

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR THE PROPOSED
IMPROVEMENT OF FEDERAL AID
SECONDARY ROUTE
HSIP FUNDS**

SECTION # 16-00282-00-GR
JOB # C-97-008-19
PROJECT # WZM5(680)
CONTRACT # 95832
GUARDRAIL UPGRADE PROJECT MACON COUNTY, ILLINOIS

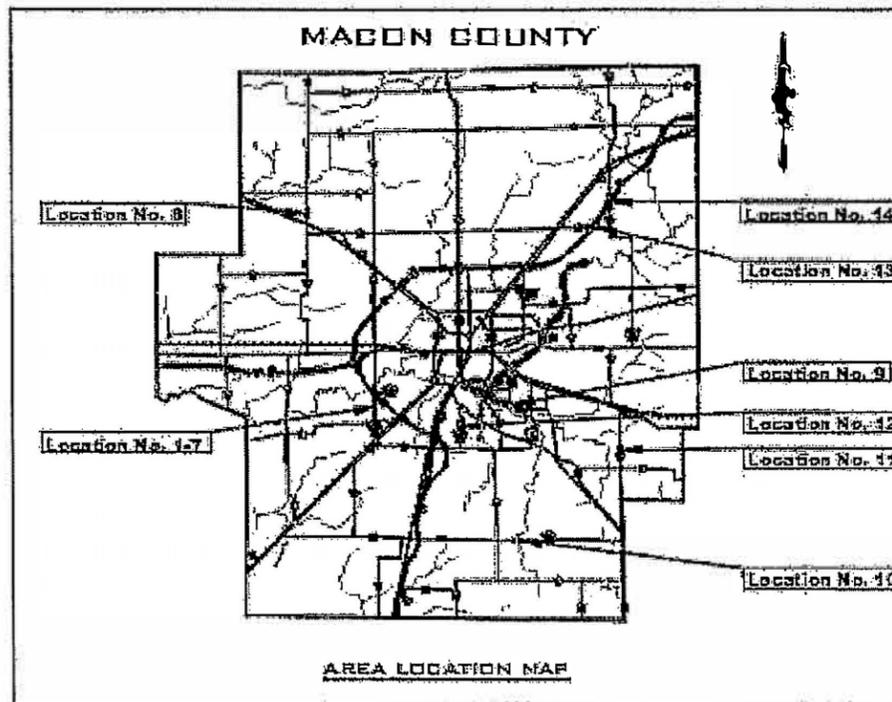
INDEX OF SHEETS

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STANDARDS

- 830111, Weak Post guardrail Attached to Culvert
- 830301-08, Shldr Wid for TY 1 SPL Guardrail Term
- 831011-10, Traffic Barrier Terminal Type 2
- 701006-05, Off Road Operations
- 701306-04, Ln. Closure, 2L, 2W, Slow Moving
- 701901-07, Traffic Cntl. Devices
- 725001-01, Object and Terminal Markers
- B.L.R. 23-4, Traffic Barrier Terminal Type 1
- B.L.R. 26-3, Steel Plate Beam Guardrail 29" Height

	ADT
CH-10 at Wyckles Road	650
CH-20 over I-72	660
CH-21 at Heman Road	400
CH-25 over I-72	1000
CH-28 just west of Wyckles Road	1200
CH-32 just east of Kraft Road	1000
CH-41 from Cantrell to south of CH-28	1000
CH-50 just east of Lake Bluff Drive	3050
CH-57 north of Sefton Road	2350
CH-61 just north of Mt. Gilead Rd.	1600



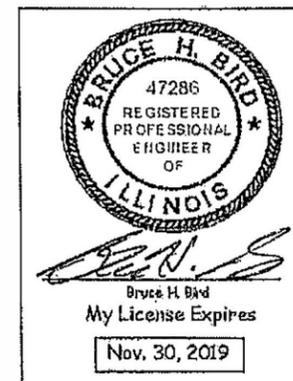
TOTAL LENGTH = 5900 FEET
NET LENGTH = 4850 FEET



J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123 or 811



1-800-892-0123



APPROVED: RESUBMITTED 7 2018
Bruce H. Bird
COUNTY ENGINEER

PASSED: 4/6/18 2018
Don Phillips
DISTRICT ENGINEER OF LOCAL ROADS AND STREETS

Releasing For Bid Based
On Limited Review: 4/6 2018
Jeffrey M. South
REGION FOUR ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

PAY ITEM #	DESCRIPTION	UNITS	TOTAL
20400800	FURNISHED EXCAVATION	CU YD	514
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	6
54201069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	16
69000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FDDT POSTS	FOOT	3562.5
63000054	WEAK POST GUARDRAIL ATTACHED TO CULVERT CASE V	FOOT	125
63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	19
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	18
63200310	GUARDRAIL REMOVAL	FOOT	4646
67100100	MOBILIZATION	LSUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	LSUM	1
72501000	TERMINAL MARKER-DIRECT APPLIED	EACH	23
LR631020	TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	3

LOCATION DESCRIPTIONS

- CH-10 @ Wyckles Road, Length 75', Remove turnout terminals and install Type 1 SPL Terminal with Terminal Marker, and a Type 2 Terminal. Furnished Excavation for Type 1 Terminal.
- CH-28 0.1 miles west of Wyckles Road, Length 200', Remove turnout terminals and install Type 2 and Type 1 SPL Terminals with Markers. Furnished Excavation for Type 1 Terminals.
- CH-41 Wyckles Road 0.1 miles north of CH-28, Length 75', Remove turnout terminals and install Type 2 and Type 1 SPL terminals with Markers. Furnished Excavation for Type 1 Terminals.
- CH-41 Wyckles Road at Hartung Road, Length 300', Remove turnout terminals and the guardrail along Hartung Road, and install Type 2 and Type 1 SPL terminals with Terminal Markers and Furnished Excavation.
- CH-41 Wyckles Road 0.1 miles north of W. Rock Springs Road, Length 150', Remove turnout terminals and install Type 2 and Type 1 SPL Terminals with Markers. Install SPBGR with 8' Radius for opening in rail. Furnished Excavation for Type 1 Terminals.
- CH-41 Wyckles Road 0.1 miles south of CH-28, Length 600', Remove guardrail on both sides and install new SPBGR and new Type 2 and Type 1 SPL Terminals with Terminal Markers. Furnished Excavation for Type 1 Terminals.
- CH-41 Wyckles Road at the Sangamon River, Length 2200', Remove guardrail on both sides leaving the Type 6 terminals attached to the structure. Install new SPBGR and new Type 2 and Type 1 SPL Terminals. Furnished Excavation for Type 1 Terminals.
- CH-21 Kenney Road at Heman Road, Length 50', Remove existing terminal and install a new Type 1 SPL Terminal.
- CH-50 Lost Bridge Road just east of Lake Bluff Road, Length 200', Remove existing guardrail and place new SPBGR with Type 2 and Type 1 Traffic Barrier Terminals.
- CH-32 Andrews Street just east of Karl Road, Length 400', Remove existing guardrail and place new SPBGR Attached to Culvert with Type 2 and Type 1 SPL Terminals with Markers. Extend Pipe Culvert and place Furnished Excavation for field entrance. Furnished Excavation for Type 1 Terminals.
- CH-57 85th Street north of Sefton Road, Length 250', Remove existing guardrail and place new SPBGR Attached to Culvert and Type 2 and Type 1 SPL Terminals with Markers. Furnished Excavation for Type 1 Terminal.
- CH-61 Franklin Street just north of Mt. Gilead Road, Length 150', Remove existing guardrail, and install new SPBGR with Type 2 and Type 1 SPL Terminals with Markers.
- CH-20 over I-72, Length 100', Remove 3 turnout terminals and install new Type 2 and Type 1 SPL Terminals with Terminal Markers. Furnished Excavation for Type 1 Terminals.
- CH-25 over I-72, Length 100', Remove 2 turnout terminals and install new Type 1 Terminals with Markers. Furnished Excavation for Type 1 Terminals.

