SUNDOWN TOWNHOMES

Site Permit Application Package

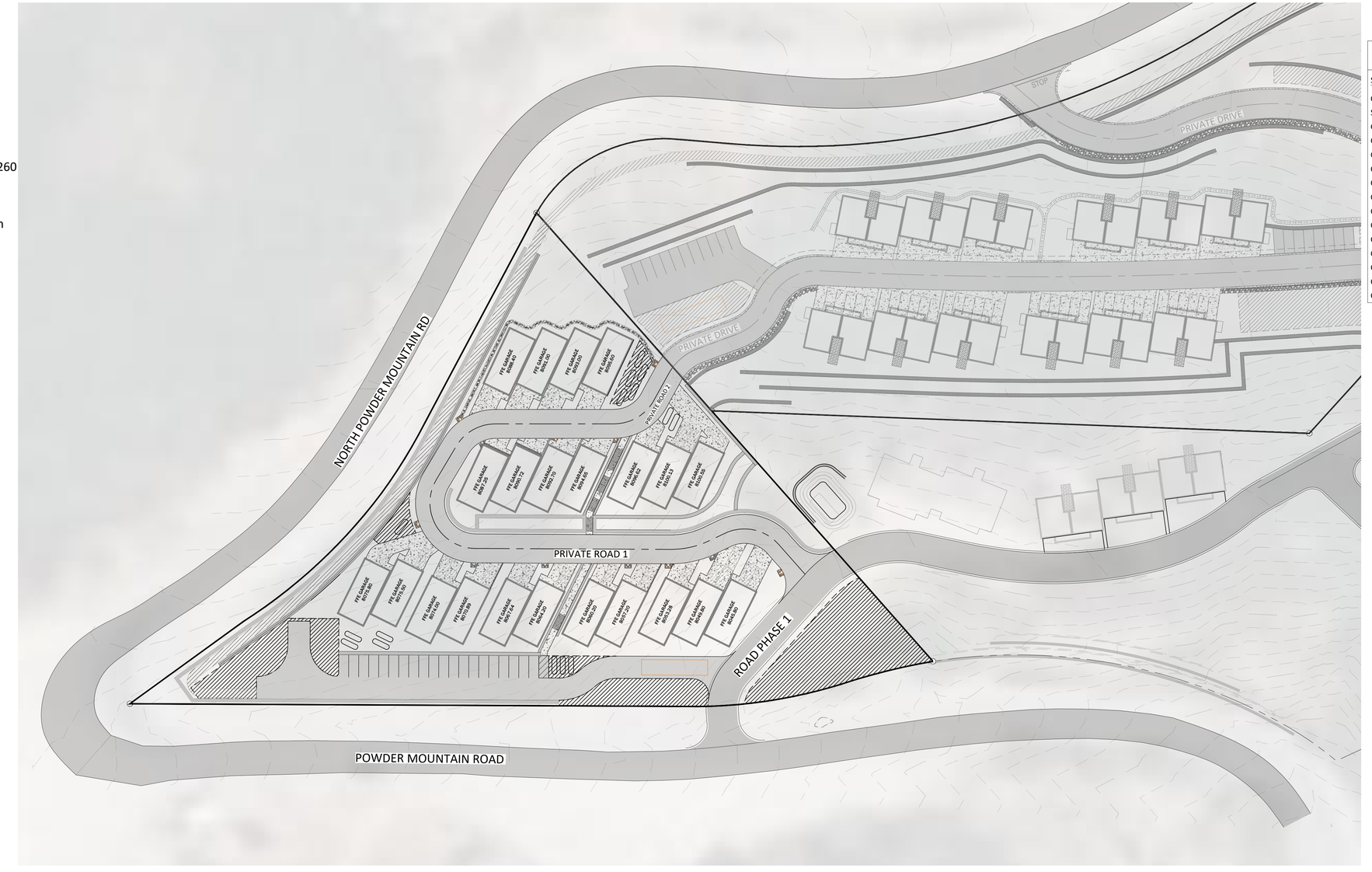
Approximately 6550 North Powder Mountain Road
Eden, Utah 84310

OWNER

OWNER: Mike Brenny
PHONE: 801-808-9328
EMAIL: mike@thirdriverre.com

CIVIL ENGINEERING

FAWKES CONSULTANTS INC.
ADDRESS: 165 W CANYON CREST RD STE 260
ALPINE, UTAH 84004
CONTACT: Jordan "Guy" Williams, P.E.
PHONE: 213-500-5936
EMAIL: gwilliams@fawkesconsultants.com



SHEET INDEX

Call before you Dig
Avoid cutting underground utility lines. It's costly.
Call 811
1-800-662-4111

FAWKES CONSULTANTS INC.

165 W Canyon Crest Rd Ste 260
Alpine, Utah 84004
Gwilliams@fawkesconsultants.com

SUBMITTAL SET

DATE: 07/08/2025
PROJECT NO. 24.028

REVISION	DATE
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COVER SHEET
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

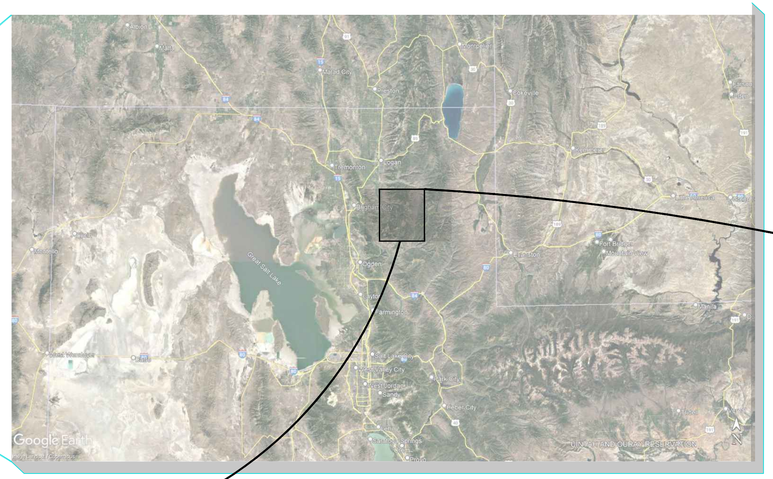
SCALE:

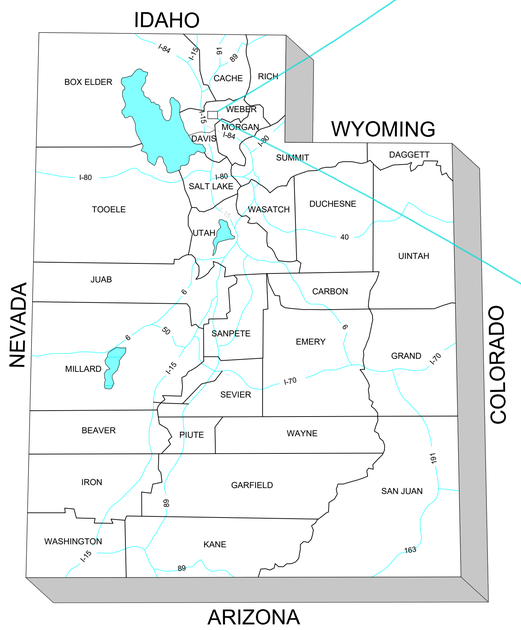
CV

DRAWN BY: DN

01/16

VICINITY MAP





STATE MAP

SITE MAP

Scale: 1" = 30'

30 0 15 30 40 50 60

Graphic Scale

N

WEST EAST SOUTH

FAWKES CONSULTANTS INC.

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Alpine, Utah 84004
Gwilliams@fawkesconsultants.com

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SITE MAP
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SM

DRAWN BY: DN

02/16

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

GENERAL NOTES:

1) ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING: CURRENT REGULATORY AGENCY STANDARDS AND SPECIFICATIONS, AND REGULATORY AGENCY COMPREHENSIVE PLAN, WHERE APPLICABLE.

2) PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT REGULATORY AGENCY FOR A PRE-CONSTRUCTION CONFERENCE AS DIRECTED BY THE OWNER. CONTRACTOR SHALL ALSO NOTIFY THE BELOW LISTED PROJECT CONTACTS (48) HOURS IN ADVANCE OF SAID MEETING:

A. REGULATORY AGENCY: WATER, SEWER, & STORM WATER
Weber County
170 N Main St.
Kamas, UT 84036
(435) 783-4630

B. DEVELOPER: DEV. Mike Brenny

C. ENGINEER:
FAWKES CONSULTANTS INC.
165 W. CANYON CREST RD STE 260
ALPINE, UTAH 84004
CONTACT:
JORDAN "GUY" WILLIAMS
213-500-5936
GWILLIAMS@FAWKESCONSULTANTS.COM

D. GAS
DOMINION ENERGY
CUSTOMER SERVICE LINE: (800) 323-5517

E. POWER COMPANY:
ROCKY MOUNTAIN POWER
CUSTOMER SERVICE LINE: (801) 465-8020

F. TELEPHONE COMPANY:
CENTURYLINK
CUSTOMER SERVICE LINE: (800) 603-6000

3) IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND 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 ENGINEER IMMEDIATELY REGARDING ANY DISCREPANCIES OR AMBIGUITIES WHICH MAY EXIST IN THE PLANS OR SPECIFICATIONS. THE ENGINEER'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 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 IN 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 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 PERMITS AND 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 RIGHT-OF-WAYS, EASEMENTS, AND/OR PERMITS ARE SECURED PRIOR TO CONSTRUCTION.

7) CONTRACTOR SHALL OBTAIN A LAND DISTURBANCE PERMIT WHERE APPLICABLE FOR ANY WORK DONE WITHIN RIGHT-OF-WAYS OR EASEMENTS FROM REGULATORY AGENCY AND/OR UDOT. CONTRACTOR SHALL NOTIFY REGULATORY AGENCY, 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) OWNER SHALL FILE NOTICE OF INTENT WITH THE STATE OF UTAH DIVISION OF WATER QUALITY AND ALSO OBTAIN A FUGITIVE DUST CONTROL PERMIT AS REQUIRED.

10) 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 ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING THEIR BID.

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.

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.

11) THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, BARRICADES, SIGNS, FLAGMEN OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY, AS REQUIRED BY REGULATORY AGENCY. IF TRAFFIC CONTROL IS NECESSARY, A TRAFFIC CONTROL PLAN SHOULD BE SUBMITTED TO REGULATORY AGENCY ENGINEERING DEPARTMENT FOR APPROVAL PRIOR TO ANY WORK BEING STARTED.

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

13) THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR REGULATORY AGENCY.

14) 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.

15) THE CONTRACTOR AGREES THAT:

A. THEY SHALL BE RESPONSIBLE TO CLEAN THE JOB SITE AT THE END OF EACHPHASE 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.

16) THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

17) DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTOR'S EXPENSE, TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH REGULATORY AGENCY COMPREHENSIVE PLAN.

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

19) 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 OWNER; ALL RE-TESTING AND/OR RE- INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

20) 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.

21) 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 OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

22) THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOM- MODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR.

PRIOR TO COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER, 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 THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

23) WORK IN EASEMENT AND/OR RIGHT-OF-WAY IS SUBJECT TO THE APPROVAL AND ACCEPTANCE OF THE REGULATORY AGENCY RESPONSIBLE FOR OPERATION AND/OR MAINTENANCE OF SAID EASEMENT AND/OR RIGHT-OF-WAY.

CLEARING AND GRADING NOTES:

1) CONTRACTOR SHALL PERFORM EARTHWORK IN ACCORDANCE WITH REGULATORY AGENCY STANDARD SPECIFICATIONS AND DIVISION 2 OF THE AMERICAN PUBLIC WORKS ASSOCIATION STANDARD SPECIFICATIONS.

2) IF THE PROJECT REQUIRES ANY IMPORT OR EXPORT TO ACHIEVE A BALANCED SITE, A SEPARATE UNIT PRICE PER CUBIC YARD SHALL BE INCLUDED IN THE BID FOR SAID IMPORT OR EXPORT. ANY EXPORT MATERIAL SHALL BE STOCKPILED OR REMOVED FROM THE PROJECT SITE AS DIRECTED BY THE OWNER AND/OR ENGINEER.

UNDERGROUND UTILITIES:

1) THE INFORMATION SHOWN ON THE PLANS WITH REGARD TO THE EXISTING UTILITIES AND/OR IMPROVEMENTS, WAS DERIVED FROM FIELD INVESTIGATIONS AND/OR RECORD INFORMATION. THE ENGINEER DOES NOT GUARANTEE THESE LOCATIONS TO BE EITHER TRUE OR EXACT. PRIOR TO CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY ALL EXISTING IMPROVEMENTS AND TO EXPOSE ALL EXISTING UNDERGROUND UTILITIES RELATED TO THE PROJECT, INCLUDING BUT NOT LIMITED TO, SEWER, STORM DRAIN, WATER, IRRIGATION, GAS, ELECTRICAL, ETC. AND SHALL NOTIFY THE ENGINEER IN WRITING FORTY-EIGHT (48) HOURS IN ADVANCE OF EXPOSING THE UTILITIES, SO THAT THE EXACT LOCATION AND ELEVATION CAN BE VERIFIED AND DOCUMENTED. THE COST ASSOCIATED TO PERFORM THIS WORK SHALL BE INCLUDED IN EITHER THE LUMP SUM CLEARING COST OR IN THE VARIOUS ITEMS OF WORK. IF LOCATION AND/OR ELEVATION DIFFERS FROM THAT SHOWN ON THE DESIGN PLANS, PROVISIONS TO ACCOMMODATE NEW LOCATION/ELEVATION MUST BE MADE PRIOR TO CONSTRUCTION.

2) PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES OF UTAH BY DIALING 811 OR 1-800-662-4111 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTORS SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES CALL. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.

3) THE CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4' OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH INDUSTRIAL COMMISSION OF UTAH SAFETY ORDERS FOR EXCAVATIONS AND TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.

4) PRIOR TO OPENING AN EXCAVATION, EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E. SEWER, WATER, FUEL, ELECTRIC LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH AN INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST 48 HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.

THE CONTRACTOR WILL VERIFY DEPTHS OF ALL UTILITIES IN THE FIELD BY POT HOLING A MINIMUM OF 300 FEET AHEAD OF PIPELINE CONSTRUCTION TO AVOID CONFLICTS WITH DESIGNED PIPELINE GRADE AND ALIGNMENT. IF A CONFLICT ARISES RESULTING FROM THE CONTRACTOR NEGLECTING TO POT HOLE UTILITIES THE CONTRACTOR WILL BE REQUIRED TO RESOLVE THE CONFLICT WITHOUT ADDITIONAL COST OR CLAIM TO THE OWNER.

5) IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSTALL PIPE OF ADEQUATE CLASSIFICATION WITH SUFFICIENT BEDDING TO MEET ALL REQUIREMENTS AND RECOMMENDATIONS OF THE REGULATORY AGENCY FOR H-20 LOAD REQUIREMENTS.

6) SANITARY SEWER AND WATER SYSTEM CONSTRUCTION TO BE INSTALLED PER THE REQUIREMENTS OF THE REGULATORY AGENCY.
A. ALL SANITARY SEWER CONSTRUCTION SHALL COMPLY WITH THE REGULATORY AGENCY STANDARDS.
B. ALL WATER SERVICE LINES SHALL BE CONSTRUCTED ACCORDING TO REGULATORY AGENCY STANDARDS.
C. ALL WATERLINE BENDS, ELBOWS, TEES, AND CROSSES SHALL HAVE THRUST BLOCKS PLACED ACCORDING TO REGULATORY AGENCY STANDARDS.
D. ALL WATERLINE LOOPS SHALL BE CONSTRUCTED ACCORDING TO REGULATORY AGENCY STANDARDS.
E. CONTRACTOR TO VERIFY ALL PIPE LENGTHS. PIPE LENGTHS SHOWN ARE MEASURED FROM EDGE OF MH TO EDGE OF MH. NO ADJUSTMENT WAS MADE FOR SLOPE.

7) THE CONTRACTOR SHALL NOTIFY INFINITY CONSULTANTS, INC. IN WRITING AT LEAST 48 HOURS PRIOR TO BACKFILLING OF ANY PIPE WHICH STUBS TO A FUTURE PHASE OF CONSTRUCTION FOR INVERT VERIFICATION. TOLERANCE SHALL BE IN ACCORDANCE WITH THE REGULATORY AGENCY STANDARD SPECIFICATIONS.

8) ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.

9) THE CONTRACTOR IS RESPONSIBLE FOR ALL STREET LIGHT TRENCHING.

SURFACE IMPROVEMENTS:
1) ALL MANHOLE RIMS, LAMPHOLES, VALVES AND MONUMENT BOXES, ETC. SHALL BE ADJUSTED TO FINISHED GRADE & COLLARED AFTER STREET PAVING, UNLESS OTHERWISE NOTED. COST FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICES FOR SAID FACILITIES.

2) PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON PLANS. REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INCLUDED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR SUCH WORK.

3) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO TIE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.

4) STRIPING AND PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH REGULATORY AGENCY STANDARDS.

ROADWAY MATERIALS:
ROADWAY MATERIALS SPECIFICATIONS AND CONSTRUCTION REQUIREMENTS SHALL BE AS OUTLINED BY REGULATORY AGENCY STANDARDS AND THESE PLANS.

SEWER IMPROVEMENT COMPLIANCE:
1) ALL CONSTRUCTION SHALL COMPLY WITH THE REGULATORY AGENCY'S DESIGN STANDARDS AND SPECIFICATIONS.

2) CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND INVERT ELEVATIONS OF EXISTING MANHOLES AND OTHER UTILITIES BEFORE STAKING OR CONSTRUCTING ANY NEW SEWER LINES.

SWPPP NOTES
1) SEE EROSION CONTROL SHEET FOR DETAILS AND BMP's.

2) CONTRACTOR IS REQUIRED TO OBTAIN AN NOI FROM THE STATE OF UTAH FOR SWPPP PURPOSES.

3) CONTRACTOR IS REQUIRED TO SCHEDULE AND ATTEND A PRE-CONSTRUCTION MEETING WITH REGULATORY AGENCY PRIOR TO COMMENCING ANY SITE WORK FOR THIS PROJECT.

GENERAL DEMOLITION NOTES:
1. Demolition and site clearing for this contract are to include all areas shown within demolition limits or by note.
2. Refer to site improvement plans for more details on limits of removal.
3. Demolish existing buildings and clear from site. (Including removal of all footings and foundations.)
4. All curbs, gutters, walks, slabs, walls, fences, flatwork, asphalt, waterlines and meters, gas lines, sewer lines, light poles, buried cables, storm drain piping and structures to be cleared from site unless otherwise shown.
5. All utilities, sewer, water, gas, telephone and electrical services to be disconnected and capped according to city, county and utility company requirements, unless otherwise shown.
6. Basements and other excavated areas to be backfilled with clean granular material compacted to 95% of maximum lab density as determined by ASTM D 1557-78. (Test results to be given to owner)
7. Clear and grub trees, shrubs, and vegetation within construction limits, disposal to be off-site except where noted otherwise.
8. DO NOT interrupt any services or disrupt the operation of any businesses shown outside the demolition limits.
9. If ASBESTOS is found in existing structures, the Asbestos must be removed in a legal manner by a contractor licensed to handle asbestos materials. (Not a part of contract)
10. Remove debris, rubbish, and other materials resulting from the demolition and site clearing operations from the site and dispose of in a legal manner.
11. The location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies and, where possible, measurements taken in the field. The information is not to be relied upon as being exact or complete. Contractor shall contact authorities having jurisdiction for field locations. Contractor shall be responsible for protection of in place and relocated utilities during construction.
12. Stockpiles shall be graded to maintain slopes not greater than 3 horizontal to 1 vertical. Provide erosion control as needed to prevent sediment transport to adjacent drainage ways.
13. Contractor shall be responsible for disposal of all waste material. Disposal shall be at an approved site for such material. Burning onsite is not permitted.
14. Contractor shall verify with city any street removal, curb cuts, and any restoration required for utility line removal.
15. Install traffic warning devices as needed in accordance with local standards.
16. Contractor shall obtain all permits necessary for demolition from City, County, State or Federal Agencies as required.

GENERAL SITE NOTES:
1. Stalls designated as accessible will require a painted accessible symbol and sign.
2. Fire lane markings and signs to be installed as directed by the Fire Marshall. Road widths equal to or less than 32 feet shall require red curbside painting and "No Parking" signs that are approved positioned along the fire apparatus access routes.
3. Aisle markings, directional arrows and stop bars will be painted at each driveway as shown on the plans.
4. Building sidewalks, ramps, and bollards are building contractor responsible items. See architectural plans.
5. All dimensions are to back of curb unless otherwise noted.
6. Fire hydrants and access roads shall be installed prior to construction of any buildings. All fire hydrants shall be placed with the 4 1/2" connection facing the point of access for Fire Department Apparatus.
7. All Street lighting installed within the project will be installed by the developer(s) and will be owned and maintained by the property owner(s).

GENERAL GRADING NOTES:
1. Survey Provided By Owner. Civil Engineer not responsibility for inaccuracies in survey information. Contractor to verify in field data and to inform Civil Engineer of any discrepancies.
2. All work shall be in accordance with the City Public Works Standard.
3. Cut slopes shall be no steeper than 2 horizontal to 1 vertical.
4. Fill slopes shall be no steeper than 2 horizontal to 1 vertical.
5. Fills shall be compacted per the recommendations of the geotechnical report prepared for the project and shall be certified by the geotechnical engineer.
6. Areas to receive fill shall be properly prepared and approved by the City inspector and geotechnical Engineer prior to placing fill.
7. Fills shall be benched into competent material as per specifications and geotechnical report.
8. All trench backfill shall be tested and certified by the site geotechnical engineer per the grading code.
9. A geotechnical engineer shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
10. The final compaction report and certification from the geotechnical engineer shall contain the type of field testing performed. Each test shall be identified with the method of obtaining the in-place density, whether sand cone or drive ring and shall be so noted for each test. Sufficient maximum density determinations shall be performed to verify the accuracy of the maximum density curves used by the field technician.
11. Dust shall be controlled by watering.
12. The location and protection of all utilities is the responsibility of the permitee.
13. Approved protective measures and temporary drainage provisions must be used to protect adjoining properties during the grading project.
14. All public roadways must be cleared daily of all dirt, mud and debris deposited on them as a result of the grading operation. Cleaning is to be done to the satisfaction of the city engineer.
15. The site shall be cleared and grubbed of all vegetation and deleterious matter prior to grading.
16. The contractor shall provide shoring in accordance with OSHA requirements for trench walls.
17. Aggregate base shall be compacted per the geotechnical report prepared for the project.
18. Elevations shown on this plan are finish grades. Rough grades are the subgrades of the improvements shown hereon.
19. As part of the construction documents, owner has provided contractor with a topographic survey performed by manual or aerial means. Such survey was prepared for project design purposes and is provided to the contractor as a courtesy. It is expressly understood that such survey may not accurately reflect existing topographic conditions.
20. Erosion Control: Protect all inlet boxes, catch basins, etc. with straw bales or other approved method to strain the storm water during construction. Protect surrounding properties and streets from site runoff with sandbags and earth berms.

GENERAL UTILITY NOTES:
1. Coordinate all utility connections to building with plumbing plans and building contractor.
2. Verify depth and location of all existing utilities prior to constructing any new utility lines. Notify Civil Engineer of any discrepancies or conflicts prior to any connections being made.
3. All catch basin and inlet box grates are to be bicycle proof.
4. All inlet boxes located in curb and gutter are to be placed parallel to the curb and gutter and set under the frame and grate. Improperly placed boxes will be removed and replaced at no additional cost to the owner. Precast or cast in place boxes are acceptable.
5. Refer to the site electrical plan for details and locations of electrical lines, transformers and light poles.
6. Gas lines, telephone lines, and cable TV lines are not a part of these plans unless otherwise noted.
7. Water meters are to be installed per city standards and specifications. It will be the contractor's responsibility to install all items required.
8. Water lines, valves, fire hydrants, fittings etc. are to be constructed as shown. Contractor is responsible to construct any vertical adjustments necessary to clear sewer, storm drain or other utilities as necessary including valve boxes and hydrant spools to proper grade.
9. Field verify all existing and/or proposed Roof Drain/Roof Drain down spout connections to Storm Water System with Civil, Plumbing & Architectural plans. Notify Engineer of any discrepancies.
10. All gravity flow utility lines shall be installed prior to any pressurized utilities unless written permission is obtained from the engineer of record before construction begins.
11. Fire hydrants and access roads shall be installed prior to construction of any buildings. All hydrants shall be placed with the 4 1/2" connection facing the point of access for Fire Department Apparatus.
12. Prior to the construction of any buildings, a fire flow test of the new hydrants shall be conducted to verify the actual fire flow available for this project. The Fire Prevention Division of this department shall witness this test and shall be notified a minimum of 48 hours prior to the test.
13. As a Private Development, the private fire hydrants shall be annually maintained and a 5-year flow test shall be performed in accordance with NFPA 24 and 25. All records shall be provided and submitted through The Compliance Engine found at http://www:thecomplianceengine.com.

UTILITY PIPING MATERIALS:
All piping to be installed per manufacturers recommendations. Refer to project specifications for more detailed information regarding materials, installation, etc.

CULINARY SERVICE LATERALS
MAIN TO METER
- Type 'K' copper or HDPE CTS-OD SDR-9 poly tubing.

METER TO BUILDING
- 3/4" to 2" diameter pipe - CTS Poly, Soft Temper
- Over 2" diameter pipe - AWWA C-900 Class 150 pipe

WATER MAIN LINES AND FIRE LINES
1. ALL WATER MAIN TO BE IPS HDPE DR 9.

SANITARY SEWER LINES
1. ALL SEWER PIPING TO BE HDPE OR PER PLAN.

STORM DRAIN LINES
1. ALL STORM DRAIN PIPING HDPE OR PER PLAN.

NATURAL GAS SERVICE LATERALS (QUESTAR)
1. PLASTIC PIPING MATERIAL: Plastic polyethylene pipe materials and compression couplings must be approved for natural gas applications and must be installed underground. All plastic pipe and fittings must conform to ASTM D2513 (60 psi and above high density pipe approved 3408).

2. Plastic pipe must be joined by individuals qualified in the heat fusion method of connecting pipe and fittings or approved mechanical fittings. A minimum number 18 insulated yellow copper tracer wire shall be installed with underground nonmetallic gas piping and shall terminate above grade at each end. Tracer wire shall not come in contact with plastic piping.

3. Risers and prefabricated risers inserted with plastic pipe shall conform to ASTM D2513, shall be metallic, have a space of 10 inches from the bottom of the service valve and grade, and shall be wrapped or coated to a point at least 6 inches above grade or protected in an approved manner. When a riser connects underground to plastic pipe, the underground horizontal metallic portion of the riser shall extend at least 12 inches before connecting to the plastic pipe by means of an approved transition fitting, adapter or heat fusion.

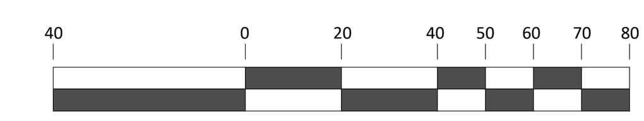
4. Plastic pipe used underground for customer fuel lines must be approved polyethylene material and be buried a minimum of 12 inches. It shall not be used inside buildings or above ground. PVC (Polyvinyl Chloride) is not approved for piping systems in Questar Gas's service area. Individual gas lines (metallic or plastic) to single outside appliance (outside lights, grilles, etc.) shall be installed a minimum of 8 inches below grade, provided such installation is approved and installed in locations not susceptible to physical damage.

