NEVADA TAHOE CONSERVATION DISTRICT

BURKE CREEK HIGHWAY 50 CROSSING AND REALIGNMENT PROJECT - PHASE 1

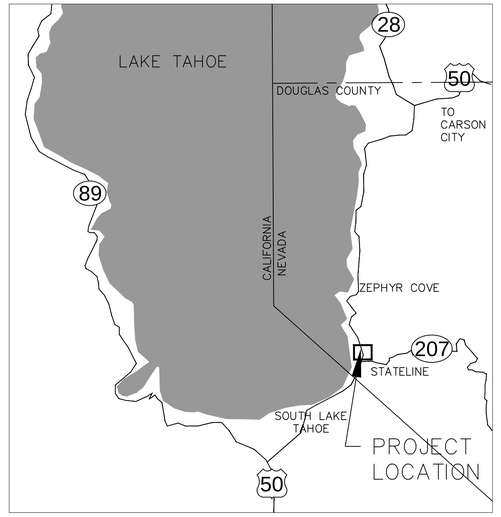
IN THE COUNTY OF DOUGLAS

EIP # 01.02.03.0001

PLAN

SCALE: 1" = 150'

SHEET INDEX



VICINITY MAP

NOT TO SCALE

ENGINEER:

MEGHAN C. KELLY, P.E.
REGISTERED CIVIL ENGINEER
STATE OF NEVADA, NO. 20851
NEVADA TAHOE CONSERVATION DISTRICT
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5/20/16
DATE

Nevada Tahoe Conservation District

MEGHAN C. KELLY — CIVIL — No. 20851 — Exp: 6/30/2017 — STATE OF NEVADA — PROFESSIONAL ENGINEER

TITLE
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT PHASE 1

DESIGNED/DRAWN
MK/MK
CHECKED
MG
DATE
05/13/2016
SCALE
AS SHOWN
PROJECT
BCC
SHEET
i
1 OF 25

GENERAL NOTES

1. ALL IMPROVEMENTS SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION, AND TO THE SATISFACTION OF NEVADA TAHOE CONSERVATION DISTRICT (NTCD) & THE NEVADA DEPARTMENT OF TRANSPORTATION (NDOT). IMPROVEMENT CONSTRUCTION SHALL COMPLY WITH THESE PLANS AND THE MOST RECENT STANDARD SPECIFICATIONS & PLANS FOR ROAD & BRIDGE CONSTRUCTION ("STANDARD SPECIFICATIONS"). AND CONSTRUCTION NOT SPECIFIED IN THESE PLANS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. THE CONTRACTOR IS OBLIGATED TO BE FAMILIAR WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS NOT DISCUSSED IN THE GENERAL NOTES. THE CONTRACT SPECIAL TECHNICAL PROVISIONS SHALL SUPERSEDE THOSE OF THE STANDARD SPECIFICATIONS WHERE DISCREPANCIES OCCUR.

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

3. 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.

4. 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.

5. 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.

6. NTCD WILL PROVIDE ONE SET OF CONSTRUCTION STAKES AT NTCD'S EXPENSE. ADDITIONAL CONSTRUCTION STAKES WILL BE 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.

7. 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.

8. ASPHALT REPLACEMENT SHALL INCORPORATE A 4% ±1% CROSS SLOPE BETWEEN THE SAWCUT AND THE NEW ROADSIDE TREATMENT. NEW ROADSIDE FLOW CONVEYANCES SHALL INCORPORATE SUCH GRADE AS NECESSARY TO GUARANTEE WATER CONTINUES TO FLOW IN THE PRESENT DIRECTION, WITHOUT PONDING OR BREAKOUTS.

9. 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.

10. NTCD WILL PROVIDE INITIAL TESTING AND INSPECTION OF WORK AND MATERIAL AT NTCD'S EXPENSE. 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.

11. STANDARD WORK DAYS SHALL BE MONDAY THROUGH FRIDAY. SATURDAY AND SUNDAY MAY BE WORKED ON OCCASION ONLY TO MAKE UP FOR WEATHER DELAYS OR OTHER SCHEDULE DELAYS WITH TRPA APPROVAL. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.

12. 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. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.

13. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK TO WATER AREAS AS NECESSARY TO CONTROL DUST. THE CONTRACTOR WILL PROVIDE SWEEPING PER SPECIFICATION.

14. ALL TREES AND NATURAL VEGETATION TO REMAIN ON THE SITE SHALL BE PROTECTED PER TRPA.

15. 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.

16. 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.

17. 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.

18. 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.

19. NO WASHING OF VEHICLES OR HEAVY EQUIPMENT, INCLUDING CEMENT MIXERS, SHALL BE PERMITTED ANYWHERE ON THE SUBJECT PROPERTY UNLESS AUTHORIZED BY TRPA IN WRITING.

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

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

22. 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 NDOT RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS SITE DEVELOPMENT OR CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SYSTEM.

23. 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.

24. 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

26. TRAFFIC CONTROL AND LANE CLOSURES WILL BE PER NDOT STANDARD SPECIFICATIONS.

27. ACCESS TO BUSINESSES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF CONSTRUCTION

ABBREVIATIONS

NOT ALL ABBREVIATIONS LISTED ARE USED IN THESE PLANS

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

UTILITIES

CABLE TELEVISION	CHARTER COMMUNICATIONS, (775) 588-1077
NATURAL GAS	SOUTHWEST GAS, (877) 860-6022
ELECTRIC	NV ENERGY, (775) 834-4444
STORM DRAIN	DOUGLAS COUNTY PUBLIC WORKS (775) 782-9989
SEWER	DOUGLAS COUNTY SEWER IMPROVEMENT DISTRICT (775) 588-3558
WATER	KINSGBURY GID, (775) 588-3548
PHONE	FRONTIER (775) 782-0966
USA DIGS	(800) 642-2444 OR 811

LEGEND

NOTE: LEGENDS PROVIDED ON INDIVIDUAL PLAN SHEETS OVERRIDE THIS LEGEND

EXISTING	PROPOSED
MAJOR CONTOUR	MAJOR CONTOUR
MINOR CONTOUR	MINOR CONTOUR
6695 EXISTING MAJOR CONTOUR LABEL	6694 PROPOSED MAJOR CONTOUR LABEL
5+00 EXISTING ALIGNMENT	5+00 PROPOSED ALIGNMENT(ROAD CENTERLINE)
EXISTING GRADE (SECTION VIEW)	GRADING DAYLIGHT LINE/GRADING LIMIT
PROPERTY LINE	GRADING LINE/FEATURE LINE
EXISTING FENCE	PROPOSED GRADE (SECTION VIEW)
OR PAVEMENT	CLF CONSTRUCTION LIMIT FENCE
SD STORM DRAIN LINE	FF FILTER FENCE
CATCH BASIN	SEDIMENT ROLL
SD STORM DRAIN MANHOLE	EROSION CONTROL BLANKET
W WATER LINE	STAGING AREA
WM WATER METER/ VALVE	PROPOSED PIPE
SS SANITARY SEWER LINE	PROPOSED CONCRETE
SS SANITARY SEWER MANHOLE	PROPOSED VEGETATION/WILLOW
OH E OVERHEAD ELECTRIC LINE	ROCK LINED CHANNEL (PLAN VIEW)
POWER POLE	SEDIMENT REMOVAL
UG T UNDER GROUND TELEPHONE LINES	ROCK (SECTION VIEW)
OH T OVERHEAD TELEPHONE LINES	ROCK DISSIPATER
UG FO UNDERGROUND FIBER OPTIC LINES	PROJECT BOUNDARY
GAS UNDERGROUND GAS LINES	PROPOSED FENCE (TYPE SPECIFIED ON PLAN)
DRAINAGE	
TREE	
FIRE HYDRANT	
CURB	
OR CONCRETE	
CONTROL POINT	
BUILDING	
PRIVATE DRIVEWAY	
SIGN	
ROCK LINED CHANNEL	
EXISTING ROCK WALL	
125-382-13 ASSESSOR PARCEL NUMBER	
958 TYNER ST. PHYSICAL ADDRESS (PRIVATE LOT)	

3 / D-5 — SECTION OR DETAIL IDENTIFICATION; NUMBER OF SHEET ON WHICH SECTION OR DETAIL IS DRAWN

3 / — — SECTION OR DETAIL IDENTIFICATION; SYMBOL FOR DETAIL ON THE SAME SHEET

HORIZONTAL AND VERTICAL PROJECTION

VERTICAL CONTROL IS DATUM NGVD 29 US FEET;
HORIZONTAL CONTROL IS NDOT CONTROL LINE LPN 907 HORIZONTAL DATUM NAD 83/94 (aka NAD 83HARN) STATE PLANE COORDINATE SYSTEM NEVADA ZONE WEST (U.S. FEET) AND MODIFIED TO GROUND COMBINED SCALE FACTOR OF 0.9997370692

Nevada Tahoe Conservation District

PROFESSIONAL ENGINEER — STATE OF NEVADA — MEGHAN C. KELLY — Exp: 6/30/2017 — CIVIL — No. 20557

GENERAL NOTES
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	*ii*
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Nevada Tahoe Conservation District

PROFESSIONAL ENGINEER STATE OF NEVADA
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20851

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BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

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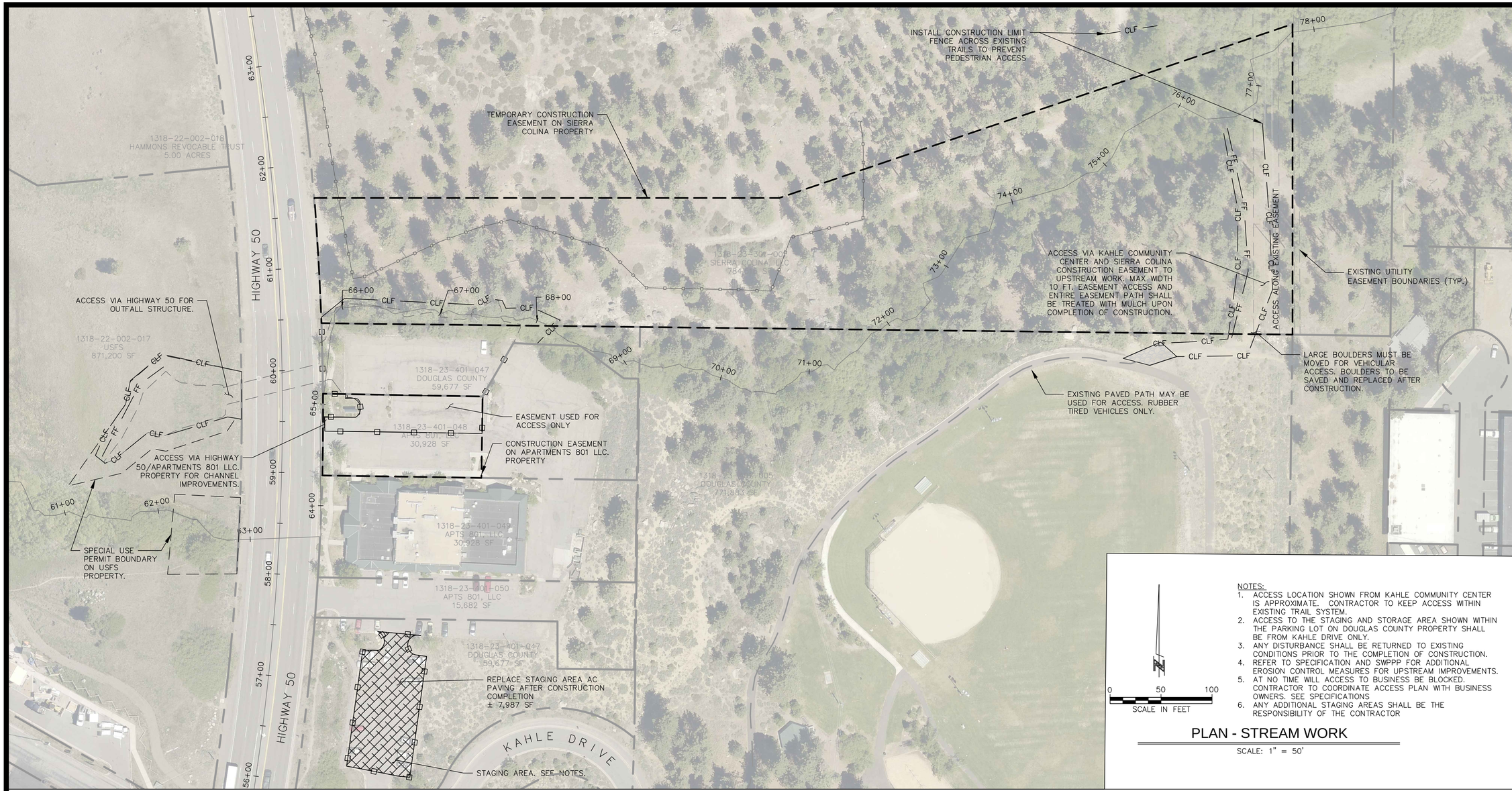

NOTES:
1. ACCESS LOCATION SHOWN FROM KAHLE COMMUNITY CENTER IS APPROXIMATE. CONTRACTOR TO KEEP ACCESS WITHIN EXISTING TRAIL SYSTEM.
2. ACCESS TO THE STAGING AND STORAGE AREA SHOWN WITHIN THE PARKING LOT ON DOUGLAS COUNTY PROPERTY SHALL BE FROM KAHLE DRIVE ONLY.
3. ANY DISTURBANCE SHALL BE RETURNED TO EXISTING CONDITIONS PRIOR TO THE COMPLETION OF CONSTRUCTION.
4. REFER TO SPECIFICATION AND SWPPP FOR ADDITIONAL EROSION CONTROL MEASURES FOR UPSTREAM IMPROVEMENTS.
5. AT NO TIME WILL ACCESS TO BUSINESS BE BLOCKED. CONTRACTOR TO COORDINATE ACCESS PLAN WITH BUSINESS OWNERS. SEE SPECIFICATIONS
6. ANY ADDITIONAL STAGING AREAS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR

0 50 100
SCALE IN FEET

PLAN - STREAM WORK

SCALE: 1" = 50'

NOTES:
1. NO STAGING OR STORAGE WILL BE ALLOWED IN NORTHERN DRAINAGE WORK AREA.
2. LANE CLOSURES TO PERFORM WORK SHALL BE PER TRAFFIC CONTROL PLAN AND COORDINATED WITH NDOT.

PLAN - NORTHERN DRAINAGE WORK

SCALE: 1" = 50'

Nevada Tahoe Conservation District

PROFESSIONAL ENGINEER — MEGHAN C. KELLY — Exp: 6/30/2017 — CIVIL — No. 20557 — STATE OF NEVADA

STAGING, STORAGE, AND ACCESS PLAN
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
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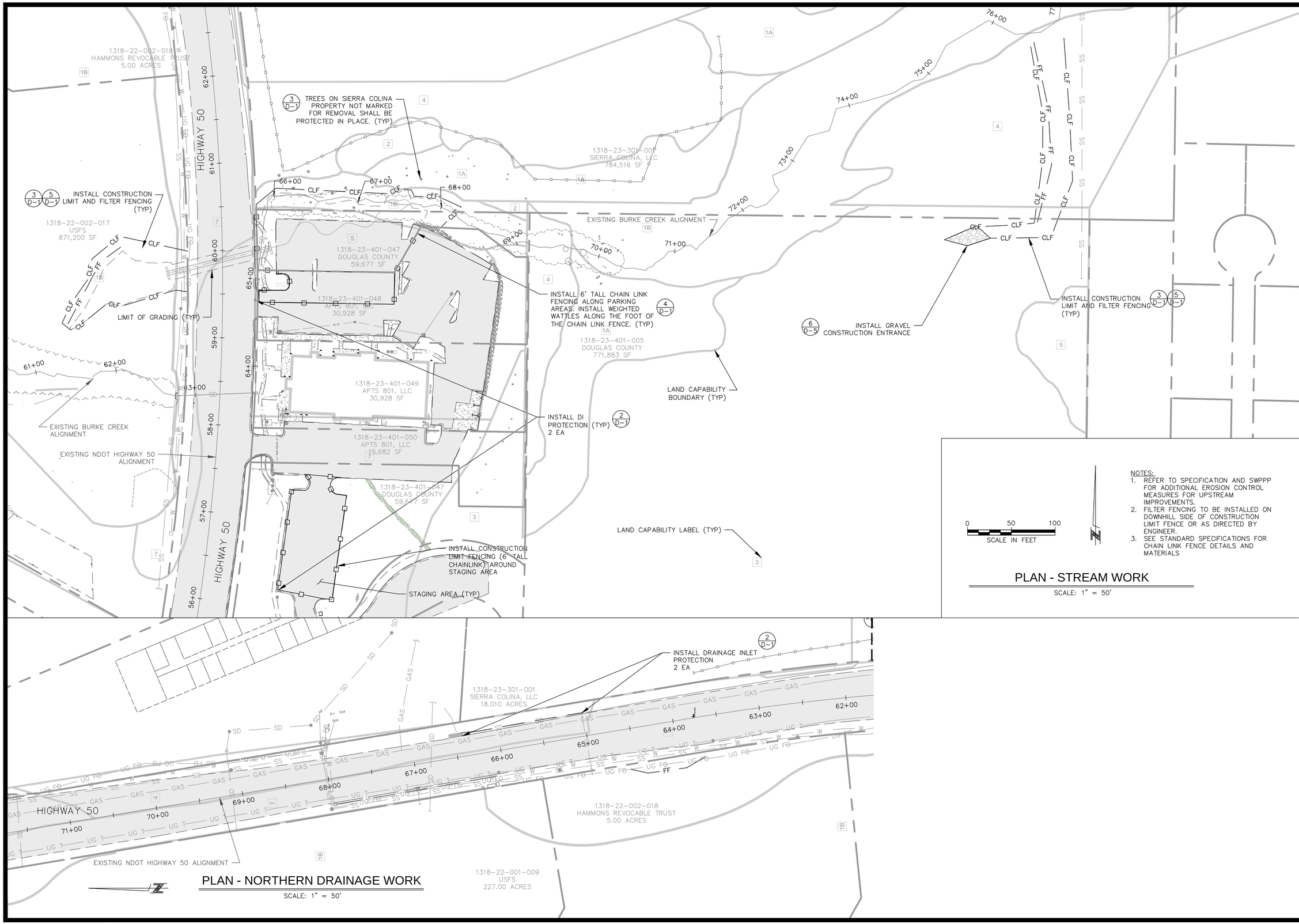

Nevada Tahoe Conservation District

REGISTERED PROFESSIONAL ENGINEER
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20557
STATE OF NEVADA

TEMPORARY EROSION CONTROL PLAN
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	G-2

0 20 40
SCALE IN FEET

NOTES:
1. REMOVED TREES AND VEGETATION TO BE SALVAGED FOR STREAM WORK AND BID ALTERNATE ITEM, IF AWARDED.
2. CAP ALL CONDUIT AND REMOVE CONDUCTORS AS PART OF LAMP POST REMOVAL. REMOVE AND DISPOSE OF ELECTRICAL CONDUIT AS NECESSARY TO ALLOW FOR PROJECT GRADING.
3. FOR LANDSCAPE REMOVAL CAP IRRIGATION LINES AT PROPERTY LINE AND REMOVE ABANDONED LINES.

PROPOSED TREE REMOVAL

6"–14" DBH	7
15"–22" DBH	6
23" –29" DBH	1
30" OR GREATER	0

HIGHWAY 50

EXISTING BURKE CREEK ALIGNMENT

PROPOSED BURKE CREEK ALIGNMENT (TYP). SEE CIVIL SHEETS.

REMOVE SECTION OF EXISTING 24" CMP STORM DRAIN PIPE ±51 LF

REMOVE AND DISPOSE OF LAMP POST. SEE NOTES.

REMOVE CURB, SIDEWALK, AND LANDSCAPING
±18 LF CURB REMOVAL
±162 SF SIDEWALK REMOVAL
±996 SF LANDSCAPE REMOVAL
SEE SHEET C–2 & R–1 FOR DETAIL

REMOVE A/C PAVEMENT ±1,111 SF
REPLACE PER SPECIAL PROVISONS

PROPOSED CULVERT CROSSING. SEE CIVIL SHEETS.

