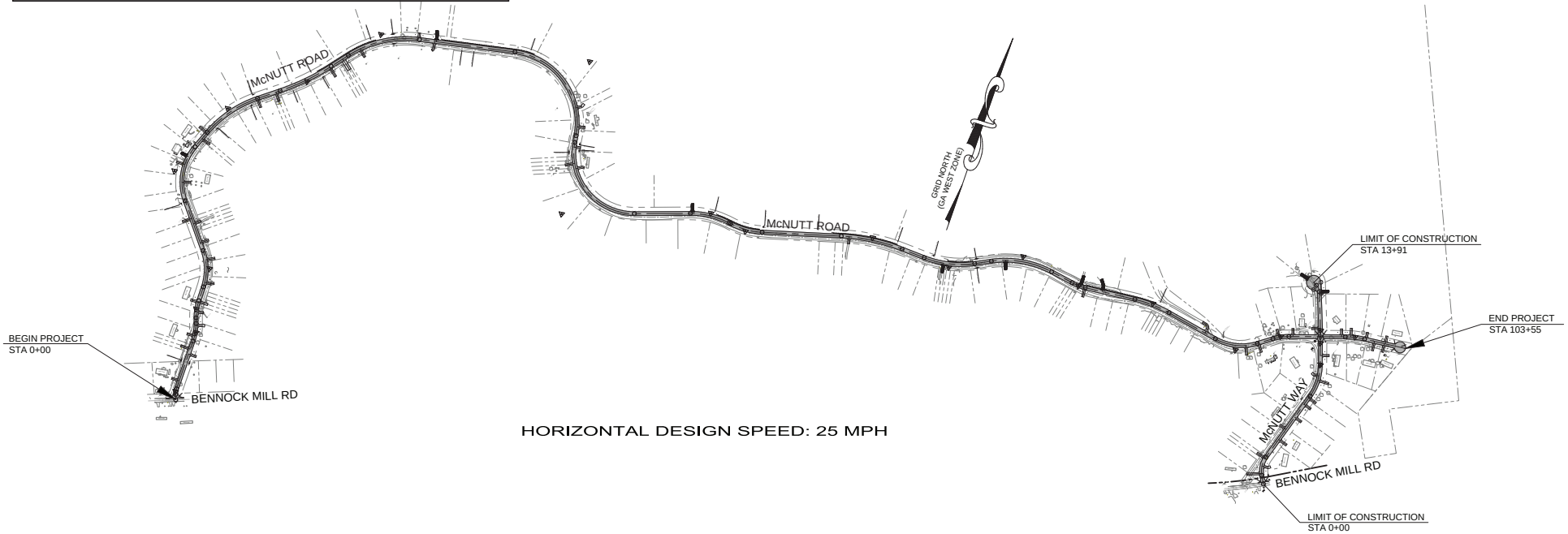
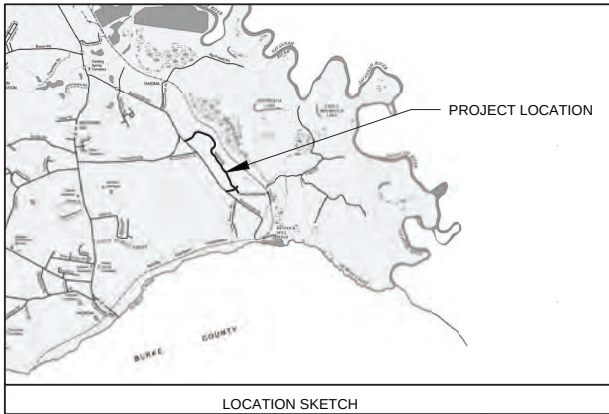


PLAN AND PROFILE OF PROPOSED

GRADING, DRAINAGE AND PAVING OF McNUTT ROAD AND McNUTT WAY

CITY OF AUGUSTA RICHMOND COUNTY, GEORGIA



THIS PROJECT HAS BEEN PREPARED USING THE HORIZONTAL GEORGIA COORDINATE SYSTEM OF 1984 (NAD 1983)/84 WEST ZONE, AND THE NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988.



LENGTH OF ROAD	1.96
	MILES



PLANS COMPLETED	..
REVISIONS	
THIS PROJECT IS 100% WITHIN RICHMOND COUNTY AND IS 100% IN CONG. DIST. 12.	
DRAWING NO.	01-0001

[illegible]

DRAWING NO.	DESCRIPTION	LATEST REVISION
	EROSION CONTROL	
50-0001	EROSION CONTROL COVER SHEET	
51-0001	ES&PC GENERAL NOTES	
52-0001	EC-L1 EROSION CONTROL LEGEND AND UNIFORM CODE SHEET (SHEET 1 OF 7)	
52-0002	EC-L2 EROSION CONTROL LEGEND AND UNIFORM CODE SHEET (SHEET 2 OF 7)	
52-0003	EC-L3 EROSION CONTROL LEGEND AND UNIFORM CODE SHEET (SHEET 3 OF 7)	
52-0004	EC-L4 EROSION CONTROL LEGEND AND UNIFORM CODE SHEET (SHEET 4 OF 7)	
52-0005	EC-L5 EROSION CONTROL LEGEND AND UNIFORM CODE SHEET (SHEET 5 OF 7)	
52-0006	EC-L6 EROSION CONTROL LEGEND AND UNIFORM CODE SHEET (SHEET 6 OF 7)	
52-0007	EC-L7 EROSION CONTROL LEGEND AND UNIFORM CODE SHEET (SHEET 7 OF 7)	
53-0001	EROSION CONTROL DRAINAGE AREA MAP	
54-0001 TO 54-0039	BMP LOCATION DETAILS	
55-0001	EROSION CONTROL WATERSHED MAP AND SITE MONITORING LOCATION	
	EROSION CONTROL CONSTRUCTION DETAILS	
56-0002	D-30 SILT CONTROL GATES FOR STRUCTURES TYPE - 1,2, AND 3	
56-0003	D-24A TEMPORARY SILT FENCE (SHEET 1 OF 4)	
56-0004	D-24B TEMPORARY SILT FENCE BERM DITCH, INSTALLATION, BRUSH BARRIER (SHEET 2 OF 4)	
56-0005	D-24C TEMPORARY SILT FENCE J HOOKS, INLET SEDIMENT TRAPS (SHEET 3 OF 4)	
56-0006	D-24D TEMPORARY SILT FENCE FABRIC CHECK DAM (4 OF 4)	
56-0007	D-41 CONSTRUCTION EXIT	
56-0008	D-55A RIP RAP OUTLET PROTECTION (SHEET 1 OF 2)	
56-0009	D-55B RIP RAP OUTLET PROTECTION (SHEET 2 OF 2)	
56-0010	D-56 STONE RIP RAP AND SAND BAG TEMPORARY CHECK DAMS	
60-0001 TO 60-0013	RIGHT-OF-WAY PLANS	

GENERAL NOTES - STANDARD SIGNS

1. ALL STANDARD HIGHWAY SIGNS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND THE GEORGIA SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND/OR SPECIAL PROVISIONS.
2. SIGN ERECTION STATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION. NO SIGN LOCATION SHALL BE CHANGED BY THE CONTRACTOR OR BY THE PROJECT ENGINEER WITHOUT PRIOR APPROVAL FROM THE OFFICE OF TRAFFIC OPERATIONS.
3. ALL STANDARD HIGHWAY SIGNS SHALL BE ERECTED AT A HEIGHT OF 7 FEET ABOVE THE NORMAL EDGE OF PAVEMENT TO THE BOTTOM OF THE SIGN OR ASSEMBLY,
- 4a. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON INTERSTATE HIGHWAYS SHALL BE 32 FEET FROM THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S), UNLESS SPECIFIED OTHERWISE IN THE PLANS. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON RAMP SHALL BE 2 FEET FROM THE NORMAL EDGE OF PAVED SHOULDER, OR EDGE OF GRADED SHOULDER WHEN PRESENT.
- 4b. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON ALL OTHER ROADWAYS SHALL BE 6 FEET FROM THE EDGE OF THE PAVED SHOULDER OR 12 FEET FROM THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S), WHICHEVER IS GREATER. THE HORIZONTAL CLEARANCE IN NON-MOUNTABLE CURB SECTIONS SHALL BE AT LEAST 2 FEET FROM THE CURB FACE TO THE NEARER EDGE OF THE SIGN(S).
- 4c. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS MOUNTED BEHIND GUARD RAIL SHALL BE 6 FEET FROM THE FACE OF THE GUARD RAIL TO THE NEARER EDGE OF THE SIGN(S).
5. SINGLE PLATE, HORIZONTAL RECTANGULAR SIGNS OVER 48 INCHES IN WIDTH SHALL BE MOUNTED ON TWO POSTS WITH 2 EACH 2 INCH x _____ INCH x (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAPS. THE STRAPS SHALL BE FLUSH WITH THE BACK OF THE SIGN WITH ONE EACH ACROSS THE TOP AND BOTTOM OF THE SIGN. THE CENTERLINE OF EACH POST SHALL BE INSET 1/6TH OF THE SIGN WIDTH FROM THE EDGE OF THE SIGN. SIGN PLATE BOLT HOLES SHALL BE... INCH DIAMETER, DRILLED OR PUNCHED, AS SHOWN ON THE SIGN PLATE DETAILS.
6. EACH 42 OR 48 INCH WIDE x 18 OR 24 INCH HIGH SIGN REQUIRES ONE 2 INCH x _____ INCH x (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAP LOCATED IN THE CENTER OF THE SIGN AND FLUSH WITH THE BACK OF THE SIGN.
7. SIGN ASSEMBLIES SHALL BE MOUNTED ON ALUMINUM OR GALVANIZED STEEL STRAP FRAMES. FOR DETAILS AND STRAP SPECIFICATIONS REFER TO SIGN ASSEMBLY-TYPICAL FRAMING DETAILS.
8. TYPE 9 (HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL STANDARD HIGHWAY SIGNS REQUIRING REFLECTORIZED BACKGROUNDS EXCEPT AS SPECIFIED BELOW OR SPECIFIED OTHERWISE IN THE PLANS. EITHER CLASS 1 OR CLASS 2 ADHESIVE BACKING IS PERMISSIBLE.
9. TYPE 11 (VERY HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL RED SERIES SIGNS (R1-1, R1-2, R1-3P, R5-1, R5-1A, R5-1B).
10. TYPE 9 (VERY HIGH INTENSITY) FLUORESCENT YELLOW GREEN REFLECTIVE SHEETING SHALL BE USED FOR SCHOOL ZONE (S1-1, S2-1, S3-1, S4-3, AND THE TOP PORTION OF THE S5-1) SIGNS, BICYCLE CROSSING (W11-1) SIGNS, AND PEDESTRIAN CROSSING (W11-2 AND W11A-2) SIGNS. SIGNS WITHIN THE SAME ASSEMBLY AS THE SCHOOL ZONE SIGNS SPECIFICALLY LISTED ABOVE AND ALL REGULATORY SIGNS PLACED AS PART OF THE SCHOOL ZONE SIGNING SHALL HAVE TYPE IX (VERY HIGH INTENSITY) REFLECTIVE SHEETING BACKGROUNDS OF THE APPROPRIATE COLOR.
11. TYPE 9 (VERY HIGH INTENSITY) FLUORESCENT YELLOW REFLECTIVE SHEETING SHALL BE USED FOR ALL WARNING SIGNS.
12. A _____ INCH MINIMUM AIR SPACE SHALL BE REQUIRED BETWEEN ALL SIGN PLATES WITHIN AN ASSEMBLY.
13. WHERE SIGNS WITHIN AN ASSEMBLY EXTEND BELOW THE STANDARD MOUNTING HOLES ON THE POST(S), ADDITIONAL...INCH DIAMETER HOLE(S), DRILLED OR PUNCHED, SHALL BE REQUIRED TO PROPERLY MOUNT THE ASSEMBLY.
14. INTERSTATE SHIELDS SHALL CONTAIN THE WORD GEORGIA. ALL INTERSTATE, U.S., AND GEORGIA SHIELDS REQUIRING ALT, BUS, CONN, LOOP, OR SPUR SHALL USE 4 INCH SERIES "D" LETTERS. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, FOR DETAILS.
15. FOR DETAILS OF SPECIAL DESIGN HIGHWAY SIGNS, SEE DETAILS OF MISCELLANEOUS SIGNS.
16. REFER TO PLAN SHEETS FOR LOCATION OF THE DISTRICT ENGINEERS OFFICE TO BE SHOWN ON ALL R552-1 (LIMITED ACCESS) SIGNS IN THIS PROJECT, IF ANY.
17. THE CONTRACTOR WILL, AS REQUESTED BY THE DISTRICT TRAFFIC OPERATIONS ENGINEER, BE REQUIRED TO REMOVE ANY EXISTING SIGNS THAT ARE DUPLICATED OR ARE CONTRARY TO THESE SIGN PLANS.



Moreland Altobelli
Associates, LLC
327 Oakridge Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5907

	NAME	DATE
DESIGNED BY	NAA	03-12-20
DRAWN BY	NAA	03-12-20
CHECKED BY	KEQ	03-12-20

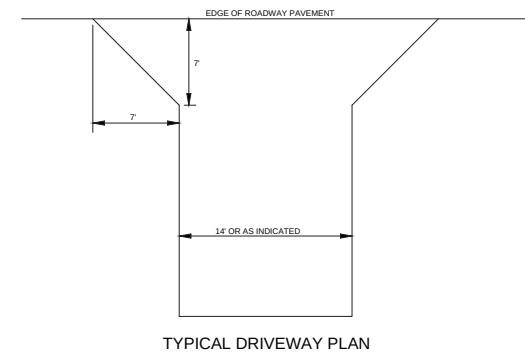
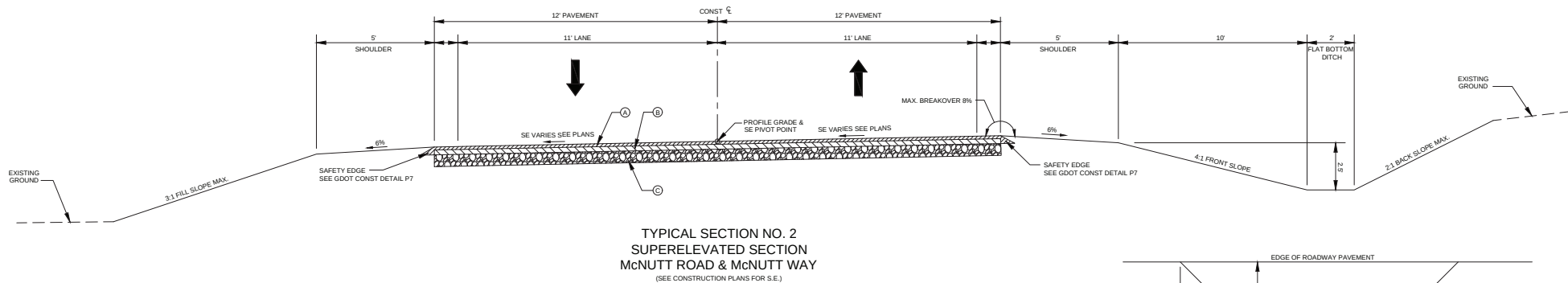
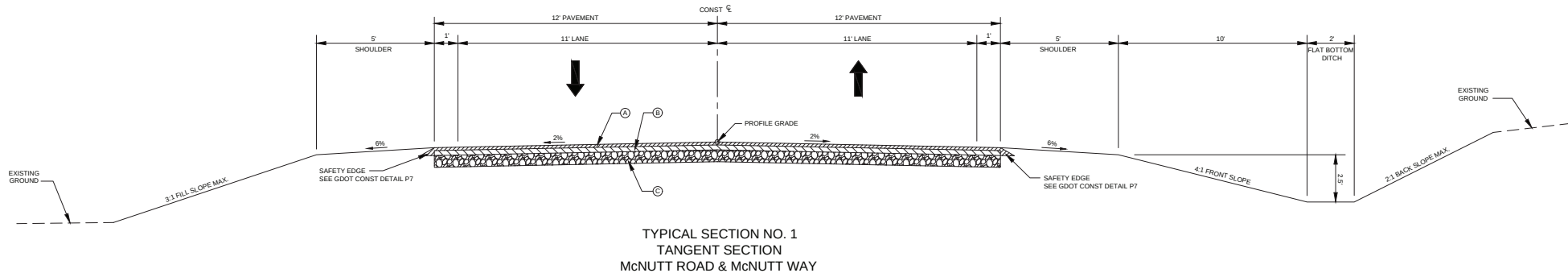


McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES	

GENERAL NOTES
McNUTT ROAD AND McNUTT WAY

DRAWING NUMBER
04-0001



- (A) RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2, INCL MITUM MATL & H LIME, 165 lbs / sy
- (B) RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR GP 2, INCL MITUM MATL & H LIME, 220 lbs / sy
- (C) GRADED AGGREGATE BASE COURSE 6", INCL MATL



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	03-12-20
DRAWN BY	NAA	03-12-20
CHECKED BY	KEQ	03-12-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

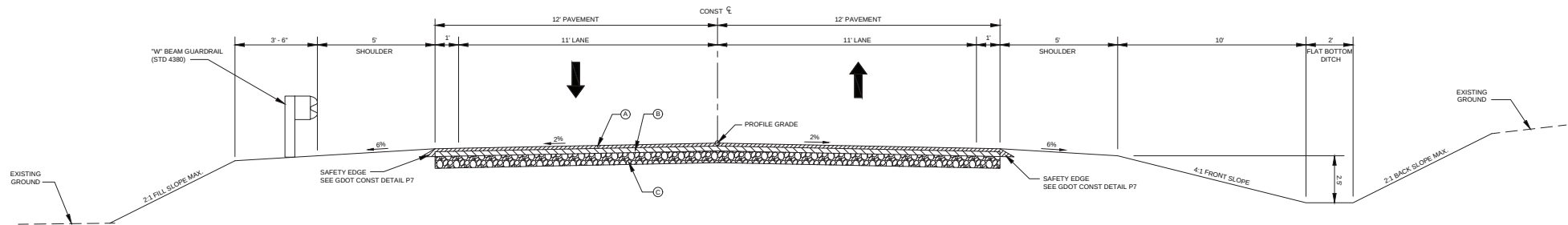
REVISION DATES

TYPICAL SECTIONS

McNUTT ROAD AND
McNUTT WAY

DRAWING
NUMBER

05-0001



TYPICAL SECTION NO. 3
GUARDRAIL SECTION
McNUTT ROAD
(STA 26+00 TO 29+50)
(STA 34+25 TO 39+50)
(STA 58+50 TO 60+75)
(STA 66+00 TO 69+50)
(STA 73+50 TO 74+50)
(STA 82+60 TO 86+50)

- (A) RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2, INCL MITUM MATL & H LIME, 165 lbs / sy
- (B) RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 2, INCL MITUM MATL & H LIME, 220 lbs / sy
- (C) GRADED AGGREGATE BASE COURSE 6", INCL MATL



Moreland Altobelli
Associates, LLC
217 Oakmead Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-9507

DESIGNED	NAME	DATE
BY	NAA	09-12-20
DRAWN	NAME	DATE
BY	NAA	09-12-20
CHECKED	NAME	DATE
BY	KEO	09-12-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES

TYPICAL SECTIONS
McNUTT ROAD
05-0002

DRAWING
NUMBER

05-0002

GUARDRAIL QUANTITIES

Table 1: Summary of the data distribution across different categories and sub-categories.		Category A		Category B		Category C		Category D		Category E	
Sub-Category	Value	Sub-Category	Value	Sub-Category	Value	Sub-Category	Value	Sub-Category	Value	Sub-Category	Value
Sub-Category 1	10	Sub-Category 2	20	Sub-Category 3	30	Sub-Category 4	40	Sub-Category 5	50	Sub-Category 6	60
Sub-Category 7	70	Sub-Category 8	80	Sub-Category 9	90	Sub-Category 10	100	Sub-Category 11	110	Sub-Category 12	120
Sub-Category 13	130	Sub-Category 14	140	Sub-Category 15	150	Sub-Category 16	160	Sub-Category 17	170	Sub-Category 18	180
Sub-Category 19	190	Sub-Category 20	200	Sub-Category 21	210	Sub-Category 22	220	Sub-Category 23	230	Sub-Category 24	240
Sub-Category 25	250	Sub-Category 26	260	Sub-Category 27	270	Sub-Category 28	280	Sub-Category 29	290	Sub-Category 30	300
Sub-Category 31	310	Sub-Category 32	320	Sub-Category 33	330	Sub-Category 34	340	Sub-Category 35	350	Sub-Category 36	360
Sub-Category 37	370	Sub-Category 38	380	Sub-Category 39	390	Sub-Category 40	400	Sub-Category 41	410	Sub-Category 42	420
Sub-Category 43	430	Sub-Category 44	440	Sub-Category 45	450	Sub-Category 46	460	Sub-Category 47	470	Sub-Category 48	480
Sub-Category 49	490	Sub-Category 50	500	Sub-Category 51	510	Sub-Category 52	520	Sub-Category 53	530	Sub-Category 54	540
Sub-Category 55	550	Sub-Category 56	560	Sub-Category 57	570	Sub-Category 58	580	Sub-Category 59	590	Sub-Category 60	600
Sub-Category 61	610	Sub-Category 62	620	Sub-Category 63	630	Sub-Category 64	640	Sub-Category 65	650	Sub-Category 66	660
Sub-Category 67	670	Sub-Category 68	680	Sub-Category 69	690	Sub-Category 70	700	Sub-Category 71	710	Sub-Category 72	720
Sub-Category 73	730	Sub-Category 74	740	Sub-Category 75	750	Sub-Category 76	760	Sub-Category 77	770	Sub-Category 78	780
Sub-Category 79	790	Sub-Category 80	800	Sub-Category 81	810	Sub-Category 82	820	Sub-Category 83	830	Sub-Category 84	840
Sub-Category 85	850	Sub-Category 86	860	Sub-Category 87	870	Sub-Category 88	880	Sub-Category 89	890	Sub-Category 90	900
Sub-Category 91	910	Sub-Category 92	920	Sub-Category 93	930	Sub-Category 94	940	Sub-Category 95	950	Sub-Category 96	960
Sub-Category 97	970	Sub-Category 98	980	Sub-Category 99	990	Sub-Category 100	1000	Sub-Category 101	1010	Sub-Category 102	1020
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Sub-Category 109	1090	Sub-Category 110	1100	Sub-Category 111	1110	Sub-Category 112	1120	Sub-Category 113	1130	Sub-Category 114	1140
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Sub-Category 121	1210	Sub-Category 122	1220	Sub-Category 123	1230	Sub-Category 124	1240	Sub-Category 125	1250	Sub-Category 126	1260
Sub-Category 127	1270	Sub-Category 128	1280	Sub-Category 129	1290	Sub-Category 130	1300	Sub-Category 131	1310	Sub-Category 132	1320
Sub-Category 133	1330	Sub-Category 134	1340	Sub-Category 135	1350	Sub-Category 136	1360	Sub-Category 137	1370	Sub-Category 138	1380
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Sub-Category 529	5290	Sub-Category 530	5300	Sub-Category 531	5310	Sub-Category 532	5320	Sub-Category 533	5330	Sub-Category 534	5340
Sub-Category 535	5350	Sub-Category 536	5360	Sub-Category 537	5370	Sub-Category 538	5380	Sub-Category 539	5390	Sub-Category 540	5400
Sub-Category 541	5410	Sub-Category 542	5420	Sub-Category 543	5430	Sub-Category 544	5440	Sub-Category 545	5450	Sub-Category 546	5460
Sub-Category 547	5470	Sub-Category 548	5480	Sub-Category 549	5490	Sub-Category 550	5500	Sub-Category 551	5510	Sub-Category 552	5520
Sub-Category 553	5530	Sub-Category 554	5540	Sub-Category 555	5550	Sub-Category 556	5560	Sub-Category 557	5570	Sub-Category 558	5580
Sub-Category 559	5590	Sub-Category 560	5600	Sub-Category 561	5610	Sub-Category 562	5620	Sub-Category 563	5630	Sub-Category 564	5640
Sub-Category 565	5650	Sub-Category 566	5660	Sub-Category 567	5670	Sub-Category 568	5680	Sub-Category 569	5690	Sub-Category 570	5700
Sub-Category 571	5710	Sub-Category 572	5720	Sub-Category 573	5730	Sub-Category 574	5740				

COUNTRY STATION NAME	VOR 1100		VOR 1200		VOR 1300		VOR 1400		VOR 1500		VOR 1600		VOR 1700		VOR 1800		VOR 1900		VOR 2000		VOR 2100		VOR 2200		VOR 2300		VOR 2400		VOR 2500		VOR 2600		VOR 2700		VOR 2800		VOR 2900		VOR 3000		VOR 3100		VOR 3200		VOR 3300		VOR 3400		VOR 3500		VOR 3600		VOR 3700		VOR 3800		VOR 3900		VOR 4000		VOR 4100		VOR 4200		VOR 4300		VOR 4400		VOR 4500		VOR 4600		VOR 4700		VOR 4800		VOR 4900		VOR 5000		VOR 5100		VOR 5200		VOR 5300		VOR 5400		VOR 5500		VOR 5600		VOR 5700		VOR 5800		VOR 5900		VOR 6000		VOR 6100		VOR 6200		VOR 6300		VOR 6400		VOR 6500		VOR 6600		VOR 6700		VOR 6800		VOR 6900		VOR 7000		VOR 7100		VOR 7200		VOR 7300		VOR 7400		VOR 7500		VOR 7600		VOR 7700		VOR 7800		VOR 7900		VOR 8000		VOR 8100		VOR 8200		VOR 8300		VOR 8400		VOR 8500		VOR 8600		VOR 8700		VOR 8800		VOR 8900		VOR 9000		VOR 9100		VOR 9200		VOR 9300		VOR 9400		VOR 9500		VOR 9600		VOR 9700		VOR 9800		VOR 9900		VOR 10000		VOR 10100		VOR 10200		VOR 10300		VOR 10400		VOR 10500		VOR 10600		VOR 10700		VOR 10800		VOR 10900		VOR 11000		VOR 11100		VOR 11200		VOR 11300		VOR 11400		VOR 11500		VOR 11600		VOR 11700		VOR 11800		VOR 11900		VOR 12000		VOR 12100		VOR 12200		VOR 12300		VOR 12400		VOR 12500		VOR 12600		VOR 12700		VOR 12800		VOR 12900		VOR 13000		VOR 13100		VOR 13200		VOR 13300		VOR 13400		VOR 13500		VOR 13600		VOR 13700		VOR 13800		VOR 13900		VOR 14000		VOR 14100		VOR 14200		VOR 14300		VOR 14400		VOR 14500		VOR 14600		VOR 14700		VOR 14800		VOR 14900		VOR 15000		VOR 15100		VOR 15200		VOR 15300		VOR 15400		VOR 15500		VOR 15600		VOR 15700		VOR 15800		VOR 15900		VOR 16000		VOR 16100		VOR 16200		VOR 16300		VOR 16400		VOR 16500		VOR 16600		VOR 16700		VOR 16800		VOR 16900		VOR 17000		VOR 17100		VOR 17200		VOR 17300		VOR 17400		VOR 17500		VOR 17600		VOR 17700		VOR 17800		VOR 17900		VOR 18000		VOR 18100		VOR 18200		VOR 18300		VOR 18400		VOR 18500		VOR 18600		VOR 18700		VOR 18800		VOR 18900		VOR 19000		VOR 19100		VOR 19200		VOR 19300		VOR 19400		VOR 19500		VOR 19600		VOR 19700		VOR 19800		VOR 19900		VOR 20000		VOR 20100		VOR 20200		VOR 20300		VOR 20400		VOR 20500		VOR 20600		VOR 20700		VOR 20800		VOR 20900		VOR 21000		VOR 21100		VOR 21200		VOR 21300		VOR 21400		VOR 21500		VOR 21600		VOR 21700		VOR 21800		VOR 21900		VOR 22000		VOR 22100		VOR 22200		VOR 22300		VOR 22400		VOR 22500		VOR 22600		VOR 22700		VOR 22800		VOR 22900		VOR 23000		VOR 23100		VOR 23200		VOR 23300		VOR 23400		VOR 23500		VOR 23600		VOR 23700		VOR 23800		VOR 23900		VOR 24000		VOR 24100		VOR 24200		VOR 24300		VOR 24400		VOR 24500		VOR 24600		VOR 24700		VOR 24800		VOR 24900		VOR 25000		VOR 25100		VOR 25200		VOR 25300		VOR 25400		VOR 25500		VOR 25600		VOR 25700		VOR 25800		VOR 25900		VOR 26000		VOR 26100		VOR 26200		VOR 26300		VOR 26400		VOR 26500		VOR 26600		VOR 26700		VOR 26800		VOR 26900		VOR 27000		VOR 27100		VOR 27200		VOR 27300		VOR 27400		VOR 27500		VOR 27600		VOR 27700		VOR 27800		VOR 27900		VOR 28000		VOR 28100		VOR 28200		VOR 28300		VOR 28400		VOR 28500		VOR 28600		VOR 28700		VOR 28800		VOR 28900		VOR 29000		VOR 29100		VOR 29200		VOR 29300		VOR 29400		VOR 29500		VOR 29600		VOR 29700		VOR 29800		VOR 29900		VOR 30000		VOR 30100		VOR 30200		VOR 30300		VOR 30400		VOR 30500		VOR 30600		VOR 30700		VOR 30800		VOR 30900		VOR 31000		VOR 31100		VOR 31200		VOR 31300		VOR 31400		VOR 31500		VOR 31600		VOR 31700		VOR 31800		VOR 31900		VOR 32000		VOR 32100		VOR 32200		VOR 32300		VOR 32400		VOR 32500		VOR 32600		VOR 32700		VOR 32800		VOR 32900		VOR 33000		VOR 33100		VOR 33200		VOR 33300		VOR 33400		VOR 33500		VOR 33600		VOR 33700		VOR 33800		VOR 33900		VOR 34000		VOR 34100		VOR 34200		VOR 34300		VOR 34400		VOR 34500		VOR 34600		VOR 34700		VOR 34800		VOR 34900		VOR 35000		VOR 35100		VOR 35200		VOR 35300		VOR 35400		VOR 35500		VOR 35600		VOR 35700		VOR 35800		VOR 35900		VOR 36000		VOR 36100		VOR 36200		VOR 36300		VOR 36400		VOR 36500		VOR 36600		VOR 36700		VOR 36800		VOR 36900		VOR 37000		VOR 37100		VOR 37200		VOR 37300		VOR 37400		VOR 37500		VOR 37600		VOR 37700		VOR 37800		VOR 37900		VOR 38000		VOR 38100		VOR 38200		VOR 38300		VOR 38400		VOR 38500		VOR 38600		VOR 38700		VOR 38800		VOR 38900		VOR 39000		VOR 39100		VOR 39200		VOR 39300		VOR 39400		VOR 39500		VOR 39600		VOR 39700		VOR 39800		VOR 39900		VOR 40000		VOR 40100		VOR 40200		VOR 40300		VOR 40400		VOR 40500		VOR 40600		VOR 40700		VOR 40800		VOR 40900		VOR 41000		VOR 41100		VOR 41200		VOR 41300		VOR 41400		VOR 41500		VOR 41600		VOR 41700		VOR 41800		VOR 41900		VOR 42000		VOR 42100		VOR 42200		VOR 42300		VOR 42400		VOR 42500		VOR 42600		VOR 42700		VOR 42800		VOR 42900		VOR 43000		VOR 43100		VOR 43200		VOR 43300		VOR 43400		VOR 43500		VOR 43600		VOR 43700		VOR 43800		VOR 43900		VOR 44000		VOR 44100		VOR 44200		VOR 44300		VOR 44400		VOR 44500		VOR 44600		VOR 44700		VOR 44800		VOR 44900		VOR 45000		VOR 45100		VOR 45200		VOR 45300		VOR 45400		VOR 45500		VOR 45600		VOR 45700		VOR 45800		VOR 45900		VOR 46000		VOR 46100		VOR 46200		VOR 46300		VOR 46400		VOR 46500		VOR 46600		VOR 46700		VOR 46800		VOR 46900		VOR 47000		VOR 47100		VOR 47200		VOR 47300		VOR 47400		VOR 47500		VOR 47600		VOR 47700		VOR 47800		VOR 47900		VOR 48000		VOR 48100		VOR 48200		VOR 48300		VOR 48400		VOR 48500		VOR 48600		VOR 48700		VOR 48800		VOR 48900		VOR 49000		VOR 49100		VOR 49200		VOR 49300		VOR 49400		VOR 49500		VOR 49600		VOR 49700		VOR 49800		VOR 49900		VOR 50000		VOR 50100		VOR 50200		VOR 50300		VOR 50400		VOR 50500		VOR 50600		VOR 50700		VOR 50800		VOR 50900		VOR 51000		VOR 51100		VOR 51200		VOR 51300		VOR 51400		VOR 51500		VOR 51600		VOR 51700		VOR 51800		VOR 51900		VOR 52000		VOR 52100		VOR 52200		VOR 52300		VOR 52400		VOR 52500		VOR 52600		VOR 52700		VOR 52800		VOR 52900		VOR 53000		VOR 53100		VOR 53200		VOR 53300		VOR 53400		VOR 53500		VOR 53600		VOR 53700		VOR 53800		VOR 53900		VOR 54000		VOR 54100		VOR 54200		VOR 54300		VOR 54400		VOR 54500		VOR 54600		VOR 54700		VOR 54800		VOR 54900		VOR 55000		VOR 55100		VOR 55200		VOR 55300		VOR 55400		VOR 55500		VOR 55600		VOR 55700		VOR 55800		VOR 55900		VOR 56000		VOR 56100		VOR 56200		VOR 56300		VOR 56400		VOR 56500		VOR 56600		VOR 56700		VOR 56800		VOR 56900		VOR 57000		VOR 57100		VOR 57200		VOR 57300		VOR 57400		VOR 57500		VOR 57600		VOR 57700		VOR 57800		VOR 57900		VOR 58000		VOR 58100		VOR 58200		VOR 58300		VOR 58400		VOR 58500		VOR 58600		VOR 58700		VOR 58800		VOR 58900		VOR 59000		VOR 59100		VOR 59200		VOR 59300		VOR 59400		VOR 59500		VOR 59600		VOR 59700		VOR 59800		VOR 59900		VOR 60000		VOR 60100		VOR 60200		VOR 60300		VOR 60400		VOR 60500		VOR 60600		VOR 60700		VOR 60800		VOR 60900		VOR 61000		VOR 61100		VOR 61200		VOR 61300		VOR 61400		VOR 61500		VOR 61600		VOR 61700		VOR 61800		VOR 61900		VOR 62000		VOR 62100		VOR 62200		VOR 62300		VOR 62400		VOR 62500		VOR 62600		VOR 62700		VOR 62800		VOR 62900		VOR 63000		VOR 63100		VOR 63200		VOR 63300		VOR 63400		VOR 63500		VOR 63600		VOR 63700		VOR 63800		VOR 63900		VOR 64000		VOR 64100		VOR 64200		VOR 64300		VOR 64400		VOR 64500		VOR 64600		VOR 64700		VOR 64800		VOR 64900		VOR 65000		VOR 65100		VOR 65200		VOR 65300		VOR 65400		VOR 65500		VOR 65600		VOR 65700		VOR 65800		VOR 65900		VOR 66000		VOR 66100		VOR 66200		VOR 66300		VOR 66400		VOR 66500		VOR 66600		VOR 66700		VOR 66800		VOR 66900		VOR 67000		VOR 67100		VOR 67200		VOR 67300		VOR 67400		VOR 67500		VOR 67600		VOR 67700		VOR 67800		VOR 67900		VOR 68000		VOR 68100		VOR 68200		VOR 68300		VOR 68400		VOR 68500		VOR 68600		VOR 68700		VOR 68800		VOR 68900		VOR 69000		VOR 69100		VOR 69200		VOR 69300		VOR 69400		VOR 69500		VOR 69600		VOR 69700		VOR 69800		VOR 69900		VOR 70000		VOR 70100		VOR 70200		VOR 70300		VOR 70400		VOR 70500		VOR 70600		VOR 70700		VOR 70800		VOR 70900		VOR 71000		VOR 71100		VOR 71200		VOR 71300		VOR 71400		VOR 71500		VOR 71600		VOR 71700		VOR 71800		VOR 71900		VOR 72000		VOR 72100		VOR 72200		VOR 72300		VOR 72400		VOR 72500		VOR 72600		VOR 72700		VOR 72800		VOR 72900		VOR 73000		VOR 73100		VOR 73200		VOR 73300		VOR 73400		VOR 73500		VOR 73600		VOR 73700		VOR 73800		VOR 73900		VOR 74000		VOR 74100		VOR 74200		VOR 74300		VOR 74400		VOR 74500		VOR 74600		VOR 74700		VOR 74800		VOR 74900		VOR 75000		VOR 75100		VOR 75200		VOR 75300		VOR 75400		VOR 75500		VOR 75600		VOR 75700		VOR 75800		VOR 75900		VOR 76000		VOR 76100		VOR 76200		VOR 76300		VOR 76400		VOR 76500		VOR 76600		VOR 76700		VOR 76800		VOR 76900		VOR 77000		VOR 77100		VOR 77200		VOR 77300		VOR 77400		VOR 77500		VOR 77600		VOR 77700		VOR 77800		VOR 77900		VOR 78000		VOR 78100		VOR 78200		VOR 78300		VOR 78400		VOR 78500		VOR 78600		VOR 78700		VOR 78800	
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EROSION CONTROL QUANTITIES

LOCATION	150-1000	163-0232	163-0240	163-0300	163-0501	163-0527	163-0528	163-0530	163-0041	163-0058	603-2181	603-7000	167-1000	167-1500	171-0030	700-6910	700-7000	700-8000	700-8100	711-01
	TRAFFIC CONTROL	TEMPORARY GRASSING	MULCH	CONSTRUCTION EXIT	SILT CONTROL GATE, TP 1	RIP DAM CHECK DAMS	FABRIC CHECK DAMS	MAINT OF SILT GATE, TP C	MAINT OF SILT GATE, TP C	MAINT OF SILT CONTROL GATE, TP 1	STN DUMPED RIP P 18 IN	PLASTIC FILTER FABRIC	WATER QUALITY MONITORING	WATER QUALITY INSPECTIONS	TEMP SILT FENCE, TP C	PERMANENT GRASSING	AG LIMES	FERTILIZER HIGH GRADE	FERTILIZER LOW GRADE	TURF MAT, 1 Y
McNutt Road and McNutt Way	L5	AC	TN	EA	EA	EA	LF	26444	LF	EA	SY	SY	EA	MO	LF	AC	TN	TN	LB	SY
	23	138	2	5	235	307	26444	342	5	330	330	2	12	26444	23	23	14	0.6		
TOTALS	0	23	138	2	5	235	307	26444	342	5	330	330	2	12	26444	23	23	14	0.6	



**Moreland Altobelli
Associates, LLC**
327 Dahlonega Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	03-12-20
DRAWN BY	NAA	03-12-20
CHECKED BY	KEQ	03-12-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

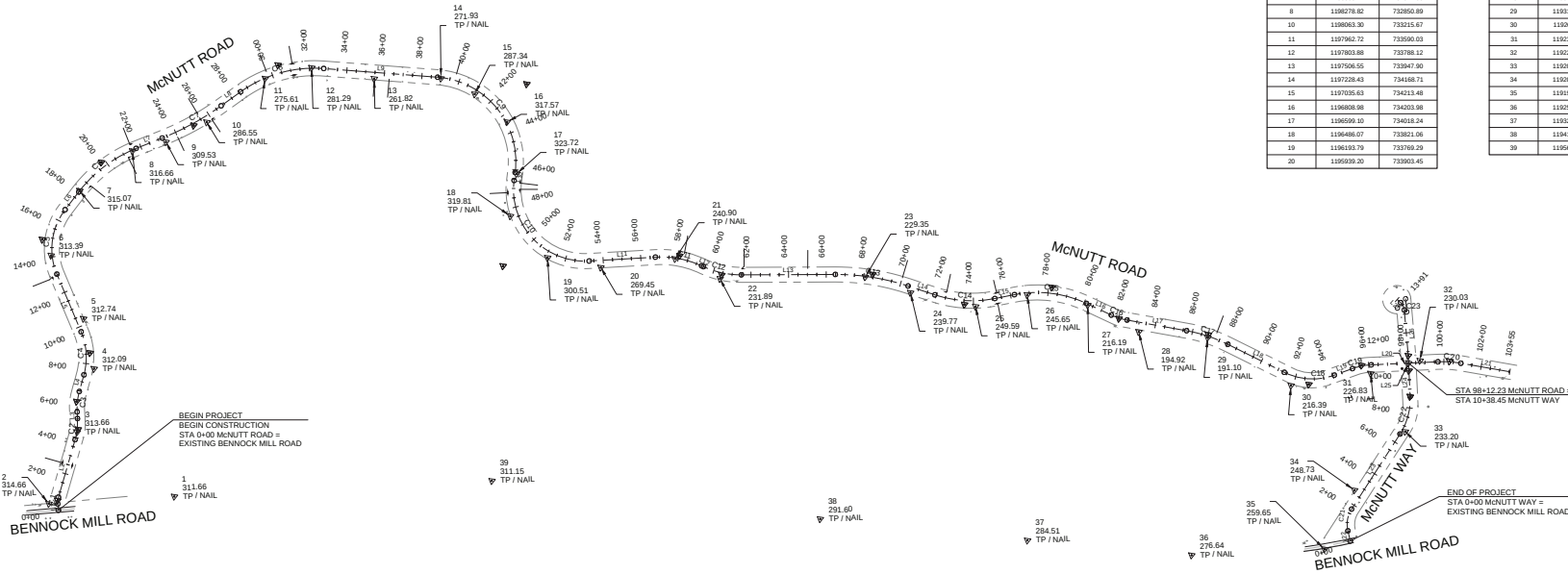
REVISION DATES		

SUMMARY OF QUANTITIES

**McNUTT ROAD AND
McNUTT WAY**

DRAWING
NUMBER

06-0001



HORIZONTAL DESIGN SPEED: 25 MPH

TRAVERSE POINT TABLE		
Point #	Northing	Easting
1	1196967.83	731544.59
2	1196968.81	732099.06
3	1197086.19	731404.00
4	1197723.34	731814.87
5	1197932.08	731989.31
6	1198275.16	732147.02
7	1198986.74	732531.38
8	1199278.82	732959.39
9	1199603.30	733215.67
10	1197962.72	733590.03
11	1197903.88	733788.12
12	1197506.55	733947.90
13	1197228.43	734168.71
14	1197035.63	734213.48
15	1196808.98	734203.38
16	1196699.30	734018.34
17	1196488.07	733821.06
18	1196183.79	733769.39
19	1195939.20	733903.45

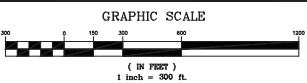
TRAVERSE POINT TABLE		
Point #	Northing	Easting
20	1195656.96	734383.71
21	1195403.92	734247.82
22	1194802.64	734732.67
23	1194562.44	734815.73
24	1194244.90	734871.89
25	1194067.37	735190.00
26	1193781.05	735347.12
27	1193479.69	735402.08
28	1193172.53	735404.40
29	1192867.61	735678.30
30	1192573.85	735990.29
31	1192209.93	736205.15
32	1191989.28	736104.57
33	1191825.74	736462.15
34	1191628.00	736414.59
35	1191435.50	735873.08
36	1191262.64	732653.45

LINE TABLE: McNUTT ROAD							
LINE #	LENGTH	DIRECTION	BEGIN STA	END STA	BEGIN NORTH	BEGIN EAST	END NORTH
L1	33.32	N46°45'54"E	0+00.00	0+33.32	1197407.00	731106.09	1197429.83
L2	317.92	N67°50'22"E	0+33.32	3+51.24	1197407.00	731106.09	731405.90
L3	35.56	N48°42'18"E	5+01.88	5+37.44	1197629.58	731552.20	731578.82
L4	91.89	N67°12'02"E	6+48.67	7+40.56	1197709.96	731871.27	731756.98
L5	332.55	N20°15'54"E	8+72.37	12+04.92	1197709.96	731958.48	732088.00
L6	118.54	N69°12'54"E	10+47.38	12+04.92	1198267.00	732384.96	732503.48
L7	149.48	S69°57'13"E	12+04.92	13+54.40	1198271.94	732873.86	733003.25
L8	128.16	S73°48'51"E	13+54.40	15+03.56	1198056.88	733331.73	733454.82
L9	807.18	S33°49'55"E	15+03.56	20+10.74	1197750.88	733824.64	734182.64
L10	42.72	S59°13'11"W	20+10.74	20+53.46	1196669.16	734019.10	733962.40
L11	352.67	S41°30'22"E	20+53.46	22+06.13	1196609.00	733892.28	734126.00
L12	11.44	S13°40'12"E	22+06.13	22+17.57	1195512.18	734241.85	734244.55
L13	499.30	S38°24'50"E	22+17.57	24+16.87	1195027.26	734338.66	734645.09
L14	148.67	S19°57'02"E	24+16.87	25+65.54	1194894.28	734553.10	734802.02
L15	105.83	S49°21'49"E	25+65.54	26+71.43	1194894.28	735088.92	735149.24
L16	146.46	S13°08'17"E	26+71.43	27+17.89	1193791.98	735349.23	735382.52
L17	321.33	S28°00'51"E	27+17.89	29+39.22	1193667.18	735413.37	735564.29
L18	334.83	S11°48'50"E	29+39.22	31+74.05	1193666.26	735542.99	735711.58
L19	102.29	S58°06'02"E	31+74.05	32+76.34	1192520.14	735864.24	735951.08
L20	354.87	S40°48'51"E	32+76.34	35+31.21	1192399.36	736208.51	736280.46
L21	264.09	S28°17'32"E	35+31.21	37+55.30	1192030.68	736329.74	736454.51

LINE TABLE: McNUTT WAY							
LINE #	LENGTH	DIRECTION	BEGIN STA	END STA	BEGIN NORTH	BEGIN EAST	END NORTH
L22	55.17	N38°52'29"E	0+00.00	0+55.17	1191908.48	735223.30	735257.67
L23	475.02	N84°35'54"E	1+75.14	6+50.16	1191908.48	735223.30	735257.67
L24	24.21	N93°15'12"E	13+47.14	13+71.35	1192482.11	736385.03	736386.51

CURVE TABLE: McNUTT ROAD									
CURVE #	RADIUS	LENGTH	PI STA	PI NORTH	PI EAST	DELTA	D (ARC)	T	
C1	100.00	36.93	N67°20'38.36"E	1197442.62	731143.98	108°50'32"	57°17'45"	18.68	
C2	339.00	113.71	N68°18'50.09"E	1197590.70	731509.08	160°46'56"	16°54'05"	57.39	
C3	339.00	108.43	N67°57'08.89"E	1197888.47	731620.39	161°30'16"	16°54'05"	55.20	
C4	350.54	233.60	N48°06'33.12"E	1197792.48	731987.63	141°40'03"	16°20'42"	121.33	
C5	345.00	362.47	N59°06'58.13"E	1198054.28	732385.08	119°48'11"	16°36'27"	199.98	
C6	720.00	387.44	S29°22'08.69"E	1198013.34	732702.51	149°10'07"	7°50'28"	186.53	
C7	1480.00	358.03	S68°52'02.07"E	1198107.02	733156.97	168°06'23"	9°52'17"	179.88	
C8	670.00	467.60	S53°49'12.88"E	1197853.19	733888.33	140°00'44"	8°33'08"	243.78	
C9	450.00	730.78	S12°41'47.80"W	1196852.03	734026.83	185°57'14"	12°43'57"	474.58	
C10	380.00	688.04	S8°51'24.39"W	1196352.54	733888.28	79°14'28"	15°04'40"	458.73	
C11	520.00	252.63	S27°35'17.10"E	1195848.39	734211.40	152°09'51"	11°01'06"	128.86	
C12	480.00	207.29	S28°02'31.50"E	1195409.76	734269.44	155°12'52"	11°56'12"	105.29	
C13	1220.00	393.14	S29°10'56.16"E	1194780.67	734788.29	161°32'11"	4°41'47"	198.29	
C14	630.00	333.41	S34°39'25.50"E	1194298.18	734843.44	150°35'13"	9°05'40"	165.35	
C15	620.00	382.00	S31°51'02.84"E	1193899.47	735303.13	147°46'27"	6°14'29"	202.89	
C16	339.00	88.02	S20°34'33.75"E	1193806.26	735392.98	165°07'29"	16°54'05"	44.26	
C17	820.00	233.82	S19°34'54.67"E	1193803.48	735819.10	163°48'07"	6°59'14"	116.89	
C18	339.00	273.85	S34°57'29.97"E	1192596.71	735741.23	133°42'57"	16°54'05"	144.89	
C19	339.00	332.28	S49°27'26.20"E	1192438.88	735994.63	162°40'42"	16°54'05"	51.53	
C20	560.00	122.39	S34°33'11.17"E	1192084.78	736300.62	167°28'41"	10°13'53"	61.44	

CURVE TABLE: McNUTT WAY									
CURVE #	RADIUS	LENGTH	PI STA	PI NORTH	PI EAST	DELTA	D (ARC)	T	
C21	150.00	120.58	N61°34'11.57"E	1193001.50	735297.40	133°56'34"	38°11'50"	63.76	
C22	339.00	209.52	N60°53'31.82"E	1193062.40	735941.54	144°39'15"	16°54'05"	108.23	
C23	60.00	45.41	N20°11'52.78"E	1192458.30	736383.56	130°38'14"	9°29'29"	23.85	



Moreland Altobelli Associates, LLC
217 Oakridge Street
Suite 1401
Cumming, Georgia 30040
Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	03-12-20
DRAWN BY	NAA	03-12-20
CHECKED BY	KEQ	03-12-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

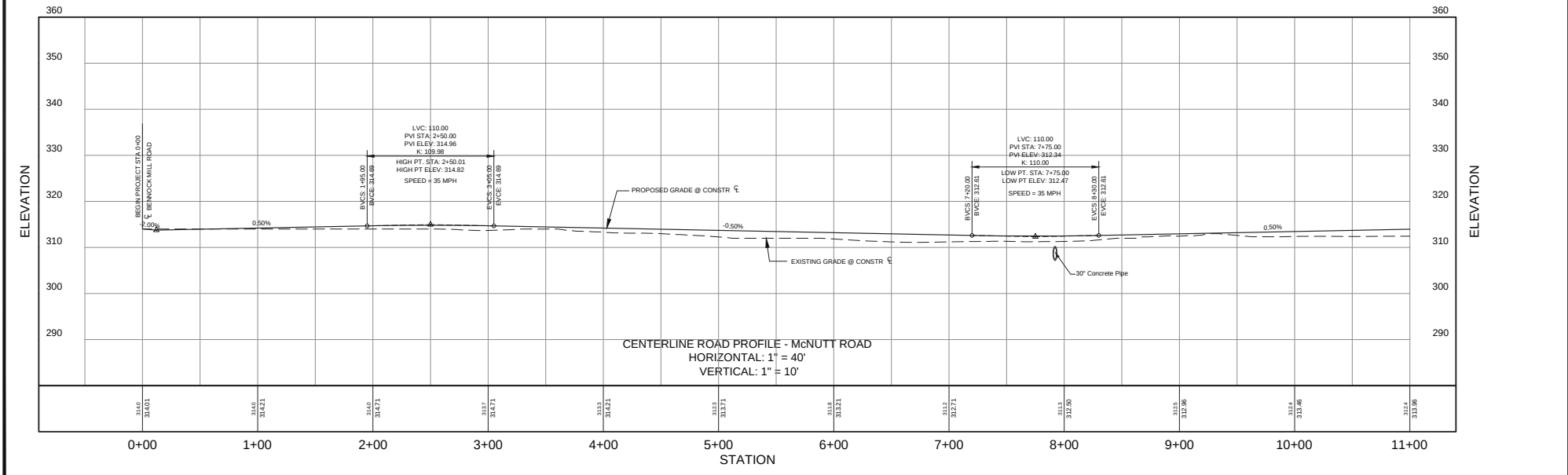
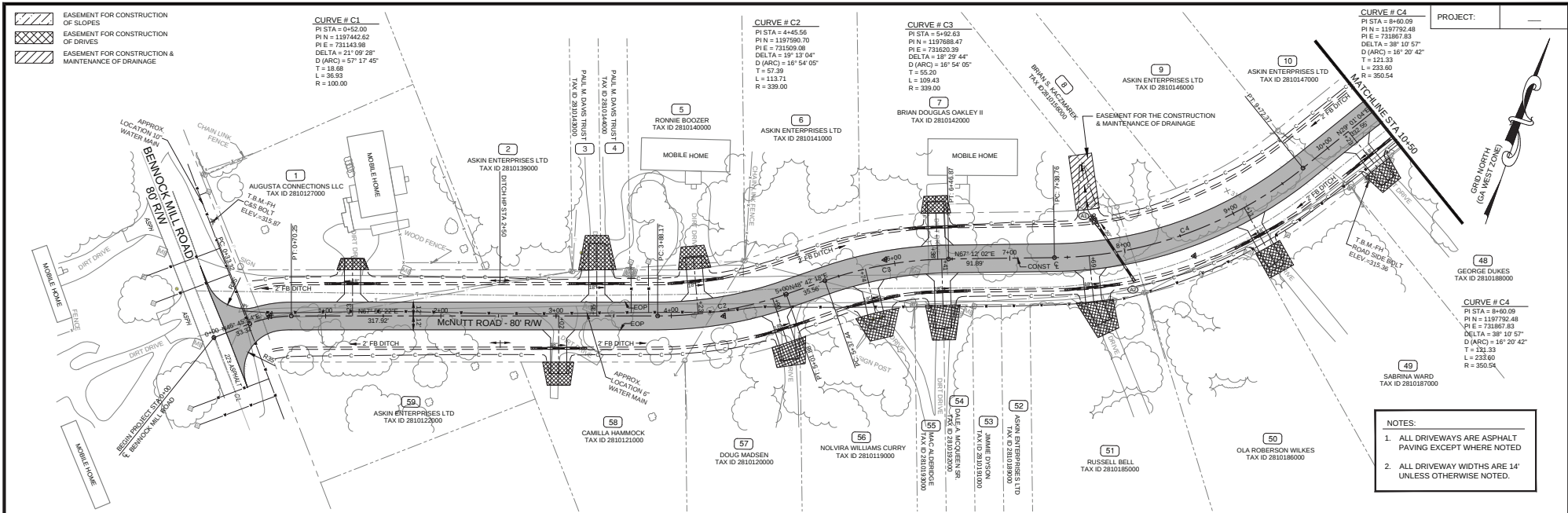
REVISION DATES	

CONSTRUCTION LAYOUT SHEET
McNUTT ROAD AND
McNUTT WAY

DRAWING NUMBER
11-0001

McNUTT WAY ALIGNEMENT

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Augusta
 PLANNING & ENGINEERING

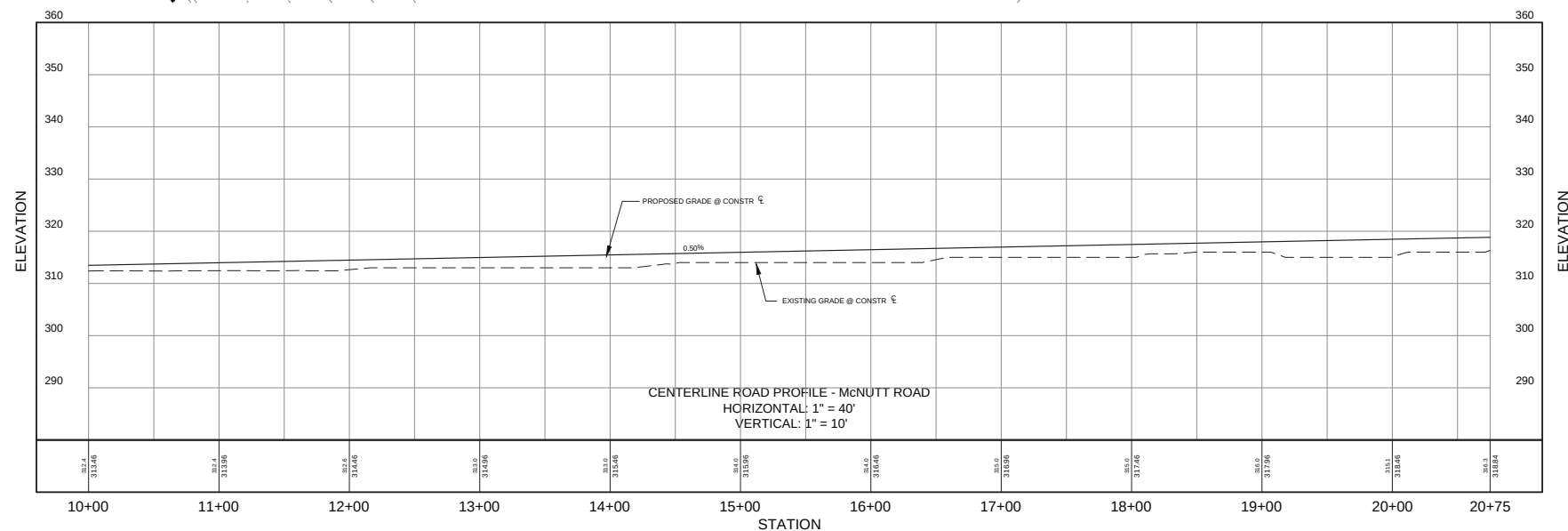
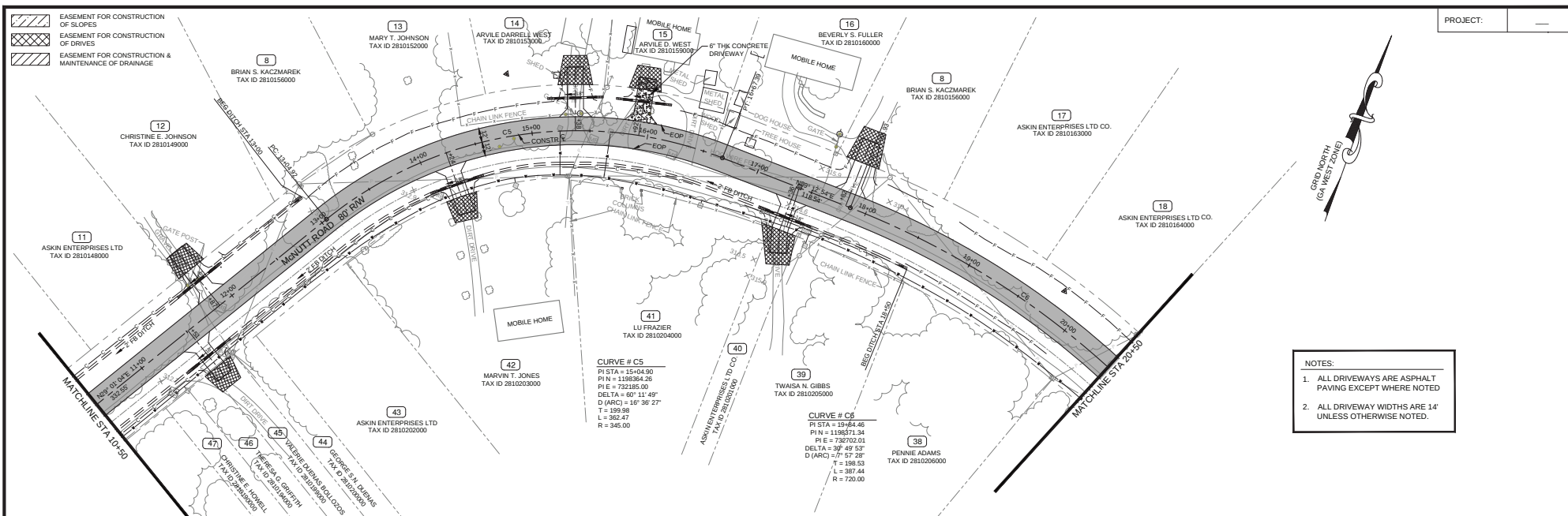
McNUTT ROAD CONSTRUCTION PLANS

REVISION	DATE	DESCRIPTION
1	09-12-20	ISSUED FOR PERMIT
2	09-12-20	REVISED FOR CONSTRUCTION

PLAN AND PROFILE

McNUTT ROAD
 0+00 to 10+50

DRAWING NUMBER
13 - 0001



HORIZONTAL SCALE: 1" = 40'
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 217 Oaklawn Street
 Suite 1403
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAM	05-12-20
CHECKED	NAM	05-12-20
BY	KEO	05-12-20



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION	DATE

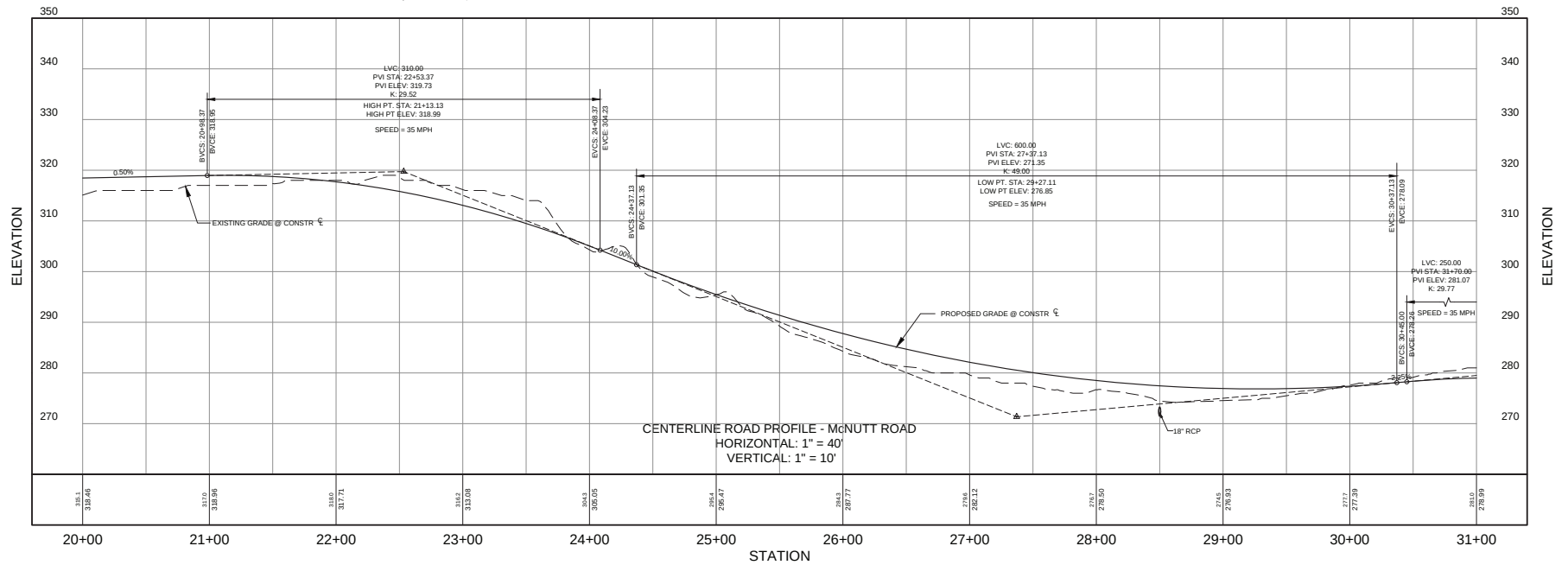
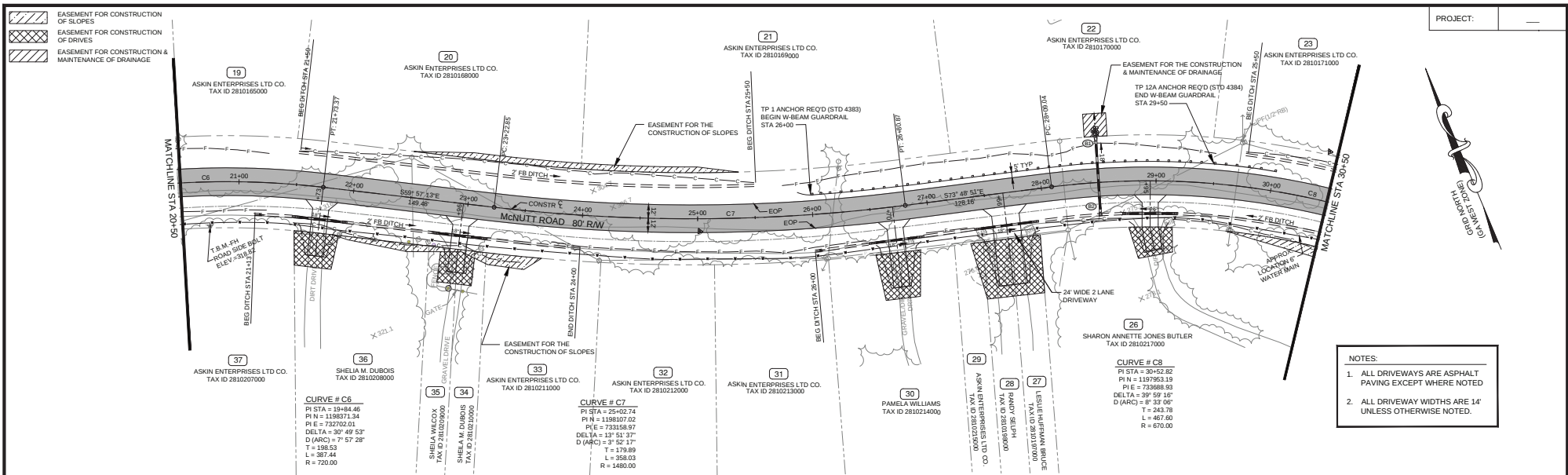
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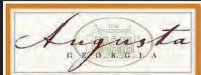
**McNUTT ROAD
 10+50 to 20+50**

DRAWING
 NUMBER

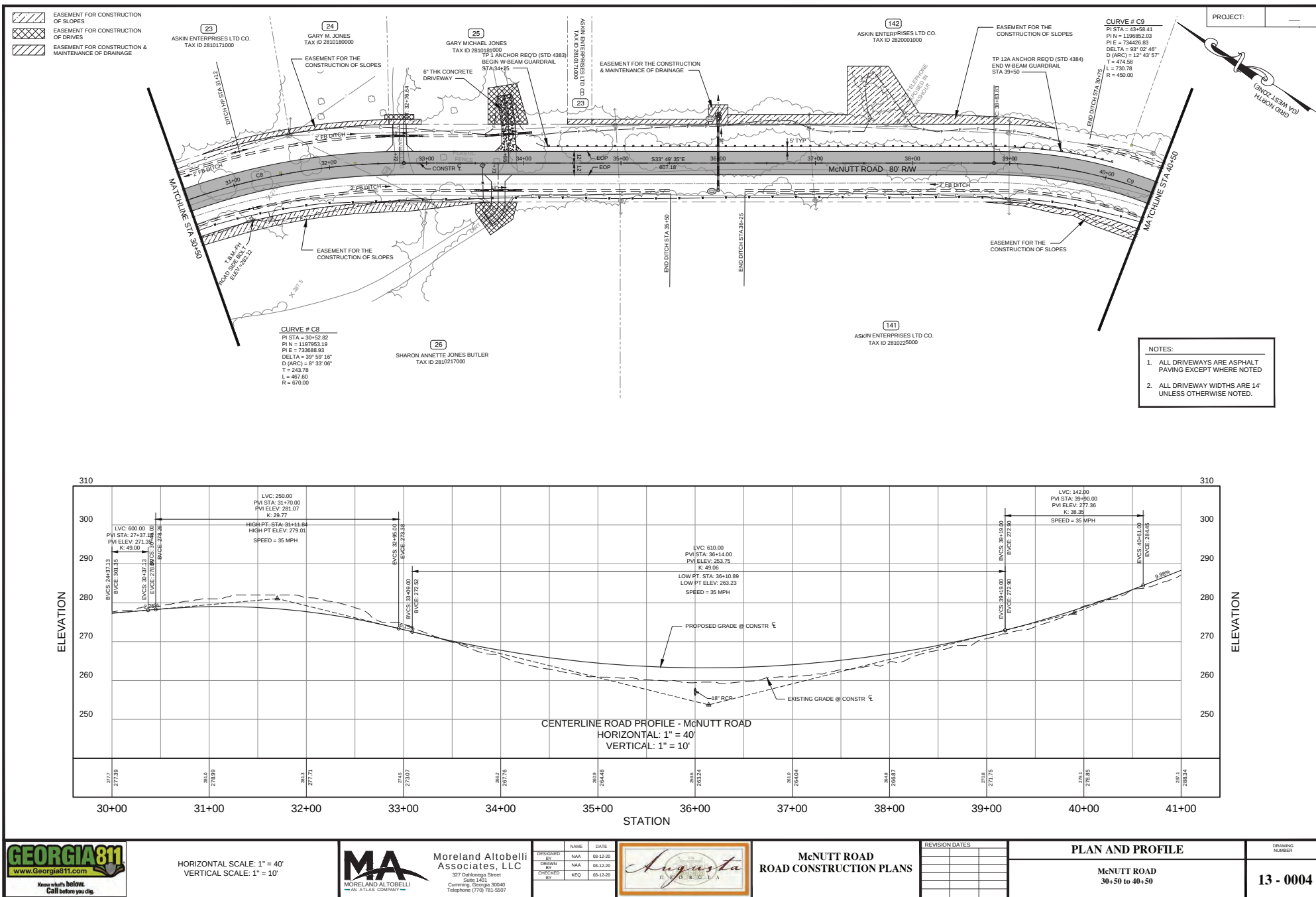
13 - 0002

D:\Projects\McNutt Road\Road Design\McNutt Road\Station 1 10' x 20' Map, 5/27/2011 10:41:54 AM



GEORGIA811 www.Georgia811.com Know what's below. Call before you dig.	HORIZONTAL SCALE: 1" = 40' VERTICAL SCALE: 1" = 10'	MA MORELAND ALTABELLI AN ATLAS COMPANY	Moreland Altobelli Associates, LLC 217 Collins Street Suite 1401 Columbus, Georgia 30604 Telephone: (770) 761-6507		McNUTT ROAD ROAD CONSTRUCTION PLANS	REVISION DATES	PLAN AND PROFILE	McNUTT ROAD 20+50 to 30+50	DRAWING NUMBER 13 - 0003

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HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Collinsville Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

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DRAWN	NAM	05-12-20
CHECKED	BY	05-12-20
BY	KEO	05-12-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION	DATE

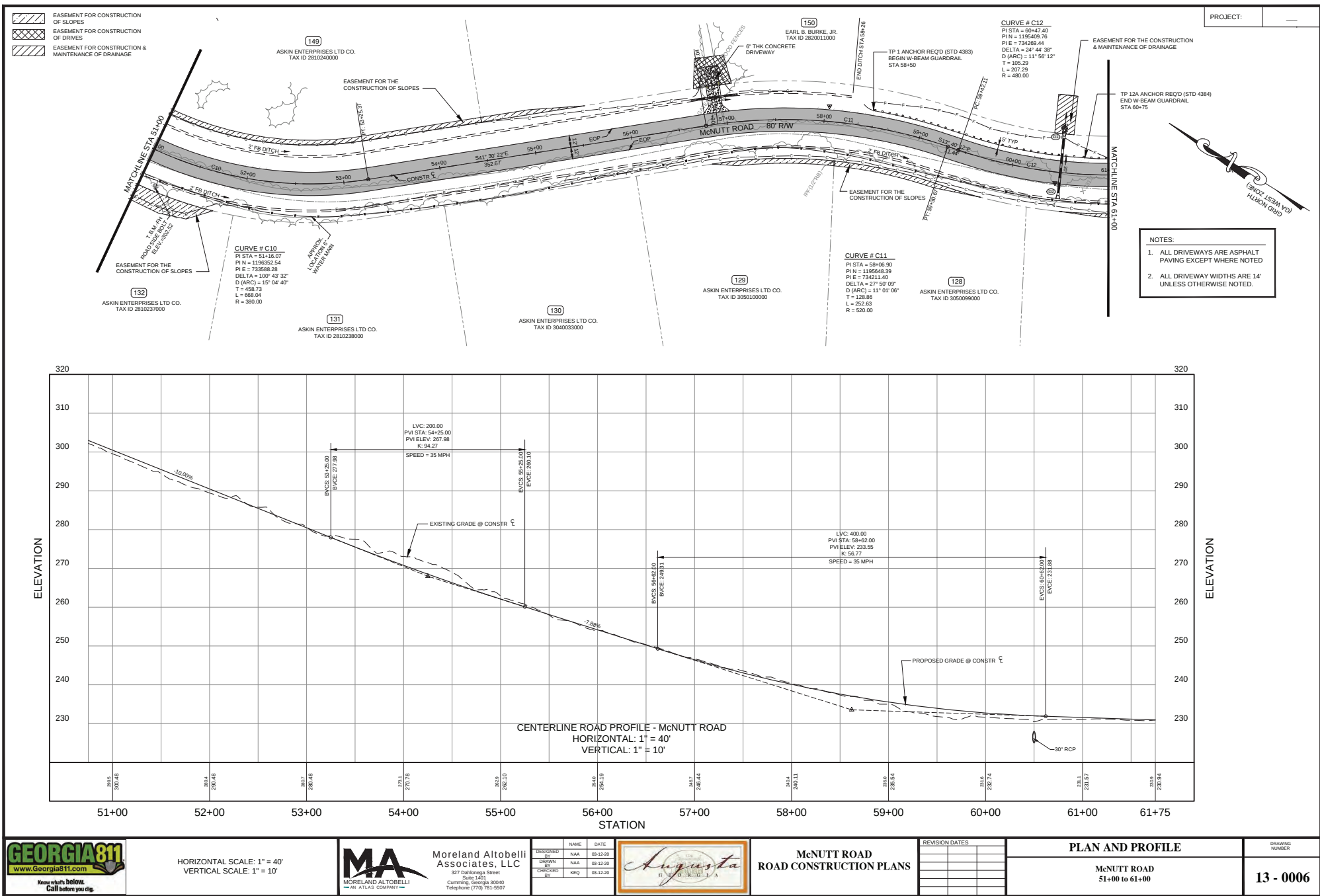
PLAN AND PROFILE

McNUTT ROAD
30+50 to 40+50

DRAWING NUMBER

13 - 0004

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HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli
Associates, LLC
217 Collinswood Street
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Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED	NAME	DATE
WAA	WAA	09-12-20
DRAWN	WAA	09-12-20
CHECKED	KEO	09-12-20
BY		



REVISION DATES

REVISION DATES

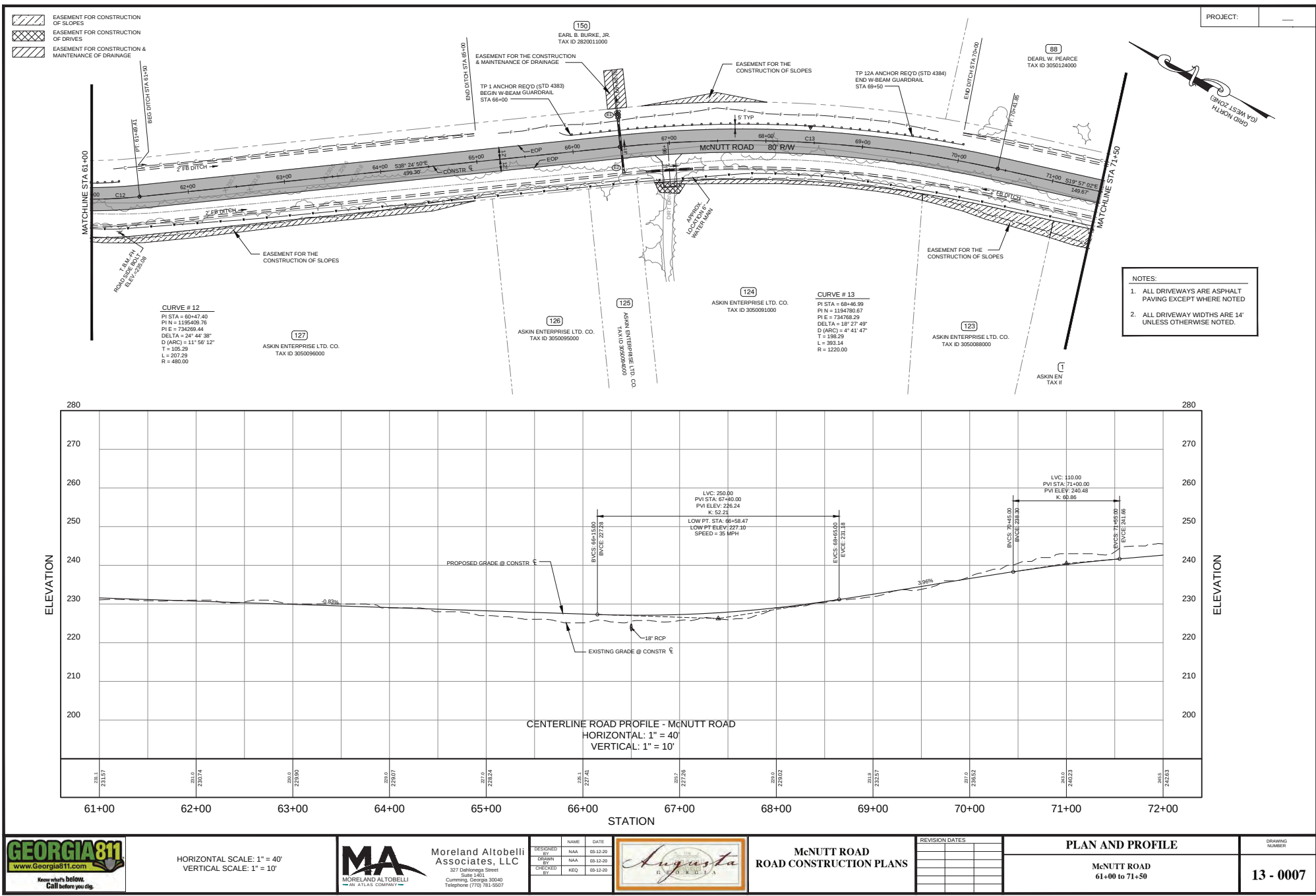
REVISION DATES

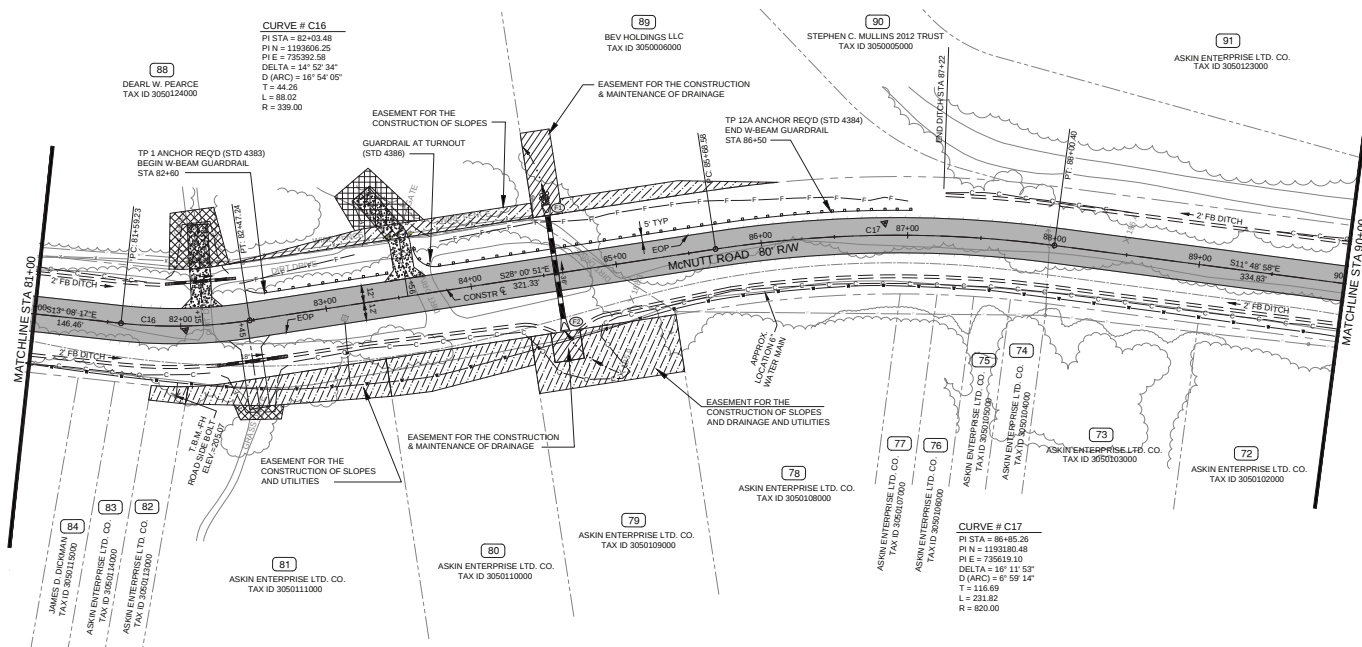
REVISION DATES

REVISION DATES

REVISION DATES

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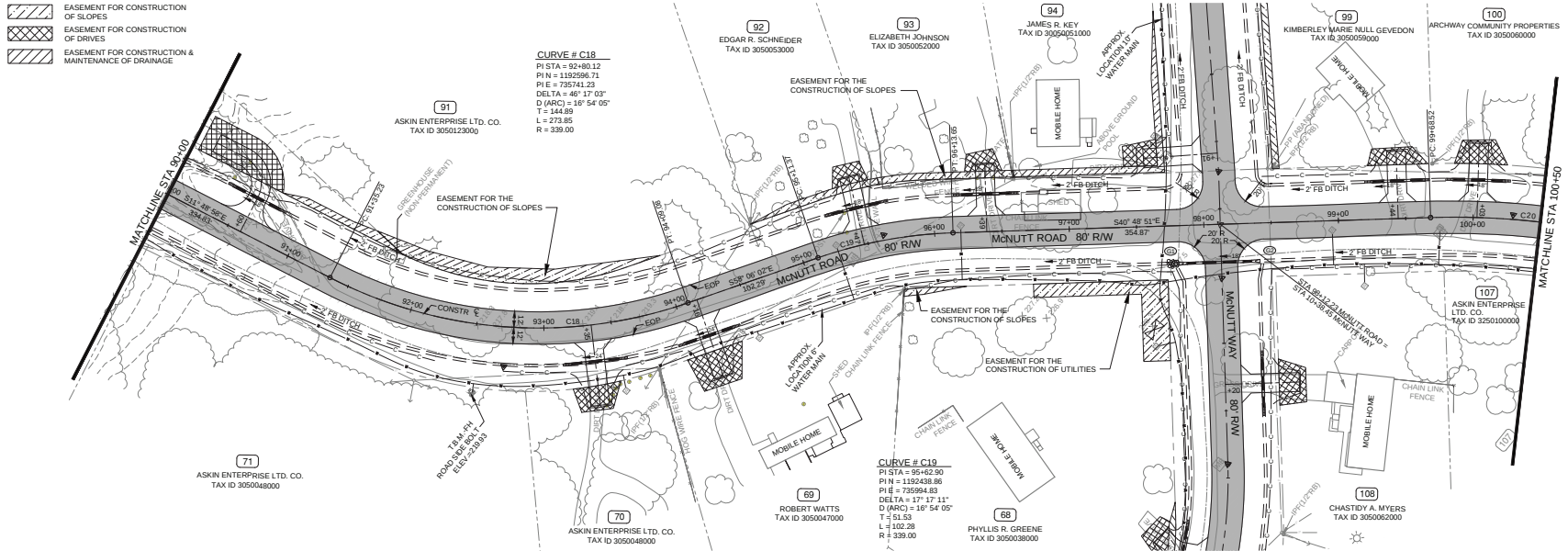
	NAME	DATE
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CHECKED BY	KEQ	03-12-20



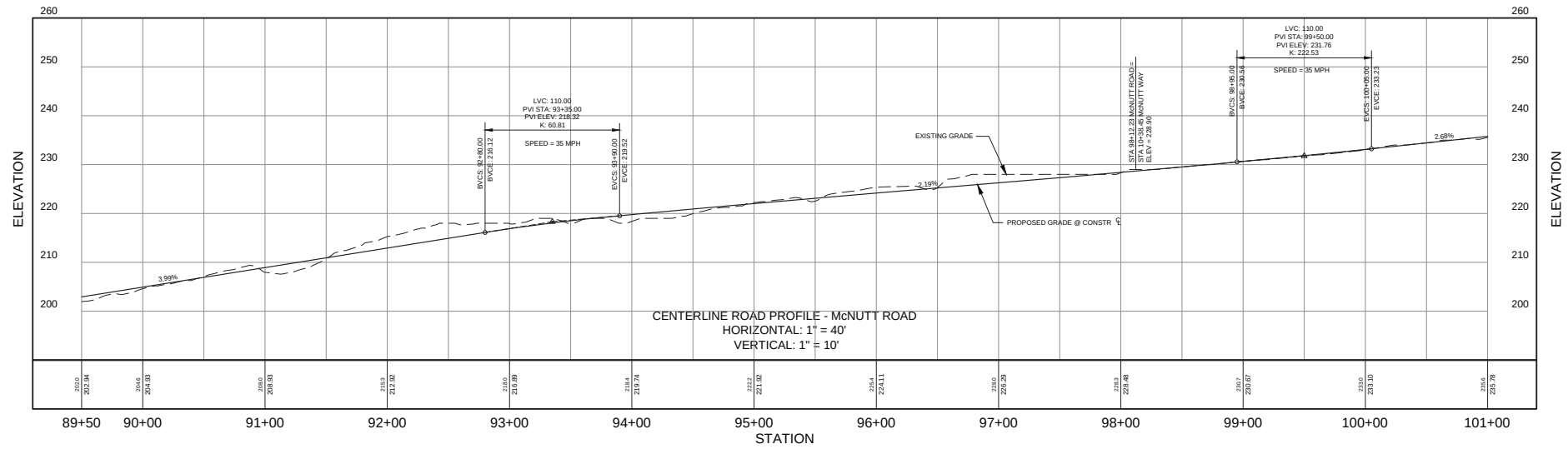
PLAN AND PROFILE	
McNUTT ROAD 81+00 to 90+00	

DRAWING NUMBER
13 - 0009

- EASEMENT FOR CONSTRUCTION OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRAVES
- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF DRAINAGE



- NOTES:**
1. ALL DRIVEWAYS ARE ASPHALT PAVING EXCEPT WHERE NOTED
 2. ALL DRIVEWAY WIDTHS ARE 14' UNLESS OTHERWISE NOTED.



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HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'

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 217 Oaklawn Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
NAH	09-12-20	
DRAWN	NAH	09-12-20
CHECKED	KEO	09-12-20

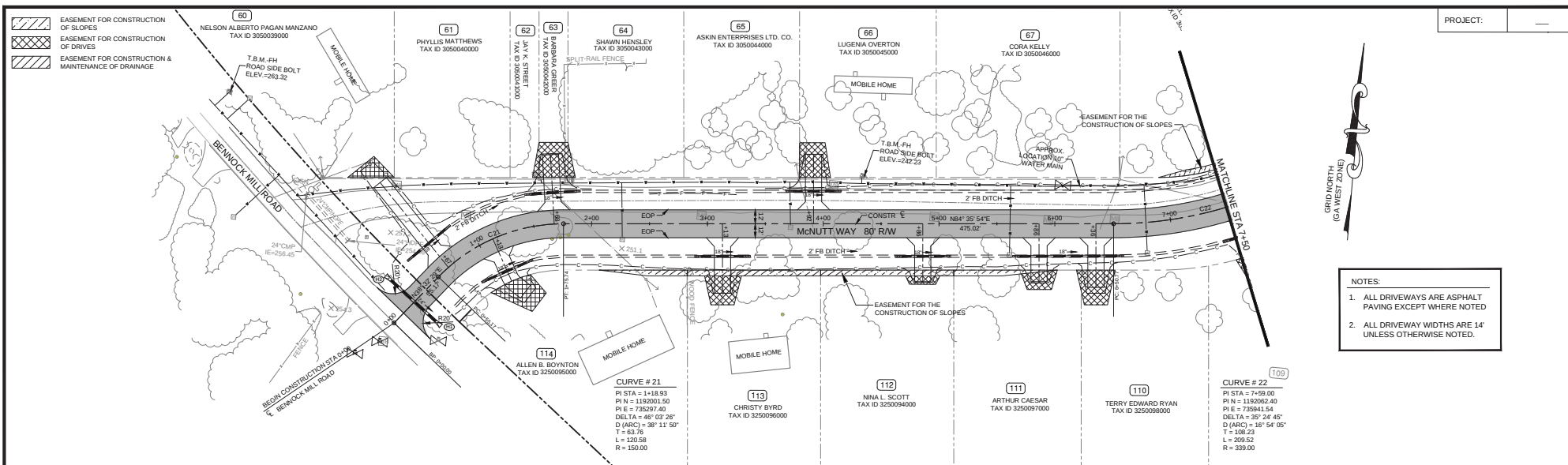
**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION	DATE	DESCRIPTION

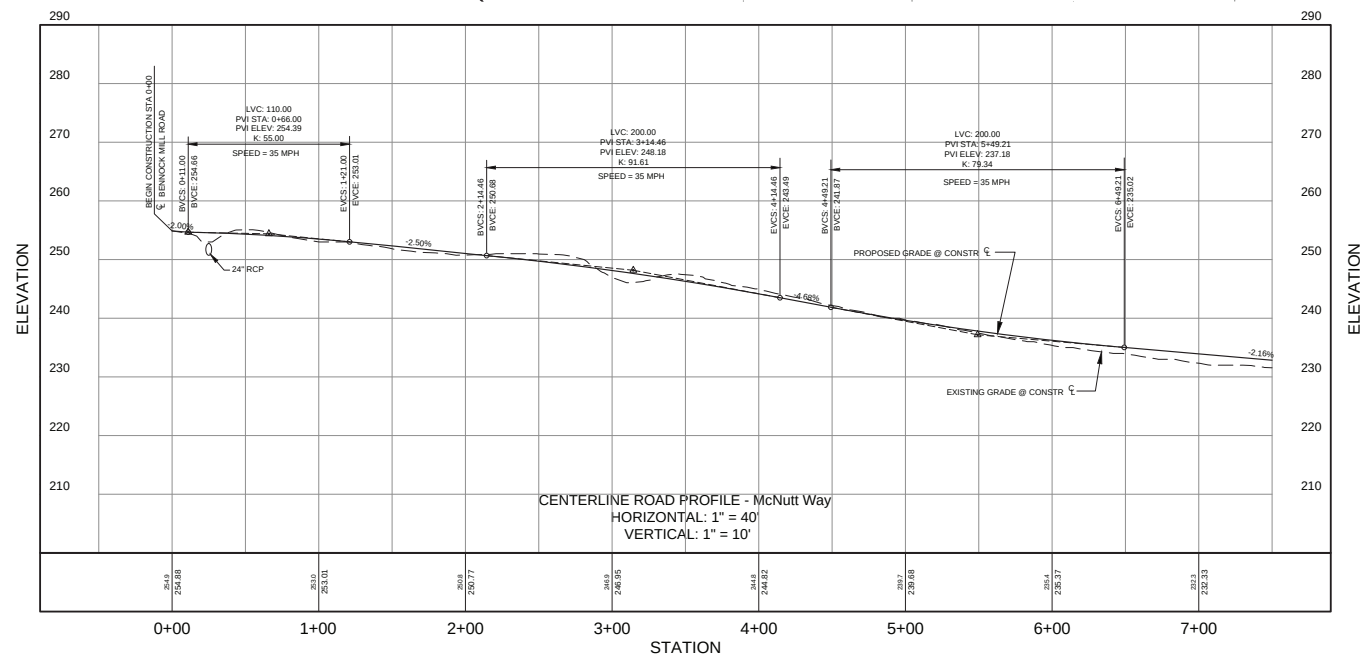
PLAN AND PROFILE

McNUTT ROAD
 90+00 to 100+50

DRAWING NUMBER
13 - 0010



- NOTES:
1. ALL DRIVEWAYS ARE ASPHALT PAVING EXCEPT WHERE NOTED
 2. ALL DRIVEWAY WIDTHS ARE 14' UNLESS OTHERWISE NOTED.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'

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217 Calloway Street
Suite 1401
Cumming, Georgia 30040
Telephone: (770) 781-9507

**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

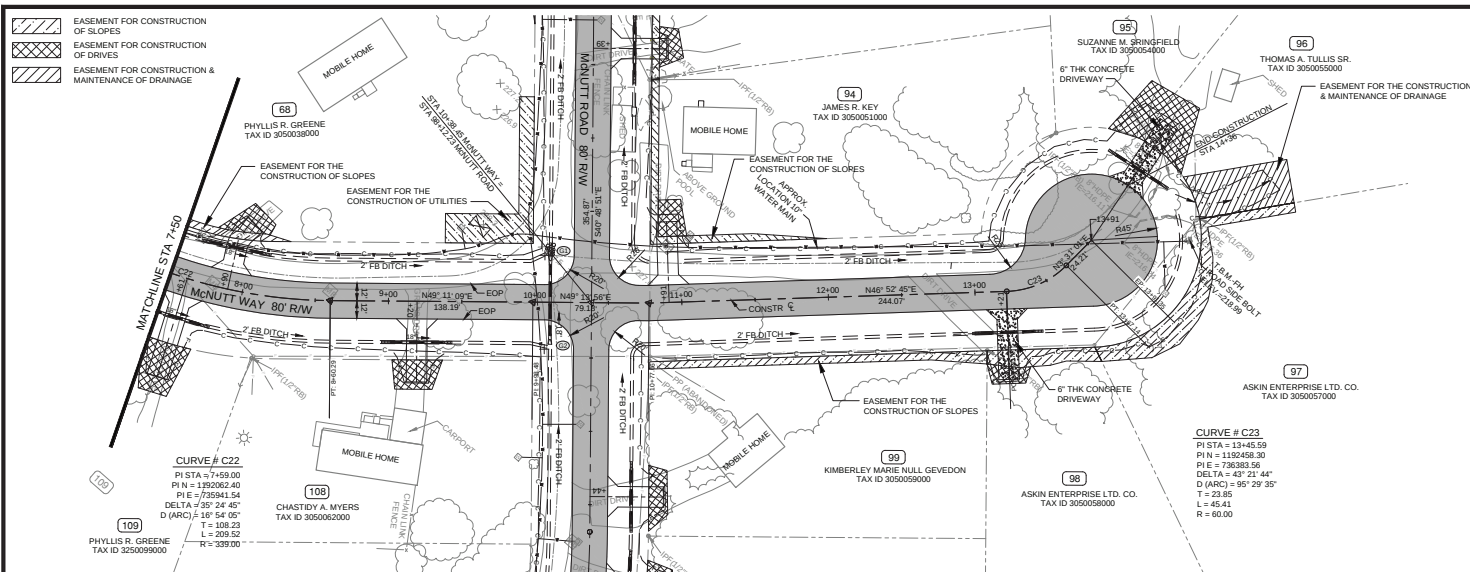
REVISION DATES		
NO.	DATE	DESCRIPTION

PLAN AND PROFILE

McNUTT WAY
0+00 to 7+50

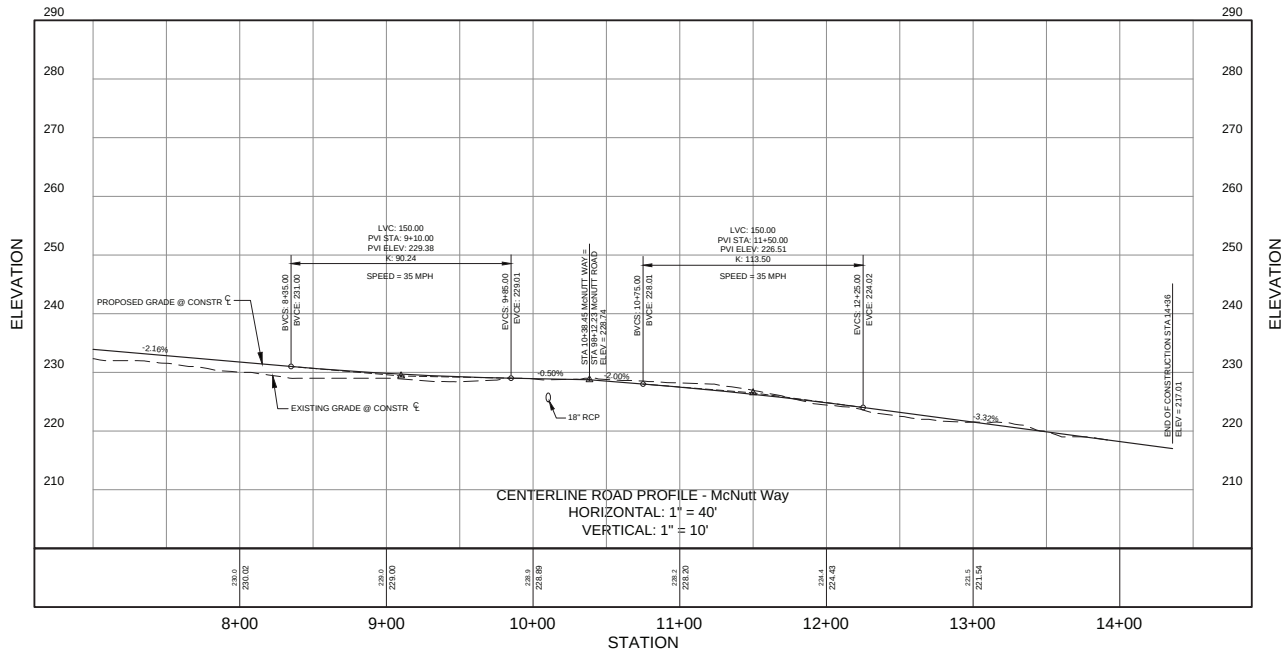
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- NOTES:**
1. ALL DRIVEWAYS ARE ASPHALT PAVING EXCEPT WHERE NOTED
 2. ALL DRIVEWAY WIDTHS ARE 14' UNLESS OTHERWISE NOTED.

