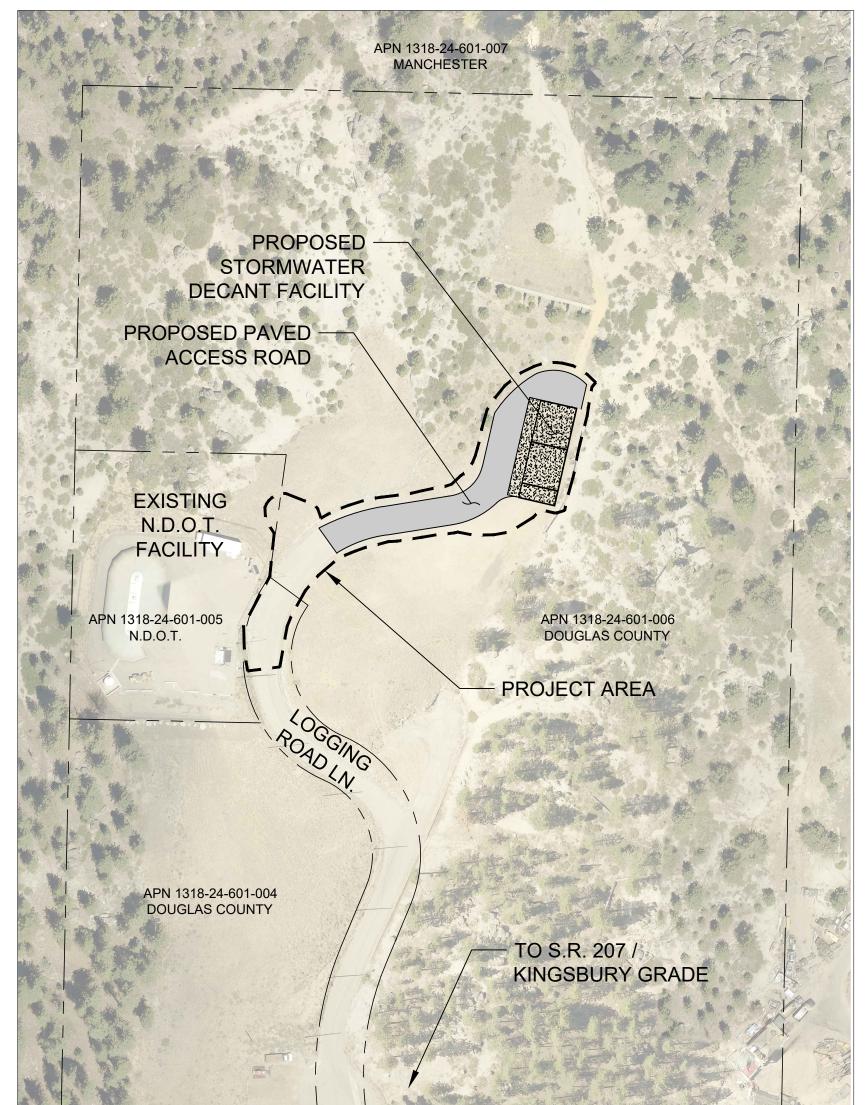
NEVADA TAHOE CONSERVATION DISTRICT

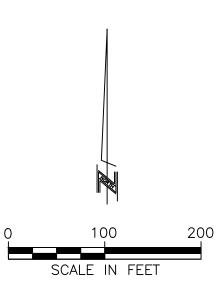
LOGGING ROAD STORMWATER DECANT FACILITY

EIP #01.01.02.0020 IN THE COUNTY OF DOUGLAS



PLAN

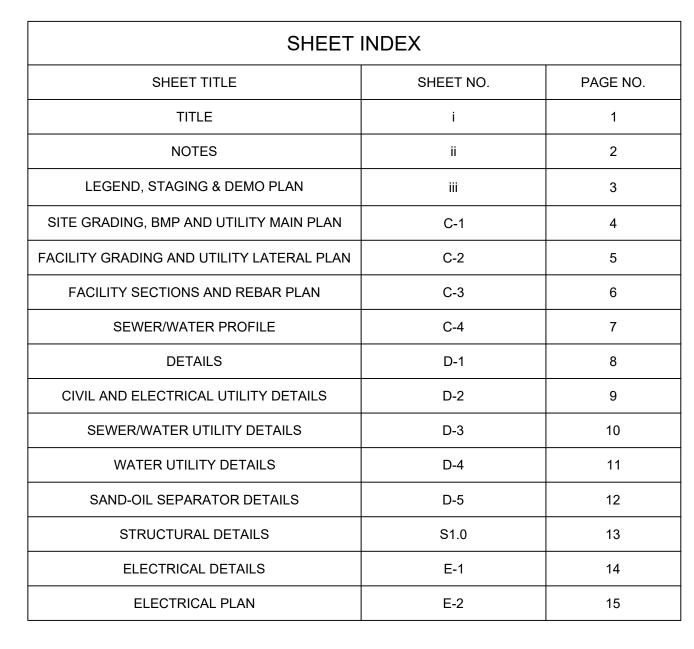
SCALE: 1" = 200

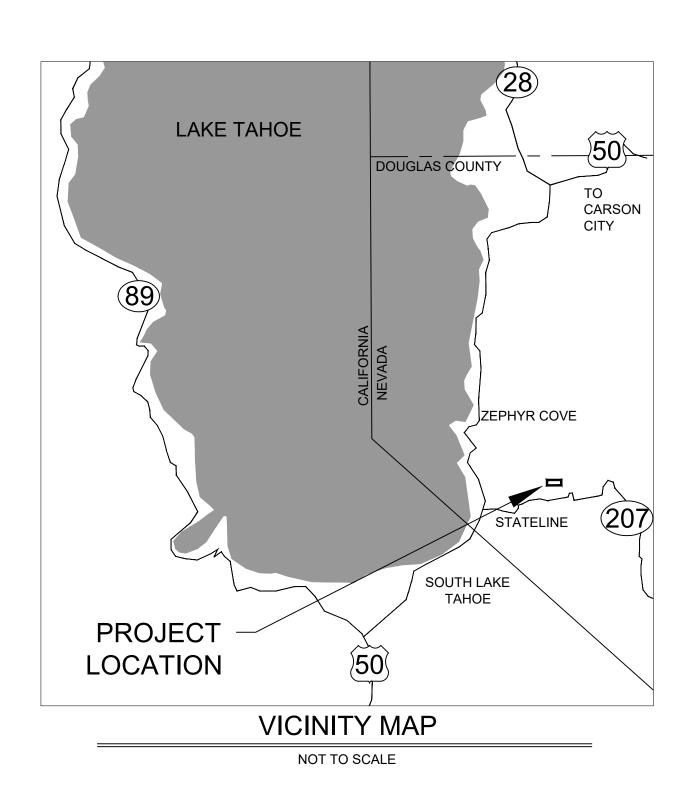


LAKE TAHOE

ENVIRONMENTAL IMPROVEMENT

PROGRAM





ENGINEER:

me Clarky MEGHAN C. KELLY, P.E.

4/1/2021

APPROVAL:

REGISTERED CIVIL ENGINEER STATE OF NEVADA, NO. 20851

ZEPHYR COVE, NV 89448

400 DORLA CT.

(775) 586-1610

NEVADA TAHOE CONSERVATION DISTRICT

PHILIP RITGER

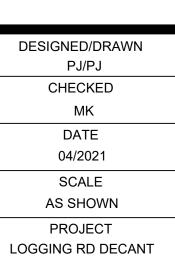
PUBLIC WORKS DIRECTOR DOUGLAS COUNTY 1120 AIRPORT RD. BUILDING F-2 MINDEN, NV 89423

BID SET APRIL 1, 2021











1 of 15

ONE WEEK PRIOR TO THE COMMENCEMENT OF ANY WORK, CONSTRUCTION OR INSTALLATIONS ASSOCIATED WITH THIS PERMIT, THE PERMITTEE SHALL NOTIFY THE DOUGLAS COUNTY INSPECTOR AT (775) 782-6237 OF INTENT TO BEGIN AND REQUEST/SCHEDULE PRECONSTRUCTION MEETING AT THE PROJECT SITE WITH DOUGLAS COUNTY CONSTRUCTION INSPECTOR. FAILURE TO PROVIDE PROPER INSPECTION NOTIFICATION AS PRESCRIBED ABOVE SHALL RESULT IN THIS PERMIT BECOMING INVALID AND WORK BEING STOPPED. NO WORK SHALL BE STARTED WITHOUT FIRST NOTIFYING THE COUNTY ENGINEERING INSPECTOR AT (775) 782-6237 AT LEAST 2 WORKING DAYS BEFORE WORK IS COMMENCED.

3. CONTRACTORS SHALL COMPLY WITH THE REQUIREMENTS TO OBTAIN THE NECESSARY SITE IMPROVEMENT PERMITS AND SHALL COMPLY WITH THE SITE IMPROVEMENT PERMIT CONDITIONS AS FOUND ON THE BACK OF THE PERMIT FORM.

4. THE APPROVED PLAN, PERMIT AND INSPECTION RECORD MUST BE ON THE JOB SITE AT ALL TIMES.

DOUGLAS COUNTY PARKS AND RECREATION, COMMUNICATIONS, AND SHERIFF'S OFFICE IS NOT REPRESENTED BY USA DIGS. WHEN HE CONTRACTOR EXCAVATES NEAR OR ADJACENT TO ANY OF THESE FACILITIES/PROPERTIES, THE CONTRACTOR SHALL CONTACT THE ADMINISTRATOR OF APPLICABLE DEPARTMENT AT PHONE NUMBER SHOWN ON COUNTY WEBSITE TO REQUEST ASSISTANCE IN LOCATING ALL THEIR UNDERGROUND FACILITIES. THIS REQUIREMENT MAY ALSO APPLY TO ANY OTHER COUNTY FACILITY/PROPERTY.

6. THE CONTRACTOR SHALL OBTAIN A STORMWATER GENERAL OR A SURFACE AREA DISTURBANCE PERMIT FROM THE NEVADA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS REQUIRED, AND SHALL COMPLY WITH ITS REQUIREMENTS FOR DUST CONTROL ON ALL APPLICABLE PROJECTS. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK TO WATER AREAS AS NECESSARY TO CONTROL DUST. THE CONTRACTOR WILL PROVIDE SWEEPING PER SPECIFICATION. DUST SHALL BE CONTROLLED BY THE CONTRACTOR TO THE SATISFACTION OF THE COUNTY, AND IN ACCORDANCE WITH THE AIR QUALITY PERMIT FROM THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION WHEN REQUIRED.

7. THE ENGINEER HEREBY CERTIFIES AS EVIDENCED BY A PROFESSIONAL SEAL & SIGNATURE, THAT ALL AFFECTED UTILITY COMPANIES BOTH PUBLIC AND PRIVATE HAVE BEEN CONTACTED. ALL EXISTING AND/OR PROPOSED UTILITY LINES AND OTHER RELATED INFORMATION HAVE BEEN TRANSFERRED ONTO THESE PLANS. TO THE BEST OF ENGINEER'S KNOWLEDGE AND BASED ON INFORMATION FROM THE UTILITY COMPANY. THE ENGINEER ALSO HEREBY CERTIFIES THAT ALL EXISTING AND/OR PROPOSED PUBLIC RIGHT-OF-WAY AND EASEMENTS HAVE BEEN CORRECTLY PLOTTED AND SHOWN.

8. THE ENGINEER, OR LAND SURVEYOR OF RECORD SHALL CERTIFY UPON COMPLETION OF CONSTRUCTION THAT ALL PUBLIC IMPROVEMENTS (WATER AND SEWER UTILITIES, STORM DRAINAGE, CONCRETE, PAVING, STREET LIGHTS, ETC.) HAVE BEEN INSTALLED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE APPROVED PLANS. ANY CHANGES SHALL BE REFLECTED ON "AS-BUILT"/RECORD DRAWINGS PROVIDED BY THE ENGINEER TO THE COUNTY'S ENGINEERING DIVISION.

9. THE REGISTERED ENGINEER OR LAND SURVEYOR SHALL CERTIFY THAT THE MINIMUM HORIZONTAL AND VERTICAL SEPARATIONS BETWEEN UTILITIES WITHIN PUBLIC RIGHT-OF-WAY AND EASEMENTS HAVE BEEN MAINTAINED AS REQUIRED BY LAW OR POLICY.

10. IF A FIRE HYDRANT IS NEEDED TO OBTAIN CONSTRUCTION WATER, THE CONTRACTOR SHALL OBTAIN A FIRE HYDRANT METER FROM DOUGLAS COUNTY PUBLIC WORKS OR APPLICABLE WATER PURVEYOR AND PAY ALL APPLICABLE FEES AND CHARGES

11. IF DURING THE CONSTRUCTION OF A PUBLIC FACILITY, THE CONTRACTOR FAILS TO OR IS UNABLE TO COMPLY WITH A REQUEST TO THE ENGINEERING INSPECTOR, AND IT IS NECESSARY FOR COUNTY FORCES TO DO WORK THAT IS NORMALLY THE CONTRACTOR'S RESPONSIBILITY, THE COUNTY SHALL BE JUSTIFIED IN BILLING THE CONTRACTOR. EACH INCIDENT REQUIRING WORK BY COUNTY FORCES SHALL BE COVERED BY A SEPARATE BILLING AT THE CURRENT APPLICABLE RATES.

12. THE CONTRACTOR IS ADVISED THAT DAMAGE TO PUBLIC SERVICES OR SYSTEMS AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE ENGINEERING INSPECTOR. UNLESS OTHERWISE APPROVED BY THE COUNTY, ALL REPAIRS SHALL BE DONE WITHIN 24 HOURS. THE CONTRACTOR IS ADVISED THAT ANY COSTS RELATED TO REPAIR OR REPLACEMENT OF DAMAGED PUBLIC SERVICES AND SYSTEMS AS A RESULT OF CONTRACTOR'S ACTIVITIES SHALL BE BORNE BY THE CONTRACTOR.

13. CONTRACTOR SHALL MAINTAIN A SET OF PLANS ON SITE SHOWING "AS CONSTRUCTED" CHANGES. UPON COMPLETION, CONTRACTOR SHALL SUPPLY DOUGLAS COUNTY AND NTCD A SET OF "AS BUILT" PLANS. SEE SPECIAL PROVISIONS.

14. MOBILIZATION/STAGING AND STORAGE AREAS ARE TO BE SECURED BY THE CONTRACTOR AND APPROVED BY TRPA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF MOBILIZATION SITES, INCLUDING PLACEMENT AND MAINTENANCE OF BMPS.

15. PRIOR TO STARTING WORK, THE CONTRACTOR SHALL INSTALL TEMPORARY BMP MEASURES AT LOCATIONS WHERE NEEDED TO CONTROL EROSION AND WATER POLLUTION DURING THE CONSTRUCTION OF THE PROJECT. THE BMP MEASURES SHALL REMAIN IN PLACE AND SHALL BE MAINTAINED IN A FUNCTIONAL CONDITION FOR THE DURATION OF THE CONSTRUCTION. DURING CONSTRUCTION ENVIRONMENTAL PROTECTION DEVICES, SUCH AS EROSION CONTROL, DUST CONTROL, AND VEGETATION PROTECTION DEVICES SHALL BE MAINTAINED AT ALL TIMES. SILT FENCE OR SEDIMENT LOGS WILL BE REQUIRED AT OTHER LOCATIONS AS SHOWN ON THE DRAWINGS OR STAKED IN THE FIELD BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL MEET OR EXCEED TRPA REQUIREMENTS.

16. ALL EXISTING VEGETATION SHALL BE PRESERVED UNLESS SPECIFICALLY IDENTIFIED BY THE ENGINEER FOR REMOVAL. BMP'S TO PROTECT VEGETATION SHALL BE INSTALLED BY THE CONTRACTOR IF REQUIRED BY TRPA. CONTRACTOR TO REVEGETATE ANY AREAS OUTSIDE THE DISTURBED AREA SHOWN ON THE PLANS WITH PLANTS APPROVED BY TRPA AT THEIR OWN EXPENSE.

17. NTCD WILL PROVIDE ONE SET OF CONSTRUCTION STAKES AT THE PROJECT'S EXPENSE. ADDITIONAL CONSTRUCTION STAKES WILL BE 41. PROVIDED AT THE CONTRACTOR'S EXPENSE. LIMITS FOR ALL ITEMS OF WORK SHALL BE STAKED IN THE FIELD BY THE ENGINEER. THESE LIMITS AND THE RESULTING TREATMENT LENGTH/AREAS MAY VARY FROM THOSE SHOWN ON THE DRAWINGS. PAYMENT FOR ITEMS OF WORK WILL BE MADE FOR THE AMOUNT AUTHORIZED BY THESE FIELD STAKED LIMITS AND THE SPECIAL TECHNICAL PROVISIONS.

18. UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. WHERE EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AND ALL AFFECTED UTILITY COMPANIES TO LOCATE ALL BURIED UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR RELOCATION OF UTILITIES AS REQUIRED BY THE WORK, WHENEVER CONNECTIONS TO OR CLEARANCE FROM ANY UTILITY IS REQUIRED. THE CONTRACTOR SHALL POTHOLE TO VERIFY THE LOCATION, SIZE AND MATERIAL OF THE UTILITY PRIOR TO CONSTRUCTION. CALL 811 FOR USA DIGS TWO WORKING DAYS PRIOR TO DIGGING.

19. ANY DAMAGE DONE BY THE CONTRACTOR OR HIS SUBCONTRACTORS TO PRIVATE PROPERTY AND/OR OUTSIDE OF THE NOTED LIMITS OF WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND/OR HIS SUBCONTRACTORS.

20. NTCD WILL PROVIDE INITIAL TESTING AND INSPECTION OF WORK AND MATERIAL AT NTCD'S EXPENSE. ANY SUBSEQUENT TESTS BASED ON THE FAILURE TO MEET THE STANDARDS SHALL BE AT THE EXPENSE OF THE CONTRACTOR. THE COST OF REMOVAL AND/OR REPLACEMENT OF ANY DEFECTIVE WORK OR MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF RETESTING AND/OR INSPECTING OF REPLACED WORK AND MATERIAL IS ALSO THE RESPONSIBILITY OF THE CONTRACTOR. SUCH COSTS WILL BE DEDUCTED FROM ANY MONEYS DUE OR WHICH MAY BECOME DUE TO THE CONTRACTOR.

21. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM. NOISE SHALL BE REDUCED BY THE MANDATORY USE OF MUFFLERS ON ALL CONSTRUCTION VEHICLES AND EQUIPMENT. WHERE FEASIBLE, SOLENOIDAL PAVEMENT BREAKERS WILL BE USED IN LIEU OF AIR POWERED JACK HAMMERS.

22. SOIL AND CONSTRUCTION MATERIAL SHALL NOT BE TRACKED OFF THE CONSTRUCTION SITE. GRADING OPERATIONS SHALL CEASE IN THE EVENT THAT A DANGER OF VIOLATING THIS CONDITION EXISTS.

23. LOOSE SOIL MOUNDS OR SURFACES SHALL BE PROTECTED FROM WIND OR WATER EROSION BY BEING APPROPRIATELY COVERED WHEN CONSTRUCTION IS NOT IN ACTIVE PROGRESS OR WHEN REQUIRED BY TRPA.

24. EXCAVATED MATERIAL SHALL BE STORED UPGRADE FROM THE EXCAVATED AREA WHENEVER POSSIBLE. NO MATERIAL SHALL BE STORED IN ANY STREAM ENVIRONMENT ZONE (SEZ) OR WET AREA.

25. ONLY EQUIPMENT OF A SIZE AND TYPE THAT WILL DO THE LEAST AMOUNT OF DAMAGE, UNDER PREVAILING SITE CONDITIONS, AND CONSIDERING THE NATURE OF THE WORK TO BE PERFORMED, WILL BE USED.

