

06-16-2023 LETTING ITEM 197

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAS 807	20-00129-00-RS	LAWRENCE	6	1
			CONTRACT	95937

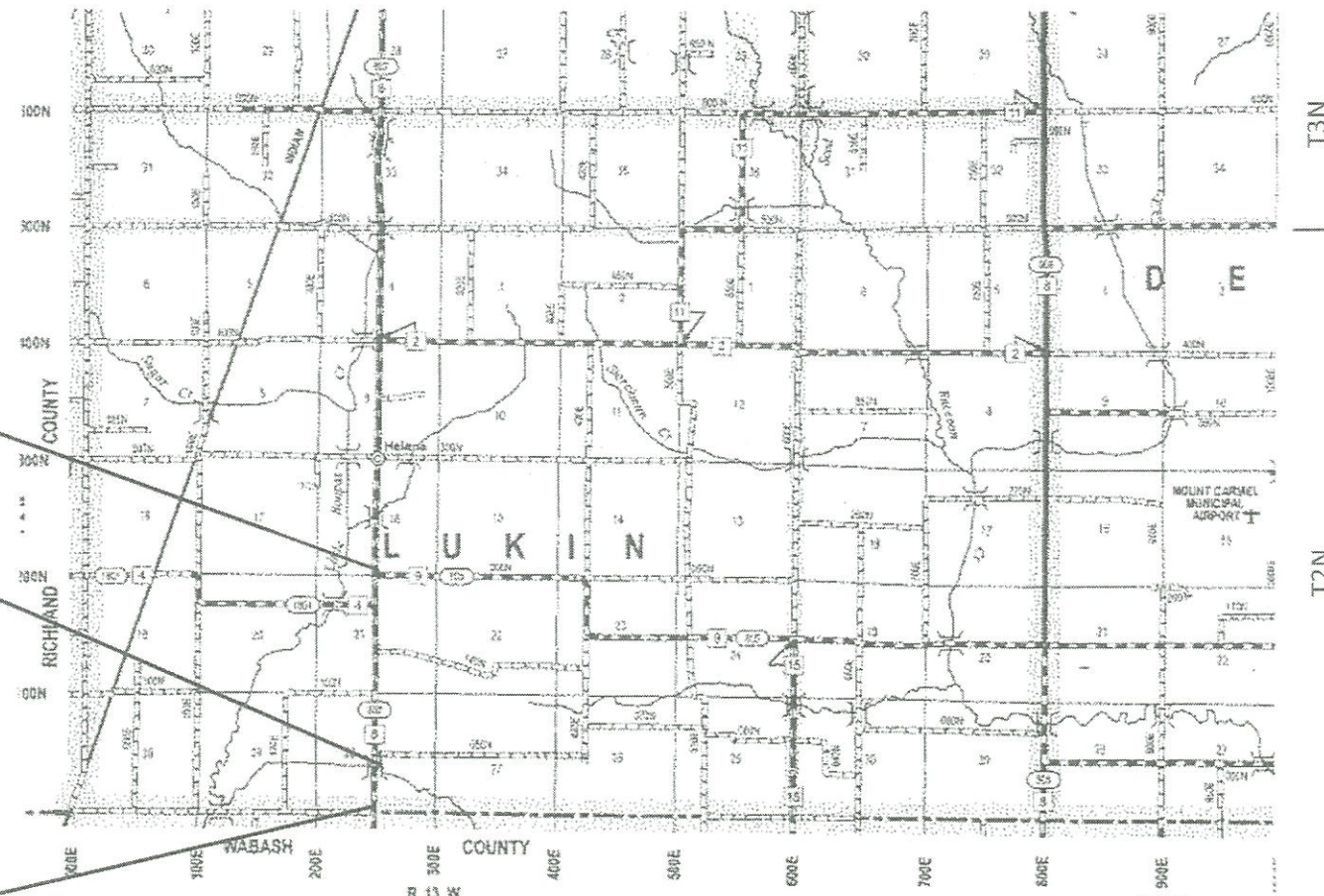
**INDEX OF SHEETS**

1. Cover Sheet
2. Summary of Quantities, Highway Standards, and General Notes
3. Typical Sections and Schedules
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5. Pipe Culvert Profiles
6. Pipe Culvert Profiles and Guardrail Layout

HIGHWAY STANDARDS, SEE SHEET #2

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLANS FOR PROPOSED  
SURFACE TRANSPORTATION PROJECT**

FAS 807  
SECTION 20-00129-00-RS  
LAWRENCE COUNTY  
PROJECT GGVT(981)  
JOB NO. C-97-089-23



PROJECT ENDS  
STA 108+00

STRUCTURE 051-3016  
STA 20+01.50 to STA 20+22.50

PROJECT BEGINS  
STA 0+00

APPROVED April 14, 2023

Aaron M. Meier  
COUNTY ENGINEER

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PASSED 04/17/23

Scott R. Kelly  
DISTRICT SEVEN ENGINEER OF  
LOCAL ROADS & STREETS

RELEASING FOR  
BID BASED ON  
LIMITED REVIEW 04/17/23

Jeffery M. Ryan  
REGION FOUR ENGINEER

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



CONTRACT NO. 95937  
DESIGN CLASS = MAJOR COLLECTOR  
ADT = 850  
DESIGN SPEED = 50 MPH



GROSS LENGTH = 10,800.0 FT (2.05 MILES)  
OMISSIONS = 0.0 FT (0.00 MILES)  
NET LENGTH = 10,800.0 FT (2.05 MILES)

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAS 807	20-00129-00-RS	LAWRENCE	6	2
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**HIGHWAY STANDARDS**

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
630001-12	STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS DAY ONLY
701336-07	LANE CLOSURE, 2L, 2W, WORK AREAS IN SERIES, FOR SPEEDS ≥ 45 MPH
701901-08	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 24-2	MAILBOX TURNOUT FOR LOCAL ROADS

