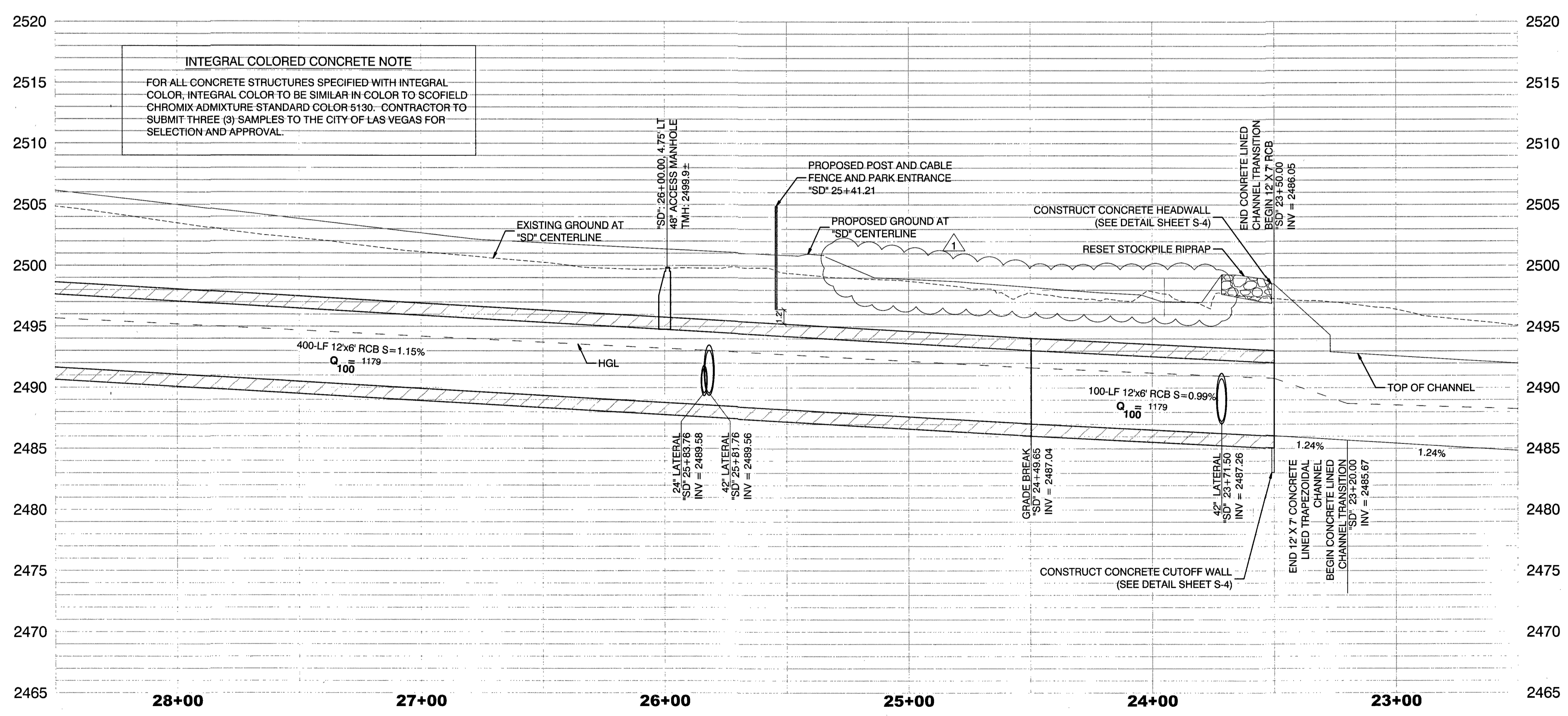


**GRAPHIC SCALE**  
 30 0 15 30 60  
 (IN FEET)

**CALL BEFORE CONSTRUCTION**

BEFORE YOU DIG	USA NORTH	811 OR 900-227-2600
	F.A.S.T.	702-432-5300
BEFORE YOU UNDERGROUND	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

- CONSTRUCTION NOTES**
- CONSTRUCT RCB PLUG (SEE DETAIL 3, SHEET S-1)
  - CONSTRUCT STORM DRAIN PIPE PLUG (SEE DETAIL 4, SHEET S-1)
  - CONSTRUCT INTEGRAL COLORED CONCRETE CHANNEL TRANSITION AND HEADWALL (SEE DETAIL SHEET S-5)
  - CONSTRUCT 12" WIDE INTEGRAL COLORED CONCRETE CHANNEL ACCESS RAMP (SEE DETAIL 2, SHEET SD-14 AND DETAIL 1, SHEET S-8)
  - CONSTRUCT INTEGRAL COLORED CONCRETE FLUME (SEE DETAIL 1, SHEET SD-14)
  - CONSTRUCT 48" RCB ACCESS MANHOLE (SEE DETAIL 6, SHEET S-1)
  - INSTALL 42" RCP
  - CONSTRUCT 60" TYPE III MANHOLE (USDCCA STD. DWG. NO. 406.1)
  - CONSTRUCT 12" WIDE 6" INTEGRAL COLORED CONCRETE OVER 6" TYPE II AGGREGATE BASE CHANNEL ACCESS RAMP (SEE SHEET GR-01) ('SD' 12+11.00, 20.00' LT TO 'SD' 12+11.00, 57.90' LT)
  - INSTALL 18" RCP
  - INSTALL 24" RCP
  - INSTALL 30" RCP
  - INSTALL 36" RCP
  - INSTALL 48" RCP
  - CONSTRUCT 12" X 6" RCB (SEE DETAILS SHEET S-3)
  - CONSTRUCT 20" X 7" RCB (SEE DETAILS SHEET S-3)
  - CONSTRUCT 6" INTEGRAL COLORED CONCRETE PAD OVER 4" TYPE II AGGREGATE BASE WITH CUTOFF WALLS (SEE DETAIL SHEET S-6)
  - CONSTRUCT RESET RIPRAP LINED TRAPEZOIDAL CHANNEL W/40' BOTTOM WIDTH. EXISTING TOPS OF BANK TO REMAIN. (SEE SHEET SD-11 FOR LIMITS OF PARTIALLY GROUTED RIPRAP) (SEE SHEET SD-12 FOR PARTIALLY GROUTED RIPRAP DETAIL)
  - CONSTRUCT INTEGRAL COLORED CONCRETE HEADWALL (SEE SHEET S-6)
  - RESET STOCKPILED RIPRAP AS IDENTIFIED ON NOTE 7 OF SHEET DR-02
  - INSTALL ACCESS LADDER (SEE DETAIL 4, SHEET S-2)
  - INSTALL METAL GRATE (SEE DETAIL SHEET S-10)
  - CONSTRUCT SPECIAL DROP INLET W/ CONCRETE APRON (SEE DETAILS ON SHEET SD-13, SHEET S-9)
  - CONSTRUCT TYPE "DM2" DROP INLET (USDCCA STD. DWG. NO. 412.1)
  - CONSTRUCT TRENCH DRAIN (SEE DETAIL SHEET S-7)
  - CONSTRUCT 12" WIDE X 7" DEEP INTEGRAL COLORED CONCRETE LINED TRAPEZOIDAL CHANNEL (SEE DETAIL SHEET S-3)
  - INSTALL 12" WIDE 6" TYPE II MAINTENANCE ROAD
  - CONSTRUCT NDOT TYPE 28 DROP INLET (NDOT STD. DWG. R-4.2.2) W/ CONCRETE APRON (NDOT STD. DWG. R-4.2.7) (SEE DETAIL SHEET SD-13)
  - CONSTRUCT 12" WIDE 6" TYPE II CHANNEL ACCESS RAMP (SEE SHEET GR-01) ('SD' 12+11.00, 57.90' LT TO 'SD' 12+56.41, 122.28' LT)
  - CONSTRUCT 4" DEEP BY 1" THICK CONCRETE CUTOFF WALL
  - CONSTRUCT 6" INTEGRAL COLORED CONCRETE PAD OVER 4" TYPE II AGGREGATE BASE
  - CONSTRUCT TYPE "CM" DROP INLET, INSIDE WIDTH = 1'-8" (USDCCA STD. DWG. NO. 422)
  - CONSTRUCT INTEGRAL COLORED CONCRETE CHANNEL TRANSITION AND HEADWALL (SEE DETAIL SHEET S-4)
  - CONSTRUCT 48" TYPE I MANHOLE (USDCCA STD. DWG. NO. 403.1)
  - CONSTRUCT EARTHEN/RIPRAP LINED BERM (SEE SECTION F, SHEET SD-10)



- NOTES**
- ALL PIPE LENGTHS MEASURED ALONG PIPE CENTERLINE TO CENTER OF MANHOLE OR GRADE BREAK OR TO INSIDE EDGE OF DI, RCB, OR STRUCTURE.
  - ALL DROP INLETS AND CONCRETE APRONS SHALL INCLUDE STORM WATER MANAGEMENT STAMP AND DETAIL PER USDCCA STD. DWG. NO. 421.
  - ALL STORM DRAIN SHALL BE CLASS II UNLESS OTHERWISE NOTED.
  - NV ENERGY, CENTURYLINK TELEPHONE, AND SOUTHWEST GAS SHOWN FOR INFORMATIONAL ONLY. REFERENCE NV ENERGY, CENTURYLINK TELEPHONE, AND SOUTHWEST GAS DRAWINGS FOR CONSTRUCTION DETAILS. CONTRACTOR TO COORDINATE WITH UTILITIES FOR REMOVAL AND INSTALLATION OF FACILITIES.
  - ALL EXISTING UTILITY LOCATIONS SHOW HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION. THE DEPTH BELOW GRADE OF THE VARIOUS UTILITIES DEPICTED ON THE PLANS VARIES THROUGHOUT THE PROJECT AREA. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHERE EXCAVATING AND GRADING THE SUBBASE IN THE VICINITY OF UTILITIES TO AVOID DAMAGE TO THE LATTER.
  - ALL EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
  - SEE SC-01 FOR RCB AND CHANNEL GEOMETRY.

