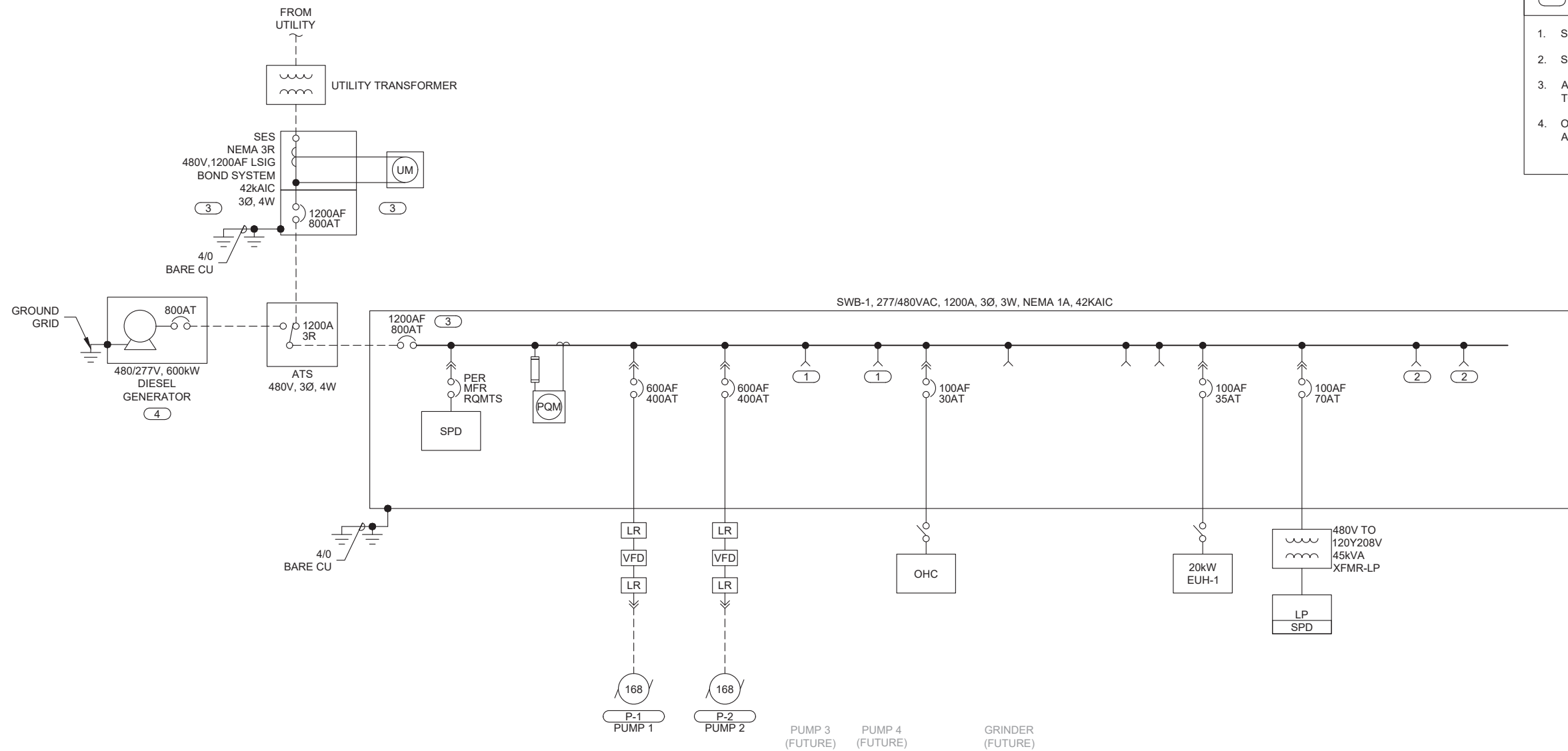
## ELECTRICAL - LAYOUT BASEMENT LAYOUT

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E303

SHEET



### ONELINE DIAGRAM

CIRCUIT/DESCRIPTION	KVA	HP	FLA
MOTOR LOADS			
PUMP 1		168.0	201.6
PUMP 2		168.0	201.6
GRINDER (FUTURE)		5.0	7.6
OHC		5.0	7.6
NON-MOTOR LOADS			
LIGHTING TRANSFORMER	45.0		54.2
EHU-1	20.0		24.1
			0.0
			0.0
SUBTOTAL			496.7
+ 25% OF LARGEST MOTOR			50.4
TOTAL AMPS @ 480V/3PHASE			547.1
SERVICE SIZE (AMPS)			800.0

### CALCULATION

CIRCUIT/DESCRIPTION	KVA	HP	FLA
<b>MOTOR LOADS</b>			
PUMP 1		221.0	266.0
PUMP 2		221.0	266.0
PUMP 3		221.0	266.0
PUMP 4		221.0	*
GRINDER		5.0	7.6
OHC		5.0	7.6
			0.0
<b>NON-MOTOR LOADS</b>			
LIGHTING TRANSFORMER	45.0		54.2
EUH-1	20.0		24.1
			0.0
<b>SUBTOTAL</b>			<b>891.6</b>
+ 25% OF LARGEST MOTOR			66.5
<b>TOTAL AMPS @ 480V/3PHASE</b>			<b>958.1</b>
SERVICE SIZE (AMPS)			1200.0

### CALCULATION (FUTURE)

PANEL:		VOLTAGE: 120/208 BUS A.I.C: 22KA		MAIN CB: 175 AMP BKR AIC: 22KA		BUS AMPS: 200 AMP MOUNTING: SURFACE		
CIRCUIT DESCRIPTION	BKR	CIRCUIT	LOAD	PHASE	LOAD	CIRCUIT	BKR	CIRCUIT DESCRIPTION
HVAC-1	40/2	1	3600	A	500	2	20/1	PLC
		3	3600	B	100	4	20/1	FIT
		5	3600	C	100	6	20/1	AIT
HVAC-2 (FUTURE)	40/2	7	3600	A		8	20/1	
INSIDE LIGHTS	20/1	9	720	B		10	20/1	
OUTSIDE LIGHTS	20/1	11	140	C	750	12	20/1	SUMP PUMP
INSIDE OUTLETS	20/1	13	720	A		14	20/1	
OUTSIDE OUTLETS	20/1	15	360	B	4800	16		GEN AUX
	20/1	17		C	4800	18	50/2	
	20/1	19		A		20	20/1	
	20/1	21		B		22	20/1	
	20/1	23		C		24	20/1	
	20/1	25		A		26	20/1	
	20/1	27		B		28	20/1	
	20/1	29		C		30	20/1	
						</		

## PANEL SCHEDULE

## KEY NOTES

1. SPACE FOR FUTURE 600AF 500AT BREAKER.
2. SPACE FOR FUTURE.
3. ADJUSTABLE TRIP TO ALLOW FUTURE UPDATE TO 1200A.
4. OWNER PROVIDED, CONTRACTOR INSTALLED AND WIRED.

DRAWING IS TO SCALE  
IF BAR MEASURES:  
1" = FULL SCALE  
1/2" = HALF SCALE

[illegible]

**NORTH VILLAGE SPECIAL SERVICE DISTRICT**

## UVU LIFT STATION

# ELECTRICAL - POWER DISTRIBUTION ONELINE DIAGRAM

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DRAWING NO.