**GENERAL NOTES**

THE QUANTITY SHOWN IN THE SUMMARY OF QUANTITIES FOR HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70 ALLOWS 173 TONS FOR ENTRANCES, 14 TON FOR MAILBOX TURNOUTS, AND 2023 TONS FOR THE 1½" HOT-MIX ASPHALT SURFACE COURSE, IL-9.5 MIX "C" N70

THE FOLLOWING RATES HAVE BEEN USED TO CALCULATE PLAN QUANTITY  
 AGGREGATE SHOULDERS, TY. B 1.8 TON/CU YD  
 HOT-MIX ASPHALT 0.0560 TON/ SQ YD\*INCH  
 BITUMINOUS MATERIALS (TACK COAT) 0.05 LBS/SQ FT  
 RIPRAP 1.8 TONS/CU YD

GRADING AND SHAPING DITCHES SHALL BE INCLUDED IN THE PRICE FOR PROPOSED PIPE CULVERTS

**SUMMARY OF QUANTITIES**

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
28100805	STONE DUMPED RIPRAP, CLASS A3	TON	20
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	210
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	16800
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	111
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	4360
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	2210
40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	94
48101200	AGGREGATE SHOULDERS, TYPE B	TON	2510
542C0223	PIPE CULVERTS, CLASS C, TYPE 1 18"	FOOT	40
542C0229	PIPE CULVERTS, CLASS C, TYPE 1 24"	FOOT	70
542C0235	PIPE CULVERTS, CLASS C, TYPE 1 30"	FOOT	50
542C0241	PIPE CULVERTS, CLASS C, TYPE 1 36"	FOOT	60
542C0265	PIPE CULVERTS, CLASS C, TYPE 1 60"	FOOT	100
542C1063	PIPE CULVERTS, CLASS C, TYPE 2 18"	FOOT	60
542C1093	PIPE CULVERTS, CLASS C, TYPE 2 48"	FOOT	80
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	130
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	200
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	125
67100100	MOBILIZATION	L SUM	1
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1
70100600	TRAFFIC CONTROL AND PROTECTION, STANDARD 701336	L SUM	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2160
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	900
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	11363
LR443100	AREA REFLECTIVE CRACK CONTROL TREATMENT	SQ YD	24000
XX127400	PAVEMENT REMOVAL AND REPLACENT (SPECIAL)	TON	116

**THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:**

LOCATION(S)	MIXTURE USE(S)	PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE	MIXTURE WEIGHT	QUALITY MANAGEMENT PROGRAM	SUBLOT SIZE	MATERIAL TRANSFER DEVICE (REQUIRED?)
MAINLINE	HMA SURFACE COURSE, IL-9.5, MIX "C", N70 (1.5")	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C	N70	QC/QA	3000	N/A
MAINLINE	HMA BINDER COURSE, IL-19.0, N70 (2.25")	PG 64-22	4.0% @ N=70	IL - 19.0	N/A	N70	QC/QA	3000	N/A
INCIDENTAL	HMA SURFACE COURSE, IL-9.5, MIX "C", N70	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C	N70	QC/QA	N/A	N/A

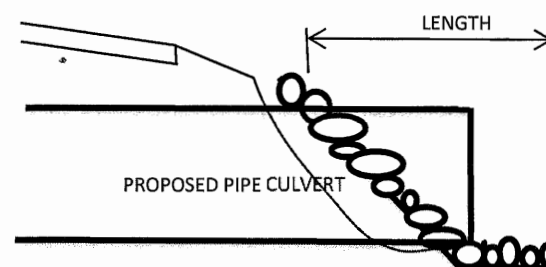
**STONE RIPRAP, CLASS A3**

STATION	SIDE OF ROAD	LOCATION	LENGTH	WIDTH	AREA	THICKNESS	TON
1+32	WEST	AROUND PIPE	10	15	150	12"	10
38+60	WEST	AROUND PIPE	15	10	150	12"	10
TOTAL =							20.0

**STONE RIPRAP, CLASS A4**

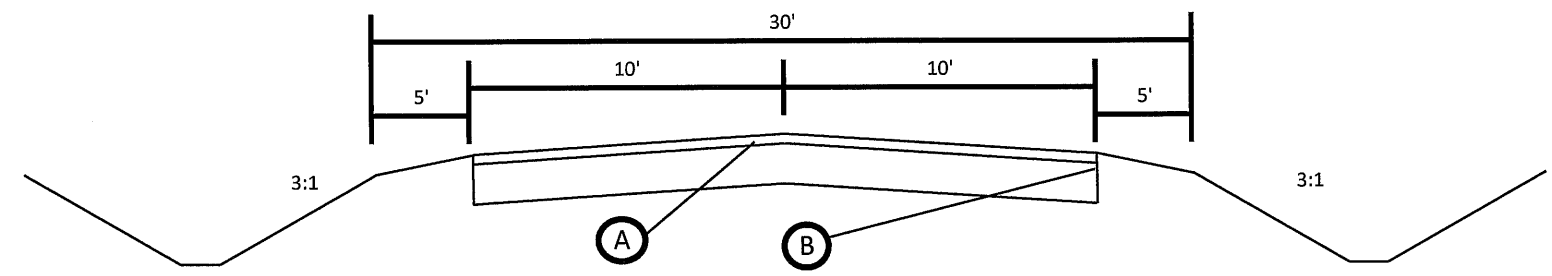
STATION	SIDE OF ROAD	LOCATION	LENGTH	WIDTH	AREA	THICKNESS	TON
90+20	WEST	AROUND PIPE	15	20	300	16"	30
106+96	BOTH	BOX CULVERT	15	20	300	16"	180
TOTAL =							210.0