**LATERAL RUN PROFILE INDEX**

LATERAL RUN NO	SEE SHEETS
X	SD-07 THRU SD-09

PREPARED BY: SLATER HANIFAN GROUP  
 CONSULTING ENGINEERS & PLANNERS  
 4740 S. WILLOW STREET, SUITE 100, LAS VEGAS, NV 89119  
 PHONE (702) 284-5300 FAX (702) 284-5309

CITY OF LAS VEGAS  
 BID# 16-48876  
 DATE: AUGUST 2016  
 SUBMITTAL STAGE:

DESIGNED BY: DAM  
 DRAWN BY: SPC/DAM  
 CHECKED BY: JSR/NJF

TITLE: BRENT LANE DRAINAGE SYSTEM & TRAIL  
 SHEET: STORM DRAIN PLAN AND PROFILE "SD" 22+50.00 TO "SD" 28+50.00

STATE OF NEVADA  
 MARK J. FAILLA  
 Exp. 06/30/2019  
 No. 14566  
 12/15/17

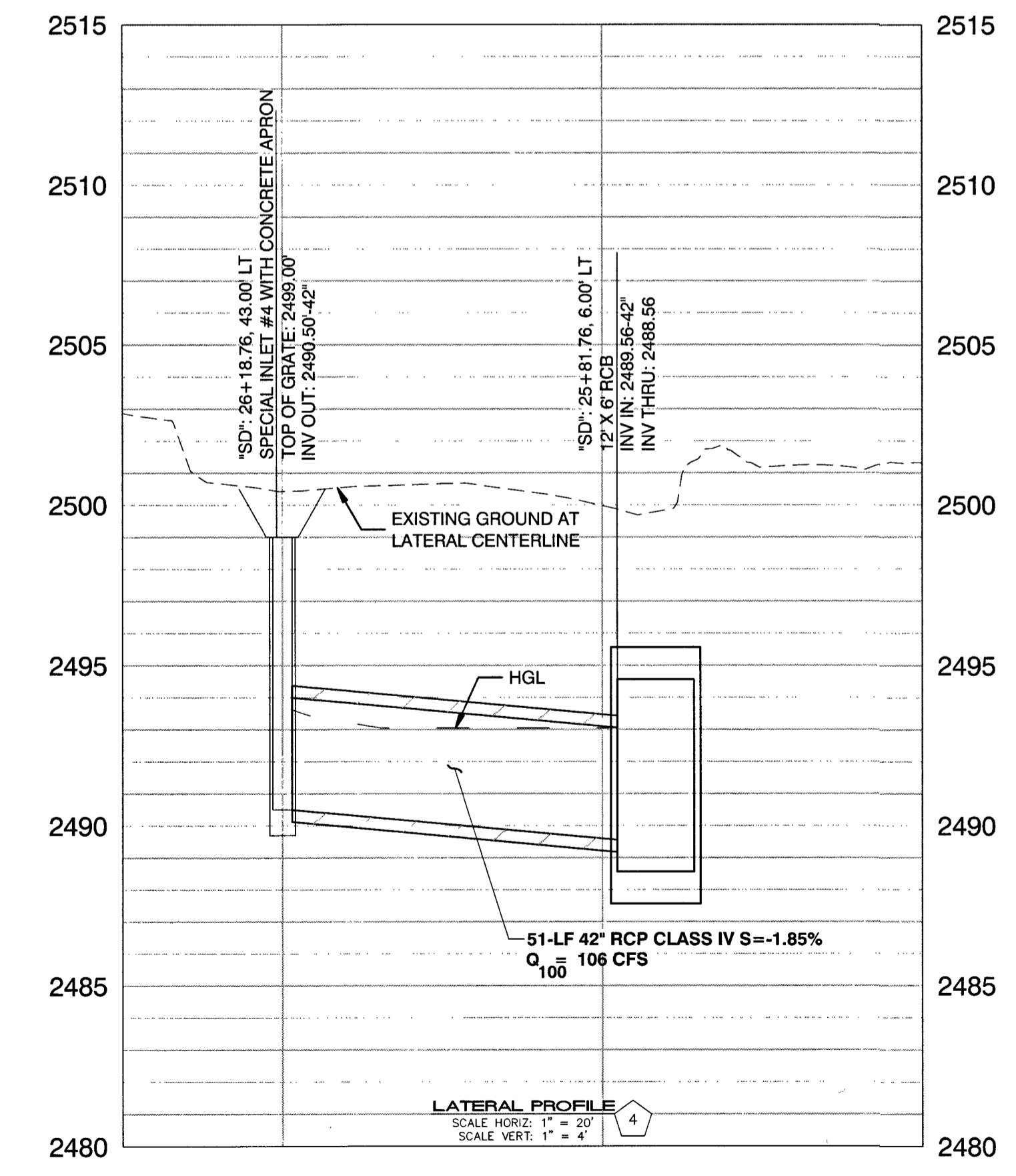
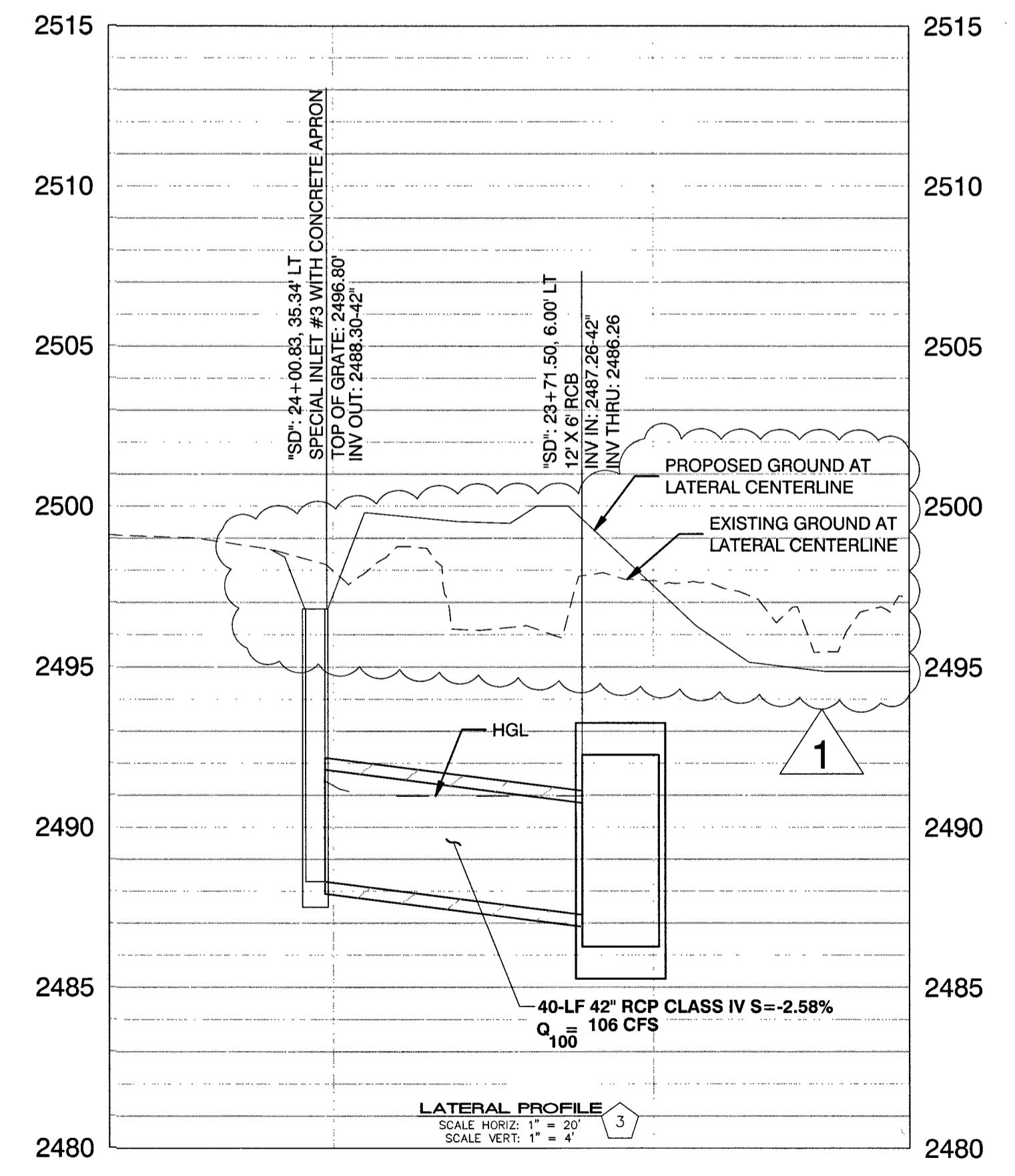
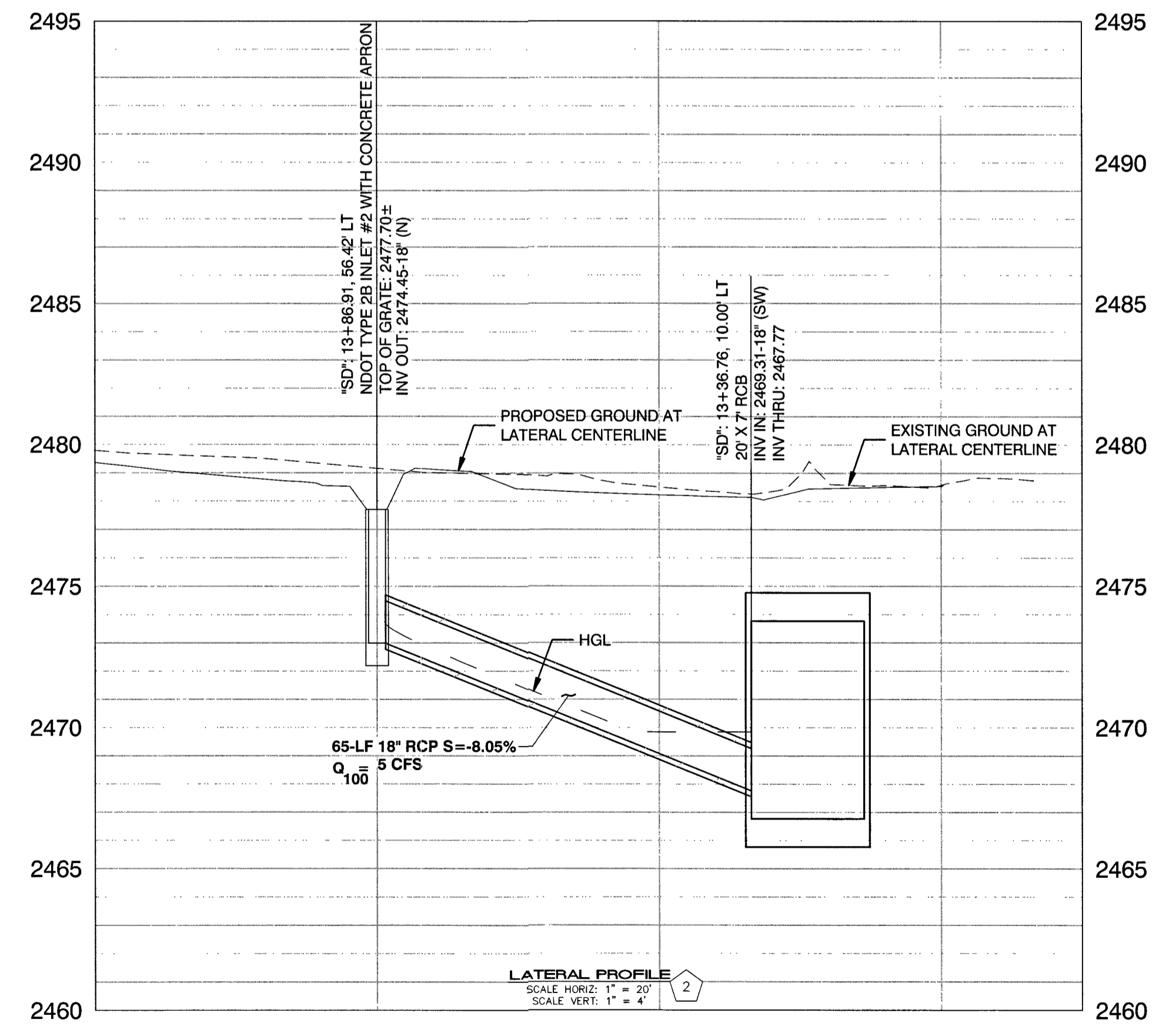
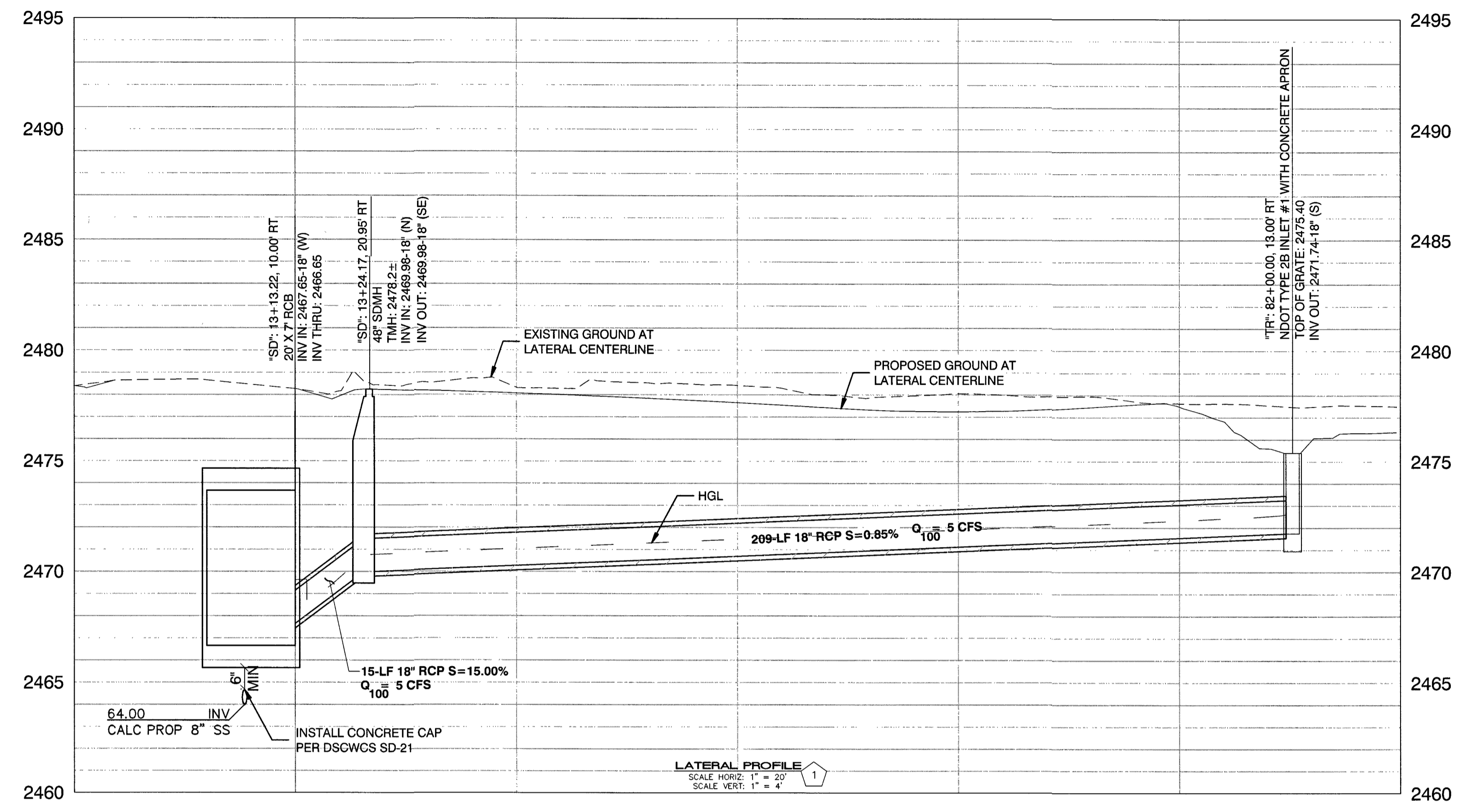
SHEET: SD-04  
 13 OF 64  
 DRAWING NO. 731-92