FILL EXISTING 24" CMP STORM DRAIN PIPE WITH SLURRY TO EXISTING DI. SEE SPECIAL PROVISIONS ±44 LF

SAWCUT CURB AT PROPERTY LINE

SAWCUT AND REMOVE A.C. PAVEMENT ±8,550 SF

SAWCUT REMAINING ISLAND AT PROPERTY LINE

REMOVE EXISTING ISLANDS, CURB, AND LANDSCAPING ±260 SF

REMOVE AND DISPOSE OF LAMP POST. SEE NOTES

EXISTING ROCK (TYP)

SAWCUT CURB AT PROPERTY LINE

SAWCUT REMAINING ISLAND AT PROPERTY LINE

EXISTING BURKE CREEK ALIGNMENT

EXISTING NDOT HIGHWAY 50 ALIGNMENT

6" WATER MAIN

WATER

61+00 62+00 63+00 64+00 65+00 66+00 67+00 68+00 69+00 60+00 59+00 58+00

Nevada Tahoe Conservation District

PROFESSIONAL ENGINEER STATE OF NEVADA
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20857

DEMOLITION
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/MK
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DATE	05/13/2016
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PROJECT	BCC

SHEET
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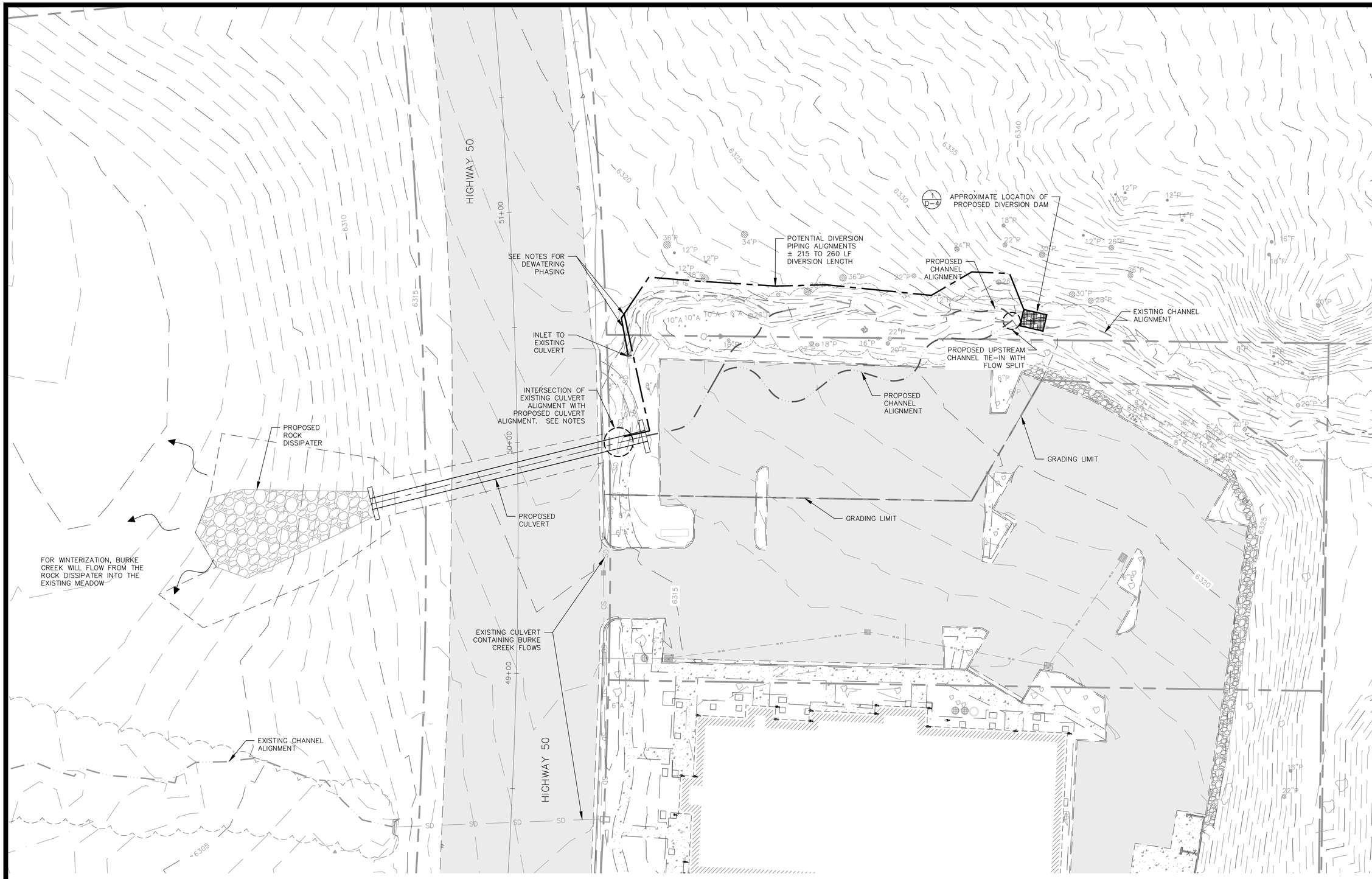


NOTES:
1. DEWATERING AND DIVERSION MAY ALSO OCCUR AT UPSTREAM IMPROVEMENTS NOT SHOWN ON THIS SHEET. SEE PRELIMINARY DEWATERING AND DIVERSION PLAN, SPECIAL PROVISIONS, AND SWPPP FOR ALL DEWATERING AND DIVERSION REQUIREMENTS
2. CONTRACTOR TO SUBMIT PLAN AND PHASING FOR DIVERSION BEFORE, DURING, AND AFTER PROPOSED CULVERT CONSTRUCTION BEFORE ANY DEWATERING OR DIVERSION OCCURS.
3. DEWATERING AND DIVERSION PLAN SHALL PROTECT EXISTING VEGETATION ON SIERRA COLINA PROPERTY

0 20 40
SCALE IN FEET

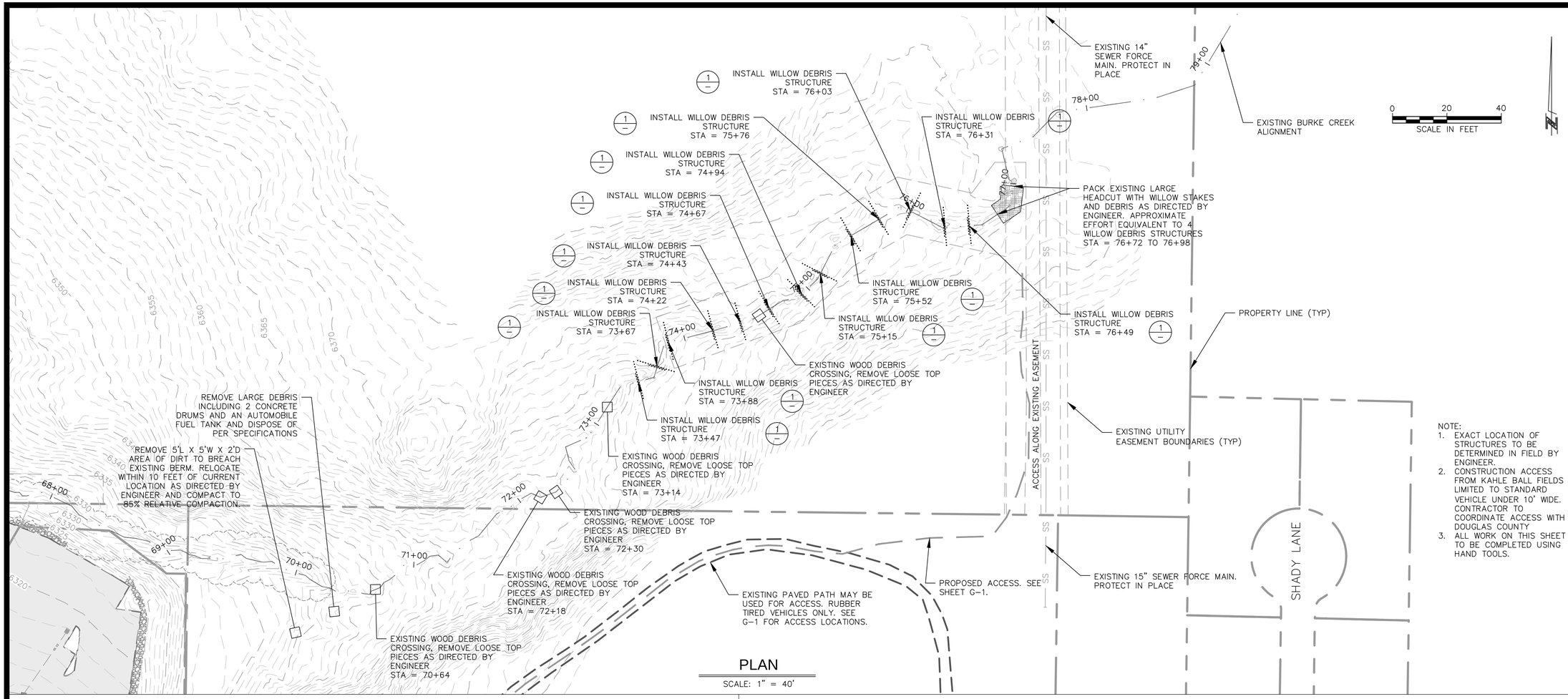
N

Nevada Tahoe Conservation District

PROFESSIONAL ENGINEER
STATE OF NEVADA
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20557

DEWATERING & DIVERSION PLAN
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

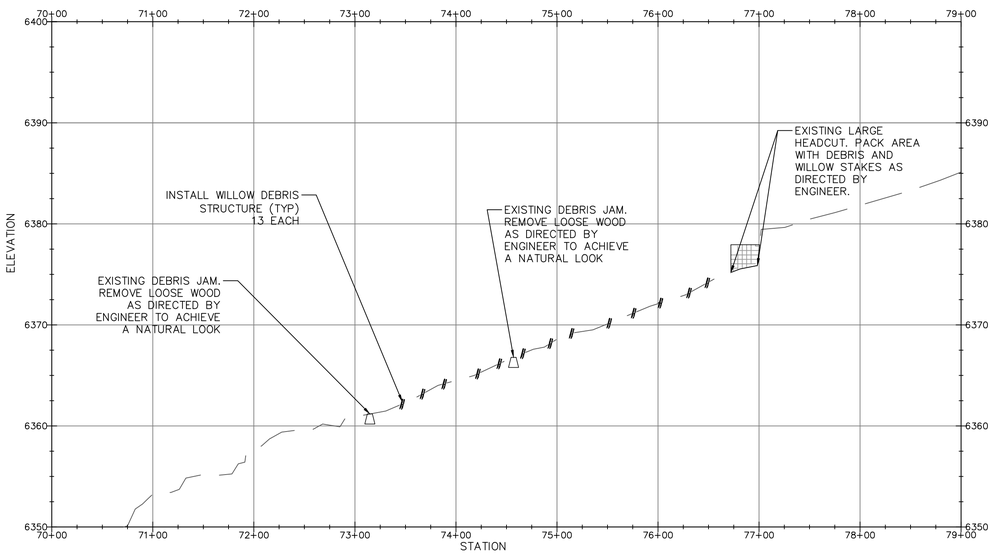
DESIGNED/DRAWN	DS/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	1" = 20'
PROJECT	BCC
SHEET	G-4



NOTE:
1. EXACT LOCATION OF STRUCTURES TO BE DETERMINED IN FIELD BY ENGINEER.
2. CONSTRUCTION ACCESS FROM KAHLE BALL FIELDS LIMITED TO STANDARD VEHICLE UNDER 10' WIDE. CONTRACTOR TO COORDINATE ACCESS WITH DOUGLAS COUNTY
3. ALL WORK ON THIS SHEET TO BE COMPLETED USING HAND TOOLS.

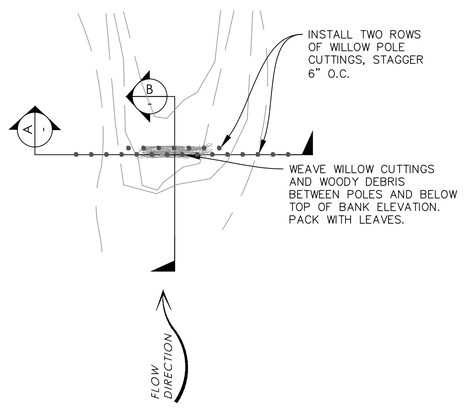
PLAN

SCALE: 1" = 40'

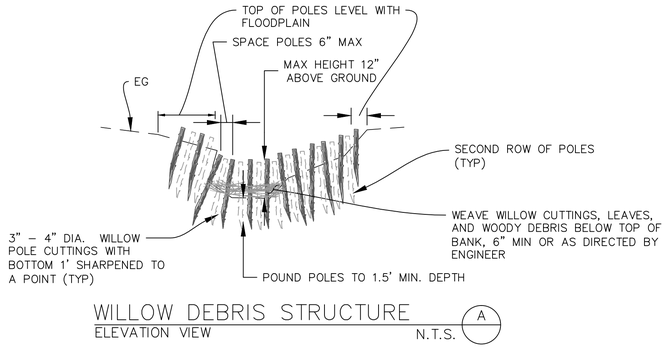


PROFILE - BURKE CREEK

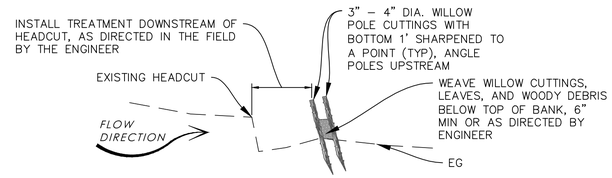
SCALE: HORIZ: 1" = 75', H:V = 1:10



WILLOW DEBRIS STRUCTURE
PLAN VIEW N.T.S. (1)



WILLOW DEBRIS STRUCTURE
ELEVATION VIEW N.T.S. (A)



WILLOW DEBRIS STRUCTURE
PROFILE VIEW N.T.S. (B)

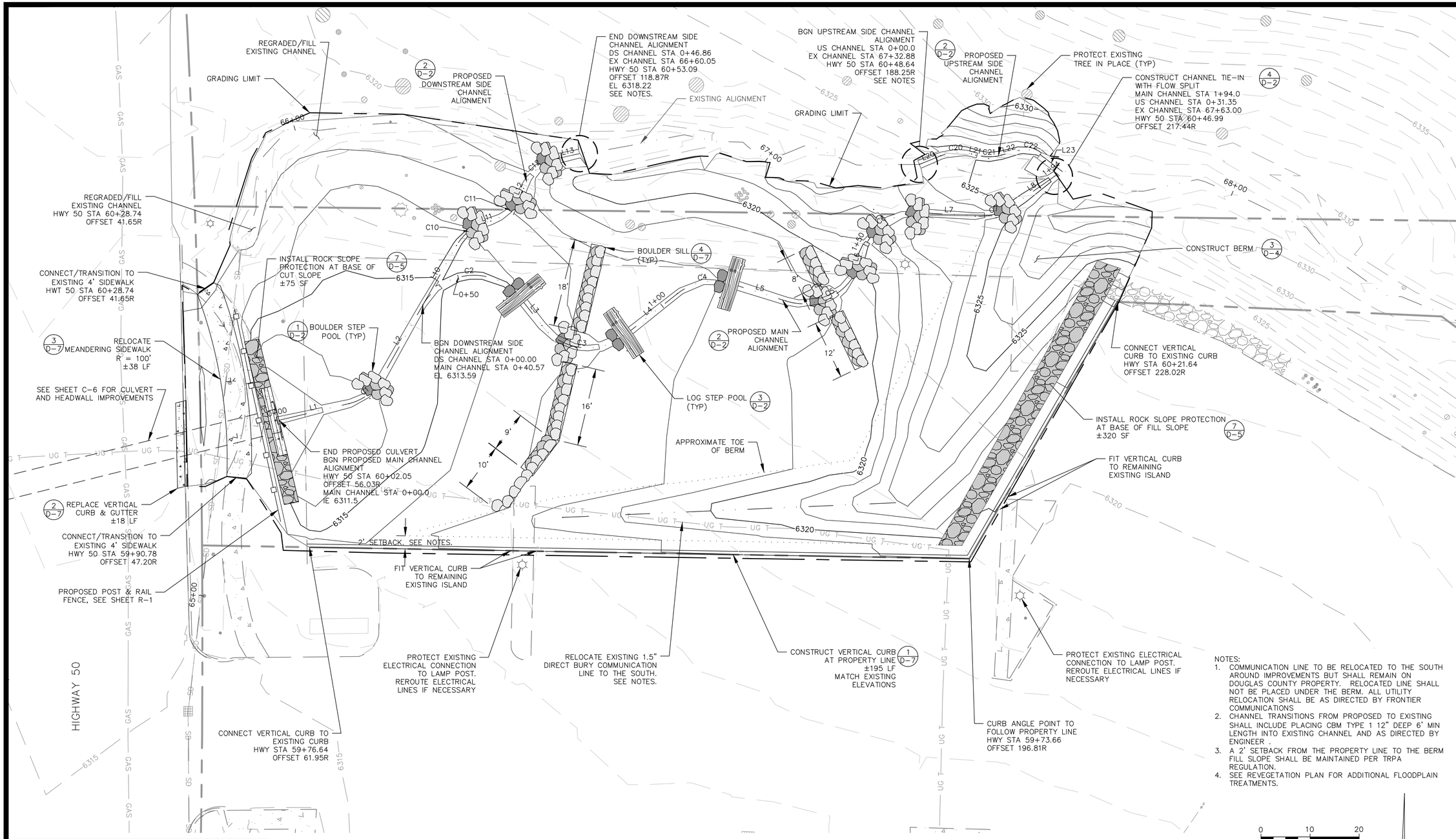
Nevada Tahoe Conservation District

MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20551
STATE OF NEVADA
PROFESSIONAL ENGINEER

UPSTREAM IMPROVEMENTS BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT PHASE 1

DESIGNED/DRAWN	MCK
CHECKED	MBG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET
C-1
8 OF 25



NOTES:
1. COMMUNICATION LINE TO BE RELOCATED TO THE SOUTH AROUND IMPROVEMENTS BUT SHALL REMAIN ON DOUGLAS COUNTY PROPERTY. RELOCATED LINE SHALL NOT BE PLACED UNDER THE BERM. ALL UTILITY RELOCATION SHALL BE AS DIRECTED BY FRONTIER COMMUNICATIONS
2. CHANNEL TRANSITIONS FROM PROPOSED TO EXISTING SHALL INCLUDE PLACING CBM TYPE 1 12" DEEP 6' MIN LENGTH INTO EXISTING CHANNEL AND AS DIRECTED BY ENGINEER .
3. A 2' SETBACK FROM THE PROPERTY LINE TO THE BERM FILL SLOPE SHALL BE MAINTAINED PER TRPA REGULATION.
4. SEE REVEGETATION PLAN FOR ADDITIONAL FLOODPLAIN TREATMENTS.

0 10 20
SCALE IN FEET

N

MAIN CHANNEL ALIGNMENT				
Number	Align Start Sta	Radius	Length	Line/Chord Direction
L1	0+00.00		14.75	N76° 35' 11.34"E
C1	0+14.75	10.00	8.22	N53° 02' 07.48"E
L2	0+22.97		17.60	N29° 29' 03.61"E
C2	0+40.57	12.00	23.53	N85° 39' 33.41"E
L3	0+64.10		7.25	S38° 09' 56.80"E
C3	0+71.35	12.00	18.86	S83° 11' 55.35"E
L4	0+90.22		13.80	N51° 46' 06.09"E
C4	1+04.01	12.00	11.69	N79° 40' 22.28"E

MAIN CHANNEL ALIGNMENT				
Number	Align Start Sta	Radius	Length	Line/Chord Direction
L5	1+15.70		11.67	S72° 25' 21.52"E
C5	1+27.38	12.00	19.46	N61° 06' 38.14"E
L6	1+46.84		0.72	N14° 38' 37.80"E
C6	1+47.56	12.00	16.57	N54° 11' 42.75"E
L7	1+64.13		10.91	S86° 15' 12.30"E
C7	1+75.04	12.00	8.14	N74° 18' 36.22"E
L8	1+83.19		10.82	N54° 52' 24.74"E

DOWNSTREAM SIDE CHANNEL ALIGNMENT				
Number	Align Start Sta	Radius	Length	Line/Chord Direction
L10	0+00.00		13.95	N29° 32' 48.14"E
C10	0+13.95	10.00	7.60	N51° 18' 26.27"E
L11	0+21.54		1.29	N73° 04' 04.39"E
C11	0+22.83	10.00	9.06	N47° 06' 37.89"E
L12	0+31.89		0.79	N21° 09' 11.38"E
C12	0+32.68	10.00	9.81	N49° 14' 43.83"E
L13	0+42.49		4.38	N77° 20' 16.29"E

UPSTREAM SIDE CHANNEL ALIGNMENT				
Number	Align Start Sta	Radius	Length	Line/Chord Direction
L20	0+00.00		4.69	N68° 11' 40.69"E
C20	0+04.69	10.00	6.41	N86° 34' 04.65"E
L21	0+11.11		0.95	S75° 03' 31.39"E
C21	0+12.06	10.00	5.25	N89° 54' 47.21"E
L22	0+17.31		3.73	N74° 53' 05.82"E
C22	0+21.04	5.00	4.57	S78° 54' 13.31"E
L23	0+25.61		5.74	S52° 41' 32.45"E