**RIPRAP TYPICAL**

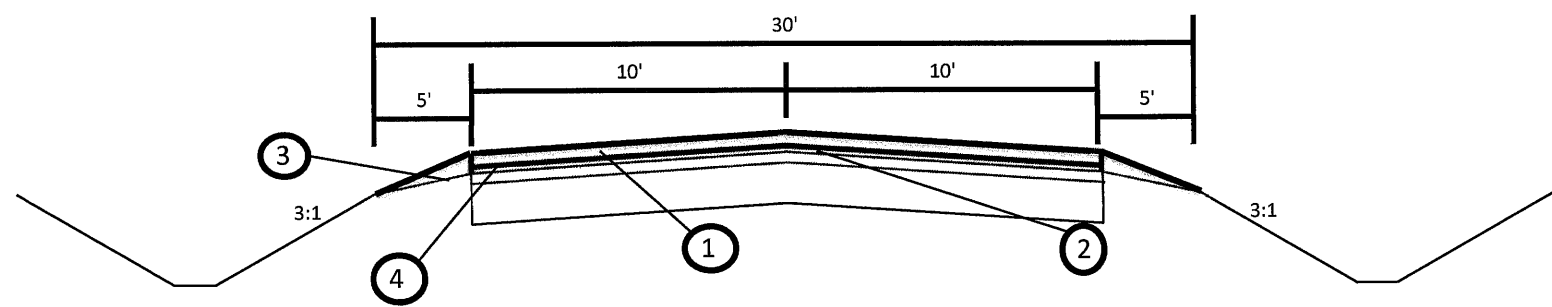


\* SPECIALTY ITEMS

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAS 807	20-00129-00-RS	LAWRENCE	6	3
CONTRACT			95937	



**EXISTING TYPICAL SECTION**



**PROPOSED TYPICAL SECTION**

- Ⓐ Existing 2" Bituminous Surface Plant Mix (Class B)
- Ⓑ Existing 9" Aggregate Base Course

- ① Proposed 1-1/2" Hot-Mix Asphalt Surface Course, IL-9.5, Mix "C", N70
- ② Proposed 2-1/4" Hot-Mix Asphalt Binder Course, IL-19.0, N70
- ③ Proposed 4' Aggregate Shoulder
- ④ Proposed Area Reflective Crack Control Treatment

**PAVEMENT MARKING SCHEDULE**

STATION	TO	STATION	LOCATION	FOOT
0+00		108+00	CL	2213
22+00		36+00	RIGHT	1400
37+00		49+00	LEFT	1200
56+00		73+00	RIGHT	1700
73+00		90+00	LEFT	1700
81+00		95+50	RIGHT	1450
96+00		108+00	LEFT	1200
103+00		108+00	RIGHT	500
TOTAL =				11363.0

**GUARDRAIL SCHEDULE**

STATION	TO	STATION	SIDE OF ROAD	OFFSET	STEEL PLATE BEAM GUARDRAIL TYPE A, 6 FOOT POSTS	GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER - DIRECT APPLIED
					FOOT	FOOT	EACH	EACH
105+68.50		107+26	EAST	15' TO 41'	100	75	2	2
106+21		107+96	WEST	15'	100	50	2	2
TOTAL					200	125	4	4

**SCHEDULE OF MAILBOX TURNOUTS**

STATION	LOCATION	TONS
36+80	LEFT	9.3
72+33	LEFT	4.7
TOTAL =		14.0

NOTE: THE MATERIAL SHALL BE HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70 FOR THE MAILBOX TURNOUTS. THIS QUANTITY IS INCLUDED IN HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70.

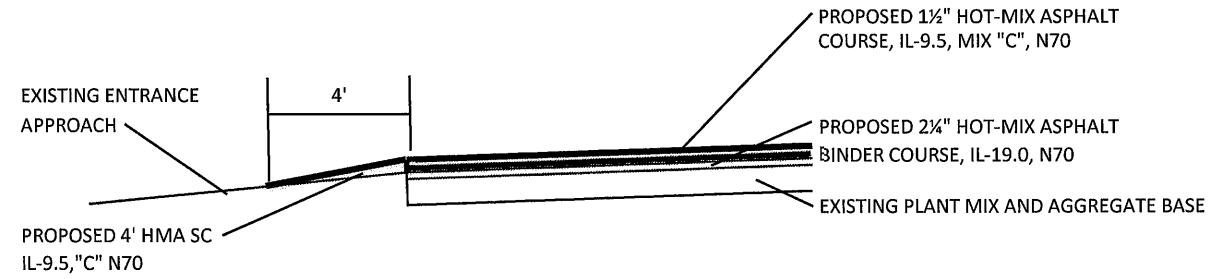
**SCHEDULE OF PIPE CULVERTS**

Culvert	STATION	TYPE 1					TYPE 2		CONTROLLED LOW-STRENGTH MATERIAL
		18" PC	24" PC	30" PC	36" PC	60" PC	18" PC	48" PC	
1	1+32			50					15.2
2	26+51 SR	40					60		5.7
3	38+60								13.7
4	45+90					100			40.6
5	81+50		70						7.8
6	85+61				60				15
7	90+20							80	31.4
TOTAL		40.0	70.0	50.0	60.0	100	60.0	80.0	129.4



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAS 807	20-00129-00-RS	LAWRENCE	6	4
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**PRIVATE & FIELD ENTRANCE APPROACH DETAIL**