GENERAL NOTES

- ALL AREAS DISTURBED BY THE CONTRACTOR OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE SEEDDED AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- ACCESS TO ALL ENTRANCES SHALL BE MAINTAINED AT ALL TIMES.
- BEFORE ORDERING PIPE CULVERTS, PIPE DRAINS, END SECTIONS OR INLETS THE CONTRACTOR SHALL FIELD VERIFY FOR EXACT LENGTHS, SIZES, AND QUANTITIES REQUIRED AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- ALL DRAINAGE STRUCTURES SHALL BE FREE OF SILT, DEBRIS, OR OTHER SUCH OBSTRUCTIONS AT THE TIME OF FINAL INSPECTION. THE CLEANING OF THESE DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS INVOLVED.
- GRADING SHALL BE DONE BY HAND AROUND LIGHT POLES, UTILITY POLES, SIGN POSTS, SHRUBS, TREES, OR OTHER NATURAL OR MAN-MADE OBJECTS WHERE SHALLOW FILLS OR CUTS ARE ADJACENT TO THE ITEMS. IT IS THE INTENT THAT THE LIMITS OF CONSTRUCTION BE SUCH AS TO PRESERVE IN THE ORIGINAL STATE AS MUCH AREA AS POSSIBLE. THE DECISION AS TO ITEMS TO REMAIN IN PLACE SHALL BE AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER CUBIC YARD FOR FURNISHED EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- IN ADDITION TO FIELD SURVEYS AND ARIAL SURVEYS, PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING FACILITIES ARE SUBJECT TO CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE LIST OF STANDARDS INCLUDED IN THESE PLANS.
- WHERE SECTION OR SUB-SECTION MARKERS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED AGENT OR LAND SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- DRAWINGS AND DETAILS ARE ASSUMED NOT TO SCALE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATION.
- ANY DAMAGE TO THE UNDERGROUND FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. UTILITY ADJUSTMENTS SHALL BE MADE BY THE UTILITY COMPANIES UNLESS OTHERWISE NOTED.



GENERAL NOTES, SUMMARY OF QUANTITIES
AND LOCATION DESCRIPTIONS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
16-00282 00-GR	MACON	14	2

GUARDRAIL REPAIR SCHEDULE BY LOCATION

LOCATION	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL TY 1	TERMINAL MARKER DA	SPBGR Attached to Structure	SPBGR TY A 6' POSTS	TRAFFIC BARRIER TERMINAL TY 1 SPECIAL (TANGENT)	TRAFFIC BARRIER TERMINAL TYPE 2	FURNISHED EXCAVATION	SEEDING SPECIAL	PIPE CULVERT CL D TY 2 24"	AGGREGATE SURFACE COURSE TY B
	FOOT	STD BLR 23-4 EACH	STD 725001-01 EACH	STD 630111 FOOT	STD BLR 26-3 FOOT	EACH	STD 631011-10 EACH	CU YD	ACRE	FOOT	TON
Location # 1 CH-10 @ Wyckles Road	NE QUADRANT	25.0				1.0		13.0	0.020		
	SE QUADRANT	25.0			25.0		1.0				
Location # 2 CH-28 0.1 miles west of Wyckles road	NE QUADRANT	37.5		1.0		1.0		32.0	0.020		
	NW QUADRANT	37.5		1.0		1.0		9.0	0.010		
	SE QUADRANT	25.0			12.5		1.0				
	SW QUADRANT	37.5		1.0		1.0		10.0	0.010		
Location # 3 CH-41 Wyckles Rd. 0.1 miles north of CH-28	NE QUADRANT	25.0			12.5		1.0				
	NW QUADRANT	25.0		1.0		1.0		8.0	0.010		
Location # 4 CH-41 Wyckles Rd. at Hartung Rd.	NE QUADRANT	225.0					1.0				
	NW QUADRANT	37.5		1.0		1.0		72.0	0.020		
	SW QUADRANT	25.0			12.5		1.0				
Location # 5 CH-41 Wyckles Rd. 0.1 miles north of West Rock Springs Road SEE DETAIL	NE QUADRANT	25.0					1.0				
	NW OPENING ****	25.0			37.5						
	NW QUADRANT	25.0		1.0		1.0		27.0	0.020		
	SE QUADRANT	25.0		1.0		1.0		35.0	0.030		
Location # 6 CH-41 Wyckles Rd. 0.1 miles south of CH-28 SEE DETAIL	EAST SIDE	450.0		1.0	387.5	1.0	1.0	37.0	0.020		
	WEST SIDE	375.0		1.0	312.5	1.0	1.0	97.0	0.030		
Location # 7 CH-41 Wyckles Rd. at the Sangamon River SEE DETAIL	NE QUADRANT	546.0			537.5		1.0				
	NW QUADRANT *	609.0			612.5						
	SE QUADRANT **	45.0			50.0						
	SE QUADRANT ***	700.0		1.0	662.5	1.0		3.0	0.010		
Location # 8 CH-21 Kenney Rd. at Heman Road											
	SE QUADRANT	39.0		1.0		1.0					
Location # 9 CH-50 Lost Bridge Road Just east of Lake Bluff Drive	SOUTH SIDE	200.0	1.0	1.0	187.5		1.0				
Location # 10 CH-32 just east of Karl Rd. SEE DETAIL	NORTH SIDE	50.0		1.0	37.5	1.0	1.0	39.0	0.020		
	SOUTH SIDE	50.0		1.0	37.5	1.0	1.0	45.0	0.030		
	NORTH SIDE FIELD ENTR.							20.0		16.0	6.0
Location # 11 CH-57 N. of Sefton Rd. SEE DETAIL	EAST SIDE	62.5		1.0	25.0	1.0	1.0	45.0	0.030		
	WEST SIDE	62.5		1.0	25.0	1.0	1.0	14.0	0.020		
Location # 12 CH-61 Franklin St. just N. of Mt. Gilead Rd. SEE DETAIL											
	EAST SIDE	150.0		1.0	87.5	1.0	1.0				
Location # 13 CH-20 Illiniwick Road over I-72	NW QUADRANT	25.0			25.0		1.0				
	SE QUADRANT	25.0			25.0		1.0				
	SW QUADRANT	25.0		1.0		1.0		8.0	0.010		
Location # 14 CH-25 Argenta Road over I-72	NW QUADRANT	25.0	1.0	1.0							
	SE QUADRANT	25.0	1.0	1.0							
Total	4646.0	3.0	21.0	125.0	3562.5	18.0	19.0	514.0	0.3	16.0	6.0