EARTHWORK TABLE	
CUT	707 CY
FILL	292 CY
NET	415 CY CUT

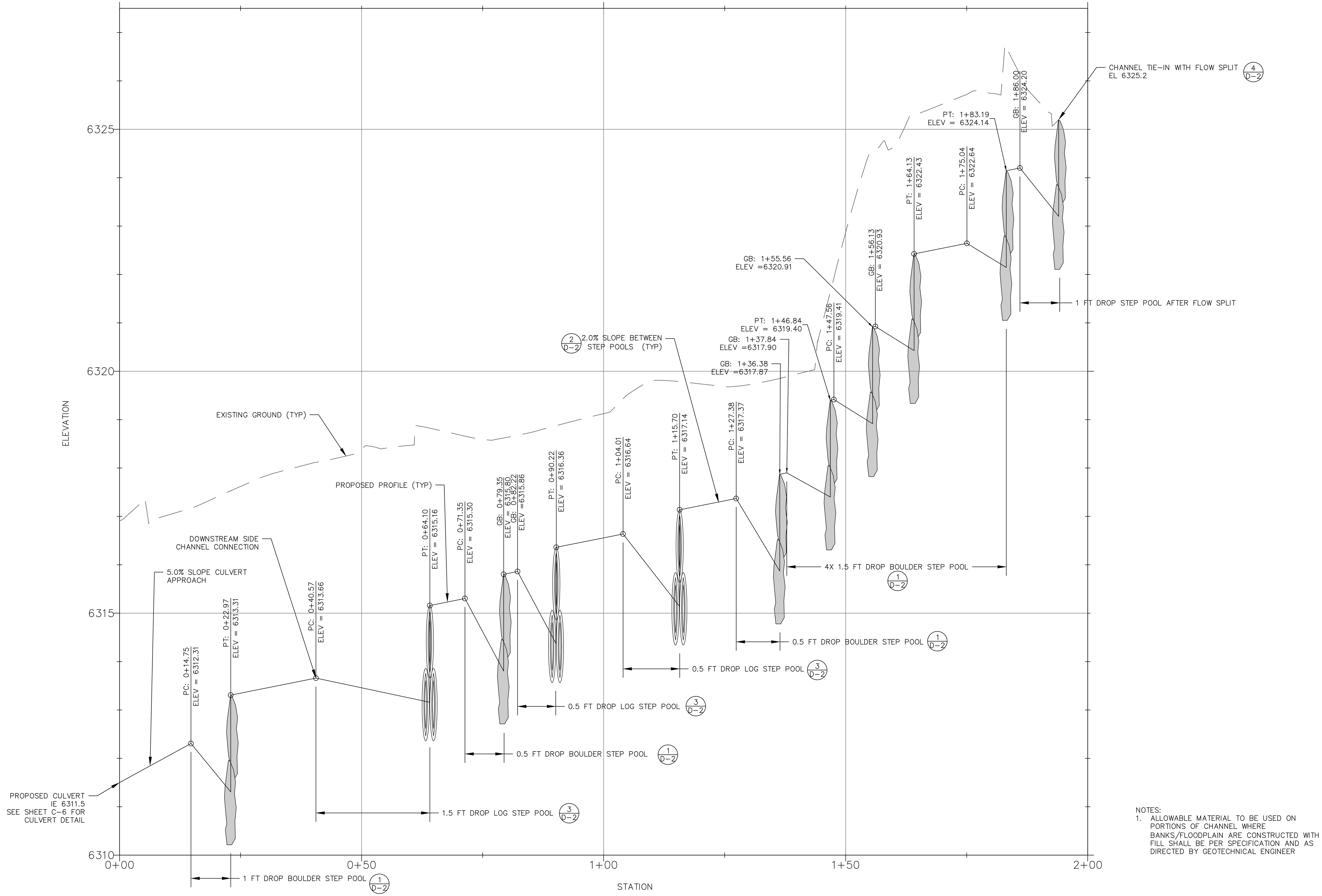
Nevada Tahoe Conservation District

REGISTERED PROFESSIONAL ENGINEER
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20557
STATE OF NEVADA

PROPOSED CREEK REALIGNMENT PLAN
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN
DS/MBG
CHECKED
MCK
DATE
05/13/2016
SCALE
AS SHOWN
PROJECT
BCC

SHEET
C-2
9 OF 25



NOTES:
1. ALLOWABLE MATERIAL TO BE USED ON PORTIONS OF CHANNEL WHERE BANKS/FLOODPLAIN ARE CONSTRUCTED WITH FILL SHALL BE PER SPECIFICATION AND AS DIRECTED BY GEOTECHNICAL ENGINEER

PROPOSED BURKE CREEK PROFILE
MAIN CHANNEL

SCALE: HORIZ:1" = 10'; H:V = 1:10

0 10 20
SCALE IN FEET
1H:10V

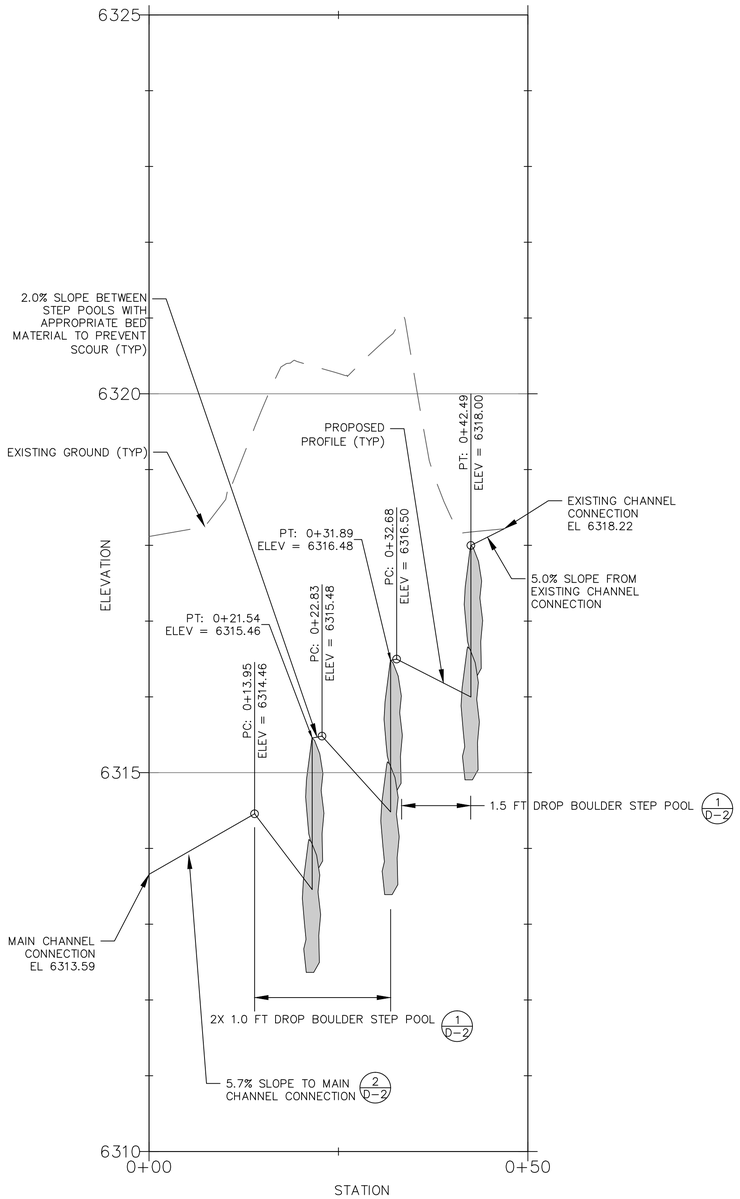
Nevada Tahoe Conservation District

PROFESSIONAL ENGINEER STATE OF NEVADA
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20851

MAIN CHANNEL CREEK PROFILE
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

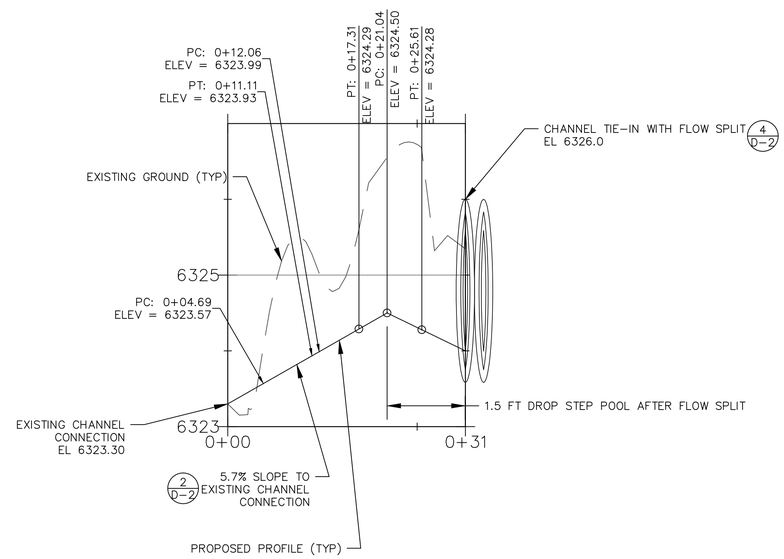
DESIGNED/DRAWN	DS/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET
C-3



PROPOSED BURKE CREEK PROFILE
DOWNSTREAM SIDE CHANNEL

SCALE: HORIZ:1" = 10'; H:V = 1:10



PROPOSED BURKE CREEK PROFILE
UPSTREAM SIDE CHANNEL

SCALE: HORIZ:1" = 10'; H:V = 1:10

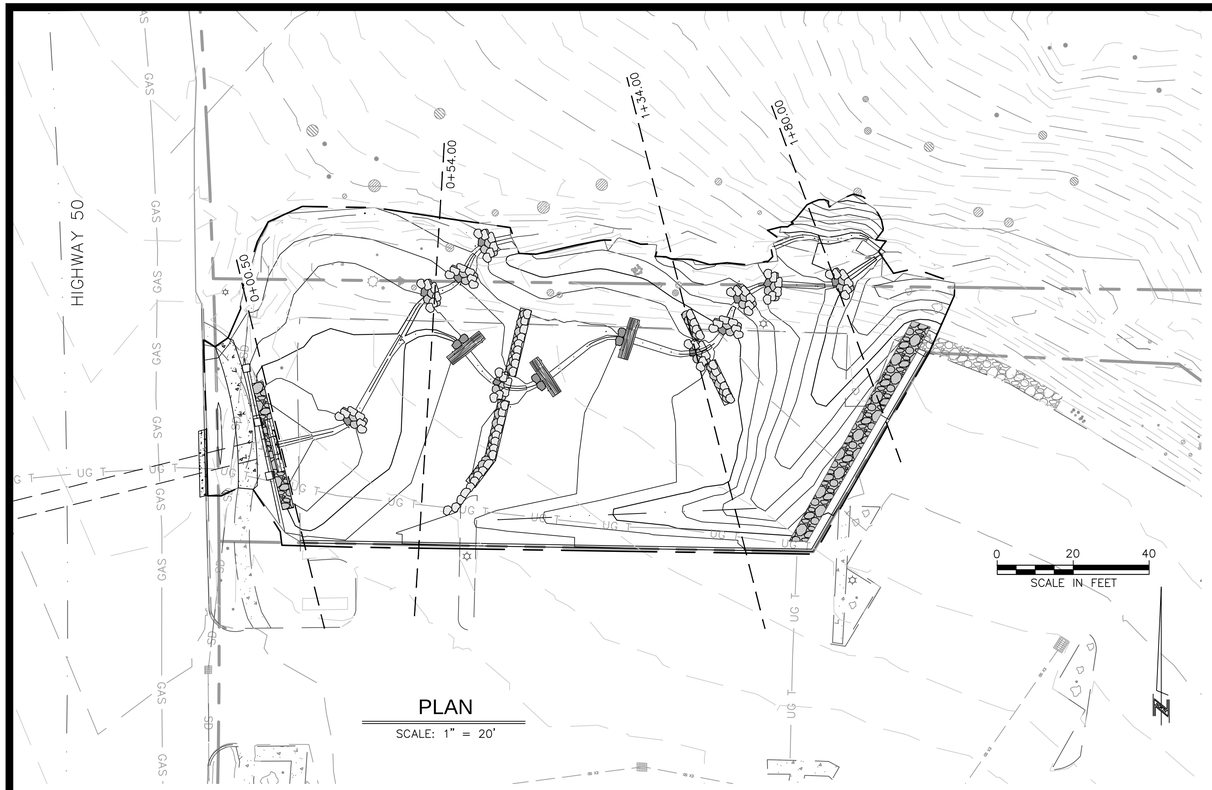
0 10 20
SCALE IN FEET
1H:10V

Nevada Tahoe Conservation District

SIDE CHANNEL CREEK PROFILE
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	DS/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

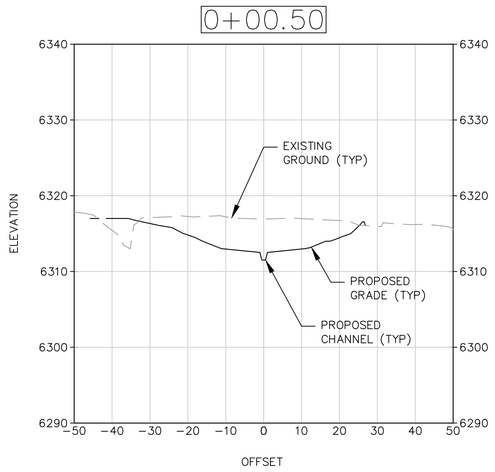
SHEET
C-4
11 OF 25



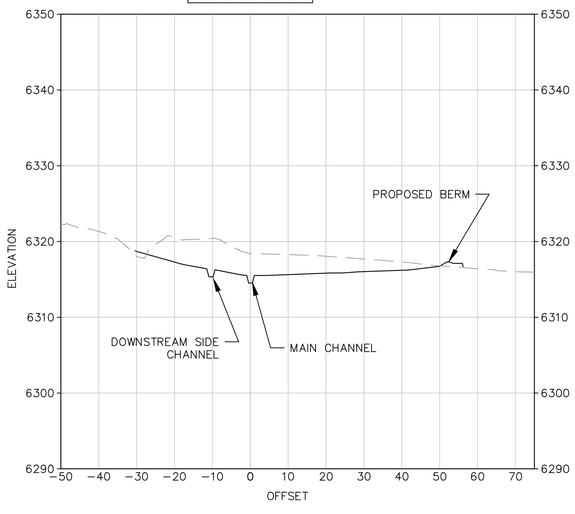
PLAN

SCALE: 1" = 20'

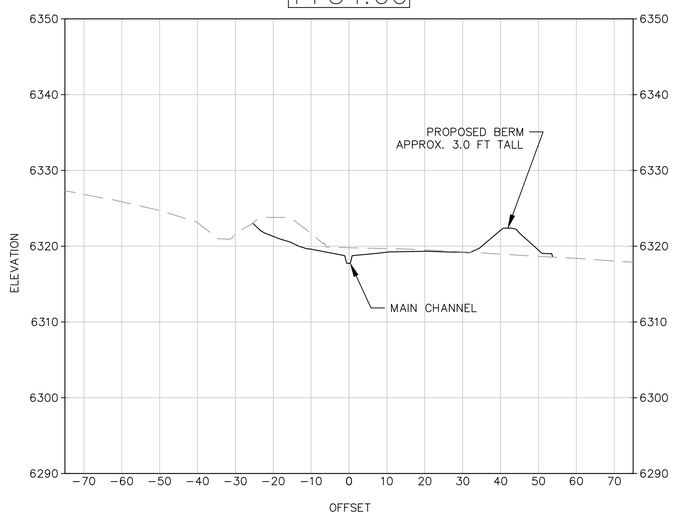
0+00.50



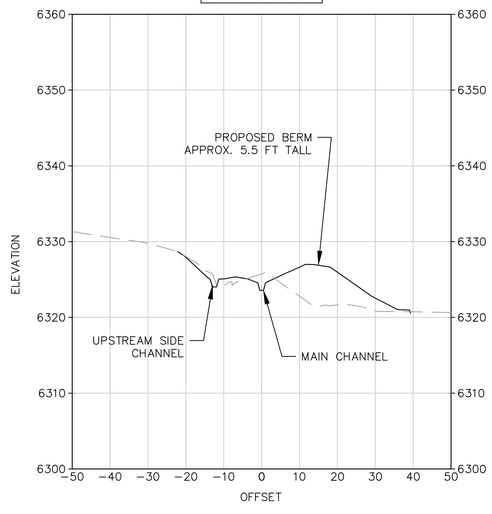
0+54.00



1+34.00



1+80.00



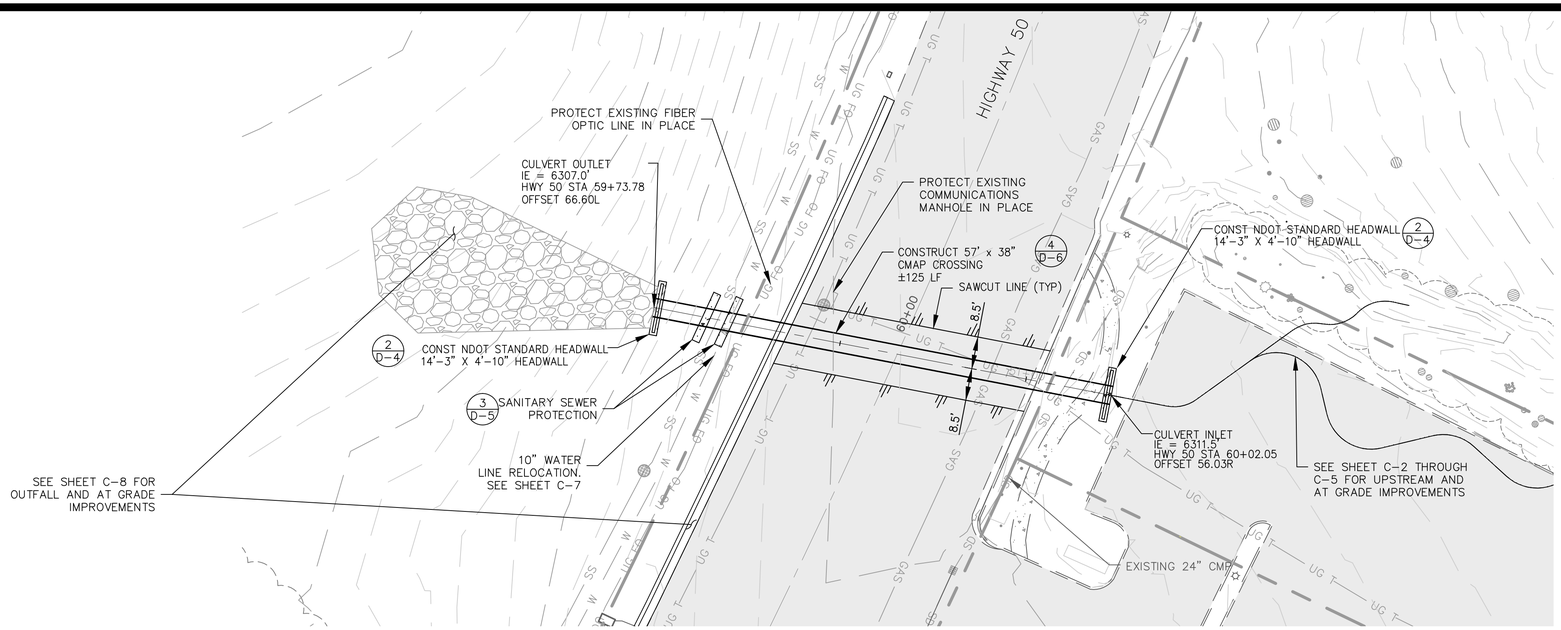
FLOODPLAIN CROSS SECTIONS
UPSTREAM OF HIGHWAY 50

SCALE: HORIZ:1" = 20'; H:V = 1:2

Nevada Tahoe Conservation District

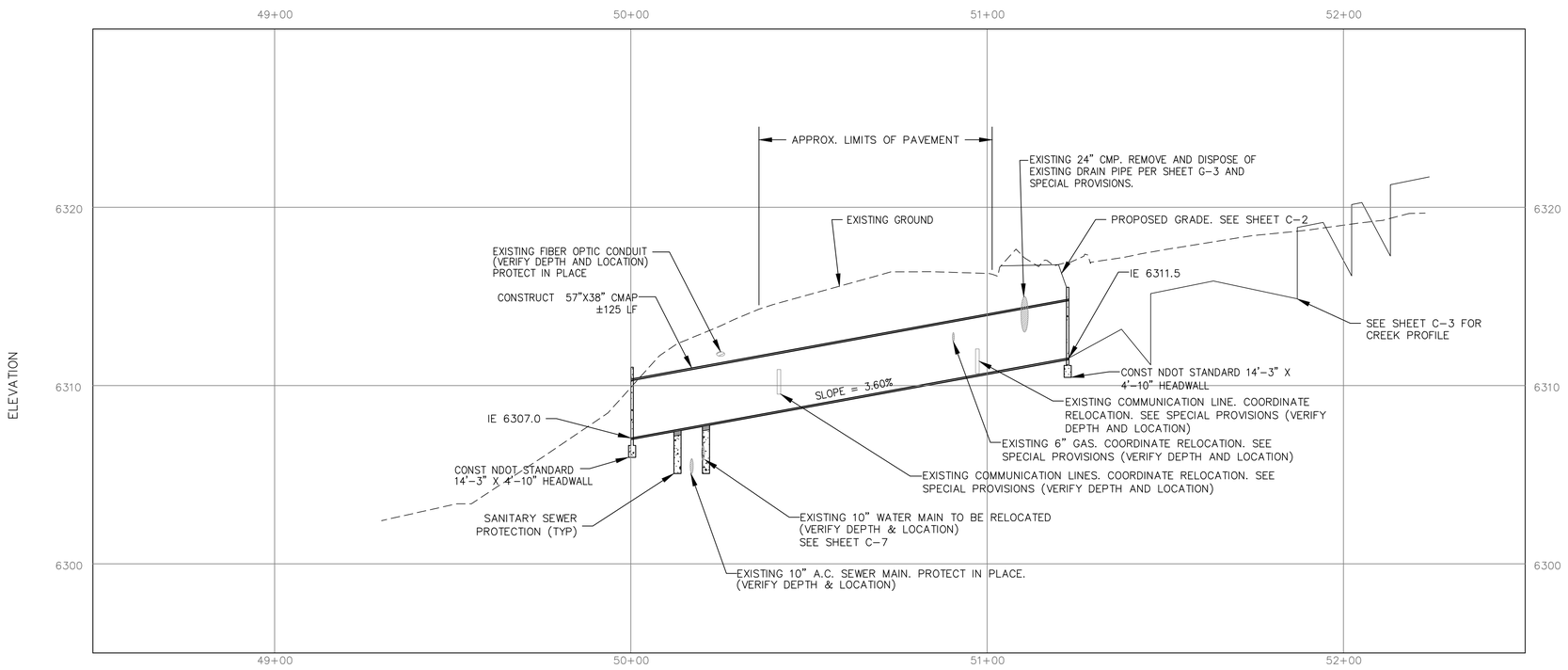
PROPOSED FLOODPLAIN CROSS SECTIONS
BURKE CREEK HWY 50 CROSSING AND
REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MBG/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	C-5



