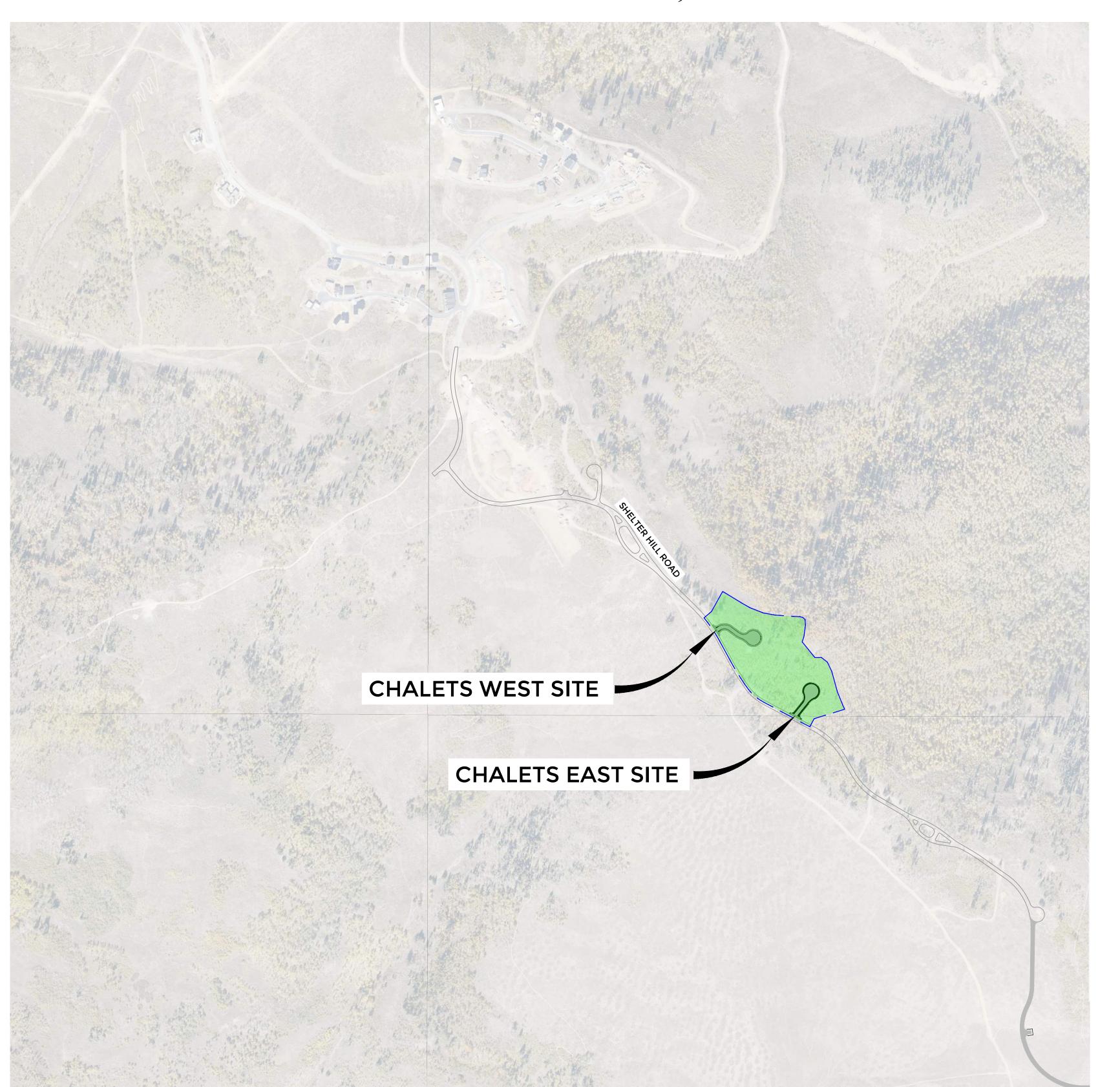
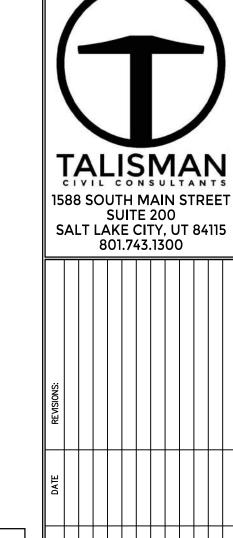
SHELTER HILL CHALETS POWDER MOUNTAIN RESORT

LOCATED IN THE WEST HALF OF SECTION 9, TOWNSHIP 7 NORTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN, WEBER COUNTY, UTAH

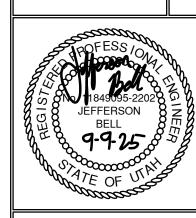


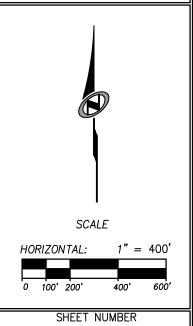
SHEET INDEX	NUMBER
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POWDER MOUNTAIN
SHELTER HILL CHALETS

TCC JOB NUMBER:







2. CONTRACTOR TO STRICTLY FOLLOW GEOTECHNICAL RECOMMENDATIONS FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, RETAINING WALLS AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH THE

PROJECT GEOTECHNICAL ENGINEER. TRAFFIC CONTROL, STRIPING & SIGNAGE TO CONFORM TO CURRENT UDOT TRANSPORTATION ENGINEER'S MANUAL AND MANUAL OF UNIFORM TRAFFIC CONTROL

DEVICES. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO

ITS ORIGINAL CONDITION AT NO COST TO OWNER. 5. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION

REQUIREMENTS BEFORE COMMENCING CONSTRUCTION. 6. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE. 7. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST

RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES. 8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED THOROUGHLY REVIEWED PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.

9. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING ENGINEER OR INSPECTING AUTHORITY 48 HOURS IN ADVANCE OF COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.

10. ANY WORK IN THE PUBLIC RIGHT—OF—WAY WILL REQUIRE PERMITS FROM THE APPROPRIATE, CITY, COUNTY OR STATE AGENCY CONTROLLING THE ROAD, INCLUDING OBTAINING REQUIRED INSPECTIONS.

11. ALL DIMENSIONS. GRADES & UTILITY DESIGNS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. 12. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP

ANY QUESTIONS BEFOREHAND. 13. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL

ENGINEER. 14. CATCH SLOPES SHALL BE GRADED AS SPECIFIED ON GRADING PLANS. 15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FLAGGING, CAUTION SIGNS, LIGHTS, BARRICADES, FLAGPERSONS, AND ALL OTHER DEVICES NECESSARY FOR PUBLIC

16. 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. 17. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY THEM 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 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. 18. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.

19. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR GOVERNING AGENCIES.

20. 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. 21. 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.

22. 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.

23. 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. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.

24. 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 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.

25. 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, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE 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. 26. 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.

GENERAL NOTES CONT.

27. 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. 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 THE TRUE INTENT AND PURPOSE OF THESE PLANS AND SPECIFICATIONS. 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.

28. 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

29. 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 FEET OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH. THE CONTRACTOR SHALL COMPLY WITH INDUSTRIAL COMMISSION OF UTAH SAFETY ORDERS SECTION 68 — EXCAVATIONS, AND SECTION 69 — TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.

30. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.

UTILITY NOTES

1. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY. INCLUDING BUT NOT LIMITED TO: TELEPHONE SERVICE, GAS SERVICE, CABLE, POWER, INTERNET.

2. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING A COMBINATION OF ON-SITE SURVEYS (BY OTHERS). 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 AT 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 CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. 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. CONTRACTOR SHALL POT HOLE ALL UTILITIES TO DETERMINE IF CONFLICTS EXIST PRIOR TO BEGINNING ANY EXCAVATION. NOTIFY ENGINEER OF ANY CONFLICTS. CONTRACTOR SHALL VERIFY LOCATION AND INVERTS OF EXISTING UTILITIES TO WHICH NEW UTILITIES WILL BE CONNECTED. PRIOR TO COMMENCING ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN

ACCORDANCE WITH THE REQUIRED PROCEDURES. 4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT THEIR EXPENSE.

5. ALL VALVES AND MANHOLE COVERS SHALL BE RAISED OR LOWERED TO MEET FINISHED GRADE.

6. CONTRACTOR SHALL CUT PIPES OFF FLUSH WITH THE INSIDE WALL OF THE BOX OR MANHOLE. 7. CONTRACTOR SHALL GROUT AT CONNECTION OF PIPE TO BOX OR MANHOLE WITH

NON-SHRINKING GROUT, INCLUDING PIPE VOIDS LEFT BY CUTTING PROCESS, TO A SMOOTH FINISH. 8. CONTRACTOR SHALL GROUT WITH NON-SHRINK GROUT BETWEEN GRADE RINGS AND BETWEEN BOTTOM OF INLET LID FRAME AND TOP OF CONCRETE BOX. 9. SILT AND DEBRIS IS TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH

BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL

AFTER THE FINAL BOND RELEASE INSPECTION. 10. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL

MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS. 11. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DEWATERED CONDITIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COST OF DEWATERING AND NO COST CHANGE WILL BE PROVIDED.

12. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.

13. MAINTAIN A MINIMUM 18" VERTICAL SEPARATION DISTANCE BETWEEN ALL UTILITY CROSSINGS. AT WATER/SEWER CROSSINGS, WATER IS REQUIRED TO CROSS ABOVE SANITARY SEWER UNLESS AN EXCEPTION HAS BEEN GRANTED BY THE UTAH DIVISION OF DRINKING WATER.

14. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY

UTILITY LINES. 15. ALL BOLTED FITTINGS MUST BE GREASED AND WRAPPED.

16. UNLESS SPECIFICALLY NOTED OTHERWISE, MAINTAIN AT LEAST 2 FEET OF COVER OVER ALL STORM DRAIN LINES AT ALL TIMES (INCLUDING DURING CONSTRUCTION). 17. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 84" OF COVER TO TOP OF

PIPE BELOW FINISHED GRADE AND BE INSULATED PER WATER DISTRICT 18. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET, PIPE EDGE TO PIPE EDGE, FROM THE WATER LINES.

19. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS, CROSSES AND TEES.

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

21. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE. 22. THE CONTRACTOR SHALL NOTIFY TALISMAN CIVIL CONSULTANTS, LLC. 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. 23. UNDER NO CIRCUMSTANCE SHALL THE PIPE OR ACCESSORIES BE DROPPED INTO

24. THE CONTRACTOR SHALL MARK ALL UNDERGROUND UTILITIES IN LOCATIONS WHERE UTILITIES ARE NOT LOCATED WITHIN A ROADWAY. THE CONTRACTOR SHALL MARK UTILITIES AT ANGLE POINTS, PCs, AND PTs WITH A 2' REBAR STAKE INSTALLED FLUSH TO GRADE. SURVEY ALL LOCATIONS AND PROVIDE GPS COORDINATES WITH AS-BUILT DRAWINGS.

25. ANY CHANGES TO THE ROAD GRADE OR PROFILE NEED TO BE APPROVED BY POWDER MOUNTAIN AND PROJECT ENGINEER, AS THIS MAY AFFECT THE FINAL BURY DEPTH OF WATER LINES.

26. PROVIDE AND INSTALL FIRE HYDRANT IDENTIFICATION FLAGS ON ALL FIRE HYDRANTS WITHIN PROJECT PER POWDER MOUNTAIN RECOMMENDATIONS. 27. ALL FLUSHING SHALL BE OVERSEEN BY PMWSID. PROVIDE 48 HOURS NOTICE

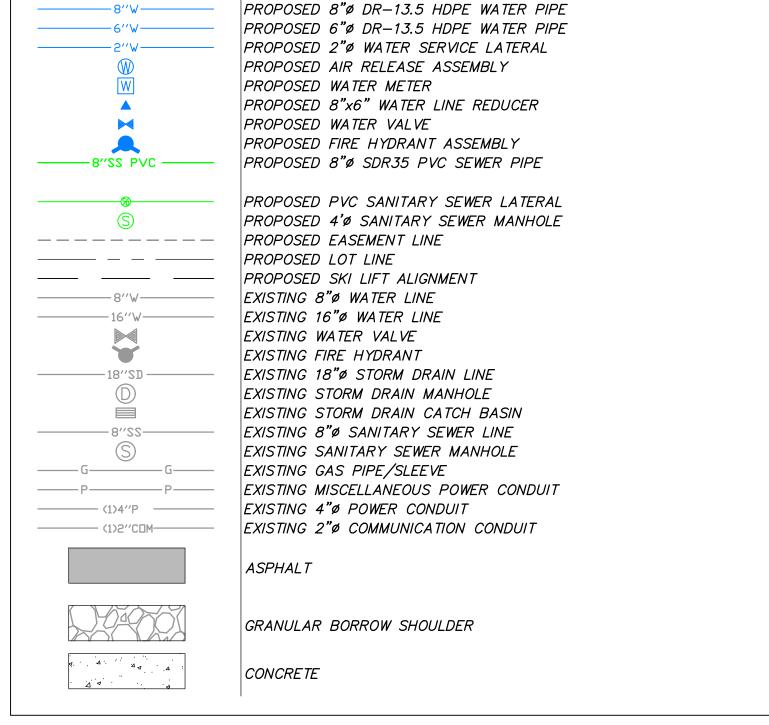
PRIOR TO FLUSHING. 28. ALL WORK ON WATER AND SEWER INFRASTRUCTURE REQUIRES INSPECTION BY

PMWSID. PROVIDE 48 HOURS NOTICE PRIOR TO WORK COMMENCEMENT. 29. NO CONSTRUCTION WATER SHALL BE TAKEN FROM THE EXISTING WATER SYSTEM WITHOUT APPROVAL FROM THE DISTRICT.

SYMBOL / LINETYPE

LEGEND:

DESCRIPTION



NOTE: LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN PLAN SET.

EROSION CONTROL GENERAL NOTES

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO WEBER COUNTY ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE COUNTY. INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO COORDINATE WITH PMWSID TO ARRANGE FOR CONSTRUCTION WATER AND WILL BE REQUIRED TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.

THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND FILE A "NOTICE OF INTENT" WITH THE UTAH DIVISION OF WATER

MAINTENANCE:

ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL VEGETATION IS RE-ESTABLISHED.

THE CONTRACTOR'S RESPONSIBILITY SHALL INCLUDE MAKING BI-WEEKLY CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE DOCUMENTED AND COPIES OF THE INSPECTIONS KEPT ON SITE.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAIN EVENT. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE—HALF THE HEIGHT OF BARRIER.

SEDIMENT TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL. BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY. THE CLEAN UP WILL INCLUDE SWEEPING OF THE TRACKED MATERIAL, PICKING IT UP, AND DEPOSITING IT TO A CONTAINED AREA.

ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS:

A) SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED

B) TRACKING STRAW PERPENDICULAR TO SLOPES

C) INSTALLING A LIGHT—WEIGHT, TEMPORARY EROSION CONTROL BLANKET

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:



HATCHING INDICATES AREAS TO RECEIVE 4" TOPSOIL AND TO BE SEEDED FOR NATURAL VEGETATION. AREAS RECEIVING SEEDING FOR NATURAL REVEGETATION MUST BE COVERED WITH AN EROSION CONTROL BLANKET AFTER THE FINAL GRADING AND SEEDING ARE FINISHED. INSTALL NORTH AMERICAN GREEN SC-150 BLANKET OR APPROVED EQUAL. FOLLOW MANUFACTURER'S SPECIFICATIONS. INSTALL NORTH AMERICAN GREEN P300 EROSION CONTROL BLANKET ON ALL SLOPES GREATER THAN 1.5:1.



INSTALL 15' X 50' VEHICLE WASH DOWN AREA WITH 1"-2.5" COARSE AGGREGATE PLACED A MINIMUM 8" THICK. SUPPLY WATER FOR VEHICLE WASH DOWN.