PROPERTY UNLESS AUTHORIZED BY TRPA IN WRITING.

26. NO WASHING OF VEHICLES OR HEAVY EQUIPMENT, INCLUDING CEMENT MIXERS, SHALL BE PERMITTED ANYWHERE ON THE SUBJECT

27. NO VEHICLE OR HEAVY EQUIPMENT SHALL BE ALLOWED IN A STREAM ENVIRONMENT ZONE OR WET AREA EXCEPT AS AUTHORIZED BY TRPA.

28. ALL CONSTRUCTION SHALL BE WINTERIZED BY OCTOBER 15 TO REDUCE THE WATER QUALITY IMPACTS ASSOCIATED WITH WINTER WEATHER.

29. THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE COUNTY RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SYSTEM. PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS SHALL BE USED TO PROTECT ADJOINING PROPERTIES DURING CONSTRUCTION OF IMPROVEMENTS. ALL STREETS SHALL BE MAINTAINED FREE OF DUST AND MUD CAUSED BY GRADING OPERATIONS. ALL OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE STORMWATER DISCHARGE PERMIT FROM THE NEVADA DIVISION OF ENVIRONMENTAL PROTECTION.

30. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LONGER THAN 24 HOURS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS BEEN TEMPORARILY OR PERMANENTLY CEASED.

31. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMP'S WEEKLY, PRIOR TO A FORECASTED RAIN EVENT AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS FROZEN GROUND CONDITIONS OF SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO STORM WATER GENERAL PERMIT NVR100000, SECTION 1.B.1.G. AND THE PROJECT SWPPP

32. TRAFFIC CONTROL AND LANE CLOSURES WILL BE PER DOUGLAS COUNTY AND NDOT STANDARD SPECIFICATIONS WHERE APPLICABLE. ANY ROAD CLOSURES REQUIRE THE CONTRACTOR TO OBTAIN A ROAD CLOSURE PERMIT FROM DOUGLAS COUNTY.

33. ACCESS TO HOMES AND BUSINESSES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION. ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC., SHALL BE INSTALLED TO FINISH GRADE OR SHALL BE ADJUSTED TO FINISH GRADE AFTER PLACING OF ASPHALTIC SURFACE COURSE BY THE CONTRACTOR PER APPLICABLE DOUGLAS COUNTY STANDARD DETAILS. THE STREET PAVING PERMITTEE/CONTRACTOR IS HEREBY NOTIFIED THAT IN THE EVENT THAT ACCEPTANCE OF THE PUBLIC STREET PAVING IS DELAYED; ONE YEAR OR MORE AFTER THE PAVEMENT IS INSTALLED, THE PERMITTEE/CONTRACTOR SHALL APPLY A SEAL COAT TO THE PAVEMENT. TYPE OF MATERIAL AND RATE OF APPLICATION WILL BE DIRECTED BY THE DOUGLAS COUNTY ENGINEERING DEPARTMENT. MANHOLE MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF SECTION 204 "MANHOLES AND CATCH BASINS" OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. PORTLAND CEMENT CONCRETE (P.C.C.) SHALL HAVE THE FOLLOWING CHARACTERISTICS: 4000 PSI MINIMUM COMPRESSIVE STRENGTH @ 28 DAYS, (CURB AND GUTTER TRANSITION ONLY, ALL UNEXPOSED CONCRETE MAY BE 3000 PSI), MIN. 6 SACKS OF CEMENT PER CUBIC YARD WITH A MAX. WATER/CEMENT RATIO OF 0.45, AIR ENTRAINMENT 6% ±1.5%, SLUMP AT 1 TO 4 INCHES. ALL MATERIALS SHALL CONFORM TO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SECTION 202. REINFORCING STEEL SHALL BE GRADE 40 AND 1.5 INCHES MINIMUM CLEAR COVER. ALL STORM DRAIN PIPE AND STRUCTURES SHALL BE CLEANED OF SEDIMENT AND DEBRIS PRIOR TO ISSUANCE OF A NOTICE OF COMPLETION. FRAMES AND GRATES SHALL BE MATCHED TO ACHIEVE A CLOSE TOLERANCE FIT, WITH MINIMAL GAPS, AS APPROVED BY THE STORM DRAIN UTILITY.

34. PRECAST MANHOLES SECTIONS, OTHER THAN GRADE RINGS, SHALL BE JOINED WITH FLEXIBLE PLASTIC GASKET MATERIAL SUCH AS RAM-NEK OR APPROVED EQUAL PER MANUFACTURER'S RECOMMENDATIONS.

35. MANHOLES LOCATED OUTSIDE PAVED AREAS SHALL REQUIRE ALL WEATHER ACCESS ROADWAY CONSISTING OF 6 INCHES TYPE 2, CLASS B AGGREGATE BASE (CONFORMING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SECTION 200.01.02) AND STORM DRAIN MANHOLE MARKERS BE INSTALLED. STORM DRAIN MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKER (CUM 375), 5'-2" WITH DECAL READING "STORM DRAIN MANHOLE". PLACE MARKERS ON EASEMENT LINE NEAREST TO MANHOLE OR AS DIRECTED BY THE STORM DRAIN UTILITY.

36. GRATES SHALL BE PLACED OUTSIDE OF THE PEDESTRIAN TRAVELED WAY. GRATE OPENINGS SHALL NOT EXCEED 0.5 INCHES IN WIDTH OR 4 INCHES IN LENGTH. GRATES SHALL BE TRAFFIC RATED AND ADA COMPLIANT.

37. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE, OSHA REQUIREMENTS FOR EXCAVATION, AND SPECIAL REQUIREMENTS OF THE PERMIT. VIOLATIONS WILL RESULT IN THE STOPPAGE OF ALL WORK UNTIL THE VIOLATION IS CORRECTED.

38. SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL, OR AS DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE COUNTY.

39. FILLS SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION."

40. THE ENGINEER OF RECORD SHALL PROVIDE THE COUNTY AND ALL OTHER APPROPRIATE ENTITIES WITH COPIES OF ALL TEST RESULTS ON A WEEKLY BASIS AND A BOUND REPORT OF THE TEST RESULTS AND INSPECTION REPORTS, ARRANGED IN CHRONOLOGICAL ORDER, AT THE COMPLETION OF THE PROJECT. THE ENGINEER OF RECORD SHALL PROVIDE THE COUNTY WITH AN OPINION REGARDING THE CONSTRUCTION SIMILAR TO THE FOLLOWING:

ENGINEER'S OPINION

I HEREBY CERTIFY THAT I AM A LICENSED ENGINEER IN THE STATE OF NEVADA. TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE PROJECT WAS CONSTRUCTED IN GENERAL CONFORMANCE WITH THE PLANS AND SPECIFICATIONS, AND IN MY PROFESSIONAL OPINION, IS IN COMPLIANCE WITH APPLICABLE LAWS, CODES AND ORDINANCES.

42. FILL AREAS SHALL BE CLEARED OF ALL VEGETATION AND DEBRIS, SCARIFIED, AND BE APPROVED BY THE ENGINEER OF RECORD PRIOR TO THE PLACING OF FILL.

43. NO ROCK OR SIMILAR MATERIAL GREATER THAN 4" IN DIAMETER SHALL BE PLACED IN THE FILL UNLESS RECOMMENDATIONS FOR SUCH PLACEMENT HAVE BEEN SUBMITTED BY THE GEOTECHNICAL ENGINEER IN ADVANCE AND APPROVED BY THE COUNTY.

44. THE GEOTECHNICAL ENGINEER SHALL VERIFY ALL GRADING INCLUDING COMPACTION REQUIREMENTS AND THE STABILITY OF SLOPES CREATED, EXISTING OR REMAINING.

45. IN THE EVENT OF CHANGES ARISING DURING CONSTRUCTION, THE NTCD ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR REVIEW AND APPROVAL BY THE COUNTY. NO CHANGES IN THE DESIGN WILL BE PERMITTED UNLESS WRITTEN APPROVAL IS GIVEN BY THE COUNTY.

46. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT APPROVED LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES OR TO REPAIR DAMAGED EROSION CONTROL MEASURES.

47. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND DESILTING FACILITIES. GRADED SLOPE SURFACE PROTECTION MEASURES DAMAGED DURING THE RAINSTORM SHALL ALSO BE

48. FILL SLOPES AT THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE TOP OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.

49. A SIX-FOOT HIGH PERIMETER FENCE OR A 24-HOUR GUARD SHALL BE POSTED ON THE SITE WHENEVER THE DEPTH OF WATER IN A FACILITY EXCEEDS 18 INCHES.

WATER UTILITY GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AS ADOPTED BY DOUGLAS COUNTY. THE OWNER / CONTRACTOR SHALL OBTAIN A PERMIT FROM DOUGLAS COUNTY COMMUNITY DEVELOPMENT PRIOR TO THE START OF CONSTRUCTION.

2. ALL TRAFFIC CONTROL AND BARRICADING WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND THE NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK, 1986 EDITION. NO STREET CLOSURES WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF A TRAFFIC CONTROL PLAN BY THE DOUGLAS COUNTY ENGINEERING DIVISION.

3. THE OWNER / CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT "CALL BEFORE YOU DIG" 1-800-227-2600 FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION. AN UNDERGROUND SERVICE ALERT MAY ALSO BE LOGGED AT WWW.USANORTH.ORG.

4. THE OWNER / CONTRACTOR SHALL CALL DOUGLAS COUNTY ENGINEERING DIVISION (782-6237) FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION. THE OWNER / CONTRACTOR SHALL CALL TWENTY-FOUR (24) HOURS PRIOR TO REQUIRED INSPECTIONS AND TESTING. THE REQUIRED INSPECTIONS AND TESTING ARE LISTED ON THE INSPECTION RECORD ISSUED WITH EACH PERMIT. THE OWNER / CONTRACTOR MUST HAVE THE PERMIT NUMBER AND THE DESCRIPTION LISTED ON THE INSPECTION RECORD TO SCHEDULE REQUIRED INSPECTIONS AND TESTING.

5. THE APPROVED PLAN, PERMIT AND INSPECTION RECORD MUST BE ON THE JOB SITE AT ALL TIMES.

WATER MAIN SHUTDOWNS / INTERRUPTION OF SERVICE: WATER UTILITY APPROVAL IS REQUIRED FORTY-EIGHT (48) HOURS PRIOR TO NOTIFICATION OF CUSTOMERS. COMMERCIAL AND RESIDENTIAL CUSTOMERS SHALL BOTH RECEIVE FORTY-EIGHT (48) HOURS WRITTEN NOTICE OF A SHUTDOWN, AND SPECIAL ARRANGEMENTS MAY HAVE TO BE MADE TO ACCOMMODATE CUSTOMERS OPERATIONAL NEEDS. THE WATER UTILITY IS RESPONSIBLE FOR THE NOTIFICATION WHEN WORK IS PERFORMED BY THE WATER UTILITY. THE CONTRACTOR IS RESPONSIBLE IN ALL OTHER CASES. A LIST SHALL BE KEPT BY THE RESPONSIBLE PARTY LISTING THE DATE, TIME, AND ADDRESS OF ALL PERSONS NOTIFIED. THE PERSON NOTIFIED SHALL BE INCLUDED ON THE LIST FOR ALL COMMERCIAL CUSTOMERS. THE CONTRACTOR WILL BE SUBJECT TO DAMAGE CLAIMS SHOULD THEY FAIL TO NOTIFY CUSTOMERS OR MAINTAIN DOCUMENTATION OF NOTIFICATION OF CUSTOMERS. THE CONTRACTOR SHALL NOT OPERATE ANY EXISTING WATER VALVES WITHOUT AUTHORIZATION OF THE WATER UTILITY.

7. ALL WATER MAINS SHALL BE C900, C905, DUCTILE IRON, AS SPECIFIED ON THE PLANS OR AS APPROVED BY THE WATER UTILITY, ALL WATER SERVICES 2" OR LESS SHALL BE IPS. PE PIPE (AWWA STANDARD C901); SERVICES 3" OR GREATER SHALL BE CLASS 150 C900 PVC OR AS SPECIFIED ON THE PLANS.

8. LINE SEPARATION MUST MEET THE PROVISIONS OF NAC 445A.6715 THROUGH 445A.6718 IN ITS ENTIRETY, NDEP'S VERTICAL CROSSING SUMMARY, AND BE APPROVED BY STATE AND WATER UTILITY.

9. ALL HOT TAPS ARE TO BE PERFORMED BY A LICENSED CONTRACTOR APPROVED BY THE WATER UTILITY. THE CONTRACTOR SHALL CONTACT THE WATER UTILITY AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO SCHEDULING HOT TAP DATE AND TIME.

10. WATER VALVE MARKERS SHALL BE BLUE CARSONITE UTILITY MARKER (CRM-3066), 5'-2" WITH WATER UTILITY'S DECAL OR APPROVED EQUAL. PLACE MARKER NO MORE THAN FIVE (5) FEET FROM THE VALVE OR AS DIRECTED BY THE WATER UTILITY.

11. ALL WATER MAIN AND WATER SERVICE INSPECTIONS MUST BE COMPLETED PRIOR TO ANY CERTIFICATE OF OCCUPANCY OR NOTICE OF COMPLETION BY THE WATER UTILITY ACCEPTING IMPROVEMENTS

DOUGLAS COUNTY SEWER GENERAL NOTES

1. ALL SEWER MAINS AND LATERALS IN THE RIGHT-OF-WAY/EASEMENT SHALL BE PVC SDR 35 UNLESS OTHERWISE

2. FLEXIBLE TRANSITION COUPLINGS MAY BE USED WHEN CONNECTING SEWER MAINS TO EXISTING SEWER MAINS, MODEL PER SEWER UTILITY APPROVAL.

3. SEWER MANHOLE MARKERS SHALL BE INSTALLED WHEN MANHOLES ARE LOCATED OUTSIDE OF THE PAVED SURFACE. SEWER MANHOLE MARKERS SHALL BE GREEN CARSONITE UTILITY MARKERS, 5'-2" WITH MANHOLE DECAL (668-MH) OR APPROVED EQUAL. PLACE MARKERS WITHIN EASEMENT IN CLOSE PROXIMITY TO MANHOLE OR AS DIRECTED BY THE SEWER UTILITY.

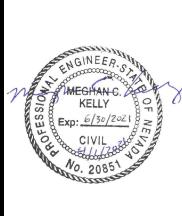
4. THE CONTRACTOR SHALL INSTALL A PLUG AT THE POINT OF EXTENSION OF A SEWER MAIN PRIOR TO THE START OF CONSTRUCTION. THE PLUG SHALL REMAIN IN PLACE UNTIL ALL LINES HAVE BEEN INSPECTED, TESTED,

5. SEWER LINES SHALL BE TESTED PER SECTION 336.03.07 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. AN AIR PRESSURE TEST AND AN ALIGNMENT TEST PER THE DOUGLAS COUNTY DESIGN CRITERIA AND STANDARDS, AND A DEFLECTION TEST PER SECTION 336.03.09 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SHALL BE PERFORMED ON ALL SEWERLINES.

6. ALL SEWER MAINS SHALL HAVE A COLOR TELEVISION INSPECTION PRIOR TO ACCEPTANCE BY THE SEWER UTILITY AND PRIOR TO PAVING.



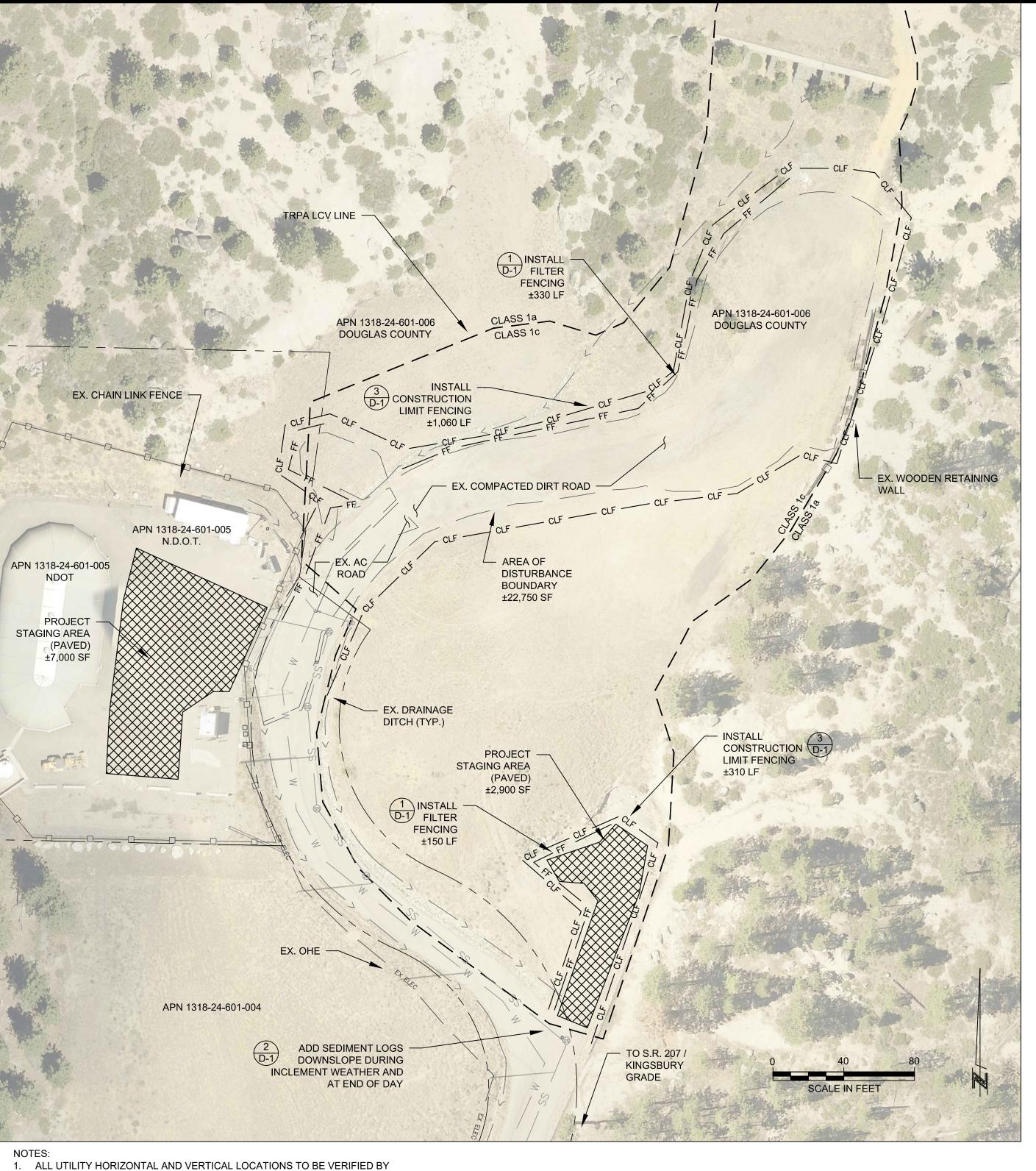
BID SET



DESIGNED/DRAWN PJ/PJ CHECKED DATE 04/2021 SCALE AS SHOWN

PROJECT LOGGING RD DECANT SHEET

2 of 15



- CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- 2. FILTER FABRIC MAY BE USED IN LIEU OF FIBER ROLLS WITH APPROVAL FROM ENGINEER. 3. UP TO 60 PERCENT OF EXCAVATED SOIL BELOW TOP 12" IS EXPECTED TO BE TRASH FROM A HISTORIC DUMPSITE. DISPOSE OF OFFSITE AT AN
- APPROVED FACILITY. 4. NO TREES >= 6" D.B.H. ARE PLANNED TO BE REMOVED AS PART OF THIS