PROJECT: _____



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



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 217 Columbus Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAM	09-12-20
CHECKED	KEO	09-12-20



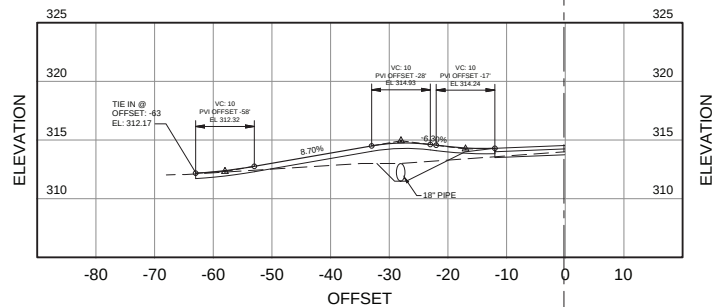
McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION DATES

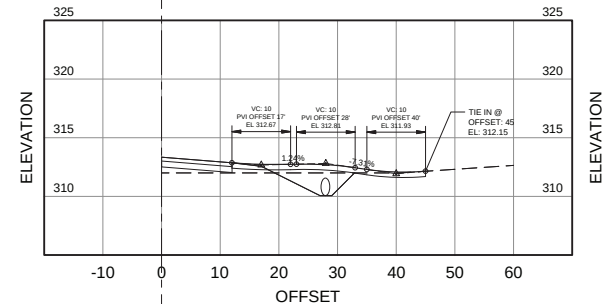
PLAN AND PROFILE

McNUTT WAY
 7+50 to END

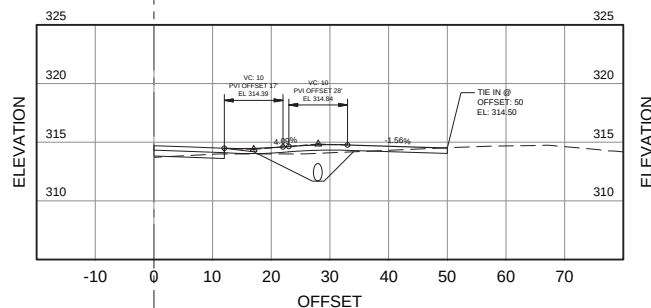
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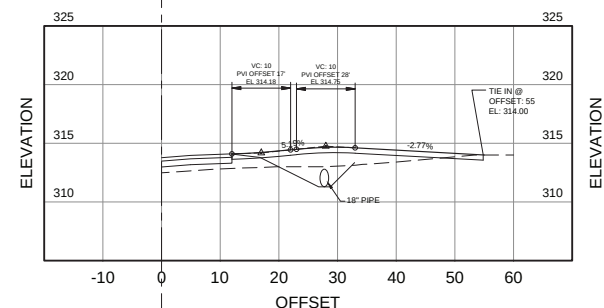
DRIVEWAY STA 3+35 LF (McNUTT ROAD)



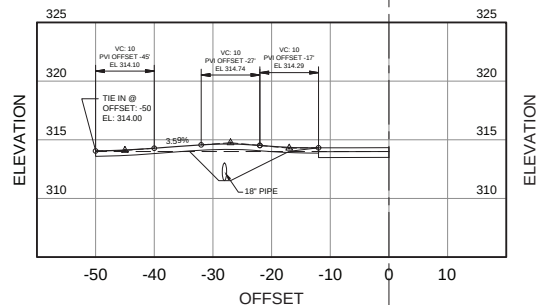
DRIVEWAY STA 5+74 RT (1)



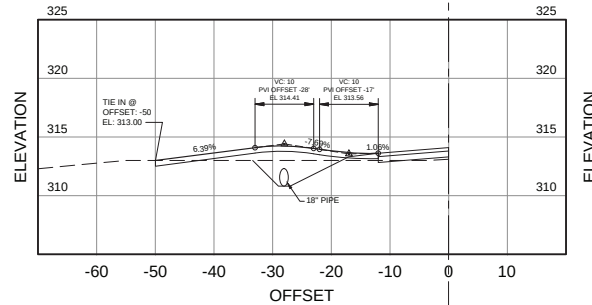
DRIVEWAY STA 3+02 RT (McNUTT ROAD)



DRIVEWAY STA 4+90 RT (McNUTT ROAD)



DRIVEWAY STA 1+23 LT (McNUTT ROAD)



DRIVEWAY STA 4+23 LF (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Delaware Street
Suite 1401
Columbus, Georgia 31904
Telephone (770) 781-5507

DESIGNED	NAME	DATE
DRAWN	NAM	02-24-20
CHECKED	NAM	02-24-20
BY	KED	02-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

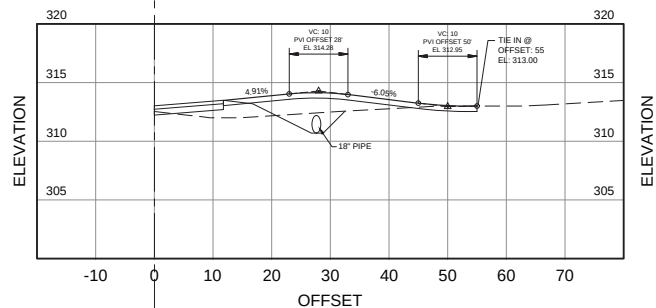
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DRIVEWAY PROFILES

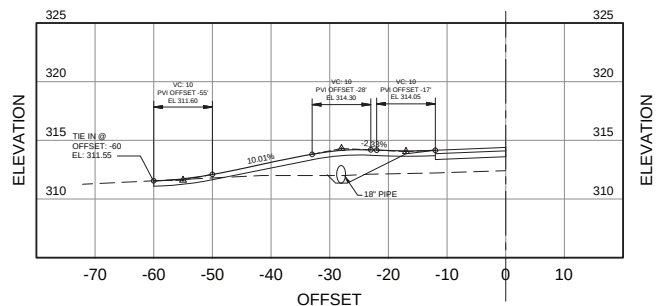
McNUTT ROAD
1+23 to 6+41

DRAWING
NUMBER

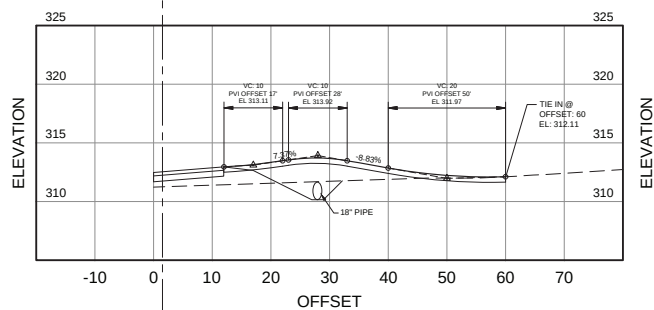
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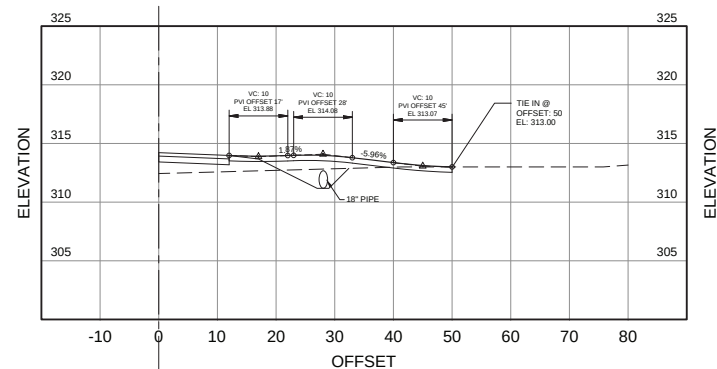
DRIVEWAY STA 9+11 RT (McNUTT ROAD)



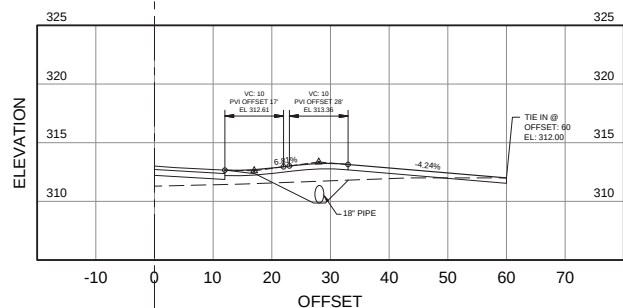
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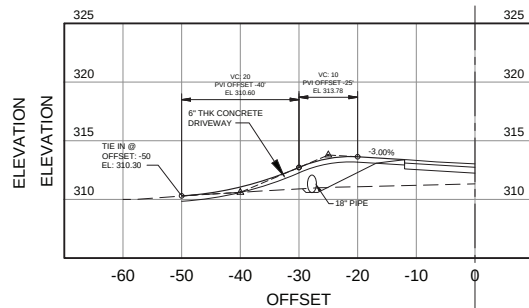
DRIVEWAY STA 7+69 RT (McNUTT ROAD)



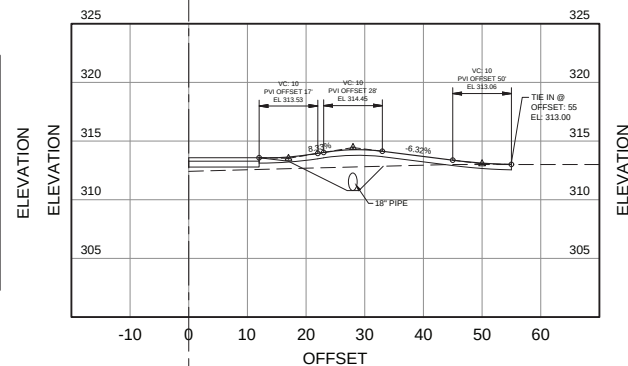
DRIVEWAY STA 11+51 RT (McNUTT ROAD)



DRIVEWAY STA 6+41 RT (McNUTT ROAD)



DRIVEWAY STA 6+38 LT (McNUTT ROAD)



DRIVEWAY STA 10+23 RT (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Delmarco Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

DESIGNED	NAME	DATE
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CHECKED	NAM	05-24-20
BY	KED	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

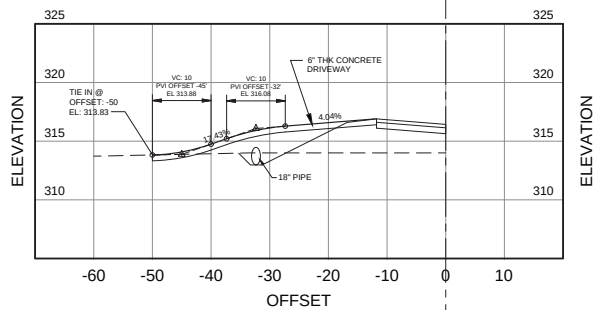
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DRIVEWAY PROFILES

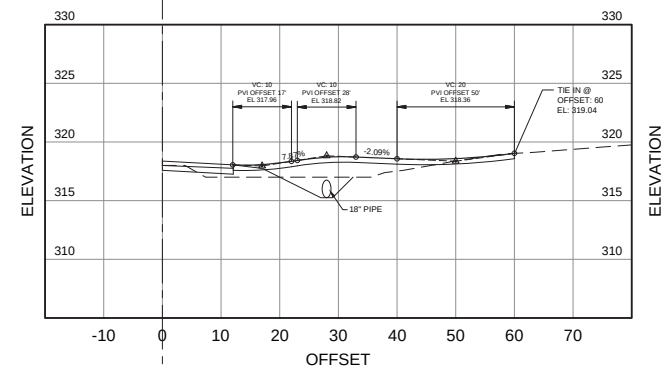
McNUTT ROAD
7+69 to 14+24

DRAWING NUMBER

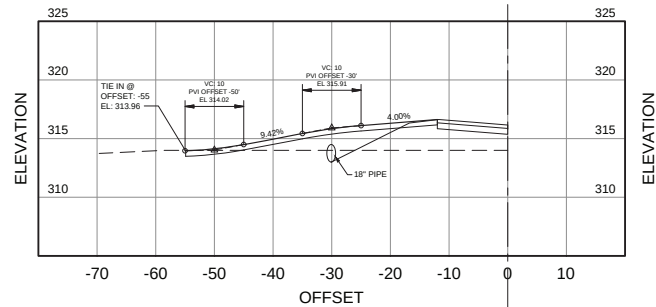
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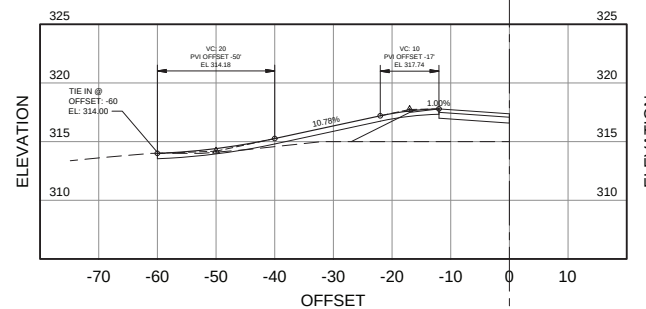
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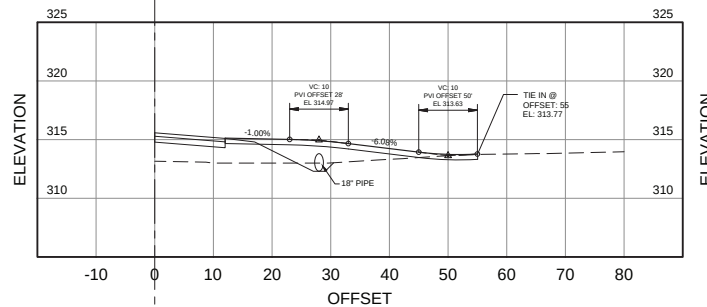
DRIVEWAY STA 21+73 RT (McNUTT ROAD)



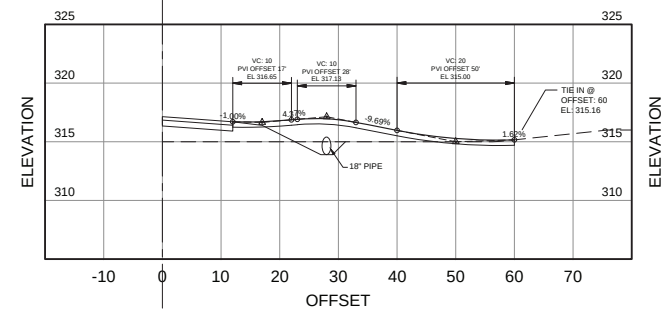
DRIVEWAY STA 15+38 LT (McNUTT ROAD)



DRIVEWAY STA 17+82 LT (McNUTT ROAD)



DRIVEWAY STA 14+24 RT (McNUTT ROAD)



DRIVEWAY STA 17+36 RT (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

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CHECKED BY	NAA	05-24-20
BY	KEO	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

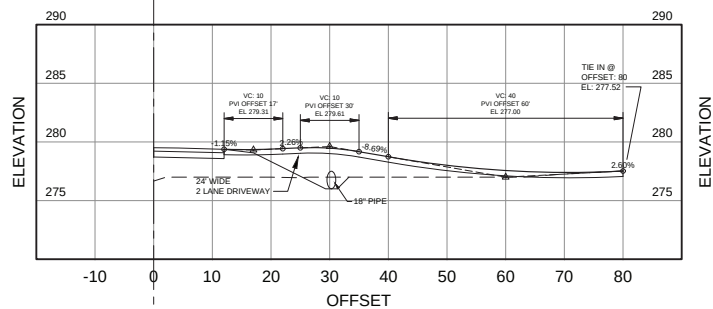
REVISION DATES

DRIVEWAY PROFILES

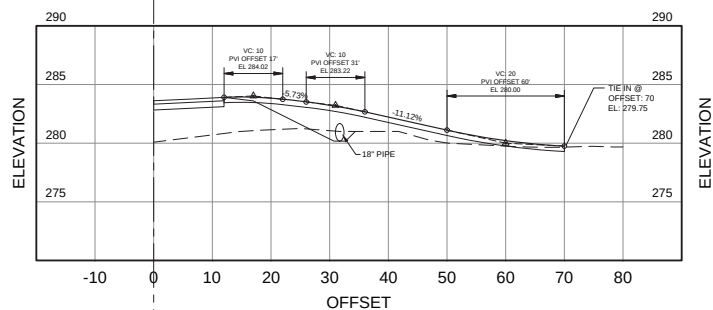
McNUTT ROAD
15+38 to 22+96

DRAWING NUMBER

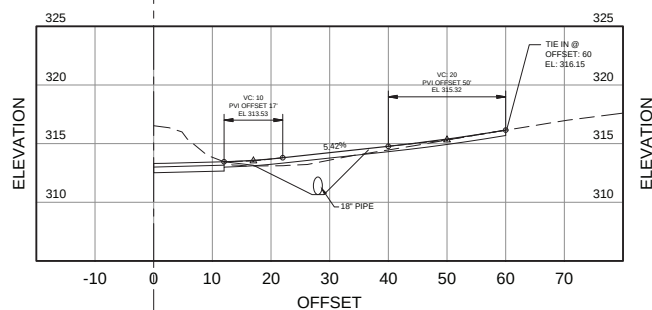
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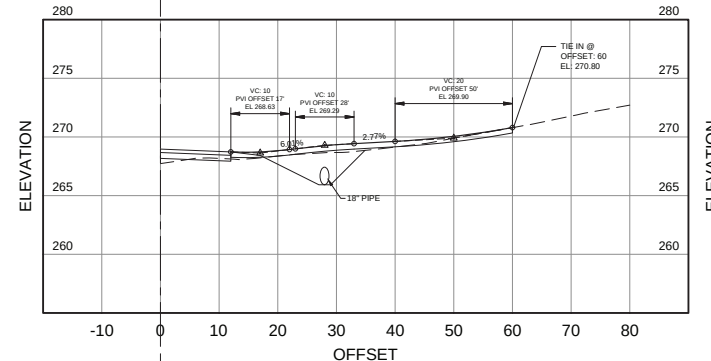
DRIVEWAY STA 27+66 RT (McNUTT ROAD)



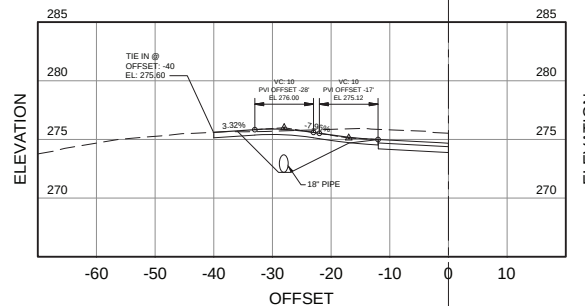
DRIVEWAY STA 26+70 RT (McNUTT ROAD)



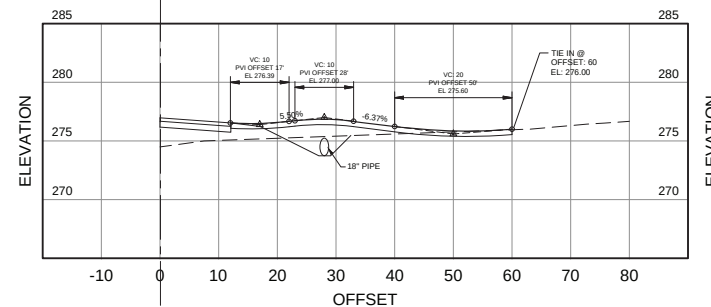
DRIVEWAY STA 22+96 RT (McNUTT ROAD)



DRIVEWAY STA 33+73 RT (McNUTT ROAD)



DRIVEWAY STA 32+72 LT (McNUTT ROAD)



DRIVEWAY STA 28+95 RT (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Delmarco Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

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CHECKED BY	NAA	05-24-20
BY	KED	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

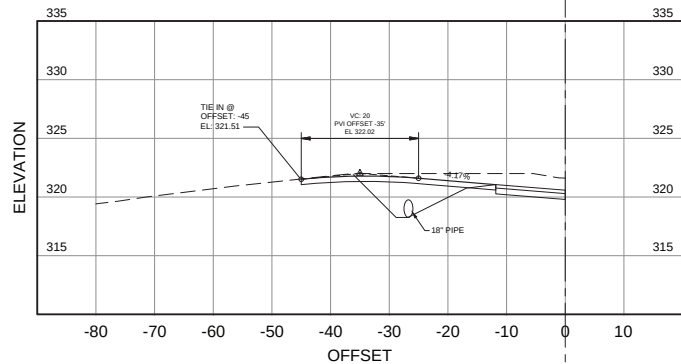
REVISION DATES

DRIVEWAY PROFILES

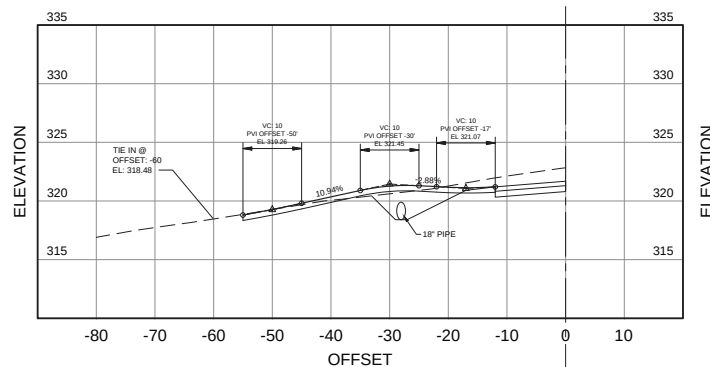
McNUTT ROAD
26+70 to 33+85

DRAWING NUMBER

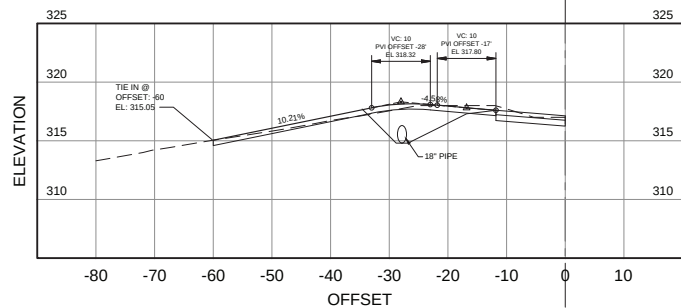
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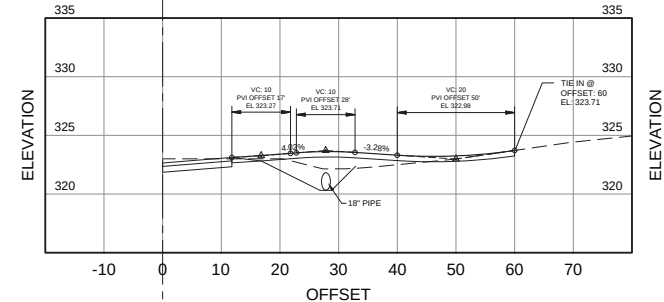
DRIVEWAY STA 45+58 LT (McNUTT ROAD)



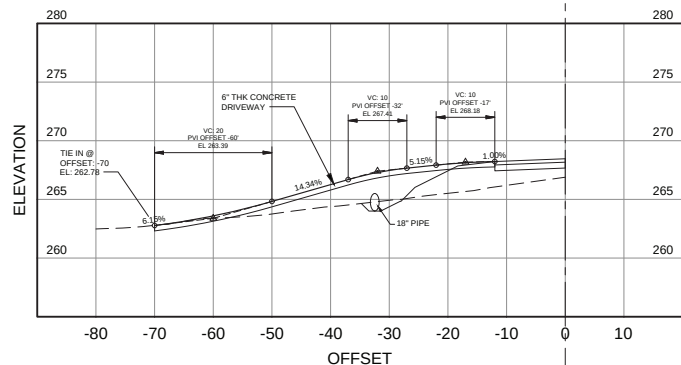
DRIVEWAY STA 48+25 LT (McNUTT ROAD)



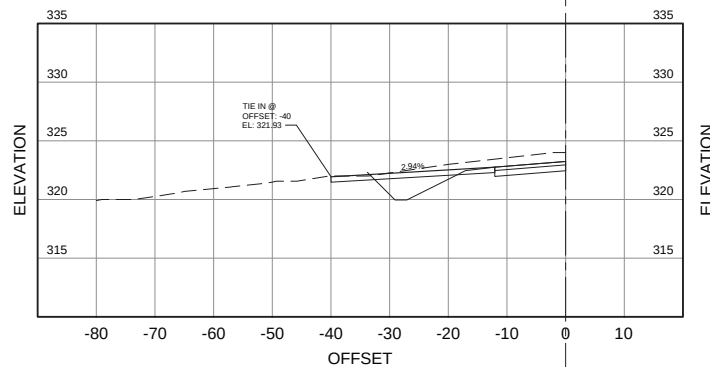
DRIVEWAY STA 44+38 LT (McNUTT ROAD)



DRIVEWAY STA 47+91 RT (McNUTT ROAD)



DRIVEWAY STA 33+85 LT (McNUTT ROAD)



DRIVEWAY STA 46+88 LT (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

DESIGNED BY	NAME	DATE
DRAWN BY	NAA	02-24-20
CHECKED BY	NAA	02-24-20
BY	KEO	02-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

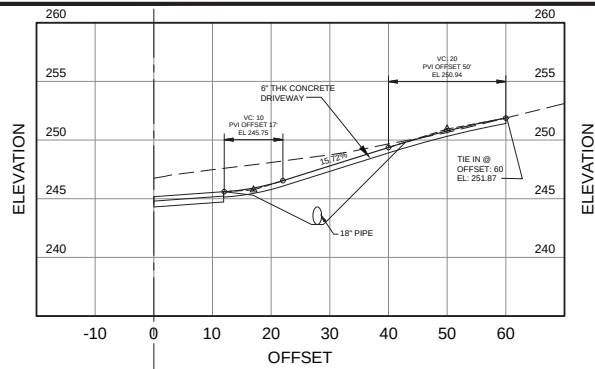
REVISION DATES

DRIVEWAY PROFILES

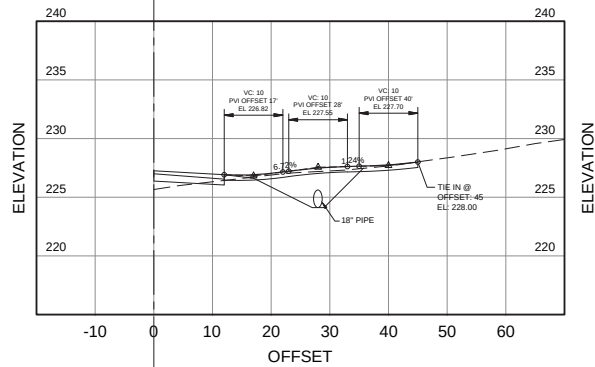
McNUTT ROAD
45+58 to 56+90

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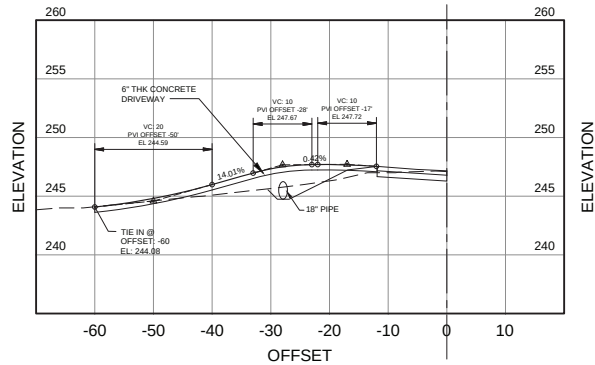
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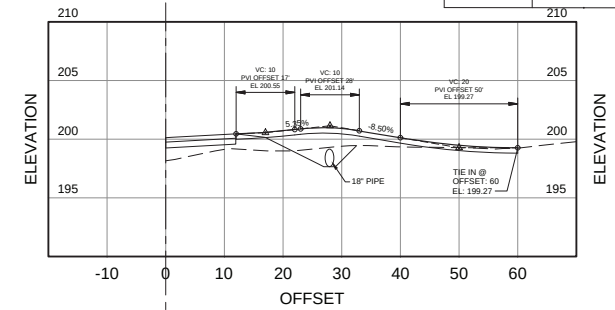
DRIVEWAY STA 73+18 RT (McNUTT ROAD)



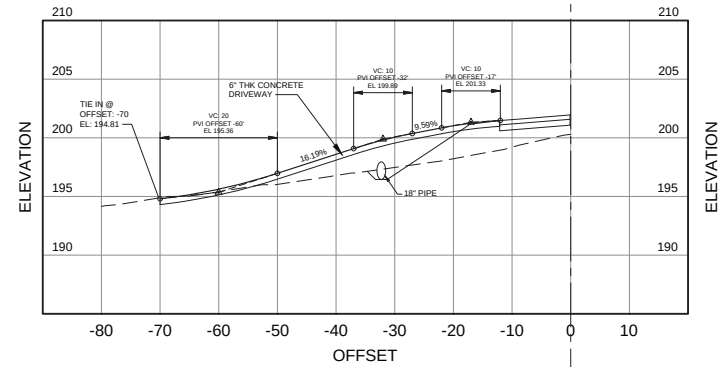
DRIVEWAY STA 66+98 RT (McNUTT ROAD)



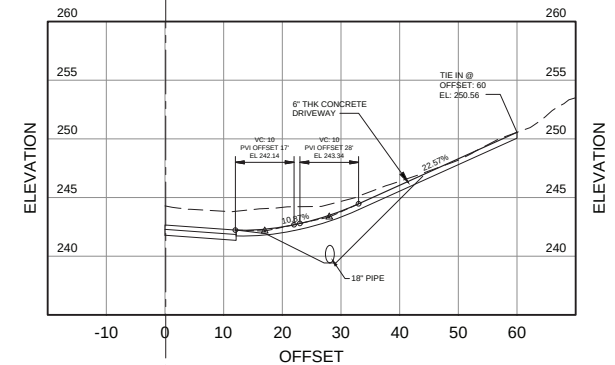
DRIVEWAY STA 56+90 LT (McNUTT ROAD)



DRIVEWAY STA 82+45 RT (McNUTT ROAD)



DRIVEWAY STA 82+15 LT (McNUTT ROAD)



DRIVEWAY STA 77+11 RT (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

DESIGNED	NAME	DATE
DRAWN	NAM	05-24-20
CHECKED	NAM	02-24-20
BY	KEO	02-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

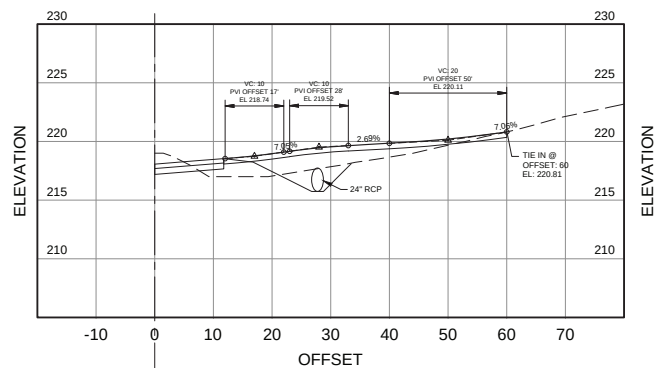
REVISION	DATE

DRIVEWAY PROFILES

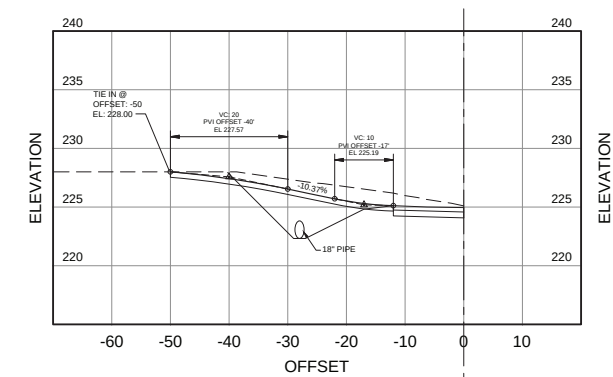
McNUTT ROAD
66+98 to 83+56

DRAWING
NUMBER

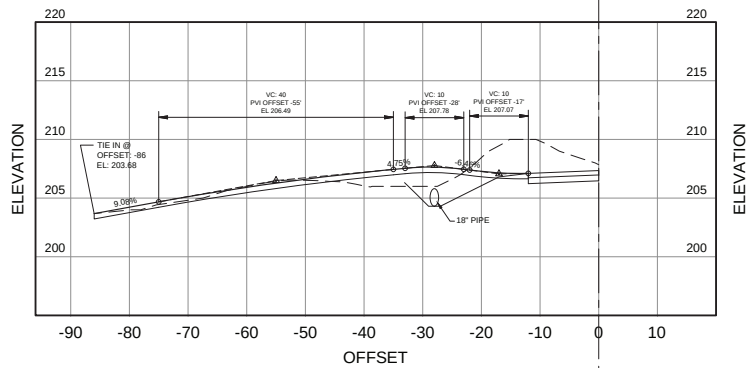
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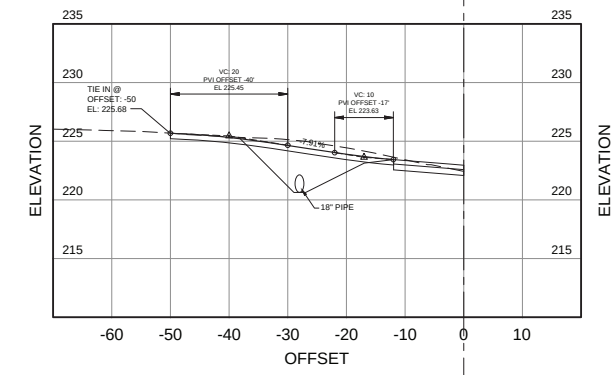
DRIVEWAY STA 93+35 RT (McNUTT ROAD)



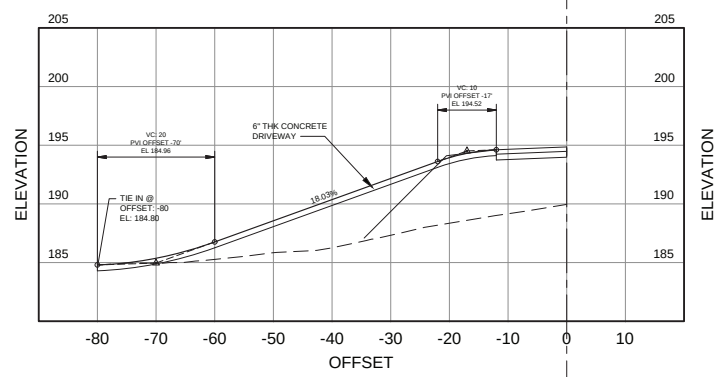
DRIVEWAY STA 96+39 LT (McNUTT ROAD)



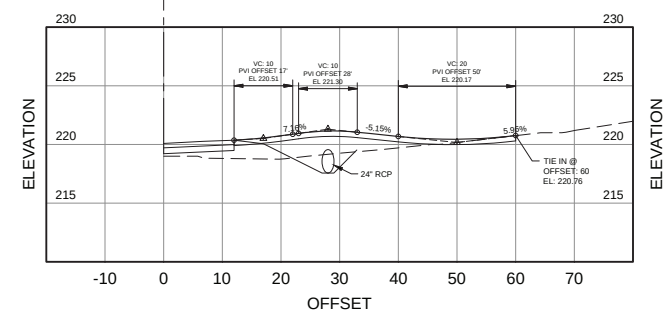
DRIVEWAY STA 90+60 LT (McNUTT ROAD)



DRIVEWAY STA 95+47 LT (McNUTT ROAD)



DRIVEWAY STA 83+56 LT (McNUTT ROAD)



DRIVEWAY STA 94+16 RT (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'

MA
MORELAND ALTOBELLI
— AN ATLAS COMPANY —

Moreland Altobelli
Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

DESIGNED BY	NAME	DATE
DRAWN BY	NAA	02-24-20
CHECKED BY	NAA	02-24-20
BY	KEO	02-24-20



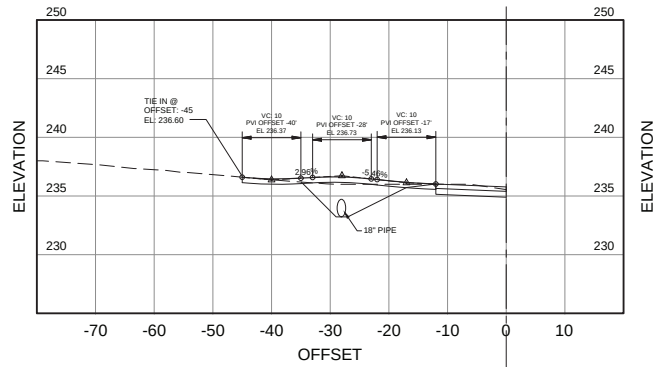
**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES

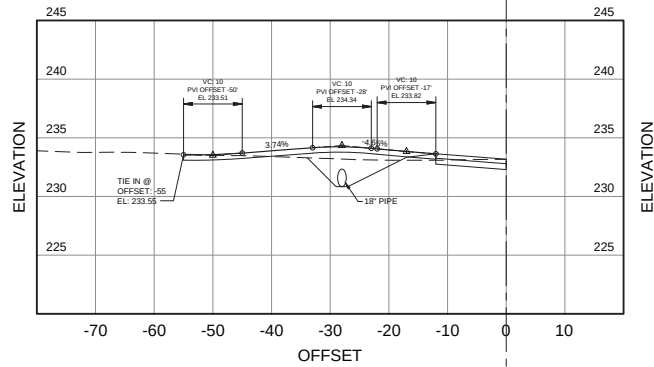
DRIVEWAY PROFILES

McNUTT ROAD
90+60 to 99+44

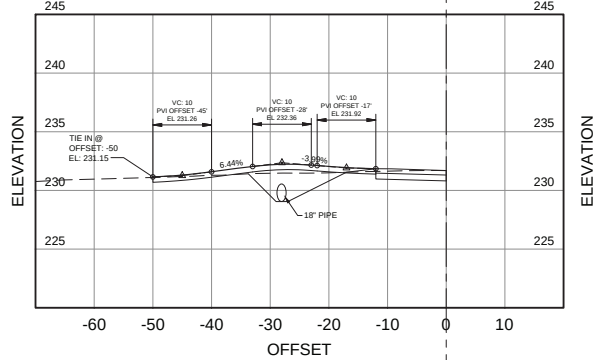
DRAWING NUMBER
17 - 0007



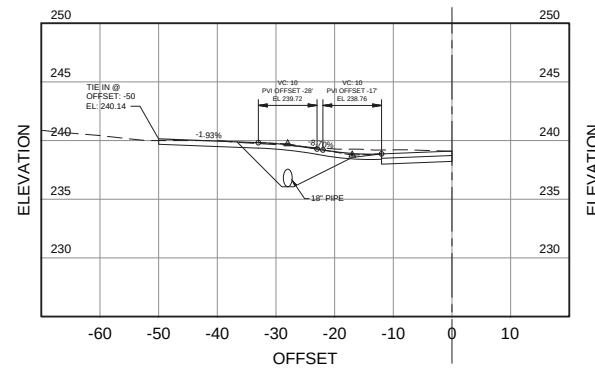
DRIVEWAY STA 101+00 LT (McNUTT ROAD)



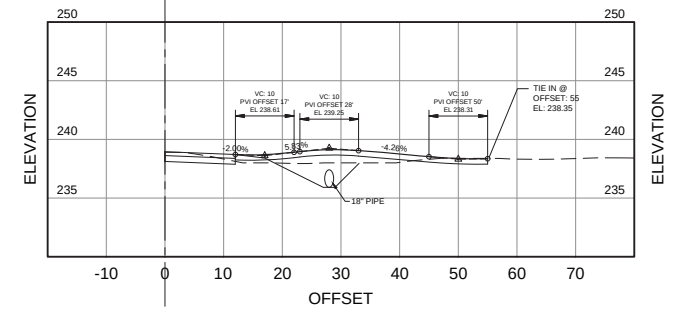
DRIVEWAY STA 100+03 LT (McNUTT ROAD)



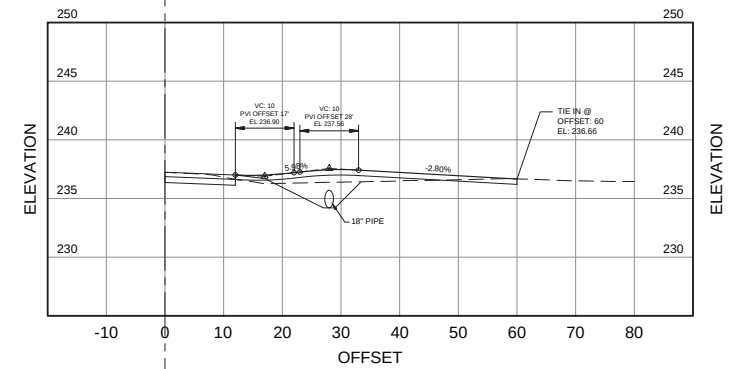
DRIVEWAY STA 99+44 LT (McNUTT ROAD)



DRIVEWAY STA 102+24 LT (McNUTT ROAD)



DRIVEWAY STA 102+18 RT (McNUTT ROAD)



DRIVEWAY STA 101+55 RT (McNUTT ROAD)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

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CHECKED BY	NAA	05-24-20
BY	KED	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION	DATE

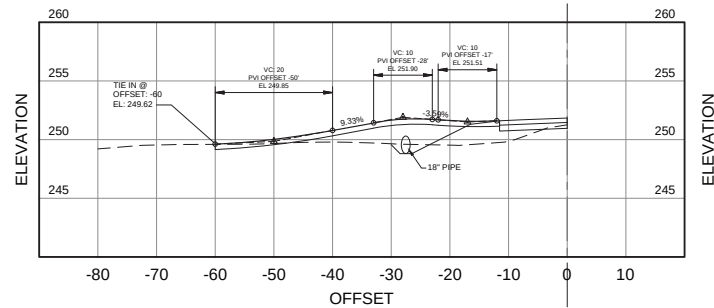
DRIVEWAY PROFILES

McNUTT ROAD
100+03 to 102+24

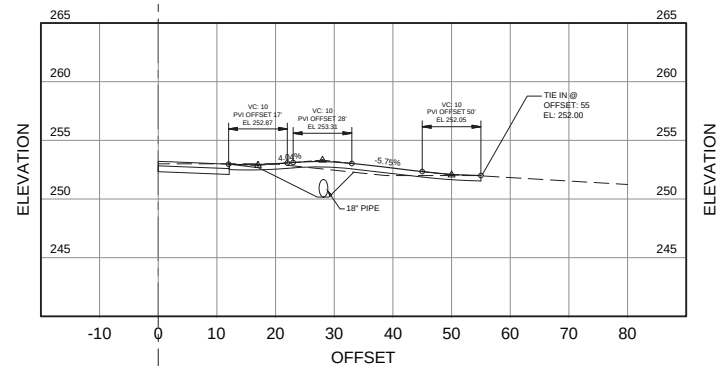
DRAWING
NUMBER

17 - 0008

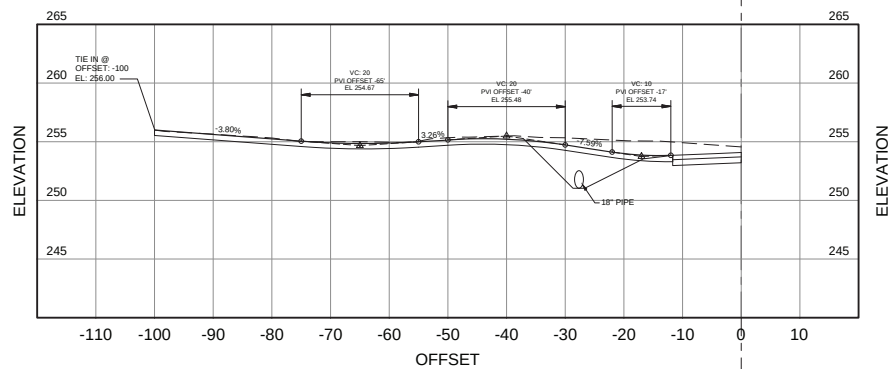
PROJECT: _____



DRIVEWAY STA 1+68 LT (McNUTT WAY)



DRIVEWAY STA 1+13 RT (McNUTT WAY)



DRIVEWAY STA 0+67 LT (McNUTT WAY)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Doherty Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

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DRAWN	NAA	02-24-20
CHECKED	BY	02-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

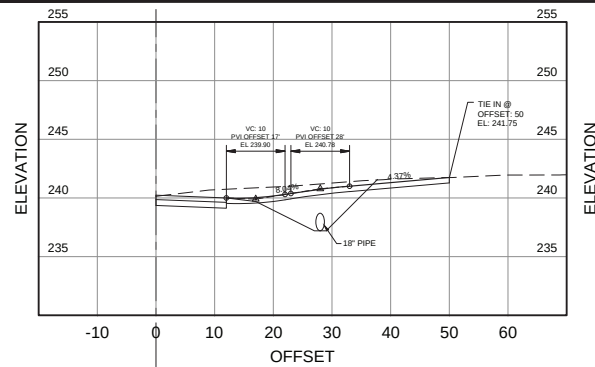
REVISION DATES

DRIVEWAY PROFILES

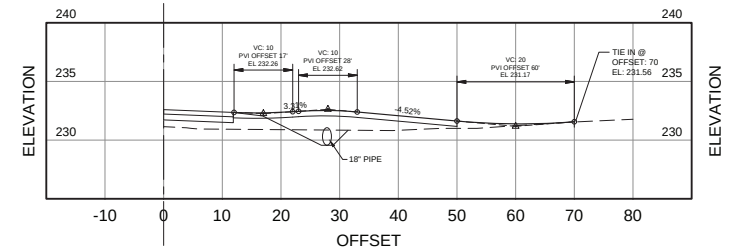
McNUTT WAY
0+67 to 1+68

DRAWING
NUMBER

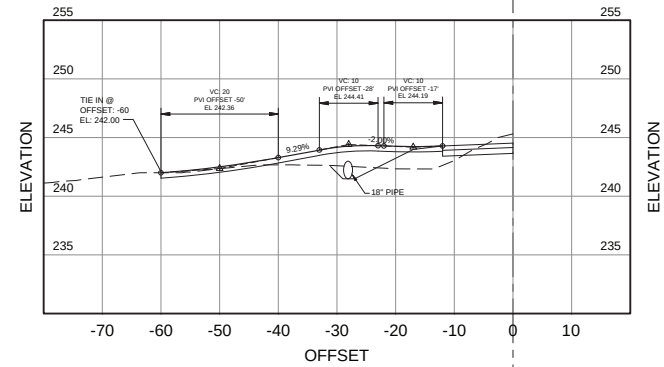
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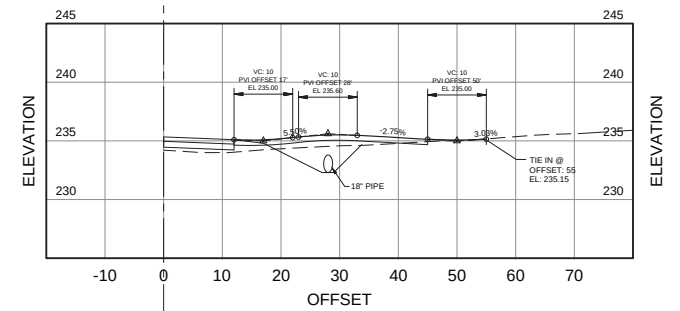
DRIVEWAY STA 4+86 RT (McNUTT WAY)



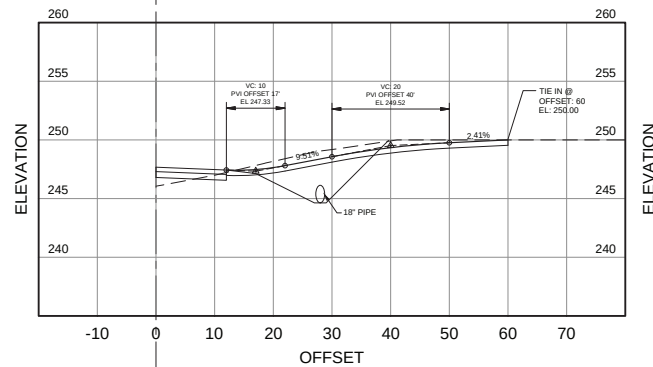
DRIVEWAY STA 7+61 RT (McNUTT WAY)



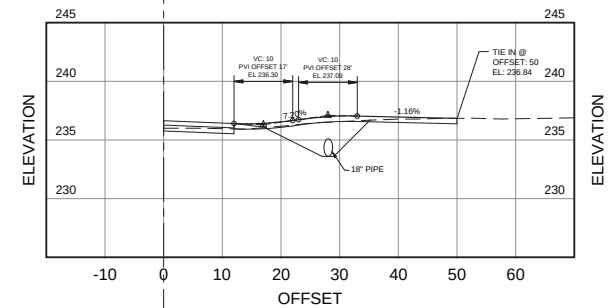
DRIVEWAY STA 3+92 LT (McNUTT WAY)



DRIVEWAY STA 6+36 RT (McNUTT WAY)



DRIVEWAY STA 3+13 RT (McNUTT WAY)



DRIVEWAY STA 5+86 RT (McNUTT WAY)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Doherty Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

DESIGNED	NAME	DATE
BY	NAM	05-24-20
DRAWN	NAME	DATE
BY	NAM	05-24-20
CHECKED	NAME	DATE
BY	KEO	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

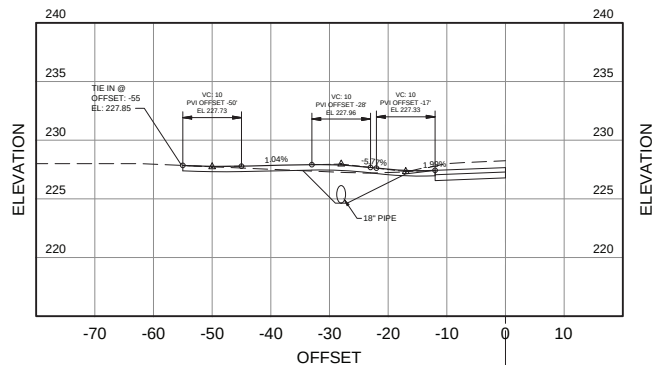
REVISION	DATE

DRIVEWAY PROFILES

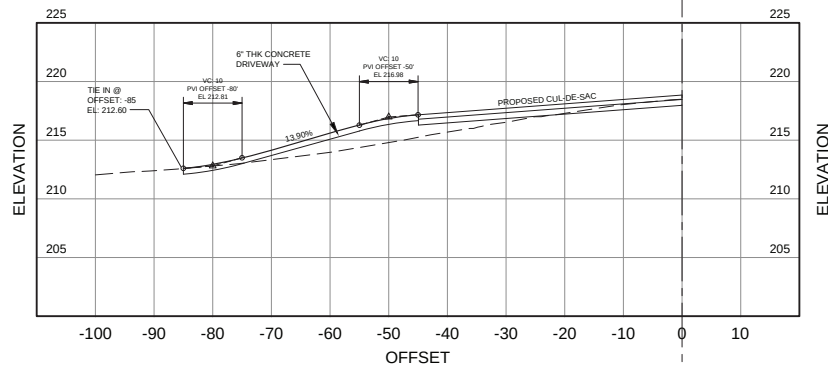
McNUTT WAY
3+13 to 7+61

DRAWING
NUMBER

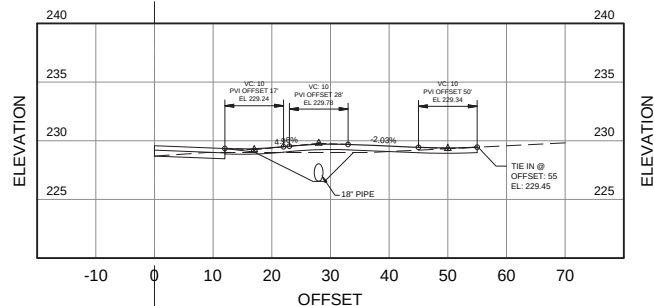
17 - 0010



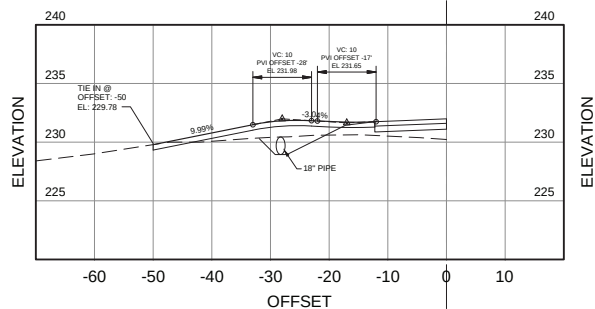
DRIVEWAY STA 10+91 LT (McNUTT WAY)



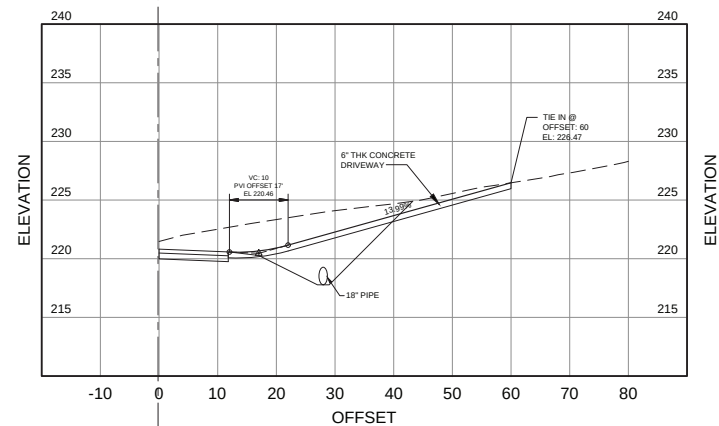
DRIVEWAY STA 13+91 LT (McNUTT WAY)



DRIVEWAY STA 9+20 RT (McNUTT WAY)



DRIVEWAY STA 7+90 LT (McNUTT WAY)



DRIVEWAY STA 13+21 RT (McNUTT WAY)

NOTE:
ALL DRIVEWAYS ARE ASPHALT
PAVING EXCEPT WHERE NOTED



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

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DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES

DRIVEWAY PROFILES

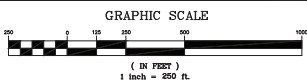
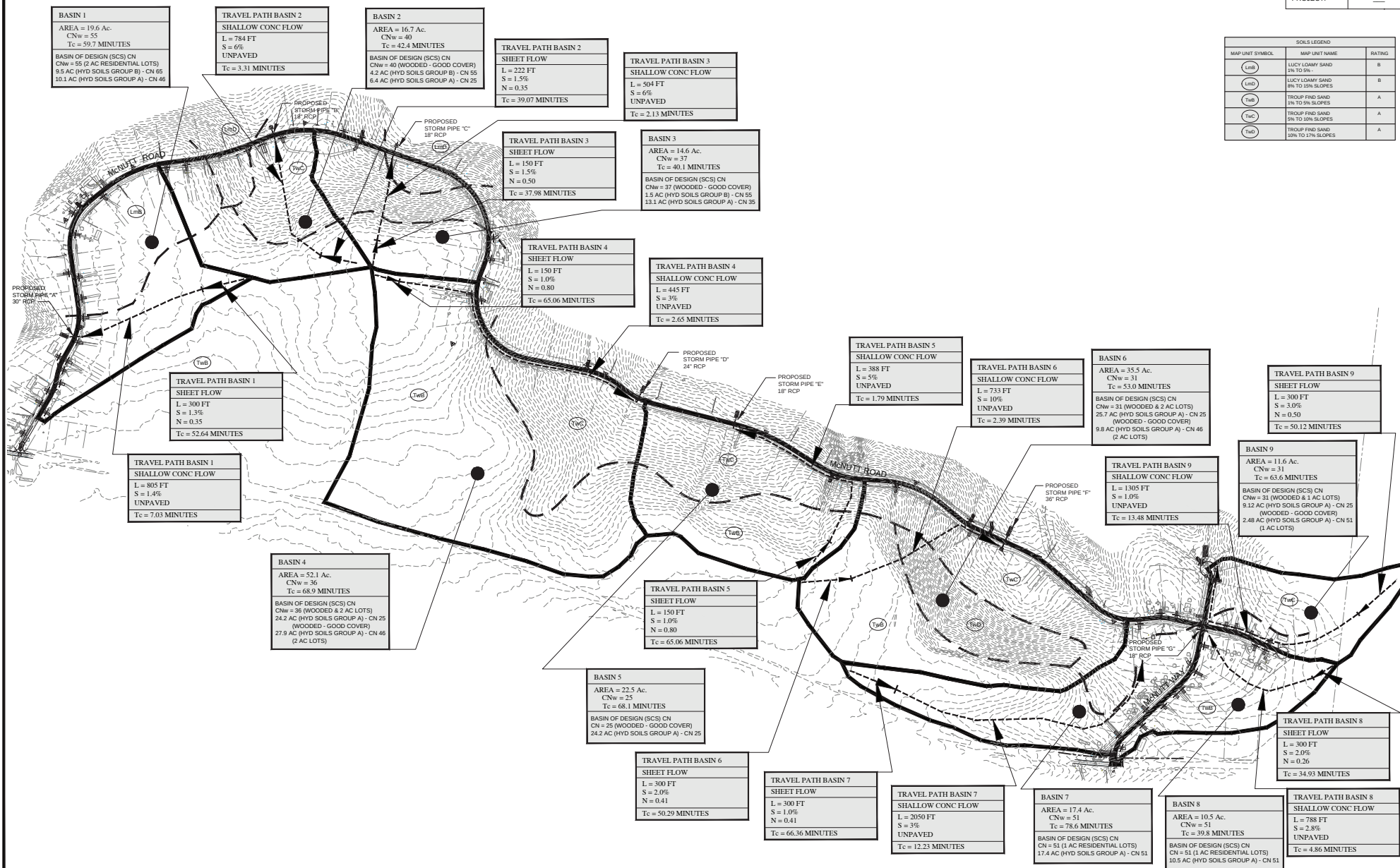
McNUTT WAY
7+90 to 13+91

DRAWING NUMBER

17 - 0011

PROJECT: _____

SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 2% TO 5% SLOPES	B
	LUCY LOAMY SAND 8% TO 15% SLOPES	B
	TROUP FINE SAND 2% TO 5% SLOPES	A
	TROUP FINE SAND 8% TO 15% SLOPES	A
	TROUP FINE SAND 15% TO 17% SLOPES	A



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Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
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DRAWN	NAME	DATE
CHECKED	NAME	DATE
BY	NAME	DATE



McNUTT ROAD
ROAD CONSTRUCTION PLANS

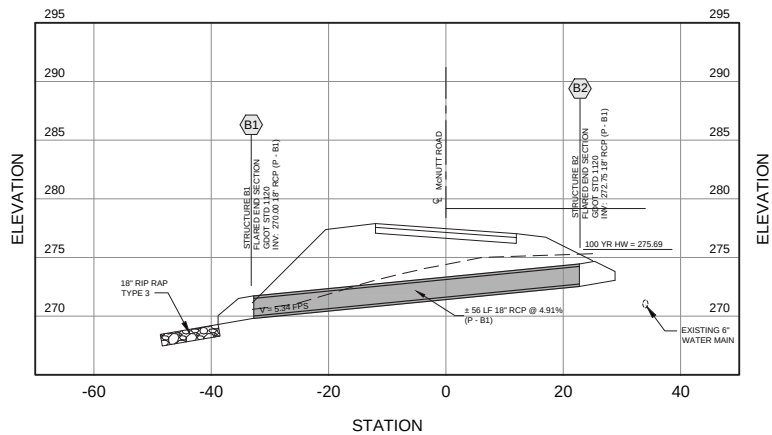
REVISION DATES

DRAINAGE AREA MAP

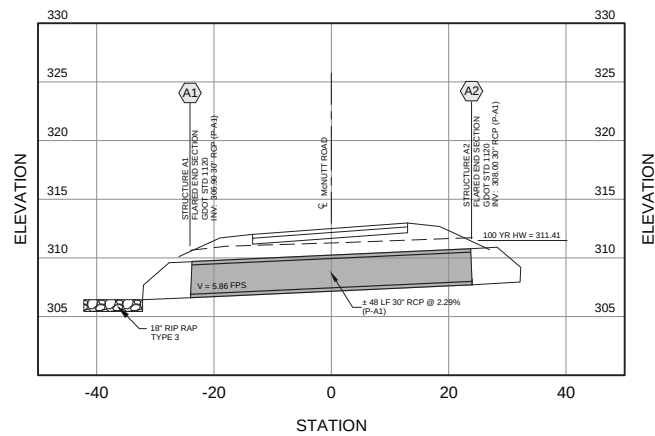
McNUTT ROAD AND
McNUTT WAY

DRAWING
NUMBER

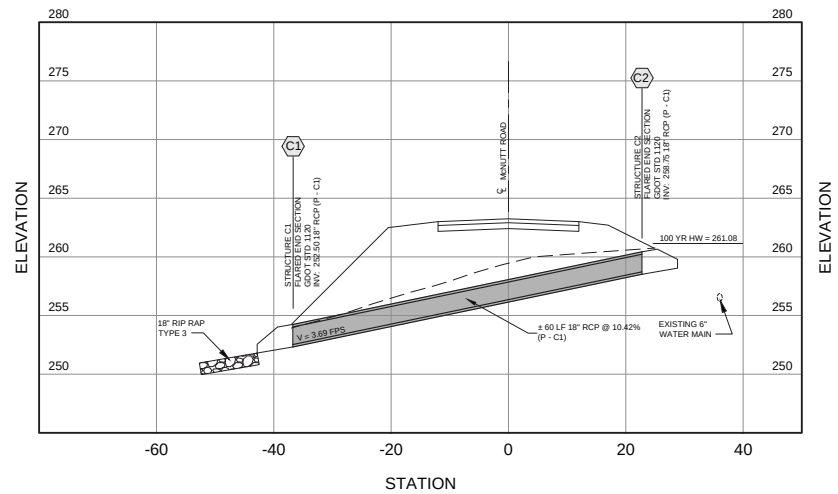
21 - 0001



STORM PIPE PROFILE - STRUCTURE B1 - B2
STA 28+50 (McNUTT ROAD)
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'



STORM PIPE PROFILE - STRUCTURE A1 - A2
STATION 7+92 (McNUTT ROAD)
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'



STORM PIPE PROFILE - STRUCTURE C1 - C2
STA 36+00 (McNUTT ROAD)
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
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McNUTT ROAD
ROAD CONSTRUCTION PLANS

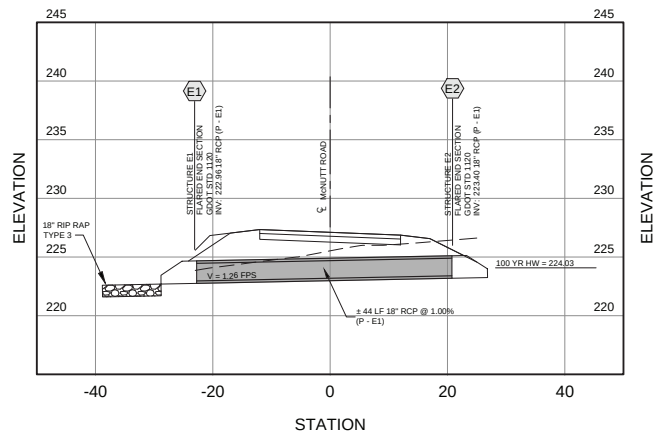
REVISION DATES

DRAINAGE PROFILES

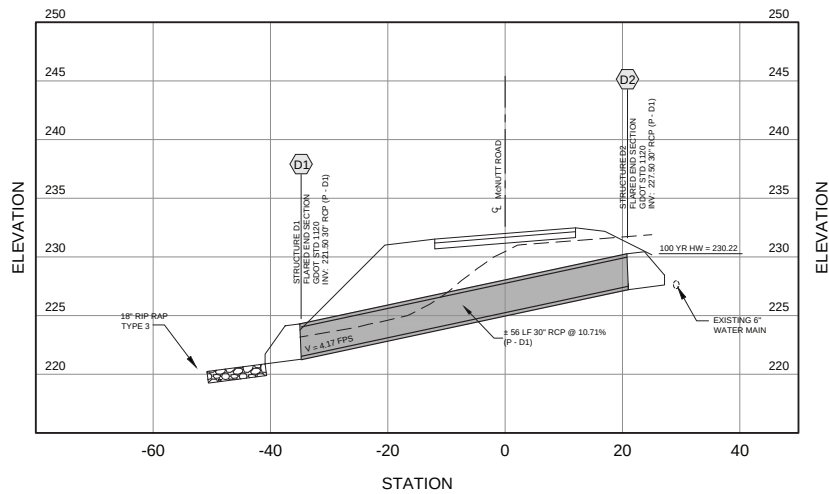
McNUTT ROAD
7+92 to 36+00

DRAWING NUMBER

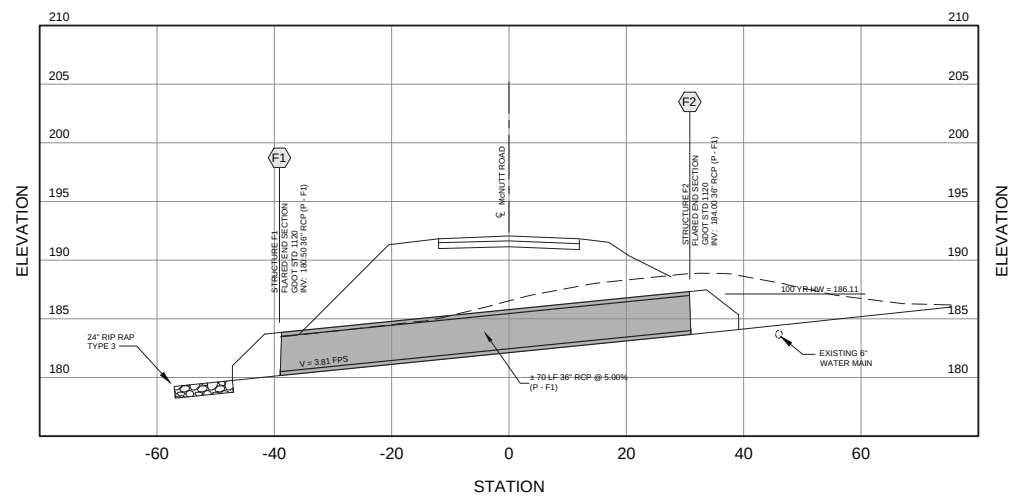
22 - 0001



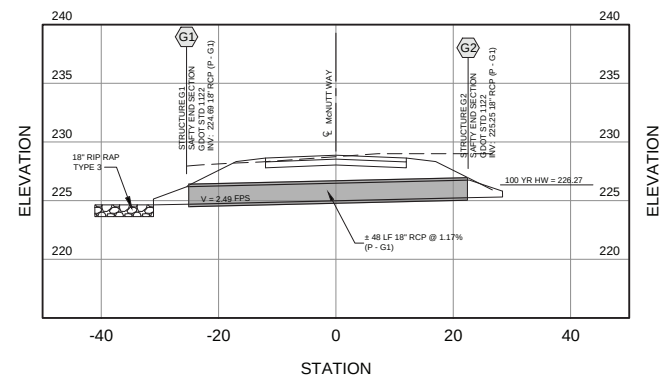
STORM PIPE PROFILE - STRUCTURE E1 - E2
STA 66+50 (McNUTT ROAD)
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'



STORM PIPE PROFILE - STRUCTURE D1 - D2
STA 60+50 (McNUTT ROAD)
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'



STORM PIPE PROFILE - STRUCTURE F1 - F2
STA 84+59 (McNUTT ROAD)
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'



STORM PIPE PROFILE - STRUCTURE G1 - G2
STA 10+12 (McNUTT WAY)
HORIZONTAL: 1" = 40'
VERTICAL: 1" = 20'



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

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DRAWN	NAA	05-24-20
CHECKED	KEO	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

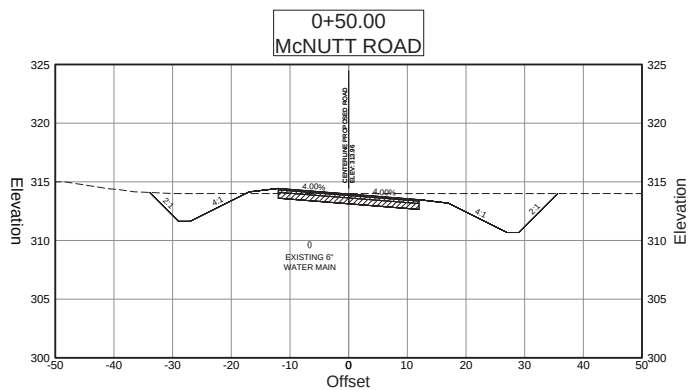
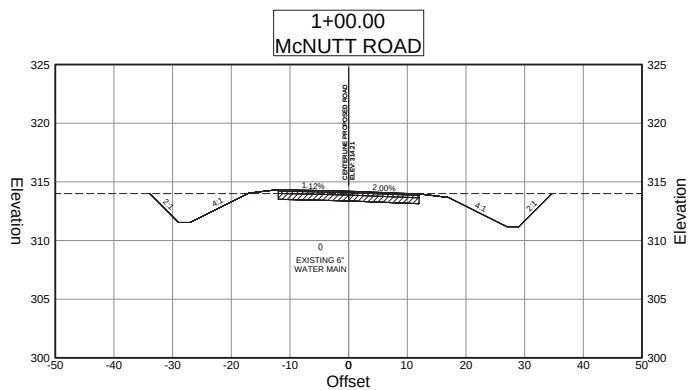
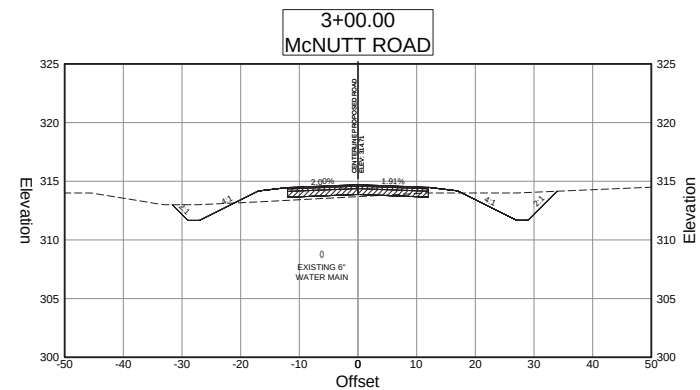
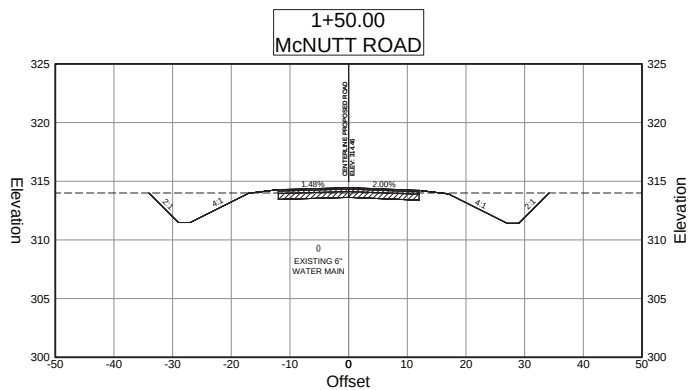
REVISION DATES

DRAINAGE PROFILES

McNUTT WAY
10+12

DRAWING
NUMBER

22 - 0003



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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217 College Street
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McNUTT ROAD
ROAD CONSTRUCTION PLANS

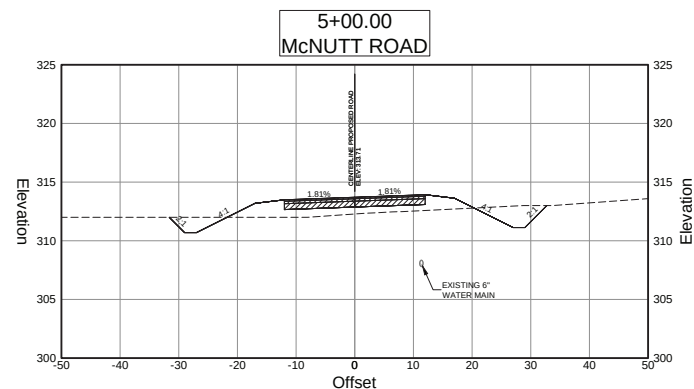
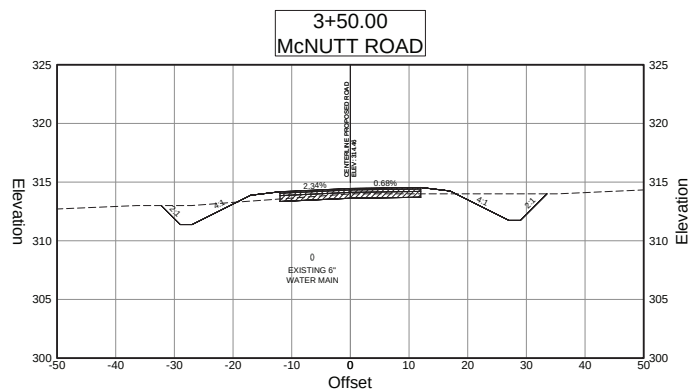
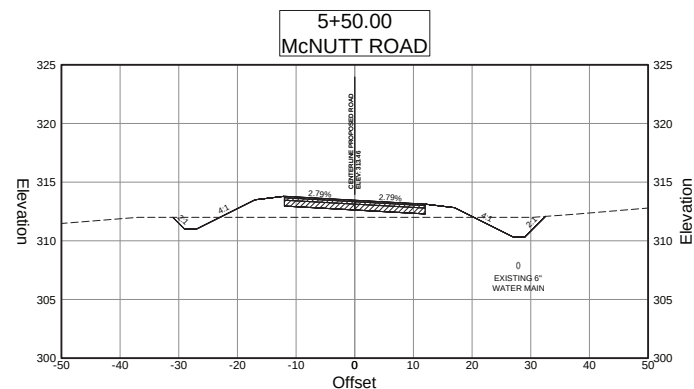
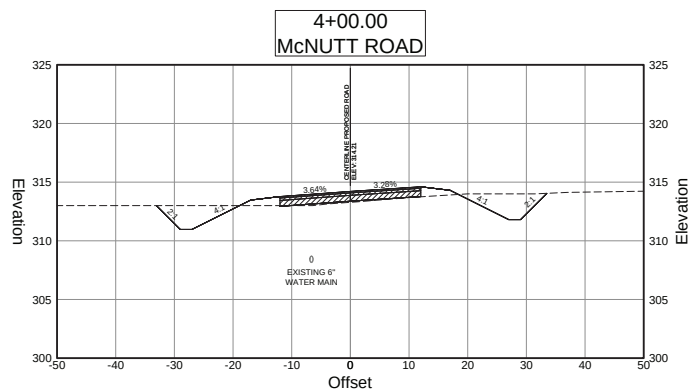
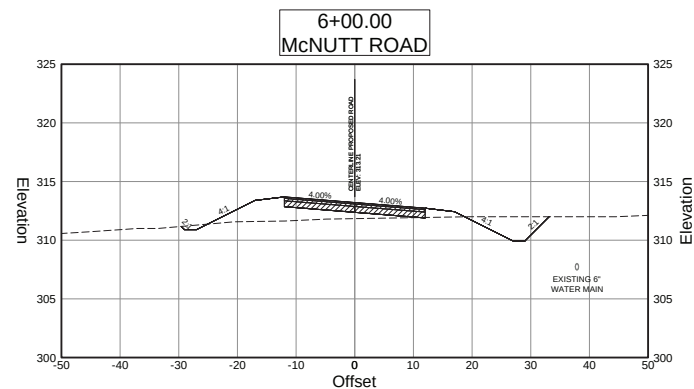
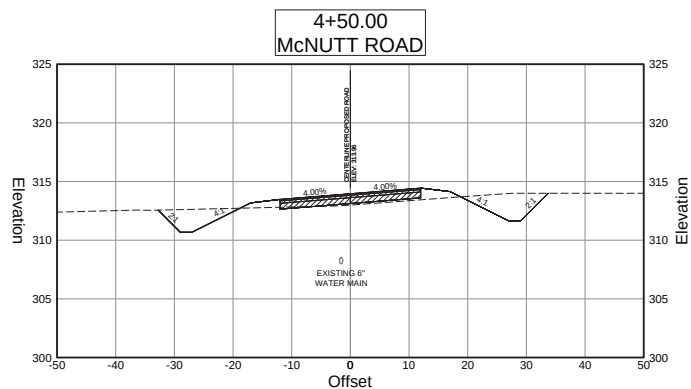
REVISION DATES

CROSS SECTIONS

McNUTT ROAD
0+50 to 3+00

DRAWING NUMBER

23 - 0001



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 College Street
Suite 1401
Cumming, Georgia 30040
Telephone: (770) 781-9507

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DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

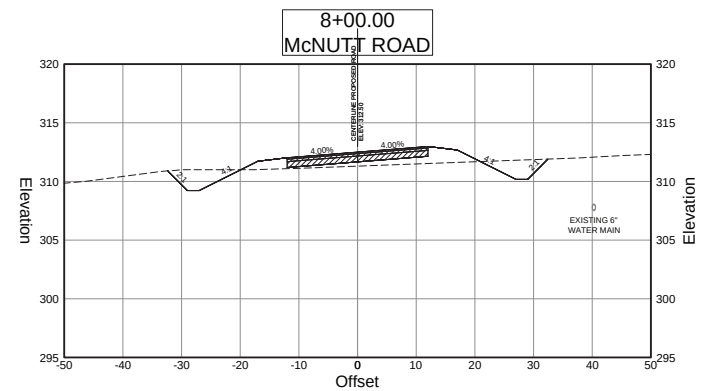
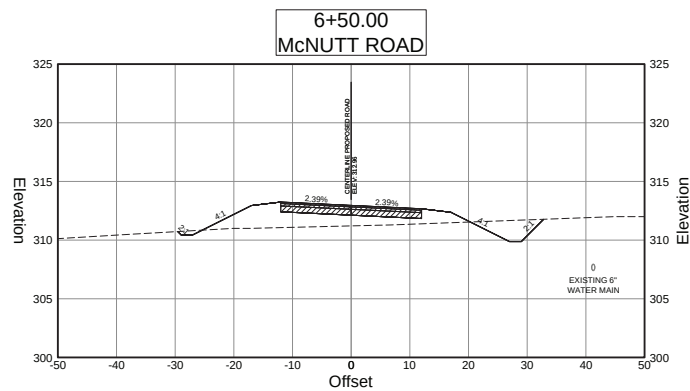
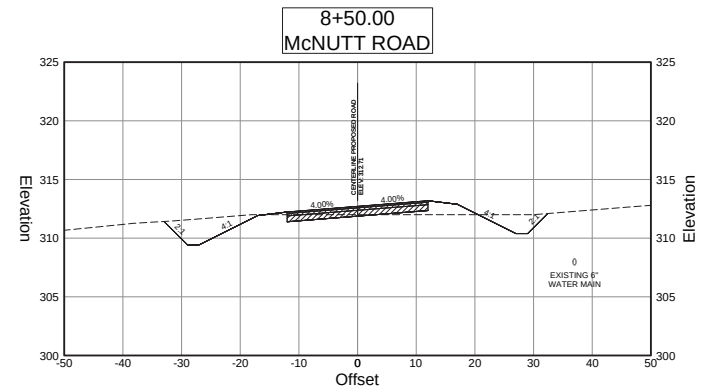
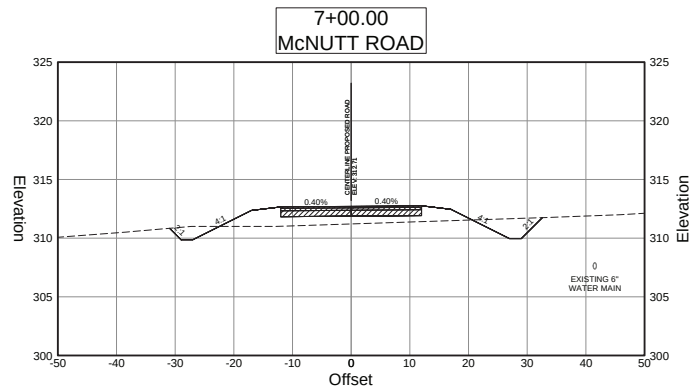
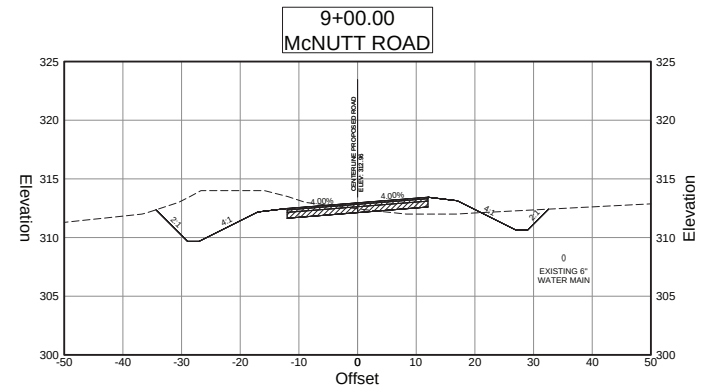
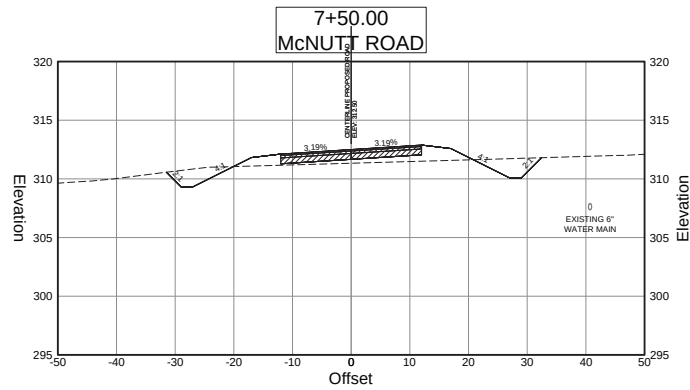
REVISION DATES

CROSS SECTIONS

McNUTT ROAD
3+50 to 6+00

DRAWING NUMBER

23 - 0002



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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217 Hollingsworth Street
Suite 1405
Cumming, Georgia 30040
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McNUTT ROAD
ROAD CONSTRUCTION PLANS

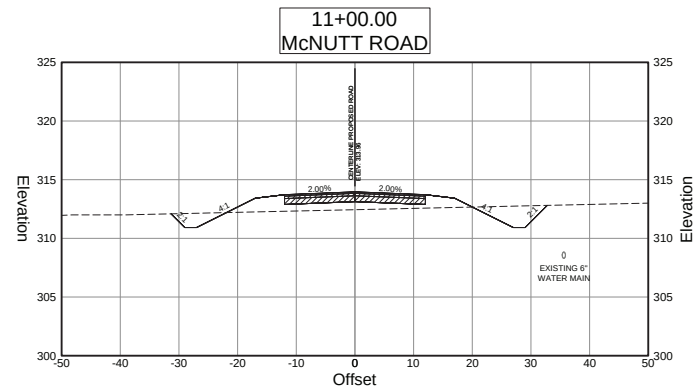
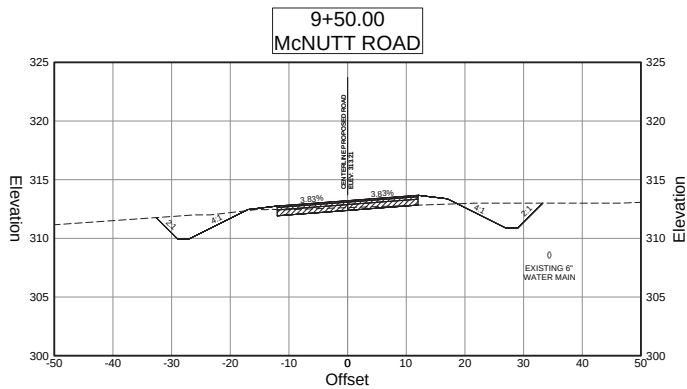
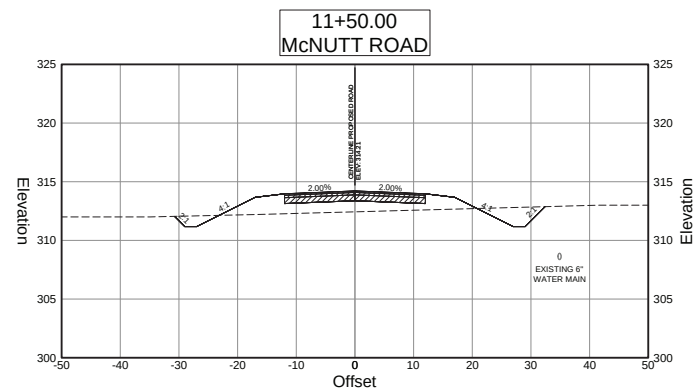
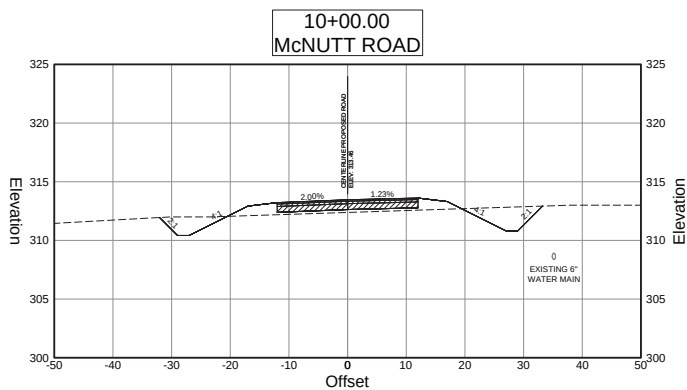
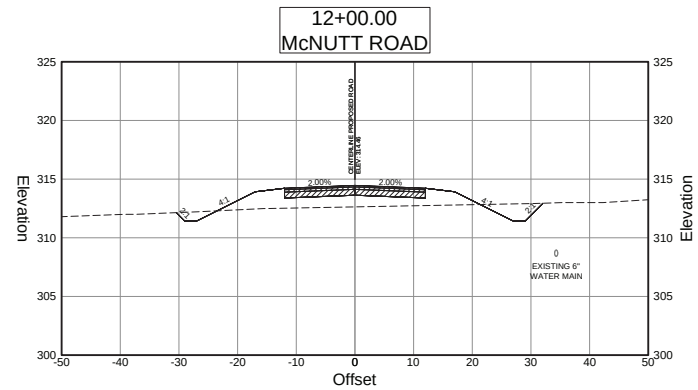
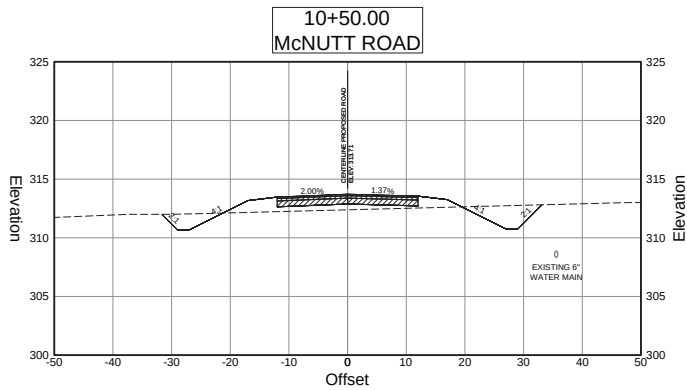
REVISION	DATE

CROSS SECTIONS

McNutt Road
6+50 to 9+00

DRAWING
NUMBER

23 - 0003



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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217 Cummings Street
Suite 1405
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Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

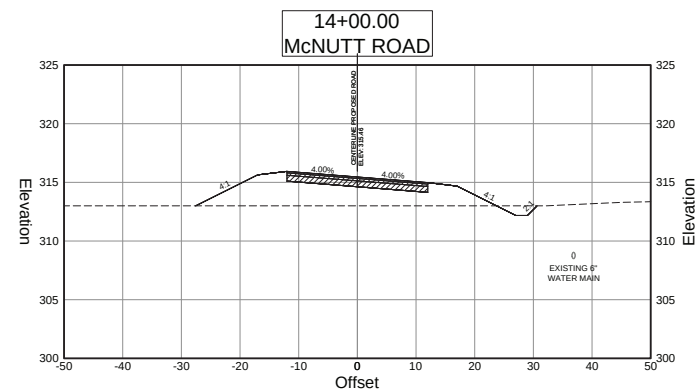
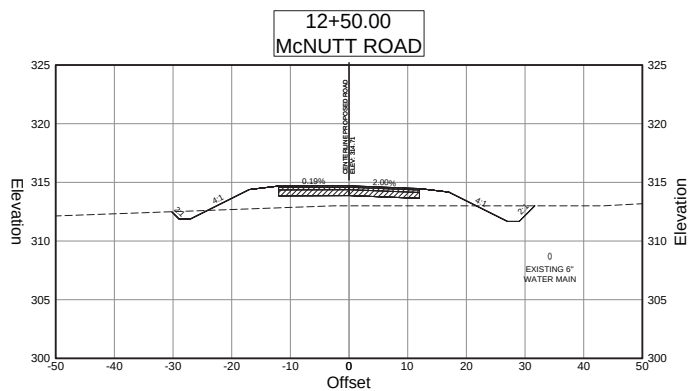
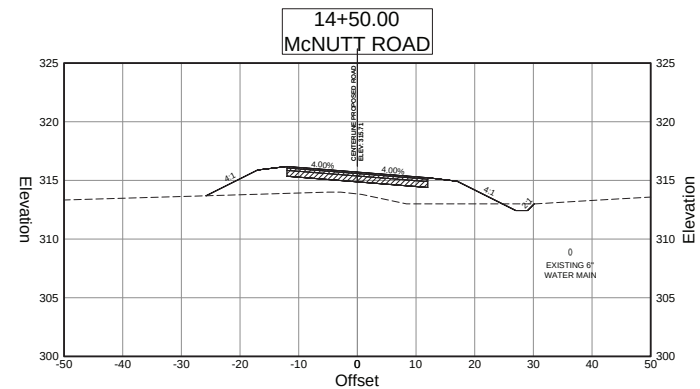
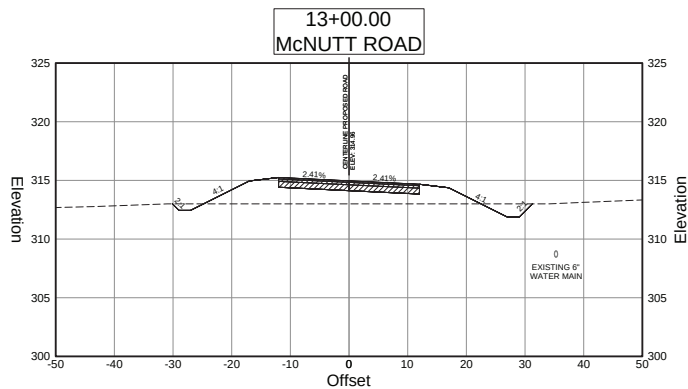
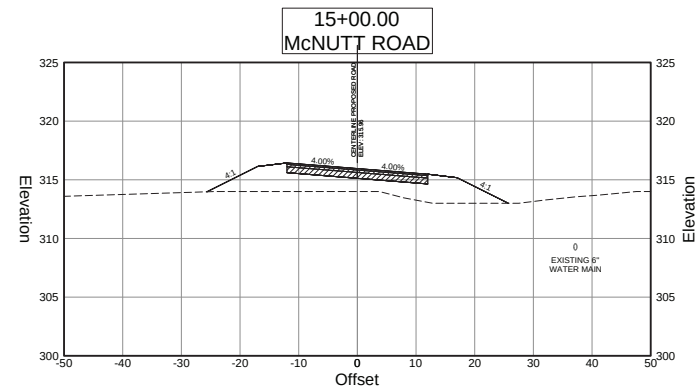
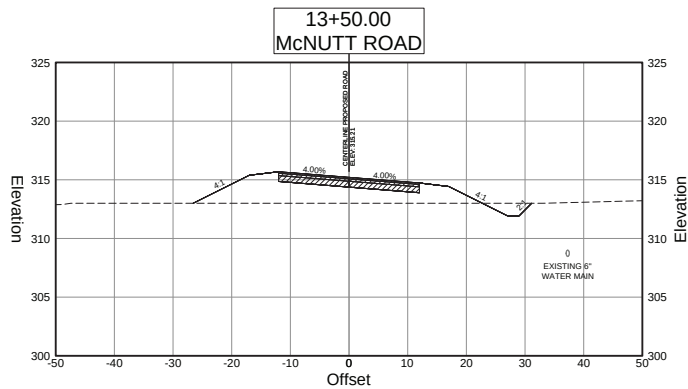
REVISION	DATE

CROSS SECTIONS

McNutt Road
9+50 to 12+00

DRAWING
NUMBER

23 - 0004



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Columbus Street
Suite 1405
Cumming, Georgia 30040
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**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

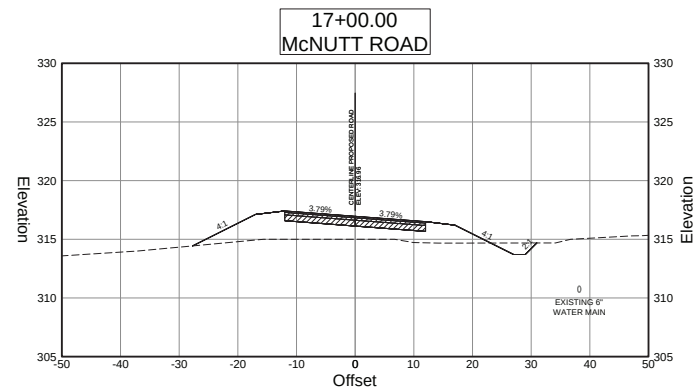
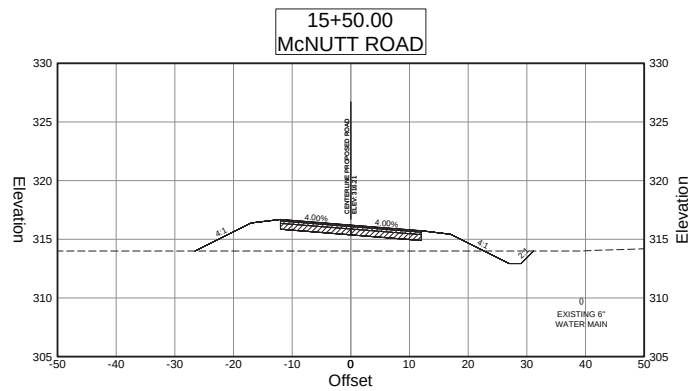
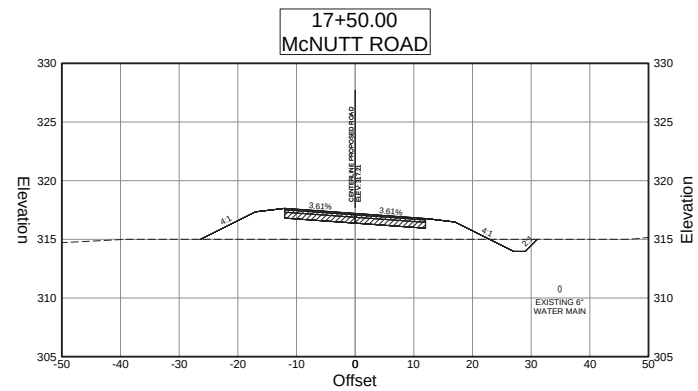
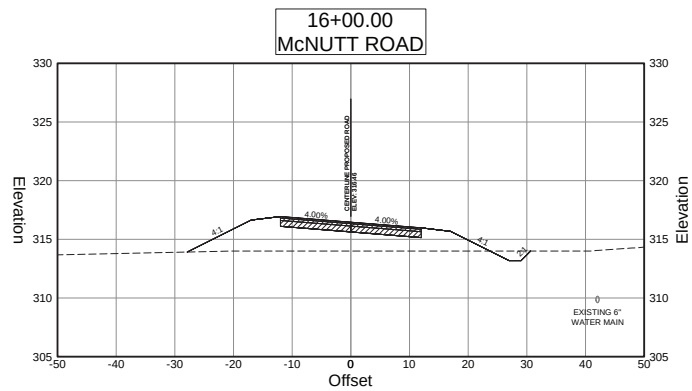
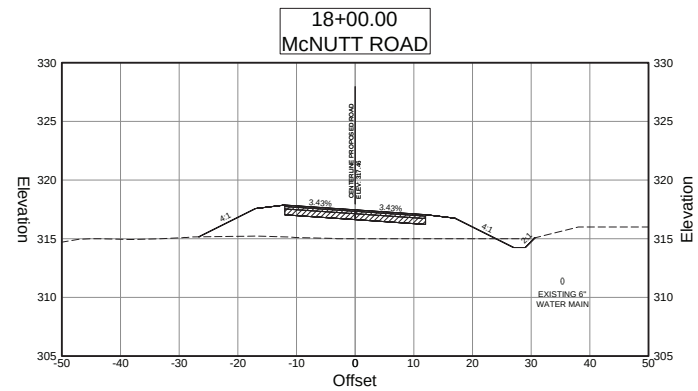
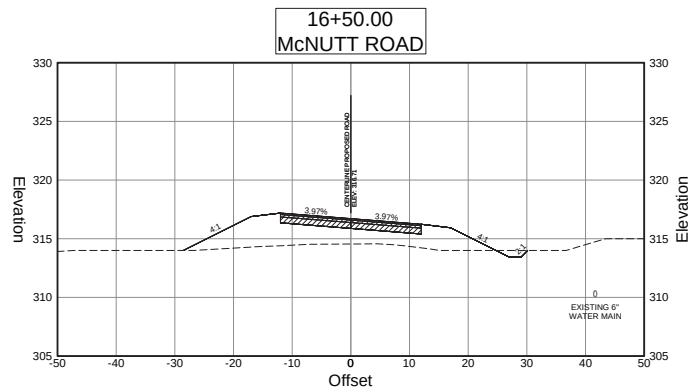
REVISION	DATE

CROSS SECTIONS

McNutt Road
12+50 to 15+00

DRAWING
NUMBER

23 - 0005



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

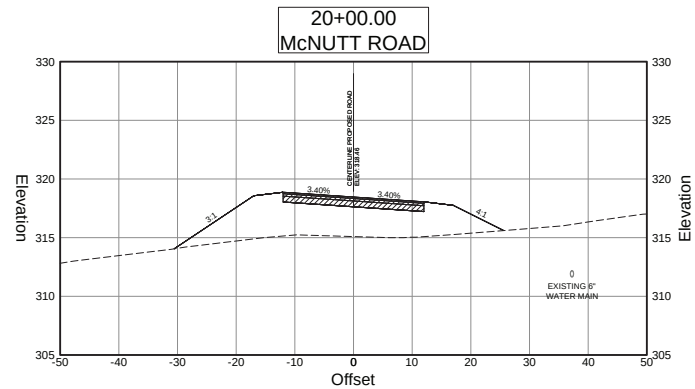
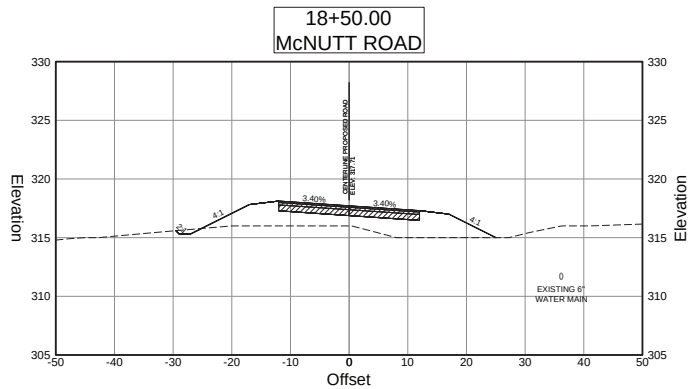
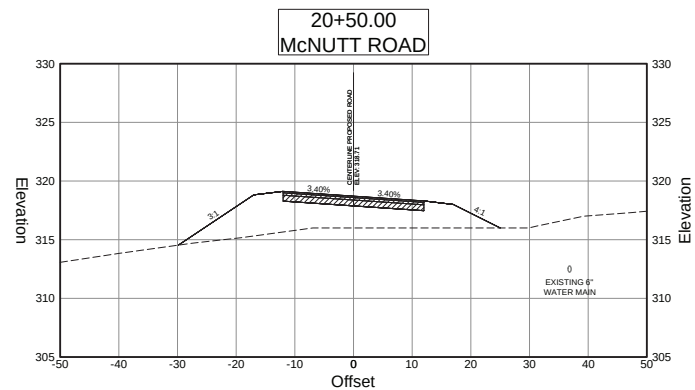
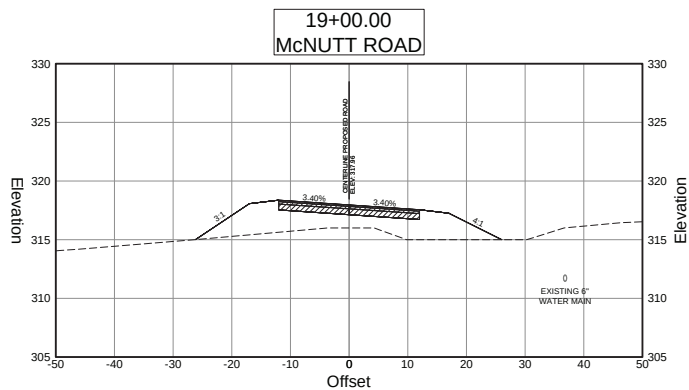
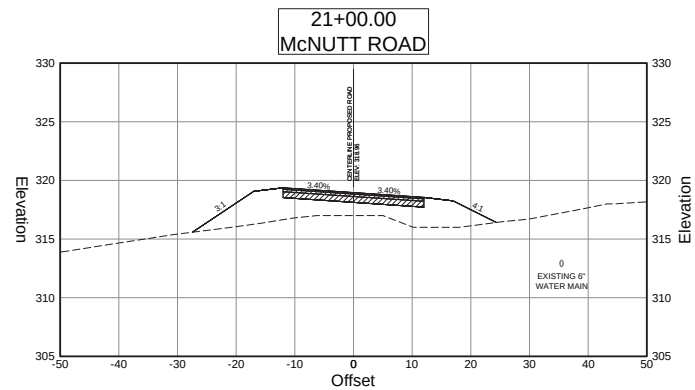
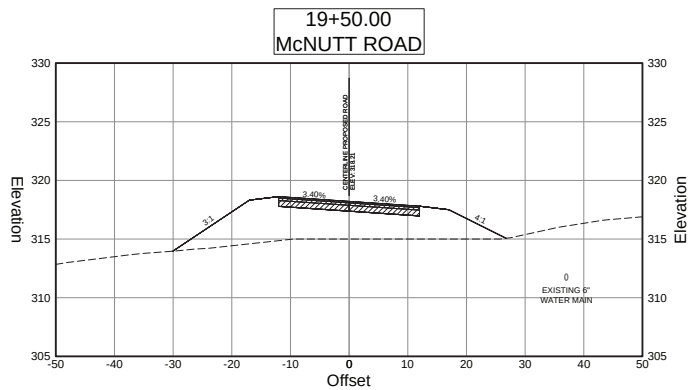
REVISION DATES