STABILIZED CONSTRUCTION ENTRANCE FOR SITE INGRESS/EGRESS. IF ALTERNATE ACCESS POINTS ARE APPROVED BY OWNER, ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES WILL BE REQUIRED. INSTALL INLET PROTECTION IN FORM OF CONCRETE BLOCKS / FILTER CLOTH / GRAVEL

OR SILT SACK AT EXISTING AND PROPOSED CATCH BASINS AS SHOWN ON PLAN. INSTALL EARTH BERM ALONG DOWN GRADIENT LIMITS OF DISTURBANCE AS SHOWN ON

INSTALL ORANGE SAFETY FENCING AROUND OUTER LIMITS OF PROJECT PRIOR TO _____ GRADING.

EROSION CONTROL GENERAL NOTES CONT

SEED MIX:

ANY EXPOSED SLOPE MUST BE RESEEDED BY SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED. USE THE FOLLOWING SEED MIXTURE.

MOUNTAIN BROME 7.50 lb/AC SLENDER WHEATGRASS 6.25 lb/AC WESTERN WHEATGRASS 5.00 lb/AC *IDAHO FESCUE* 2.50 lb/AC SANDBERG BLUEGRASS 1.25 lb/AC BIG BLUEGRASS 1.25 lb/AC vii. BLUEBUNCH WHEATGRASS 1.25 lb/AC ROCKY MOUNTAIN PENSTEMON 1.00 lb/AC MOUNTAIN LUPINE 2.00 lb/AC 0.50 lb/AC x. SHOWY GOLDENEYE xi. WESTERN YARROW 0.25 lb/AC xii. BLUE FLAX 1.25 lb/AC

CULINARY WATER NOTES

1. ALL MATERIALS THAT MAY COME IN CONTACT WITH DRINKING WATER, INCLUDING PIPES, GASKETS, LUBRICANTS AND O-RINGS, SHALL BE ANSI-CERTIFIED AS MEETING THE REQUIREMENTS OF ANSI/NSF STANDARD 61, DRINKING WATER SYSTEM COMPONENTS - HEALTH EFFECTS. TO PERMIT FIELD-VERIFICATION OF THIS CERTIFICATION, ALL COMPONENTS SHALL BE APPROPRIATELY STAMPED WITH THE NSF LOGO.

2. PIPE, JOINTS, FITTINGS, VALVES, AND FIRE HYDRANTS SHALL CONFORM TO ANSI/NSF STANDARD 61. AND APPLICABLE SECTIONS OF AWWA STANDARDS C104-A21.4-08 THROUGH C550-05 AND C900-07 THROUGH C950-07.

3. FOR PVC PIPE, ASTM D2774, RECOMMENDED PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING AND PVC PIPE AND AWWA MANUAL OF PRACTICE M23.

4. FOR HDPE PIPE, ASTM D2774, RECOMMENDED PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING AND AWWA MANUAL OF

5. ALL TYPES OF INSTALLED PIPE SHALL BE PRESSURE TESTED AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600-10.

6. THE OPEN ENDS OF ALL PIPELINES UNDER CONSTRUCTION SHALL BE COVERED

AND EFFECTIVELY SEALED AT THE END OF THE DAY'S WORK. 7. ALL NEW WATER MAINS OR APPURTENANCES SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA STANDARD C651-05 OR A METHOD APPROVED BY PMWSID.THE SPECIFICATIONS SHALL INCLUDE DETAILED PROCEDURES FOR THE ADEQUATE FLUSHING, DISINFECTION AND MICROBIOLOGICAL TESTING OF ALL WATER MAINS. ON ALL NEW AND EXTENSIVE DISTRIBUTION SYSTEM CONSTRUCTION, EVIDENCE OF SATISFACTORY DISINFECTION SHALL BE PROVIDED TO PMWSID. SAMPLES FOR COLIFORM ANALYSES SHALL BE COLLECTED AFTER DISINFECTION IS COMPLETE AND THE SYSTEM IS REFILLED WITH DRINKING WATER. A STANDARD HETEROTROPHIC PLATE COUNT IS ADVISABLE. THE USE OF WATER FOR PUBLIC DRINKING WATER PURPOSES SHALL NOT COMMENCE UNTIL THE BACTERIOLOGIC TESTS INDICATE THE WATER IS FREE FROM CONTAMINATION.

WEBER COUNTY

2380 WASHINGTON BLVD. #240 OGDEN, UT 84401 (801) 399-8374

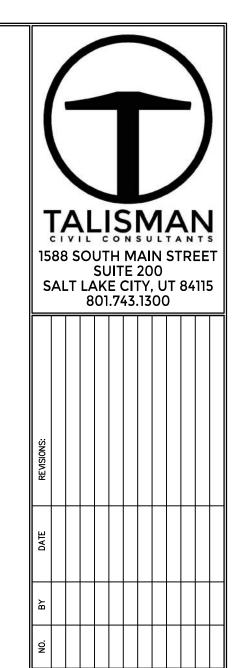
ROCKY MOUNTAIN POWER

1438 WEST 2550 SOUTH OGDEN, UT 84401 (801) 629-4429

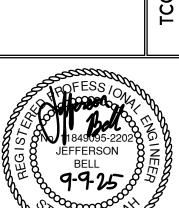
POWDER MOUNTAIN WATER & SEWER DISTRICT

PO BOX 270 EDEN, UT 84310 (801) 745-0912





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303.7 CURVED GRAVITY FLOW MAIN LINES

- A.GRAVITY FLOW MAIN LINES MAY BE DESIGNED AND CONSTRUCTED ON CURVILINEAR HORIZONTAL AND VERTICAL ALIGNMENTS ON A CASE BY CASE BASIS AS APPROVED BY PMWSID. IF THE USE OF CURVILINEAR LINES IS APPROVED THE FOLLOWING CRITERIA SHALL APPLY.
- B.PIPE MATERIAL SHALL BE HDPE MEETING THE REQUIREMENTS OF SECTION 402.2. C.THE NUMBER OF HORIZONTAL AND VERTICAL CURVES IN A LINE SEGMENT SHALL BE
- D.ADDITIONAL CONSTRUCTION AND AS—CONSTRUCTED SURVEYING WILL BE REQUIRED TO PROVIDE ACCURATE LOCATION INFORMATION FOR THE AS—CONSTRUCTED LINE. THE INSTALLED PIPE MUST BE SURVEYED BY A QUALIFIED SURVEYOR EVERY 25' TO DETERMINE PROPER HORIZONTAL AND VERTICAL PLACEMENT. THIS INFORMATION SHALL BE INDICATED ON THE RECORD DRAWINGS.
- E.MINIMUM SLOPE: 5% UNLESS THE FOLLOWING SPECIAL CONSTRUCTION PROCEDURES ARE USED IN WHICH CASE 3% MINIMUM.
- 1. INSTALLED PIPE MUST BE SURVEYED BY A QUALIFIED SURVEYOR EVERY 10' TO DEMONSTRATE THAT A 3% SLOPE IS MAINTAINED.
- 2. ANY LINE SEGMENT THAT HAS ANY PORTION OF THE SURVEYED LINE WITH A
- SLOPE LESS THAN 2.5% SHALL BE RE—INSTALLED.

 3. SURVEY NOTES SHALL BE SUBMITTED TO PMWSID TO DEMONSTRATE COMPLIANCE WITH THESE REQUIREMENTS.
- 4. THE PARTY RESPONSIBLE FOR PERFORMING THE SURVEY AND SUBMITTING SURVEY NOTES SHALL BE DETERMINED DURING THE PRE—CONSTRUCTION MEETING.
- G.MINIMUM RADIUS OF HORIZONTAL AND VERTICAL CURVES: 100' UNLESS SPECIFICALLY APPROVED BY THE DISTRICT ENGINEER IN WHICH CASE SPECIAL CONSTRUCTION PROCEDURES SIMILAR TO THOSE CONTAINED IN PARAGRAPH E SHALL BE USED. RADIUSES LESS THAN 50' SHALL NOT BE ALLOWED
- H.THE CONSTRUCTION METHODS AND PROCEDURES THAT WILL BE USED TO ASSURE THAT THE LINES ARE CONSTRUCTED TO THE DESIGN HORIZONTAL AND VERTICAL ALIGNMENT SHALL BE SUBMITTED AND APPROVED BY PMWSID.

402.2HIGH DENSITY POLYETHYLENE (HDPE) PIPE

- A.MATERIALS: VIRGIN RESINS, CELL CLASSIFICATION MEETING OR EXCEEDING PE 345464C AS DEFINED IN ASTM D 3350, RESINS SHALL BE LISTED BY THE PLASTIC PIPE INSTITUTE IN ITS PIPE—GRADE REGISTRY TR—4. B.PIPE AND FITTINGS:
- 1. ASTM MATERIAL DESIGNATION CODE: PE 3608/3408 OR PE 4710 HIGH DENSITY, EXTRA HIGH MOLECULAR WEIGHT.
- 2. SDR 17 IN ACCORDANCE WITH ASTM F 714.
- 3. OUTSIDE DIAMETER TO BE DUCTILE IRON PIPE SIZE (DIPS) OR IRON PIPE SIZE
- 4. MARKED IN ACCORDANCE WITH ASTM F 714.
- 5. PIPE SHALL BE MANUFACTURED WITH AN INTEGRAL COLOR—CODED STRIPE OF HDPE, COLOR GREEN.
- C.FITTINGS FOR PRIVATE LATERAL LINES:
- 1. NO MOLDED HDPE FITTINGS WILL BE ALLOWED.
- 2. 45-DEGREE BENDS SHALL BE FUSION WELDED SEAMLESS LONG RADIUS HDPE SWEEP BENDS, OR FUSION WELDED 3 SEGMENT FABRICATED HDPE FITTINGS.
- 3. WYES FOR CLEANOUTS SHALL BE FABRICATED FUSION WELDED FITTING. 4. THE SDR OF THE FITTING SHALL MATCH THE SDR OF THE ADJOINING PIPE.
- D.JOINTS:

 1. ZERO LEAK-RATE HEAT-FUSION JOINT CONFORMING TO ASTM D 3261.
- 2. HDPE GRAVITY LINES 8" AND LARGER SHALL HAVE THE INTERNAL BEAD
 RESULTING FROM THE HEAT—FUSION PROCESS REMOVED AND EXTRACTED FROM
- THE PIPE DURING THE COOLING STAGE OF THE FUSION PROCESS.

 3. THE BEAD REMOVAL PROCESS SHALL BE IN ACCORDANCE WITH THE BEAD
- REMOVAL EQUIPMENT MANUFACTURER'S SPECIFICATIONS.
 4. THE EXTRACTED FUSION BEAD SHALL BE SUBJECTED TO VISUAL INSPECTION AND
- VERIFICATION PER SECTION 516.8. E.MINIMUM SLOPE REQUIREMENTS IN ACCORDANCE WITH SECTION 303.7 SHALL APPLY.

402.3POLYVINYL CHLORIDE (PVC) PIPE

- A.MATERIAL: PVC PLASTIC HÁVING A CELL CLASSIFICATION OF 12364 OR 12454 AS DEFINED IN ASTM D1784 B.PIPE:
- 1. 4" THRU 15" DIAMETER: ASTM D 3034, SDR-35.

6" PRIVATE LATERAL WASTEWATER LINES.

- 2. 18" THRU 48": ASTM F 679 (LARGE DIAMETER SOLID WALL), SDR 35.
- 3. MINIMUM PIPE STIFFNESS SHALL BE 46 PSI WHEN TESTED IN ACCORDANCE WITH ASTM D 2412.

 C. FITTINGS:
- 1. GASKETED SEWER FITTINGS CONFORMING TO ASTM F- 1336.
- 2. SOLVENT WELD PVC FITTINGS MEETING ASTM D3034 MAY BE USED ON 4" AND 6" PRIVATE LATERALS. GASKETED FITTINGS SHALL NOT BE USED FOR SOLVENT WELDING.
- D.JOINTS:

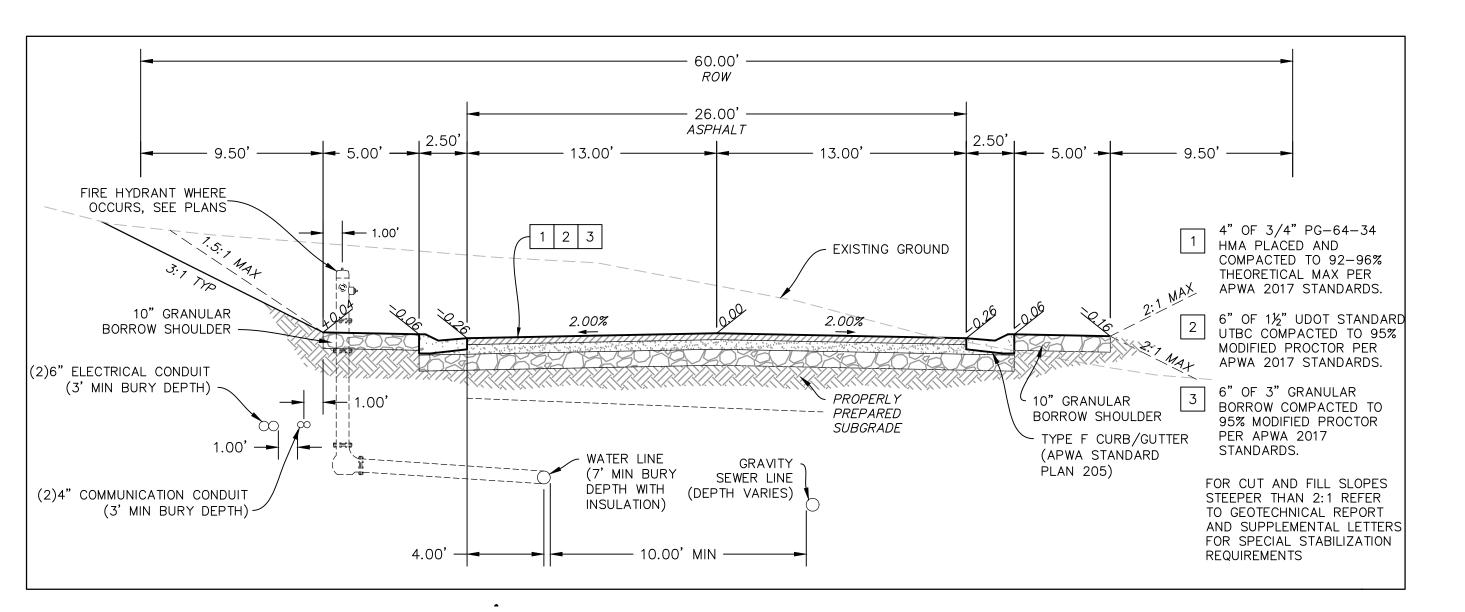
 1. INTEGRAL BELL GASKETED JOINTS CONFORMING TO ASTM D3212. RUBBER GASKETS
- SHALL BE FACTORY INSTALLED AND CONFORM TO ASTM F 477.

 2. JOINTS ON 4" AND 6" DIAMETER PIPE MAY BE SOLVENT WELD JOINTS CONFORMING TO ASTM D 2855. A PURPLE PRIMER CONFORMING TO ASTM D 656 AND SOLVENT CEMENT NOT PURPLE IN COLOR AND CONFORMING TO ASTM 2564
- SHALL BE USED.

 E.PIPE LENGTHS SHALL NOT BE GREATER THAN 20 FEET.