E501

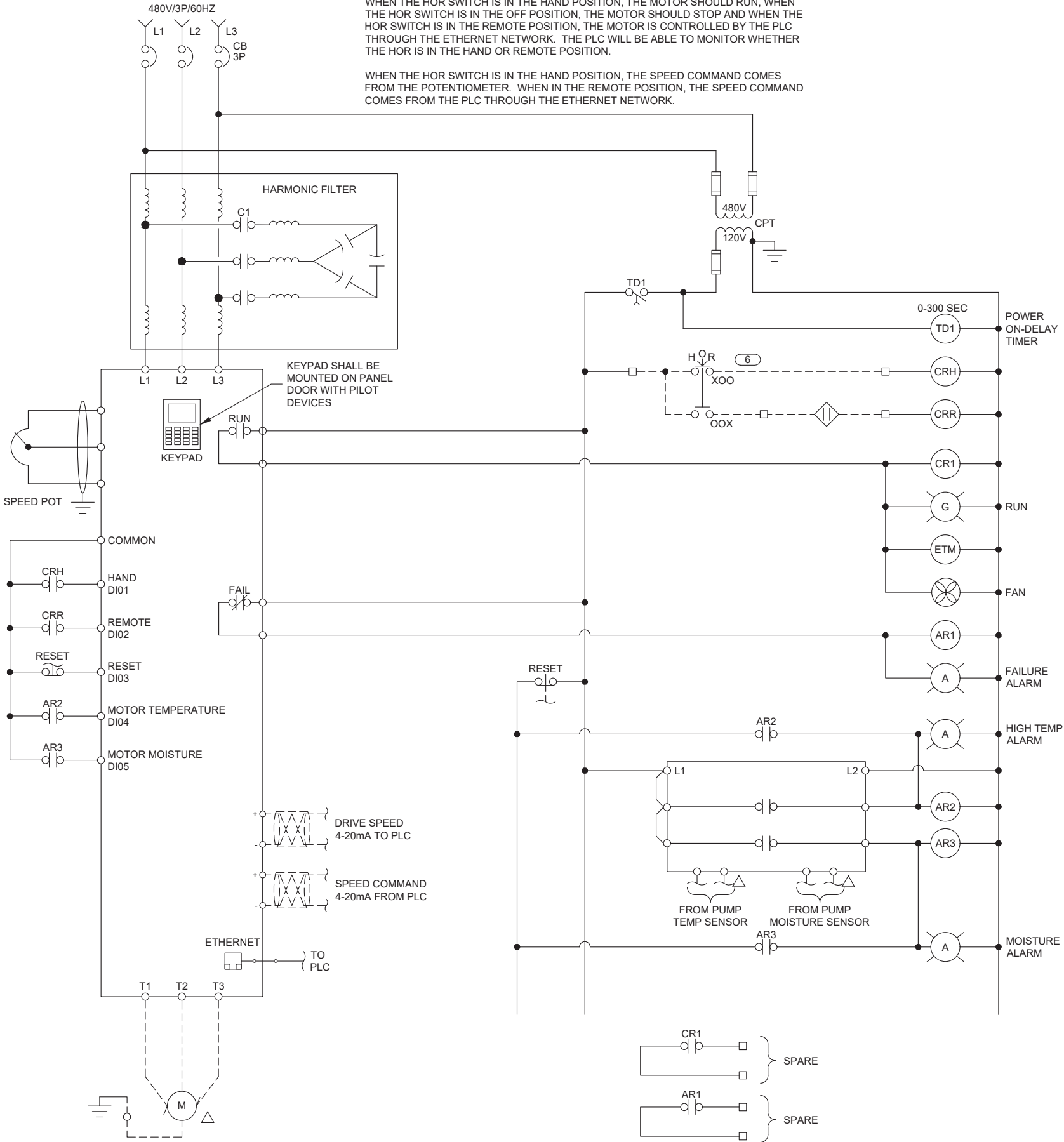
SHEET



VFD CONTROL DESCRIPTION

WHEN THE HOR SWITCH IS IN THE HAND POSITION, THE MOTOR SHOULD RUN, WHEN THE HOR SWITCH IS IN THE OFF POSITION, THE MOTOR SHOULD STOP AND WHEN THE HOR SWITCH IS IN THE REMOTE POSITION, THE MOTOR IS CONTROLLED BY THE PLC THROUGH THE ETHERNET NETWORK. THE PLC WILL BE ABLE TO MONITOR WHETHER THE HOR IS IN THE HAND OR REMOTE POSITION.

WHEN THE HOR SWITCH IS IN THE HAND POSITION, THE SPEED COMMAND COMES FROM THE POTENTIOMETER. WHEN IN THE REMOTE POSITION, THE SPEED COMMAND COMES FROM THE PLC THROUGH THE ETHERNET NETWORK.



SCHEMATIC

NOTES:

- 1 TYPICAL SCHEMATIC DIAGRAMS ARE INTENDED TO REFLECT THE GENERAL CONTROL STRATEGY. ACTUAL CIRCUITRY MAY VARY FOR SPECIFIC EQUIPMENT SUPPLIED. THE NUMBER AND TYPE OF DEVICES SHALL BE FURNISHED AS REQUIRED FOR PROPER OPERATION OF THE EQUIPMENT.
- 2 CONTROL POWER TRANSFORMERS (CPT) SHALL BE ADEQUATELY SIZED AND SHALL BE PROVIDED WITH PROPERLY SIZED FUSES FOR BOTH THE PRIMARY AND SECONDARY WINDINGS.
- 3 FUSES SHALL BE ADEQUATELY SIZED PER THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.
- 4 ADJUST TIME DELAY RELAYS PRIOR TO STARTUP. STAGGER TIMER SETTINGS FOR POWER ON-DELAY RELAYS.
- 5 CONTROL SWITCHES SHALL BE DOOR MOUNTED ON THEIR RESPECTIVE PANELS. DEVICES SHALL BE RATED FOR LINE VOLTAGE AND 125% OF LOAD CURRENT.
- 6 LOCAL CONTROLS SHALL BE INSTALLED ACCORDING TO P&ID'S AND NOT NECESSARILY AS SHOWN ON SCHEMATICS. SEE LCP SCHEMATICS AND CONDUIT SCHEDULE FOR EXACT WIRING.

DRAWING IS TO SCALE  
IF BAR MEASURES:  
1" = FULL SCALE  
1/2" = HALF SCALE

ORIGINAL				REVISIONS			
NO.	DATE	DESIGN	DRAWN	CHECKED			
0	00/00/0000						

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ELECTRICAL - POWER DISTRIBUTION  
SCHEMATIC

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DRAWING NO.

E601

SHEET



- NOTES:

SHEET



CONDUIT	SIZE	CONDUCTORS	SERVICE	FROM	TO	DUCTBANKS	NOTES
P000			480V	UTIL XFMR	SES		COORDINATE WITH UTILITY
P001	4X3"	3X (4 350 KCML W/ 3/0 GND)	480V	SES	ATS		ONE SPARE FOR FUTURE UPGRADE TO 1200A
P002	4X3"	3X (4 350 KCML W/ 3/0 GND)	480V	GENERATOR	ATS		ONE SPARE FOR FUTURE UPGRADE TO 1200A
P002A	1"	3 #8 W/ #10 GND	208V	LP	GEN-AUX		
P003	4X3"	3X (3 350 KCML W/ 3/0 GND)	480V	ATS	SWITCHBOARD		ONE SPARE FOR FUTURE UPGRADE TO 1200A
P004	3"	3 350 KCML W/ #3 GND	480V	SWITCHBOARD	VFD-P-1		
P004A	3"	3C 350 KCML WITH GROUND VFD CABLE	480V	VFD-P-1	P-1		
P005	3"	3 350 KCML W/ #3 GND	480V	SWITCHBOARD	VFD-P-2		
P005A	3"	3C 350 KCML WITH GROUND VFD CABLE	480V	VFD-P-2	P-2		
P006	3"	PULL STRING	480V	SWITCHBOARD	VFD-P-3 (FUTURE)		
P006A	3"	PULL STRING	480V	VFD-P-3 (FUTURE)	P-3 (FUTURE)		
P007	3"	PULL STRING	480V	SWITCHBOARD	VFD-P-4 (FUTURE)		
P007A	3"	PULL STRING	480V	VFD-P-4 (FUTURE)	P-4 (FUTURE)		
P008	1.5"	3 #4 W/ #8 GND	480V	SWITCHBOARD	XFMR-LP		
P009	2"	4 3/0 AWG W/ #6 GND	208V	XFMR-LP	LP		#2 BONDING JUMPER
P010	1"	4 #12 W/ #12 GND	120V	LP	PLC		PLC AND EXHAUST FAN
P011	1"	2 #12 W/ #12 GND	120V	PLC	EXHAUST FAN		
P012	1"	2 #12 W/ #12 GND	120V	LP	FIT		
P013	1"	2 #10 W/ #10 GND	208V	LP	HVAC-1 DISC		
P014	1"	2 #10 W/ #10 GND	208V	HVAC-1 DISC	HVAC-1		
P015	1"	2 #10 W/ #10 GND	208V	LP	HVAC-2 DISC		
P016	1"	PULL STRING	208V	HVAC-2 DISC	HVAC-2 (FUTURE)		
P017	1"	2 #12 W/ #12 GND	120V	LP	SUMP PUMP		
P018	1"	PULL STRING	480V	SWITCHBOARD	GRINDER VCP (FUTURE)		
P018A	1"	PULL STRING	480V	GRINDER VCP (FUTURE)	GRINDER (FUTURE)		
P019	1"	3 #12 W/ #12 GND	480V	SWITCHBOARD	OHC DISC		
P019A	1"	3 #12 W/ #12 GND	480V	OHC DISC	OHC		
P020	1"	3 #10 W/ #10 GND	480V	SWITCHBOARD	EUH-1 DISC		
P020A	1"	3 #10 W/ #10 GND	480V	EUH-1 DISC	EUH-1		
C004	1"	4 #14	CONTROL	VFD-P-1	P-1		MOISTURE & TEMPERATURE
C005	1"	4 #14	CONTROL	VFD-P-2	P-2		MOISTURE & TEMPERATURE
C006	1"	PULL STRING	CONTROL	VFD-P-3 (FUTURE)	P-3 (FUTURE)		MOISTURE & TEMPERATURE
C007	1"	PULL STRING	CONTROL	VFD-P-4 (FUTURE)	P-4 (FUTURE)		MOISTURE & TEMPERATURE
C008	1"	2 #12 W/#12 GND	120V	PLC	EXHAUST FAN		
C009	1	PULL STRING	CONTROL	PLC	GRINDER VCP (FUTURE)		
C010	1"	3 #14	24VDC	PLC	ZSO-010, 020		
C030	1"	4 #14	24VDC	PLC	ZSO-030, 040		INTRINSICALLY SAFE CIRCUIT
C140	1"	3 #14 W/ #14GND	120VAC	PLC	ALARM PANEL		
C141	1"	2 #14	24VDC	PLC	ALARM PANEL		
C142	1"	3 #14 W/ #14GND	120VAC	ALARM PANEL	REMOTE ANNUCIATOR		
C143	1"	2 #14	24VDC	ALARM PANEL	REMOTE SILENCE BUTTON		
S100	1"	TSP, 2 #14	SIGNAL	PLC	FIT-100		
S110	1"	TSP	SIGNAL	PLC	PIT-110		
S122	1"	TSP	SIGNAL	PLC	LIT-122		
S140	1"	3XTSP	SIGNAL	PLC	AIT-140		
F001	2"	LMR400	SIGNAL	PLC	ANTENNA		
F002	2"	PULL STRING		NEAR UTIL XFMR	OUTSIDE BUILDING		COORDINATE WITH UTILITY, SEAL AND CAP