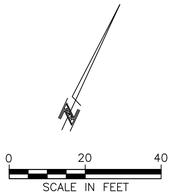
PLAN

SCALE: 1" = 20'



PROFILE

SCALE: HORIZ: 1" = 20', H:V = 1:5

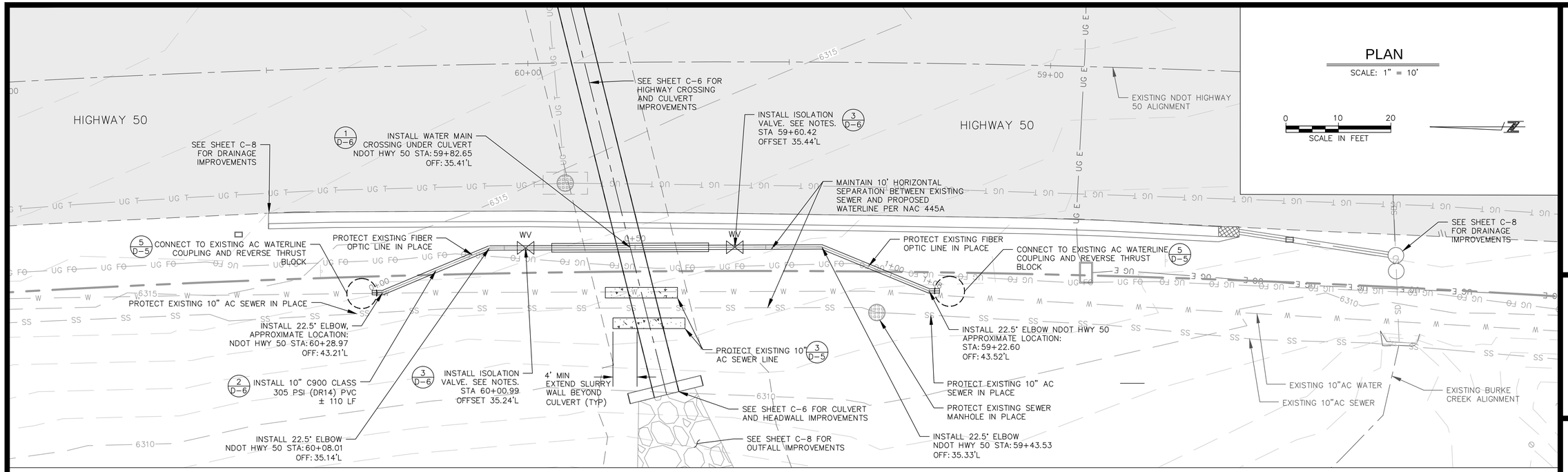


NOTES:
1. SEE C-2, C-7, DEMOLITION, AND LANDSCAPING SHEETS FOR ADDITIONAL IMPROVEMENTS ABOVE CMAP AT STREET LEVEL.
2. ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.

Nevada Tahoe Conservation District

CULVERT CROSSING PLAN AND PROFILE
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	AL
CHECKED	MG/MK
DATE	05/13/2016
SCALE	1"=20' H, H:V=1:5
PROJECT	BCC
SHEET	C-6
	13 OF 25



PLAN

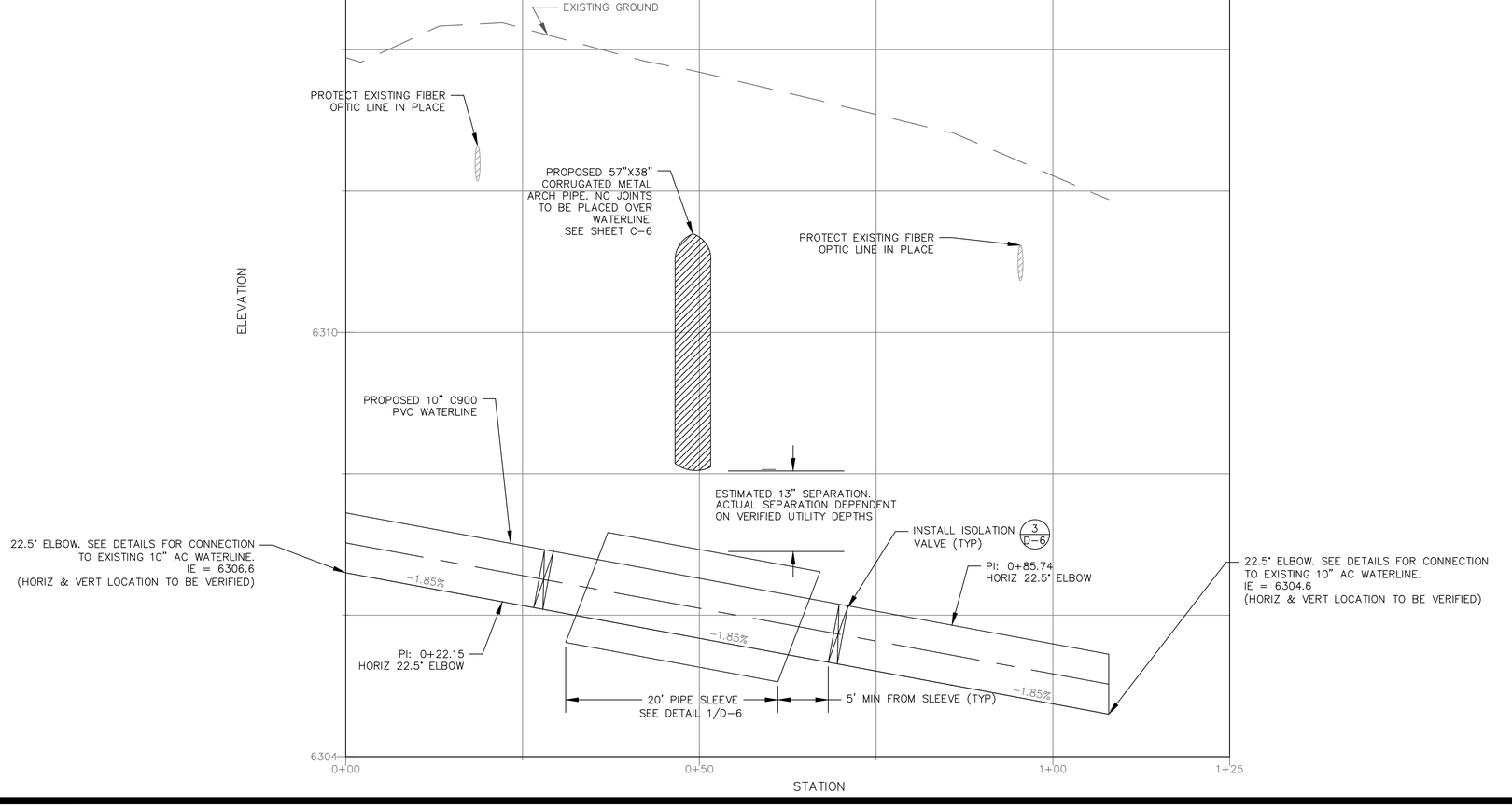
SCALE: 1" = 10'

0 10 20

SCALE IN FEET

PROPOSED 10" WATER MAIN RELOCATION PROFILE

SCALE: HORIZ 1" = 10'; H:V = 1:10



0 10 20

SCALE IN FEET
1H: 10V

NOTES:
1. ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS OR DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE. EXACT LOCATION OF WATERLINE, INCLUDING CONNECTIONS, FITTINGS, AND VALVES, IS DEPENDENT ON EXISTING UTILITY LOCATION VERIFICATION. FIELD FIT OF WATERLINE MAY BE NECESSARY. INSTALLATION SHALL BE WITHIN ALL NAC AND KGID STANDARDS.
3. IF FIELD CONDITIONS REVEAL A HIGH POINT WILL BE CREATED WITHIN THE RELOCATED WATERLINE, AN AIR VACUUM VALVE WILL NEED TO BE INSTALLED. THIS KIND OF DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
4. CONTRACTOR TO COORDINATE WITH KGID WATER UTILITY FOR IRRIGATION CONNECTION.
5. APPROVAL FOR WATERLINE RELOCATION AND SUBMITTALS MUST BE OBTAINED FROM KGID BEFORE INSTALLATION.
6. SEE SHEET C-9 FOR LOCATION OF ISOLATION VALVE INSTALLATION ON EXISTING 10" AC WATERLINE. INSTALLATION TO BE PREFORMED BEFORE WATERLINE RELOCATION WORK AND COORDINATED WITH KGID.
7. VALVES IN THE KGID WATER SYSTEM SHALL ONLY BE TURNED BY KGID OPERATORS. IN NO CASE SHALL THE CONTRACTOR TURN ANY VALVES WITHIN THE KGID SYSTEM.
8. SEE DETAILS FOR ADDITIONAL NOTES ON COMMUNICATIONS WITH DCSID.

Nevada Tahoe Conservation District

MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20557
STATE OF NEVADA
PROFESSIONAL ENGINEER

UTILITY RELOCATION
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MBG/MBG
CHECKED	MCK/ATS
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	C-7

NOTES:
1. ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. TRANSITION CHANNEL FROM 58" CULVERT TO 24" CHANNEL TOP WIDTH OVER 10 FEET.
3. LIMITS OF CBM TO BE STAKED IN FIELD BY ENGINEER
4. SALVAGE EXISTING VEGETATION TO BE USED IN STREAM WORK

0 10 20
SCALE IN FEET

EARTHWORK TABLE	
CUT	170 CY
FILL	0 CY
NET	170 CY CUT

SEE SHEET C-6 FOR HIGHWAY CROSSING IMPROVEMENTS

EXISTING NDOT HIGHWAY 50 ALIGNMENT

HIGHWAY 50

60+00

59+00

BGN CURB
TBC STATION 60+50.70
OFFSET 30.32'L

(2/D-7) CONSTRUCT ROLLED CURB AND GUTTER ±182 LF

(5/D-4) INSTALL COMBINATION DI AT NATURAL LOW POINT AS DIRECTED BY ENGINEER, STATION 58+66.79 OFFSET 29.79'L

BGN RCP
STATION 58+62.74
OFFSET 30.62'L

END RCP
STATION 58+33.71
OFFSET 33.69'L

EXISTING 24" CMP

(2/D-3) INSTALL DOUBLE SEDIMENT TRAP AND TIE-IN TO EXISTING 24" CMP

SEE SHEET C-6 FOR CULVERT AND HEADWALL DIMENSIONS

CULVERT OUTLET. SEE NOTE 2.
HWY 50 STA 59+73.78
OFFSET 66.60L
EL 6307.0

RELOCATE EXISTING ELECTRICAL VAULT

(4/D-6) INSTALL 15" RCP ±30 LF

PROP BURKE CREEK CENTERLINE 11.4% SLOPE

(7/D-5) INSTALL ROCK SLOPE PROTECTION (TYP) ±82 SF

WILLOW STAKES (TYP) INSTALL ON GRID PATTERN, 5' O.C. MAX

4' EMBEDDED BOULDER(TYP). SEE SECTION F-F

TOE OF CHANNEL BANK (TYP)

GRADE BREAK
HWY 50 STA 59+63.73
OFFSET 106.25L
EL 6302.0

CHANNEL BED MATERIAL. SEE SECTION F-F THIS SHEET. LIMITS OF CBM TO BE STAKED IN THE FEILD BY ENGINEER ±2,070 SF

EMBED LOG END INTO EG

WING LOG

PLACE 4' BALLAST BOULDERS ON TOP OF LOGS AS SHOWN

6298.6

6301.5

EMBED LOG END INTO EG

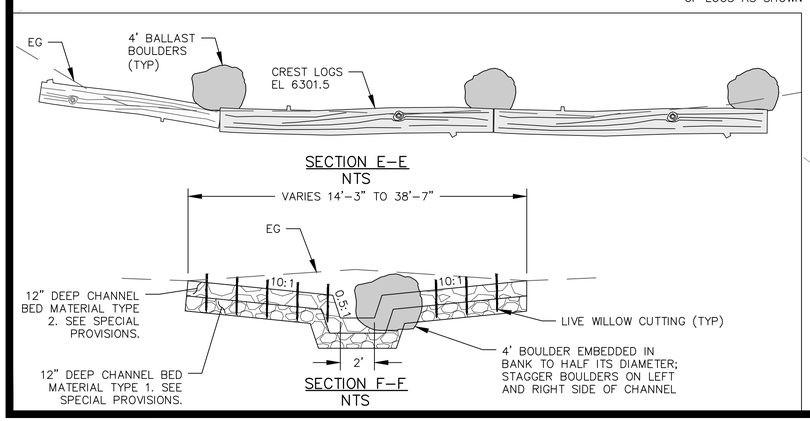
CREST LOG
TOP OF ALL CREST LOGS: EL 6301.5

MINIMIZE MEADOW DISTURBANCE TO EXTENT PRACTICABLE.

EXISTING BURKE CREEK ALIGNMENT

EDGE OF DENSE VEGETATION (TYP)

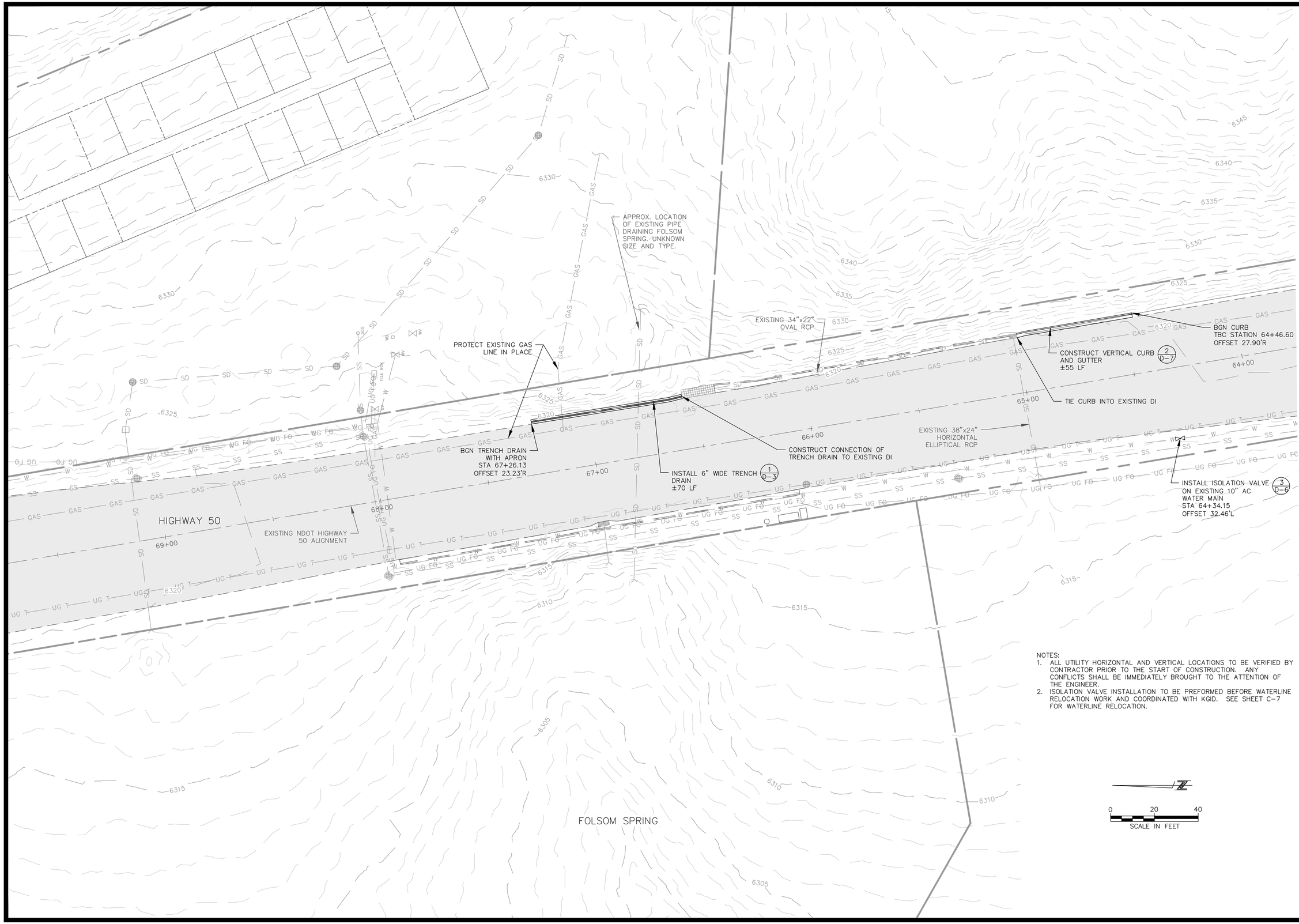
9+00



Nevada Tahoe Conservation District

CULVERT OUTFALL
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MBG/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	C-8
	15 OF 25



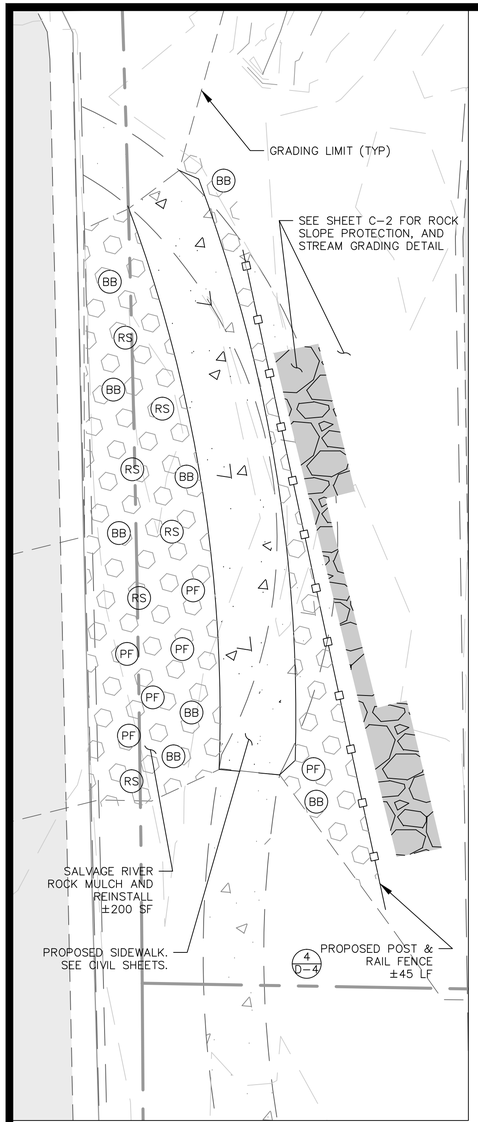
NOTES:
1. ALL UTILITY HORIZONTAL AND VERTICAL LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY CONFLICTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. ISOLATION VALVE INSTALLATION TO BE PREFORMED BEFORE WATERLINE RELOCATION WORK AND COORDINATED WITH KGID. SEE SHEET C-7 FOR WATERLINE RELOCATION.