ABBREVIATIONS:

AC	ASPHALTIC CONCRETE	MAX	MAXIMUM
APPR.	APPROXIMATELY	MH	MANHOLE
BW	BOTTOM OF WALL	MIN	MINIMUM
CB	CATCH BASIN	NTS	NOT TO SCALE
CL OR ℄	CENTERLINE	OH	OVERHEAD
CONC	CONCRETE	PC	POINT OF CURVATURE
DET	DETAIL	PL	PROPERTY LINE
DIA	DIAMETER	POC	POINT ON CURVE
DIP	DUCTILE IRON PIPE	PP	POWER POLE
DWG	DRAWING	PVC	POLYVINYL CHLORIDE
EA	EACH	PU&DE	PUBLIC UTILITY / DRAINAGE EASEMENT
EG	EXISTING GRADE	PUE	PUBLIC UTILITY EASEMENT
EP	EDGE OF PAVEMENT	RCP	REINFORCED CONCRETE PIPE
ELEV	ELEVATION	R.O.W.	RIGHT-OF-WAY
ESMT	EASEMENT	SS	SANITARY SEWER
EXIST.	EXISTING	SD	STORM DRAIN
FF	FINISH FLOOR	S.F.	SQUARE FEET
FH	FIRE HYDRANT	SHT	SHEET
FL	FLOWLINE	STD	STANDARD
FT	FEET	T	THICKNESS
GB	GRADE BREAK	TBC	TOP BACK OF CURB
HP	HIGH POINT	TG	TOP OF GRATE
HORIZ	HORIZONTAL	TOA	TOP OF ASPHALT
HYD	HYDRANT	TOC	TOP OF CONCRETE
ID	INSIDE DIAMETER	TOS	TOP OF SLAB
I.E.	INVERT ELEVATION	TW	TOP OF WALL
IRR	IRRIGATION	TYP	TYPICAL
	LENGTH	VAR	VARIES
L.F.	LINEAR FEET	VERT	VERTICAL
LP	LOW POINT	WS	WATER SURFACE
ME	MATCH EXISTING		

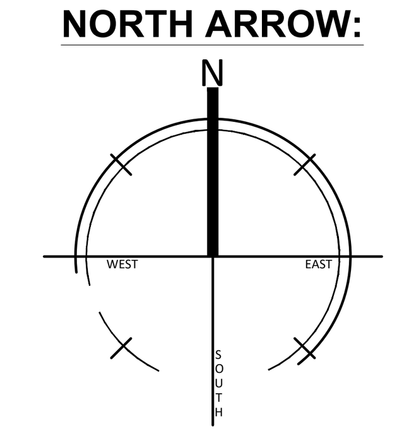
GRAPHIC SCALE:

Scale: 1" = 40'



Graphic Scale

NORTH ARROW:



Call before you Dig
Avoid cutting underground utility lines. it's costly.
Call 811
1-800-662-4111

Legend

(Note: All Items may not appear on drawing)

San. Sewer Manhole
Water Manhole
Storm Drain Manhole Cleanout
Electrical Manhole
Catch Basins
Exist. Fire Hydrant
Fire Hydrant
Exist. Water Valve
Water Valve
Power pole
Power pole w/guy
Light Pole
Fence

Metal Pipe Concrete Pipe	CMP
Reinforced Concrete Pipe	RCP
Ductile Iron Pipe	DIP
Top of Asphalt	TA
Edge of Asphalt	EA
Centerline	CL
Existing Grade	EG
Flowline	FL
Finish Floor	FF
Finish Grade	FG
Top of Curb	TC
Top of Wall	TWL
Top of Walk	TW
Top of Concrete	TCN
Natural Ground	NG
Match Existing	ME
Fire Department Connection	FDC
Ridge Line	R

Direction of Flow

Existing Asphalt
New Asphalt
Heavy Duty Asphalt
Existing Concrete
New Concrete
Spill Curb & Gutter

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SUBMITTAL SET

DATE: 07/08/2025
PROJECT NO. 24.028

REVISION	DATE
1	
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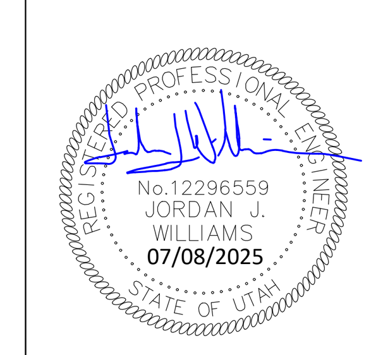
GENERAL NOTES
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310



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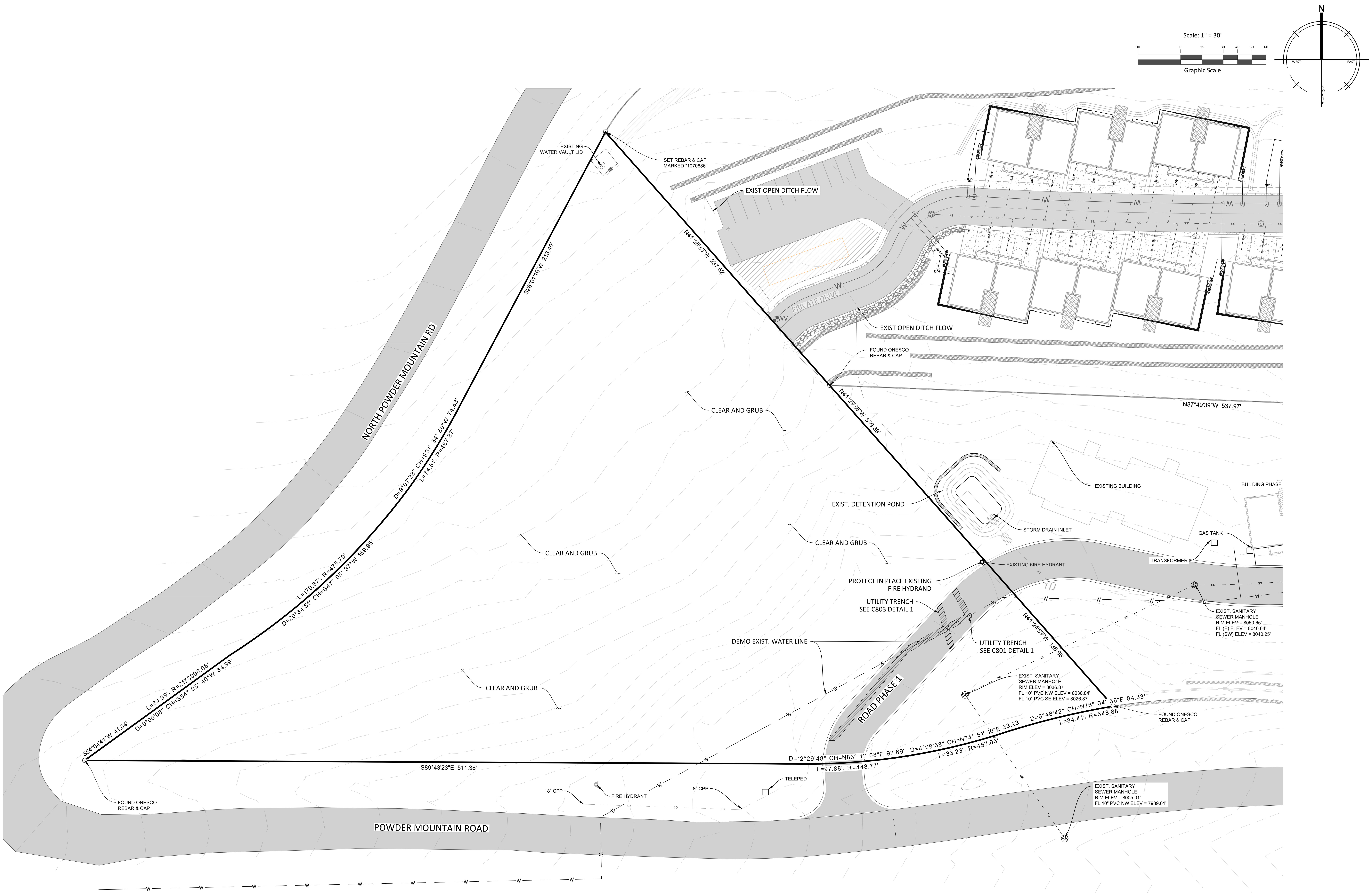
DRAWN BY: DN



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DEMOLITION PLAN
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE: 1"=30'

C100

DRAWN BY: DN

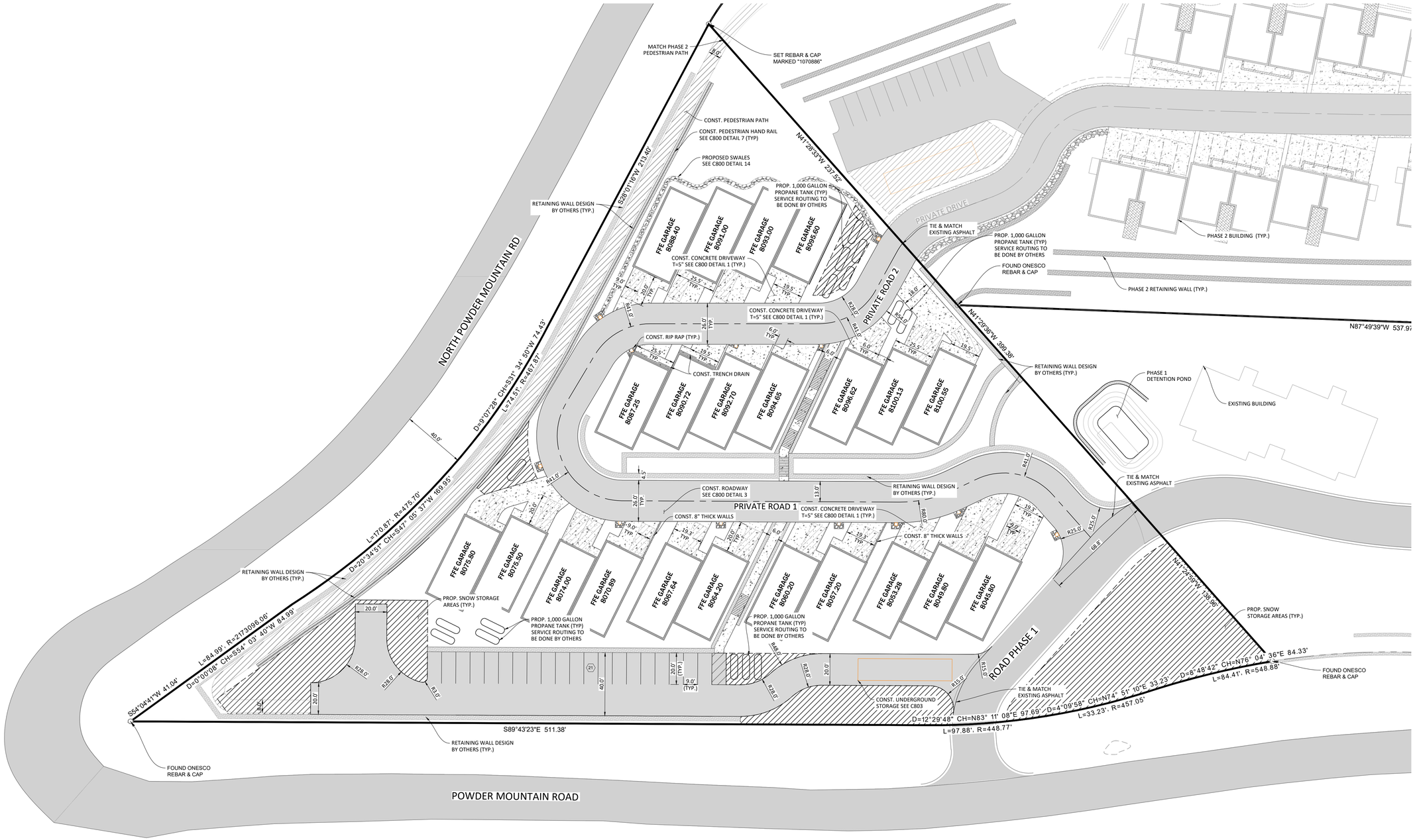
Scale: 1" = 30'

Graphic Scale

30 0 15 30 40 50 60

N

WEST EAST SOUTH



NOTES:
1. THE POSTED SPEED LIMIT OF NORTH POWDER MOUNTAIN ROAD IS 40 MPH. PER AASHOT ROADSIDE CLEARZONE REQUIREMENTS, THE RETAINING WALL MUST BE AT A MINIMUM OF 18 FEET FROM THE EDGE OF THE ROAD. THIS DESIGN MEETS THESE REQUIREMENTS.

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SITE PLAN
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

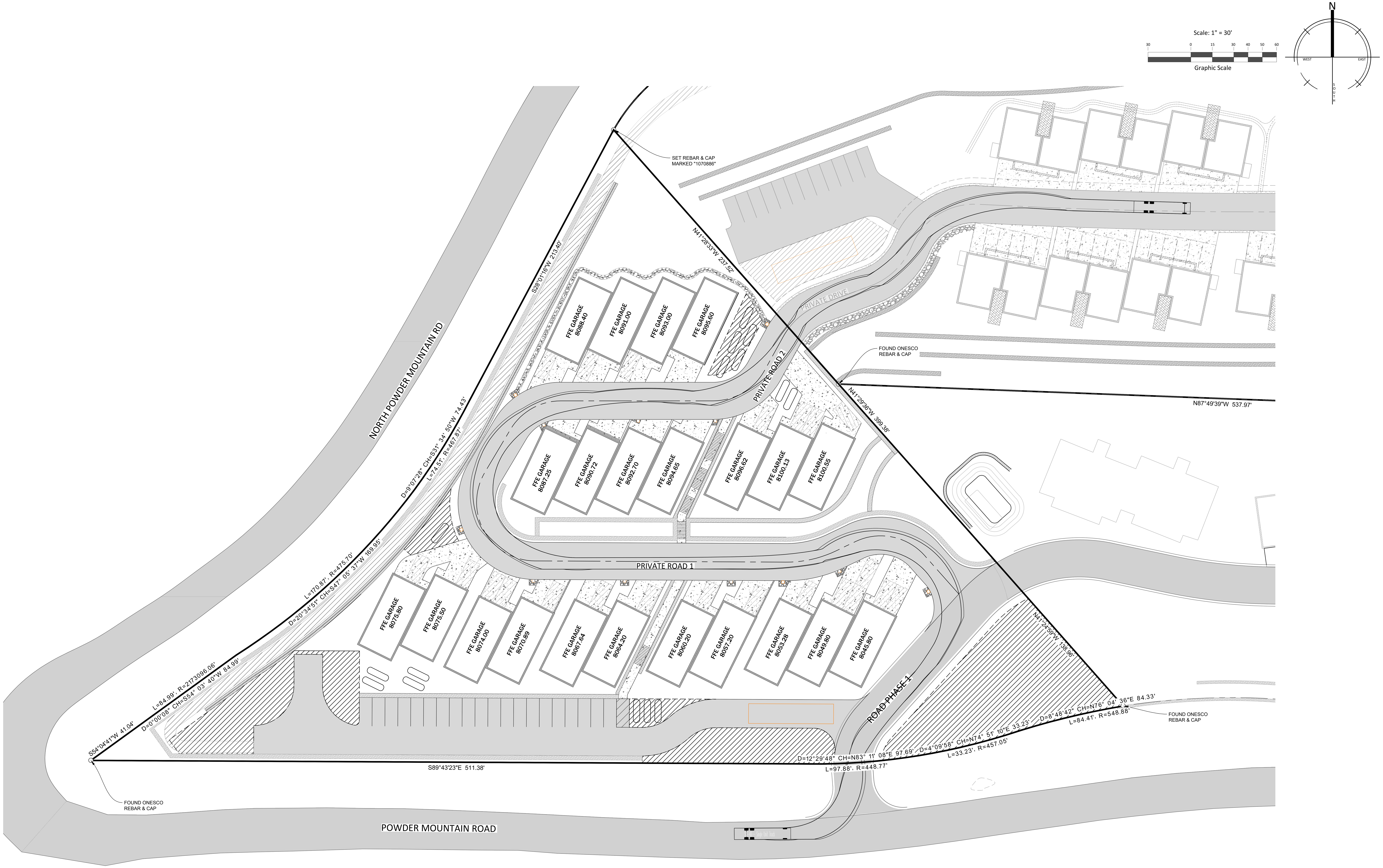
PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE: 1"=30'

C200

DRAWN BY: DN

05/16



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FIRE TRUCK TURNING RADIUS EXHIBIT
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE: 1"=30'

C201

DRAWN BY: DN

Scale: 1" = 20'

20 0 10 20 30 40

Graphic Scale

N

WEST EAST

S

STORM DRAIN CALCULATIONS

PRE-DEVELOPMENT RUNOFF - RATIONAL METHOD

Q=CIA

C = 0.15 FOR NATURAL LANDSCAPE
I (100-YR) = 6.57 IN/HR
A = 3.3473 ACRES

Q = 0.15 * 6.57 * 3.3473
Q = 3.30 CFS

POST DEVELOPMENT - RATIONAL METHOD

ALLOWABLE RELEASE = 3.30 CFS

Q = CIA

C = 0.597
I (100-YR) = 6.57 IN/HR
A = 3.3473 ACRES

Q = 0.597 * 6.57 * 3.3473
Q = 13.13 CFS

RUNOFF COEFFICIENT

TOTAL AREA = 3.3473 ACRES
LANDSCAPED AREA = 1.350 ACRES (C = 0.15)
HARDSCAPED AREA = 1.997 ACRES (C = 0.90)

C = (1.350 * 0.15 + 1.997 * 0.90) / 3.3473
C = 0.597

TIME OF CONCENTRATION

TC = [1.8 * (1.1 -K) * SQRT(L)] / CBRT(S)

K-LANDSCAPE = 0.35
K-HARDSCAPE = 0.91
L-LANDSCAPE = 215 FT
L-HARDSCAPE = 28 FT
S-LANDSCAPE = 3%
S-HARDSCAPE = 5%

TC-LANDSCAPE = [1.8 * (1.1 - 0.35) * SQRT(215)] / CBRT(3) = 13.73 MIN
TC-HARDSCAPE = [1.8 * (1.1 - 0.91) * SQRT(28)] / CBRT(5) = 1.06 MIN

TC = 14.78 MIN

CRITICAL STORM DURATION IS 25 MINUTES
VOLUME AT CRITICAL STORM DURATION WITH 3.30 CFS RELEASE IS 7,273 CF

REQUIRED VOLUME = 7,273 CF
PROVIDED VOLUME = 7,438 CF

NOTES:
1. RIM ELEVATIONS FOR CATCH BASINS ARE BASED ON THE CENTER OF THE CATCH BASIN. CATCH BASIN RIMS ARE TO MATCH SLOPE OF ROAD/FINISHED GRADE.
2. CATCH BASINS IN ASPHALT ARE TO BE SURROUNDED BY 1' OF CONCRETE
3. CATCH BASINS OUTSIDE OF ASPHALT ARE TO BE SURROUNDED BY RIP RAP. T= 16", D50 = 6"
4. THE POSTED SPEED LIMIT OF NORTH POWDER MOUNTAIN ROAD IS 40 MPH. PER AASHOT ROADSIDE CLEARZONE REQUIREMENTS, THE RETAINING WALL MUST BE AT A MINIMUM OF 18 FEET FROM THE EDGE OF THE ROAD. THIS DESIGN MEETS THESE REQUIREMENTS.

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GRADING PLAN
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

PROFESSIONAL ENGINEER No.12296559 JORDAN J. WILLIAMS 07/08/2025 STATE OF UTAH

SCALE: 1"=20'

C300

DRAWN BY: DN

07/16

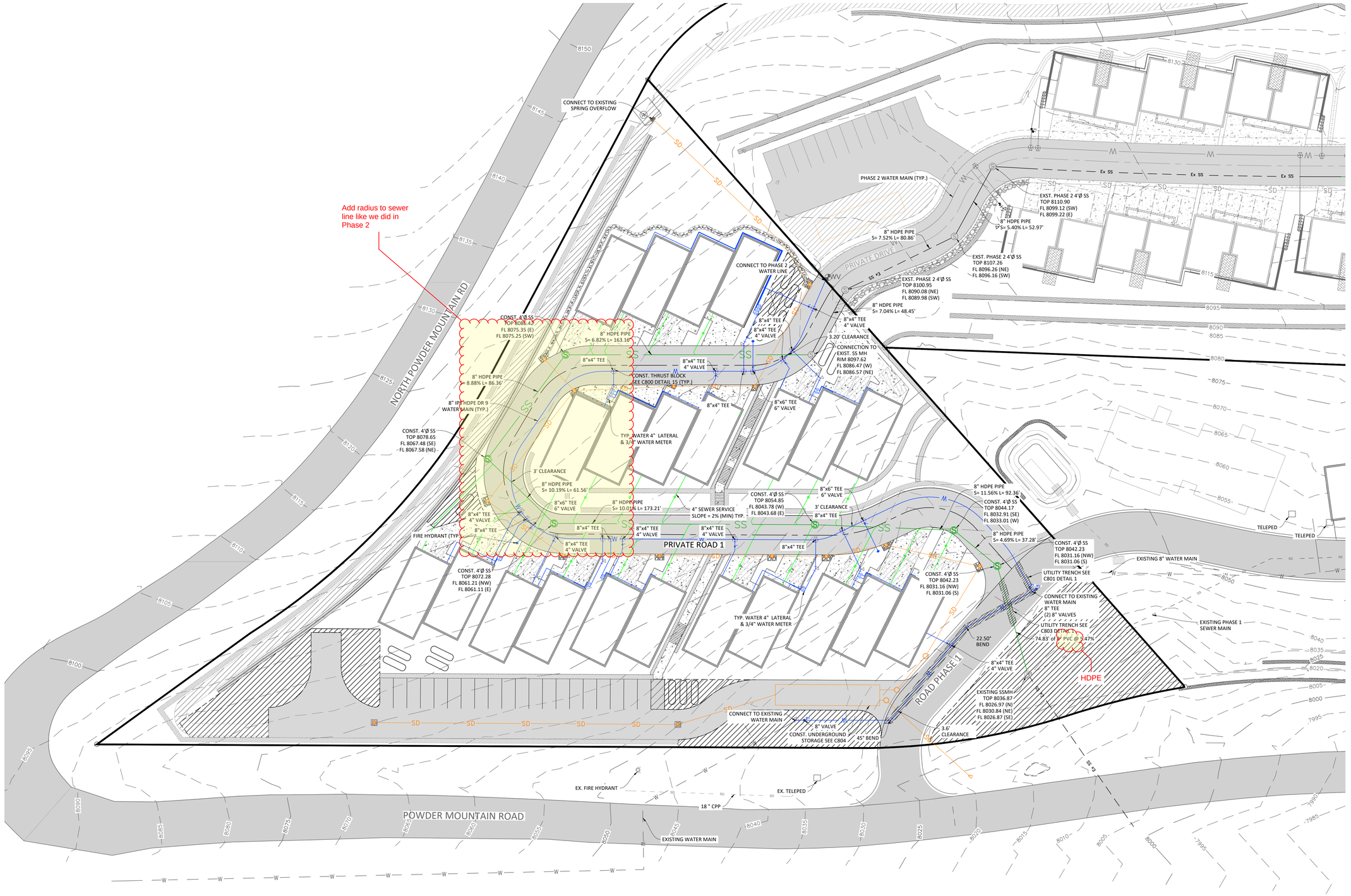
Scale: 1" = 30'

30 0 15 30 40 50 60

Graphic Scale

N

WEST EAST SOUTH



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UTILITY PLAN
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

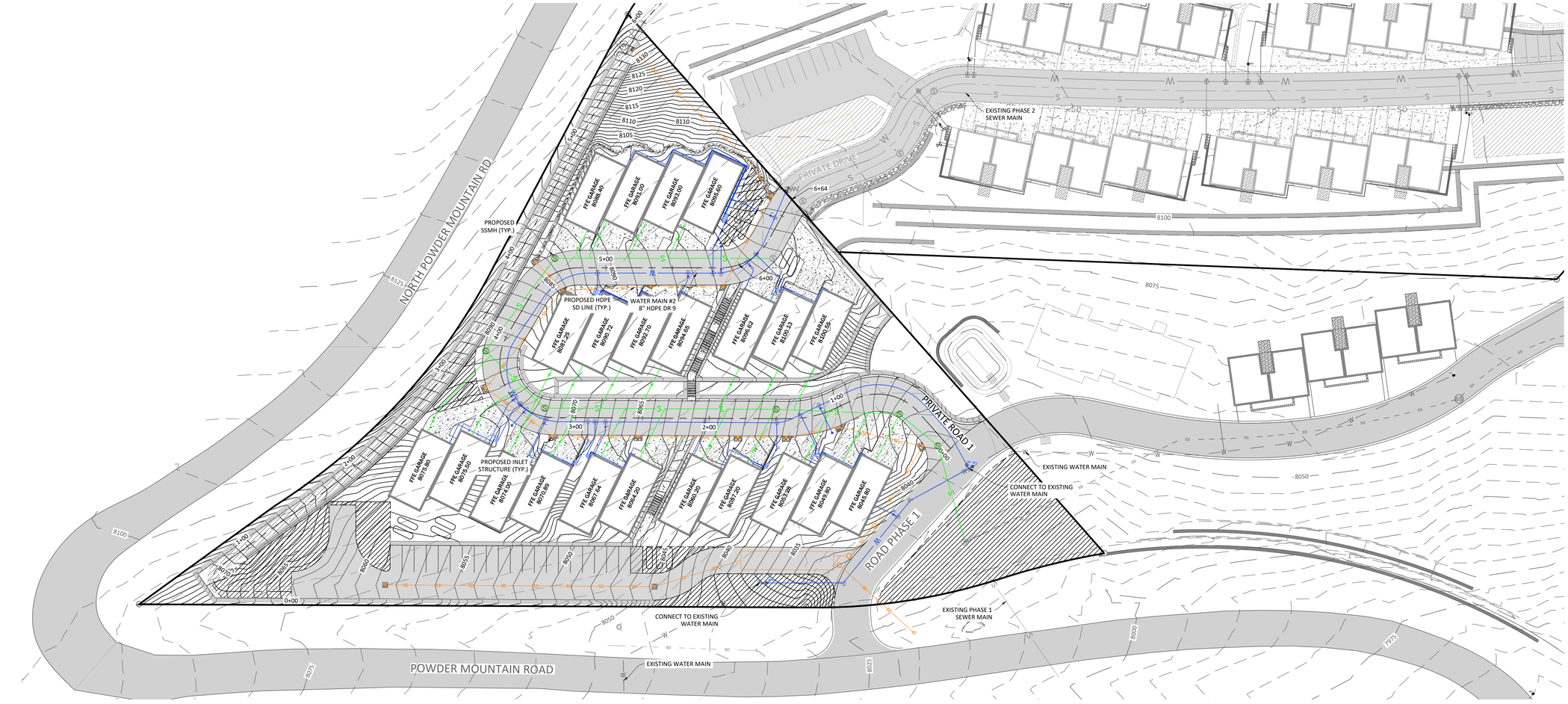
PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE: 1"=30'