CONDUIT SCHEDULE

TAG	DESCRIPTION	MAKE	MODEL	SUPPLY	RANGE	COMMENTS
ZSO-10	WEST DOOR INTRUSION DETECTION SWITCH	SENETOL	2505A	24VDC		OR APPROVED EQUAL
ZSO-20	EAST DOOR INTRUSION DETECTION SWITCH	SENETOL	2505A	24VDC		OR APPROVED EQUAL
ZSO-30	WEST HATCH INTRUSION DETECTION SWITCH	BANNER	SHLS83RC10D	24VDC		OR APPROVED EQUAL, INTRISICALLY SAFE CIRCUIT
ZSO-40	EAST HATCH INTRUSION DETECTION SWITCH	BANNER	SHLS83RC10D	24VDC		OR APPROVED EQUAL, INTRISICALLY SAFE CIRCUIT
FIT-100	PUMP FLOW METER	SIEMENS	SITRANS F 5100W	120V	0-6000GPM	WITH 6000 TRANSMITTER, OR APPROVED EQUAL
PIT-110	PUMP PRESSURE TRANSMITTER	SIEMENS	SITRANS P320	LOOP	0-400FT H2O	OR APPROVED EQUAL
LSH-120	WET WELL HIGH LEVEL SWITCH	FLYGT	ENM-10	24VDC		OR APPROVED EQUAL, INTRISICALLY SAFE CIRCUIT, WITH APPROPRIATE CABLE
LSL-121	WET WELL LOW LEVEL SWITCH	FLYGT	ENM-10	24VDC		OR APPROVED EQUAL, INTRISICALLY SAFE CIRCUIT, WITH APPROPRIATE CABLE
LT-122	WET WELL TANK LEVEL TRANSMITTER	TE KPSI	750	LOOP	0-20 FT	OR APPROVED EQUAL
LSH-130	FLOOD DETECTION LEVEL SWITCH	GEMS	LS-1700	24VDC		OR APPROVED EQUAL
AIT-140	COMBUSTIBLE GAS DETECTOR	MSA	5000	24VDC		OR APPROVED EQUAL, LEL, O2

INSTRUMENTATION SCHEDULE

HVAC SCHEDULE						
H#	LOCATION	SERVICE	TYPE	V/HP (KW)	CAPACITY/SIZE	REMARKS
HVAC 1	ELEC ROOM	HVAC	MINI-SPLIT INDOOR UNIT	208V	42KBTUH COOLING/45KBTUH HEATING	MITSHUBISHI PCA-A42KA7 OR APPROVED EQUAL
HVAC 1	OUTSIDE	HVAC	MINI-SPLIT OUTDOOR UNIT	208V	42KBTUH COOLING/45KBTUH HEATING	MITSUBISHI PUZ-A42NKA7 OR APPROVED EQUAL
TSTAT-1	ELEC ROOM	HVAC	THERMOSTAT	24VAC	ROOM THERMOSTAT	MITSUBISHI
HVAC 2 (FUTURE)	ELEC ROOM	HVAC	MINI-SPLIT INDOOR UNIT	208V	42KBTUH COOLING/45KBTUH HEATING	MITSHUBISHI PCA-A42KA7 OR APPROVED EQUAL
HVAC 2 (FUTURE)	OUTSIDE	HVAC	MINI-SPLIT OUTDOOR UNIT	208V	42KBTUH COOLING/45KBTUH HEATING	MITSUBISHI PUZ-A42NKA7 OR APPROVED EQUAL
TSTAT-2 (FUTURE)	ELEC ROOM	HVAC	THERMOSTAT	24VAC	ROOM THERMOSTAT	MITSUBISHI
EXHAUST FAN	PUMP HOUSE	EXHAUST FAN	WALL MOUNTED	115V 1/4 HP	3128 CFM	DAYTON 484X42, OR APPROVED EQUAL
SFH-1	PUMP HOUSE	EXHAUST FAN HOUSING	WALL MOUNTED		20 INCH HOUSING	
LOUVER	PUMP HOUSE	SUPPLY LOUVER	WALL MOUNTED	115V	20H x 20W COMBINATION LOUVER DAMPER	GREENHECK EAC-401-20X20 W/ DUCT TO

HVAC SCHEDULE

01/21

DRAWING IS TO SCALE  
IF BAR MEASURES:  
1" = FULL SCALE  
1/2" = HALF SCALE

ORIGINAL

DESIGN | DRAWN | CHECKED

NO. | DATE

0 | 00/00/0000

REVISIONS


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UVU LIFT STATION

ELECTRICAL - POWER DISTRIBUTION  
CONDUIT SCHEDULE

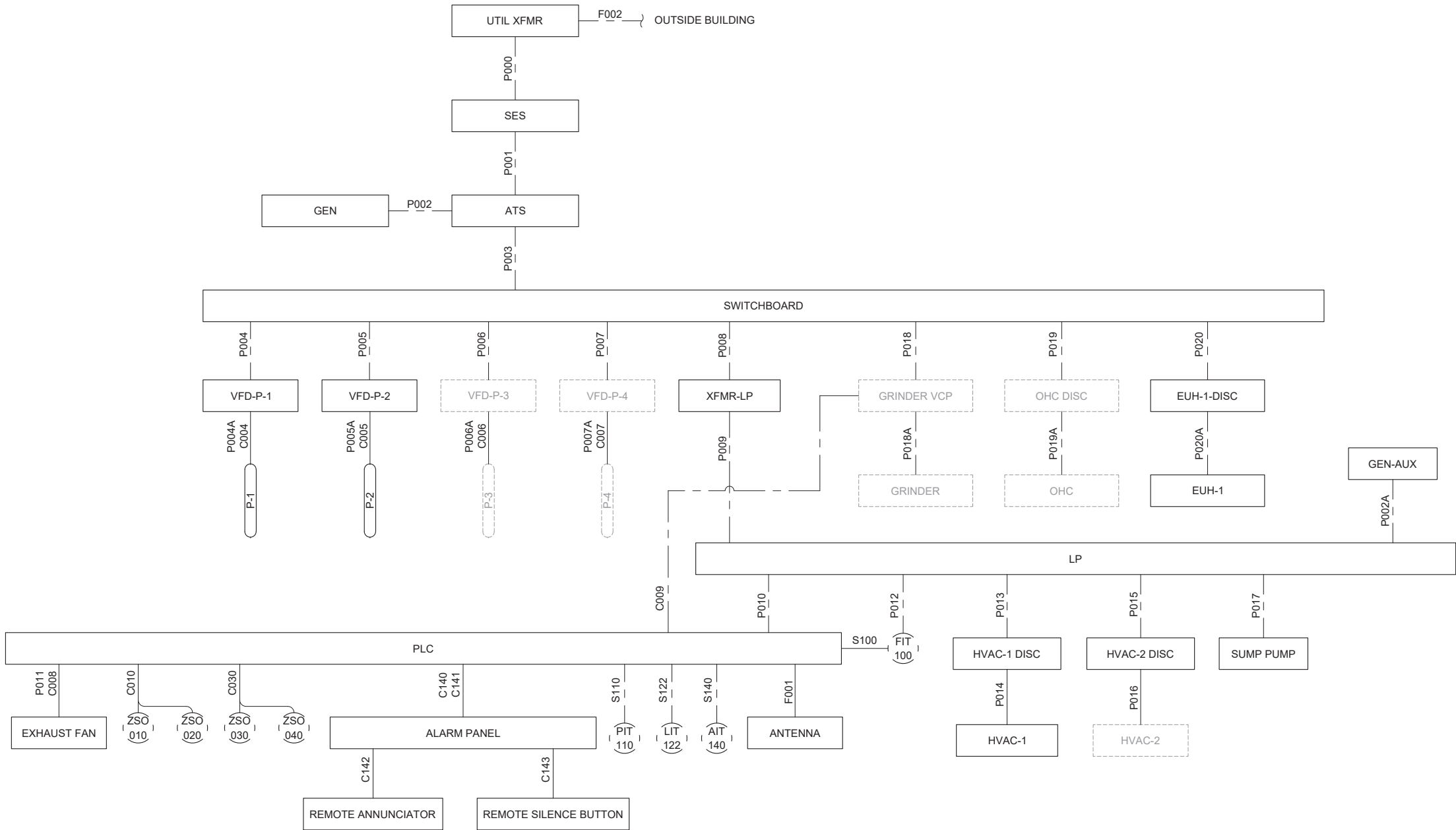
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DRAWING NO.

E801

SHEET



CONDUIT DEVELOPMENT

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE			
0	1/2	1	
ORIGINAL			
NO.	DATE	DESIGN	CHECKED
0	00/00/0000		
REVISIONS			

NORTH VILLAGE SPECIAL SERVICE DISTRICT

UVU LIFT STATION

ELECTRICAL - POWER DISTRIBUTION  
CONDUIT DEVELOPMENT

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DRAWING NO.