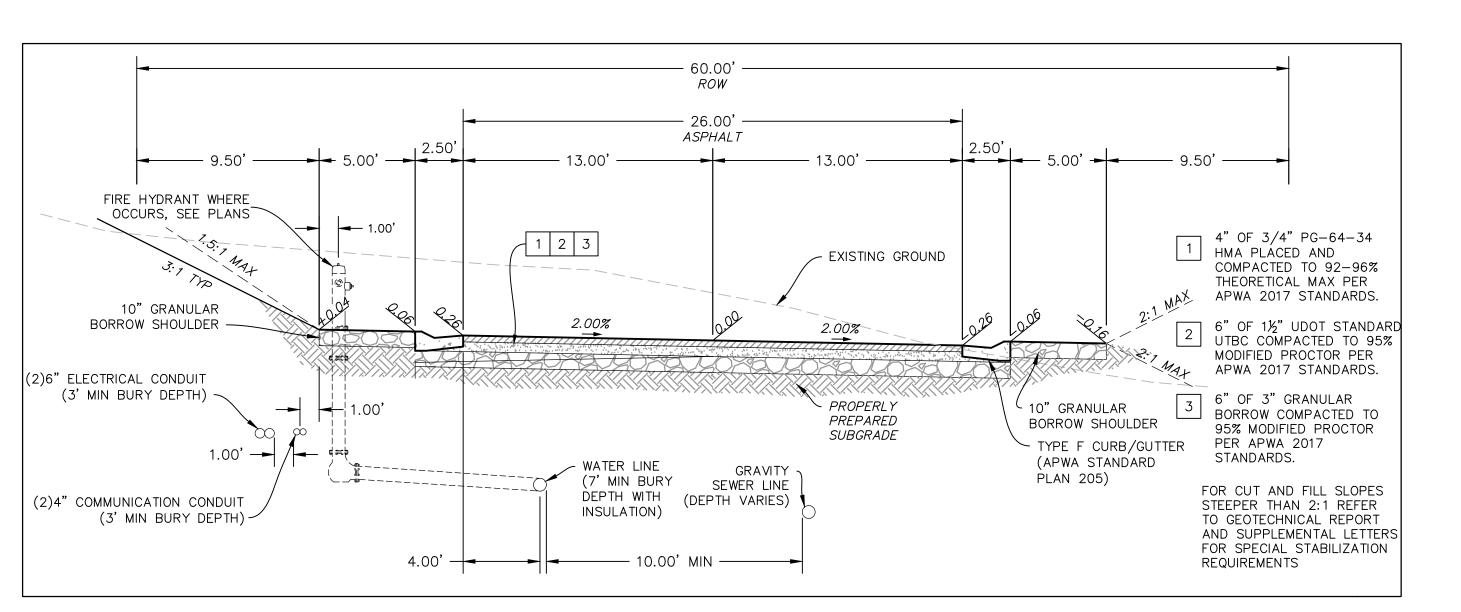
 F.PVC PIPE MEETING REQUIREMENTS OF ASTM D 1785, SCHEDULE 40 OR SCHEDULE 80,
 WITH EQUIVALENT GASKETED OR SOLVENT WELD FITTINGS, MAY BE USED FOR 4" AND
- 516.8VISUAL INSPECTION OF HEAT FUSED HDPE PIPE BEAD REMOVAL AND EXTRACTION
 A REMOVAL AND EXTRACTION OF THE HDPE PIPE INTERNAL READ RESULTING FROM TH
- A. REMOVAL AND EXTRACTION OF THE HDPE PIPE INTERNAL BEAD RESULTING FROM THE HEAT FUSION JOINTING PROCESS SHALL BE REQUIRED FOR ALL GRAVITY FLOW HDPE PIPE.
- B.AN PMWSID INSPECTOR MUST BE ON—SITE DURING THE FUSION OPERATION TO PERFORM THE VISUAL INSPECTION OF THE REMOVED AND EXTRACTED FUSION BEAD. C.THE VISUAL INSPECTION SHALL INCLUDE:
- 1. VERIFICATION THAT COMPLETE INTERNAL FUSION BEAD REMOVAL WAS PERFORMED.
 2. THE EXTRACTED INTERNAL FUSION BEAD APPEARANCE SHALL HAVE THE SAME DOUBLE ROLL BACK APPEARANCE AS THE EXTERNAL FUSION BEAD.
- 3. THE EXTRACTED INTERNAL FUSION BEAD SHALL POSSESS A SMOOTH ROOT CUT.

 4. REMOVAL OF THE INTERNAL BEAD MAY INCLUDE PIPE WALL MASS. HOWEVER, ANY WALL MASS THAT IS REMOVED SHALL NOT EXCEED 1/10TH OF THE PIPE WALL
- D.ANY JOINTS NOT MEETING THE VISUAL INSPECTION REQUIREMENTS SHALL HAVE THE JOINT CUT OUT, A NEW HEAT FUSION JOINT MADE, AND THE INTERIOR BEAD REMOVED AND EXTRACTED.



60' RIGHT OF WAY ROAD - CROWNED

SCALE: N.T.S.



B 60' RIGHT OF WAY ROAD - NON-CROWNED

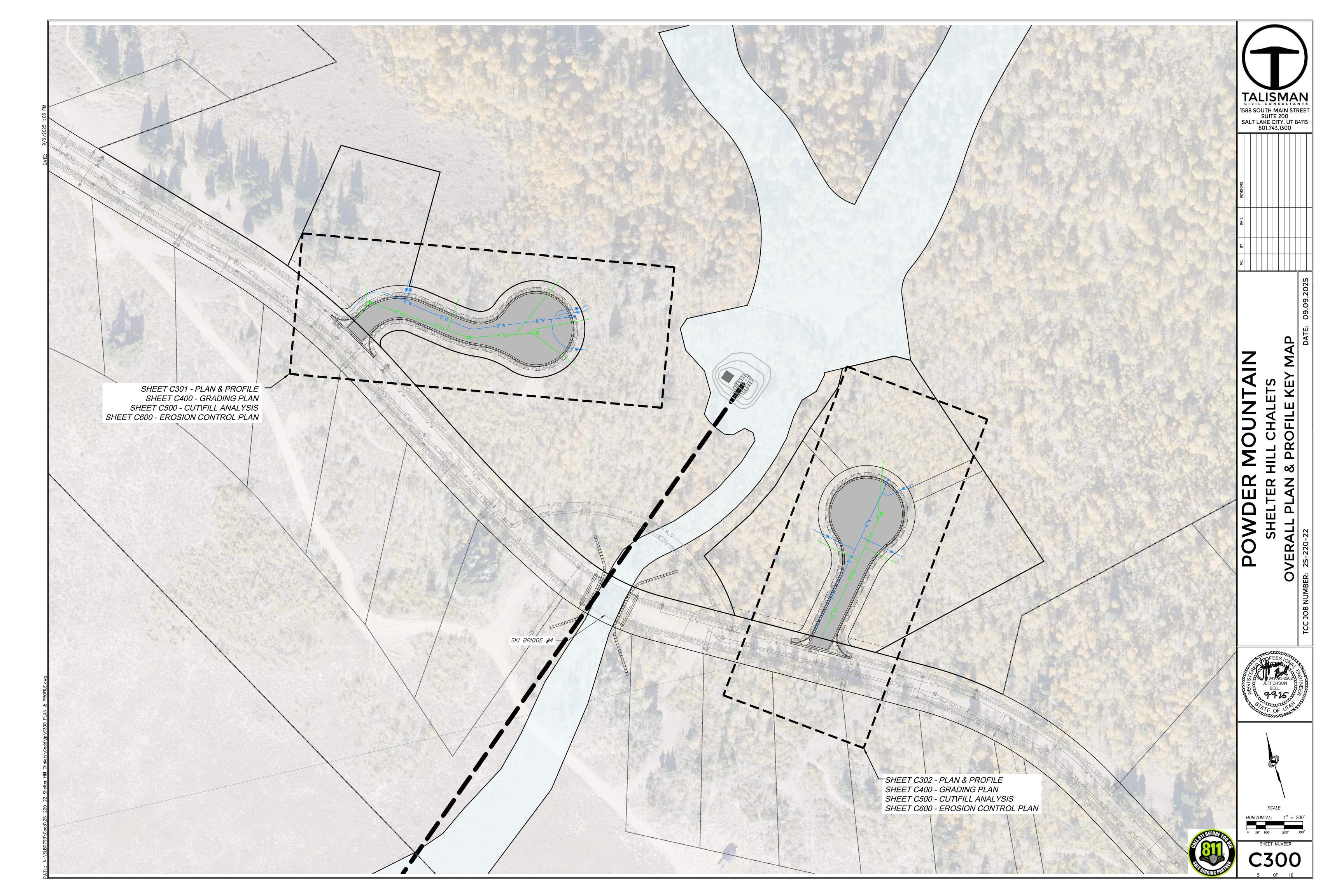
- SCALE: N.T.S.

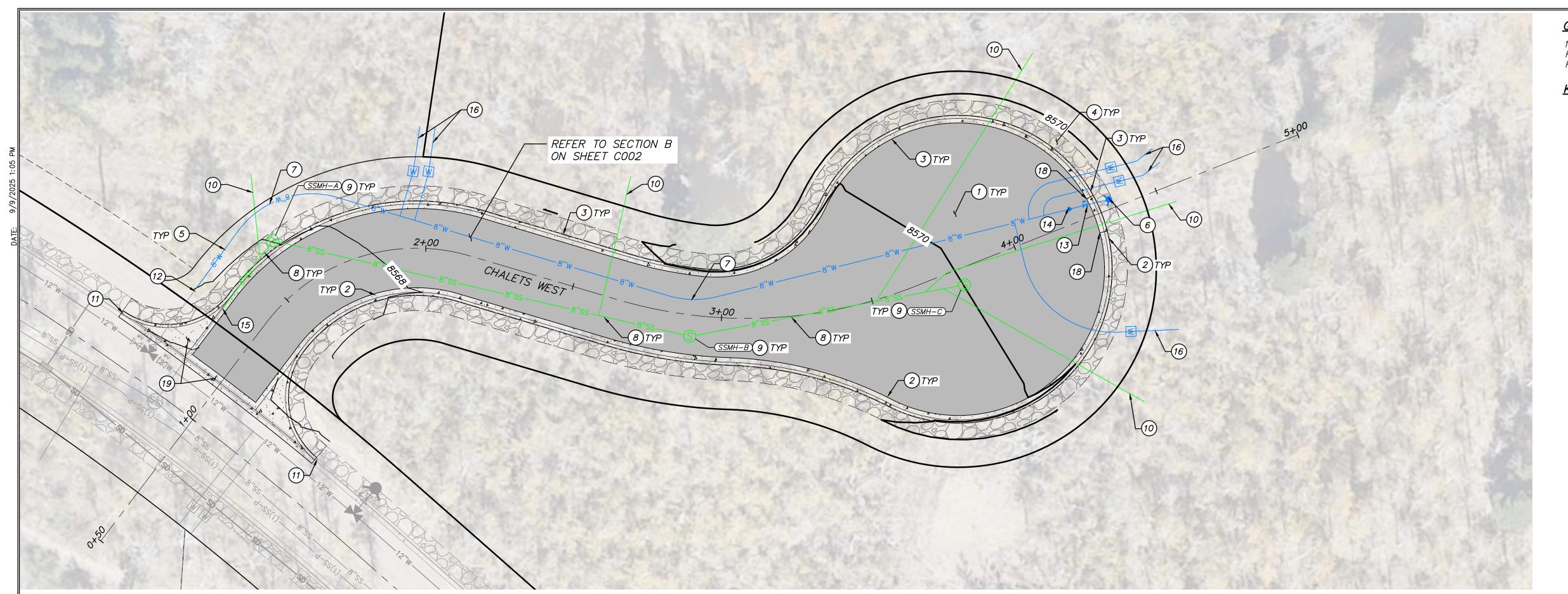


SHELTER HILL CHALETS
GENERAL NOTES

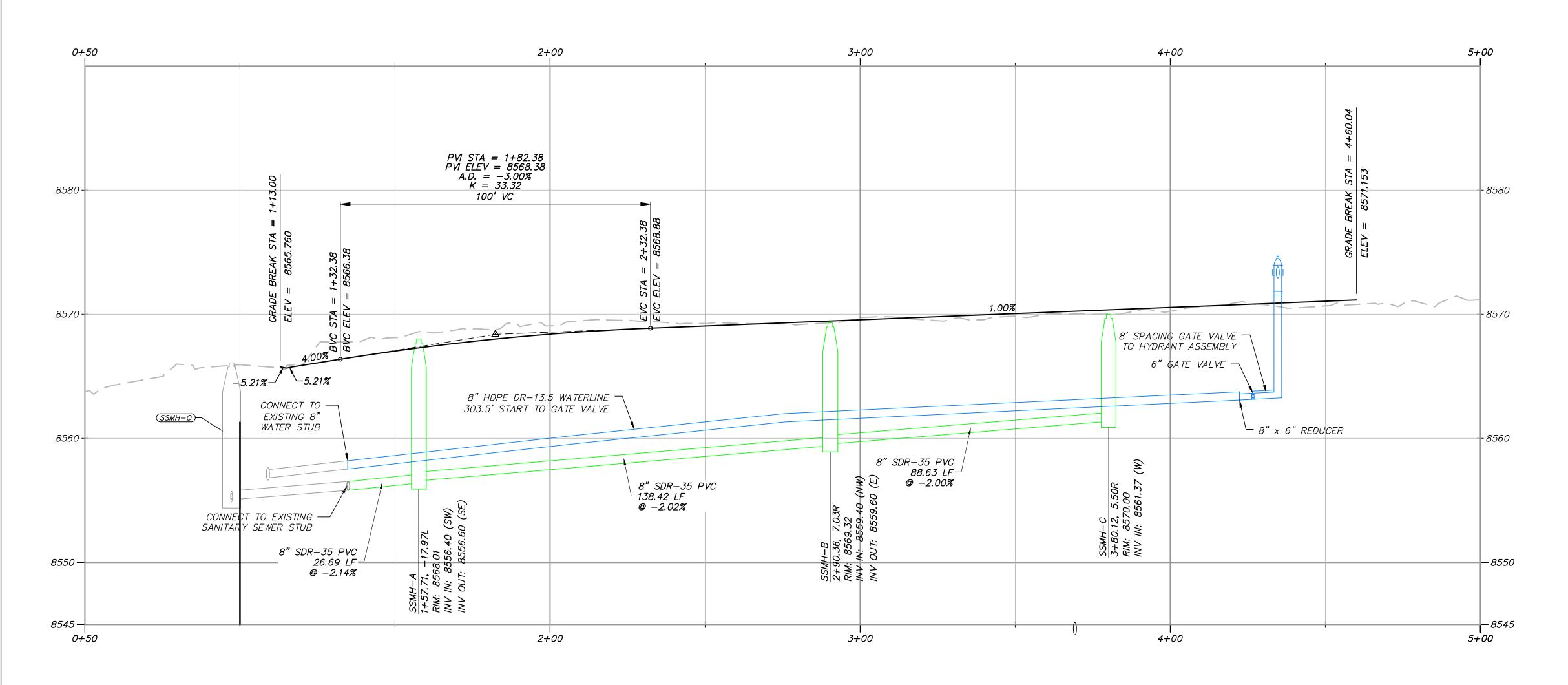








CHALETS WEST STA 1+00 - 5+00



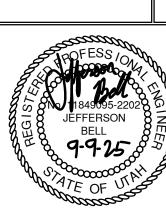
GENERAL NOTES:

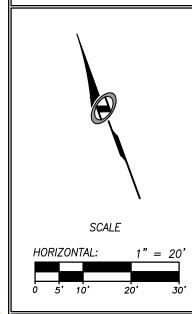
1. CONTRACTOR IS TO VERIFY CONNECTION POINTS WITH EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING UTILITIES AND UTILITY STRUCTURES THAT ARE

KEYNOTES:

- 1) INSTALL ASPHALT PAVEMENT. SECTION ON SHEET COO2.
- 2) INSTALL TYPE F CURB & GUTTER. SEE APWA STANDARD PLAN 205.2, SHEET C903.
- 3) INSTALL TYPE F MODIFIED CURB AND GUTTER. SEE DETAIL A ON SHEET C904.
- INSTALL 5' WIDE x 10" DEEP OF 3" GRANULAR BORROW SHOULDER, COMPACTED TO 95% MODIFIED PROCTOR PER APWA 2017 STANDARDS.
- (5) INSTALL 8" HDPE DR-13.5 WATERLINE PER PMWSID DETAIL W-1, SHEET C900.
- 6) INSTALL FIRE HYDRANT PER PMWSID DETAILS W-4 & W4A, SHEET C900.
- 7) 30' MINIMUM BEND RADIUS PER MANUFACTURERS RECOMMENDATIONS.
- 8 INSTALL SANITARY SEWER, SEE PLAN & PROFILE SHEETS FOR PIPE MATERIAL, PER PMWSID DETAIL SS-1, SHEET C900.
- 9) INSTALL 48" SANITARY SEWER MANHOLE PER PMWSID DETAIL SS-2, SHEET C900.
- (10) INSTALL SANITARY SEWER LATERAL PER PMWSID UT-1 & SS-3, SHEETS C900 & C901.
- CONNECT NEW TYPE F CURB & GUTTER TO EXISTING CURB & GUTTER PER APWA STANDARD PLAN 206, SHEET C902.
- (12) CONNECT TO EXISTING WATER STUB.
- 13) INSTALL 6" GATE VALVE.
- (14) INSTALL 8"X6" REDUCER.
- (15) CONNECT TO EXISTING SEWER STUB.
- (16) INSTALL WATER SERVICE LATERAL AND METER PER PMWSID DETAIL W-2 & UT-1, SHEET C900.
- CORE FOR PIPE PENETRATION AND INSTALL INTERNAL SANITARY SEWER DROP PER DETAIL ON SHEET C901.
- TRANSITION TYPE F CURB & GUTTER TO TYPE F MODIFIED CURB & GUTTER PER DETAIL B ON SHEET C904.
- 19 INSTALL 4' WATERWAY PER APWA STANDARD PLAN 211, SHEET C902 AND WATERWAY TRANSITION PER APWA STANDARD PLAN 213, SHEET C903.