UTILITIES

CABLE TELEVISION CHARTER COMMUNICATIONS, (775) 588-1077 SOUTHWEST GAS, (877) 860-6022 NATURAL GAS ELECTRIC NV ENERGY, (775) 834-4444 KINGSBURY GID, (775) 588-3548 SEWER WATER KINGSBURY GID, (775) 588-3548 PHONE ATT, (800) 288-2020 USA DIGS (800) 642-2444 OR 811

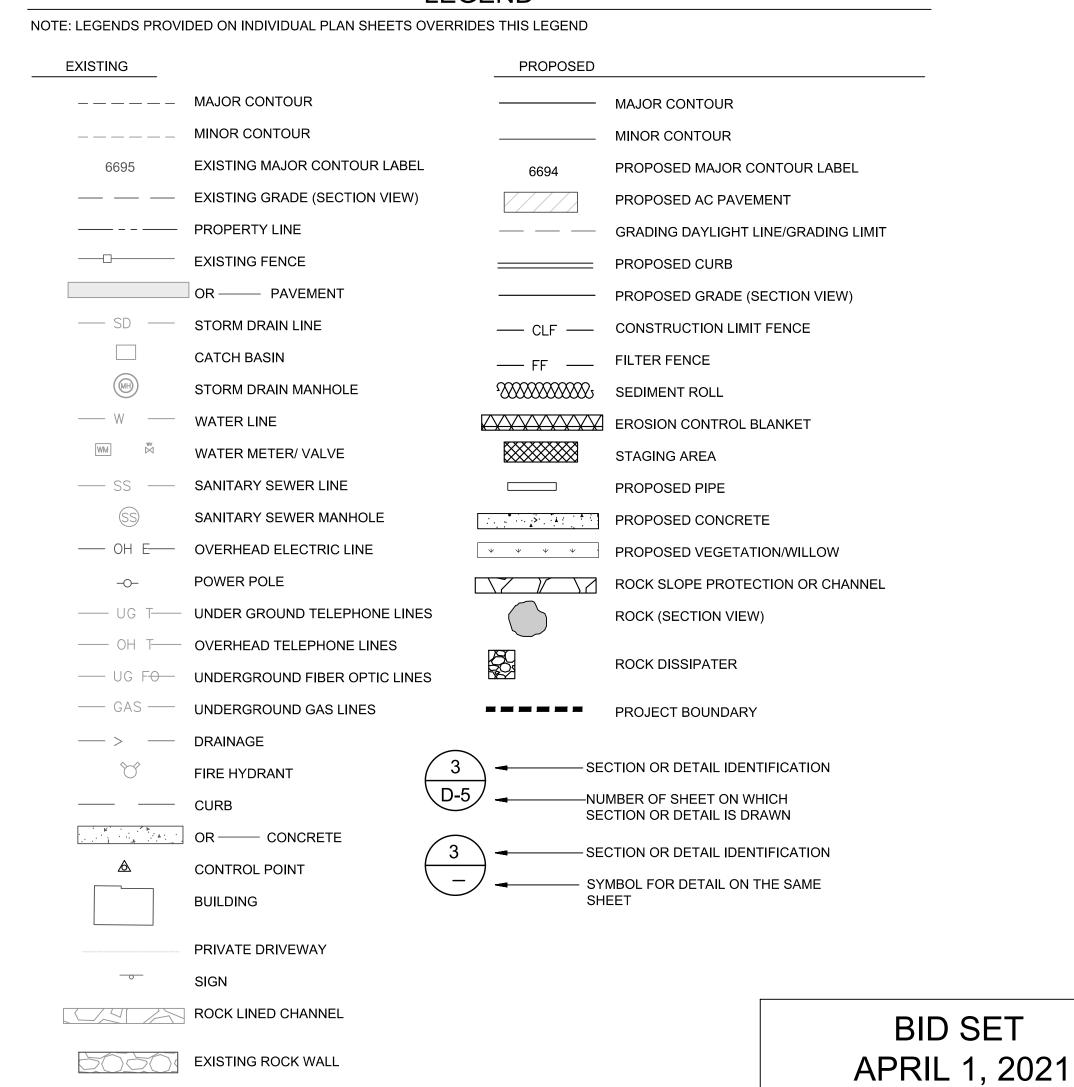
HORIZONTAL AND VERTICAL PROJECTION

VERTICAL CONTROL IS DATUM NAVD 88 (US FEET); HORIZONTAL CONTROL IS HORIZONTAL DATUM NAD 83 STATE PLANE COORDINATE SYSTEM NEVADA ZONE WEST (U.S. FEET).

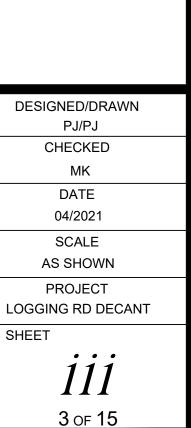
ABBREVIATIONS

			EVIATIONS LISTED ARE USED IN THESE PLANS	D) (1.47	
A.B.	AGGREGATE BASE	0	DEGREE	PVMT	PAVEMENT
AC.	ACRE	G O	GAS	POC	POINT ON CURVE
A.C.	ASPHALT CONCRETE	GV	GATE VALVE	POS	POSITIVE
@	AT	GB	GRADE BREAK	PRC	POINT OF REVERSE CURVE
APPROX.	APPROXIMATE	HDPE	HIGH DENSITY POLYETHYLENE	PSI	POUNDS PER SQUARE INCH
AVG.	AVERAGE	HDPE-NP	NON-PERFORATED HIGH DENSITY POLYETHYLENE	PL	PROPERTY LINE
AWWA	AMERICAN WATER WORKS ASSOCIATION	HDPE-P	PERFORATED HIGH DENSITY POLYETHYLENE	PO	PUSH ON
BC	BEGIN CURVE	HP	HIGH POINT	PUE	PUBLIC UTILITY EASEMENT
C&G	CURB AND GUTTER	HOR., HORIZ.		R	RADIUS
CATV	CABLE TELEVISION	IN.	INCH	RCP	REINFORCED CONCRETE PIPE
C.B.	CATCH BASIN	IE	INVERT ELEVATION	REVEG	REVEGATATION
CL	CENTERLINE	IRR.	IRRIGATION	RLC	ROCK LINED CHANNEL
CLR.	CLEAR	KGID	KINGSBURY GENERAL IMPROVEMENT DISTRICT	RT,R	RIGHT
CO.	CLEAN OUT	L	LEFT	R/W, ROW	RIGHT-OF-WAY
CONST.	CONSTRUCT	LEN.	LENGTH	SS	SANITARY SEWER, STAINLESS STEEL
CF	CUBIC FEET	LF	LINEAR FEET	SSCO.	SANITARY SEWER CLEAN OUT
CMP	CORRIGATED METAL PIPE	LID	LOW IMPACT DEVELOPMENT	SSMH	SANITARY SEWER MANHOLE
CY	CUBIC YARD	LP	LOW POINT	S	SLOPE
D.G.	DECOMPOSED GRANITE	LS	LUMP SUM	S	SOUTH
DEG	DEGREE(S)	MH	MANHOLE	SF	SQUARE FOOT/FEET
DI	DROP INLET	MAX.	MAXIMUM	SHT	SHEET
DIA.	DIAMETER	MDD	MAXIMUM DRY DENSITY	STD	STANDARD
DR	DIMENSION RATIO	MJ	MECHANICAL JOINT	SDR	STANDARD DIMENSION RATIO
DWG	DRAWING	MI.	MILE	SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS
DW, DWY	DRIVEWAY	MIN.	MINIMUM	STA	STATION
EA.	EACH	MISC.	MISCELLANEOUS	SD	STORM DRAIN
EASE.	EASEMENT	N	NORTH	SDMH	STORM DRAIN MANHOLE
EG	EXISTING GRADE	N.I.C.	NOT IN CONTRACT	TBC	TOP BACK OF CURB
ELEC	ELECTRIC	NDOT	NEVADA DEPT OF TRANSPORTATION	TOC	TOP OF CURB
EP	EDGE OF PAVEMENT	NTCD	NEVADA TAHOE CONSERVATION DISTRICT	TRPA	TAHOE REGIONAL PLANNING AGENCY
ELEV.	ELEVATION	N.T.S.	NOT TO SCALE	TW	TOP OF WALL
EC	END CURVE	NO.	NUMBER	TYP	TYPICAL
EX.	EXISTING	OC	ON CENTER	UGE	UNDERGROUND ELECTRIC LINES
FG	FINISH GRADE	OG	ORIGINAL GRADE	UGT	UNDERGROUND TELEPHONE LINES
FH	FIRE HYDRANT	OH(E/T)	OVERHEAD ELECTRIC OR TELEPHONE LINES	VC	VERTICAL CURVE
FCA	FLANGE COUPLER ADAPTER	±	PLUS OR MINUS	VG	VALLEY GUTTER
FES	FLARED END SECTION (METAL)	PT.	POINT	VPC	VERTICAL POINT OF CURVATURE
FL	FLOWLINE	PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE	VPI	VERTICAL POINT OF INFLECTION
FLG	FLANGED	PC	POINT OF CURVATURE	VPT	VERTICAL POINT OF TANGENT
FT.	FOOT, FEET	Pl	POINT OF INFLECTION	W	WATER
FTG	FOOTING	PIP	PROTECT IN PLACE	WL	WATERLINE
FV	FLUSH VALVE	PVC	POLYVINYL CHLORIDE	W	WEST

LEGEND



125-382-13 ASSESSOR PARCEL NUMBER

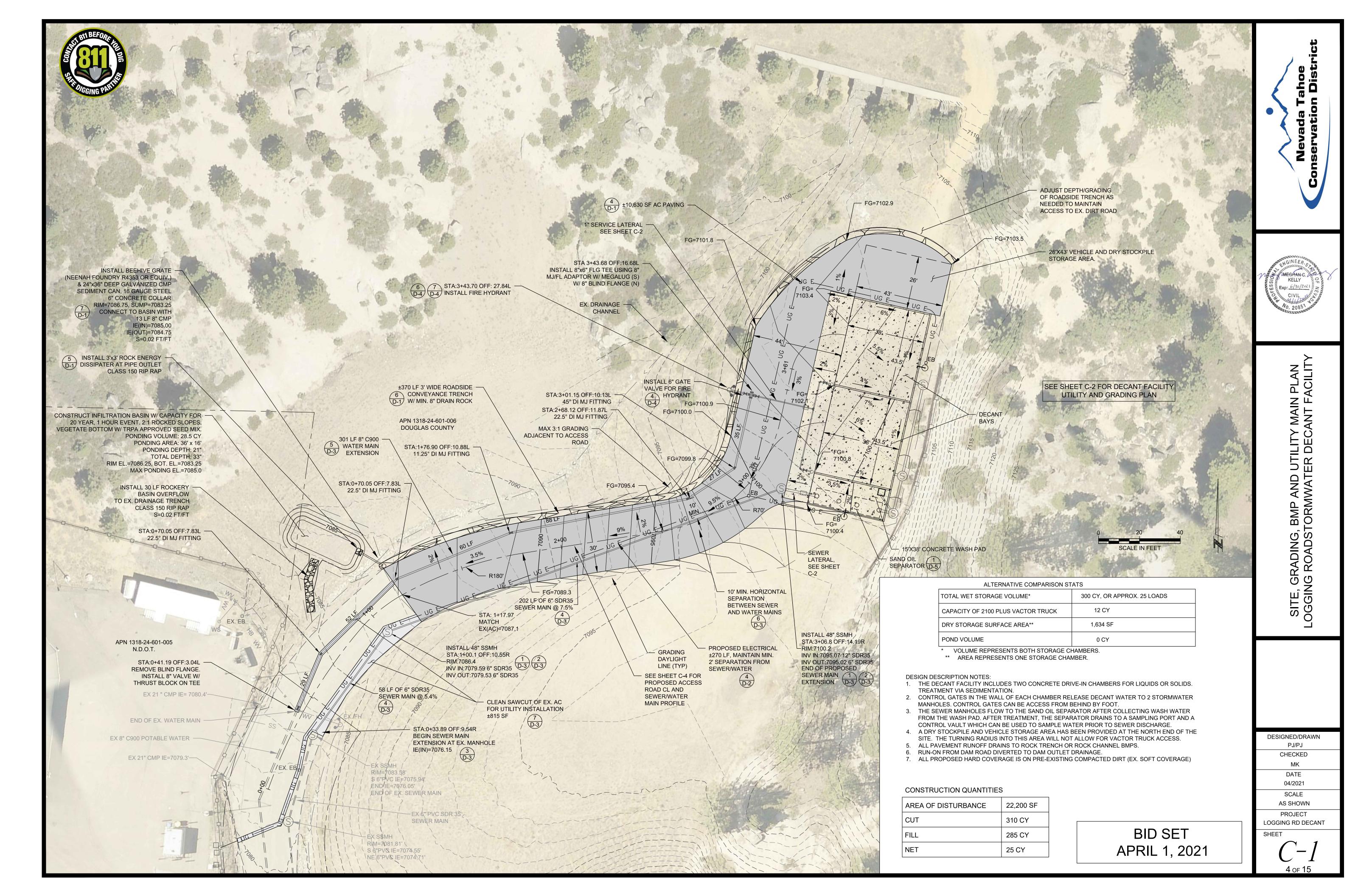




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LEGEND, L/ LOGGING |



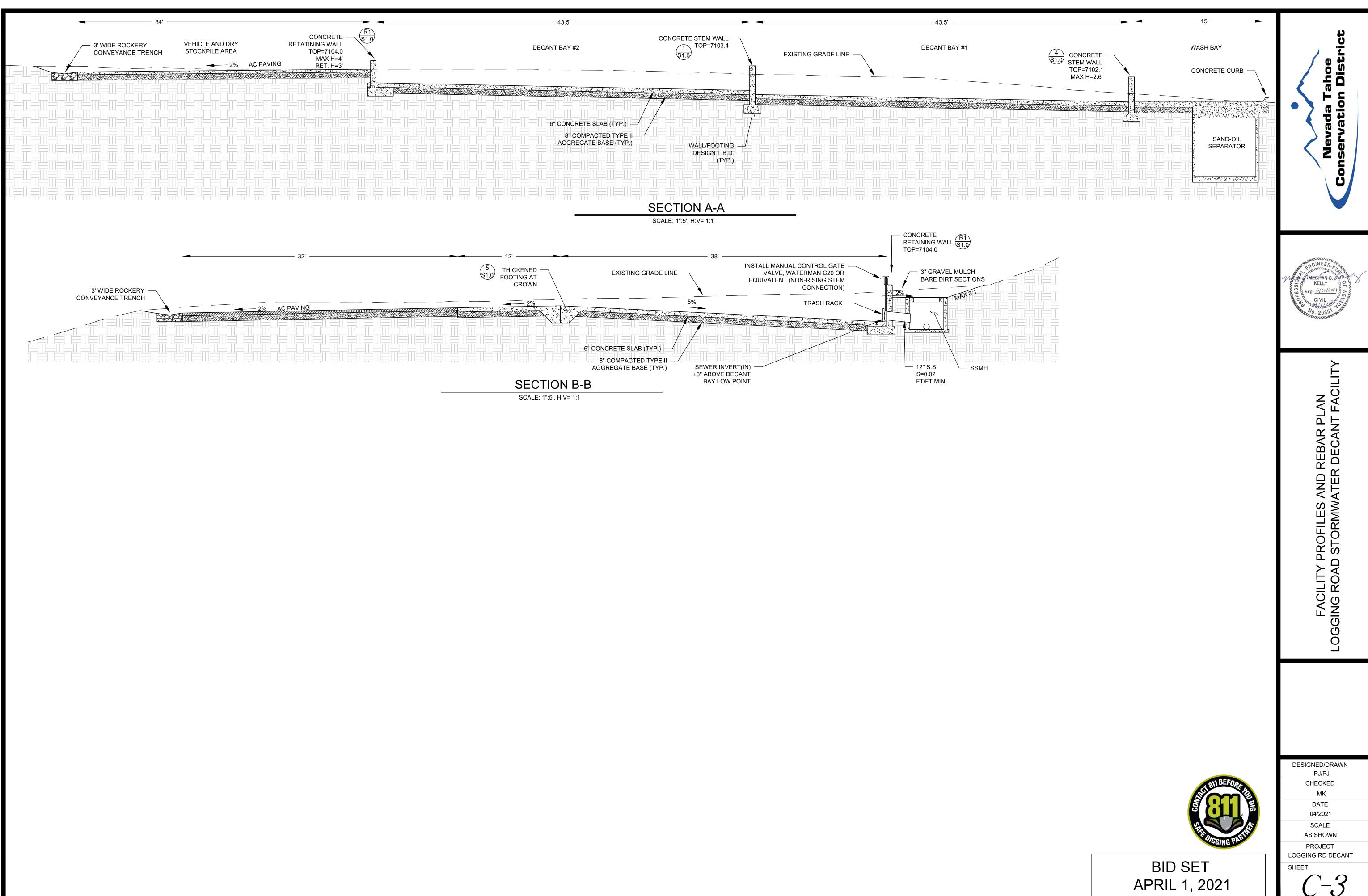




FACILITY GRADING AND UTILITY LATERAL PLAN LOGGING ROAD STORMWATER DECANT FACILITY

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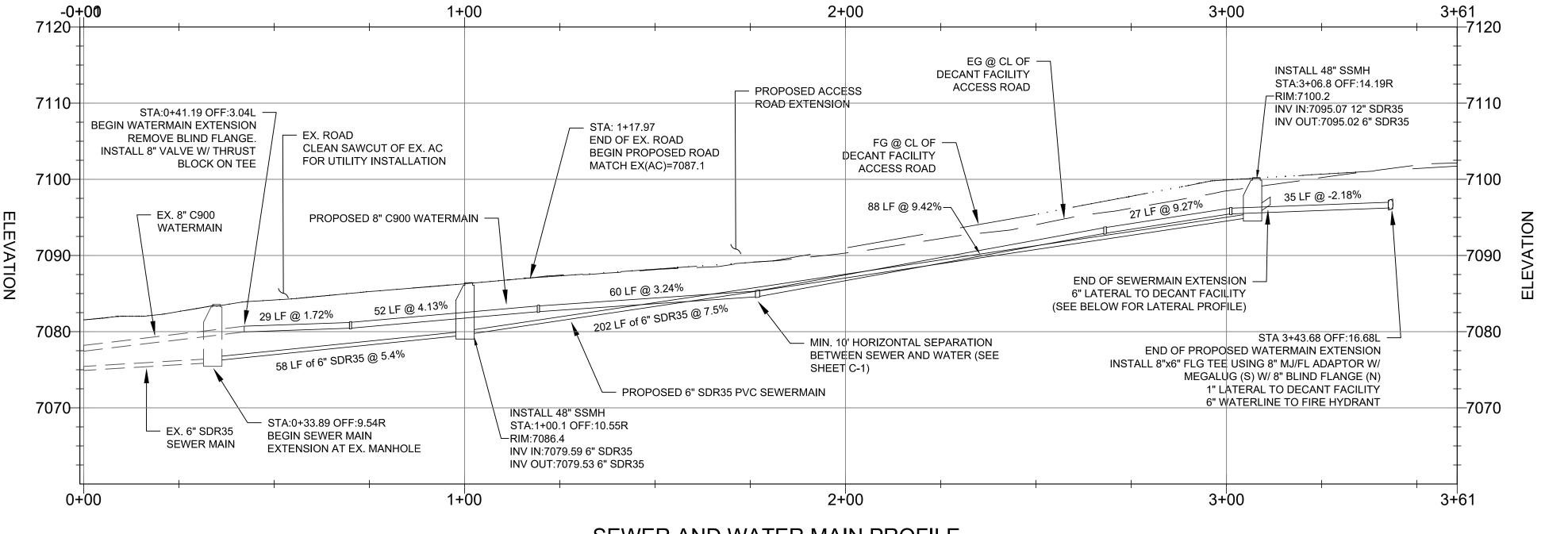
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7 of 15

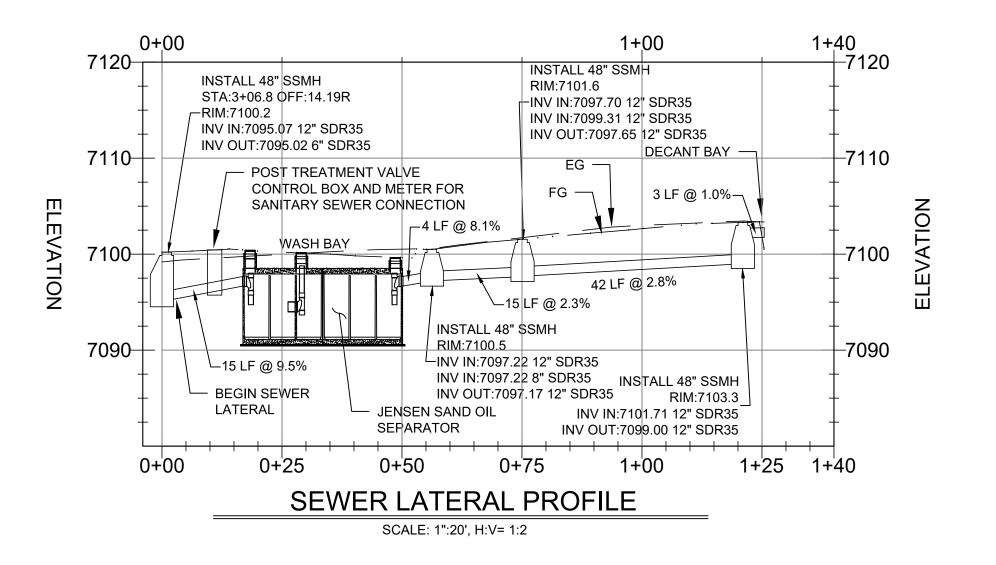
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BID SET APRIL 1, 2021



SEWER AND WATER MAIN PROFILE

SCALE: 1":20', H:V= 1:2



- DO NOT USE IN STREAMS, CHANNELS, OR ANYWHERE FLOW IS CONCENTRATED. DO NOT USE SILT FENCES TO DIVERT FLOW.