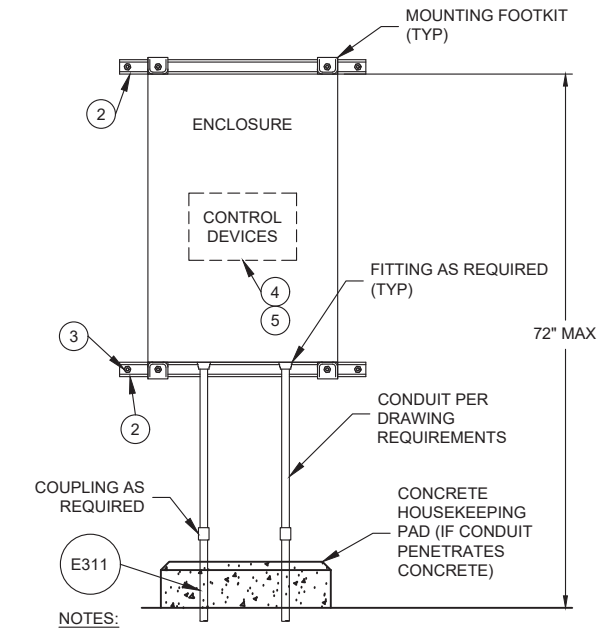
E802

SHEET



C:\USERS\ENGINEOL\_KIM\AQUA ENGINEERING\SSD - 003009.D UVU LIFT STATION 2026 DESIGN\050 DRAFTING\999 ELECTRICAL\999-E901 DETAILS 1.DWG

1/30/2026

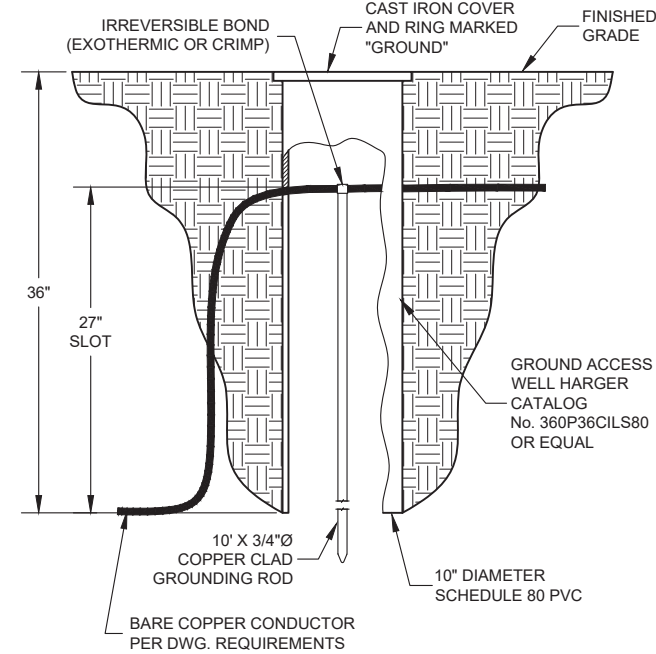


NOTES:

- 1 ALL MATERIAL SHALL BE HOT DIPPED GALVANIZED, 316 STAINLESS STEEL, OR PVC COATED GALVANIZED STEEL; AS NOTED IN THE DRAWINGS AND SPECIFICATIONS. FOR CHEMICAL ROOMS SEE COMPATIBLE MATERIALS IN SPECIFICATIONS.
- 2 1-5/8" X 1-5/8" UNISTRUT CHANNEL.
- 3 1/2" X 3" 316 SS ANCHOR BOLT OR LAG BOLT WITH WASHER, ANCHORED TO WALL (EVERY 18", 2 MIN.).
- 4 CENTER OF INSTRUMENT DISPLAYS SHALL BE 62".
- 5 CENTER OF LOCAL CONTROL STATIONS SHALL BE 52".

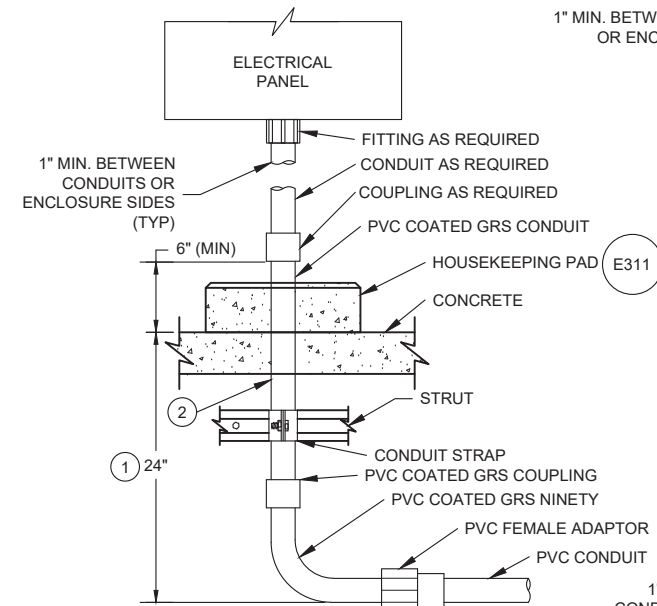
## WALL MOUNTED ENCLOSURE

E001 NTS



## GROUND ROD WITH ACCESS WELL

E101 NTS



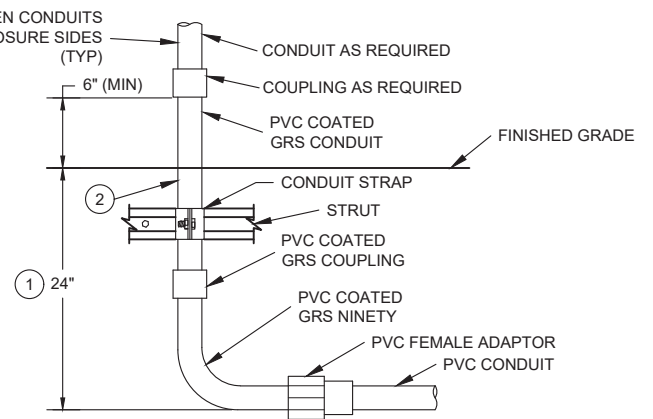
## STUB UP THROUGH CONCRETE

NOTES:

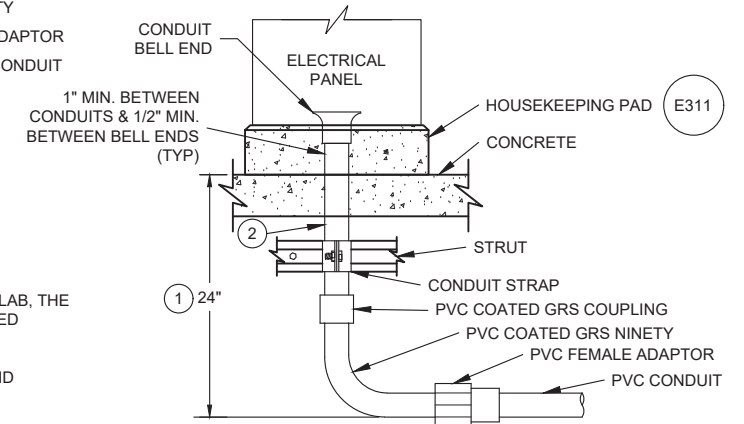
- 1 WHERE CONDUITS ARE INSTALLED IN OR UNDER A CONCRETE SLAB, THE 24" DIMENSION DOES NOT APPLY. CONDUITS SHALL BE INSTALLED BETWEEN REBAR MATS OR UNDER A SINGLE REBAR MAT.
- 2 BELOW CONCRETE, ANCHOR CONDUITS INTO ALIGNED ROWS AND COLUMNS.

## CONDUIT STUB UP

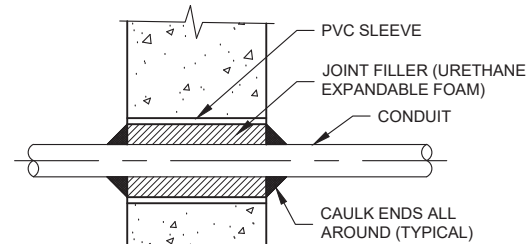
E312 NTS



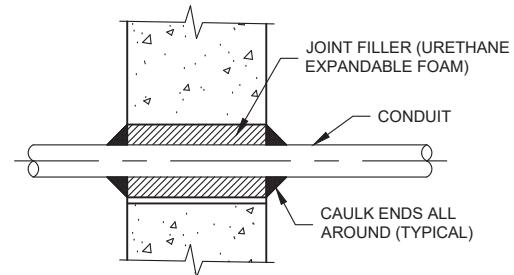
## STUB UP THROUGH OTHER SURFACE



## STUB UP INTO FLOOR-MOUNTED ELECTRICAL PANEL



## NEW CONCRETE WALL/SLAB

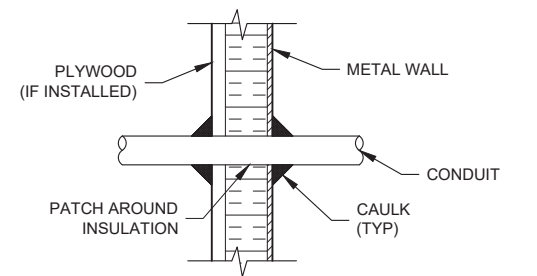


## EXISTING CONCRETE WALL/SLAB

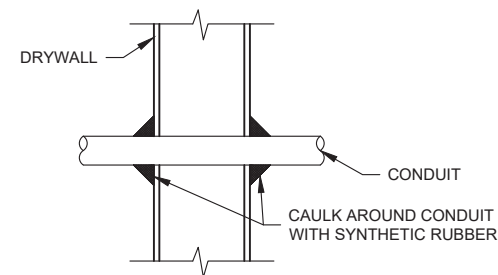
NOTE:

- 1 IN EXISTING WALL, CORE DRILL HOLE CONDUIT O.D. +1-1/2". IN NEW CONCRETE, INSTALL PVC SCHEDULE 40 SLEEVE, CONDUIT O.D. +1-1/2".