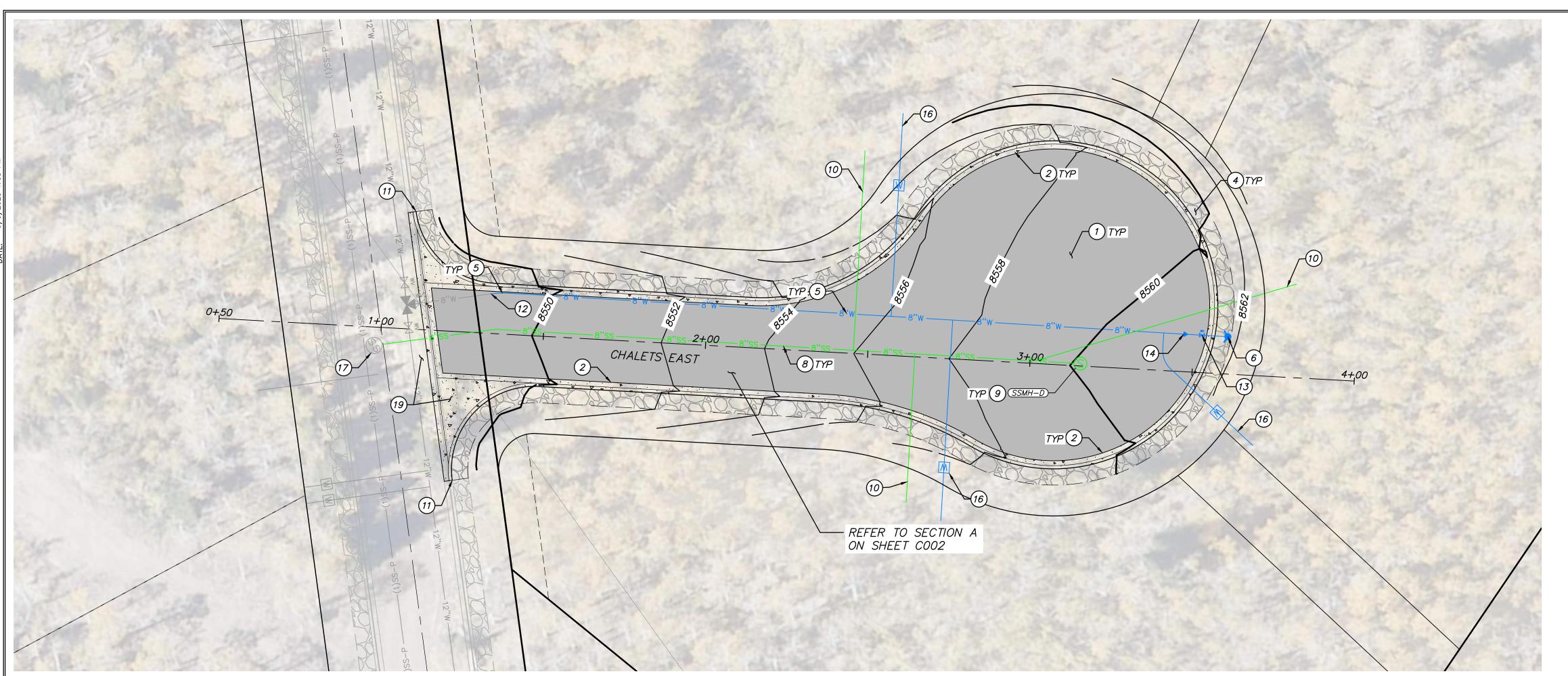
TALISMAN 1588 SOUTH MAIN STREET SUITE 200 SALT LAKE CITY, UT 84115 801.743.1300



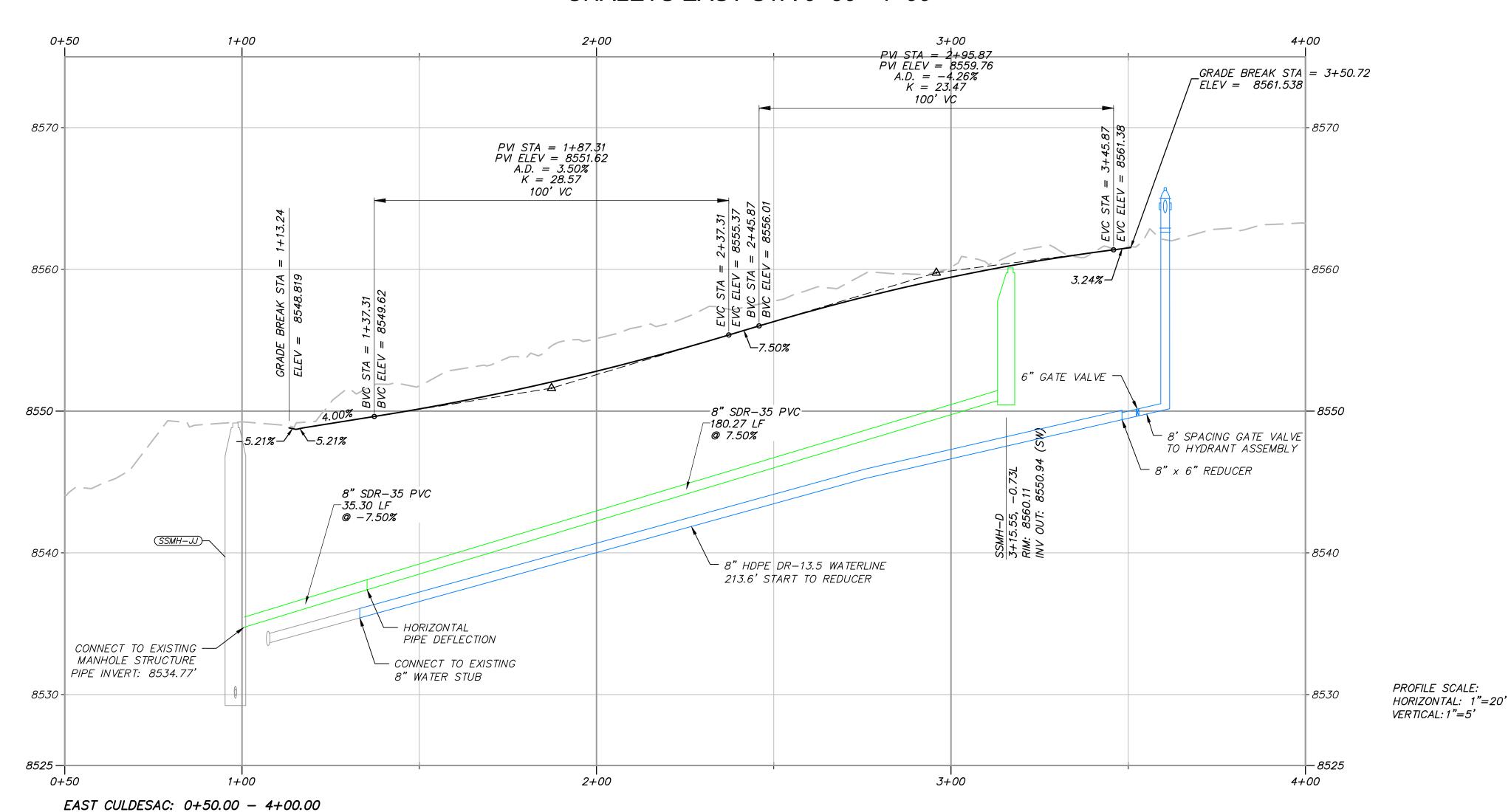




PROFILE SCALE: HORIZONTAL: 1"=20' VERTICAL: 1"=5"



CHALETS EAST STA 0+50 - 4+00



GENERAL NOTES:

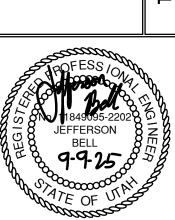
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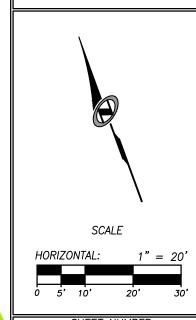
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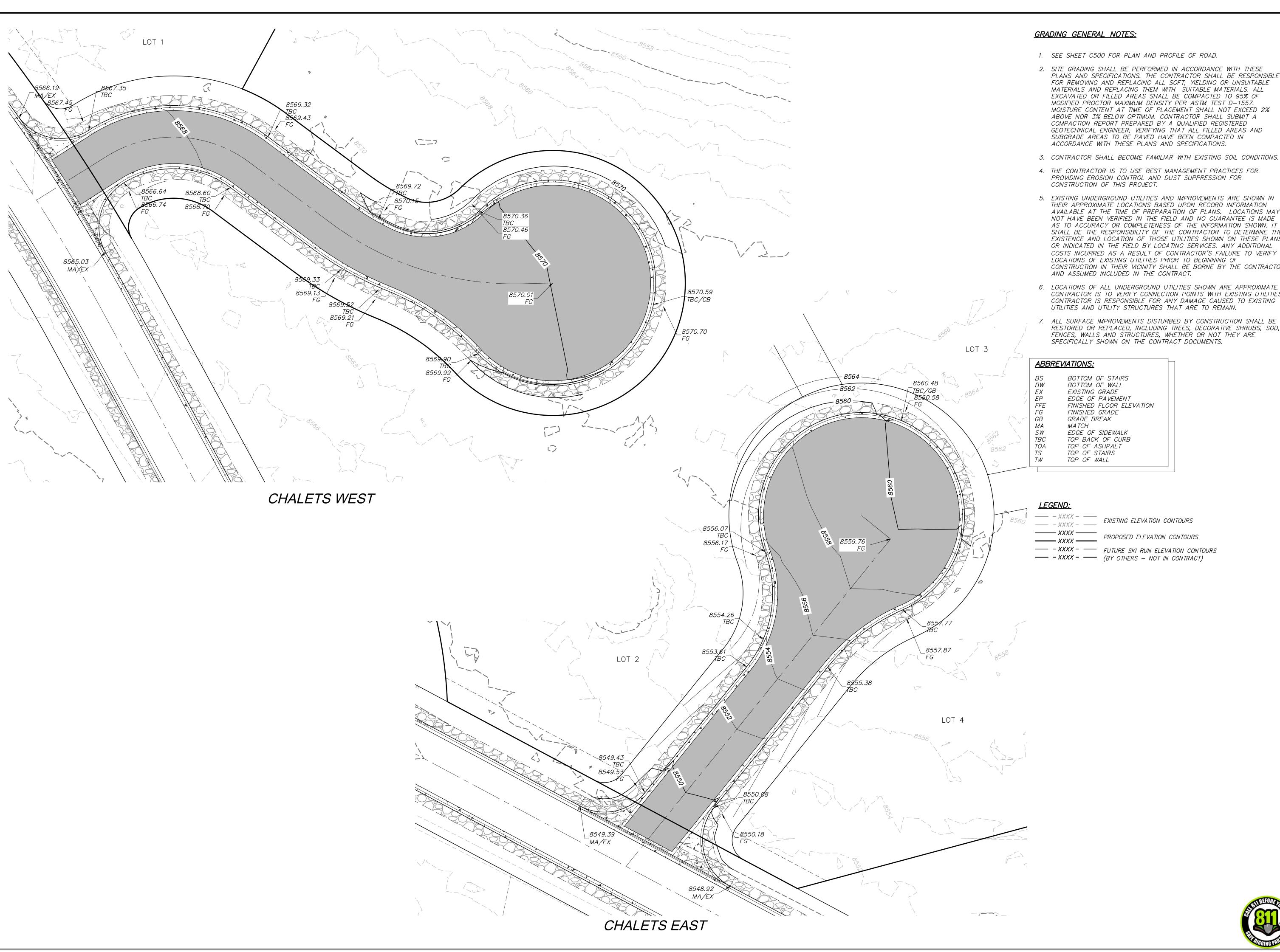
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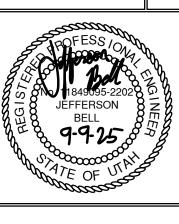
2. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOFT, YIELDING OR UNSUITABLE MATERIALS AND REPLACING THEM WITH SUITABLE MATERIALS. ALL MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED 2% GEOTECHNICAL ENGINEER, VERIFYING THAT ALL FILLED AREAS AND

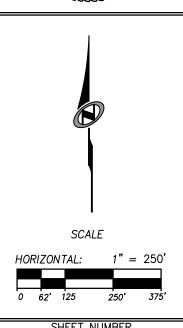


- 5. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR
- 6. LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR IS TO VERIFY CONNECTION POINTS WITH EXISTING UTILITIES. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE CAUSED TO EXISTING
- RESTORED OR REPLACED, INCLUDING TREES, DECORATIVE SHRUBS, SOD,