C400

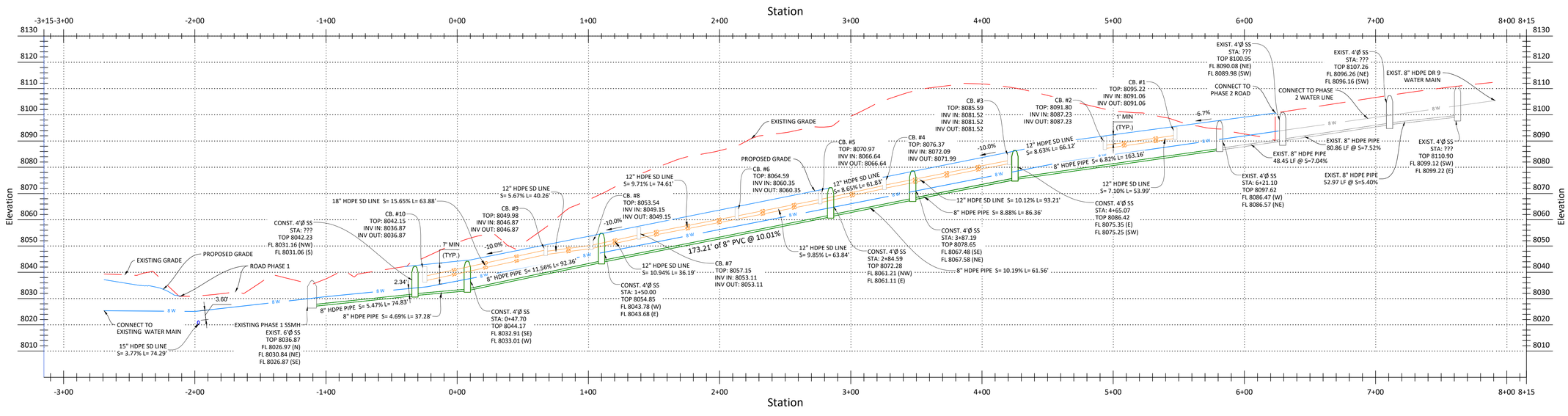
DRAWN BY: DN

08/16



PRIVATE ROAD 1 PLAN

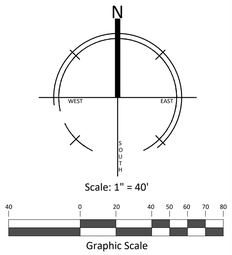
H : 1'= 40"



PRIVATE ROAD PROFILE

V : 1'=20"

H : 1'= 40"



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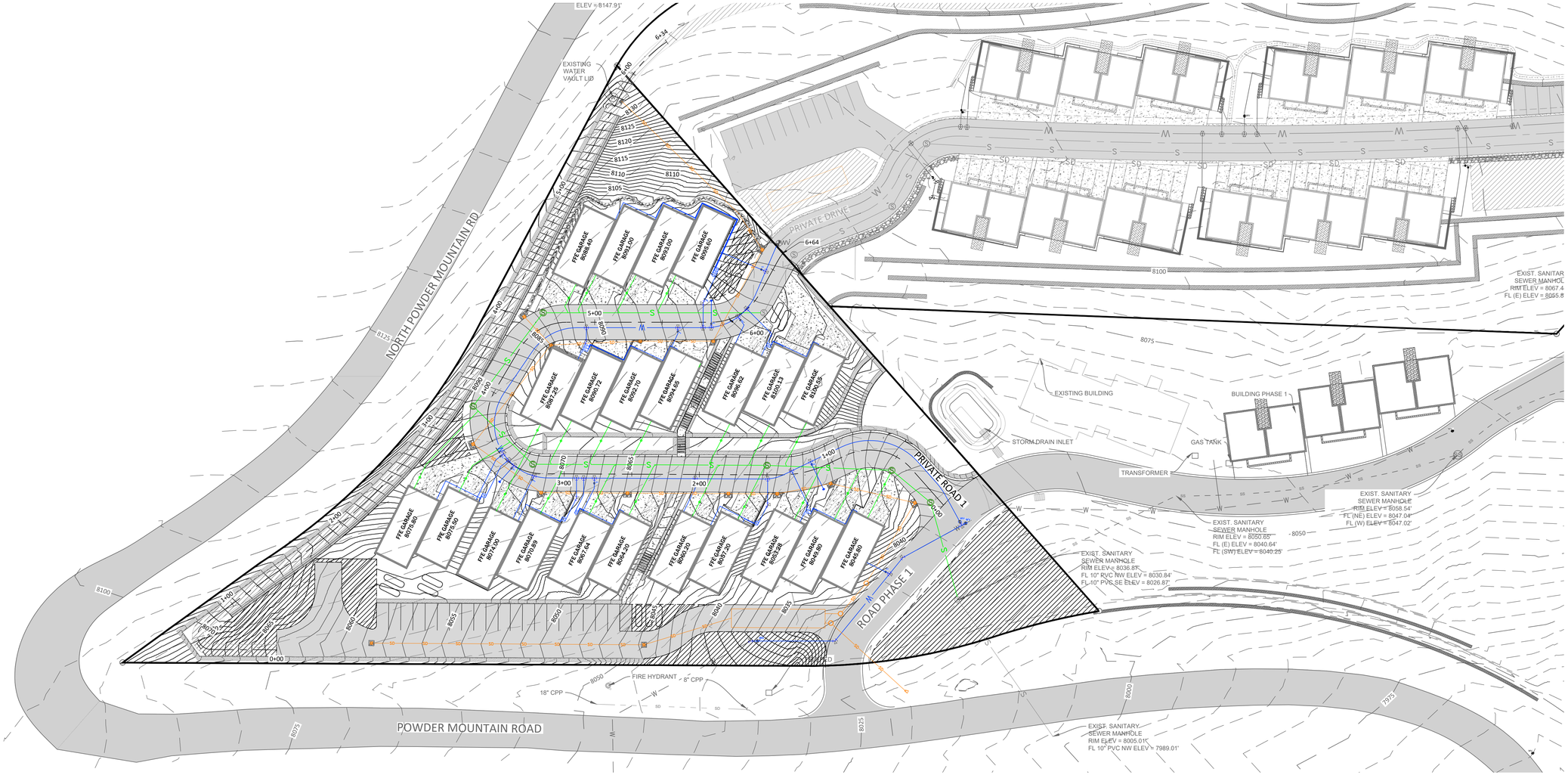
PLAN & PROFILE
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

SCALE: 1"=40'

C500

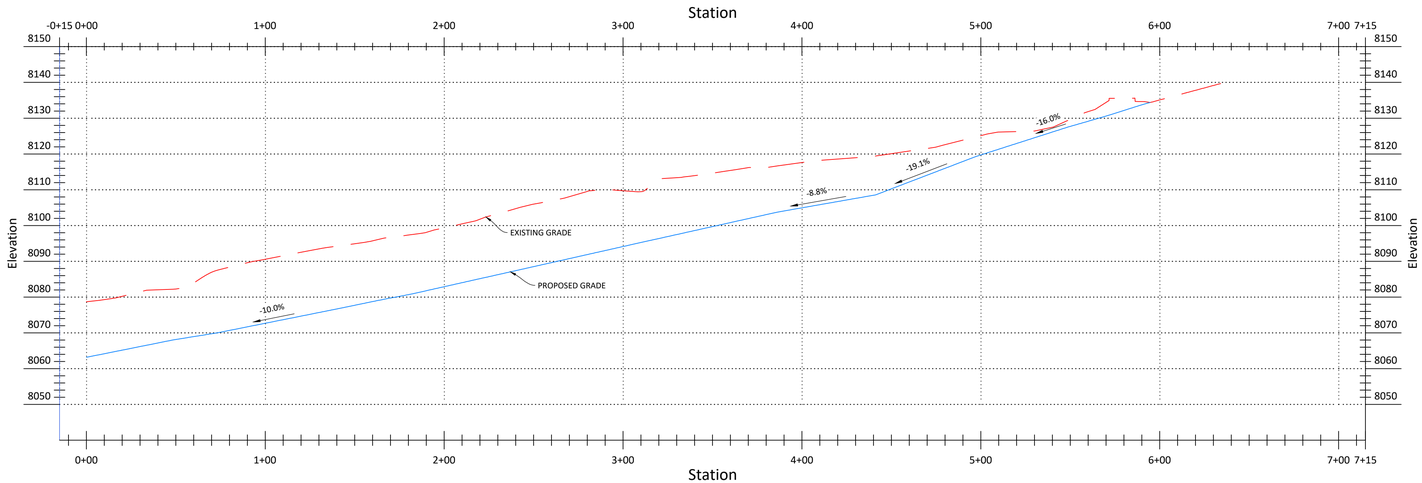
DRAWN BY: DN

09/16



PEDESTRIAN PATH PLAN

H : 1'= 40"



PEDESTRIAN PATH PROFILE

V : 1'=20"

H : 1'= 40"

N

WEST EAST SOUTH

Scale: 1" = 40'

40 0 20 40 50 60 70 80

Graphic Scale

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PEDESTRIAN PATH PLAN & PROFILE
SUNDOWN TOWNHOMES

APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE: 1"=40'

C501

DRAWN BY: DN

10/16

LEGEND

- SF — SILT FENCE
- FR FR FR — FIBER ROLL MAT
- LOD — LIMITS OF DISTURBANCE
- INLET PROTECTION- WHERE CATCH BASINS AND STORM DRAINS ARE PRESENT ON SITE
- STABILIZED CONSTRUCTION ENTRANCE
- MATERIAL STORAGE AREA
- STOCK PILE AREA

NOTE: SEE LANDSCAPE PLANS FOR HYDROSEED AREAS FOR SITE SLOPE STABILIZATION.

- CONCRETE WASHOUT AREA

EROSION CONTROL KEYNOTES

A	FIBER ROLL MAT
B	SILT FENCE
C	CONCRETE WASH OUT
D	STABILIZED CONSTRUCTION ENTRANCE
E	MATERIAL STORAGE
F	STOCKPILE AREA
G	LIMITS OF DISTURBANCE

Scale: 1" = 20'

20 0 10 20 30 40

Graphic Scale

N

WEST EAST SOUTH

NORTH POWDER MOUNTAIN RD

PRIVATE DRIVE

PRIVATE ROAD 1

PRIVATE ROAD 1

ROAD PHASE 1

FFE GARAGE 8088.40
FFE GARAGE 8091.00
FFE GARAGE 8093.00
FFE GARAGE 8095.60
FFE GARAGE 8087.25
FFE GARAGE 8090.72
FFE GARAGE 8092.70
FFE GARAGE 8094.65
FFE GARAGE 8096.62
FFE GARAGE 8100.13
FFE GARAGE 8100.55
FFE GARAGE 8075.80
FFE GARAGE 8075.50
FFE GARAGE 8074.00
FFE GARAGE 8070.89
FFE GARAGE 8067.64
FFE GARAGE 8064.20
FFE GARAGE 8060.20
FFE GARAGE 8057.20
FFE GARAGE 8053.28
FFE GARAGE 8049.80
FFE GARAGE 8045.80

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EROSION CONTROL PLAN
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

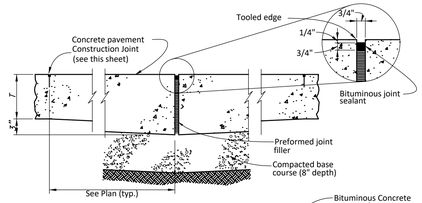
PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE: 1"=20'

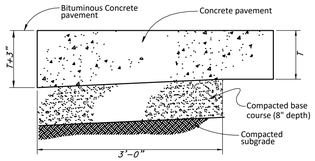
C600

DRAWN BY: DN

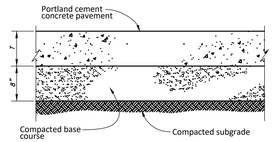
11/16



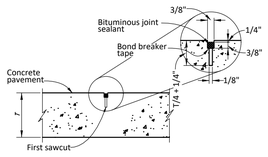
EXPANSION JOINT



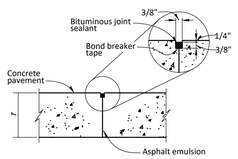
THICKENED EDGE



CONCRETE PAVEMENT SECTION



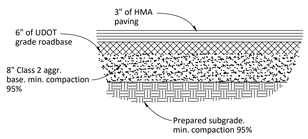
CONTRACTION JOINT



CONSTRUCTION JOINT

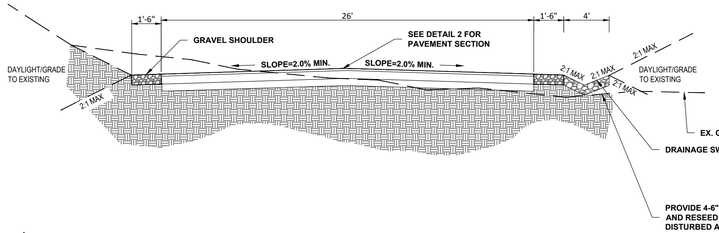
1 Concrete Pavement

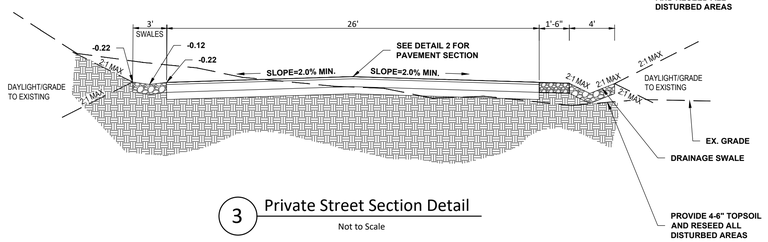
Not to Scale



2 Typical Biuminous Pavement Section

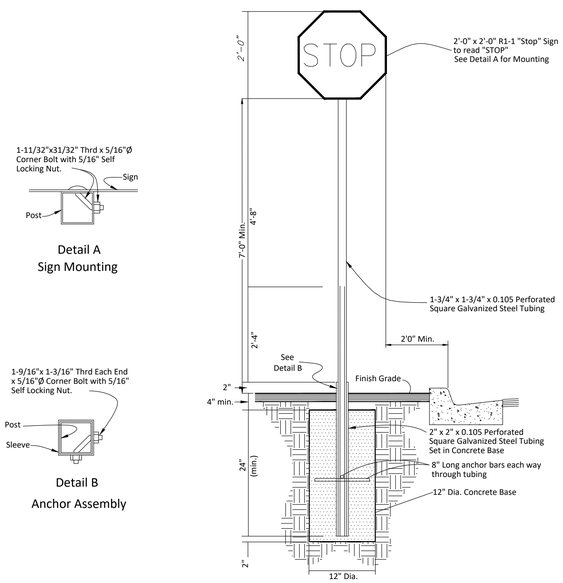
Not to Scale





3 Private Street Section Detail

Not to Scale



4 Stop Sign

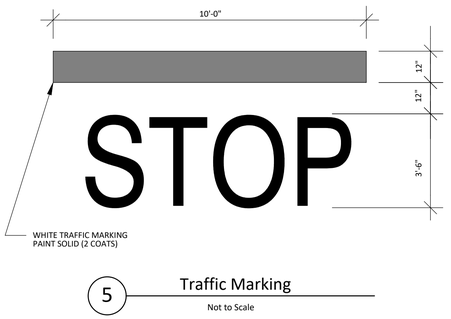
Not to Scale

Detail A

Sign Mounting

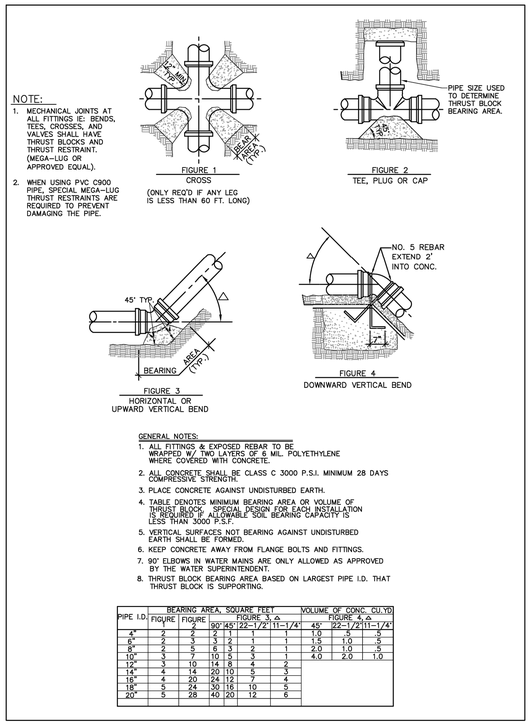
Detail B

Anchor Assembly



5 Traffic Marking

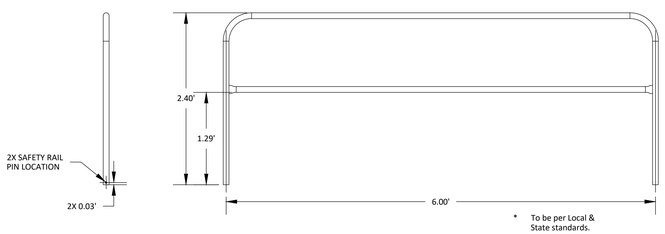
Not to Scale



PIPE I.D.	BEARING AREA, SQUARE FEET						VOLUME OF CONC. CU.YD		
	FIGURE 1			FIGURE 2		FIGURE 3	FIGURE 4		
			90°	45°	22-1/2°	11-1/4°	45°	22-1/2°	11-1/4°
4"	2	2	4	2	1	1	1.0	.5	.5
6"	2	3	5	3	1	1	1.5	1.0	.5
8"	2	5	6	3	2	1	2.0	1.0	.5
10"	3	7	10	5	3	1	4.0	2.0	1.0
12"	3	10	14	8	4	2			
14"	4	14	20	10	5	3			
16"	4	20	24	12	7	4			
18"	5	24	30	16	10	5			
20"	5	28	40	20	12	6			

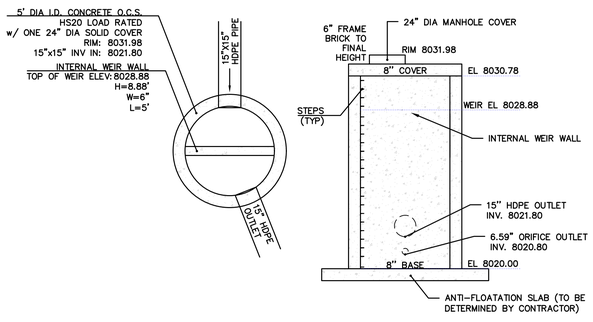
15 Thrust Block

Not to Scale



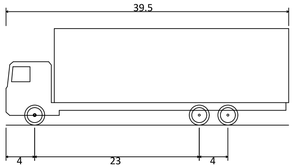
7 Pedestrian Safety Rail

Not to Scale



12 OUTLET STRUCTURE ELEVATIONS - OCS#1

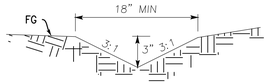
1/4" = 1'



SU-40 - Single Unit Truck	
Overall Length	39.500ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle(Virtual)	31.80°

13 LADDER TRUCK SPECS

Not to Scale

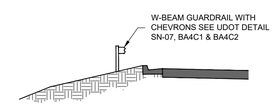


14 SWALE DETAIL

Not to Scale

8 2X2 CONTROL BOX

Not to Scale



NOTES

1. GUARDRAIL REQUIRED ON ALL FILL SLOPES STEEPER THAN 3:1 WHERE THE VERTICAL DROP OF THE SLOPES IS GREATER THAN 8'.

6 Guardrail Detail

Not to Scale

FAWKES
CONSULTANTS INC.

165 W Canyon Crest Rd Ste 260
Alpine, Utah 84004
Gwilliams@fawkesconsultants.com

SUBMITTAL SET

DATE: 07/08/2025
PROJECT NO. 24.028

REVISION	DATE
1	
2	
3	
4	
5	
6	

DETAIL
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

PROFESSIONAL ENGINEER
No.12296559
JORDAN J.
WILLIAMS
07/08/2025
STATE OF UTAH

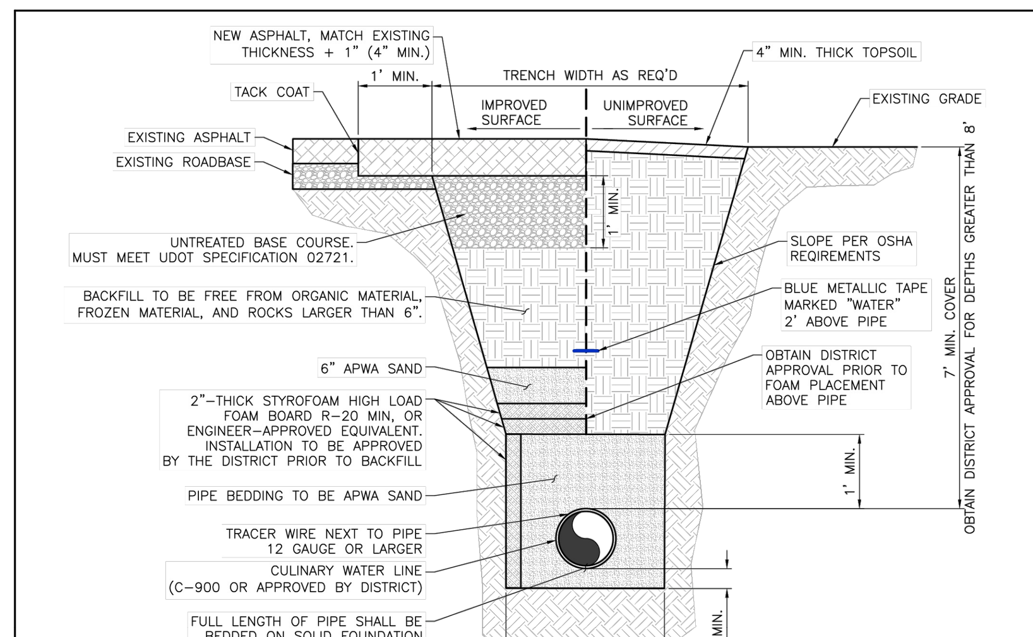
SCALE:

C800

DRAWN BY: DN

12/16

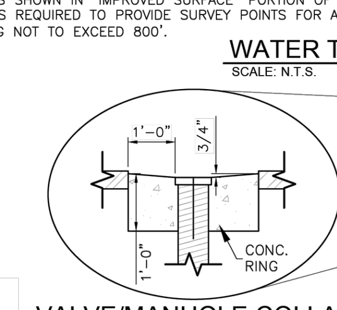
1 WATER MAIN AND TRENCHING



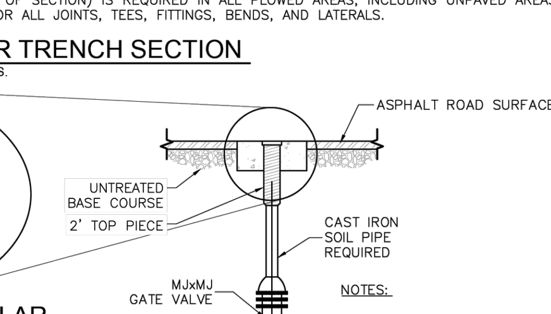
NOTES:

1. EXTEND TRACER WIRE TO METER BOX OF EACH SERVICE LATERAL, PER SHEETS W-2 AND W-4.
2. OPEN ENDS SHALL BE COVERED DURING INSTALLATION PROCESS.
3. THE DISTRICT, AT ITS SOLE DISCRETION MAY REQUIRE BURY DEPTHS OTHER THAN WHAT IS IDENTIFIED ABOVE. BURY DEPTHS ARE A FUNCTION OF ELEVATION, LOCATION, WATER DEMAND, AND PROXIMITY TO OTHER UTILITIES.
4. CONTRACTOR SHALL MEET ALL REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
5. PRIOR TO LAYING PIPE WITHIN 50' OF UTILITIES THAT MAY BE CROSSED OR EXPOSED, AS SHOWN ON THE DRAWINGS OR "BLUE STAKED", CONTRACTOR SHALL LOCATE AND NOTIFY ENGINEER OF ANY POTENTIAL DESIGN CONFLICT.
6. SCREEN BACKFILL MATERIAL TO 4"-MINUS. COMPACT BACKFILL TO 96% OF MAX. DRY DENSITY (UNDER ROADS AND STRUCTURES) OR 85% OF MAX. DRY DENSITY (OTHER LOCATIONS) PER ASTM D-1557. FOLLOW ALL LOCAL COMPACTION REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN PMWSID STANDARDS.
7. MAINTAIN 10' HORIZONTAL SPACING (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) BETWEEN ALL SEWER AND WATER LINES.
8. MAINTAIN 18" VERTICAL SPACING (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) BETWEEN ALL SEWER AND WATER CROSSINGS. ROUTE WATER LINES ABOVE SEWER.
9. TRACER CONNECTIONS SHALL BE SPLICED WITH GEL CONNECTORS.
10. SEE LOCAL JURISDICTION REQUIREMENTS.
11. INSULATION (AS SHOWN IN "IMPROVED SURFACE" PORTION OF SECTION) IS REQUIRED IN ALL PLOWED AREAS, INCLUDING UNPAVED AREAS.
12. CONTRACTOR IS REQUIRED TO PROVIDE SURVEY POINTS FOR ALL JOINTS, TEES, FITTINGS, BENDS, AND LATERALS.
13. VALVE SPACING NOT TO EXCEED 800'.

WATER TRENCH SECTION
SCALE: N.T.S.



VALVE/MANHOLE COLLAR
SCALE: N.T.S.

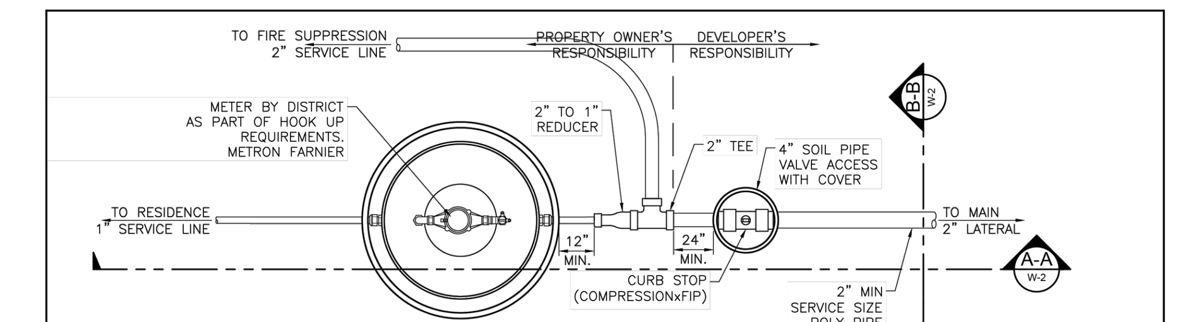


NOTES:
1: LID FOR CULINARY WATER TO BE D&L SUPPLY M-8044. STAMPED "WATER".