CROSS SECTIONS

McNutt Road
15+50 to 18+00

DRAWING
NUMBER

23 - 0006



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

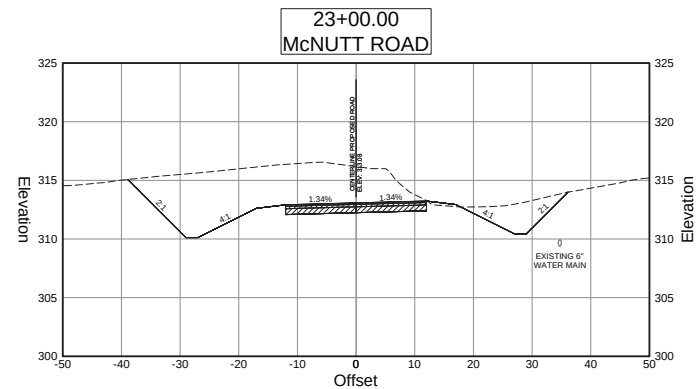
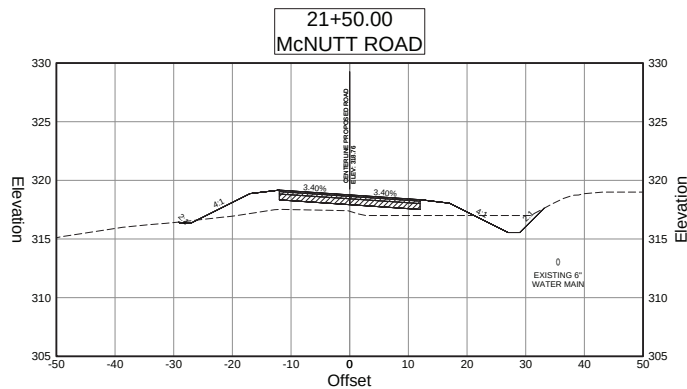
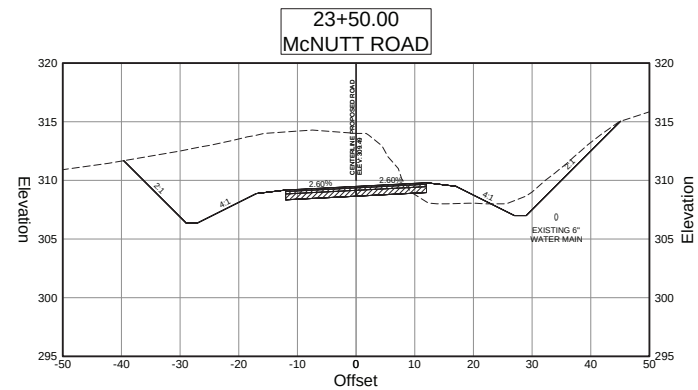
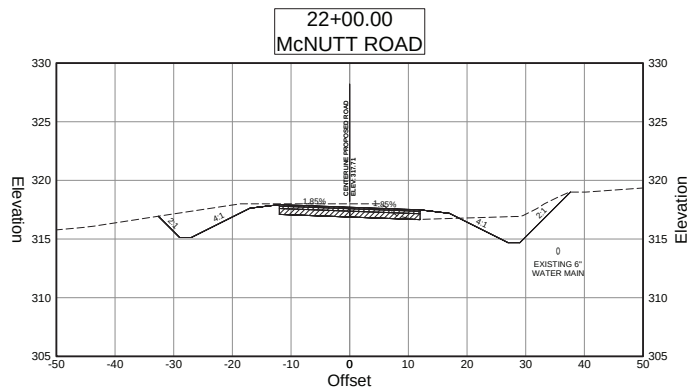
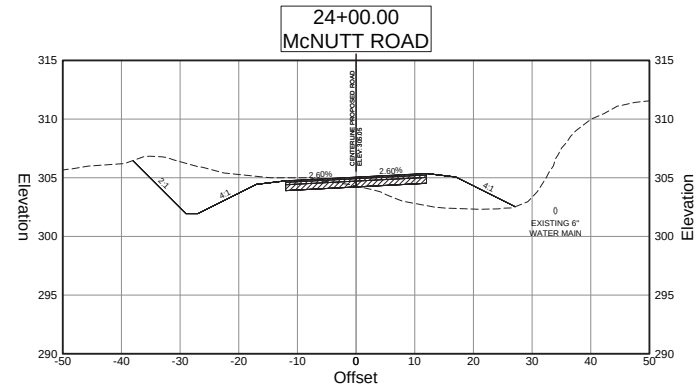
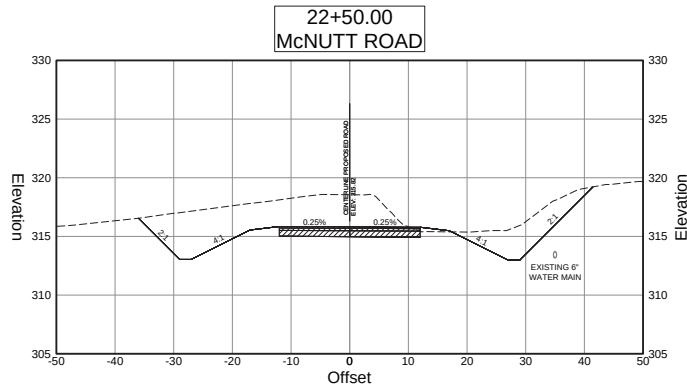
REVISION DATES	

CROSS SECTIONS

McNutt Road
18+50 to 21+00

DRAWING
NUMBER

23 - 0007



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

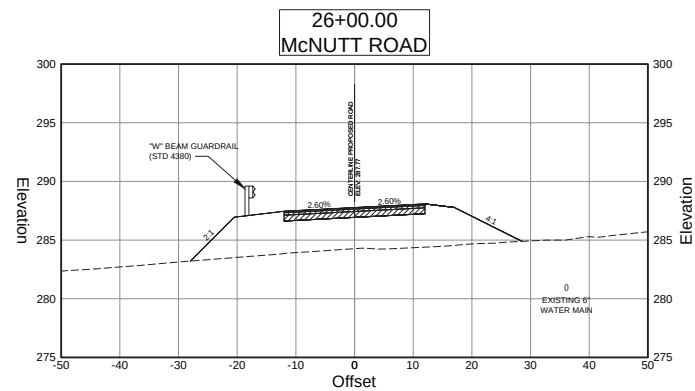
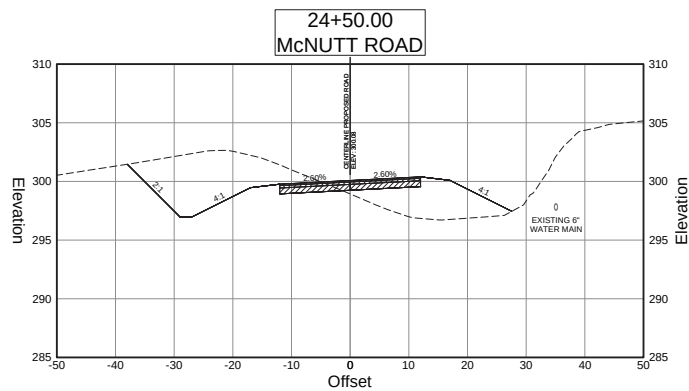
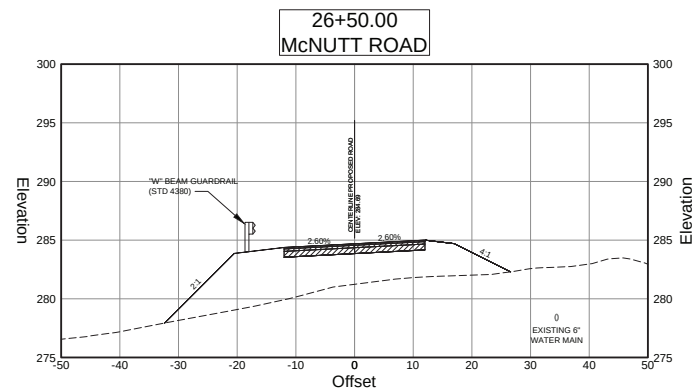
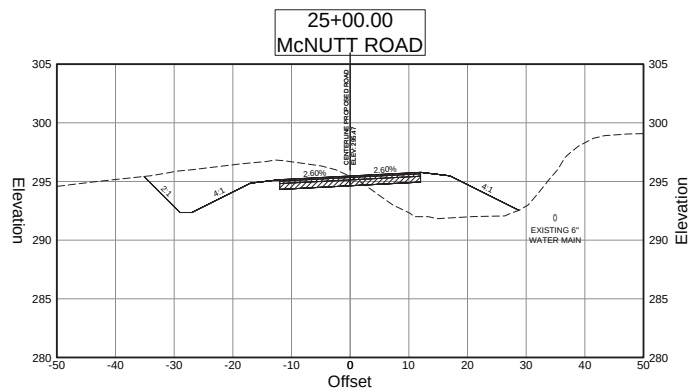
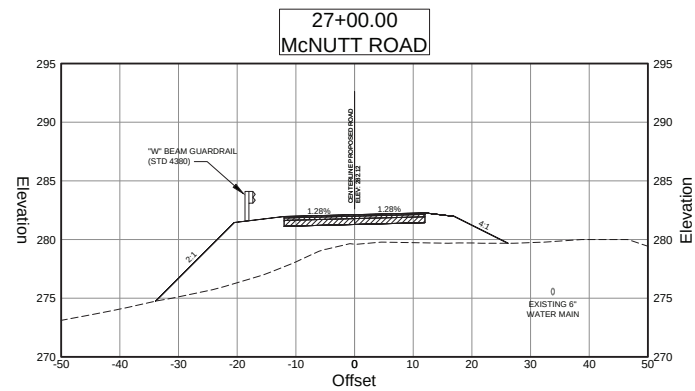
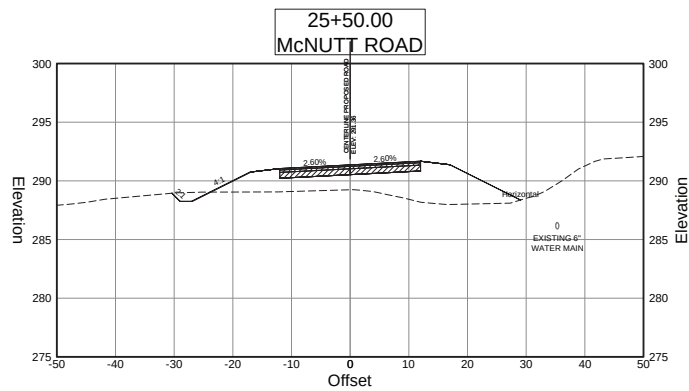
REVISION	DATE

CROSS SECTIONS

McNutt Road
21+50 to 24+00

DRAWING
NUMBER

23 - 0008



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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Associates, LLC
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

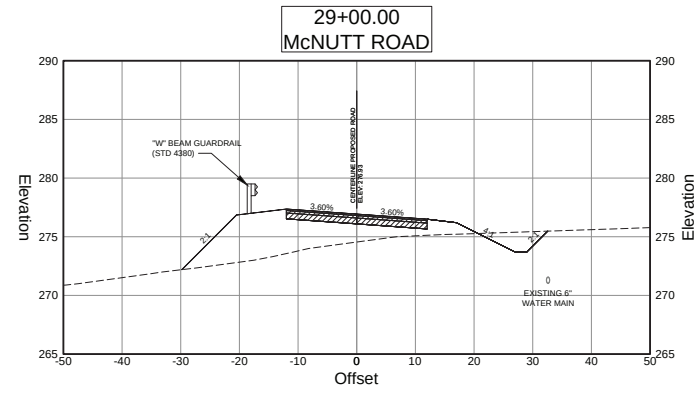
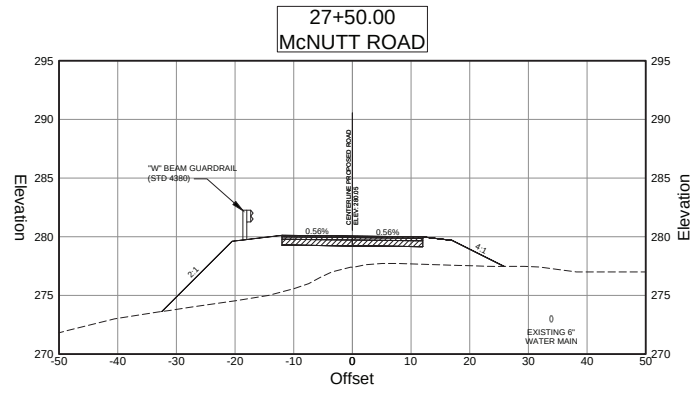
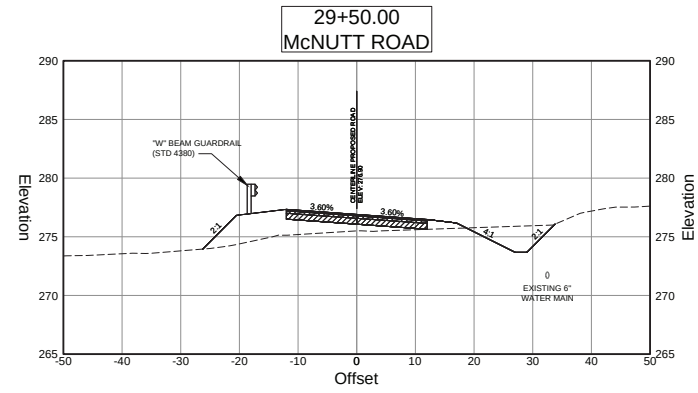
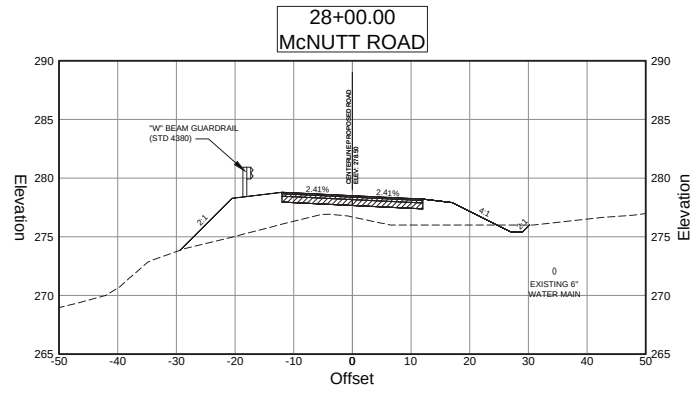
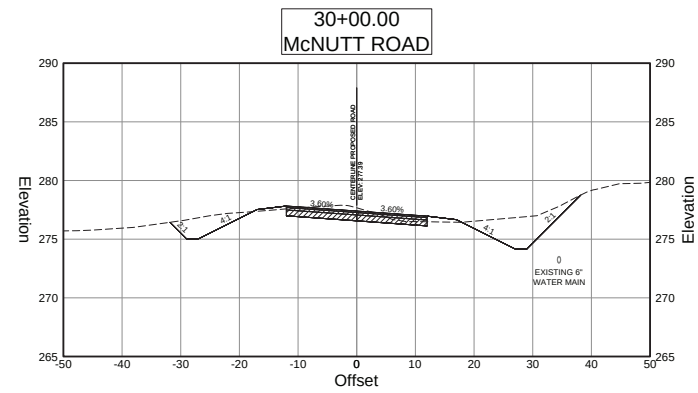
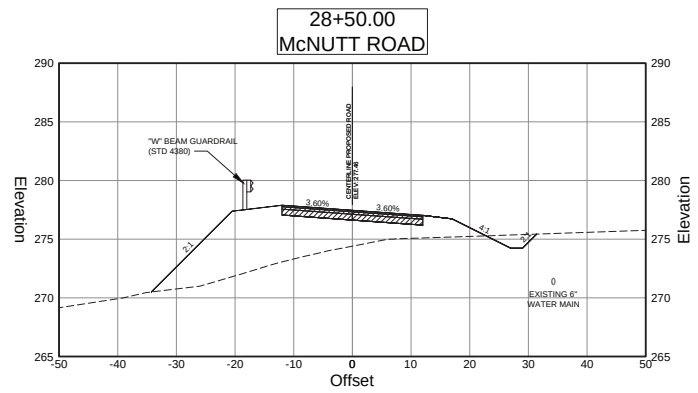
REVISION	DATE

CROSS SECTIONS

McNutt Road
24+50 to 27+00

DRAWING
NUMBER

23 - 0009



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 College Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
DRAWN BY	NAM	08-24-20
CHECKED BY	NAM	08-24-20
	KEO	08-24-20



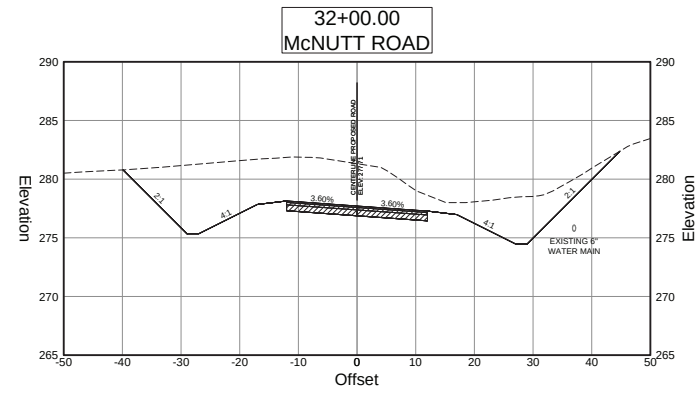
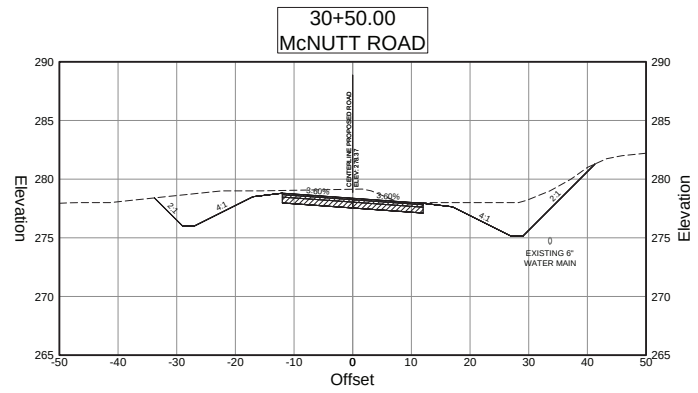
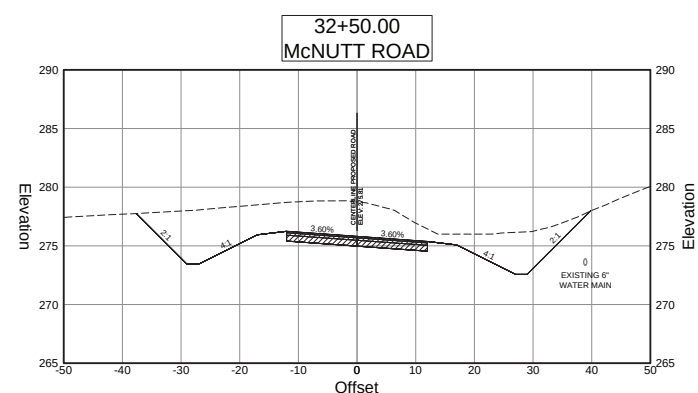
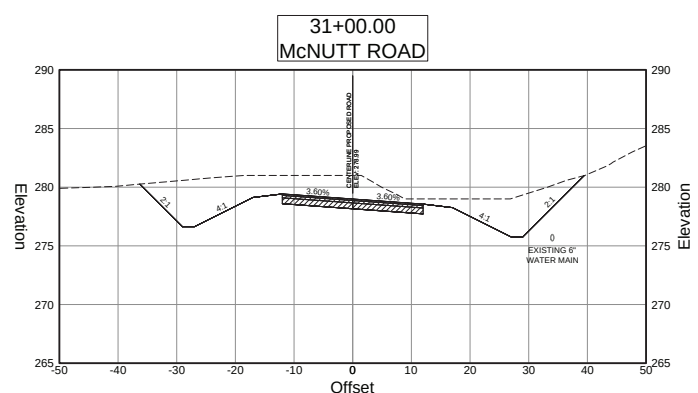
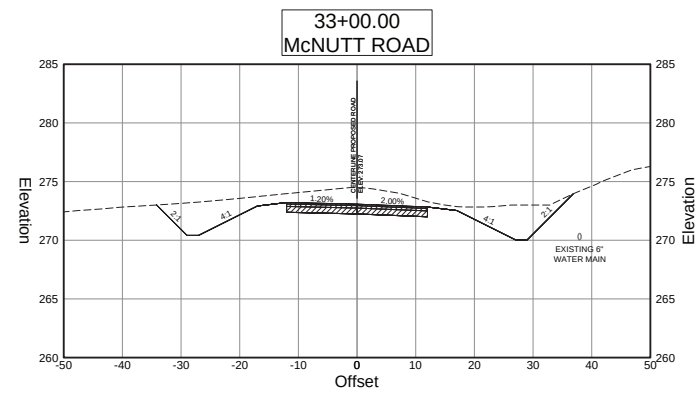
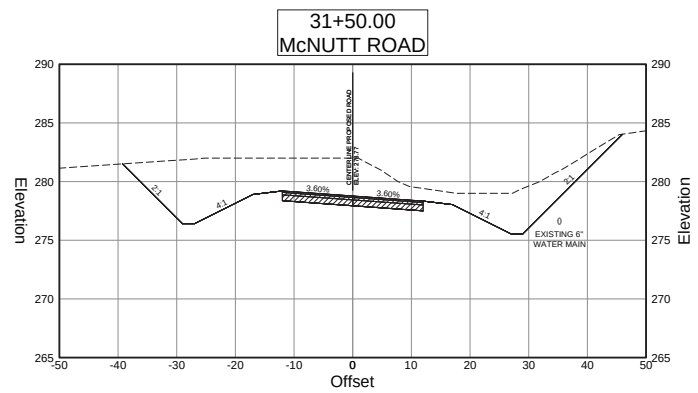
**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES

CROSS SECTIONS

McNutt Road
27+50 to 30+00

DRAWING NUMBER
23 - 0010



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 College Street
Suite 1405
Columbus, Georgia 31904
Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20

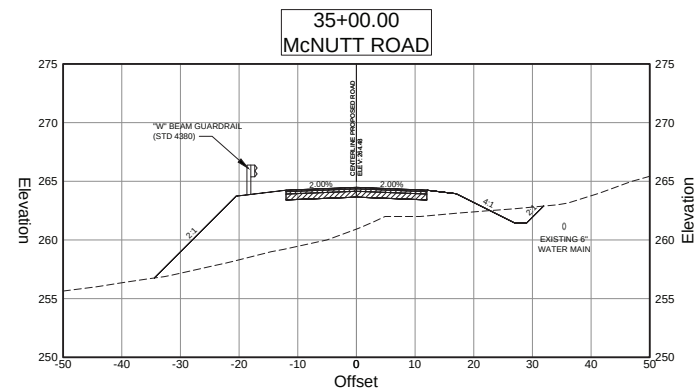
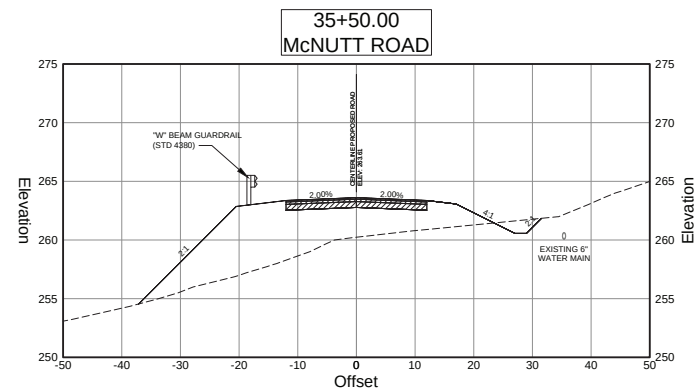
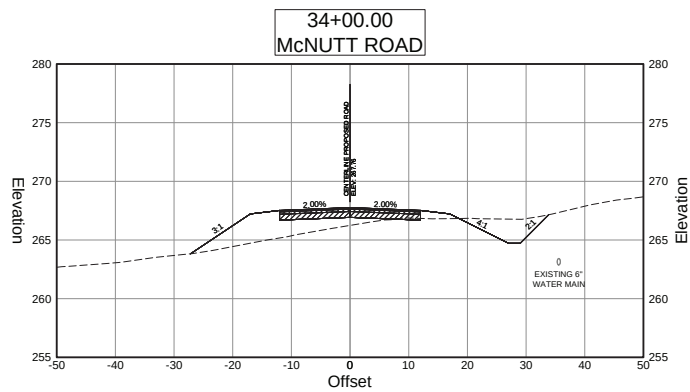
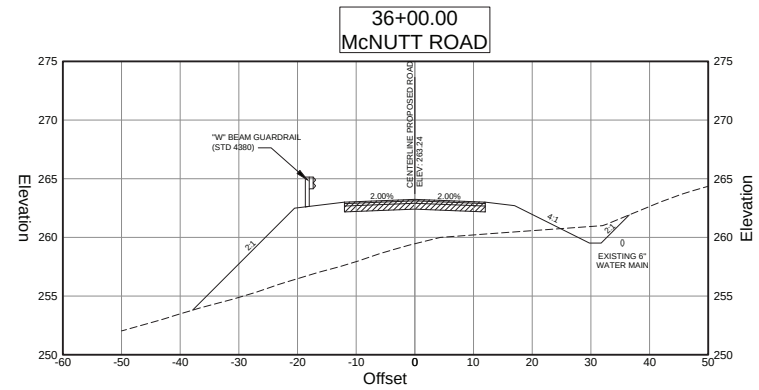
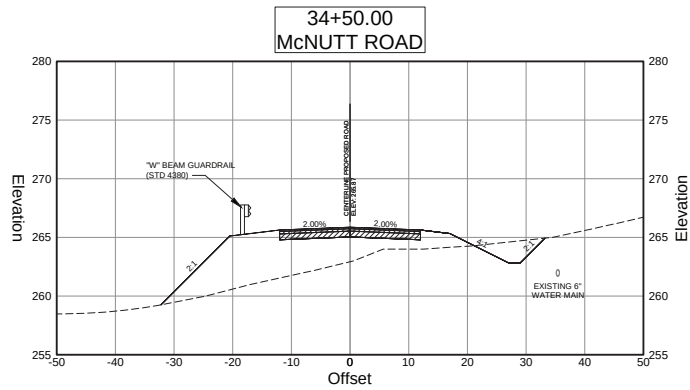


**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES

CROSS SECTIONS
McNutt Road 30+50 to 33+00

DRAWING NUMBER
23 - 0011



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 College Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

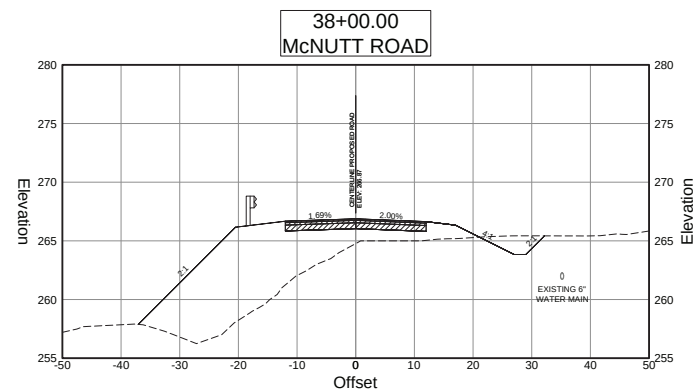
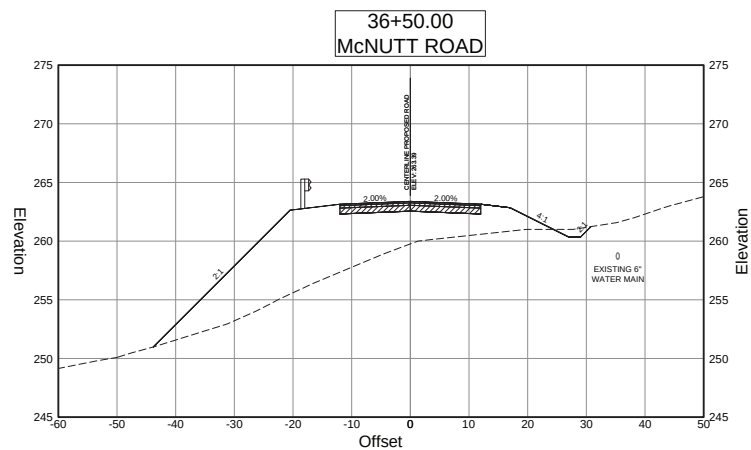
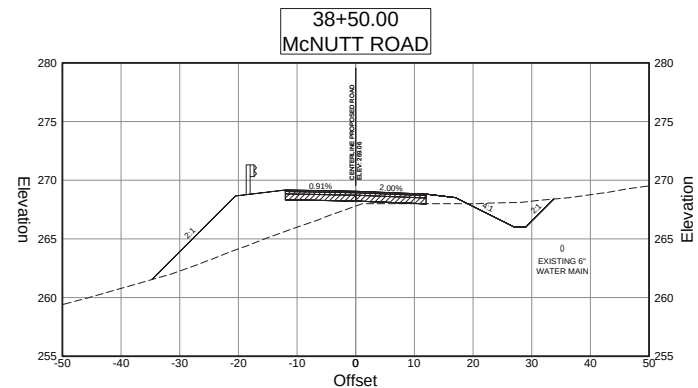
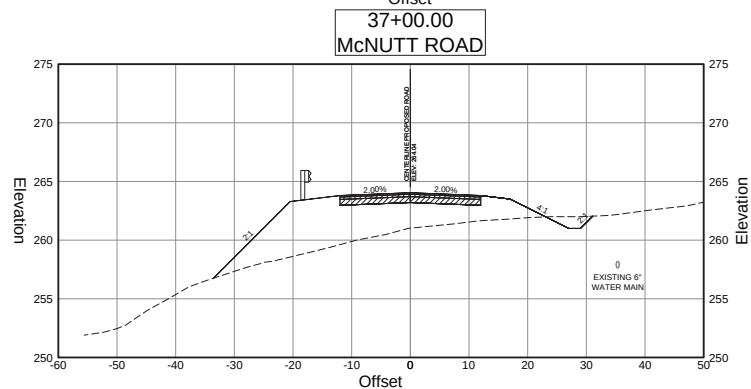
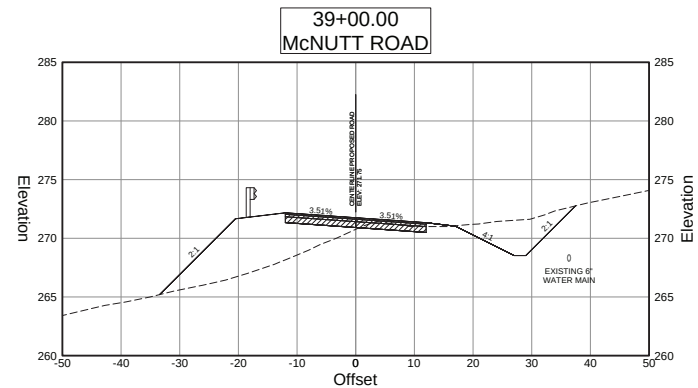
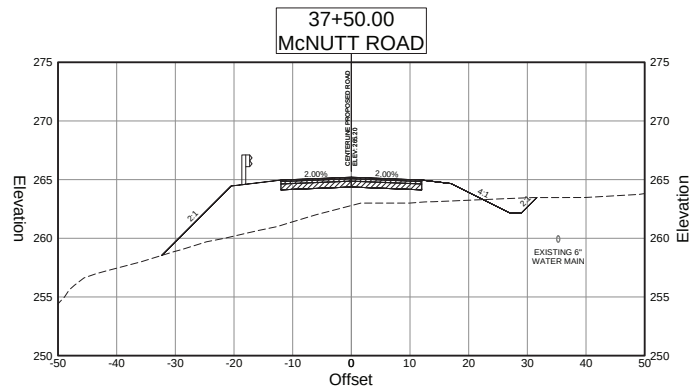
REVISION	DATE

CROSS SECTIONS

McNutt Road
33+50 to 36+00

DRAWING
NUMBER

23 - 0012



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oakridge Street
Suite 1401
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

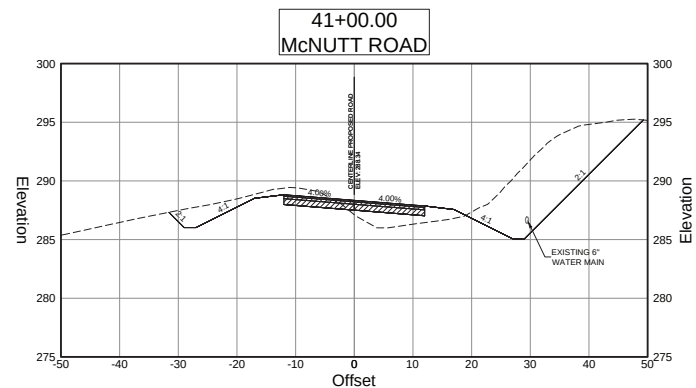
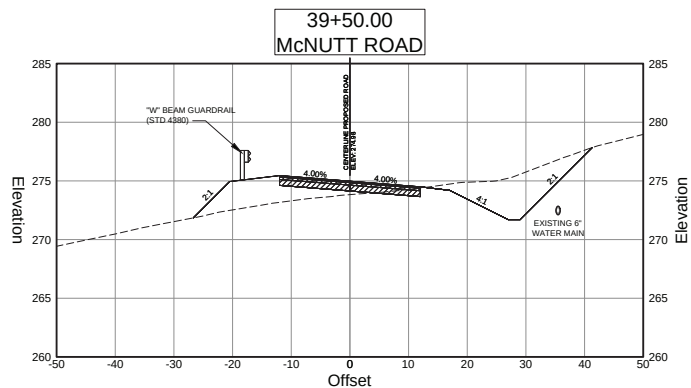
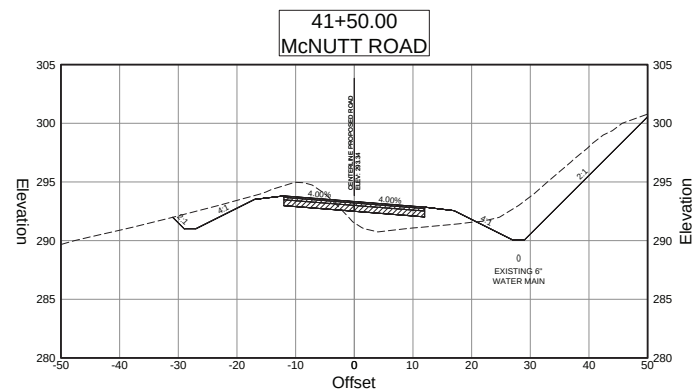
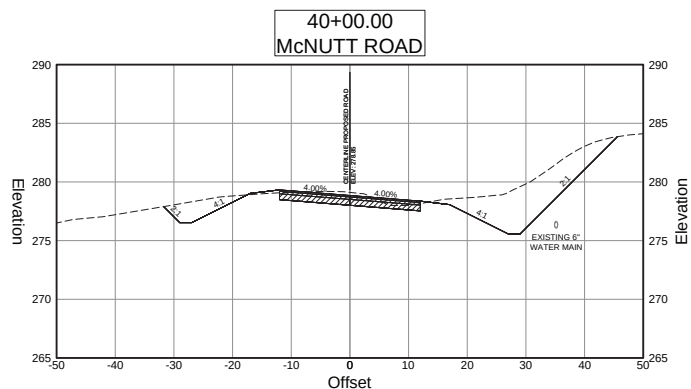
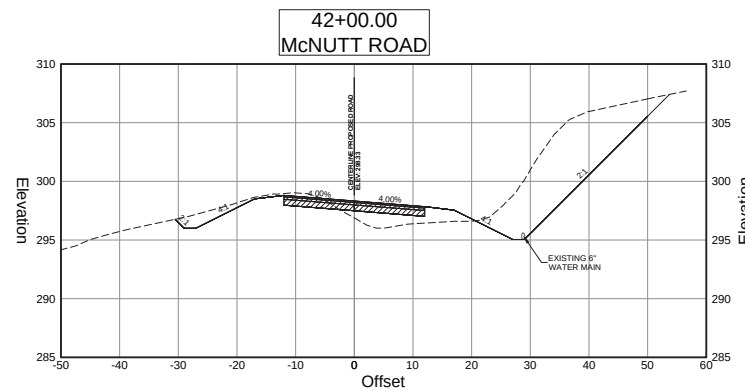
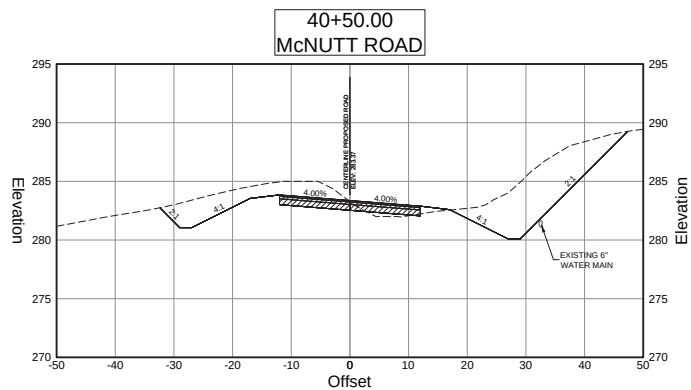
REVISION DATES	

CROSS SECTIONS

McNutt Road
36+50 to 39+00

DRAWING
NUMBER

23 - 0013



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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Associates, LLC**
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

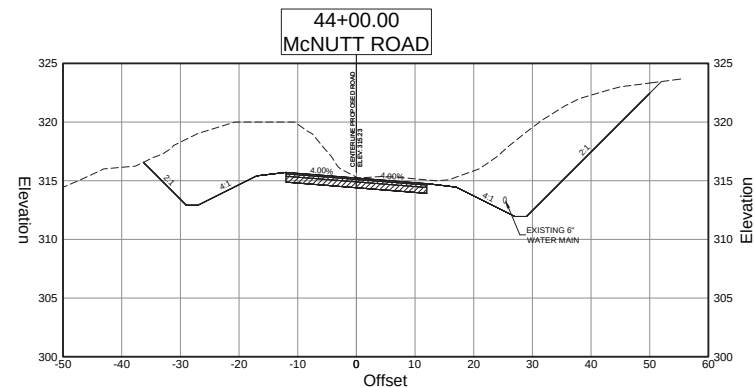
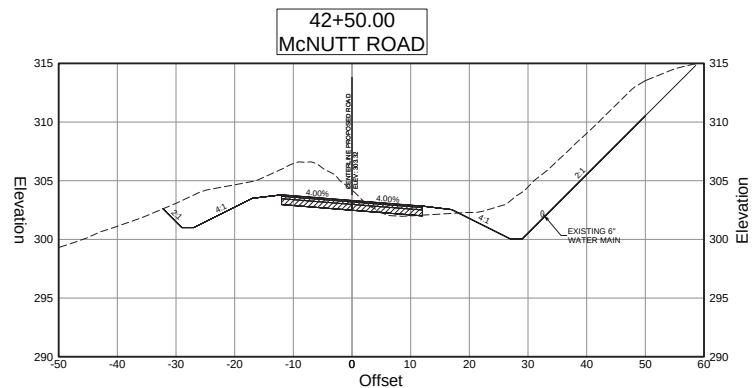
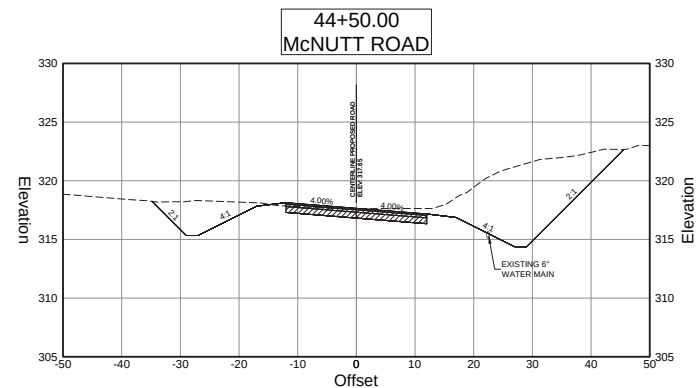
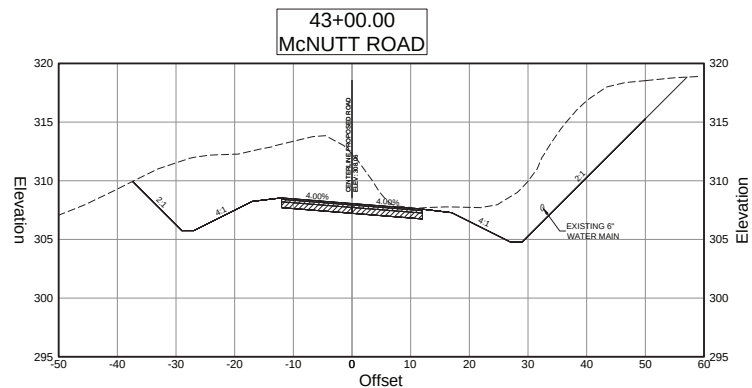
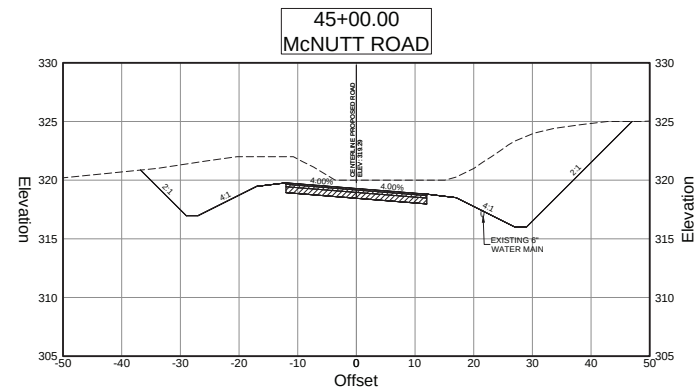
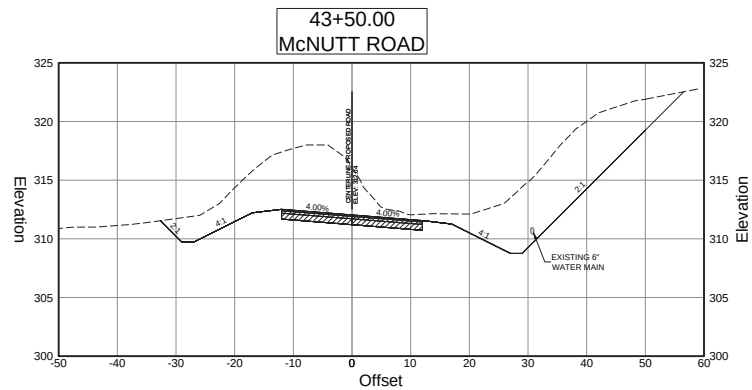
REVISION	DATE

CROSS SECTIONS

McNutt Road
39+50 to 42+00

DRAWING
NUMBER

23 - 0014



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES	

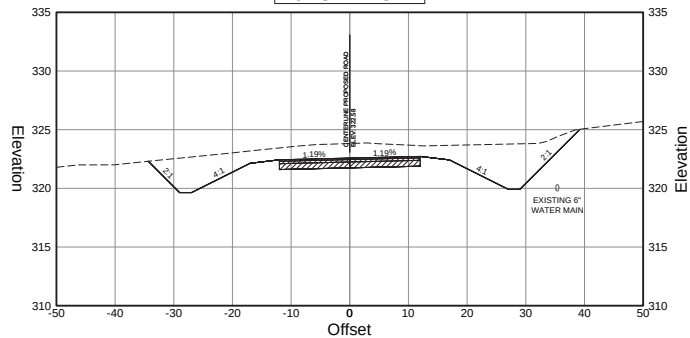
CROSS SECTIONS

McNutt Road
42+50 to 45+00

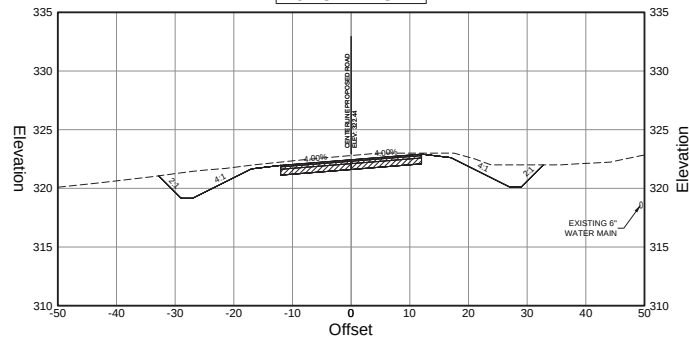
DRAWING
NUMBER

23 - 0015

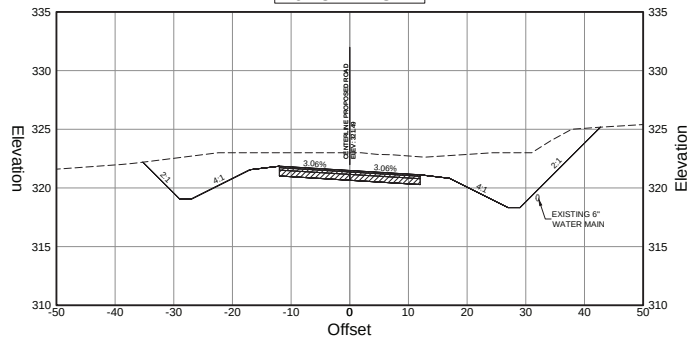
46+50.00
McNUTT ROAD



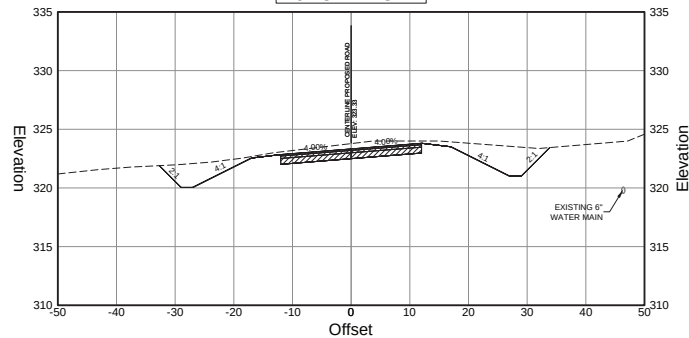
48+00.00
McNUTT ROAD



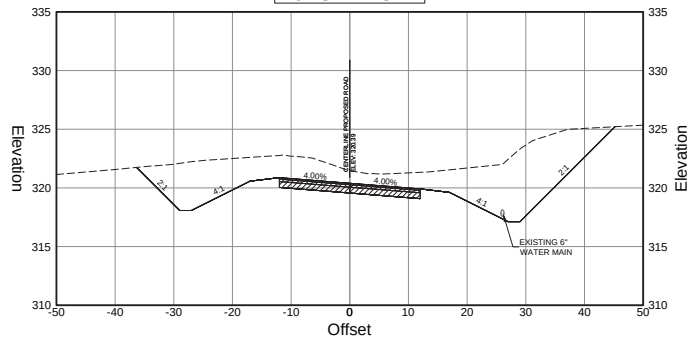
46+00.00
McNUTT ROAD



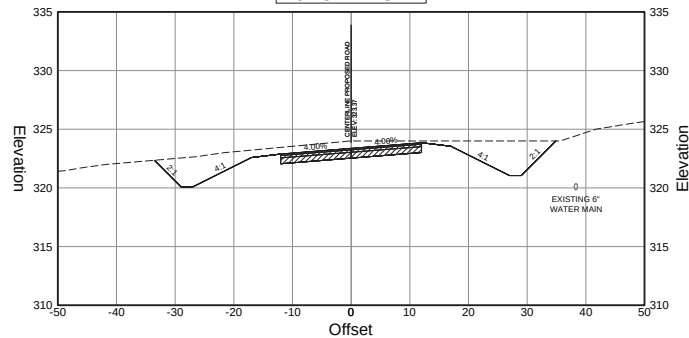
47+50.00
McNUTT ROAD



45+50.00
McNUTT ROAD



47+00.00
McNUTT ROAD



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 College Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

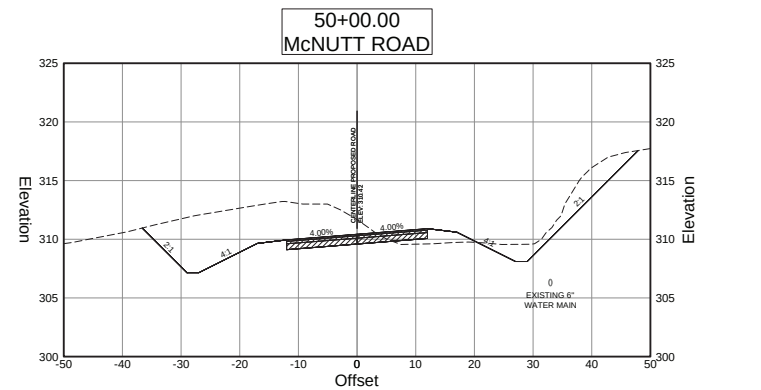
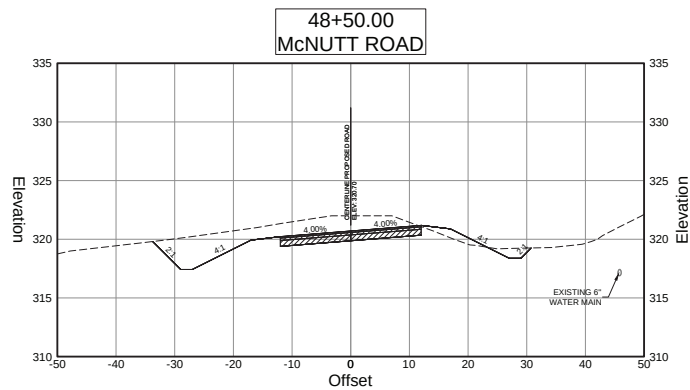
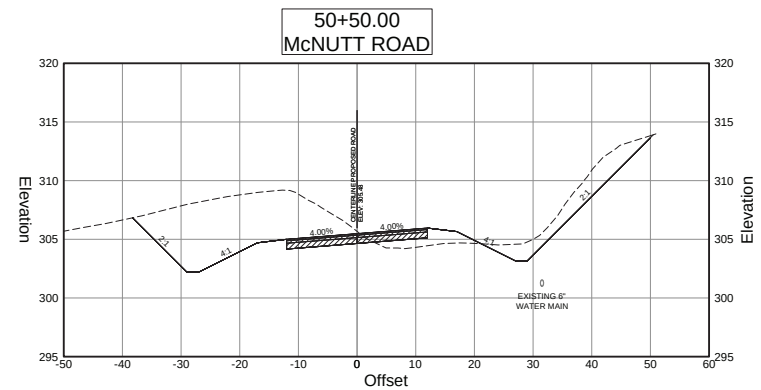
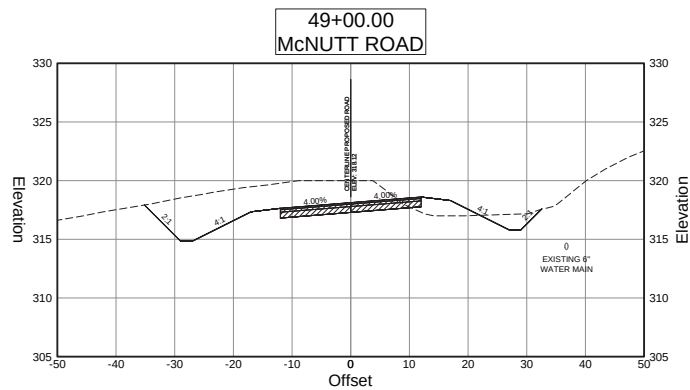
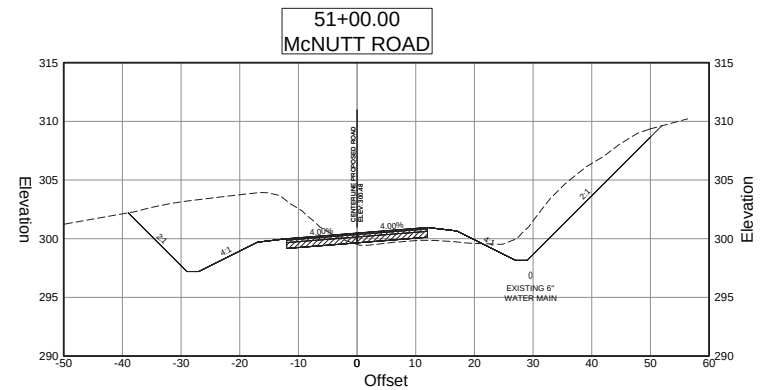
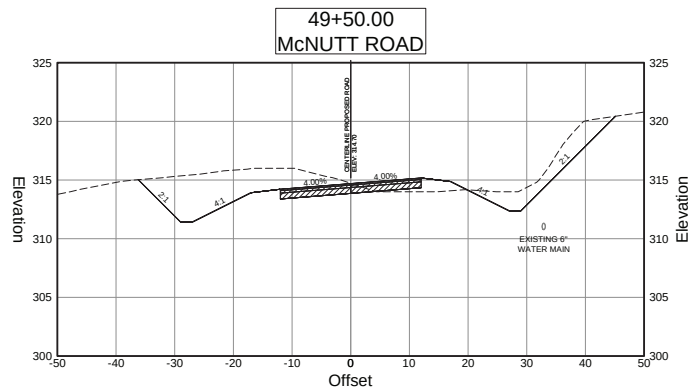
REVISION	DATE

CROSS SECTIONS

McNutt Road
45+50 to 48+00

DRAWING
NUMBER

23 - 0016



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

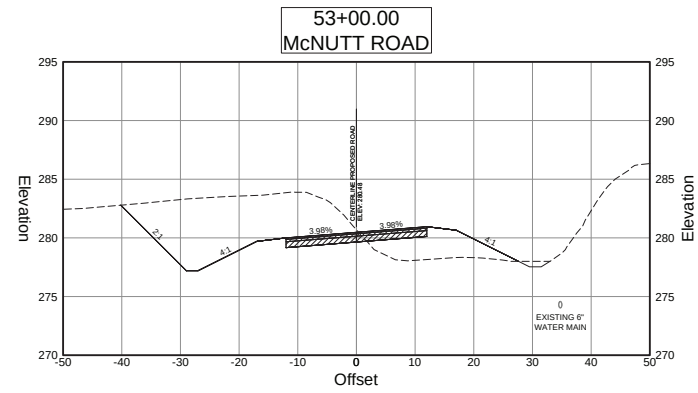
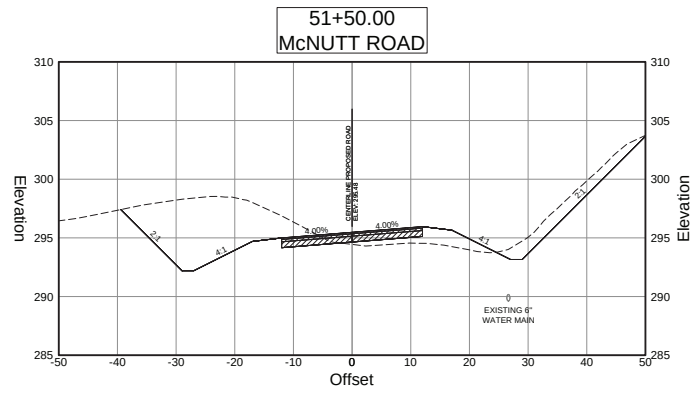
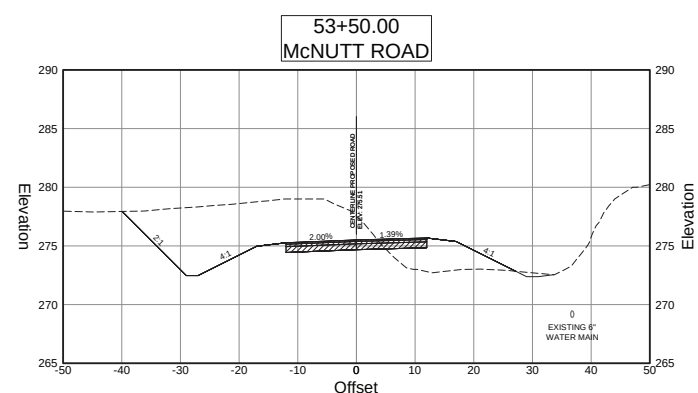
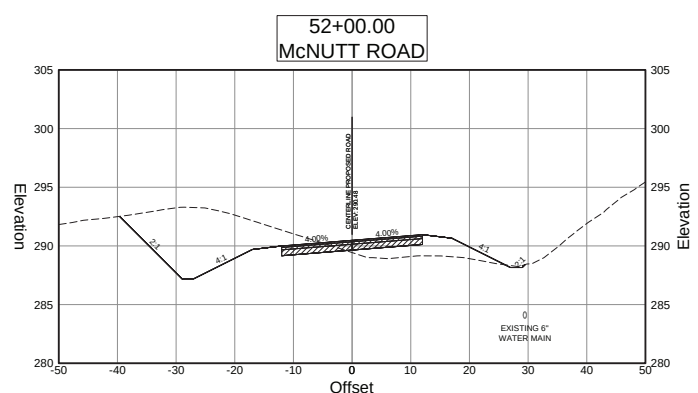
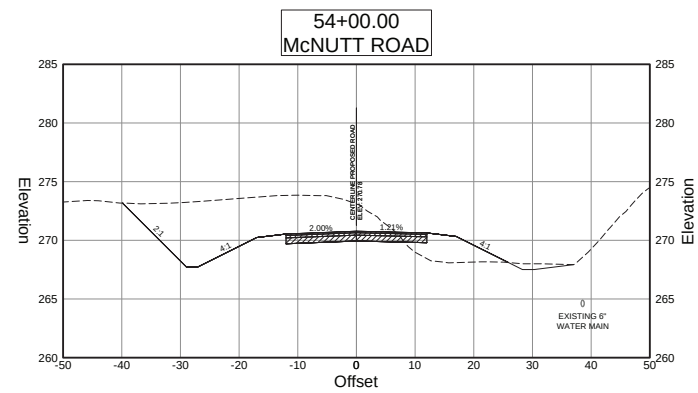
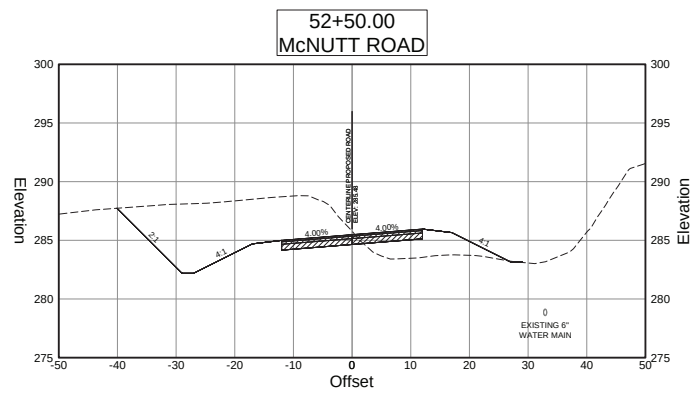
REVISION DATES	

CROSS SECTIONS

McNutt Road
48+50 to 51+00

DRAWING
NUMBER

23 - 0017



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



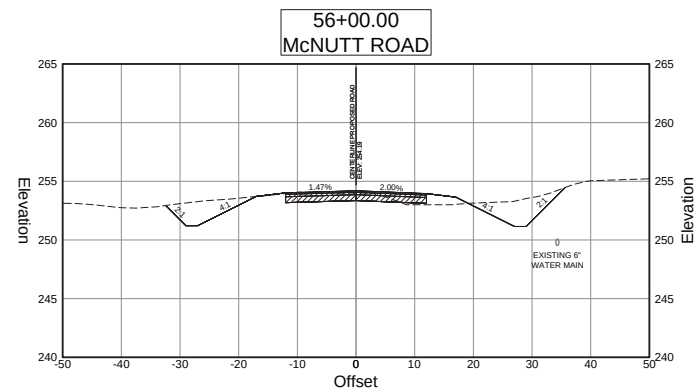
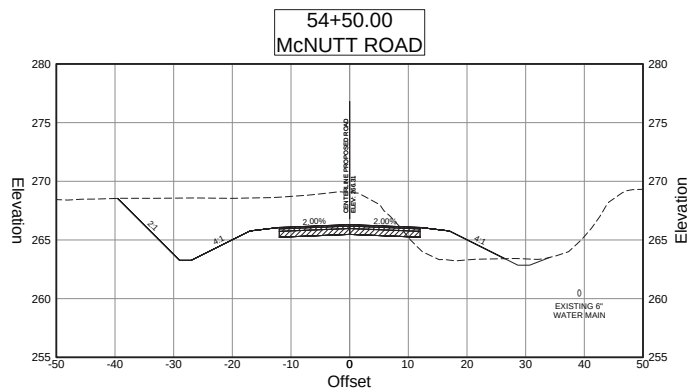
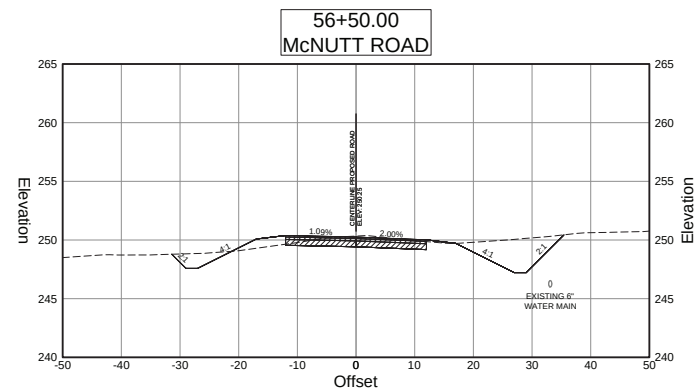
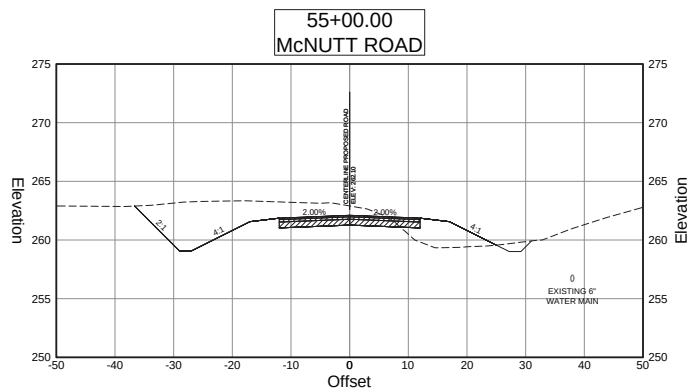
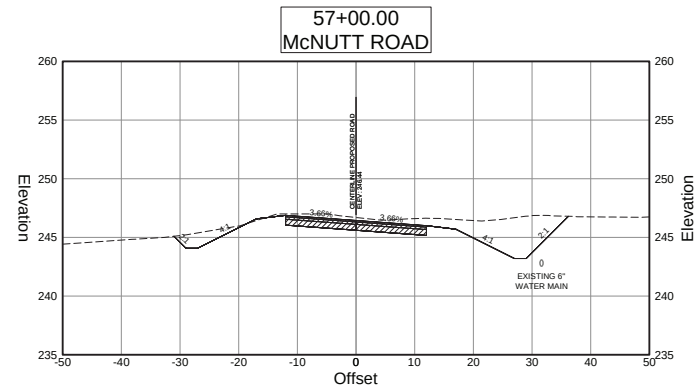
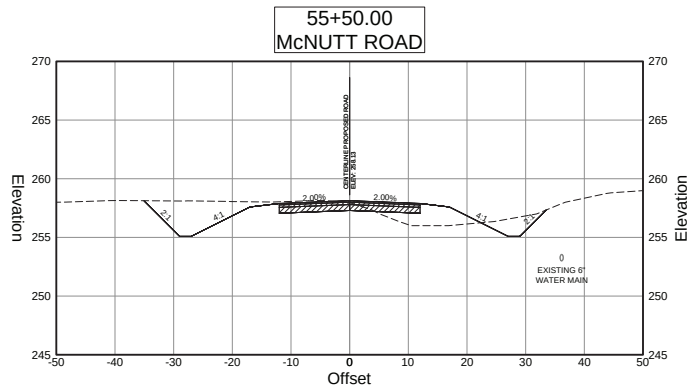
**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION	DATE

CROSS SECTIONS

McNutt Road
51+50 to 54+00

DRAWING
NUMBER
23 - 0018



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

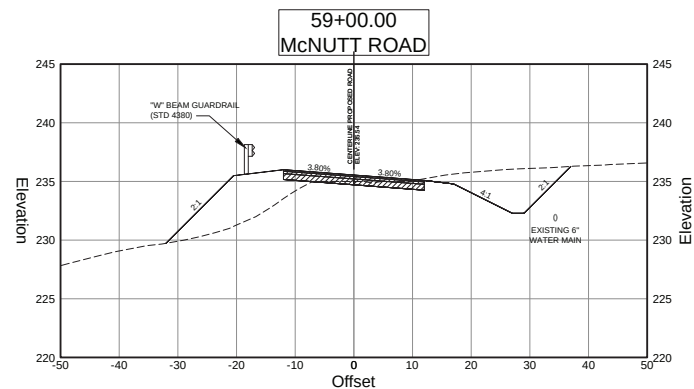
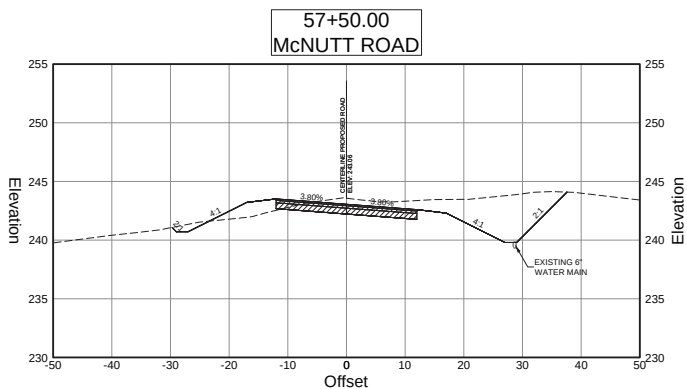
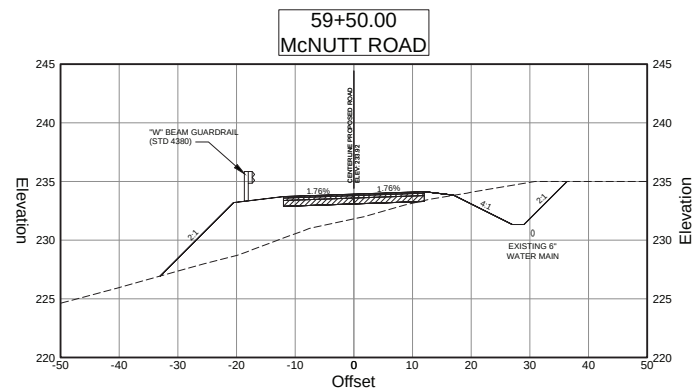
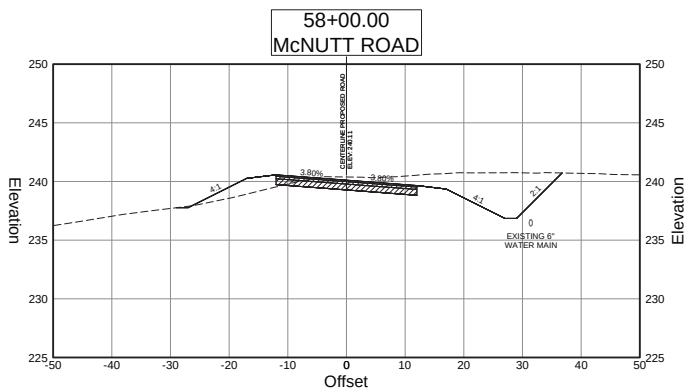
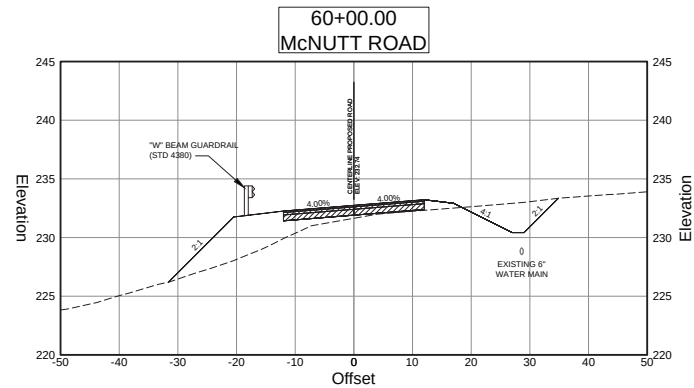
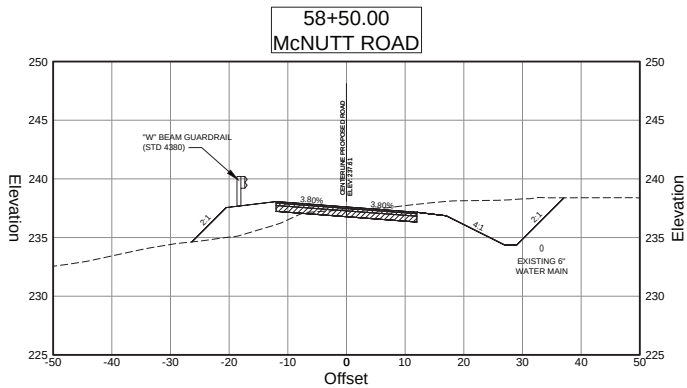
REVISION DATES	

CROSS SECTIONS

McNutt Road
54+50 to 57+00

DRAWING
NUMBER

23 - 0019



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Cummings Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

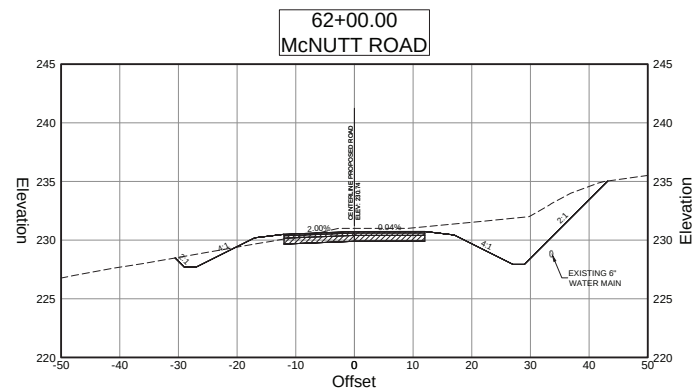
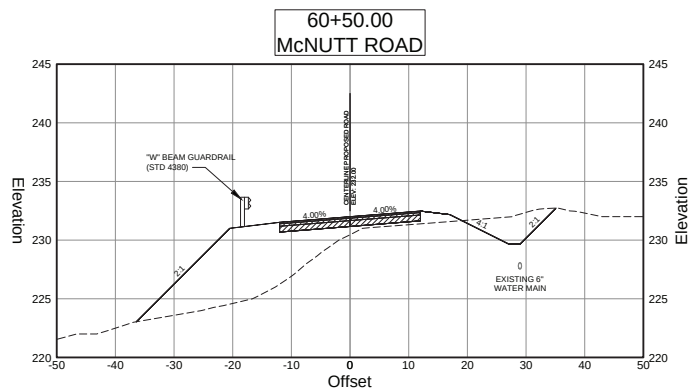
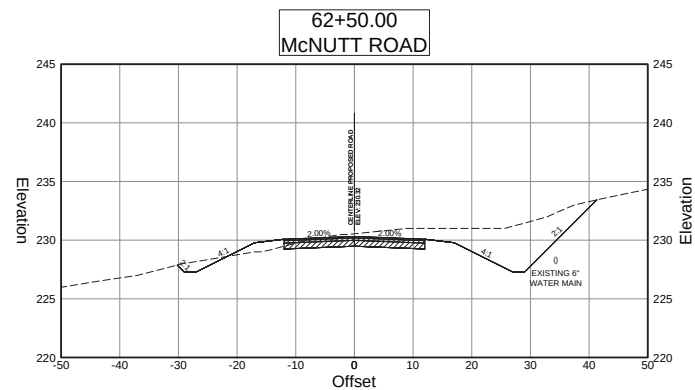
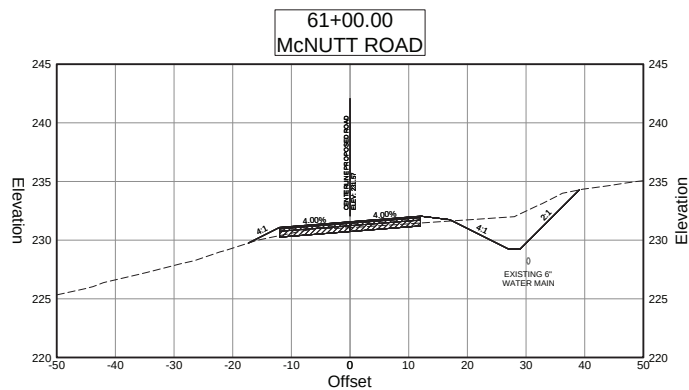
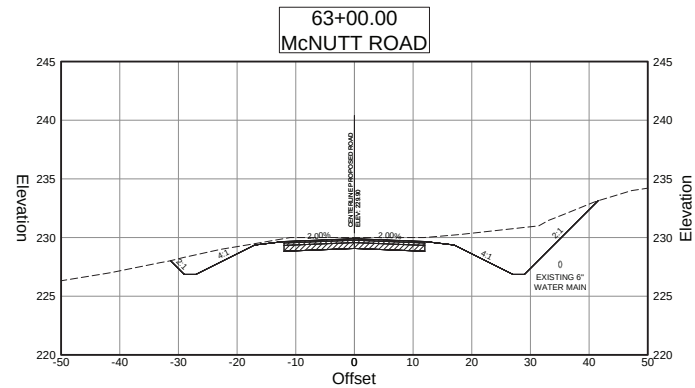
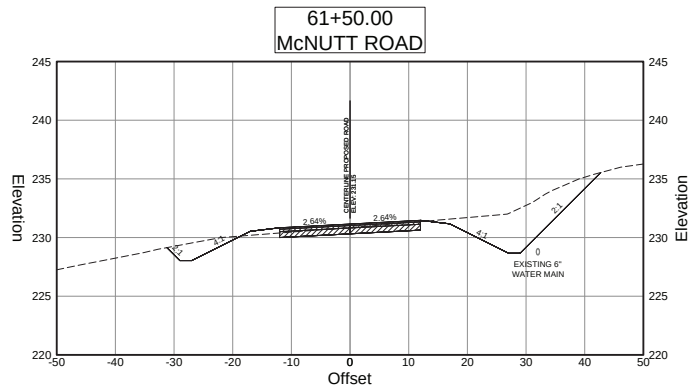
REVISION	DATE

CROSS SECTIONS

McNutt Road
57+50 to 60+00

DRAWING
NUMBER

23 - 0020



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

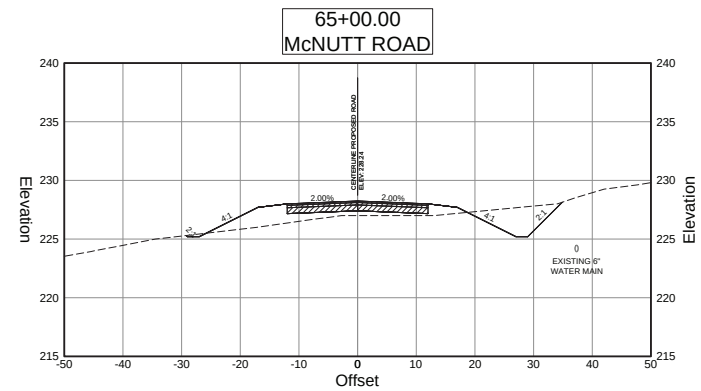
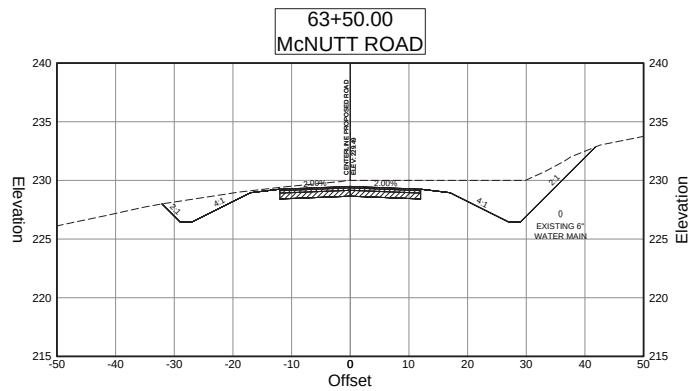
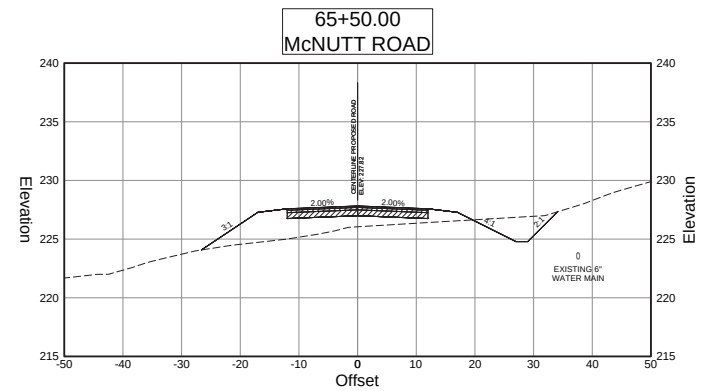
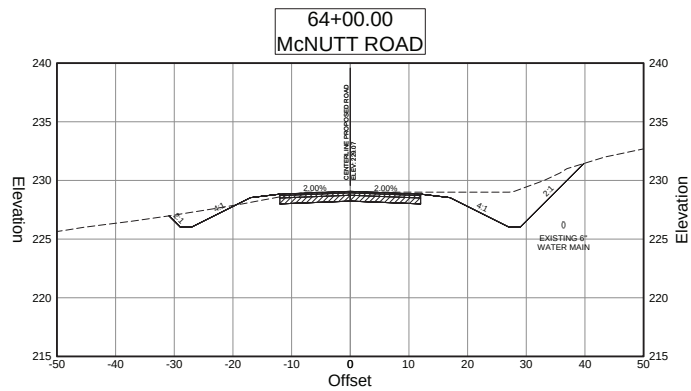
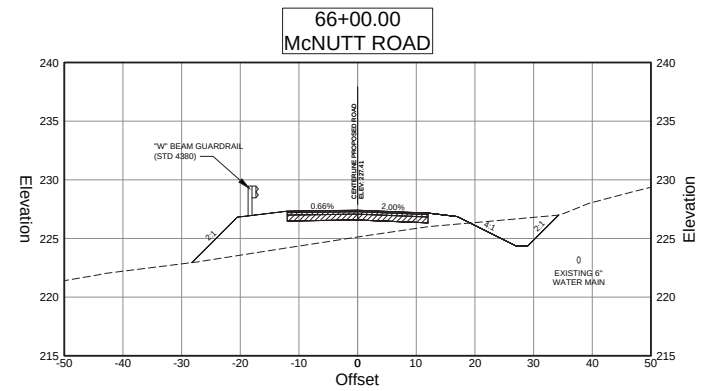
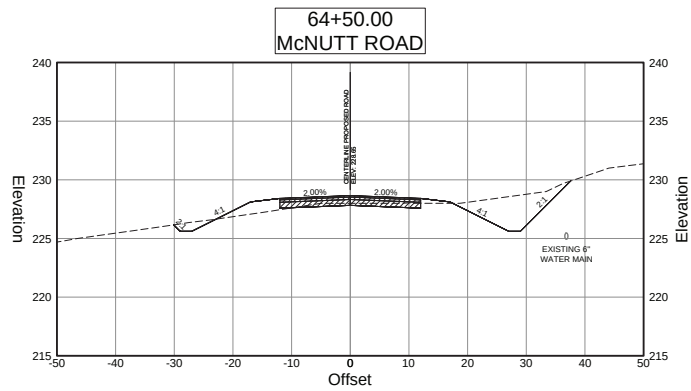
REVISION DATES	

CROSS SECTIONS

McNutt Road
60+50 to 63+00

DRAWING
NUMBER

23 - 0021



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Hollister Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

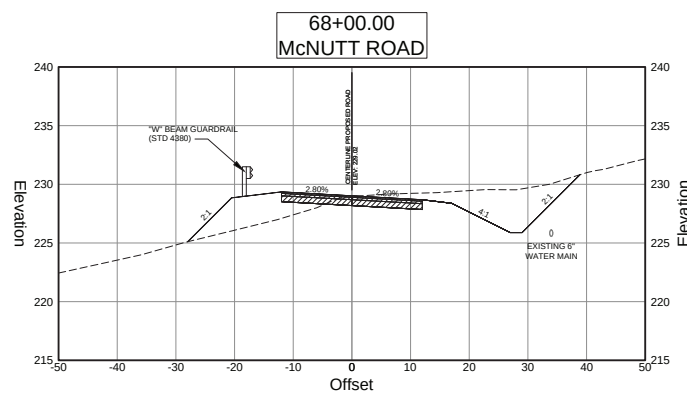
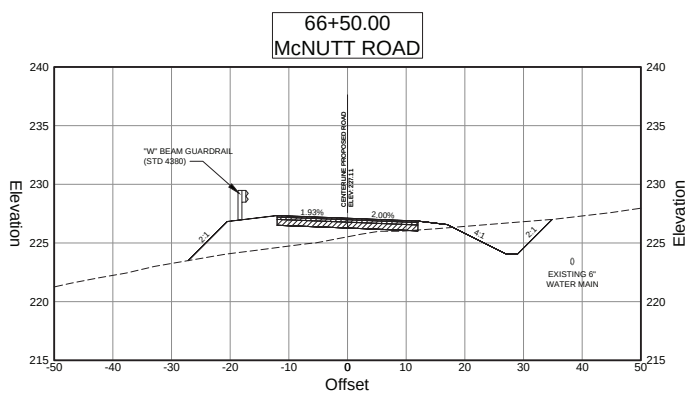
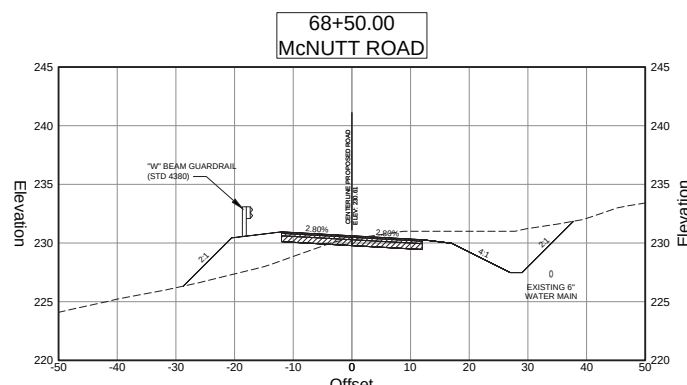
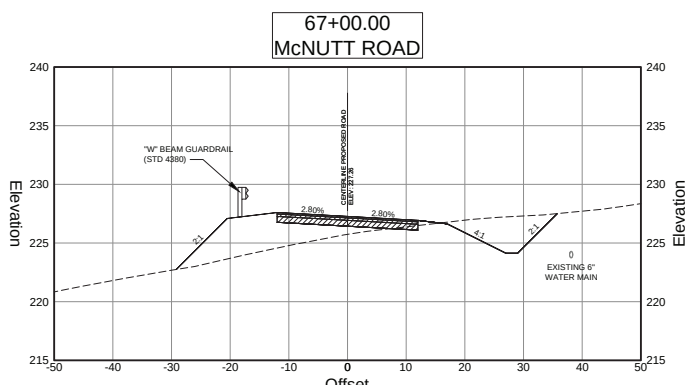
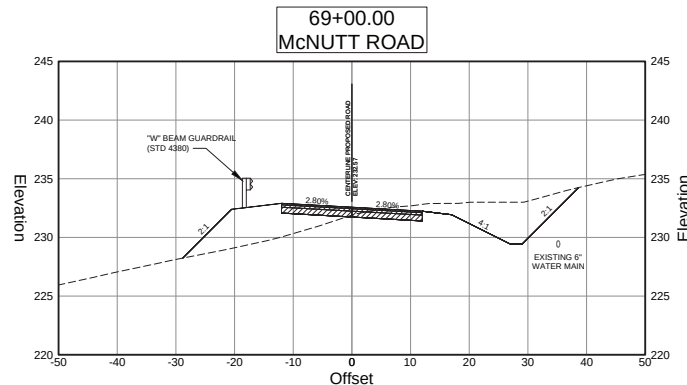
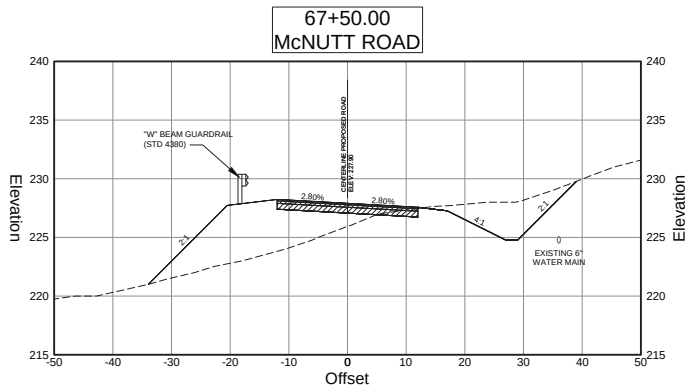
REVISION DATES	

CROSS SECTIONS

McNutt Road
63+50 to 66+00

DRAWING
NUMBER

23 - 0022



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli Associates, LLC
217 College Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



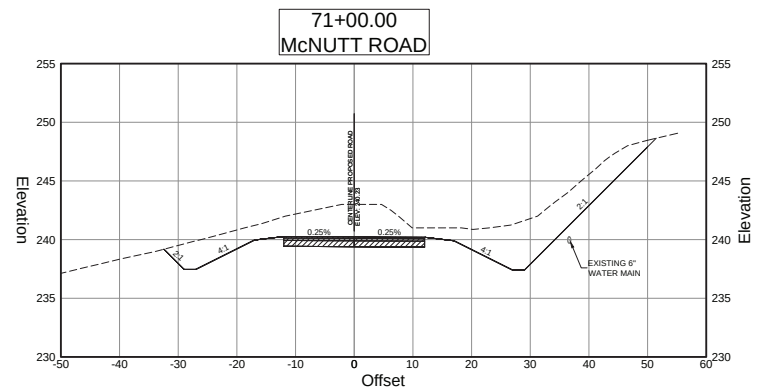
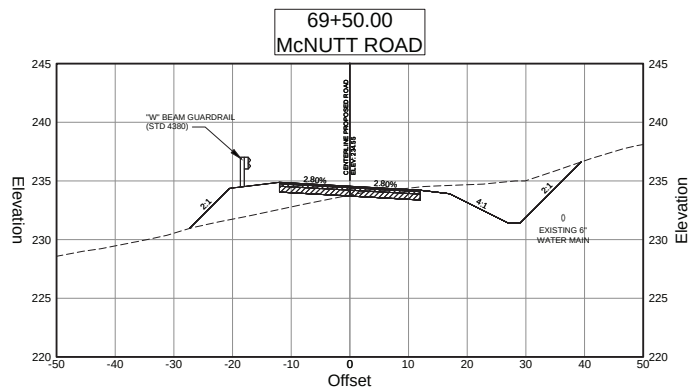
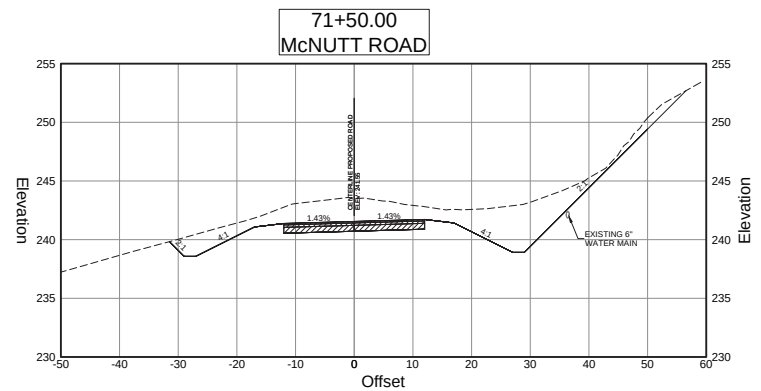
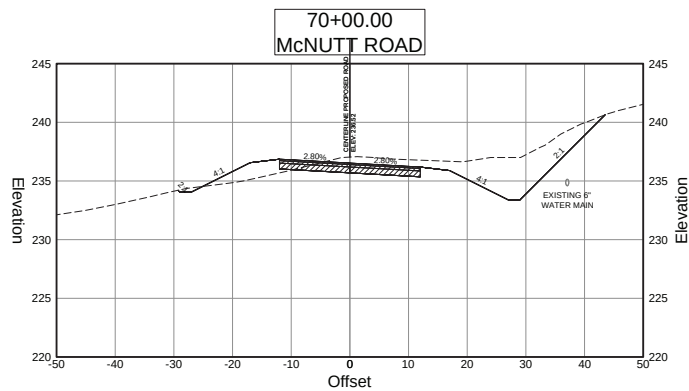
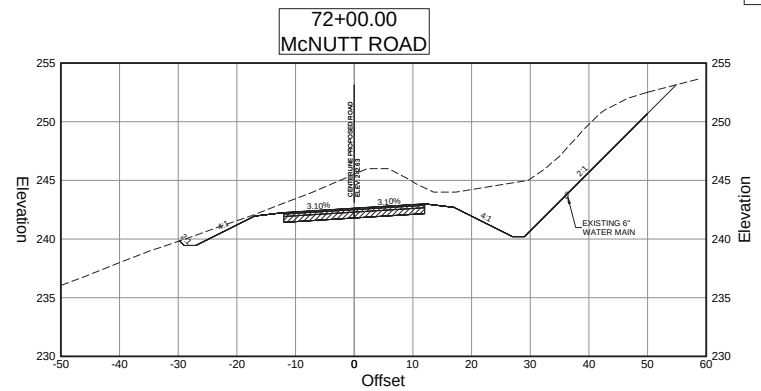
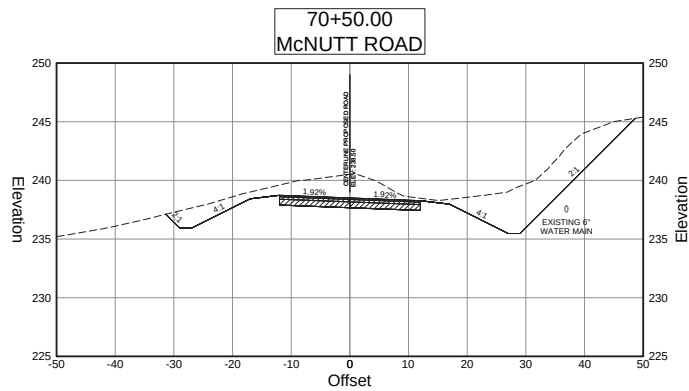
**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION	DATE

CROSS SECTIONS

McNutt Road
66+50 to 69+00

DRAWING NUMBER
23 - 0023



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Cummings Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

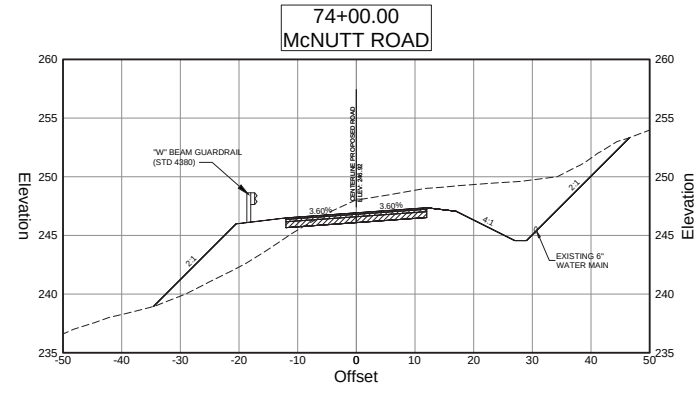
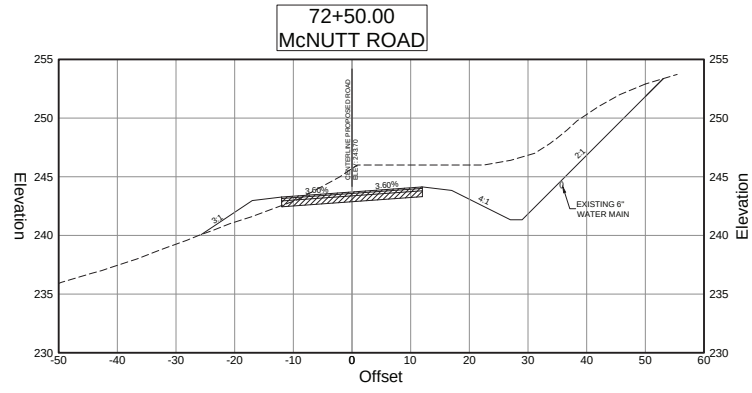
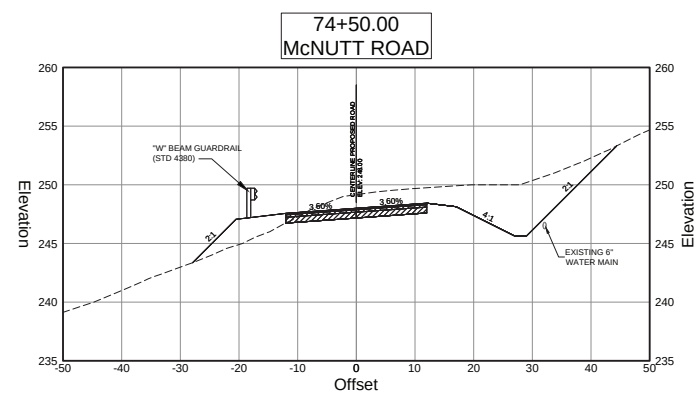
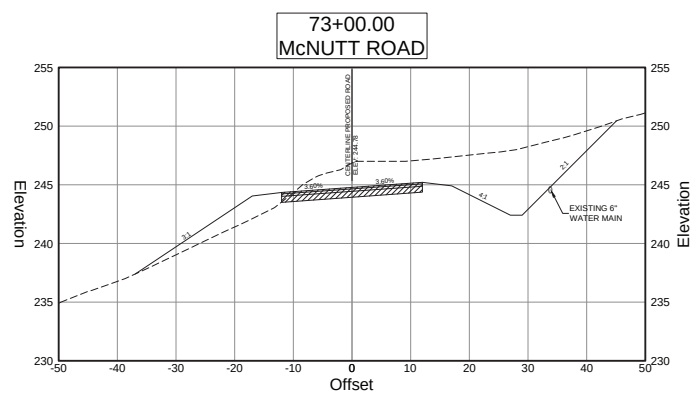
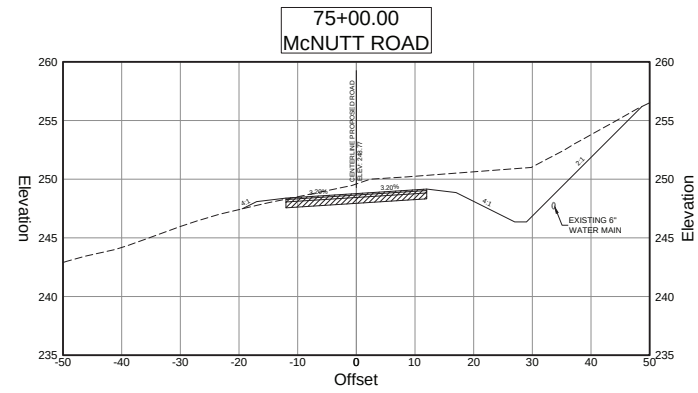
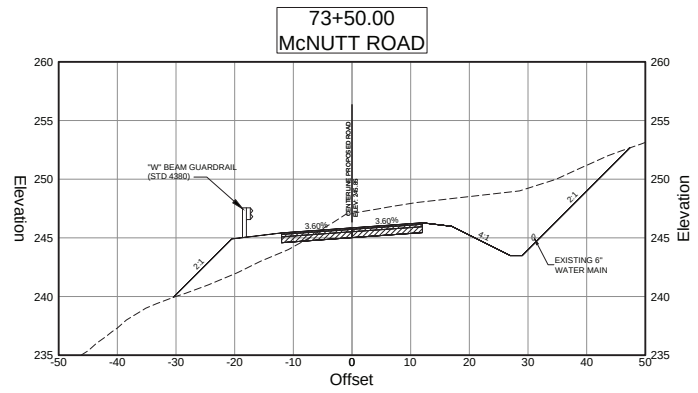
REVISION DATES	

CROSS SECTIONS

McNutt Road
69+50 to 72+00

DRAWING
NUMBER

23 - 0024



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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Associates, LLC**
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