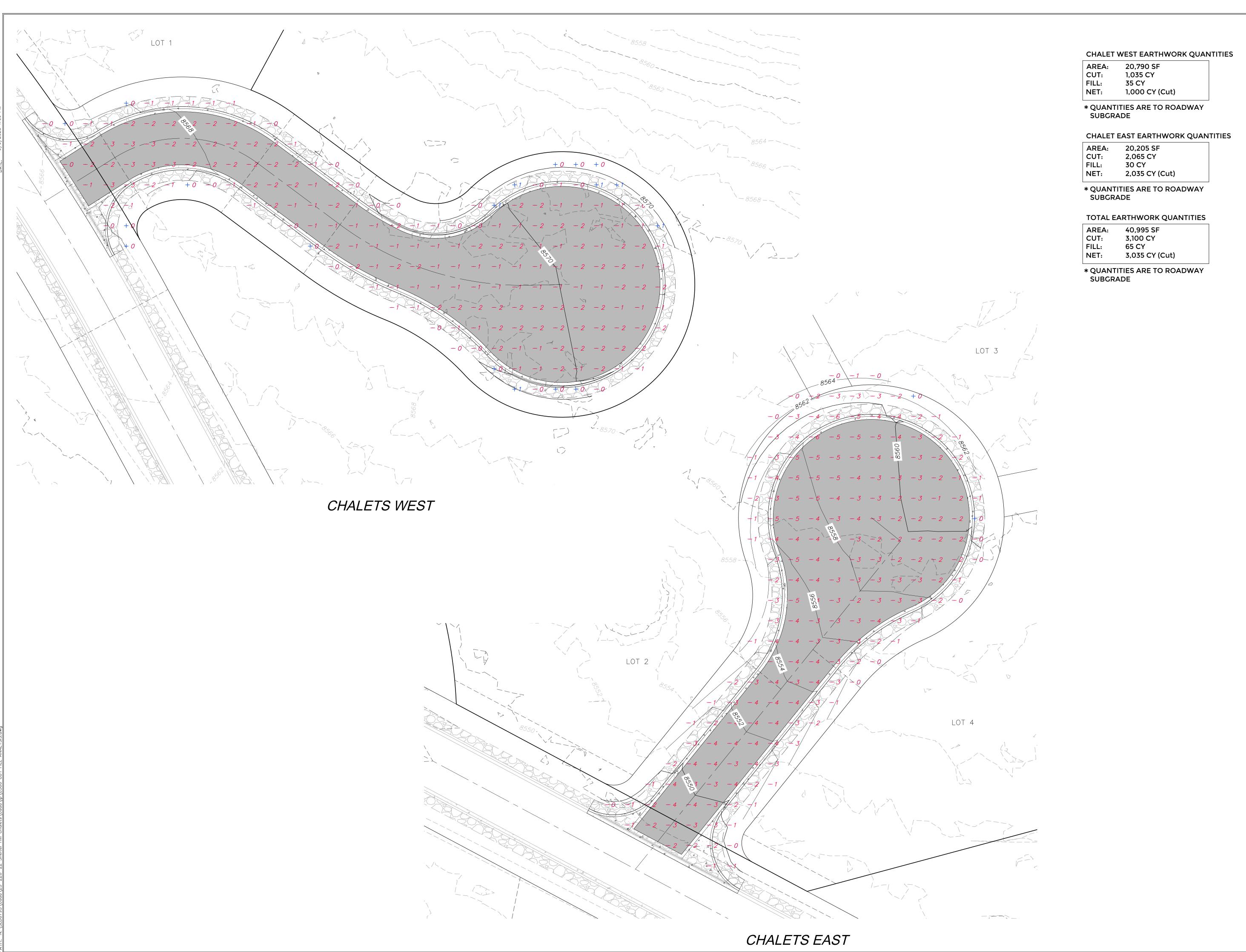


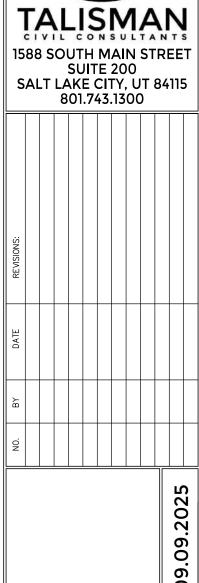


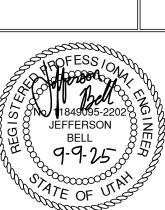


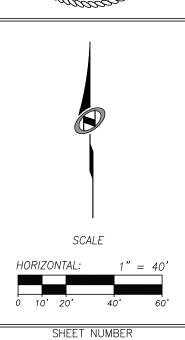




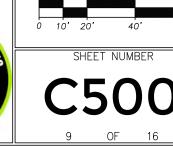


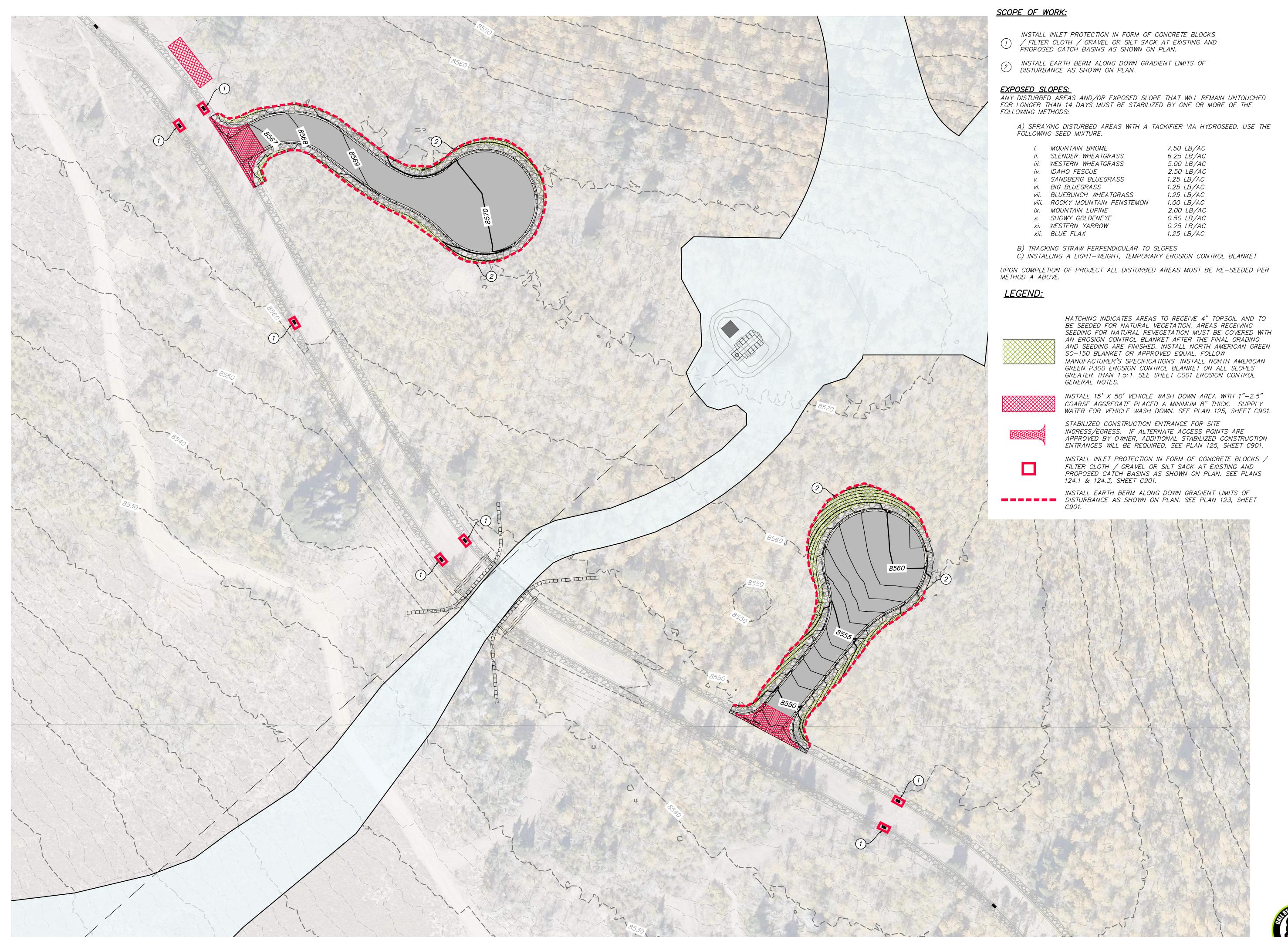






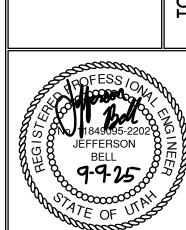


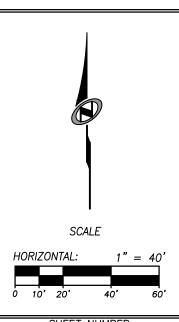


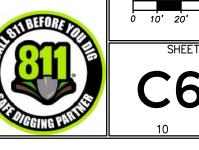


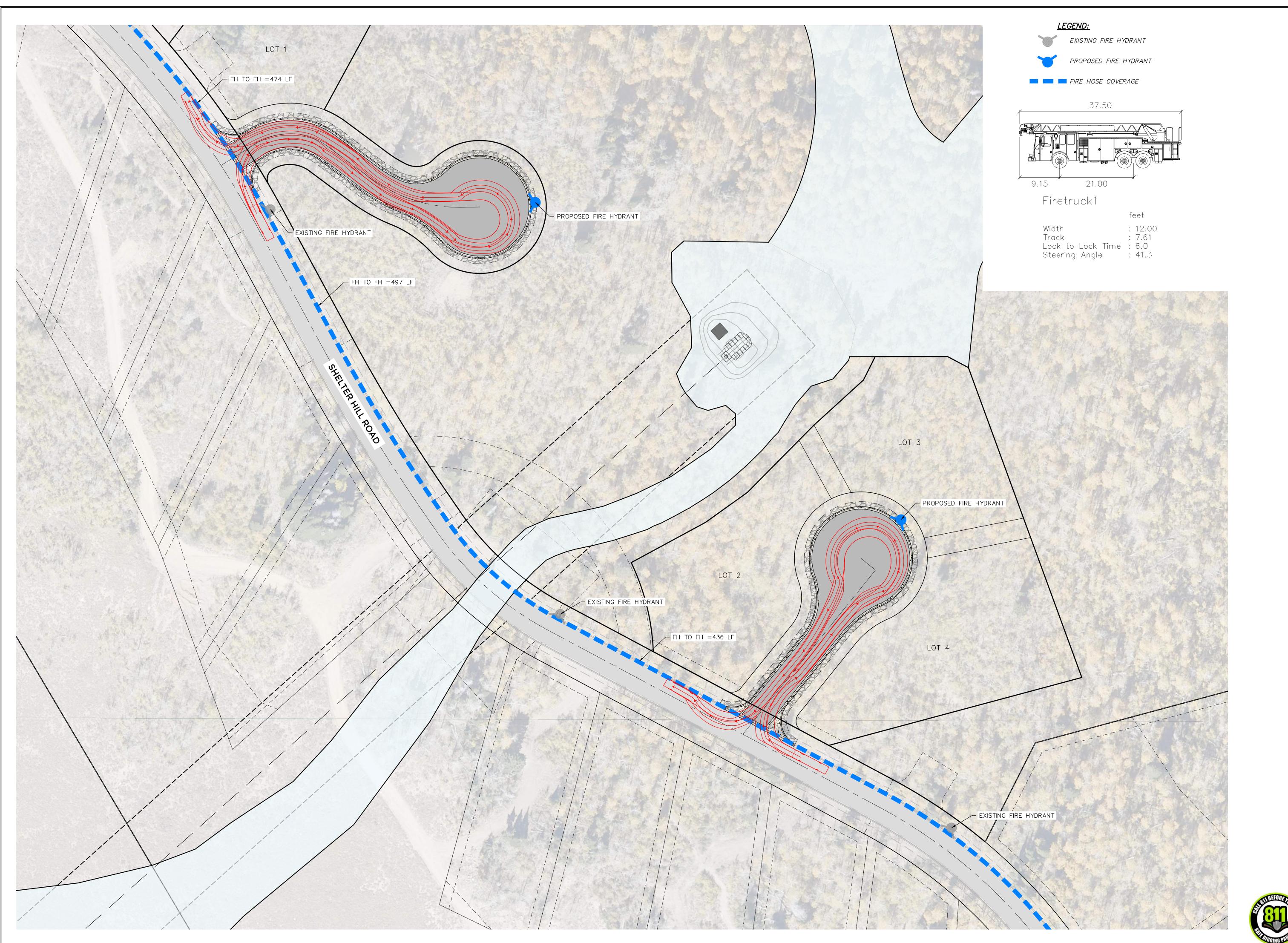


SHELTER HILL CHALETS



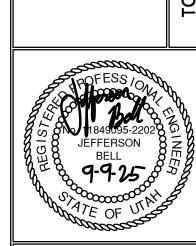


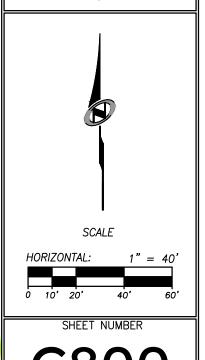


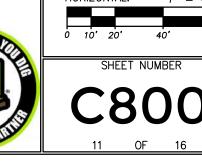


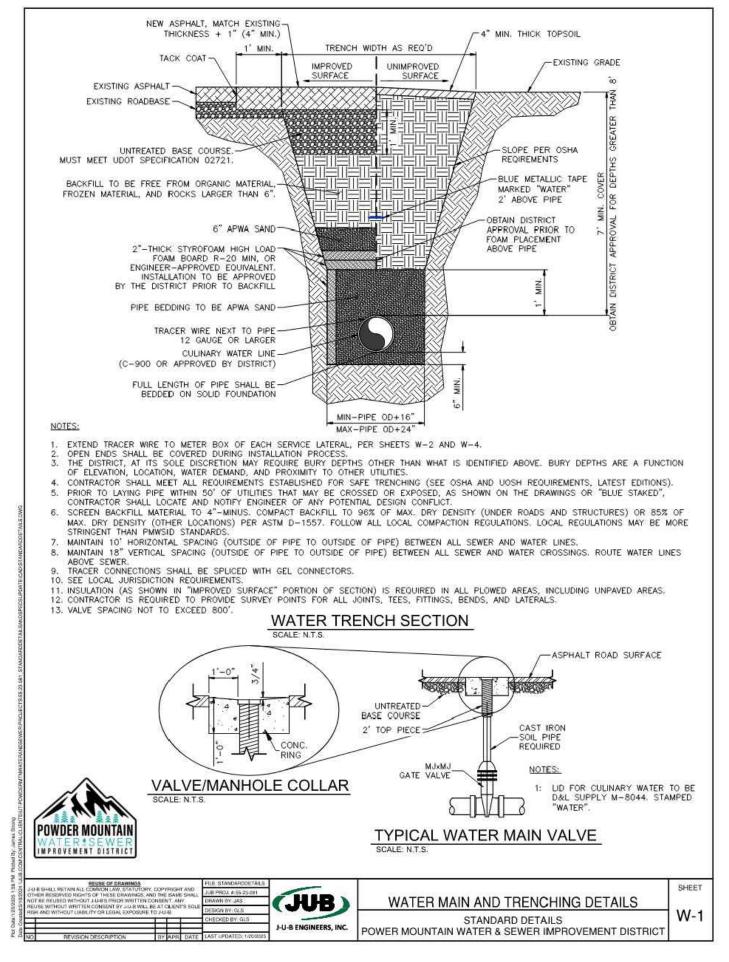


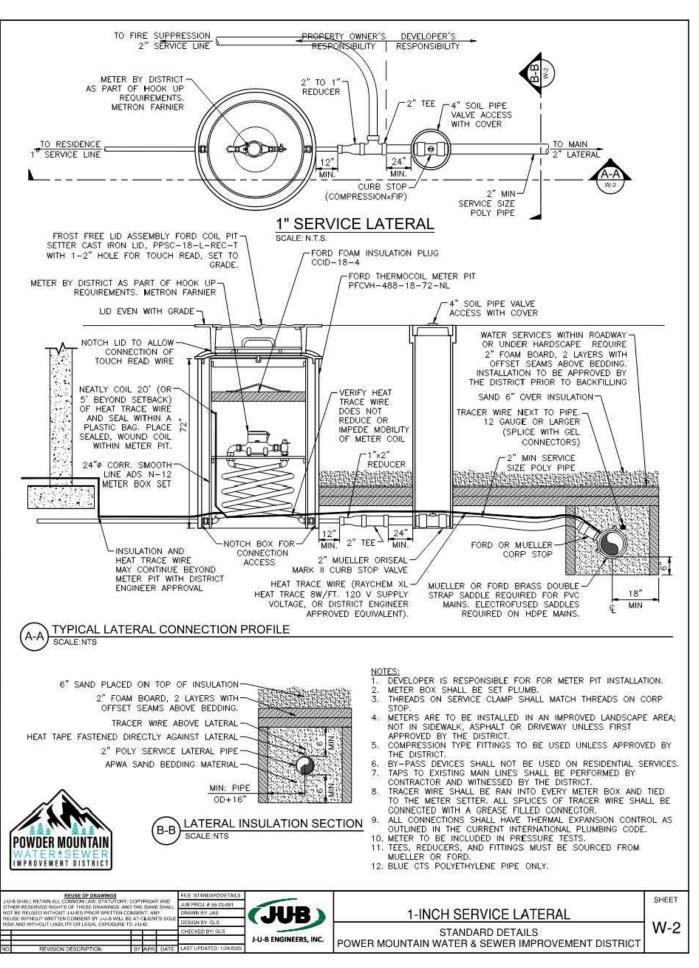
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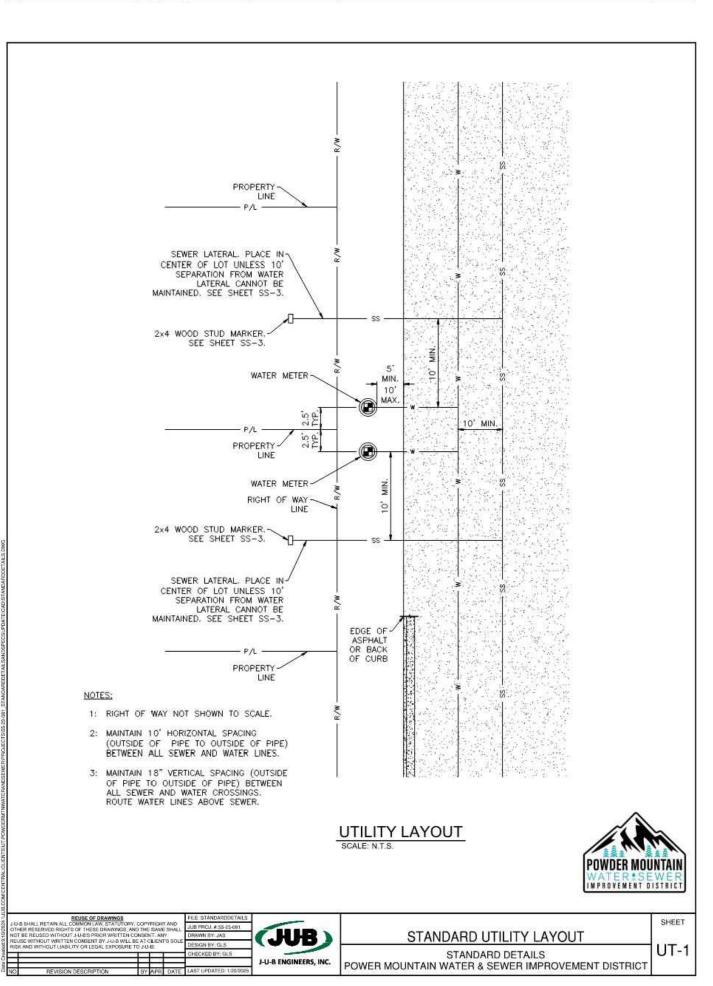