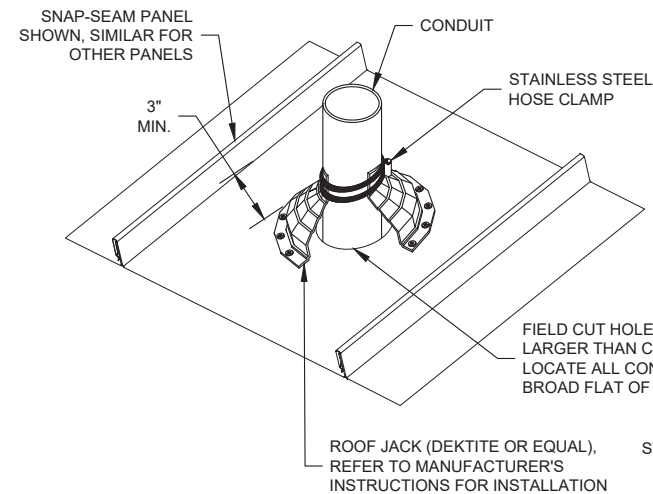
## CONDUIT PENETRATION THRU WALL OR SLAB



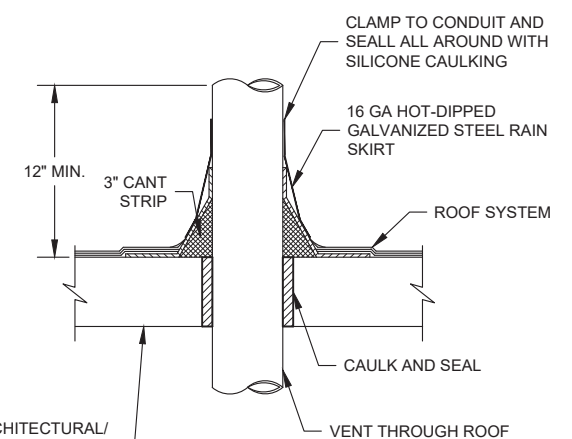
## METAL BUILDING



## DRYWALL



SEE ARCHITECTURAL/STRUCTURAL DRAWINGS FOR ROOF CONSTRUCTION



## CONDUIT PENETRATION THRU ROOF

NOTES:

- 1 PENETRATIONS SHOULD BE CENTERED IN PANELS IF AT ALL POSSIBLE.
- 2 SUBSTRATE MUST BE CUT OUT ENOUGH SO THAT DEKTITE IS ONLY ATTACHED TO ROOF PANEL.

## CONDUIT PENETRATION

E301 NTS

DRAWING IS TO SCALE  
IF BAR MEASURES:  
1" = FULL SCALE  
1/2" = HALF SCALE

ORIGINAL		DESIGN		DRAWN		CHECKED		REVISIONS	
NO.	DATE	DESIGN	DRAWN	CHECKED	NO.	DATE	DESIGN	DRAWN	CHECKED
0	00/00/0000								

NORTH VILLAGE SPECIAL SERVICE DISTRICT

UVU LIFT STATION

ELECTRICAL - DETAILS  
DETAILS 1

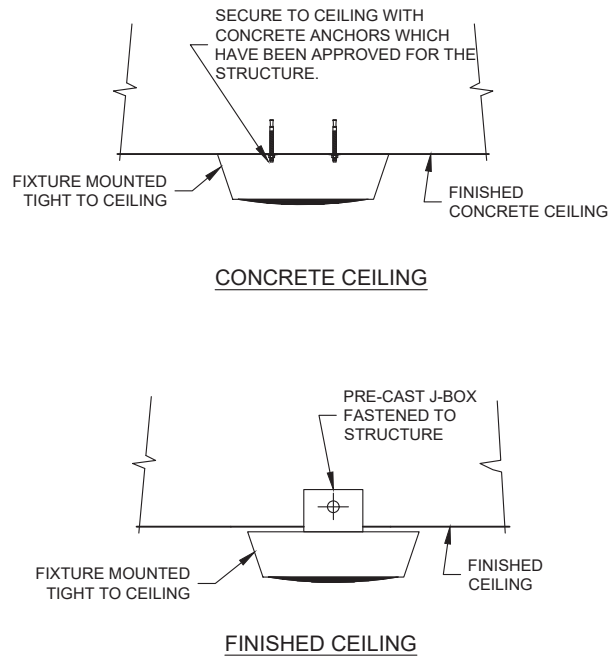
skm 533 W 2600 S, Suite 25  
Bountiful, Utah 84010  
Phone: (801) 677-0011  
www.skmeng.com

DRAWING NO.

E901

SHEET

2/4/2026 C:\USERS\ENGINEER\KIM\AQUA ENGINEERING\SSD - 003009.D UVU LIFT STATION 2026 DESIGN\050 DRAFTING\999 ELECTRICAL\999-E902 DETAILS 2.DWG

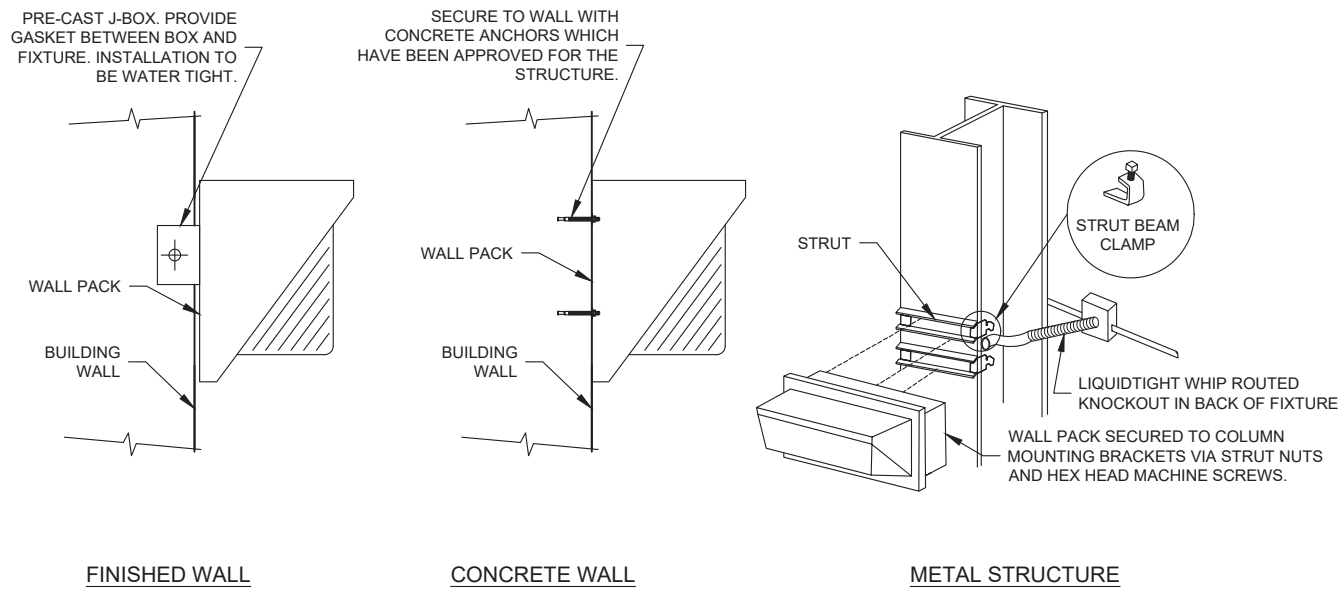


NOTE:

- 1 IN CLASSIFIED AREAS, CONTRACTOR SHALL INSTALL CONDUIT AND WIRING PER NEC AND MANUFACTURERS INSTRUCTIONS TO MAINTAIN EXPLOSION PROOF / VAPOR TIGHT INSTALLATION.