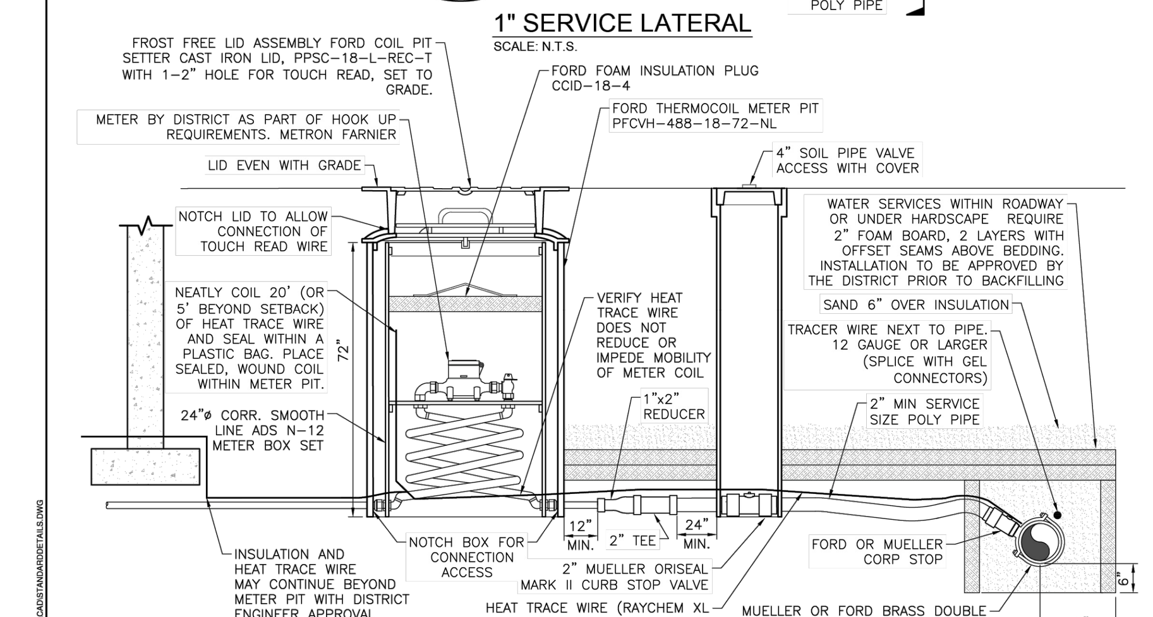
TYPICAL WATER MAIN VALVE
SCALE: N.T.S.

WATER MAIN AND TRENCHING DETAILS — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-1

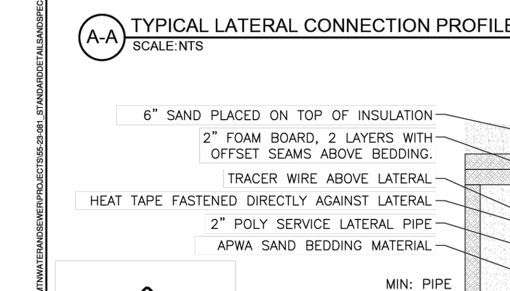
2 3/4" SERVICE LATERAL



1" SERVICE LATERAL
SCALE: N.T.S.



A-A TYPICAL LATERAL CONNECTION PROFILE
SCALE: NTS



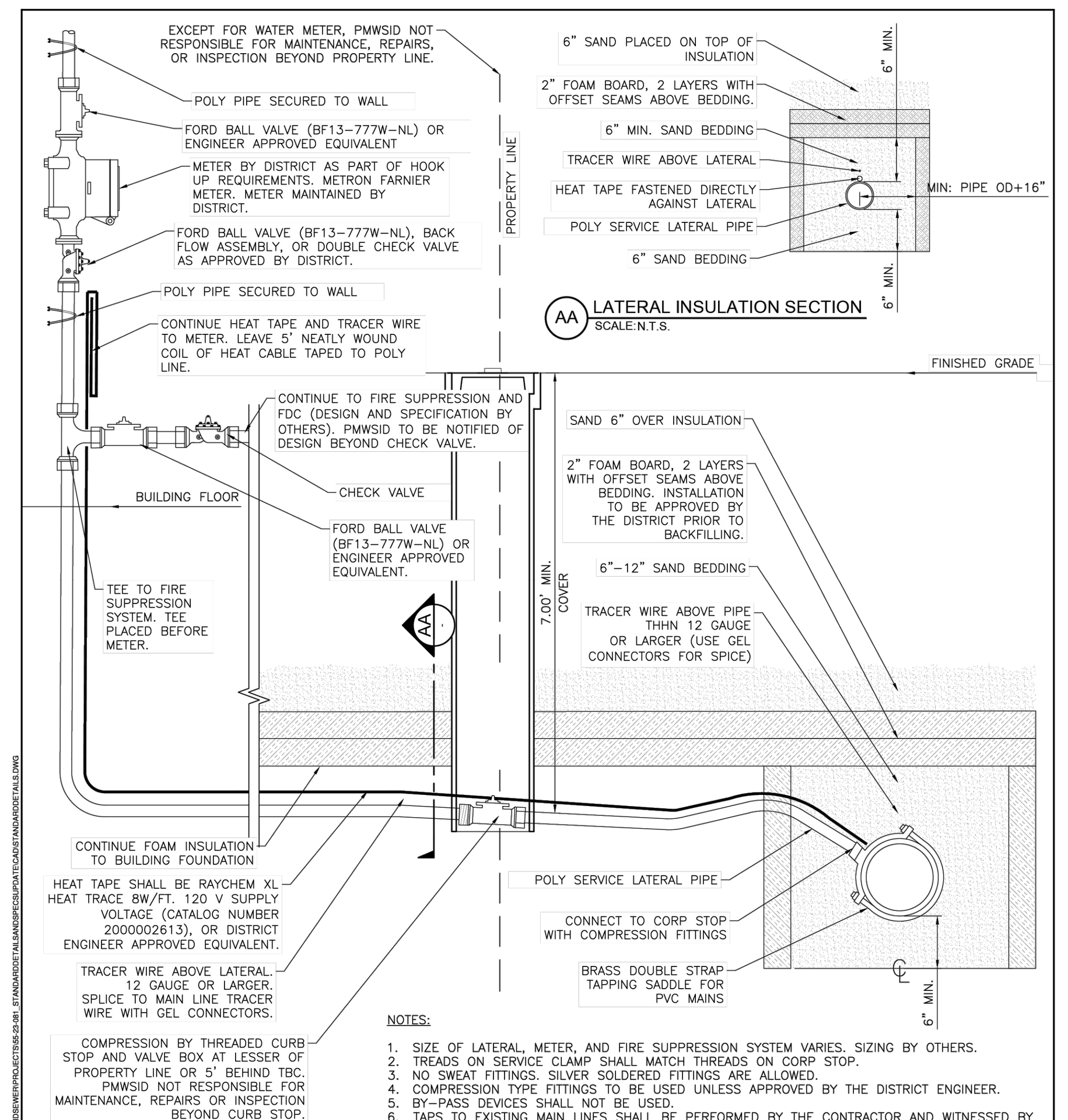
B-B LATERAL INSULATION SECTION
SCALE: NTS

NOTES:

1. DEVELOPER IS RESPONSIBLE FOR FOR METER PIT INSTALLATION.
2. METER BOX SHALL BE SET PLUMB.
3. THREADS ON SERVICE CLAMP SHALL MATCH THREADS ON CORP STOP.
4. METERS ARE TO BE INSTALLED IN AN IMPROVED LANDSCAPE AREA; NOT IN SIDEWALK, ASPHALT OR DRIVEWAY UNLESS FIRST APPROVED BY THE DISTRICT.
5. COMPRESSION TYPE FITTINGS TO BE USED UNLESS APPROVED BY THE DISTRICT.
6. BY-PASS DEVICES SHALL NOT BE USED ON RESIDENTIAL SERVICES.
7. TAPS TO EXISTING MAIN LINES SHALL BE PERFORMED BY CONTRACTOR AND WITNESSED BY THE DISTRICT.
8. TRACER WIRE SHALL BE RAN INTO EVERY METER BOX AND TIED TO THE METER SETTER. ALL SPLICES OF TRACER WIRE SHALL BE CONNECTED WITH A GREASE FILLED CONNECTOR.
9. ALL CONNECTIONS SHALL HAVE THERMAL EXPANSION CONTROL AS OUTLINED IN THE CURRENT INTERNATIONAL PLUMBING CODE.
10. METER TO BE INCLUDED IN PRESSURE TESTS.
11. TEES, REDUCERS, AND FITTINGS MUST BE SOURCED FROM MUELLER OR FORD.
12. BLUE CTS POLYETHYLENE PIPE ONLY.

1-INCH SERVICE LATERAL — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-2

3 INTERIOR WATER METER

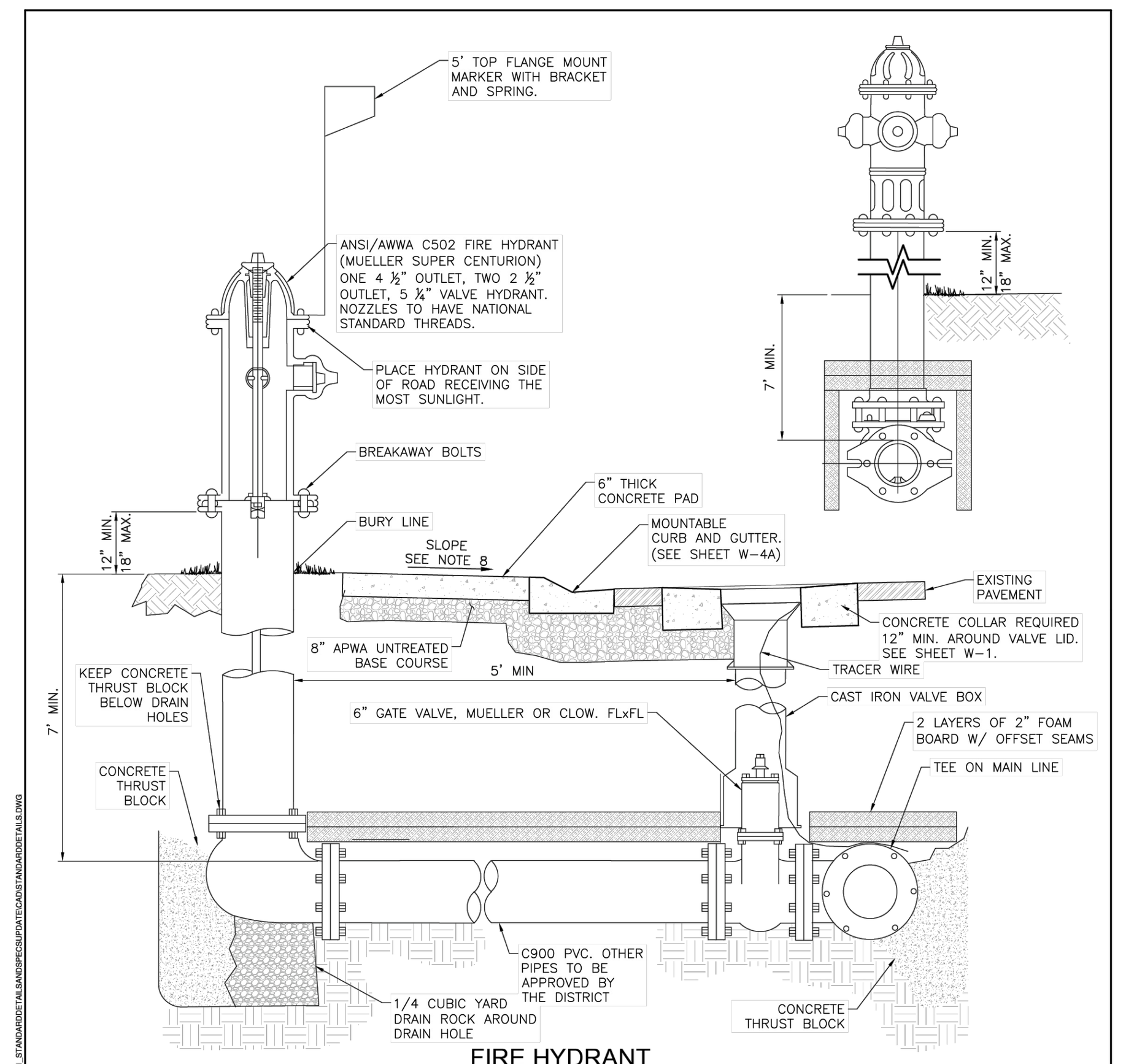


NOTES:

1. SIZE OF LATERAL, METER, AND FIRE SUPPRESSION SYSTEM VARIES. SIZING BY OTHERS.
2. TREADS ON SERVICE CLAMP SHALL MATCH THREADS ON CORP STOP.
3. NO SWEAT FITTINGS. SILVER SOLDERED FITTINGS ARE ALLOWED.
4. COMPRESSION TYPE FITTINGS TO BE USED UNLESS APPROVED BY THE DISTRICT ENGINEER.
5. BY-PASS DEVICES SHALL NOT BE USED.
6. TAPS TO EXISTING MAIN LINES SHALL BE PERFORMED BY THE CONTRACTOR AND WITNESSED BY THE DISTRICT.
7. TRACER WIRE SHALL BE PLACED ABOVE ALL WATER SERVICE LATERALS AND TIED TO THE METER.
8. DESIGNS FEATURING AN INTERIOR METER IN PLACE OF AN EXTERIOR METER SHALL BE APPROVED BY THE DISTRICT ENGINEER.
9. INTERIOR METER MAY BE ORIENTED VERTICALLY OR HORIZONTALLY.
10. INTERIOR METERS SHALL BE LOCATED IN A MECHANICAL CLOSET WITH AN EXTERIOR DOOR. KEYS SHALL BE PROVIDED TO POWDER MOUNTAIN WATER AND SEWER IMPROVEMENT DISTRICT AND POWDER MOUNTAIN RESORT PRIOR TO HOOK UP.
11. POWDER MOUNTAIN WATER AND SEWER IMPROVEMENT DISTRICT AND POWDER MOUNTAIN RESORT SHALL BE GRANTED IMMEDIATE ACCESS TO MECHANICAL ROOM AT ANY TIME, WITH OR WITHOUT PRIOR NOTICE.
12. ALL CONNECTIONS SHALL HAVE THERMAL EXPANSION CONTROL AS OUTLINED IN THE CURRENT INTERNATIONAL PLUMBING CODE.

INTERIOR WATER METER — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-3

4 FIRE HYDRANT ASSEMBLE



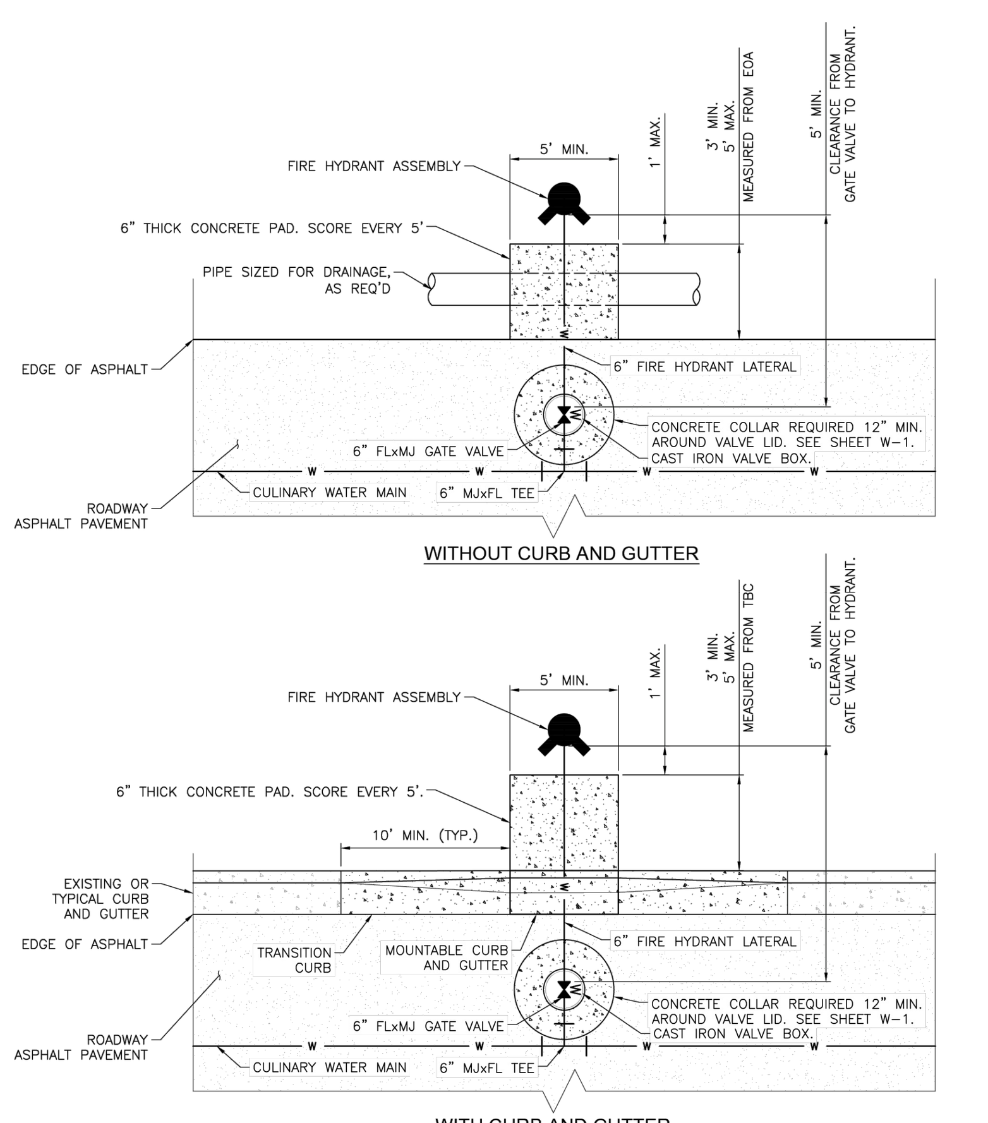
FIRE HYDRANT
SCALE: N.T.S.

NOTES:

1. LOCATION OF HYDRANT AND TEE ON WATER MAINLINE SHALL BE DETERMINED BY THE DISTRICT.
2. HYDRANT SHALL STAND PLUMB WITH PUMPER NOZZLE FACING THE STREET.
3. VALVE TO BE PLACED WITH CONCRETE RING ENTIRELY SURROUNDED BY ASPHALT.
4. TRACER WIRE TO BE ATTACHED TO HYDRANT VALVE. ALL TRACER WIRE CONNECTIONS SHALL BE SPLICED WITH GEL CONNECTORS.
5. HYDRANT AND FITTINGS TO BE POLY WRAPPED & COATED WITH TRENTON WAX.
6. ALL BOLTS SHALL BE FREE OF CONCRETE AND FULLY ACCESSIBLE.
7. DO NOT COVER BARREL DRAIN WITH DIRT OR CONCRETE. USE GRAVEL.
8. DRAWING SHOWS CURB AND GUTTER. IF THERE IS CURB AND GUTTER, THE SLOPE MUST DRAIN TOWARDS ROAD INTO GUTTER. IF THERE IS NO CURB AND GUTTER, SLOPE MUST DRAIN AWAY FROM ROAD.

FIRE HYDRANT ASSEMBLY — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-4

5 PLOWABLE FIRE HYDRANT APRON



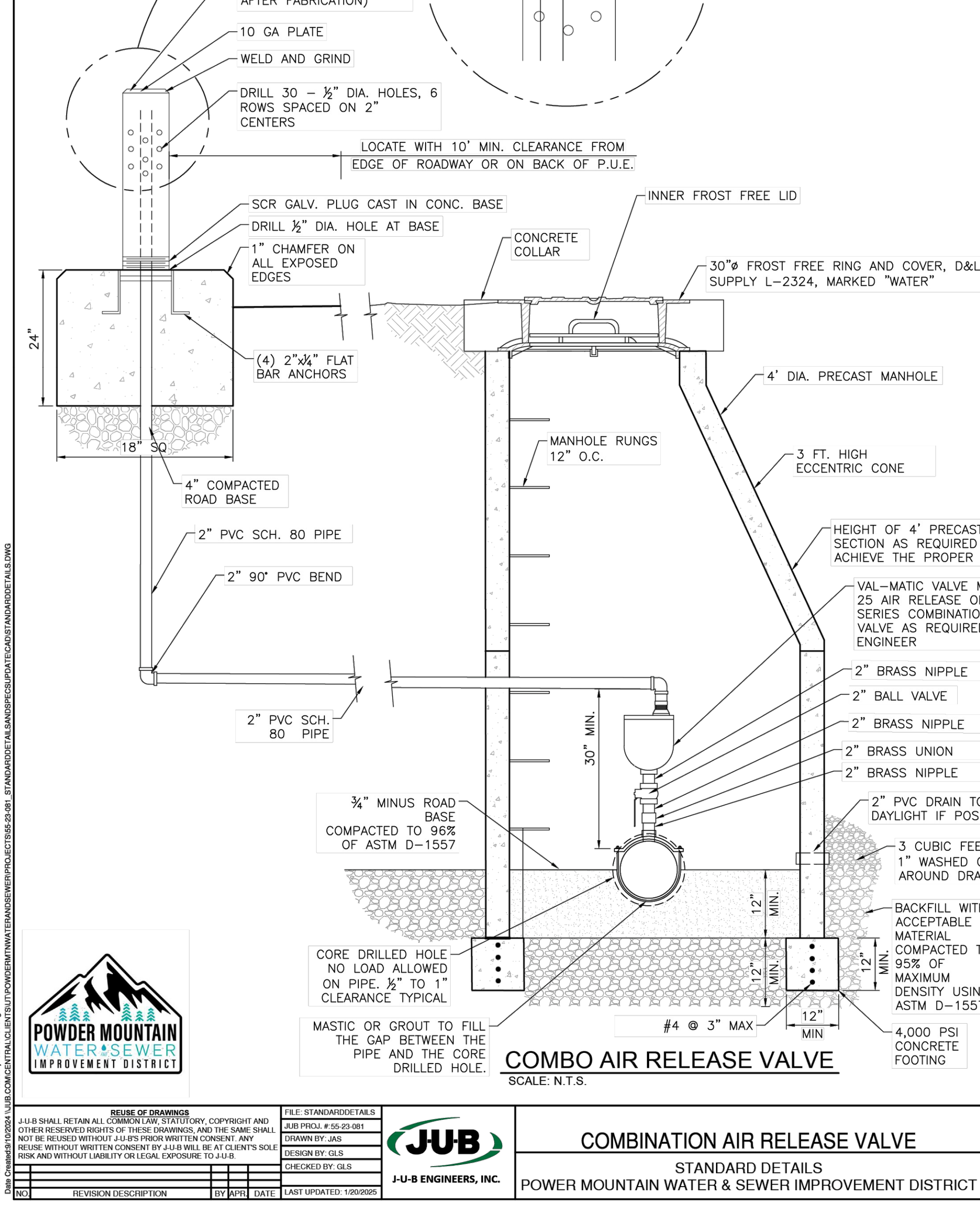
FIRE HYDRANT PAD
SCALE: N.T.S.

NOTES:

1. GATE VALVE MUST BE FLANGED DIRECTLY TO TEE FITTING.
2. LOCATION OF WATER MAIN MAY VARY FROM THE LOCATION SHOWN IN DRAWING. VALVE MAY BE PLACED IN THE CONCRETE PAD INSTEAD OF STREET WITH PRIOR DISTRICT APPROVAL.

PLOWABLE FIRE HYDRANT APRON — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-4A

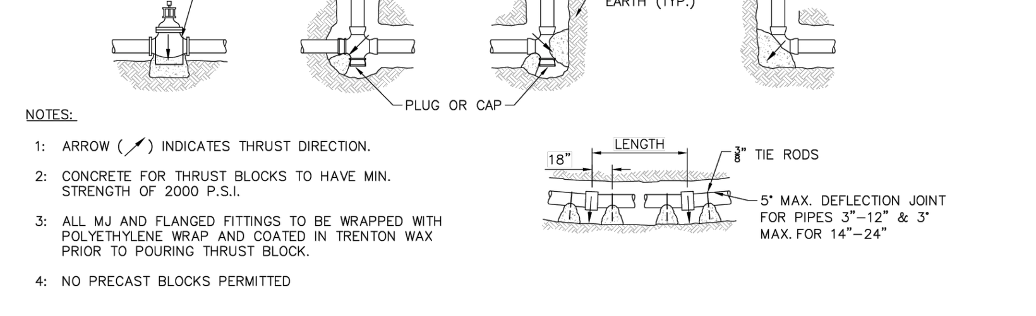
6 COMBINATION AIR RELEASE VALVE



COMBO AIR RELEASE VALVE
SCALE: N.T.S.

COMBINATION AIR RELEASE VALVE — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-5

7 THRUST BLOCK AND WATER LINE LOOP



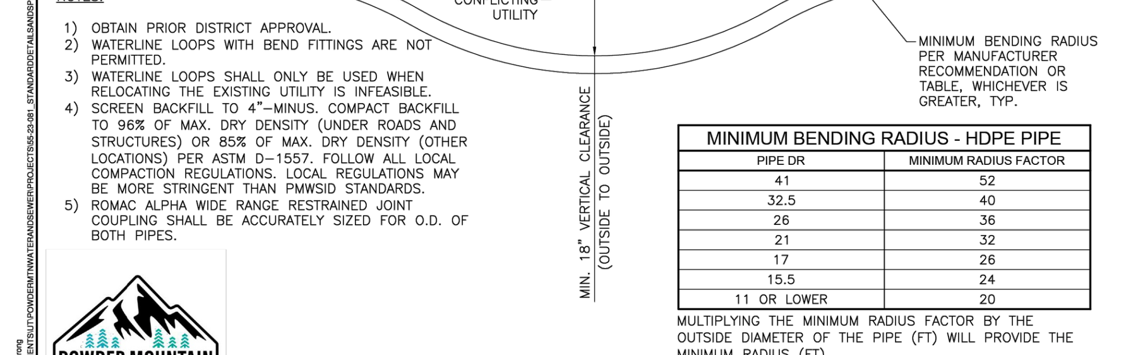
NOTES:

1: ARROW (↗) INDICATES THRUST DIRECTION.
2: CONCRETE FOR THRUST BLOCKS TO HAVE MIN. STRENGTH OF 2000 P.S.I.
3: ALL MJ AND FLANGED FITTINGS TO BE WRAPPED WITH POLYETHYLENE WRAP AND COATED IN TRENTON WAX PRIOR TO POURING THRUST BLOCK.
4: NO PRECAST BLOCKS PERMITTED

MINIMUM BEARING AREA IN SQUARE FEET

PIPE DIAMETER	TEES, VALVES, AND DEAD ENDS	90-DEGREE BENDS	45-DEGREE BENDS	22.5-DEGREE BENDS	11.25-DEGREE BENDS
4"	2.0	3.0	2.0	2.0	2.0
6"	4.0	5.5	3.0	1.5	1.0
8"	6.0	9.5	5.0	2.8	1.5
12"	14.0	20.0	11.0	5.5	3.0

THRUST BLOCK DETAIL
SCALE: N.T.S.