- THE MAXIMUM SLOPE PERPENDICULAR TO THE FENCE LINE SHOULD BE 1:1.
- PROVIDE SUFFICIENT ROOM FOR RUNOFF TO POND BEHIND THE FENCE AND TO ALLOW SEDIMENT REMOVAL EQUIPMENT TO PASS BETWEEN THE SILT FENCE AND TOES OF SLOPES OR OTHER OBSTRUCTIONS. TURN THE ENDS OF THE FILTER FENCE UPHILL TO CREATE A "J" SHAPE, TO PREVENT STORMWATER FROM FLOWING AROUND THE
- 10. LEAVE AN UNDISTURBED OR STABILIZED AREA IMMEDIATELY DOWN SLOPE FROM THE FENCE WHERE FEASIBLE.
- 11. SILT FENCES SHOULD REMAIN IN PLACE UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

AC PAVING DETAIL

SCALE: N.T.S.

D-1

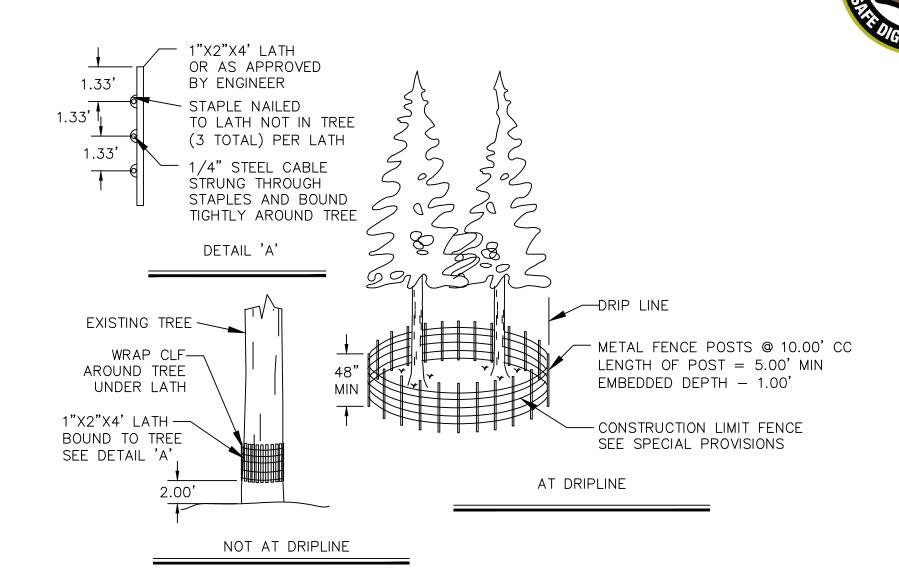
5.5' STEEL T-POSTS BOUND AT TOP 48" HIGH-DENSITY (MIN 1"x1"x24") POLYETHYLENE SAFETY FENCE ∕ 12" FIBER ROLL BACKFILL (ORANGE) UPHILL SIDE - 12"ø FIBER ROLL SEE - FINISH GRADE DETAIL FIBER ROLL SILT BARRIER AT SAFETY 4" (MIN) TRENCH **FENCE** STEEL POSTS SPACED 12 (MAX) -STAPLE^脚 SPACING FLOW 12"ø FIBER ROLL

FIBER ROLL NOTES:

ROCK-ARMOR CONVEYANCE TRENCH

SCALE: N.T.S.

- 1. FIBER ROLL SHALL NOT BE MADE FROM STRAW. FIBER ROLLS SHALL BE BOUND BY HIGH
- STRENGTH COIR NETTING, AND HAVE A MINIMUM WEIGHT OF 5 LBS PER LINEAL FOOT. 2. ORANGE SAFETY FENCE IS INTENDED TO PROTECT FIBER ROLLS FROM COMPRESSION BY VEHICLES, CONSTRUCTION EQUIPMENT, EXT. FENCES SHALL BE HIGH DENSITY POLYETHYLENE WITH A MESH OPENING OF APPROXIMATELY 1 INCH BY 4 INCHES AND A MINIMUM HEIGHT OF 4 FEET. SAFETY
- FENCE MAY BE OMITTED IN LOW TRAFFIC AREAS. 3. FIBER ROLL SILT BARRIER SHALL BE INSTALLED ALONG CONTOUR AND ON SLOPES 5H:1V OR
- FLATTER UNLESS OTHERWISE APPROVED BY TRPA. 4. THE INSTALLATION CONFIGURATION SHALL PREVENT RUNOFF FROM LEAVING THE SITE OR ENTERING
- A WATERCOURSE WITHOUT PASSING THROUGH A SILT BARRIER. 5. THE MAXIMUM LENGTH OF SLOPE DRAINING TO THE SILT BARRIER SHALL BE 100 FEET.
- 6. FIBER ROLL SHALL BE INSTALLED BY SHAPING A 4 INCH DEEP FURROW TO MATCH THE SHAPE OF THE LOG, SECURING IN FURROW WITH WOOD STAKES, AND TAMPING THE GROUND AROUND THE

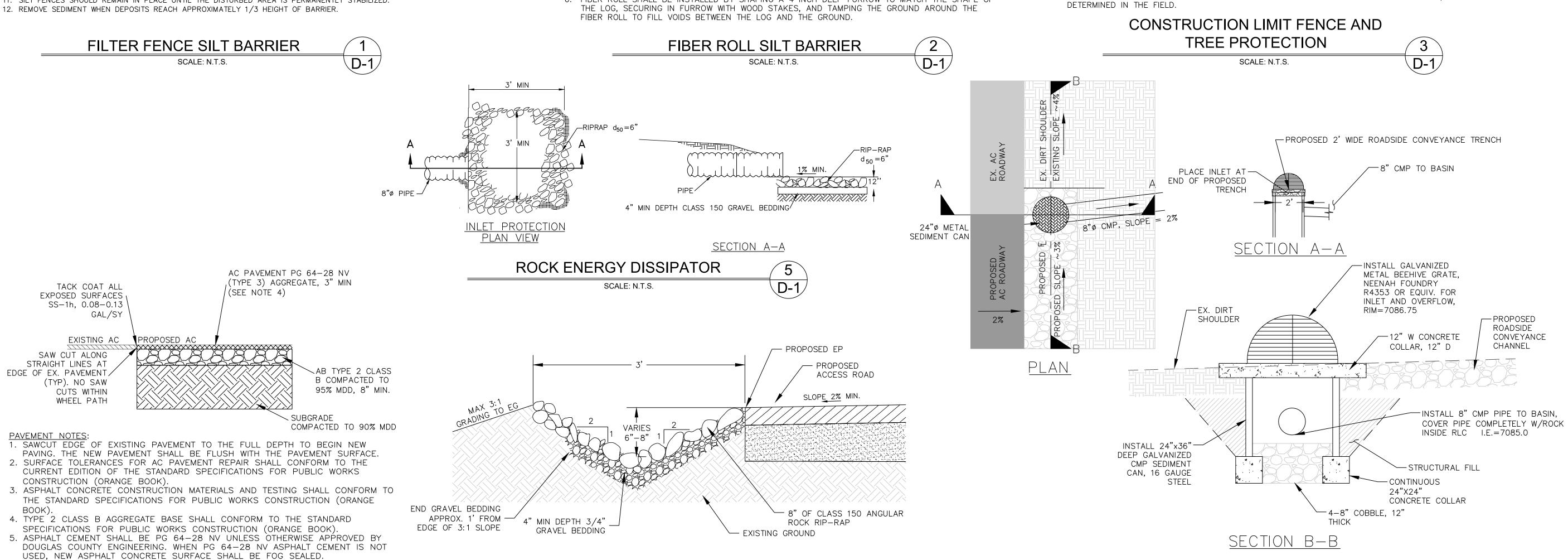


BEEHIVE GRATE INLET

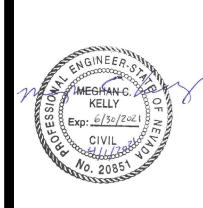
SCALE: N.T.S.

- 1. CLF AND TREE PROTECTION FENCE SHALL BE A MINIMUM OF 48" HIGH. FOR TREES WITH DRIPLINES THAT OVERHANG THE CONSTRUCTION AREAS, THE LOCATION OF THE TREE PROTECTION FENCE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER AND/OR THE TRPA AT THE
- 2. THE DETAIL SHOWN IS FOR TREE PROTECTION. MATERIAL AND SPACING SHOWN ALSO APPLIES
- 3. QUANTITY OF FILTER FENCE AND CONSTRUCTION LIMIT FENCE DOES NOT INCLUDE MINIMUM LIMITS FOR TREE PROTECTION. TREE PROTECTION FENCING TO BE PER DETAIL THIS SHEET AND/OR AS

D-1



\D-1∠



BMP AND CIVIL DETAILS ROAD STORMWATER DECANT LOGGING

DESIGNED/DRAWN PJ/PJ CHECKED MCK DATE 04/2021

SCALE AS SHOWN **PROJECT**

LOGGING RD DECANT SHEET

BID SET

APRIL 1, 2021

8 of 15

WARNING

TAPE

16 & 17

1. ALL TRENCHES MUST CONFORM TO THE LATEST APPLICABLE NVE, CITY, COUNTY,

STATE, FEDERAL, AND OSHA SPECIFICATIONS AND REQUIREMENTS. IN THE CASE OF

2. NATIVE MATERIAL REQUIRES 80% COMPACTION. REFER TO SUB01X, SECTION 5.4.2.

5. THE TOP 18" OF ALL TRENCHES IN ESTABLISHED HIGHWAYS, STREETS, AND OTHER

6. THE TOP 18" OF ALL TRENCHES ON PRIVATE PROPERTY. (NOT SUBJECT TO TRAFFIC)

8. NONMETALLIC RED WARNING TAPE WILL BE 6" WIDE, MARKED "NVE UTILITIES BURIED

9. ELECTRIC PRIMARY CONDUIT MUST BE 6" MINIMUM FROM SIDE OF TRENCH. IF MORE

TRENCH. IF MORE THAN ONE CONDUIT IS INSTALLED, MAINTAIN A 1-1/2" SEPARATION

11. ELECTRIC PRIMARY OR ANY JOINT TRENCH SHALL HAVE A MINIMUM TRENCH DEPTH

PAVED AREAS SUBJECT TO TRAFFIC, SHALL BE BACKFILLED WITH TYPE II BASE.

MAY BE BACKFILLED WITH NATIVE MATERIAL. REFER TO SUB01X, SECTION 5.4.2.

BELOW" AND SHALL BE PLACED IN ALL TRENCHES 12" ABOVE THE NVE CONDUIT.

THAN ONE CONDUIT IS INSTALLED, MAINTAIN A 1-1/2" SEPARATION FROM EACH

10. ELECTRIC SECONDARY/SERVICE CONDUIT MUST BE 2" MINIMUM FROM SIDE OF

OF 60". EXCEPTIONS/DEVIATIONS TO THESE TRENCH REQUIREMENTS MAY BE

APPROPRIATE. ANY DEVIATION MUST BE APPROVED BY THE APPROPRIATE LOCAL

12. PRIMARY ELECTRIC AND GAS WILL NOT OCCUPY THE SAME COMMON TRENCH AND

7. NO CONDUITS SHALL BE INSTALLED ABOVE OR PARALLEL TO GAS LINES.

CONFLICT, THE MORE RIGID SPECIFICATION OR STANDARD SHALL APPLY.

4. TYPE II AGGREGATE BASE REQUIRES 95% COMPACTION.

AUTHORITY IF APPLICABLE, AND THE NVE INSPECTOR

3. SAND REQUIRES 90% COMPACTION.

ELECTRIC CONDUIT.

FROM EACH ELECTRIC CONDUIT.

SEE

NOTE 8

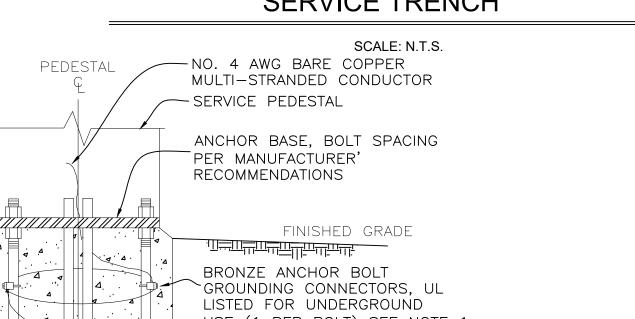
14. ALL TRENCHES MUST BE APPROVED BY NVE FIELD REPRESENTATIVE PRIOR TO ANY CONSTRUCTION.

15. IF FIELD CHANGES ARE REQUIRED, ALL CHANGES MUST BE APPROVED BY A NVE

16. SEWER (SS) AND STORM DRAIN (SD) MUST MAINTAIN A 2' RADIAL CLEARANCE FROM NVE GAS AND ELECTRIC FACILITIES, AND SEPARATED BY VIRGIN SOIL DURING PARALLEL INSTALLATIONS. ANY EXCEPTIONS/DEVIATIONS FROM THESE REQUIREMENTS MUST BE APPROVED BY THE APPROPRIATE NVE ENGINEERING DEPARTMENT.

17. WHENEVER POSSIBLE, LOCATE HYDRANT ON OPPOSITE SIDE OF STREET FROM ELECTRIC MAIN TRENCH. REFER TO TE0045U FOR DETAILS.





USE (1 PER BOLT) SEE NOTE 1 ANCHOR BOLT 3/8"x18"x2" HOT-DIP GALVANIZED WITH 2 CORROSION RESISTANT NUTS

AND 2 FLAT WASHERS PER BOLT

2"PVC SERVICE ENTRANCE CONDUIT NO. 4 AWG SINGLE—STRAND BARE COPPER GROUNDING CONDUCTOR

NO. 15 FELT, 2 LAYERS 20-FOOT NO. 8 COPPERWIRE

CONCRETE FOUNDATION

SOLID BOTTOM LOOP

SERVICE PEDESTAL FOUNDATION

. BARE COPPER GROUNDING CONNECTOR SHALL BE LOOPED AROUND ANCHOR BOLTS ONE TIME AND CONNECTED TO EACH ANCHOR BOLT BEFORE CONTINUING DOWN TO THE GROUNDING PLATE.

2. CABINET COVERS SHALL BE PARALLEL WITH CURB

2" TAPER —

3"MIN.

1. All concrete shall be class A or AA.

3. Exposed edges of concrete shall be chamfered 1 inch Structural steel weight includes the 2 inch normal diameter pipe standard weight and frame angles (3"x 3"x 3/8") and (3 1/2"x 3 1/2"x 3/8").

6. See sheet R-2.9.1 for details if connecting HDPE pipe. 7. Slope catch basin floors 10:1 from all directions toward

8. Run rebor continuous thru construction joint. Joint must be a minimum 3 inches from horizontal bars. 9. Additional pipe penetrations may be placed in any wall.

outlet pipe. If basin is used as a junction, shape flow line(s) to outlet pipe and provide a 10:1 slope to flow line(s)

GRATE DETAIL

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION

R-4.2.2 (609) Signed Original On File

5. For 2 inch nominal diameter pipe see ASTM A53

3. IN AREAS WHERE RIGHT-OF-WAY PERMITS, THE CONCRETE BASE SHALL BE PLACED AT THE BACK EDGE OF THE SIDEWALK.

4. CABINET COVERS SHALL OPEN TOWARDS THE STREET WHEN CABINETS ARE LOCATED AT BACK OF WALK. CABINET COVERS SHALL OPEN PARALLEL TO THE SIDEWALK FACING THE DIRECTION OF TRAFFIC WHEN LOCATED WITHIN THE SIDEWALK.

5. GROUND PLATE SHALL BE MADE OF NONFERROUS MATERIALS (TYPICALLY BRASS OR COPPER).

PROJECT LOGGING RD DECANT

FINISHED GRADE -Δ. ∢ 6" MIN. TYPE 2 CLASS B

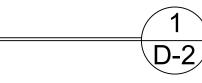
MEDIAN NOTES:

PORTLAND CEMENT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 337 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR CONCRETE EXPOSED TO FREEZE-THAW ENVIRONMENTS.

COMPACTED AGGREGATE BASE

- WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED EVERY 10 FEET. THE JOINTS SHALL BE CONSTRUCTED IN CONFORMANCE WITH SECTION 312 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. 3. EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED IN SECTION 312 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS
- CONSTRUCTION. 4. TYPE 2, CLASS B AGGREGATE BASE SHALL CONFORM TO SECTION 200 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, AND SHALL BE MECHANICALLY COMPACTED IN CONFORMANCE WITH SECTION 308 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

PCC MEDIAN CURB SCALE: N.T.S.



3. Drilling for mounting to 25 or 125 lb. pipe flange available for all gates. Due to gate design, bolt hole location (orientation) is 4. Add grout pad thickness to anchor bolt - BOLT DIA = N $PROJ = V \pm 1/8" \boxed{4}$ PARTS LIST F - D STOP BOLT COVER WEDGE (R & I) REQ'D WEDGE BOLTS GUIDE RAIL HEAD RAIL STEM HANDWHEEL C-20 STEM BOLT ARCH BOLT & N LIFT NUT Waterman standard drill ATCH. HDW. Bolt Dia = N LIMIT NUT (option IFT COLLAR "M" Dia bolt circle on the hoizontal center (25# or 125# patterns also available) GATE DIMENSIONS IN INCHES

C20 CANAL GATE

SCALE: N.T.S.