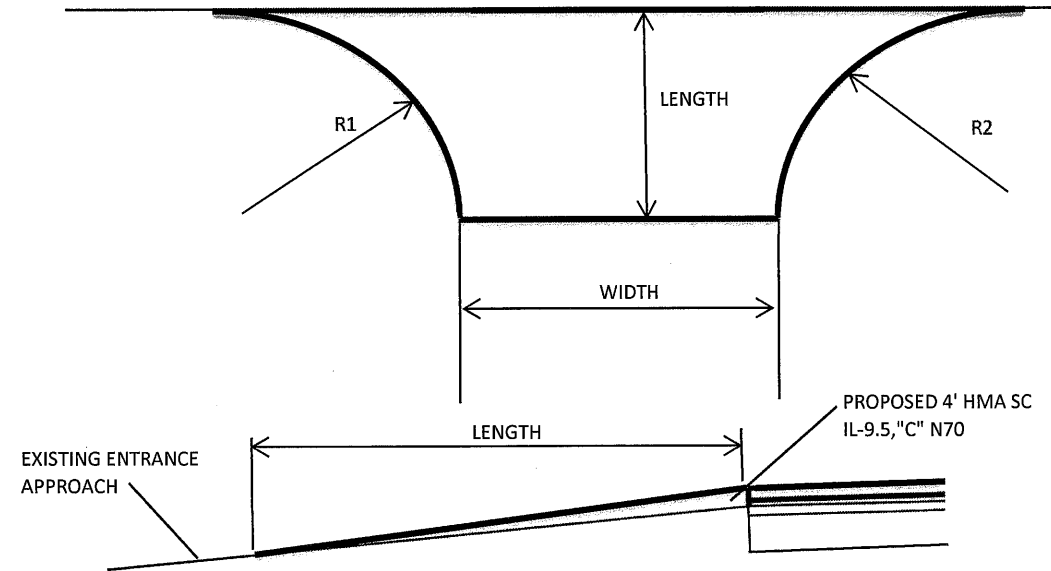


NOTE: MATCH THE EXISTING ENTRANCE WIDTHS. THE 4' AREA FROM THE EDGE OF SURFACE, AS SHOWN ABOVE, SHALL BE HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70 FOR THE PRIVATE AND FIELD ENTRANCES THIS QUANTITY IS INCLUDED IN HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70.

**SCHEDULE OF PRIVATE AND FIELD ENTRANCES**

STATION	LOCATION	TONS	STATION	LOCATION	TONS	STATION	LOCATION	TONS
1+73	LEFT	11.4	39+60	LEFT	4.6	72+45	LEFT	4.6
2+78	LEFT	3.8	41+70	LEFT	9.1	82+69	LEFT	5.3
6+68	RIGHT	6.1	43+35	RIGHT	4.6	86+00	RIGHT	6.8
13+45	LEFT	4.6	45+55	LEFT	3.8	86+96	LEFT	4.6
16+37	RIGHT	3.8	46+25	RIGHT	5.3	90+55	RIGHT	6.1
17+50	LEFT	4.6	49+60	LEFT	4.6	94+67	RIGHT	5.3
20+72	LEFT	6.1	54+02	RIGHT	4.6	94+71	LEFT	5.3
25+80	LEFT	5.3	59+10	RIGHT	5.3	96+25	LEFT	5.3
34+91	LEFT	4.6	63+57	LEFT	3.8	102+31	LEFT	6.1
36+30	LEFT	6.1	63+59	RIGHT	3.8	102+97	RIGHT	6.1
36+41	RIGHT	4.6	68+35	LEFT	7.6			
TOTAL =								173.6

**SIDEROAD DETAILS**



**SCHEDULE OF INCIDENTAL HOT-MIX ASPHALT SURFACING**

STATION	LOCATION	LENGTH	R1	R2	WIDTH	TONS
26+51	RIGHT	30	25	25	19	12.7
53+63	LEFT	35	35	35	19	13.9
72+55	RIGHT	20	20	20	21	6.9
93+80	LEFT	80	80	40	23	60.2
TOTAL =						93.7