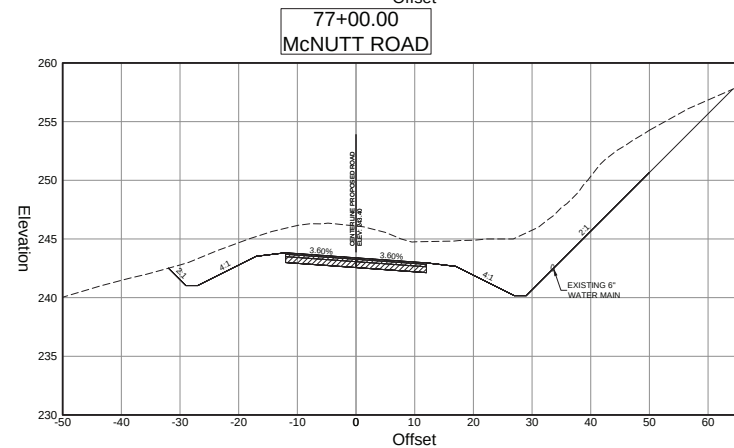
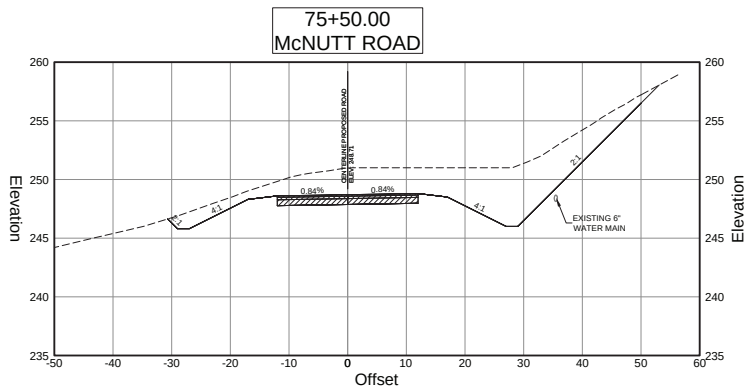
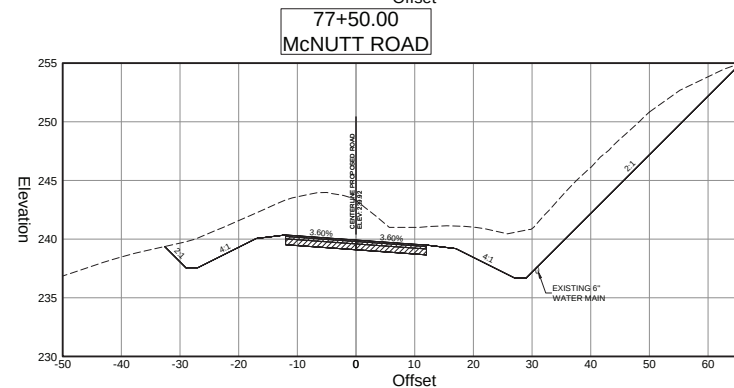
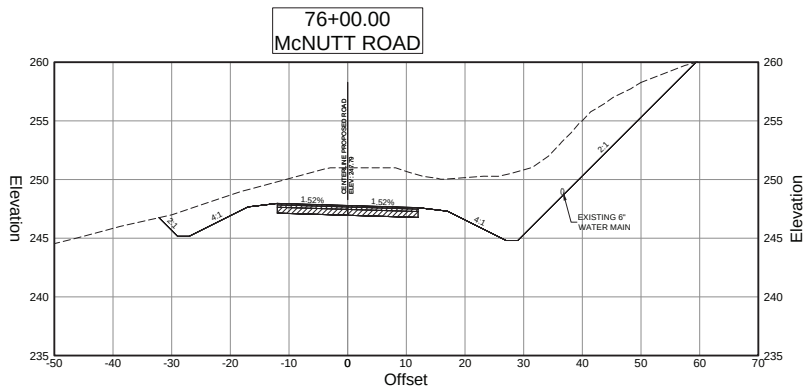
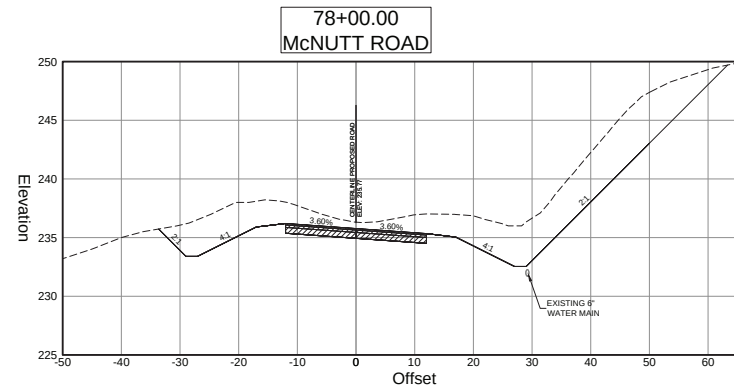
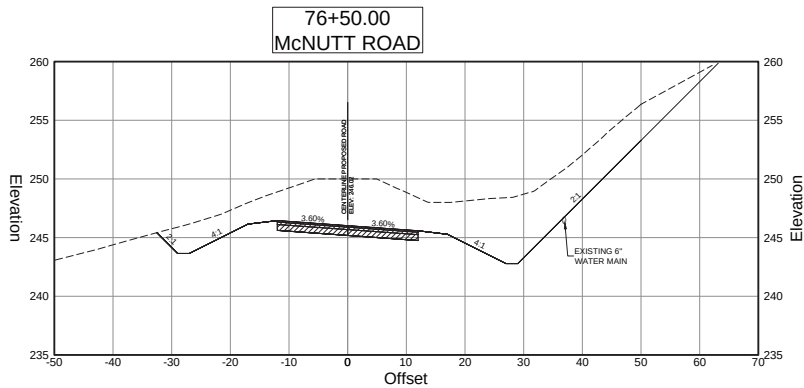
**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES	

CROSS SECTIONS

McNutt Road
72+50 to 75+00

DRAWING
NUMBER
23 - 0025



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



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Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

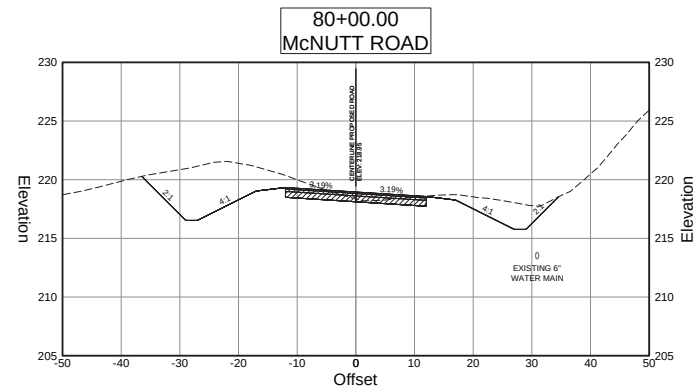
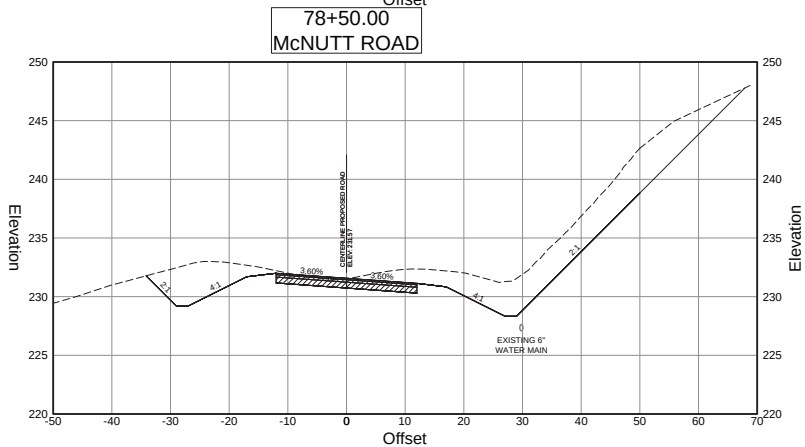
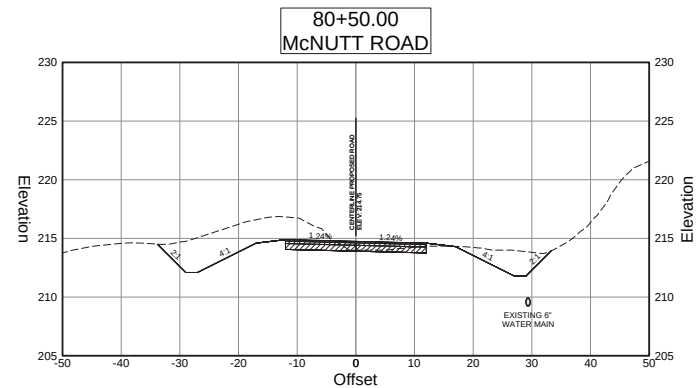
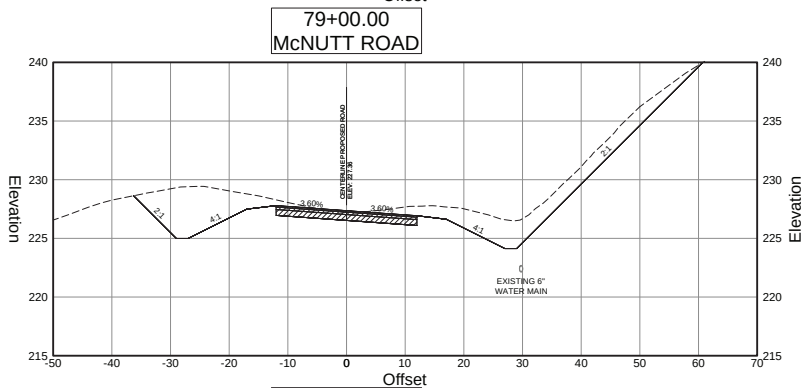
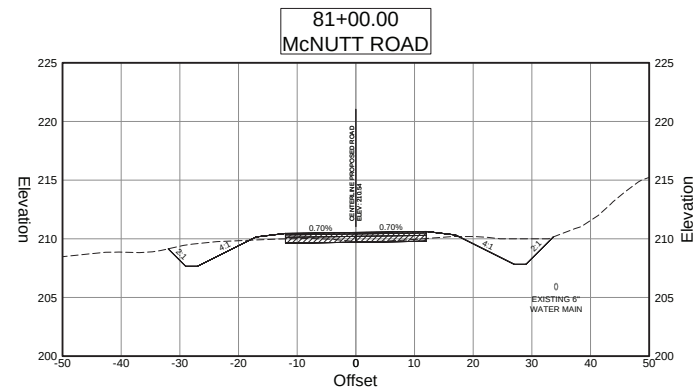
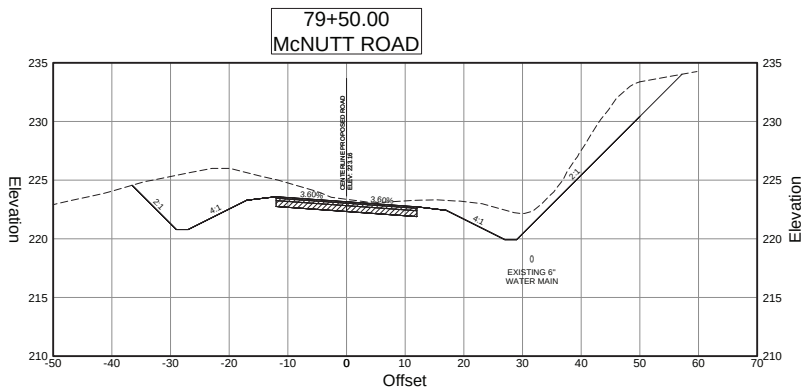
REVISION DATES	

CROSS SECTIONS

McNutt Road
75+50 to 78+00

DRAWING
NUMBER

23 - 0026



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

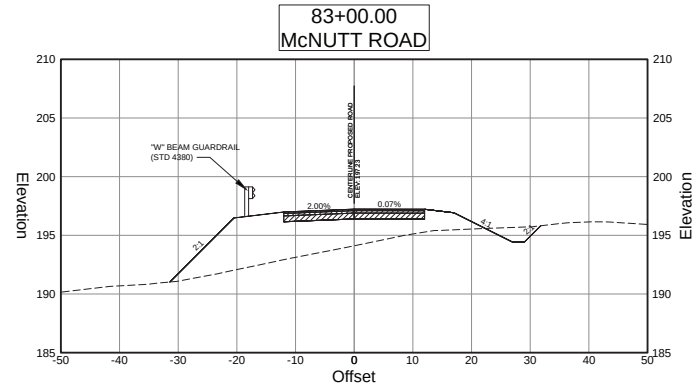
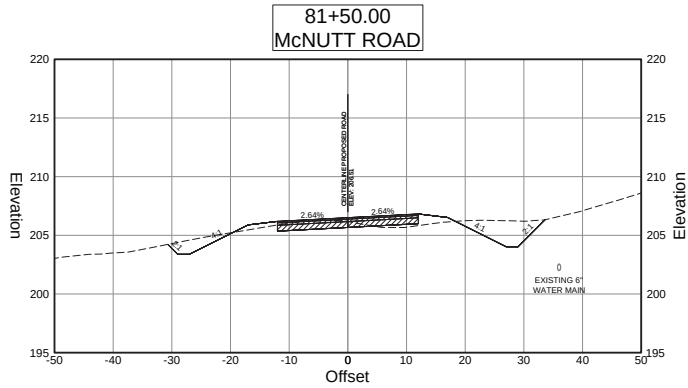
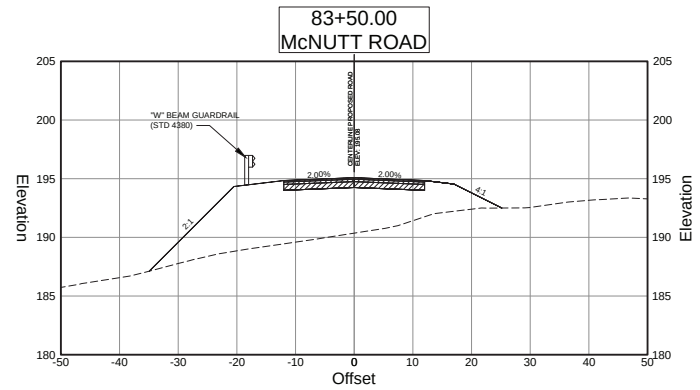
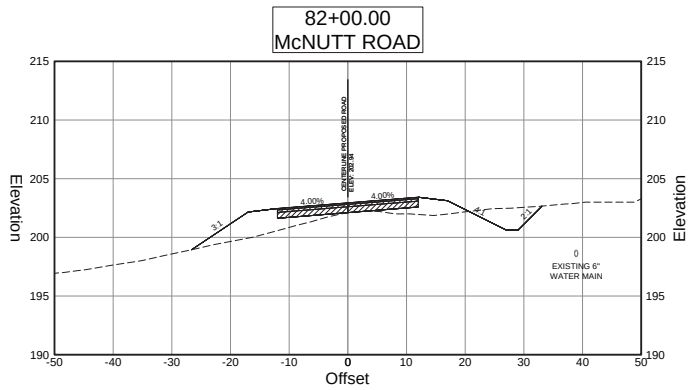
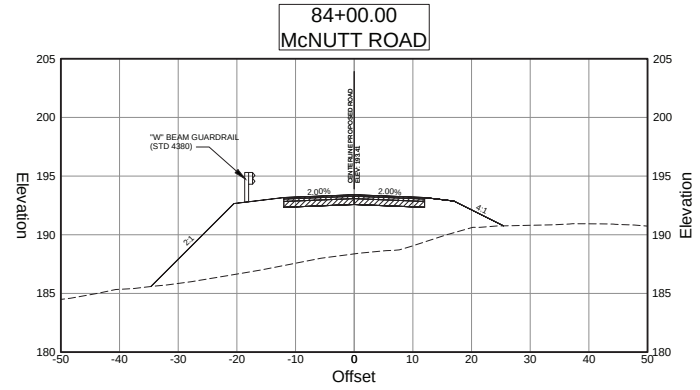
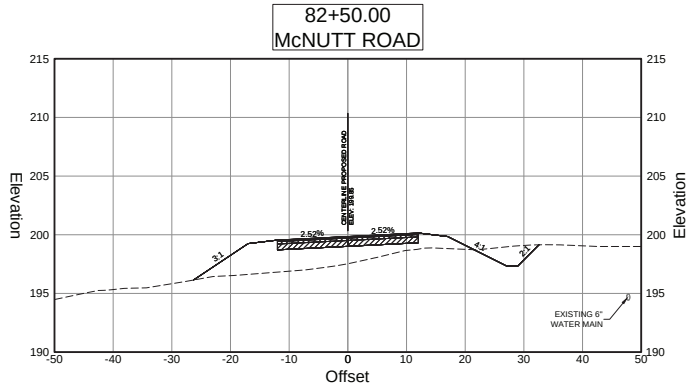
REVISION	DATE

CROSS SECTIONS

McNutt Road
78+50 to 81+00

DRAWING
NUMBER

23 - 0027



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Collingswood Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

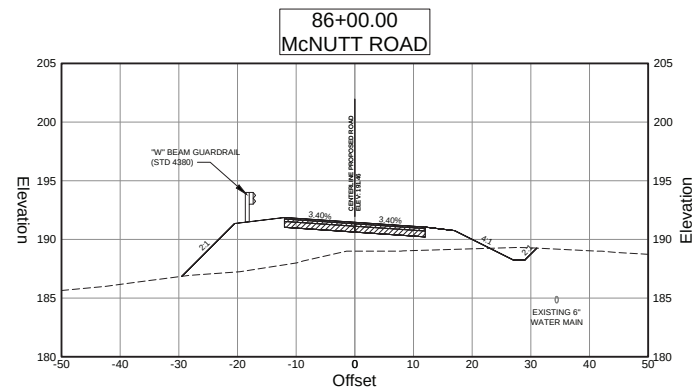
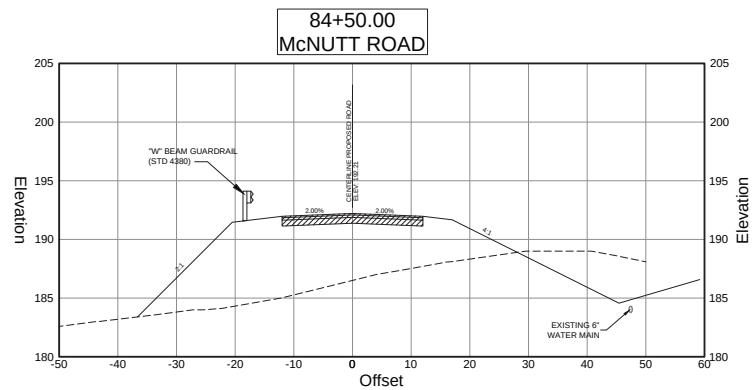
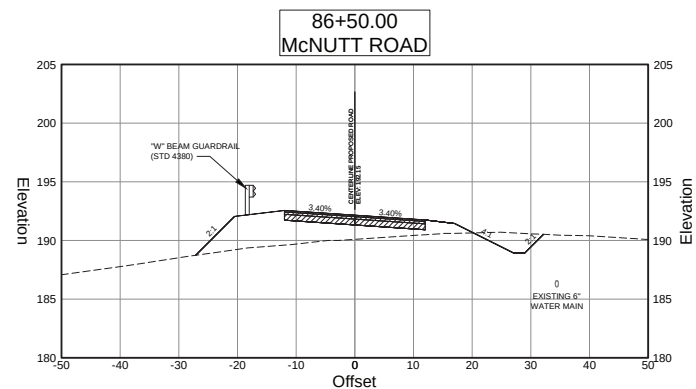
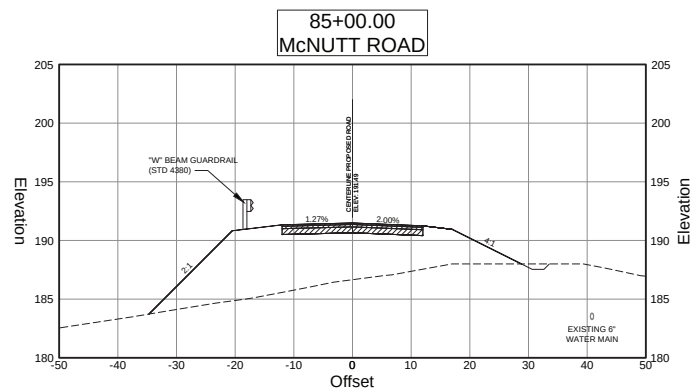
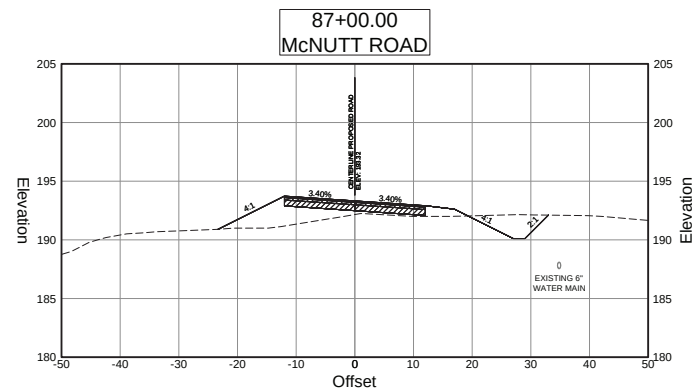
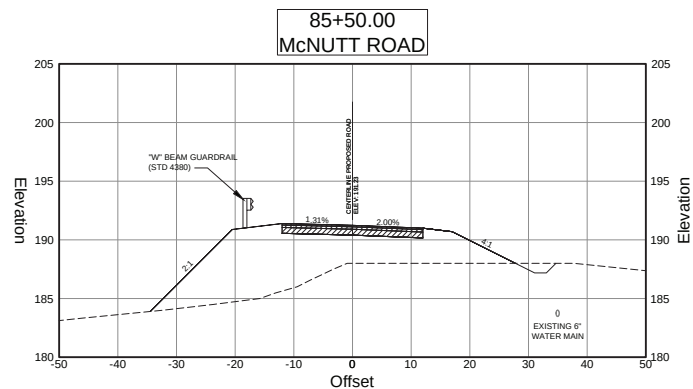
REVISION DATES	

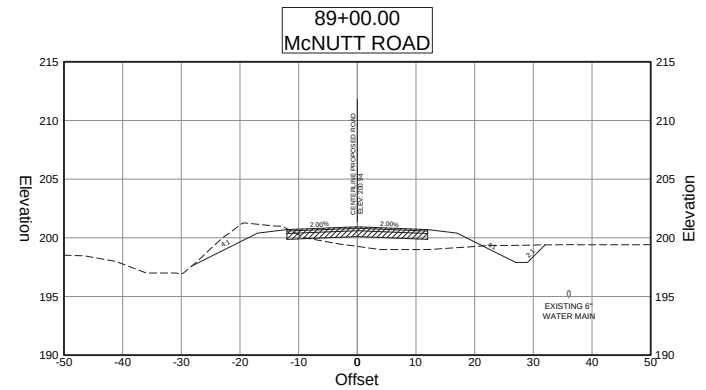
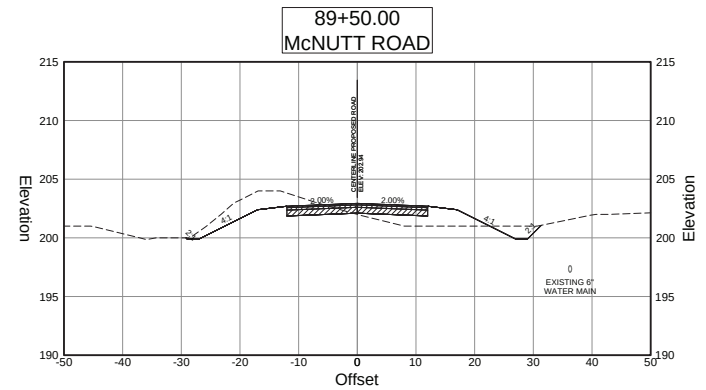
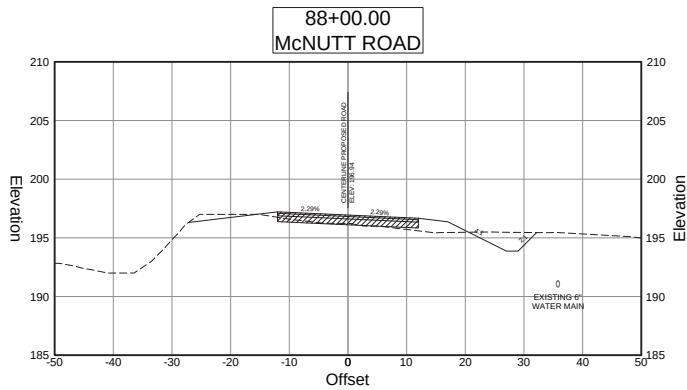
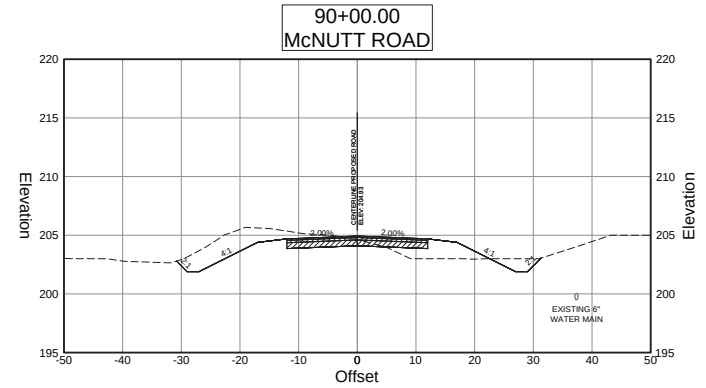
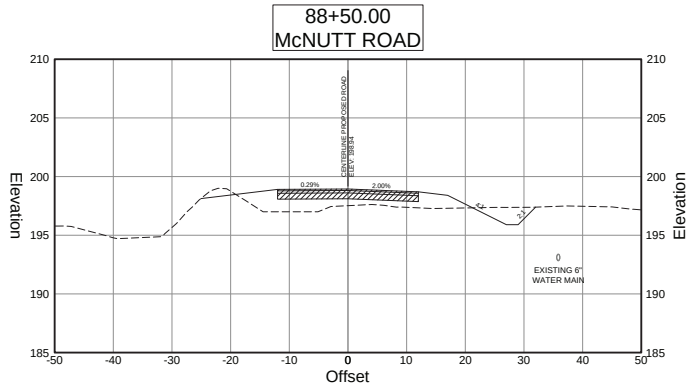
CROSS SECTIONS

McNutt Road
81+50 to 84+00

DRAWING
NUMBER

23 - 0028





HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Collinswood Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

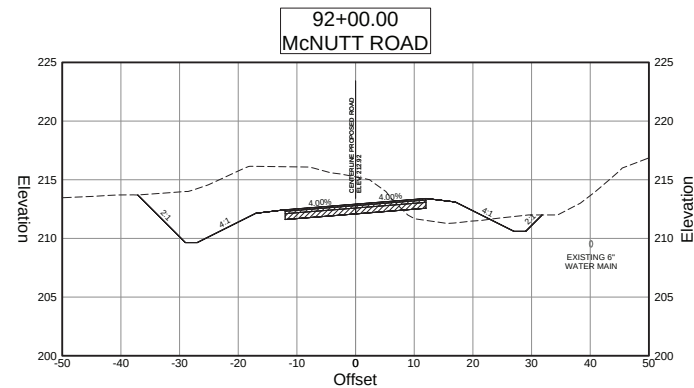
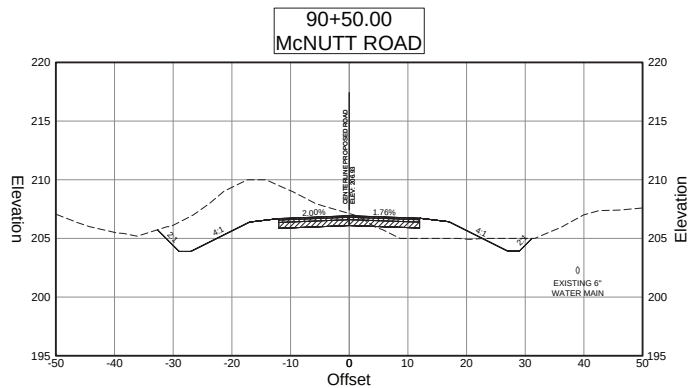
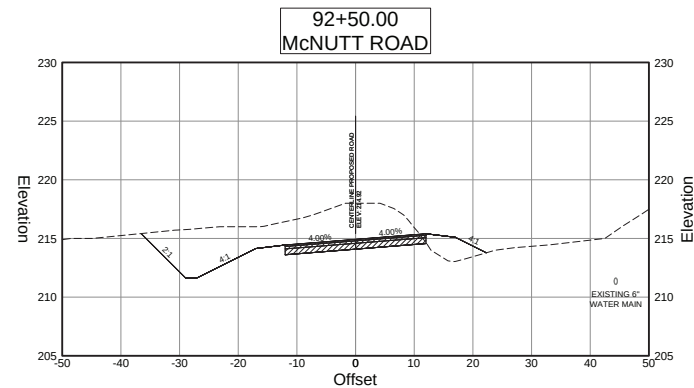
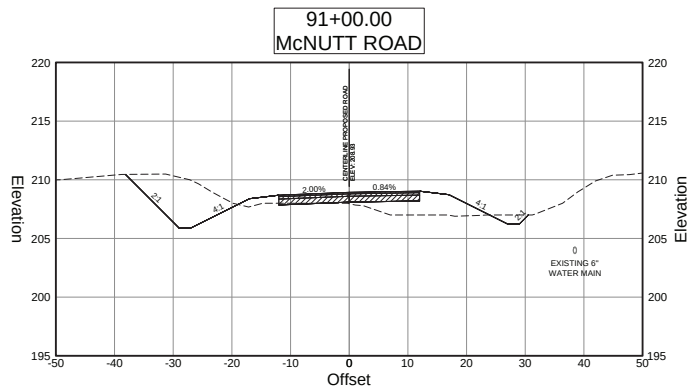
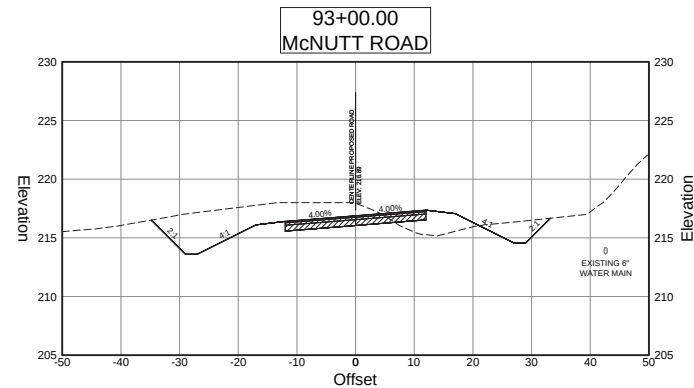
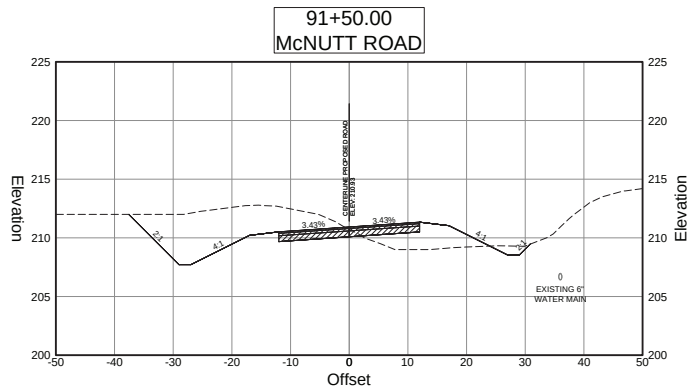
REVISION	DATE

CROSS SECTIONS

McNutt Road
87+50 to 90+00

DRAWING
NUMBER

23 - 0030



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oakdale Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

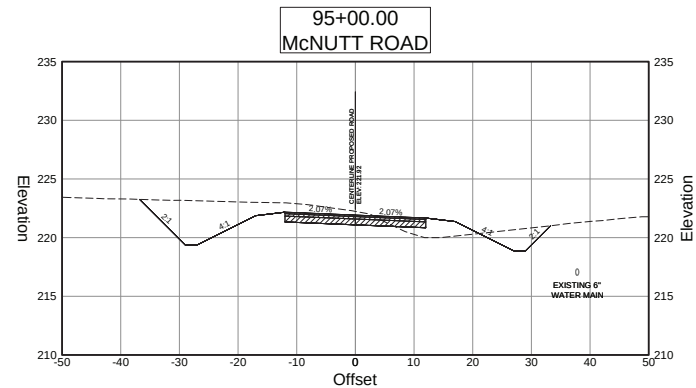
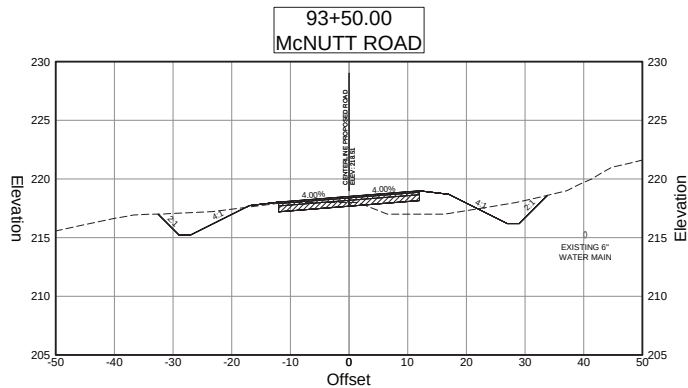
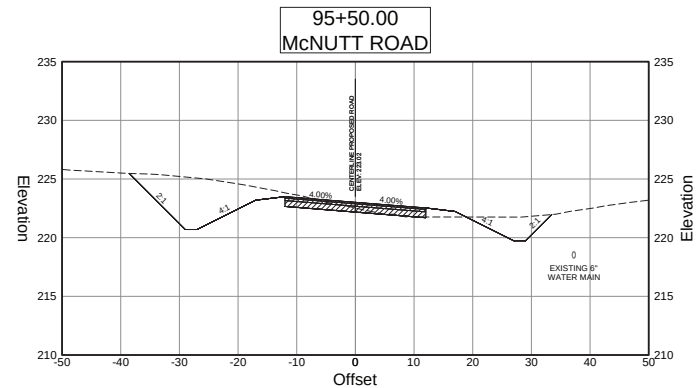
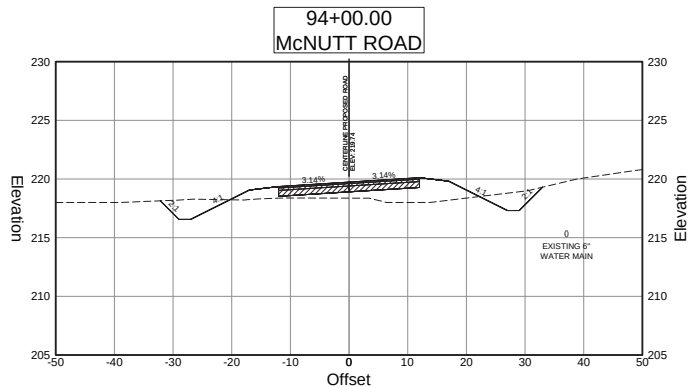
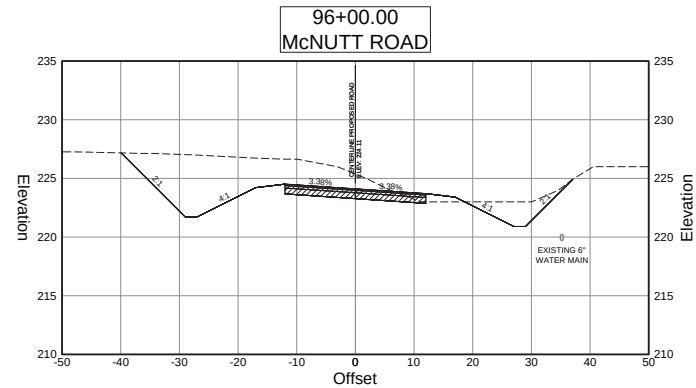
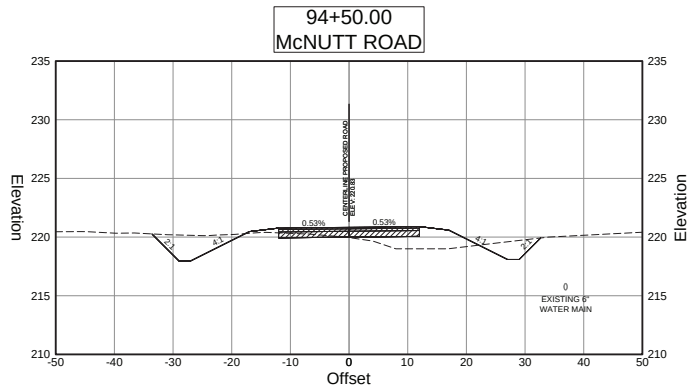
REVISION	DATE

CROSS SECTIONS

McNutt Road
90+50 to 93+00

DRAWING
NUMBER

23 - 0031



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

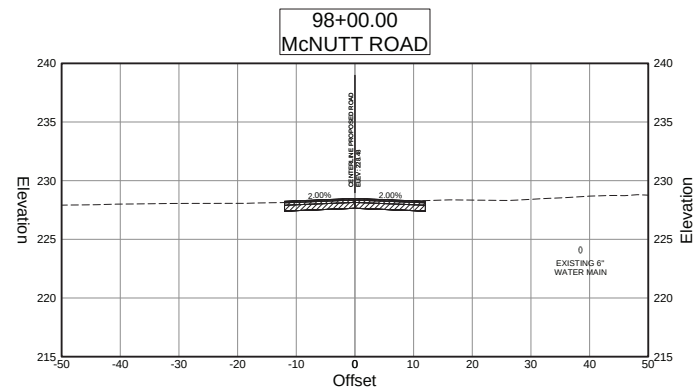
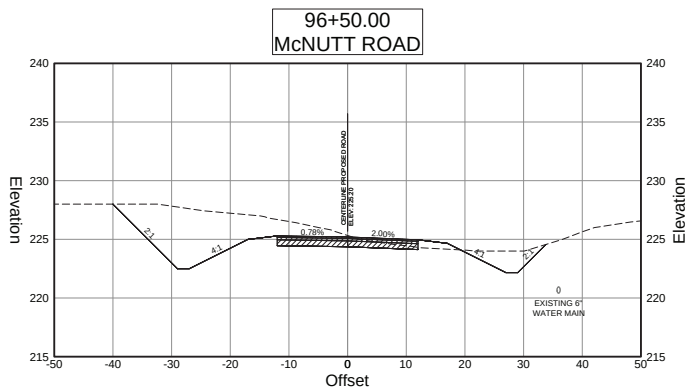
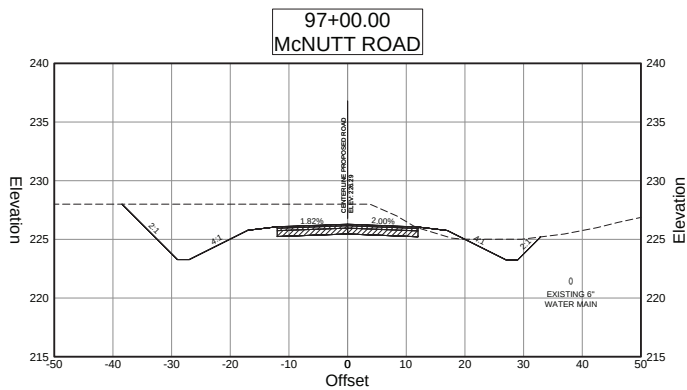
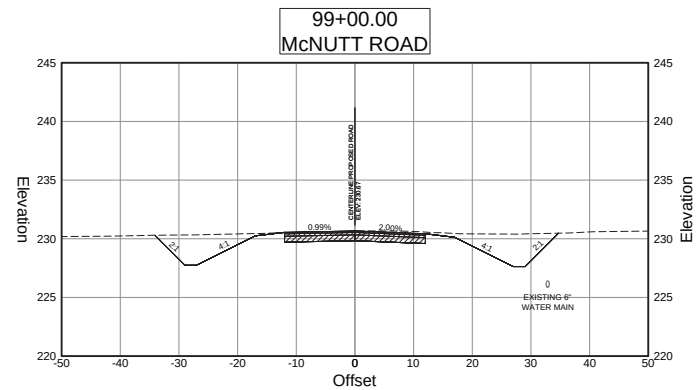
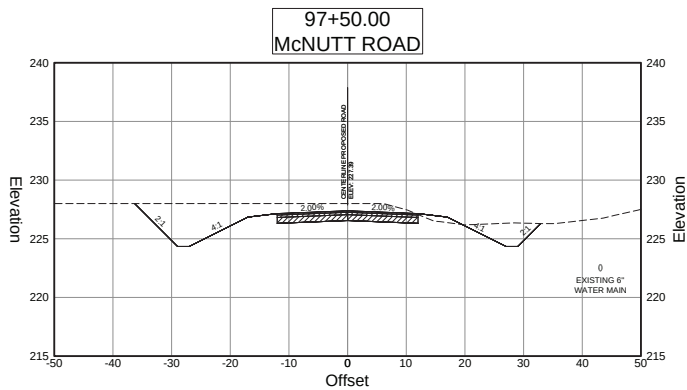
REVISION DATES	

CROSS SECTIONS

McNutt Road
93+50 to 96+00

DRAWING
NUMBER

23 - 0032



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

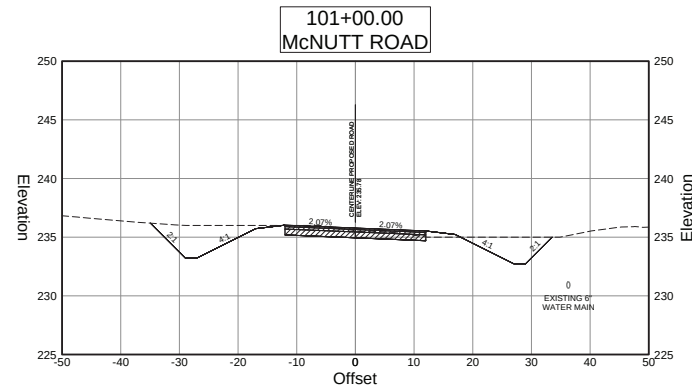
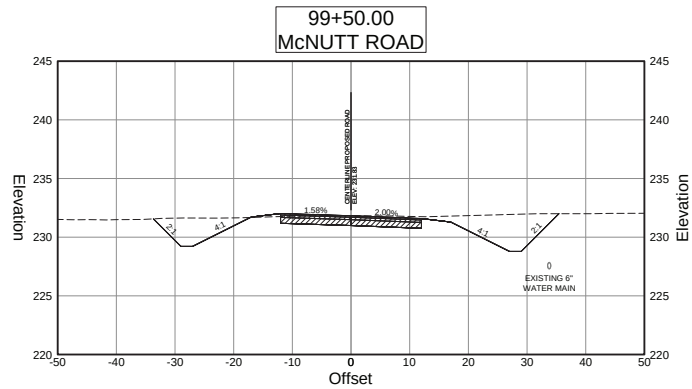
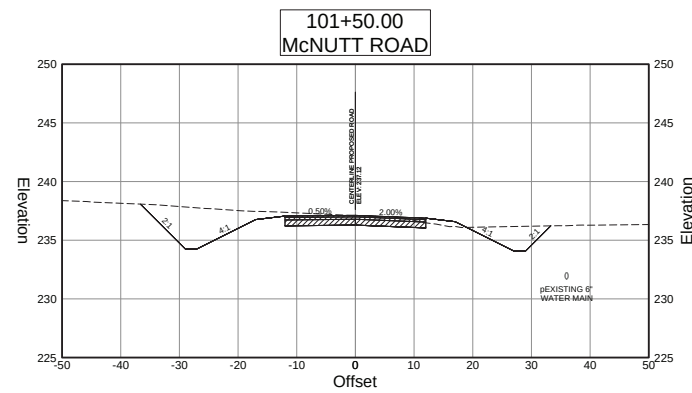
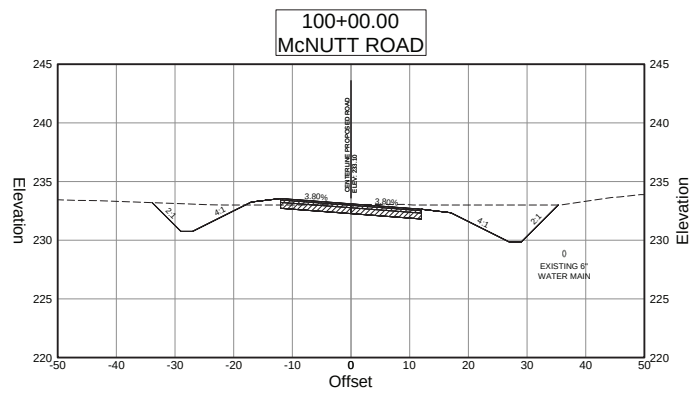
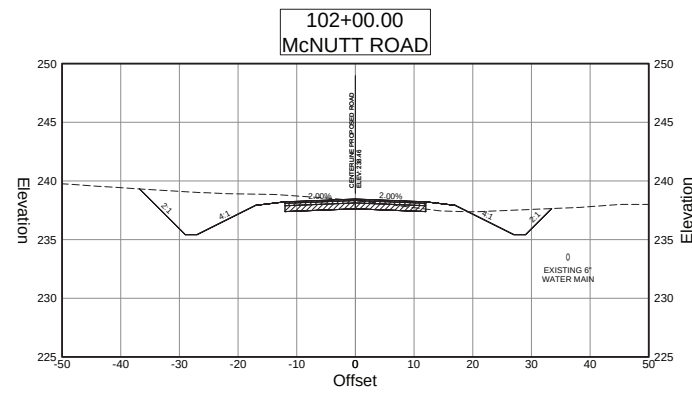
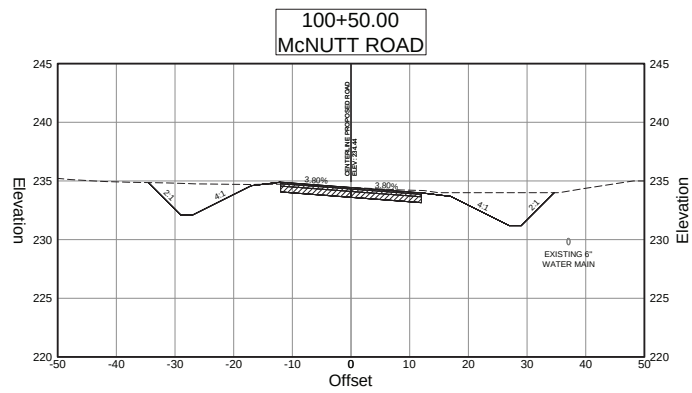
REVISION	DATE

CROSS SECTIONS

McNutt Road
96+50 to 99+00

DRAWING NUMBER

23 - 0033



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

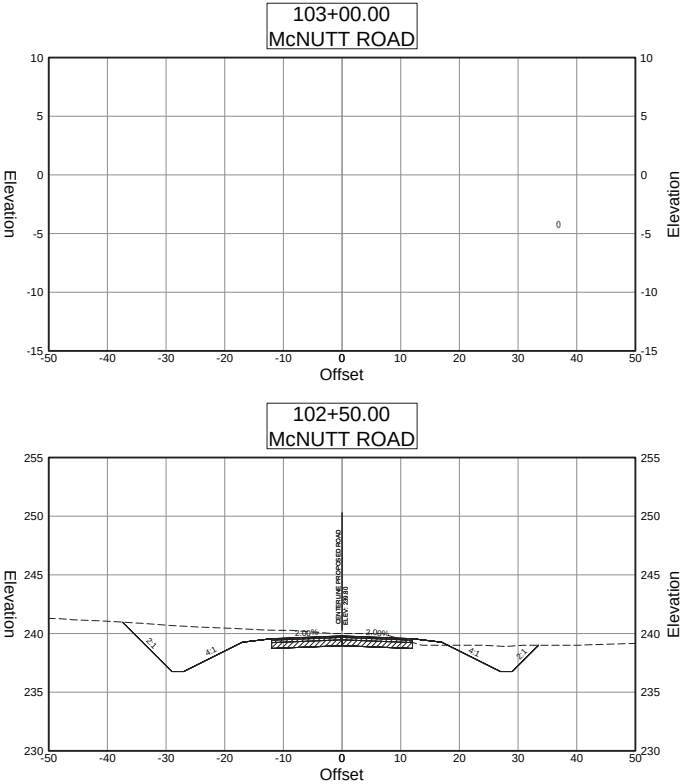
REVISION	DATE

CROSS SECTIONS

McNutt Road
99+50 to 102+00

DRAWING
NUMBER

23 - 0034



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

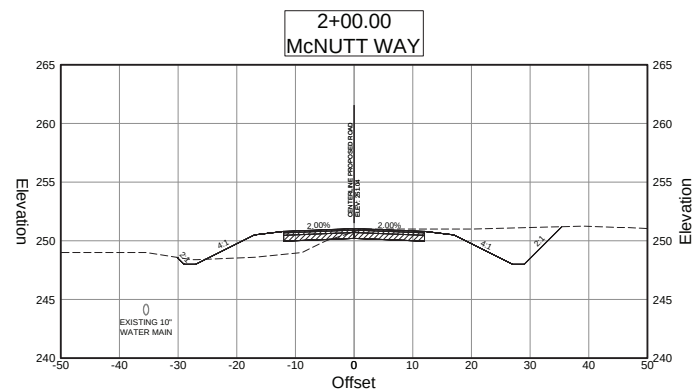
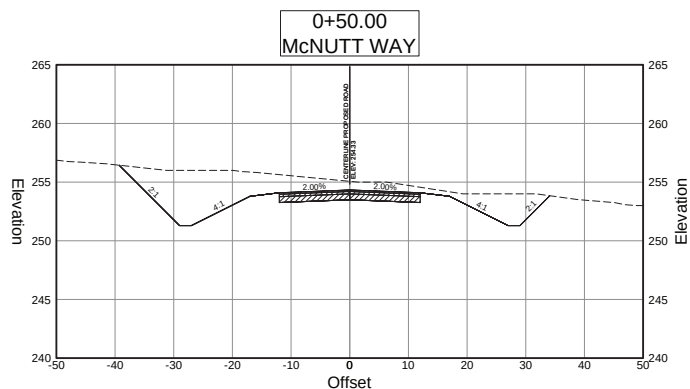
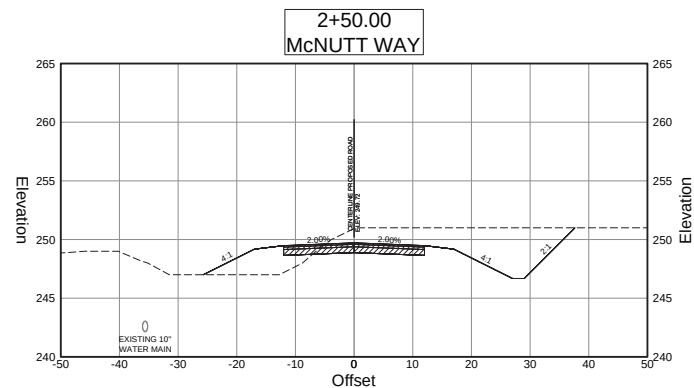
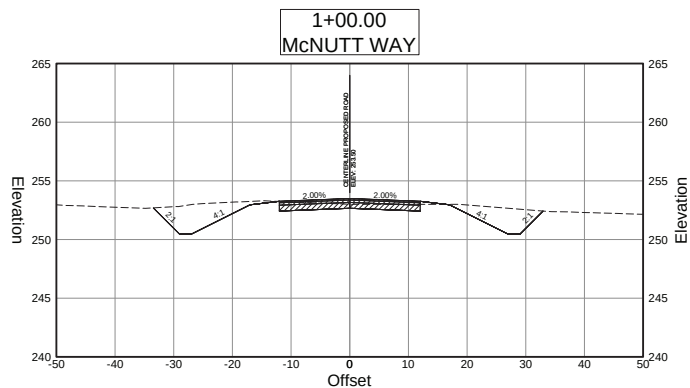
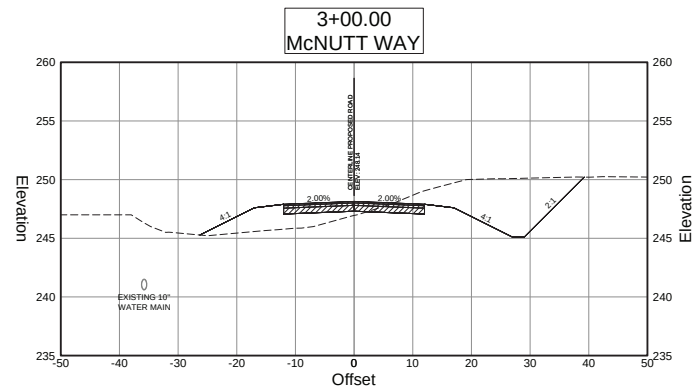
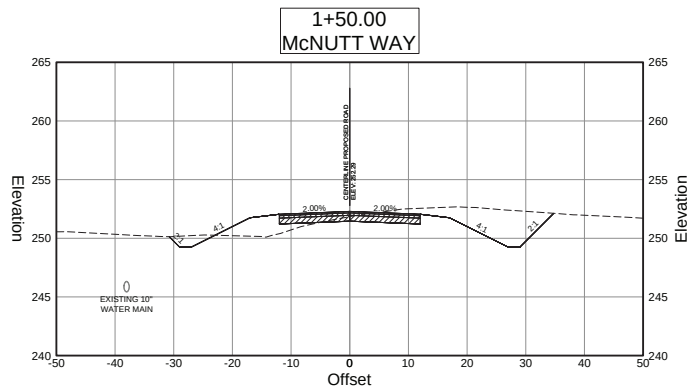
REVISION DATES

CROSS SECTIONS

McNutt Road
102+50 to 103+00

DRAWING
NUMBER

23 - 0035



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

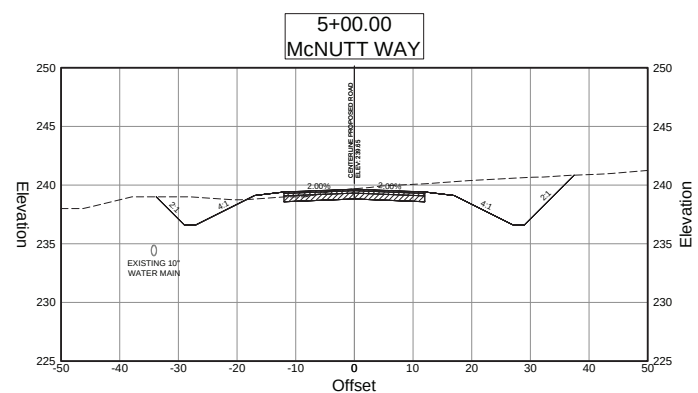
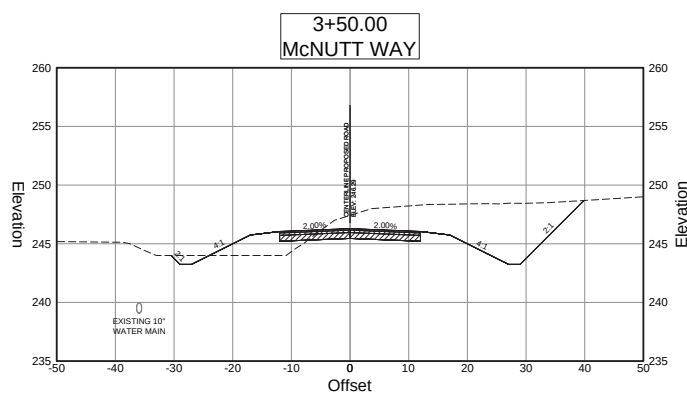
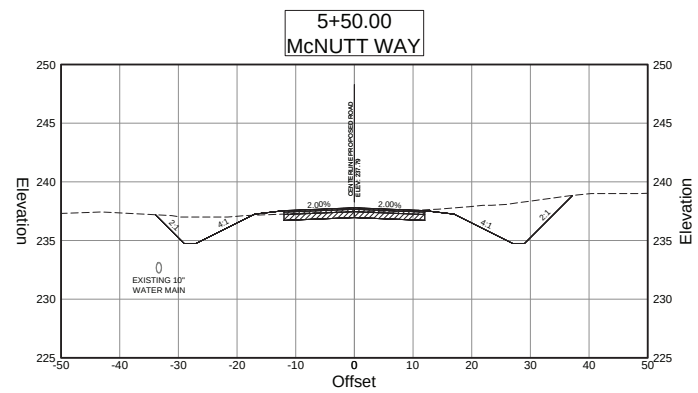
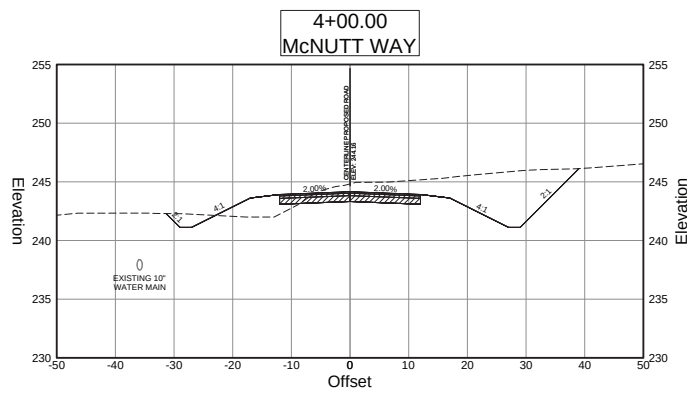
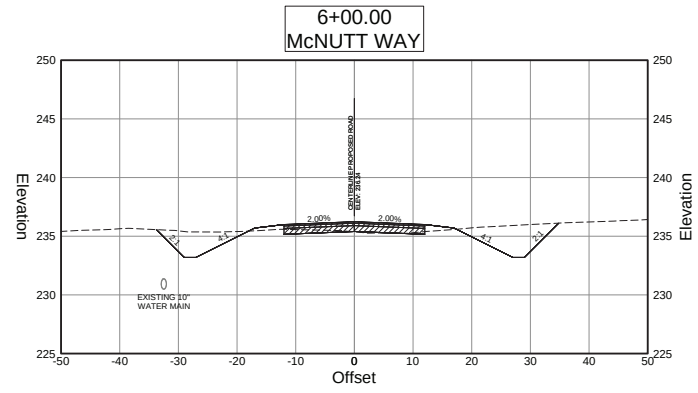
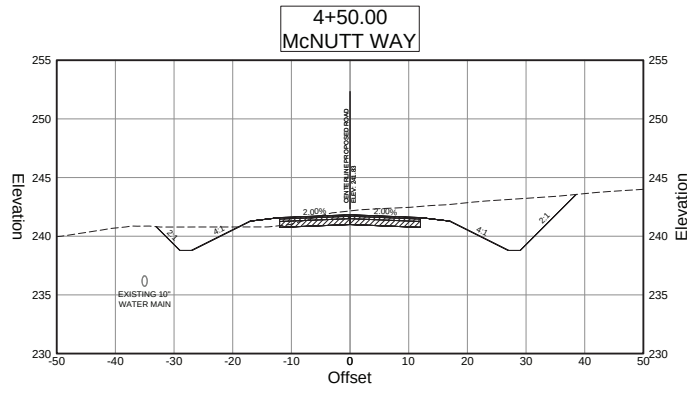
REVISION	DATE

CROSS SECTIONS

McNutt Way
0+50 to 3+00

DRAWING
NUMBER

23 - 0036



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



**Moreland Altobelli
Associates, LLC**
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
BY	NAM	06-24-20
DRAWN BY	NAME	DATE
BY	NAM	06-24-20
CHECKED BY	NAME	DATE
BY	KEO	06-24-20



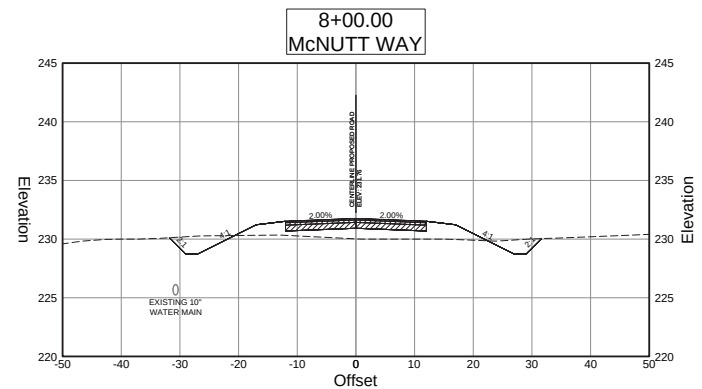
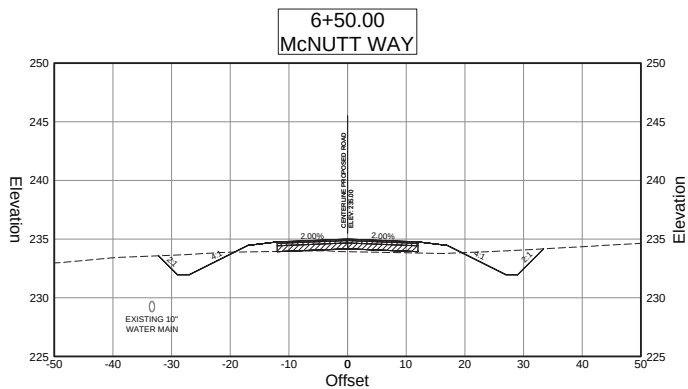
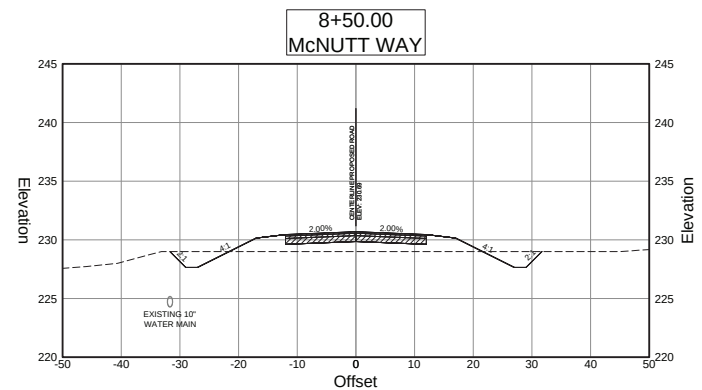
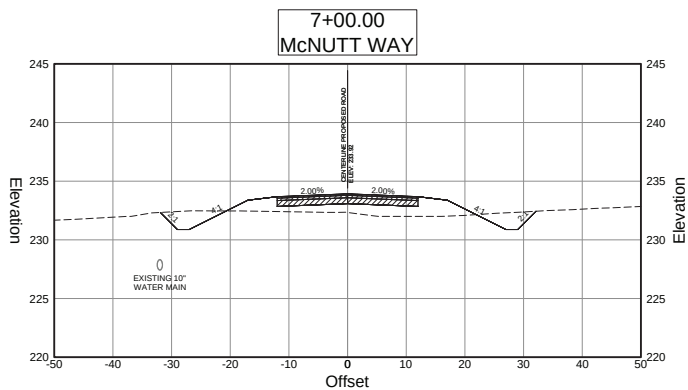
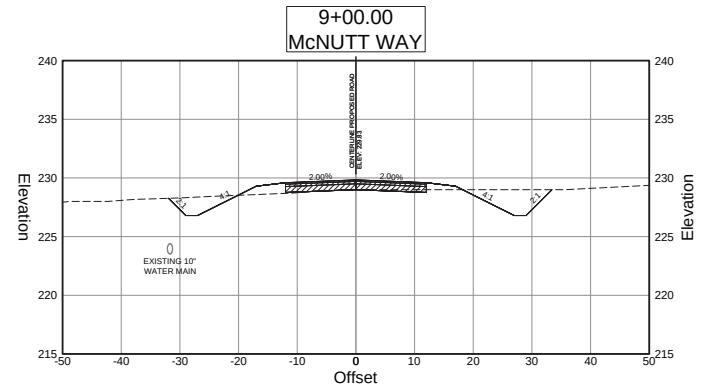
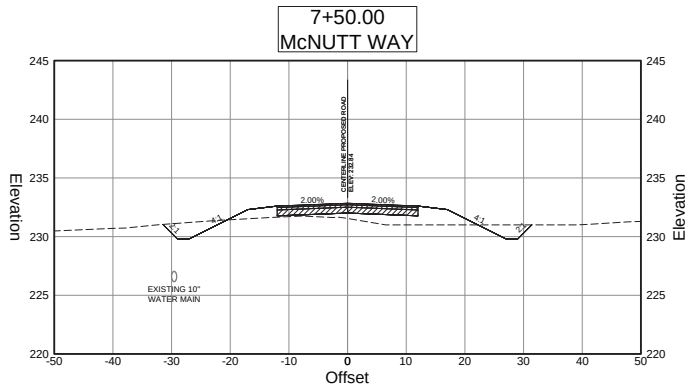
**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION	DATE

CROSS SECTIONS

McNutt Way
3+50 to 6+00

DRAWING NUMBER
23 - 0037



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
BY	NAM	05-24-20
DRAWN BY	NAME	DATE
BY	NAM	05-24-20
CHECKED BY	NAME	DATE
BY	KEO	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

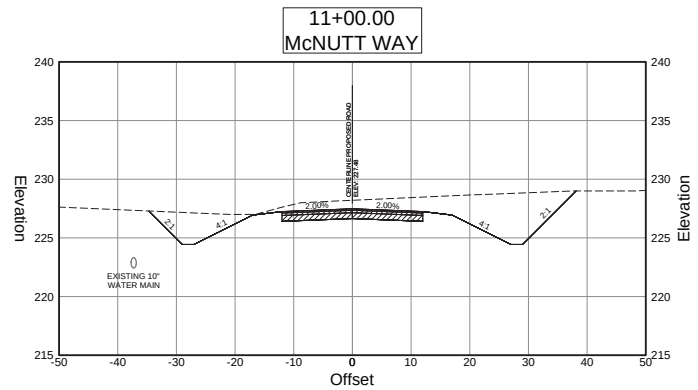
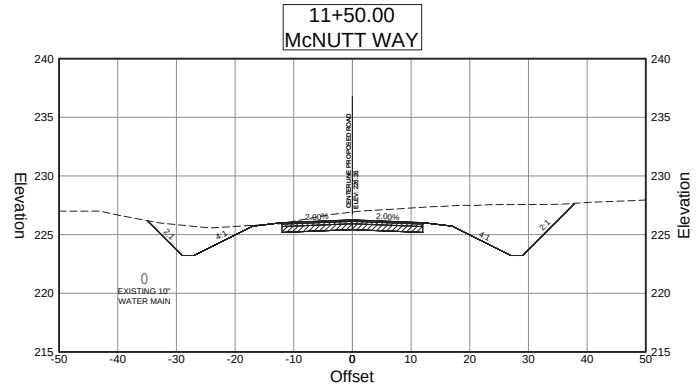
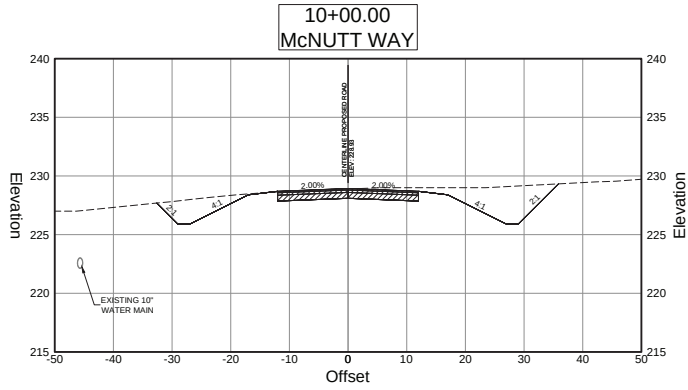
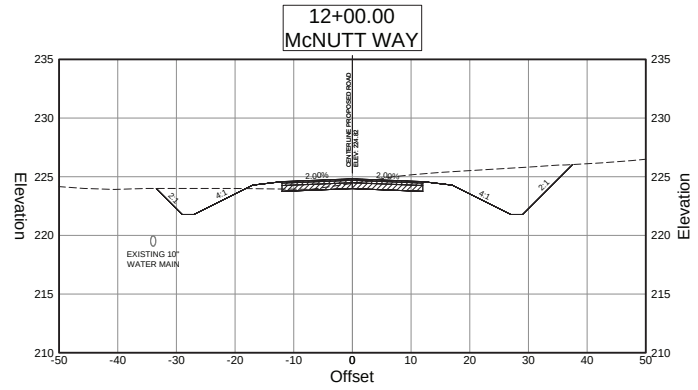
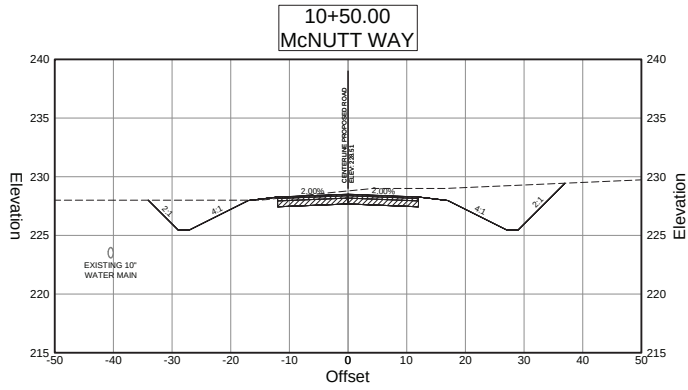
REVISION DATES

CROSS SECTIONS

McNutt Way
6+50 to 9+00

DRAWING NUMBER

23 - 0038



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-5507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

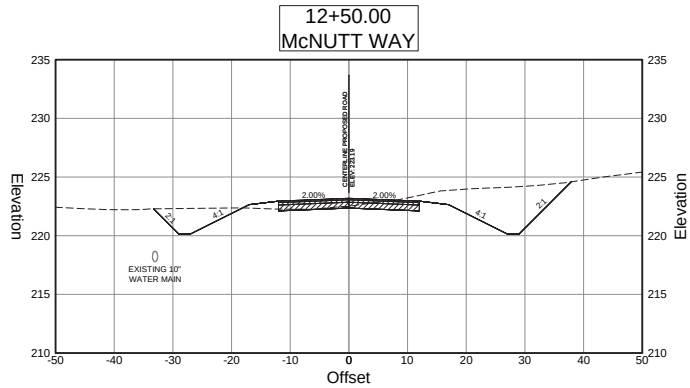
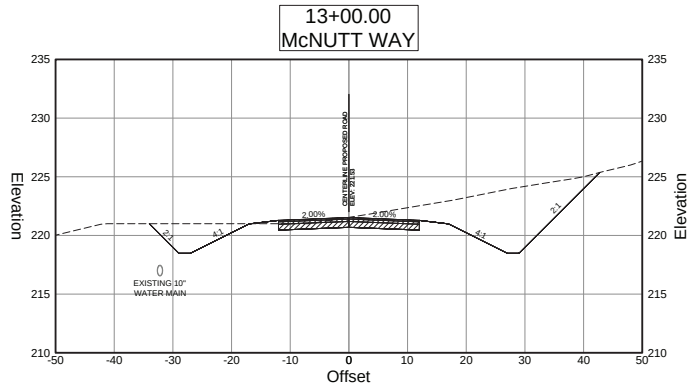
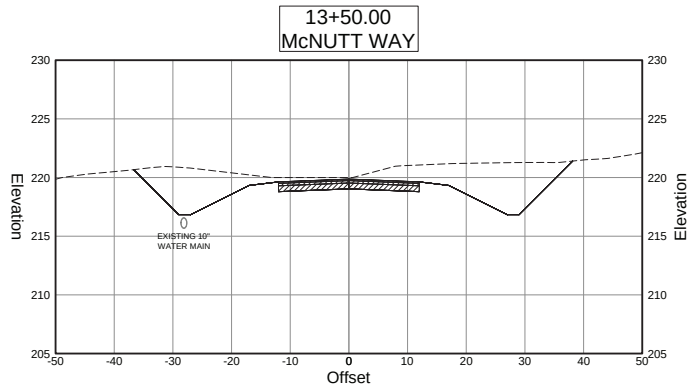
REVISION DATES	

CROSS SECTIONS

McNutt Way
9+50 to 12+00

DRAWING
NUMBER

23 - 0039



HORIZONTAL SCALE: 1" = 10'
VERTICAL SCALE: 1" = 5'



Moreland Altobelli
Associates, LLC
217 Oakridge Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

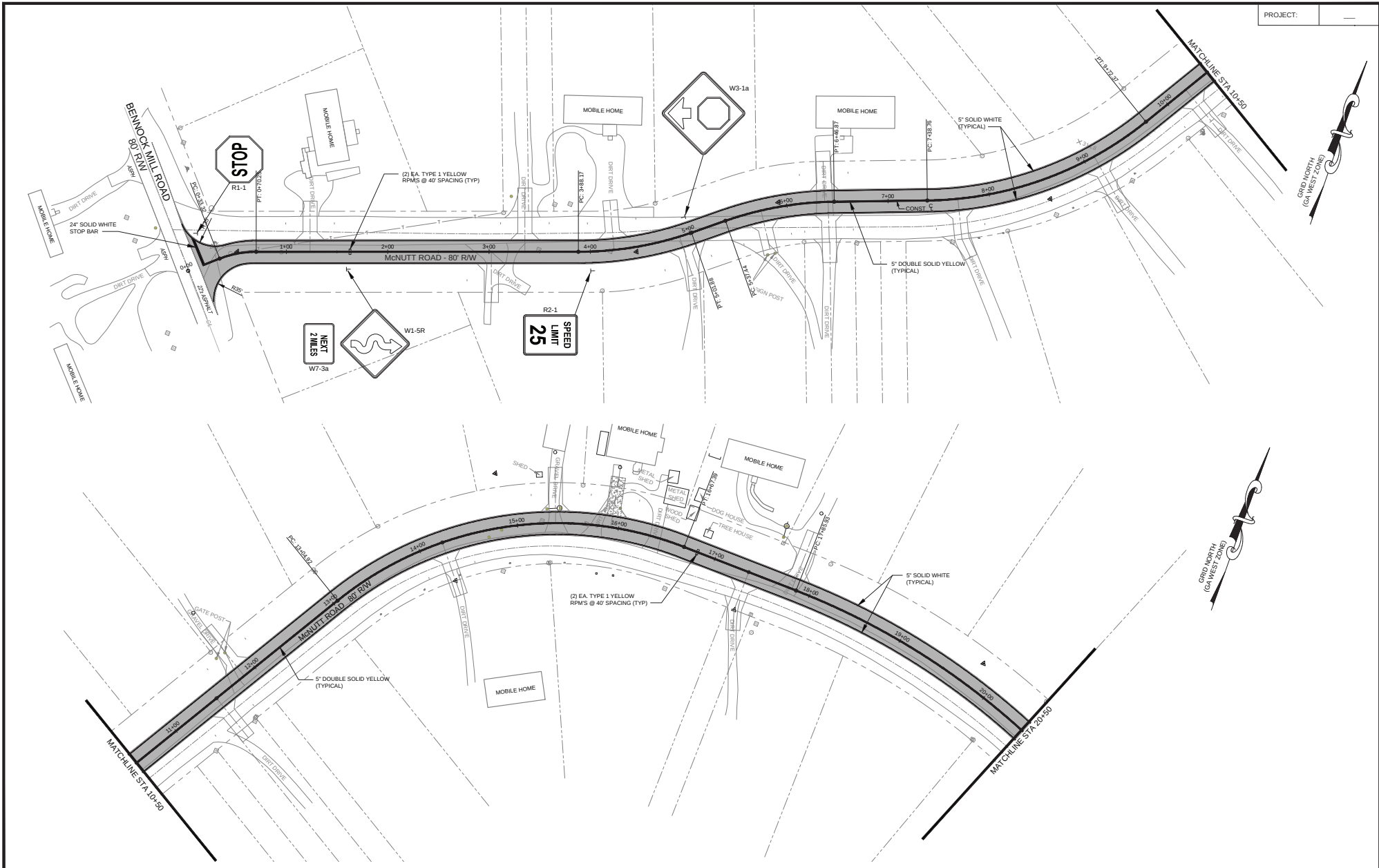
REVISION DATES

CROSS SECTIONS

McNutt Way
12+50 to 13+50

DRAWING
NUMBER

23 - 0040



HORIZONTAL SCALE: 1" = 40'

Moreland Altobelli Associates, LLC
 327 Deltorego Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone (770) 781-5507

**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES		

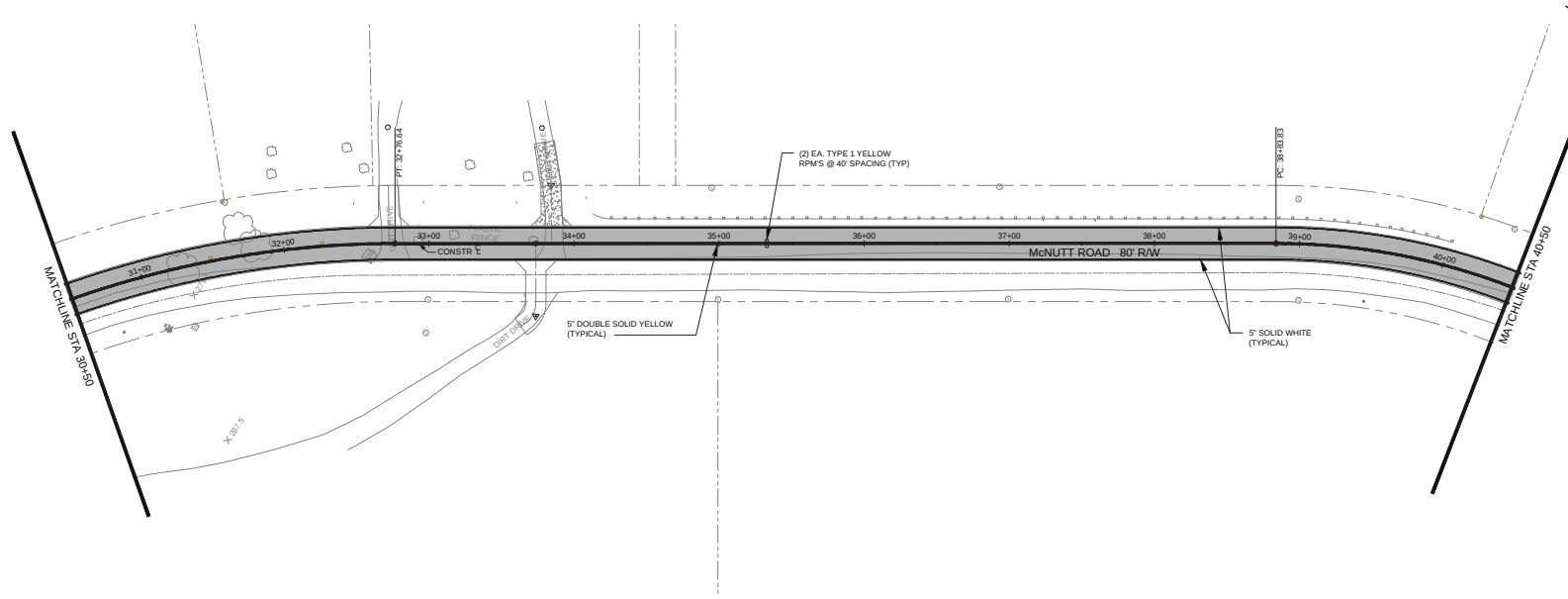
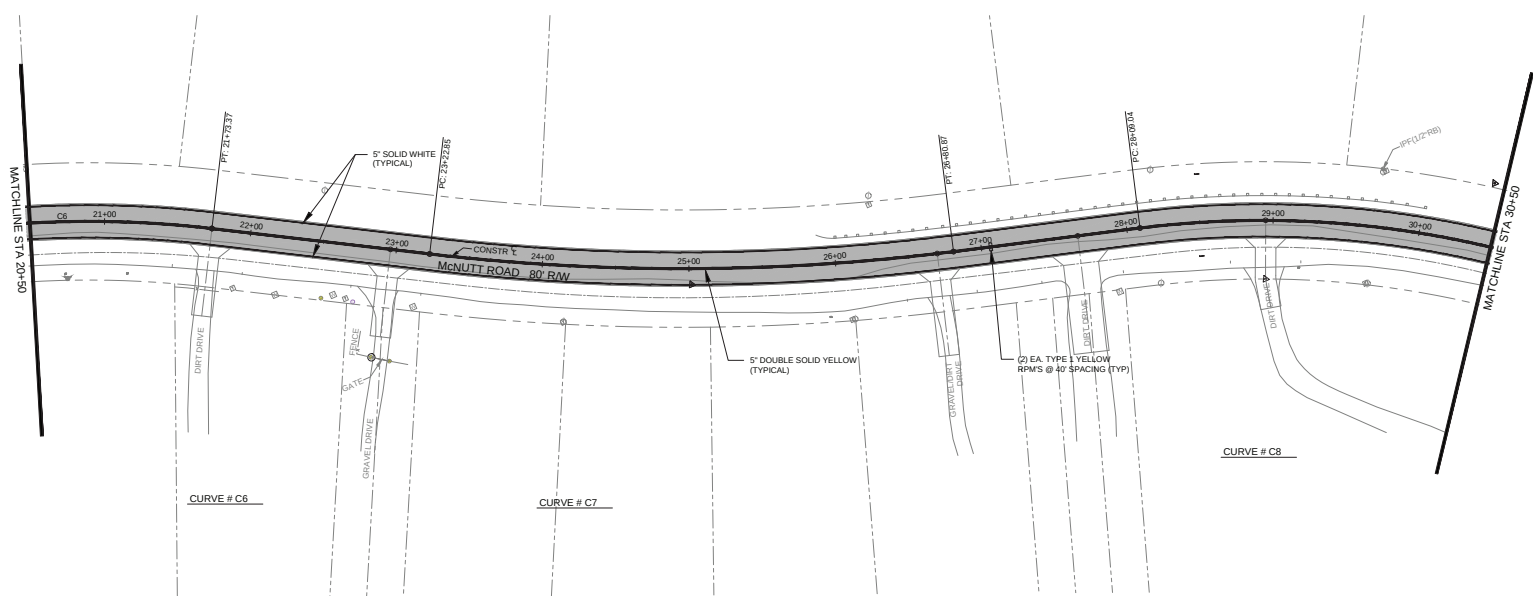
SIGNING AND MARKING PLANS

McNUTT ROAD
0+00 to 20+50

DRAWING NUMBER

26-0001

PROJECT: _____



HORIZONTAL SCALE: 1" = 40'



Moreland Altobelli
Associates, LLC
327 Oaklawn Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

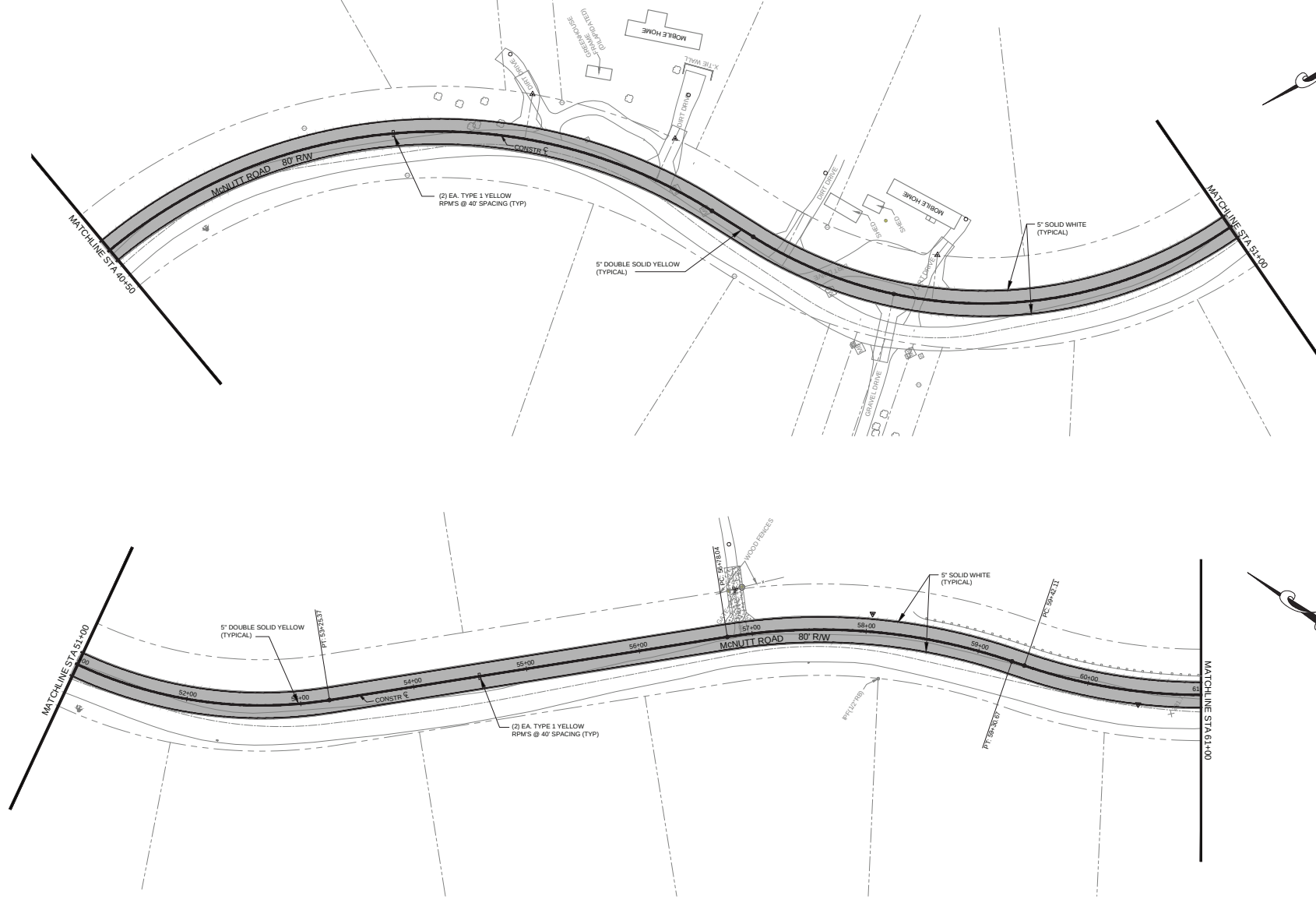
REVISION	DATE

SIGNING AND MARKING PLANS

McNUTT ROAD
20+50 to 40+50

DRAWING
NUMBER
26-0002

PROJECT: _____



GEORGIA811
www.Georgia811.com
Know what's below.
Call before you dig.

HORIZONTAL SCALE: 1" = 40'

MA
MORELAND ALTOBELLI
— AN ATLAS COMPANY —
Moreland Altobelli
Associates, LLC
327 Dalton Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES	

SIGNING AND MARKING PLANS

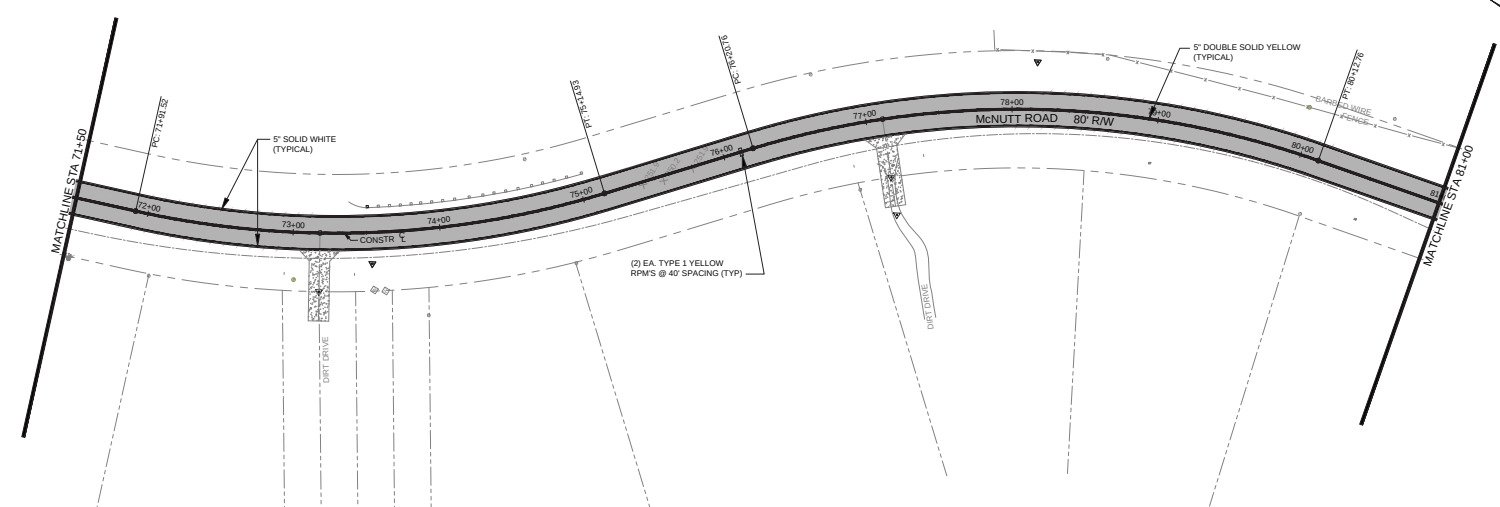
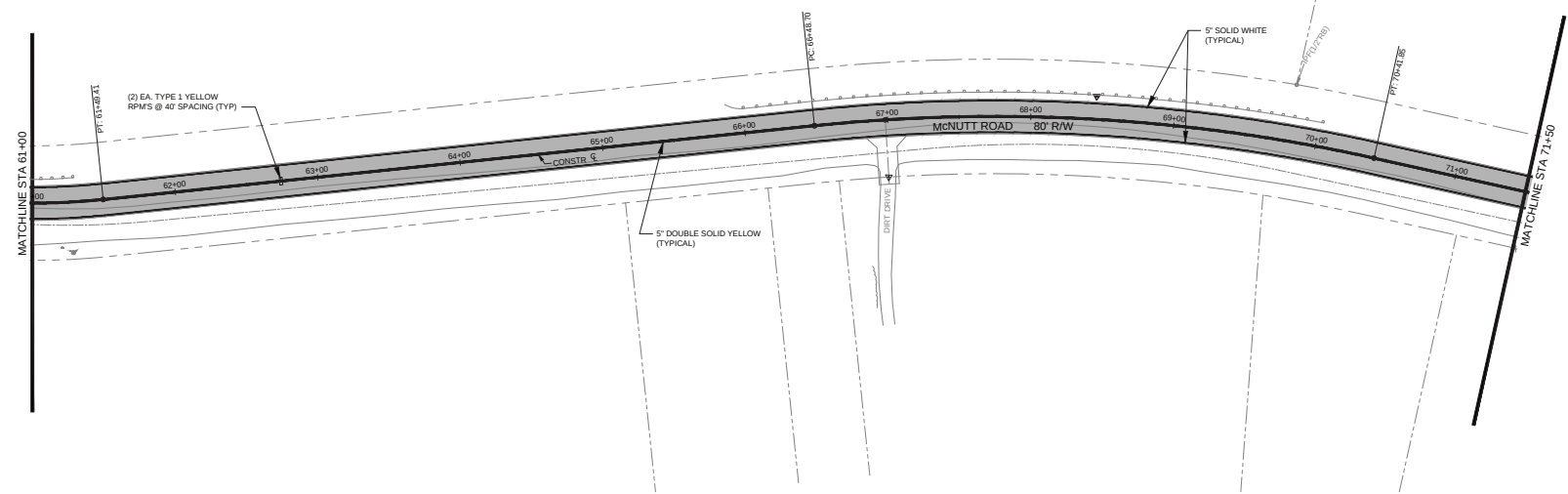
McNUTT ROAD
40+50 to 61+00

DRAWING
NUMBER
26-0003

PROJECT: _____

GRID NORTH
(GA WEST ZONE)

GRID NORTH
(GA WEST ZONE)



GEORGIA811
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Know what's below.
Call before you dig.

HORIZONTAL SCALE: 1" = 40'

MA
MORELAND ALTObelli
— AN ATLAS COMPANY —

Moreland Altobelli
Associates, LLC
327 Oaklawn Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	NAA	05-24-20
BY	KEO	05-24-20



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

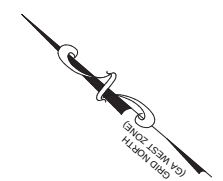
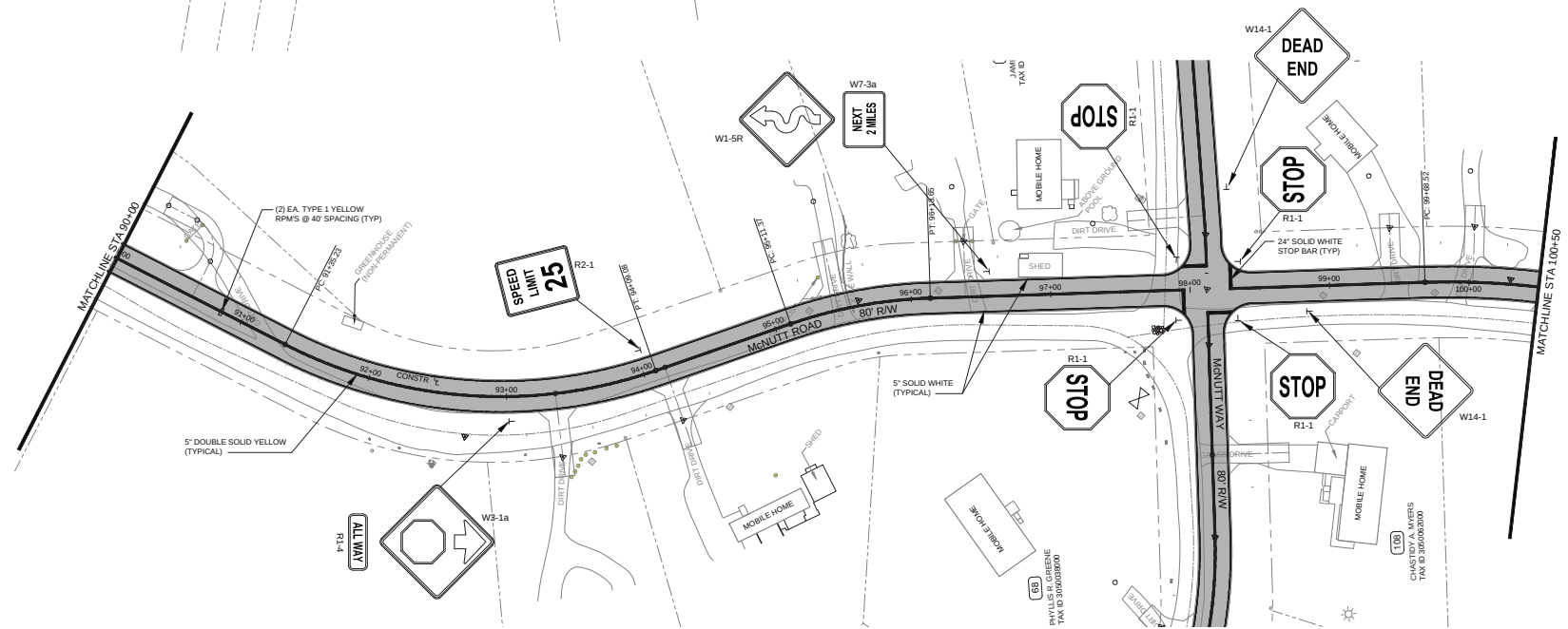
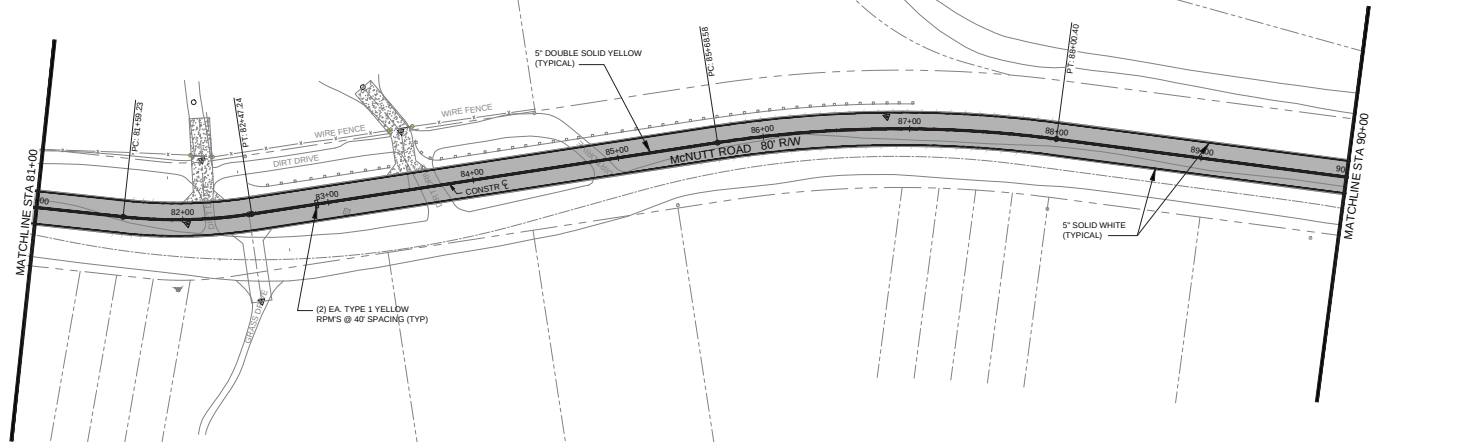
REVISION	DATE

SIGNING AND MARKING PLANS

McNUTT ROAD
61+00 to 81+00

DRAWING
NUMBER
26-0004

PROJECT: _____



HORIZONTAL SCALE: 1" = 40'



Moreland Altobelli
Associates, LLC
327 Bollinger Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20

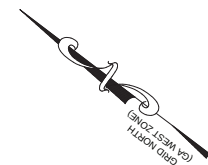
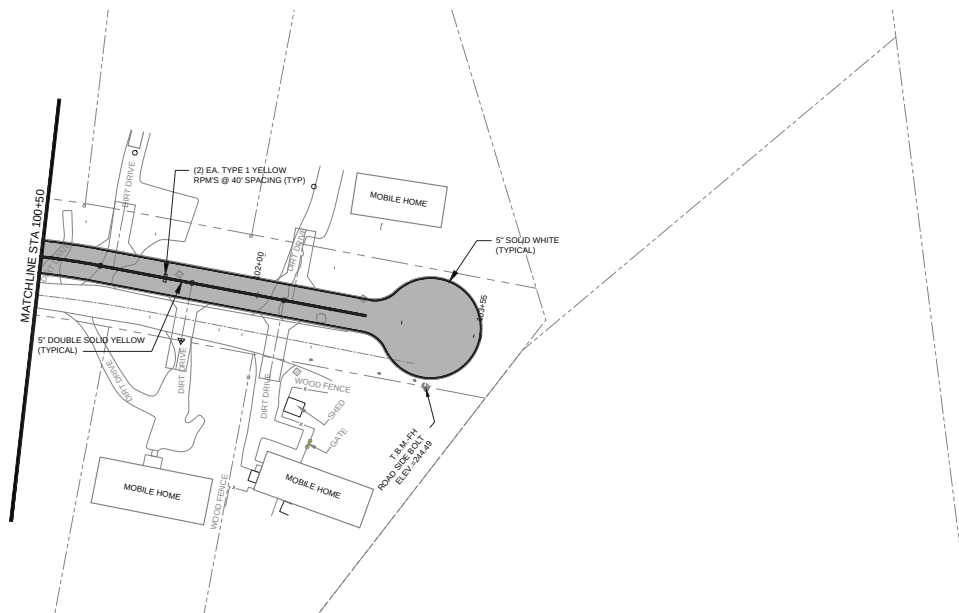


McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION DATES

SIGNING AND MARKING PLANS
McNUTT ROAD 81+00 to 100+50

DRAWING NUMBER
26-0005



GEORGIA811
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Know what's below.
Call before you dig.