NOTES:

1) OBTAIN PRIOR DISTRICT APPROVAL.
2) WATERLINE LOOPS WITH BEND FITTINGS ARE NOT PERMITTED.
3) WATERLINE LOOPS SHALL ONLY BE USED WHEN RELOCATING THE EXISTING UTILITY IS INFEASIBLE.
4) SCREEN BACKFILL TO 4"-MINUS. COMPACT BACKFILL TO 96% OF MAX. DRY DENSITY (UNDER ROADS AND STRUCTURES) OR 85% OF MAX. DRY DENSITY (OTHER LOCATIONS) PER ASTM D-1557. FOLLOW ALL LOCAL COMPACTION REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN PMWSID STANDARDS.
5) ROMAC ALPHA WIDE RANGE RESTRAINED JOINT COUPLING SHALL BE ACCURATELY SIZED FOR O.D. OF BOTH PIPES.

MINIMUM BENDING RADIUS - HDPE PIPE

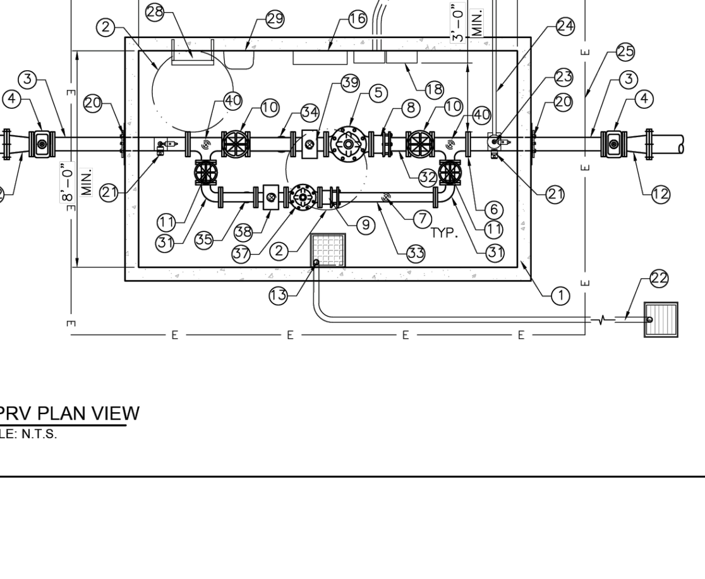
PIPE DR	MINIMUM RADIUS FACTOR
41	52
32.5	40
26	36
21	32
17	26
15.5	24
11 OR LOWER	20

MULTIPLYING THE MINIMUM RADIUS FACTOR BY THE OUTSIDE DIAMETER OF THE PIPE (FT) WILL PROVIDE THE MINIMUM RADIUS (FT)

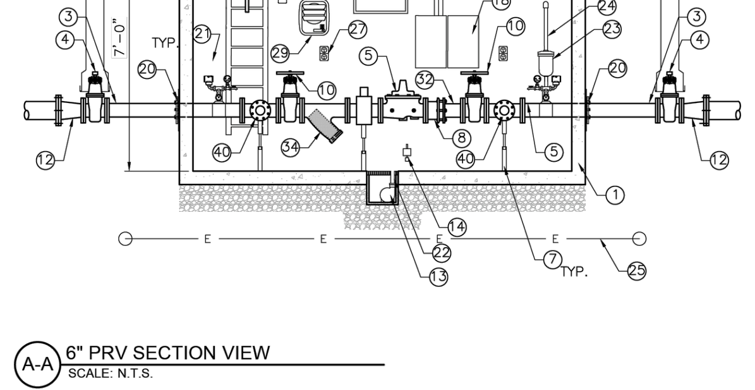
HDPE RADIUS WATER LINE LOOP
SCALE: NTS

THRUST BLOCK AND WATER LINE LOOP — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-7

8 6-INCH PRV VAULT



6" PRV PLAN VIEW
SCALE: N.T.S.



A-A 6" PRV SECTION VIEW
SCALE: N.T.S.

D1 6" PRESSURE REDUCING VALVE (8" MAIN)
SCALE: N.T.S.

6-INCH PRV VAULT — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-9A

9 6-INCH PRV VAULT, NOTES

MATERIALS LIST

NO.	DESCRIPTION	JOINT TYPE	SIZE
1	REINFORCED CONCRETE VAULT (17.5'L x 9'W x 7'D MIN. INTERIOR DIMENSIONS, SEE NOTE 9)	N/A	N/A
2	30"ø DOUBLE LID FROST-FREE MANHOLE FRAME AND COVER, CENTERED ABOVE PRVS OR ACCESS LADDER, SEE NOTE 12.	N/A	N/A
3	WALL SPOOL PIECE (LENGTH VARIES).	FL	6"
4	GATE VALVE W/ SQUARE NUT OPERATING NUT, VALVE BOX, AND CONCRETE COLLAR	FL	6"
5	PRESSURE REDUCING AND SUSTAINING VALVE WITH ANTI CAVITATION TRIM AS REQUIRED BY DISTRICT AND SOLENOID SHUT OFF VALVE, CLA-VAL MODEL NO 92-07BYKO D/S 150 CL FLANGE.	FL	6"
6	PRESSURE RELIEF PIPING, SEE NOTE 11 AND DETAIL C1, SHEET W-9E.	–	–
7	ADJUSTABLE PIPE SUPPORT. SEE DETAIL A1, STANDARD DETAIL W-12.	–	–
8	ROMAC ALPHA DJ 400 DISMANTLING JOINT	FLXFL	6"
9	ROMAC ALPHA DJ 400 DISMANTLING JOINT	FLxFL	4"
10	GATE VALVE W/ HAND WHEEL OPERATOR	FLXFL	6"
11	GATE VALVE W/ HAND WHEEL OPERATOR	FLXFL	4"
12	D.I. REDUCER	FLXFL	8"x6"
13	18"X18"X18" SUMP W/ GRATE & SUMP PUMP, ROUTED TO EXTERIOR SUMP OR STORM DRAIN. WATERTIGHT SEAL BETWEEN SUMP BOX AND VAULT REQUIRED. SEE NOTE 13.	N/A	N/A
14	FLOAT SWITCH. SEE NOTE 13 AND DETAIL C1, STANDARD DETAIL W-11.	N/A	N/A
15	LIGHT SWITCH, MOUNTED ACCESSIBLE FROM EXTERIOR OF VAULT.		
16	WALL MOUNTED 24" LED VAPOR TIGHT LIGHT FIXTURE.	N/A	N/A
17	NOT USED	N/A	N/A
18	NEMA 4X STAINLESS STEEL ENCLOSURES (POWER AND CONTROLS BOXES) SEE NOTES 3, 4, & 5 AND DETAIL D1, STANDARD DETAIL W-13	N/A	N/A
19	¾" MIN ø 304SST LIFTING ANCHOR TIED TO REBAR, SIZED AND LOCATED FOR REMOVAL OF COMPONENTS DURING MAINTENANCE. MIN. 3, INLINE ABOVE PIPE. COORDINATE LOCATION AND ORIENTATION WITH PMWSID PRIOR TO ORDERING MATERIALS.	N/A	N/A
20	LINK-SEAL TRIPAC W/ THRUST RESTRAINT - STEEL PLATE WITH MEGALUG STYLE JOINT RESTRAINT. SEE DETAIL B2, STANDARD DETAIL W-11.	N/A	N/A
21	PRESSURE TRANSDUCER ASSEMBLY. SEE DETAIL B1, STANDARD DETAIL W-10. COORDINATE WITH PMWSID FOR MIN. AND MAX. EXPECTED PRESSURES.	N/A	N/A
22	HDPE DRAIN PIPE W/ CHECK VALVE ROUTED TO OUTSIDE STORM DRAIN	N/A	N/A
23	AIRVAC ASSEMBLY. SEE DETAIL D1, STANDARD DETAIL W-10. INSTALL ON DOWNSTREAM SIDE OF PRV.	N/A	2"
24	SCH. 80 PVC AIR-VAC ASSEMBLY PIPING. SEE DETAIL D2, STANDARD DETAIL W-10.	N/A	2"
25	2/0 COPPER GROUND RING AROUND VAULT, SHOWN FOR PRE-CAST BOX. SEE NOTE 5.	N/A	2"
26	POWER METER, COORDINATE WITH ROCKY MOUNTAIN POWER. SEE DETAIL D1, STANDARD DETAIL W-13.	N/A	N/A
27	120 VOLT 20 AMP GFCI OUTLETS (48" FROM FLOOR TO TOP OF OUTLET).	N/A	N/A
28	ACCESS LADDER WITH EXTENDING SAFETY POST. SEE DETAIL B1, STANDARD DETAIL W-11.	N/A	N/A
29	MARKEL 3.7kW ELECTRIC HEATER. MODEL NUMBER 5105NHF2B	N/A	N/A
30	NOT USED	N/A	N/A
31	D.I. 90° BEND	FLxFL	4"
32	D.I. SPOOL	FLxPE	6"
33	D.I. SPOOL	FLxPE	4"
34	WYE STRAINER	FLXFL	6"
35	WYE STRAINER	FLXFL	4"
36	2" APWA SEWER ROCK	–	–
37	PRESSURE REDUCING AND SUSTAINING VALVE WITH ANTI CAVITATION TRIM AS REQUIRED BY DISTRICT AND SOLENOID SHUT OFF VALVE, CLA-VAL MODEL NO 92-07BYKO D/S 150 CL FLANGE.	FLxFL	4"
38	ENDRESS HAUSER PROLINE PROMAG W400 FLOW METER	FLxFL	6"
39	ENDRESS HAUSER PROLINE PROMAG W400 FLOW METER	FLxFL	4"
40	D.I. REDUCING TEE	FLxFL	6"x4"

NOTES:

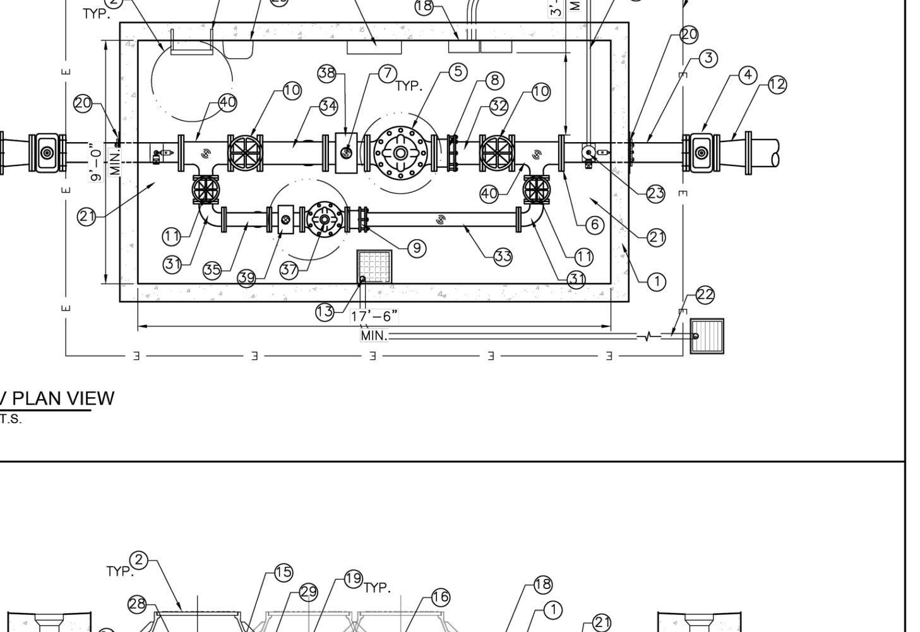
1. ALL EXPOSED PIPE INSIDE THE VAULT SHALL BE PRIMED AND PAINTED WITH TWO (2) COATS OF EPOXY PAINT. COLOR TO BE ROYAL BLUE. USE TYPE 2 WAX TAPE INSIDE VAULT PER DISTRICT STANDARD.
2. VAULT SHALL BE SUPPLIED WITH POWER FOR ALL EQUIPMENT WHERE SHOWN AND/OR NOTED, FOR A COMPLETE AND OPERABLE INSTALLATION. DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE POWER COMPANY AND PROVIDING POWER SOURCE.
3. PLC AND ASSOCIATED TELEMETERING EQUIPMENT SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR IN COORDINATION WITH THE DISTRICT. CONTRACTOR SHALL FURNISH BELOW GRADE CONTROL BOX AS SHOWN AND NOTED, AND SHALL INSTALL ALL NECESSARY WIRING FROM CONTROL BOX POWER METER AND ANTENNA, LEAVING ONE (1) PULL STRING IN SPARE CONDUITS. ANTENNA SHALL BE MOUNTED TO TOP OF 20' TALL (MIN.) UTILITY POLE (RADIO PROROGATION STUDY MAY BE REQUIRED TO DETERMINE ACTUAL HEIGHT), POWER METER SHALL BE MOUNTED AT BASE OF UTILITY POLE. SEPERATE CONDUITS SHALL BE USED FOR POWER LINES AND CONTROL/INSTRUMENTATION/COMMUNICATION LINES (ANALOG AND DIGITAL).
4. ALL CONNECTIONS TO ELECTRICAL ENCLOSURES TO BE BY A WATER-TIGHT 3-PIECE GASKETED HUB. ALL PENETRATIONS THROUGH CONCRETE AND ELECTRICAL FITTINGS THAT ARE DIRECT BURIED SHALL BE PVC COATED GRC TO A MINIMUM OF 12 INCHES BEYOND THE OUTSIDE WALL OF THE VAULT. TAPED FITTINGS WILL NOT BE ALLOWED. ALL ANALOG SIGNALS TO BE SPLIT AND ALL DIGITAL SIGNALS DUPLICATED WITH RELAYS TO PROVIDE A COPY OF ALL INPUTS AND OUTPUTS TO A FUTURE PLC WITHIN THE VAULT.
5. PRE-CAST BOX: GROUND RING TO BE BURIED 3' UNDER SURFACE, 2' AROUND BOX. CAST-IN-PLACE BOX: GROUND RING TO BE CAST INTO VAULT FOOTING. GROUND RING TO BE TIED TO TWO SEPARATE REBARS IN VAULT FOOTING. PLC POWER PANEL GROUND TO BE BONDED TO GROUND RING.
6. ALL PIPE PENETRATIONS TO BE SEALED WITH LINK SEAL. INSTALL LINK-SEAL WITH BOLT HEADS INSIDE VAULT. BOLTS SHALL BE STAINLESS STEEL.
7. THE DISTRICT APPROVED SCADA CONTRACTOR THAT IS ALLOWED TO WORK ON THIS SCADA SYSTEM IS:

   AUTOMATION CONTROLS:
   CLAYTON RICHARDSON (435) 213-7844

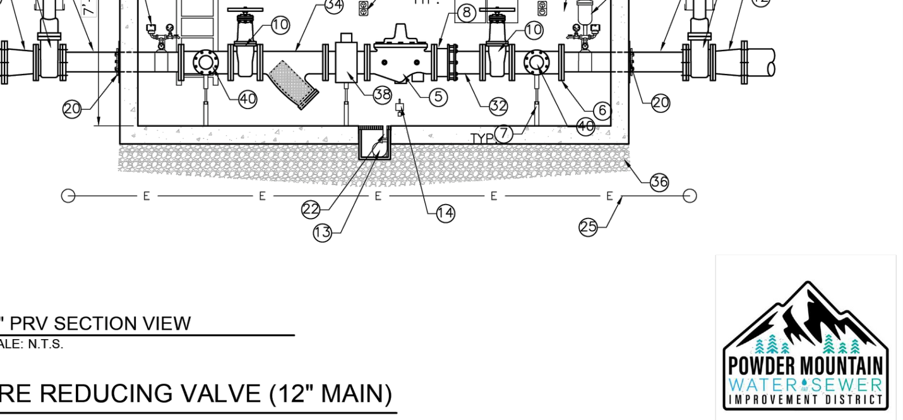
8. ALL MATERIAL SUBJECT TO PMWSID DISCRETION
   PLC ALLEN BRADLEY 1400 PART # (1766-L32AWAA) OR (766-L32BWAA)
   1762-IF4 ANALOG INPUT MODULE
   1762-OF4 ANALOG OUTPUT MODULE
   8.1. RADIO
   MICROWAVE DATA SYSTEMS (MDS)
   (DEPENDS ON RADIO SURVEY)
   8.2. LICENSED
   MICROWAVE DATA SYSTEMS RADIO (ECRL9CNNNNNS1D1USUNNN)
   ORBIT (DIN MOUNT)
   ECR RADIO 900 MHZ LICENSED
   MANAGED CONNECTED ROUTER.
   896-980 MHz RADIO COMMUNICATION ONLY WITH 1 ETHERNET PORT 2 SERIAL PORTS.
   8.3. SPREAD SPECTRUM
   MICROWAVE DATA SYSTEM RADIO TRANSNET 900
   MDS EL805 HL SPREAD SPECTRUM XCVR (HARD CASE)
9. CONCRETE VAULT MUST BE SIZED AND REINFORCED TO SUPPORT HL-93 LIVE LOAD AND PIPE THRUST. SIZING AND REINFORCEMENT CALCULATIONS SHALL BE SUBMITTED TO PMWSID AND APPROVED PRIOR TO ORDERING MATERIALS. VAULT SHALL BE UPSIZED AS REQUIRED TO MAINTAIN ELECTRICAL CLEARANCES.
10. MAINLINE PRV TO INCLUDE STAINLESS STEEL PILOT SYSTEM, INLET/OUTLET PRESSURE TRANSDUCERS, AND TO BE POWER FAILURE OPTION "LAST POSITION".
11. PRESSURE RELIEF VALVE AND PIPING SHALL BE INSTALLED WHEN REQUIRED BY PMWSID PER STANDARD DETAIL W-9E. CONTRACTOR TO COORDINATE WITH PMWSID FOR FINAL ROUTING OF PRESSURE RELIEF VALVE WASTE PIPING. PRIOR APPROVAL BY DISTRICT ENGINEER REQUIRED.
12. WHEN MANHOLES ARE LOCATED OUTSIDE OF THE TRAVEL WAY, WATER TIGHT DUCTILE IRON ACCESS HATCHES SHALL BE USED IN PLACE OF MANHOLES. HATCH SHALL BE EJ MODEL NO. 00819761B01 OR DISTRICT APPROVED EQUAL.
13. SUMP PUMP AND ASSOCIATED PIPING AND FLOAT SWITCH MAY BE REPLACED WITH GRAVEL SUMP WHEN APPROVED BY PMWSID AND IN LOW WATER TABLE AREAS.

6-INCH PRV VAULT, NOTES — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-9B

10 10-INCH PRV VAULT



10" PRV PLAN VIEW
SCALE: N.T.S.



A-A 10" PRV SECTION VIEW
SCALE: N.T.S.

D1 10" PRESSURE REDUCING VALVE (12" MAIN)
SCALE: N.T.S.

10-INCH PRV VAULT — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET W-9C

FAWKES CONSULTANTS INC.

165 W Canyon Crest Rd Ste 260
Alpine, Utah 84004
Gwilliams@fawkesconsultants.com

SUBMITTAL SET

DATE: 07/08/2025
PROJECT NO. 24.028

REVISION	DATE
1	
2	
3	
4	
5	
6	

DETAIL
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

REGISTERED PROFESSIONAL ENGINEER — No.12296559 — JORDAN J. WILLIAMS — 07/08/2025 — STATE OF UTAH

SCALE:

C801

DRAWN BY: DN

1 — 10-INCH PRV VAULT, NOTES

MATERIALS LIST			
NO.	DESCRIPTION	JOINT TYPE	SIZE
1	REINFORCED CONCRETE VAULT (17.5'L x 9'W x 7'D MIN. INTERIOR DIMENSIONS, SEE NOTE 9)	N/A	N/A
2	30"ø DOUBLE LID FROST-FREE MANHOLE FRAME AND COVER, CENTERED ABOVE PRVS OR ACCESS LADDER, SEE NOTE 12.	N/A	N/A
3	WALL SPOOL PIECE (LENGTH VARIES).	FL	10"
4	GATE VALVE W/ SQUARE NUT OPERATING NUT, VALVE BOX, AND CONCRETE COLLAR	FL	10"
5	PRESSURE REDUCING AND SUSTAINING VALVE WITH ANTI CAVITATION TRIM AS REQUIRED BY DISTRICT AND SOLENOID SHUT OFF VALVE, CLA-VAL MODEL NO 92-07BYKO D/S 150 CL FLANGE.	FL	10"
6	PRESSURE RELIEF PIPING, SEE NOTE 11 AND DETAIL C1, SHEET W-9E.	–	–
7	ADJUSTABLE PIPE SUPPORT. SEE DETAIL A1, STANDARD DETAIL W-12.	–	–
8	ROMAC ALPHA DJ 400 DISMANTLING JOINT	FLXFL	10"
9	ROMAC ALPHA DJ 400 DISMANTLING JOINT	FLxFL	6"
10	GATE VALVE W/ HAND WHEEL OPERATOR	FLXFL	10"
11	GATE VALVE W/ HAND WHEEL OPERATOR	FLXFL	6"
12	D.I. REDUCER	FLXFL	12"x10"
13	18"X18"X18" SUMP W/ GRATE & SUMP PUMP, ROUTED TO EXTERIOR SUMP OR STORM DRAIN. WATERTIGHT SEAL BETWEEN SUMP BOX AND VAULT REQUIRED. SEE NOTE 13.	N/A	N/A
14	FLOAT SWITCH. SEE NOTE 13 AND DETAIL C1, STANDARD DETAIL W-11.	N/A	N/A
15	LIGHT SWITCH, MOUNTED ACCESSIBLE FROM EXTERIOR OF VAULT.		
16	WALL MOUNTED 24" LED VAPOR TIGHT LIGHT FIXTURE.	N/A	N/A
17	NOT USED	N/A	N/A
18	NEMA 4X STAINLESS STEEL ENCLOSURES (POWER AND CONTROLS BOXES) SEE NOTES 3, 4, & 5 AND DETAIL D1, STANDARD DETAIL W-13	N/A	N/A
19	¾" MIN ø 304SST LIFTING ANCHOR TIED TO REBAR, SIZED AND LOCATED FOR REMOVAL OF COMPONENTS DURING MAINTENANCE. MIN. 3, INLINE ABOVE PIPE. COORDINATE LOCATION AND ORIENTATION WITH PMWSID PRIOR TO ORDERING MATERIALS.	N/A	N/A
20	LINK-SEAL TRIPAC W/ THRUST RESTRAINT – STEEL PLATE WITH MEGALUG STYLE JOINT RESTRAINT. SEE DETAIL B2, STANDARD DETAIL W-11.	N/A	N/A
21	PRESSURE TRANSDUCER ASSEMBLY. SEE DETAIL B1, STANDARD DETAIL W-10. COORDINATE WITH PMWSID FOR MIN. AND MAX. EXPECTED PRESSURES.	N/A	N/A
22	HDPE DRAIN PIPE W/ CHECK VALVE ROUTED TO OUTSIDE STORM DRAIN	N/A	N/A
23	AIRVAC ASSEMBLY. SEE DETAIL D1, STANDARD DETAIL W-10. INSTALL ON DOWNSTREAM SIDE OF PRV.	N/A	2"
24	SCH. 80 PVC AIR-VAC ASSMEBLY PIPING. SEE DETAIL D2, STANDARD DETAIL W-10.	N/A	2"
25	2/0 COPPER GROUND RING AROUND VAULT, SHOWN FOR PRE-CAST BOX. SEE NOTE 5.	N/A	2"
26	POWER METER, COORDINATE WITH ROCKY MOUNTAIN POWER. SEE DETAIL D1, STANDARD DETAIL W-13.	N/A	N/A
27	120 VOLT 20 AMP GFCI OUTLETS (48" FROM FLOOR TO TOP OF OUTLET).	N/A	N/A
28	ACCESS LADDER WITH EXTENDING SAFETY POST. SEE DETAIL B1, STANDARD DETAIL W-11.	N/A	N/A
29	MARKEL 3.7kW ELECTRIC HEATER. MODEL NUMBER 5105NHF2B	N/A	N/A
30	NOT USED	N/A	N/A
31	D.I. 90° BEND	FLxFL	6"
32	D.I. SPOOL	FLxPE	10"
33	D.I. SPOOL	FLxPE	6"
34	WYE STRAINER	FLXFL	10"
35	WYE STRAINER	FLXFL	6"
36	2" APWA SEWER ROCK	–	–
37	PRESSURE REDUCING AND SUSTAINING VALVE WITH ANTI CAVITATION TRIM AS REQUIRED BY DISTRICT AND SOLENOID SHUT OFF VALVE, CLA-VAL MODEL NO 92-07BYKO D/S 150 CL FLANGE.	FLxFL	6"
38	ENDRESS HAUSER PROLINE PROMAG W400 FLOW METER	FLxFL	10"
39	ENDRESS HAUSER PROLINE PROMAG W400 FLOW METER	FLxFL	6"
40	D.I. REDUCING TEE	FLxFL	10"x6"

NOTES:

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     ECR RADIO 900 MHZ LICENSED
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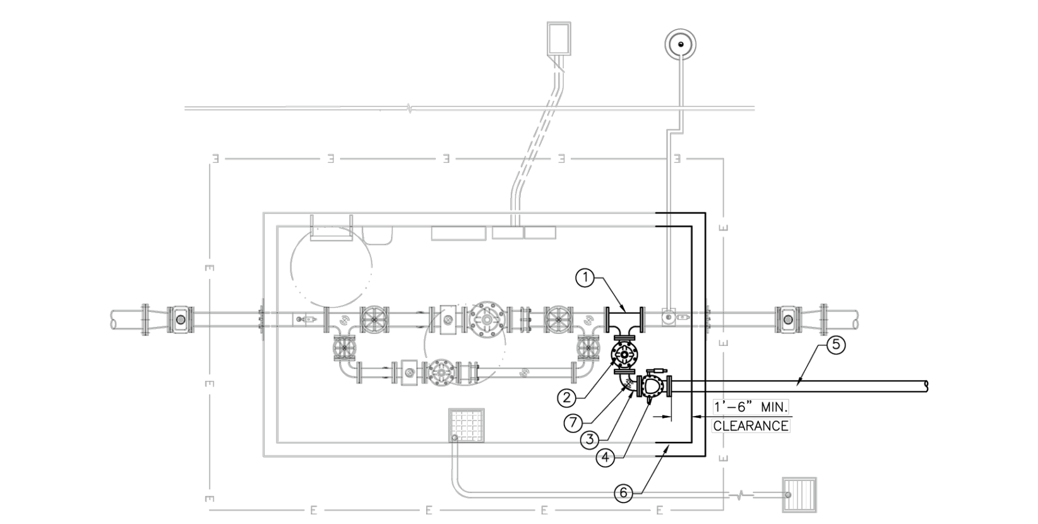
FILE: STANDARDDETAILS | JUB PROJ. #: 55-23-081 | DRAWN BY: JAS | DESIGN BY: GLS | CHECKED BY: GLS | LAST UPDATED: 1/20/2025

J-U-B ENGINEERS, INC.