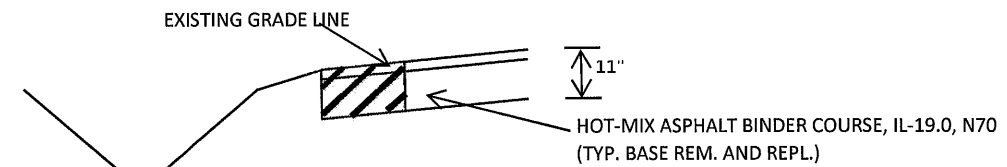
**AGGREGATE SHOULDER DETAIL**



**SCHEDULE OF AGGREGATE SHOULDER, TYPE B**

STATION	TO	STATION	LOCATION	TONS
0+00		108+00	LEFT	1300
0+00		108+00	RIGHT	1210
TOTAL =				2510.0

**DETAIL OF PAVEMENT REMOVAL AND REPLACEMENT, SPECIAL**



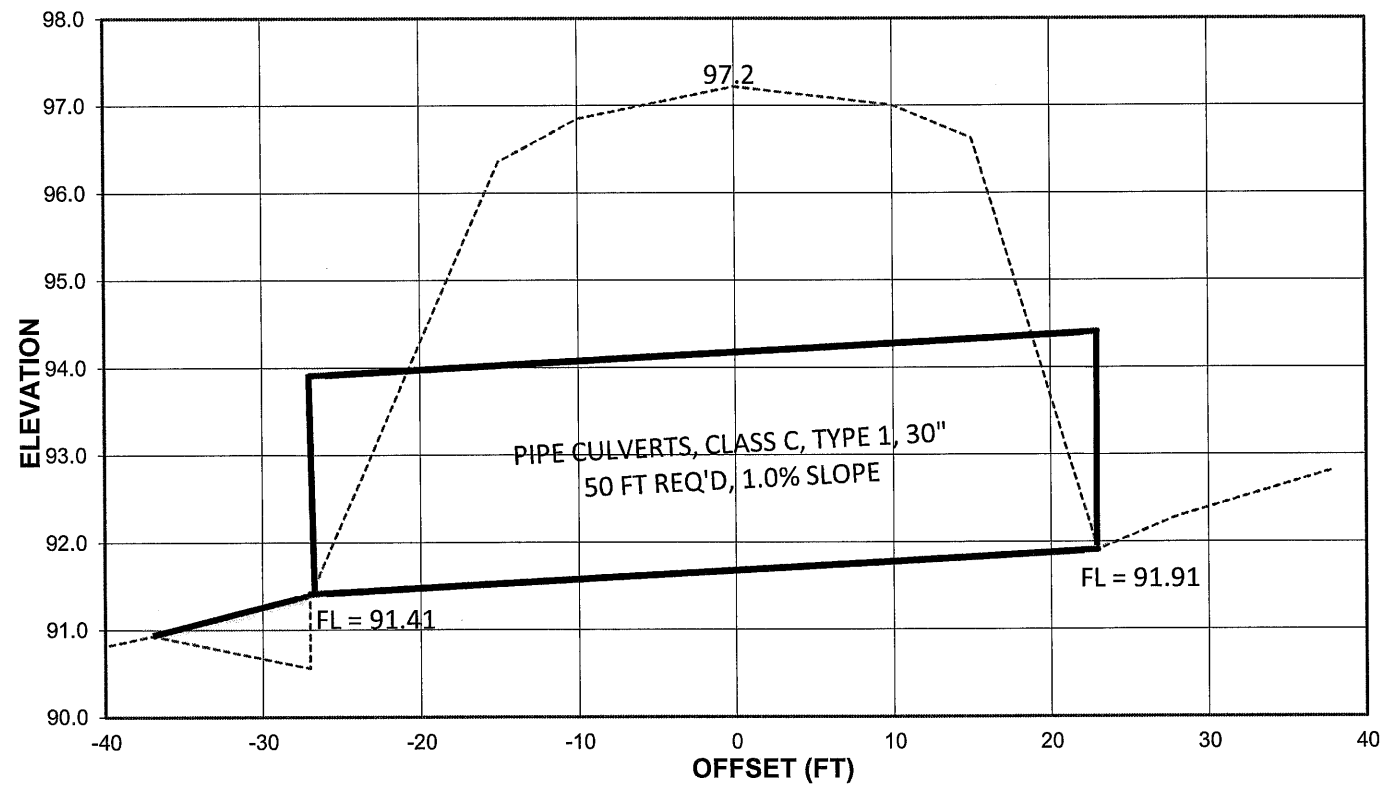
THE SCHEDULE BELOW REFLECTS APPROXIMATE LOCATION AND ESTIMATED QUANTITIES. THE ACTUAL AREAS SHALL BE LOCATED AND MARKED BY THE ENGINEER PRIOR TO CONSTRUCTION. THE BELOW QUANTITY IS INCLUDED IN PAVEMENT REMOVAL AND REPLACEMENT, SPECIAL IN THE SUMMARY OF QUANTITIES.

**SCHEDULE OF PAVEMENT REMOVAL AND REPLACEMENT, SPECIAL**

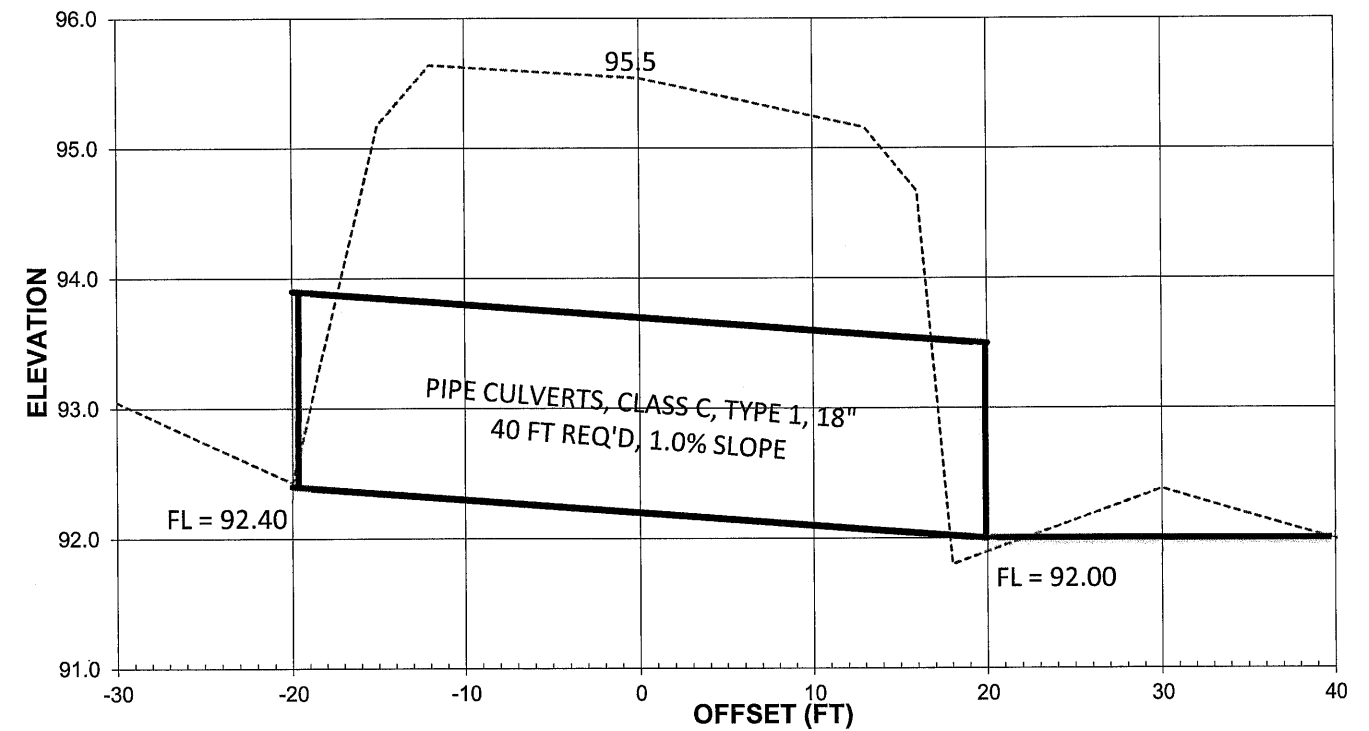
STATION	TO	STATION	LOCATION	WIDTH	SQ YD	TONS
1+32		PIPE CULVERT	ACROSS ROAD	5.5	12.2	7.5
38+60		PIPE CULVERT	ACROSS ROAD	4.5	10	6.2
45+90		PIPE CULVERT	ACROSS ROAD	16	28.8	22.0
81+50		PIPE CULVERT	ACROSS ROAD	3.5	11.3	6.9
82+70		83+20	LEFT EDGE	6	11.3	20.5
83+60		84+30	LEFT EDGE	7	54.4	33.5
85+61		PIPE CULVERT	ACROSS ROAD	6	11	9.0
90+20		PIPE CULVERT	ACROSS ROAD	7	18.3	10.5
TOTAL =					157.3	116.1