HORIZONTAL SCALE: 1" = 40'



Moreland Altobelli
Associates, LLC
327 Dahlonega Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION DATES		

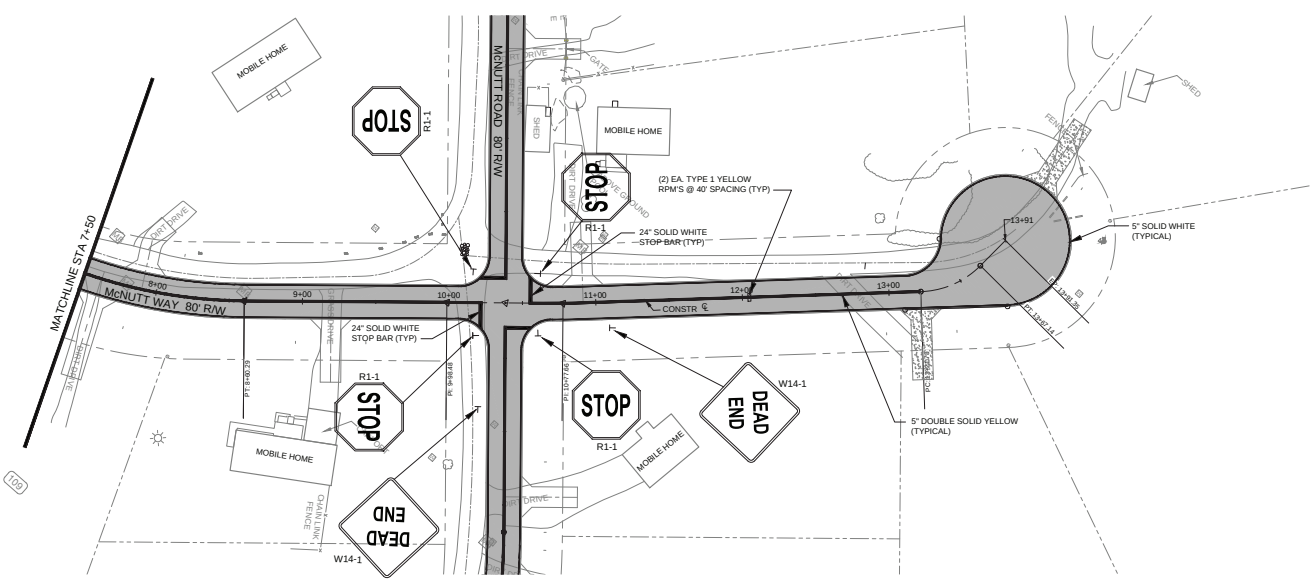
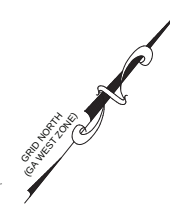
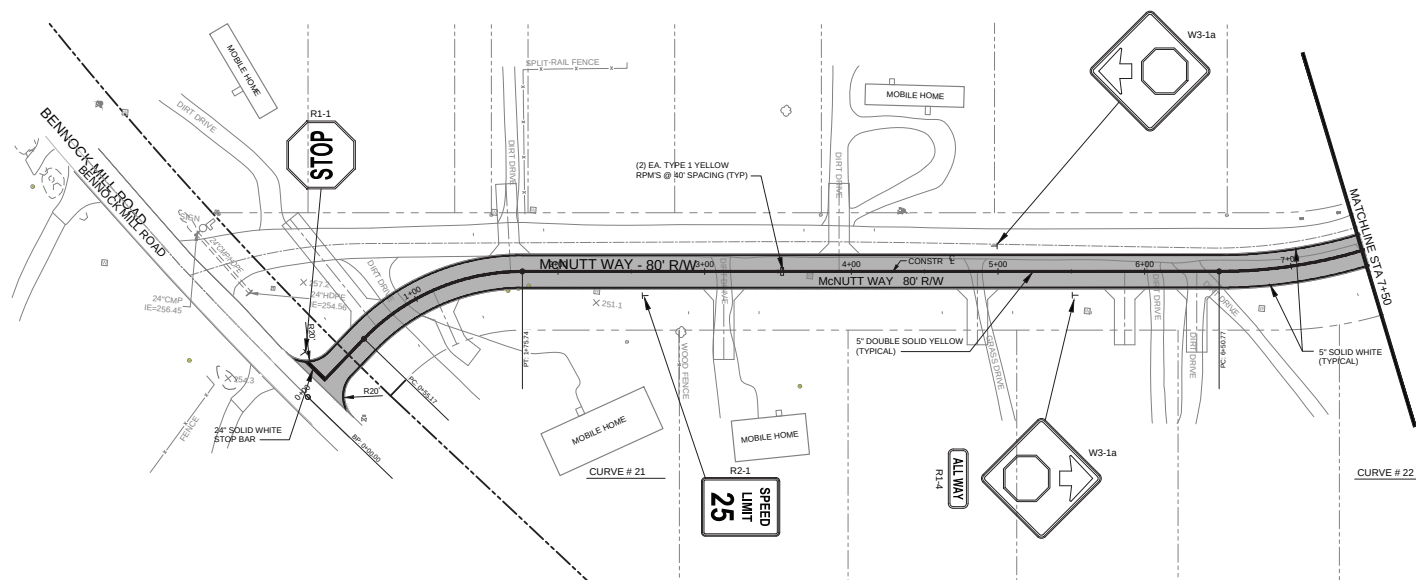
SIGNING AND MARKING PLANS

McNUTT ROAD
100+50 to END

DRAWING
NUMBER

26-0006

PROJECT: _____



HORIZONTAL SCALE: 1" = 40'



Moreland Altobelli
Associates, LLC
327 Deltapoint Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

DESIGNED BY	NAME	DATE
DRWN	NAA	02-24-20
CHECKED BY	KEO	02-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

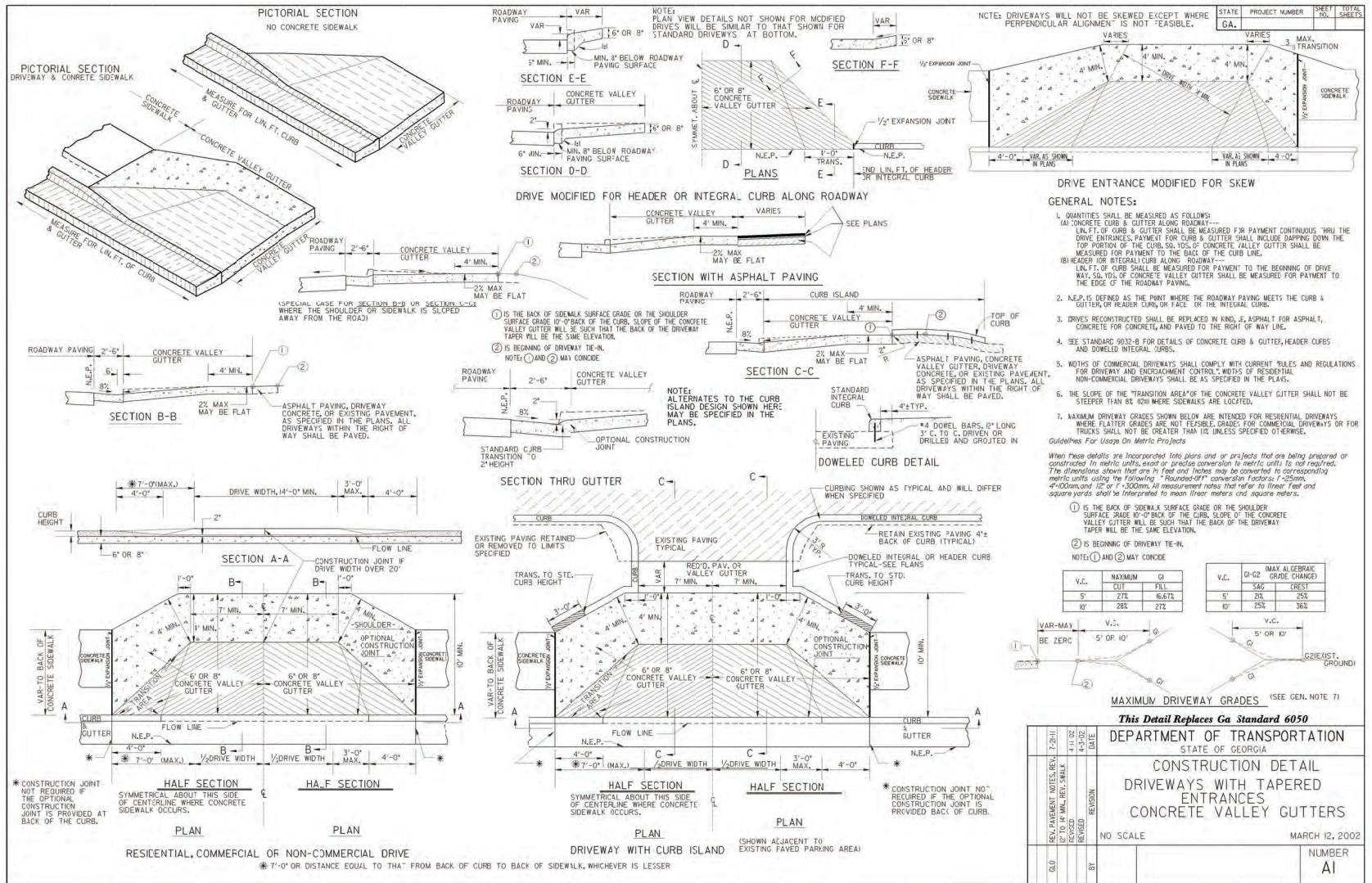
REVISION DATES

SIGNING AND MARKING PLANS

McNUTT WAY
0+00 to END

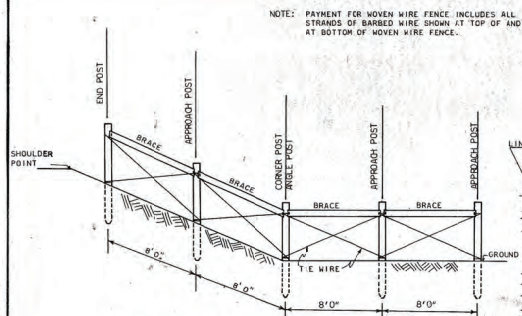
DRAWING
NUMBER
26-0007

7/2/2017 2:16:20 PM \\100007201\00007201\00007201\00007201.dwg g:\00007201\00007201.dwg 4:25:41 PM 93 709



7/2/2017 2:16:20 PM \\100007201\00007201\00007201\00007201.dwg g:\00007201\00007201.dwg 4:25:41 PM 93 709

STATE	FED. AID	PER. NO.	SHEET NO.	TOTAL SHEETS
CA.				



DETAIL OF FENCE BRACING WHEN APPROACHING FILL SLOPE OR ON ANGLE GREATER THAN 15°

GENERAL NOTES:

1. FENCE MAY BE ANGLED TO EDGE OF CULVERTS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE DESIGNATION OF THIS DETAIL ON THE PLANS WILL BE ON THE BASIS OF A SAFETY EVALUATION.
2. A CHANGE IN TYPE MATERIAL FOR LINE POST CONSTRUCTION WILL ONLY BE ALLOWED AT NATURAL BREAKS IN THE FENCE LINE SUCH AS GRADE SEPARATIONS, INTERCHANGES, AND BRIDGES.

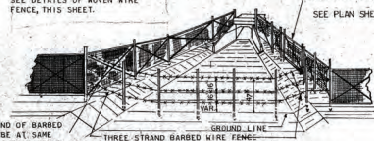
TIMBER POST NOTES:

1. DIMENSIONS SHOWN AS DIAMETERS OF ROUND POSTS ALSO APPLY TO EDGE WIDTH OF SQUARE POSTS.
2. AT ABUTMENT CHANGES IN GRADE, STAPLE EVERY LINE WIRE.
3. TIMBER POSTS TO BE SET BY DRIVING OR DRILLING POST HOLES.
4. USE 9 GAUGE GALVANIZED STAPLES - 1 1/2" LONG FOR TIMBER POSTS AT APPROACH POST, STAPLE EVERY LINE WIRE IN TOP HALF AND ALTERNATE LINE WIRES IN BOTTOM HALF. SEE STAPLING DETAIL.
5. ALL TIMBER POSTS AND BRACING ARE TO BE SEASONED AND PRESERVATIVE TREATED IN ACCORDANCE WITH SECTION 863 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR WILL BE ALLOWED TO SUBSTITUTE 4 INCH NOMINAL DIMENSION LINE POSTS FOR THE DETAILS.
7. STUDDED STEEL "T" LINE POSTS MAY BE USED WITH WOODEN PULL, CORNER, END, APPROACH, AND ANGLE POSTS.
8. SQUARE WOODEN LINE POSTS CAN BE USED IN COMBINATION WITH ROUND WOODEN PULL, CORNER, END, APPROACH, AND ANGLE POSTS.

STEEL POST NOTES:

1. SET PULL, CORNER, END AND APPROACH POST IN CONCRETE.
2. SECURE EVERY LINE WIRE AT STEEL CORNER, END, ANGLE AND PULL POSTS AT STEEL LINE POSTS FASTEN EVERY LINE WIRE IN TOP HALF OF FENCE, ALTERNATE LINE WIRES IN BOTTOM HALF.

SEE DETAILS OF WOVEN WIRE FENCE, THIS SHEET.



TOP STRAND OF BARBED WIRE TO BE AT SAME HEIGHT AS TOP STRAND OF WIRE IN WOVEN WIRE FENCE.

DETAIL SHOWING PLACEMENT OF THREE STRAND BARBED WIRE FENCE

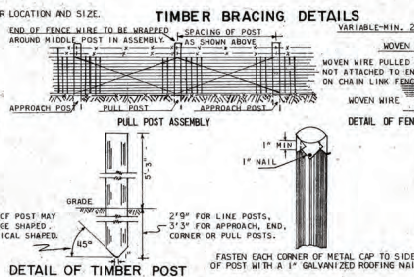
NOTE: THREE STRAND BARBED WIRE FENCE IS NOT INTENDED FOR GENERAL USE AS PASTURE FENCING. SEE CONSTRUCTION DETAILS FOR FOUR AND FIVE STRAND BARBED WIRE FENCE WHERE NEEDED.

POINT OF POST MAY BE WEDGE SHAPED, OR CONICAL SHAPED.

DETAIL OF TIMBER POST

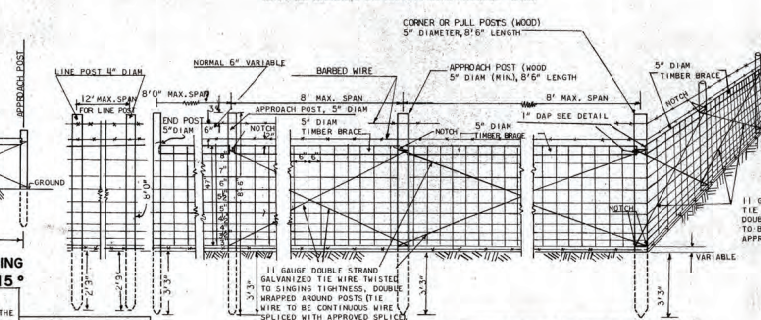
2 1/2" FOR LINE POSTS, 3 1/2" FOR APPROACH, END, CORNER OR PULL POSTS.

METHOD OF PLACING METAL CAP ON WOODEN FENCE POSTS

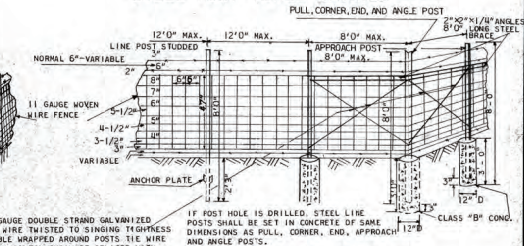


TIMBER POST FENCE DETAILS

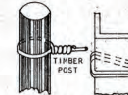
NOTE: ALL DIMENSIONS ARE MINIMUM UNLESS OTHERWISE NOTED.



STEEL POST FENCE DETAILS

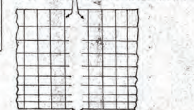


PULL, CORNER, END, APPROACH, AND ANGLE POSTS

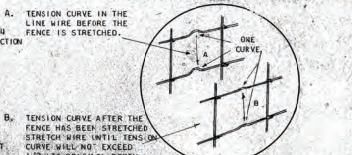


METHOD OF SECURING WIRE STRANDS OF FENCE AT END CORNER ANGLE AND PULL POST

THESE STAY WIRES TO BE REMOVED-FENCE TO BE SECURED WITH APPROVED SPLICE

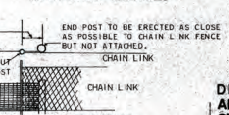


STUDDERED "T" SECTION LINE POST



DETAIL OF TENSION CURVE

STAPLING DETAILS



DETAIL OF CLAMP TO BE USED WITH ANGLE & PULL ASSEMBLIES WHERE STEEL POSTS ARE USED

SEE DETAILS ABOVE LEFT FOR CURVES

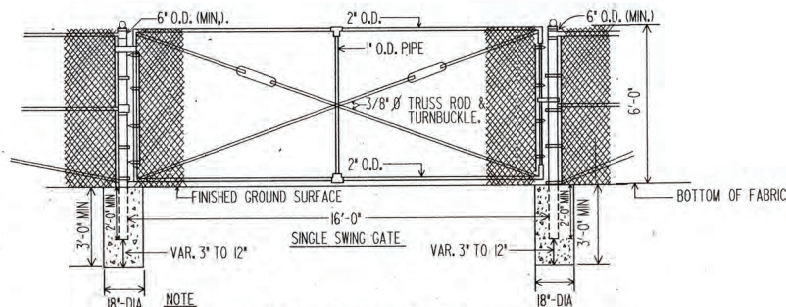
SKETCH INDICATING FENCE LOCATION AT SECTIONS OF NO FRONTAGE ROADS (REFER TO DETAIL PLANS FOR LOCATION OF FENCING FOR PROJECTS WITH FRONTAGE ROADS).

CONSTRUCTION DETAILS WOVEN WIRE FENCE

REVISED AND RE-DRAWN 9-29-76

STATE	PROJECT NUMBER	SERIES NO.	TOTAL PROJECTS
GA.			

NOTE:
WHERE CHAIN LINK WIRE FENCE HAS BARBED
WIRE, GATE SHALL ALSO REQUIRE BARBED
WIRE BUT WITH VERTICAL EXTENSION ARMS
ON THE GATE AND GATE POST UNLESS
SPECIFIED OTHERWISE..

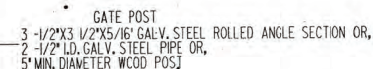
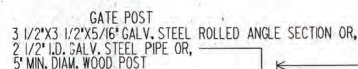
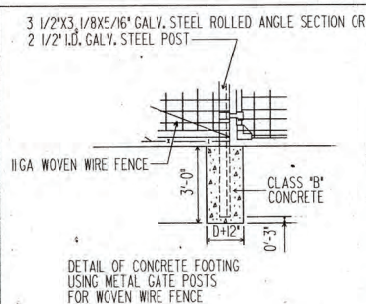
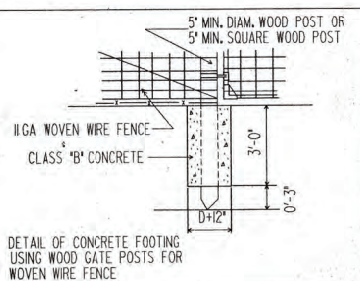


GATE FOR CHAIN LINK FENCE

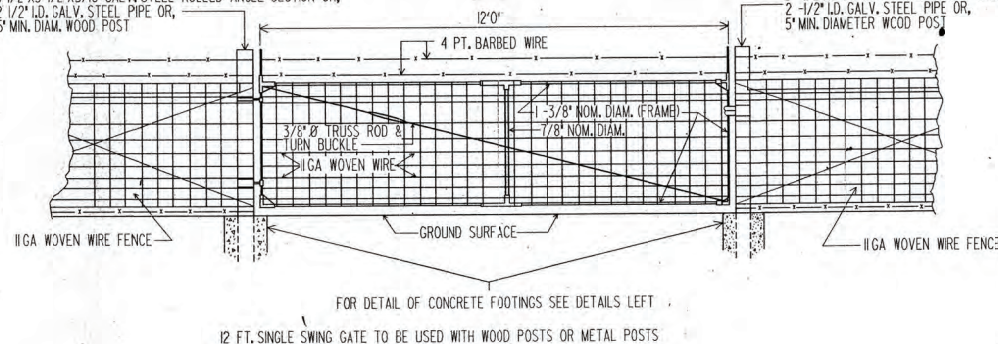
18"-DIA

NOTE

FITTINGS INCLUDING HINGES AND LATCHES, FOR GATES SHALL MEET THE APPROVAL OF THE ENGINEER AND THE REQUIREMENTS OF THE SPECIFICATIONS.



GATE FOR WOVEN WIRE FENCE



GATE: (WOVEN WIRE FENCE)

GATE POSTS: (WOVEN WIRE FENCE)

- 1- 1- 3/8" NOM. DIAMETER GALV. STEEL FRAME (12' X 4')
- 2- 7/8" NOM. DIAMETER GALV. STEEL CENTER BRACE
- 3- 3/8" & GALV. TRUSS-ROD & TURNBUCKLE
- 4- FABRIC IS TO BE WRAPPED AND TIED AROUND ENDS OF FRAME AND ATTACHED TOP AND BOTTOM WITH APPROVED FABRIC FASTENERS.
- 5- FITTINGS INCLUDING HINGES AND LATCHES, FORGATES SHALL MEET THE APPROVAL OF THE ENGINEER AND THE REQUIREMENTS OF THE MATERIAL SPECIFICATIONS.

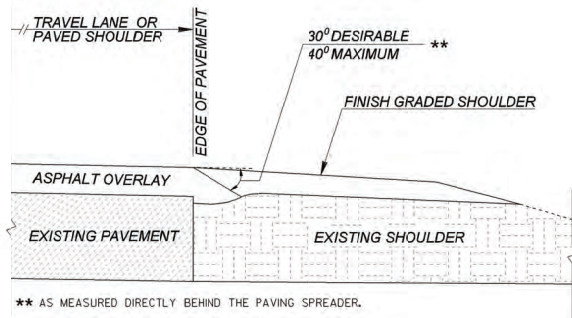
- 1- 3 - 1/2"x3 1/2"x5/16 GALV STEEL ROLLED ANGLE SECTION OR
1 - 1/2"x12 GALV STEEL PIPE OR
5 MIN. DIAM. 1/4" WOOD OR
5 MIN. SQUARE WOOD.
- 2- TYPE OF GATE POSTS TO BE USED IS SELECTED BY
CONTRACTOR. WOOD GATE POSTS ARE TO BE USED
IF CONTRACTOR ELECTS TO USE WOOD FENCE POSTS.
METAL GATE POSTS IF CONTRACTOR ELECTS TO USE
METAL FENCE POSTS.
- 3- GATE REMAINS AS SHOWN ON DETAIL FOR
FENCE WITH WOOD POST OR FENCE WITH
METAL POSTS.

	DATE	DEPARTMENT OF TRANSPORTATION	
		STATE OF GEORGIA	
	REGION	GATE-DETAILS FOR	
		CHAIN LINK & WOVEN WIRE FENCE	
		NO SCALE	JAN. 1988
REV. RMU			
DRW. AS			
TRA. —			
CHK. RMU			



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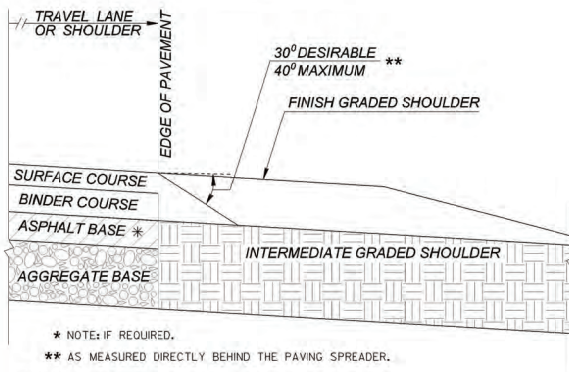
ASPHALT PAVEMENT - OVERLAY



ADDITIONAL QUANTITIES:
DEPTH OF OVERLAY (T), NO RUTTING
(T)² (IN.) X 0.000441 TN/IN.-FT X LENGTH (FT) = _____ TN

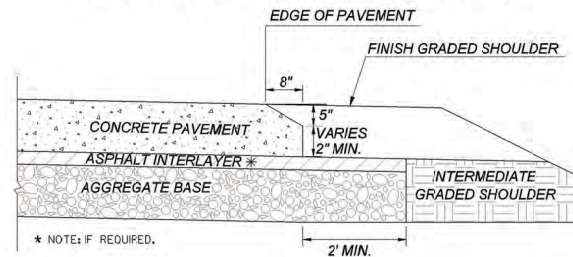
$$(T)^2 (\text{IN.}) \times 0.00041 \text{ TN/IN.-FT} \times \text{LENGTH (FT)} + (T) (\text{IN.}) \times 0.000882 \text{ TN/IN.-FT} \times \text{LENGTH (FT)} = \text{_____ TN}$$

ASPHALT PAVEMENT - NEW



ADDITIONAL QUANTITIES:
SURFACE COURSE PAVING DEPTH (T)
(T)² (IN.) X 0.000441 TN/IN.-FT X LENGTH (FT) = _____ TN

**PLAIN PC CONCRETE PAVEMENT
OR ROLLER COMPACTED CONCRETE PAVEMENT**

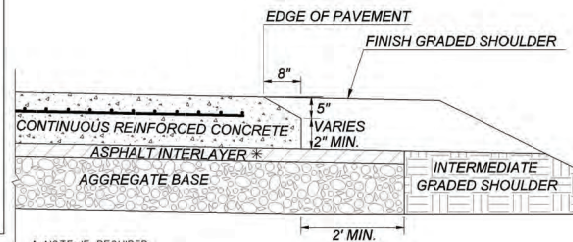


ADDITIONAL QUANTITIES:
CONCRETE
 $0.07407 \text{ SY/FT} \times \text{LENGTH (FT)} = \underline{\hspace{2cm}} \text{ SY}$

ASPHALT INTERLAYER, IF REQUIRED
 $(\text{TI IN.} \times \text{LENGTH (FT)} \times 0.004074 \text{ TN/IN.-FT} = \underline{\hspace{2cm}} \text{ TN}$

AGGREGATE BASE (BASED ON 2.07 TN/CY)
 $(\text{TI IN.} \times \text{LENGTH (FT)} \times 0.0042592 \text{ TN/IN.-FT} = \underline{\hspace{2cm}} \text{ TN}$

CONTINUOUS REINFORCED CONCRETE PAVEMENT



ADDITIONAL QUANTITIES:
CONCRETE
0.07407 SY/FT X LENGTH (FT) = _____ SY

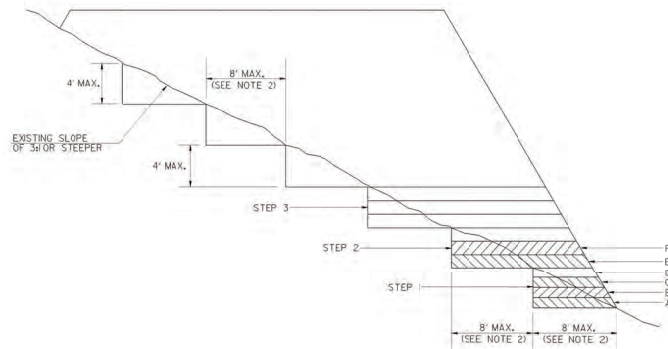
ASPHALT INTERLAYER, IF REQUIRED
(T) IN. X LENGTH (FT) X 0.004074 TN/IN.-FT = _____ TN

AGGREGATE BASE (BASED ON 2.07 TN/CY)
(T) IN. X LENGTH (FT) X 0.0042592 TN/IN.-FT = _____ TN

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		SAIL	
CONSTRUCTION DETAIL PAVEMENT EDGE TREATMENT ASPHALT AND CONCRETE PAVEMENT			
NO SCALE		SEPTEMBER 2011	
TC	BY	DES. B.A.S. DWG. C.O.G. CHK. C.O.G. REV. B.A.S.	NUMBER P-7

6/18/2009 1:34:20 PM \\S0017-001\609\071001\pa_1111.dwg pcf.gwgnr v:\S001\REVISED 5-7-13-F.pcf 00-001

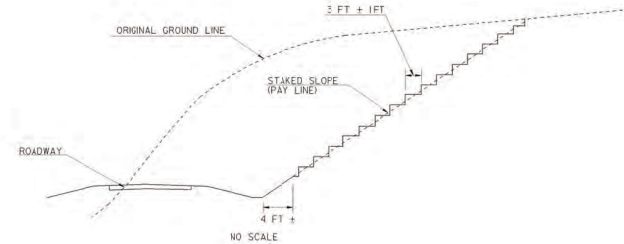
BENCHING DETAIL



NOTES :

1. WHERE THE EMBANKMENT IS TO BE PLACED ON A HILLSIDE OR ANOTHER EXISTING EMBANKMENT HAVING A SLOPE OF 3 TO 1 OR STEEPER, THE FOUNDATION MUST BE BENCHED WHILE THE EMBANKMENT IS BEING MADE (SEE DIAGRAM ABOVE).
2. THE DIAGRAM SHOWS THAT BEFORE LAYER "A" IS PLACED THE FIRST STEP (D) IS CUT INTO THE SLOPE. A MAXIMUM DISTANCE OF ABOUT 8 FEET (ABOUT 2x THE WIDTH OF THE TYPICAL D-B BULLDOZER BLADE), SUCCESSIVE LAYERS B, C, AND D ARE THEN PLACED BEFORE LAYER "A" IS PLACED. THE SECOND STEP IS CUT 8 FEET INTO THE SLOPE AND SUCCESSIVE LAYERS ARE AGAIN PLACED. IF IT IS ANTICIPATED THAT THE VERTICAL PART OF THE STEP WILL EXCEED 4 FEET IF A 3 FEET HORIZONTAL CUT IS MADE, THEN THE ACTUAL CUT STOPS WHEN THE VERTICAL PART REACHES A MAXIMUM OF 4 FEET ALLOWING THE HORIZONTAL DISTANCE TO VARY.
3. THE PROCESS OF BENCHING IS CONSIDERED INCIDENTAL TO THE ITEM OF UNCLASSIFIED EXCAVATION AND BORROW OR GRADING COMPLETE IN CONSTRUCTION OF THE EMBANKMENT AND NO ADDITIONAL MEASUREMENT OF QUANTITY OR PAYMENT WILL BE MADE FOR BENCHING.

SERRATED SLOPE DETAIL



NOTES :

1. SLOPES STEEPER THAN 3:1 SHALL BE SERRATED.
2. WIDTH OF STEP SHALL BE 3 FT ± 1 FT.
3. HEIGHT OF STEP IS A FUNCTION OF WIDTH AND STAKED SLOPE.
4. TREAD OF STEP SHALL BE APPROXIMATELY HORIZONTAL.
5. SERRATED SLOPES SHALL BE USED ON ALL PROJECTS IN DISTRICTS 1, 6, AND 7, EXCEPT WHERE SPECIFICALLY EXCEPTED BY THE GEOTECHNICAL BUREAU IN THE SOIL SURVEY REPORT. SERRATED SLOPES SHALL NOT BE USED IN DISTRICTS 2, 3, 4, AND 5, UNLESS REQUIRED BY THE SOIL SURVEY.

REVISED BENCHING DETAIL 6-16-09		DEPARTMENT OF TRANSPORTATION	
REVISED TITLE BLOCK		STATE OF GEORGIA	
REVISION		CONSTRUCTION DETAIL	
NO SCALE		SERRATED SLOPE DETAIL	
NO SCALE		BENCHING DETAIL	
JULY, 1981		NUMBER	
S-7			



Moreland Altobelli
Associates, LLC
327 Delonago Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	4-19-13
DRAWN BY	NAA	4-19-13
CHECKED BY	KEQ	4-19-13



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES

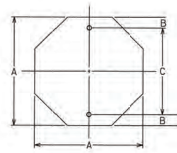
CONSTRUCTION DETAILS

McNUTT ROAD AND
McNUTT WAY

Drawing Number

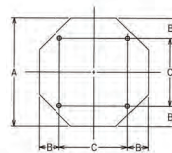
40-0006

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



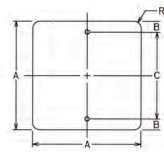
A	B	C
24	3	18
30	3	24
36	3	30

OCTAGON

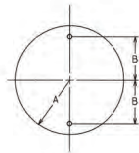


A	B	C
48	9	30

SQUARE

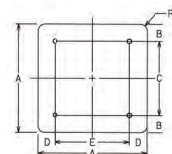


A	B	C	R
18	3	12	1 1/2
24	3	18	1 1/2
30	3	24	1 1/2



CIRCLE

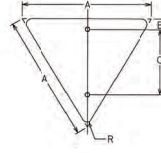
A	B
15	12
18	15



A	B	C	D	E	R
36	6	24	6	24	2 1/4
48	6	36	6	36	3

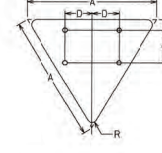
INTERSTATE SHIELD

A	B	C	D
24	24	3	18
30	24	3	18
36	36	6	24
45	36	6	24

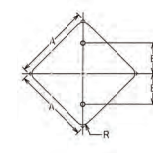


A	B	C	R
30	3	18	1 1/2
36	3	21	2
48	3	27	3

EQUILATERAL TRIANGLE



A	B	C	D	R
60	3	18	15	3



A	B	C	R
24	12	1 1/2	
30	15	1 1/2	
36	18	2 1/4	

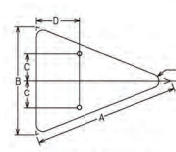
PENTAGON

A	B	C	R
30	21	3	1 1/8
36	24	3	2 1/4

DIAMOND

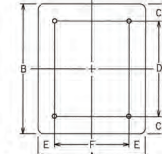
A	B	C	R
36	10	10	2 1/4
48	15	15	3
60	18	18	3 3/4

* FOR "WQ" POST ERECTION



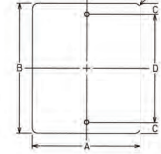
ISOSCELES TRIANGLE

A	B	C	D	R
40	30	7 1/2	12	1 1/8
48	36	9	15	2 1/4



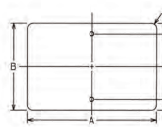
A	B	C	D	E	F	R
36	48	6	36	6	24	2 1/4
48	60	6	48	9	30	3

VERTICAL RECTANGLE



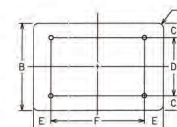
A	B	C	D	R
21	15	1 1/2	12	1 1/2
24	12	1 1/2	9	1 1/2
24	18	3	12	1 1/2
30	15	1 1/2	12	1 1/2
30	24	3	18	1 1/2
36	12	1 1/2	9	1 1/2
36	24	3	18	1 1/2
48	12	1 1/2	9	1 1/2
48	24	3	18	1 1/2

HORIZONTAL RECTANGLE



A	B	C	D	E	F	R
21	15	1 1/2	12	1 1/2		
24	12	1 1/2	9	1 1/2		
24	18	3	12	1 1/2		
30	15	1 1/2	12	1 1/2		
30	24	3	18	1 1/2		
36	12	1 1/2	9	1 1/2		
36	24	3	18	1 1/2		
48	12	1 1/2	9	1 1/2		
48	24	3	18	1 1/2		

HORIZONTAL RECTANGLE

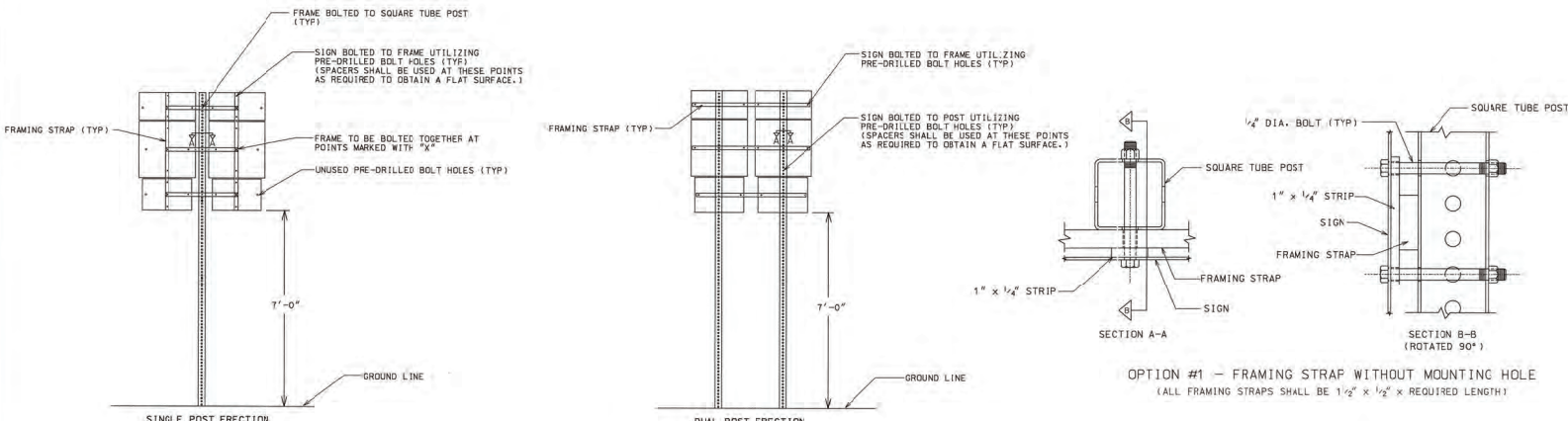


A	B	C	D	E	F	R
48	36	6	24	9	30	2 1/4
60	24	3	18	12	36	1 1/2
60	36	6	24	12	36	2 1/4

DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
		DETAILS OF SIGN PLATES
		NO SCALE JANUARY 2000

T-1

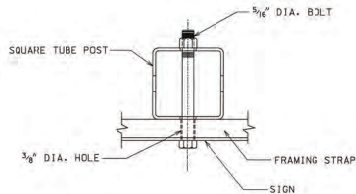
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



TYPICAL ASSEMBLY UNIT (BACK VIEW)

GENERAL NOTES:

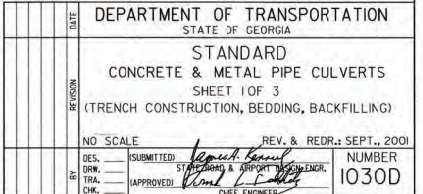
1. STYLE OF FRAMING IS OPTIONAL. ALTERNATE DESIGNS ARE ACCEPTABLE UPON APPROVAL OF THE ENGINEER. THE FRAME SHALL BE DESIGNED SO AS TO HOLD THE ASSEMBLY IN A STABLE POSITION.
2. FRAMING STRAPS SHALL BE GALVANIZED STEEL OR ALUMINUM.
3. STEEL SHALL BE A.S.T.M. DESIGNATION A-283, GRADE D, GALVANIZED IN ACCORDANCE WITH A.S.T.M. DESIGNATION A-123.
4. ALUMINUM SHALL BE ALLOY 6061-T6.
5. BOLTS, NUTS, WASHERS, AND SPACERS SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND/OR SPECIAL PROVISIONS.
6. FRAMING STRAPS ON A DUAL POST ERECTION SHALL NOT BE BOLTED TO THE POST.



OPTION #2 - FRAMING STRAP WITH MOUNTING HOLE
(ALL FRAMING STRAPS SHALL BE 2" x 1/2" x REQUIRED LENGTH)

DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC OPERATIONS DETAILS FOR TYPICAL FRAMING NO SCALE JANUARY 2000
3/31/90	CHANGED U-CHANNEL POST TO SQUARE TUBE #207	

T-2



MINIMUM CLASS OF CONCRETE OR MINIMUM THICKNESS OF STEEL AND ALUMINUM

FOR, METAL	THICKNESS	EQUIVALENT GAGE
STEEL	.064	16
	0.079	14
	0.109	12
	0.130	10
	0.168	8
ALUMINUM	0.060	16
	0.075	14
	0.105	12
	0.135	10
	0.164	8

IMPERFECT BACKFILL IS NOT REQUIRED FOR CONDITIONS SHOWN ON THE LEFT SIDE OF THE HEAVY LINE. USE NORMAL BACKFILL.	"10-1"	"10-4"	FOR CONDITIONS, TO THE RIGHT OF THE HEAVY LINE, CLASS V CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO DETAIL "A" OR "B" ON SHEET 10F 3.
--	--------	--------	--

STEEL 10R ALUM 1 DENOTES CORRUGATION PROFILE 2 2/3" X 1/2"

STEEL 2 OR ALUM 2 DENOTES CORRUGATION PROFILE 3" X 1" (OR 5" X 1" FOR STEEL PIPE ONLY)

ALL STEEL AND ALUMINUM PIPE SHALL BE LOCK-SEAM OR WELDED-SEAM (HELICAL) CONSTRUCTION.

MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD. MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

TRENCH CONSTRUCTION IS REQUIRED FOR CONDITIONS ON BOTH SIDES OF HEAVY LINE, SEE SHEET 1 OF 3.

FOR CONDITIONS TO RIGHT OF HEAVY LINE, CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO SPECIFICATIONS AND THIS STANDARD.

TABLE VALUES FOR ALUMINUM CORRUGATED PIPE (OR ALUMINUM SPIRAL RB PIPE) ARE COMPUTED BASED UPON ALCLAD ALLOY 3004-H34 HAVING MINIMUM YIELD STRENGTH, $f_y=24,000$ PSI. IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 ($f_y=20,000$ PSI), THE TABLE NO.1 ALLOWABLE FULL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:

A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 INCHES BECOMES 13.8

B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FEET BECOMES 29.7-34.0 FEET)

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

GEORGIA811
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Associates, LLC**
327 Dahlonega Street
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Cumming, Georgia 30040
Telephone (770) 781-5507



McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION DATES		

CONSTRUCTION DETAILS

McNUTT ROAD AND
McNUTT WAY

41-0002

TABLE NO. 1R ROUND PIPE - SPIRAL RIB STEEL - SPIRAL RIB ALUMINUM												
PIPE DIAMETER (INCHES)	TYPE	MINIMUM COVER (INCHES)	MINIMUM THICKNESS OF STEEL AND ALUMINUM HEIGHT OF FILL FEET ABOVE TOP OF PIPE									
			1-10	10-15	15-20	20-25	25-30	30-35	35-40	40-50	50-60	60-70
12												80-90
15												
18	STEEL R	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.079
	ALUM R	12	.060	.060	.060	.060	.060	.060	.075	.075		
24	STEEL R	12	.064	.064	.064	.064	.064	.064	.064	.079	.079	.109
	ALUM R	12	.060	.060	.060	.060	.075	.075	.105	.105		
30	STEEL R	12	.064	.064	.064	.064	.064	.064	.079	.079	.109	.109
	ALUM R	12	.060	.060	.060	.075	.075	.105	.105			
36	STEEL R	12	.064	.064	.064	.064	.064	.079	.079	.109	.109	
	ALUM R	18	.060	.060	.075	.075	.105	.105	.135	.135		
42	STEEL R	12	.064	.064	.064	.064	.079	.079	.109	.109	.109	
	ALUM R	21	.075	.075	.105	.105	.135	.135				
48	STEEL R	12	.064	.064	.064	.079	.079	.109	.109	.109		
	ALUM R	24	.105	.105	.135	.135	.165					
54	STEEL R	15	.064	.064	.064	.079	.079	.109	.109			
	ALUM R	24	.105	.105	.135	.165	.195					
60	STEEL R	15	.079	.079	.079	.079	.109	.109	.109			
	ALUM R	24	.105	.105	.135	.165	.195					
66	STEEL R	18	.079	.079	.079	.109	.109	.109	.109			
	ALUM R	24	.135	.135	.165	.195						
72	STEEL R	18	.109	.109	.109	.109	.109	.109				
	ALUM R	27	.135	.135	.165	.195						
78	STEEL R	21	.109	.109	.109	.109	.109					
	ALUM R	30	.165	.165	.195							
84	STEEL R	21	.109	.109	.109	.109	.109					
	ALUM R	30	.165	.165	.195							
90												
96												
102												
108												
114												
120												

R DENOTES SPIRAL RIB PROFILE 3/4" X 3/4" X 7-1/2"

TABLE VALUES FOR ALUMINUM SPIRAL RIB PIPE ARE COMPUTED BASED UPON ALCLAD ALLOY 3004-H34 HAVING MINIMUM YIELD STRENGTH, $f_y=24,000$ PSI. IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 ($f_y=20,000$ PSI), ALLOWABLE FILL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:

A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 IN. BECOMES 13.8 IN.)

B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FT. BECOMES 29.7-34.0 FT.)

MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD, MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

TRENCH CONSTRUCTION IS REQUIRED FOR ALL INSTALLATIONS.

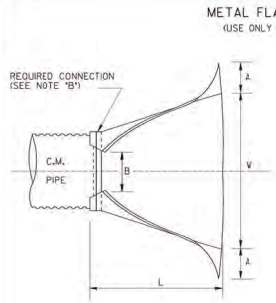
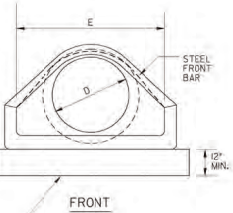
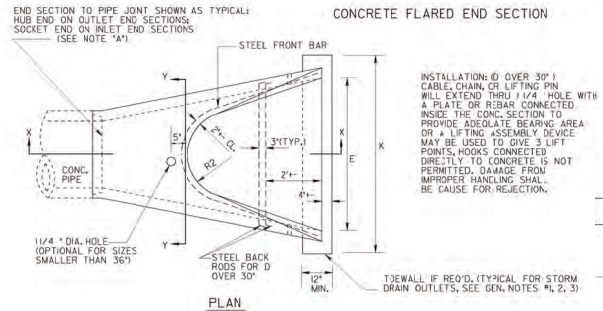
TABLE NO. 2 (PIPE-ARCH)									
TABLE SHOWING MINIMUM THICKNESS IN INCHES OF CORRUGATED STEEL AND ALUMINUM PIPE ABOVE THE TOP OF THE PIPE ARCH									
HEIGHT OF FILL FEET ABOVE THE TOP OF THE PIPE ARCH	NON-MIN. INCHES	MIN. THICKNESS INCHES	STEEL	ALUMINUM	MAX. HT. FEET	MIN. THICKNESS INCHES	STEEL	ALUMINUM	MAX. HT. FEET
15	17	13	.064	.060	10	.064	.060	.060	10
18	21	15	.064	.060	10	.064	.060	.060	10
21	24	18	.064	.060	10	.064	.060	.060	10
24	28	20	.064	.060	10	.064	.060	.060	10
30	35	24	.064	.060	10	.064	.060	.060	10
36	42	29	.064	.060	10	.064	.060	.060	10
42	49	35	.079	.075	10	.079	.075	.075	10
48	57	41	.079	.075	10	.079	.075	.075	10
54	64	43	.079	.075	10	.079	.075	.075	10
60	71	47	.079	.075	10	.079	.075	.075	10
66	78	52	.079	.075	10	.079	.075	.075	10
72	85	59	.079	.075	10	.079	.075	.075	10
78	92	66	.079	.075	10	.079	.075	.075	10
84	99	73	.079	.075	10	.079	.075	.075	10
90	106	80	.079	.075	10	.079	.075	.075	10
96	113	87	.079	.075	10	.079	.075	.075	10
102	120	94	.079	.075	10	.079	.075	.075	10
108	127	101	.079	.075	10	.079	.075	.075	10
114	134	108	.079	.075	10	.079	.075	.075	10
120	141	115	.079	.075	10	.079	.075	.075	10

NOTE FOR TABLE NO. 2: COMBINATIONS FOR PIPE-ARCHES, HAVING EQUAL PROPORTION TO THAT SHOWN, MAY BE SUBSTITUTED IF USED IN ACCORDANCE WITH SPECIFICATION.

DATE	DESIGNED	SEPT., 2001
REVISION	TRACED	NUMBER
	CHECKED	1030D
	REVISED	
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA STANDARD CONCRETE & METAL PIPE CULVERTS SHEET 3 OF 3 (FILL HEIGHTS FOR SPIRAL RIB METAL PIPE & FOR PIPE ARCH)		
NO SCALE	DESIGNED	SEPT., 2001
	TRACED	NUMBER
	CHECKED	1030D
	REVISED	

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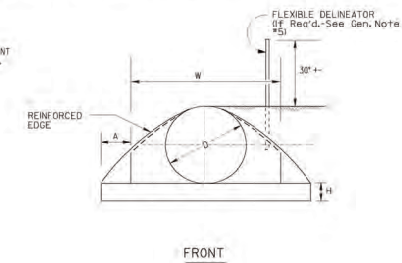
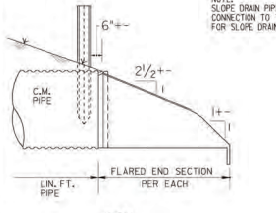
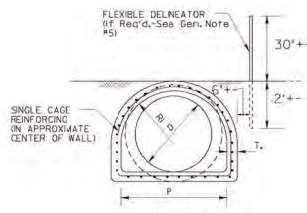
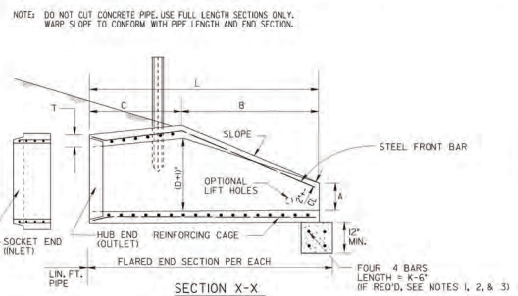
STATE	PROJECT	NUMBER	SHEET NO.	TOTAL SHEETS
GA.				



NOTE: GALVANIZED STEEL FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED STEEL PIPE AND ALUMINUM FLARED END SECTIONS ARE TO BE USED ONLY WITH CORRUGATED ALUMINUM PIPE UNLESS OTHERWISE APPROVED BY D.G.T. OFFICE OF MATERIALS AND TESTS.

FLARED END SECTION DIMENSIONS									
PIPE SIZE	THICKNESS	A	B	H	L	W			
12"	0.064"	0.060"	5"	6"	6"	18"	2'0"		
15"	0.064"	0.060"	6"	7"	6"	2'3"	2'6"		
18"	0.064"	0.060"	7"	8"	6"	2'6"	3'0"		
24"	0.064"	0.060"	9"	10"	6"	3'4"	4'0"		
30"	0.079"	0.060"	10"	13"	7"	4'2"	5'0"		
36"	0.079"	0.060"	12"	16"	9"	5'0"	6'0"		
42"	0.09"	0.064"	13"	19"	10"	5'0"	7'0"		

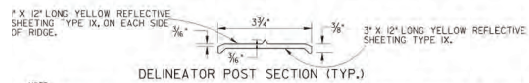
NOTE: WHERE METAL FLARED END SECTIONS ARE USED WITH MULTIPLE PIPE LINES, THE STANDARD SPACING BETWEEN PIPES (S-D) OR 3 FT. MAY HAVE TO BE INCREASED (S-L) TYPICALLY TO PREVENT OVERLAP OF END SECTION W/PIPIES. SEE ALSO STD-10000.



SPECIAL NOTE:
FLARED END SECTIONS ARE NORMALLY LIMITED TO USE OUTSIDE THE CLEAR ZONE OR BEHIND BARRIER AND WHERE HYDRAULICS PERMIT. SEE OTHER STANDARDS OR DETAILS FOR TAPERED HEADWALLS, SAFETY SLOPE END SECTIONS OR OTHER PIPE END STRUCTURES.

GENERAL NOTES :

1. TOWALLS ARE REQ'D. FOR OUTLETS OF CONC. STORM DRAINS, EXCEPT WHERE DITCH PAVING OR OTHER EROSION PROTECTION IS PROVIDED OR WHERE THE OUTLET VELOCITY IS LESS THAN 8 FT/SEC. TOWALLS ARE NOT REQUIRED FOR SIDE DRAINS, SLOPE DRAINS OR INLETS OF STORM DRAINS. THIS CRITERIA MAY BE VARIED WHERE SPECIFIED BY THE DESIGNER OR THE ENGINEER.
2. TOWALLS WILL BE PAD FOR AS CL. 40'S OF CLASS 'A' OR 'B' CONCRETE. CONTRACTOR MAY ELECT TO CONSTRUCT TOW. WALL WITH SAND CEMENT BAG RIPRAP OR STONE RIPRAP TO SAME MINIMUM DIMENSIONS WITH NO ADDITIONAL PAYMENT.
3. PRECAST TOWALLS SHALL BE CL. 40'S CONCRETE. CAST-IN-PLACE TOWALLS MAY BE CL. 40'S OR 'B' CONCRETE AND MAY BE TRENCH FORMED WHERE PLANS ITEMIZE ONE CLASS. IF CONCRETE AND CONTRACTOR ELECTS TO USE OTHER CLASS, NO ADDITIONAL PAYMENT IS MADE. NO PAYMENT IS MADE FOR STEEL IN TOWALL.
4. CENTERLINE OF FLARED END SECTION WILL ALIGN WITH CENTERLINE OF PIPE. IF PIPE IS SKEWED, THE EMBANKMENT SLOPE WILL BE VARIED TO CONFORM WITH END SECTION.
5. FLEXIBLE DELINEATORS SHALL BE REQUIRED AT CROSS DRAIN FLARED END SECTIONS, BOTH INLET AND OUTLET. PAYMENT FOR FLARED END SECTION WILL INCLUDE DELINEATORS. SEE DETAIL AND NOTES BELOW. DELINEATORS NOT REQ'D. FOR SIDE DRAIN, SLOPE DRAIN, OR LONG PIPE.



NOTE: DELINEATOR POST SHALL CONFORM TO SEC. 9109 FLEXIBLE DELINEATOR POST EXCEPT REFLECTIVE SHEETING IS NOT REQUIRED AND LENGTH IS 4'-6\"/>

SPECIAL NOTE :
PIPE SIZES (D) ARE NOMINAL MINIMUM INSIDE DIAMETERS IN ACCORDANCE WITH GEORGIA STANDARD FOR PIPE CULVERTS. 70\"/>

NOTE: *A*
CONTRACTOR WILL INFORM PRODUCER IF CONCRETE FLARED END SECTION IS FOR INLET OR FOR OUTLET END. SOCKET (TONGUE OR SPIGOT) END IS REQUIRED FOR INLETS. HUB GROOVE OR BELL END IS REQUIRED FOR OUTLETS. SOCKET TO SOCKET OR HUB TO HUB JOINT WILL NOT BE ACCEPTED UNLESS A REINFORCED CONCRETE COLLAR IS BUILT AROUND THE JOINT WITH NO PAYMENT BEING MADE FOR THE COLLAR. FLARED END SECTIONS SHALL BE JOINED TO PIPE WITH ALL SPACE IN THE JOINT FILLED WITH EITHER BITUMINOUS PLASTIC CEMENT OR PREFORMED PLASTIC GASKET (SEC. 840).

WALL THICKNESS (THIS SHOWN AS NOMINAL AND MAY BE INCREASED AT PRODUCER'S OPTION FOR D-SIZED JOINT DESIGN OR TO ALLOW A FLAT OUTSIDE BOTTOM ON THE FLARE, WITH INSIDE DIMENSIONS OF FLARE RETAINED AS SHOWN. T = PIPE WALL THICKNESS (0.08330 + P/4) TYPICAL.

DIMENSIONS AND REINFORCING FOR CONCRETE FLARED END SECTIONS (+/- TOLERANCE)									
PIPE DIA.	FRONT BAR	BACK RODS	SLOPE	A	B	C	D	E	F
12"	1-#3 x 5' 4"	NOT REQ'D.	2.2%	6"	2'0"	4'7"	6'1"	2'9"	18"
15"	1-#3 x 5' 4"	NOT REQ'D.	2.2%	5"	2'3"	3'0"	6'1"	2'9"	10"
18"	1-#3 x 7' 2"	NOT REQ'D.	2.2%	3"	2'3"	3'0"	6'1"	3'3"	2'5"
24"	1-#3 x 12' 0"	NOT REQ'D.	2.4%	0"	3'8"	2'8"	6'2"	4'0"	2'9"
30"	1-#4 x 8' 8"	NOT REQ'D.	2.4%	2"	4'6"	1'8"	6'2"	5'3"	3'7"
36"	1-#4 x 13' 0"	2-#4 x 6' 3"	2.4%	5"	5'9"	2'0"	8'2"	6'7"	4'0"
42"	1-#4 x 13' 0"	2-#4 x 7' 4"	2.4%	3"	5'3"	2'0"	8'2"	6'5"	4'6"

NOTE: SPECIFIED REINFORCING IS MINIMAL AND MAY BE INCREASED AT PRODUCERS OPTION TO AD. CASTING & HANDLING. ALTERNATE REINFORCEMENT PERMITTED IF APPROVED.

* NOTE: 'C' AND 'D' DIMENSION MAY BE MEASURED TO EITHER END OF JOINT CONNECTION AT PIPE.

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
STANDARD FLARED END SECTIONS FOR PIPES	
NC SCALE	REV. & REDR. SEPT., 1999
DES. (SUBMITTED) <i>[Signature]</i>	NUMBER 1120
REV. (STATE ROAD & AIRPORT DESIGN ENGINEER)	
CHK. (APPROVED) <i>[Signature]</i>	CHEF ENGINEER

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ROAD CONSTRUCTION PLANS

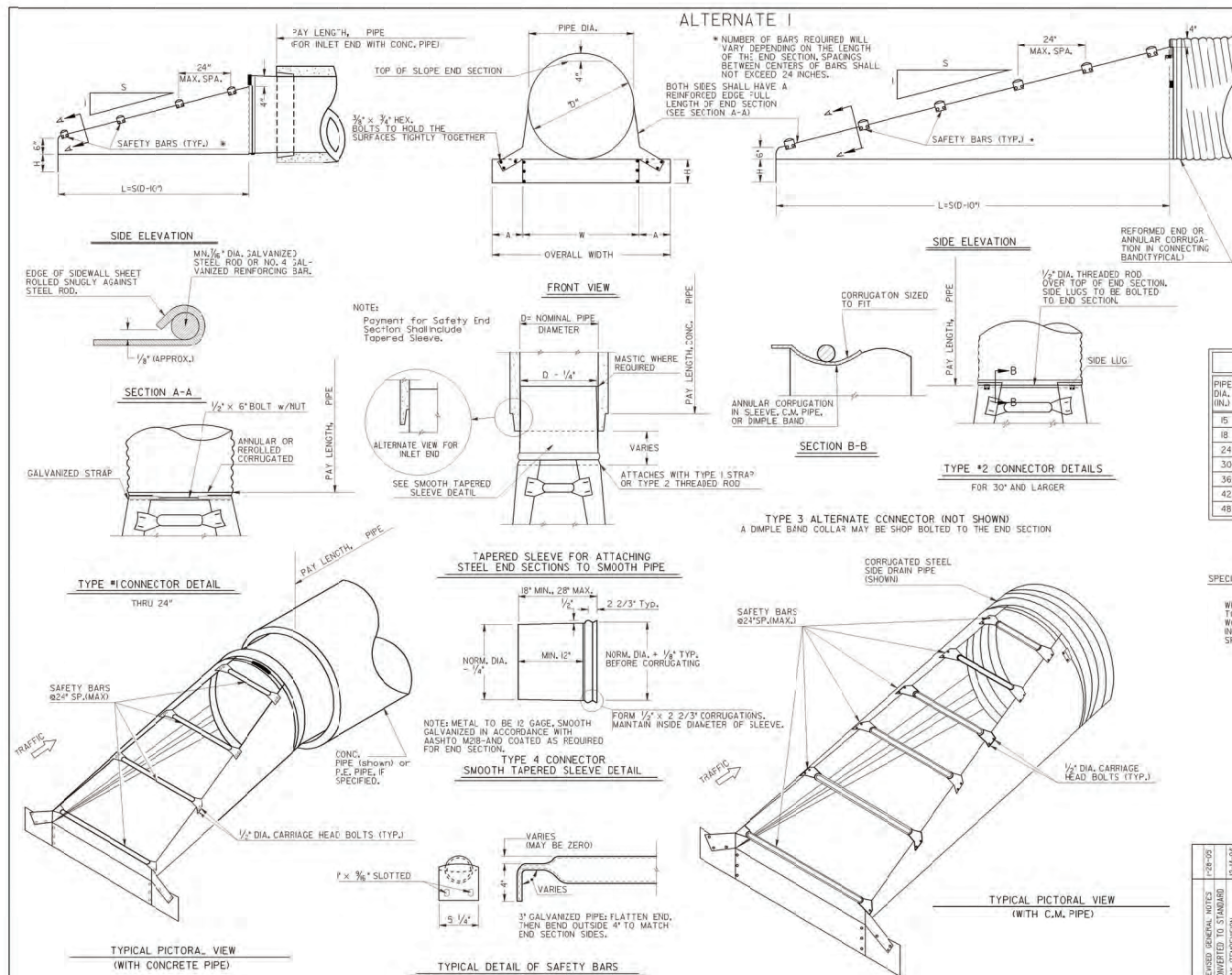
REVISION	DATE
1	4-18-03
2	4-18-03
3	4-18-03

CONSTRUCTION DETAILS

McNUTT ROAD AND
McNUTT WAY

41-0004

7/24/2005 10:09:54 AM by \\1990T-DSW\GORDON\GORDON - diff default not always 1 \\Standard\ExhibitA Standard 1-PRV\1127-1 not 00-ADD



STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEET
GA.			

GENERAL NOTES
ALTERNATE 1

GALVANIZED STEEL SHEET
USE GALVANIZED STEEL SHEET CONFORMING TO AASHTO M 218.

CONNECTORS
PAYMENT FOR END SECTION SHALL INCLUDE CONNECTION OF THE TYPE REQUIRED FOR THE SIDE DRAIN USED.

SAFETY BARS
SHALL BE 3" SCHEDULE 40 GALVANIZED STEEL PIPE, PIPE TO BE GALVANIZED AFTER FORMING. SAFETY BARS SHALL BE REQUIRED FOR ALL SAFETY END SECTIONS.

MISCELLANEOUS DETAILS
DETAILS OF CONSTRUCTION MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE MANUFACTURER'S REQUIREMENTS, SUBJECT TO APPROVAL BY THE D.O.T.'S LABORATORY. A SAMPLE MUST BE SUBMITTED TO THE P.S. SAFETY PRODUCT

PIPE DIA. (IN.)	SIZES, DIMENSIONS, AND THICKNESSES									
	MIL. THICK.		DIMENSIONS IN INCHES				DIMENSION			
			IN.	GAGE A	H	OVERALL THICKNESS (158)	FLANGE LENGTH (20)	LENGTH (20)	SLOPE (158)	LENGTH (158)
5	.664	16	8	6	21	37	44	20	61	30
8	.664	16	8	6	24	40	44	32	61	48
24	.664	16	8	6	30	43	48	56	61	84
30	.609	12	12	9	36	60	64	80	61	120
36	.609	12	12	9	42	66	64	104	61	156
42	.609	12	16	12	48	80	64	128	61	152
48	.609	12	16	14	54	86	64	152	61	228

*SEE STD. NO. 903IT FOR SLOPES
AT SIDE ROAD OR AT DRIVES.

SPECIAL NOTE:

WHERE THE LENGTH OF DITCH OR THE DISTANCE BETWEEN
TOE POINTS OF END SECTIONS ON SEPARATE INSTALLATIONS
WOULD BE LESS THAN 30 FT., CONTINUED S.D. PIPE WITH AN
INTERMEDIATE INLET OR OTHER ALTERNATE MAY BE
SPECIFIED INSTEAD.

DATE OF PLAN NOTES 10-16-98	DATE OF FIELD SURVEY 12-14-98	DEPARTMENT OF TRANSPORTATION					
		STATE OF GEORGIA					
PAY INFORMATION 11-08-98	PROJECT NO. NC200-23	STANDARD SAFETY END SECTION (METAL)					
CONTRACT NO. 210-000-71	SHEET NO. 24	(FOR SIDE RAMP PIPE-OR FOR STORM DRAIN PIPE PARALLEL TO MAINLINE)					
		ALTERNATE I					
NO SCALE							SEPT., 1998
G.W.	DRAWN BY R.A.H.	CHECKED BY T.R.A.	DESIGNED BY J.M.C.	SUBMITTED BY <i>B. Smith</i> STATE ROAD & AIRPORT DESIGN ENGINEER			NUMBER 1122
	R.A.H.	T.R.A.	J.M.C.	APPROVED BY <i>A. Smith</i>			SHEET 1 OF

[illegible]

ALTERNATE 2

END TREATMENT DIMENSIONS FOR ARCHED METAL PIPE					
PIPE DIA. (INCHES)	GAGE	SHEET THICKNESS (INCHES)	*45°SLOPE L DIMENSION	*61°SLOPE L DIMENSION	
17"x13"	6	.064"	1'-8"	2'-6"	
21"x5"	6	.064"	2'-4"	3'-6"	
24"x18"	16	.064"	3'-4"	5'-0"	
28"x20"	16	.064"	4'-0"	6'-0"	
35"x24"	14	.079"	5'-4"	8'-0"	
42"x29"	14	.079"	7'-0"	10'-6"	
49"x33"	14	.079"	8'-4"	12'-6"	
57"x38"	12	.109"	10'-0"	15'-0"	
64"x43"	12	.109"	11'-8"	17'-6"	
71"x47"	10	.138"	13'-0"	19'-6"	

* SEE STD. NO. 903IT FOR SLOPES AT SIDE ROAD OR AT DRIVES.

END TREATMENT DIMENSIONS FOR CIRCULAR METAL AND CIRCULAR CONCRETE PIPES				
PIPE DIA. (INCHES)	GAGE	SHEET THICKNESS (INCHES)	6" d/si. L/D DIMENSION	6" d/si. L/D DIMENSION
5"	16	.064"	2'-4"	3'-6"
18"	16	.064"	3'-4"	5'-0"
21"	16	.064"	4'-4"	6'-6"
24"	16	.064"	5'-4"	8'-0"
30"	16	.064"	7'-4"	11'-0"
36"	16	.064"	9'-4"	14'-0"
42"	14	.079"	11'-4"	17'-0"
48"	14	.079"	13'-4"	20'-0"
54"	14	.079"	15'-4"	23'-0"
60"	12	.091"	17'-4"	26'-0"

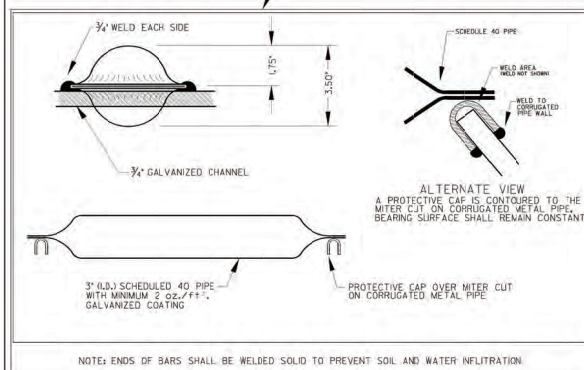
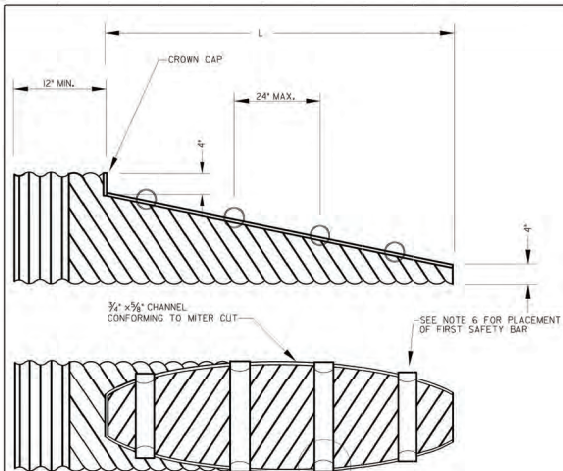
- SEE STD. NO. 903IT FOR SLOPES AT SIDE ROAD OR AT DRIVES.

GENERAL NOTE ALTERNATE 2:

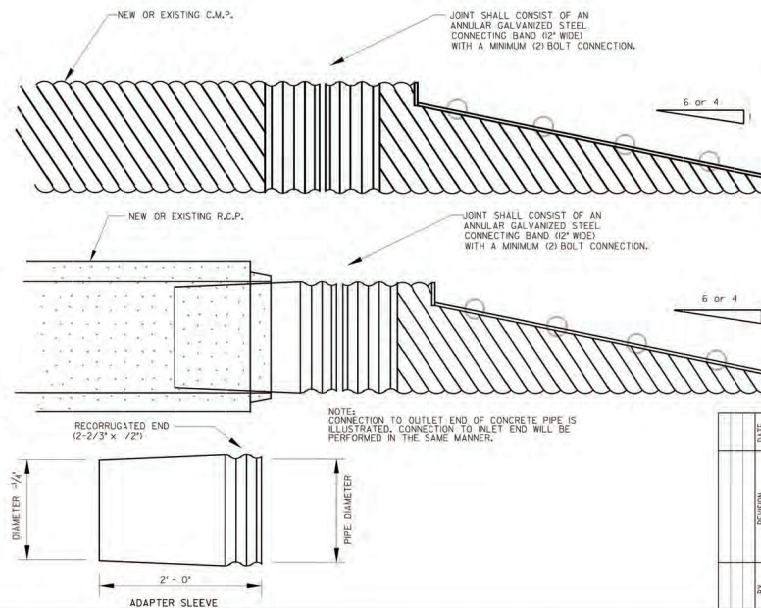
1. THE MATERIAL USED IN FABRICATION OF SLOPED END SECTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M 208 GALVANIZED STEEL.
2. SLOPED END SECTIONS SHALL BE FORMED FROM FULL CIRCLE PIPE. END SECTIONS MAY BE FORMED INTO PIPE ARCHES, WHERE SPECIFIED, AND SHALL MEET ALL REQUIREMENTS FOR FABRICATION, COATING AND OTHER FABRICATION REQUIREMENTS.
3. THE EXPOSED EDGE CUT ON THE TOP SHALL BE COVERED WITH A PROTECTIVE CAP OVERLAPPING THE TOP OF THE ARCH 3" NOT LESS THAN 4" ON EACH SIDE. THE CAP SHALL BE ENCASED WITH A PROTECTIVE CAP OVERLAPPING EACH SIDE OF THE CUT BY NOT LESS THAN 4". THE PROTECTIVE CAP IS TO BE THE SAME MATERIAL AS THE PIPE AND MINIMUM 1/8" THICK. THE JOINTS FROM THE TOP OF THE ARCH TO THE JOINTS ALTERNATING FROM SIDE TO SIDE OF THE CAP AT 4" INCH INTERVALS, SHALL BE REPAIR WITH A PROTECTIVE CAP. REPAIRS OF GALVANIZED STEEL SHALL BE IN ACCORDANCE WITH SPACING STANDARD SPECIFICATIONS SECTION 645.
4. CONNECTIONS OF GALVANIZED STEEL END TREATMENTS TO CORRUGATED ALUMINUM OR ALUMINUM PIPE SHALL BE MADE BY WELDING TO GALVANIZED STEEL BAND MEETING THE REQUIREMENTS OF AASHTO M 256. 84.
5. ADAPTED GLEVE IS TO BE OF CONSTRUCTED OF GALVANIZED STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M 208, MINIMUM 1/8" GAGE (109) MATERIAL.
6. BOTTOM SAFETY BAR SHALL HAVE A MAXIMUM CLEARANCE OF 9" WHEN MEASURED FROM THE BOTTOM OF THE INSTALLED BAR TO INSIDE CREST OF PIPE CORROGATION.

SPECIAL NOTE:

WHERE THE LENGTH OF DITCH OR THE DISTANCE BETWEEN TOE POINTS OF THE END SECTION ON SEPARATE INSTALLATIONS WOULD BE LESS THAN 30 FT., CONTINUED S.D. PIPE WITH AN INTERMEDIATE INLET OR OTHER ALTERNATE MAY BE SPECIFIED INSTEAD.



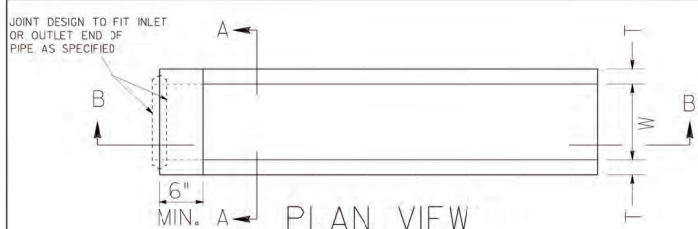
NOTE: ENDS OF BARS SHALL BE WELDED SOLID TO PREVENT SOIL AND WATER INFILTRATION



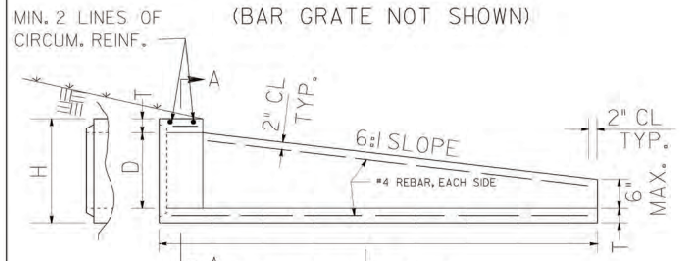
NOTE:
CONNECTION TO OUTLET END OF CONCRETE PIPE IS
ILLUSTRATED. CONNECTION TO INLET END WILL BE
PERFORMED IN THE SAME MANNER.

	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		STANDARD SAFETY END SECTION (METAL) (FOR SIDE DRAIN PIPE-OR FOR STORM DRAIN PIPE PARALLEL TO MAINLINE) ALTERNATE 2	
	SECTION	NO SCALE	JAN. 2005
	BY	DESIGNED DRAIN THROAT CHECKED APPROVED: <i>[Signature]</i> STATE ROAD & AIRPORT DESIGN ENGINEER	NUMBER 1122 SHEET 2 OF 3

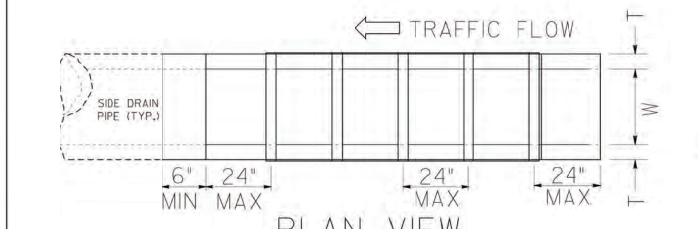
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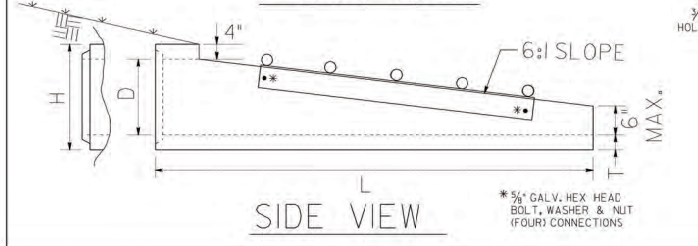
PLAN VIEW
(BAR GRATE NOT SHOWN)



SECTION B-B



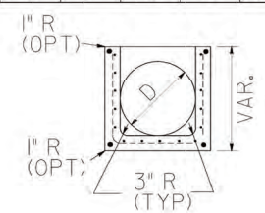
PLAN VIEW



SIDE VIEW

ALTERNATE 3

PIPE DIA	T (MIN)	D	H	L
15"	3"	15"	21"	4'-5"
18"	3"	18"	24"	6'-0"
24"	3"	24"	30"	9'-0"
30"	4"	30"	38"	12'-6"
36"	4"	36"	44"	15'-6"
42"	4"	42"	50"	18'-6"
48"	5"	48"	58"	22'-0"



SECTION A-A

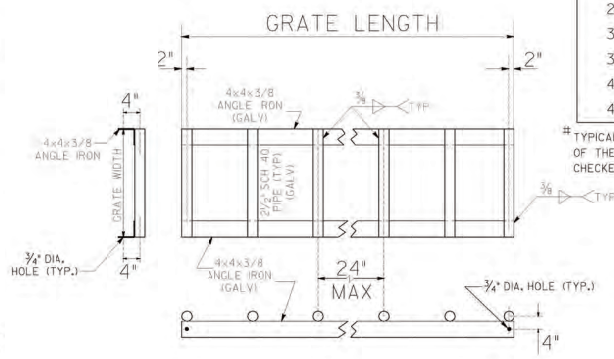
GENERAL NOTES:

1. CONCRETE STRENGTH SHALL BE 4000 PSI MINIMUM
2. REINFORCING SHALL BE PER AASHTO M170, CLASS II REINFORCED CONCRETE PIPE, PLUS ONE #4 BAR TOP AND BOTTOM, EACH SIDE.
3. WALLS MAY HAVE 1/4" TAPER. WALL THICKNESSES SHOWN ARE THE MINIMUM.
4. LIFT HOLES MAY BE PROVIDED IN THE SIDE WALLS FOR HANDLING.
5. END SECTION JOINT WILL BE A MATCHED FIT TO THE ADJOINING PIPE JOINT AT ALL INLET AND OUTLET ENDS. NON-FITTING JOINTS WILL REQUIRE A BUILT-IN-PLACE REINFORCED COLLAR CONNECTION WITH NO ADDITIONAL PAYMENT.
6. ALL END SECTIONS FOR PIPES WITH "D" OVER 24" ON SINGLE LINES WILL HAVE GALV. SAFETY BARS, SPACED NOT MORE THAN 24" ON CENTERS, AND INSTALLED PERPENDICULAR TO THE MAINLINE TRAFFIC FLOW. ALL END SECTIONS FOR MULTIPLE LINE PIPES WILL HAVE GRATES.
7. TYPICAL USE OF SAFETY END SECTIONS IS AT THE ENDS OF PIPES UNDER DRIVEWAYS OR SIDEROADS WHERE THE PIPE CULVERT IS PARALLEL TO THE MAINLINE AND FALLS INSIDE THE MAINLINE CLEAR ZONE WIDTH.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

D	(MIN) GRATE LENGTH	GRATE WIDTH (TYP) #
15"	2'-4"	1'-9 5/8"
18"	2'-4"	2'-0 5/8"
24"	6'-4"	2'-6 5/8"
30"	8'-6"	3'-2 5/8"
36"	12'-4"	3'-8 5/8"
42"	14'-6"	4'-2 5/8"
48"	18'-4"	4'-10 5/8"

* TYPICAL GRATE WIDTHS SHOWN ARE MEASURED FROM INSIDE TO INSIDE OF THE 3/8" THICK ANGLE IRON. GRATE FIT WITH END SECTION SHALL BE CHECKED BEFORE DELIVERY.



GALVANIZED SAFETY GRATE DETAIL

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
STANDARD SAFETY END SECTION (CONCRETE) (FOR SIDE DRAIN PIPE-OR FOR STORM DRAIN PIPE PARALLEL TO MAINLINE) ALTERNATE 3	
NO SCALE	OCT., 2000
DESIGNED BY: [Signature] DRAWN BY: [Signature] CHECKED BY: [Signature]	SUBMITTED BY: [Signature] STATE ROAD & AIRPORT DESIGN ENGINEER APPROVED BY: [Signature] CHIEF ENGINEER
NUMBER 1122	SHEET 3 OF 3



MA
MORELAND ALTABELLI
— AN ATLAS COMPANY —

Moreland Altobelli Associates, LLC
327 Delmonico Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

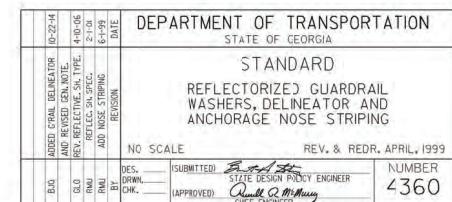


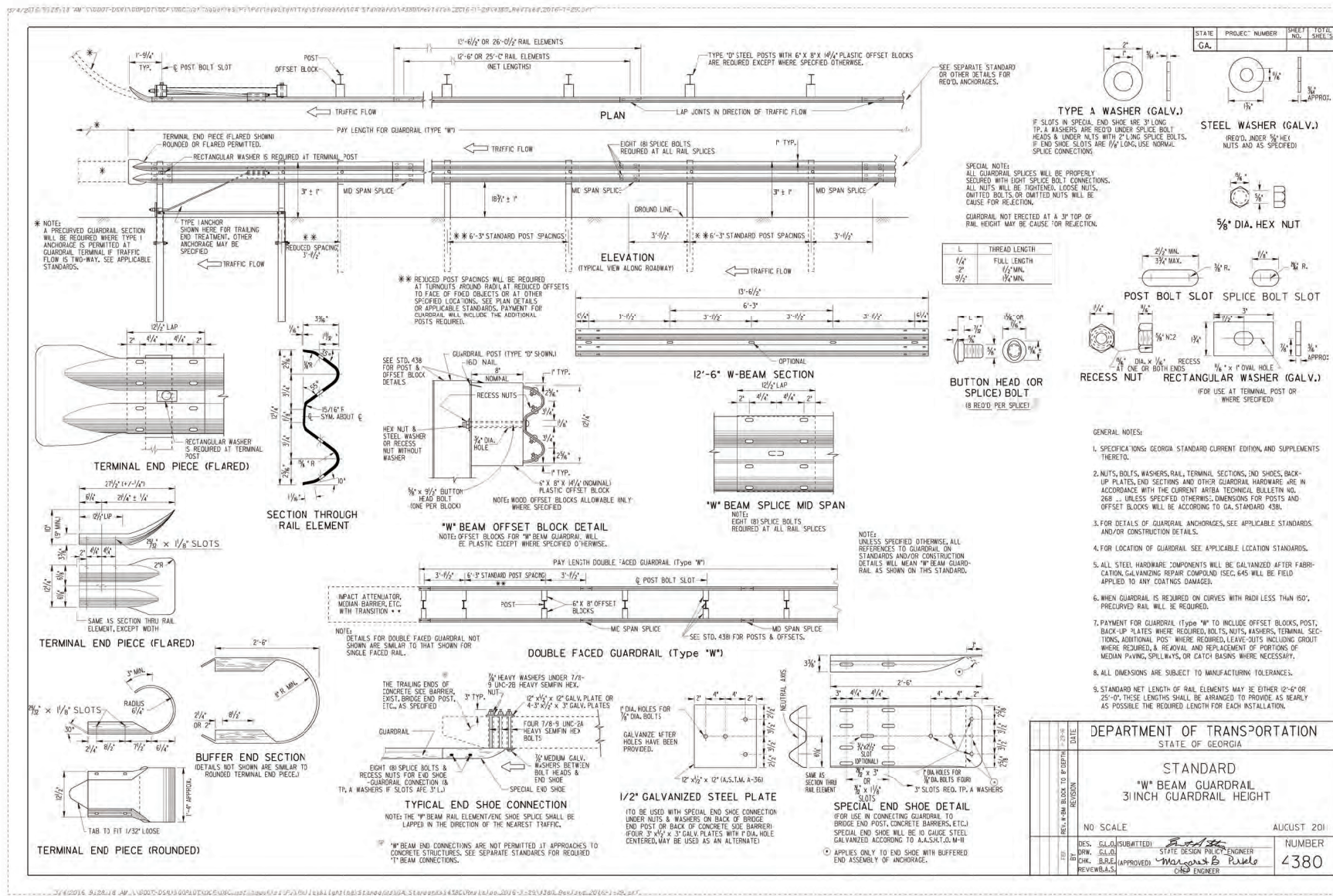
McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES

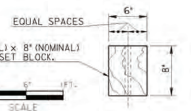
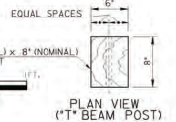
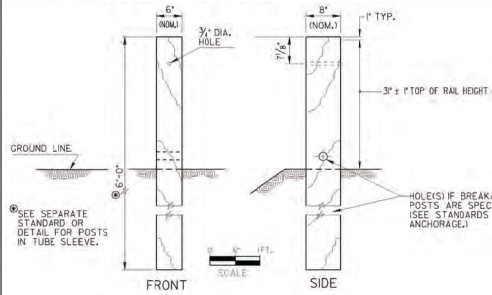
CONSTRUCTION DETAILS

McNUTT ROAD AND
McNUTT WAY





TYPE A WOOD POST (FOR "W" BEAM GUARDRAIL)
NOTE: WOOD POST ARE ALLOWABLE ONLY WHERE SPECIFIED.



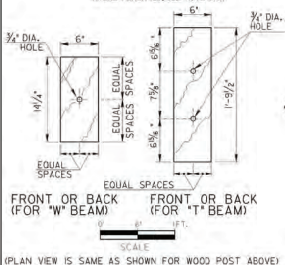
PLAN VIEW
(FOR "W" BEAM
OFFSET BLOCK)

WOOD POSTS AND WOOD OFFSET BLOCKS
MAY BE ROUGH OR SURFACED.

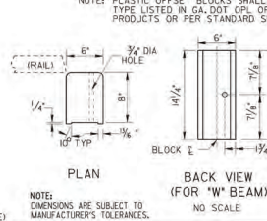
DIMENSIONS FOR WOOD POSTS AND WOOD
OFFSET BLOCKS ARE NOMINAL IN ACCORDANCE
WITH ACCEPTED LUMBER INDUSTRY STANDARDS.

NOTE: WHERE WOOD OFFSET BLOCK ON STEEL POST IS
PERMITTED IN "W" BEAM INSTALLATION, A NAIL OR
SCREW FROM POST TO WOOD IS REQUIRED TO
PREVENT ROTATION OF THE BLOCK.

WOOD OFFSET BLOCKS
(WHERE PERMITTED, SEE NOTE 5(d))

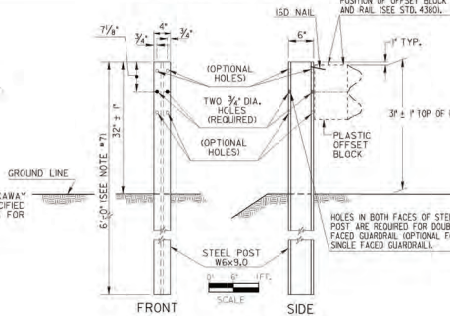


STANDARD PLASTIC OFFSET BLOCKS
NOTE: PLASTIC OFFSET BLOCKS SHALL BE OF
TYPE LISTED IN GA. DOT C.P.L. OF APPROVED
PRODUCTS OR PER STANDARD SPECIFICATIONS.

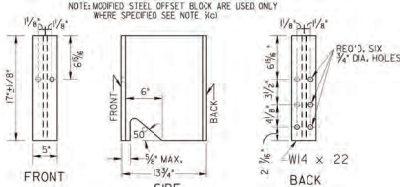


NOTE: DIMENSIONS ARE SUBJECT TO
MANUFACTURER'S TOLERANCES.

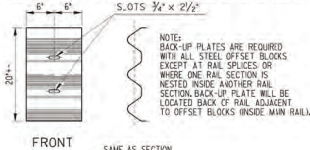
TYPE D STEEL POST (FOR "W" BEAM GUARDRAIL)



MODIFIED STEEL OFFSET BLOCK
FOR "T" BEAM GUARDRAIL
NOTE: MODIFIED STEEL OFFSET BLOCK ARE USED ONLY
WHERE SPECIFIED (SEE NOTE 6(d))

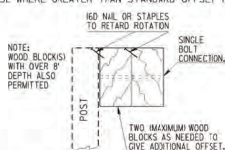


BACK-UP PLATE (FOR "T" BEAM GUARDRAIL)
S.O.T.S. 3/4" x 2 1/2"



FRONT

ADDITIONAL DEPTH OFFSET BLOCKOUTS
(FOR USE WHERE GREATER THAN STANDARD OFFSET IS SPECIFIED)

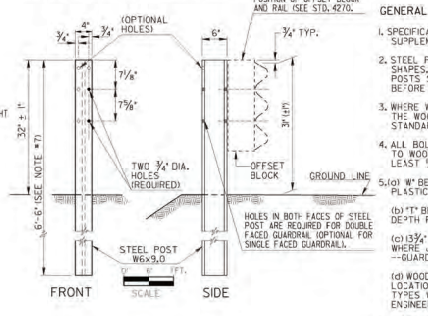


NOTE: ADDITIONAL DEPTH OFFSETS BELOW ARE SHOWN FOR "W" BEAM.
SIMILAR OFFSETS MAY BE APPLIED FOR "T" BEAM GUARDRAIL.

NOTE: ADDITIONAL DEPTH OFFSETS ARE PERMITTED
ONLY WHERE AN ISOLATED POST MUST BE
PLACED AT A GREATER THAN NORMAL OFFSET.

NOTE: FOR BLOCK CONNECTION TO POST AND TO RAIL, SEE STD. 4380 OR 4385.

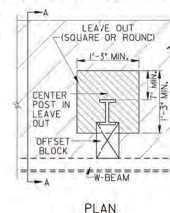
TYPE D-T STEEL POST (FOR "T" BEAM GUARDRAIL)



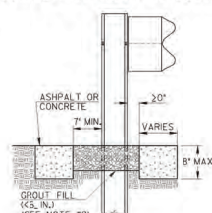
GENERAL NOTES:

1. SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION AND
SUPPLEMENTS THERE TO.
2. STEEL POSTS MAY BE EITHER ROLLED OR WELDED STRUCTURAL
SHAPES. STEEL OFFSET BLOCKS SHALL BE ROLLED WELDED
POSTS. STEEL SHALL BE SEAL WELDED BETWEEN WEB AND FLANGE
BEFORE GALVANIZING.
3. WHERE WOOD POST OR WOOD OFFSET BLOCKS ARE PERMITTED,
THE WOOD SHALL BE TREATED IN ACCORDANCE WITH GEORGIA
STANDARD SPECIFICATIONS.
4. ALL BOLTS USED FOR FASTENING THE RAIL AND OFFSET BLOCKS
TO WOOD POSTS SHALL HAVE SUFFICIENT LENGTH TO EXTEND AT
LEAST 1/4" BEYOND THE FULL NUT/UP TO 3" BEYOND.
5. (a) "W" BEAM GUARDRAIL: ALL OFFSET BLOCKS SHALL BE 8" DEPTH
PLASTIC BLOCKS EXCEPT FOR (d) BELOW.
(b) "T" BEAM GUARDRAIL: STANDARD INSTALLATION WILL USE 8"
DEPTH PLASTIC BLOCKS UNLESS OTHERWISE APPROVED.
(c) 13 1/2" DEPT. MODIFIED STEEL OFFSETS MAY BE SPECIFIED
WHERE JUSTIFIED FOR MORE SEVERE CONDITIONS. PAY ITEM IS
--GUARDRAIL, TP 1, MODIFIED OFFSET BLOCK-- PER LIN. FT.
(d) WOOD OFFSET BLOCKS MAY BE USED ONLY AT AN ISOLATED
LOCATION WITHIN A RUN OF GUARDRAIL, WHERE OTHER BLOCK
TYPES WOULD NOT PROVIDE PROPER FIT, AS DETERMINED BY THE
ENGINEER OR SHOWN IN THE PLANS.
6. POSTS WILL BE SPACED AT 6'-3" C. TO C., UNLESS OTHERWISE
NOTED.
7. ADDITIONAL LENGTH POSTS, WHERE SPECIFIED, SHALL BE 7'-0" AND
7'-6" LONG FOR "W" BEAM AND "T" BEAM GUARDRAILS RESPECTIVELY,
WITH HOLES DIMENSIONED FROM THE POST-TOP THE SAME AS
SHOWN.
8. 9'-0" POST REQUIRED IF GUARDRAIL INSTALLED ON A 2:1 SLOPE.
9. GROUT FILL SHALL BE A CONTROLLED LOW STRENGTH FLOWABLE
FILL THAT HAS A MAXIMUM 28-DAY COMPRESSIVE STRENGTH OF
100 P.S.I. ACCORDING TO SPEC. 600.

GUARDRAIL POST DETAILS IN ASPHALT OR CONCRETE PAVEMENT APPLICATIONS

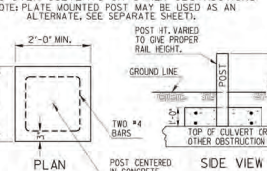


PLAN



SECTION A-A

**CONCRETE FOUNDATION FOR POST IN SHALLOW
FILLS OVER CULVERTS OR OTHER OBSTRUCTIONS**
NOTE: PLATE MOUNTED POST MAY BE USED AS AN
ALTERNATE, SEE SEPARATE SHEET.



PLAN

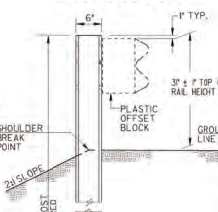
SIDE VIEW

STEEL POST TO BE PLUMBED AND FOUNDATION CONCRETE POURED AROUND
POST TO FINISHED ELEVATION.

PAYMENT FOR GUARDRAIL TO INCLUDE ALL EXTRA WORK AND MATERIALS
INCLUDING CONCRETE, C.L.A. OR C.L.B. AND NO. 4 BARS.

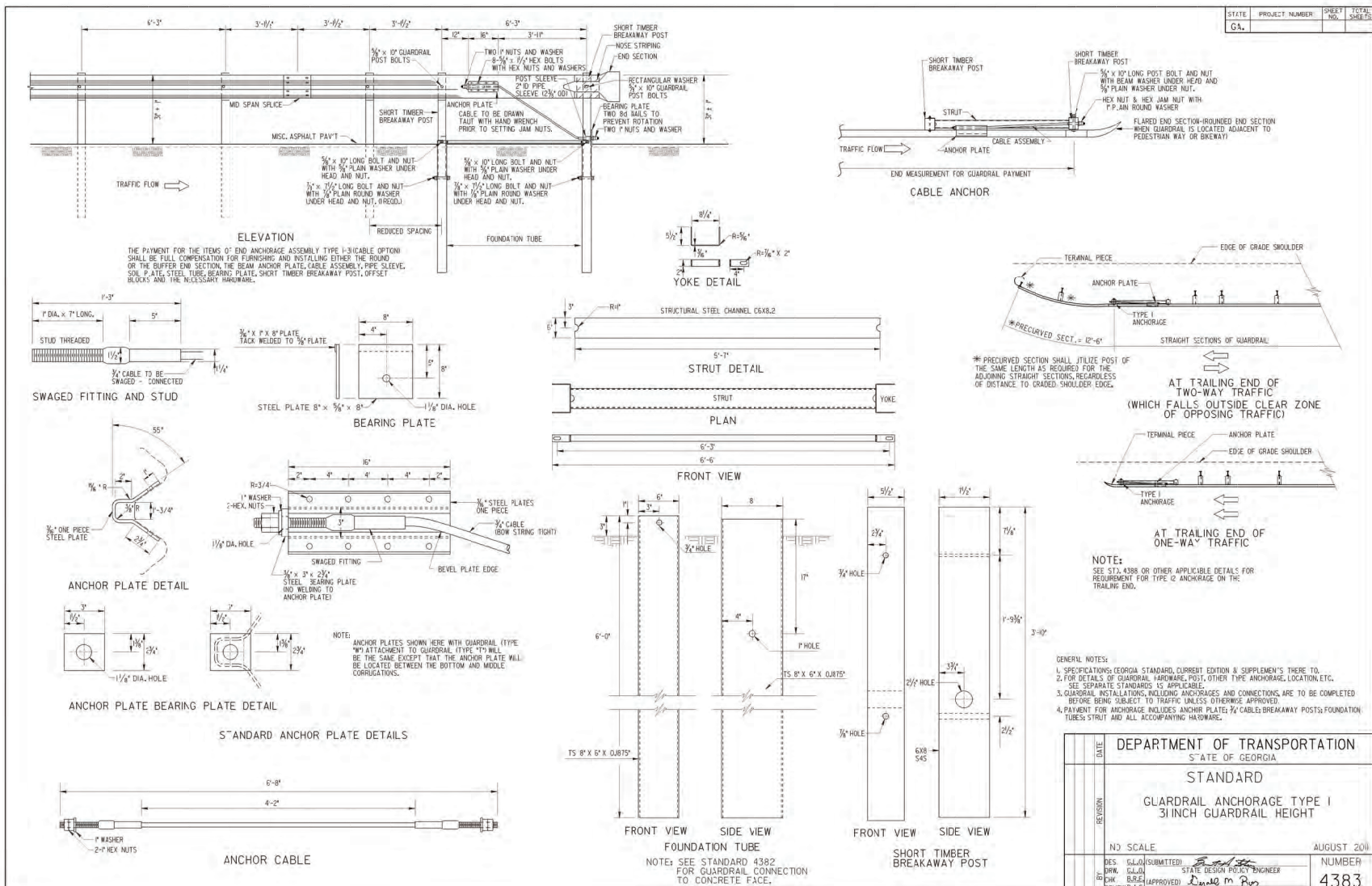
IF OFFSET FROM RAIL FACE TO HEADWALL IS LESS THAN 4'-9", POST
SPACING IS REDUCED TO 3'-0" C.C. ACROSS THE CULVERT WITH 7
SUCH SPACINGS IN ADVANCE AT NO ADDITIONAL PAYMENT.

2:1 SLOPE DETAIL

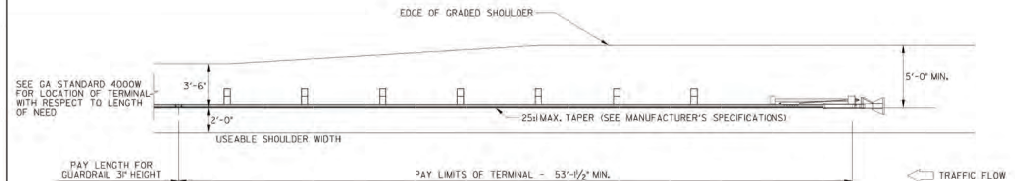


DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA			
STANDARD POSTS AND OFFSET BLOCKS FOR "W" & "T" BEAM GUARDRAIL 3 INCH GUARDRAIL HEIGHT			
SCALE: AS SHOWN		AUGUST 2011	
DES. G.L.D.	SUBMITTED	STATE DESIGN POLICY ENGINEER <i>Mark E. Ruckel</i> CIVIL ENGINEER	
DRW. G.L.D.	DATE		
CHEK. G.L.D.	DATE		
REVIEW G.L.D.	DATE	NUMBER 4381	

9/21/2011 8:13:55 AM \\G00T-DSN1\G0PLOT\QC\F60_Kfp8000.gcf gwens V:\DART\31 Inch gwdrdr\standards\4012D rev 4363.pr



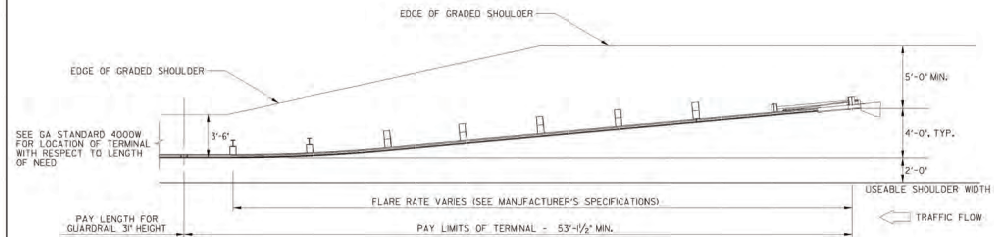
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



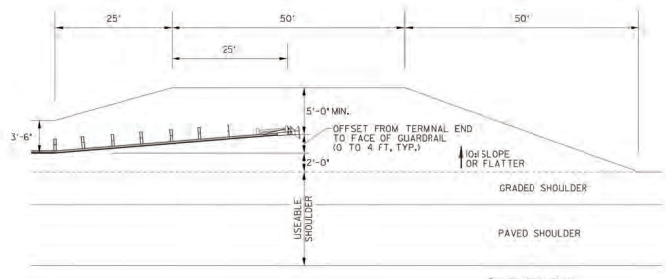
TYPE 12A - 3' GUARDRAIL TERMINAL
(TANGENT, ENERGY-ABSORBING)

- GENERAL NOTES:
1. SPECIFICATIONS: GEORGIA STANDARD CURRENT EDITION, AND SUPPLEMENTS THERETO.
 2. SEE GDOT DPL 64 FOR APPROVED PRODUCTS.
 3. THIS SHEET DEPICTS THE PAY LIMITS FOR GUARDRAIL AND TYPE 12 TERMINALS. TYPE 12 TERMINALS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
 4. W-BEAM INSTALLATIONS LESS THAN 150 FEET IN ADVANCE OF ANY SHIELDED OBJECT OR TOTAL LENGTH OF W-BEAM INSTALLATION IS LESS THAN ABOUT 150 FEET, AN ENERGY-ABSORBING TERMINAL SHOULD BE SELECTED.