**FOR TRENCHES SIX (6) FEET WIDE AND GREATER:**

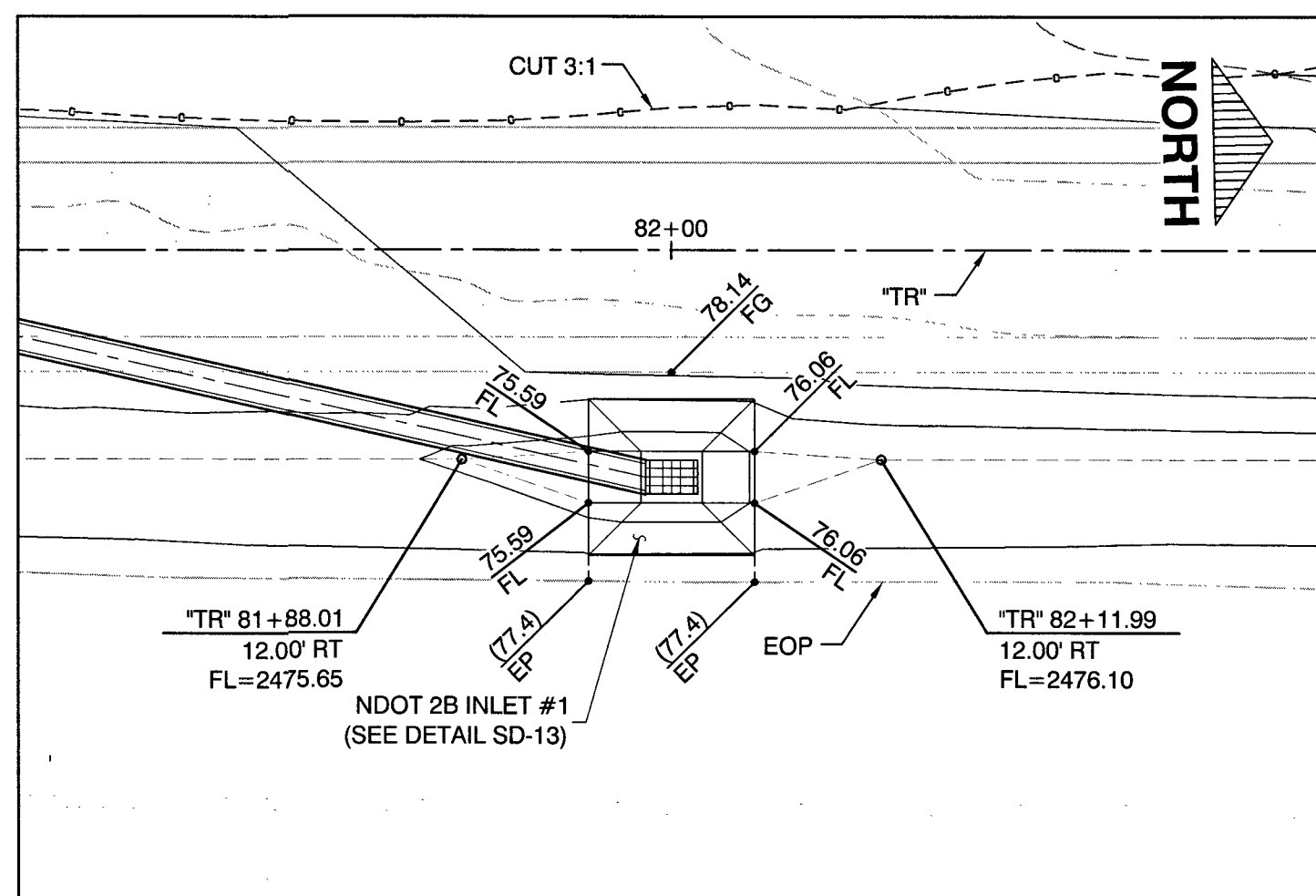
IF THE PIPE MATERIAL IS ACP, THE EXPOSED PIPE MUST BE REPLACED WITH DUCTILE IRON PIPE.