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAS 807	20-00129-00-RS	LAWRENCE	6	5
CONTRACT			95937	

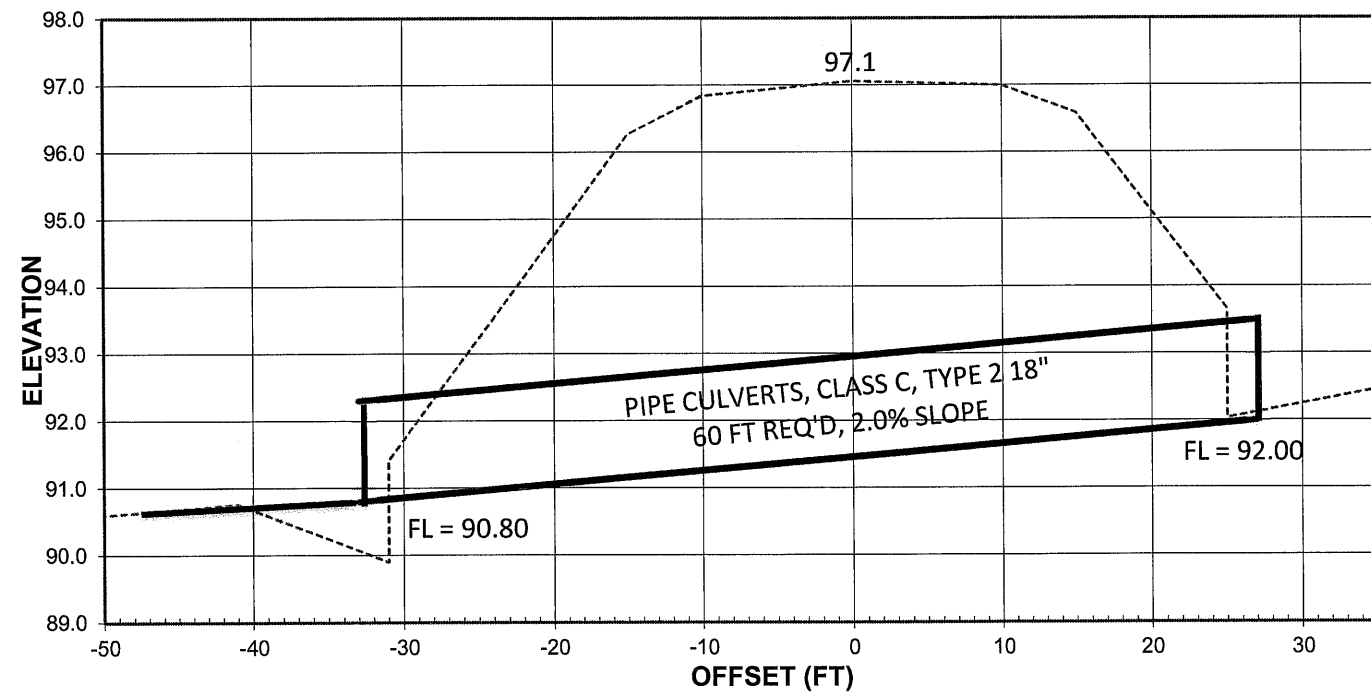
**Sta 1+32 AR PIPE**



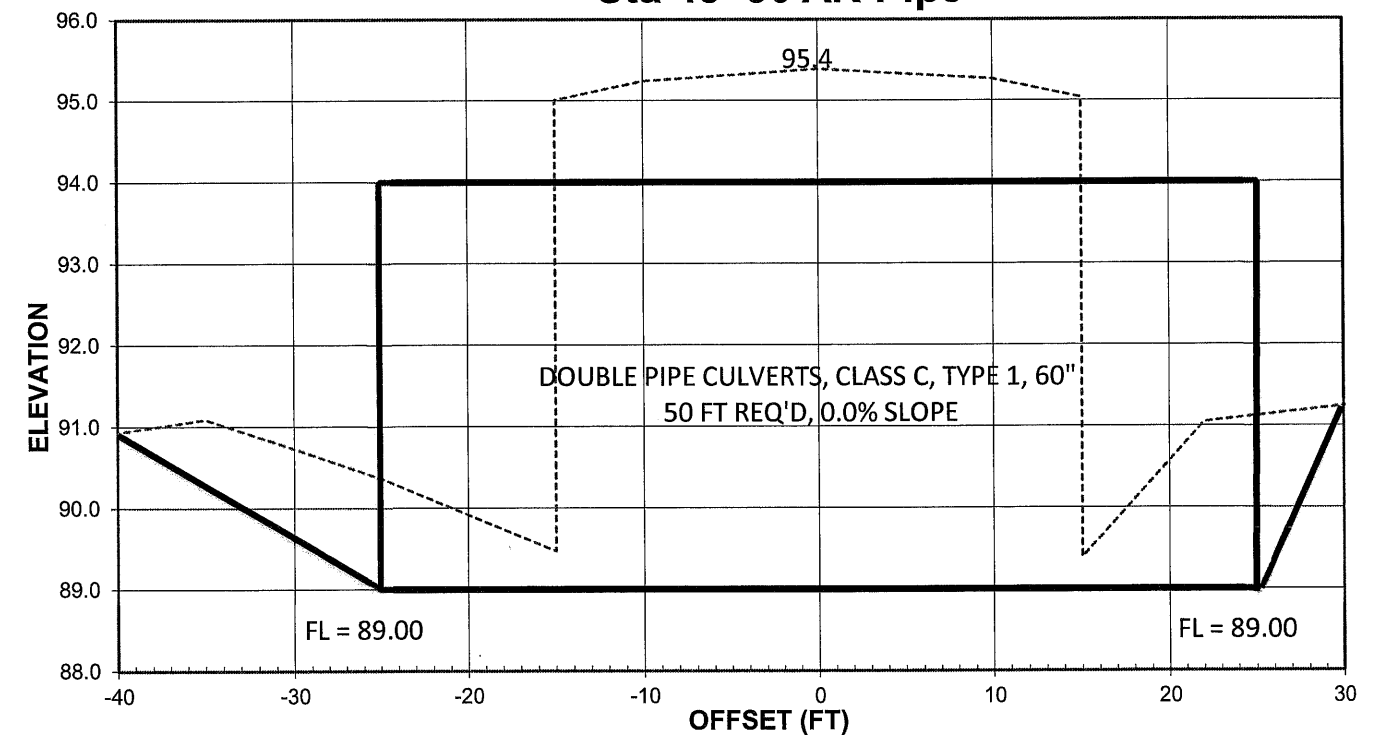