D-2

1. TYPE 2 lubricated ball bearing lift used on

2. Applies to spigotback gate only. Optional

NDOT TYPE 2B DROP INLET D-2 SCALE: N.T.S.

SECTION C-C

SECTION B-B

TAB DETAIL

Permissible 1/4" Max. Joint If Continuous Bar Not Used

LIFT HOLE HOLD-DOWN HOLD-DOWN PULL BOX REINFORCED WITH GALVANIZED Z-BAR-WELDED FRAME TOP VIEW REINFORCED 1/2"MIN. STEEL PLATE COVER, GALVANIZED AFTER FABRICATION, WITH BEAD WELD INSCRIPTION SLEEVE NUT TOP FLUSH WITH WITH BRASS BOLT FINISHED GRADE, GALVANIZED Z-BAR SEE NOTE 3 WELDED FRAME PULL BOX BONDING JUMPER. SEE NOTE 4 PORTLAND CEMENT 6"MIN. " DRAIN ROCK/ CONCRETE (PCC) WHEN INDICATED ON PLANS 6"MIN. ALL AROUND ✓ GROUNDING BUSHING 3"MIN. ALL AROUND SECTION A-A

> No. 3-1/2 (T), No. 5 (T), No. 7 (T) AND No. 9 (T) TRAFFIC RATED PULL BOX

AND NO. 9 (I) TRAFFIC RATED FULL BOX										
ELECTRICAL TRAFFIC RATED PULL BOX MINIMUM DIMENSION TABLE										
		EXTENSION								
PULL BOX	LO	wo	HEIGHT	HEIGHT L ** W **		EDGE TAPER	HEIGHT			
No. $3-1/2$ (T)	±19"	±12"	±12"	±14-1/2"	±8-3/4"	NONE	12"			
No. 5 (T)	±25"	±15"	±12"	±20-1/2"	±10-1/2"	NONE	10"			
No. 7 (T)	±35"	±22"	±12"	±30"	±17"	NONE	8"			
No. 9 (T)	±52"	±35"	±14"	±47-3/4"	±30"	NONE	10"			

** TOP DIMENSION

NOTES:

1. TRAFFIC PULL BOX SHALL BE PROVIDED WITH STEEL COVER AND SPECIAL CONCRETE FOOTING. STEEL COVER SHALL HAVE EMBOSSED NON-SKID PATTERN.

C-20 CANAL GATE DIMENSIONS

IN THE STANDARD PRODUCTS OF THE RESPECTIVE

3. TOP OF PULL BOXES SHALL BE FLUSH WITH SURROUNDING GRADE OR TOP OF ADJACENT CURB EXCEPT THAT IN UNPAVED AREAS WHERE PULL BOX IS NOT IMMEDIATELY ADJACENT TO AND PROTECTED BY A CONCRETE FOUNDATION. POLE OR OTHER CONSTRUCTION, THE BOX SHALL BE PLACED WITH ITS TOP 1" ABOVE SURROUNDING GRADE. WHERE PRACTICABLE, PULL BOXES SHOWN IN THE VICINITY OF CURBS SHALL BE PLACED ADJACENT TO THE BACK OF CURB, AND PULL BOXES SHOWN ADJACENT TO STANDARDS SHALL BE PLACED ON SIDE OF FOUNDATION FACING AWAY FROM TRAFFIC, UNLESS OTHERWISE NOTED. WHEN PULL BOX IS INSTALLED IN SIDEWALK AREA, THE DEPTH OF THE PULL BOX SHALL BE ADJUSTED SO THAT THE TOP OF THE PULL BOX IS FLUSH WITH THE TOP OF SIDEWALK.

4. BONDING JUMPER FOR METAL COVERS SHALL BE 3'-4" LONG, MINIMUM.

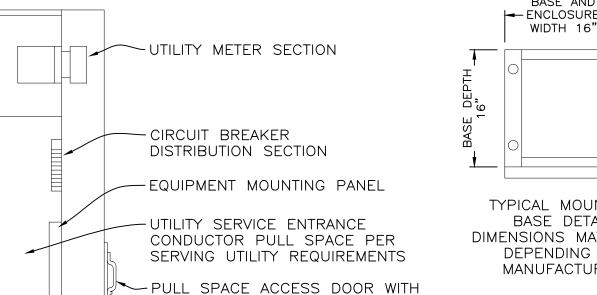
5. THE NOMINAL DIMENSIONS OF THE OPENING IN WHICH THE COVER SETS SHALL BE THE SAME AS THE COVER DIMENSIONS EXCEPT THE LENGTH AND WIDTH DIMENSIONS SHALL BE 1/8" GREATER.

6. ALL COVERS AND BOXES SHALL BE INTERCHANGEABLE WITH NEVADA STANDARD MALE AND FEMALE GAUGES. WHEN INTERCHANGED WITH A STANDARD MALE OR FEMALE GAUGE, THE TOP SURFACES SHALL BE FLUSH WITHIN 1/8". TOP OUTSIDE EDGE OF ALL CONCRETE COVERS AND PULL BOXES SHALL HAVE A 1/4" MINIMUM RADIUS.

7. PULL BOX SHALL NOT BE INSTALLED WITHIN THE BOUNDARIES OF NEW OR EXISTING CURB RAMPS.

8. PULL BOXES FOR ELECTROLIERS AND SIGNAL STANDARDS SHALL BE LOCATED AT THE SAME STATION $(\pm 5')$ AS THE ADJACENT ELECTROLIER OR SIGNAL STANDARD. PULL BOXES SHALL BE PLACED ADJACENT TO BACK OF CURB OR EDGE OF SHOULDER EXCEPT WHERE THIS IS IMPRACTICAL. A BOX MAY BE PLACED IN ANOTHER SUITABLE PROTECTED AND ACCESSIBLE LOCATION.

9. IN AREAS WHERE THE POSSIBILITY OF MATERIAL ERODING FROM AROUND THE PULL BOX EXISTS, THE PULL BOX SHALL BE PLACED IN $\frac{1}{2}$ " DRAIN ROCK (2 FOOT DEPTH ON EACH SIDE AND 1 FOOT DEPTH), AS DIRECTED BY THE ENGINEER.



HANDLE, PER SERVING UTILITY

MOUNTING BASE (OPTIONAL)

SOLID BOTTOM LOOP

-SEPARATE PEDESTAL ENCLOSURE

TYPICAL MOUNTING BASE DETAIL DIMENSIONS MAY VARY DEPENDING ON MANUFACTURER

SINGLE METER SERVICE PEDESTAL

ELECTRIC SERVICE PEDESTAL

-20-FEET NO. 8 COPPERWIRE

D-2 SCALE: N.T.S.

TRAFFIC RATED ELECTRICAL PULL BOX SCALE: N.T.S.

SERVICE PEDESTAL ENCLOSURE, 12 GAGE SHEET METAL BODY AND EQUIPMENT MOUNTING PANEL, 14 GAGE FRONT COVER(S) AND 16 GAGE MIN. FOR ALL OTHER PANELS. ALL SHEET METAL SHALL BE FINISHED WITH ZINC CHROMATE PRIMER AND GREEN BAKED ENAMEL OR POWDER COAT FINISH. METERING SECTION PER P.U.E.S.E.R. STANDARDS. -UTILITY METER SECTION, 100, 125 OR 200 AMP AS INDICATED ON PLANS, 120/240 VOLT, 1 PHASE, 3 WIRE. THE SECTION SHALL HAVE A HINGED COVER WITH PADLOCK TAB.

CIRCUIT BREAKER DISTRIBUTION SECTION, 125 OR 200 AMP AS NEEDED, 120/240 VOLT, 1 PHASE, 3 WIRE. THE SECTION SHALL BE COMPLETE WITH SEPARATE DEAD FRONT, COPPER BUSSING, SPACE FOR A MINIMUM OF TEN FULL SIZE (1") GE TYPE PLUG-IN CIRCUIT BREAKERS (EXCLUDING MAIN BREAKER), COPPER NEUTRAL/GROUNDING BUS AND MAIN BREAKER AS SPECIFIED BY THE ENGINEER. THE SETION SHALL BE FACTORY WIRED TO THE METER SECTION WITH THE APPROPRIATE SIZE COPPER CONDUCTORS.

The Concrete And Reinforcing Quantities Are Based On The H Min. Shown, increase The Concrete And Reinforcing Base Quantity By The Corresponding Add Rate (Per Foot Of Increased H) If The H Specified Is Larger Than H Min.

And Grate

O A . O . . O . . O . . O . . O . . O

B-

PLAN

SECTION A-A

3" x 3" x 1/4" Grate Angle

round Perimeter of Drop Inlet

EQUIPMENT MOUNTING PANEL, 10"HIGH x 12"WIDE MIN., OPEN OR ENCLOSED, FOR LIGHTING CONTRACTORS AS NEEDED.

-DISTRIBUTION AND EQUIPMENT SECTION DOOR WITH HINGE AND PADLOCK TAB.

BASE AND ENCLOSURE WIDTH 16"

BID SET **APRIL 1, 2021**

D-2

CIVIL AN LOGGING ROA

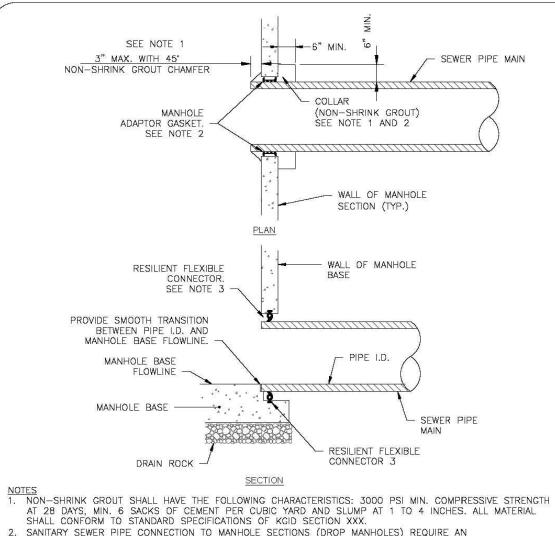
DESIGNED/DRAWN

CHECKED MCK

DATE 04/2021 SCALE

AS SHOWN

SHEET



SANITARY SEWER PIPE

OPENINGS TO EXISTING MANHOLES MUST BE CORE DRILLED.

TO MANHOLE APPROVED:

SCALE: N.T.S SS-11 D-3 DISTRICT ENGINEER MVD 21518

NOV. 2018

WATER UTILI SEWER AND LOGGING ROAD ST

DESIGNED/DRAWN PJ/PJ CHECKED MCK DATE 04/2021

SCALE AS SHOWN PROJECT LOGGING RD DECANT

SHEET 10 of 15

/SET C.I. FRAME 1/4" 24" DIA. BELOW AC CLEAR --FIBER REINFORCED CONCRETE 18" CONCRETE COLLAR OPENING COLLAR, FROM 2" BELOW TOP 5' MIN. DIAM. OF CONE. SEE "TEMPORARY COVER" 8" MIN. DEPTH DETAIL A13 AGG. BASE TO MATCH EXISTING (4"MIN.) PRECAST CONCRETE OR -PRECAST R.C. ECCENTRIC CONE HDPE ADJUSTING RINGS BY LADTECH, INC (OAE) TONGUE & GROOVE JOINTS. 12-INCH MAX. HEÌGHT* SET ALL JOINTS IN "RAM-NEK" OR "CONSEAL" JOINT SEALING COMPOUND OR EQUAL INSTALLED 5"MIN. → | PER MANUFACTURERS RECOMMENDATION 48"DIA. MIN. SEE NOTE 13 PRECAST RC RISER PRECAST MANHOLE BASE WITH-(BARREL) SECTIONS INFLOW AND OUTFLOW COUPLINGS MAINTAIN SLOPE OF SEE NOTE 16 -ADJACENT PIPE ACROSS MANHOLE BASE -KOR-N-SEAL OR A-LOK BOOT OR APPROVED EQUIVALENT AT ALL PENETRATIONS ±24" ∴4. 6"MIN. " MIN. DRY TRENCH ANTI-FLOAT BASE FOR 6" MIN. WET TRENCH GROUNDWATER CONDITIONS, OPTIONAL PER DESIGN -GRADED BEDDING MATÉRIAL FOR **ENGINEER** WET TRENCH AS DESCRIBED ON "TYPICAL SEWER TRENCH" DETAIL CO1, CLASS A BACKFILL AS BEDDING FOR DRY TRENCH TYPICAL SECTION SMALLER MAIN SEWER FLOW CHANNELS ARE TO BE BROUGHT INTO MAIN LINE CHANNELS WITH THE ELEVATION OF PIPE *4 CROWN THE SAME.

6"MIN.

-60" MIN.

SIDE VIEW SECTION

* NO WOOD OR PVC SHIMS WILL BE ALLOWED BETWEEN LID

SEWER MANHOLE

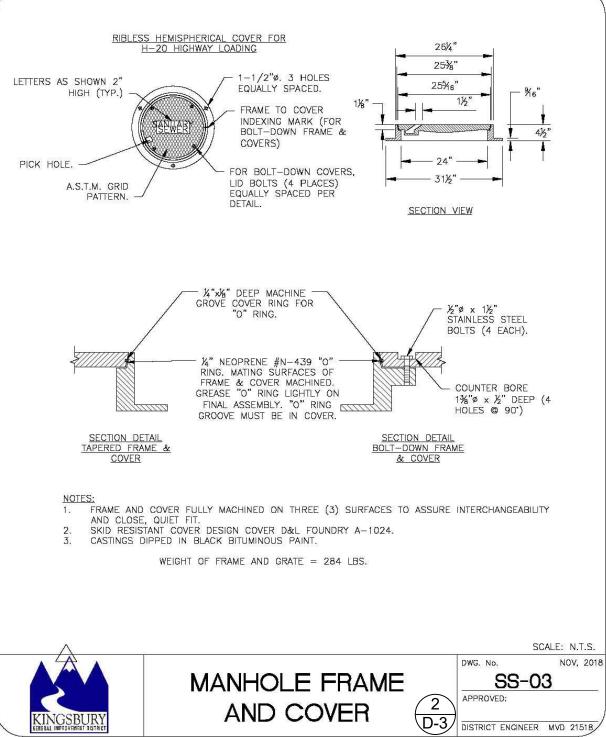
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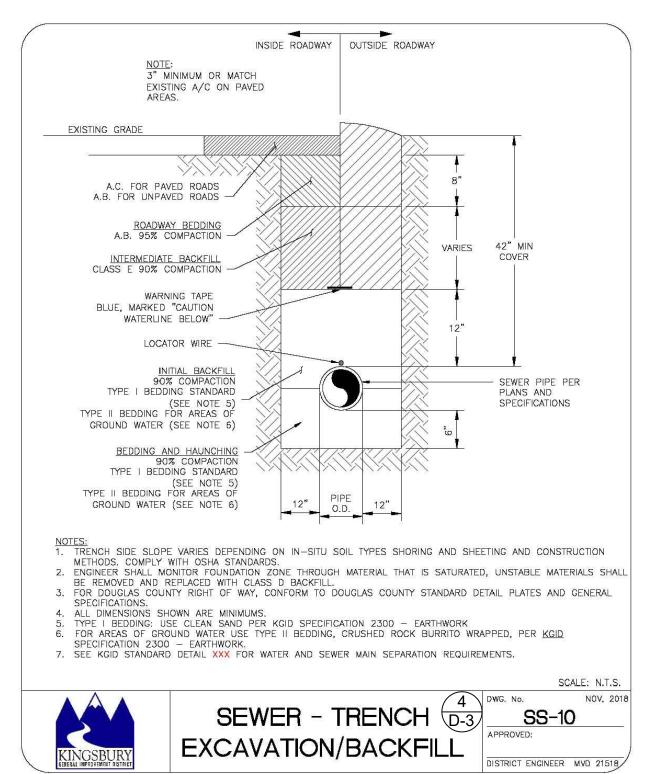
NOTES:

- 1. CONTRACTOR SHALL CONTACT AND COORDINATE WITH THE SEWER UTILITY AND ALL OTHER UTILITIES 48 HOURS PRIOR TO CONSTRUCTION.
- 2. ALL CONSTRUCTION SHALL CONFORM TO SEWER UTILITY'S STANDARDS AND NO BACKFILLING
- 3. MANHOLE SHALL BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE SECTIONS CONFORMING TO ASTM DESIGNATION C478 WET CAST ONLY.

WILL BE ALLOWED UNTIL INSPECTED AND APPROVED.

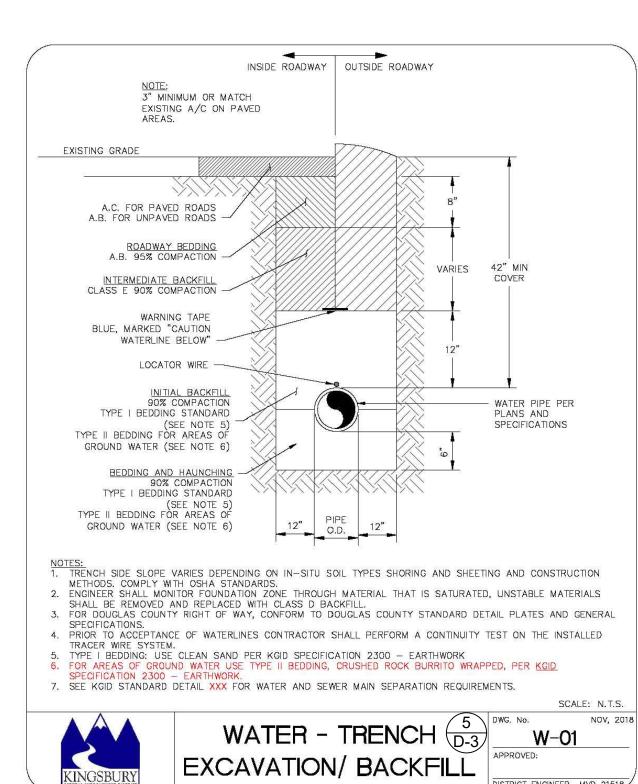
- 4. EXCAVATION FOR MANHOLE MUST BE MADE TO A MINIMUM OF 1-FOOT OUTSIDE OF THE MANHOLE WALL TO PROVIDE FOR ADEQUATE WORKSPACE. SPACE OUTSIDE OF THE MANHOLE SHALL BE BACKFILLED WITH ACCEPTABLE MATERIAL IN UNIFORM LAYERS NOT EXCEEDING 12-INCHES IN DEPTH. EACH LAYER SHALL BE THOROUGHLY COMPACTED TO THE DENSITY OF THE EARTH IN THE ADJACENT TRENCH SECTIONS. (MIN. 90% IN EXISTING OR PROPOSED STREET OR ALLEY RIGHTS-OF-WAY).
- 5. CAST IRON FRAME AND COVER SHALL BE 24-INCH DIAMETER (CLEAR OPENING) AND SHALL BE MANUFACTURED FROM GRAY CAST IRON CONFORMING TO ASTM DESIGNATION: A 48, CLASS 30 AND DESIGNED FOR A MINIMUM HS-20 TRAFFIC LOADING. COVERS AND FRAMES SHALL BE MATCH-MARKED IN PAIRS AND SEATING SURFACES MACHINED SO THAT COVER IS NON-ROCKING. COVERS SHALL HAVE ONE PICK HOLE, AND ONE CENTRALLY LOCATED 1-INCH DIG HOLE. COVERS SHALL HAVE NO "THRU" HOLES.
- 6. ALL BASES MUST BE PRECAST UNLESS OTHERWISE APPROVED BY THE SEWER UTILITY.
- 7. CONCRETE FOR CAST-IN-PLACE MANHOLE BASE, IF APPROVED BY THE SEWER UTILITY FOR USE, SHALL CONFORM TO SECTION 202 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- 8. SEWER STUBS FOR FUTURE EXTENSION SHALL BE NO MORE THAN 5-FEET IN LENGTH.
- 9. THE TOP OF INCOMING LATERAL SEWERS SHALL ENTER THE MANHOLE AT AN ELEVATION EQUAL TO THE TOP OF THE MAIN LINE. EXCEPTIONS ONLY BY PRIOR SEWER UTILITY
- 10. INVERTS SHALL BE FORMED DIRECTLY IN CONCRETE OF MANHOLE BASE AND SHALL BE SMOOTH AND ACCURATELY SHAPED TO A SEMI-CIRCULAR BOTTOM CONFORMING TO THE INSIDE OF THE ADJACENT SEWER SECTION. MAINTAIN SLOPE OF ADJACENT PIPELINE ACROSS THE MANHOLE BASE.
- 11. WHERE MANHOLES ARE NOT LOCATED IN STREETS, PLACE TOP OF MANHOLE 8-INCHES ABOVE THE EXISTING GROUND UNLESS OTHERWISE REQUIRED BY THE SEWER UTILITY. INSTALL THE CONCRETE COLLAR FROM A POINT 6-INCHES OUTSIDE THE TOP OF THE COVER FRAME AND EXTEND A MINIMUM OF 12-INCHES BELOW THE SURROUNDING GROUND SURFACE. TAPER THE CONCRETE COLLAR FROM TOP TO BOTTOM AT A 1:1 SLOPE OR
- 12. PROVIDE 60-INCH MINIMUM DIAMETER MANHOLE FOR PIPES LARGER THAN 15-INCH
- 13. COAT EXTERIOR OF MANHOLE WHERE GROUNDWATER CONDITIONS ARE PRESENT AS APPROVED BY SEWER UTILITY.
- 14. ALL MANHOLES SHALL BE VACUUM TESTED FROM TOP OF CONE PRIOR TO PAVING.
- 15. POLYMER MANHOLES SHALL BE REQUIRED AT ALL FORCE MAIN OUTLETS. POLYMER MANHOLES SHALL BE INSTALLED DOWNSTREAM OF MANHOLE WHERE FORCE MAIN CONVERTS TO GRAVITY FLOW. ONE POLYMER MANHOLE FOR EVERY 1-INCH DIAMETER SIZE OF THE
- 16. PIPE INVERT ELEVATIONS SHALL BE A MINIMUM OF 0.1 FEET ABOVE OUTFLOW PIPE ELEVATIONS FOR STRAIGHT FLOW THROUGH OR 0.2 FEET FOR 90 DEGREE BEND FLOW