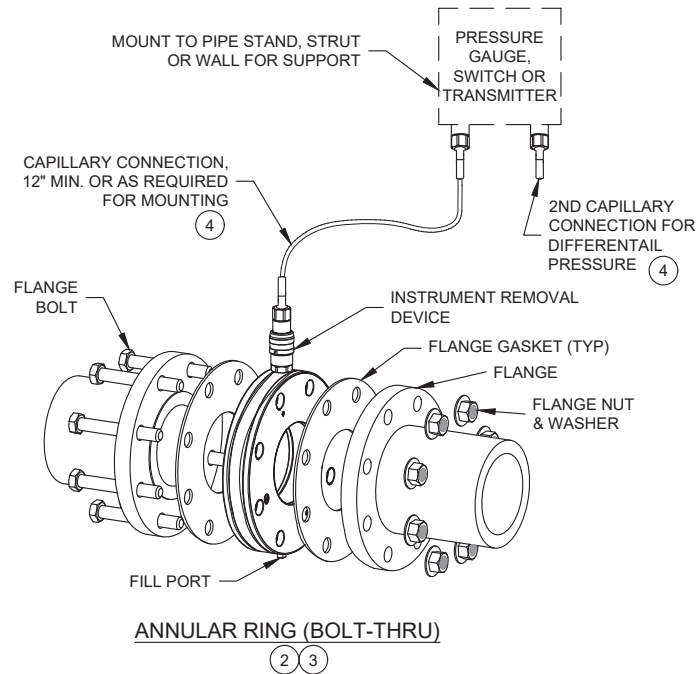
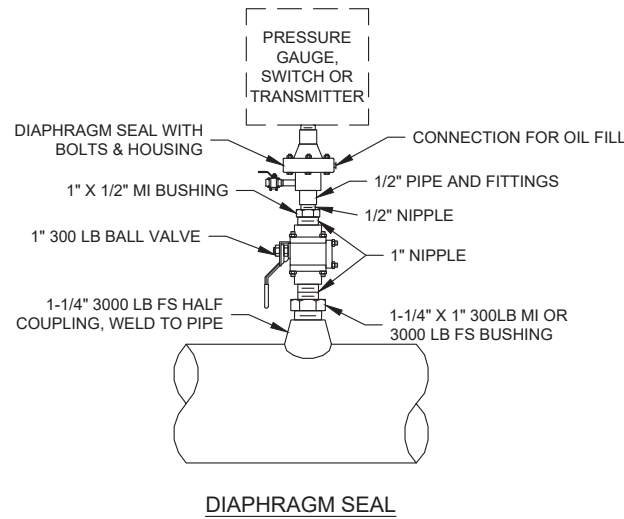
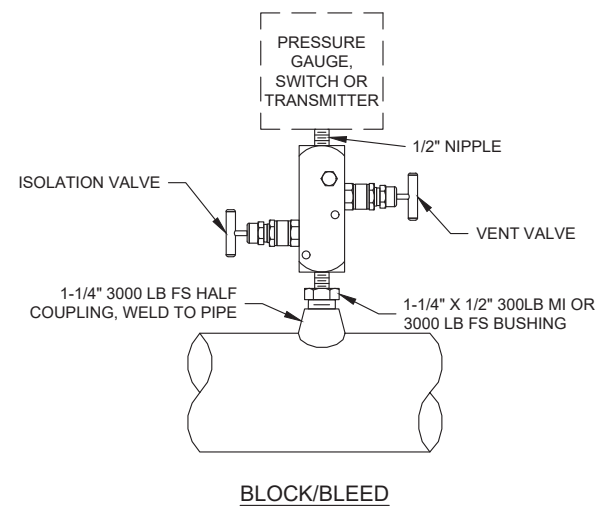
**CEILING SURFACE MOUNTED LIGHT FIXTURE**

E501 NTS



**STRUCTURE MOUNTED OUTDOOR LIGHT FIXTURE (WALL PACK)**

E531 NTS

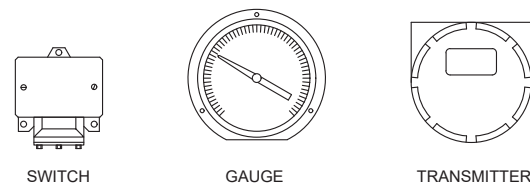


NOTES:

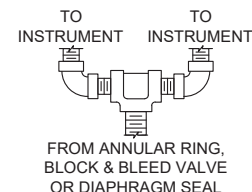
- 1 ALL VALVE, DIAPHRAGM SEAL AND PIPE MATERIAL SHALL BE 316 STAINLESS STEEL UNLESS OTHERWISE SPECIFIED, OR FOR PROCESS FLUID COMPATABILITY.
- 2 ANNULAR RING, FLANGE GASKET, FLANGE AND FLANGE HARDWARE MATERIAL SHALL BE 316 STAINLESS STEEL UNLESS OTHERWISE SPECIFIED, OR FOR PROCESS FLUID COMPATABILITY.
- 3 PSI RATING OF INSTRUMENT AND PIPING TO MATCH OR EXCEED PROCESS PIPE SYSTEM RATING.
- 4 FOR DIFFERENTIAL PRESSURE OR CONNECTIONS WHERE VIBRATION MAY OCCUR, USE CAPILLARY CONNECTIONS FROM PIPE TO GAUGE, SWITCH OR TRANSMITTER.

**PRESSURE INSTRUMENT MOUNTING**

I201 NTS



**INSTRUMENT LEGEND**



**MULTIPLE INSTRUMENT MOUNTING**

DRAWING IS TO SCALE  
IF BAR MEASURES:  
1" = FULL SCALE  
1/2" = HALF SCALE

ORIGINAL			REVISIONS		
NO.	DATE	DESIGN / DRAWN	CHECKED		
0	00/00/0000				

NORTH VILLAGE SPECIAL SERVICE DISTRICT

UVU LIFT STATION

ELECTRICAL - DETAILS  
DETAILS 2

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Bountiful, Utah 84010  
Phone: (801) 677-0011  
www.skmeng.com

DRAWING NO.