**Sta 26+51 SR Pipe Culvert**



**Sta 38+60 AR Pipe**

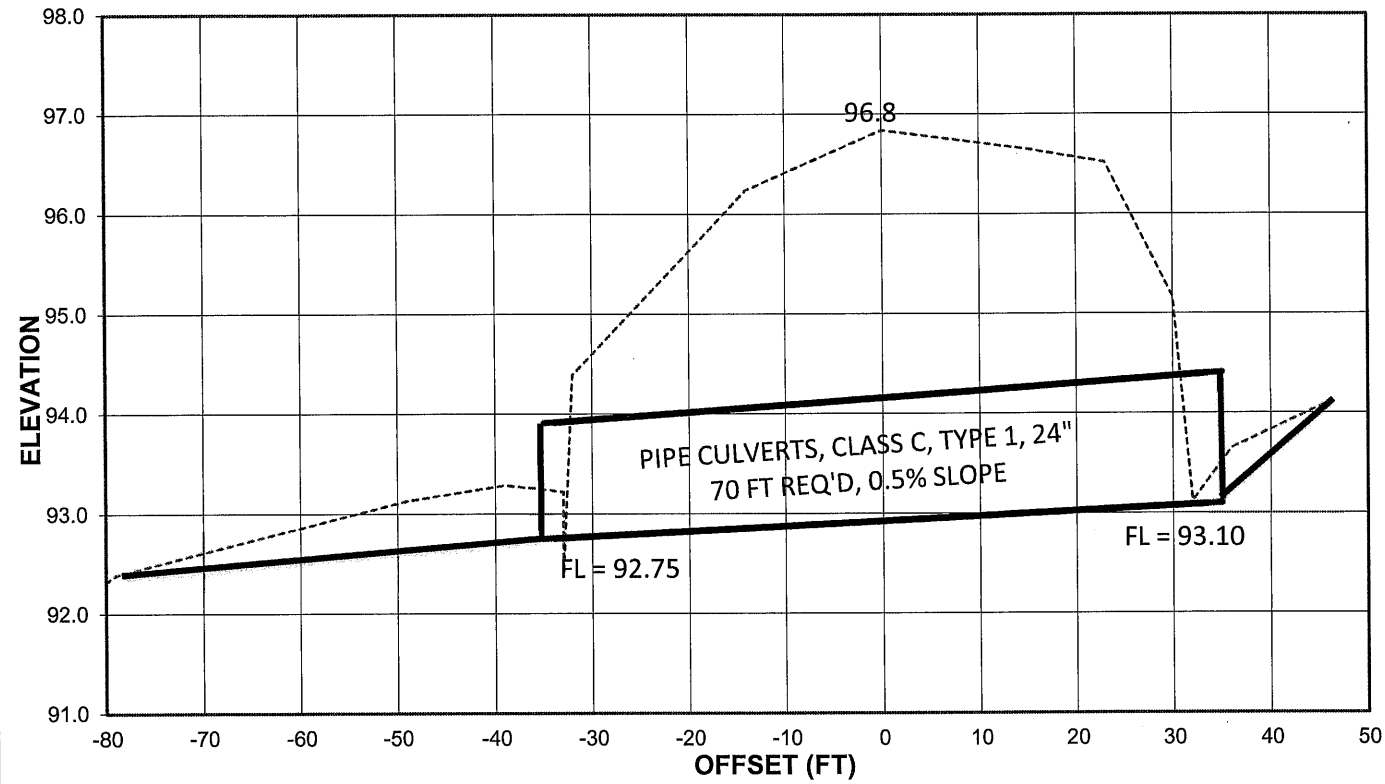


**Sta 45+90 AR Pipe**

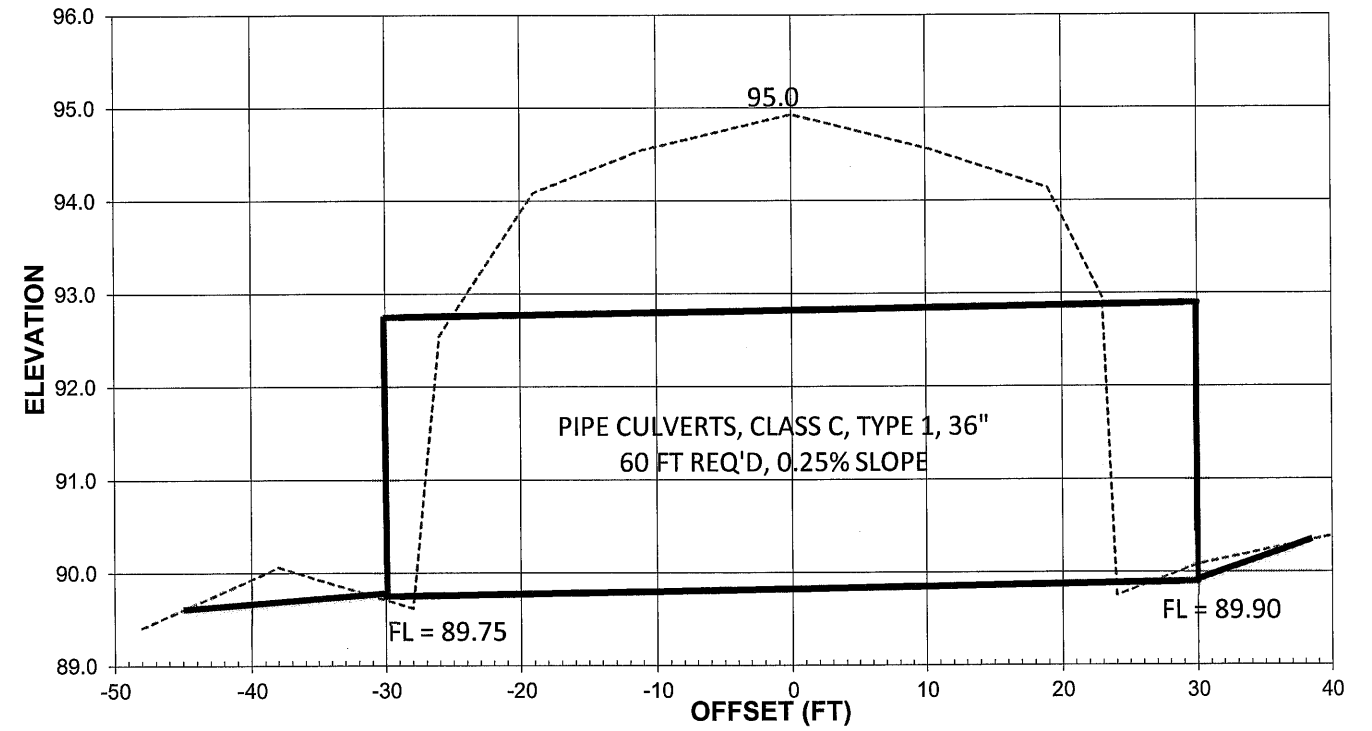


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAS 807	20-00129-00-RS	LAWRENCE	6	6
			CONTRACT	95937

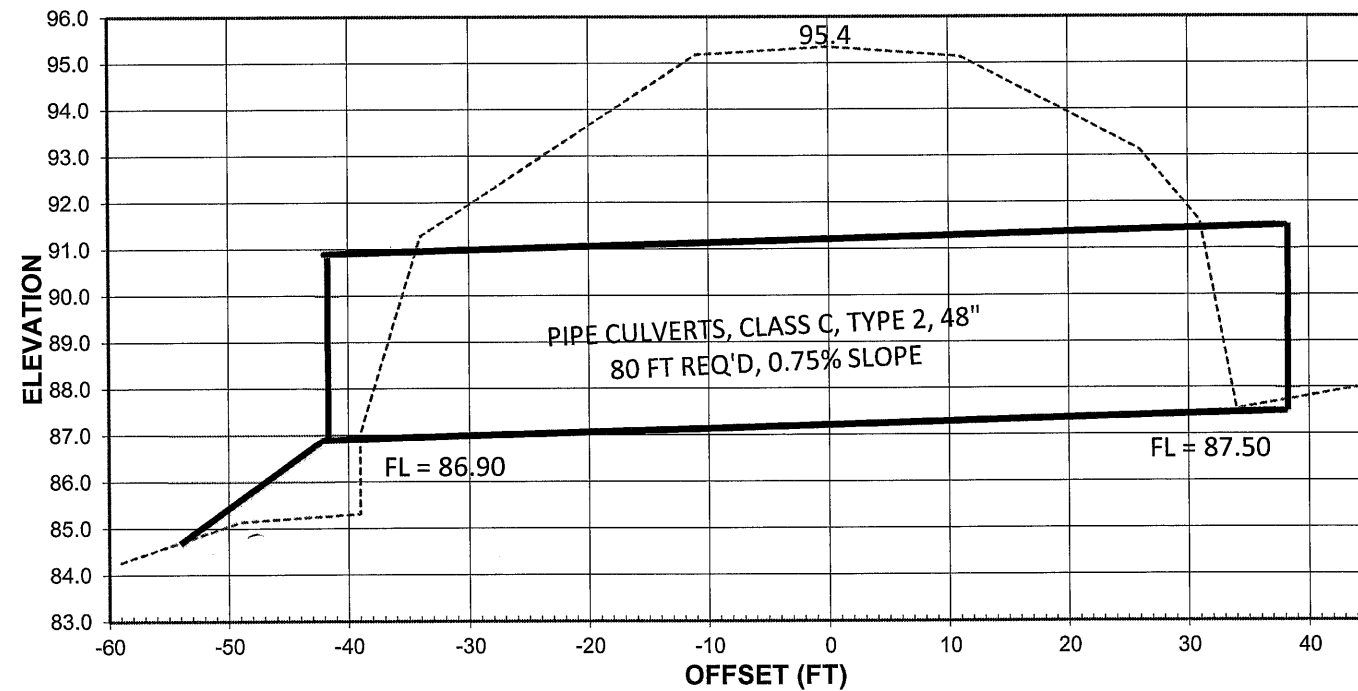
**Sta 81+50 AR PIPE**



**Sta 85+61 Pipe Culvert**



**Sta 90+20 AR Pipe**



**GUARDRAIL LAYOUT**