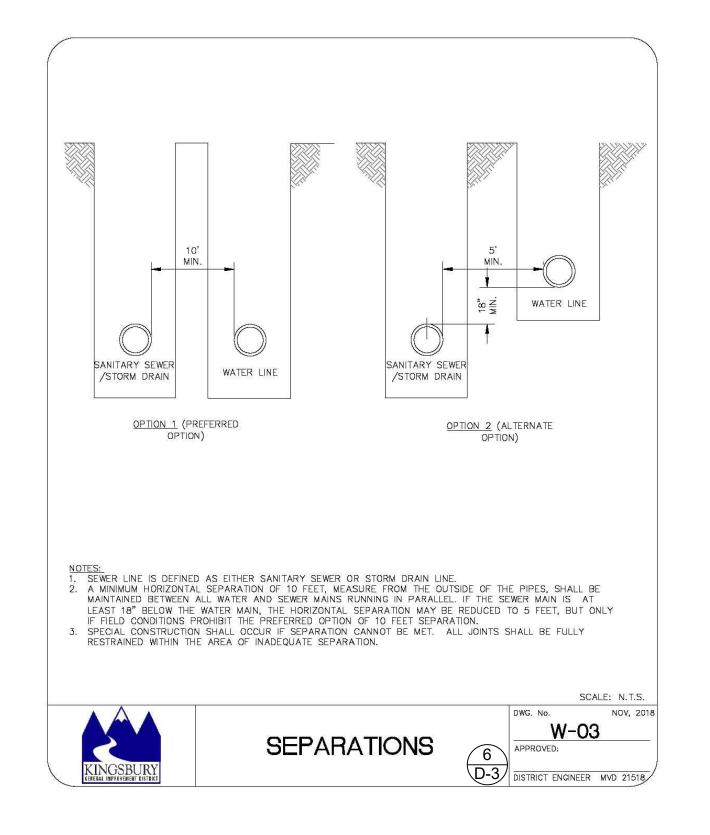


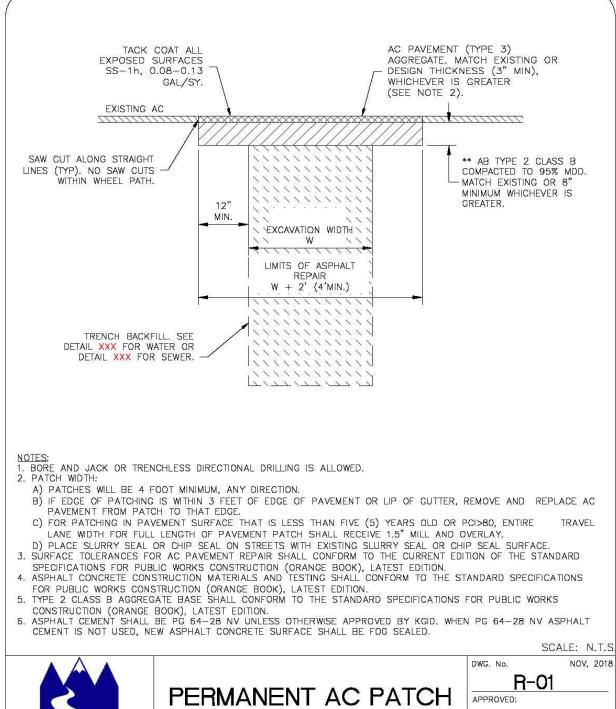


TOP VIEW

D-3





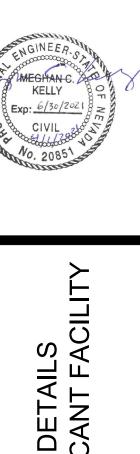




BID SET APRIL 1, 2021

D-3

DISTRICT ENGINEER MVD 21518



E E





FACILITY WATER UTILITY DETAILS ROAD STORMWATER DECANT

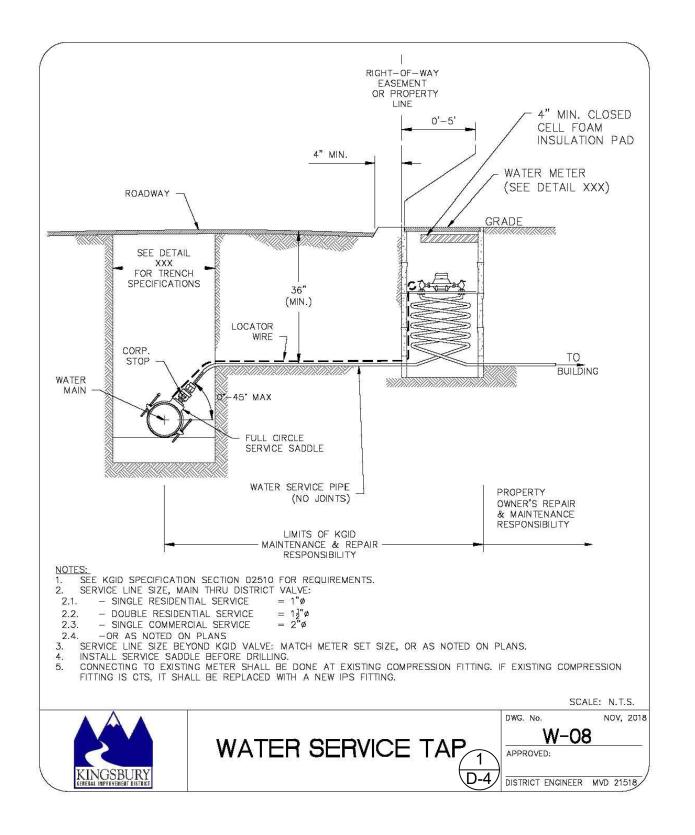
DESIGNED/DRAWN PJ/PJ CHECKED MCK DATE

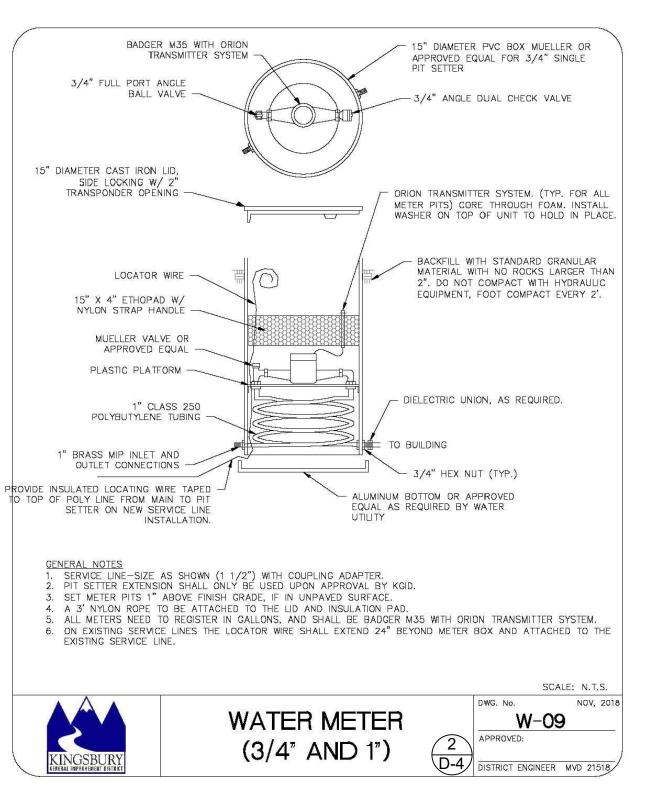
LOGGING

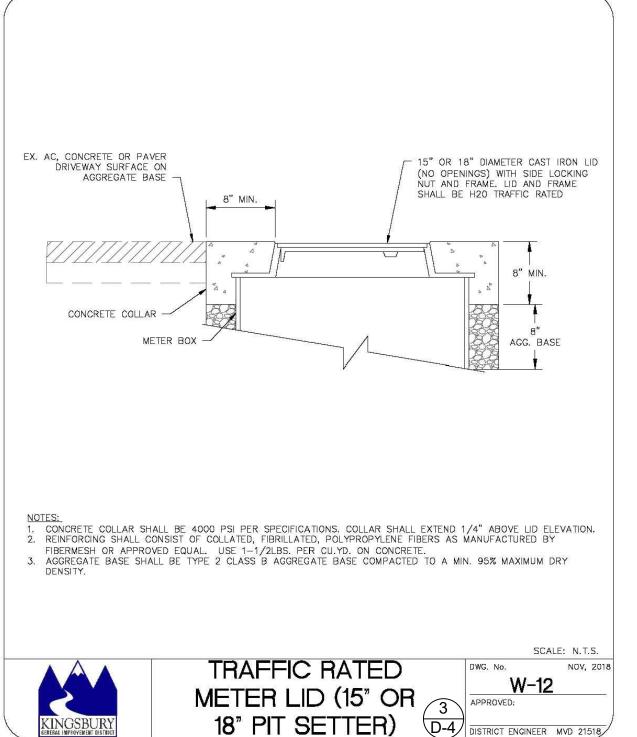
04/2021 SCALE AS SHOWN

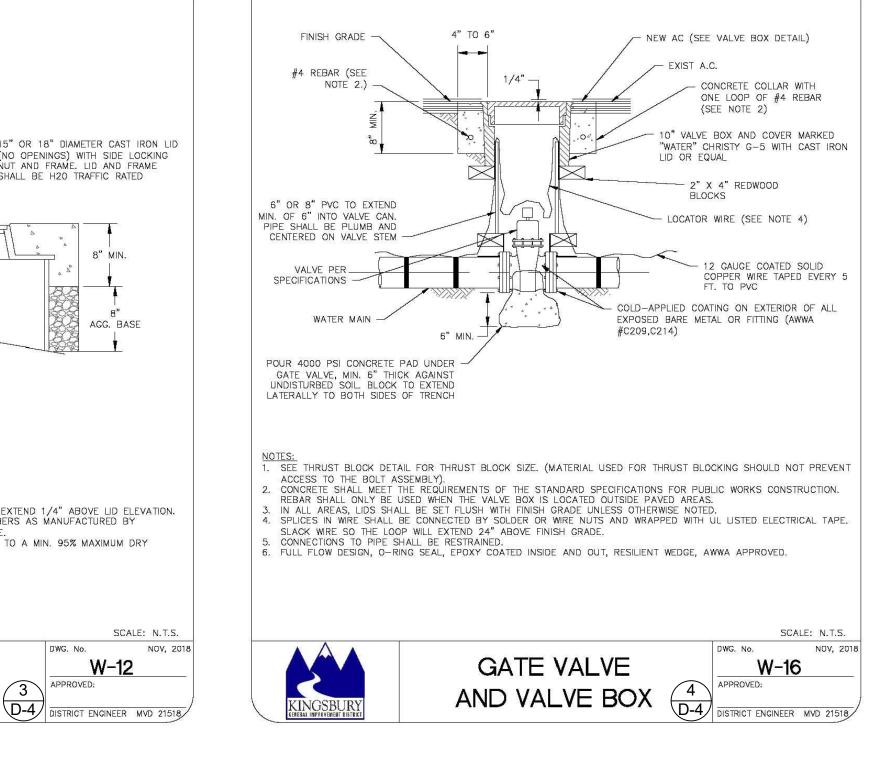
PROJECT LOGGING RD DECANT SHEET

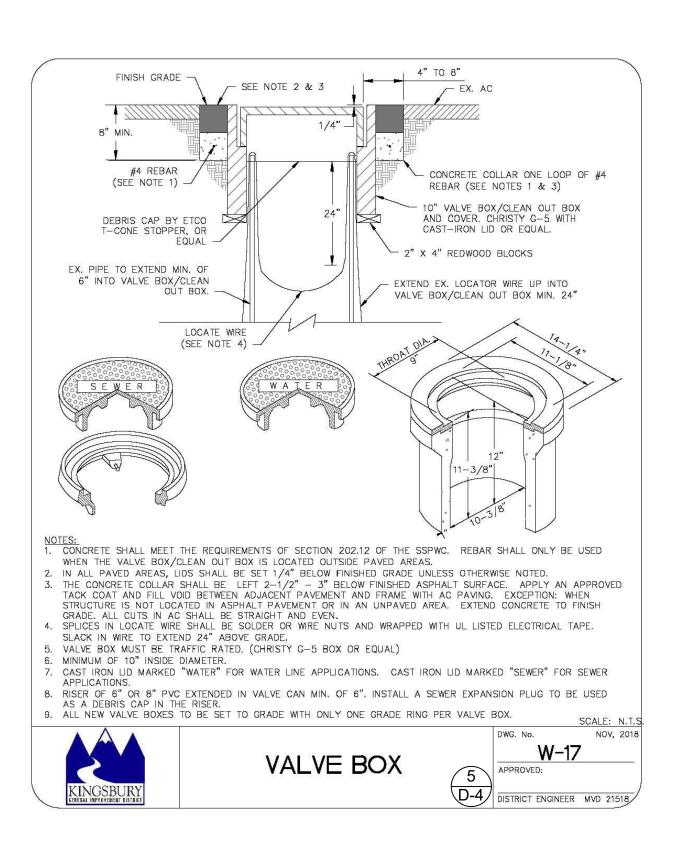
11 of 15

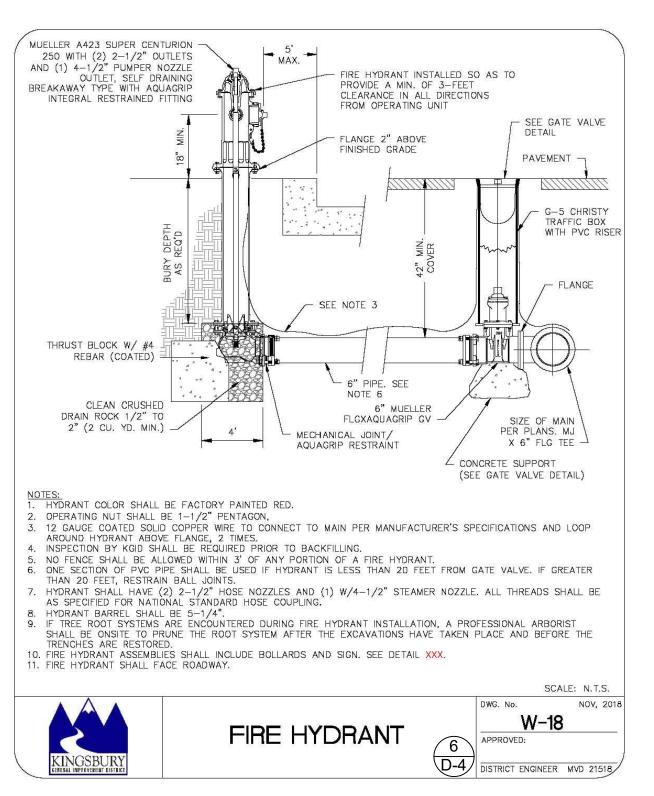


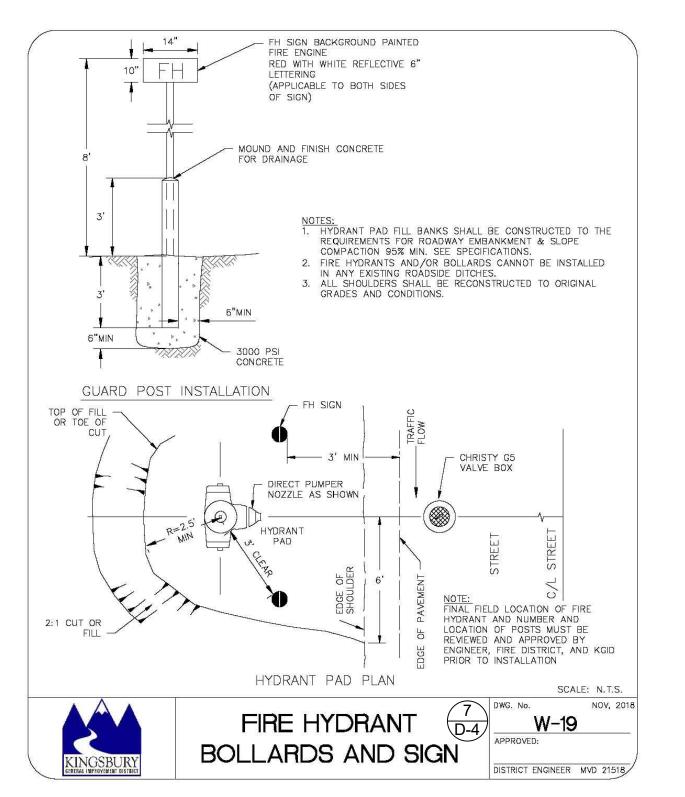


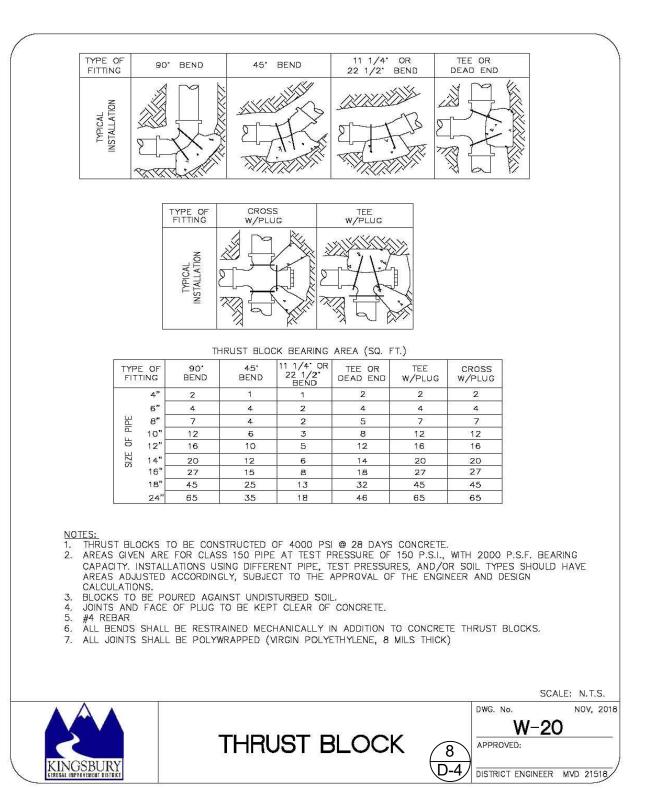










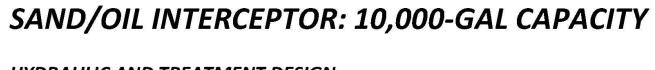




BID SET APRIL 1, 2021

SCALE AS SHOWN

PROJECT LOGGING RD DECANT



HYDRAULIC AND TREATMENT DESIGN:

OPTIMUM STORMWATER QUALITY DESIGN FLOW (SQDF) XX.XX - CFS

GENERAL NOTES:

24"Ø CAST IRON FRAME

12"Ø SDR35

- INLET PIPING

BY OTHERS

AND COVER TYP.