Nevada Tahoe Conservation District

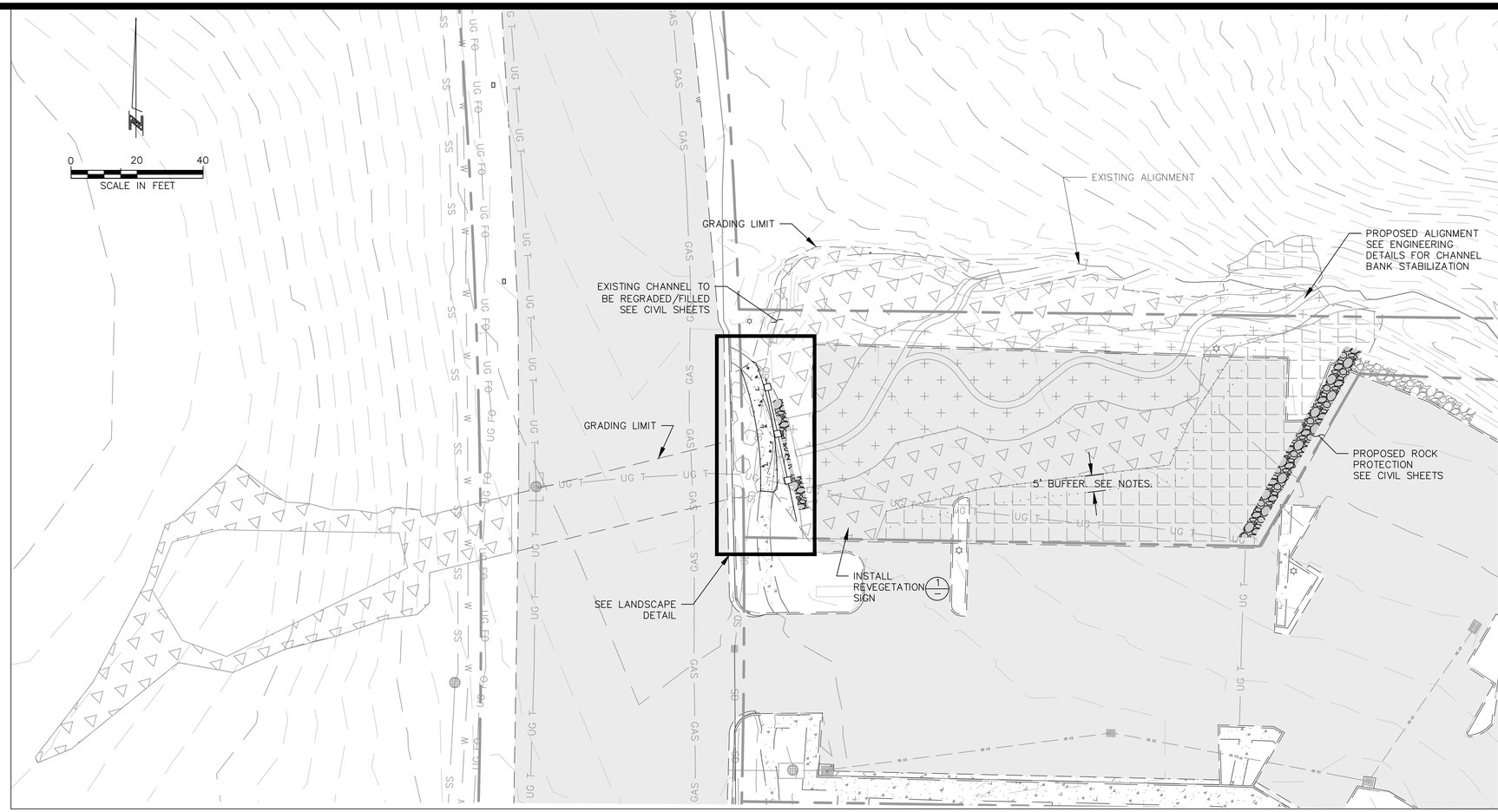
PROFESSIONAL ENGINEER
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20857
STATE OF NEVADA

DRAINAGE PLAN NORTH
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT PHASE 1

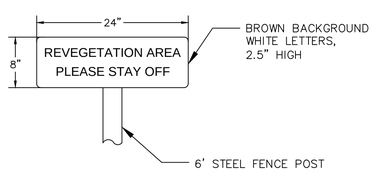
DESIGNED/DRAWN	MBG/MBG
CHECKED	MCK
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	C-9



LANDSCAPE DETAIL
SCALE 1"=5'



REVEGETATION PLAN
SCALE 1"=20'



REVEGETATION SIGN 1
SCALE 1"=1'

PLANT LEGEND					PERENNIALS			
SYMBOL	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	BOTANICAL NAME	COMMON NAME	QTY.	SIZE
AS	*Populus tremuloides*	Aspen	12	5-gal	*Gaillardia pulchella*	Indian Blanketflower	20	Supercell
SB	*Amelanchier alnifolia*	Serviceberry	8	T-pot	*Arnica nevadiensis*	Sierra Arnica	20	Supercell
SW	*Salix scouleriana*	Scouler's Willow	4	D-pot	*Delphinium glaucum*	Towering Larkspur	20	Supercell
SH	*Salix lucida ssp. Lasiandra*	Shining Willow	4	D-pot	*Potentilla gracilis*	Slender Cinquefoil	20	Supercell
LW	*Salix lemmonii*	Lemmon's Willow	4	D-pot	*Mimulus guttatus*	Common Monkeyflower	20	Supercell
DW	*Cornus sericea*	Red-Osier Dogwood	8	D-pot	*Castilleja miniata ssp. Miniata*	Giant Red Paintbrush	20	Supercell
EB	*Sambucus nigra (mexicana)*	Blue Elderberry	5	1-gal	*Castilleja parviflora*	Small-Flowered Paintbrush	20	Supercell
MS	*Spirea densiflora*	Mountain Spirea	10	1-gal	*Arnica longifolia*	Seep-Spring Arnica	20	Supercell
SC	*Ribes nevadense*	Sierra Currant	10	1-gal	*Arnica mollis*	Soft Arnica	20	Supercell
TW	*Lonicera involucrata*	Twinberry	6	1-gal	*Rubus parviflorus*	Thimbleberry	30	4"
WC	*Ribes cereum*	Wax Currant	5	1-gal	*Aquilegia formosa*	Columbine	20	4"
WR	*Rosa woodsii*	Woods' Rose	10	1-gal	*Lupinus polyphyllus*	Big Leafed Lupine	20	4"
WB	*Betula occidentalis*	Water Birch	6	Supercell	*Lilium parvum*	Alpine Lily	10	4"
MA	*Sorbus californica*	Mountain Ash	6	Supercell	*Potentilla glandulosa*	Sticky Cinquefoil	20	4"
RS	*Perovskia atriplicifolia*	Russian Sage	8	1-gal	*Mimulus lewisii*	Lewis' Monkeyflower	20	4"
PF	*Potentilla fruticosa*	Shrubby Cinquefoil	7	1-gal	*Helenium bigelovii*	Bigelow Sneezeweed	20	4"
BB	*Arctostaphylos uva-ursi*	Bearberry	11	1-gal	*Penstemon rydbergii var. oreocharis*	Meadow Penstemon	20	4"

REVEGETATION LEGEND

- TREATMENT TYPE 1 (±3,590 SF)
- TREATMENT TYPE 2 (±8,370 SF)
- TREATMENT TYPE 3 (±3,610 SF)
- TREATMENT TYPE 4 (±300 SF)
- ROCK SLOPE PROTECTION
- (AS) TREE/SHRUB WITH SPECIES SYMBOL

NOTES:
1. FINAL PLANT AND PERENNIAL LOCATIONS TO BE DETERMINED IN FIELD BY REVEGETATION SPECIALIST.
2. SALVAGED WETLAND PLUGS TO BE PLANTED AS DIRECTED BY REVEGETATION SPECIALIST.
3. SEEDS AND CONTAINER PLANTS TO BE SUPPLIED BY NTCD. ALL PLANTS SHALL BE APPROVED/ACCEPTED BY CONTRACTOR.
4. SEE CIVIL ENGINEERING PLANS AND DETAILS FOR CHANNEL STABILIZATION AND GRADING DETAILS.
5. NO TREES OR SHRUBS TO BE PLACED WITHIN LIMITS OF BERM OR AS DIRECTED BY ENGINEER.
6. A 5 FOOT BUFFER ZONE WILL BE MAINTAINED AT THE TOE OF THE BERM ON THE CHANNEL/FLOODPLAIN SIDE. NO PLANTING OF WOOD OR DEEP ROOTED PLANTS OR BURIED STRUCTURES SHALL BE ALLOWED IN THIS ZONE.
7. ALL DISTURBED AREAS TO BE REVEGETATED. ADDITIONAL REVEGETATION IN NORTHERN DRAINAGE AND UPSTEAM IMPROVEMENTS WILL BE AS DIRECTED BY ENGINEER AND PER SPECIFICATION

Nevada Tahoe Conservation District

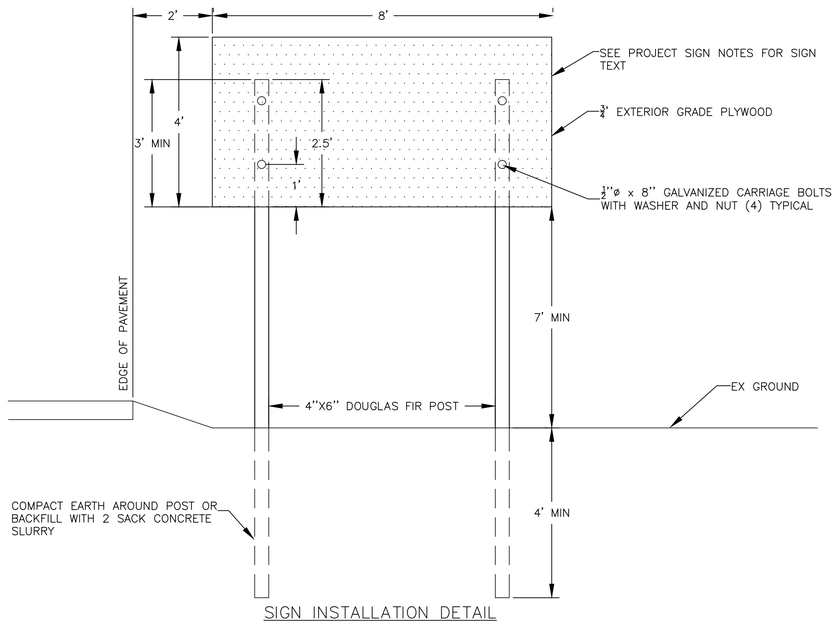
REGISTERED PROFESSIONAL ENGINEER
MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20557
STATE OF NEVADA

REVEGETATION PLAN
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN
MCP/MBG
CHECKED
MCK
DATE
05/13/2016
SCALE
AS SHOWN
PROJECT
BCC

SHEET
R-1
17 OF 25

SIGN NOTES:
1. CONTRACTOR SHALL CONTACT NTCD FOR THE LETTER FONT, STYLE, SIZE, SPACING, AND GRAPHIC ART. SIGN MAY BE ADJUSTED BY THE CONTRACTOR AS NEEDED TO CREATE THE HIGHEST QUALITY CRAFTMANSHIP DISPLAYED BY THE FINISHED PRODUCT.
2. LOCATION AS DIRECTED BY ENGINEER.

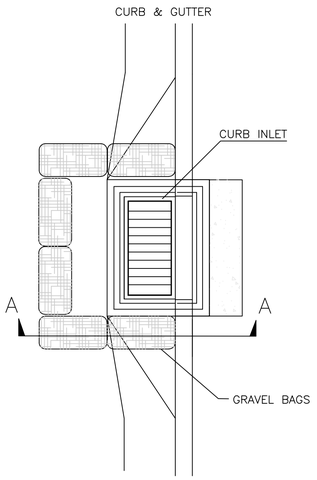


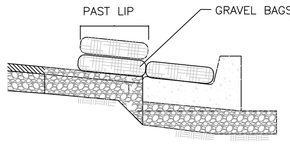
SIGN INSTALLATION DETAIL

TEMPORARY PROJECT SIGN

SCALE: N.T.S.

1 D-1



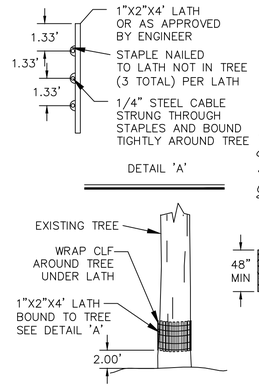


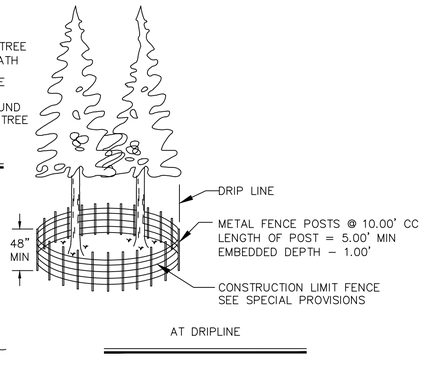
SECTION A–A

DRAINAGE INLET PROTECTION

SCALE: N.T.S.

2 D-1



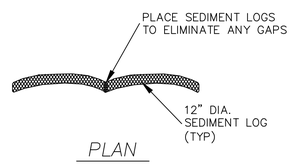


NOTE:
1. CLF AND TREE PROTECTION FENCE SHALL BE A MINIMUM OF 48" HIGH. FOR TREES WITH DRIPLINES THAT OVERHANG THE CONSTRUCTION AREAS, THE LOCATION OF THE TREE PROTECTION FENCE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER AND/OR THE TRPA AT THE PREGRADE MEETING.
2. THE DETAIL SHOWN IS FOR TREE PROTECTION. MATERIAL AND SPACING SHOWN ALSO APPLIES TO CLF.
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 DETERMINED IN THE FIELD.

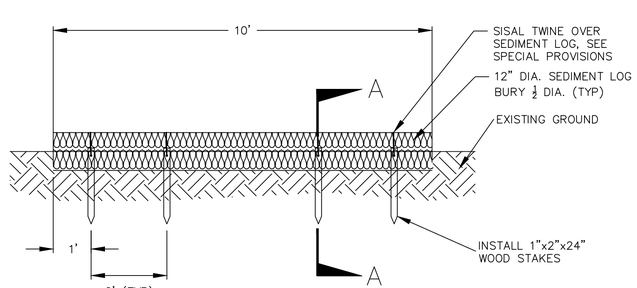
CONSTRUCTION LIMIT AND TREE PROTECTION FENCING

NOT TO SCALE

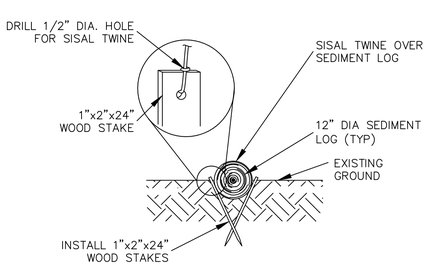
3 D-1



PLAN



PROFILE



SECTION A–A

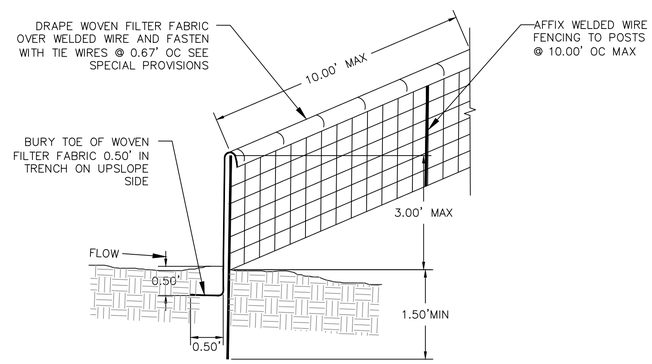
NOTES:

1. PLACEMENT OF SEDIMENT LOGS IS SUBJECT TO EXISTING CONDITIONS. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. SEE SPECIAL PROVISIONS FOR SPECIFICATIONS REGARDING SEDIMENT LOG MATERIAL REQUIREMENTS.
3. WEIGHTED SEDIMENT LOGS MAY BE NECESSARY ON PAVED AREAS.

SEDIMENT ROLL (COIR LOG)

NOT TO SCALE

4 D-1



NOTES: 1. CONTRACTOR MAY USE PRE MANUFACTURED SEDIMENT CONTROL FENCE AS APPROVED BY TRPA. SEE SPECIAL PROVISIONS.

2. PLACE FENCING SUCH THAT STORM RUNOFF CANNOT PASS AROUND OR UNDER FENCE

FILTER FENCE

NOT TO SCALE

5 D-1

Nevada Tahoe Conservation District

MEGHAN C. KELLY — CIVIL — No. 20557 — Exp: 6/30/2017 — STATE OF NEVADA — PROFESSIONAL ENGINEER

DETAILS
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

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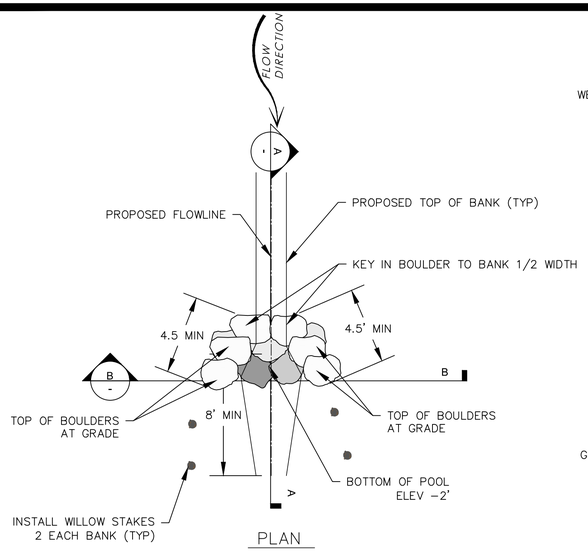
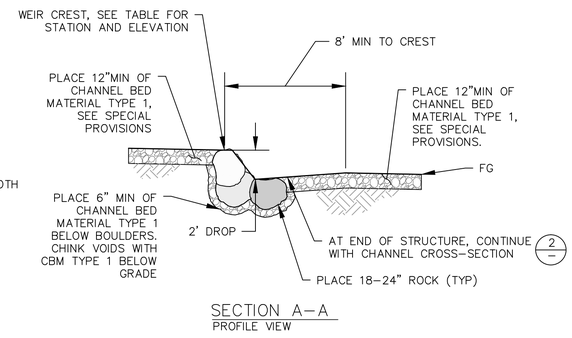
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

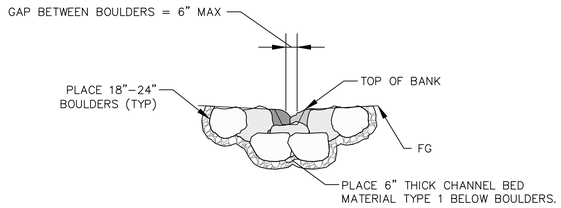
SHEET D-1
18 OF 25



PLAN



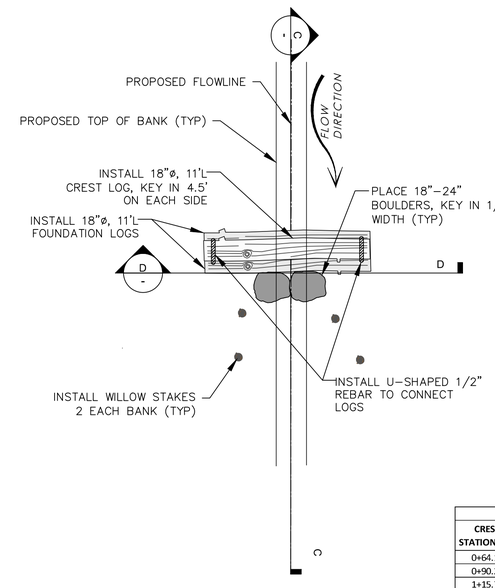
SECTION A–A
PROFILE VIEW



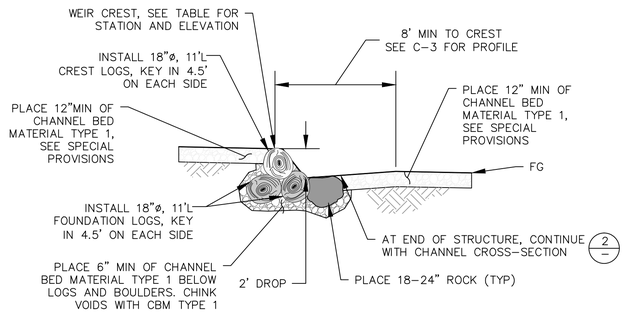
SECTION B–B
SECTION VIEW

BOULDER STEP POOLS					
CREST STATION [FT]	CREST ELEVATION [FT]	POOL LENGTH [FT]	OVERALL DROP [FT]	ASSOCIATED CHORD/LINE	MAIN OR SIDE CHANNEL
0+22.97	6316.24	8.22	1.0	C1	MAIN
0+79.35	6315.80	8.00	0.5	C3	MAIN
1+36.38	6317.87	9.00	0.5	C5	MAIN
1+46.84	6319.40	9.00	1.5	C5	MAIN
1+55.56	6320.91	8.00	1.5	C6	MAIN
1+64.13	6322.43	8.00	1.5	C6	MAIN
1+83.19	6324.14	8.14	1.5	C7	MAIN
1+94.00	6325.20	8.00	1.0	L8	MAIN
0+21.54	6315.46	7.59	1.0	C10	SIDE
0+31.89	6316.48	9.06	1.0	C11	SIDE
0+42.49	6318.00	9.80	1.5	C12	SIDE

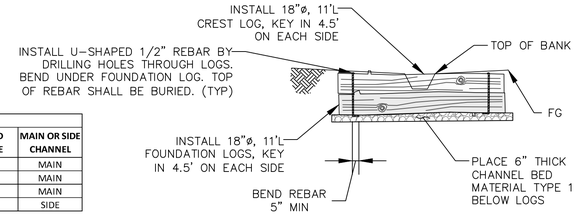
BOULDER STEP POOL
SCALE: 1" = 5'
1 / D-2