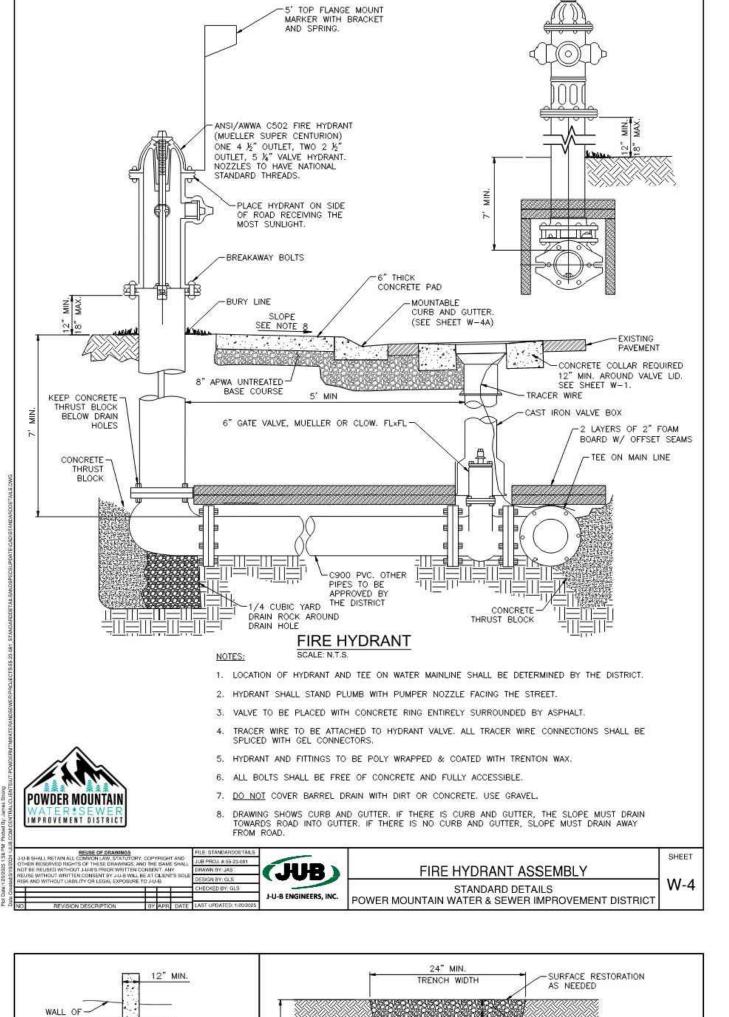


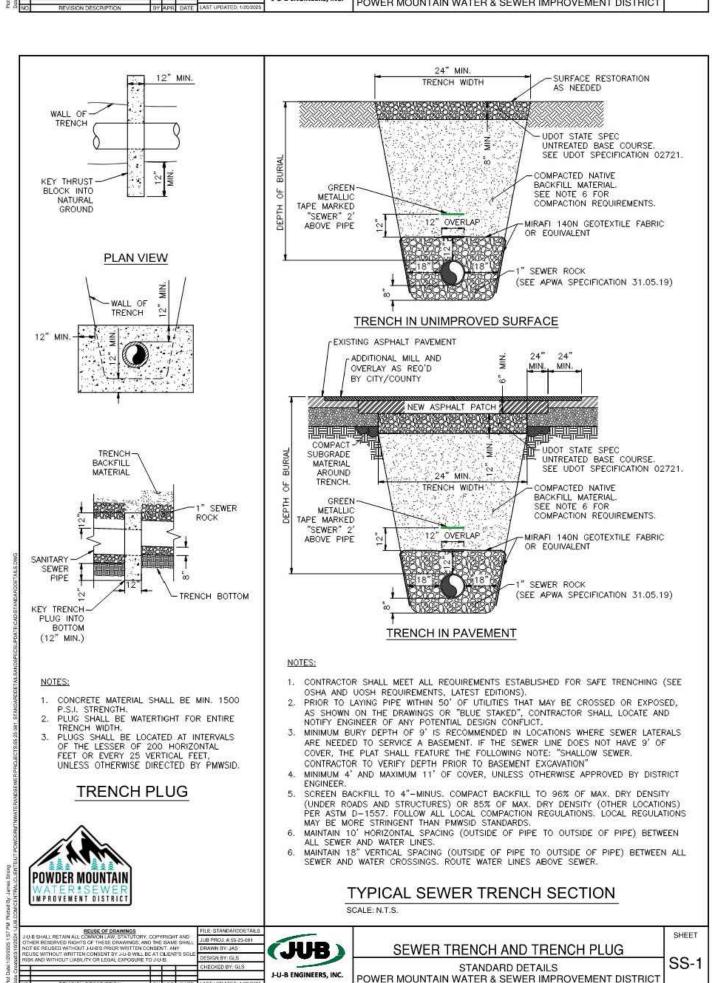


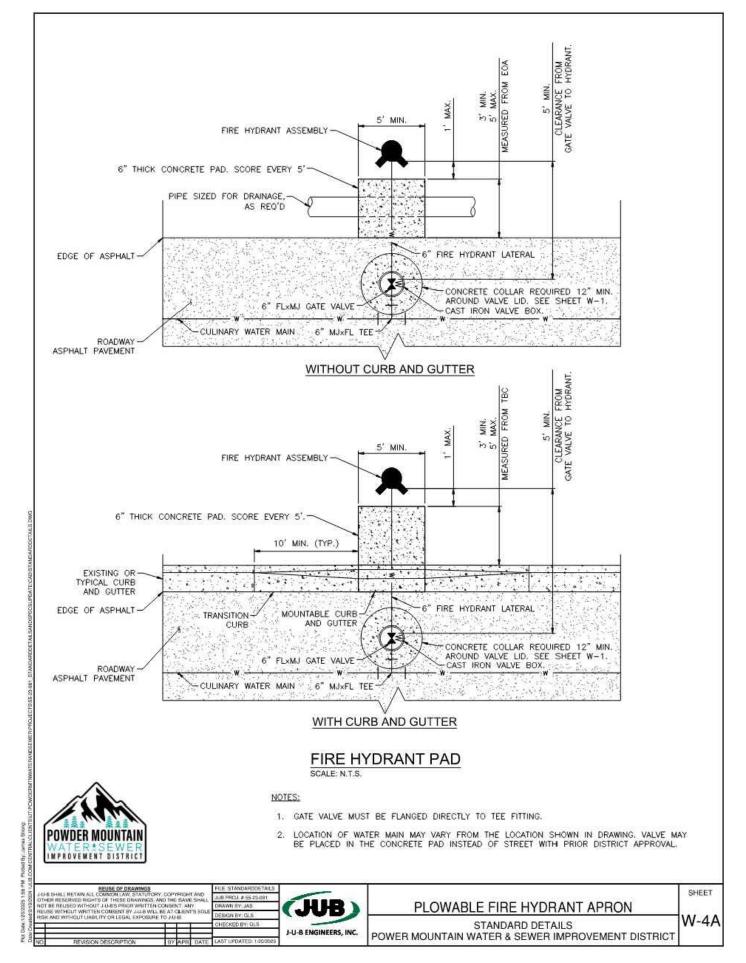


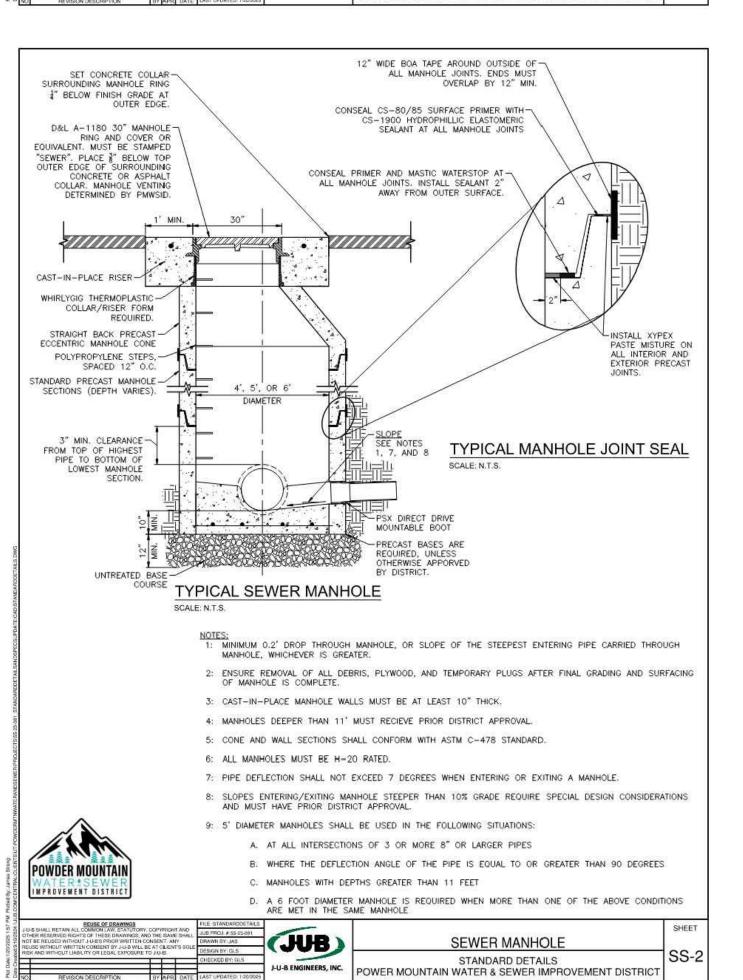














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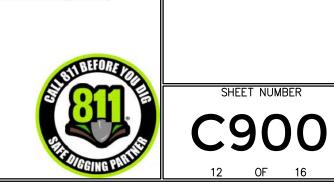
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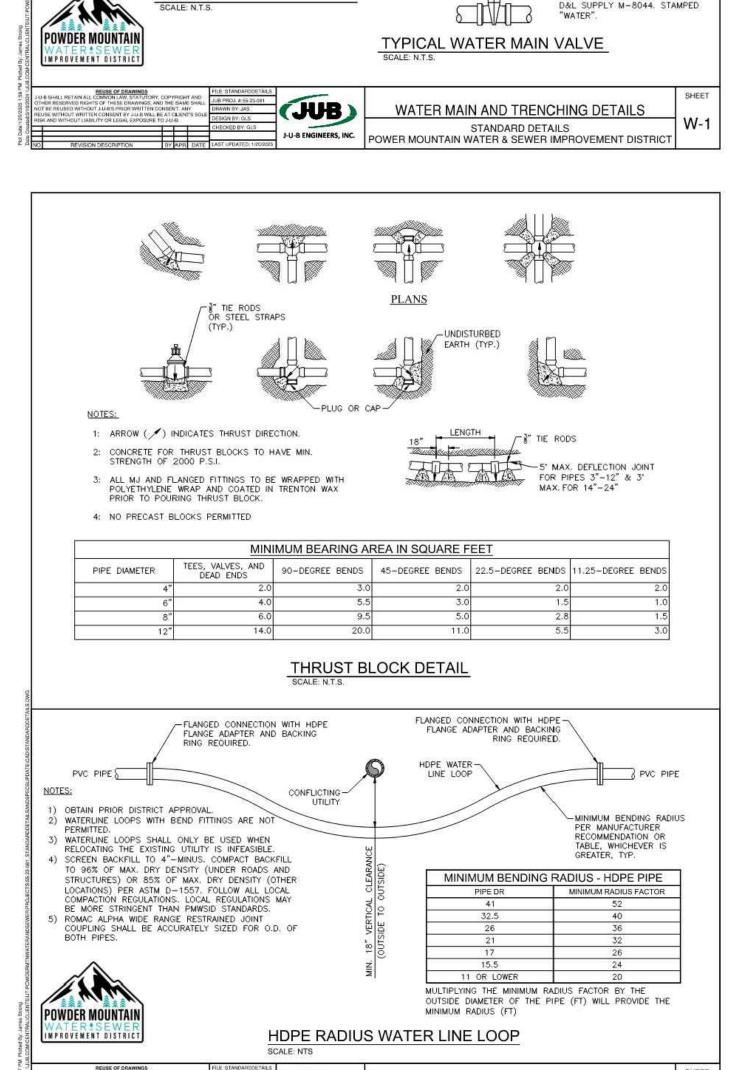
1588 SOUTH MAIN STREET

SUITE 200

SALT LAKE CITY, UT 84115

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THRUST BLOCK AND WATER LINE LOOP

STANDARD DETAILS

U-B ENGINEERS, INC. POWER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT

Inlet protection - gravel sock

GENERAL

A. Description. Placement of gravel sock on grade.

 Upstream of, or in front of storm drain inlets to filter or pond water runoff. 2) At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.

PRODUCTS (Not used)

3. EXECUTION

124.1

2 FEET

FLOW

- A. On-grade inlet protection:
- 1) Provide on-grade inlet protection when completely blocking a storm drain inlet box would result in forcing water further downstream would cause flooding or other undesirable results.
- 2) Prepare filter media (gravel sock, straw waddle, or other approved media) in
- accordance with manufacturer's recommendations.
- Install filter media just upstream of the inlet box. 4) Filter media shall butt tightly against the face of the curb and angle at approximately a 45-degree angle away from the curb to trap runoff between the
- 5) Excessive flows will flow either over or around the filter media and into the inlet
- Expect ponding behind the filter media.

B. Drop inlet protection:

- 1) Use drop inlet protection at low points in the curb and when diverting flows
- further downstream will not cause undesirable results. 2) Prepare filter media (gravel sock, straw waddle, or other approved media) in accordance with manufacturer's recommendations.
- 3) Install filter media around the entire perimeter of the inlet grate. 4) Filter media shall butt tightly against the face of the curb on both sides of the
- inlet grate. 5) Excessive flows will either flow around the media or over the top and into the
- inlet box.
- Expect ponding around the inlet box.
- C. Maintenance
- 1) Inspect inlet protection after every large storm event and at a minimum of once

THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE

(BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.