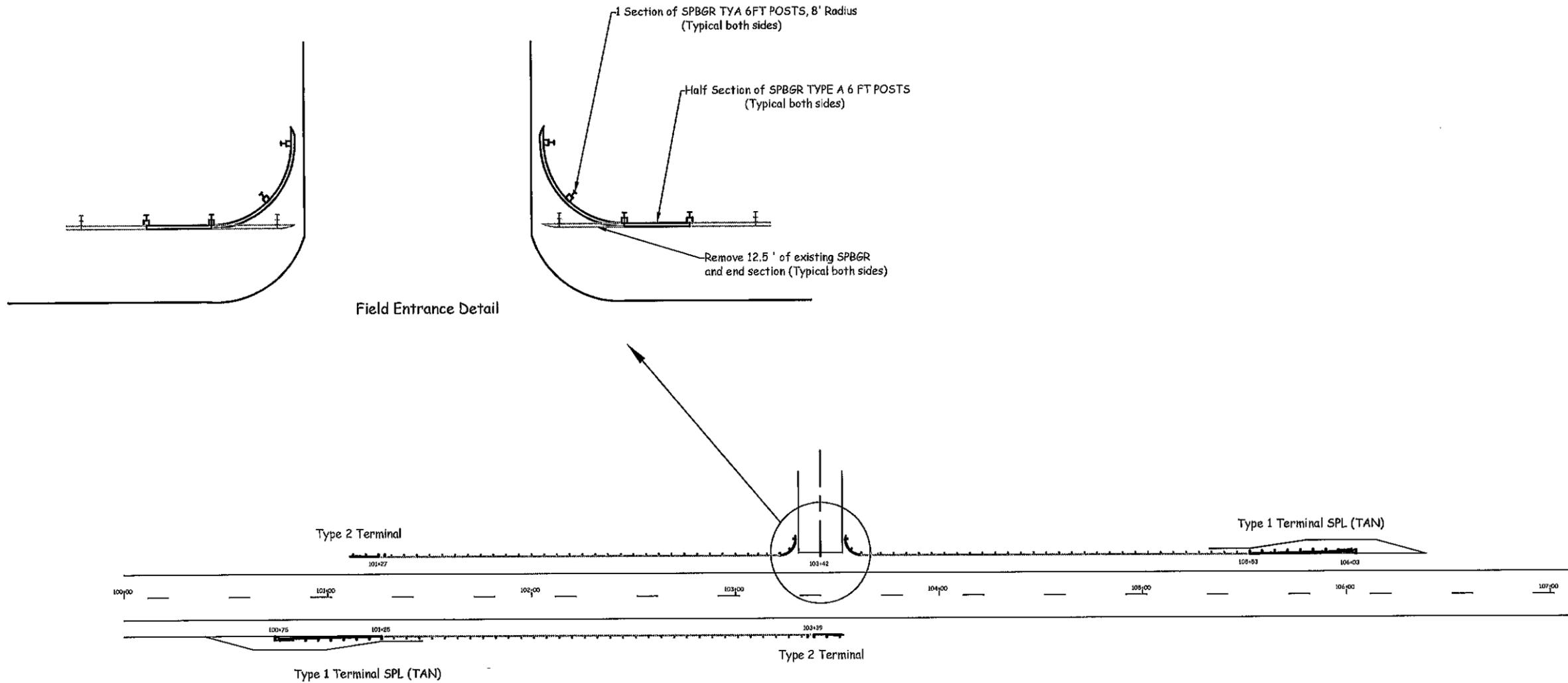
* 1 PIECE OF RAIL NEEDS A 12' RADIUS BENT INTO IT
 ** 1 PIECE OF RAIL NEEDS AN 8' RADIUS BENT INTO IT
 *** 1 PIECE OF RAIL NEEDS AN 8' RADIUS BENT INTO IT
 **** REMOVE 1 SECTION FROM EACH SIDE OF ENTRANCE, AND PLACE 1 PC. 6'-3", AND 1 FULL PC WITH 8' RADIUS BEND AND END SECTION ON EACH SIDE (SEE DETAIL)