10-INCH PRV VAULT, NOTES
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-9D

2 — PRESSURE RELIEF PIPING

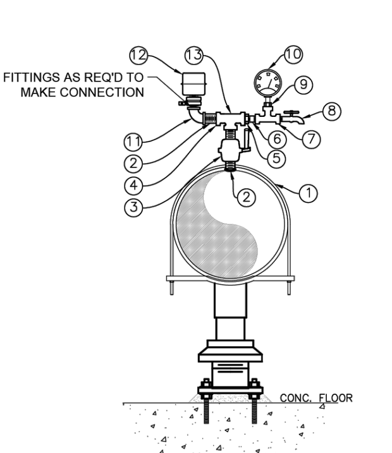


MATERIALS LIST			
NO.	DESCRIPTION	JOINT TYPE	SIZE
1	D.I. REDUCING TEE	FLxFL	6"x4"
2	PRESSURE RELIEF VALVE WITH ANTI CAVITATION TRIM AND SOLENOID SHUT OFF VALVE, CLA-VAL NO. 50-01, GLOBE STYLE, 150 CL FLANGE, W/ ANTI CAVITATION TRIM. COORDINATE WITH PMWSID TO DETERMINE ANTICIPATED ADJUSTMENT RANGE.	FLxFL	4"
3	D.I. 90° BEND	FLxFL	4"
4	CHECK VALVE	FLxFL	4"
5	D.I. WALL SPOOL. LENGTH VARIES. TRANSITION TO SCH 80 PVC MIN. 3' FROM OUTSIDE OF VAULT. DAYLIGHT TO SURFACE. MAINTAIN 2' AIRGAP BETWEEN END OF PIPE AND STORM DRAIN. DEVELOPER TO PROVIDE DAYLIGHT DETAIL AND DRAINAGE DESIGN CONSIDERATIONS.	–	–
6	PRECAST CONCRETE VAULT. EXTEND VAULT FROM STANDARD PRV VAULT TO MAINTAIN CLEARANCES AS SHOWN. SIZE VARIES.	–	–
7	ADJUSTABLE PIPE SUPPORT. SEE DETAIL A1, STANDARD DETAIL W-12.	–	–

C1 PRESSURE RELIEF VALVE PIPING
SCALE: NOT TO SCALE

PRESSURE RELIEF PIPING
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-9E

3 — AIR VAC & TRANSDUCER ASSEMBLY

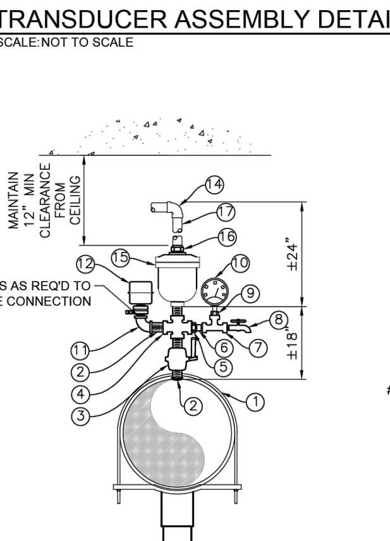


B1 TRANSDUCER ASSEMBLY DETAIL
SCALE: NOT TO SCALE

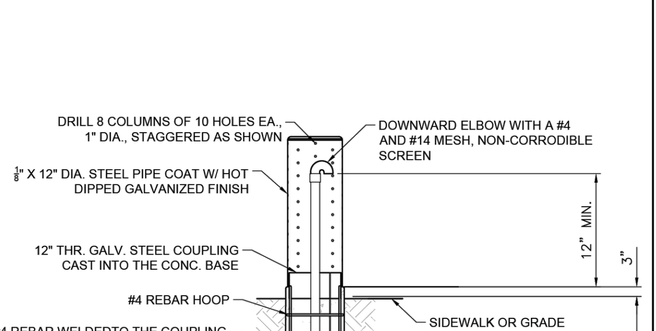
TRANSDUCER & AIR VAC ASSEMBLY SCHEDULE		
ITEM NO.	SIZE	DESCRIPTION
1	2" x PIPE SIZE	APPROVED TAPPING SADDLE.
2	2" x 3" LONG	SCH. 40 GALV. THREADED STEEL NIPPLE TH.XTH.
3	2"	BRONZE BALL VALVE WITH LEVER OPERATOR.
4	2"	SCH. 40 GALV. STEEL THREADED CROSS
5	2" x ½"	BRASS BUSHING
6	½" x 2" LONG	SCH. 40 GALV. THREADED STEEL NIPPLE TH.XTH.
7	½"	SCH. 40 GALV. STEEL THREADED TEE
8	½"	HOSE BIB WITH SMOOTH OUTLET
9	½" x ¼"	BRASS BUSHING
10	¼"	GLYCERIN FILLED PRESSURE GAUGE, 0-200 psi
11	2"	SCH. 40 GALV. THREADED 90° BEND
12	–	ROSEMOUNT MODEL 2088G3S22A1M5B4DW PRESSURE TRANSDUCER (SEE NOTE 1)
13	2"	SCH. 40 GALV. STEEL THREADED TEE
14	2"	90° PVC BEND
15	2"	COMBINATION AIR/VAC. RELIEF VALVE ASSEMBLY. APCO 140 OR ARI D-040 OR APPROVED EQUAL
16	2"	COMPRESSION ADAPTOR FITTING
17	2"	CL-200 PVC PIPE (LENGTH DETERMINED BY ENGINEER)

NOTES:

1. SET PRESSURE TRANSDUCER AT 200 PSI AND WIRE 4-20 mA SIGNAL FROM TRANSMITTER TO PLC w/ #16 TSP IN A 3/4" CONDUIT.



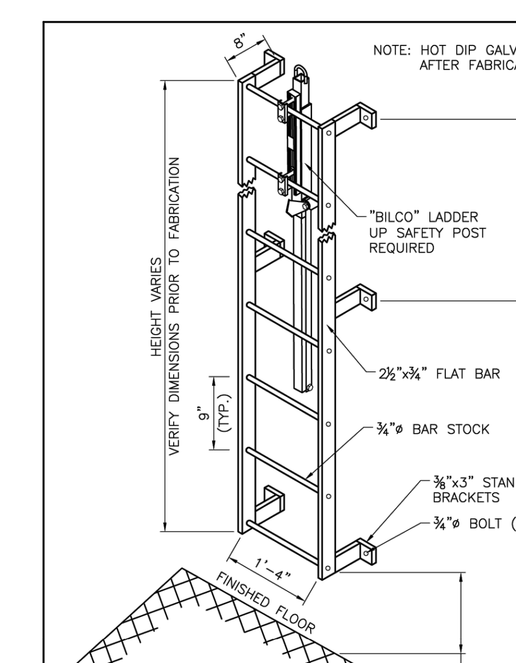
D1 AIR VAC ASSEMBLY DETAIL
SCALE: NOT TO SCALE



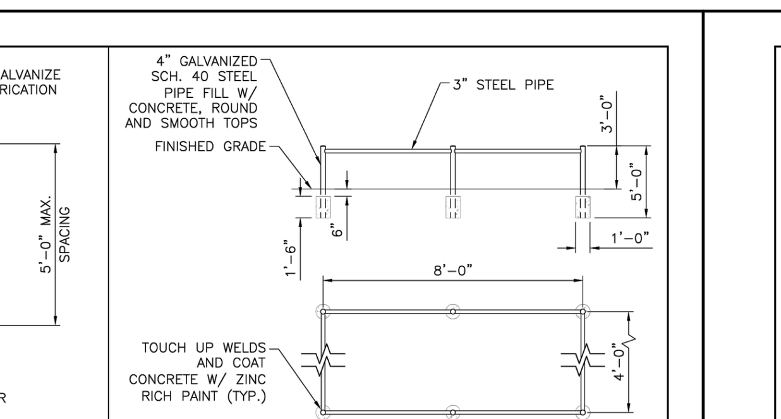
D2 AIR VAC STRUCTURE DETAIL
SCALE: NOT TO SCALE

AIR VAC & TRANSDUCER ASSEMBLY
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-10

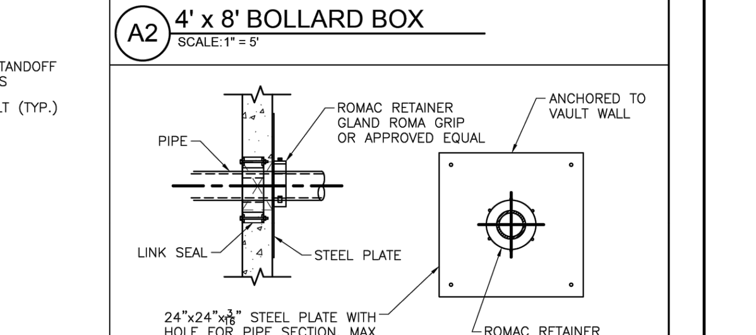
4 — STANDARD VAULT DETAILS



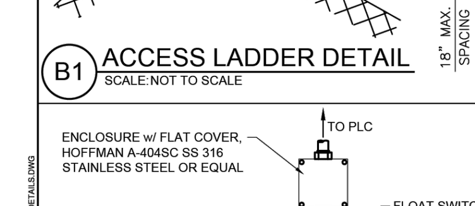
B1 ACCESS LADDER DETAIL
SCALE: NOT TO SCALE



A2 4' x 8' BOLLARD BOX
SCALE: 1" = 5'



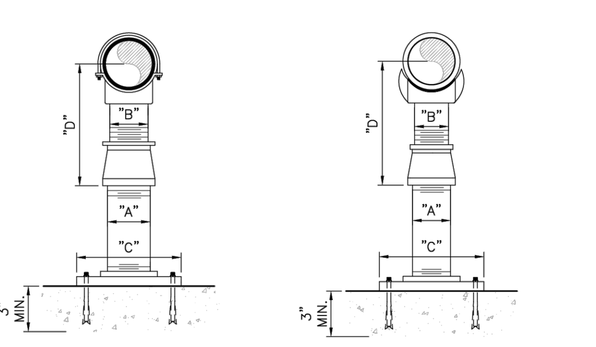
B2 WALL PENETRATION DETAIL
SCALE: 1" = 1'-0"



C1 FLOAT SWITCH DETAIL
SCALE: NOT TO SCALE

STANDARD VAULT DETAILS
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-11

5 — STANDARD VAULT DETAILS

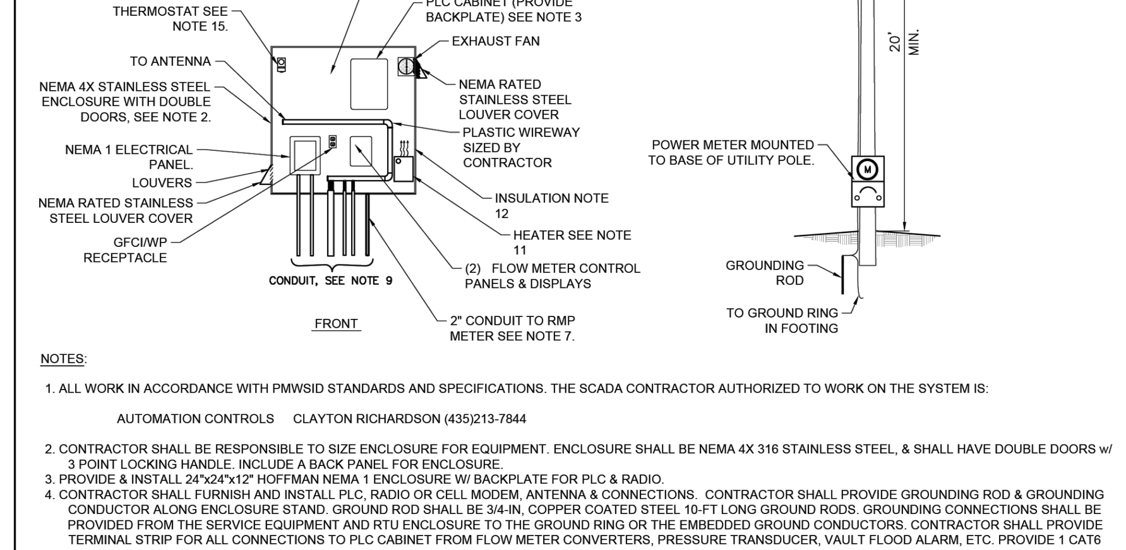


A1 ADJUSTABLE PIPE SUPPORT
SCALE: NOT TO SCALE

ADJUSTABLE PIPE SUPPORT					
APPROXIMATE DIMENSIONS IN INCHES					
PIPE SIZE	A	B	C	D MINIMUM	D MAXIMUM
2½	2½	1½	9	8	13
3				8¼	13¼
3½				8½	13½
4	3	2½		9¼	14
5				10	14¾
6				10½	15¼
8				11¾	16½
10				13½	18¼
12				15	19¾
14	4	3	11	16¼	20¾
16				17¾	22¼
18	6	3½	13½	19½	24
20				21	25½
22		4		21⁵⁄₁₆	25¹³⁄₁₆
24				23¾	28¼
26				24⁵⁄₁₆	28¹³⁄₁₆
30			16	27	31½
32				28¼	32¾
36				30¼	34¾

STANDARD VAULT DETAILS
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-12

6 — STANDARD VAULT POWER CONTROL BOX



NOTES:

1. ALL WORK IN ACCORDANCE WITH PMWSID STANDARDS AND SPECIFICATIONS. THE SCADA CONTRACTOR AUTHORIZED TO WORK ON THE SYSTEM IS:

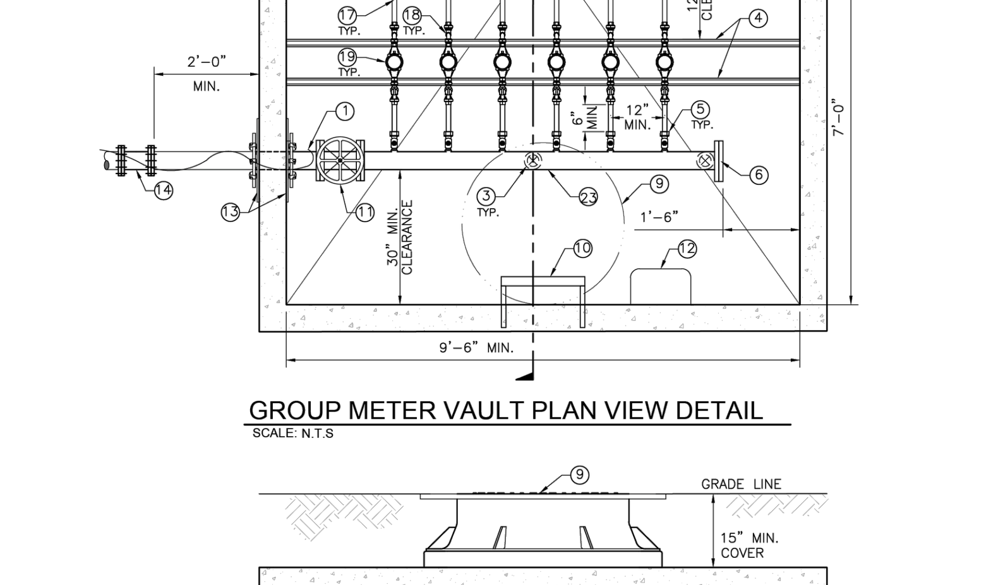
   AUTOMATION CONTROLS CLAYTON RICHARDSON (435)213-7844

2. CONTRACTOR SHALL BE RESPONSIBLE TO SIZE ENCLOSURE FOR EQUIPMENT. ENCLOSURE SHALL BE NEMA 4X 316 STAINLESS STEEL, & SHALL HAVE DOUBLE DOORS w/ 3 POINT LOCKING HANDLE. INCLUDE A BACK PANEL FOR ENCLOSURE.
3. PROVIDE & INSTALL 24"x24"x12" HOFFMAN NEMA 1 ENCLOSURE W/ BACKPLATE FOR PLC & RADIO.
4. CONTRACTOR SHALL FURNISH AND INSTALL PLC, RADIO OR CELL MODEM, ANTENNA & CONNECTIONS. CONTRACTOR SHALL PROVIDE GROUNDING ROD & GROUNDING CONDUCTOR ALONG ENCLOSURE STAND. GROUND ROD SHALL BE 3/4-IN, COPPER COATED STEEL 10-FT LONG GROUND RODS. GROUNDING CONNECTIONS SHALL BE PROVIDED FROM THE SERVICE EQUIPMENT AND RTU ENCLOSURE TO THE GROUND RING OR THE EMBEDDED GROUND CONDUCTORS. CONTRACTOR SHALL PROVIDE TERMINAL STRIP FOR ALL CONNECTIONS TO PLC CABINET FROM FLOW METER CONVERTERS, PRESSURE TRANSDUCER, VAULT FLOOD ALARM, ETC. PROVIDE 1 CAT6 ETHERNET CABLE TO EACH METER. ALSO PROVIDE RELAY FOR PULSE TOTAL. SCADA CONTRACTOR TO INSTALL ANTENNA AND ANTENNA COAX.
5. SEPARATE CONDUITS SHALL BE USED FOR POWER LINES & CONTROL/INSTRUMENTATION LINES (ANALOG AND DIGITAL).
6. ALL ELECTRICAL CONDUITS IN VAULT SHALL BE GRC OR SCHEDULE 80 PVC.
7. CONTRACTOR SHALL PROVIDE 2" CONDUIT FOR MAIN POWER FROM CONTROL BOX PANEL TO POWER COMPANY METER, WITH REQUIRED FITTINGS AND APPURTENANCES, AND SHALL PROVIDE WIRE SHOWN INSIDE CONDUIT.
8. CONTRACTOR SHALL PROVIDE (2) #16 TSP IN 3/4" CONDUITS FOR 4-20 mA SIGNAL FROM PRESSURE TRANSDUCER TRANSMITTERS TO PLC.
9. CONTRACTOR SHALL PROVIDE (1) 20 AMP 1 PHASE CB & (3) #12 CONDUCTORS IN 3/4" CONDUIT FOR (1) VAPOR-TIGHT LED LIGHT FIXTURES INSIDE OF VAULT. INSTALL LIGHT SWITCH w/ WP COVER IN CLOSE PROXIMITY TO ENTRY. PROVIDE (1) 20 AMP 1 PHASE CB & (3) #12 CONDUCTORS IN 3/4" CONDUITS FOR (2) GFCI OUTLETS IN WEATHERPROOF ENCLOSURES AND IN-USE COVERS INSIDE OF VAULT. INSTALL OUTLETS & SWITCHES 4' MIN. ABOVE FLOOR. PROVIDE (1) 20 AMP 1 PHASE CB & (3) #12 WIRE IN 3/4" CONDUIT FOR SUMP PUMP w/NEMA 5-20R SINGLE RECEPTACLE OUTLET (NEC COMPLIANT, GFCI PROTECTED) WITH IN-SERVICE COVER OVER SUMP FOR PUMP. PROVIDE (1) 20 AMP 1 PHASE CB & (3) #12 CONDUCTORS IN 3/4" CONDUIT FOR (1) ENCLOSURE HEATER (NOTE 11). PROVIDE (1) 20 AMP 1 PHASE CB & (3) #12 CONDUCTORS IN 3/4" CONDUIT FOR PLC CABINET 1 (OUTSIDE VAULT). PROVIDE (1) 20 AMP 1 PHASE CB & (3) #12 CONDUCTORS IN 3/4" CONDUIT FOR FUTURE PLC CABINET (INSIDE VAULT). PROVIDE (1) 30 AMP 2 POLE CB AND #10 CONDUCTORS IN 3/4" CONDUIT FOR VAULT HEATER. ALL OUTLETS TO HAVE GFCI PROTECTION.
10. CONDUIT NUMBER & SIZE SHOWN ON DRAWING DETAIL ARE ONLY REPRESENTATIONAL. ACTUAL NUMBER & SIZE SHALL BE AS REQ'D..
11. SIZE & PROVIDE HEATER TO MAINTAIN TEMPERATURE FOR INTERNAL EQUIPMENT ABOVE 40°F (5°C).
12. PROVIDE 2" THICK FOAM INSULATION INSIDE OF ENCLOSURE TOP, BOTTOM, BACK, SIDES & DOORS. SECURE INSULATION w/ADHESIVE.
13. ALL JUNCTION BOXES IN VAULT SHALL BE 316 STAINLESS STEEL NEMA 4X BOXES (16"x12"x6").
14. ALL WIRE SHALL BE XHHW-2 COPPER WIRE.
15. PROVIDE THERMOSTAT FOR PANEL EXHAUST FAN TO TURN ON AT TEMPERATURES ABOVE 80° F AND OFF AT TEMPERATURES LOWER THAN 75° F.
16. PROVIDE THERMOSTAT FOR VAULT HEATER TO KEEP TEMPERATURE ABOVE 40° F.

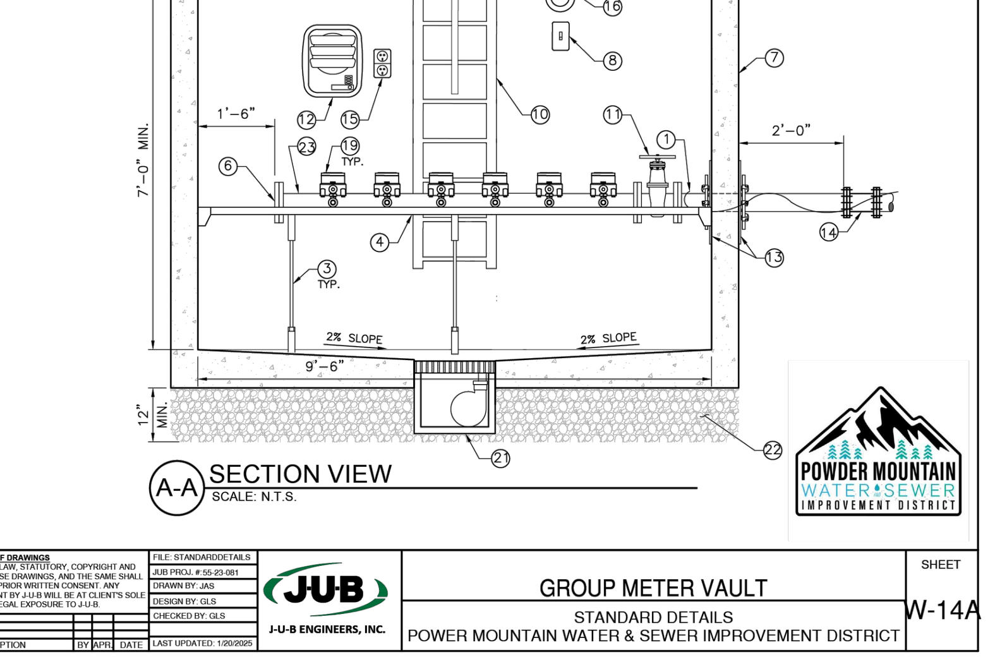
D1 POWER CONTROL BOX DETAIL
SCALE: NOT TO SCALE

STANDARD VAULT POWER CONTROL BOX
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-13

7 — GROUP METER VAULT



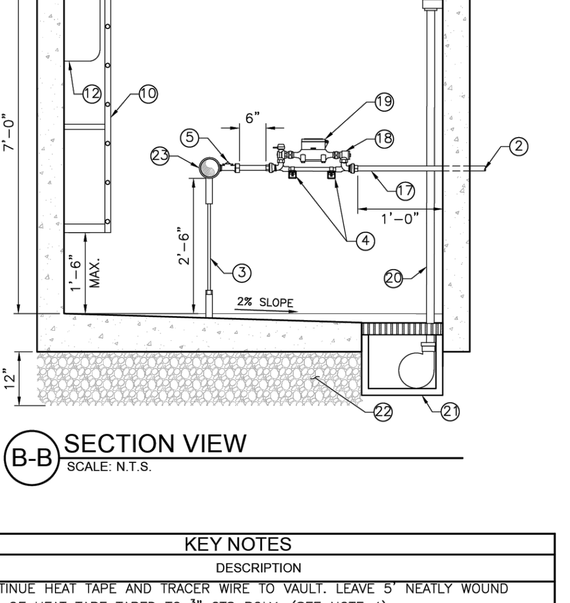
GROUP METER VAULT PLAN VIEW DETAIL
SCALE: N.T.S



A-A SECTION VIEW
SCALE: N.T.S.

GROUP METER VAULT
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-14A

8 — GROUP METER VAULT, NOTES



B-B SECTION VIEW
SCALE: N.T.S.

CAPACITY TABLE	
LATERAL SIZE	MAX. NUMBER OF 1" CONNECTIONS
2"	4
3"	9
4"	16 (SEE NOTE 8)

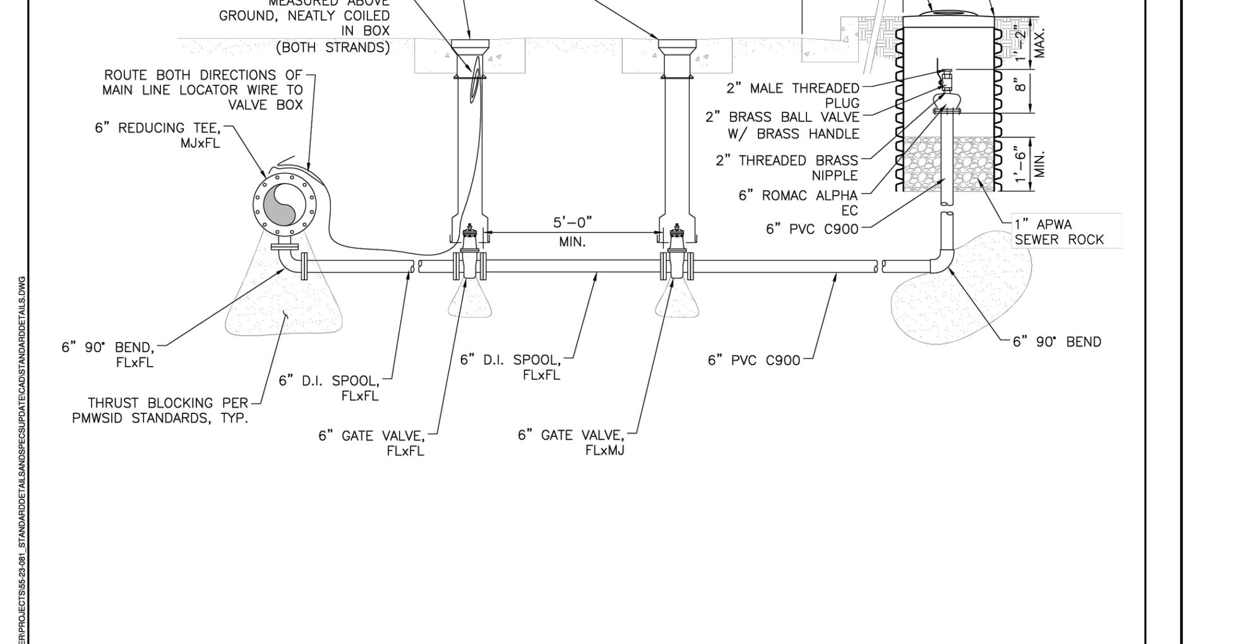
NOTES:

1. ALL EXPOSED PIPE INSIDE THE VAULT SHALL BE PRIMED AND PAINTED WITH TWO (2) COATS OF EPOXY PAINT. COLOR TO BE ROYAL BLUE. USE TYPE 2 WAX TAPE INSIDE VAULT PER DISTRICT STANDARD.
2. SUMP PUMP IS ONLY REQUIRED AS DIRECTED BY DISTRICT IN HIGH-GROUNDWATER LOCATIONS. WHEN REQUIRED, VAULT SHALL BE SUPPLIED WITH POWER FOR ALL EQUIPMENT WHERE SHOWN AND/OR NOTED, FOR A COMPLETE AND OPERABLE INSTALLATION. DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE POWER COMPANY AND PROVIDING POWER SOURCE.
3. WHEN APPROVED BY DISTRICT, SUMP PUMP AND BOX MAY BE REPLACED BY GRAVEL SUMP DRAIN. SIZE VARIES AND SHALL BE DETERMINED BY DISTRICT.
4. METER, METER SETTER, LATERAL, MAIN LINE, AND VAULT SIZES AND QUANTITIES MAY VARY AND SHALL BE DETERMINED AND APPROVED BY PMWSID.
5. CONCRETE VAULT MUST BE SIZED AND REINFORCED TO SUPPORT HL-93 LIVE LOAD AND PIPE THRUST. SIZING AND REINFORCEMENT CALCULATIONS SHALL BE SUBMITTED TO PMWSID AND APPROVED PRIOR TO ORDERING MATERIALS.
6. WHEN MANHOLES ARE LOCATED OUTSIDE OF THE TRAVEL WAY, WATER TIGHT DUCTILE IRON ACCESS HATCHES SHALL BE USED IN PLACE OF MANHOLES. HATCH SHALL BE EJ MODEL NO. 00819761B01 OR DISTRICT APPROVED EQUAL.
7. LINK-SEAL ALL PIPE PENETRATIONS.
8. LATERALS GRETER THAN 4" OR FACILITIES REQUIRING MORE THAN 12 CONNECTIONS REQUIRE PRIOR DISTRICT APPROVAL AND DESIGN.