CONTRACTOR MUST SUBMIT PIPE SUPPORT DETAIL PREPARED BY A NEVADA LICENSED ENGINEER TO LVVWD ENGINEERING SERVICES BEFORE CONSTRUCTION TO SHOW HOW WATERLINE(S) WILL BE SUPPORTED DURING EXCAVATION AND BACK FILL.

SUPPORTED PIPE MAY BE EXPOSED FOR NO LONGER THAN 90 DAYS MAXIMUM. IF THE PIPE WILL BE EXPOSED FOR MORE THAN 90 DAYS PLANS MUST BE SUBMITTED AND APPROVED BY THE LVVWD TO RELOCATE PIPE.

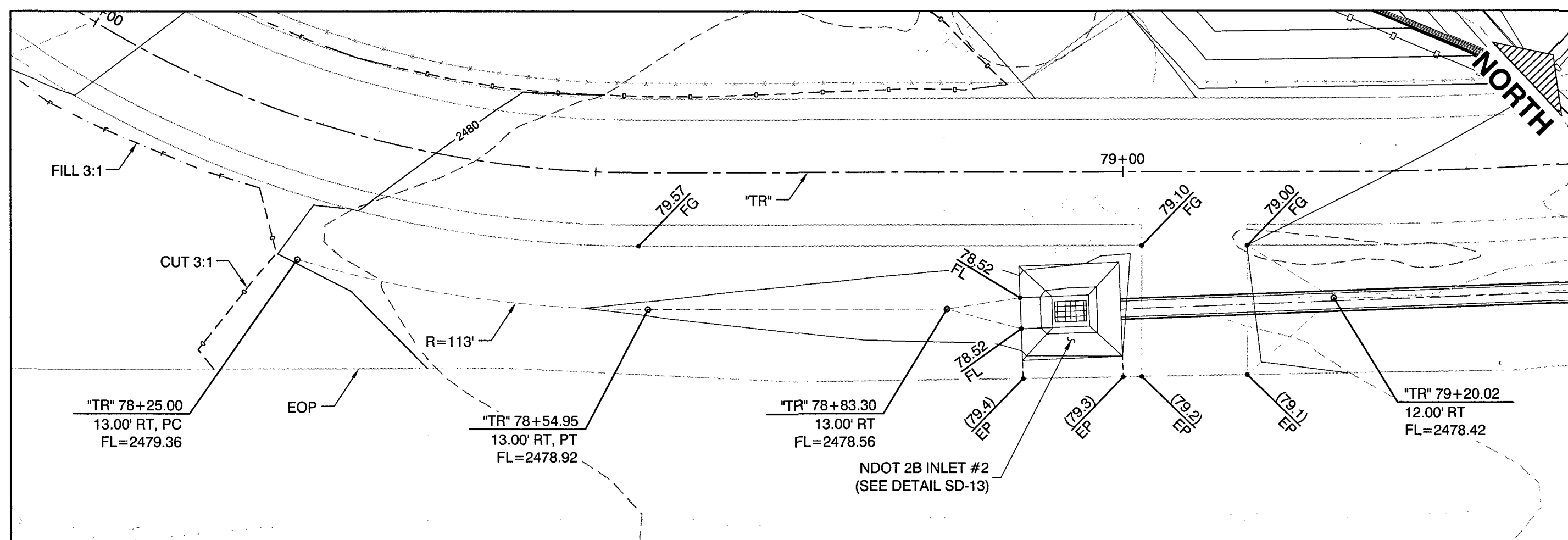


<b>SLATER HANIFAN GROUP</b> CONSULTING ENGINEERS & PLANNERS 5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118 PHONE (702) 264-3300 FAX (702) 264-3399		PREPARED FOR <b>CITY OF LAS VEGAS</b> H# 49876	BID# 16-49876 DESIGNED BY: DAM DRAWN BY: SPC/DAM CHECKED BY: JSR/MJF	DATE: AUGUST 2016 SUBMITTAL STAGE:	CONCRETE TIAL DATE: 12/14/17 NO. DATE REVISIONS
<b>BRENT LANE DRAINAGE SYSTEM &amp; TRAIL</b> SHEET		<b>STORM DRAIN LATERAL PROFILES</b>			
		SHEET <b>SD-07</b> 16 OF 64 DRAWING NO.			



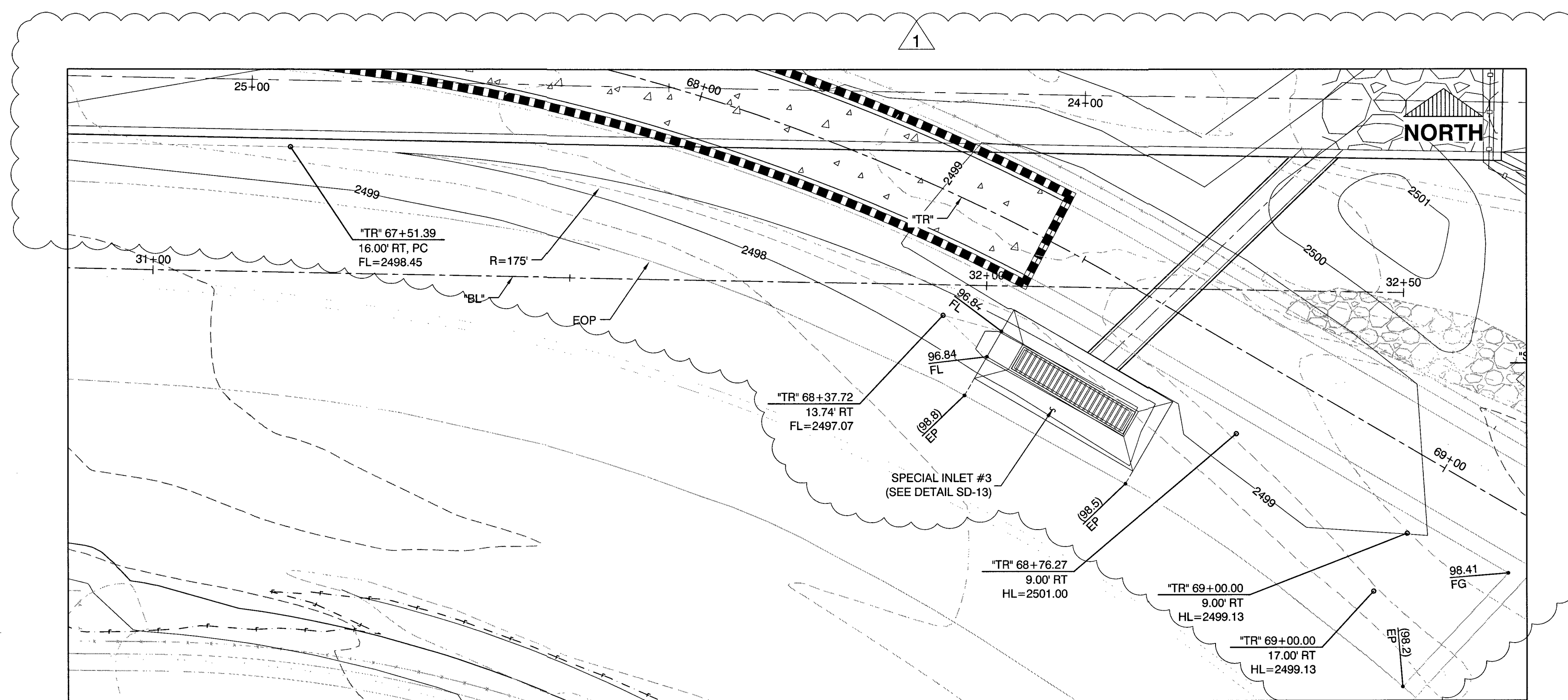
DROP INLET GRADING DETAIL  
SCALE: 1" = 10'-0"

1  
SD-15



DROP INLET GRADING DETAIL  
SCALE: 1" = 10'-0"

2  
SD-15



DROP INLET GRADING DETAIL  
SCALE: 1" = 10'-0"

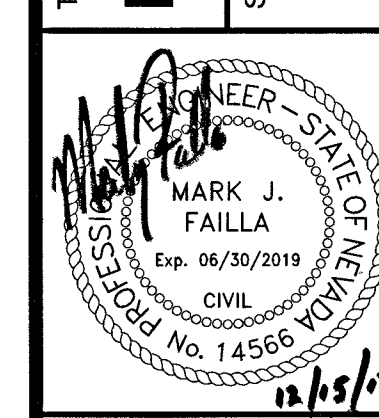
3  
SD-15

NO.	DATE	REVISIONS
1	12/14/17	CONCRETE TYPED

PREPARED BY  
**SLATER HANIFAN GROUP**  
CONSULTING ENGINEERS & PLANNERS  
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118  
PHONE (702) 244-5300 FAX (702) 244-5399