FILTER MEDIA (HEIGHT

ON-GRADE INLET PROTECTION DETAIL

FLOW_

- 2) Remove sediment accumulated when it reaches 2-inches in depth.
- 3) Replace filter medium when damage has occurred or when medium is no longer functioning as intended.

Inlet protection - fence or straw bale

GENERAL

A. Description. A temporary sediment barrier around storm drain inlet.

B. Application. At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.

2. PRODUCT (Not used)

3. EXECUTION

- Installation and application criteria.
- 1) Provide up gradient sediment controls, such as silt fence during construction of
- 2) When construction of inlet is complete erect straw bale barrier, silt fence or other
- approved sediment barrier surrounding perimeter of inlet. Install filter fabric completely around grate.

B. Maintenance.

- 1) Inspect inlet protection after every large storm event and at a minimum of once
- Remove sediment accumulated when it reaches 4-inches in depth.
- 3) Repair or re-align barrier or fence as needed.
- 4) Look for bypassing or undercutting and re-compact soil around barrier or fence

Equipment and vehicle wash down area

A. Description. A temporary stabilized pad of gravel for general washing of equipment and construction vehicles.

B. Application.

1) At any site where regular washing of vehicles and equipment will occur.

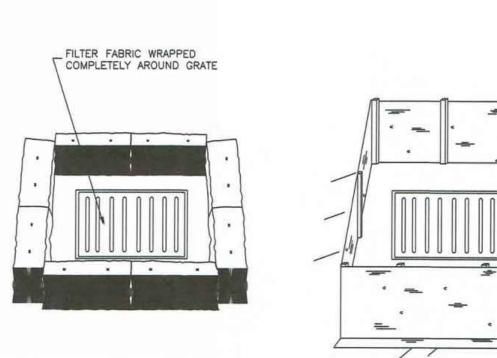
2) May also be used as a filling point for water trucks limiting erosion caused by overflow or spillage of water.

PRODUCT (Not used)

3. EXECUTION

- A. Clear and grub area and grade to provide maximum slope of 1 percent away from
- paved roadway.
- B. Compact subgrade. C. Place filter fabric under wash down area if desired (recommended for wash area
- that remains more than 3 months). D. Install silt fence down gradient (see Plan 122)
- E. Maintenance.
- Requires periodic top dressing with additional stones.
- Solely used to control sediment in wash water. Cannot be utilized for washing equipment or vehicles that may cause contamination of runoff (such as fertilizer equipment or concrete equipment).
- 3) Keep the wash area in a condition which will prevent tracking or flow of mud onto
- 4) Periodically dress the top with 2-inch stone may be required, as conditions
- demand, and repair any structures used to trap sediments. Inspect daily for loss of gravel or sediment buildup.
- 6) Inspect adjacent area for sediment deposit and install additional controls as
- 7) Expand stabilized area as required to accommodate activities. 8) Maintain silt fence as outlined in Plan 122.

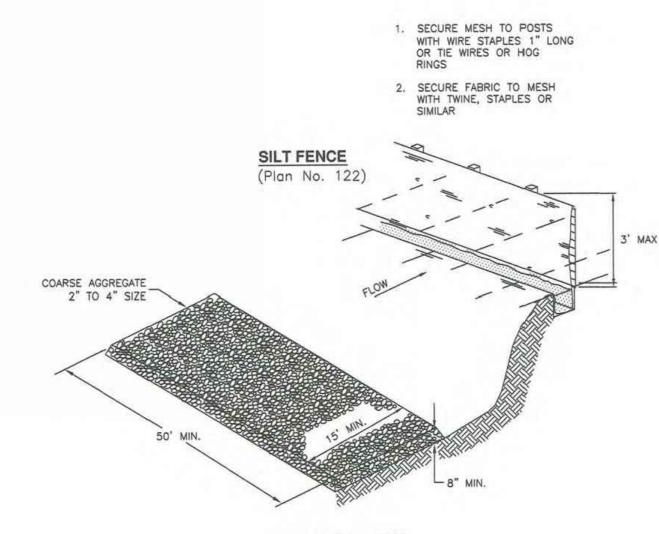
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STRAW BALE BARRIER (Plan No. 121)

SILT FENCE (Plan No. 121)

THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



WASH DOWN AREA

 \mathbf{C}

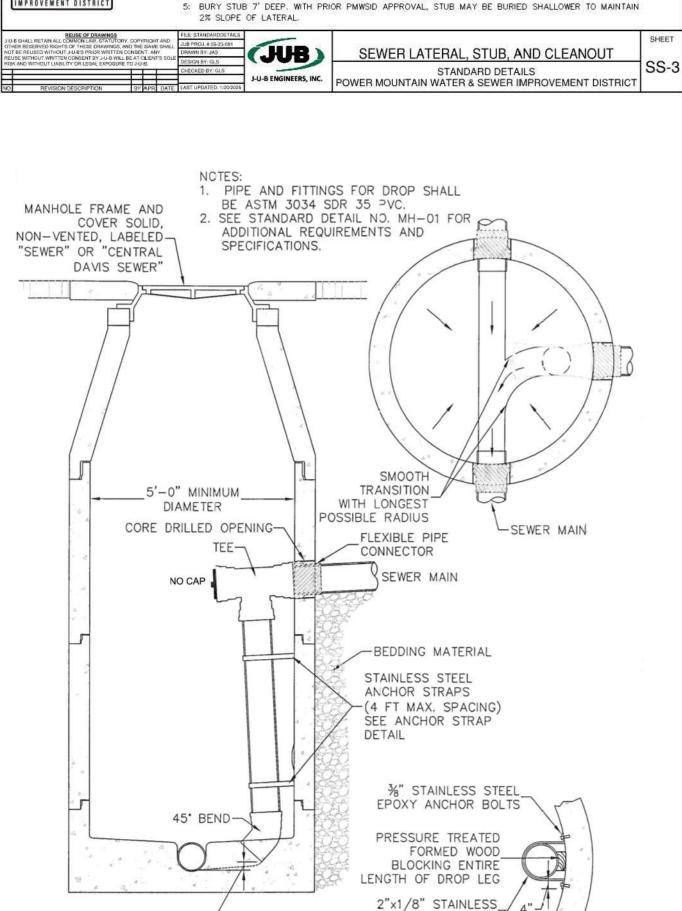
TALISMAN

1588 SOUTH MAIN STREET

SUITE 200

SALT LAKE CITY, UT 84115

801.743.1300



DROP MANHOLE

0.2' MINIMUM DROP IN FORMED FLOW CHANNEL STEEL STRAP



Inlet protection - gravel sock

SUMP INLET PROTECTION DETAIL



FILTER MEDIA (HEIGHT



Inlet protection - fence or straw bale

124.3

February 2006

Equipment and vehicle wash down area

125 February 2006



Stabilized roadway entrance

GENERAL

- A. Description. A temporary stabilized pad of gravel for controlling equipment and construction vehicle access to the site.
- B. Application. At any site where vehicles and equipment enter the public right of way.
- PRODUCT (Not used)

3 EXECUTION

- A. Clear and grub area and grade to provide maximum slope of 1 percent away from paved roadway.
- B. Compact subgrade.
- C. Place filter fabric under stone if desired (recommended for entrance area that remains more than 3 months).
- D. Maintenance.
- Prevent tracking or flow of mud into the public right-of-way.
- 2) Periodic top dressing with 2-inch stone may be required, as conditions demand, and repair any structures used to trap sediments.
- Inspect daily for loss of gravel or sediment buildup.
- 4) Inspect adjacent area for sediment deposit and install additional controls as
- 5) Expand stabilized area as required to accommodate activities.

Curb and gutter

GENERAL

- A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
- B. Additional requirements are specified in APWA Section 32 16 13.

2. PRODUCTS

- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73. C. Concrete: Class 4000, APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete
- crazing (spider cracks) may develop if air temperature exceeds 90 degrees F. D. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

3. EXECUTION

- A. Base Course Placement: APWA Section 32 05 10. Thickness is 6-inches if flowline grade is 0.5 percent (s=0.005) or greater. If slope is less, provide 8-inches. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- B. Concrete Placement: APWA Section 03 30 10. 1) Install expansion joints vertical, full depth, with top of filler set flush with concrete
- joints are not required in concrete placement using slip-form construction. 2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Match joint location in adjacent Portland-cement concrete roadway pavement.

surface. Install at the start or end of a street intersection curb return. Expansion

3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent. C. Protection and Repair: Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

Curb and gutter connection

GENERAL

A. Connect new curb and gutter to existing curb and gutter that has not been placed by

PRODUCTS

- A. Reinforcement: Galvanized or epoxy coated, 60 ksi yield grade steel, ASTM A615. B. Adhesive: Epoxy adhesive grout, APWA Section 03 61 00.
- C. Bond Breaker: Paraffin wax, lithium grease, or other semi-solid, inert lubricant.
- D. Expansion Cap: Plastic, with bar movement allowance of 1/2-inch.

3. EXECUTION

- A. Ensure drill rigs (or jigs) are set at mid-depth of the gutter and horizontal to the surface. Make hole size large enough to account for dowel bar and adhesive.
- B. Clean holes and dowel bars of dirt, dust and particles. Ensure coating on bars have
- C. Place bonding agent in the back of each hole so adhesive flows out around each bar fully encasing it. DO NOT apply adhesive to end of the bar and then insert the bar
- D. Insert dowels with at least one full turning motion and if necessary, place a grout retention disk on the dowel after insertion to contain adhesive.
- E. Apply complete coverage of bond-breaker on the protruding end of each dowel. F. Install expansion caps on protruding dowel bar ends.

Waterway

GENERAL

- A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
- B. Unless indicated otherwise, width of waterway as follows.
- 1) 4 feet for a residential street.
- 2) 6 feet for a non-residential street.
- 3) If wider than 6 feet, offset the flow line in the waterway to match (line up with) the curb and gutter flow line. Adjust cross slopes to match existing slopes.
- C. Additional requirements are specified in APWA Section 32 16 13.

2. PRODUCTS

- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
- C. Concrete: Class 4000, APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
- D. Reinforcement: Galvanized or epoxy coated, deformed, 60 ksi yield grade steel,
- E. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.

EXECUTION

211

- A. Base Course Placement: APWA Section 32 05 10. Thickness is 6-inches if flowline grade is 0.5 percent (s=0.005) or greater. If slope is less, provide 8-inches. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
- B. Concrete Placement: APWA Section 03 30 10. 1) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface. Expansion joints are not required in concrete placement using slip-form
- 2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Match joint location in adjacent Portland-cement concrete roadway pavement.
- 3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent. C. Protection and Repair: Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

126 205.2 206

BACKFILL BEHIND CURB BEFORE

PAVING AGAINST LIP OF GUTTER

BACKFILL -

2" CONTRACTION
JOINT

2" TO 4" SIZE COARSE AGGREGATE

SEDIMENT FABRIC UNDER GRAVEL

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT

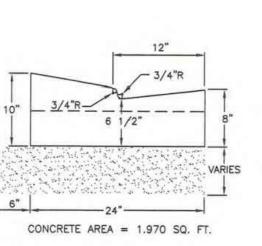
PRACTICE (RMP) IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN

HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.

CONCRETE AREA = 1.989 SQ. FT.

CONCRETE AREA = 1.665 SQ. FT.

Type E



CONCRETE AREA = 1.539 SQ. FT.

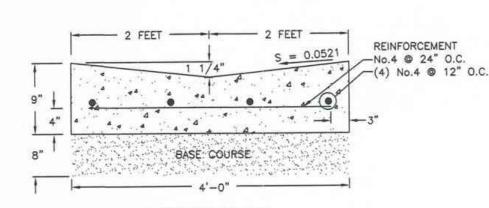
Type F

Type G Type H EXISTING CONCRETE (NOT IN CONTRACT) DOWELLED COLD JOINT (SEE PLAN 206)

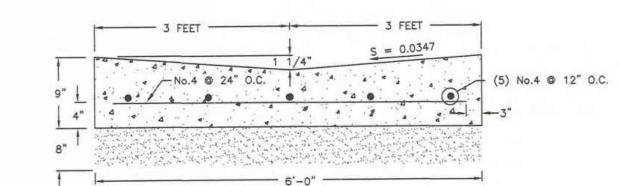
JOINT DETAIL

205.2

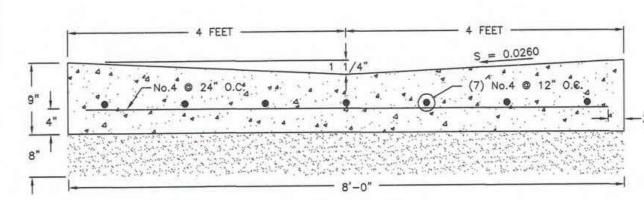
Curb and gutter connection



4'-0" WATERWAY CONCRETE AREA = 2.583 SQ. FT.



6'-0" WATERWAY CONCRETE AREA = 3.875 SQ. FT.



8'-0" WATERWAY CONCRETE AREA = 5.166 SQ. FT.



211 July 2011



TALISMAN

1588 SOUTH MAIN STREET

SUITE 200

SALT LAKE CITY, UT 84115

801.743.1300

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 \mathbf{C}

JĚFFERSON



Stabilized roadway entrance

126 February 2006

Curb and gutter

April 2011

ADHESIVE RETENTION -

No. 5, GALVANIZED OR EPOXY COATED SMOOTH STEEL DOWEL BAR 18" LONG

BLOW HOLE CLEAN AND - APPLY BONDING AGENT TO END OF HOLE BEFORE INSERTING DOWEL BAR - EXPANSION BOND-BREAKER TO PROTRUDING BAR

206 June 2009

Waterway

Plan

Waterway transition structure

GENERAL

- A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
- B. Additional requirements are specified in APWA Section 32 16 13...

2. PRODUCTS

A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel

213

SIDEWALK

CURB CUT ASSEMBLY

L----

(PLAN 261)

TYPE C JOINT

(PLAN 235)

- surface. Install at the start or end of a street intersection curb return. Expansion joints are not required in concrete placement using slip-form construction.
- 2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Match joint location in adjacent Portland-cement concrete roadway pavement.
- C. Protection and repair. Protect concrete from deicing chemicals during cure. Repair construction that does not drain. If necessary, fill flow-line with water to verify.

Precast manhole

GENERAL

- A. The drawing shows typical pipe connections. Refer to construction drawings for connection locations or refer to field location of existing piping when engineering pipe
- connection to the manhole. B. Manhole size.
- 1) Diameter is 4-feet: For pipe under 12" diameter.
- 2) Diameter is 5-feet: For pipe 12" and larger, or when 3 or more drain pipes intersect
- C. Wall thickness: Precast reinforced concrete walls 4 3/4" minimum. 2) Cast-in-place concrete to be 8 inches thick minimum.

PRODUCTS

- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
- C. Concrete: Class 4000, APWA Section 03 30 04.
- D. Riser and Reducing Riser: ASTM C478. E. Joint Sealant: Rubber based, compressible.
- F. Grout: 2 parts sand to 1 part cement mortar, ASTM C1329.
- G. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.

EXECUTION

- A. Foundation Stabilization: Get ENGINEER's permission to use a sewer rock or a sewer
- rock in a geotextile wrap to stabilize an unstable foundation. B. Base Course Placement: APWA Section 32 11 23. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor
- density, APWA Section 31 23 26. C. Invert cover. During construction, place invert covers over the top of pipe in manholes
- that currently convey sewerage. See Plan 412. D. Concrete Deck or Reducing Riser: When depth of manhole from pipe invert to finish
- grade exceeds 7 feet, use an ASTM C478 reducing riser. E. Pipe Connections: Grout around all pipe openings.
- F. Pipe Seal: Install rubber-based pipe seals on all plastic pipes when connecting plastic pipes to manholes. Hold water-stop in place with stainless steel bands.
- G. Joints: Place flexible sealant in all riser joints. Finish with grout.
- H. Adjustment: If the required manhole adjustment is more than 1'-0", remove the cone and grade rings and adjust the manhole elevation with the appropriate manhole section, the cone section, and the grade rings or plastic form to make frame and lid match finish
- I. Finish: Provide smooth and neat finishes on interior of cones, shafts, and rings. Imperfect moldings or honeycombs will not be accepted.
- J. Backfill: Provide backfill against the manhole shaft. Pea gravel and recycled RAP aggregate is NOT ALLOWED. Water jetting is NOT allowed. Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23 26.