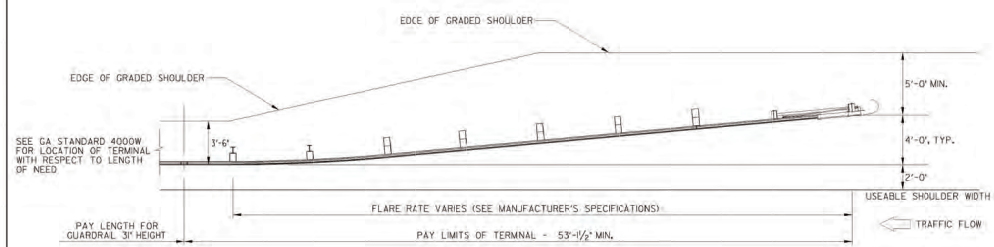
ITEM NO.	UNITS	DESCRIPTION
641-5015	EA	GUARDRAIL TERMINAL, TP 12A - 3', TANGENT, ENERGY-ABSORBING
641-5020	EA	GUARDRAIL TERMINAL, TP 12B - 3', FLARED, ENERGY-ABSORBING
641-5025	EA	GUARDRAIL TERMINAL, TP 12C - 3', FLARED, NON-ENERGY-ABSORBING



TYPE 12B - 3' GUARDRAIL TERMINAL
(FLARED, ENERGY-ABSORBING)



TERMINAL PAD GRADING DETAIL



TYPE 12C - 3' TERMINAL
(FLARED, NON-ENERGY-ABSORBING)

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA			
STANDARD GUARDRAIL TERMINALS, TYPE 12A, 12B, AND 12C 31 INCH GUARDRAIL HEIGHT			
NO SCALE	AUGUST 2011		NUMBER 4384
BY RES. GLO. SUBMITTED DRW. GLO. STATE DESIGN POLICY ENGINEER CHK. B.R.E. (APPROVED) REVIEWER			



Moreland Altobelli
Associates, LLC
327 DeLoach Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	4-19-19
DRAWN BY	NAA	4-19-19
CHECKED BY	KEQ	4-19-19

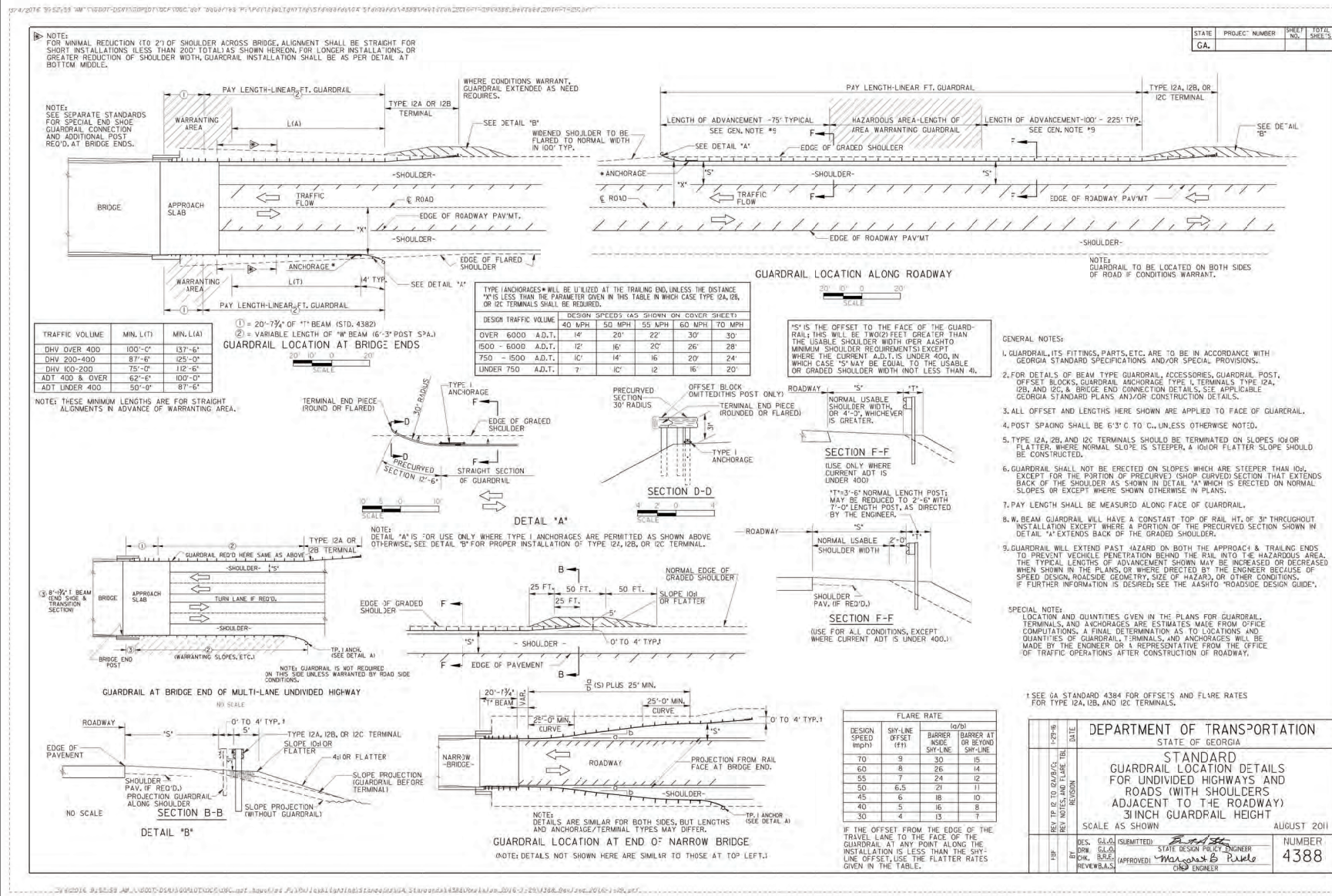


McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES

CONSTRUCTION DETAILS
McNUTT ROAD AND McNUTT WAY

DOCUMENT NUMBER
41-0012



ESPCP GENERAL NOTES

The escape of sediment from the project site shall be prevented by the installation of erosion and sediment control measures and practices prior to land-disturbing activities.

Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective control, additional erosion and sedimentation control measures shall be implemented to control or treat the sediment source.

ESPCP ALTERATIONS

This Erosion, Sedimentation, and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project on the basis of common construction methods and techniques. If the Contractor elects to alter the staged construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 161-Control of Soil Erosion and Sedimentation of the contract.

The Contractor, the Certified Design Professional, and the WECS shall carefully evaluate this plan prior to commencing land-disturbing activities. Admndments/revisions to the ESPCP which have a significant effect on BMPs with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC Level-II Certified Design Professional. Additional BMPs may be added per Special Provision 161-Control of Soil Erosion and Sedimentation.

CONSTRUCTION SCHEDULE AND SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted after the project is awarded along with the NOI. A copy of the construction schedule shall be maintained at the project site.

INITIAL PHASE:

Placement of perimeter erosion control barrier prior to the commencement of any clearing activities. Land disturbance activities shall only occur after the appropriate BMP's have been installed. These BMPs are to be in place until the Final Phase.

INTERMEDIATE PHASE:

Construction activities detailed in the construction staging plans. this includes grading, drainage, paving and installation of major structures. Throughout this phase, temporary erosion control measures shall be installed and maintained as depicted by the BMP installation details.

FINAL PHASE:

Final grading, grassing, mulching and other miscellaneous items. Removal and proper cleanup of temporary erosion control. Placement of permanent erosion control items as detailed in the plans.

SITE STABILIZATION AND VEGETATION PLANTING SCHEDULE

The EPD General NPDES GAR100002 permit states that any disturbed area where construction activities have temporarily or permanently ceased shall be stabilized within 14 days of such cessation or as soon as practicable if precluded by adverse weather conditions. However in special cases, the Project Engineer may require the contractor to perform stabilization more often than 14 days.

Disturbed areas shall be stabilized with suitable material listed in the current edition of the Department's Standard Specifications (or Special Provisions) Sections 161, 163, 700, or 711 on the basis of when construction activities are expected to resume.

All temporary and permanent vegetative practices including plant species, planting dates, seeding, fertilizing, liming, and mulching rates for this project can be found in Section 700 of the current edition of the Department's Standard Specifications (or Special Provisions) and other applicable contract documents or landscaping plans.

BMP INSTALLATION AND MAINTENANCE MEASURES

The Department's Standard Specifications (or Special Provisions) 161, 163, 165, 700, 711, and other contract documents for installation and maintenance measures.

PETROLEUM STORAGE,SPILLS AND LEAKS

These plans expressly delegate the responsibility of proper on-site hazardous material management to the Contractor. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture, clean up, and disposal of any petroleum product, or other hazardous material, leaks or spills associated with the servicing, refueling or operation of any equipment utilized at the site. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with the action plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCP addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GAR100002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

DEWATERING AND PUMPING ACTIVITIES

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag, or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of pumped discharges. The contractor shall prepare sampling plans in accordance with the current GAR100002 NPDES permit by utilizing a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

NONSTORMWATER DISCHARGES

Nonstormwater discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and other contract documents. The NPDES does not authorize the discharge of soaps or solvents used in vehicle and equipment washing or the discharge of wastewater containing stucco, paint,oils, curing compounds, and other construction materials.

READY MIX CHUTE WASH DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of Portland cement concrete is prohibited on this site.

In accordance with Standard Specification 107: Legal Regulations and Responsibility to the Public, only the discharge chute utilized in the delivery of Portland cement concrete may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travelled way, including shoulders, for a wash-down pit. The pit shall be large enough to store all wash-down water without overtopping. Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above it shall be graded to match the elevation of the surrounding areas. Alternate wash-down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash-down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down pit that includes the following: (1) a location away from any storm drain, stream, or river, (2) access to the vehicle being used for wash down, (3) sufficient volume for wash-down water, and (4) permission to use the area for wash down.

On sites where permission or access to excavate a wash-down pit is unavailable, the Contractor may have to wash-down into a sealable 55-gallon drum or other suitable container and then transport the container to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

OTHER CONTROLS

If the Contractor elects to store building material, building products, construction waste, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials on the site, the Contractor shall provide an appropriate covering to minimize the exposure of those materials or products to precipitation and stormwater to minimize the discharge of pollutants. Minimization of exposure is not required in cases where exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of the specific material or product poses little risk to stormwater contamination or is intended for outdoor use.

The Contractor shall follow this ESPCP and ensure and demonstrate compliance with all applicable State and/or local regulations for waste disposal, sanitary sewer and septic systems, and petroleum storage.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Standard Specifications.

POSTCONSTRUCTION BMPs FOR STORMWATER MANAGEMENT

All permanent postconstruction BMPs are shown in the construction plans and in the ESPCP plan. The postconstruction BMPs for this project consist of, enhanced dry/wet swales, vegetated swales/ditches, vegetation, riprap at pipe outlets for velocity dissipation and outlet stabilization, slope stabilization matting, and rip rap ditch lining where necessary. The postconstruction BMPs will provide permanent stabilization of the site and prevent abnormal transportation of sediment and pollutants into receiving waters.

SOIL SERIES INFORMATION

The following is a summary of the soils that are expected to be found on the project site:

SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 1% TO 5% -	B
	LUCY LOAMY SAND 8% TO 15% SLOPES	B
	TROUP FIND SAND 1% TO 5% SLOPES	A
	TROUP FIND SAND 5% TO 10% SLOPES	A
	TROUP FIND SAND 10% TO 17% SLOPES	A

SILT FENCE INSTALLATION WITH J HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique is called using J hooks (or spurs). The J hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J hooks shall be spaced in accordance with GDOT Construction Detail D-24C. The maximum J-hook spacing is reached when the top of the J hook is at the same elevation as the bottom of the immediately upgradient J hook. J Hooks shall be paid for as silt fence items per linear foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

EROSION CONTROL REQUIRED STATEMENTS:

- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.**
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.**
- EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION ACTIVITY AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.**
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND-DISTURBING ACTIVITIES.**
- MAINTENANCE OF ALL SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES, WHETHER TEMPORARY OR PERMANENT, SHALL BE AT ALL TIMES THE RESPONSIBILITY OF THE PROPERTY OWNER.**
- THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPs WITHIN 7 DAYS AFTER INSTALLATION.**
- NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.**
- AMENDMENTS/REVISIONS TO THE ES&PC PLAN WHICH HAVE A SIGNIFICANT EFFECT ON BMPs WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY THE DESIGN PROFESSIONAL.**
- WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.**



Moreland Altobelli
Associates, LLC
217 Oakmead Street
Suite 1401
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED	NAME	DATE
WAK	WAK	05-24-20
DRAWN	NAME	DATE
NAA	NAA	02-24-20
CHECKED	BY	DATE
KED	KED	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES	

ES&PC GENERAL NOTES

McNUTT ROAD and McNUTT WAY

DRAWING
NUMBER

51 - 0001

SEDIMENT STORAGE

The site has a total disturbed area of 22.14 acres. The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMPs specified in this table.

Location	Total Drainage Area (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (yd ³)	Total Storage Volume Provided (yd ³)	Temporary Sediment Basins		Check Dams (ft yd ³ /each)		Inlet Sediment Traps (ft yd ³ /each)		Silt Gates (ft yd ³ /each)		Silt Fence (0.3 yd ³ /ft)	
					Basin #	Total Volume (yd ³)	# of Devices	Total Volume (yd ³)	# of Devices	Total Volume (yd ³)	# of Devices	Total Volume (yd ³)	Length (ft)	Total Volume (yd ³)
Outfall A1	11.1	1.66	113	607			17	607						
Outfall B1	8.5	1.23	82	429			12	429						
Outfall C1	16.7	1.53	103	147			46	147						
Outfall D1	14.6	2.58	173	483			76	483						
Outfall E1	52.1	2.39	160	260			97	260						
Outfall F1	22.5	2.23	149	277			31	277						
Outfall G1	52.9	3.9	261	496			87	496						
Outfall H1	10.5	3.7	248	298			59	298						
Total Sheet Flow		2.8	134	919									3564	919

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPs:

No alternative or additional BMPs will be used on this project.

RIPRAP OUTLET PROTECTION

Structure #, Outfall ID#, or Station and Offset	Pipe Diameter Do (ft)	Q ₁₀ (ft ³ /s)	V ₁₅ (ft/s)	Tailwater Condition TW<0.5 Do	Width at Drainage Structure W1=3Do (ft)	Apron Length La (ft)	Downstream Width W2=Do+La (ft)	Average Stone Diameter d ₅₀ (ft)	Apron Thickness D (ft)	Riprap Type (Type 3 or Type 1)	Quantity (yd ³)
A-1	1.5	4.5	6.19	TW<0.5 Do	4.50	10	11.50	0.50	0.75	Type 3	9
B-1	2.0	9.0	5.46	TW<0.5 Do	6.00	10	12.00	0.50	0.75	Type 3	10
C-1	1.5	2.3	5.94	TW<0.5 Do	4.50	10	11.50	0.50	0.75	Type 3	9
D-1	1.5	1.1	3.69	TW<0.5 Do	4.50	10	11.50	0.50	0.75	Type 3	9
E-1	2.0	2.7	4.17	TW<0.5 Do	6.00	10	11.50	0.50	0.75	Type 3	10
F-1	1.5	0.2	1.26	TW<0.5 Do	4.50	10	12.00	0.50	0.75	Type 3	9
G-1	3.0	7.7	3.81	TW<0.5 Do	9.00	15	24.00	0.75	1.00	Type 3	28
H-1	1.5	0.6	2.49	TW<0.5 Do	4.50	10	11.50	0.50	0.75	Type 3	9

DISCHARGES INTO OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an impaired stream segment that has been listed for criteria violated, "Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

CHANNEL PROTECTION

All channels may be stabilized exclusively with permanent grassing. All roadside ditches on this project have velocity less than 5.0 fps; therefore, only permanent grassing will be used to stabilize ditches.

STATE-WATER BUFFER IMPACTS

State-water buffers, as defined by O.C.G.A. 12-7-1, are not impacted by this project.

Non-exempt activities shall not be conducted within the 25- or 50-foot undisturbed stream buffers as measured from the point wreted vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits.

WATER QUALITY INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the inspecting and sampling procedures. Sampling locations are provided in the Sampling Location table herein.

RETENTION OF RECORDS

The Department will retain all records related to the implementation of this ESPCP in accordance with Part IV.F of the General Permit GAR100002.

INSPECTIONS AND REPORTING

As the primary permittee, the Department must retain the design professional who prepared the ESPCP, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days of installation over the entire infrastructure project. Alternatively, for linear infrastructure projects, the permittee must retain either of these personnel to inspect the initial sediment storage requirements and perimeter control BMPs for the initial segment, as defined by Part IV.A.5. of the current GAR100002 Permit, within 7 days of installation and all sediment basins within the entire linear infrastructure project within 7 days of installation. The inspecting design professional shall report the results to the primary permittee within 7 days, and the permittee must correct all deficiencies within 2 business days of receipt of the inspection report, unless on-site weather conditions are such that more time is required. Additionally, the Department's Construction Project Engineer will be responsible for all subsequent 7 day inspections for all new BMP installations.

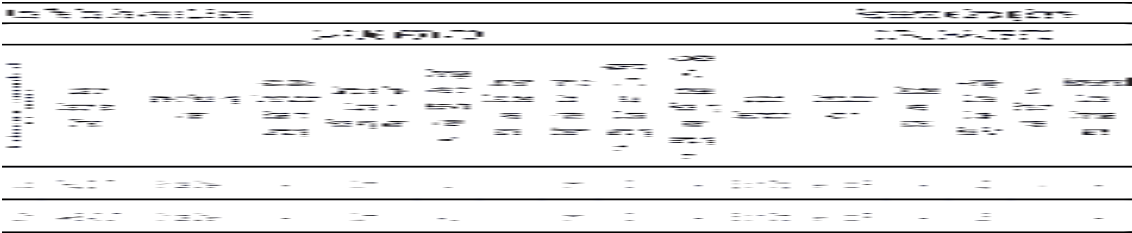
All other inspections shall be documented on the appropriate Department inspection forms. See Standard Specification (or Special Provision) 167 and other contract documents for inspection and reporting requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Whenever the Department finds that a BMP has failed or is deficient beyond routine maintenance and has resulted in sediment deposition into waters of the State, the Contractor shall take reasonable steps to address the condition, including cleaning up any contaminated surfaces so the material will not discharge in subsequent storm events. When the repair does not require a new or replacement BMP or significant repair, the BMP failure or deficiency must be corrected by the close of the next business day from the time of discovery. A repair requiring a new or replacement BMP or significant repair must be operational by no later than 7 days from the time of discovery. If the repair time within 7 days is infeasible, the Contractor and the Department shall schedule the BMP repair to be operational as soon as practical after the 7 day time frame.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

SAMPLING LOCATIONS AND GENERAL NOTES

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index 0-10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance/safety. The disturbed area classes are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion sedimentation and pollution control plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table shows the groups of similar outfall drainage basins.



The primary sampled features specified should be used as the initial sampling locations. An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.



Moreland Altobelli
Associates, LLC
217 Oakridge Street
Suite 1401
Cumming, Georgia 30040
Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES	

ES&PC GENERAL NOTES

McNUTT ROAD AND McNUTT WAY

DRAWING NUMBER

51 - 0002

Georgia Soil and Water Conservation Commission
EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS

PROJECT: _____

SWCD: BRIER CREEK (REGION 3)

Project Name: McNUTT ROAD AND McNUTT WAY PAVING

Address: McNUTT ROAD, AUGUSTA, GEORGIA

City/County: RICHMOND COUNTY

Date on Plans: _____

Name & Email of Person Filling Out Checklist: NATHAN ADAMS nathan.adams@oneatl.com

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN	Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN				
51-0001	Y	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed)			29 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).				
50-0001	Y	2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC Plan or the Plan will not be reviewed)			30 Provide complete requirements of inspections and record keeping by the primary permittee.*				
50-0001	Y	3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.			31 Provide complete requirements of sampling frequency and reporting of sampling results.*				
50-0001	Y	4 Provide the name, address, email address, and phone number of primary permittee.			32 Provide complete details for retention of records as per Part IV.F. of the permit.*				
		5 Note total and disturbed acreage of the project or phase under construction.			33 Description of analytical methods to be used to collect and analyze the samples from each location.*				
50-0001	Y	6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.			34 Appendix B rationale for NTU values at all outfall sampling points where applicable.*				
50-0001	Y	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.			35 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.*				
		8 Description of the nature of construction activity.			36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*				
		9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.			37 Graphic scale and North arrow.				
		10 Identify the project/receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.			38 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: <table border="1"><tr><td>Existing Contours</td><td>USGS 1": 2000' Topographical Sheets</td></tr><tr><td>Proposed Contours</td><td>1" = 400' Centerline Profile</td></tr></table>	Existing Contours	USGS 1": 2000' Topographical Sheets	Proposed Contours	1" = 400' Centerline Profile
Existing Contours	USGS 1": 2000' Topographical Sheets								
Proposed Contours	1" = 400' Centerline Profile								
		11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 21 of the permit.			39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org .				
		12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 20 of the permit.*			40 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*				
		13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on Part IV D.6.c.(3) page 37 of permit as applicable.*			41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact.				
		14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins within 7 days after installation," in accordance with Part IV A.5, page 26 of the permit.*			42 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.				
		15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wooded vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."			43 Delineation and acreage of contributing drainage basins on the project site.				
		16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.			44 Delineate on-site drainage and off-site watersheds using USGS 1" : 2000' topographical sheets.				
		17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."			45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.				
		18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit."			46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.				
		19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."			47 Soil series for the project site and their delineation.				
		20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."			48 The limits of disturbance for each phase of construction.				
		21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."			49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.				
		22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Impaired Stream Segment must comply with Part III, C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment.*			50 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.				
		23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan.*	56-0000	Y	51 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.				
		24 BMPs for concrete washdown of boots, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited.*			52 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.				
		25 Provide BMPs for the remediation of all petroleum spills and leaks.							
		26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.*							
		27 Description of practices to provide cover for building materials and building products on site.*							
		28 Description of the practices that will be used to reduce the pollutants in storm water discharges.*							

*If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the * checklist items would be N/A.
Effective January 1, 2019



DESIGNED	NAME	DATE
DRAWN	N/A	05-24-20
CHECKED	KEO	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

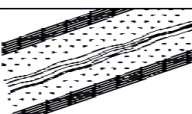
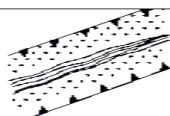
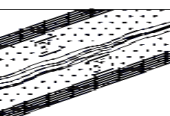
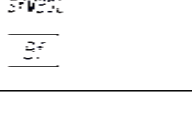
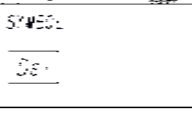
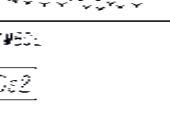
REVISION DATES

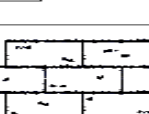
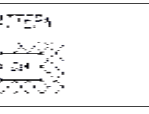
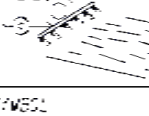
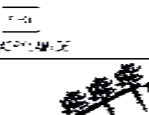
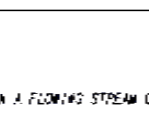
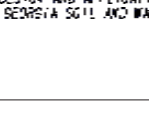
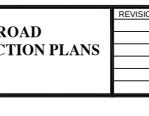
ES&PC GENERAL NOTES

McNUTT ROAD AND McNUTT WAY

DRAWING NUMBER

51 - 0003

CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
			RANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS. WHEN THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.
		LINE CODE 	
			AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESAs INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS.
ESA		LINE CODE 	IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.
		ESSA-ZESTIFF-ED-STREAM-BUFFER, ETC. 	
			A STRIP OF UNDISTURBED OR NATURAL VEGETATION, ENHANCED OR RESTORED OR PLANT VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS.
Bf		SYMBOL 	WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY RANGE BARRIER FENCE.
			MULCH IS AN APPLICATION OF STRAW WHICH USED TO PROTECT SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO PLANT SPACING.
Ss1	SECTION 102	SYMBOL 	MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER.
			THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA AND SEASON. IT IS TRADICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST.
Ss2	SECTION 103, 200	SYMBOL 	TEMPERARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATIONS.
			THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.

CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
			THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON.
Ss3	SECTION 200	SYMBOL 	PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION.
			THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
			
			
			
			
			
			
			
			

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



Moreland Altobelli Associates, LLC
217 Cumberland Street
Suite 1403
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES

EROSION CONTROL LEGEND

McNUTT ROAD AND McNUTT WAY

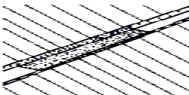
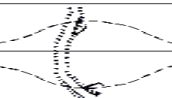
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52 - 0001

CODE	APPLY TO STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION	CODE	APPLY TO STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
SC	SOIL STABILIZATION CONSTRUCTION DETAIL CH-5 SECTION 115		SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND STABILIZE TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHOULDER, OR CHANNELS. SLOPE STABILIZATION MAY BE A POLYMER EROSION CONTROL PRODUCT (PEEP) OR A POLYMER EROSION CONTROL PRODUCT (PEEP). SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2:1 OR STEEPER AND WITHIN 25 FEET OF ALL CROSS DRAINS AND CULVERTS. MATERIAL (COCONUT FIBER BLANKET OR WOOD FIBER BLANKET) SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.	CH-5	STONE CHECK DAM OR SANDBAG CHECK DAM CONSTRUCTION DETAIL CH-5 SECTION 115		STONE CHECK DAMS ARE CONSTRUCTED OF TYPICAL RIVERPAV WITH SECTORS, LEAKED, AND STONE CHECK DAMS ARE BUILT IN PLANNED DIVIDES TO BE USED TO STABILIZE SLOPES. STABILIZATION SHOULD BE TAKEN TO BEING OTHER APPROPRIATE CHECK DAMS AND/OR BARS WITHIN THE CLEAR ZONE. SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENDURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE, LULUWAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2 CFS/FT OF WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
TOO	TACKLE PERS SECTION 115 TOO 255		TACKLE PERS REQUIREMENTS, SUCH AS ANCHOR POLYACRYLAMIDE (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT THE SAME SHOWN IN THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT STABILIZATION. REFER TO THE LATEST EDITION OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN SEGMENT FOR DETAIL.	CH-4	VEGETATED CHANNEL STABILIZATION SECTION 115		A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR FLOODS UP TO 2 CFS/FT. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE SOFT CHANNEL Lining PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. TYPICALLY NOT SHOWN IN PLANS.
CH-5	POLYACRYLAMIDE CONSTRUCTION DETAIL CH-5 SECTION 115		A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POOL, OVERFLOW WEIR, AND CLIP REINFORCEMENT MATTING, WITH GLASS-FIBER PLACED IN TOP OF A SPECIAL CONSTRUCTION WHICH CONTROL ENERGY DISCHARGE AND FULFILLMENT OF STORM WATER. SEE CONSTRUCTION DETAIL CH-5 FOR ADDITIONAL INFORMATION AND STAGING REQUIREMENTS. THIS ITEM IS SUITABLE FOR USE IN PHASES OF THREE THAT ARE PART OF THE EROSION CONTROL CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2 CFS/FT OF WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.	CH-5	CHANNEL STABILIZATION PATTERN, THREE CONSTRUCTION DETAIL CH-5 SECTION 115		THIS ITEM CONSISTS OF LINED CHANNEL WITH THREE (3) RIVERPAV BAY THICK, UNLESS SPECIFIED OTHERWISE, PLACED IN TOP OF A SECTORS LEAKED, AND THE CHANNEL SHALL PROTECT THE CHANNEL, PLACING TO A DEPTH NOT RECOMMENDED BY THE SOFT CHANNEL Lining PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. NOT SHOWN IN PLANS. IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
CH-5	COMPOST FILTER DAM CONSTRUCTION DETAIL CH-5 SECTION 115		A COMPOST FILTER DAM CHECK DAM IS COMPOSED OF A PHOTOGRAPHABLE OR PHOTOGRAPHABLE FILTERED MESH MATERIAL, CONTAINING A BUILT FIBER FILTER MATERIAL DERIVED FROM A NON-TOXIC SOURCE OF ORGANIC MATTER, THEY SHALL BE PROPERLY STAGED FOR SUCH APPLICATIONS. REFER TO THE LATEST EDITION OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN SEGMENT FOR MATERIAL SPECIFICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2 CFS/FT OF WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.	CH-5	CHANNEL STABILIZATION PATTERN, THREE CONSTRUCTION DETAIL CH-5 SECTION 115		THIS ITEM CONSISTS OF LINED CHANNEL WITH THREE (3) RIVERPAV BAY THICK, UNLESS SPECIFIED OTHERWISE, PLACED IN TOP OF A SECTORS LEAKED, AND THE CHANNEL SHALL PROTECT THE CHANNEL, PLACING TO A DEPTH NOT RECOMMENDED BY THE SOFT CHANNEL Lining PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. NOT SHOWN IN PLANS. IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
CH-5	BUILT STORM CHECK DAM CONSTRUCTION DETAIL CH-5 SECTION 115		A BUILT STORM CHECK DAM IS COMPOSED OF BUILT PROPERLY BOUND WITH WIRE REINFORCEMENT. INSTEAD OF WIRE, BUILT SHOULD BE PLACED IN TOP OF A SECTORS LEAKED, AND THE CHANNEL SHALL PROTECT THE CHANNEL, PLACING TO A DEPTH NOT RECOMMENDED BY THE SOFT CHANNEL Lining PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2 CFS/FT OF WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.				

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S "MANUAL FOR EROSION AND SEDIMENT CONTROL IN SEGMENT".

CODE	STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
27-27	1.00 REINFORCEMENT MAT 100% CONSTRUCTION DETAIL 10-25 SECTION 71		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN A CHANNEL TO STABILIZE THE SOIL BY REINFORCING THE TRASS POINTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0.4 LBS/FT ² . THE TFM SHALL PROTECT THE CHANNEL FLOW NO TO A DEPTH 100% RECOMMENDED BY THE SOFT CHANNEL LINDAS PROGRAM.
		LINE CODE 	100% SHALL BE IDENTIFIED IN A TABLE LOCATED IN THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
27-27B	1.00 REINFORCEMENT MAT 100% CONSTRUCTION DETAIL 10-25 SECTION 71		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN A CHANNEL TO STABILIZE THE SOIL BY REINFORCING THE TRASS POINTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0.4 LBS/FT ² . THE TFM SHALL PROTECT THE CHANNEL FLOW NO TO A DEPTH 100% RECOMMENDED BY THE SOFT CHANNEL LINDAS PROGRAM.
		LINE CODE 	100% SHALL BE IDENTIFIED IN A TABLE LOCATED IN THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
27-27C	1.00 REINFORCEMENT MAT 100% CONSTRUCTION DETAIL 10-25 SECTION 71		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN A CHANNEL TO STABILIZE THE SOIL BY REINFORCING THE TRASS POINTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0.4 LBS/FT ² . THE TFM SHALL PROTECT THE CHANNEL FLOW NO TO A DEPTH 100% RECOMMENDED BY THE SOFT CHANNEL LINDAS PROGRAM.
		LINE CODE 	100% SHALL BE IDENTIFIED IN A TABLE LOCATED IN THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
27-27D	1.00 REINFORCEMENT MAT 100% CONSTRUCTION DETAIL 10-25 SECTION 71		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN A CHANNEL TO STABILIZE THE SOIL BY REINFORCING THE TRASS POINTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0.4 LBS/FT ² . THE TFM SHALL PROTECT THE CHANNEL FLOW NO TO A DEPTH 100% RECOMMENDED BY THE SOFT CHANNEL LINDAS PROGRAM.
		LINE CODE 	100% SHALL BE IDENTIFIED IN A TABLE LOCATED IN THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
27-27E	1.00 REINFORCEMENT MAT 100% CONSTRUCTION DETAIL 10-25 SECTION 71		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN A CHANNEL TO STABILIZE THE SOIL BY REINFORCING THE TRASS POINTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0.4 LBS/FT ² . THE TFM SHALL PROTECT THE CHANNEL FLOW NO TO A DEPTH 100% RECOMMENDED BY THE SOFT CHANNEL LINDAS PROGRAM.
		LINE CODE 	100% SHALL BE IDENTIFIED IN A TABLE LOCATED IN THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
D-27E	R.F.P. REINFORCEMENT MAT FOR CONSTRUCTION DETAIL, DATE SECTION 411		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH REINFORCEMENT (ASTM A 601) CHANNELS TO STABILIZE THE SOIL BY PERMANENTLY TRAPPING ROOTS TO PROVIDE LONG TERM PROTECTION FROM SOIL STRESSERS (E.G. ROOTS). THE MAT SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 100" RECOMMENDED BY THE SOFT CHANNEL Lining PROGRAM.
	LINE CODE		100" SHALL BE IDENTIFIED IN A TABLE LOCATED IN THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
D-28	CONCRETE CHANNEL STABILIZATION CONSTRUCTION DETAIL, DATE 44-45 SECTION 444		CHANNELS ARE LINED WITH CONCRETE (F.P. VELOCITIES MAY VARY). THIS ITEM CONSTITUTES CONSTRUCTION OF A TYPE OF CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH 100" RECOMMENDED BY THE SOFT CHANNEL Lining PROGRAM.
	LINE CODE		100" SHALL BE IDENTIFIED IN A TABLE LOCATED IN THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
D-29	CONSTRUCTION EXIT CONSTRUCTION DETAIL, DATE SECTION 453, 200		A CONSTRUCTION EXIT IS A STONE STABILIZED FAC THAT REDUCES OR ELIMINATES THE TRANSFER OF SOIL FROM CONSTRUCTION AREAS TO PUBLIC AREAS BY EROSION. THE EXIT SHALL BE USED AT ACCESS POINTS, NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS PILES, ETC. THE EXIT SHALL BE MINIMUM 20" WIDE, 20" LONG, 18" THICK, AND PROVIDES A SUFFICIENT UNDERFLOW ON SITES WHERE THE GRADE TOWARD A PAVED AREA IS GREATER THAN 2% (A FULL WIDTH CURB OR PILE 6" TO 18" HIGH WITH AN OUTLET SHALL BE CONSTRUCTED OVER THE WASHING AREA OF PAVED AREA). THE WASHING AREA TO RECEIVE AND MUST ALSO BE REQUIRED FOR TO ENTRAP AND TRAP PUBLIC ROADWAYS.
	SYMBOL		ALL CONSTRUCTION EXIT REQUIREMENTS ARE INCLUDED IN THE PRICE OF THE CONSTRUCTION EXIT.
D-30	STREAM DIVERGION CENTRIFUGAL POLYMER LINE FILM SECTION 452		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHERE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PREVENT STREAM BEDS FROM EROSION, AND THE CHANNEL WITH PROTECTIVE FILM TO PREVENT FLOW. INSTALL TWO ROWS OF FILM PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LOADS FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE CHANNEL GEOMETRY, CHANNEL SLOPE AND POLYMER. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 0.5 TO 1.0 FPS.
	LINE CODE		THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1/2 SQUARE MILE.
			CONSTRUCTION OF THE DIVERGION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.

NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION	CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
(D-2)	STREAM DIVERSION CHANNEL SECTION 467		A TEMPORARY CHANNEL CONSTRUCTED TO DIVERT FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LIKE THE CHANNEL WITH SLOTTED CURBS, INSTALL TWO ROWS OF CURBS PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND RUGHOSS. THIS IS ACCEPTABLE FOR VELOCITIES BETWEEN 3.0 - 10.0 FPS. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.	(D-2-A)	PERMANENT DRAINAGE DOWNSPIN STD. 20-36 DET. 20-36 SECTION 467		A CONCRETE PLUMB TYPE MAY BE USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. THIS IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO FOOT CULMINES REGARDING SLUTTER SPREAD AND OTHER CRITERIA.
(D-2)	STREAM DIVERSION CHANNEL SECTION 467		A TEMPORARY CHANNEL CONSTRUCTED TO DIVERT FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LIKE THE CHANNEL WITH SLOTTED CURBS, INSTALL TWO ROWS OF CURBS PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND RUGHOSS. THIS IS ACCEPTABLE FOR VELOCITIES BETWEEN 3.0 - 10.0 FPS. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.	(D-2-B)	PERMANENT DRAINAGE DOWNSPIN STD. 20-36 DET. 20-36 SECTION 467		A CONCRETE PLUMB TYPE MAY BE USED TO DIRECT SURFACE RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. THIS IS USED IN ALL DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE LOT SLOPE. IT IS DESIGNED TO SAFELY CARRY WATER DOWN THE LOT SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO FOOT CULMINES REGARDING SLUTTER SPREAD AND OTHER CRITERIA.
(D-3)	DIVERSION BERM CONSTRUCTION DETAIL 30-1 SECTION 202		A NON-DESIGNED TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SLOPE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REGULATE THE LENGTH OF A SLOPE. THEY ARE USED TO PROTECT PLANTING, PREVENTING SLOPE EROSION AND TO DIVERT THE RUNOFF TO A STABLE OUTLET. DOWNSPINS FOR PLANTING AREAS AND IN ALL GRADING PROJECTS.	(D-3-A)	PERMANENT DRAINAGE DOWNSPIN STD. 20-36 DET. 20-36 SECTION 467		CONCRETE DRAIN INLET WITH METAL PAVE IS USED TO DRAIN CURBS, ON A SLOPE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, RESULTING OUTLET PROTECTION. TEMPORARY AND PERMANENT INLETS SHALL BE SPACED ACCORDING TO FOOT CULMINES REGARDING SLUTTER SPREAD AND OTHER CRITERIA.
(D-3)	DIVERSION CHANNEL SECTION 202		A DESIGNED TEMPORARY OR PERMANENT CHANNEL WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SLOPE TO DIVERT OFFSITE PLANTING FROM DISTURBED AREAS WITHIN THE PROJECT AREA. CHANNEL FOR OFFSITE PLANTING SHALL BE STABILIZED WITH APPROPRIATE CHANNEL STABILIZATION. REFER TO THE LATEST EDITION OF THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN EROSION FOR DESIGN CRITERIA. A DIVERSION CHANNEL DETAIL MUST ALSO BE PROVIDED IN THE EROSION.	(D-3-B)	PERMANENT DRAINAGE DOWNSPIN STD. 20-36 DET. 20-36 SECTION 467		CONCRETE DRAIN INLET WITH METAL PAVE IS USED TO DRAIN CURBS, ON A SLOPE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, RESULTING OUTLET PROTECTION. TEMPORARY AND PERMANENT INLETS SHALL BE SPACED ACCORDING TO FOOT CULMINES REGARDING SLUTTER SPREAD AND OTHER CRITERIA.
(D-3)	TEMPORARY PARS SLOPE DRAIN CONSTRUCTION DETAIL 30-1 SECTION 167		A TEMPORARY PARS SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 150 FEET ON 2% - 5% SLOPES, 200 FEET ON STEEPER SLOPES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE TYPICAL PIPE SIZE IS A 48 INCH DIAMETER. THE PIPE SHALL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 100'. THE DRAIN AREA SHALL BE STABILIZED FOR VELOCITY DISSIPATION AND EROSION CONTROL.	(D-3)	PERMANENT DRAINAGE DOWNSPIN STD. 20-36 DET. 20-36 SECTION 467		CONCRETE DRAIN INLET WITH METAL PAVE IS USED TO DRAIN CURBS, ON A SLOPE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, RESULTING OUTLET PROTECTION. TEMPORARY AND PERMANENT INLETS SHALL BE SPACED ACCORDING TO FOOT CULMINES REGARDING SLUTTER SPREAD AND OTHER CRITERIA.

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION	CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
57	FILTER PINE CONSTRUCTION DETAIL D-46 SECTION 163		A TEMPORARY STONE BARRIER CONSTRUCTED AT DRAINAGE STRUCTURE OUTLETS AND ROAD OUTLETS, IT REDUCES RUNOFF VELOCITY AND PREVENTS SEGMENT FROM LEAVING SITE PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. REFER TO THE LATEST EDITION OF THE MANUAL FOR EROSION AND SEGMENT CONTROL IN SECTION 1 FOR ADDITIONAL INFORMATION ON USAGE.	57-B	RETROFITTING EXISTING ROAD CONSTRUCTION DETAIL D-46 SECTION 163		A SLOTTED BOARD CONSISTS OF STONE AND/OR FILTER FABRIC AND BOARDS WITH 0.5' x 1' SLOTTED OPENINGS AS A TEMPORARY SEGMENT. PERMANENT STOPWATER SEGMENT AND OUTLET. DRAINAGE AREA LESS THAN 10 ACRES. OUTLET AREA WAS NOT ABLE TO STORE 67 CUBIC YARDS OF SEGMENT PER ACRE OF DISTURBED AREA. ROADWAY DRAINAGE STRUCTURE OPEN END PILES, TAPERED HEADWALLS, OR CONCRETE WEIR OUTLETS WITH DRAINAGE AREA LESS THAN 10 ACRES. REFER TO THE LATEST EDITION OF THE MANUAL FOR EROSION AND SEGMENT CONTROL IN SECTION 1 FOR DESIGN CRITERIA.
58	ROCK FILTER DAM CONSTRUCTION DETAIL D-45 SECTION 163, 603		ROCK FILTER DAMS ARE CONSTRUCTED OF THREE (3) STONE RIPPAP FACED WITH KEY STONE ON THE UPSTREAM SIDE. THEY ARE PLACED ACROSS DRAINAGEWAYS WHICH DRAIN 10 ACRES OR LESS. SEPTIC-TYPE UNDERLAYER SHALL BE USED WHEN PLACING ROCK FILTER DAMS. THE DAM SHOULD NOT BE HIGHER THAN THE CHANNEL DAMS. ROCK FILTER DAMS SHOULD BE USED IN 200 FEET PRIOR TO DISCHARGING INTO STREAMS, WETLANDS, DRAINWAYS, OR OTHER BODIES.	58-50 58-50 58-50	RETROFITTING SILT CONTROL DITCHES CONSTRUCTION DETAIL D-50 SECTION 163		A SILT CONTROL DITCH CONSISTS OF BRACKS WITHOUT SPACING AND FILTER FABRIC. IT BE USED FOR TEMPORARY SEGMENT STORAGE ON ROADWAY AND OUTLETS AT THE MOUTH OF DRAINAGE AREAS WITH A DRAINAGE AREA LESS THAN 10 ACRES. THE DISTURBED AREA WITHIN THE DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. SILT CONTROL DITCHES SHOULD NOT BE USED ALONE, BUT WITH ANOTHER BMP DOWNSTREAM PRIOR TO DISCHARGE LEAVING PROJECT AREA. DO NOT USE SILT DITCHES IN STATE WATERS. P-58-THP-1 IS USED IN BOX CULVERTS. P-58-THP-2 IS USED IN DRAINAGE HEADWALLS. P-58-THP-3 IS USED ON PAVED END SECTIONS AND TAPERED HEADWALLS.
59	STONE FILTER BERM CONSTRUCTION DETAIL D-45 SECTION 163, 603		STONE FILTER BERMS ARE CONSTRUCTED SIMILAR TO ROCK FILTER DAMS FOR A LINEAR APPLICATION. THEY ARE CONSTRUCTED OF THREE (3) STONE RIPPAP FACED WITH KEY STONE ON THE UPSTREAM SIDE. SEPTIC-TYPE UNDERLAYER SHALL BE USED WHEN PLACING STONE FILTER BERMS. STONE FILTER BERMS ARE IDEAL ALONG THE PERIMETER FOR SHEET FLOW AND/OR SHALLOW CONCENTRATED FLOW TO A CONFINED AREA WHERE PERIMETER SILT FENCE ALSO MAY BE INSUFFICIENT. THERE IS NO WELL-DEFINED CHANNEL FOR A STANDARD ROCK FILTER DAM, AND/OR CONSTRUCTING A ROCK OUTLET TEMPORARY SEGMENT THAT IS NOT APPLICABLE.	59-15	SEGMENT BARRIER (SENSITIVE) SILT FENCE TYPE 1 CONSTRUCTION DETAIL D-54 SECTION 163		SEGMENT BARRIERS MINIMIZE AND PREVENT SEGMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTERING OF SEGMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-1 SILT FENCE IS USUALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OF 10 ACRES WITH HILLS LESS THAN 10%. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
60	RIPPAP CONSTRUCTION SECTION 602		RIPPAP IS A FLEXIBLE PERMANENT BLANKET FOR PROTECTION OF FILL SLOPES AND BRIDGE END FILLS. RIPPAP TYPE-1 SHOULD BE PLACED ON TOP OF A SEPTIC-TYPE UNDERLAYER AT A MINIMUM 6" THICKNESS OR AS INDICATED ON THE PLANS. RIPPAP MAY ALSO BE USED AT DRAINAGE STRUCTURE OUTLETS WITHIN THE RIGHT-OF-WAY. HOWEVER, APPROPRIATE OUTLET PROTECTION SHOULD BE PROVIDED AT OUTLETS. REFER TO STORM DRAIN OUTLET PROTECTION FOR ADDITIONAL INFORMATION ON USING RIPPAP AT OUTLETS.	60-15	SEGMENT BARRIER (SENSITIVE) SILT FENCE TYPE 2 CONSTRUCTION DETAIL D-54 SECTION 163		SEGMENT BARRIERS MINIMIZE AND PREVENT SEGMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTERING OF SEGMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-2 SILT FENCE IS USUALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OF 10 ACRES WITH HILLS 10% AND GREATER. ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-2 SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.
61	RETROFITTING HALF-ROUND PILE CONSTRUCTION DETAIL D-44 SECTION 163		A RETROFITTED HALF-ROUND PILE WITH STONE FILTER PLACED IN FRONT OF A PERMANENT STOPWATER DETENTION ROAD OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEGMENT FILTER. SHOULD BE USED ONLY IN DETENTION Ponds WITH LESS THAN 10 ACRES TOTAL DRAINAGE AREA. SHALL ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEGMENT PER ACRE OF DISTURBED AREA. REFER TO THE LATEST EDITION OF THE MANUAL FOR EROSION AND SEGMENT CONTROL IN SECTION 1 FOR DESIGN CRITERIA.	61-15	SEGMENT BARRIER (SENSITIVE) SILT FENCE TYPE 3 CONSTRUCTION DETAIL D-54 SECTION 163		SEGMENT BARRIERS MINIMIZE AND PREVENT SEGMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTERING OF SEGMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-3 SILT FENCE IS USUALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OF 10 ACRES WITH HILLS 10% AND GREATER. ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-3 SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S "MANUAL FOR EROSION AND SEDIMENT CONTROL" IN SECTION 1.

NOTE:

2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

[illegible]

CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION	CODE	PRACTICE STD. OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
ST	STORM DRAIN OUTLET PROTECTION PA. STD. 1163 & 2332		A PIPE TO BOX OUTLET PROTECTION HEADWALL WITH AN APPROX. DISSIPATIVE BLOSSOM IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE PLACED TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. IT IS USED IN THE OUTLET OF ALL BOX CULVERTS AND ON 48" AND LARGER PIPES. MAY BE USED ON INLET FOR FLOWING STREAMS. USE ON SMALL PIPES WHEN OUTLET VELOCITY OF THE 25-YEAR STORM IS 12 FPS AND GREATER.				
ST-1							
ST-2							
ST-3							
ST-4							
ST-5							
ST-6							
ST-7							
ST-8							
ST-9							
ST-10							
ST-11							
ST-12							
ST-13							
ST-14							
ST-15							

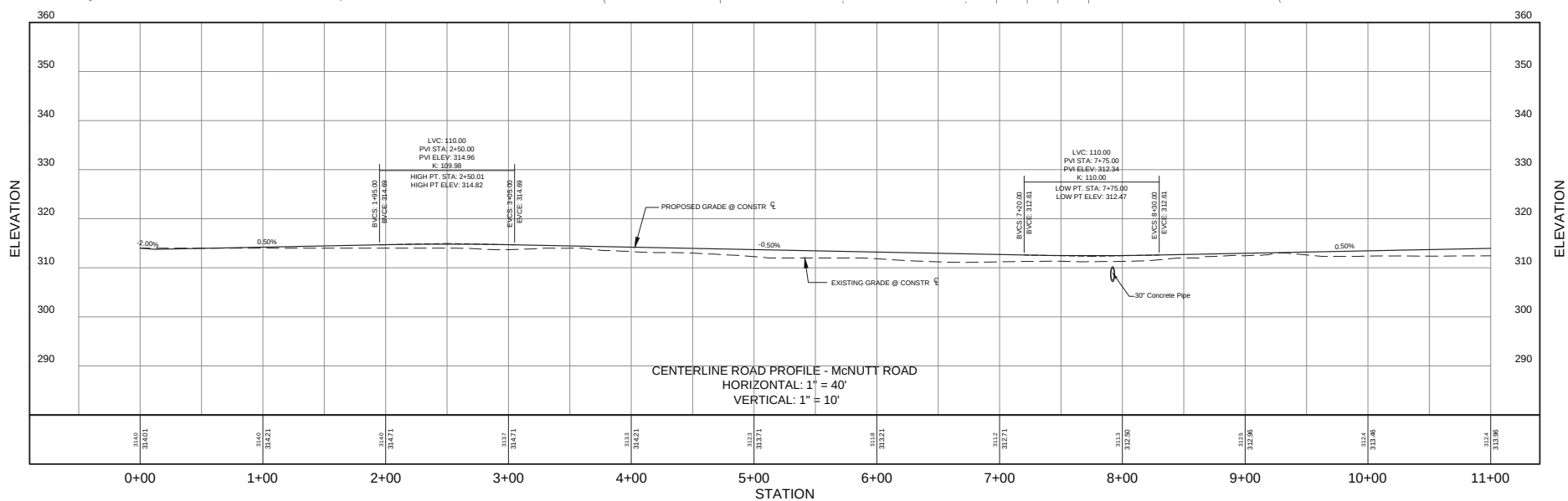
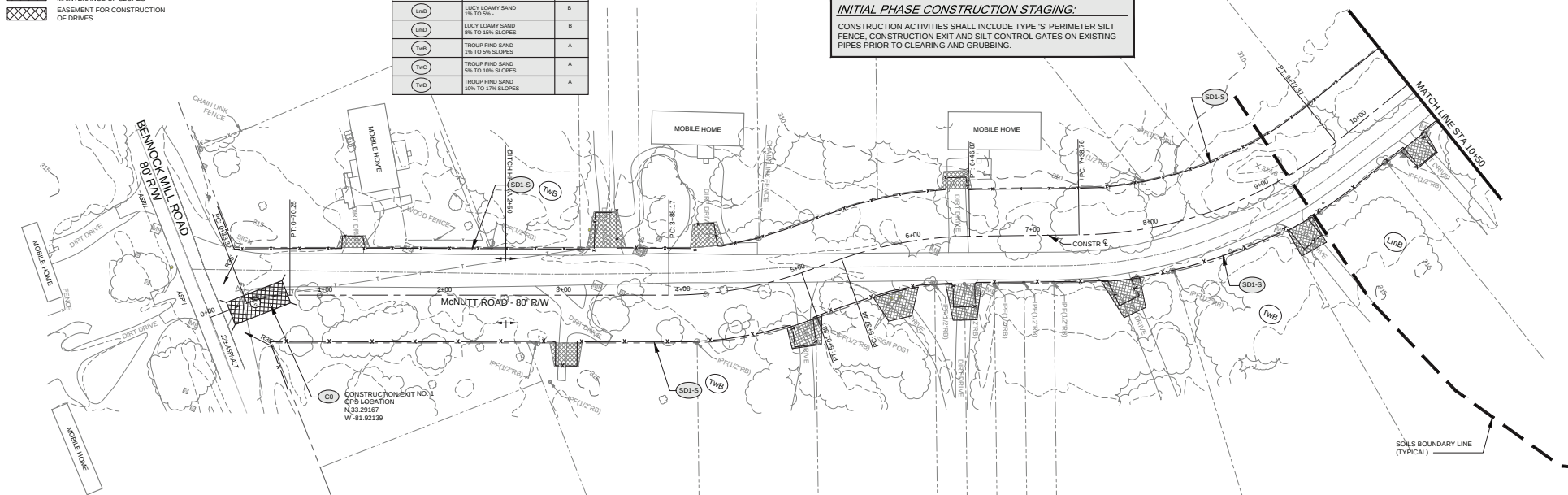
NOTE:

1. DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
2. FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 1% to 5%	B
	LUCY LOAMY SAND 8% to 15% SLOPES	B
	TROUP FINE SAND 1% to 5% SLOPES	A
	TROUP FINE SAND 5% to 10% SLOPES	A
	TROUP FINE SAND 10% to 17% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



**Moreland Altobelli
Associates, LLC**
327 Dahlonega Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	KEQ	01-24-
DRAWN BY	NAA	01-24-
CHECKED BY	NAA	01-24-



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES		

BMP LOCATION DETAILS

INITIAL PHASE
McNUTT ROAD
0+00 TO 10+50

DRAWING
NUMBER

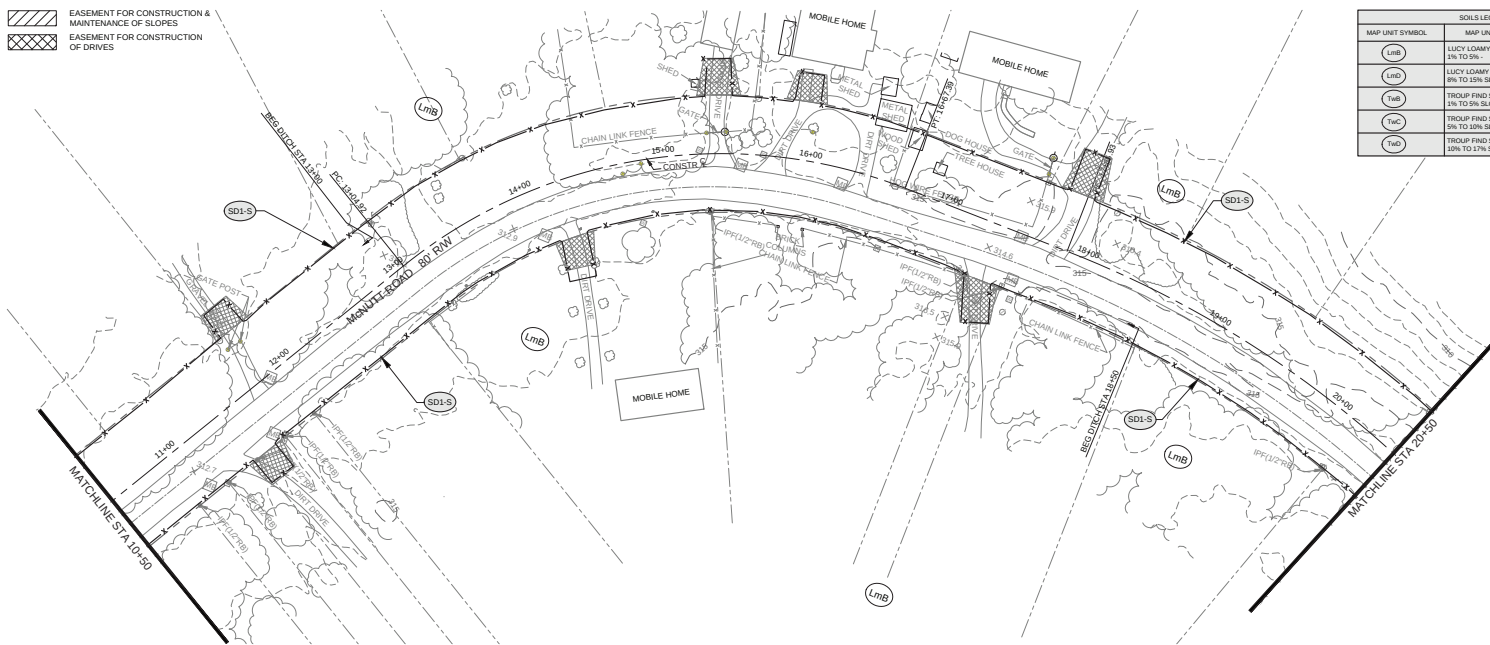
54-0001

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

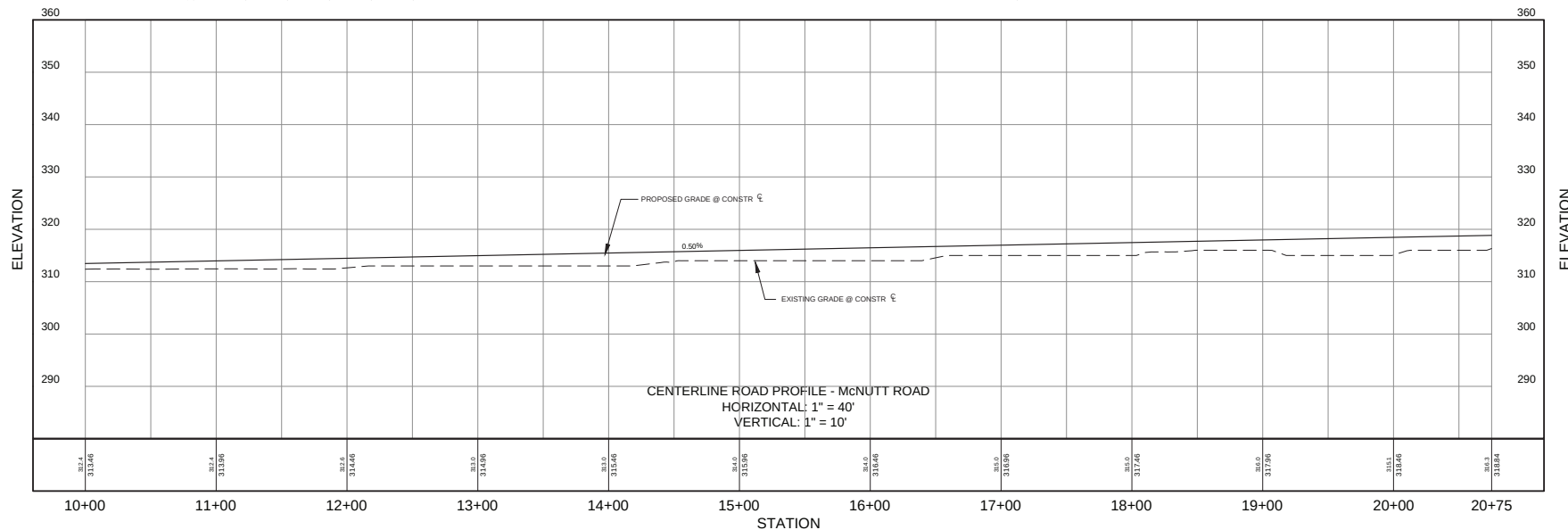
SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 3% TO 5% SLOPES	B
	LUCY LOAMY SAND 6% TO 15% SLOPES	B
	TROUP FINE SAND 1% TO 5% SLOPES	A
	TROUP FINE SAND 5% TO 10% SLOPES	A
	TROUP FINE SAND 10% TO 17% SLOPES	A



PROJECT: _____



INITIAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
DRAWN BY	NAM	02-24-20
CHECKED BY	NAM	02-24-20
BY	KEO	02-24-20



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION DATES	

BMP LOCATION DETAILS

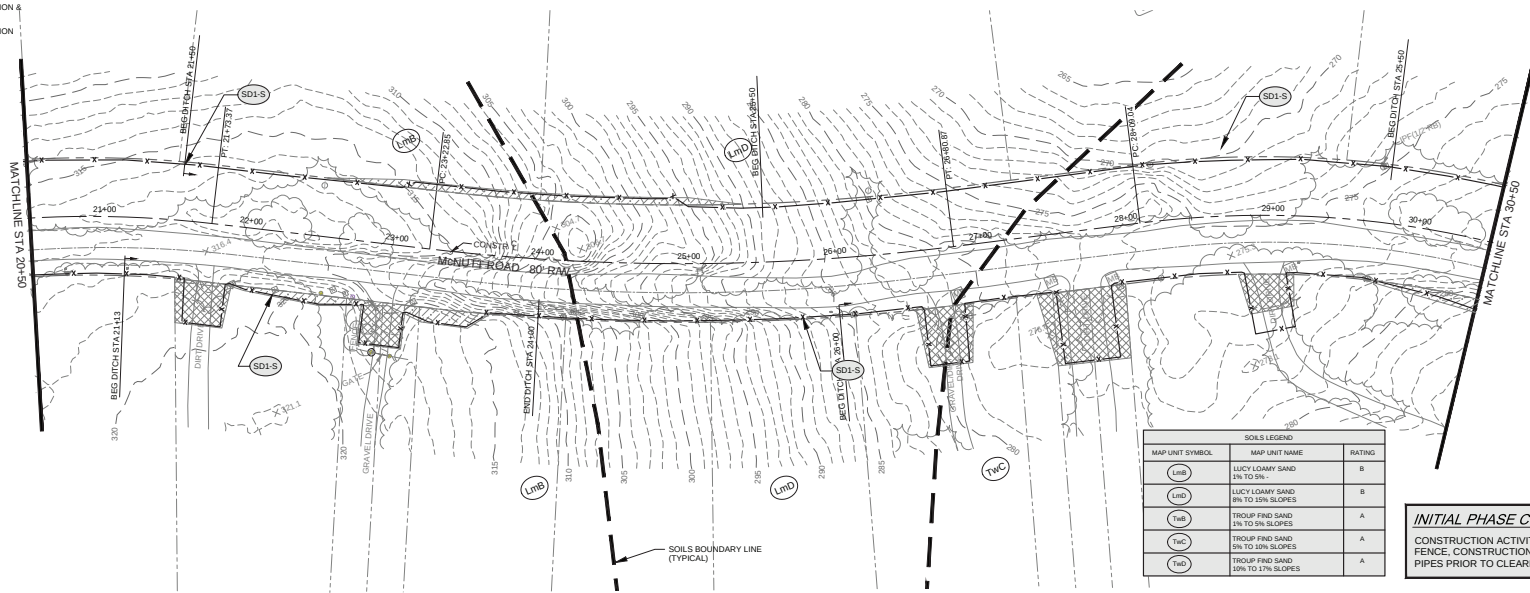
INITIAL PHASE
 McNUTT ROAD
 10+50 TO 20+50

DRAWING NUMBER

54-0002

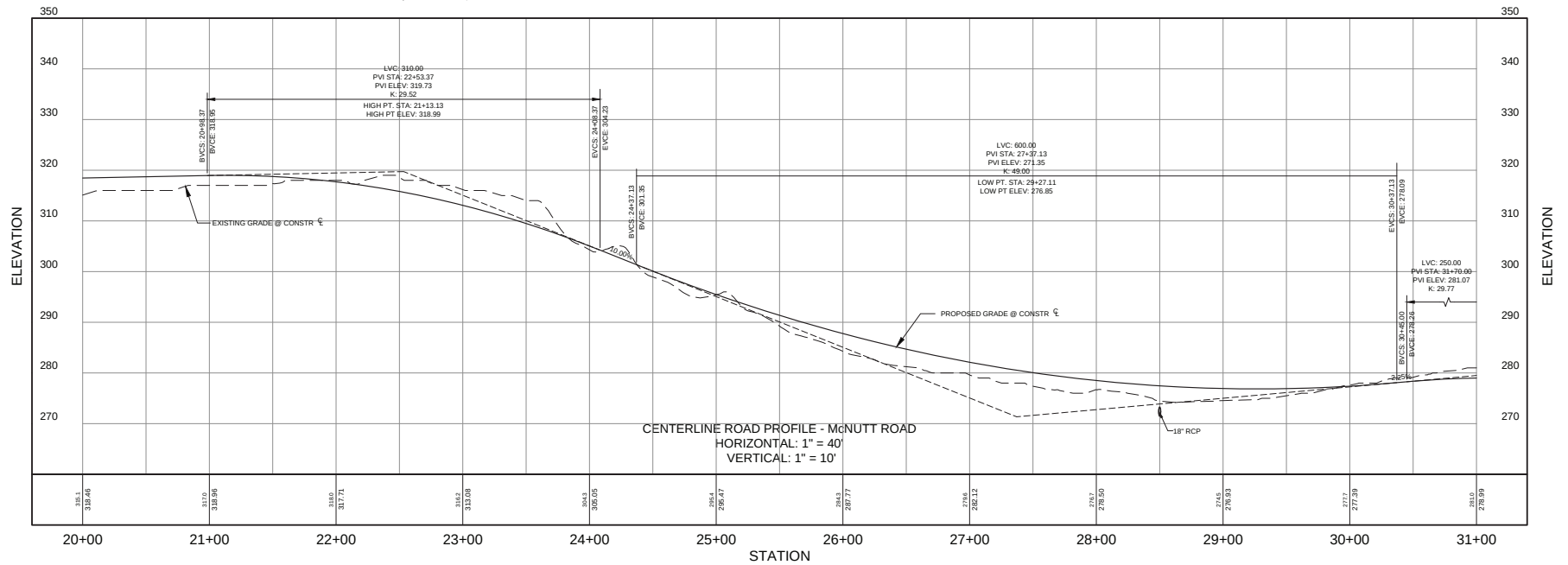
- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
(LMD)	LUCY LOAMY SAND 2% TO 5% SLOPES	B
(LHC)	LUCY LOAMY SAND 5% TO 15% SLOPES	B
(TMD)	TROUP FINE SAND 2% TO 5% SLOPES	A
(TWC)	TROUP FINE SAND 5% TO 15% SLOPES	A
(TMD)	TROUP FINE SAND 15% TO 17% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAM	02-24-20
CHECKED	NAM	02-24-20
BY	KEO	02-24-20



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES	

BMP LOCATION DETAILS

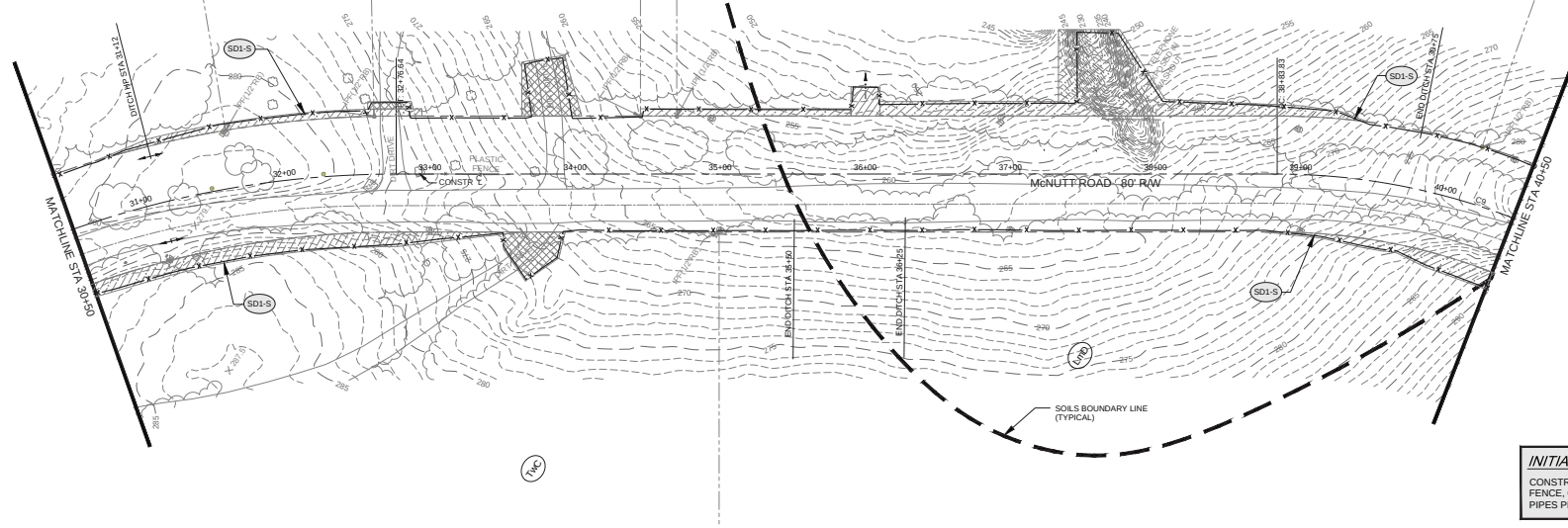
INITIAL PHASE
McNUTT ROAD
20+50 TO 30+50

DRAWING NUMBER

54-0003

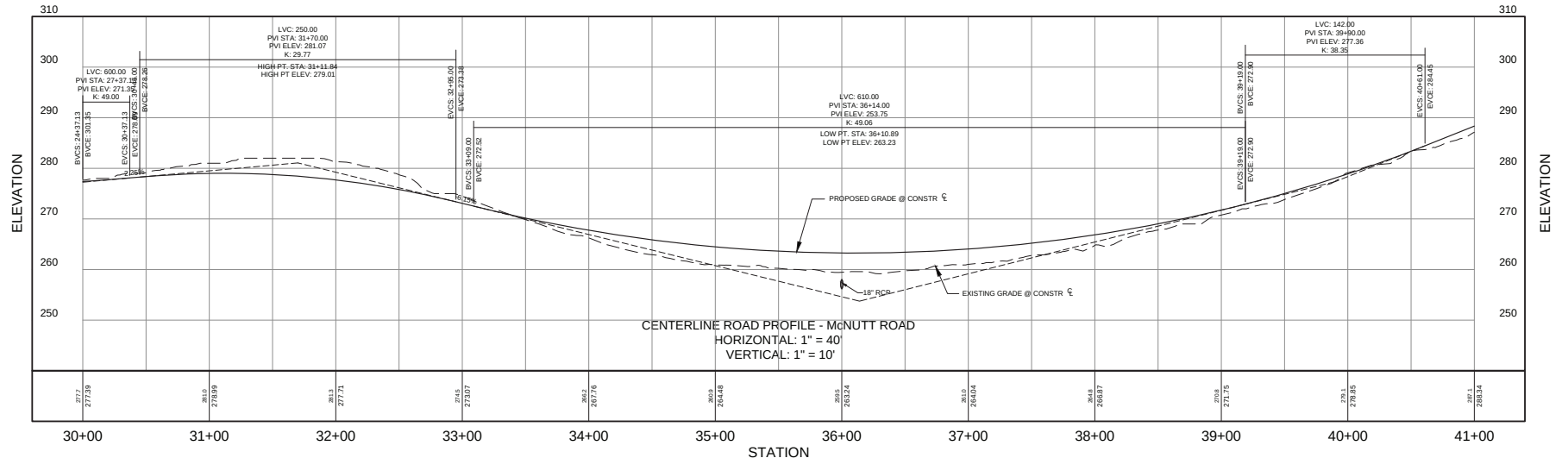
- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



MAP UNIT SYMBOL	MAP UNIT NAME	RATING
(LSD)	LUCY LOAMY SAND 5% TO 8% SLOPES	B
(LSD)	LUCY LOAMY SAND 8% TO 10% SLOPES	B
(TSD)	TROUP FINE SAND 5% TO 10% SLOPES	A
(TSD)	TROUP FINE SAND 10% TO 15% SLOPES	A
(TSD)	TROUP FINE SAND 15% TO 20% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Collins Street
Suite 1400
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	02-24-20
CHECKED	NAA	02-24-20
BY	KEO	02-24-20



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES

BMP LOCATION DETAILS

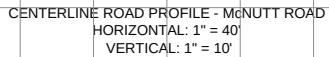
INITIAL PHASE
McNUTT ROAD
30+50 TO 40+50

DRAWING NUMBER

54-0004

INITIAL PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.

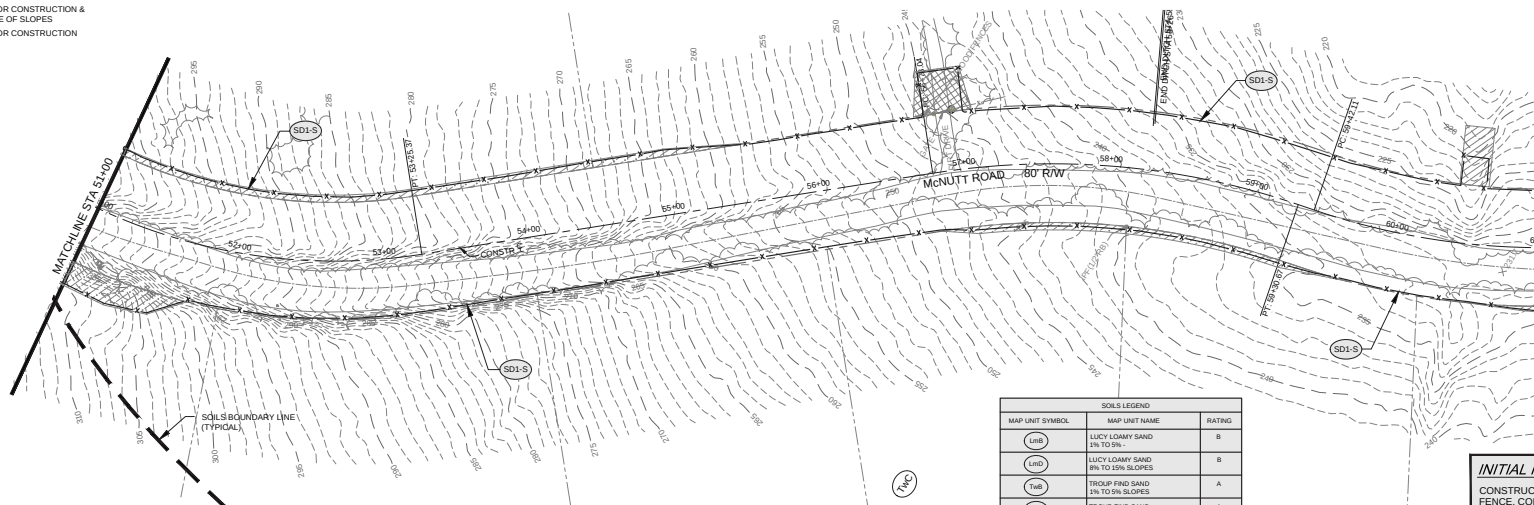


DRAWING
NUMBER

54-0005

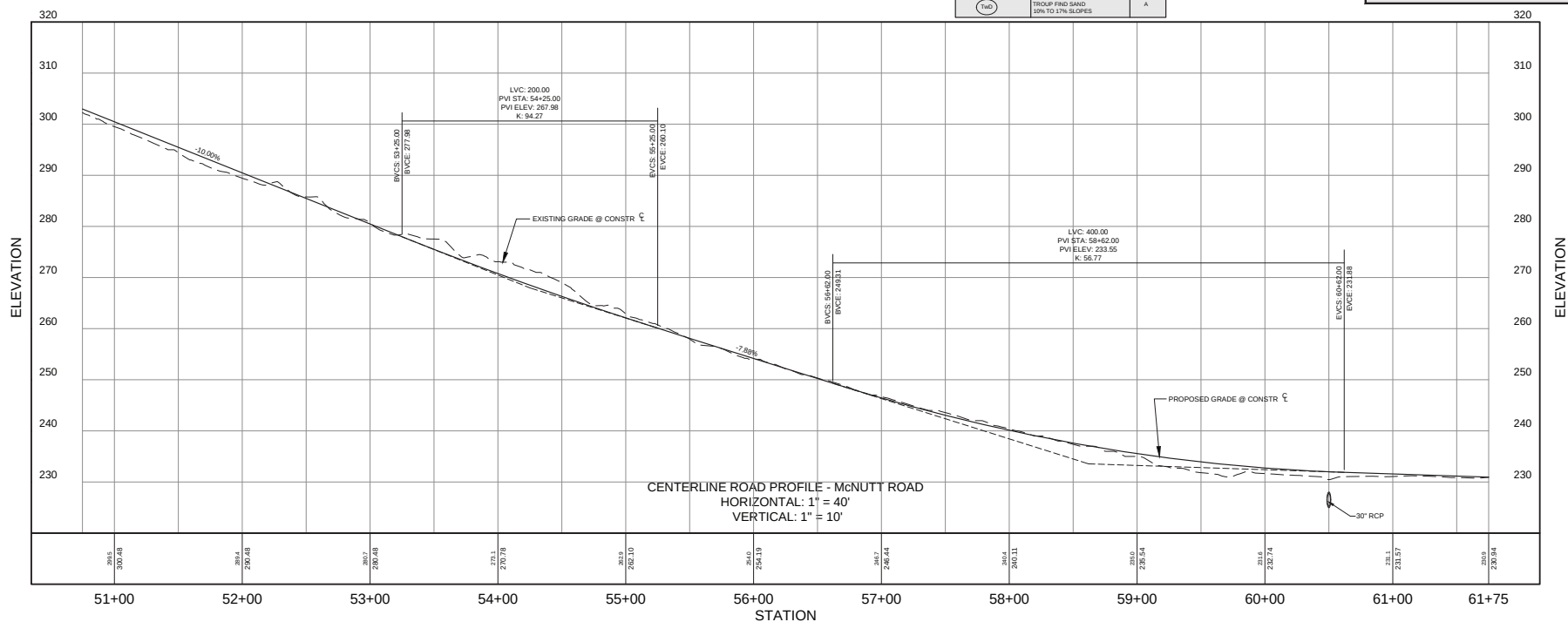
- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 2% TO 5%	B
	LUCY LOAMY SAND 5% TO 15% SLOPES	B
	TROUP FINE SAND 2% TO 5% SLOPES	A
	TROUP FINE SAND 5% TO 10% SLOPES	A
	TROUP FINE SAND 10% TO 15% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Collingswood Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	02-24-20
CHECKED	NAA	02-24-20
BY	KEO	02-24-20



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION DATES	

BMP LOACTION DETAILS

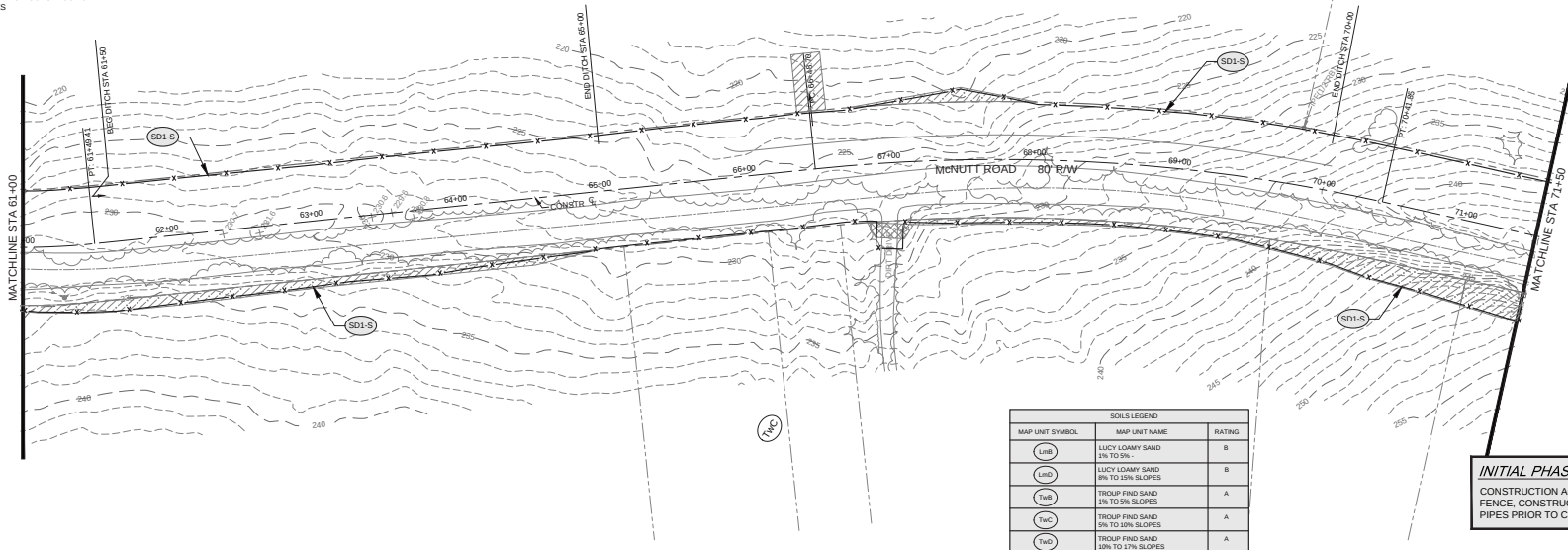
INITIAL PHASE
 McNUTT ROAD
 51+00 TO 61+00

DRAWING NUMBER

54-0006

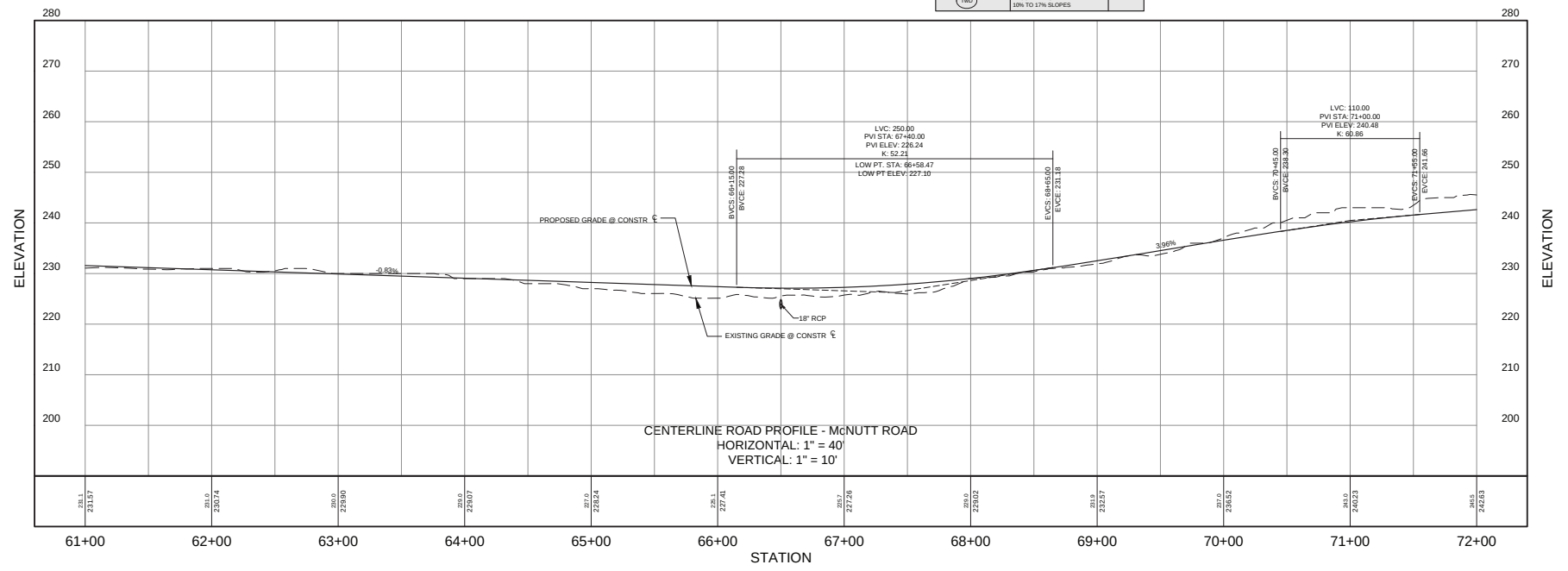
- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
(LNB)	LUCY LOAMY SAND 1% TO 5% SLOPES	B
(LND)	LUCY LOAMY SAND 6% TO 10% SLOPES	B
(TWB)	TROUP FINE SAND 1% TO 5% SLOPES	A
(TWC)	TROUP FINE SAND 6% TO 10% SLOPES	A
(TWD)	TROUP FINE SAND 10% TO 17% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Oakridge Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAME	DATE
CHECKED	NAME	DATE
BY	NAME	DATE



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES	

BMP LOCATION DETAILS

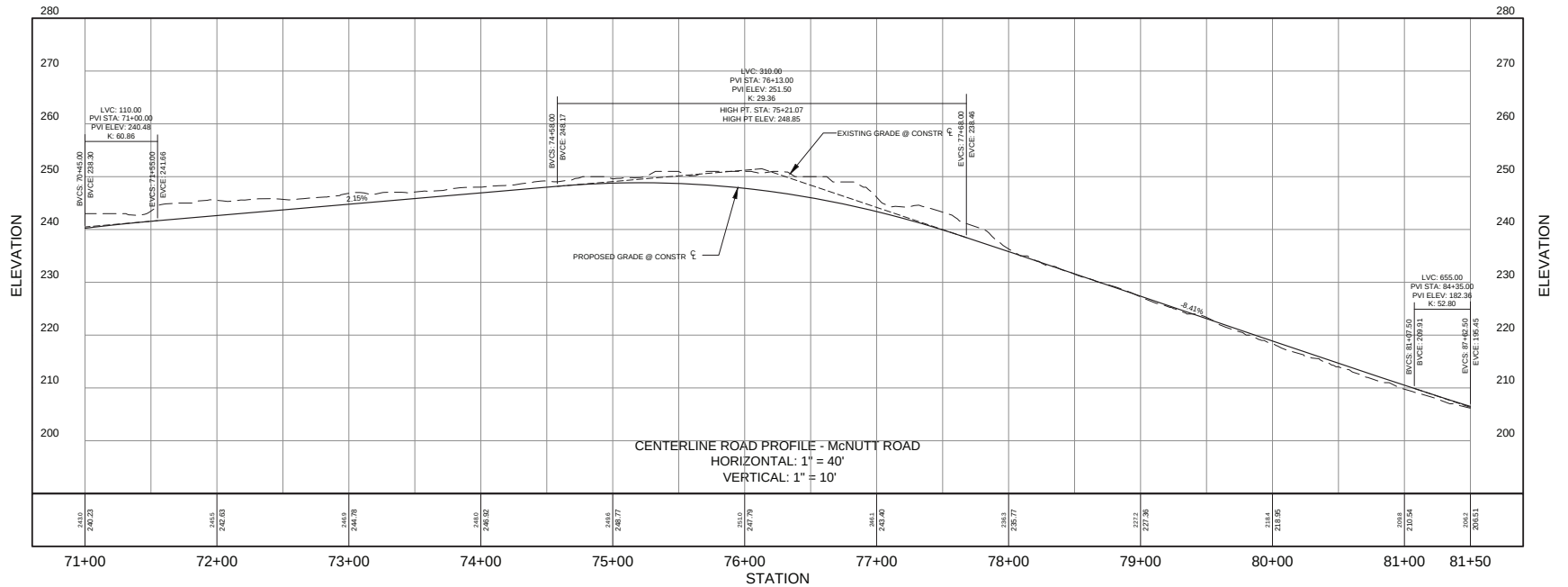
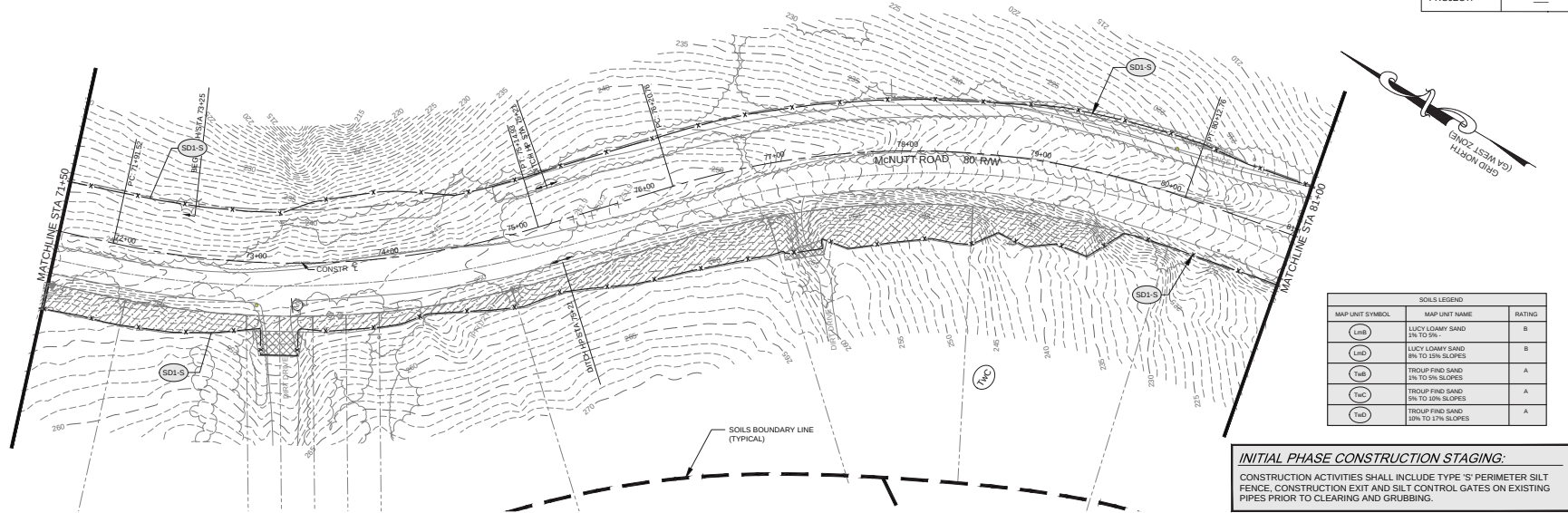
INITIAL PHASE
McNUTT ROAD
61+00 TO 71+50

DRAWING NUMBER

54-0007

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oakridge Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	KEO	05-24-20
BY		



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION	DATE

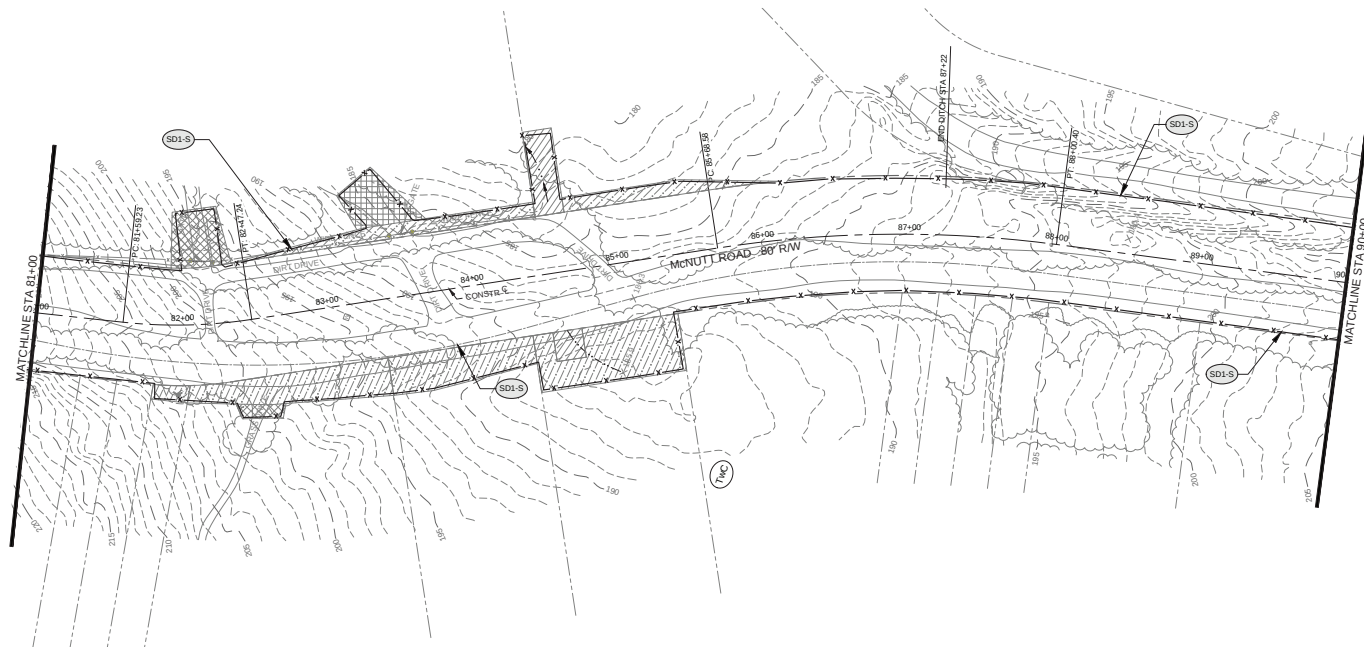
BMP LOCATION DETAILS

**INITIAL PHASE
 McNUTT ROAD
 71+50 TO 81+00**

DRAWING NUMBER

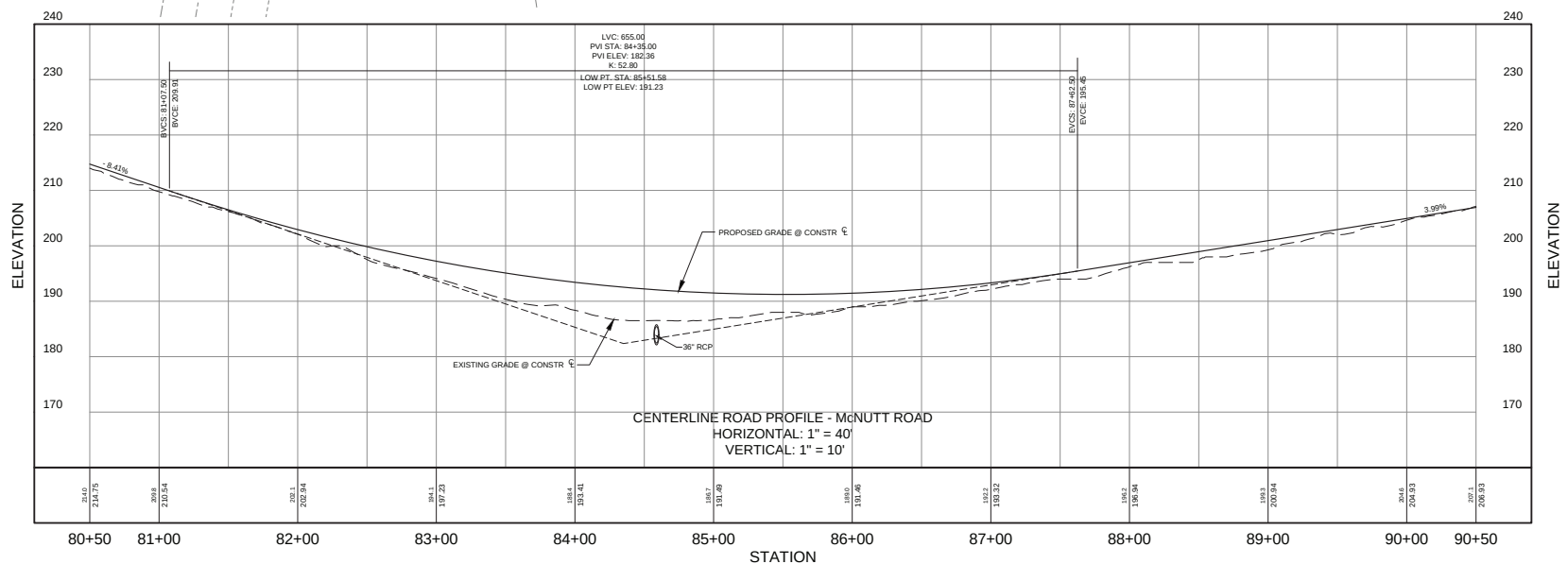
54-0008

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 1% TO 5%	B
	LUCY LOAMY SAND 6% TO 15% SLOPES	B
	TRUCK FINE SAND 1% TO 5% SLOPES	A
	TRUCK FINE SAND 6% TO 15% SLOPES	A
	TRUCK FINE SAND 16% TO 17% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Collins Street, Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	NAA	05-24-20
BY	KED	05-24-20



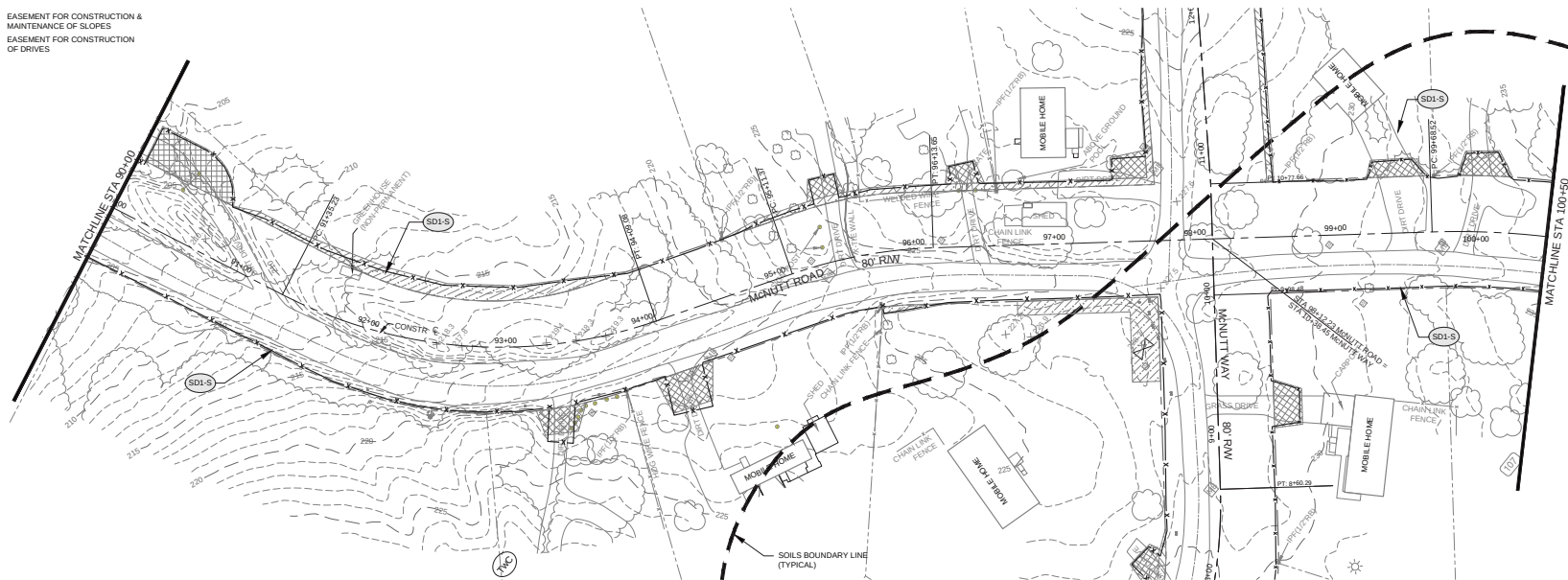
**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION DATES	

BMP LOCATION DETAILS	
INITIAL PHASE	
McNUTT ROAD	
81+00 TO 90+00	

DRAWING NUMBER
54-0009

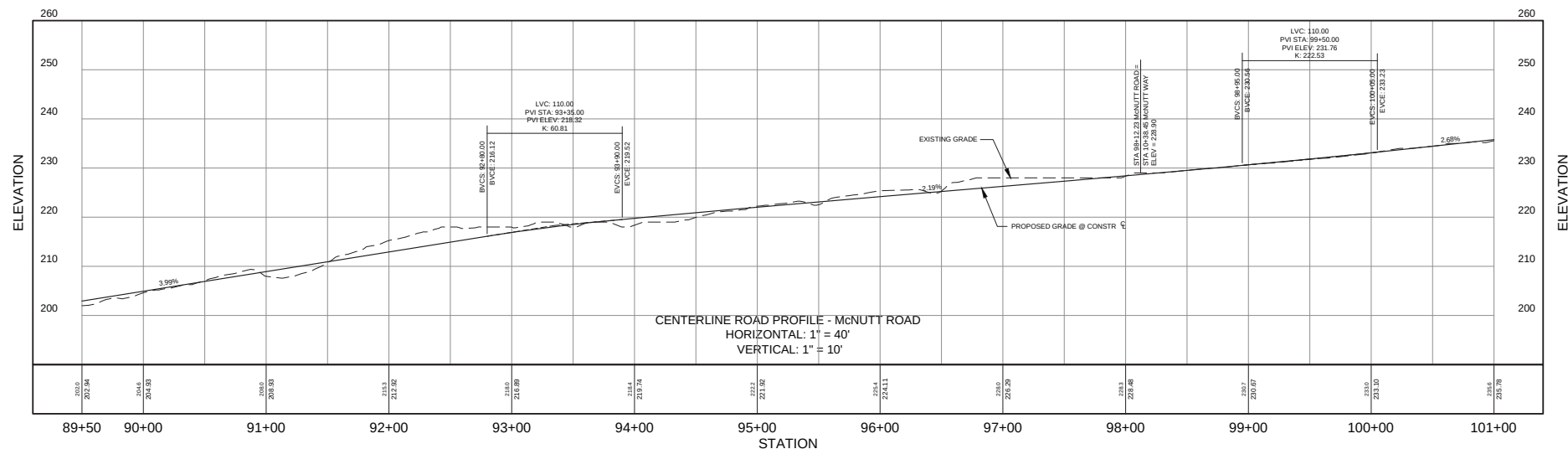
- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LIME	
	LIME	
	LIME	
	LIME	
	LIME	
	LIME	
	LIME	
	LIME	
	LIME	
	LIME	

INITIAL PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli
 Associates, LLC
 217 Oaklawn Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	NAA	05-24-20
BY	KEO	05-24-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION DATES	

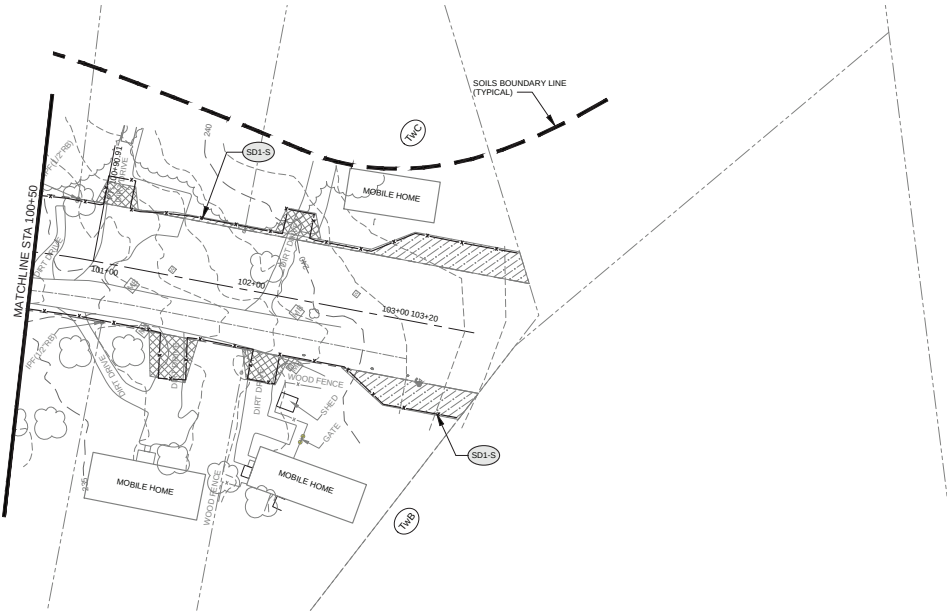
BMP LOCATION DETAILS

INITIAL PHASE
 McNUTT ROAD
 90+00 TO 100+50

DRAWING NUMBER

54-0010

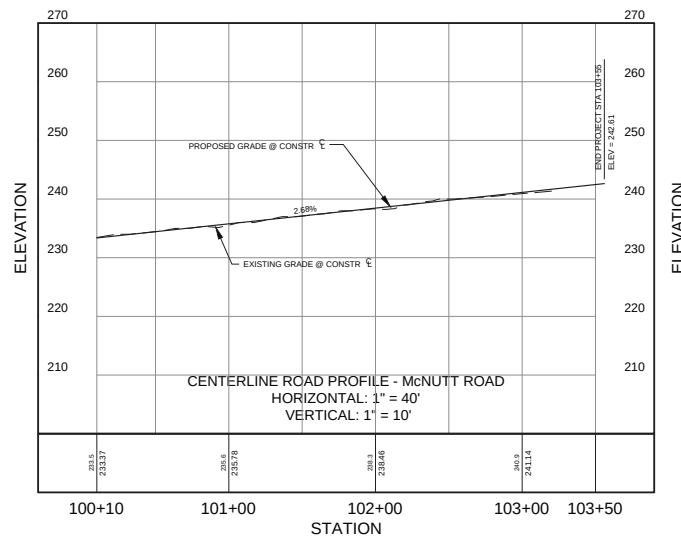
-  EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 3% TO 5% -	B
	LUCY LOAMY SAND 8% TO 15% SLOPES	B
	TROUP FINE SAND 4% TO 5% SLOPES	A
	TROUP FINE SAND 5% TO 10% SLOPES	A
	TROUP FINE SAND 10% TO 17% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES	

BMP LOCATION DETAILS

INITIAL PHASE
 McNUTT ROAD
 100+50 TO END

DRAWING NUMBER

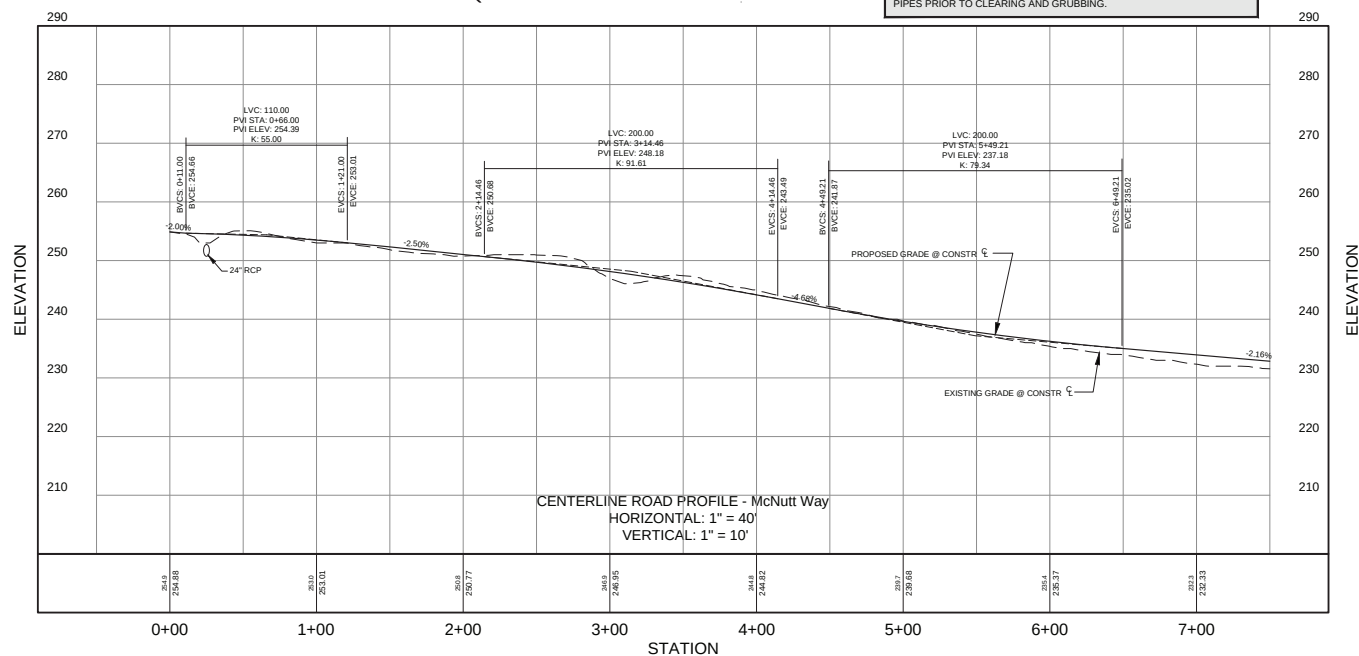
54-0011



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 1% TO 5% -	B
	LUCY LOAMY SAND 8% TO 15% SLOPES	B
	TROUP FINE SAND 1% TO 5% SLOPES	A
	TROUP FINE SAND 5% TO 10% SLOPES	A
	TROUP FINE SAND 10% TO 12% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



**Moreland Altobelli
Associates, LLC**
327 Dahlonega Street
Suite 1401
Cumming, Georgia 30040
Telephone (770) 781-5507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

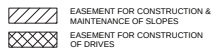
REVISION DATES		

BMP LOCATION DETAILS

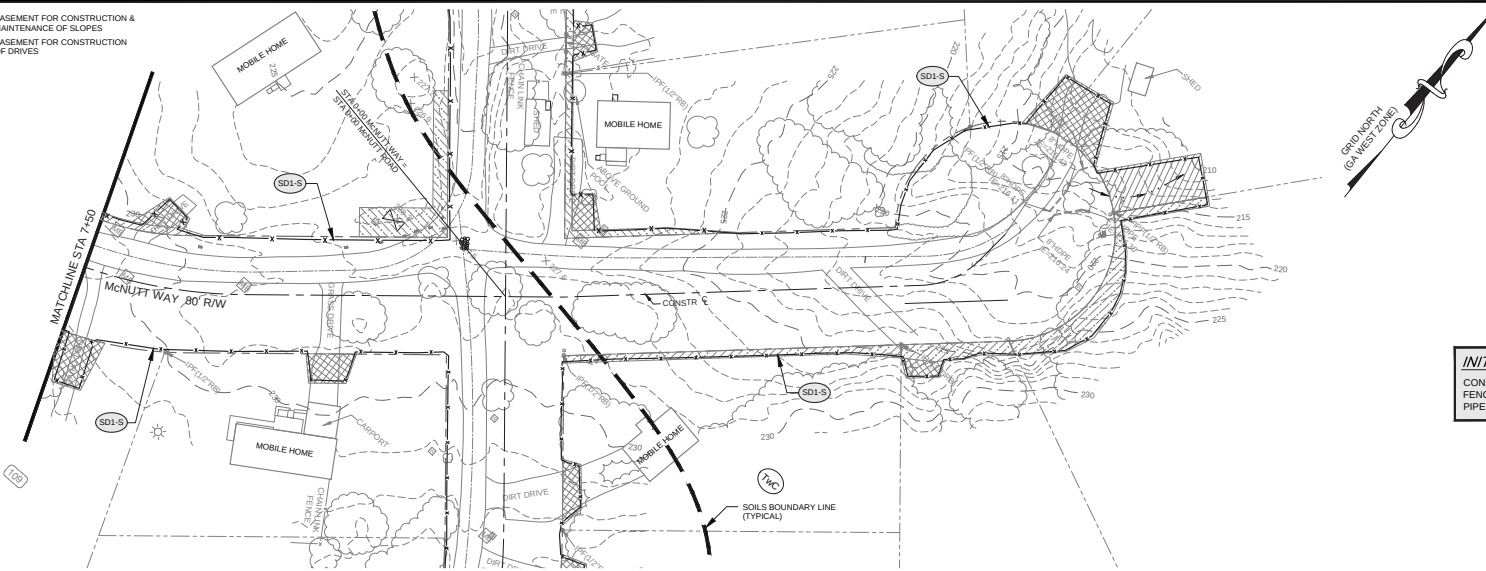
INITIAL PHASE
MCNUTT WAY
0+00 TO 7+50

DRAWING
NUMBER

54-0012



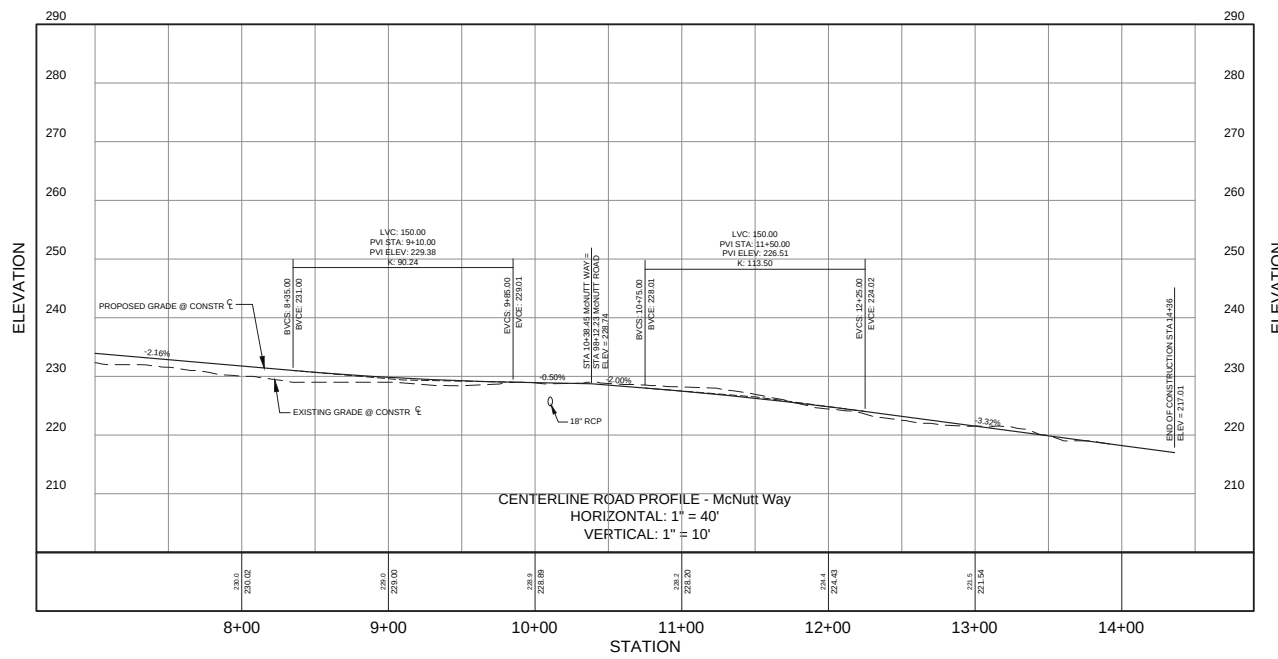
PROJECT: _____



SOILS LEGEND		
MAP UNIT SYMBOL	MAP UNIT NAME	RATING
	LUCY LOAMY SAND 1% TO 5% -	B
	LUCY LOAMY SAND 8% TO 15% SLOPES	B
	TROUP FINE SAND 2% TO 5% SLOPES	A
	TROUP FINE SAND 5% TO 10% SLOPES	A
	TROUP FINE SAND 10% TO 17% SLOPES	A

INITIAL PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE TYPE 'S' PERIMETER SILT FENCE, CONSTRUCTION EXIT AND SILT CONTROL GATES ON EXISTING PIPES PRIOR TO CLEARING AND GRUBBING.