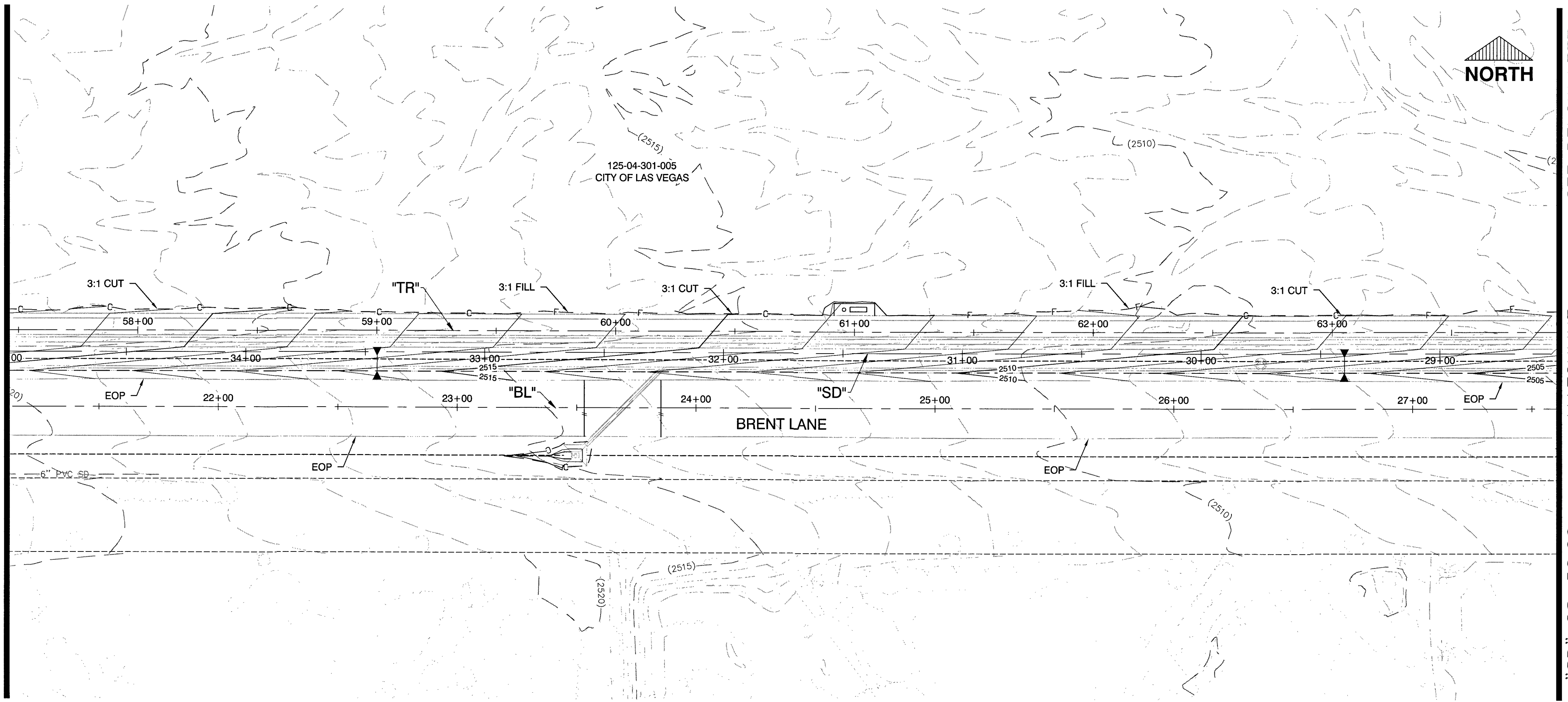
PREPARED FOR	BID #	DESIGNED BY	DRAWN BY	CHECKED BY
CITY OF LAS VEGAS	16-49876	JSR	JAS	RWC
H# 49876	DATE: AUGUST 2016	SUBMITTAL STAGE:		

TITLE  
**BRENT LANE DRAINAGE SYSTEM & TRAIL**  
SHEET  
**DROP INLET GRADING DETAILS**



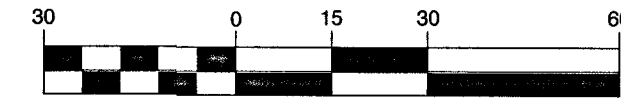
SHEET  
**SD-15**  
24 OF 64  
DRAWING NO.

SEE SHEET GR-04  
MATCHLINE  
"SD" 35+00.00



SEE BELOW LEFT  
MATCHLINE  
"SD" 28+50.00

GRAPHIC SCALE



CALL BEFORE CONSTRUCTION

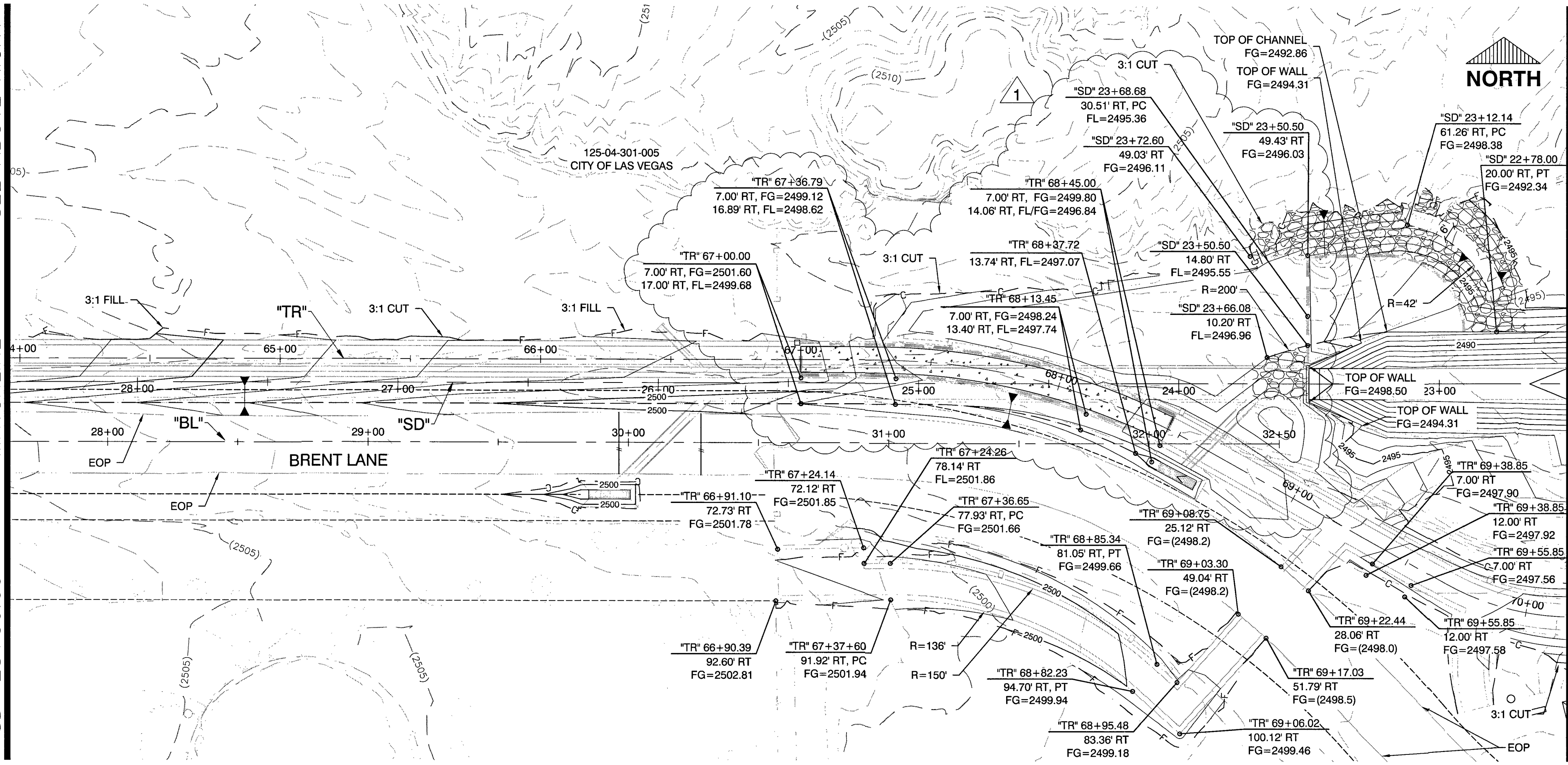
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
BEFORE YOU OVERHEAD	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
	NV ENERGY	702-227-2929

LEGEND



RIPRAP

SEE ABOVE RIGHT  
MATCHLINE  
"SD" 28+50.00

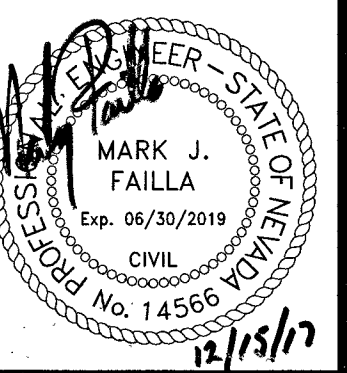


SEE SHEET GR-02  
MATCHLINE  
"SD" 22+50.00

PREPARED BY  
**SLATER HANIFAN GROUP**  
CONSULTING ENGINEERS & PLANNERS  
5700 S. ARVILLE STREET #216 LAS VEGAS, NV 89118  
PHONE (702) 246-5300 FAX (702) 246-5399