KEY NOTES	
NO.	DESCRIPTION
1	CONTINUE HEAT TAPE AND TRACER WIRE TO VAULT. LEAVE 5' NEATLY WOUND COIL OF HEAT TAPE TAPED TO ¾" CTS POLY. (SEE NOTE 4)
2	CONTINUE SERVICE LATERAL TO RESIDENCE. FURNISH AND INSTALL INSULATION AND HEAT TAPE. SEE SHEET W-2.
3	ADJUSTABLE PIPE SUPPORT. SEE DETAIL A1, SHEET W-12.
4	SUPPORT STRINGER FOR WATER METER SETTER (SS UNISTRUT P1000 SECTION OR EQUIV). ANCHOR TO CONCRETE WALLS.
5	¾" CORP. STOP (THREADED x COMPRESSION). (SEE NOTE 4)
6	4" BLIND FLANGE. (SEE NOTE 4)
7	PRECAST REINFORCED CONCRETE VAULT (7'W *7H * 8.5'L MIN. INTERIOR DIMENSIONS). (SEE NOTES 4 AND 5)
8	LIGHT SWITCH (SEE NOTE 2)
9	30" ø DOUBLE LAYER FROST PROOF MANHOLE FRAME AND COVER. (SEE NOTE 6)
10	ACCESS LADDER WITH EXTENDING SAFETY POST. SEE DETAIL B1, SHEET W-11.
11	4-INCH GATE VALVE WITH HANDWHEEL OPERATOR (FL X FL). (SEE NOTE 4)
12	ELECTRIC UNIT HEATER. DAYTON 3UF76 W/ 8X966 MOUNTING BRACKET AND 2E569 BUILT IN THERMOSTAT (SEE NOTE 2).
13	LINK SEAL TRIPAC WITH THRUST RESTRAINT. STEEL PLATE WITH MEGALUG STYLE JOINT RESTRAINT. SEE DETAIL B2, SHEET W-11.
14	CONNECTION TO PVC. 4-INCH ROMAC ALPHA WIDE-RANGE RESTRAINT COUPLING, OR APPROVED EQUIVALENT.
15	GFCI-RATED 120-VOLT 20-AMP OUTLET WITH COVER. (SEE NOTE 2)
16	VAPOR TIGHT LED LIGHT FIXTURE (4000K LITHONIA OR APPROVED EQUAL). (SEE NOTE 2)
17	¾" CTS POLY. TUBING (BLUE COLOR). (SEE NOTE 4)
18	FORD ¾" LINE SETTER WITH ANGLE VALVE AND DUAL CHECK VALVE (LSVBHH41-444W-G-N L STYLE). FASTEN TO UNISTRUT STRINGER. (SEE NOTE 4)
19	METER PROVIDED BY DISTRICT AS PART OF HOOK-UP REQUIREMENTS. METRON FARNIER.
20	HDPE DRAIN PIPE W/ CHECK VALVE ROUTED TO OUTSIDE STORM DRAIN. COORDINATE CONECTION WITH PMWSID. (SEE NOTE 3)
21	18"X18"X18" SUMP W/ GRATE & SUMP PUMP. WATERTIGHT SEAL BETWEEN SUMP BOX AND VAULT REQUIRED. (SEE NOTES 2 AND 3)
22	1½" WASHED SEWER ROCK FOUNDATION.
23	PExFL DUCTILE IRON SPOOL. SIZE DETERMINED BY DISTRICT.

GROUP METER VAULT, NOTES
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-14B

9 — 6-INCH BLOW OFF ASSEMBLY



6-INCH BLOW OFF ASSEMBLY
STANDARD DETAILS
POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT
SHEET W-15

FAWKES CONSULTANTS INC.

165 W Canyon Crest Rd Ste 260
Alpine, Utah 84004
Gwilliams@fawkesconsultants.com

SUBMITTAL SET

DATE: 07/08/2025
PROJECT NO. 24.028

REVISION	DATE
1	
2	
3	
4	
5	
6	

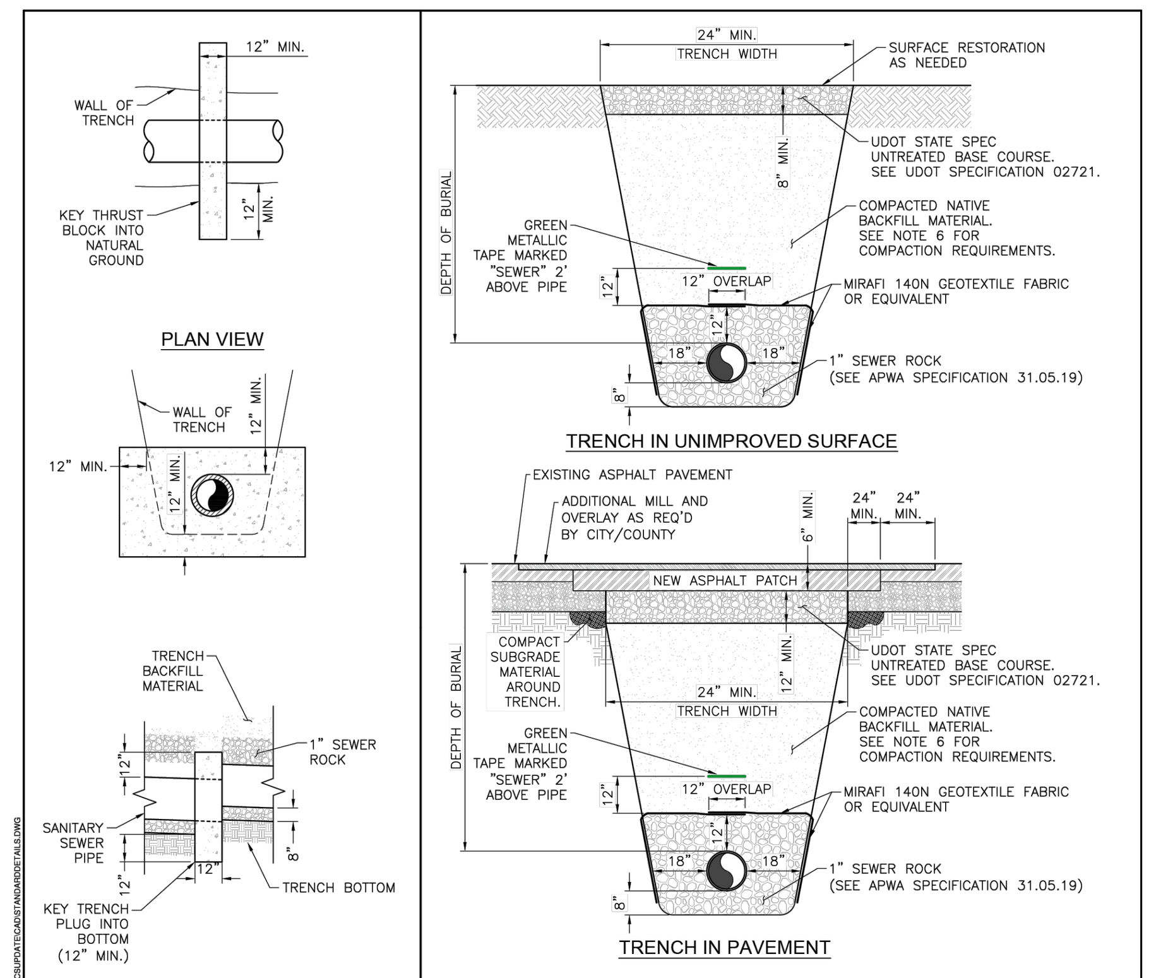
DETAIL
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

REGISTERED PROFESSIONAL ENGINEER No.12296559 JORDAN J. WILLIAMS 07/08/2025 STATE OF UTAH

SCALE:

C802

DRAWN BY: DN



NOTES:

1. CONCRETE MATERIAL SHALL BE MIN. 1500 P.S.I. STRENGTH.
2. PLUG SHALL BE WATERTIGHT FOR ENTIRE TRENCH WIDTH.
3. PLUGS SHALL BE LOCATED AT INTERVALS OF THE LESSER OF 200 HORIZONTAL FEET OR EVERY 25 VERTICAL FEET, UNLESS OTHERWISE DIRECTED BY PMWSID.

TRENCH PLUG

NOTES:

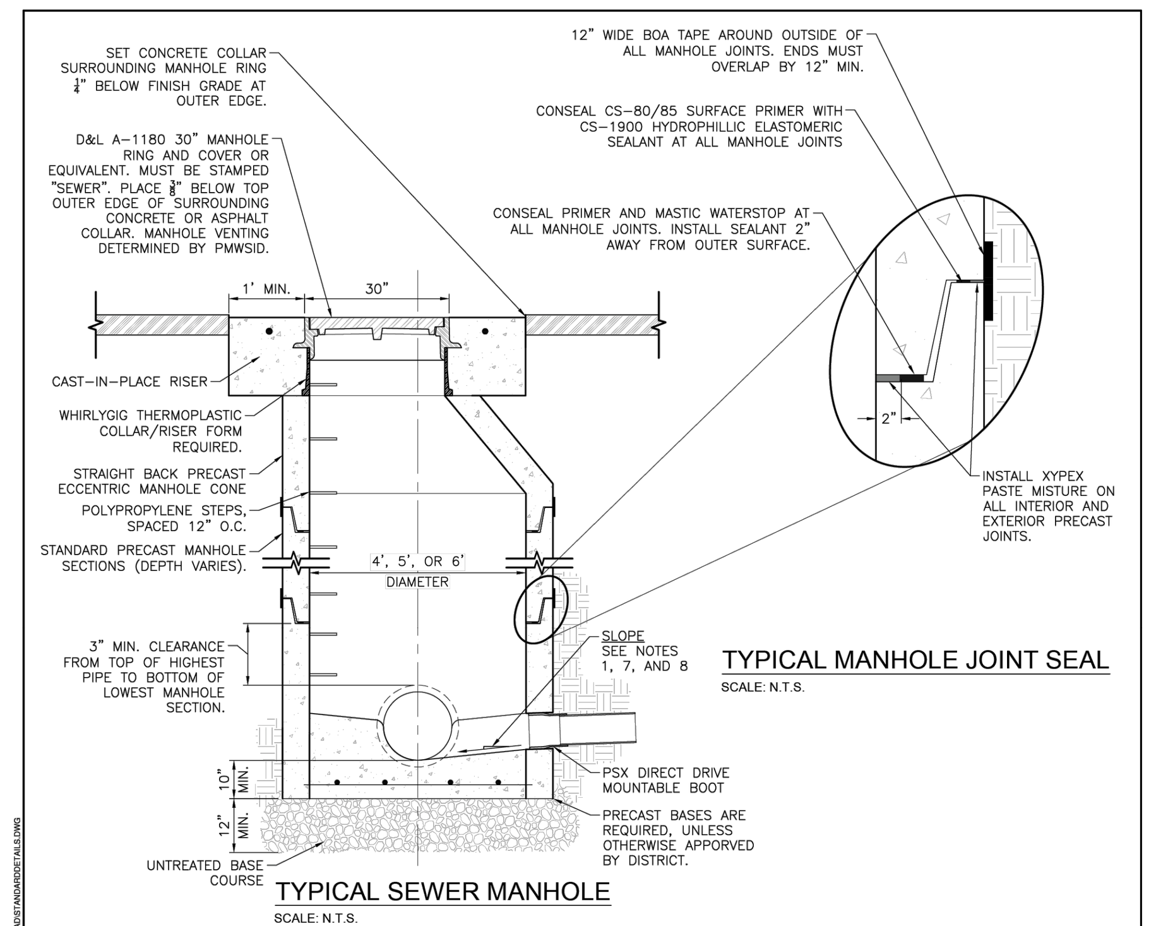
1. CONTRACTOR SHALL MEET ALL REQUIREMENTS ESTABLISHED FOR SAFE TRENCHING (SEE OSHA AND UOSH REQUIREMENTS, LATEST EDITIONS).
2. PRIOR TO LAYING PIPE WITHIN 50' OF UTILITIES THAT MAY BE CROSSED OR EXPOSED, AS SHOWN ON THE DRAWINGS OR "BLUE STAKED", CONTRACTOR SHALL LOCATE AND NOTIFY ENGINEER OF ANY POTENTIAL DESIGN CONFLICT.
3. MINIMUM BURY DEPTH OF 9' IS RECOMMENDED IN LOCATIONS WHERE SEWER LATERALS ARE NEEDED TO SERVICE A BASEMENT. IF THE SEWER LINE DOES NOT HAVE 9' OF COVER, THE PLAT SHALL FEATURE THE FOLLOWING NOTE: "SHALLOW SEWER. CONTRACTOR TO VERIFY DEPTH PRIOR TO BASEMENT EXCAVATION"
4. MINIMUM 4' AND MAXIMUM 11' OF COVER, UNLESS OTHERWISE APPROVED BY DISTRICT ENGINEER.
5. SCREEN BACKFILL TO 4"-MINUS. COMPACT BACKFILL TO 96% OF MAX. DRY DENSITY (UNDER ROADS AND STRUCTURES) OR 85% OF MAX. DRY DENSITY (OTHER LOCATIONS) PER ASTM D-1557. FOLLOW ALL LOCAL COMPACTION REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN PMWSD STANDARDS.
6. MAINTAIN 10' HORIZONTAL SPACING (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) BETWEEN ALL SEWER AND WATER LINES.
6. MAINTAIN 18" VERTICAL SPACING (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) BETWEEN ALL SEWER AND WATER CROSSINGS. ROUTE WATER LINES ABOVE SEWER.

TYPICAL SEWER TRENCH SECTION
SCALE: N.T.S.

SEWER TRENCH AND TRENCH PLUG — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET SS-1

J-U-B ENGINEERS, INC.

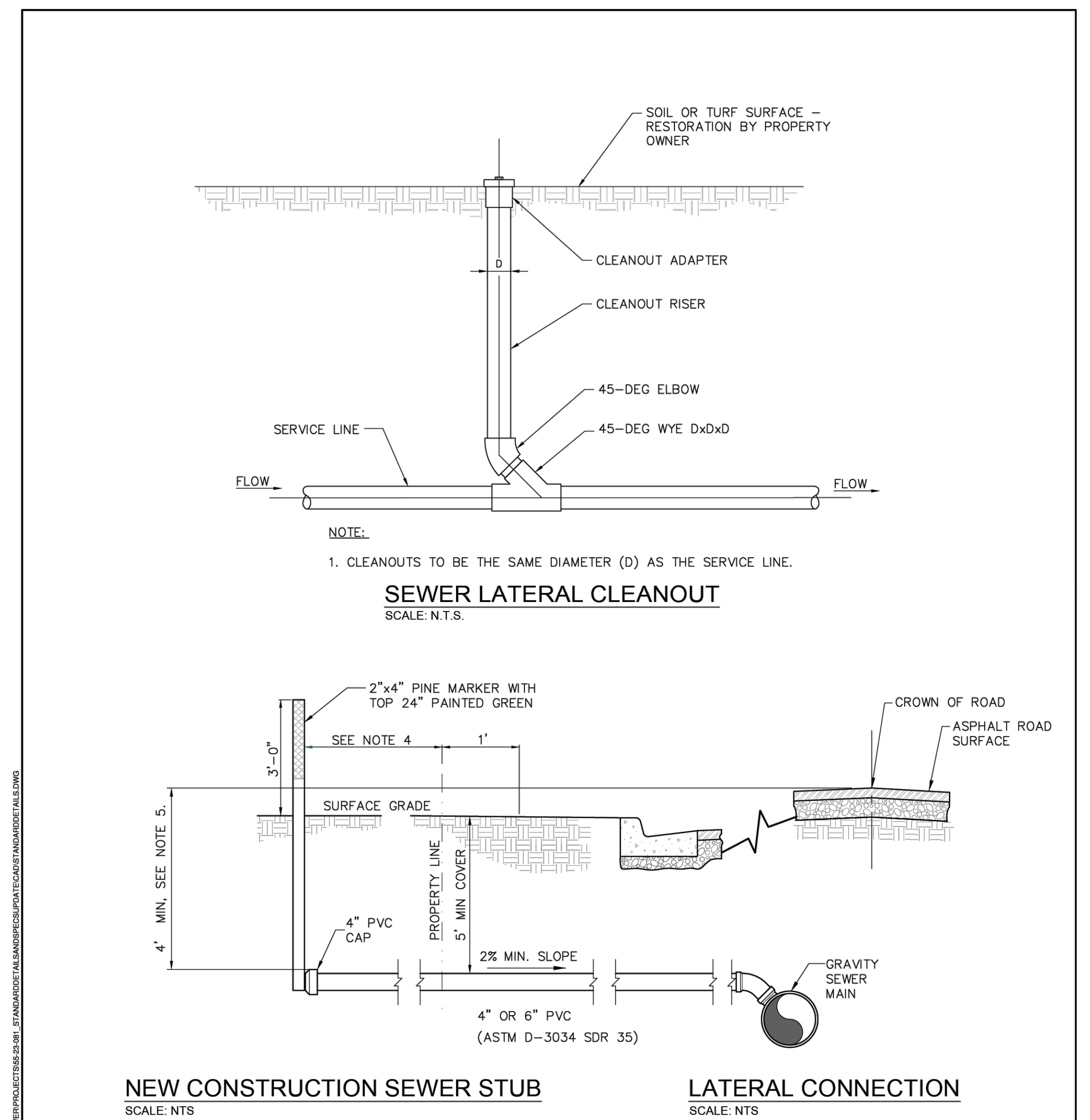
① SEWER TRENCH AND TRENCH PLUG



NOTES:
1: MINIMUM 0.2' DROP THROUGH MANHOLE, OR SLOPE OF THE STEEPEST ENTERING PIPE CARRIED THROUGH MANHOLE, WHICHEVER IS GREATER.
2: ENSURE REMOVAL OF ALL DEBRIS, PLYWOOD, AND TEMPORARY PLUGS AFTER FINAL GRADING AND SURFACING OF MANHOLE IS COMPLETE.
3: CAST-IN-PLACE MANHOLE WALLS MUST BE AT LEAST 10" THICK.
4: MANHOLES DEEPER THAN 11' MUST RECIEVE PRIOR DISTRICT APPROVAL.
5: CONE AND WALL SECTIONS SHALL CONFORM WITH ASTM C-478 STANDARD.
6: ALL MANHOLES MUST BE H-20 RATED.
7: PIPE DEFLECTION SHALL NOT EXCEED 7 DEGREES WHEN ENTERING OR EXITING A MANHOLE.
8: SLOPES ENTERING/EXITING MANHOLE STEEPER THAN 10% GRADE REQUIRE SPECIAL DESIGN CONSIDERATIONS AND MUST HAVE PRIOR DISTRICT APPROVAL.
9: 5' DIAMETER MANHOLES SHALL BE USED IN THE FOLLOWING SITUATIONS:
   A. AT ALL INTERSECTIONS OF 3 OR MORE 8" OR LARGER PIPES
   B. WHERE THE DEFLECTION ANGLE OF THE PIPE IS EQUAL TO OR GREATER THAN 90 DEGREES
   C. MANHOLES WITH DEPTHS GREATER THAN 11 FEET
   D. A 6 FOOT DIAMETER MANHOLE IS REQUIRED WHEN MORE THAN ONE OF THE ABOVE CONDITIONS ARE MET IN THE SAME MANHOLE

SEWER MANHOLE — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET SS-2

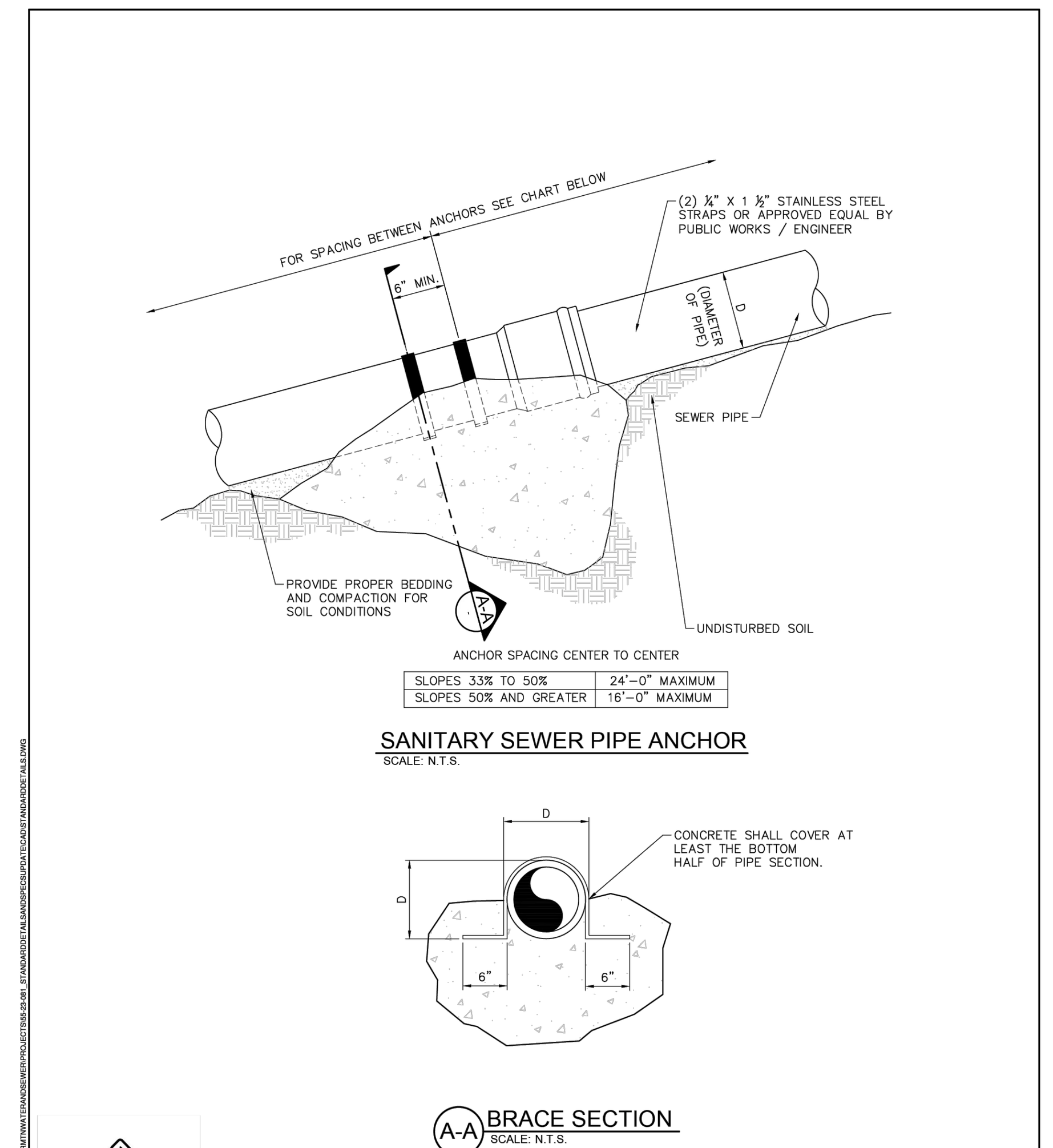
② SEWER MANHOLE



NOTES
1: CONNECT TO MAIN VIA 45° ELBOW ANGLED DOWNWARD INTO A TEE FITTING.
2: PMWSID MAINTAINS THE SEWER LATERAL FROM THE SEWER MAIN TO THE STREET RIGHT-OF-WAY LINE. THE PROPERTY OWNER MAINTAINS THE SEWER LATERAL FROM THE BUILDING TO THE STREET RIGHT-OF-WAY LINE. A PLUGGED LATERAL IS THE PROPERTY OWNER'S RESPONSIBILITY FROM THE BUILDING TO THE SEWER MAIN.
3: DEVELOPER TO PROVIDE SURVEY POINTS FOR EACH STUB LOCATION AND ELEVATION.
4: STUB SEWER LATERAL TO EITHER 10' BEHIND PROPERTY LINE, 20' BEHIND EDGE OF ASPHALT, OR 20' BEHIND TOP BACK OF CURB; WHICHEVER IS LONGEST.
5: BURY STUB 7' DEEP. WITH PRIOR PMWSID APPROVAL, STUB MAY BE BURIED SHALLOWER TO MAINTAIN 2% SLOPE OF LATERAL.