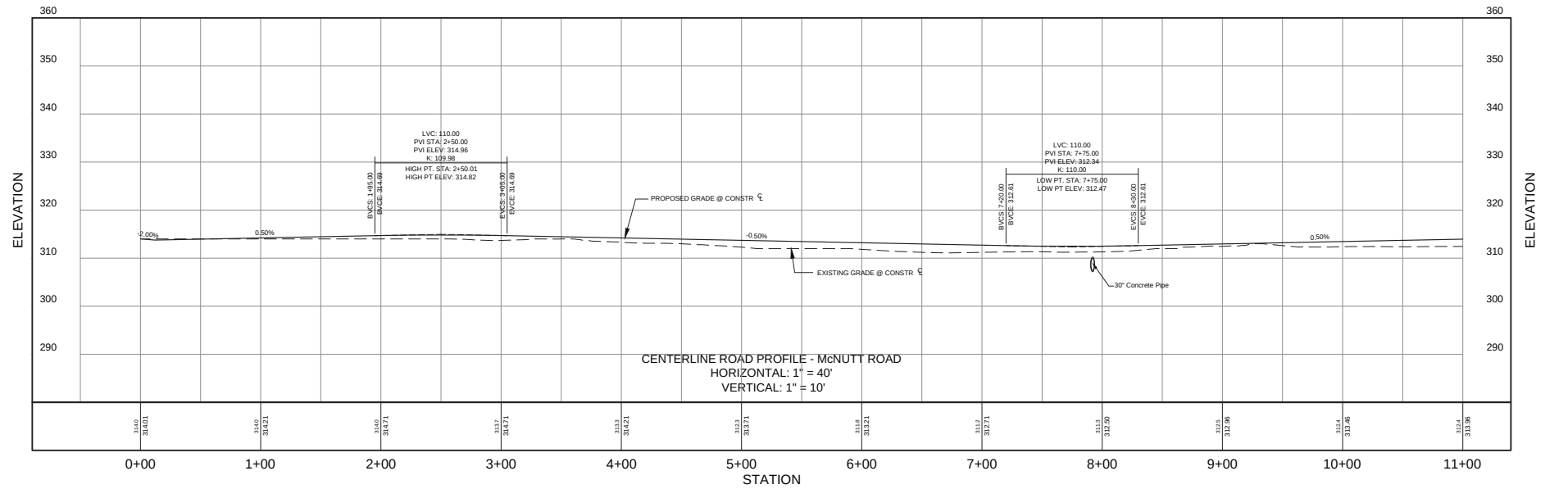
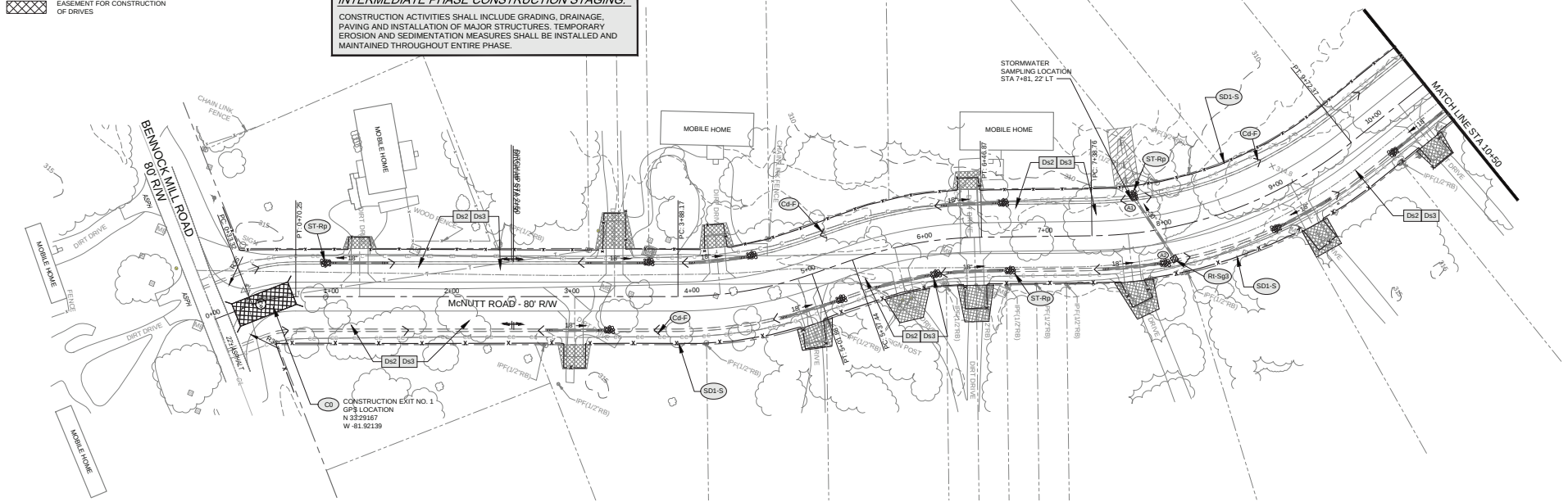


 GEORGIA811 www.Georgia811.com <i>Know what's below. Call before you dig.</i>	HORIZONTAL SCALE: 1" = 40' VERTICAL SCALE: 1" = 10'	 Moreland Altobelli Associates, LLC 327 Darnallsa Street Suite 1001 Cumming, Georgia 30040 Telephone (770) 785-5507	DESIGNED BY: NAA (0-24-20) DRAWN BY: NAA (0-24-20) CHECKED BY: KEQ (0-24-20)	 McNUTT ROAD ROAD CONSTRUCTION PLANS	REVISION DATES <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>											BMP LOCATION DETAILS INITIAL PHASE MCNUTT WAY 7+50 TO END	DRAWING NUMBER 54-0013

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

INTERMEDIATE PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.

PROJECT: _____



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	KEO	05-24-20
BY		



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

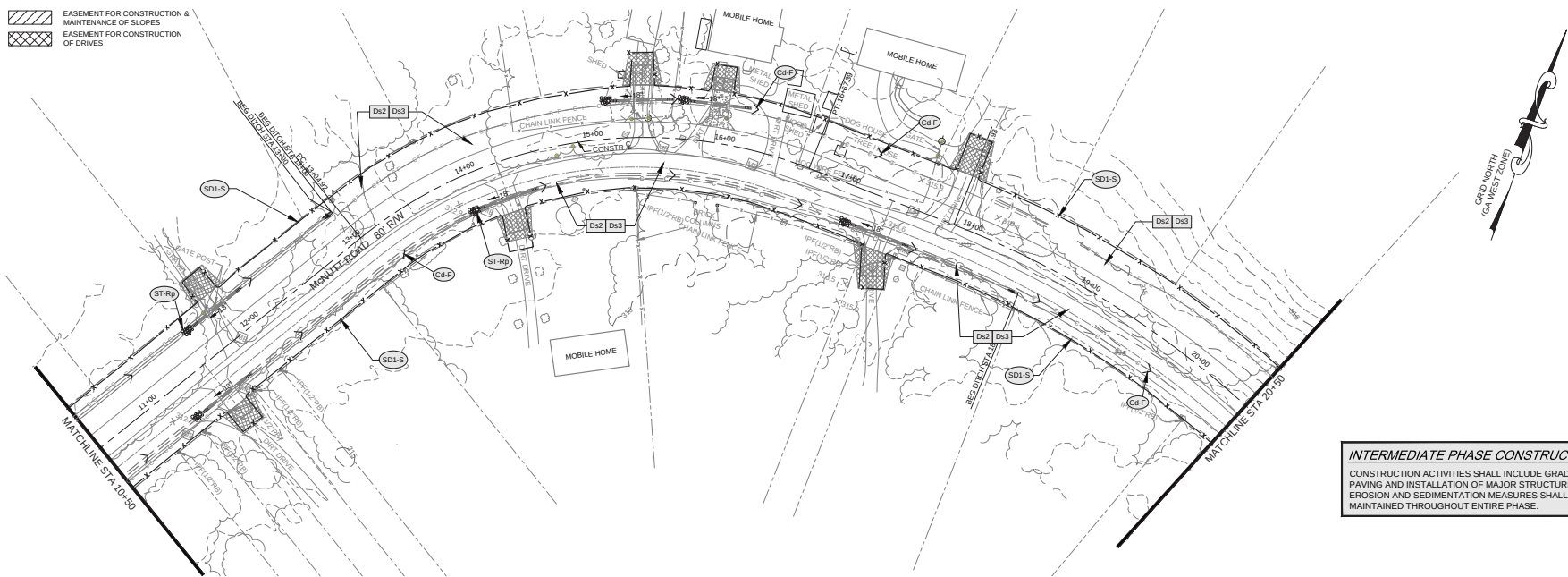
REVISION	DATE

BMP LOCATION DETAILS
 INTERMEDIATE PHASE
 McNUTT ROAD
 0+00 TO 10+50

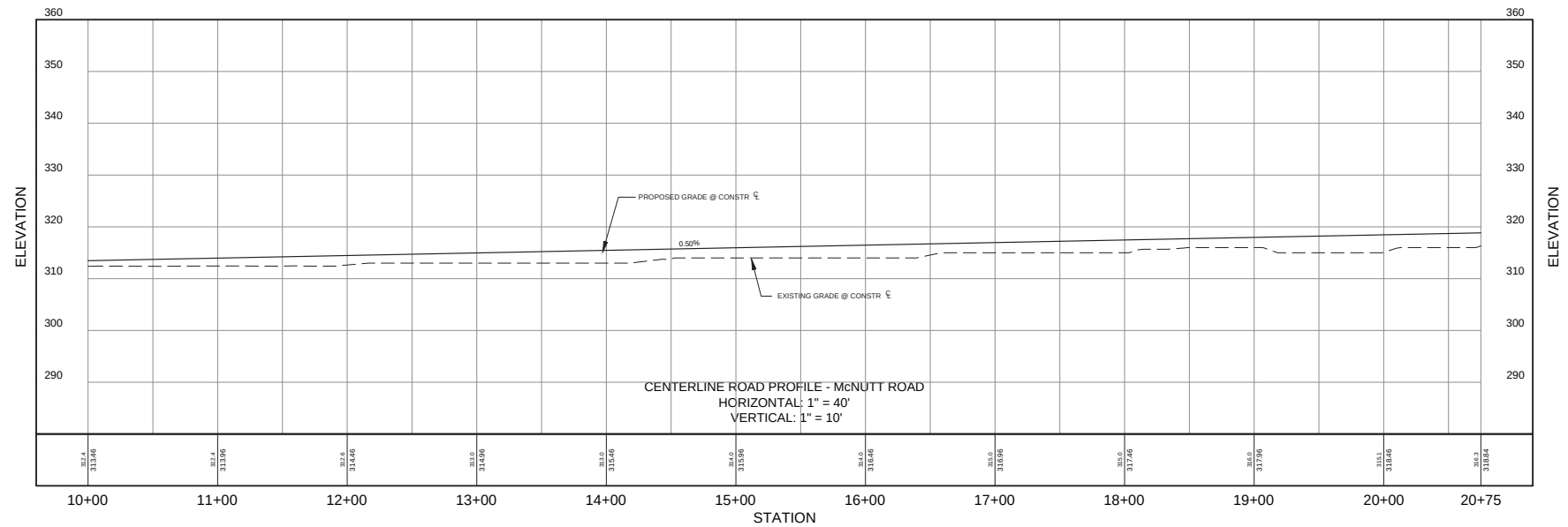
DRAWING NUMBER
54-0014

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
DRAWN BY	NAM	02-24-20
CHECKED BY	NAM	02-24-20
BY	KEO	02-24-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

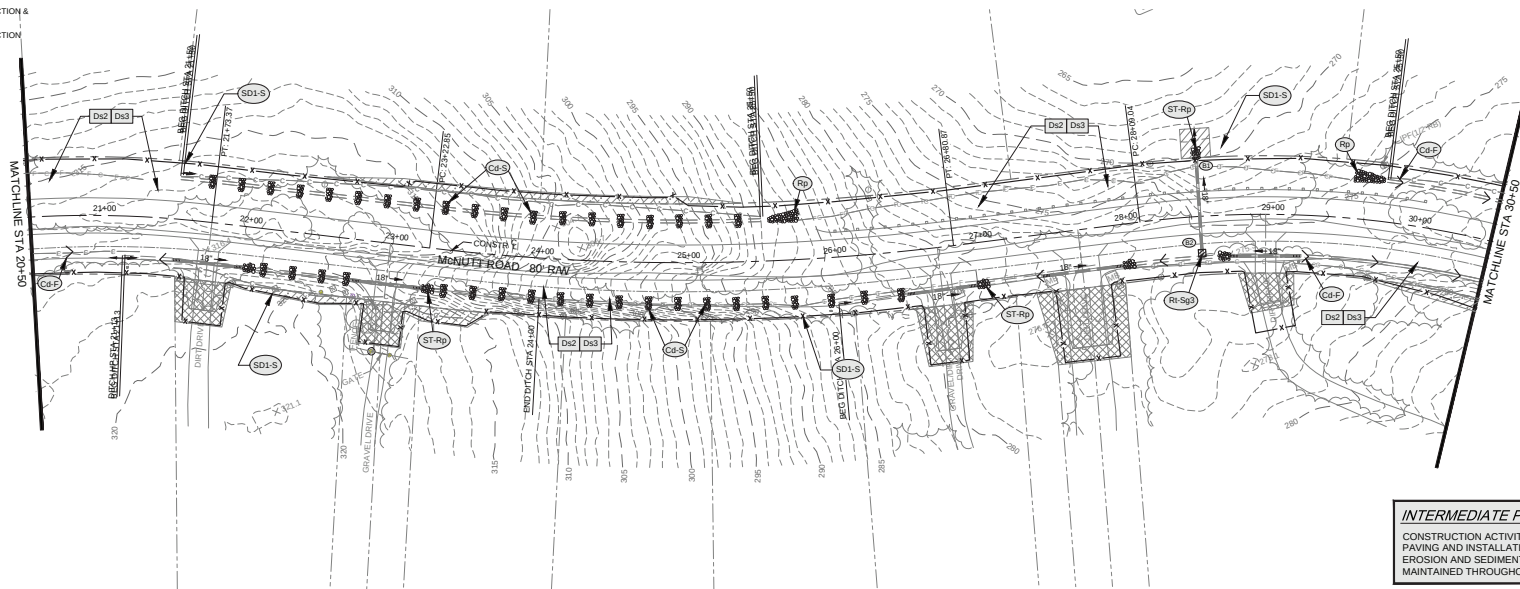
REVISION DATES

BMP LOCATION DETAILS
INTERMEDIATE PHASE
McNUTT ROAD
10+50 TO 20+50

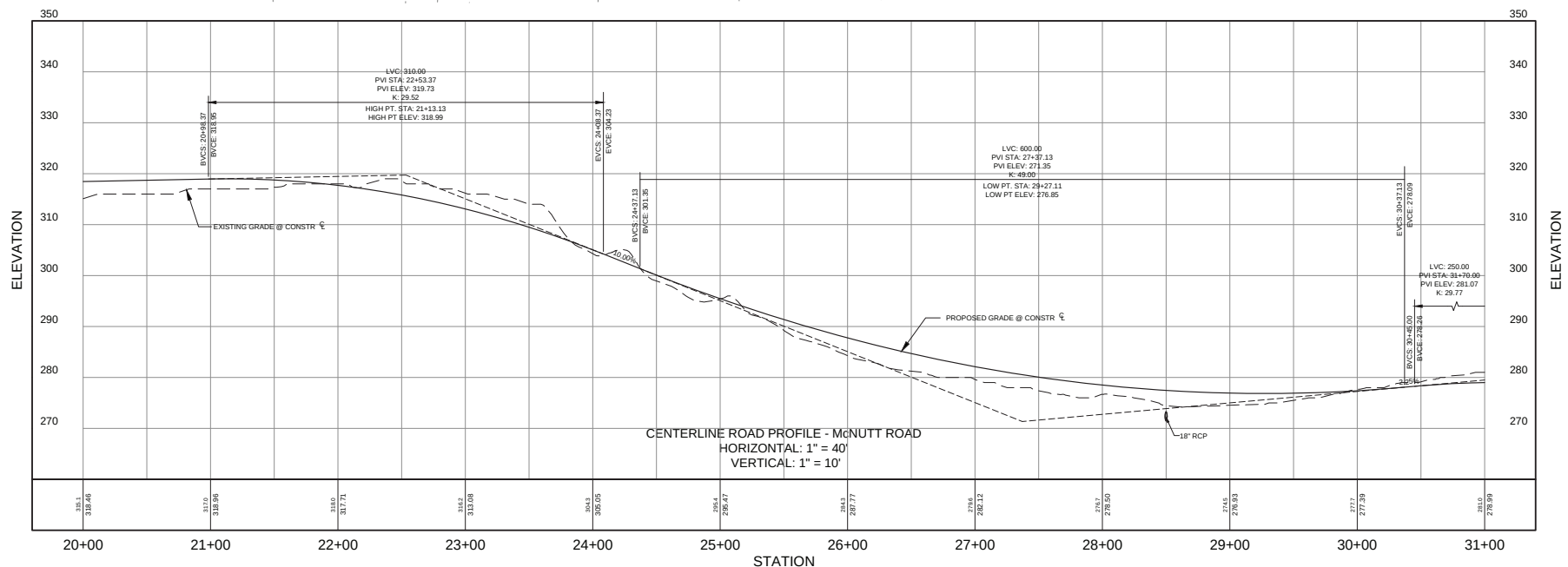
DRAWING NUMBER
54-0015

 EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 College Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	02-24-20
CHECKED	NAA	02-24-20
BY	KEO	02-24-20



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

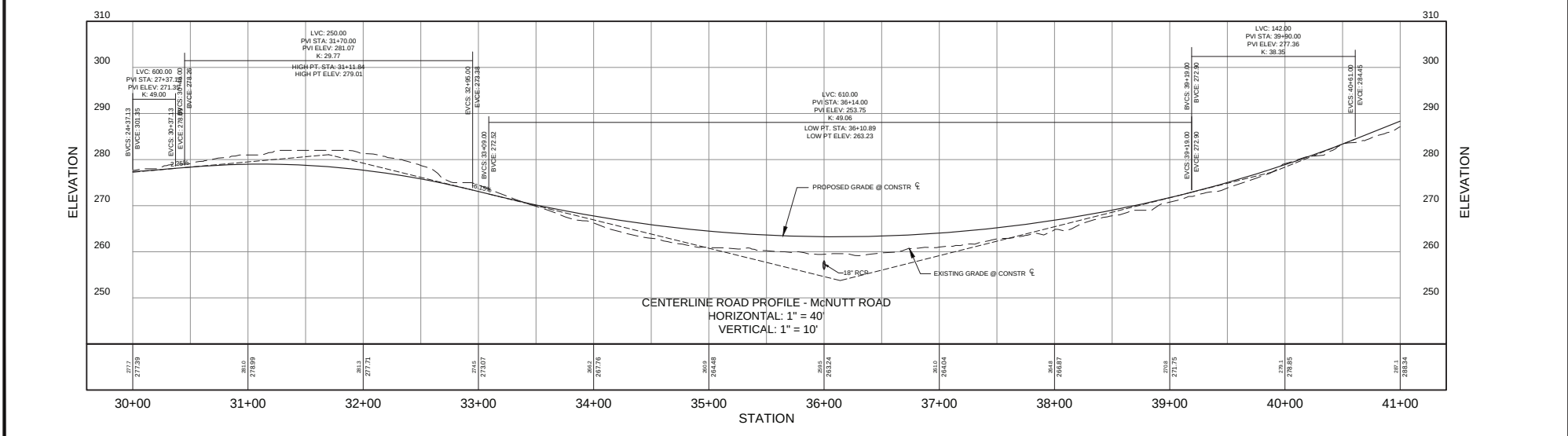
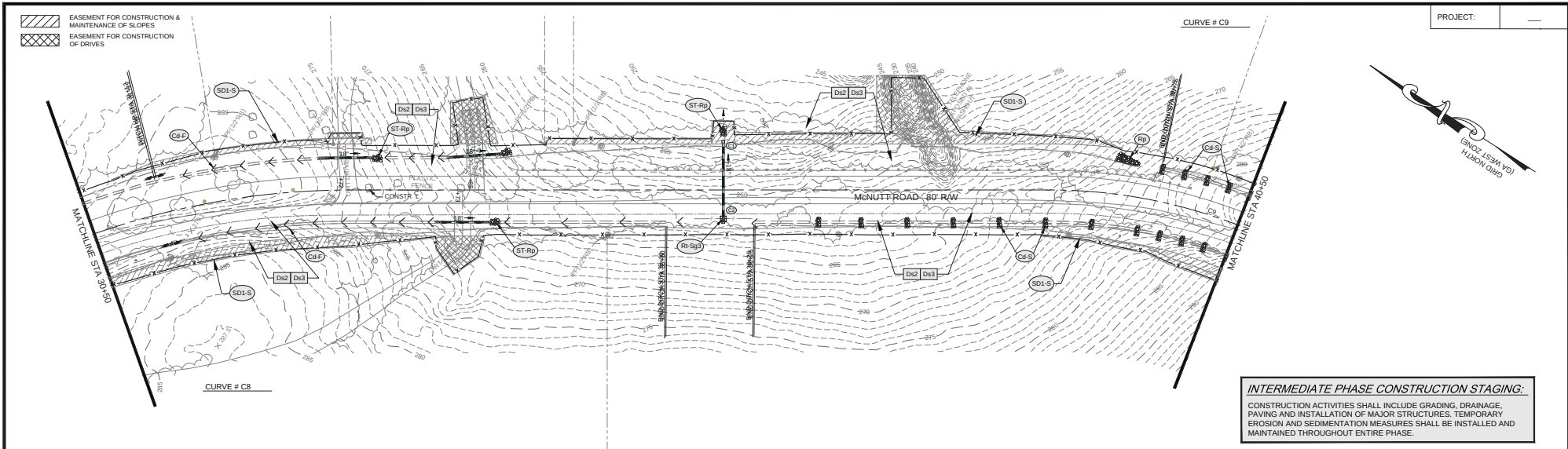
REVISION	DATE

BMP LOCATION DETAILS

INTERMEDIATE PHASE
 McNUTT ROAD
 20+50 TO 30+50

DRAWING NUMBER

54-0016



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HORIZONTAL SCALE: 1" = 40'

VERTICAL SCALE: 1" = 10'

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Cumming, Georgia 30040
Telephone: (770) 781-9507

McNUTT ROAD

ROAD CONSTRUCTION PLANS

REVISION DATES		

BMP LOCATION DETAILS

INTERMEDIATE PHASE

McNUTT ROAD

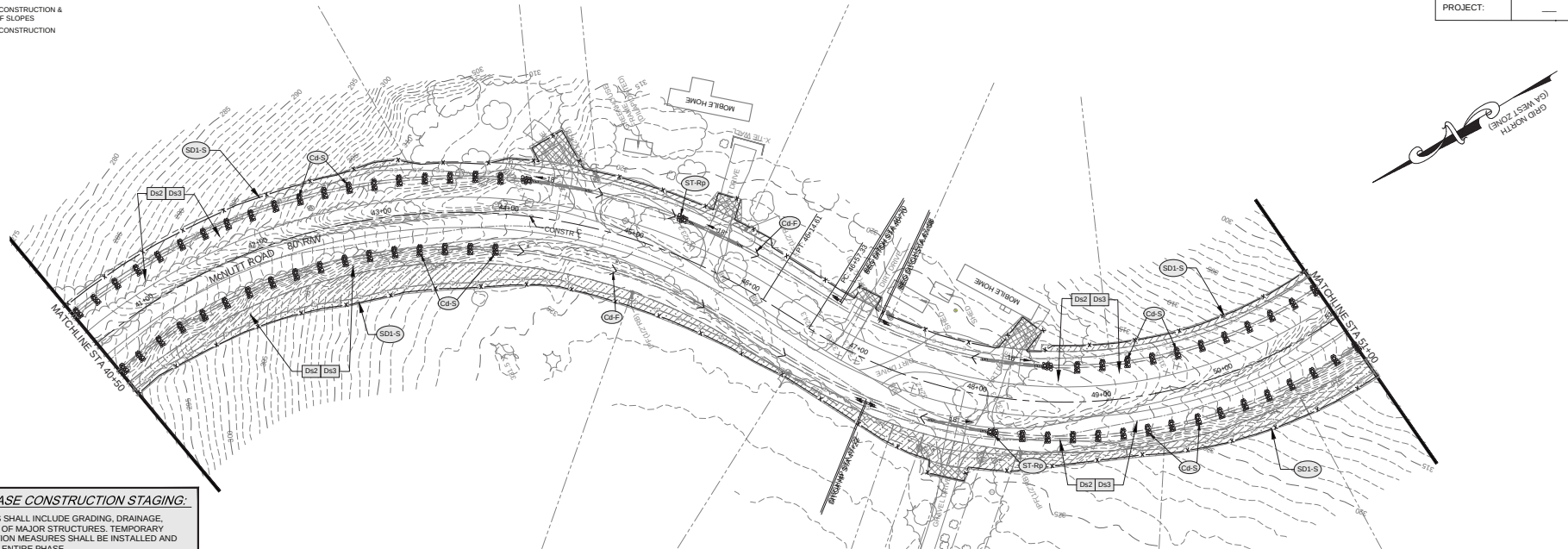
30+50 TO 40+50

DRAWING NUMBER

54-0017

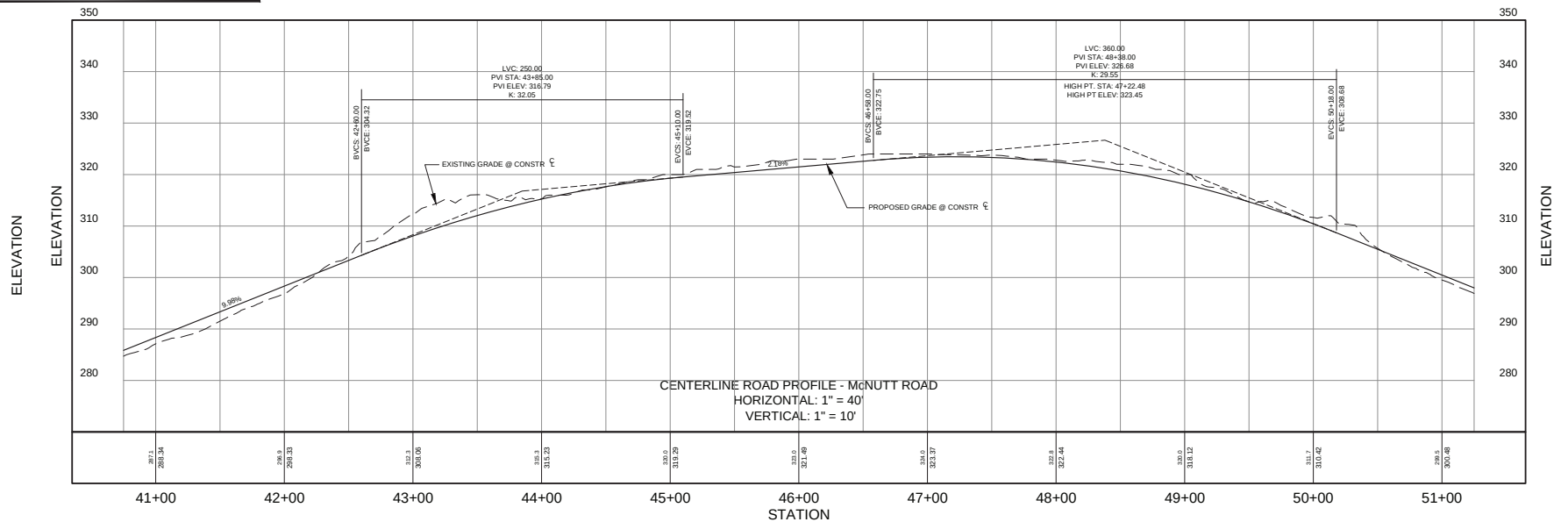
- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Oaklawn Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAME	02-24-20
CHECKED	NAME	02-24-20
BY	NAME	02-24-20



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION	DATE

BMP LOCATION DETAILS

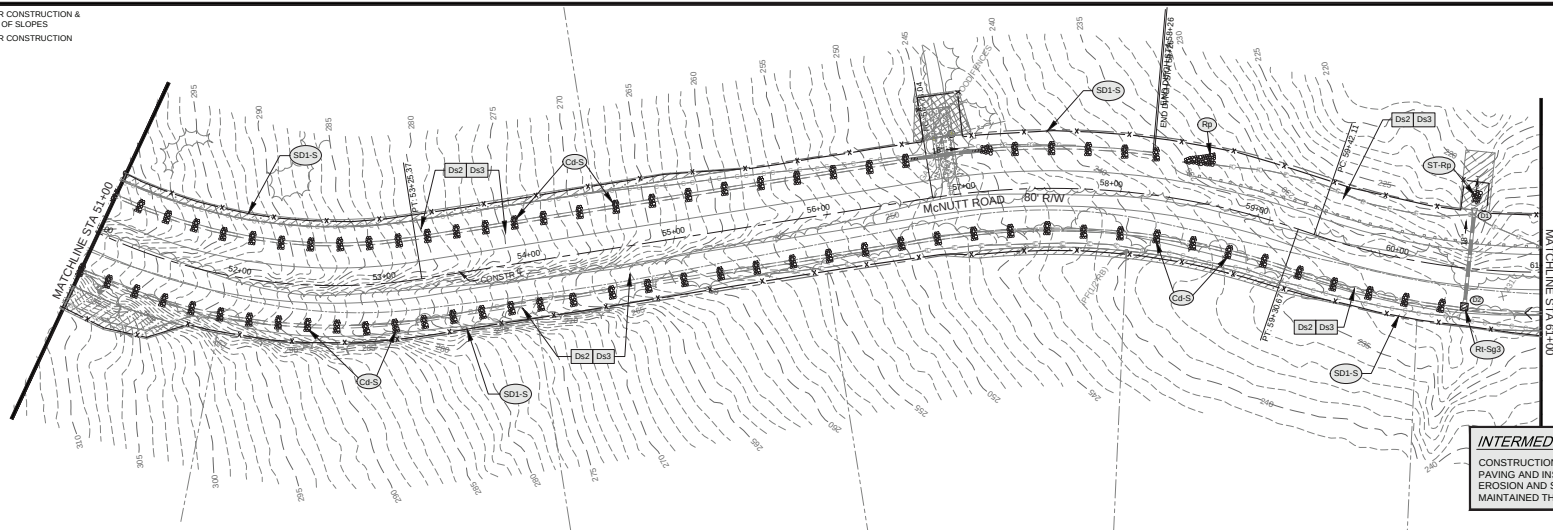
INTERMEDIATE PHASE
MCNUTT ROAD
40+50 TO 51+00

DRAWING NUMBER

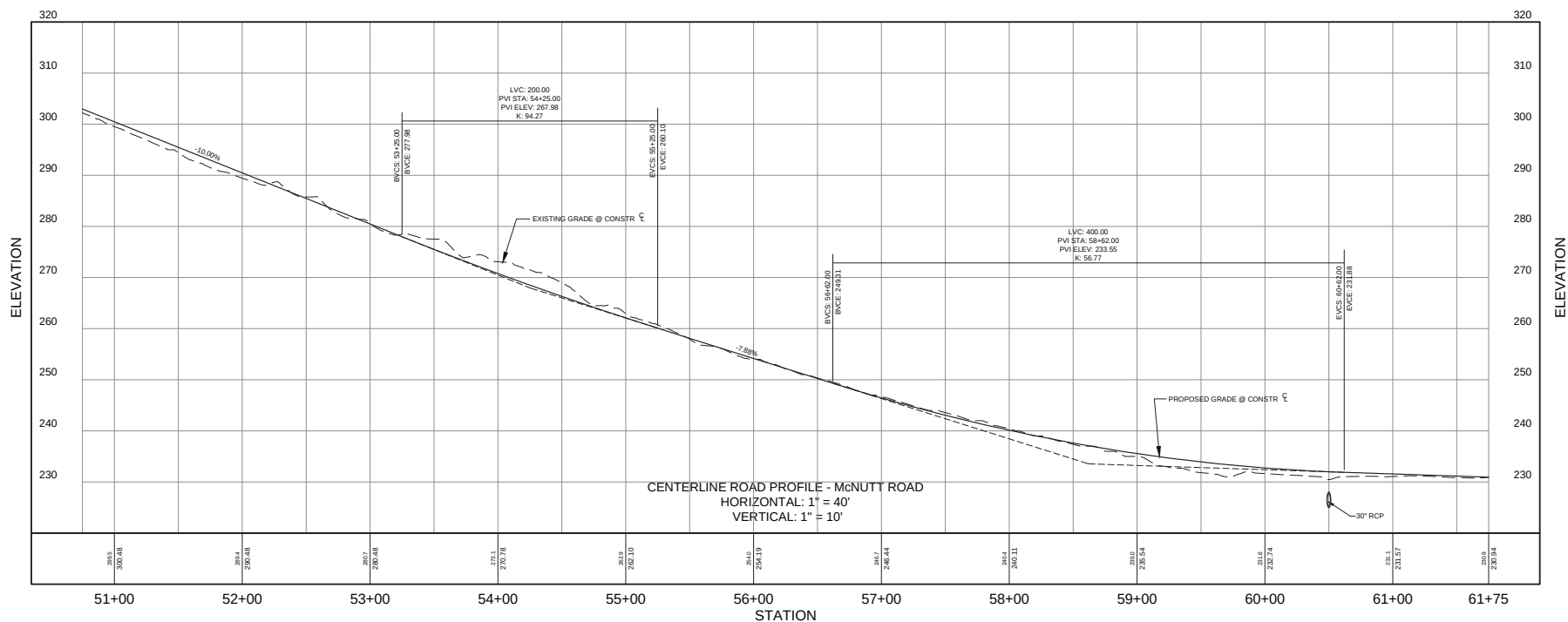
54-0018

EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Oaklawn Street
Suite 1400
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
DRAWN BY	NAA	02-24-20
CHECKED BY	NAA	02-24-20
BY	KEO	02-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION DATES

BMP LOCATION DETAILS

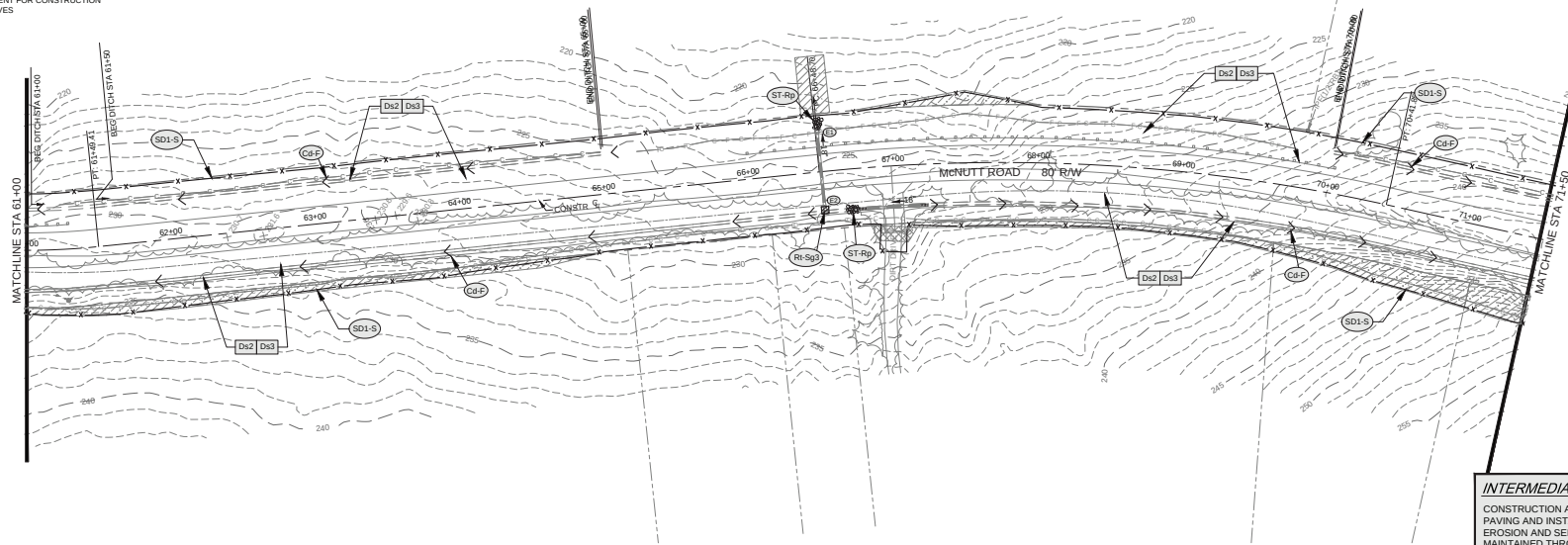
INTERMEDIATE PHASE
MCNUTT ROAD
51+00 TO 60+00

DRAWING NUMBER

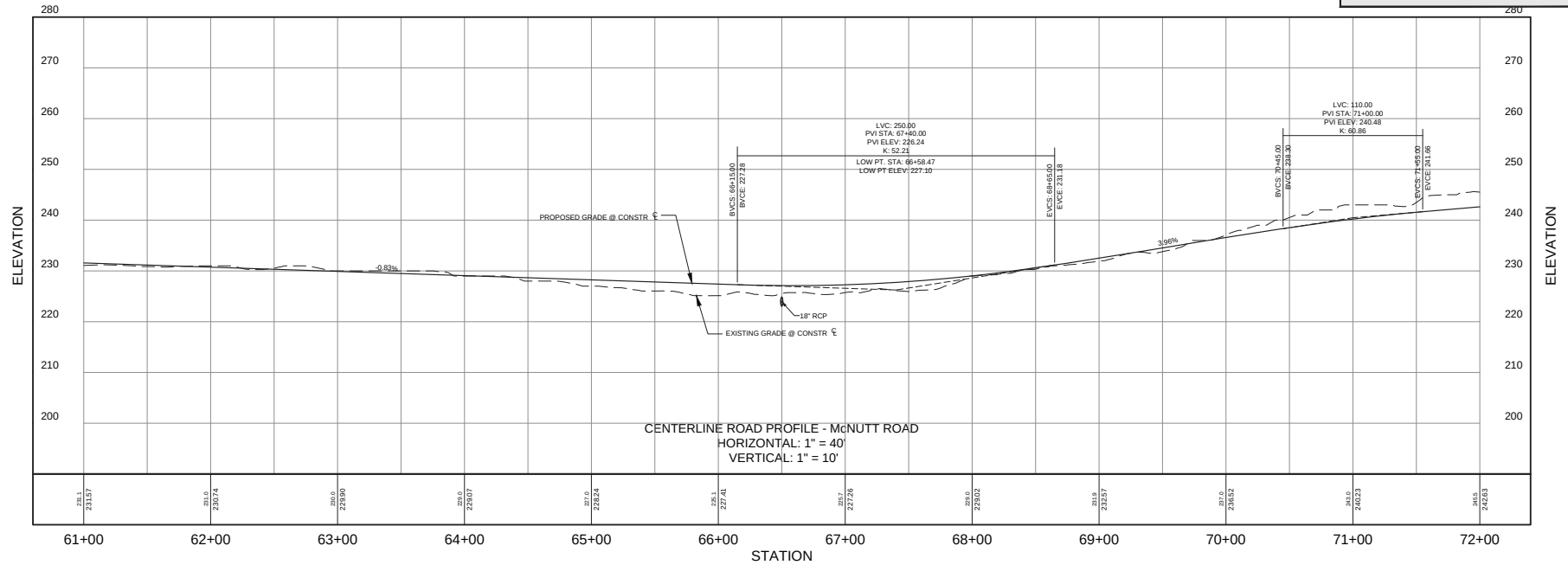
54-0019

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli
Associates, LLC
217 Oaklawn Street
Suite 1402
Cumming, Georgia 30040
Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAM	05-24-20
CHECKED	BY	05-24-20
CHECKED	BY	05-24-20



McNUTT ROAD
ROAD CONSTRUCTION PLANS

REVISION	DATE

BMP LOCATION DETAILS

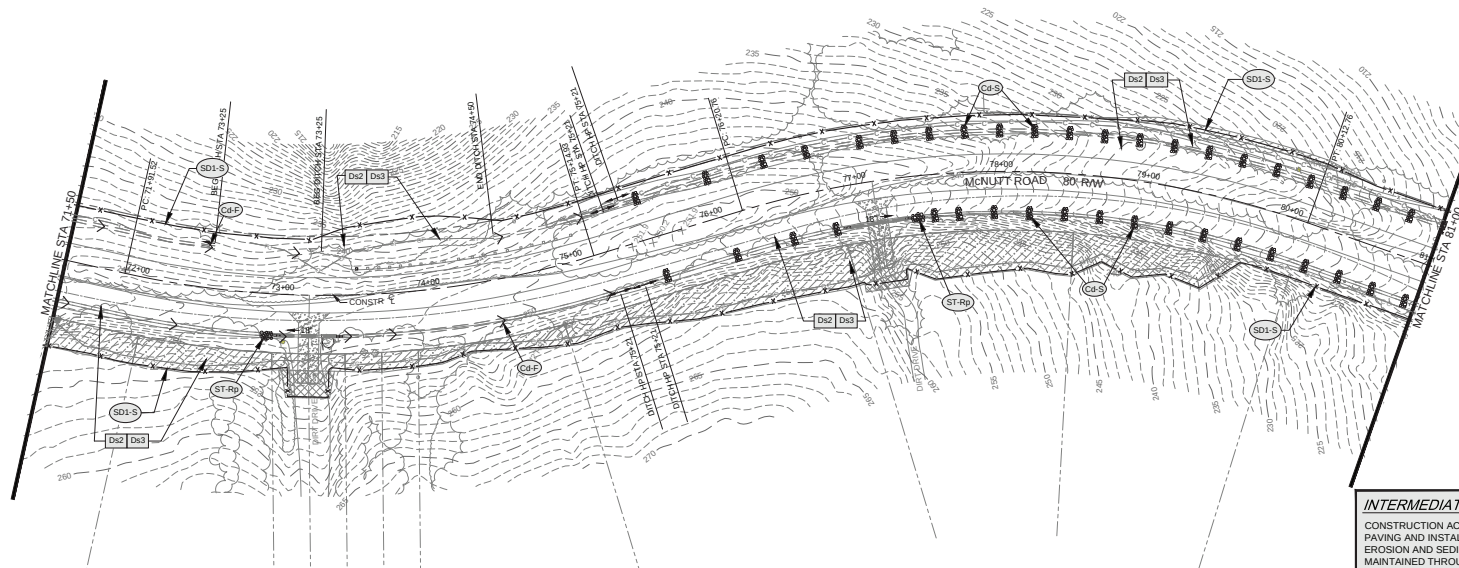
INTERMEDIATE PHASE
McNUTT ROAD
61+00 TO 71+50

DRAWING NUMBER

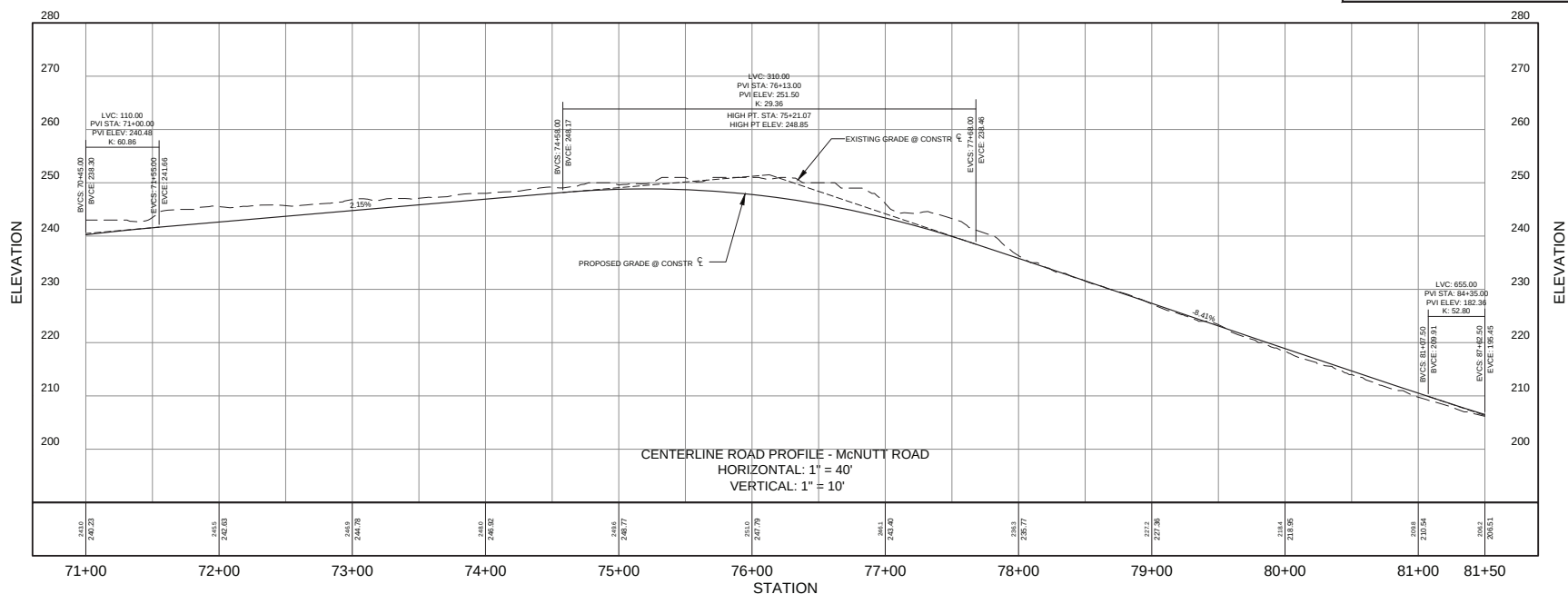
54-0020

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	KEO	05-24-20
BY		



McNUTT ROAD
 ROAD CONSTRUCTION PLANS

REVISION	DATE

BMP LOCATION DETAILS

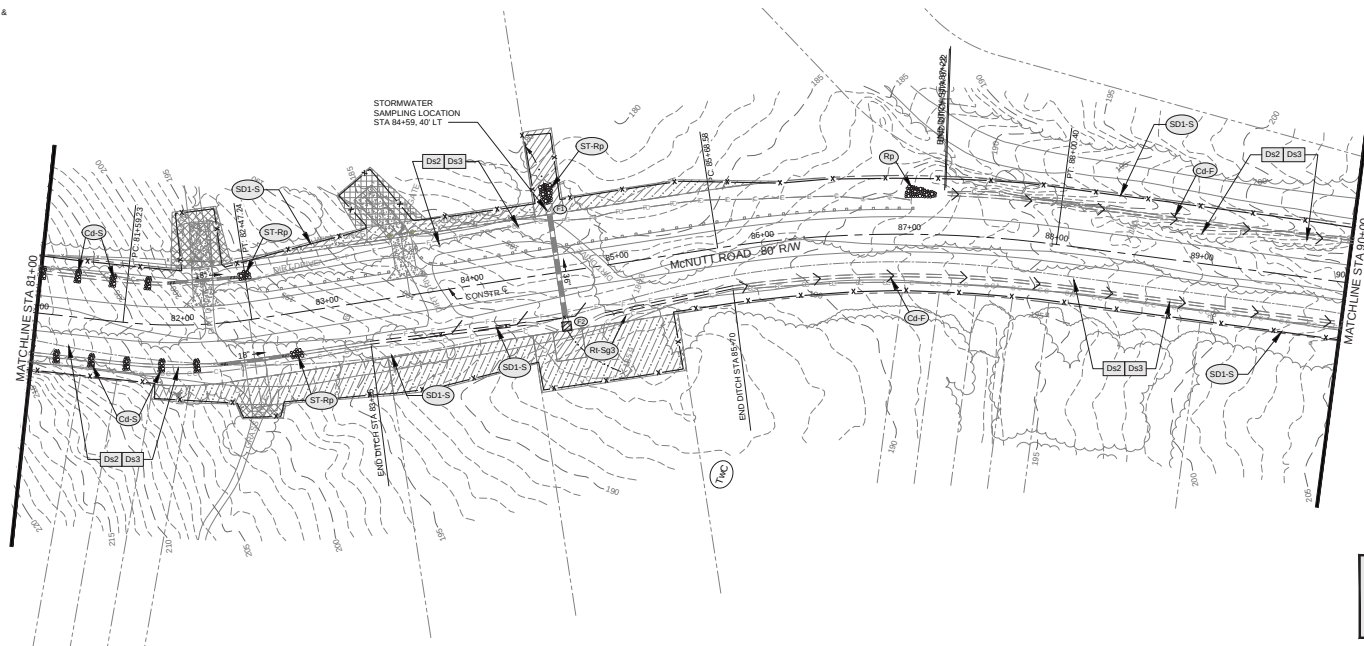
INTERMEDIATE PHASE
 McNUTT ROAD
 71+50 TO 81+00

DRAWING NUMBER

54-0021

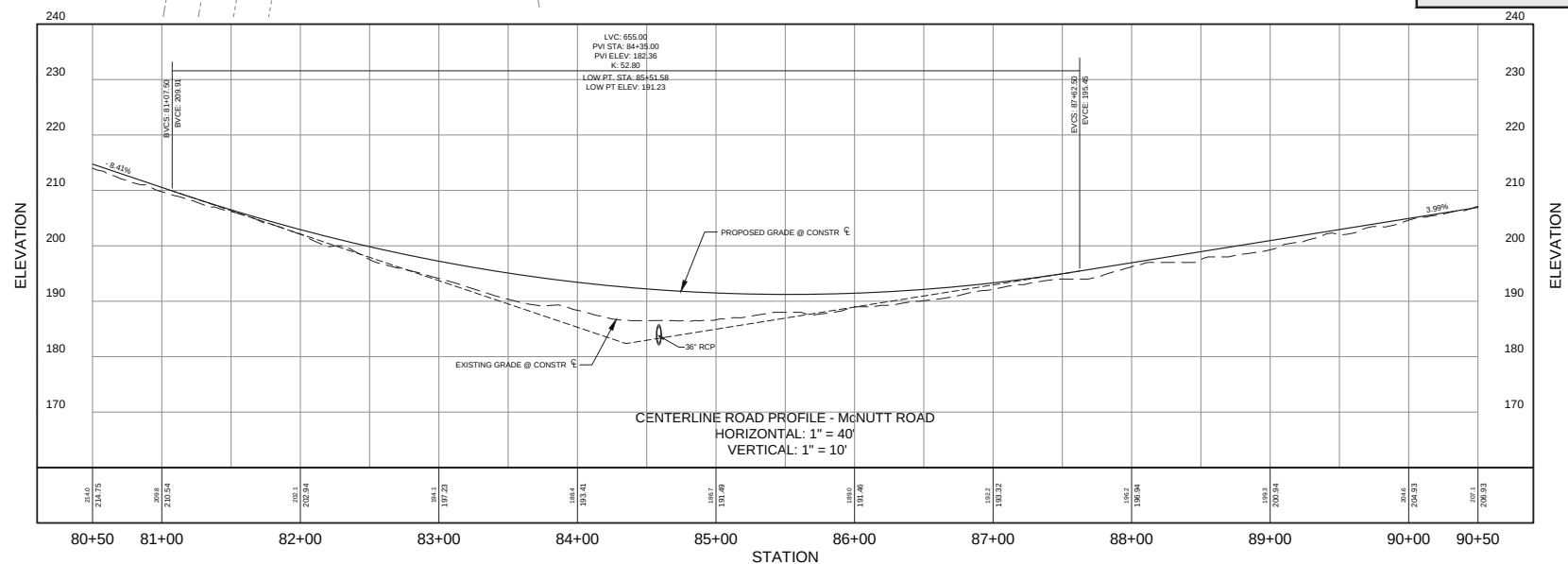
 EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Collingswood Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	NAA	05-24-20
BY	KEO	05-24-20



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION	DATE

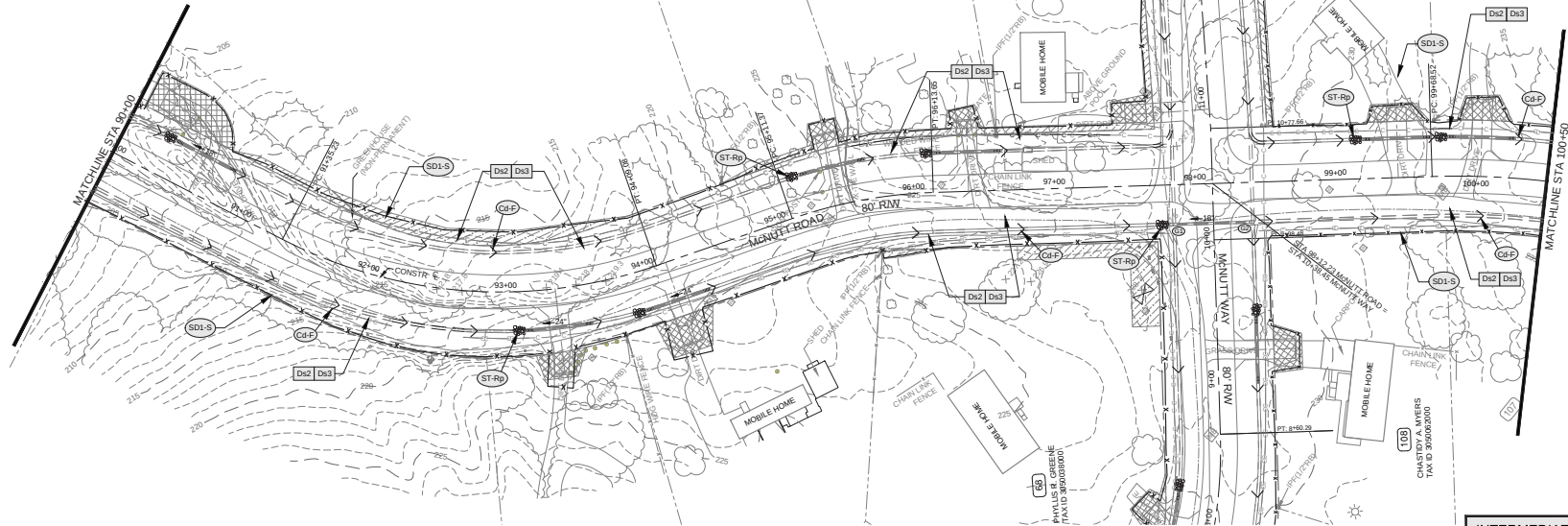
BMP LOCATION DETAILS

INTERMEDIATE DETAILS
 McNUTT ROAD
 81+00 TO 90+00

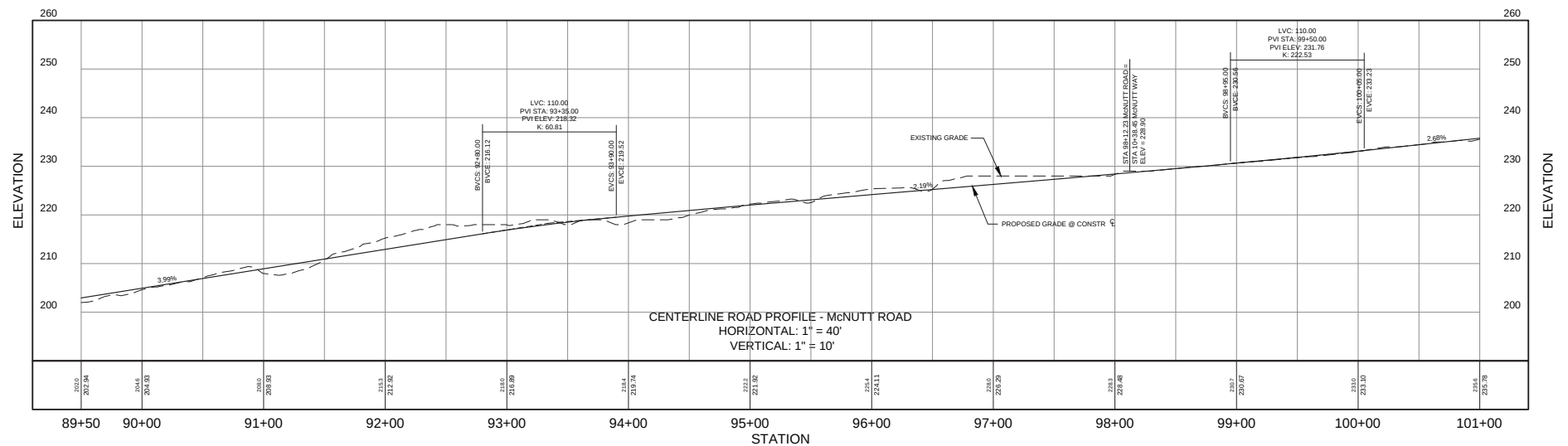
DRAWING NUMBER

54-0022

-  EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES



INTERMEDIATE PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



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 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	NAA	05-24-20
BY	KEO	05-24-20



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

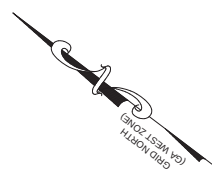
REVISION	DATE

BMP LOCATION DETAILS

INTERMEDIATE PHASE
 McNUTT ROAD
 90+00 TO 100+50

DRAWING NUMBER

54-0023



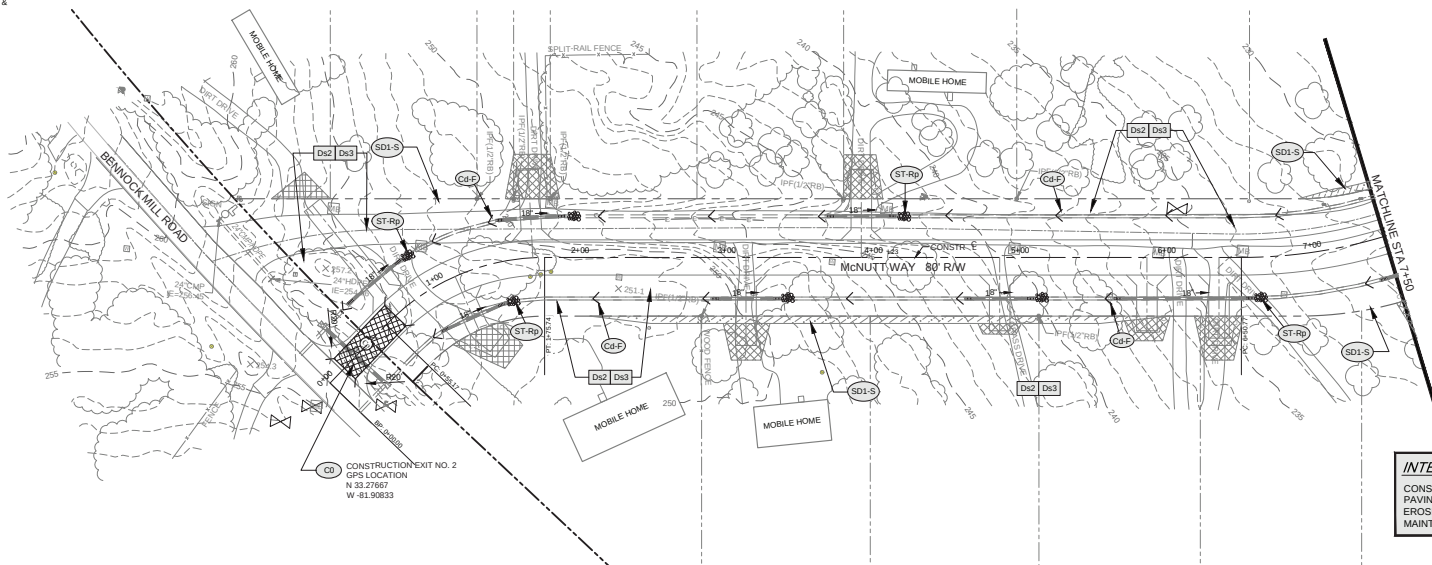
CENTERLINE ROAD PROFILE - McNUTT ROAD
 HORIZONTAL: 1" = 40'
 VERTICAL: 1" = 10'

STATION	EXISTING GRADE @ CONSTR. ELEV.	PROPOSED GRADE @ CONSTR. ELEV.
100+10	2323.7	2325.5
101+00	2337.8	2335.6
102+00	2354.0	2352.3
103+00	2411.4	2409.9
103+50	2426.1	2425.5

END PROJECT STA 103+50
 ELEV. = 242.61

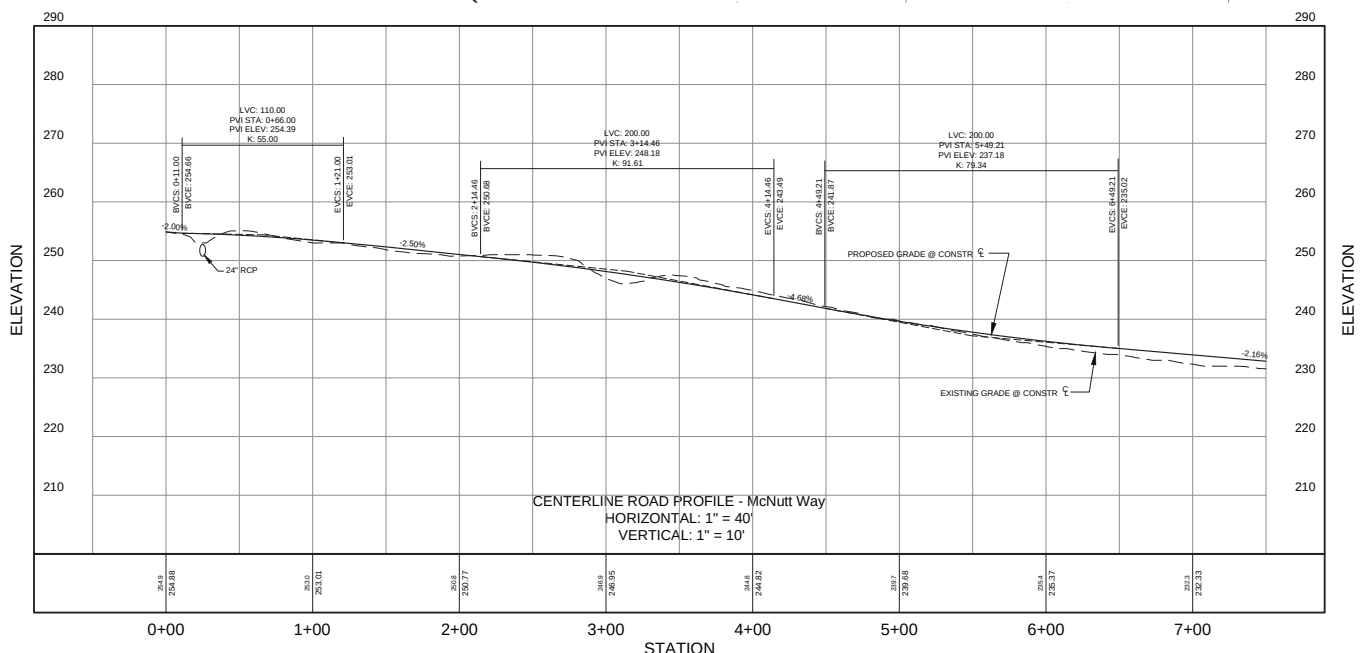
 GEORGIA811 www.Georgia811.com <i>Know what's below. Call before you dig.</i>	HORIZONTAL SCALE: 1" = 40' VERTICAL SCALE: 1" = 10'	 Moreland Altobelli Associates, LLC 327 Cantonage Street Suite 301 Cumming, Georgia 30040 Telephone (770) 783-5507	DESIGNED BY: NAA (03-24-20) DRAWN BY: NAA (03-24-20) CHECKED BY: KEQ (03-24-20)	 McNUTT ROAD ROAD CONSTRUCTION PLANS	REVISION DATES <table border="1"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>											BMP LOCATION DETAILS INTERMEDIATE PHASE MCNUTT ROAD 100+50 TO END	DRAWING NUMBER 54-0024

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES



PROJECT: _____

INTERMEDIATE PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
DRAWN BY	NAM	05-24-20
CHECKED BY	NAM	05-24-20
	KEO	05-24-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION DATES

BMP LOCATION DETAILS
 INTERMEDIATE DETAILS
 McNUTT WAY
 0+00 TO 7+50

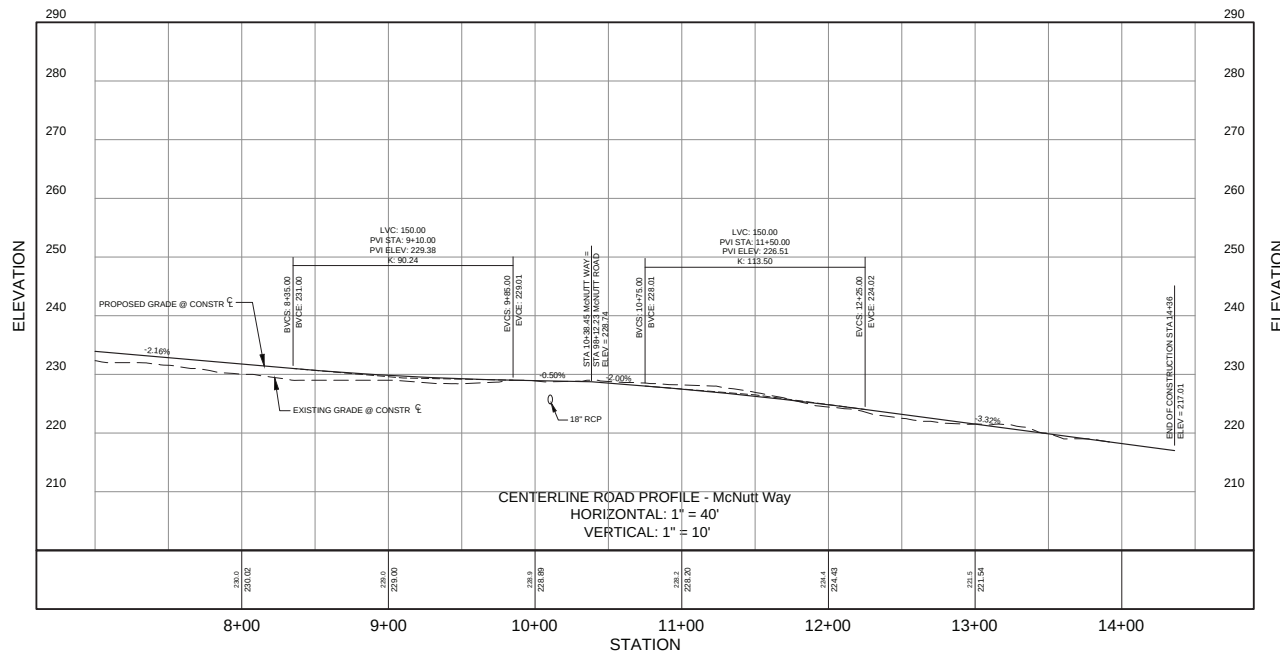
DRAWING NUMBER
54-0025

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



INTERMEDIATE PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE GRADING, DRAINAGE, PAVING AND INSTALLATION OF MAJOR STRUCTURES. TEMPORARY EROSION AND SEDIMENTATION MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT ENTIRE PHASE.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Oakdale Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



**McNUTT ROAD
2019 CONSTRUCTION PLANS**

REVISION DATES

BMP LOCATION DETAILS

INTERMEDIATE PHASE
McNUTT WAY
7+50 TO END

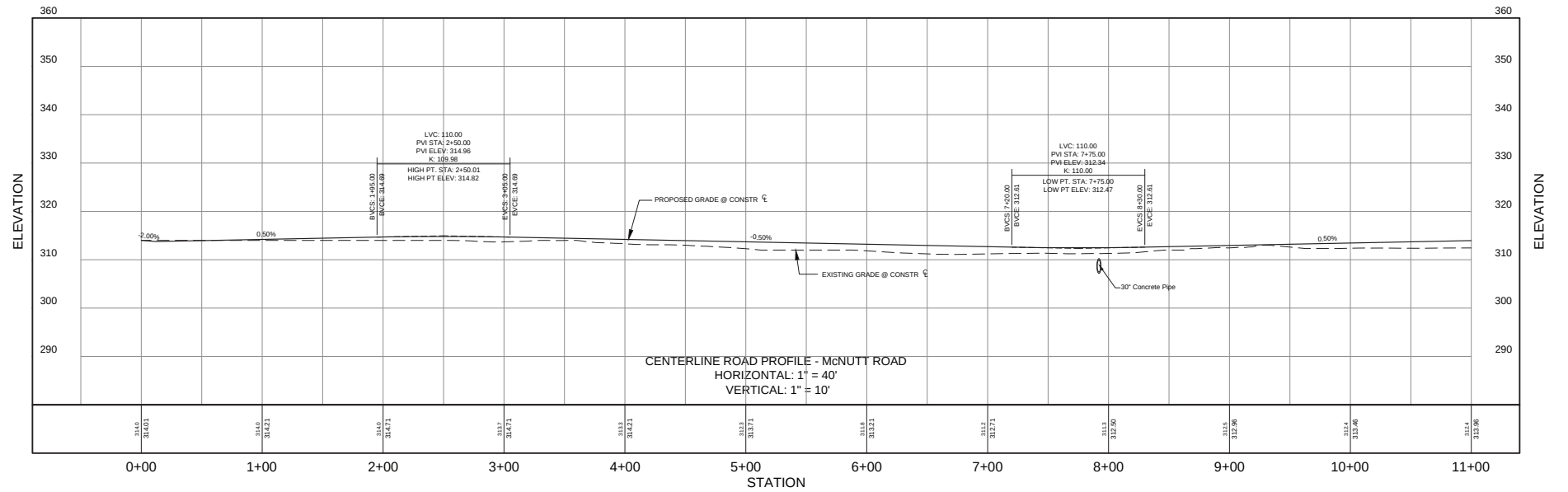
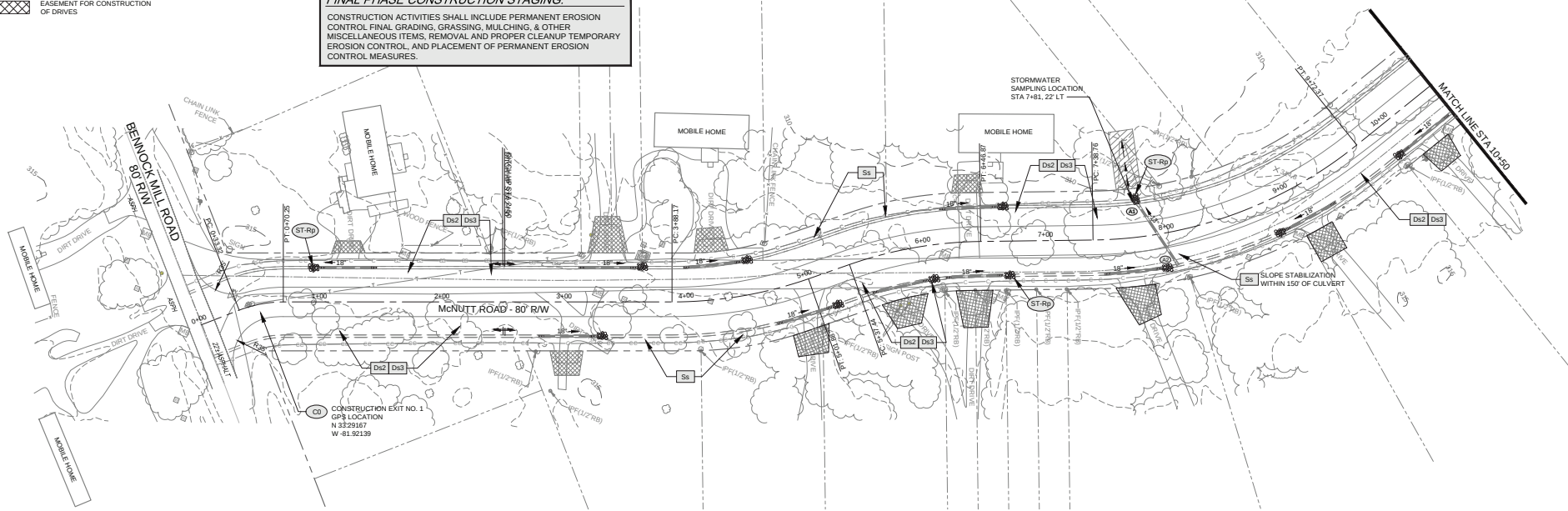
DRAWING NUMBER

54-0026

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

FINAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.