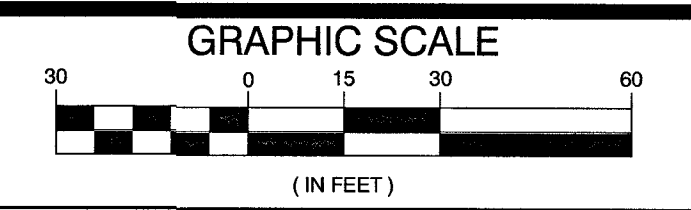
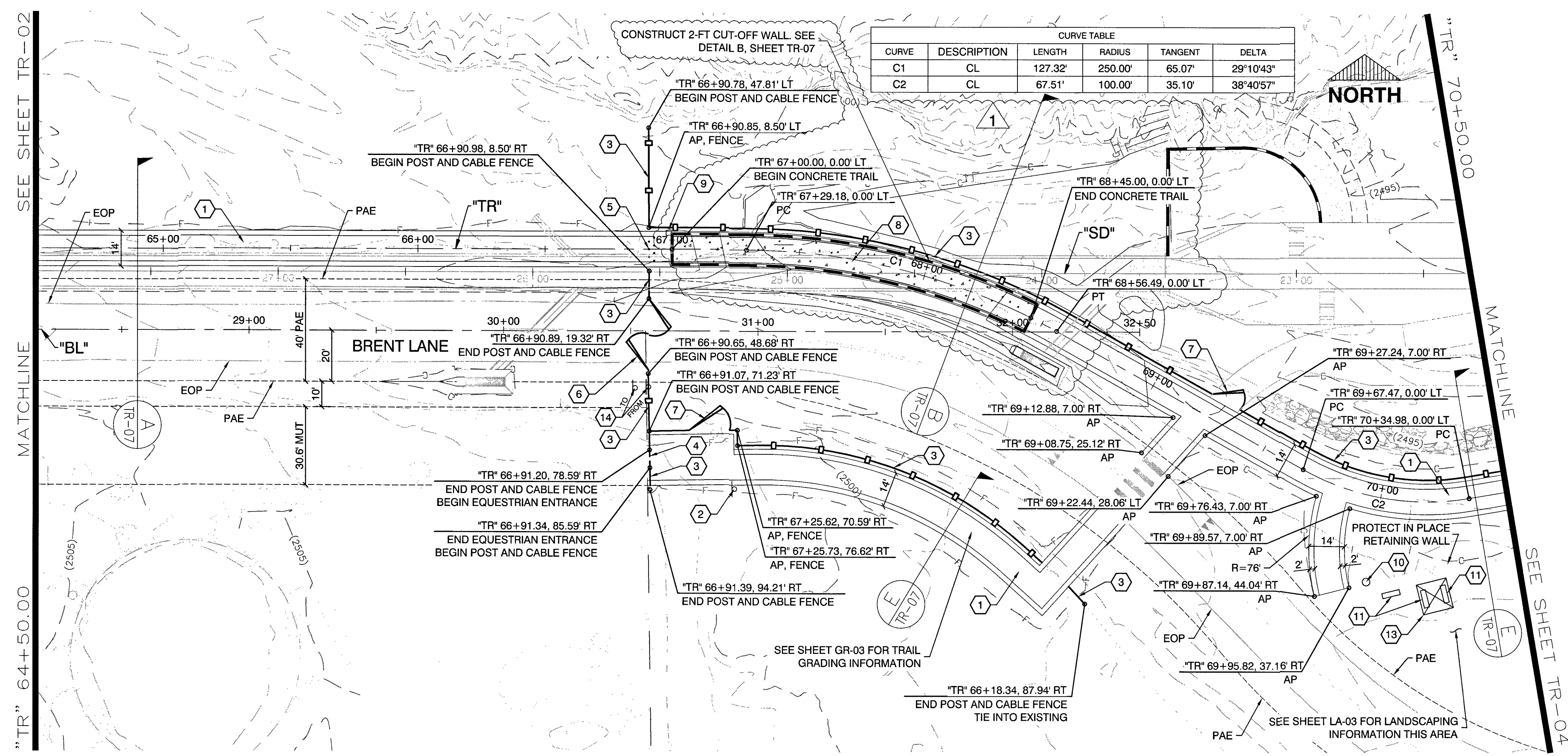
PREPARED FOR <b>CITY OF LAS VEGAS</b>	BID# 16-49876	DESIGNED BY: DAM	SPO/DAM
H# 49876	DATE: AUGUST 2016	DRAWN BY:	JSR/MAJ
	SUBMITTAL STAGE	CHECKED BY:	

TITLE  
**BRENT LANE DRAINAGE SYSTEM & TRAIL**  
SHEET  
**GRADING PLAN**  
**"SD" 18+50.00 TO "SD" 28+50.00**



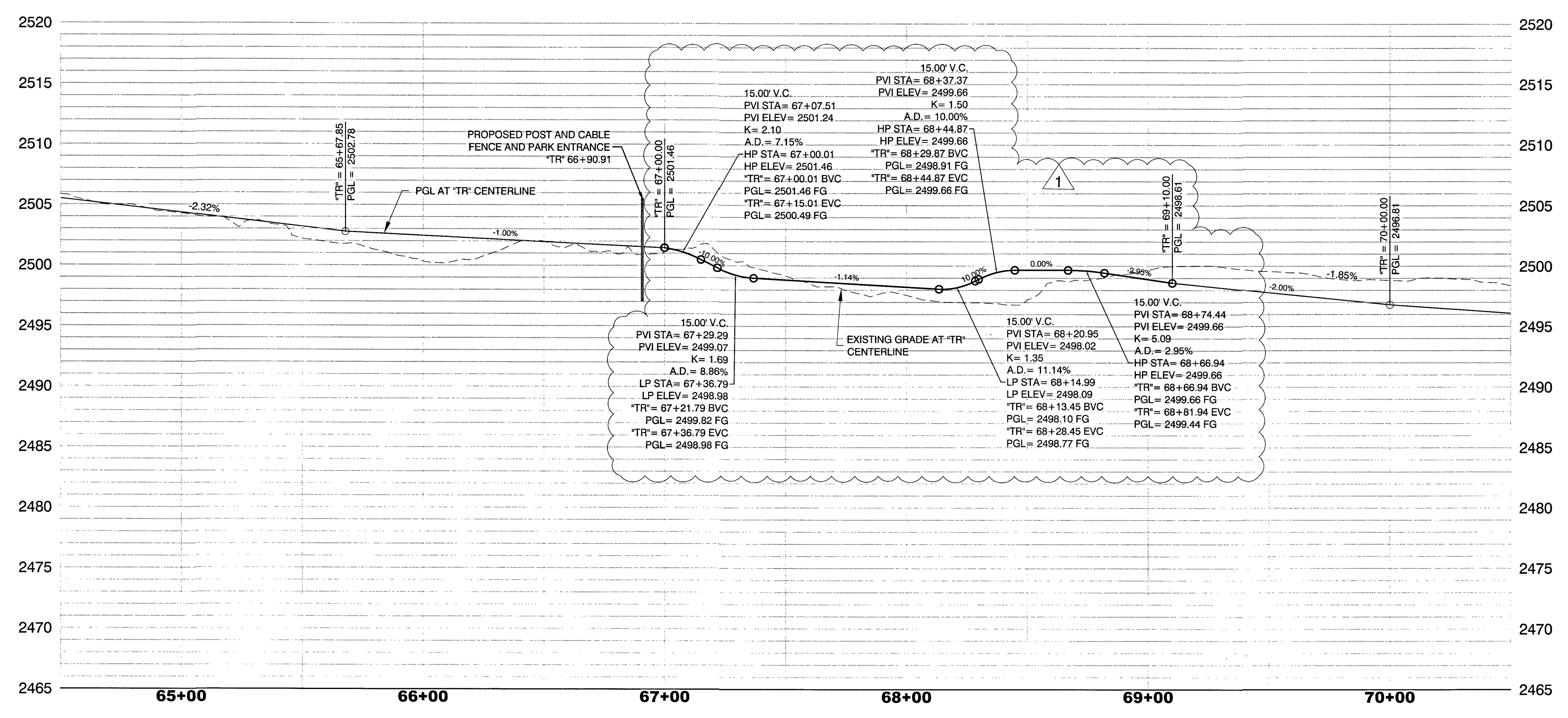
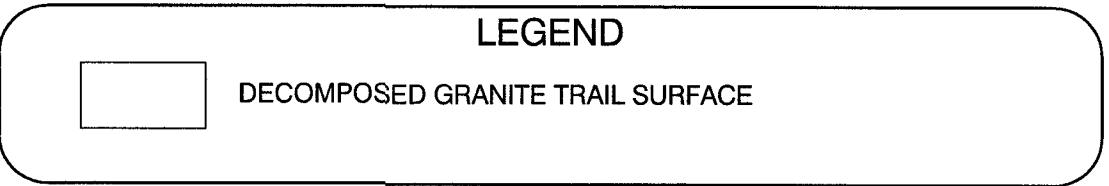
SHEET  
**GR-03**  
28 OF 64  
DRAWING NO.