- 1. THIS LAYOUT SKETCH IS PROVIDED IN A SCHEMATIC FORMAT. THIS SHEET IS AN ENGINEERING & CONSTRUCTION FORMATTED DETAIL. ENGINEERING & CONSTRUCTION DETAIL READILY AVAILABLE. CONTACT JENSEN PRECAST.
- 2. PLAN VIEW TOP SLAB WITH FRAMES AND COVERS ARE NOT SHOWN FOR CLARITY. 3. INLET/OUTLET PIPE STUBS PROVIDED BY JENSEN PRECAST, PIPE TYPE ADAPTORS PROVIDED BY
- 4. DESIGN LOAD: H-20 TRAFFIC FROM 1'-1" TO 4' OF COVER PER ASTM C890 & C915 AND AASHTO LOADING METHODS. DESIGNS FOR OTHER DEPTHS & LOADINGS CONDITIONS READILY AVAILABLE, CONTACT
- 5. CONTACT JENSEN PRECAST FOR OTHER INSTALLATION DEPTHS AND/OR LOADING CONDITIONS FOR STRUCTURAL DESIGN REVISION TO MEET PROJECT SPECIFIC NEEDS.

CONSTRUCTION NOTES:

- 1. CONTRACTOR TO VERIFY ALL DIMENSIONS OF ALL PRECAST PIECES IN FIELD.
- 2. VERIFY SUB-BASE MATERIAL ELEVATIONS BEFORE PLACING PRECAST COMPONENTS OR
- 3. APPLY BUTYL MASTIC AND/OR GROUT TO SEAL JOINTS OF MANHOLE STRUCTURE.
- 4. APPLY LOAD TO MASTIC SEAL IN JOINTS OF TANK SECTIONS TO COMPRESS SEALANT IF NECESSARY. UNIT MUST BE WATER TIGHT, HOLDING WATER UP TO FLOWLINE INVERT (MINIMUM).
- 5. ALL INTERNAL COMPONENTS INSTALLED BY MANUFACTURER UNLESS OTHERWISE SPECIFIED. 6. BLOCK AND/OR GROUT PACK BENEATH FRAMES AND COVERS TO MATCH FINISHED GRADE.

MATERIAL NOTES:

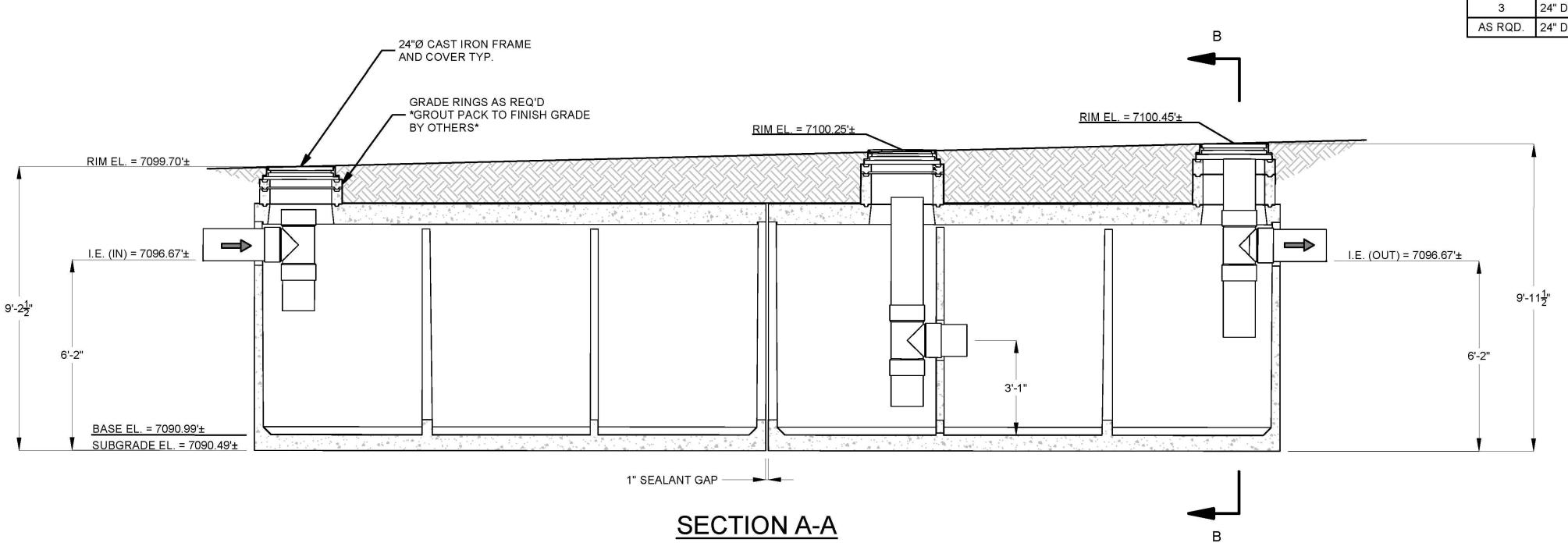
1. ALL DIMENSIONS ARE IN FEET OR FRACTIONAL INCHES. 2. PRECAST MATERIALS AND MANUFACTURING METHODS SHALL CONFORM TO ALL APPLICABLE ASTM AND AASTHO SPECIFICATIONS.

LIFTING WEIGHTS:

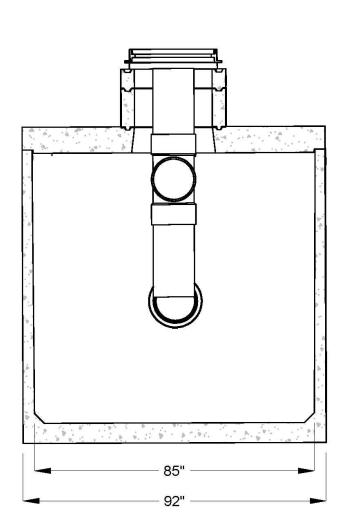
1. HEAVIEST PICK WEIGHT IS 22,300 LBS±

MATERIALS LIST - PROVIDED WITH UNIT:

QTY	COMPONENT DESCRIPTION	MATERIAL PROVIDER	RESPONSIBLE INSTALLER
1	12" DIA. INLET PIPE STUBS & STAND	JENSEN	CONTRACTOR
1	12" DIA. OUTLET PIPE STUBS & STAND	JENSEN	CONTRACTOR
2	12" DIA. INLET / OUTLET TEES	JENSEN	CONTRACTOR
3	24" DIA. CAST IRON FRAME AND COVER	JENSEN	CONTRACTOR
AS RQD.	24" DIA. GRADE RINGS	JENSEN	CONTRACTOR



PLAN VIEW



SECTION B-B

DISCLAIMERS, INCLUDING BUT NOT LIMITED TO:

7'-8" 7'-2"

12"Ø SDR35 INLET PIPING

BY OTHERS

- 1.) All precast concrete materials and manufacturing methods shall conform to all current and applicable ASTM, AASHTO and NPCA standards and specifications.
- 4.) These layout drawings are intended to show overall system design only. All concrete component thicknesses, dimensions, lengths and joint orientations may

- 521 DUNN CIRCLE, SPARKS, NV 89431 www.jensenwaterresources.com

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> Jnless in conjunction with business conducted with Jensen Precast, any use of Jensen Precast work product without express, written consent is PART NUMBER: prohibited, and recipient is prohibited from distributing any and all work

DESCRIPTION:

Tank JZ 10000 Gallon 4 Inch Assembly Holding Tank EE KINGSBURY, NV

R. Salter

DRAWN BY: 200038046 2 of 2 1/31/2019 1/25/2021



BID SET APRIL 1, 2021

7.) For complete design and product information, or custom design conditions, please conctact Jensen Precast.

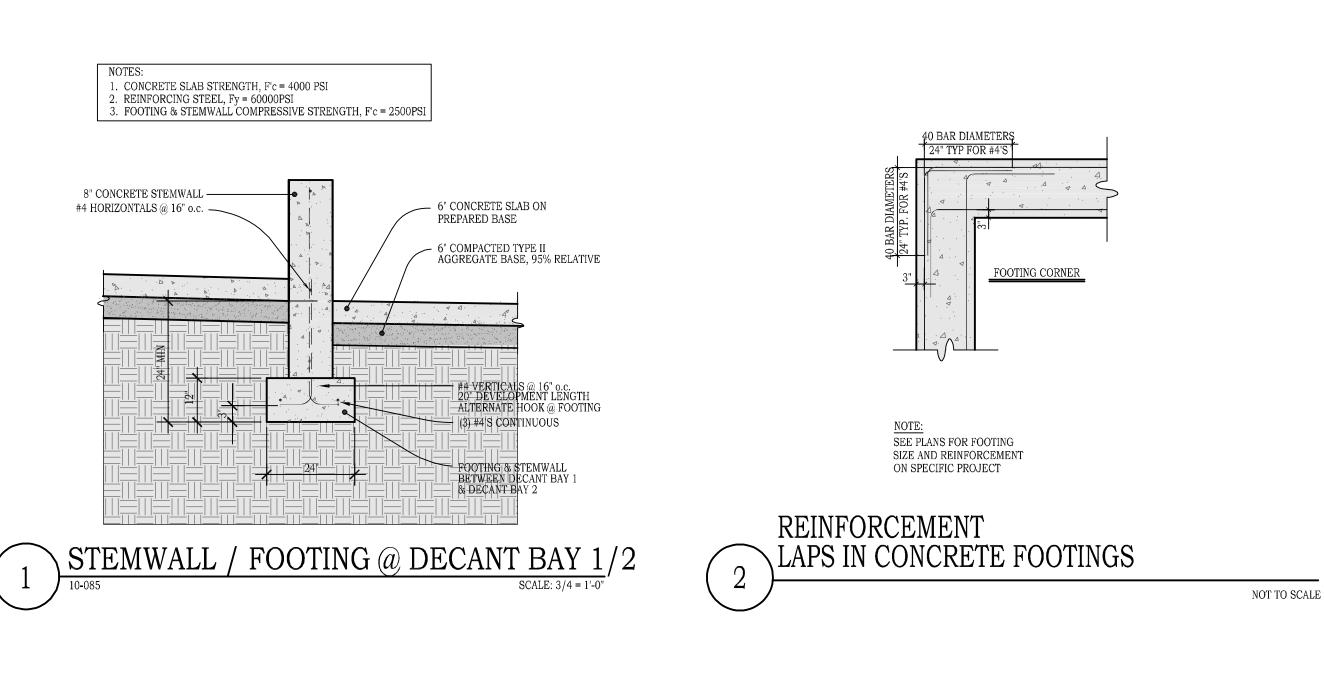
2.) All precast concrete components to be manufactured in an NPCA certified plant. 3.) All elevations have been provided by others, and have not been verified by Jensen Precast. Contractor to verify all dimensions and elevations prior to installatio

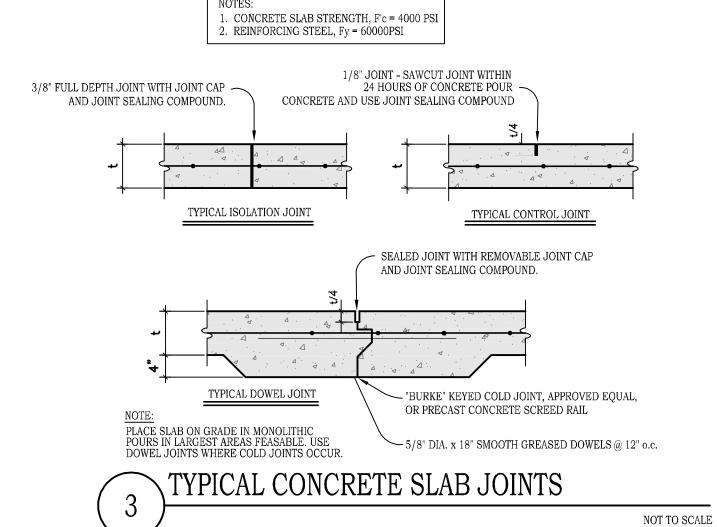
vary across Jensen Precast's manufacturing facilities and are subject to change pending final design. Contractor to confirm all information prior to installation.

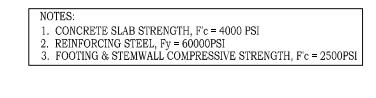
5.) System design criteria has been provided to Jensen Precast. Others are responsible for verification that system meets the intended application. 6.) Foundation, subgrade and backfill to be designed by others.

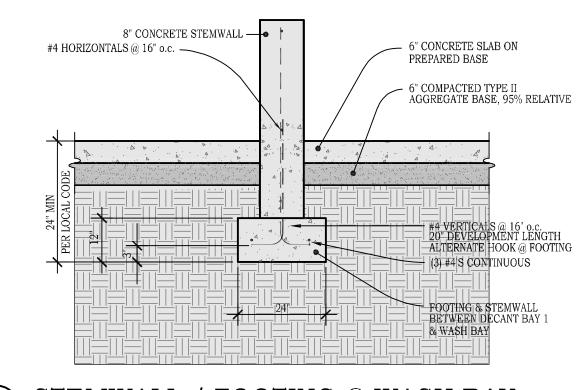
WATER

(855) 468-5600





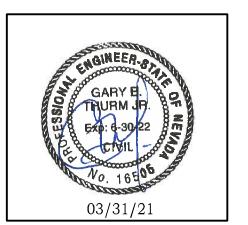






THREE CASTLES ENGINEERING, LLC An Engineering and Consulting Company

CARY E. THURM, JR., P.E. #16505 1228 Pep Circle Gardnerville, NV 89410 Phone: (775) 783-1058 Fax: (775) 783-9259 e-mail: threecastlesengineering@gmail.com



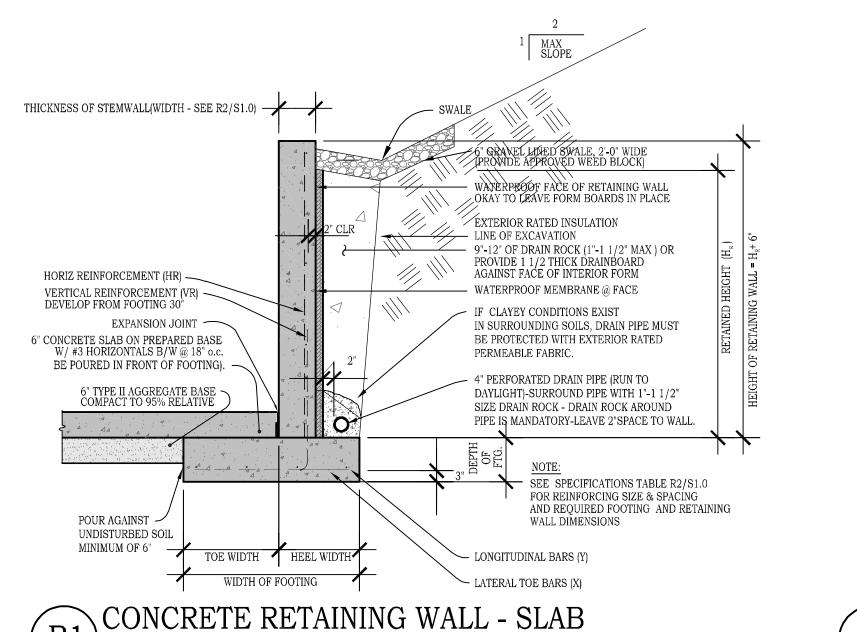
ORIGIN DATE: 03/04/21

REVISION

EXPANSION JOINT L. CONCRETE SLAB STRENGTH, F'c = 4000 PSI @ TRANSITION -EXPANSION JOINT 2. REINFORCING STEEL, Fy = 60000PSI A/C PAVING ON @ CROWN — PREPARED BASE #4 SMOOTH DOWEL @ 18" o.c. — 6" MIN. CONCRETE SLAB w/ #3 HORIZONTALS B/W ON 6" TYPE II - THICKENED FOOTING MONOLITHIC WITH SLAB COMPACTED AGGREGATE BASÉ, 95% RELATIVE CONTINUOUS #4 HORIZONTAL

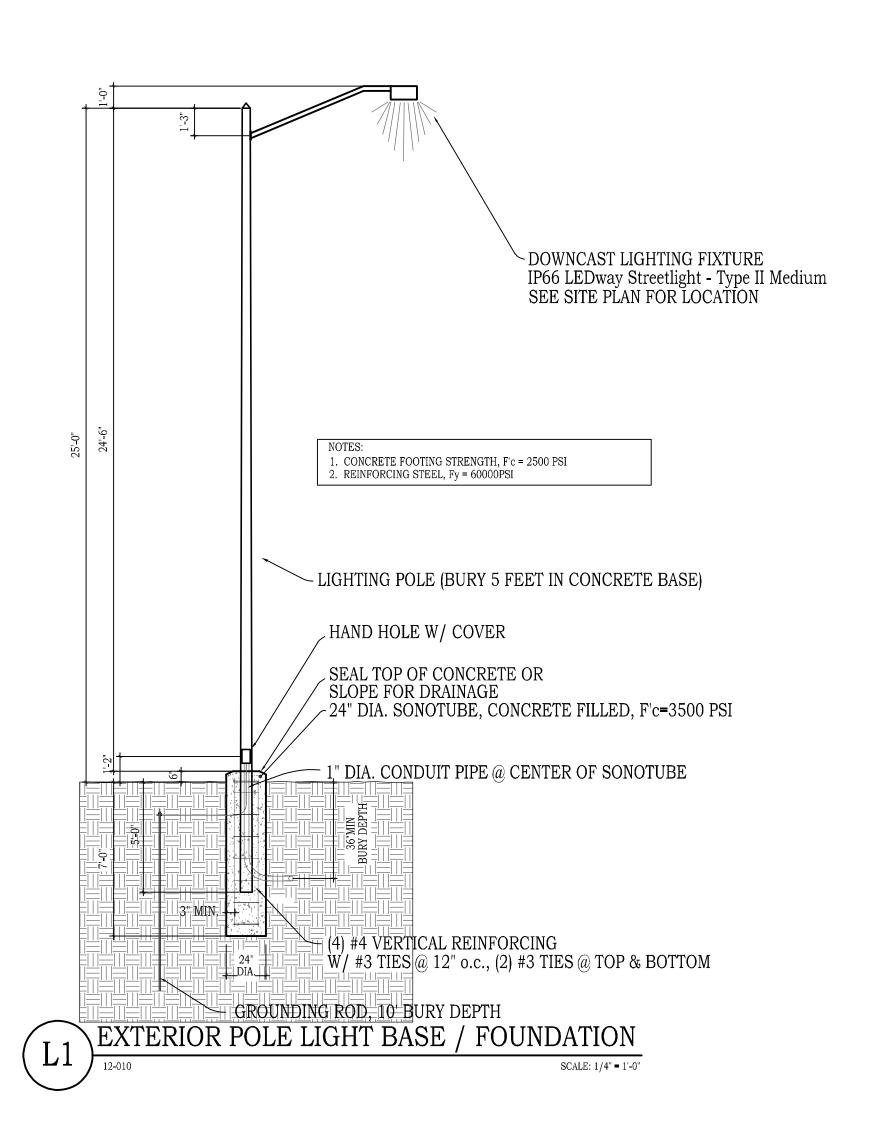
CONCRETE SLAB ON PREPARED BASE WITH THICKENED FOOTING @ CROWN NOT TO SCALE

SCALE: 3/4" = 1'-0"