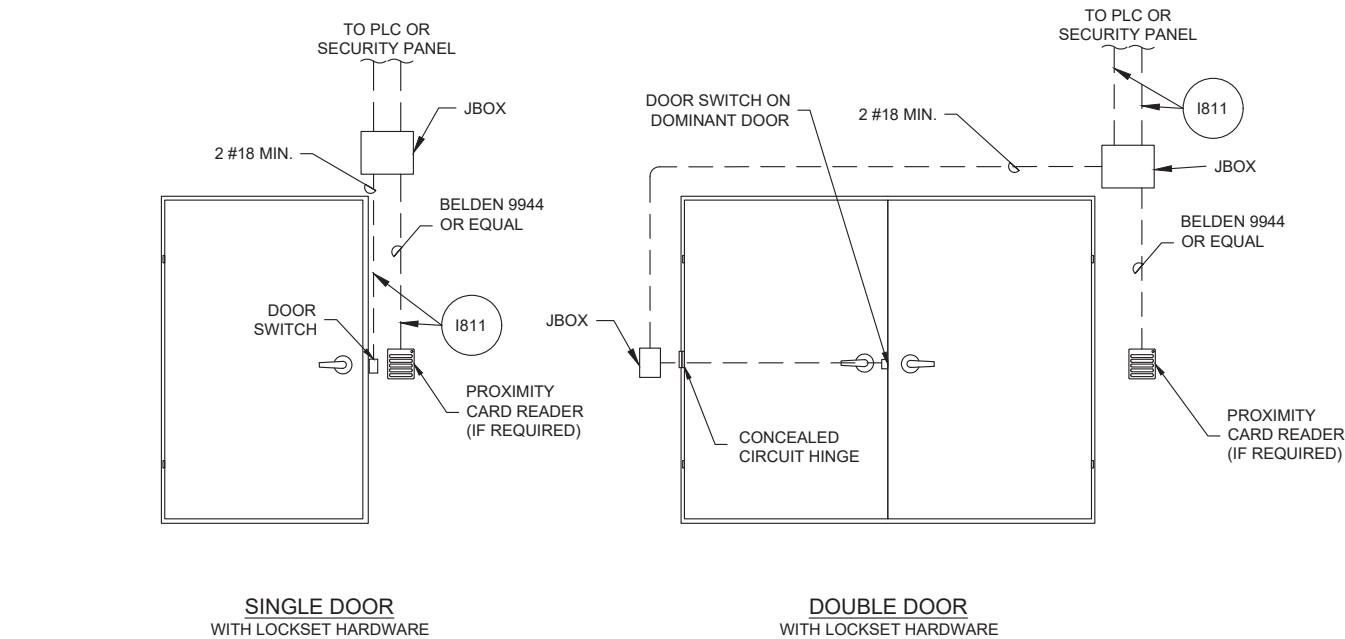
**E902**

SHEET

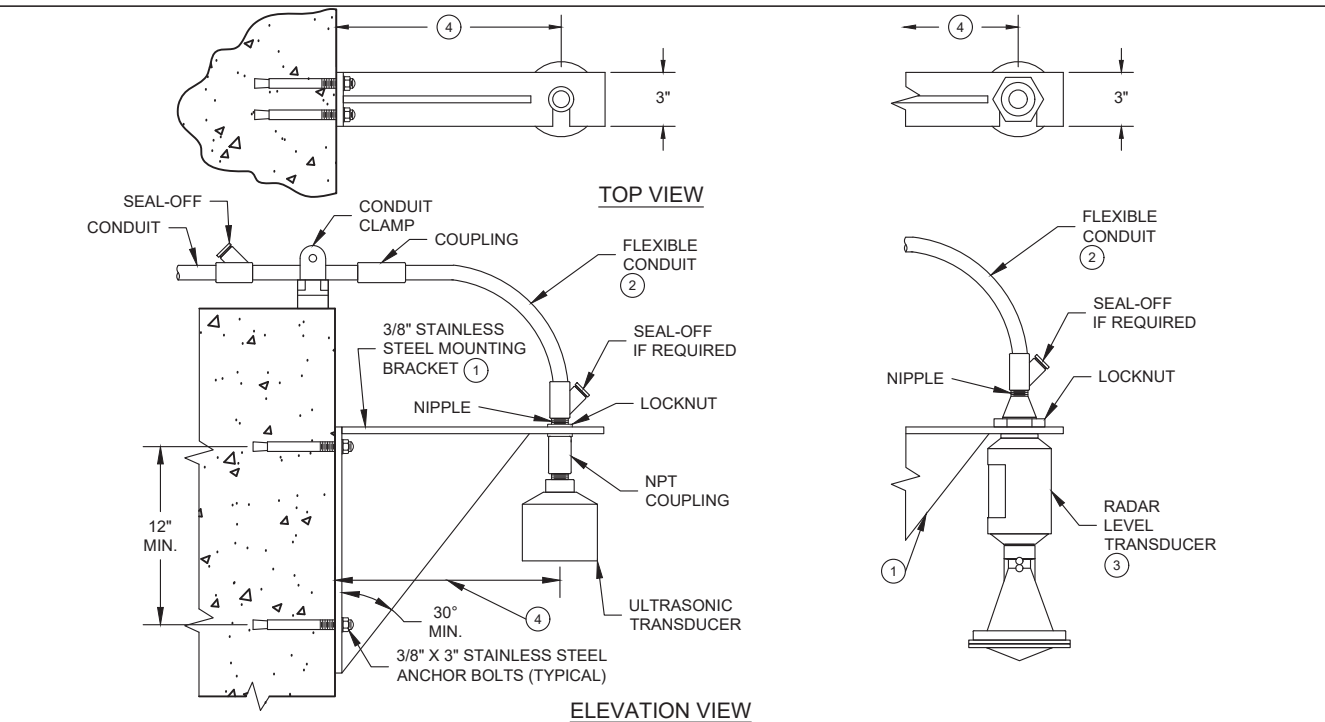


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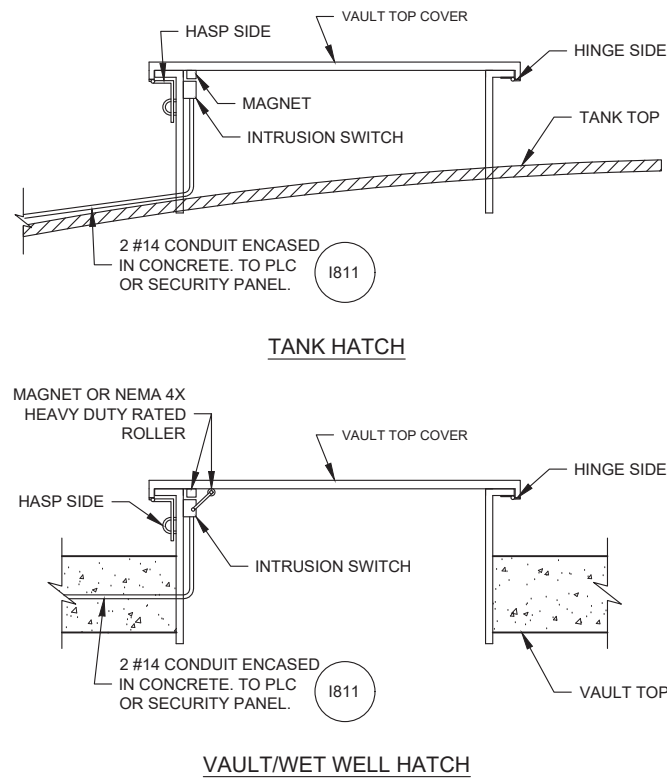
2/4/2026



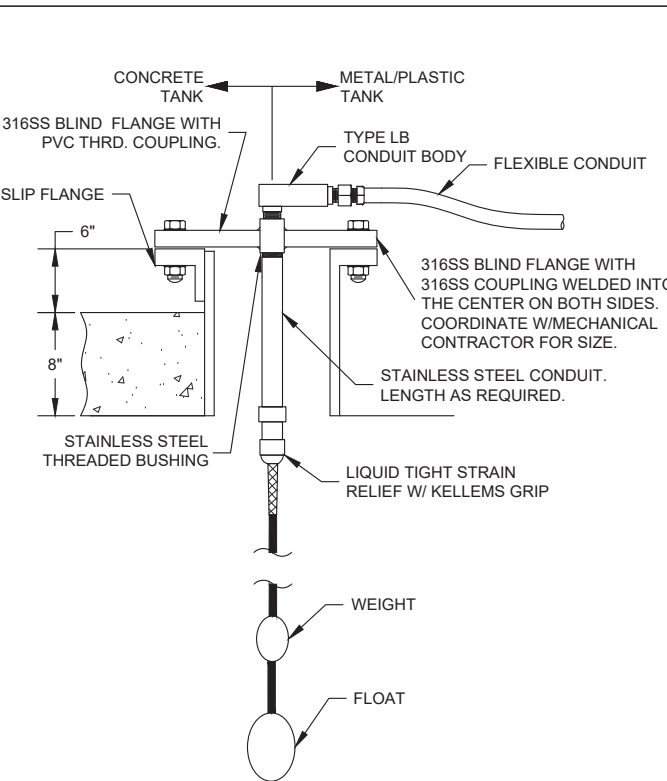
1801 NTS  
**DOOR INTRUSION SWITCH**



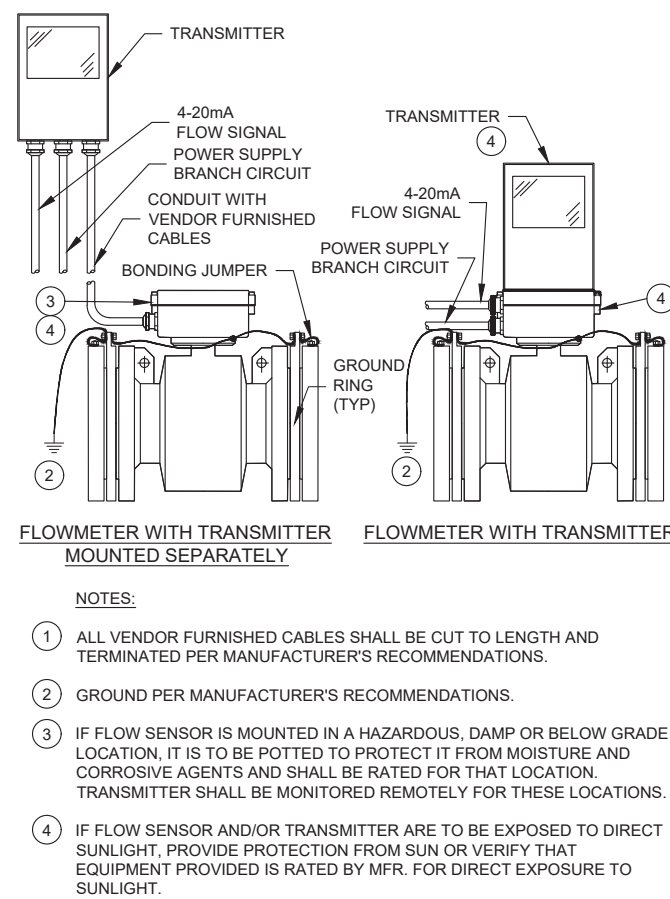
1101 NTS  
**OPEN TANK ULTRASONIC/RADAR LEVEL TRANSDUCER MOUNTING**



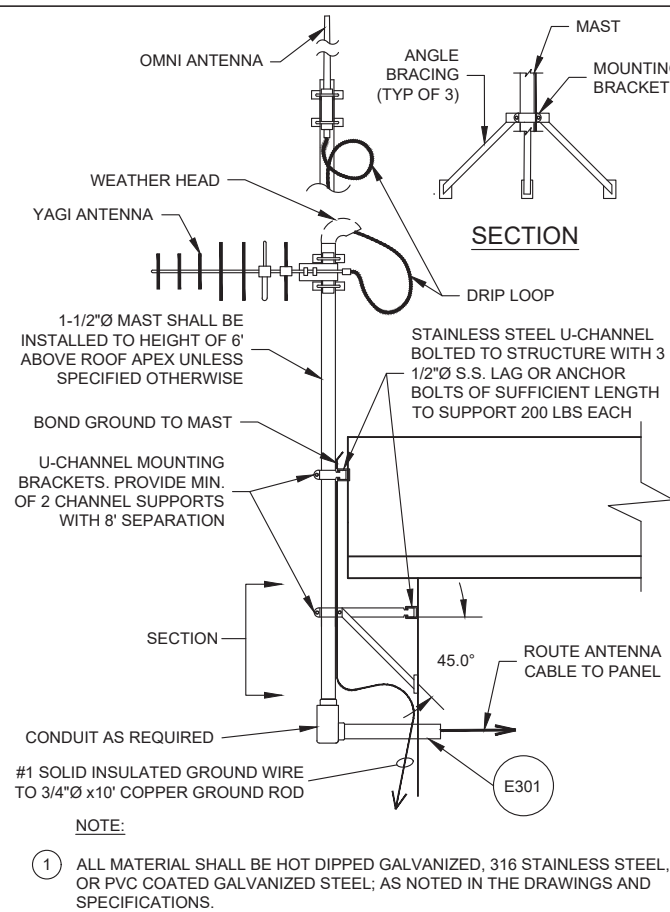
1802 NTS  
**HATCH INTRUSION SWITCH**



1143 NTS  
**FLANGE MOUNTED FLOAT**



1011 NTS  
**MAGNETIC FLOWMETER**



1701 NTS  
**ANTENNA MAST TO BUILDING**

DRAWING IS TO SCALE IF BAR MEASURES: 1" = FULL SCALE 1/2" = HALF SCALE		ORIGINAL		DESIGN		DRAWN		CHECKED	
NO.	DATE	DESIGN	0	00/00/0000	DRAWN			CHECKED	
		REVISIONS							

NORTH VILLAGE SPECIAL SERVICE DISTRICT

UVU LIFT STATION

ELECTRICAL - DETAILS  
DETAILS 3

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DRAWING NO.