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
15-00282-00-GR	MACON	14	3

LOCATION #5 DETAILS

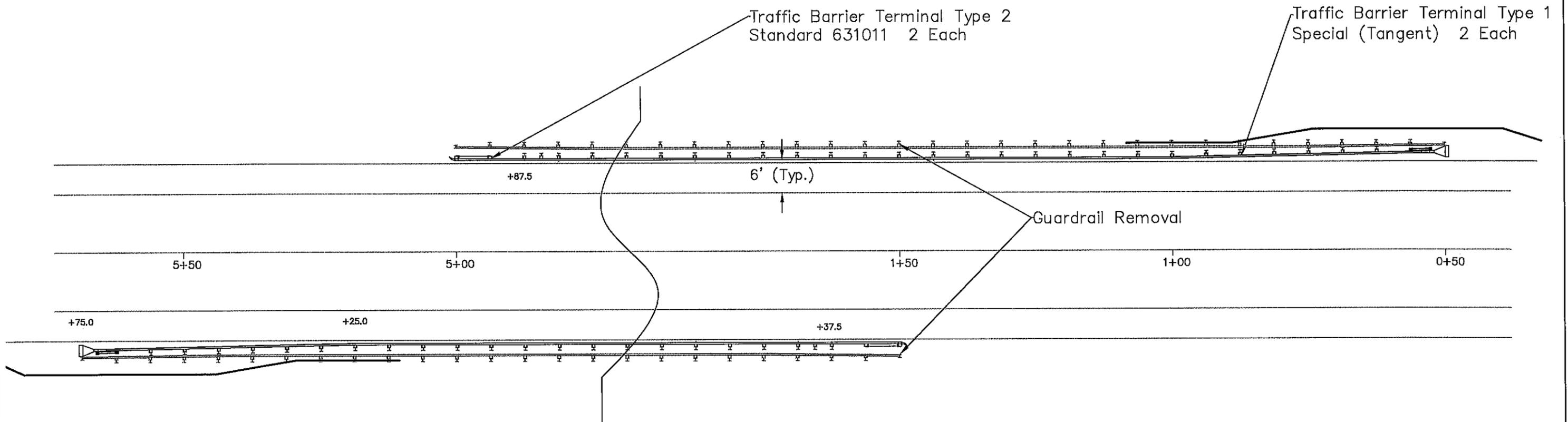
Wyckles Road North of W. Rocks Springs Rd.



GUARDRAIL REMOVAL	125 FEET
TERMINAL MARKER DA	2 EACH
SPBGR TY A 6' POSTS (STD 630001-11)	50 FEET
TRAFFIC BARRIER TERMINAL TY 1 SPECIAL (TANGENT)	2 EACH
TRAFFIC BARRIER TERMINAL TYPE 2	2 EACH
FURNISHED EXCAVATION	62 CU YD
SEEDING CLASS 2 SPECIAL	0.05 ACRES

	2016 Guardrail Upgrade Project	Design by: AJM	Issued by:
	Section 16-00282-00-GR	Drawn by: AJM	Date: 11/9/17
	Location #5 Detail	Checked by:	OD Reference:
	MACON COUNTY -- ENGINEERING DIVISION		Sheet 4 of 14

Wyckles Road
 CH-41
 Guardrail Repair Plan
 Location #6

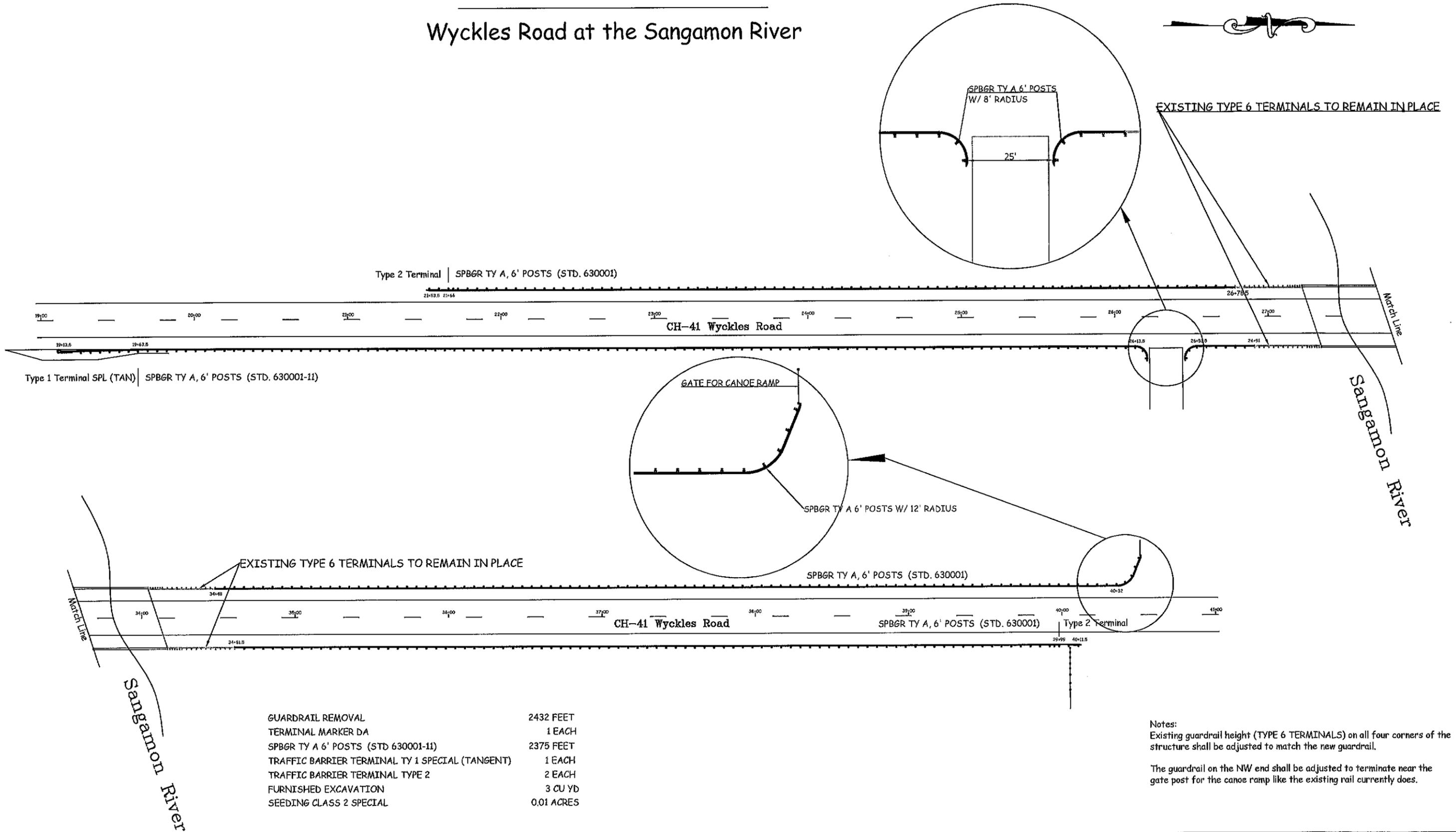


GUARDRAIL REMOVAL	825 FEET
TERMINAL MARKERS DA	2 EACH
SPBGR TY A 6' POSTS (STD. B.L.R. 26)	700 FEET
TRAFFIC BARRIER TERMINAL TY I SPECIAL (TANGENT)	2 EACH
TRAFFIC BARRIER TERMINAL TYPE 2	2 EACH
FURNISHED EXCAVATION	97 CU YD
SEEDING CL. 2 SPECIAL	0.05 ACRES