PROJECT: _____



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HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'

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 217 Oaklawn Street, Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION	DATE	BY	CHKD
1	05-24-20	NAA	KEO
2	02-24-20	NAA	KEO
3	02-24-20	KEO	KEO

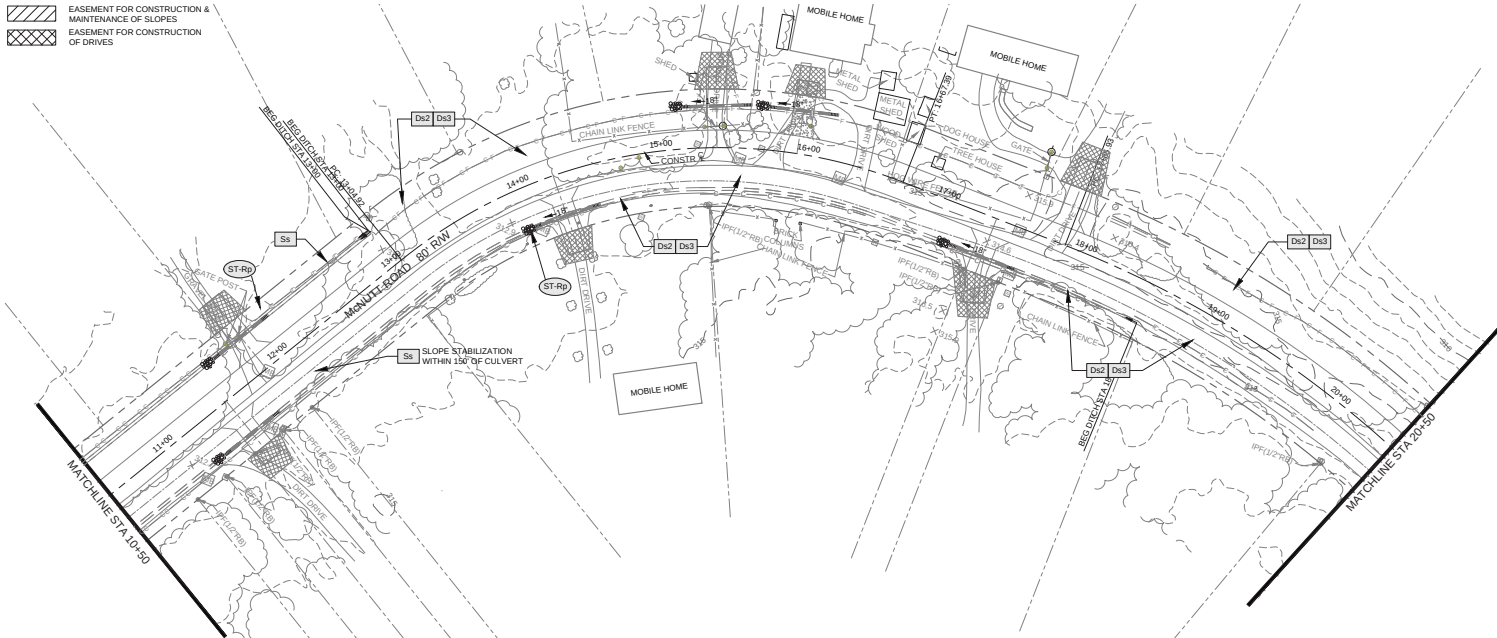
BMP LOCATION DETAILS

FINAL PHASE
MCNUTT ROAD
0+00 TO 10+50

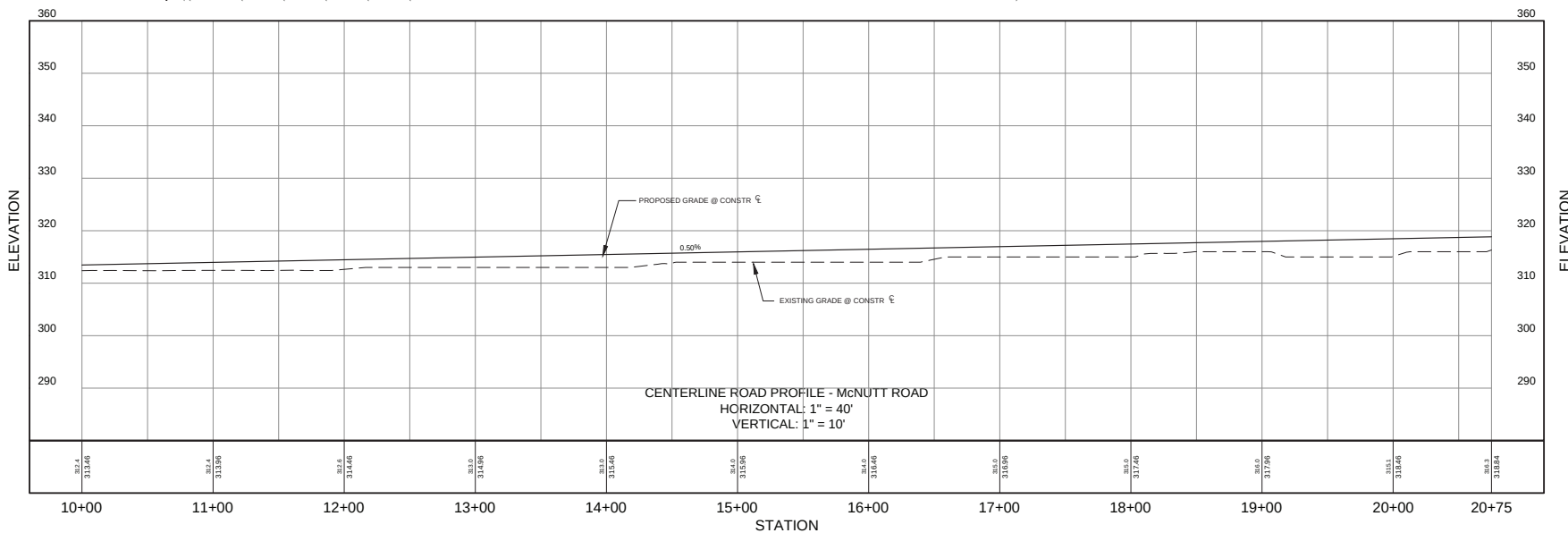
DRAWING NUMBER
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- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES



FINAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL, FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED BY	NAME	DATE
DRAWN BY	NAM	02-24-20
CHECKED BY	NAM	02-24-20
BY	KEO	02-24-20



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION DATES

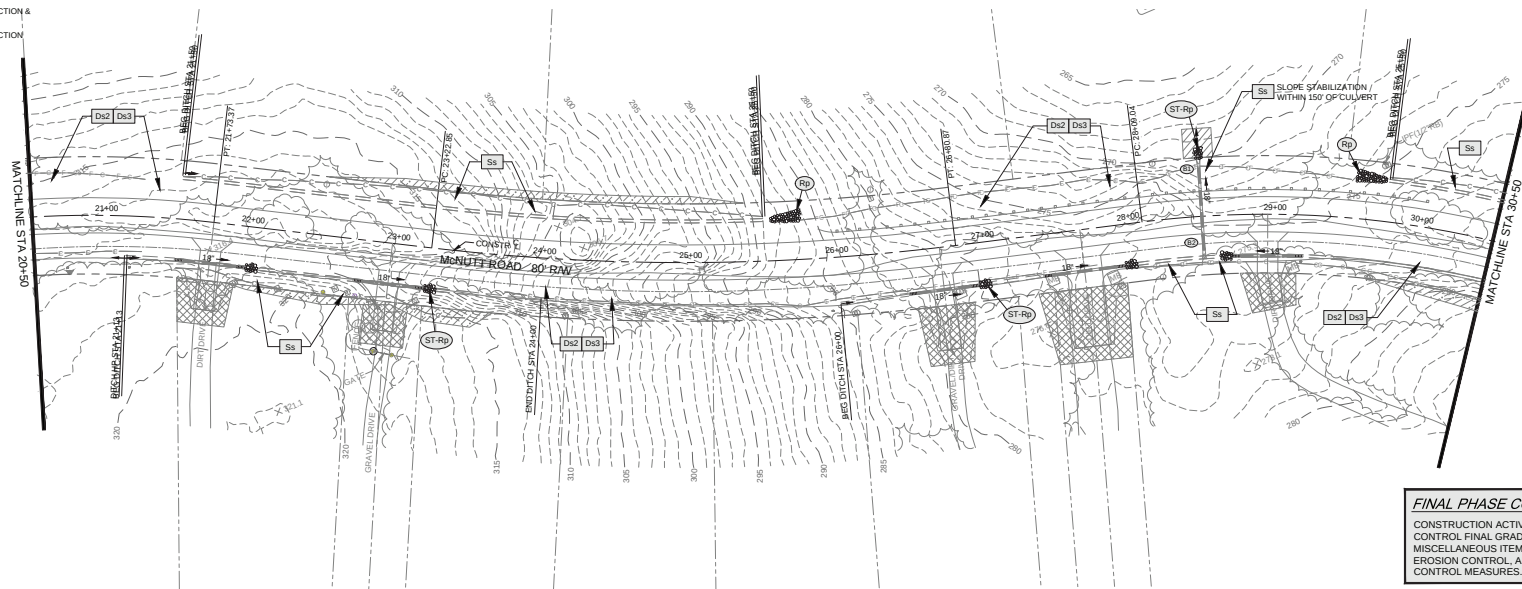
BMP LOCATION DETAILS

FINAL PHASE
 McNUTT ROAD
 10+50 TO 20+50

DRAWING NUMBER

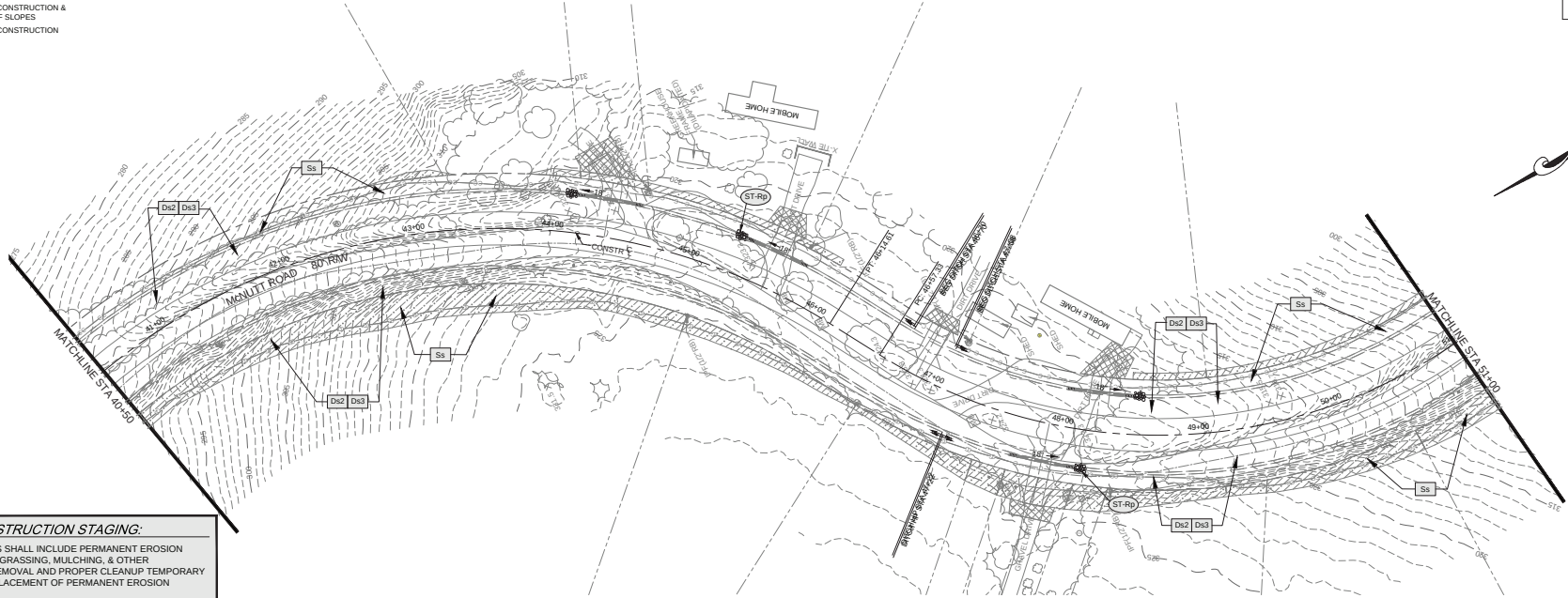
54-0028

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

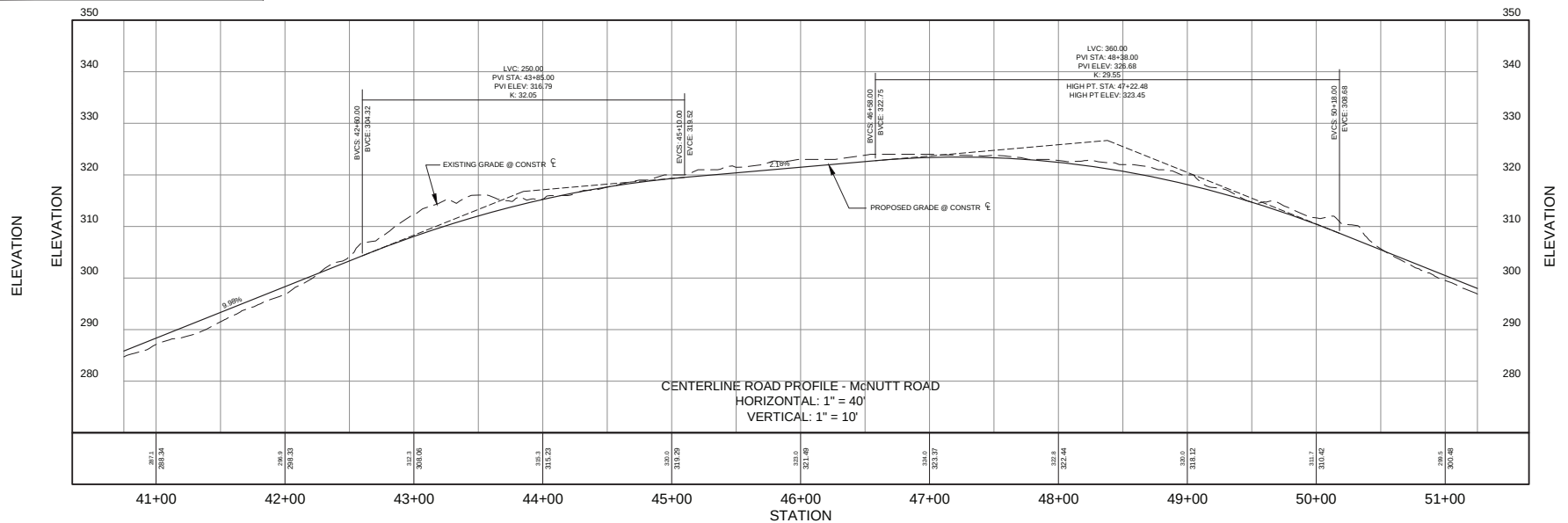


- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



FINAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL, FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP, TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli
 Associates, LLC
 217 Oaklawn Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAME	02-24-20
CHECKED	NAME	02-24-20
BY	NAME	02-24-20



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

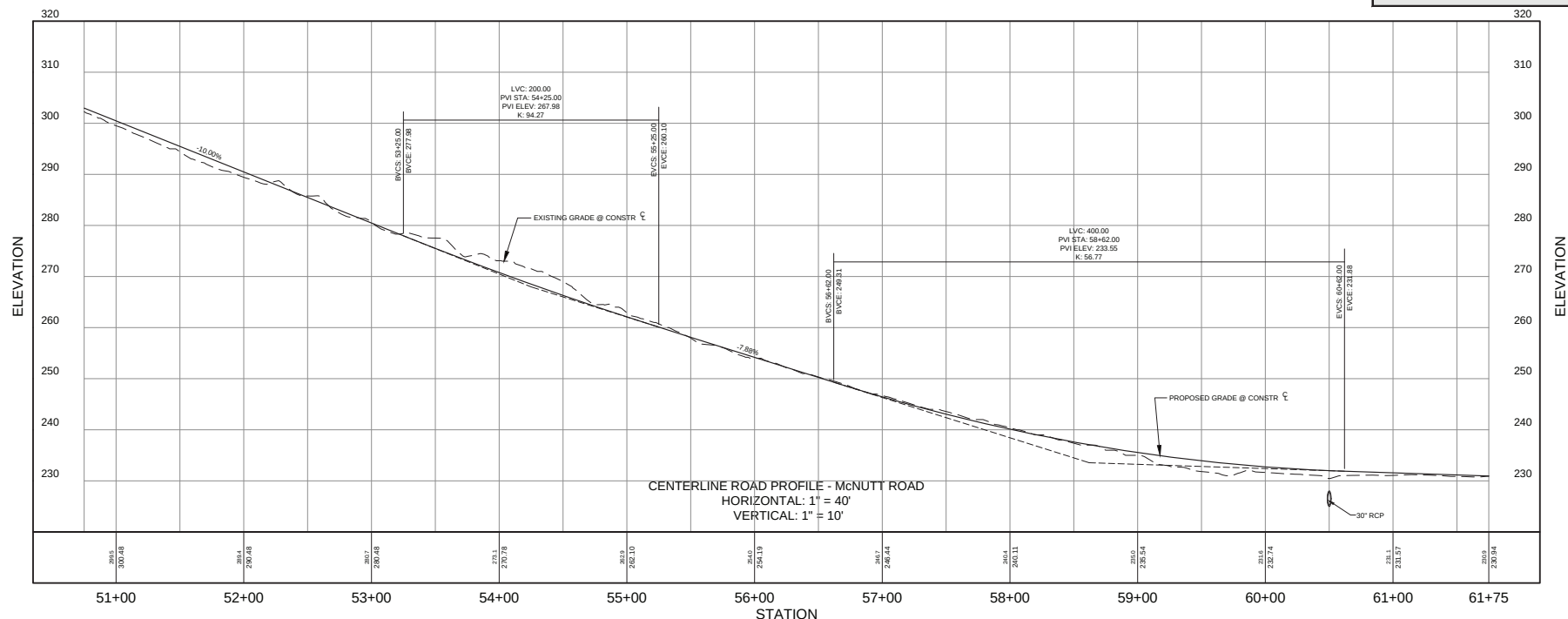
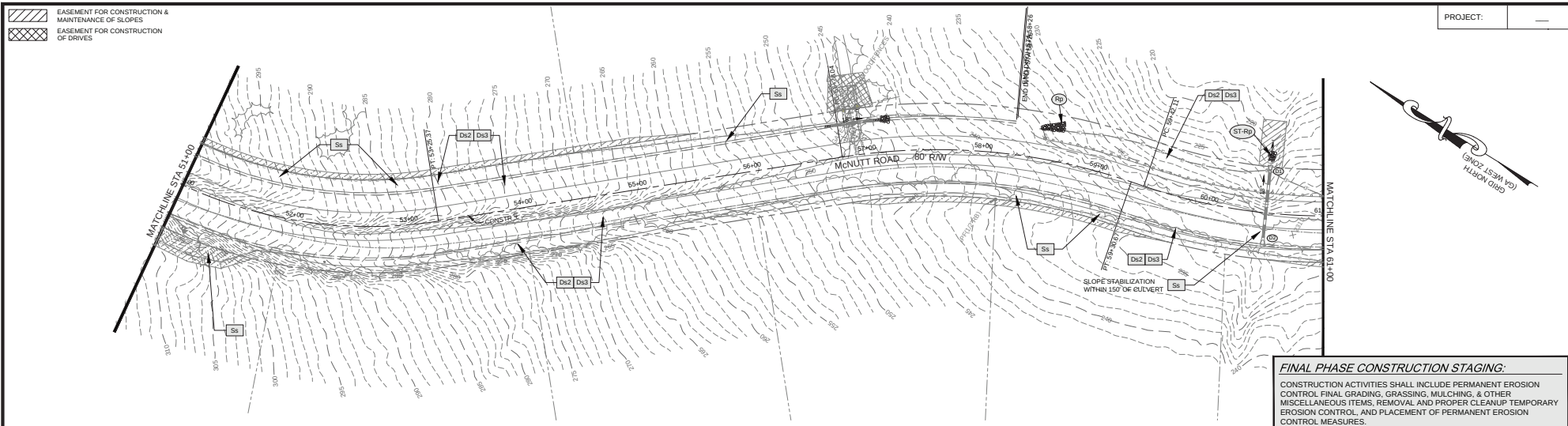
REVISION	DATE

BMP LOCATION DETAILS

FINAL PHASE
 McNUTT ROAD
 40+50 TO 51+00

DRAWING
 NUMBER

54-0031





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HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



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 Telephone: (770) 781-9507



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION DATES		
NO.	DATE	DESCRIPTION
1	02-24-20	ISSUED
2	02-24-20	DRAWN
3	02-24-20	CHECKED
4	02-24-20	BY

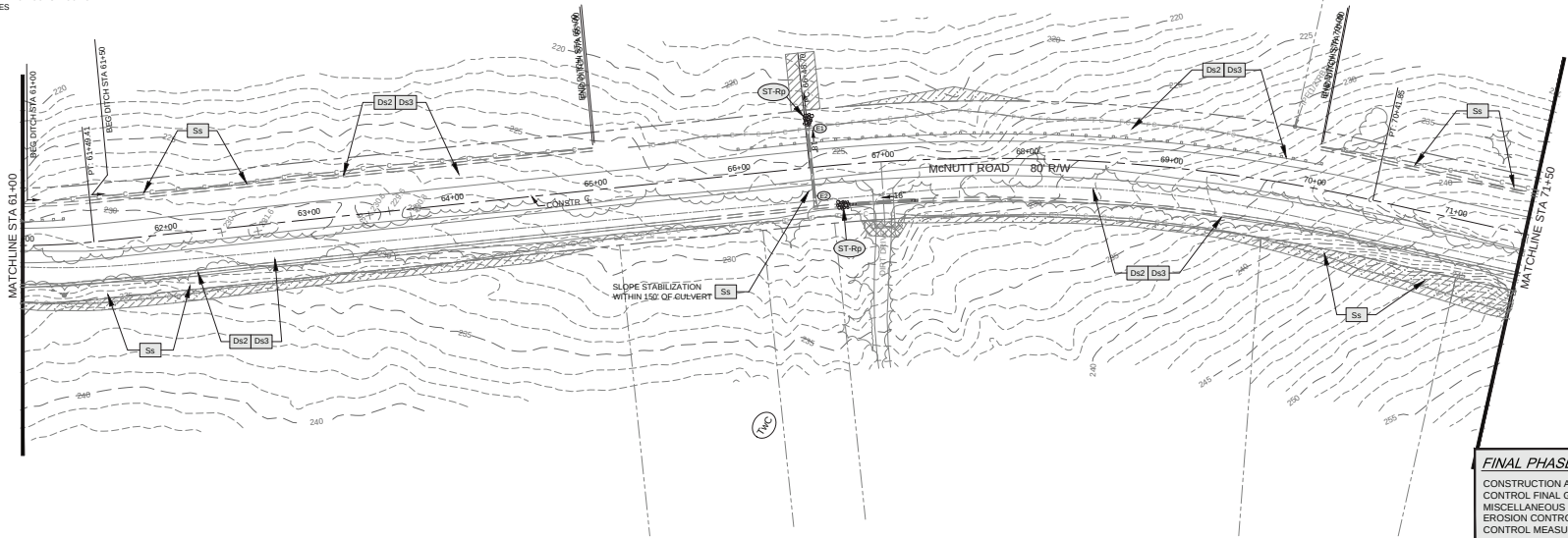
BMP LOCATION DETAILS

FINAL PHASE
 McNUTT ROAD
 51+00 TO 60+00

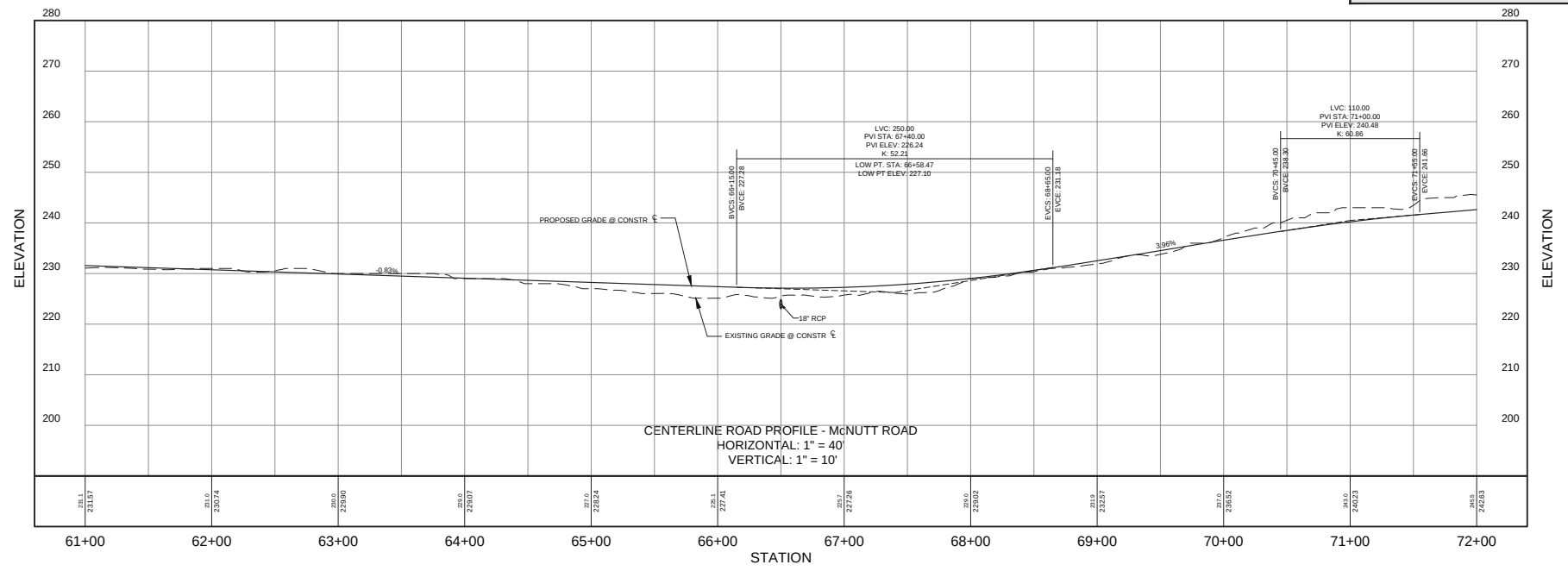
DRAWING NUMBER
54-0032

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



FINAL PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



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VERTICAL SCALE: 1" = 10'

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Cumming, Georgia 30040
Telephone: (770) 781-9507

Augusta
EST. 1808

**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION	DATE	DESCRIPTION

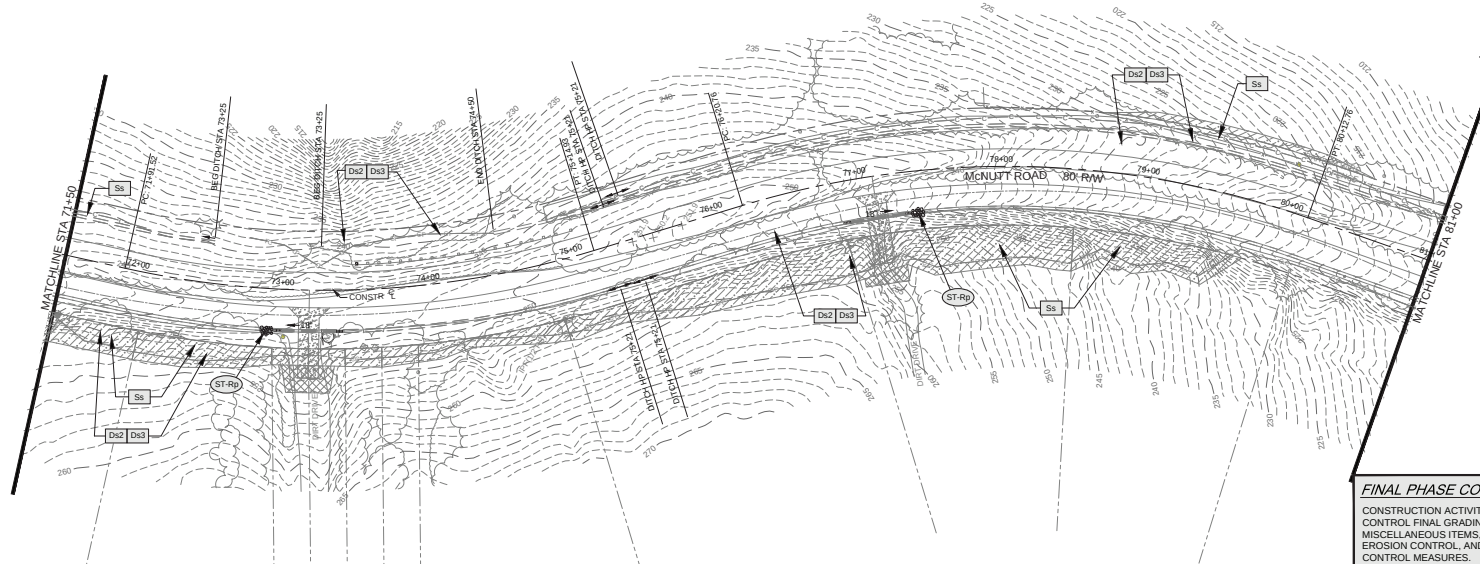
BMP LOCATION DETAILS

FINAL PHASE
McNUTT ROAD
61+00 TO 71+50

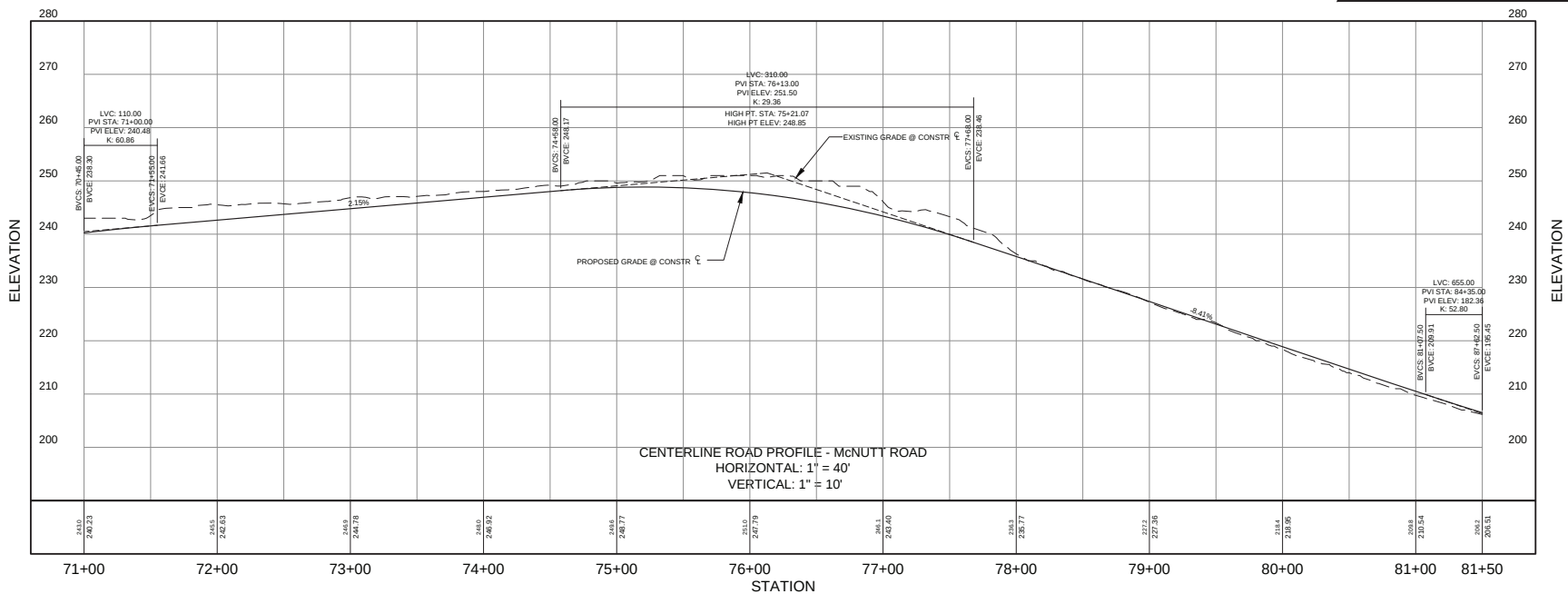
DRAWING NUMBER
54-0033

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



FINAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL, FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP, TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 127 Callender Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-5507

DESIGNED	NAME	DATE
DRAWN	NAM	02-24-20
CHECKED	KEO	02-24-20
BY		



**McNUTT ROAD
 ROAD CONSTRUCTION PLANS**

REVISION	DATE

BMP LOCATION DETAILS

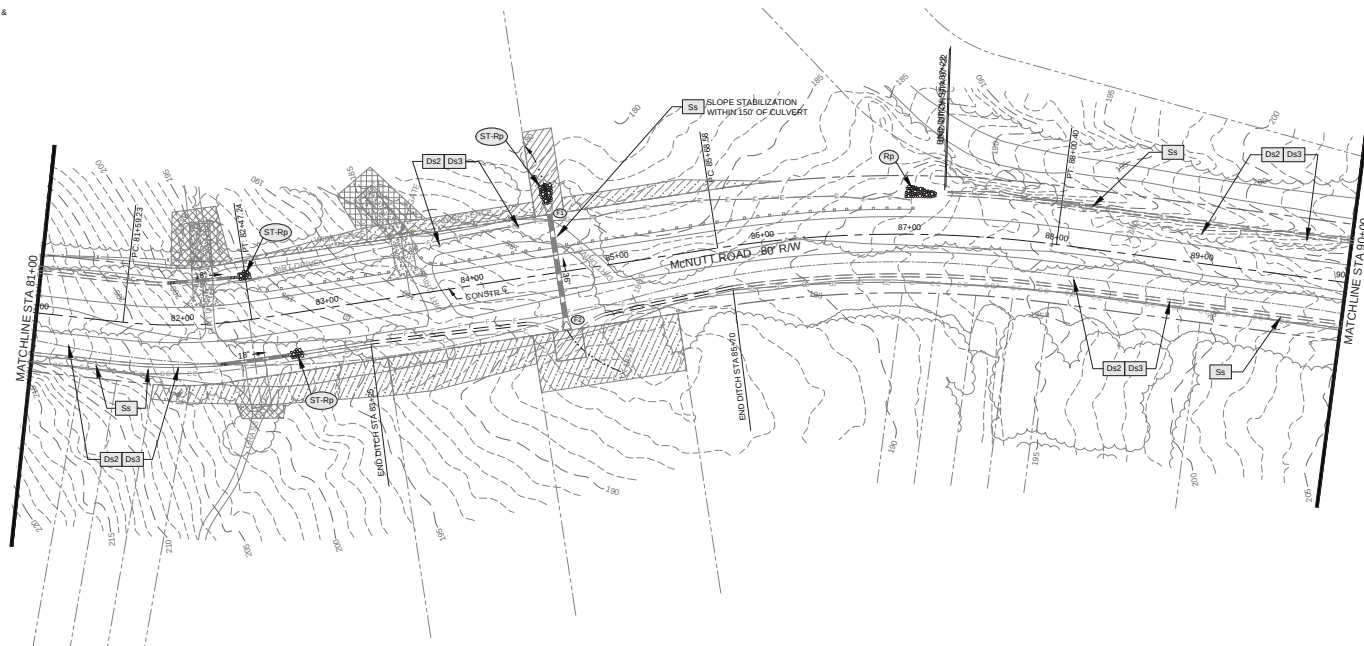
FINAL PHASE
 McNUTT ROAD
 71+50 TO 81+00

DRAWING NUMBER

54-0034

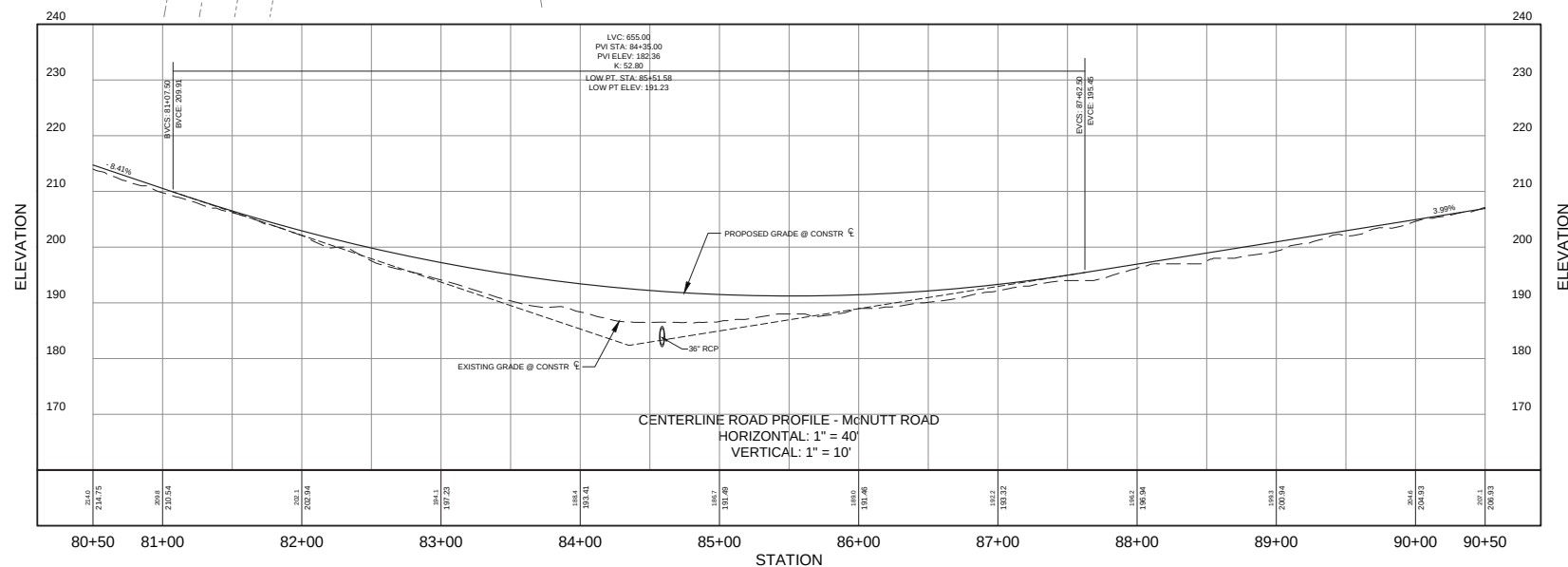
 EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



FINAL PHASE CONSTRUCTION STAGING:

CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL, FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 College Street
 Suite 1405
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

DESIGNED	NAME	DATE
DRAWN	NAA	05-24-20
CHECKED	NAA	05-24-20
BY	KEO	05-24-20



**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION	DATE

BMP LOCATION DETAILS

FINAL DETAILS
 McNUTT ROAD
 81+00 TO 90+00

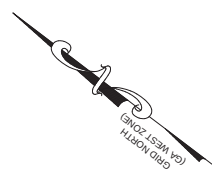
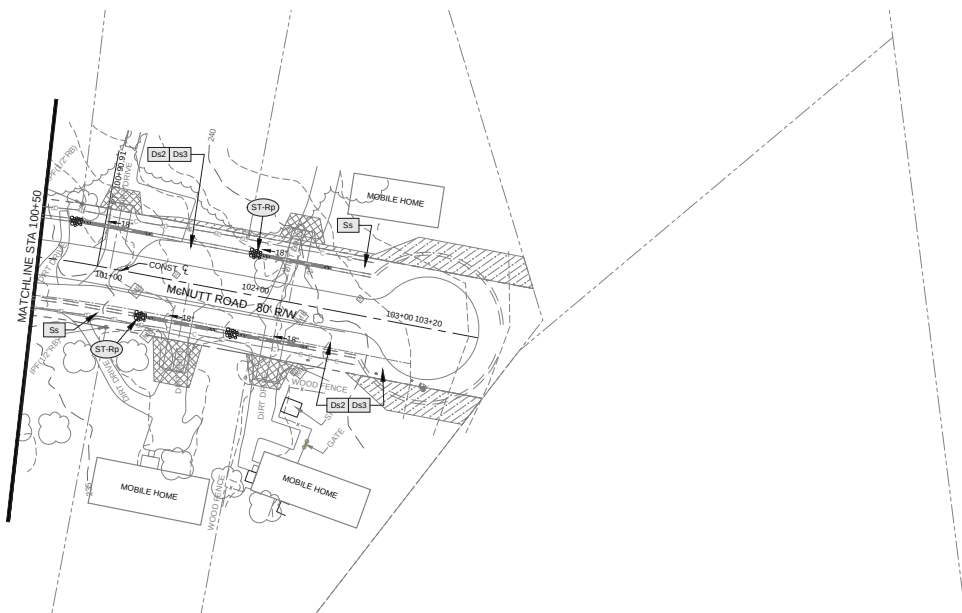
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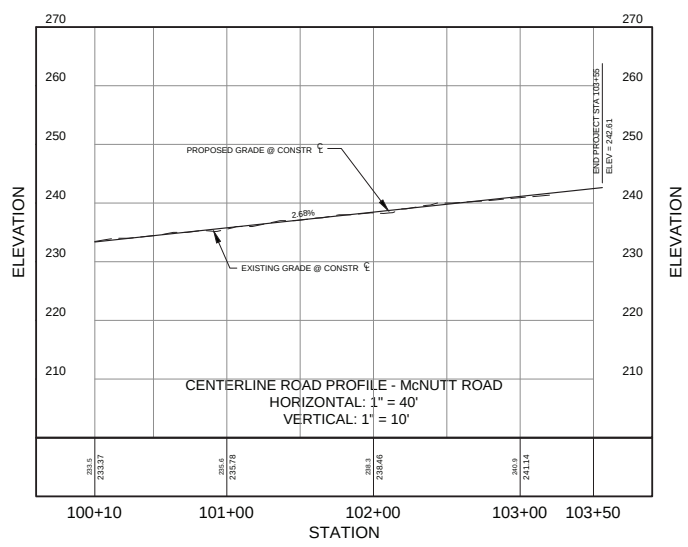
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- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



FINAL PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL, FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP, TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Collingswood Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



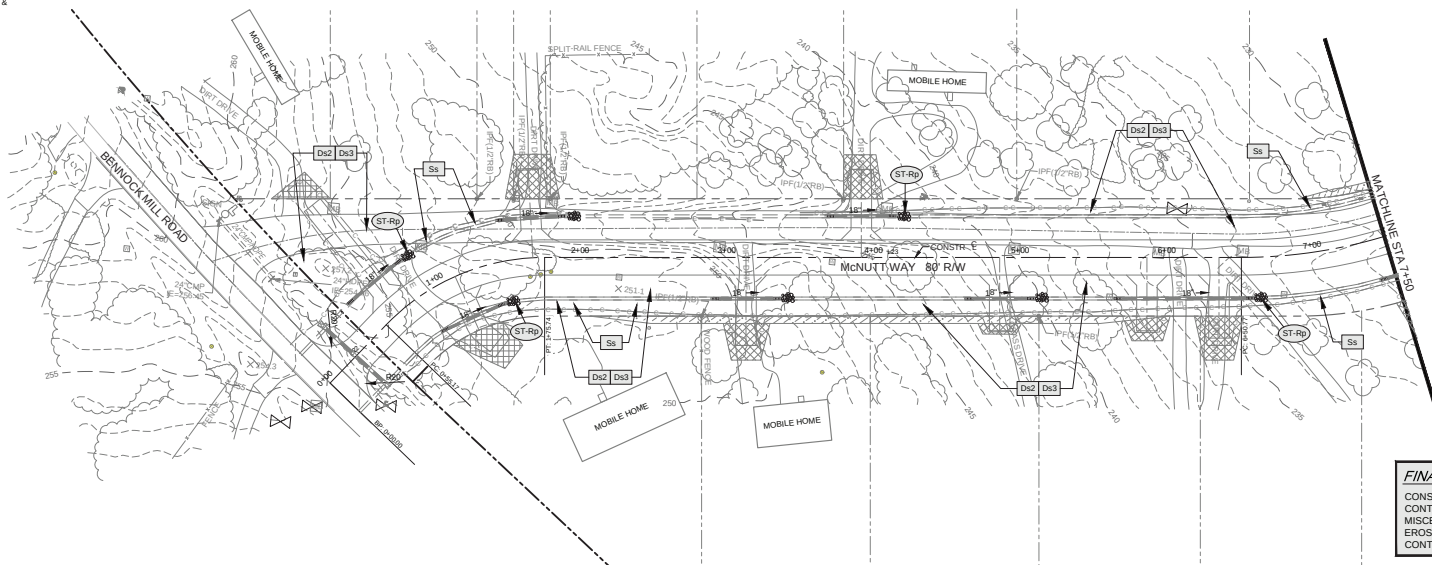
**McNUTT ROAD
ROAD CONSTRUCTION PLANS**

REVISION DATES	

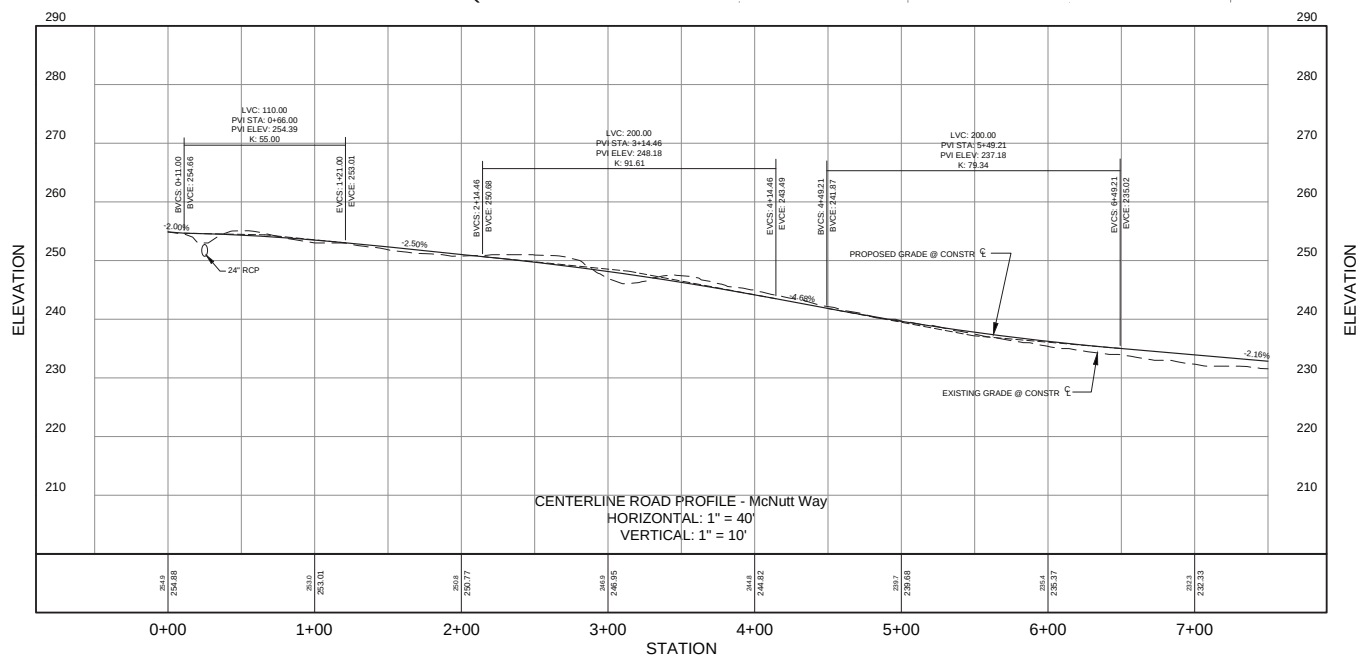
BMP LOCATION DETAILS	
FINAL PHASE	
McNUTT ROAD	
100+50 TO END	

DRAWING NUMBER
54-0037

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTRUCTION OF DRIVES



FINAL PHASE CONSTRUCTION STAGING:
 CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



HORIZONTAL SCALE: 1" = 40'
 VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
 217 Oaklawn Street
 Suite 1401
 Cumming, Georgia 30040
 Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD ROAD CONSTRUCTION PLANS

REVISION DATES

BMP LOCATION DETAILS

FINAL DETAILS
 McNUTT WAY
 0+00 TO 7+50

DRAWING NUMBER

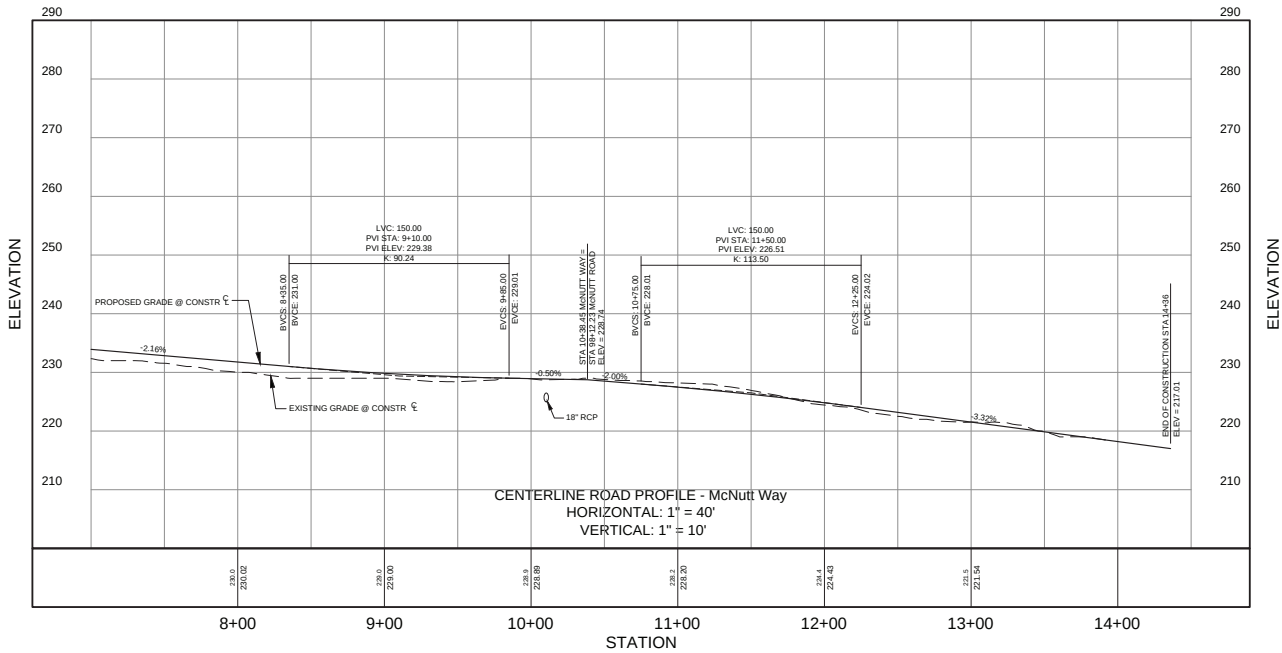
54-0038

- EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
- EASEMENT FOR CONSTRUCTION OF DRIVES

PROJECT: _____



FINAL PHASE CONSTRUCTION STAGING:
CONSTRUCTION ACTIVITIES SHALL INCLUDE PERMANENT EROSION CONTROL FINAL GRADING, GRASSING, MULCHING, & OTHER MISCELLANEOUS ITEMS, REMOVAL AND PROPER CLEANUP-TEMPORARY EROSION CONTROL, AND PLACEMENT OF PERMANENT EROSION CONTROL MEASURES.



HORIZONTAL SCALE: 1" = 40'
VERTICAL SCALE: 1" = 10'



Moreland Altobelli Associates, LLC
217 Oakdale Street
Suite 1405
Cumming, Georgia 30040
Telephone: (770) 781-9507

	NAME	DATE
DESIGNED BY	NAA	01-24-20
DRAWN BY	NAA	01-24-20
CHECKED BY	KEQ	01-24-20



McNUTT ROAD
FINAL PHASE CONSTRUCTION PLANS

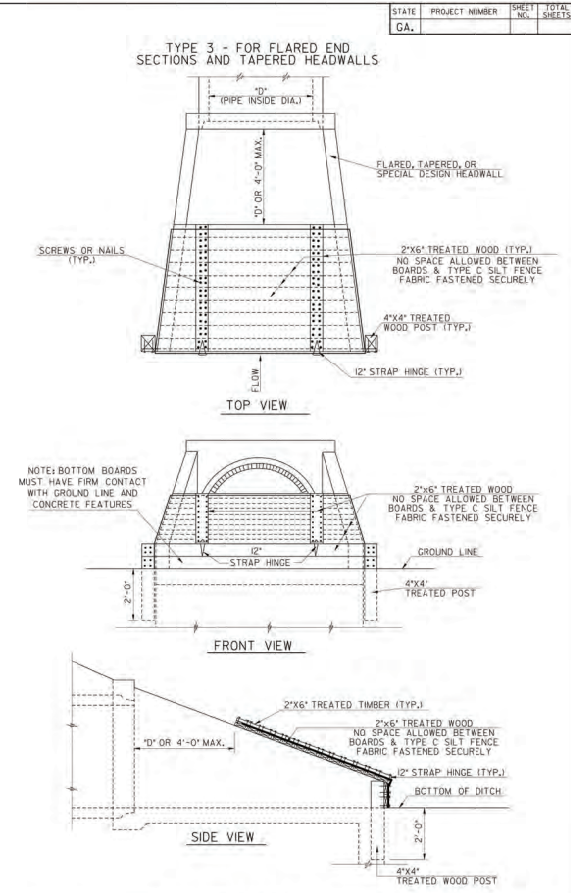
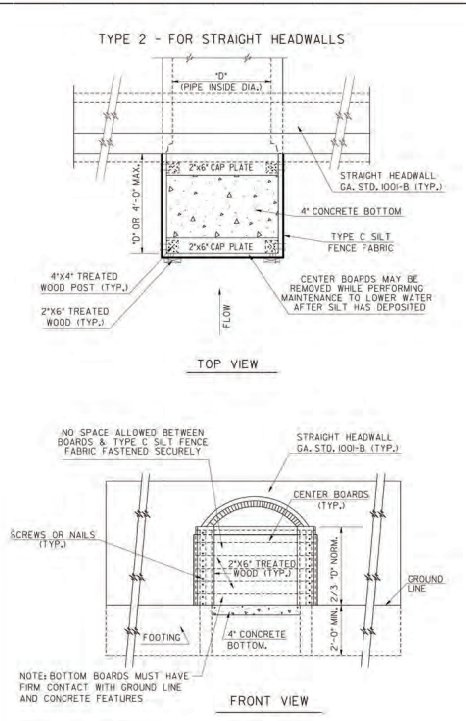
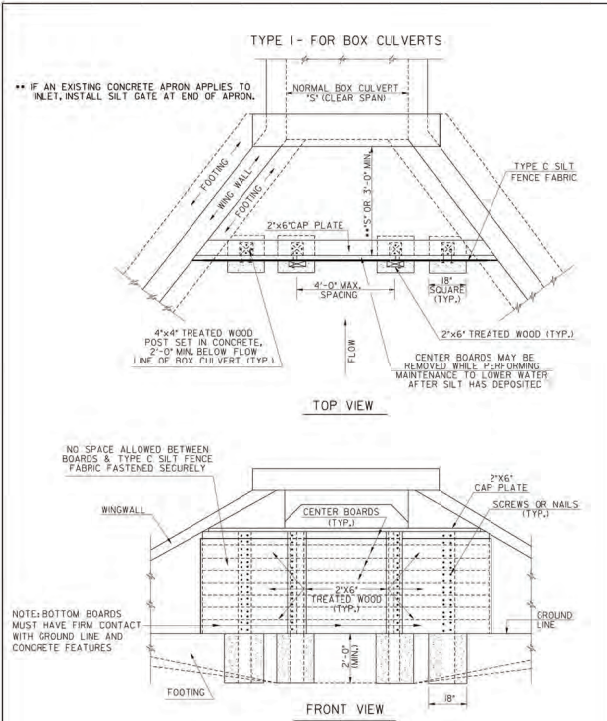
REVISION DATES

BMP LOCATION DETAILS

FINAL PHASE
McNUTT WAY
7+50 TO END

DRAWING NUMBER

54-0039



- SILT CONTROL GATE TYPE 1 NOTES:**
- REFER TO GA. STD 2332 FOR CONCRETE APRONS.
 - SEE SECTION 163 FOR THE REMOVAL OF TYPE 1 SILT CONTROL GATES.

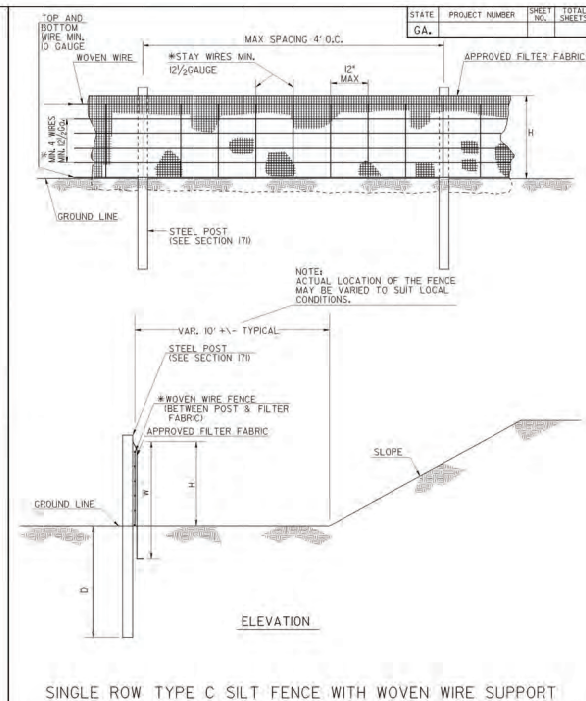
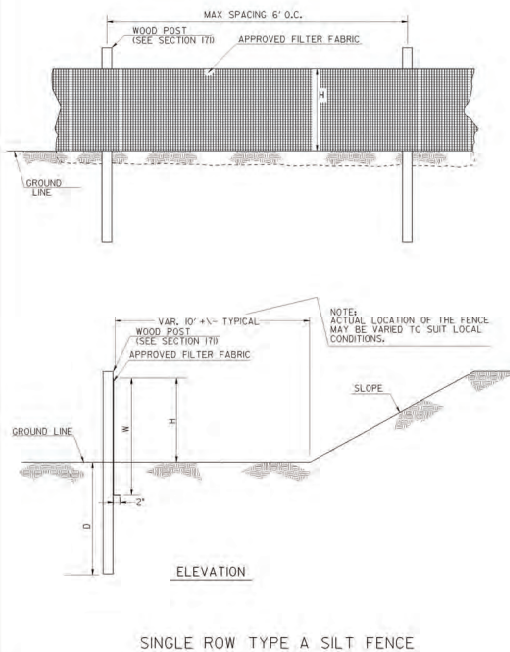
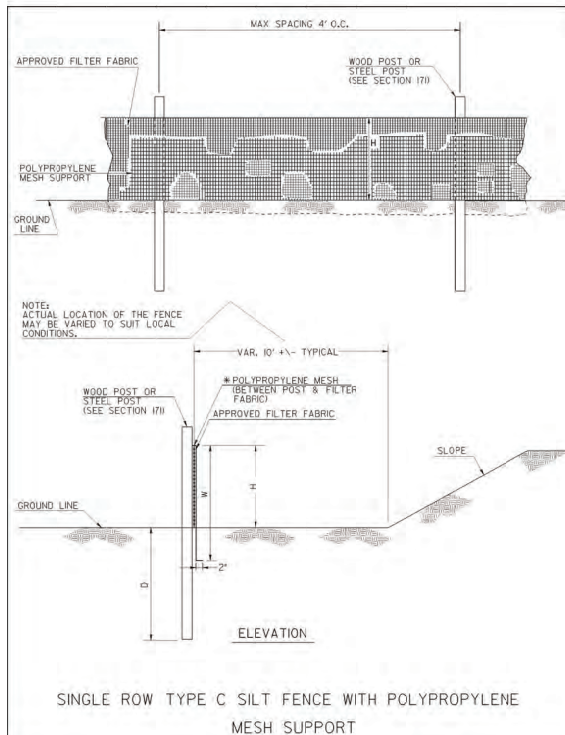
- GENERAL NOTES:**
- A SILT CONTROL GATE IS A TEMPORARY STRUCTURE PLACED AT INLETS TO FORM A BASIN FOR TRAPPING SEDIMENT.
 - SILT GATES SHALL NOT BE USED ON STRUCTURES THAT CONVEY STATE WATERS.
 - SILT GATES SHALL ONLY BE USED ON DRAINAGE AREAS UP TO 50-ACRES WITH NO MORE THAN 5-ACRES DISTURBED WITHIN THE DRAINAGE AREA.
 - USE WOOD SCREWS OR NAILS TO CONNECT WOOD COMPONENTS WITH NO SPACE ALLOWED BETWEEN BOARDS. TYPE C SILT FENCE FABRIC MUST BE FASTENED SECURELY WITH STAPLES OR NAILS TO OUTSIDE FACE OF BOARDS AND COVERING ALL BUTT-JOINTS BETWEEN BOARDS. OVERLAP ADDITIONAL SILT FENCE FABRIC A MINIMUM OF 12-INCHES.
 - REMOVE SEDIMENT WHEN IT REACHES ONE-THIRD THE HEIGHT OF SILT CONTROL GATE AND SILT FENCE FABRIC SHALL BE REPLACED WHEN DAMAGED OR DETERIORATED.
- PAY ITEMS:**
- | ITEM NO. | DESCRIPTION | UNIT |
|----------|--|------|
| 163-0501 | CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 1 | (EA) |
| 163-0502 | CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 2 | (EA) |
| 163-0503 | CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3 | (EA) |
| 165-0085 | MAINTENANCE OF SILT CONTROL GATE, TP 1 | (EA) |
| 165-0086 | MAINTENANCE OF SILT CONTROL GATE, TP 2 | (EA) |
| 165-0087 | MAINTENANCE OF SILT CONTROL GATE, TP 3 | (EA) |

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

DATE	BY	CHKD	APP'D	REVISION
11-20-03	W. J. B.			1
11-20-03	W. J. B.			2
11-20-03	W. J. B.			3
11-20-03	W. J. B.			4
11-20-03	W. J. B.			5
11-20-03	W. J. B.			6
11-20-03	W. J. B.			7
11-20-03	W. J. B.			8
11-20-03	W. J. B.			9
11-20-03	W. J. B.			10
11-20-03	W. J. B.			11
11-20-03	W. J. B.			12
11-20-03	W. J. B.			13
11-20-03	W. J. B.			14
11-20-03	W. J. B.			15
11-20-03	W. J. B.			16
11-20-03	W. J. B.			17
11-20-03	W. J. B.			18
11-20-03	W. J. B.			19
11-20-03	W. J. B.			20

DEPARTMENT OF TRANSPORTATION	
STATE OF GEORGIA	
CONSTRUCTION DETAILS	
SILT CONTROL GATES FOR STRUCTURES TYPE - 1, 2, AND 3	
NO SCALE	REV. & REDR. DEC., 2000
NUMBER D-20	

1/18/2011 1:25:13 PM "16007-25110(DPLOT00100.AT)8000.dwt" g:\work\1\6007-25110.dwg Construction Details D-24A D-24A.dwg 00-000



FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
TYPE "A"	4 FT.	2'-4"	1'-6"	3'-0"	
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24B.

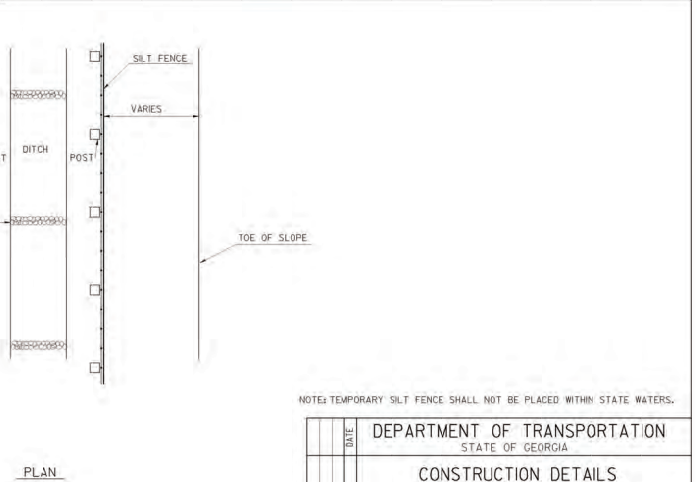
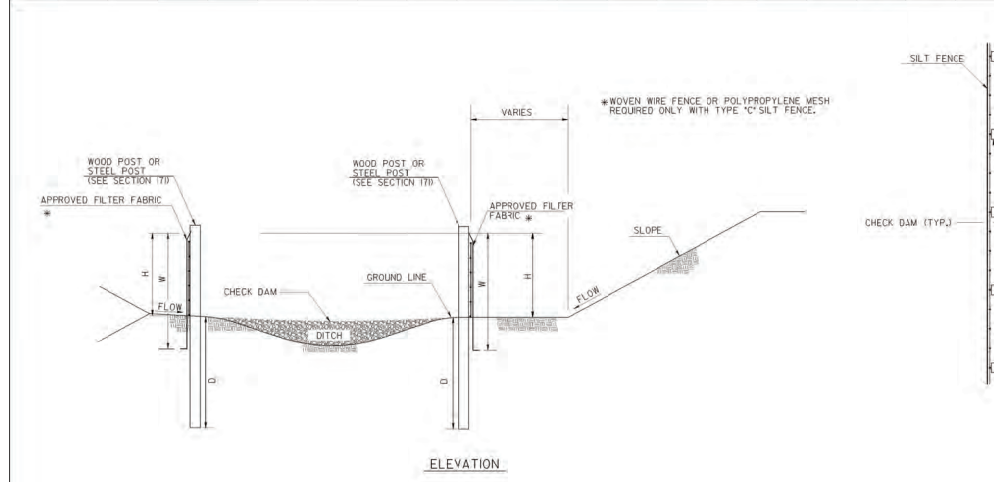
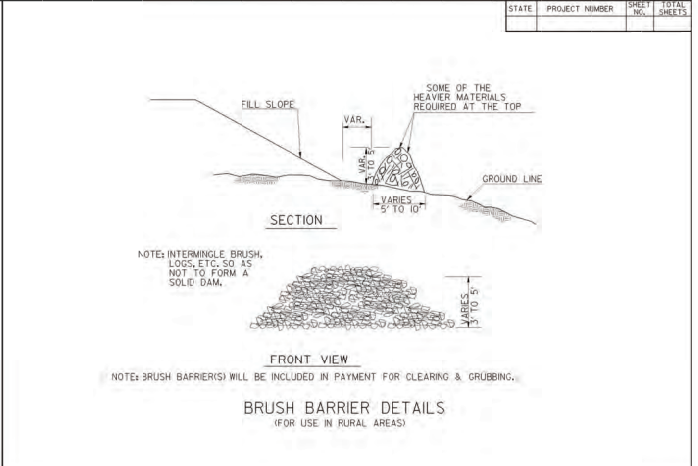
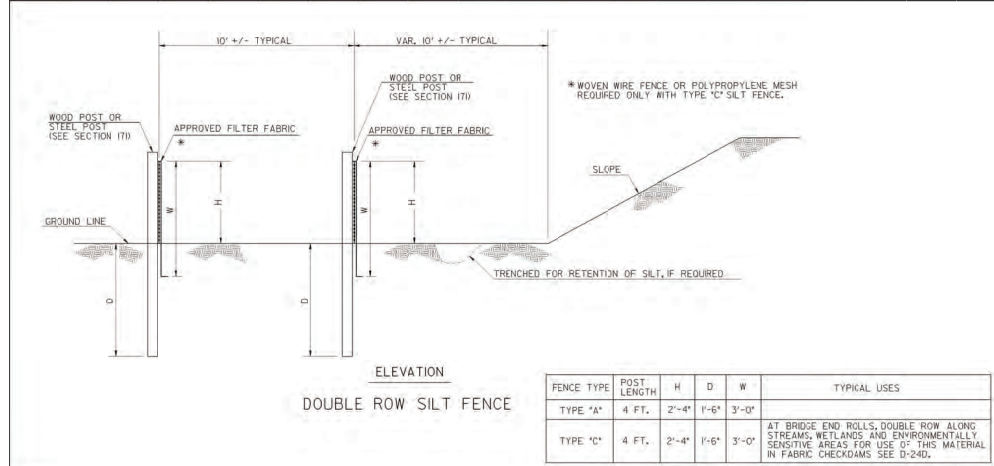
NOTES:

1. WIRE STAPLES SHALL BE AT LEAST 17 GAUGE, WITH LEGS AT LEAST 1/2 INCHES LONG AND A CROWN AT LEAST 5/8 INCHES WIDE. NAILS SHALL BE AT LEAST 14 GAUGE, 1 INCH LONG, WITH BUTTON HEADS AT LEAST 3/4 INCHES WIDE.
2. NAILS OR STAPLES SHALL BE EVENLY PLACED WITH AT LEAST 5 PER POST FOR TYPE A FENCE AND 4 PER POST FOR TYPE C FENCE.
3. THE VERTICAL WIRES FOR THE WOVEN WIRE SUPPORT FENCE SHALL HAVE A MAXIMUM SPACING OF 12 INCHES. THE TOP AND BOTTOM WIRES SHALL BE AT LEAST 10 GAUGE AND ALL OTHER WIRES SHALL BE AT LEAST 12 1/2 GAUGE.
4. TEMPORARY SILT FENCE INSTALLATION IS DIFFERENT THAN THE SILT RETENTION BARRIER INSTALLATION.
5. SEE SECTION 171 FOR SILT FENCE SPECIFICATIONS.
6. SEE SECTION 894 FOR FENCING SPECIFICATIONS.
7. SEE OPL-36 FOR A LIST APPROVED SILT FENCE FABRIC.
8. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS UNLESS PERMITTED.

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION	CONSTRUCTION DETAILS TEMPORARY SILT FENCE
BY	NO SCALE REV. AND REDRAWN JAN. 2011
	NUMBER D-24A (SHEET 1 OF 4)

1/18/2011 1:25:13 PM "16007-25110(DPLOT00100.AT)8000.dwt" g:\work\1\6007-25110.dwg Construction Details D-24A D-24A.dwg 00-000

1/18/2011 2:04:43 PM \\G001-25\\100PLOT\\00709.A1\\8000.qcf gwinet VLS\\DATA\\Raw_Construction Details\\D-24B-D-24B.dwt 00-000



NOTE: TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

DATE	REVISION	BY

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

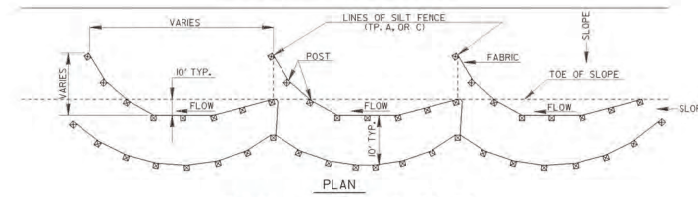
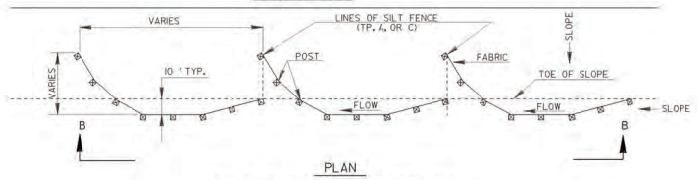
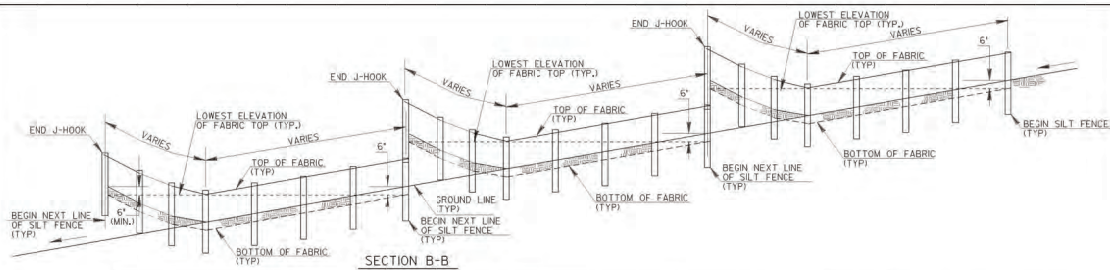
CONSTRUCTION DETAILS
TEMPORARY SILT FENCE
BERM DITCH, INSTALLATION, BRUSH BARRIER

NO SCALE REV. AND REDRAWN JAN, 2011

NUMBER
D-24B
(SHEET 2 OF 4)

1/18/2011 5:06:33 PM \\G007F25A10B010702F00J1A000.ctb g:\works\100001\100001.dwg User: j1011101 2/14/11 12:24:02 250,417 50,606

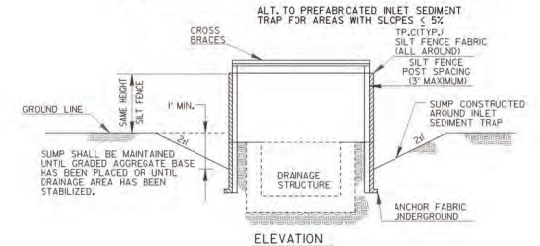
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			



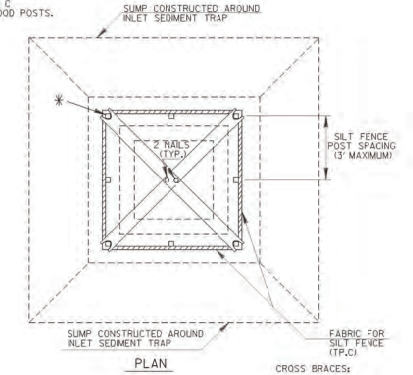
TYPICAL J HOOK SPACING		
SLOPE PERCENT	TYPE OF SILT FENCE	MINIMUM SPACING (FEET)
1% TO 2%	TYPE A	100' ±
2% TO 3%	TYPE A	50' ±
3% TO 5%	TYPE C	50' ±
4% TO 5%	TYPE C	25' ±

NOTE:
1. IF THE GRADE IS BETWEEN 0 TO 1 PERCENT, THE SILT FENCE SHALL BE PLACED ACROSS THE DITCH.
2. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

TYPICAL LOCATION AROUND DROP INLETS



* CROSS BRACING REQUIRED WHEN USING "ALTERNATE" TYPE C PRODUCTS WHICH USE WOOD POSTS.



NOTE:
PAYMENT AS INLET SEDIMENT TRAP PER EACH.
NOTE:
SEE SEPARATE SHEET ENTITLED "TEMPORARY SILT FENCE DETAILS" FOR SILT FENCE ERECTION DETAILS.

(PLASTIC ALTERNATE)

NOTE:
THE DRAINAGE AREA ENTERING THE INLET SEDIMENT TRAP SHALL BE NO GREATER THAN ONE ACRE.

TYPICAL CONSTRUCTION SEQUENCE FOR INLET SEDIMENT TRAP ALTERNATE

- EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.
- PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.
- SLIDE THE FILTER OVER THE FRAME.
- FILL THE FILTER POCKETS WITH SOL. #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.
- BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.

NOTE:
INLET SEDIMENT TRAP ALTERNATE SHALL BE AS APPROVED BY THE GA. D.O.T. OFFICE OF MATERIALS & RESEARCH. DETAILS & SPECIFICATIONS NOT SHOWN ARE PER THE MANUFACTURER'S REQUIREMENTS.

(METAL ALTERNATE)

2"-0" OF 2" CMP OR SMOOTH STEEL WITH 2" MIN. DIA. HOLES AT RANDOM PATTERN AT 6" MAX. SPACING (HOLES MAY BE TORCHED)

1/4" MIN. THICK HIGH DENSITY POLYETHYLENE FRAME (OR APPROVED ALTERNATE)

BASE OF FRAME SHAPED & SIZED TO FIT INLET TOP

NOTE: WHERE INLET SEDIMENT TRAPS ARE SPECIFIED, EITHER THE PLASTIC ALTERNATE (LEFT) OR THE METAL ALTERNATE (RIGHT) MAY BE USED AS APPROVED BY THE ENGINEER.

SIDE VIEW

SIDE VIEW

TOP VIEW

INLET SEDIMENT TRAP - FOR DROP INLETS

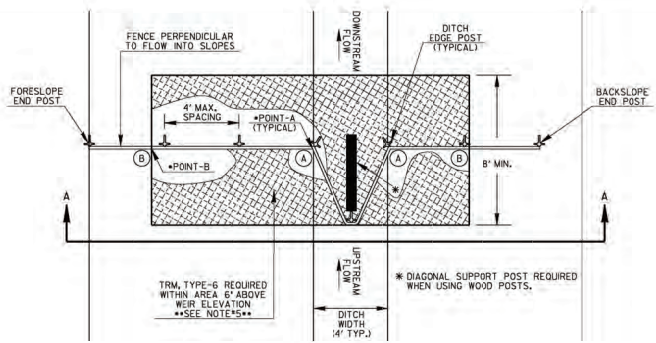
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
CONSTRUCTION DETAILS TEMPORARY SILT FENCE J-HOOK, INLET SEDIMENT TRAPS	
NO SCALE	JANUARY 2011
NUMBER D-24C (SHEET 3 OF 4)	

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

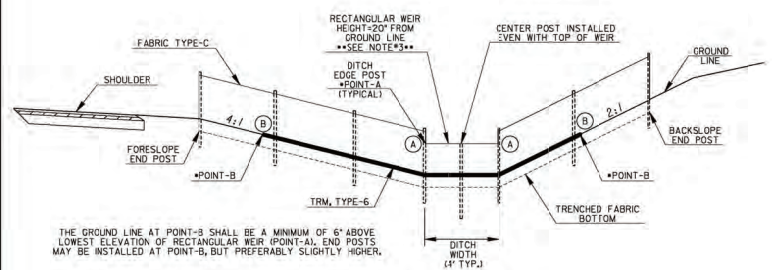
NOTES:

- FABRIC CHECK DAMS MAY BE USED FOR FLOWS UP TO 2.0-CFS. A ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM POINT FOR FLOWS GREATER THAN 2.0-CFS.
- FABRIC CHECK DAMS SHALL NOT BE PLACED WITHIN FLOWING STATE WATERS.
- FABRIC CHECK DAMS MAY BE USED IN DITCHES WITH DEPTHS AT LEAST 26-IN. IF DITCH DEPTH IS LESS THAN 26-IN, THE WEIR INVERT MAY BE LOWERED SLIGHTLY IN THE FIELD TO PROVIDE 6-IN MINIMUM FREEBOARD ABOVE POINT-A OR TO MATCH SPACING OF WIRE SUPPORT. THE WEIR HEIGHT SHALL BE NO LESS THAN 15-IN. THE DESIGNER SHALL CONSIDER OTHER APPROPRIATE BMPs FOR CONCENTRATED FLOW FOR DITCH DEPTHS LESS THAN 26-IN.
- THE FOLLOWING STEPS ARE RECOMMENDED FOR PROPER FABRIC CHECK DAM INSTALLATION:
 - DETERMINE DITCH CENTERLINE AND USE A LINE LEVEL OR OTHER MEANS TO FIND POINT-B WITHIN THE DITCH FORESLOPE AND BACKSLOPE TO PROVIDE 6-IN MINIMUM FREEBOARD ABOVE POINT-A.
 - CREATE TRENCH 6-IN BELOW DITCH GRADE TO FIT LAYOUT FROM STEP-A WITH MINIMAL SOIL DISTURBANCE.
 - LAYOUT TURF REINFORCEMENT MATTING (TRM, TYPE-6 TO PROVIDE PROTECTION A MINIMUM LENGTH OF 8-FT DOWNSTREAM OF CENTER POST TO FUNCTION AS A SPLASH PAD TO PREVENT SCOURING. ADDITIONAL NECESSARY TRM SHALL BE OVERLAPPED 3-FT. THE WIDTH SHALL BE THE DISTANCE BETWEEN POINT-B ON THE DITCH FORESLOPE AND POINT-B ON BACKSLOPE.
 - INSTALL FENCE POSTS THROUGH TRM WITHIN TRENCH. CENTER POST AND POSTS WITHIN WEIR AREA SHALL BE INSTALLED FLUSH WITH WEIR. CUT TRM WITHIN TRENCH FOLLOWING CHECK DAM LAYOUT AND SAVE UPSTREAM PORTION OF TRM FOR FURTHER USE.
 - PROPERLY INSTALL TYPE-C SILT FENCE. TRENCH BACKFILL SHALL BE COMPACTED WITH A HAND TAMPER, JUMPING JACK COMPACTOR, OR PLATE COMPACTOR TO PREVENT UNDERMINING.
 - INSTALL PREVIOUSLY CUT TRM FROM STEP-D UPSTREAM AGAINST CHECK DAM. INSTALLING UPSTREAM AND DOWNSTREAM TRM ACCORDING TO DETAIL D-35 FOR THIS TEMPORARY APPLICATION IS NOT REQUIRED. HOWEVER, TRM SHALL HAVE PROPER CONTACT WITH GROUND SURFACE, ANCHORED 6-IN MAXIMUM SPACING ALONG THE EDGES, AND ADEQUATELY WITHIN THE MATTED AREA.
- TEMPORARY INSTALLATION OF TRM WITH FABRIC CHECK DAMS SHALL BE INCLUDED IN THE LINEAR COST OF THE CONSTRUCTION, REMOVAL, AND MAINTENANCE OF EACH FABRIC CHECK DAM. NO ADDITIONAL PAYMENT WILL BE MADE.

PAY ITEMS:
63-0528 CONSTRUCT & REMOVE FABRIC CHECK DAM, TYPE-C SILT FENCE (LF)
65-0041 MAINTENANCE OF CHECK DAMS - ALL TYPES (LF)



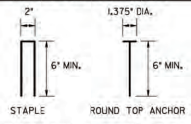
GRADE OF DITCH	MINIMUM SPACING (FEET)
LESS THAN 1%	100' ±
1% TO 3%	75' ±
3% TO 6%	50' ±
6% TO 8%	25' ±



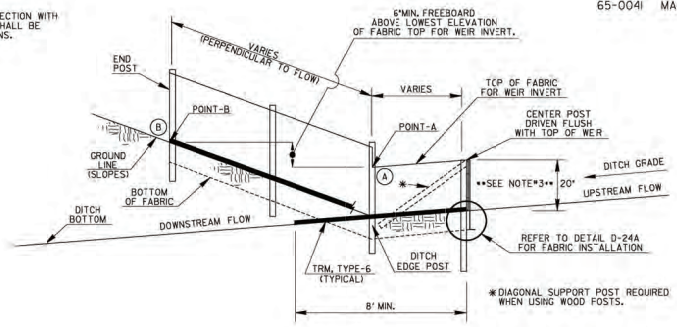
SECTION A-A

NOTE: CROSS-SECTION SHOWN IS AN EXAMPLE OF A TYPICAL CUT SECTION WITH A 4-FT FLAT BOTTOM DITCH. ACTUAL FABRIC CHECK DAMS SHALL BE INSTALLED SIMILARLY ACCORDING TO ROADWAY CROSS-SECTIONS.

TURF REINFORCEMENT MATTING ANCHOR



NOTE: TURF REINFORCEMENT MATTING SHALL BE ANCHORED WITH 8-GAUGE METAL STAPLES OR ROUND TOP ANCHORS. ANCHORS SHALL BE LONG ENOUGH TO PROVIDE SUFFICIENT GROUND PENETRATION TO RESIST PULL OUT.



DATE	
REVISION	
BY	

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAILS
TEMPORARY SILT FENCE
FABRIC CHECK DAM

NO SCALE REV. AND REDRAWN, JULY 2015

NUMBER
D-24D
(SHEET 4 OF 4)



Moreland Altobelli Associates, LLC
217 Oakridge Street
Suite 1402
Cumming, Georgia 30040
Telephone: (770) 781-9507



McNUTT ROAD
ROAD CONSTRUCTION PLANS

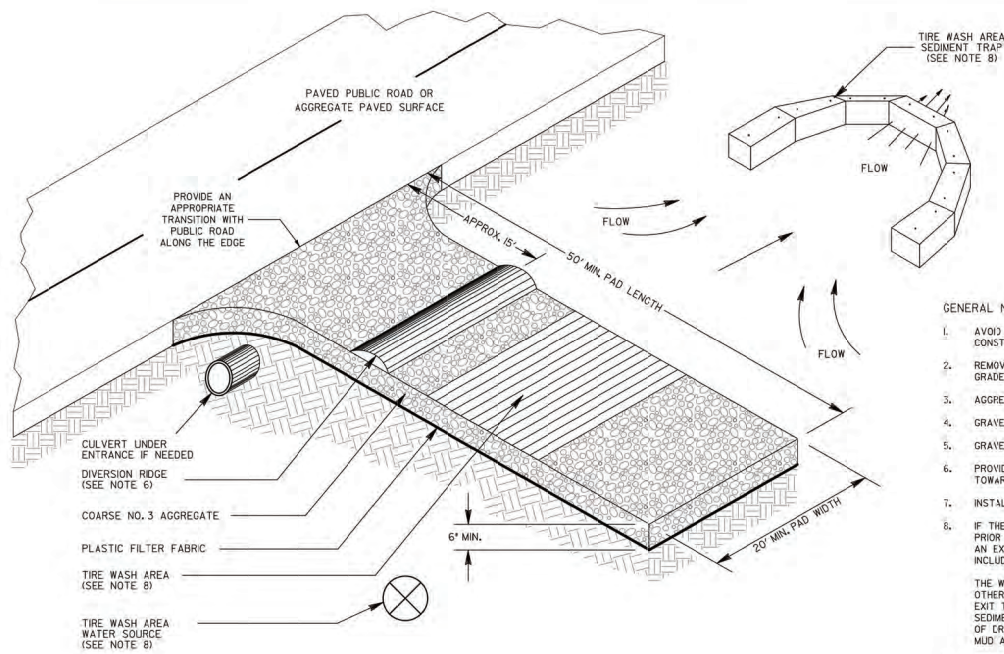
REVISION	DATE

EROSION CONSTRUCTION DETAILS

McNUTT ROAD AND
McNUTT WAY

DRAWING NUMBER
56-0005

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

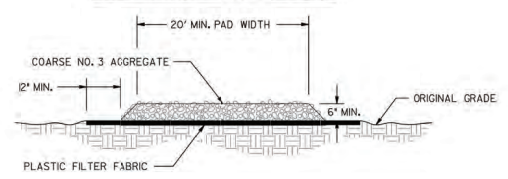


GENERAL NOTES:

1. AVOID LOCATING CONSTRUCTION EXITS ON STEEP SLOPES OR AT SHARP CURVES ON PUBLIC ROADS. CONSTRUCTION EXITS ARE NOT REQUIRED FOR DIRT PUBLIC ROADS.
 2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA AND GRADE FOR POSITIVE DRAINAGE.
 3. AGGREGATE SIZE SHALL BE COARSE NO. 3 AGGREGATE WITH 0.0% PASSING THE 1.06 INCH U.S. STANDARD SIEVE.
 4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES AND PLACED ON APPROVED PLASTIC FILTER FABRIC.
 5. GRAVEL PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
 6. PROVIDE A TRAVERSABLE DIVERSION RIDGE CONSTRUCTED OF AGGREGATE 6 INCHES TO 8 INCHES HIGH WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
 7. INSTALL CULVERT UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
 8. IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL PAD DOES NOT SUFFICIENTLY REMOVE THE MUD PRIOR TO ENTERING PUBLIC ROADS, THE CONTRACTOR SHALL ADD A CONSTRUCTION EXIT TIRE WASH ASSEMBLY TO AN EXISTING CONSTRUCTION EXIT WHEN DIRECTED BY THE ENGINEER. THE CONSTRUCTION EXIT TIRE WASH ASSEMBLY INCLUDES: TIRE WASH AREA, WATER SOURCE, AND SEDIMENT TRAP OR OTHER ACCEPTABLE SEDIMENT STORAGE DEVICE.

THE WASHING SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE THAT DRAINS INTO A SEDIMENT TRAP OR OTHER ACCEPTABLE SEDIMENT STORAGE DEVICE. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE CONSTRUCTION EXIT TO THE SEDIMENT CONTROL DEVICE. ACCEPTABLE SEDIMENT STORAGE DEVICES INCLUDE TEMPORARY SEDIMENT TRAPS, HAY BALES OR STONE FILTER RING WITH THE SEDIMENT STORAGE SIZED FOR 67 CUBIC YARDS PER ACRE OF DRAINAGE. TIRE WASHING SHALL BE DONE MANUALLY OR BY EQUIPMENT SUITABLE FOR TRUCK TRAFFIC THAT REMOVES MUD AND DIRT.
 9. AGGREGATE SHALL BE KEPT LOOSE OR SCARIFIED WHEN AGGREGATE BECOMES CONSOLIDATED.
 10. CONSTRUCTION EXIT SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR, AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. MAINTENANCE OF CONSTRUCTION EXIT WILL BE PAID ON THE BASIS OF HAVING OR NOT HAVING A CONSTRUCTION EXIT TIRE WASH ASSEMBLY WHEN DIRECTED BY THE ENGINEER. ALL MUD AND DEBRIS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- SEE STANDARD SPECIFICATION 163, AND SUPPLEMENTS THERETO FOR THE CONSTRUCTION AND REMOVAL OF CONSTRUCTION EXITS. SEE STANDARD SPECIFICATION 165, AND SUPPLEMENTS THERETO FOR THE MAINTENANCE OF CONSTRUCTION EXITS.

ENTRANCE ELEVATION



PAY ITEM:		
163-0300	CONSTRUCTION EXIT	(EA)
163-0310	CONSTRUCTION EXIT TIRE WASH ASSEMBLY	(EA)
165-0101	MAINTENANCE OF CONSTRUCTION EXIT	(EA)
165-0310	MAINTENANCE OF CONSTRUCTION EXIT TIRE WASH ASSEMBLY	(EA)

REV. TIRE WASH & NOTES 04-18-18 REV. CIVIC 2008 MANUAL 04-22-18 REV. CONSTRUCTION LABELS 07-18-17	DATE	
	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
	CONSTRUCTION DETAILS	
	CONSTRUCTION EXIT	
NO SCALE		FEBRUARY 2001
DESIGNED	BY	NUMBER
DRAWN	BY	D-41
TRACED	BY	
CHECKED	BY	

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Augusta

11 N. D. R. D. S. A.

McNUTT ROAD

ROAD CONSTRUCTION PLANS

REVISION DATES	

EROSION CONSTRUCTION DETAILS

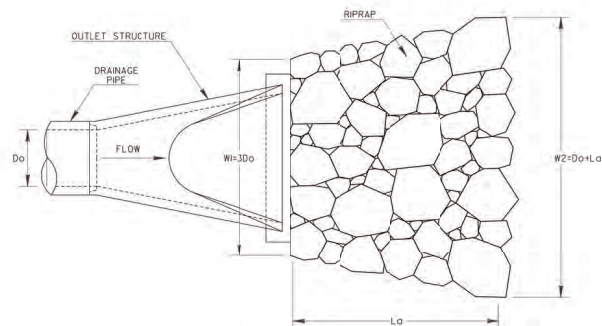
McNUTT ROAD AND McNUTT WAY

DRAWING NUMBER

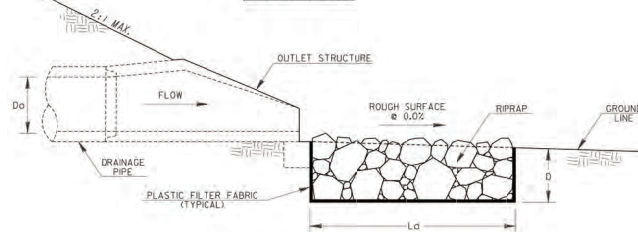
56-0006

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

OUTLET TO FLAT AREA

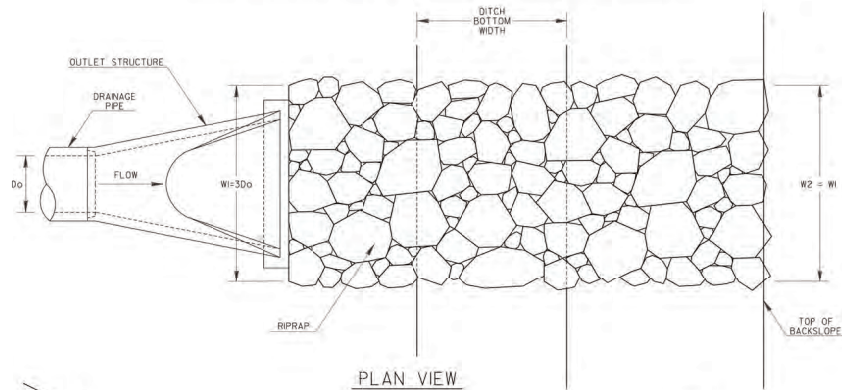


PLAN VIEW

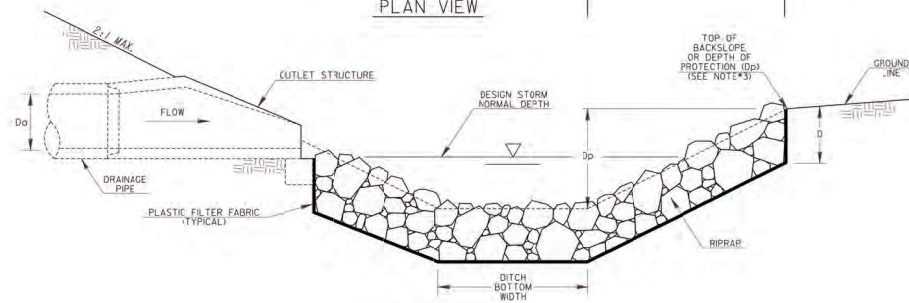


PROFILE VIEW

OUTLET PERPENDICULAR TO WELL-DEFINED CHANNEL



PLAN VIEW



PROFILE VIEW

GENERAL NOTES:

1. RIPRAP OUTLET PROTECTION SHOULD BE USED TO REDUCE A DRAINAGE STRUCTURE'S DISCHARGE VELOCITY. RIPRAP OUTLET PROTECTION IS SHOWN FOR GEORGIA STANDARD #20, BUT IS INSTALLED SIMILARLY FOR OTHER DRAINAGE OUTLET STRUCTURES.
2. RIPRAP OUTLET PROTECTION SHALL BE DESIGNED IN ACCORDANCE WITH THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'. THE DESIGNER SHALL PROVIDE THE FOLLOWING IN THE PLANS: PIPE DIAMETER (D0), FLOW RATE OF DESIGN STORM (Q), VELOCITY (V), TAILWATER CONDITION (TW), APRON LENGTH (L0), APRON WIDTH AT DRAINAGE STRUCTURE (W1), APRON WIDTH DOWNSTREAM (W2), AVERAGE STONE DIAMETER (d50), INSTALLATION DEPTH (D), AND TYPE OF RIPRAP WITH QUANTITY.
THE MINIMUM DESIGN FOR RIPRAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM EVENT, BUT LARGER STORMS ARE RECOMMENDED.
3. THE APRON WIDTHS SHALL BE THE SAME WHEN THE DRAINAGE STRUCTURE DISCHARGES PERPENDICULAR INTO A WELL-DEFINED CHANNEL. THE LENGTH SHALL EXTEND ACROSS THE CHANNEL AND UP TO THE TOP OF THE CHANNEL BACKSLOPE OR 1-FOOT ABOVE THE NORMAL DEPTH OF THE CHANNEL'S DESIGN STORM (WHICHEVER IS LESS). THE DESIGNER SHALL PROVIDE THE DEPTH OF PROTECTION (Dp) IF THE APRON DOES NOT EXTEND TO THE TOP OF THE BACKSLOPE.
4. IF THE OUTLET HYDRAULICS REQUIRE A d50<0.70 FEET, TYPE-3 RIPRAP MAY BE USED.
IF THE OUTLET HYDRAULICS REQUIRE A d50<1.20 FEET, TYPE-1 RIPRAP SHOULD BE USED.
IF THE OUTLET HYDRAULICS REQUIRE A d50>1.20 FEET, THE DESIGNER SHALL DESIGN AND PROVIDE A SPECIAL DETAIL FOR APPROPRIATE OUTLET PROTECTION.
5. PLASTIC FILTER FABRIC IS REQUIRED UNDERNEATH RIPRAP APRON.
6. PAYMENT FOR RIPRAP SHALL BE MEASURED IN SQUARE YARDS FOR SPECIFIED INSTALLATION DEPTH. PAYMENT FOR PLASTIC FILTER FABRIC SHALL BE MEASURED IN SQUARE YARDS CONSISTENT WITH RIPRAP QUANTITY AND PAID FOR SEPARATELY.

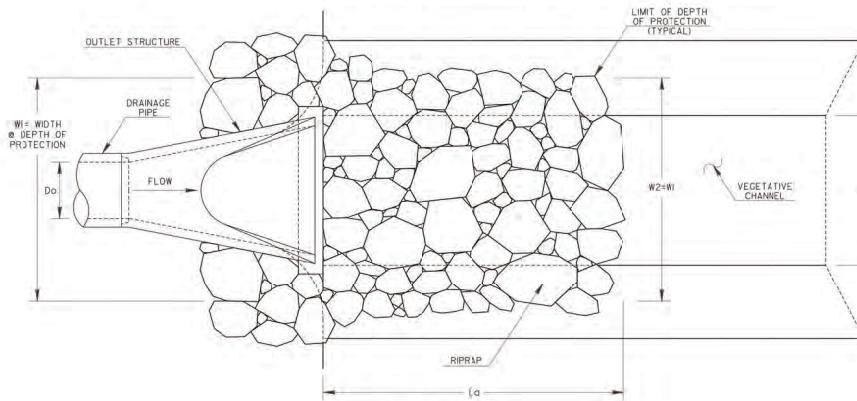
D0	=	PIPE DIAMETER
Q	=	DESIGN STORM FLOW RATE
V	=	DESIGN STORM VELOCITY
TW	=	TAILWATER CONDITION/DESIGN STORM NORMAL DEPTH
L0	=	APRON LENGTH
W1	=	APRON WIDTH UPSTREAM
W2	=	APRON WIDTH DOWNSTREAM
d50	=	AVERAGE STONE DIAMETER
D	=	INSTALLATION DEPTH
Dp	=	DEPTH OF PROTECTION

RIPRAP TYPE	REQUIRED d50 (IN)	MIN. DEPTH "D" (IN)
1	≤1.20	36
3	≤0.67	18

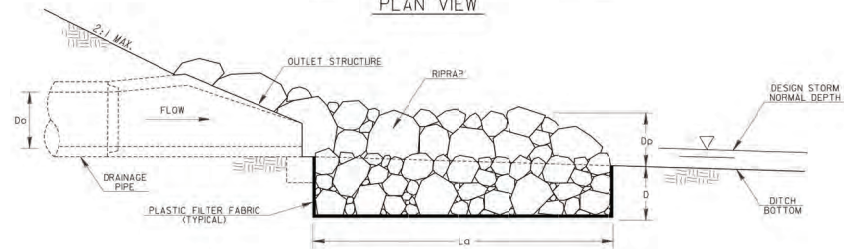
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
CONSTRUCTION DETAILS	
RIPRAP OUTLET PROTECTION (SHEET 1 OF 2)	
NO SCALE	4-22-2016
DESIGNED: JLL DRAWN: JLL CHECKED: JLL	NUMBER D-55A

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

OUTLET PARALLEL TO WELL-DEFINED CHANNEL

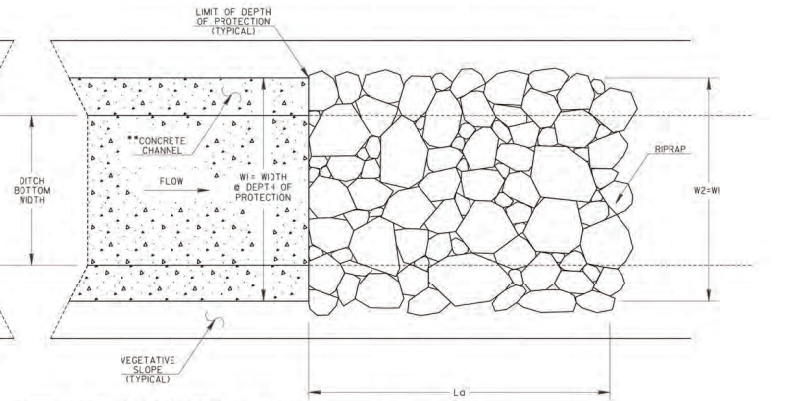


PLAN VIEW



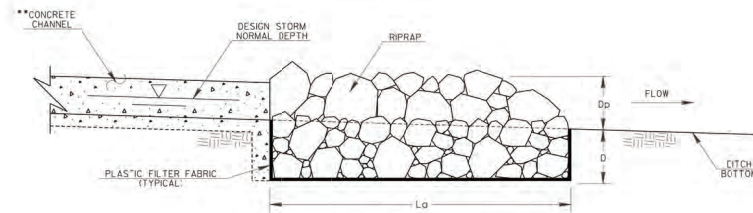
PROFILE VIEW

CONCRETE CHANNEL TO RIPRAP TRANSITION



PLAN VIEW

••REFER TO CONSTRUCTION DETAIL D-10 FOR CONCRETE DITCH PAVING INFORMATION



PROFILE VIEW

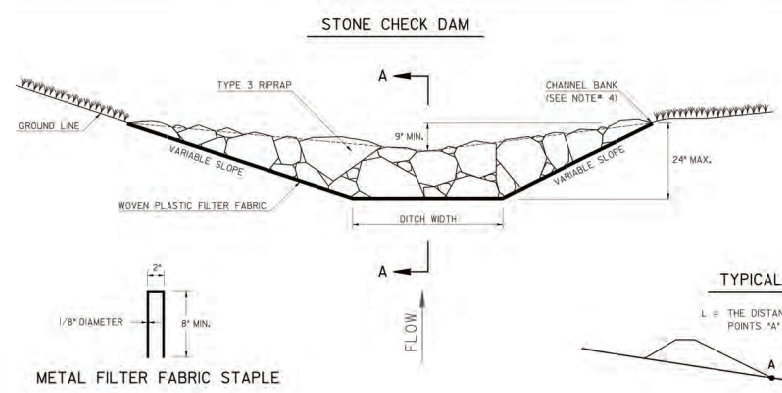
GENERAL NOTES:

1. RIPRAP OUTLET PROTECTION SHOULD BE USED TO REDUCE A DRAINAGE STRUCTURE'S DISCHARGE VELOCITY. RIPRAP OUTLET PROTECTION IS SHOWN FOR GEORGIA STANDARD #20, BUT IS INSTALLED SIMILARLY FOR OTHER DRAINAGE OUTLET STRUCTURES. RIPRAP OUTLET PROTECTION IS SHOWN FOR A CONCRETE DITCH, BUT IS INSTALLED SIMILARLY TO TRANSITION FROM OTHER CHANNEL LININGS.
2. RIPRAP OUTLET PROTECTION SHALL BE DESIGNED IN ACCORDANCE WITH THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". THE DESIGNER SHALL PROVIDE THE FOLLOWING IN THE PLANS: PIPE DIAMETER (Dp), FLOW RATE OF DESIGN STORM (Q), VELOCITY (V), TAILWATER CONDITION (TW), APRON LENGTH (Ld), APRON WIDTH AT DRAINAGE STRUCTURE (W1), APRON WIDTH DOWNSTREAM (W2), AVERAGE STONE DIAMETER (d50), INSTALLATION DEPTH (D), AND TYPE OF RIPRAP WITH QUANTITY.
THE MINIMUM DESIGN FOR RIPRAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM EVENT, BUT LARGER STORMS ARE RECOMMENDED.
3. THE APRON WIDTHS SHALL BE THE SAME WHEN THE DRAINAGE STRUCTURE DISCHARGES PARALLEL INTO A WELL-DEFINED CHANNEL. THE APRON WIDTHS IN THIS CASE SHALL REPRESENT THE WIDTH AT THE DEPTH OF PROTECTION. THE RIPRAP SHALL BE INSTALLED TO THE TOP OF CHANNEL OR 1-FOOT ABOVE THE NORMAL DEPTH OF THE CHANNEL'S DESIGN STORM (WHICHEVER IS LESS). THE DESIGNER SHALL PROVIDE THE DEPTH OF PROTECTION (Dp) IF THE RIPRAP SHOULD NOT BE INSTALLED TO THE TOP OF THE CHANNEL. RIPRAP SHOULD ALSO BE INSTALLED TO ARMOR CHANNEL CORNER AT THE OUTLET STRUCTURE.
4. IF THE OUTLET HYDRAULICS REQUIRE A d50<0.70 FEET, TYPE-3 RIPRAP MAY BE USED.
IF THE OUTLET HYDRAULICS REQUIRE A d50<1.20 FEET, TYPE-1 RIPRAP SHOULD BE USED.
IF THE OUTLET HYDRAULICS REQUIRE A d50>1.20 FEET, THE DESIGNER SHALL DESIGN AND PROVIDE A SPECIAL DETAIL FOR APPROPRIATE OUTLET PROTECTION.
5. PLASTIC FILTER FABRIC IS REQUIRED UNDERNEATH RIPRAP APRON.
6. PAYMENT FOR RIPRAP SHALL BE MEASURED IN SQUARE YARDS FOR SPECIFIED INSTALLATION DEPTH. PAYMENT FOR PLASTIC FILTER FABRIC SHALL BE MEASURED IN SQUARE YARDS CONSISTENT WITH RIPRAP QUANTITY AND PAID FOR SEPARATELY.

Dp = PIPE DIAMETER
Q = DESIGN STORM FLOW RATE
V = DESIGN STORM VELOCITY
TW = TAILWATER CONDITION/DESIGN STORM NORMAL DEPTH
Ld = APRON LENGTH
W1 = APRON WIDTH UPSTREAM AT DEPTH OF PROTECTION
W2 = APRON WIDTH DOWNSTREAM AT DEPTH OF PROTECTION
d50 = AVERAGE STONE DIAMETER
D = INSTALLATION DEPTH
Dp = DEPTH OF PROTECTION

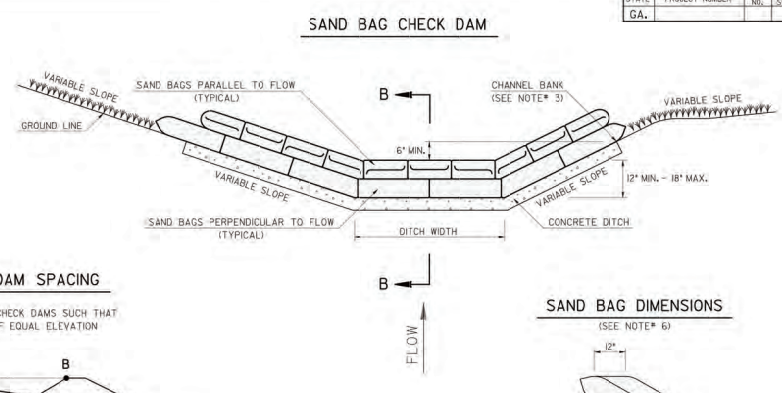
RIPRAP TYPE	REQUIRED d50 (F")	MIN. DEPTH "D" (IN)
1	≤1.20	36
3	≤0.67	18

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		CONSTRUCTION DETAILS	
		RIPRAP OUTLET PROTECTION (SHEET 2 OF 2)	
NO SCALE		4-22-2016	
DESIGNED: JLL	NUMBER	D-55B	
DRAWN: JLL			
TRACED: _____			
CHECKED: _____			

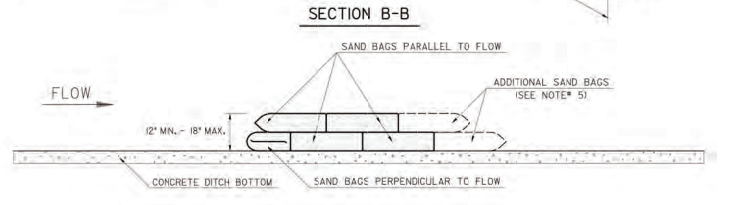
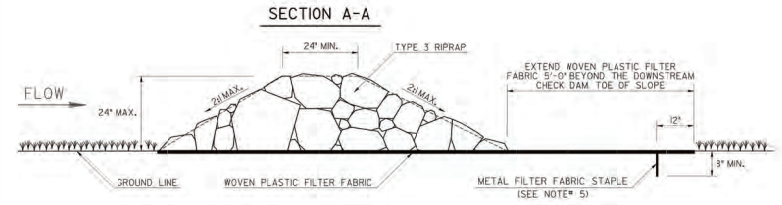
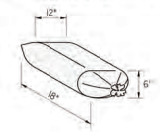


TYPICAL CHECK DAM SPACING

L = THE DISTANCE BETWEEN CHECK DAMS SUCH THAT POINTS 'A' AND 'B' ARE OF EQUAL ELEVATION



SAND BAG DIMENSIONS
(SEE NOTE # 6)



STONE CHECK DAM GENERAL NOTES:

1. STONE CHECK DAMS SHALL NOT BE INSTALLED IN THE CLEAR ZONE OF UNPROTECTED ACTIVE TRAFFIC.
2. APPROPRIATE CONVENTIONAL OR APPROVED ALTERNATIVE BMPs SHALL BE PROVIDED DOWNSTREAM OF STONE CHECK DAMS AT THE DISCHARGE POINT FOR FLOWS GREATER THAN 2.0-CUBIC FEET PER SECOND.
3. STONE CHECK DAMS SHALL NOT BE PLACED WITHIN FLOWING STATE WATERS.
4. THE CENTER OF THE STONE CHECK DAM SHALL BE AT LEAST 9-INCHES LOWER THAN THE OUTER EDGES OF THE STONE CHECK DAM. THE HEIGHT AT THE CENTER OF THE STONE CHECK DAM MAY BE INCREASED TO A MAXIMUM OF 24-INCHES IF A MINIMUM OF 9-INCHES OF FREEBOARD IS STILL PROVIDED AT THE CHANNEL BANK.
5. ANCHOR THE WOVEN PLASTIC FILTER FABRIC TO THE GROUND SURFACE WITH METAL FILTER FABRIC STAPLES 12-INCHES FROM THE EDGE AND NO GREATER THAN 12-INCHES APART.
6. REMOVE SEDIMENT WHEN IT REACHES ONE-HALF THE HEIGHT OF THE STONE CHECK DAM. WOVEN PLASTIC FILTER FABRIC SHALL BE REPLACED WHEN DAMAGED OR DETERIORATED.
7. PROVIDE PERMANENT CHANNEL PROTECTION AS SHOWN AND/OR NOTED IN THE PLANS AFTER STONE CHECK DAM IS REMOVED.

SAND BAG CHECK DAM GENERAL NOTES:

1. SAND BAG CHECK DAMS ARE ONLY USED FOR TEMPORARY VELOCITY CONTROL IN CONCRETE LINED DITCHES AND SHALL NOT BE INSTALLED IN THE CLEAR ZONE OF UNPROTECTED ACTIVE TRAFFIC.
2. APPROPRIATE CONVENTIONAL OR APPROVED ALTERNATIVE BMPs SHALL BE PROVIDED UPSTREAM AND/OR DOWNSTREAM OF CONCRETE DITCHES.
3. THE CENTER OF THE SAND BAG CHECK DAM SHALL BE AT LEAST 6-INCHES LOWER THAN THE OUTER EDGES OF THE SAND BAG CHECK DAM AT THE GROUND LINE. THE HEIGHT AT THE CENTER OF THE SAND BAG CHECK DAM SHALL BE A MINIMUM OF 12-INCHES AND A MAXIMUM OF 18-INCHES.
4. INSTALL SAND BAGS TIGHTLY ABUTTING EACH OTHER AND STACK IN A RUNNING BOND PATTERN. FOLD ANY FLAPS AWAY FROM WATER FLOW.
5. IF ADDITIONAL SAND BAGS ARE WARRANTED FOR STABILITY, INSTALL AS SHOWN AND DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST.
6. SAND BAG SIZES MAY VARY. ASSUME A FILLED SAND BAG HAS APPROXIMATE DIMENSIONS OF 12"x6"x18".
7. REMOVE SEDIMENT WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SAND BAG CHECK DAM. SAND BAGS SHALL BE REPLACED WHEN DAMAGED OR DETERIORATED AT NO ADDITIONAL COST TO THE DEPARTMENT.

NOTE:
SEE STANDARD SPECIFICATION 163, AND SUPPLEMENTS THERETO FOR THE CONSTRUCTION AND REMOVAL OF STONE CHECK DAMS AND SAND BAG CHECK DAMS. SEE STANDARD SPECIFICATIONS AND SUPPLEMENTS THERETO FOR THE MAINTENANCE OF STONE CHECK DAMS AND SAND BAG CHECK DAMS.

PAY ITEMS:
163-0527 CONSTRUCT AND REMOVE RIPRAP CHECK DAMS, STONE PLAIN RIPRAP/SAND BAGS (EA)
165-0041 MAINTENANCE OF CHECK DAMS - ALL TYPES (LF)

DATE		REVISION	

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
CONSTRUCTION DETAILS STONE RIPRAP & SAND BAG TEMPORARY CHECK DAMS	
NO SCALE	11-28-2018
DESIGNED BY DRAWN BY CHECKED BY	NUMBER D-56



**McNUTT ROAD
2017 CONSTRUCTION PLANS**

REVISION DATES	

EROSION CONSTRUCTION DETAILS

McNUTT ROAD AND
McNUTT WAY

DRAWING
NUMBER

56-0009