NO.	DATE	REVISIONS
1	12/14/17	CONCRETE TRAIL



CALL BEFORE CONSTRUCTION		
BEFORE YOU DIG	USA NORTH	811 OR 800-227-2600
BEFORE YOU UNDERGROUND	F.A.S.T.	702-432-5300
	CLARK COUNTY TRAFFIC OPERATIONS	702-455-7511
	CITY OF LAS VEGAS T.E.F.O.	702-229-6611
BEFORE YOU OVERHEAD	NV ENERGY	702-227-2929

- CONSTRUCTION NOTES**
- CONSTRUCT 1/4" MINUS DECOMPOSED GRANITE TRAIL SURFACE (SEE DETAIL SHEET TR-07)
  - INSTALL DIRECTION SIGN (SEE DETAIL C SHEET TR-09)
  - INSTALL POST AND CABLE FENCE (SEE DETAIL A SHEET TR-08)
  - INSTALL EQUESTRIAN ENTRANCE (SEE DETAIL B SHEET TR-09)
  - INSTALL REMOVABLE BOLLARD(S) (SEE DETAIL B ON SHEET TR-08)
  - INSTALL SALVAGED SWING GATE
  - INSTALL 16" SWING GATE (SEE DETAIL A SHEET TR-09)
  - CONSTRUCT INTEGRAL COLORED CONCRETE TRAIL SURFACE (SEE DETAIL B SHEET TR-07)
  - INSTALL MONUMENT PLAQUE (SEE DETAIL A AND D SHEET TR-10)
  - INSTALL TRASH RECEPTACLE (SEE DETAIL C SHEET TR-10)
  - INSTALL BENCH (SEE DETAIL B SHEET TR-10)
  - INSTALL PET WASTE STATION (SEE DETAIL D SHEET TR-09)
  - INSTALL 12 X 12 SHADE STRUCTURE (SEE DETAILS ON SHEETS TR-11 TO TR-13)
  - REMOVE AND RESET SIGN ON GROUND MOUNTED POST (USDCOA STD. DWG. NO. 249.1)

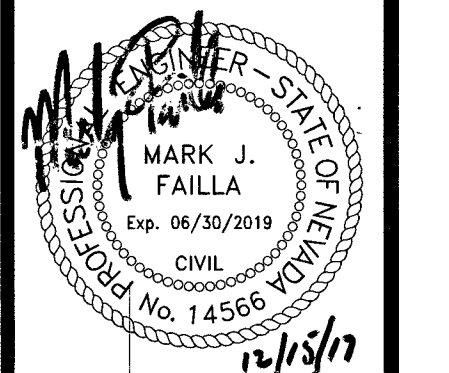


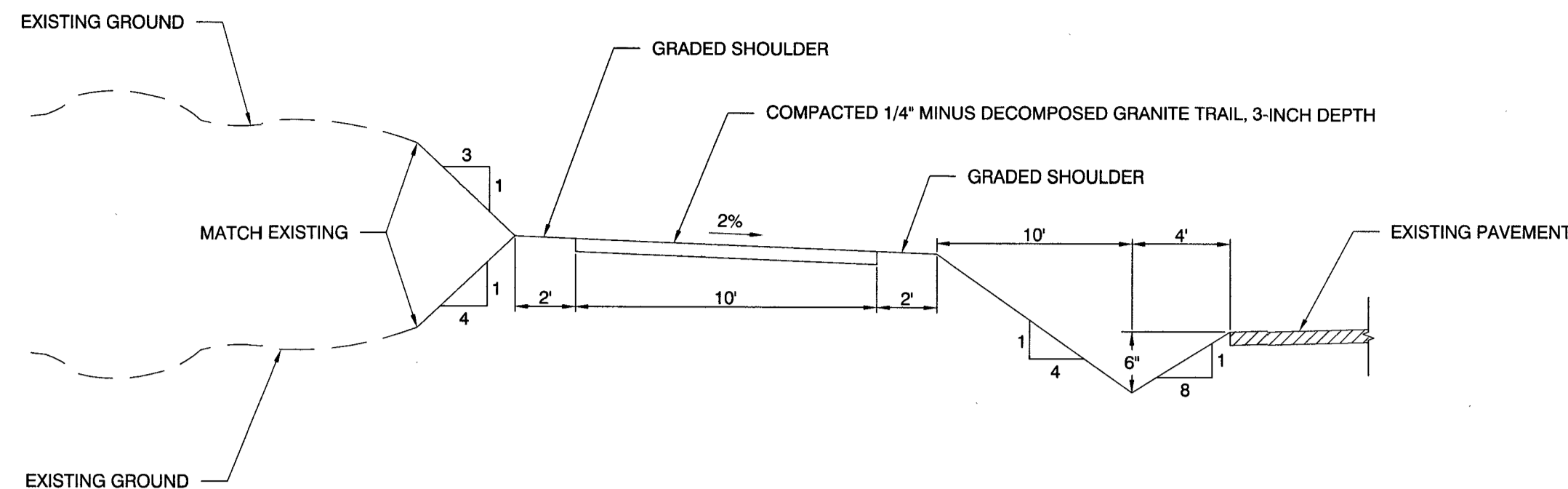
NO.	DATE	REVISIONS
1	12/14/17	CONCRETE TRAIL

PREPARED BY  
**S-I-K**  
 SLATER HANIFAN GROUP  
 CONSULTING ENGINEERS & PLANNERS  
 5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118  
 PHONE (702) 284-5300 FAX (702) 884-5399

DESIGNED BY: DAM	DRAWN BY: SPC/DAM	CHECKED BY: JSR/JJF
DATE: AUGUST 2016	SUBMITTAL STAGE:	
H# 49876	BID# 16-49876	

TITLE  
**BRENT LANE DRAINAGE SYSTEM & TRAIL**  
 SHEET  
**TRAIL PLAN AND PROFILE**  
**"TR" 64+50.00 TO "TR" 70+50.00**



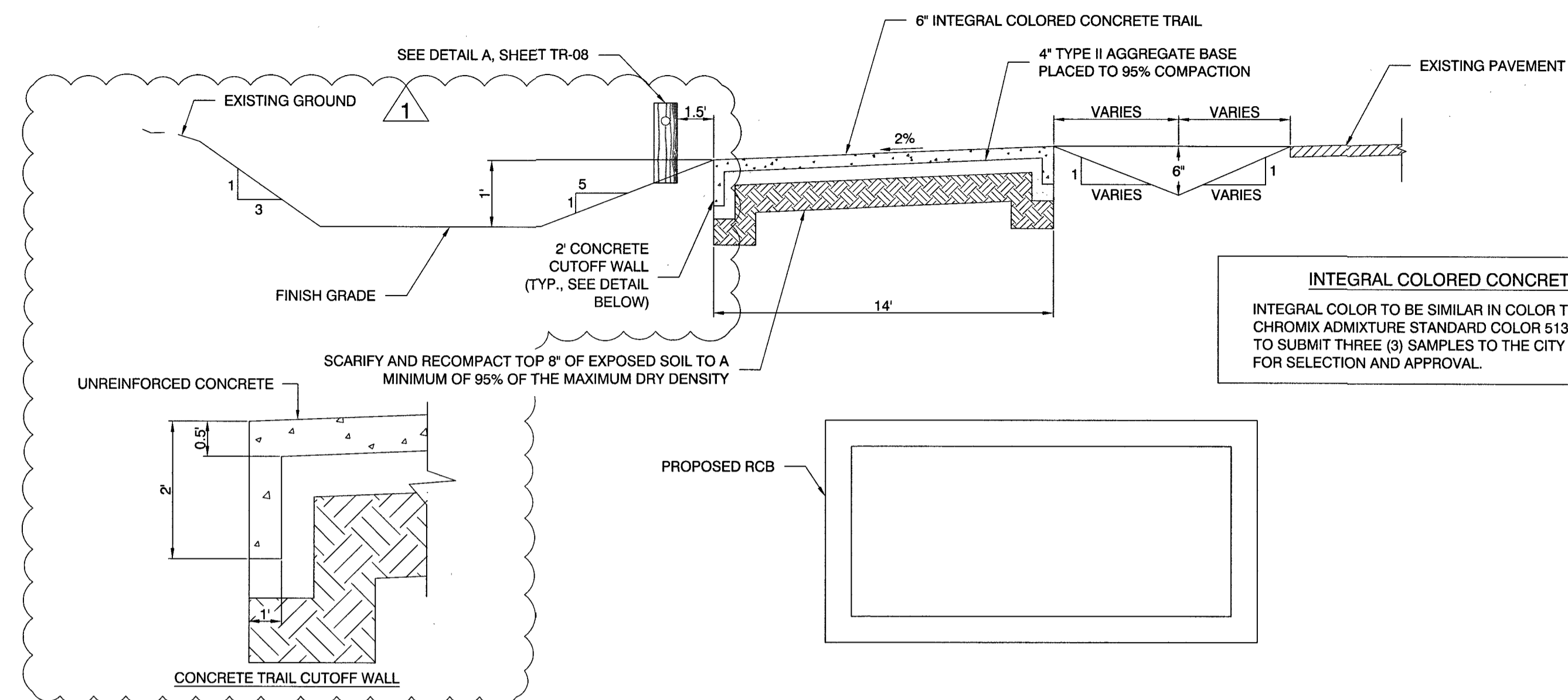


TRAIL SECTION

NOT TO SCALE

"TR" 53+66.23 TO "TR" 67+00.00

A



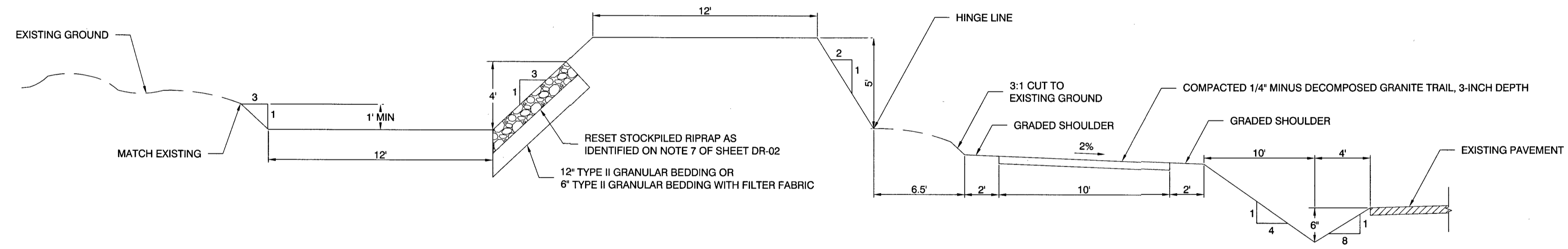
CONCRETE TRAIL SECTION

NOT TO SCALE

"TR" 67+00.00 TO "TR" 68+45.00

B

**INTEGRAL COLORED CONCRETE NOTE**  
 INTEGRAL COLOR TO BE SIMILAR IN COLOR TO SCOFIELD CHROMIX ADMIXTURE STANDARD COLOR 5130. CONTRACTOR TO SUBMIT THREE (3) SAMPLES TO THE CITY OF LAS VEGAS FOR SELECTION AND APPROVAL.