	2018 Guardrail Upgrade Project	Design by	AJM	Checked by	
	Section 18-00282-00-GR	DWG by	AJM	Date	11/28/17
	Location #6 Detail	Checked by		DD Reference	
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LOCATION #7 DETAILS

Wyckles Road at the Sangamon River



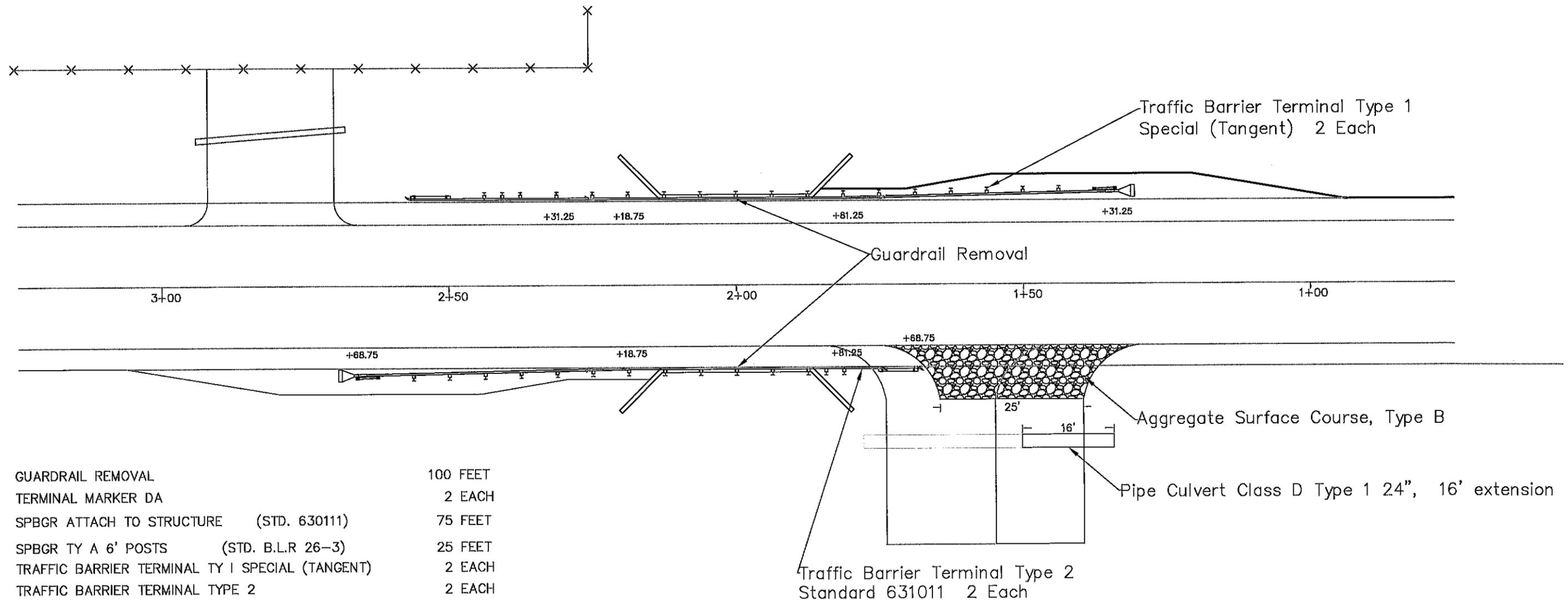
GUARDRAIL REMOVAL	2432 FEET
TERMINAL MARKER DA	1 EACH
SPBGR TY A 6' POSTS (STD 630001-11)	2375 FEET
TRAFFIC BARRIER TERMINAL TY 1 SPECIAL (TANGENT)	1 EACH
TRAFFIC BARRIER TERMINAL TYPE 2	2 EACH
FURNISHED EXCAVATION	3 CU YD
SEEDING CLASS 2 SPECIAL	0.01 ACRES

Notes:
Existing guardrail height (TYPE 6 TERMINALS) on all four corners of the structure shall be adjusted to match the new guardrail.

The guardrail on the NW end shall be adjusted to terminate near the gate post for the canoe ramp like the existing rail currently does.

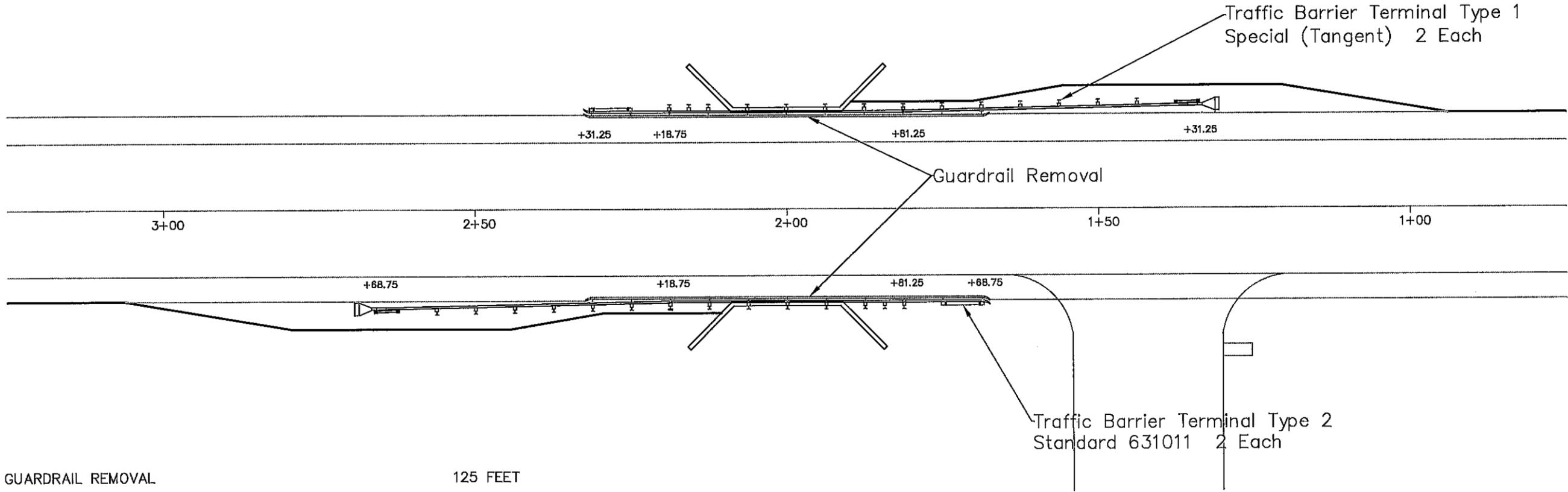
	2016 Guardrail Upgrade Project	Drawn by: AJM	Revised by:
	Section 16-00882-00-GR	DD by: AJM	Date: 11/28/17
	Location #7 Detail	Checked by:	DD Reference:
	MACON COUNTY - ENGINEERING DIVISION		Sheet 6 of 14