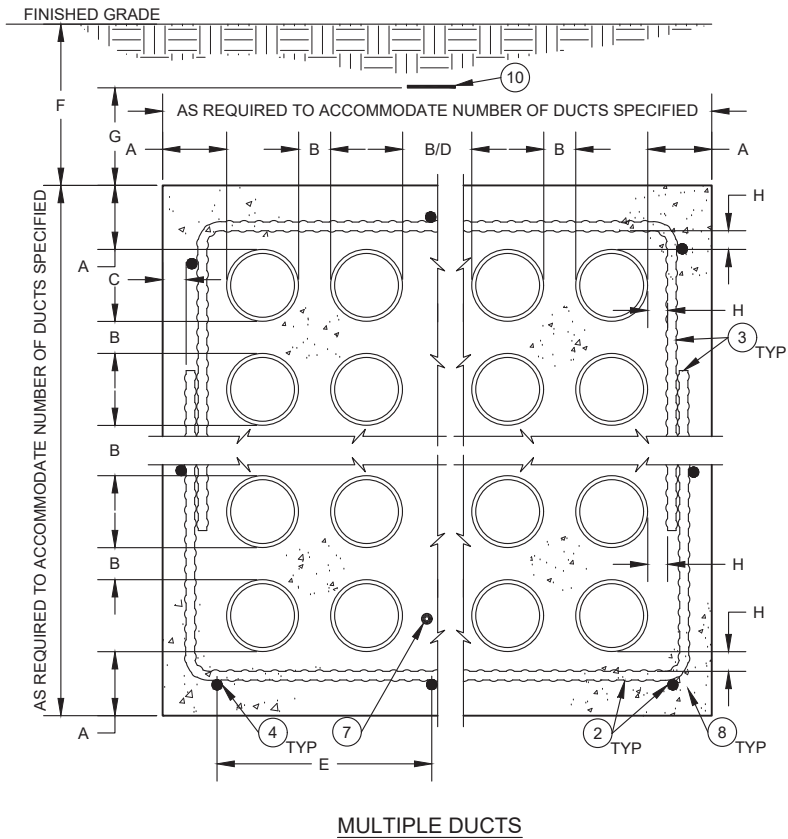
E903

SHEET

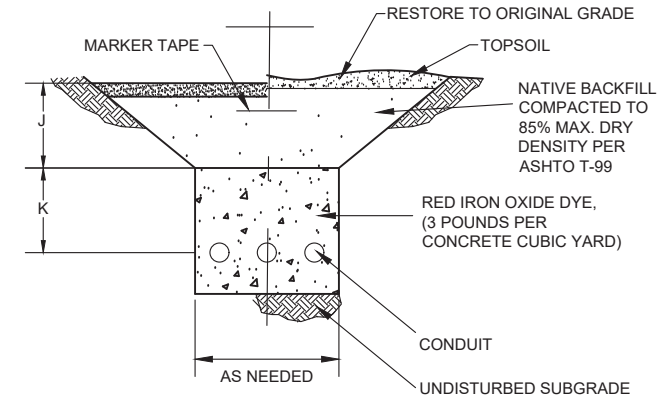
E201

## CONCRETE ENCASED DUCT BANK

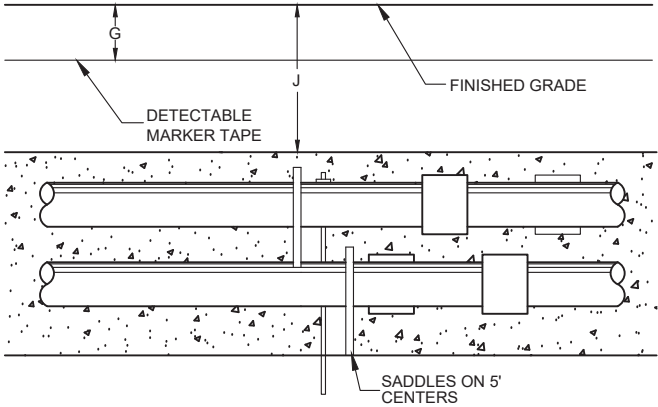
NTS



DIMENSION TABLE	
A	4" MIN. TYP.
B	2" MIN. SEE NOTE 12
C	2" MIN. SEE NOTE 2
D	12" MIN. SEE NOTE 13
E	18" MAX. SEE NOTE 4
F	18" MIN.
G	12"
H	1.5" MIN. TYP.
J	30" MIN. BELOW 600 VOLTS 48" MIN. ABOVE 600 VOLTS
K	6" MIN. BELOW 600 VOLTS 12" MIN. ABOVE 600 VOLTS



DUCT BANK TRENCH



DUCT BANK SECTION

### NOTES:

- ALL DIMENSIONS SHOWN ARE MINIMUM DIMENSIONS. UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- ALL REBAR SHALL BE #4 BAR AND HAVE A MINIMUM CONCRETE EMBEDMENT OF 2" (EDGE OF REBAR TO OUTSIDE SURFACE OF CONCRETE).
- REBAR HOOPS SHALL OVERLAP 9" MINIMUM AND SHALL BE PROVIDED EVERY 4 FEET HORIZONTALLY. HOOPS SHALL NOT BE REQUIRED ON SINGLE ROW DUCT BANKS.
- HORIZONTAL REBAR SHALL BE PLACED @ A MAXIMUM OF 18" ON CENTER ALL AROUND THE DUCT BANK ENVELOPE AND SHALL BE SUPPORTED EVERY 4 FEET LONGITUDINALLY. SINGLE ROW DUCT BANKS LESS THAN 24" WIDE SHALL HAVE A MIN. OF 2 HORIZONTAL BARS.
- DUCT SPACERS (SADDLES) SHALL BE PROVIDED FOR PROPER SUPPORT OF CONDUIT DUCTS. SPACERS SHALL BE PROVIDED HORIZONTALLY AS RECOMMENDED BY THE MANUFACTURER AND TO PREVENT ANY SAGGING OF THE DUCTS (LOW SPOTS WILL NOT BE ALLOWED).
- DUCTS SHALL BE SECURED TO PREVENT FLOATING DURING THE CONCRETE ENCASEMENT.
- PROVIDE A 4/0 (OR MAIN GROUNDING CONDUCTOR SIZE IF SMALLER) BARE CONTINUOUS COPPER GROUND. SEE GROUNDING SPECIFICATION SECTION 260526. THE GROUND CONDUCTOR SHALL RUN CONTINUOUSLY THROUGH PULL BOXES AND HAND HOLES AND SHALL CONTINUE FROM THE DUCT BANK INTO THE ELECTRICAL EQUIPMENT OR BUILDING GROUNDING SYSTEM AND SHALL BE BONDED TO EACH RIDGID METAL CONDUIT. BOND CONDUCTORS TO BE SOILD COPPER #10 AWG OR LARGER AS REQUIRED BY THE NEC, AND ELSEWHERE IN THESE PLANS.
- DUCT BANK CONCRETE SHALL BE COLOR DYED RED BY MIXING 3 LBS. IRON OXIDE PER CUBIC YARD OF CONCRETE.
- ALL DUCT BANKS SHALL BE SLOPED @ 1/4" PER 10 FEET TO ALLOW DRAINAGE. NO LOW SPOTS WILL BE ALLOWED IN RACEWAY.
- A 3" WIDE DETECTABLE PLASTIC MARKER TAPE WITH INSCRIPTION "CAUTION ELECTRICAL LINES BURIED BELOW" (BLACK LETTERS ON RED BACKGROUND) SHALL BE INSTALLED 12" ABOVE THE TOP OF ALL CONCRETE ENCASED DUCT BANKS.
- REFER TO CONDUIT SCHEDULE FOR WIRE FILL OF ALL DUCTS.
- ALL DUCTS OF THE SAME DUTY (480V POWER, 120V POWER, 120V CONTROLS, AND SIGNAL) SHALL BE SEPARATED BY A MINIMUM OF 2".
- SIGNAL AND FIBER DUCTS SHALL BE SEPARATED FROM 480V POWER BY A MIN. OF 12", FROM 120V POWER BY A MIN. OF 6" AND FROM 120V CONTROL BY MIN. OF 4" UNLESS NOTED OTHERWISE ON THE DRAWINGS. 120V POWER AND 120V CONTROL DUCTS SHALL BE SEPARATED FROM 480V POWER BY A MIN. OF 4" UNLESS NOTED OTHERWISE ON THE DRAWINGS.

NORTH VILLAGE SPECIAL SERVICE DISTRICT

UVU LIFT STATION

ELECTRICAL - DETAILS  
DETAILS 4

DRAWING IS TO SCALE  
IF BAR MEASURES:  
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1/2" = HALF SCALE

ORIGINAL		DESIGN		DRAWN		CHECKED		REVISIONS	
NO.	DATE	DESIGN	DATE	DRAWN	DATE	CHECKED	DATE	NO.	DESCRIPTION
0	00/00/0000								

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DRAWING NO.

E904

SHEET