PLAN



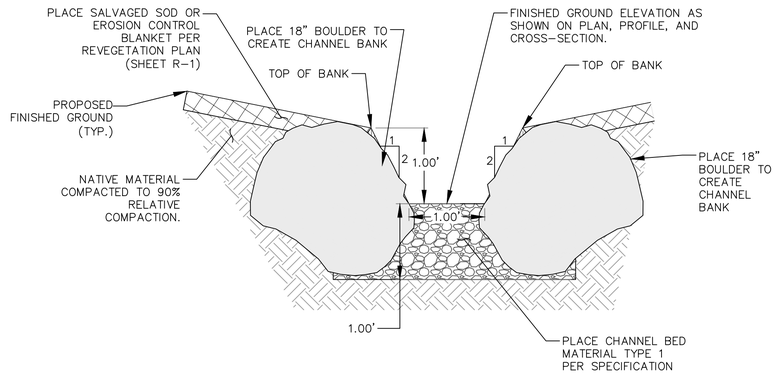
SECTION C–C
PROFILE VIEW



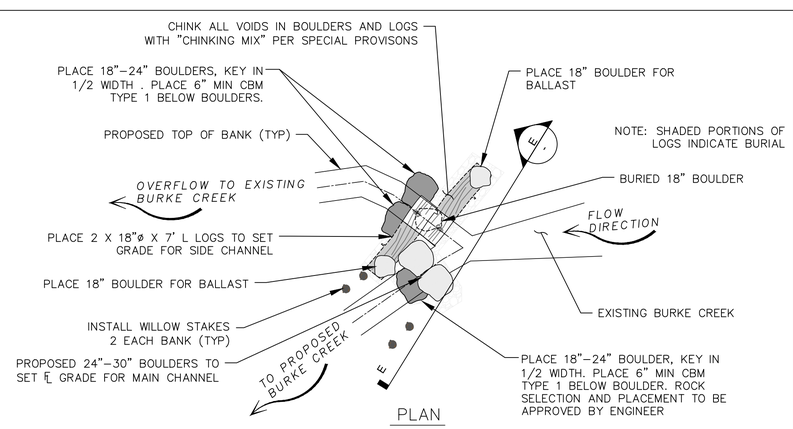
SECTION D–D
SECTION VIEW

LOG STEP POOLS					
CREST STATION [FT]	CREST ELEVATION [FT]	POOL LENGTH [FT]	OVERALL DROP [FT]	ASSOCIATED CHORD/LINE	MAIN OR SIDE CHANNEL
0+64.10	6315.16	23.53	1.5	C2	MAIN
0+90.22	6316.36	8.00	0.5	C3	MAIN
1+15.70	6317.14	11.69	0.5	C4	MAIN
0+31.35	6326.00	10.32	1.5	L23	SIDE

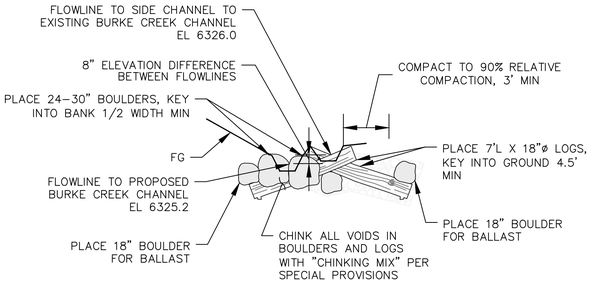
LOG STEP POOL
SCALE: 1" = 5'
3 / D-2



CHANNEL CROSS-SECTION
SCALE: 1" = 1'
2 / D-2



PLAN



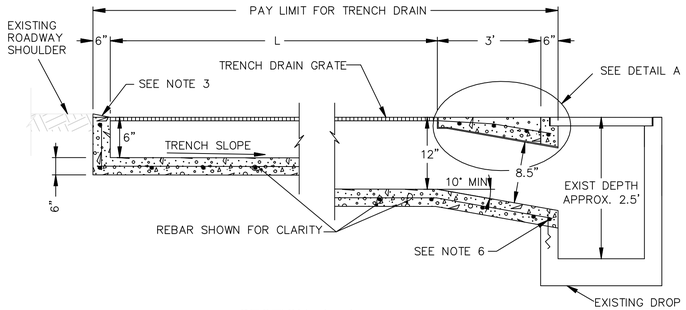
SECTION E–E
SECTION VIEW

CHANNEL TIE-IN WITH FLOW SPLIT
NOT TO SCALE
4 / D-2

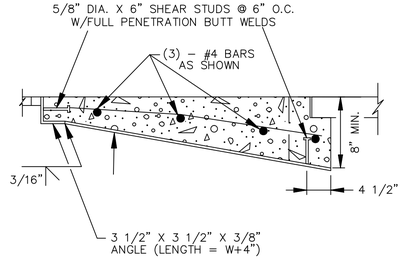
Nevada Tahoe Conservation District

DETAILS
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

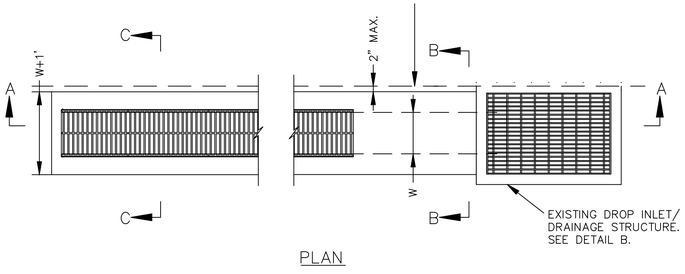
DESIGNED/DRAWN	MCK
CHECKED	MBG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	D-2



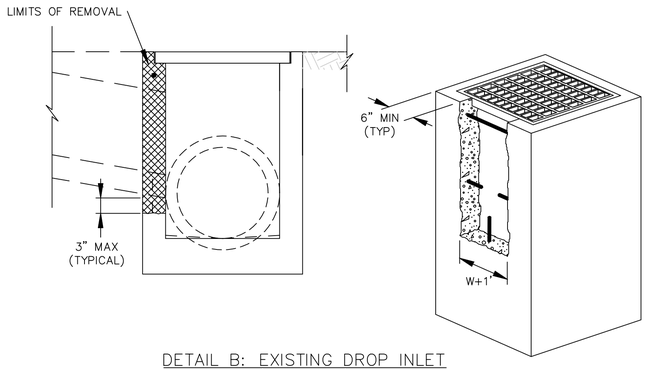
SECTION A–A



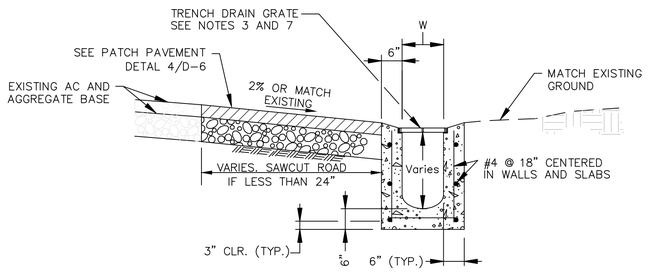
DETAIL A



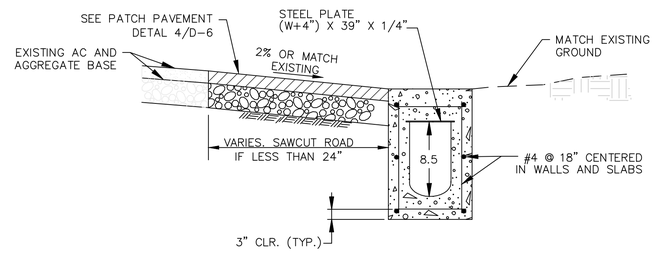
PLAN



DETAIL B: EXISTING DROP INLET (REMOVAL)



SECTION C–C



SECTION B–B

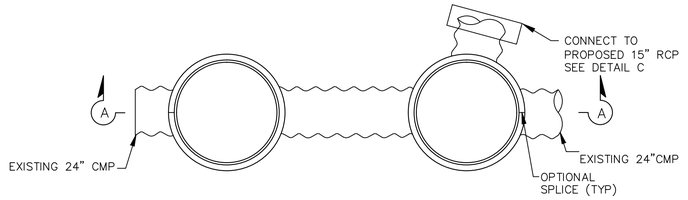
TRENCH DRAIN NOTES:

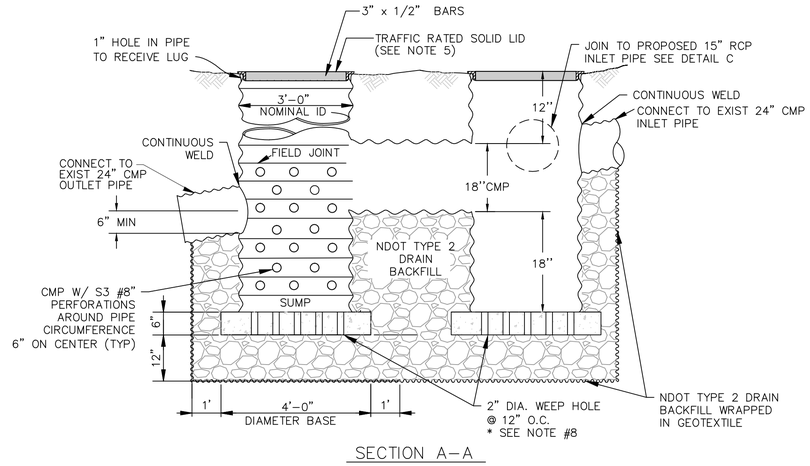
1. TRENCH DRAIN PRODUCTS SHALL BE FROM NDOT QUALIFIED PRODUCT LIST (QPL) FOUND AT http://www.nevadadot.com/About_NDOT/NDOT_Divisions/Planning/Research/Qualified_Products_List.aspx
2. REVISIONS REQUIRE APPROVAL BY THE ENGINEER IN WRITING PRIOR TO CONSTRUCTION.
3. CONSTRUCTION OF THE TRENCH DRAIN SHALL FOLLOW THE MANUFACTURERS RECOMMENDATIONS.
4. TRENCH DRAIN GRATE TO BE 1/4" TO 3/8" BELOW ADJACENT PAVEMENT SURFACE.
5. L, W, AS SPECIFIED ON PLANS.
6. ALL CONCRETE SHALL BE CLASS A OR AA.
7. IF RETROFITTING TO AN EXISTING DROP INLET PRESERVE EXISTING REBAR DURING REMOVAL OF SIDE WALL AS NEEDED TO TIE TO TRENCH DRAIN REINFORCEMENT. INSTALL ADDITIONAL REBAR TO FACILITATE CONNECTION TO DROP INLET AND REPLACE DAMAGED EXISTING REBAR. DOWELING PERPENDICULAR TO SIDE WALL IN LIEU OF CONNECTING TO EXISTING REBAR IS NOT PERMITTED.
8. GRATE SHALL BE HS–25 LOAD RATED AND BICYCLE SAFE.
9. ALL GRATES SHALL BE REMOVABLE. USE TWO–PIECE GRATES THROUGHOUT.

TRENCH DRAIN

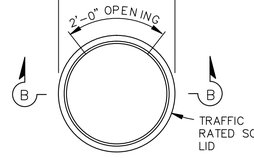
SCALE: N.T.S.

1
D-3

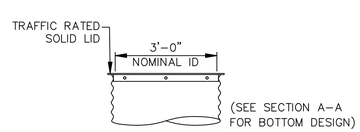




SECTION A–A

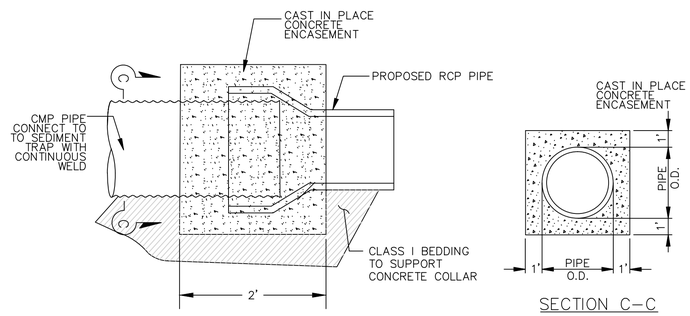


DETAIL B



SECTION B–B

STEEL PIPE INLET WITH STEEL COVER (SEE NOTE 3)



SECTION C–C

DETAIL C: CMP TO RCP TRANSITION

DOUBLE SEDIMENT TRAP NOTES:

1. PLANS WILL NOTE WHERE CONNECTION TO EXISTING SD IS REQUIRED OR IF NEW STORM DRAIN NEEDS TO BE CONSTRUCTED.
2. CMP SHALL BE 12 GAUGE AND 36" DIAMETER.
3. INLET PIPES SHALL NOT PROTRUDE INTO BASIN.
4. ALL HARDWARE TO BE GALVANIZED AFTER FABRICATION. SEE NDOT STANDARD SPECIFICATIONS OR SPECIAL PROVISIONS.
5. LID SHALL BE H20 TRAFFIC RATED, SOLID, AND DETACHABLE. SEE NDOT SPECIAL PROVISIONS.

DOUBLE SEDIMENT CAN

SCALE: N.T.S.

2
D-3

Nevada Tahoe Conservation District

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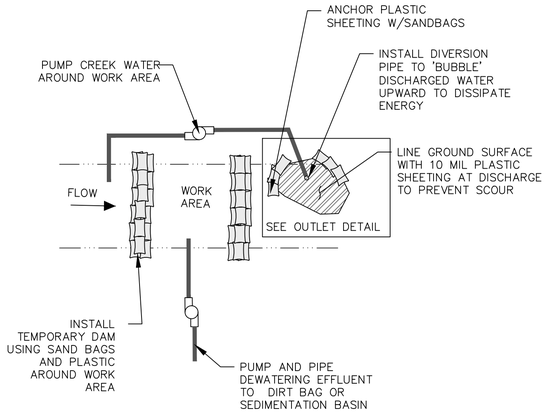
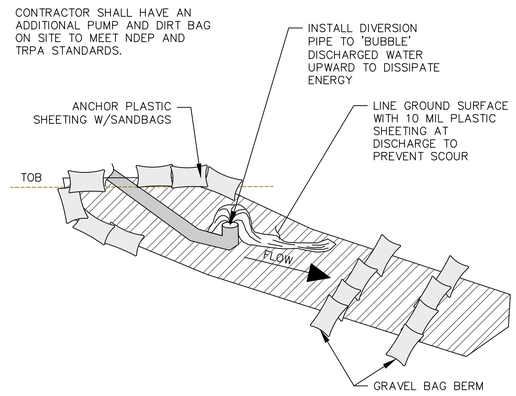
PROJECT	BCC

SHEET
D-3
20 OF 25



DIVERSION AND DEWATERING PLAN



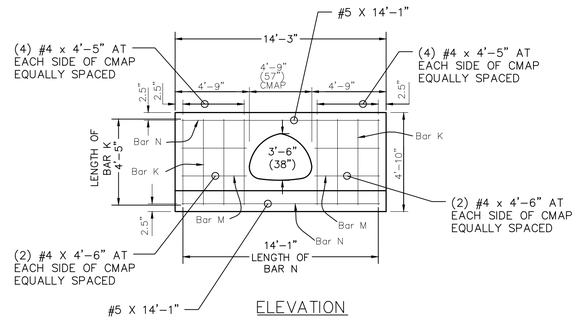
OUTLET DETAIL

DIVERSION NOTES:
1. SEE DRAFT SWPPP AND SPECIFICATIONS FOR PRELIMINARY DEWATERING AND DIVERSION PLAN
2. CONTRACTOR RESPONSIBLE TO FINALIZE SWPPP AND DEWATERING AND DIVERSION PLAN. CONTRACTOR RESPONSIBLE FOR GAINING FINAL APPROVALS FOR CONSTRUCTION METHODS FOR DIVERSION AND DEWATERING FROM ALL APPLICABLE AGENCIES

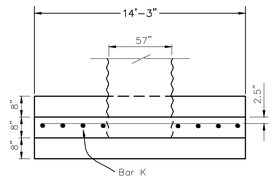
EXAMPLE DIVERSION DAM

SCALE: N.T.S.

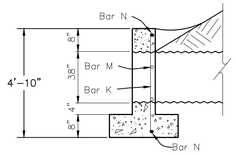
1 / D-4



ELEVATION



PLAN



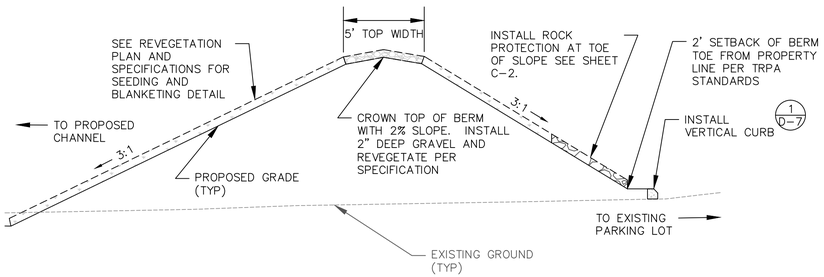
SECTION

NDOT STANDARD HEADWALL NOTES:
1. CONCRETE SHALL BE NDOT CLASS A OR AA.
2. REINFORCING STEEL SHALL BE DEFORMED BARS WITH MAXIMUM SPACING OF 18" SET 2" CLEAR OF SURFACE OF CONCRETE EXCEPT AS NOTED. BAR ENDS SHALL BE KEPT 1" CLEAR OF SURFACE OF CONCRETE. REINFORCING BARS MAY BE CUT AND BENT IN FIELD.
3. FOOTINGS SHOWN ARE OF MINIMUM DEPTH AND SHALL BE EXTENDED IF SOIL IS UNSUITABLE OR LIABLE TO SCOUR.

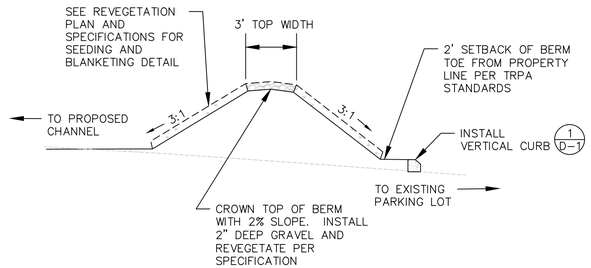
NDOT STANDARD HEADWALL

SCALE: N.T.S.

2 / D-4



NORTH–SOUTH TYPICAL BERM SECTION



EAST–WEST TYPICAL BERM SECTION

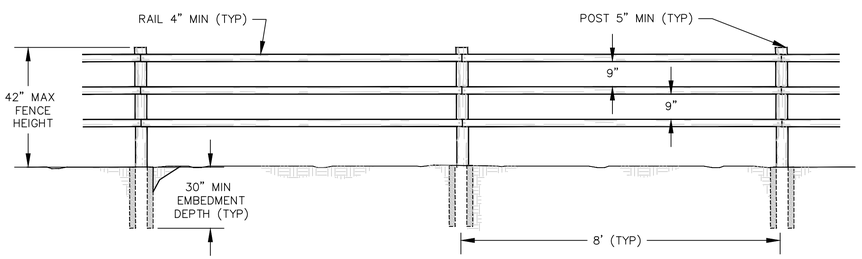
BERM DETAIL NOTES:
1. BERM SIDE SLOPE TO BE 3:1 AND MAY BE STEEPER TO MEET EXISTING GRADE
2. SEE REVEGETATION PLAN AND SPECIFICATIONS FOR BERM TREATMENTS.
3. COMPACTION THROUGHOUT BERM SHALL BE AT LEAST 90 PERCENT RELATIVE COMPACTION EXCEPT, WHERE FILL DEPTH IS TO BE GREATER THAN 2 FEET, 95 PERCENT RELATIVE COMPACTION WILL BE REQUIRED (ASTM D1557). SEE SPECIFICATIONS FOR PREPARATION AND GRADING INFORMATION.
4. 5' BUFFER ZONE WILL BE MAINTAINED ON THE CHANNEL SIDE OF THE BERM. NO PLANTING OF WOODY OR DEEP ROOTED PLANTS WILL BE ALLOWED IN THE BUFFER ZONE.
5. 2' SETBACK WILL BE MAINTAINED FROM THE PROPERTY LINE TO THE TOE OF THE BERM PER TRPA STANDARDS

BERM DETAIL

SCALE: N.T.S.

3 / D-4

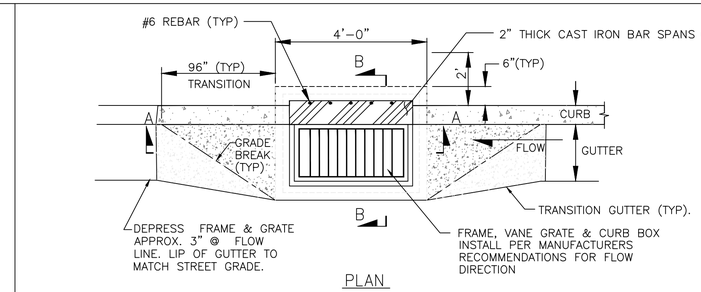
FENCE NOTES:
1. FENCE LOCATIONS AS STAKED IN FIELD
2. PRE–DRILL HOLES FOR FASTENERS TO PREVENT SPLITTING OF BRACING OR POSTS.
3. COMPACT AND BACKFILL IN 6 INCH LIFTS UNTIL NO VISUAL DISPLACEMENTS



POST AND RAIL FENCE

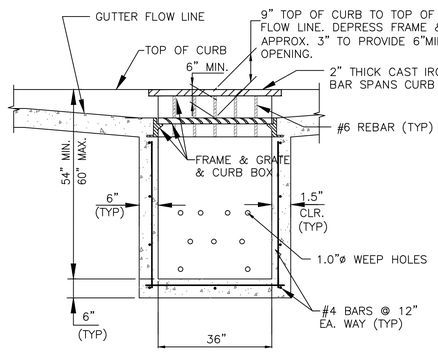
SCALE: N.T.S.