Andrews Street
CH-32
Guardrail Repair Plan
Location #10



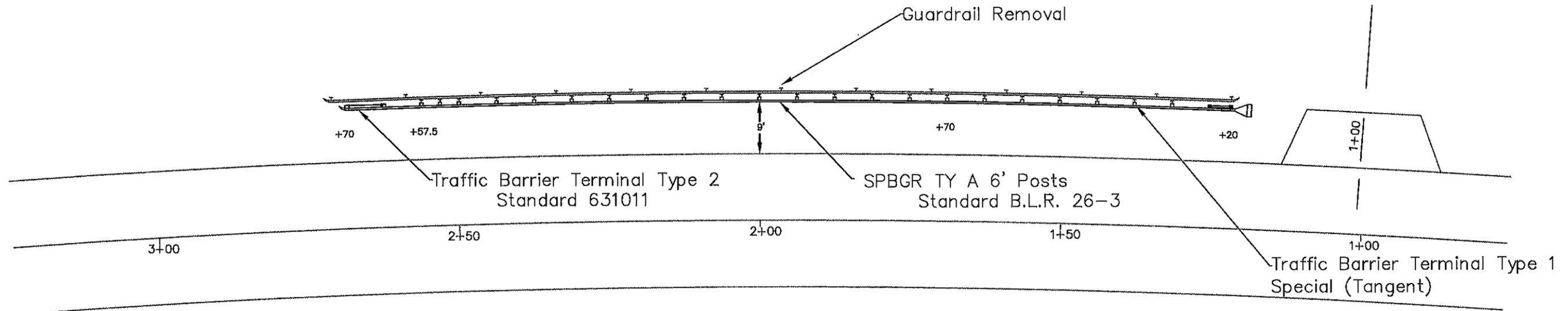
GUARDRAIL REMOVAL	100 FEET
TERMINAL MARKER DA	2 EACH
SPBGR ATTACH TO STRUCTURE (STD. 630111)	75 FEET
SPBGR TY A 6' POSTS (STD. B.L.R 26-3)	25 FEET
TRAFFIC BARRIER TERMINAL TY I SPECIAL (TANGENT)	2 EACH
TRAFFIC BARRIER TERMINAL TYPE 2	2 EACH
FURNISHED EXCAVATION	104 CU YD
SEEDING CLASS 2 SPL	.05 ACRES
PIPE CULVERT CL D TY 2 24"	16 FEET
AGGREGATE SURFACE COURSE, TYPE B	6 TONS

Dalton City Blacktop
 CH-57
 Guardrail Repair Plan
 Location #11



GUARDRAIL REMOVAL	125 FEET
TERMINAL MARKER DA	2 EACH
SPBGR ATTACH TO STRUCTURE (STD. 630111)	50 FEET
SPBGR TY A 6' POSTS (STD. B.L.R. 26-3)	25 FEET
TRAFFIC BARRIER TERMINAL TY 1 SPECIAL (TANGENT)	2 EACH
TRAFFIC BARRIER TERMINAL TYPE 2	2 EACH
FURNISHED EXCAVATION	59 CU YD
SEEDING CLASS 2 SPL	.05 ACRES

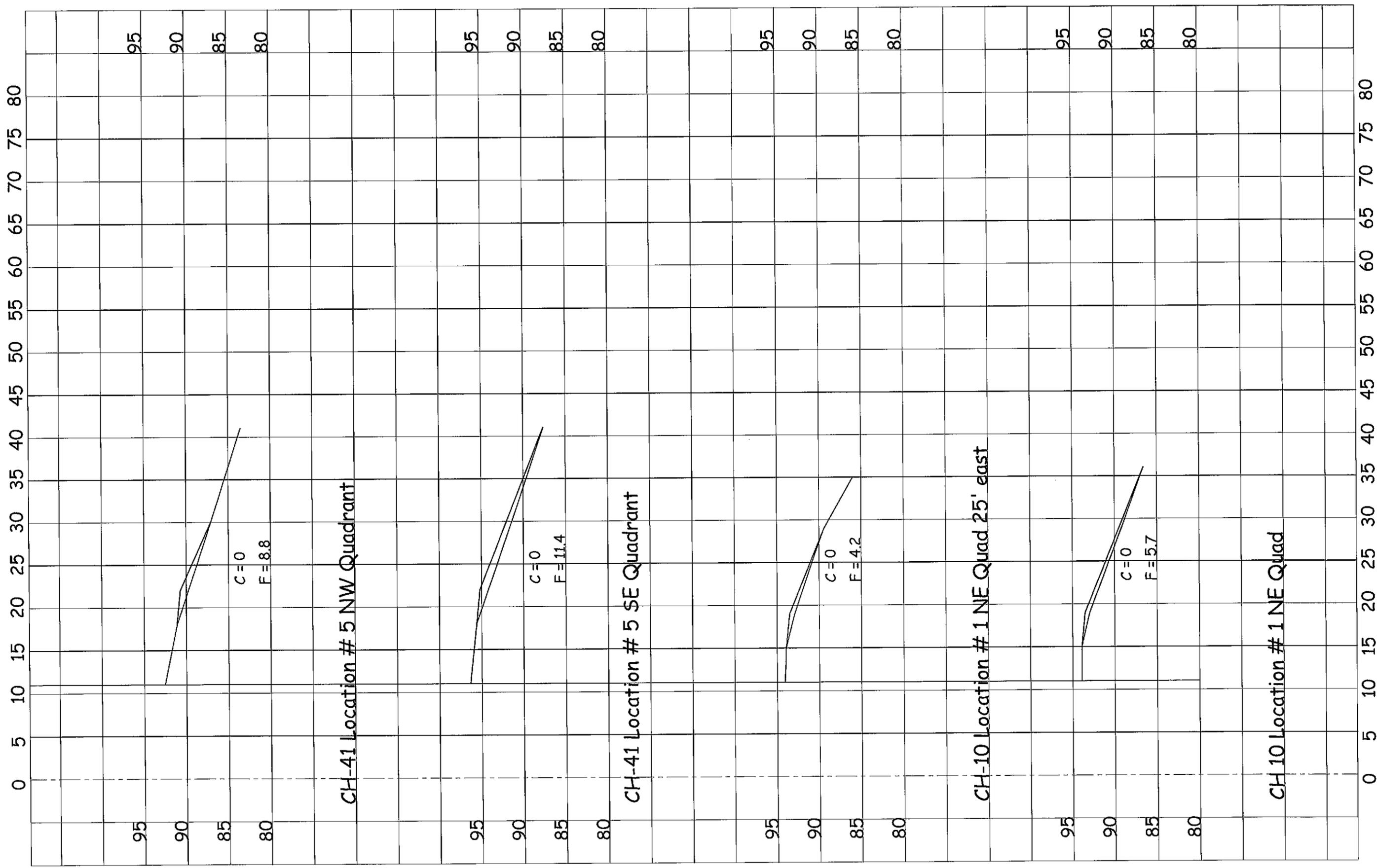
Franklin Street
 CH-61
 Guardrail Repair Plan
 Location #12