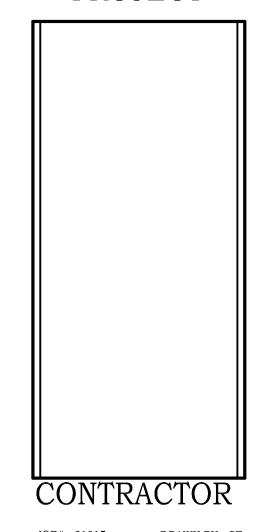
	STEMW	ALL THICKNE	SS		OOTING			
	1ST STEM	3RD ST	EM		DIM	MENSIONS		
H_R	WIDTH / HT	WIDTH / HT	WIDTH /	НТ	TOE	HEEL	WIDTH	DEPTH
3'	8"				21"	12"	33"	12"
4'	8"				21"	21"	4 2"	12"
5'	8"				30"	21"	51"	14"
		VR	STEMWAL	L REIN	IFORG	CING	ı	HR
				L REIN	IFORC	CING		
H_R	1ST STEM	2ND S	2ND STEM 3F			M		
3'	#4'S @ 16" o.	c					#4'S @ 24" o.c.	
4'	#4'S @ 16" o.	c					#4'S @ 24" o.c.	
5'	#5'S @ 16" o.c.							24" o.c.
		FOO	OTING RE	INFOR	CMEN	VΤ		
	TOE REINI	FORCING	HEEI	REINE	FORCI	ING	CONT	NUOUS
H_R		4.0	#4	4'S @ 2	4" o.c		(2)	#4'S
3'	#4'S @ 2	4" o.c.					(0)	44'C
	#4'S@2' #4'S@2'			4'S @ 2	4" o.c		(2)	#4'S

VARIABLE HEIGHT FOOTING & RETAINING WALL SCHEDULE CRW-007SCHED



AHOE CONSERVATION DISTRICT STORMWATER DECANT FACILIT NEVADA T

PROJECT



SHEET

ALL WORK PERFORMED SHALL BE FIRST CLASS WORK IN EVERY ASPECT. THE WORK SHALL BE

PERFORMED BY MECHANICS SKILLED IN THEIR RESPECTIVE TRADES, WHO SHALL AT ALL TIMES

BE UNDER THE SUPERVISION OF COMPETENT PERSONS. ALL WORK SHALL BE INSTALLED TO

IN ADDITION TO THE MATERIALS SPECIFIED ELSEWHERE, FURNISH AND INSTALL ALL OTHER

ALL WORK UNDER THIS SECTION SHALL BE PERFORMED IN COOPERATION WITH THE WORK

PERFORMED UNDER ALL OTHER SECTIONS OF THE SPECIFICATIONS FOR THE PROJECT IN

INSTALLATION OF ALL WORK. REFER THE DRAWINGS AND SPECIFICATIONS COVERING THE

WORK TO BE PERFORMED UNDER ALL SECTIONS, SO THAT THE RELATION AND EXTENT OF THE

WORK OF THIS SECTION WITH RESPECT TO THE WORK OF ALL OTHER SECTIONS IS UNDERSTOOD.

GIVE RIGHT OF WAY TO RACEWAYS AND PIPING SYSTEMS INSTALLED AT A REQUIRED SLOPE.

ADDITIONAL WORK MAY BE REQUIRED ON THE PROJECT WHICH IS OUTSIDE THE SCOPE OF THE

ACCEPTED BY THE OWNER, PRIOR TO COMMENCING WORK. PROPOSALS SHALL INCLUDE A LIST

OF QUANTITIES OF ALL MATERIAL BEING USED WITH UNIT COSTS BROKEN DOWN INTO MATERIAL AND LABOR COSTS PER UNIT. CONTRACTOR SHALL PROVIDE ACTUAL EQUIPMENT QUOTES WHEN

MATERIAL COSTS AND LABOR UNITS SHALL NOT EXCEED THE LATEST EDITION OF RS MEANS

CONTRACT. SUCH ADDITIONAL WORK WILL BE DESCRIBED IN SUPPLEMENTAL INSTRUCTIONS

AND/OR CLARIFICATIONS, TO BE ESTIMATED AND PRICED BY THE CONTRACTOR, AND

ORDER TO AVOID INTERFERENCE WITH OTHER WORK AND TO SECURE THE PROPER

CONDUIT SYSTEMS MUST BE COMPLETE PRIOR TO INSTALLATION OF WIRING.

MISCELLANEOUS ITEMS NECESSARY FOR THE COMPLETION OF THE WORK TO THE EXTENT THAT

COMPLY WITH NECA'S "STANDARD OF INSTALLATION."

ALL SYSTEMS ARE COMPLETE AND OPERATIVE.

<u>WORKMANSHIP</u>

CHANGE ORDERS

REQUESTED BY ENGINEER.

ELECTRICAL COST DATA.

3.2

3.3

CIRCUITS AND APPROXIMATE LOCATION OF EQUIPMENT. THE CONTRACTOR SHALL REVIEW

USE DIMENSIONS IN FIGURES, SHOP DRAWINGS, ETC. AND ACTUAL SITE MEASUREMENTS IN

PREFERENCE TO SCALED DIMENSIONS. DO NOT SCALE DRAWINGS FOR EXACT SIZES OR

LOCATIONS - USE DIMENSIONED DETAILS OR ACTUAL FIELD CONDITIONS. VERIFY ITEM

MOUNTING HEIGHTS AS REQUIRED BY PROJECT CONDITIONS PRIOR TO ROUGH-IN.

BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING FOR DETERMINATION.

WITHIN IO FEET, WITHOUT EXTRA COST TO OWNER (PRIOR TO ROUGH-IN).

(PRIOR TO ROUGH-IN).

BEEN MADE, WILL NOT BE RECOGNIZED.

DRAWINGS OF ALL TRADES TO ASSURE COORDINATION PRIOR TO PLACEMENT OF WORK, RIGHT

IS RESERVED TO CHANGE LOCATION OF EQUIPMENT AND DEVICES, AND ROUTING OF CONDUITS

THE CIVIL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS IN MATTERS OF

DIMENSIONS, DISCREPANCIES BETWEEN DIFFERENT DRAWINGS OR BETWEEN DRAWINGS AND

REQUIREMENTS FOR EQUIPMENT ACTUALLY FURNISHED AND ADJUST LAYOUT TO COMPLY WITH

NEC IIO. RIGHT IS RESERVED TO CHANGE LAYOUT WITHIN IO FEET WITHOUT ADDITIONAL COST

CONDITIONS, DRAWINGS AND SPECIFICATIONS RELATED TO WORK, AND IS INFORMED AS TO

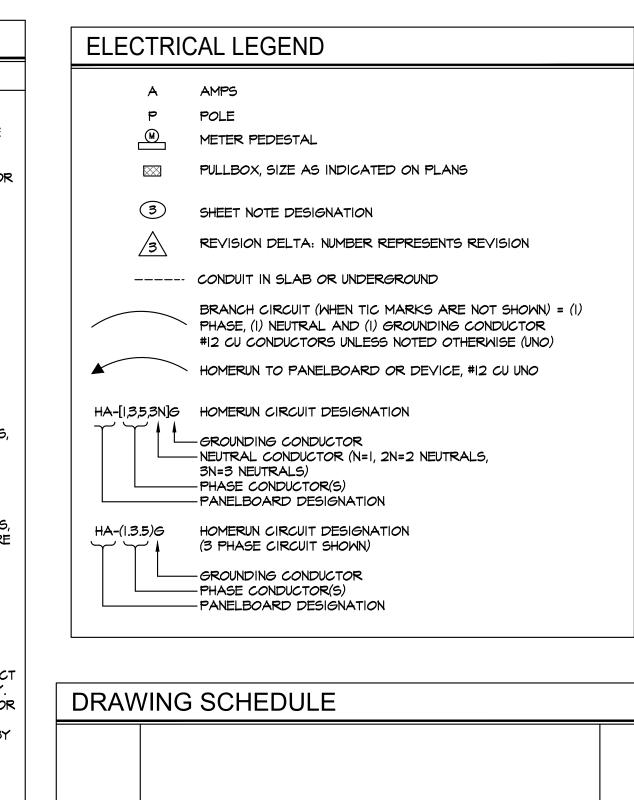
EXTENT AND CHARACTER OF WORK. LATER CLAIMS FOR LABOR AND MATERIALS REQUIRED

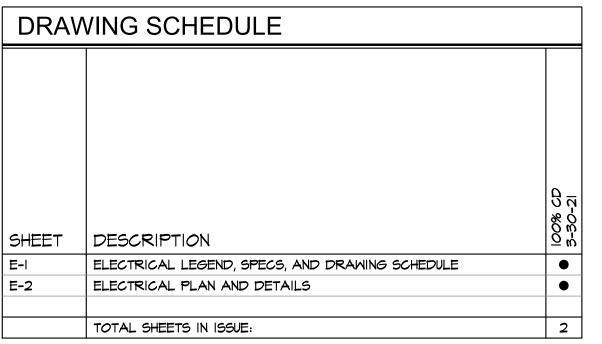
DUE TO DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN HAD EXAMINATION

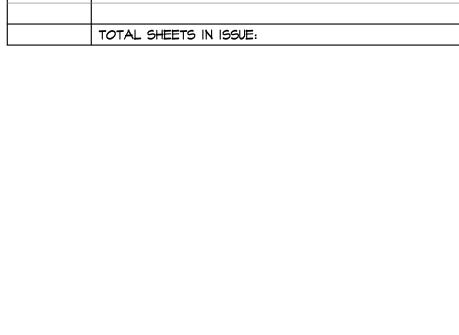
EXECUTION OF CONTRACT IS EVIDENCE THAT CONTRACTOR HAS EXAMINED ALL EXISTING

SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE

LAYOUT EQUIPMENT AS SHOWN ON DRAWINGS AS CLOSE AS POSSIBLE. VERIFY ACCESS







JUNCTION, PULL AND CONNECTION BOXES: IDENTIFICATION OF SYSTEMS AND CIRCUITS SHALL

MARKER AT CONCEALED BOXES, ALL FIRE ALARM BOXES SHALL HAVE COVERS PAINTED RED.

BRANCH CIRCUIT CONDUCTORS SHALL BE IDENTIFIED IN EACH JUNCTION BOX AND PULL BOX

WITH WIRE MARKERS AS MANUFACTURED BY T&B, PANDUIT, 3M, OR IDEAL TO INDICATE

JUNCTION BOX COVERS IN BRANCH CIRCUIT WIRING SHALL BE LABELED WITH PANEL AND

CIRCUIT NUMBERS. JUNCTION BOX COVERS FOR SPECIAL SYSTEMS SHALL BE LABELED WITH

SYSTEM NAME AND OTHER IDENTIFICATION AS DIRECTED; FOR EXAMPLE, "FIRE ALARM-ZONE I".

WHERE BOXES ARE INSTALLED FLUSH MOUNTED IN FINISHED AREAS OR SURFACE MOUNTED IN

UNFINISHED AREAS, LABELING SHALL BE WITH ENGRAVED PLASTIC NAMEPLATE AS SPECIFIED

DEVICE PLATES - SWITCHES AND RECEPTACLES: IDENTIFY THE PANELBOARD AND BRANCH

CIRCUIT NUMBER FROM WHICH SERVED ON THE FRONT OF THE DEVICE PLATE WITH PERMANENT

POLYESTER TAPE. LOCATE ALL LABELS AT THE BOTTOM OF THE PLATE IN THE SAME LOCATION

HEREIN. WHERE BOXES ARE INSTALLED ABOVE ACCESSIBLE CEILINGS, LABELING MAY BE NEAT

INDICATE SYSTEM VOLTAGE AND CONTAINED CIRCUITS ON OUTSIDE OF BOX COVER. USE

ALL TEMPERATURE CONTROL BOXES SHALL HAVE COVERS PAINTED BLUE.

HAND WRITTEN LETTERING WITH INDELIBLE MARKER.

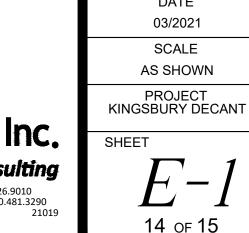
PANEL/CIRCUIT NUMBER.

THROUGHOUT.

END OF SECTION 260000

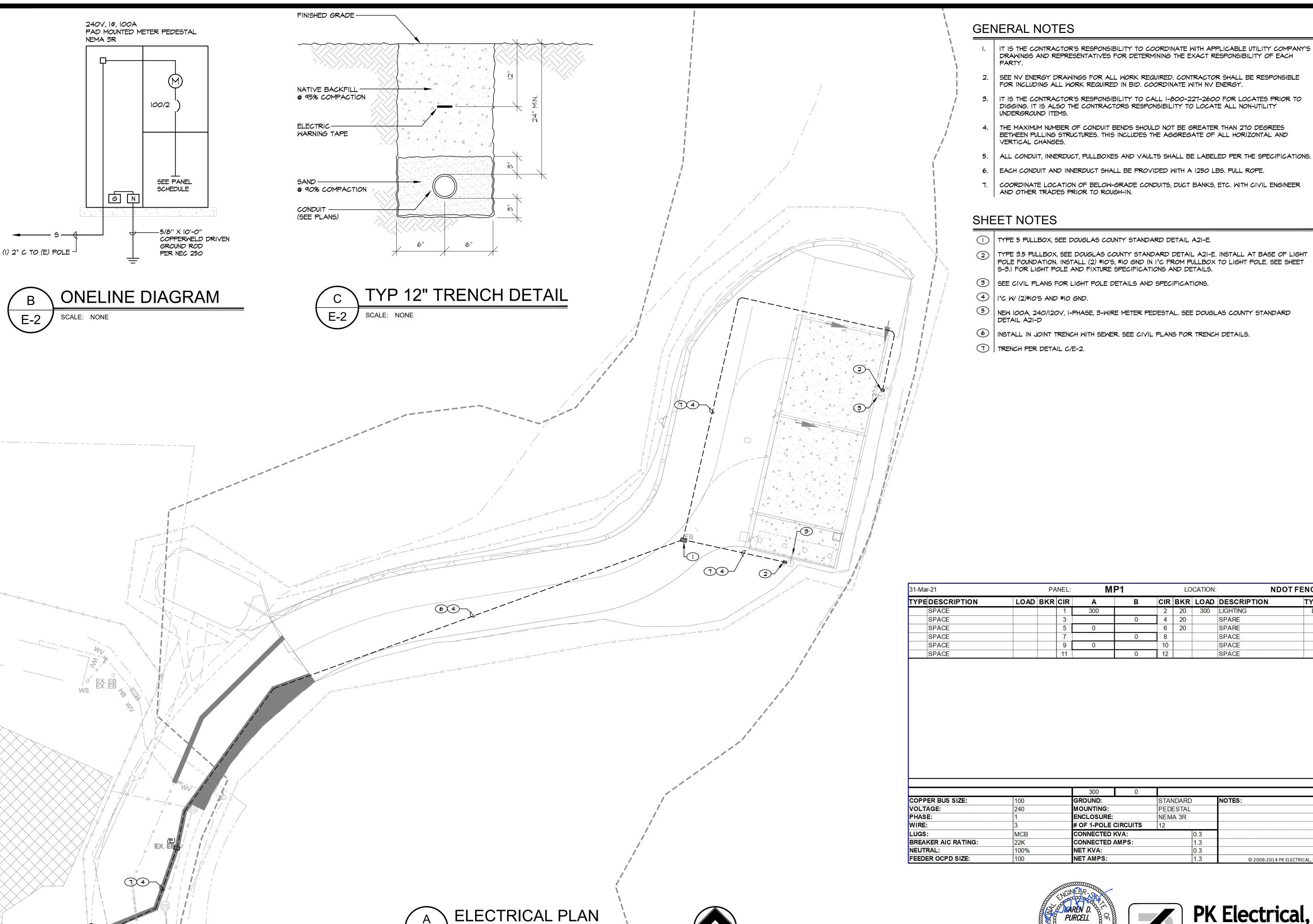
SELF-ADHESIVE MARKING TAPE LABELS AT EXPOSED LOCATIONS AND INDELIBLE BLACK





DESIGNED/DRAWN BD/BD CHECKED KDP DATE 03/2021

SCALE



SCALE: 1" = 20'-0"

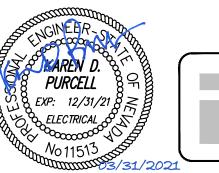
5 METER PEDESTAL 'MPH

IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH APPLICABLE UTILITY COMPANY'S DRAWINGS AND REPRESENTATIVES FOR DETERMINING THE EXACT RESPONSIBILITY OF EACH

2 TYPE 3.5 PULLBOX, SEE DOUGLAS COUNTY STANDARD DETAIL A2I-E. INSTALL AT BASE OF LIGHT POLE FOUNDATION. INSTALL (2) #10'S, #10 GND IN 1"C FROM PULLBOX TO LIGHT POLE. SEE SHEET

31-Mar-21		PANE		L: MP1		LOCATION:				NDOT FENCE	
TYPEDESCRIPTION	LOAD	BKR	CIR	Α	В	CIR	BKR	LOAD	DESCRIPTION	TY	
SPACE	deminor************************************		1	300		2	20	300	LIGHTING	L	
SPACE			3		0	4	20		SPARE		
SPACE			5	0		6	20		SPARE		
SPACE			7		0	8			SPACE		
SPACE			9	0		10			SPACE		
SPACE			11		1 0	12	······································		SPACE		

		300 0		
COPPER BUS SIZE:	100	GROUND:	STANDARD	NOTES:
VOLTAGE:	240	MOUNTING:	PEDESTAL	
PHASE:	1	ENCLOSURE:	NEMA 3R	
WIRE:	3	# OF 1-POLE CIRCUITS	12	
LUGS:	MCB	CONNECTED KVA:	0.3	
BREAKER AIC RATING:	22K	CONNECTED AMPS:	1.3	
NEUTRAL:	100%	NET KVA:	0.3	
FEEDER OCPD SIZE:	100	NET AMPS:	1.3	© 2008-2014 PK ELECTRICAL, INC





PK Electrical, Inc. Engineering • Design • Consulting
681 Sierra Rose Drive, Suite B | Reno, NV 89511 | 775.826.9010
4601 DTC Boulevard, Suite 740 | Denver, CO 80237 | 720.481.3290

AS SHOWN PROJECT KINGSBURY DECANT

DESIGNED/DRAWN