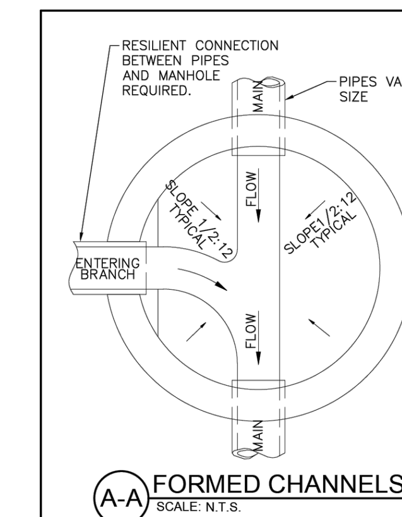
SEWER LATERAL, STUB, AND CLEANOUT — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET SS-3

③ SEWER LATERAL, STUB, AND CLEANOUT

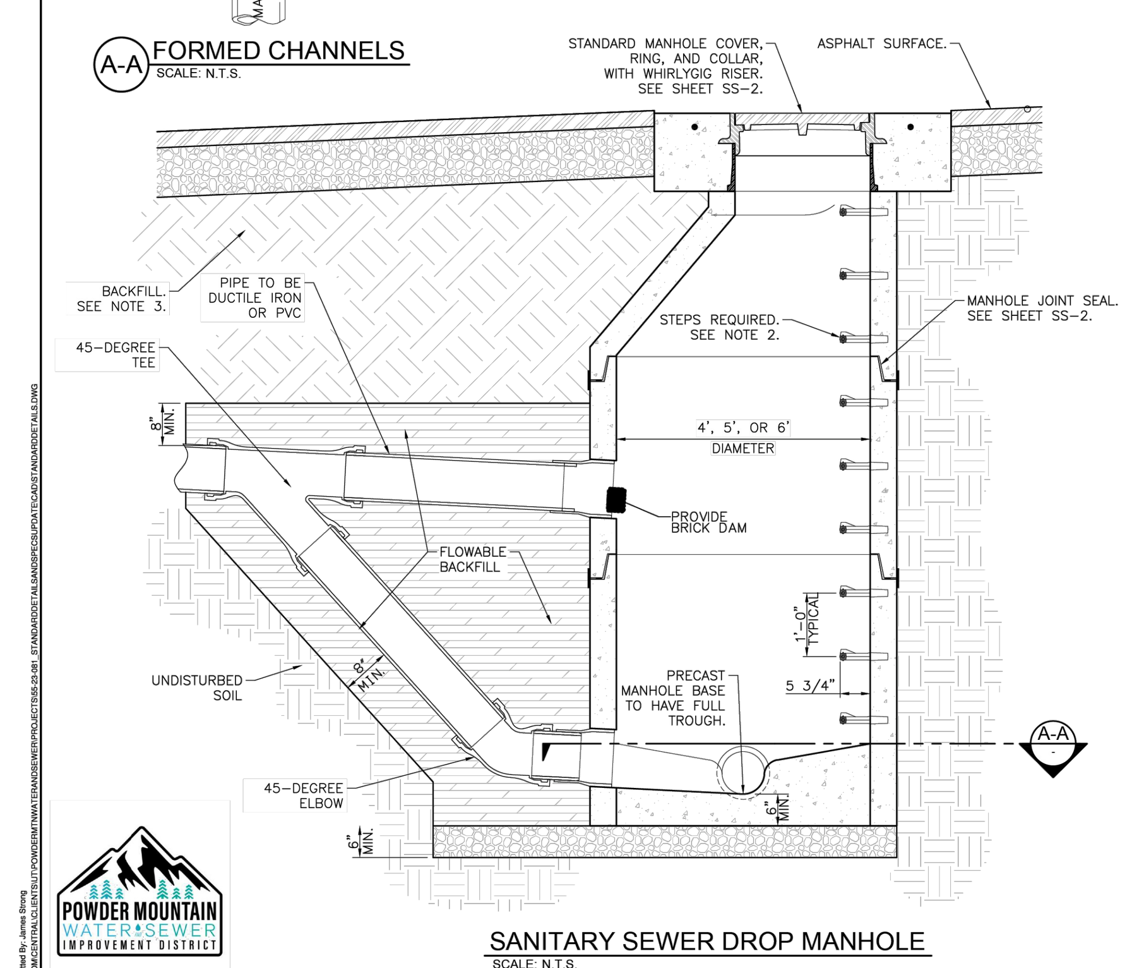


SEWER PIPE ANCHOR — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET SS-4

④ SEWER PIPE ANCHOR



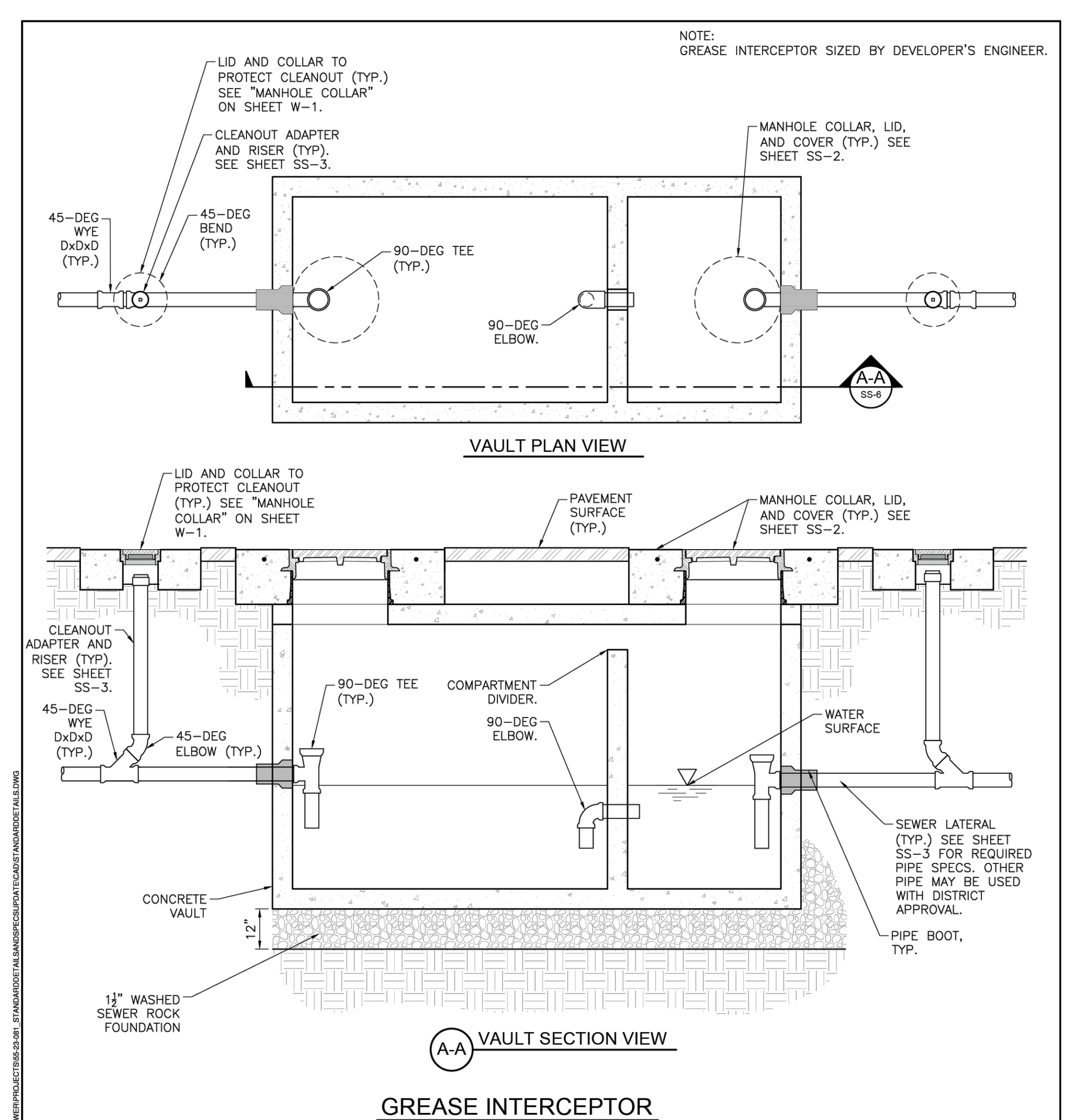
NOTES:
1. DROP MANHOLES MUST RECEIVE PRIOR DISTRICT APPROVAL.
2. STEPS SHALL BE MADE OF COPOLYMER POLYPROPYLENE. CONFORMING TO ASTM D-4101. REINFORCING STEEL TO BE DEFORMED ½" DIAMETER GRADE 60 ROD.
3. SCREEN BACKFILL TO 4"-MINUS. COMPACT BACKFILL TO 96% OF MAX. DRY DENSITY (UNDER ROADS AND STRUCTURES) OR 85% OF MAX. DRY DENSITY (OTHER LOCATIONS) PER ASTM D-1557. FOLLOW ALL LOCAL COMPACTION REGULATIONS. LOCAL REGULATIONS MAY BE MORE STRINGENT THAN PMWSID STANDARDS.



DROP MANHOLE — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET SS-5

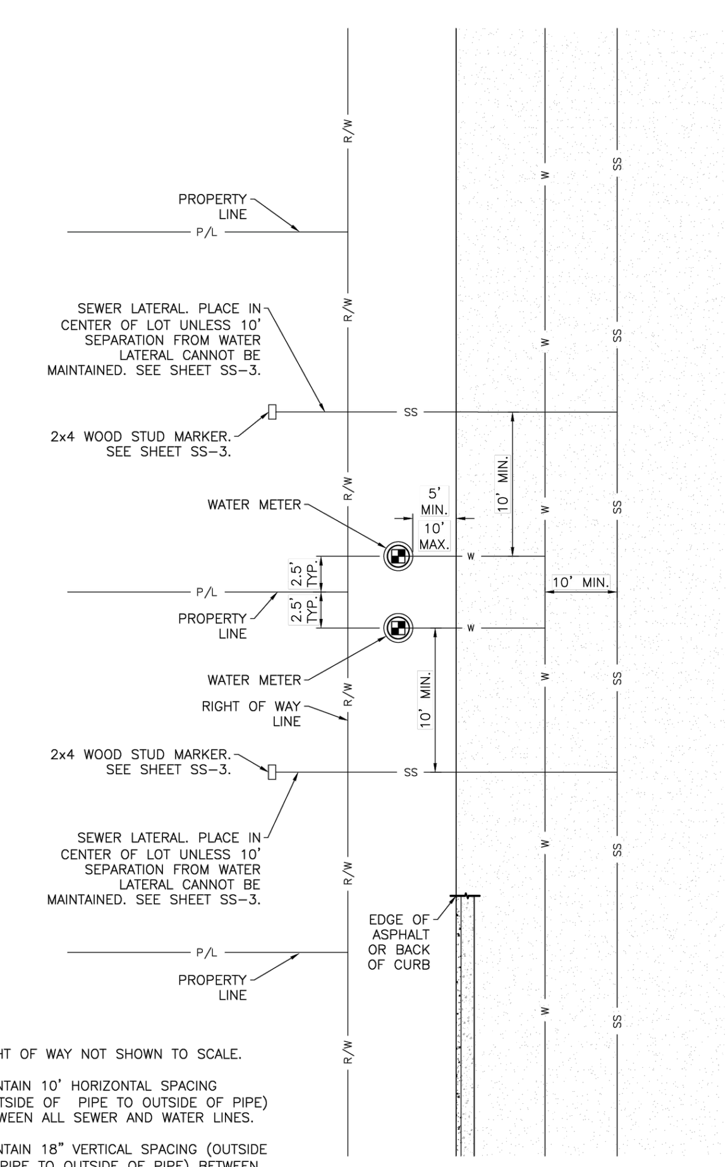
⑤ DROP MANHOLE

NOTE:
GREASE INTERCEPTOR SIZED BY DEVELOPER'S ENGINEER.



GREASE INTERCEPTOR — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET SS-6

⑥ GREASE INTERCEPTOR

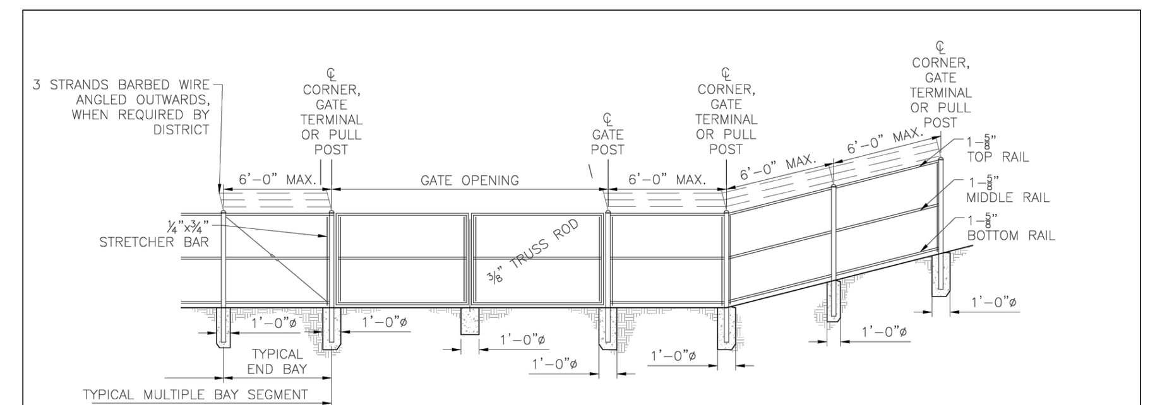


NOTES:
1: RIGHT OF WAY NOT SHOWN TO SCALE.
2: MAINTAIN 10' HORIZONTAL SPACING (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) BETWEEN ALL SEWER AND WATER LINES.
3: MAINTAIN 18" VERTICAL SPACING (OUTSIDE OF PIPE TO OUTSIDE OF PIPE) BETWEEN ALL SEWER AND WATER CROSSINGS. ROUTE WATER LINES ABOVE SEWER.

UTILITY LAYOUT
SCALE: N.T.S.

STANDARD UTILITY LAYOUT — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET UT-1

⑦ STANDARD FENCE



CHAINLINK FENCE NOTES:

1. ALL FABRIC SHALL BE 6 FEET HIGH CHAIN LINK OF 2 INCH GALVANIZED MESH OF 11½ GAUGE.
2. ALL STEEL PIPE MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A-120, SCHEDULE 40, HOT DIPPED ZINC COATED STEEL PIPE.
3. ALL POSTS SHALL BE 2-⅜" SCHEDULE 40 PIPE SPACED AT 6'-0" ON CENTER. ALL POSTS SHALL BE SET IN CONCRETE AND SHALL BE TOPPED WITH LINE ARM & 3 STRANDS BARBED WIRE.
4. ALL TOP, MIDDLE, AND BOTTOM RAILS SHALL BE 1-⅝" SCHEDULE 40 PIPE.
5. ALL END, CORNER OR PULL POST SHALL BE 9 FEET IN LENGTH WITH A MINIMUM DIAMETER OF 2⅞ INCHES. ALL LINE POSTS SHALL BE 8 FEET 8 INCHES IN LENGTH WITH A MINIMUM DIAMETER OF 2⅜ INCHES.
6. 9-GAUGE WIRE AND 9-GAUGE WRAP TIES REQUIRED.

GATES

GATE POSTS AND GATE FRAMES			
HEIGHT	GATE OPENING	GATE POST	GATE FRAME
6 FEET AND OVER	SINGLE TO 6' OR DOUBLE TO 12'	2⅞"	1⅞"
	SINGLE OVER 6' TO 13' OR DOUBLE OVER 12' TO 24'	4"	
	SINGLE OVER 13' TO 18' OR DOUBLE OVER 24' TO 36'	6⅝"	
	SINGLE OVER 18' OR DOUBLE OVER 36'	8⅝"	

FENCES

HEIGHT OF FABRIC	DEPTH OF POST	LENGTH OF END, CORNER OR PULL POSTS	LENGTH OF LINE POSTS	SIZE OF POSTS: END, CORNER AND PULL PIPE OPTION	SIZE OF POSTS: LINE POST (MIN. SIZE) PIPE OPTION	SIZE OF POSTS: GATE POSTS
6'-0"	3'-0"+	9'-0"+	8'-8"	2⅞"	2⅜"	4"

CHAIN LINK FENCE DETAIL

STANDARD FENCE — STANDARD DETAILS — POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT — SHEET FC-1

⑧ STANDARD UTILITY LAYOUT

FAWKES CONSULTANTS INC.
165 W Canyon Crest Rd Ste 260
Alpine, Utah 84004
Gwilliams@fawkesconsultants.com

SUBMITTAL SET

DATE: 07/08/2025
PROJECT NO. 24.028

REVISION	DATE
1	
2	
3	
4	
5	
6	

DETAIL
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

REGISTERED PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE:

C803

DRAWN BY: DN

ACO StormBrixx®

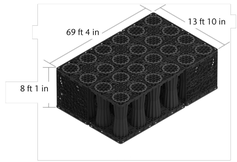
Online Project Configuration

Project Details
Description : MM Tank 2
Date : 07-07-2025
City : Corinth
State : Texas
Zip Code : 76208
Country : USA

Customer Details
Contact : Guy Williams
Email : gwilliams@fawkesconsultants.com

Tank Configuration

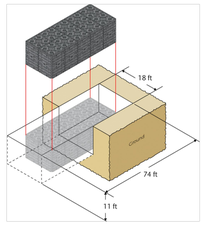
Tank Function	Detention/Retention
Product	Heavy Duty (600HD)
Number of Layers	4
Total Net Volume (ft³)	7,438 ft³
Total Gross Volume (ft³)	7,752 ft³
Length of Tank (ft/in)	69 ft 4 in
Width of Tank (ft/in)	13 ft 10 in
Depth of Tank (ft/in)	8 ft 1 in



Cavity & Excavation Details

Length of Cavity (ft/in)	73 ft 4 in
Width of Cavity (ft/in)	17 ft 10 in
Depth of Cavity (ft/in)	10 ft 6 in
Volume of Material to be Excavated (ft³)	13,800 ft³
*Membrane Quantity (ft²)	3,755.2 ft²
Cover Dimension (ft/in)	2 ft 0 in
**Backfill Material (ft³)	6,048 ft³

* Calculation includes a 15% overlap
** Pavement not accounted for



* Diagram shows cavity size rounded to nearest foot

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

Project Configuration Inlets, Outlets, and Access

Inlets

	Qty
Inlets	**2**
Remote Access Unit	2
Side Panels	0
Horizontal Pipe Connector	0

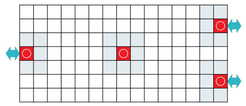
Outlets

	Qty
Outlets	**1**
Remote Access Unit	1
Side Panels	0
Horizontal Pipe Connector	0

Access

	Qty
Access Points	**1**
Remote Access Unit	1
Remote Access Plate	0

Grid Note
The grids below do not represent accurate dimensions or proportions they just give a general guide to both inlet / outlet and access placement on your StormBrixx scheme.



Inlet/Outlet Grid Key
Inlet/Outlet Pipe
Inlet/Outlet using Remote Access Unit

Access Grid Key
Remote Access Unit with maintenance access
Remote Access Plate with maintenance access

825 W. Beechcraft Street
Casa Grande, AZ 85122
Tel : (888) 490-9552
info@acousa.com

Bill of Materials

Pt No.		Description	Qty	Price Each ($)	Extended Price ($)	Weight Each (lbs)	Extended Weight (lbs)
314061		Half-Module 600 HD	980	72.00	70,560.00	22.40	21,952.0
314062		Side Panel 600 HD	336	18.00	6,048.00	3.79	1,273.4
140213		Stormbrixx Universal top cover	245	9.00	2,205.00	1.31	321.0
314023		Layer Connector 600 HD	550	1.00	550.00	0.03	16.5
27034		Remote Access Unit 600 HD	16	420.00	6,720.00	70.50	1,128.0
314038		Extension Shaft	12	80.00	960.00	4.84	58.1
314133		Remote Access Vented Cover - Ductile Iron	4	275.00	1,100.00	83.60	334.4
93147		Horizontal Pipe Connector 8° SCH 40	1	127.80	127.80	4.31	4.3
93144		Horizontal Pipe Connector 15° SDR 35	1	210.00	210.00	10.80	10.8
Totals				**Price**	**88,480.80**	**Weight**	**25,098.5**

Notes:
1) These prices are the manufacturer's suggested retail price (MSRP). Please contact your local dealer or ACO Customer Service for more information.

2) You should have received an email with your output results from: no-reply@acosbconfigurator.com If you do not receive the confirmation within a few minutes, please check your spam folder.

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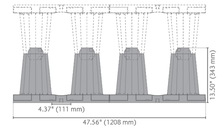
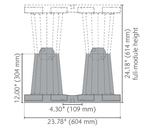
ACO StormBrixx®

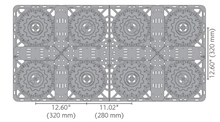
December 2024

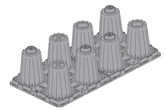
StormBrixx 600 HD

Half-Module 600 HD
part no. 314061









Note: (2) half-modules are connected to form (1) full-module, (1) side panel fits (1) full-module.

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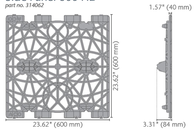
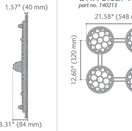
ACO StormBrixx®

December 2024

StormBrixx 600 HD

Side Panel 600 HD
part no. 314062

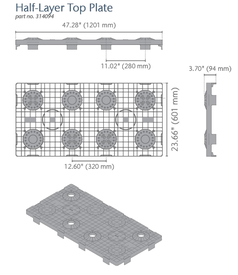




Universal Top Cover
part no. 140213

Half-Layer Side Panel 600 HD
part no. 314095

Half-Layer Top Plate
part no. 314094



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ACO StormBrixx®

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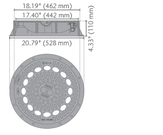
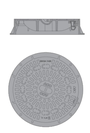
StormBrixx 600 HD

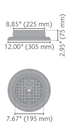
Remote Access Cover (Vented)
part no. 314133



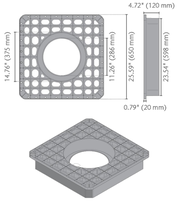
Remote Access Cover (Non-Vented)
part no. 314132



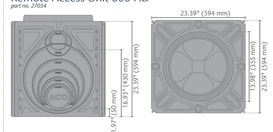
Inspection Point Cover
part no. 314044



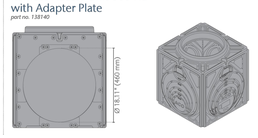
Remote Access Plate
part no. 314075



Remote Access Unit 600 HD
part no. 27034



Remote Access Unit 600 HD with Adapter Plate
part no. 138140



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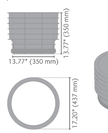
ACO StormBrixx®

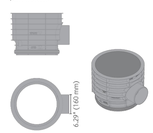
December 2024

StormBrixx 600 HD

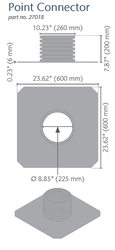
Extension Shaft
part no. 314038



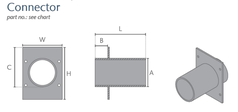
Extension Shaft with Pipe Socket
part no. 314039



Vertical Inspection Point Connector
part no. 27018



Horizontal Pipe Connector
part no.: see chart



Part No.	A	B (in (mm))	C (in (mm))	H (in (mm))	W (in (mm))	L (in (mm))
93139	4" SDR 35	2.00 (51)	6.25 (158)	8.25 (209)	6.70 (170)	8.00 (203)
93145	4" SCH 40	2.00 (51)	7.47 (189)	8.29 (210)	6.70 (170)	8.00 (203)
93140	6" SDR 35	2.00 (51)	8.95 (227)	9.93 (252)	10.22 (259)	8.00 (203)
93146	6" SCH 40	2.00 (51)	9.11 (231)	9.93 (252)	10.22 (259)	8.00 (203)
93141	8" SDR 35	2.00 (51)	10.46 (265)	11.39 (289)	11.64 (295)	8.00 (203)
93147	8" SCH 40	2.00 (51)	10.57 (268)	11.39 (289)	11.64 (295)	8.00 (203)
93142	12" SDR 35	2.00 (51)	13.48 (342)	14.30 (363)	16.66 (423)	8.00 (203)
93144	15° SCH 40	2.00 (51)	17.28 (439)	19.25 (489)	19.25 (489)	8.00 (203)

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ACO StormBrixx®

December 2024

StormBrixx 600 HD

Product Details

Product Name	Part No.	Length in (mm)	Width in (mm)	Depth in (mm)	Weight lbs
Half-Module 600 HD	314061	47.56 (1208)	23.78 (604)	13.50 (343)	23.8
Side Panel 600 HD	314062	23.62 (600)	23.62 (600)	2.17 (55)	3.8
Half-Layer Side Panel 600 HD	314095	23.31 (592)	11.67 (297)	1.26 (32)	2.0
Universal Top Cover	140213	21.58 (548)	21.58 (548)	1.74 (44)	1.6
Half-Layer Top Plate	314094	47.28 (1201)	23.66 (601)	3.70 (94)	7.7
Layer Connector	314023	3.94 (100)	1.58 (40)	1.82 (46)	0.1
Remote Access Cover (Vented) - Ductile Iron (Load Class D400)	314133	-	Ø 20.79 (528)	4.33 (110)	83.6
Remote Access Cover (Non-Vented) - Ductile Iron (Load Class D400)	314132	-	Ø 20.79 (528)	4.33 (110)	86.5
Inspection Point Cover - Ductile Iron (Load Class D400)	314044	-	Ø 8.85 (225)	2.95 (75)	34.5
Remote Access Plate	314075	25.59 (650)	25.59 (650)	4.72 (120)	10.8
Remote Access Unit 600 HD	27034	23.39 (594)	23.39 (594)	19.37 (497)	40.0
Remote Access Unit 600 HD with Adapter Plate	138140	24.41 (620)	23.39 (594)	24.02 (610)	71.0
Extension Shaft	314038	-	Ø 17.20 (437)	13.77 (350)	4.8
Extension Shaft with Pipe Socket	314039	-	Ø 17.20 (437)	13.77 (350)	6.2
Vertical Inspection Point Connector	27018	-	Ø 8.85* (225)	7.87 (200)	5.5
4" HDR 35 Horizontal Pipe Connector	93139	8.00 (203)	6.70 (170)	8.25 (209)	1.9
4" SCH 40 Horizontal Pipe Connector	93145	8.00 (203)	6.70 (170)	8.29 (210)	1.9
6" HDR 35 Horizontal Pipe Connector	93140	8.00 (203)	10.22 (259)	9.93 (252)	3.2
6" SCH 40 Horizontal Pipe Connector	93146	8.00 (203)	10.22 (259)	9.93 (252)	3.2
8" HDR 35 Horizontal Pipe Connector	93141	8.00 (203)	11.64 (295)	11.39 (289)	5.5
8" SCH 40 Horizontal Pipe Connector	93147	8.00 (203)	11.64 (295)	11.39 (289)	5.5
12" HDR 35 Horizontal Pipe Connector	93142	8.00 (203)	16.66 (423)	14.30 (363)	5.5
15° SCH 40 Horizontal Pipe Connector	93144	8.00 (203)	19.25 (489)	19.25 (489)	5.5
			* internal width		

Specification Summary

General
The StormBrixx stormwater management system shall be ACO StormBrixx 600 HD as supplied by ACO, Inc.

ACO StormBrixx 600 HD meets AASHTO HS-25 loading conditions.

Geomembranes/Geotextiles
The StormBrixx stormwater system shall be wrapped in either appropriate permeable geotextile or impermeable geomembrane (supplied and specified by others) as indicated by project design engineer.

Accessories
The StormBrixx stormwater system may be used in conjunction with one or more optional products: remote access unit, remote access plate extension shaft, and/or inspection point connector.

Installation
The StormBrixx stormwater system shall be installed in strict accordance with the manufacturer's installation instructions and recommendations.

Materials
The half-module shall be manufactured from polypropylene and have minimum properties as follows:

Charpy unnotched impact strength:	9.5 ft-lb/in² (20 kJ/m²)
Tensile strength, ultimate:	3,480 psi (23,994 kPa)
Water absorption:	0.01%
Frost proof:	YES
Salt proof:	YES
Fuels/oils-resistant:	YES

The stormwater tank shall provide an average 95% open area, holding up to 15.18 ft³ (0.43 m³) per module (2 half-modules assembled) and offer full access to all areas and levels for maintenance. Configuration and use of side/top panels will marginally impact these figures.

ACO, Inc.

Telephone #: 888.490.9552

ACO Specification Information

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Alpine, Utah 84004
Gwilliams@fawkesconsultants.com

SUBMITTAL SET

DATE: 07/08/2025
PROJECT NO. 24.028

REVISION	DATE
1	
2	
3	
4	
5	
6	

DETAIL
SUNDOWN TOWNHOMES
APPROX. 6550 NORTH POWDER MOUNTAIN ROAD
EDEN, UTAH 84310

PROFESSIONAL ENGINEER
No.12296559
JORDAN J. WILLIAMS
07/08/2025
STATE OF UTAH

SCALE:

C804

DRAWN BY: DN

16/16