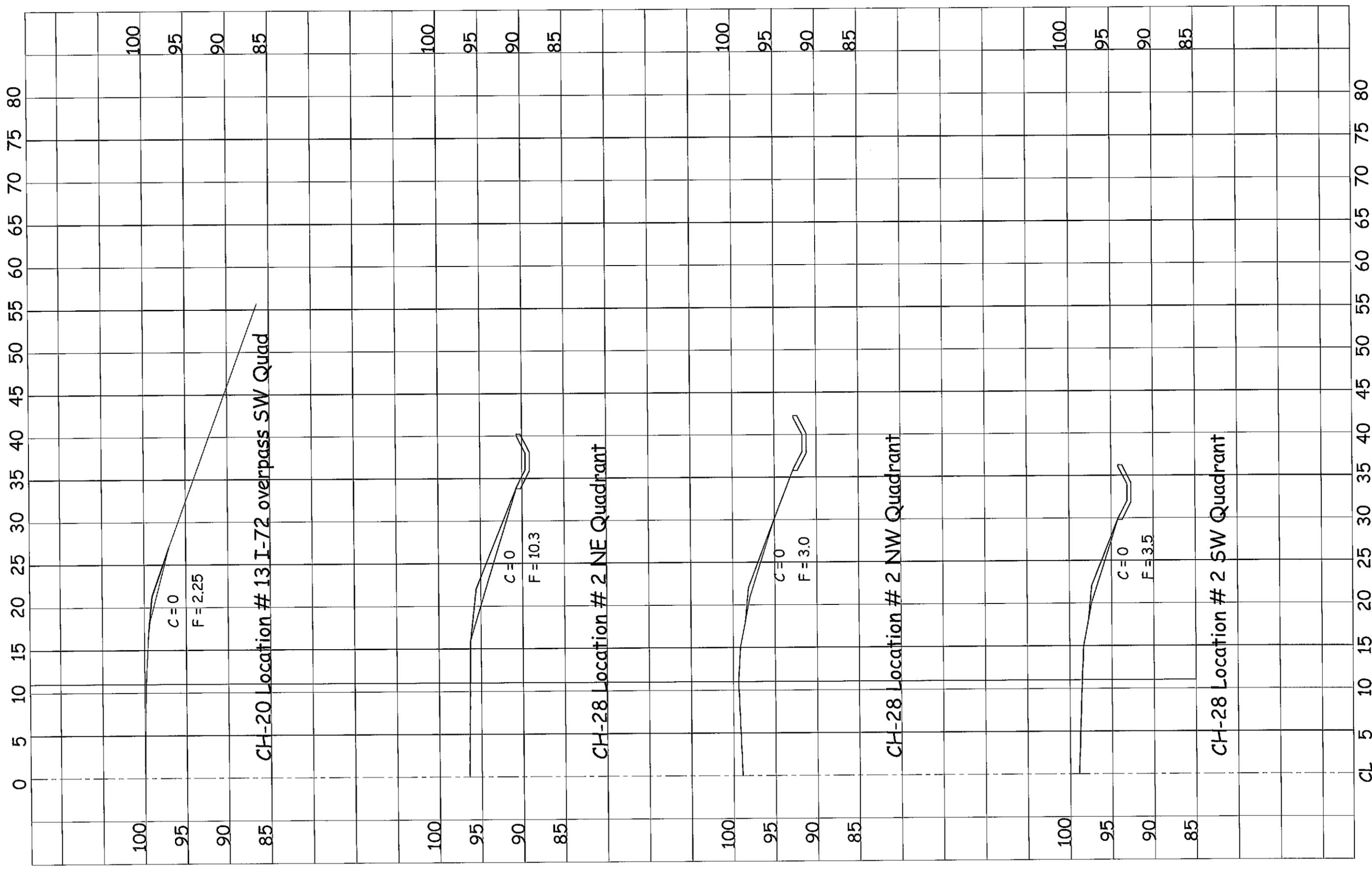
GUARDRAIL REMOVAL	150 FEET
TERMINAL MARKER DA	1 EACH
TRAFFIC BARRIER TERMINAL TY I SPECIAL (TANGENT)	1 EACH
TRAFFIC BARRIER TERMINAL TYPE 2	1 EACH
SPBGR TY A 6' POSTS (STD. B.L.R. 26-3)	87.5 FEET