Trench backfill

A. The drawing applies to backfilling a trench (and embankment) above the pipe zone.

PRODUCTS

- A. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 3-inches. B. Flowable Fill: APWA Section 31 05 15. Target is 60 psi in 28 days with 90 psi maximum in 28 days, It must flow easily requiring no vibration for consolidation.

3. EXECUTION

- A. Trench Backfill Above the Pipe Zone: Follow requirement indicated in APWA Section 33 05 20 and the following provisions. See Standard Plan 382 for backfilling
- 1) DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate as trench
- 2) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a standard proctor density, APWA Section 31 23
- Water jetting is NOT allowed.
- B. Flowable Fill: If controlled low strength material is placed in the trench. Cure the material before placing surface restorations.
- C. Embankment Backfill: When trench sides are sloped proceed as follows. 1) Maximum lift thickness is 8-inches before compaction.
- 2) Compact per APWA Section 31 23 26 to 95 percent or greater relative to a
- standard proctor density. 3) Submission of quality control compaction test result data may be requested by
- ENGINEER at any time. Provide results of tests immediately upon request.
- D. Surface Restoration: 1) Landscaped Surface: Follow APWA Section 32 92 00 (turf or grass) or APWA
- Section 32 93 13 (ground cover) requirements. Rake to match existing grade. Replace vegetation to match pre-construction conditions. 2) Paved Surface: Follow APWA Section 33 05 25 (bituminous pavement

install surfacing until compaction density is acceptable to ENGINEER.

surfacing), or APWA Section 33 05 25 (concrete pavement surfacing). Do not

THIS PLAN SHOWS VARIOUS SLOPES RECOMMENDED FOR VARIOUS TYPES OF SLOPE STABILITY PROBLEMS. THE VERTICAL TEXT INDICATES VARIOUS MATERIALS THAT MAY BE ENCOUNTERED. THE SERVICES OF A PROFESSIONAL SOILS ENGINEER SHOULD BE USED TO VERIFY SLOPE STABILITY.

EXISTING PAVEMENT

IF DEPTH OF TRENCH IS

SHORES OR TRENCH

GREATER THAN 4 FEET AND

SUPPORTS ARE NOT USED,

LOPES ARE REQUIRED.

SEE OSHA REGULATIONS

GENERAL

A. Install the pipe in the center of the trench or no closer than 6-inches from the wall of the pipe to the wall of the trench.

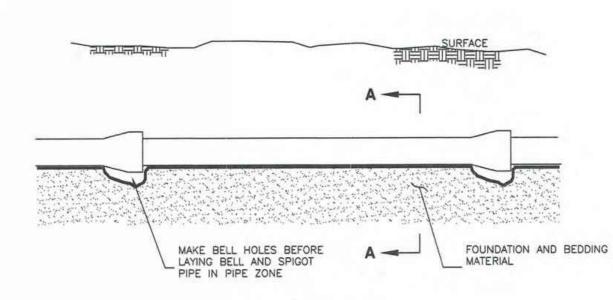
Pipe zone backfill

2. PRODUCTS

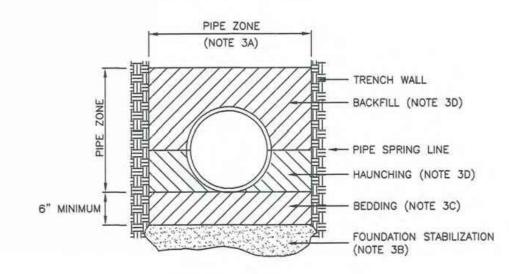
- A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
- B. Backfill: Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
- C. Concrete: APWA Section 03 30 04.
- D. Flowable Fill: Target is 60 psi in 28 days with 90 psi maximum in 28 days, APWA Section 31 05 15. It must flow easily requiring no vibration for consolidation.
- E. Stabilization-Separation Geotextile: Moderate or high at CONTRACTOR's choice, APWA Section 31 05 19.

3. EXECUTION

- A. Excavate the Pipe Zone: Width is measured at the pipe spring line and includes any necessary sheathing. Provide width recommended by pipe manufacturer. Follow manufacturer's recommendations when using trench boxes.
- B. Foundation Stabilization: Get ENGINEER's permission before installing common fill. Vibrate to stabilize. Installation of stabilization-separation geotextile will be required to separate backfill material and native subgrade materials if common fill cannot
- provide a working surface or prevent soils migration. C. Bedding: Follow APWA Section 33 05 20 requirements and the following provisions.
- 1) Furnish untreated base course material unless specified otherwise by pipe
- manufacturer. 2) Maximum lift thickness is 8-inches.
- 3) Bedding immediately under the pipe should not be compacted, but loosely
- 4) Compaction is 95 percent or greater relative to a modified proctor density,
- APWA Section 31 23 26. 5) When using concrete, provide at least Class 2,000, APWA Section 03 30 04.
- D. Pipe Zone: DO NOT USE sewer rock, pea gravel, or recycled RAP aggregate in the pipe zone. Water jetting is NOT allowed.
- 1) Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26
 - unless pipe manufacturer requires more stringent installation. 2) Submission of quality control compaction test result data developed for the haunch zone may be requested by ENGINEER at any time. CONTRACTOR is to provide results of tests immediately upon request.
- E. Flowable Fill (when required and if allowed by pipe manufacturer):
- 1) Place the controlled low strength material, APWA Section 31 05 15.
- 2) Prevent pipe flotation by installing in lifts and providing pipe restraints as required by pipe manufacturer.
- 3) Reset pipe to line and grade if pipe "floats" out of position.



ELEVATION VIEW



SECTION A-A

INSTALLATION

CONCRETE PIPE: FOLLOW ASTM C 1479 STANDARD PRACTICE FOR INSTALLATION OF PRECAST CONCRETE SEWER, STORM DRAIN, AND CULVERT PIPE USING

PLASTIC PIPE: FOLLOW ASTM D 2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY-FLOW APPLICATIONS"

CORRUGATED METAL PIPE: FOLLOW ASTM A 798 STANDARD PRACTICE FOR INSTALLING FACOTRY-MADE CORRUGATED STEEL PIPE FOR SEWERS AND OTHER

VITRIFIED CLAY PIPE: FOLLOW ASTM C 12. "STANDARD RECOMMENDED PRACTICE FOR INSTALLING VITRIFIED CLAY PIPE LINES.



TALISMAN

1588 SOUTH MAIN STREET

SUITE 200

SALT LAKE CITY, UT 84115

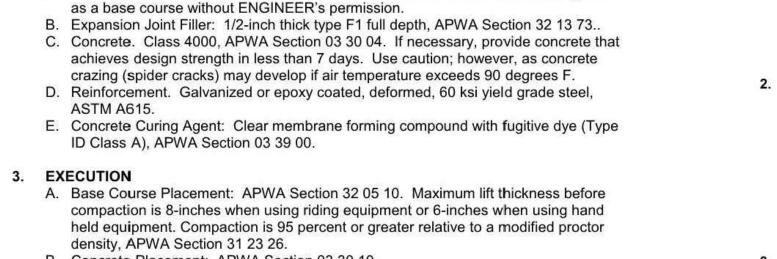
801.743.1300

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JĚFFERSON





B. Concrete Placement: APWA Section 03 30 10. 1) Install expansion joints vertical, full depth, with top of filler set flush with concrete

3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

TYPE C JOINT (PLAN 261)

REINFORCEMENT

No.4 @ 12" O.C.

TYPE C JOINT (PLAN 261)

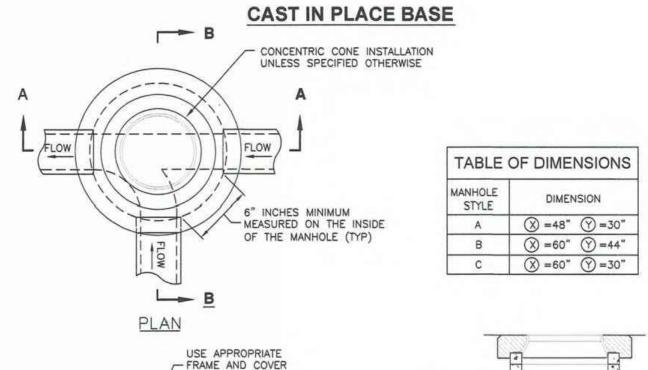
6 FT WATERWAY --

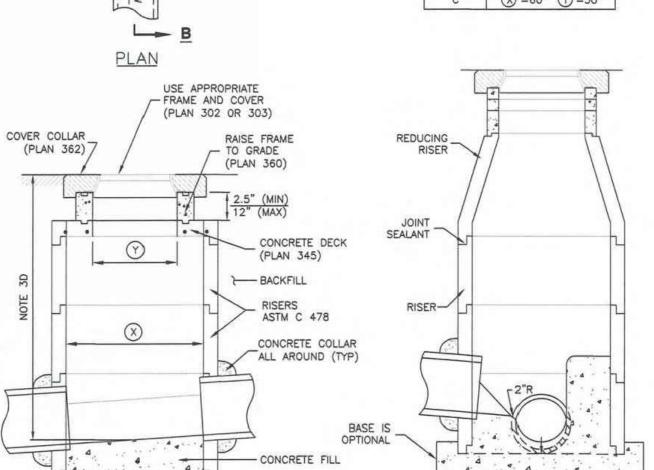
4 FT WATERWAY

(PLAN 211)

- CONSTRUCTION JOINT

341.1





- BASE COURSE SECTION A-A **SECTION B-B**

PAVEMENT RESTORATION

RESTORATION

MAGNETIC MARKING TAPE

MAX. DEPTH = 18"

EXISTING SUBGRADE

BELOW FINAL SURFACE

(PLAN 255 OR 256)

BACKFILL

(NOTE 3A)

PIPE ZONE

(SEE DRAWINGS

OR PLAN 382)

Trench backfill

38 July 2016

Pipe zone backfill



BASE COURSE

May 2005

November 2010

January 2011

Waterway transition structure

SECTION A-A

CONSTRUCTION JOINT -

GUTTER GRADE

REINFORCEMENT No.4 9 12" O.C.

PLAN

DUMMY CURB

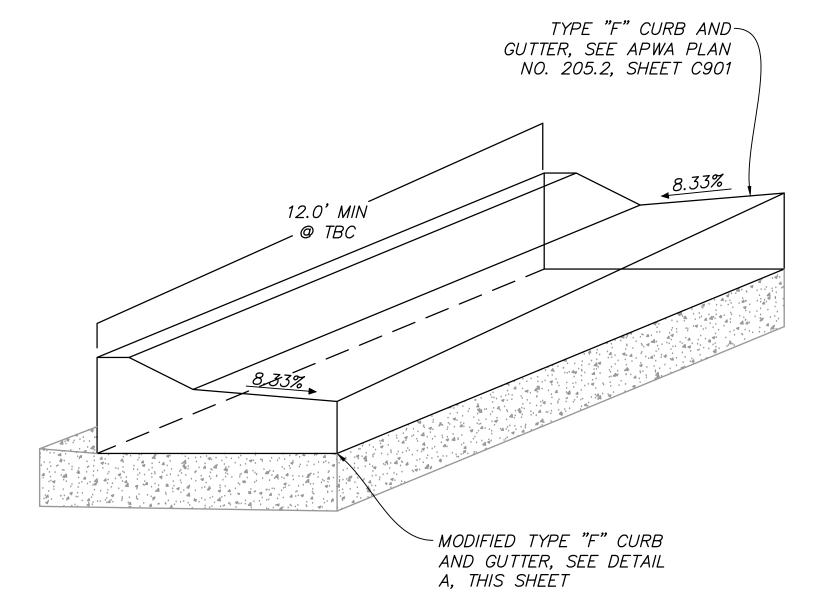
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Precast manhole



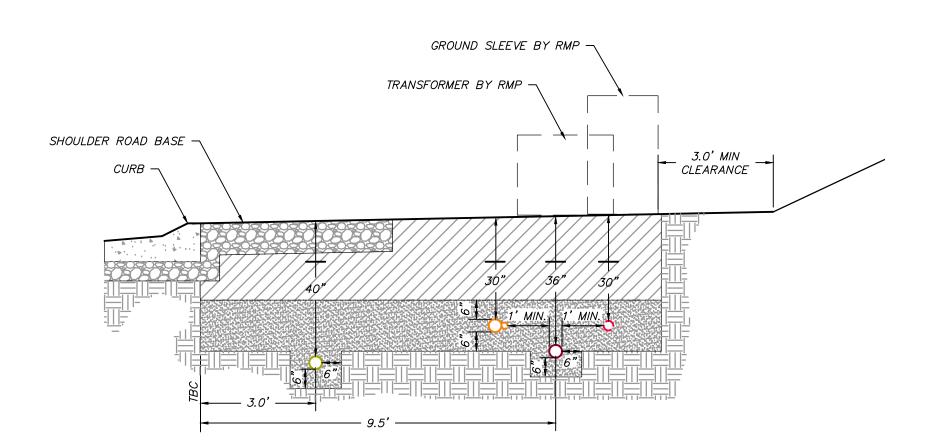
NOTE: TIP-OUT CURB APPLIES ONLY TO THE UPHILL SIDE OF CHALET WEST

MODIFIED TYPE F CURB AND GUTTER SCALE: N.T.S.



B TYPE F CURB TRANSITION

- SCALE: N.T.S.



NOTES:

* SCREENED BACKFILL SHALL CONTAIN ONLY SOIL

& ROCKS THAT WILL PASS THROUGH A 4" SIEVE.

* PRIOR TO BACKFILLING, ROCKY MOUNTAIN POWER
SHALL INSPECT BACKFILL MATERIAL AND
CONDUIT INSTALLATION

*INSTALL FLAT PULL LINE RATED TO WITHSTAND 1000 LBS OF TENSION WITHIN CONDUITS WITH 72" EXTRA LINE FROM EACH END. PULL LINE TO BE SEALED INSIDE ENDS OF CONDUIT AND BOTH CONDUIT ENDS CAPPED.

* BACKBONE PRIMARY REQUIRES (1) 3", 4" OR 6" CONDUIT. PRIMARY TO TRANSFORMERS REQUIRES (1)3" CONDUIT. WHERE BOTH EXIST IN SAME TRENCH, PROVIDE 12" SEPARATION. ALL PRIMARY TO HAVE 36" COVER. O 3", 4" OR 6" CONDUIT FOR PRIMARY ELECTRICAL
3" CONDUIT FOR SECONDARY ELECTRICAL

NATURAL GAS PIPELINE
 4" CONDUIT FOR COMMUNICATIONS
 2" CONDUIT FOR COMMUNICATIONS
 MYLAR WARNING TAPE

UNDISTURBED EARTH

SCREENED BACKFILL MIN 6" AROUND ALL
SIDES OF CONDUITS.

BACKFILL COMPACTED TO 90%

BACKFILL COMPACTED TO 90% ROAD BASE

DRY UTILITY TRENCH

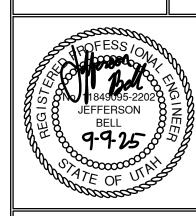


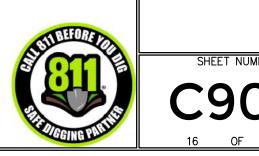
OUNTAIN CHALETS

SHELTER HILL CH DETAILS

R: 25-220-22

TCC JOB NUM





:0793\Cadd\25-220-22 Shelter Hill Chalets\Cadd\lp\C902 DETAILS.dv