4 / D-4

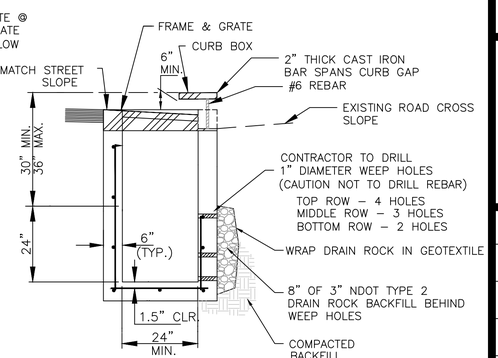


PLAN

DI NOTES:
1. CONCRETE FOR CAST IN PLACE CATCH BASIN AND 4'x2' CONCRETE PAD SHALL BE 6.25 SACK 4000psi WITH 4.5–7.5% ENTRAINED AIR.
2. REINFORCING STEEL SHALL BE FIBERMESH.
3. CONCRETE STRUCTURE MAY BE A PRE–CAST CONCRETE UNIT UPON APPROVAL OF THE COUNTY ENGINEER.
4. FRAME AND GRATE SHALL BE NEENAH R–3067–V (VANE GRATE) OR APPROVED EQUAL.



SECTION A–A



SECTION B–B

COMBINATION DROP INLET

SCALE: 1" = 2'

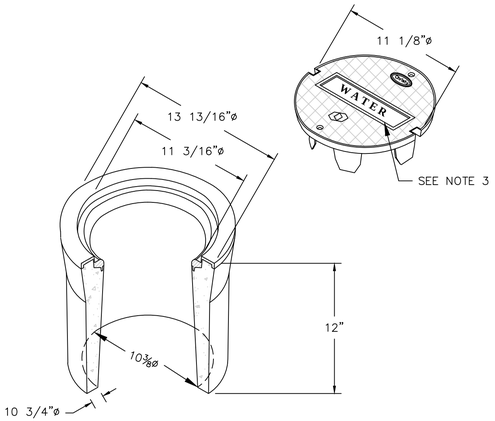
5 / D-4

Nevada Tahoe Conservation District

DETAILS
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

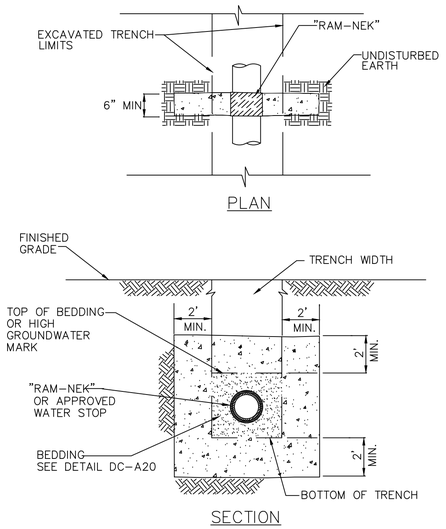
DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET
D-4
21 OF 25



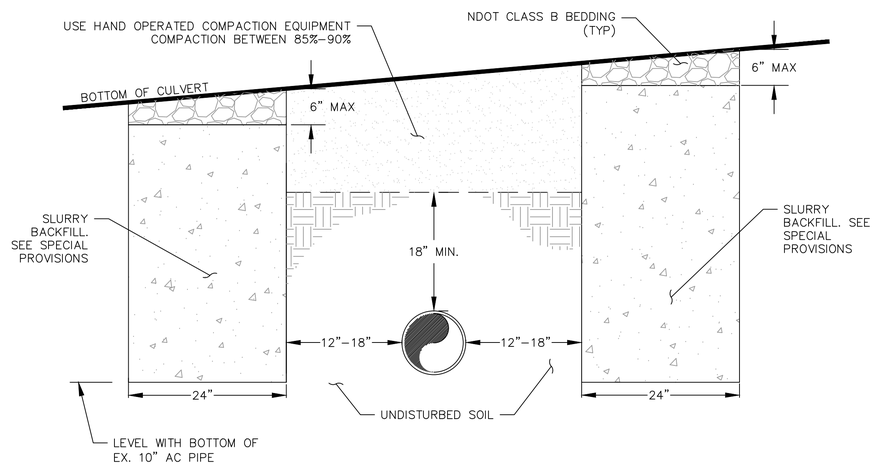
VALVE BOX NOTES:
1. VALVE BOX MUST BE TRAFFIC RATED (CHRISTY G-5 BOX OR APPROVED EQUAL).
2. MINIMUM OF 10" INSIDE DIAMETER.
3. CAST IRON LID MARKED "WATER" FOR WATER LINE APPLICATIONS. CAST IRON LID MARKED "RECLAIMED WATER" OR "RCW" WHEN INSTALLED ON A RECLAIMED WATER MAIN. LID SHALL BE MARKED "SS FORCE MAIN" OR "SS FM" WHEN INSTALLED ON A SANITARY SEWER FORCE MAIN.
4. RISER OF 6" MAX PVC EXTENDED IN VALVE CAN A MINIMUM OF 6".
5. ALL NEW VALVE BOXES TO BE SET TO GRADE PER DETAIL 3/D-6.
6. SET VALVE BOX AND ONE POINT OF TRIANGULAR LID TO POINT IN DIRECTION OF WATER MAIN.

VALVE BOX
SCALE: N.T.S.
1 / D-5



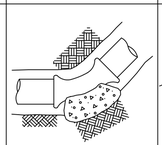
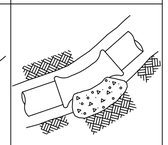
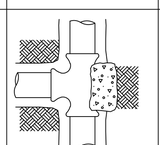
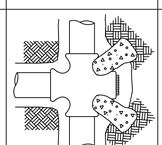
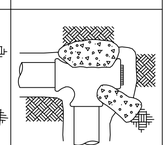
WATER STOP NOTES:
1. WATER STOPS SHALL BE CONSTRUCTED AT 200' MAXIMUM SPACING IN GROUNDWATER CONDITIONS AND WHERE TYPE "C" BEDDING IS USED, AS DIRECTED BY THE ENGINEERING DIVISION.
2. WRAP PIPE WITH "RAM-NEK" OR EQUIVALENT WHERE PIPE IS EXPOSED TO CONCRETE PRIOR TO POURING.
3. USE LIGHT CONCRETE, TWO SACK SLURRY. IF DRYWALL IS USED FOR CONCRETE FORMS, IT MAY BE LEFT IN PLACE.

WATER STOP
SCALE: N.T.S.
2 / D-5



SEWER PROTECTION NOTES
1. PROVIDE 48 HOUR NOTIFICATION TO DCSID OF CONSTRUCTION SCHEDULE PRIOR TO COMMENCING CONSTRUCTION, AS WELL AS FOR ANY CHANGES TO THAT SCHEDULE, TO ALLOW DCSID THE OPPORTUNITY TO INSPECT EACH STEP OF CONSTRUCTION IN THE VICINITY OF THEIR INFRASTRUCTURE PRIOR TO IT BEING COVERED
2. LOCATE EXISTING PIPE AT EACH END OF SLURRY SUPPORTS BY EXPOSING IT USING A NON-FORCE METHOD SUCH AS A VACTOR TRUCK OR HYDRO-EXCAVATION
3. A PRE-CONSTRUCTION VIDEO WAS PERFORMED BY DCSID ON 10/7/15. ACCEPT THIS VIDEO AS PRE-PROJECT CONDITION OR PERFORM INDEPENDENT VIDEO PRIOR TO MOBILIZATION OF HEAVY EQUIPMENT
4. PERFORM POST-CONSTRUCTION VIDEO AFTER BACKFILL AND FINAL GRADING IS COMPLETE
5. REPAIR ANY DAMAGE TO DCSID INFRASTRUCTURE TO THE SATISFACTION OF DCSID AND IN ACCORDANCE WITH DCSID APPROVED METHODOLOGY
6. LIMIT USE OF VIBRATORY EQUIPMENT WITHIN 5' (VERTICAL AND HORIZONTAL) FROM EXISTING PIPE
7. IN THE EVENT OF A PIPE FAILURE DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESULTING COSTS INCLUDING BUT NOT LIMITED TO EMERGENCY CONTAINMENT, ENVIRONMENTAL CLEANUP, BYPASS PUMPING, REPAIR, FINES, AND FEES
8. DCSID SHALL BE NOTIFIED IMMEDIATELY OF ANY DAMAGE TO OR ISSUES WITH THEIR INFRASTRUCTURE

SANITARY SEWER PROTECTION
SCALE: N.T.S.
3 / D-5

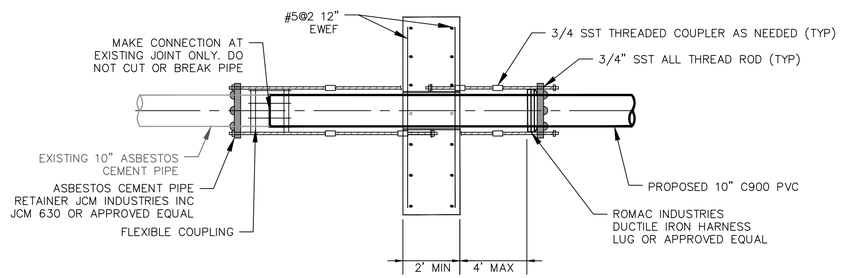
TYPE OF FITTING	90° BEND	45° BEND	11.25° OR 22.5° BEND
TYPICAL INSTALLATION			
TYPE OF FITTING	TEE OR DEAD END	CROSS W/PLUG	TEE W/PLUG
TYPICAL INSTALLATION			

THRUST BLOCK BEARING AREA – SQUARE FEET

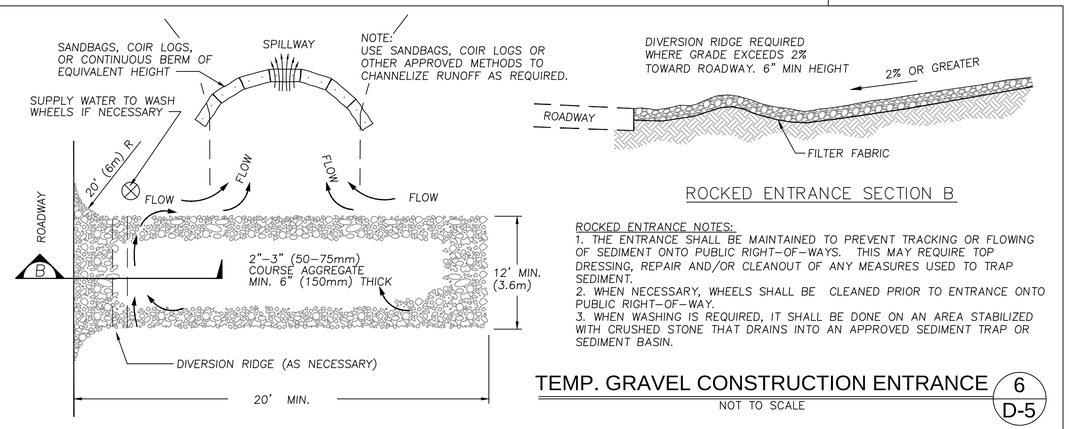
SIZE OF PIPE	TYPE OF FITTING	90° BEND	45° BEND	11.25° OR 22.5° BEND	TEE OR DEAD END	CROSS W/PLUG	TEE W/PLUG
	4"	2	1	1	2	2	2
	6"	5	3	2	4	5	5
	8"	8	5	3	6	8	8
	10"	13	7	4	9	13	13
	12"	18	10	5	13	18	18
	14"	25	13	7	17	25	25
	16"	32	17	9	23	32	32

THRUST BLOCK NOTES:
1. CONCRETE FOR THRUST BLOCKS SHALL CONFORM TO SECTION 202 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED SOIL.
3. JOINTS AND FACE OF PLUGS SHALL BE KEPT CLEAR OF CONCRETE.
4. THRUST BLOCK BEARING AREAS ARE FOR A 150 PSI TEST PRESSURE WITH 2000 PSF BEARING CAPACITY, NOMINAL PIPE DIAMETER, AND A FACTOR OF SAFETY OF 1.5 INSTALLATIONS USING DIFFERENT TEST PRESSURES, AND/OR SOIL TYPES SHALL BE ADJUSTED BY THE DESIGN ENGINEER.

THRUST BLOCKS
SCALE: N.T.S.
4 / D-5

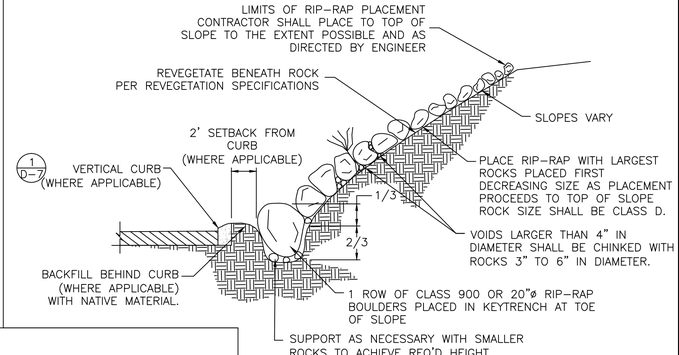


EXISTING AC WATERLINE CONNECTION
SCALE: N.T.S.
5 / D-5



ROCKED ENTRANCE NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

TEMP. GRAVEL CONSTRUCTION ENTRANCE
NOT TO SCALE
6 / D-5



RSP NOTES:
1. CONTRACTOR SHALL ENCOURAGE THE USE OF ORGANIC MATERIAL REMOVED FROM SLOPES AND GRADING AS A SOURCE OF MULCH FOR REVEGETATION TREATMENT.
2. CONTRACTOR SHALL ENSURE THAT ROCK SLOPE PROTECTION IS NOT WEIGHT BEARING ON CURB (WHERE APPLICABLE).

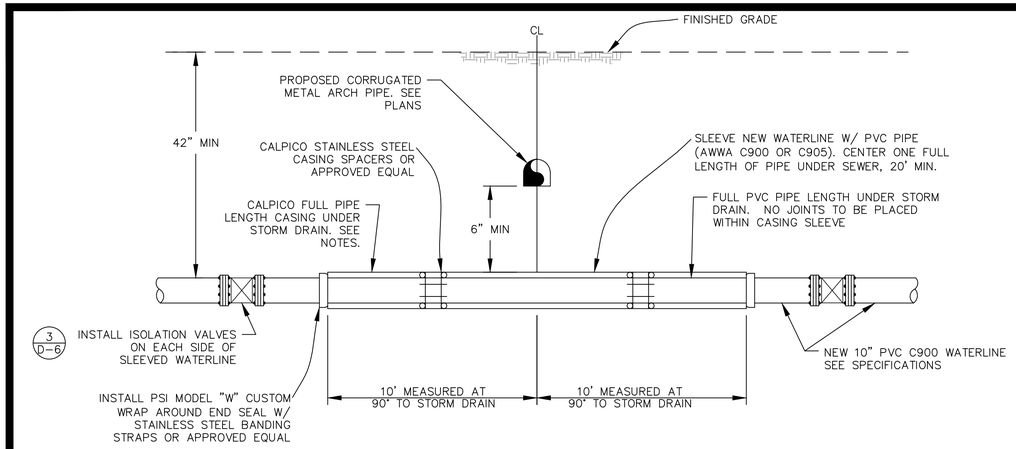
ROCK SLOPE PROTECTION
NOT TO SCALE
7 / D-5

Nevada Tahoe Conservation District

DETAILS
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/JB
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET
D-5
22 OF 25



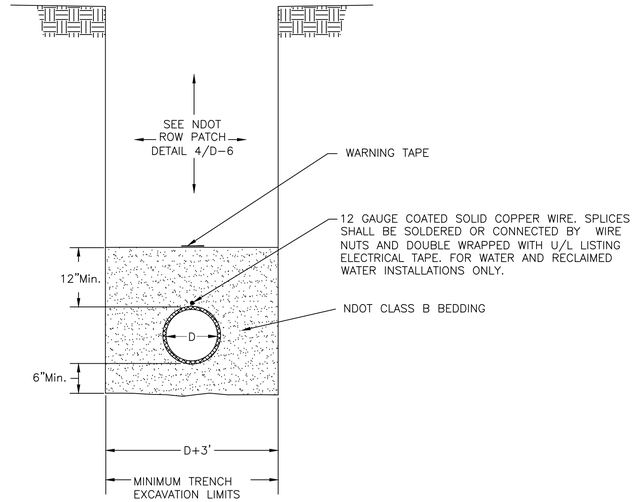
CROSSING NOTES:

1. FOR PURPOSES OF SEPARATION AND PROTECTION OF THE WATER SUPPLY, RECLAIMED WATER AND STORM DRAIN LINE SHALL BE CONSIDERED A SEWER LINE.
2. CUT ADJACENT PIPE SECTIONS AS REQUIRED TO CENTER FULL 20' WATERLINE PIPE LENGTH UNDER SEWER.
3. CASING PIPE SHALL BE SIZED TO FIT 10" WATER MAIN, SPACERS, JOINTS, AND ALL OTHER APPURTENANCES. CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THE CORRECT DIAMETER OF CASING.
4. CONCRETE FOR THRUST BLOCKS SHALL NOT INTERFERE WITH THE REMOVAL OF BOLTED ASSEMBLIES.
5. ROUTING WATER LINE UNDER SEWER LINE REQUIRES APPROVAL BY THE WATER UTILITY.
6. CROSSING MUST COMPLY WITH NAC 445A

WATER MAIN CROSSING

SCALE: N.T.S.

1 D-6



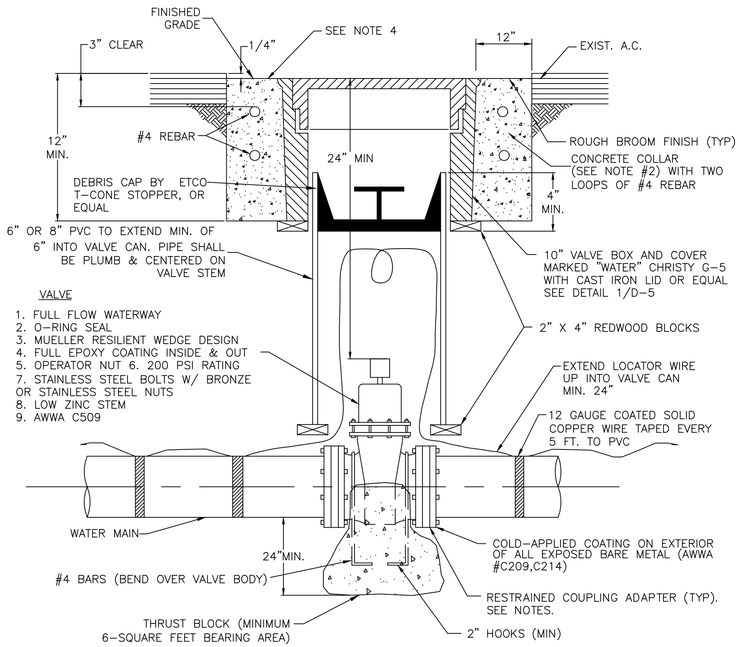
WATER LINE TRENCH NOTES:

1. TRENCHES MORE THAN 4' DEEP SHALL BE SHORED, LAID BACK TO AT LEAST THE ANGLE OF REPOSE FOR EXISTING FIELD CONDITIONS, OR SOME OTHER MEANS OF PROTECTION SHALL BE PROVIDED.
2. IF HAZARDOUS FIELD CONDITIONS INDICATE GROUND MOVEMENT MAY BE EXPECTED, TRENCHES LESS THAN 4' DEEP SHALL BE PROTECTED AS INDICATED IN NOTE 1.
3. A TRAVEL LANE SHALL BE MAINTAINED. TRENCH EXCAVATION INCLUDING SHIELD AND SHORING SYSTEMS SHALL COMPLY WITH CURRENT OSHA SAFETY REGULATIONS, FEDERAL REGISTER 29 CFR, PART 1926, SUBPART P.
4. ALL MATING SURFACES SHALL BE TACK COATED PRIOR TO PAVING (NO DIRECT PAYMENT).
5. SLURRY BACKFILL TRENCH TO BE USED WHEN UNABLE TO MAINTAIN A 12' TRAVEL LANE WITH THE STANDARD TRENCH OR AS DIRECTED BY THE ENGINEER.
6. COMPACTION SHALL BE PERCENT RELATIVE COMPACTION BASED ON THE MAXIMUM DRY DENSITY DETERMINED WITH TEST METHOD NO. NEV. T101.
7. IN HIGH GROUND WATER, GRANULAR BACKFILL WRAPPED IN AN APPROVED GEOTEXTILE MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
8. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR ANY ADDITIONAL EXCAVATION OR BACKFILL REQUIRED FOR EXCAVATIONS TO MEET OSHA REGULATIONS.
9. PLACE WARNING TAPE 1 FT. ABOVE WATER, AND RECLAIMED WATER PIPE.
10. WATER STOPS SHALL BE USED IN HIGH GROUND– WATER CONDITIONS PER DETAIL 2/D–5.