	2016 Guardrail Upgrade Project	Drawn by	AJM	Revised by	
	Section 18-00282-00-GR	QC'd by	AJM	Date	11/28/17
	Location #12 Detail	Checked by		QC Reference	
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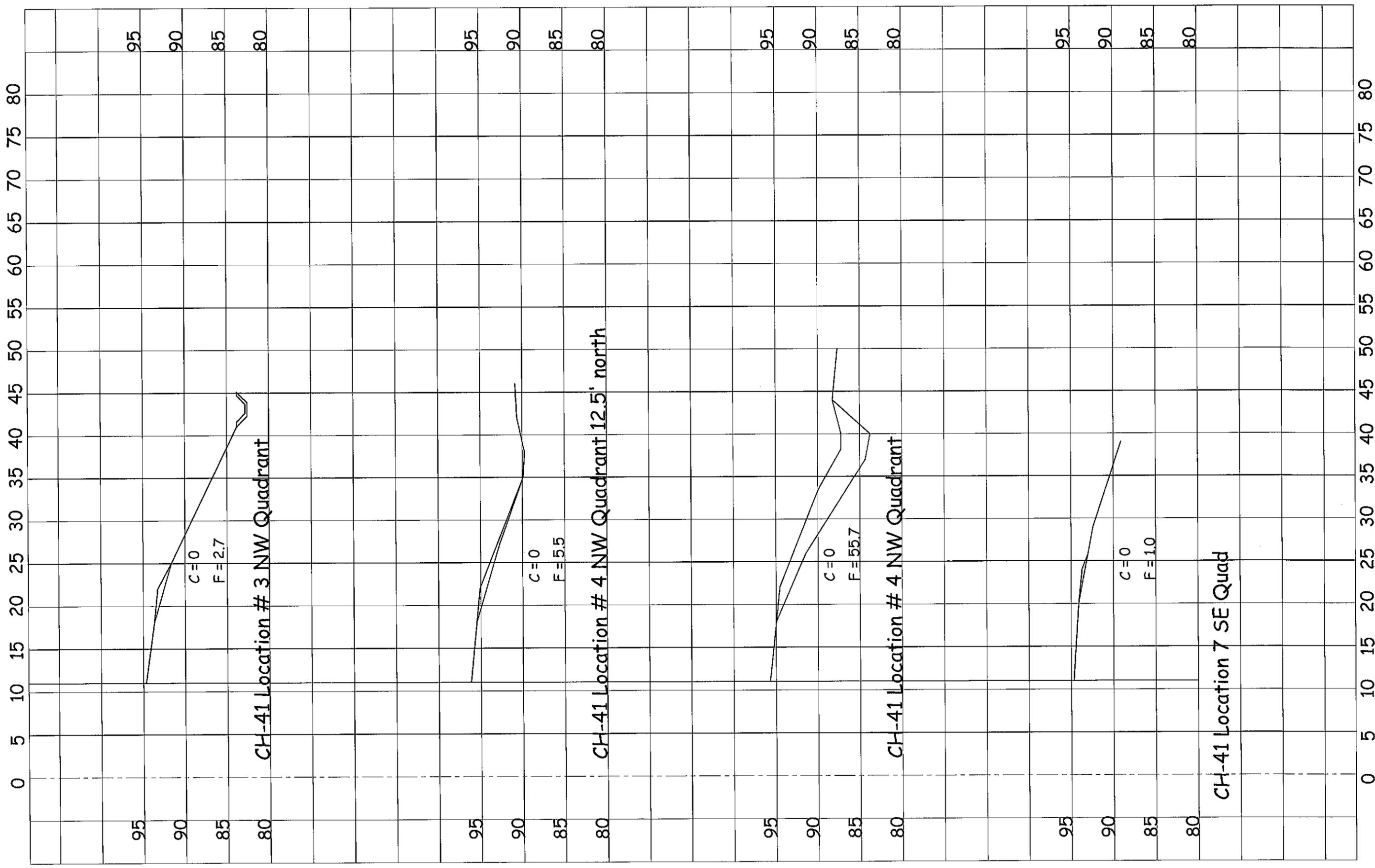
LOCATION #1 & #5



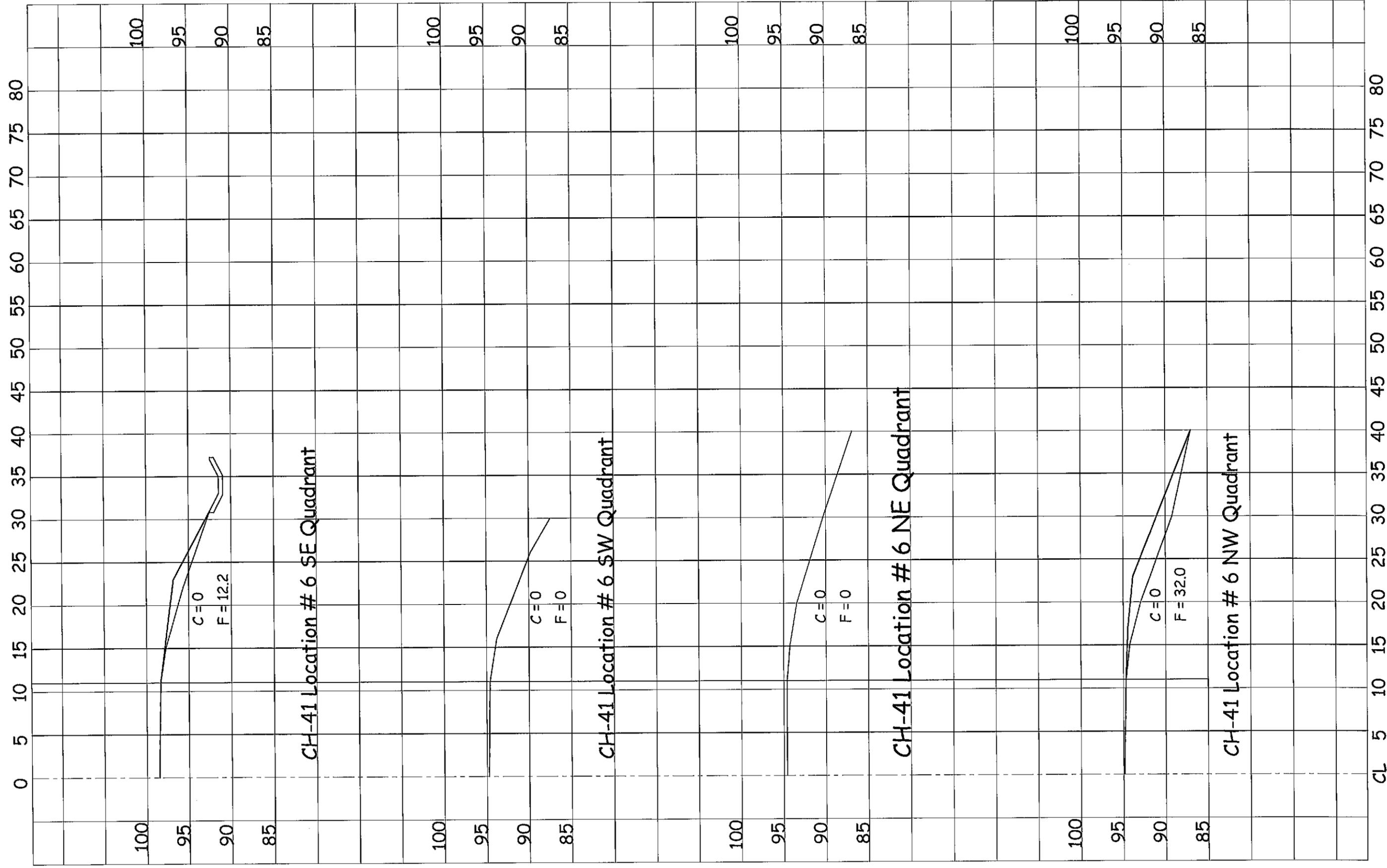
LOCATION #2 & #13



LOCATION #3, #4, & #7



LOCATION #6



LOCATION #10 & #11