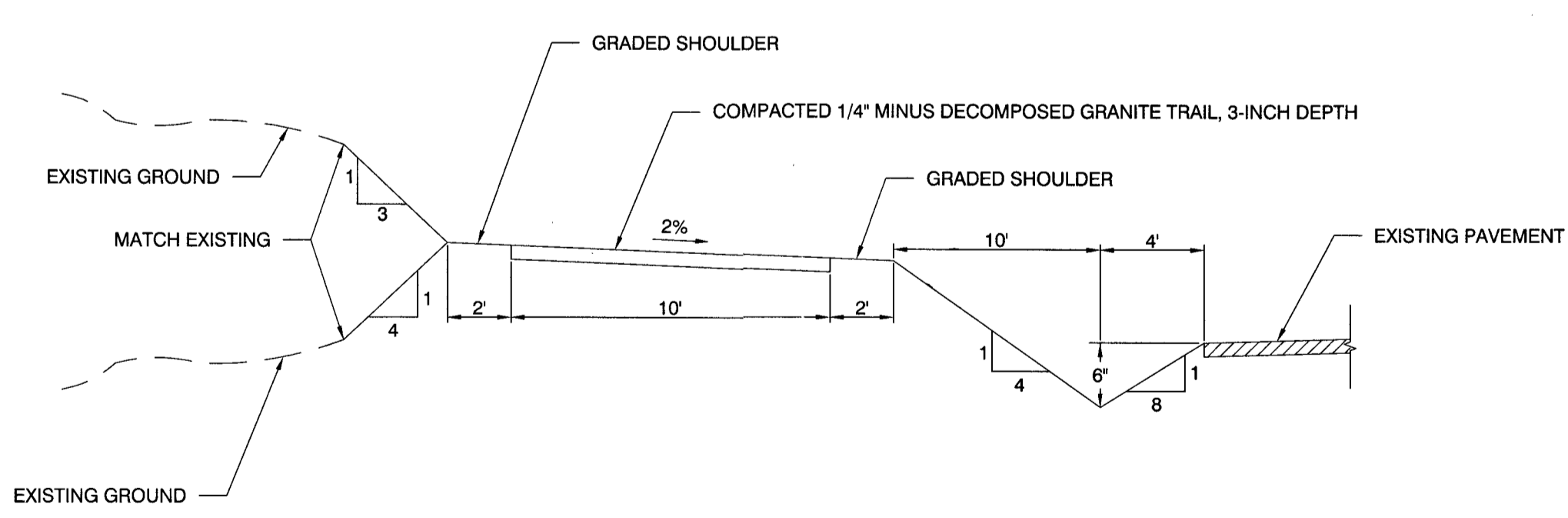


BERM SECTION

NOT TO SCALE

"TR" 79+90.00 TO "TR" 82+61.51

C

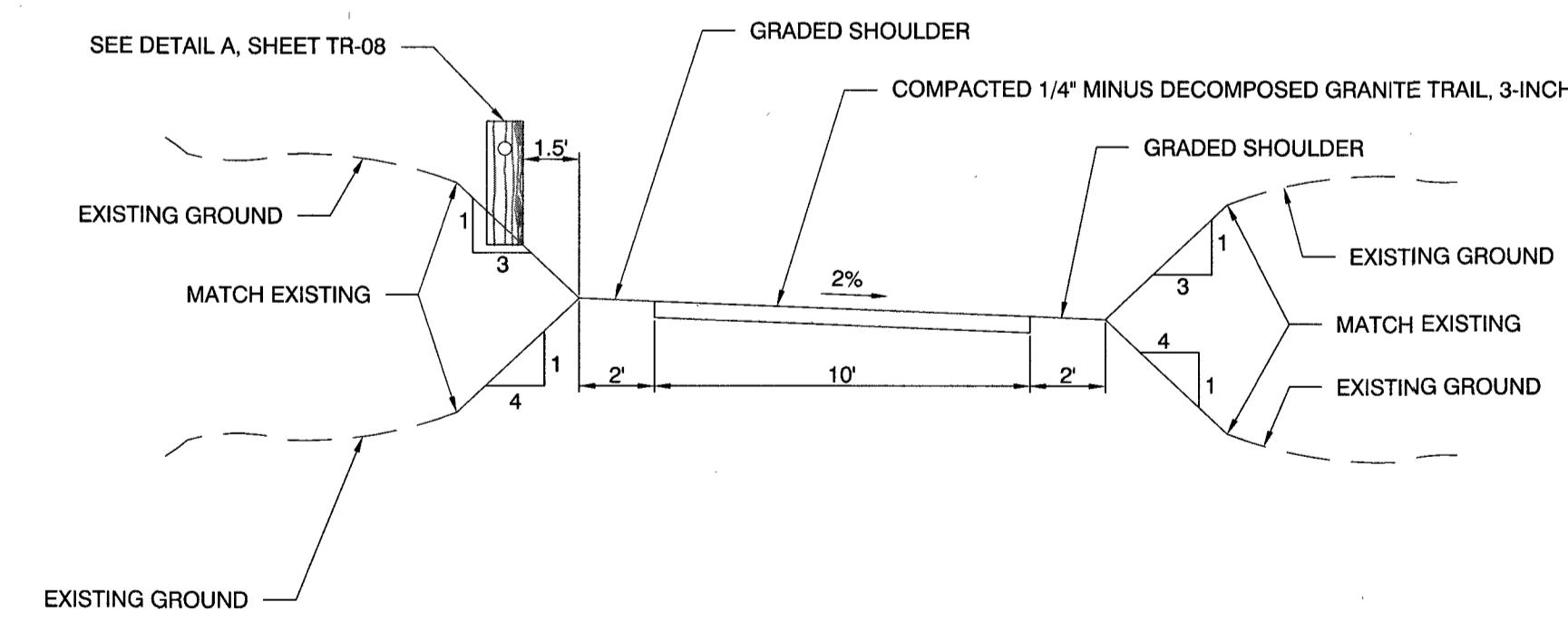


TRAIL SECTION

NOT TO SCALE

"TR" 82+61.51 TO "TR" 84+26.69

D

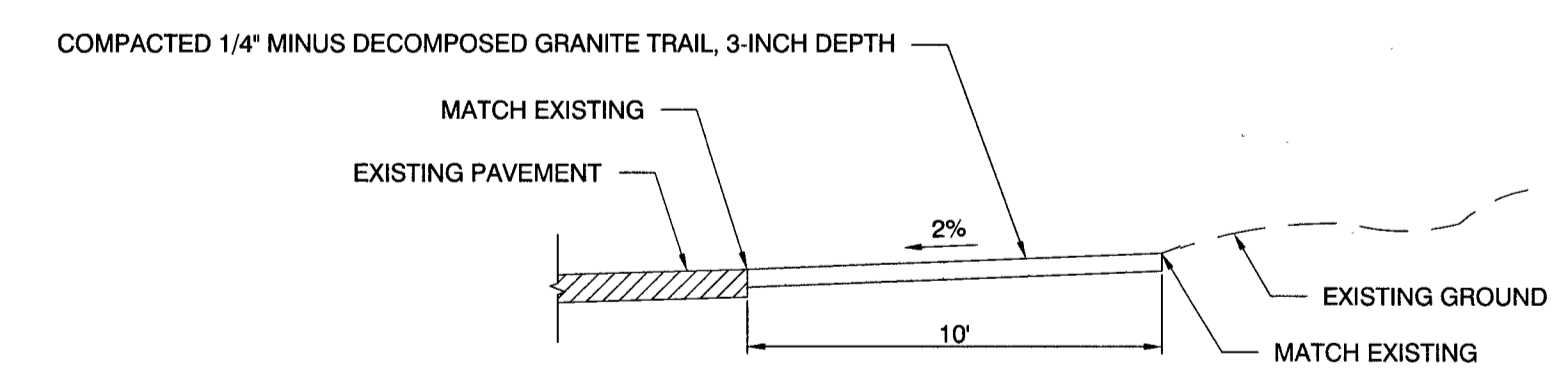


TRAIL SECTION

NOT TO SCALE

"TR" 68+70.00 TO "TR" 79+90.00

E



TRAIL SECTION

NOT TO SCALE

"TR" 84+67.51 TO "TR" 84+80.58

F

**DECOMPOSED GRANITE COLOR NOTE**  
 DECOMPOSED GRANITE TO MATCH DECOMPOSED GRANITE TRAIL COLOR UTILIZED IN FLOYD LAMB PARK. CONTRACTOR TO SUBMIT THREE (3) COLOR SAMPLES TO THE CITY OF LAS VEGAS FOR SELECTION AND APPROVAL.

PREPARED BY <b>CITY OF LAS VEGAS</b> H# 48976		DESIGNED BY: DAM DRAWN BY: DAM CHECKED BY: JSR/MJF	
DATE: AUGUST 2016 SUBMITTAL STAGE:		NO. DATE 1 12/14/17 CONCRETE TRAIL	
<b>BRENT LANE DRAINAGE SYSTEM &amp; TRAIL</b> SHEET			
<b>TRAIL TYPICAL SECTIONS</b>			
SHEET <b>TR-07</b> 37 OF 64 DRAWING NO.			

PREPARED BY  
**S-I-G GROUP**  
 CONSULTING ENGINEERS & PLANNERS  
 5740 S. ARVILLE STREET #210, LAS VEGAS, NV 89118  
 PHONE (702) 284-5300 FAX (702) 284-5309