WATER LINE TRENCH EXCAVATION AND BACKFILL

SCALE: N.T.S.

2 D-6



VALVE

1. FULL FLOW WATERWAY
2. O–RING SEAL
3. MUELLER RESILIENT WEDGE DESIGN
4. FULL EPOXY COATING INSIDE & OUT
5. OPERATOR NUT 6. 200 PSI RATING
7. STAINLESS STEEL BOLTS W/ BRONZE OR STAINLESS STEEL NUTS
8. LOW ZINC STEM
9. AWWA C509

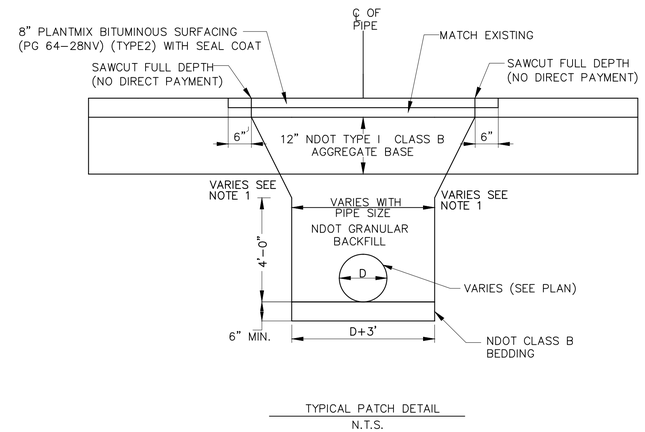
VALVE NOTES:

1. MATERIAL USED FOR THRUST BLOCKING SHALL NOT PREVENT ACCESS TO THE BOLT ASSEMBLY.
2. CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 202.12 OF THE STANDARD SPECIFICATIONS.
3. IN ALL AREAS, LIDS SHALL BE SET FLUSH WITH FINISHED GRADE UNLESS OTHERWISE NOTED.
4. THE CONCRETE COLLAR SHALL BE 1/4" BELOW SURROUNDING PAVEMENT. APPLY BLACK COLORANT TO SURFACE OF CONCRETE.
5. SPLICES IN WIRE SHALL BE CONNECTED BY SOLDER OR WIRE NUTS AND WRAPPED WITH UL LISTED ELECTRICAL TAPE.
6. PROVIDE AND INSTALL EXTENSION STEMS SO THAT VALVE OPERATING NUT IS NOT GREATER THAN FIVE (5) FEET BELOW FINISHED GRADE.
7. THRUST BLOCK MAY BE ELIMINATED FOR FLANGED VALVES WITH MUELLER AQUAGRIP OR APPROVED EQUAL FLANGED RESTRAINT ADAPTOR.
8. PROVIDE PIPE POLYETHYLENE PROTECTIVE WRAP ON ALL VALVES, 8–MILS MINIMUM, SECURED WITH 2–INCH WIDE PRESSURE SENSITIVE PLASTIC TAPE, 10–MILS MINIMUM.
9. COUPLING ADAPTOR TYPE SHALL BE RESTRAINED AND SELECTED PER PROPOSED OR EXISTING WATER MAIN MATERIAL TYPE. WHERE VALVE IS CONNECTED TO AC PIPE, COUPLING ADAPTER SHALL BE ENCASED IN CONCRETE TO PROVIDE RESTRAINT. CONCRETE ENCASEMENT SHALL EXTEND 1' MINIMUM FROM COUPLING CONNECTION. ENCASEMENT SHALL NOT INTERFERE WITH OPERATION OF THE VAVLE.

ISOLATION VALVE

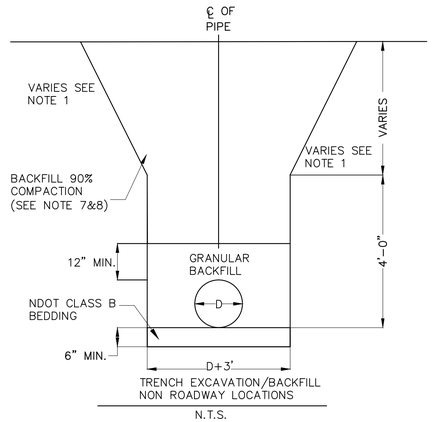
SCALE: N.T.S.

3 D-6



TYPICAL PATCH DETAIL

N.T.S.



TRENCH EXCAVATION/BACKFILL NON ROADWAY LOCATIONS

N.T.S.

TRENCH/PATCHING NOTES:

1. TRENCHES MORE THAN 4' DEEP SHALL BE SHORED, LAID BACK TO AT LEAST THE ANGLE OF REPOSE FOR EXISTING FIELD CONDITIONS, OR SOME OTHER MEANS OF PROTECTION SHALL BE PROVIDED.
2. IF HAZARDOUS FIELD CONDITIONS INDICATE GROUND MOVEMENT MAY BE EXPECTED, TRENCHES LESS THAN 4' DEEP SHALL BE PROTECTED AS INDICATED IN NOTE 1.
3. PAVING JOINTS IN ROADWAY ARE NOT ALLOWED IN WHEEL PATHS.
4. MATCH EXISTING STRIPING THROUGH LIMITS OF PATCH AREA.
5. A TRAVEL LANE SHALL BE MAINTAINED. TRENCH EXCAVATION INCLUDING SHIELD AND SHORING SYSTEMS SHALL COMPLY WITH CURRENT OSHA SAFETY REGULATIONS, FEDERAL REGISTER 29 CFR, PART 1926, SUBPART P.
6. ALL MATING SURFACES SHALL BE TACK COATED PRIOR TO PAVING (NO DIRECT PAYMENT).
7. SLURRY BACKFILL TRENCH TO BE USED WHEN UNABLE TO MAINTAIN A 12' TRAVEL LANE WITH THE STANDARD TRENCH OR AS DIRECTED BY THE ENGINEER.
8. COMPACTION SHALL BE PERCENT RELATIVE COMPACTION BASED ON THE MAXIMUM DRY DENSITY DETERMINED WITH TEST METHOD NO. NEV. T101.
9. IN HIGH GROUND WATER, GRANULAR BACKFILL WRAPPED IN AN APPROVED GEOTEXTILE MAY BE USED WITH THE APPROVAL OF THE ENGINEER.
10. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR ANY ADDITIONAL EXCAVATION OR BACKFILL REQUIRED FOR EXCAVATIONS TO MEET OSHA REGULATIONS.

NDOT ROW TRENCH/PATCHING

SCALE: N.T.S.

4 D-6

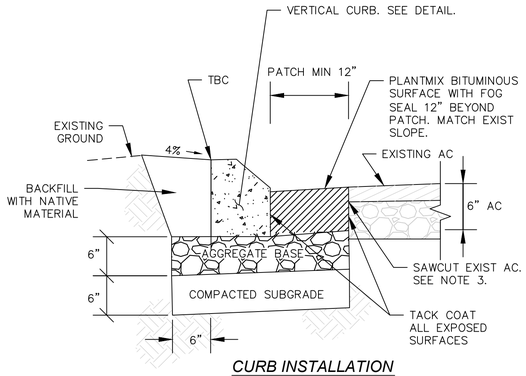
Nevada Tahoe Conservation District

MEGHAN C. KELLY — Exp: 6/30/2017 — CIVIL — No. 20557 — STATE OF NEVADA — PROFESSIONAL ENGINEER

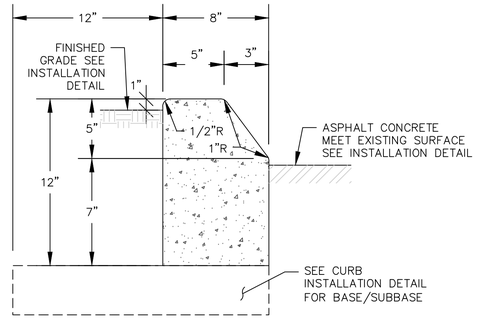
DETAILS
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/JB
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET D-6
23 OF 25



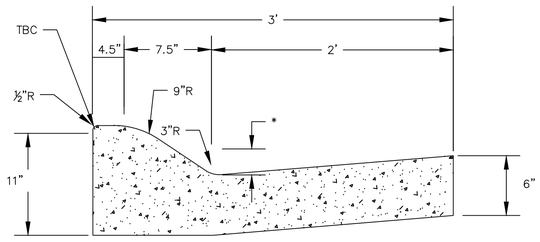
CURB INSTALLATION



VERTICAL CURB

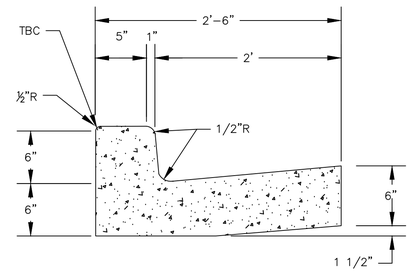
CURB NOTES:
1. CURB TYPE PER PLAN.
2. SAW CUT ALONG STRAIGHT LINES. NO SAW CUTS WITHIN WHEEL PATH
3. SURFACE TOLERANCES FOR AC PAVEMENT REPAIR SHALL CONFORM TO THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK)
4. ASPHALT CONCRETE MATERIALS AND TESTING SHALL CONFORM THE THE CURRENT EDITION OF THE ORANGE BOOK.
5. AGGREGATE BASE SHALL BE TYPE 2 CLASS B COMPACTED TO 95% MDD.
6. COMPACTED SUBGRADE SHALL BE CLASS A OR CLASS E (NATIVE) BACKFILL COMPACTED TO 90% MDD
7. TACKCOAT ALL EXPOSED SURFACES SS-1h, 0.07-0.13 GAL/SY
8. PORTLAND CEMENT SHALL CONFORM TO SECTION 337.10.01.01 OF THE STANDARD SPECIFICATIONS (ORANGE BOOK) FOR CONCRETE EXPOSED TO FREEZE-THAW ENVIRONMENTS.
9. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED EVERY 5 FEET. THE JOINTS SHALL PENETRATE TO A DEPTH OF 2 INCHES AND BE CONSTRUCTED IN CONFORMANCE WITH SECTION 312.09.02 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
10. EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED IN SECTION 312.09.01A OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

CONCRETE VERTICAL CURB
SCALE: NTS — 1 / D-7

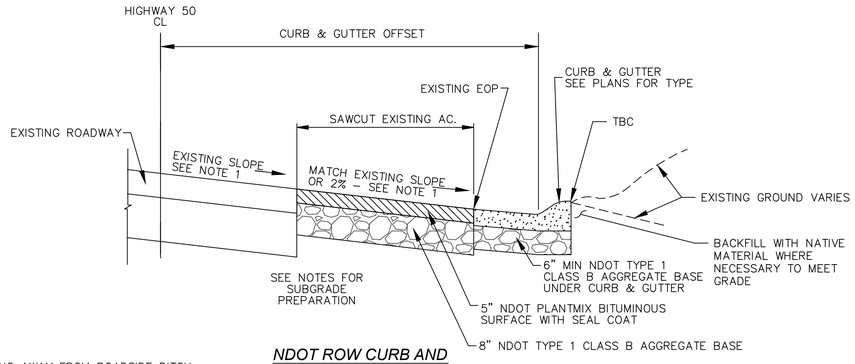


NOTE:
* 2" WHEN POSITIONED ON LOW SIDE OF ROADBED. OTHERWISE GUTTER CROSS SLOPE TO MATCH THAT ON ADJACENT ROADBED

ROLLED CURB AND GUTTER (NDOT TYPE 6)



VERTICAL CURB AND GUTTER (NDOT TYPE 1)

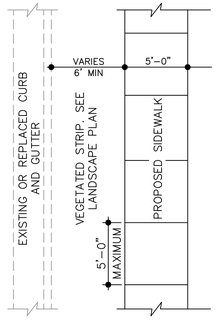


NDOT ROW CURB AND GUTTER INSTALLATION

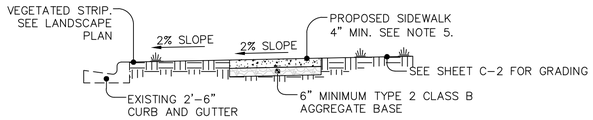
C&G NOTES:

1. WHERE EXISTING CROSS SLOPE IS LESS THAN 2% OR SLOPING AWAY FROM ROADSIDE DITCH, PAVE DITCH AT 2% SLOPE
2. WHERE POSSIBLE, PAVING JOINTS IN ROADWAY ARE NOT ALLOWED IN WHEEL PATHS.
3. MATCH EXISTING STRIPING THROUGH LIMITS OF PATCH AREA
4. A TRAVEL LANE SHALL BE MAINTAINED. TRENCH EXCAVATION INCLUDING SHIELD AND SHORING SYSTEMS SHALL COMPLY WITH CURRENT OSHA SAFETY REGULATIONS, FEDERAL REGISTER 29 CFR, PART 1926, SUBPART P.
5. ALL MATING SURFACES SHALL BE TACK COATED PRIOR TO PAVING (NO DIRECT PAYMENT).
6. PREPARE SUBGRADE 6" MIN PER NDOT STANDARD SPECIFICATION SECTION 302

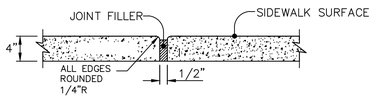
NDOT CONCRETE CURB AND GUTTER
SCALE: NTS — 2 / D-7



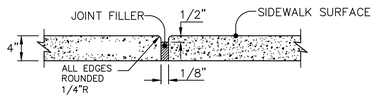
PLAN VIEW



TYPICAL SECTION



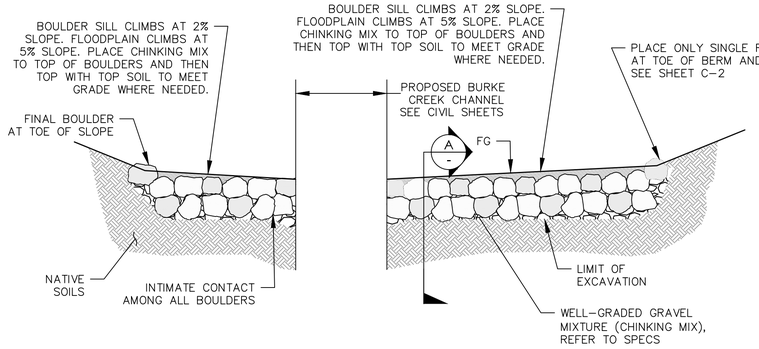
EXPANSION JOINT



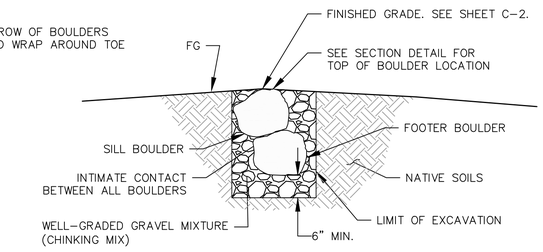
WEAKENED PLANE JOINT, SIDEWALK CURB AND GUTTER

NOTES:
1. ALL CONCRETE SHALL BE REMOVED AT EXISTING JOINTS. SEE SECTION 311.10.07 OF THE STANDARD SPECIFICATIONS "CONSTRUCTION JOINTS" FOR POURING CONCRETE NEXT TO EXISTING CONCRETE.
2. PORTLAND CEMENT CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 202 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR CONCRETE EXPOSED TO FREEZE-THAW ENVIRONMENTS.
3. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED EVERY 5 FEET. THE JOINTS SHALL PENETRATE TO A DEPTH OF 2 INCHES AND BE CONSTRUCTED IN CONFORMANCE WITH SECTION 312.09.02 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
4. EXPANSION JOINTS SHALL BE CONSTRUCTED AT LOCATIONS DESIGNATED IN SECTION 312.09.01A OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
5. TYPE 2, CLASS B AGGREGATE BASE SHALL CONFORM TO SETION 20 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND SHALL BE MECHANICALLY COMPACTED IN CONFORMANCE WITH SECTION 308.05 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
6. CONCRETE SIDEWALKS ADJACENT TO DRIVEWAYS SHALL HAVE A MINIMUM THICKNESS OF 6".
7. NO OBSTRUCTIONS, SUCH AS UTILITY POLES, SIGNAL POLES AND CONTROLS, WATER METER BOXES, PULL BOXES, ETC. ARE ALLOWED WITHIN SIDEWALKS.
8. PROPOSED SIDEWALK SHALL BE TRANSITIONED TO EXISTING 4' SIDEWALK FOR 1' MINIMUM LENGTH.

SIDEWALK
SCALE: NTS — 3 / D-7



BOULDER SILL SECTION



BOULDER SILL PROFILE

BOULDER SILL NOTES:
1. IF BEDROCK ENCOUNTERED DURING EXCAVATION, NOTIFY ENGINEER IMMEDIATELY. BOULDER SILL WILL BE CONSTRUCTED AROUND BEDROCK WITH BEDROCK TAKING PLACE OF SOME BOULDERS.

BOULDER SILL
SCALE: NTS — 4 / D-7

Nevada Tahoe Conservation District

PROFESSIONAL ENGINEER — MEGHAN C. KELLY — Exp: 6/30/2017 — CIVIL — No. 20557 — STATE OF NEVADA

DETAILS
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT
PHASE 1

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC
SHEET	D-7

INSTALL ROLLING DIP (TYP) (1/-)

INSTALL TEMPORARY GRAVEL ENTRANCE PER SPECIAL PROVISIONS

INSTALL REVEGETATION SIGNAGE AS DIRECTED BY ENGINEER (2/-)

SCARIFY EXISTING DIRT ACCESS ROAD PER SPECIFICATION ±11,700 SF

INSTALL REVEGETATION SIGNAGE AS DIRECTED BY ENGINEER (2/-)

INSTALL REVEGETATION SIGNAGE AS DIRECTED BY ENGINEER (2/-)

INSTALL CONSTRUCTION LIMIT FENCING, ±20 LF

EXISTING TRAIL TO REMAIN DUE TO UTILITY EASEMENTS

INSTALL REVEGETATION SIGNAGE AS DIRECTED BY ENGINEER (2/-)

EXISTING UTILITY EASEMENT BOUNDARIES (TYP.)

INSTALL REVEGETATION SIGNAGE AS DIRECTED BY ENGINEER (2/-)

SEE SHEET G-1 FOR TEMPORARY BMPS FOR THIS AREA.

PROJECT BOUNDARY (TYP)

HIGHWAY 50

66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00 77+00 78+00 79+00

64+00 65+00

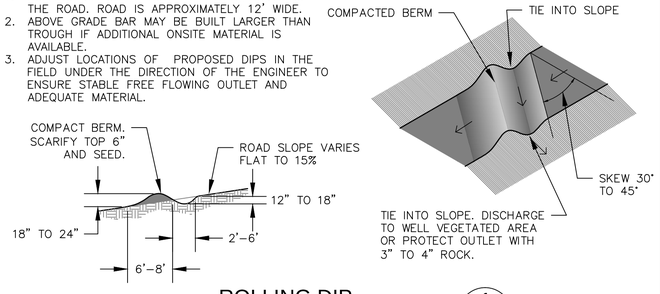
1318-23-401-047
DOUGLAS COUNTY

1318-23-401-048
APTS 801, LLC

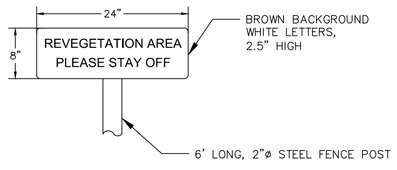
1318-23-401-049
APTS 801, LLC

1318-23-401-005
DOUGLAS COUNTY

NOTES:
1. ROLLING DIP SHALL RUN THE ENTIRE WIDTH OF THE ROAD. ROAD IS APPROXIMATELY 12' WIDE.
2. ABOVE GRADE BAR MAY BE BUILT LARGER THAN TROUGH IF ADDITIONAL ONSITE MATERIAL IS AVAILABLE.
3. ADJUST LOCATIONS OF PROPOSED DIPS IN THE FIELD UNDER THE DIRECTION OF THE ENGINEER TO ENSURE STABLE FREE FLOWING OUTLET AND ADEQUATE MATERIAL.



ROLLING DIP (1/-)
SCALE: NTS



REVEGETATION SIGNAGE (2/-)
SCALE: NTS

NOTES:
1. REMOVE ALL TRASH FROM ENTIRE AREA.

LEGEND
- SCARIFY AND SEED ROAD TREATMENT
- WOODY SLASH TRAIL TREATMENT
- HAND RAKE TRAIL TREATMENT
- INSTALL REVEGETATION SIGNAGE

0 40 80
SCALE IN FEET

Nevada Tahoe Conservation District

MEGHAN C. KELLY
Exp: 6/30/2017
CIVIL
No. 20557
STATE OF NEVADA
PROFESSIONAL ENGINEER

BID ALTERNATE - SIERRA COLINA WORK
BURKE CREEK HWY 50 CROSSING AND REALIGNMENT PROJECT

DESIGNED/DRAWN	MK/MK
CHECKED	MG
DATE	05/13/2016
SCALE	AS SHOWN
PROJECT	BCC

SHEET
ALT-1
25 OF 25