

91-2  
FILMEL  
MAY 9 1968

UNAPPROVED  
MAR 21 1968

# STATE OF OHIO DEPARTMENT OF HIGHWAYS

**LIMITED ACCESS**  
A PORTION OF THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY FROM 224+00 TO 268+00 BY ACTION OF THE DIRECTOR OF HIGHWAYS IN ACCORDANCE WITH PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO	U-602 (21)	

1  
124

CUYAHOGA COUNTY  
CUY. 82-12.40

# CUY. -82-12.40 CUYAHOGA COUNTY CITIES OF BROADVIEW HTS. AND BRECKSVILLE

## U-602 (21)

### 1967 SPECIFICATIONS

The Standard Specifications of the State of Ohio Department of Highways including changes and Supplemental Specifications listed in the proposal shall govern this improvement.

The right of way for this improvement will be provided by the State of Ohio.

I hereby approve these plans and declare that the making of this improvement will not require the closing to traffic of the highway and that provisions for the maintenance and safety of traffic will be as set forth on the plans and estimates.

- Approved Charles W. Zupnick  
Date 5-15-67 Division Deputy Director
- Approved C. H. Althoff  
Date 7-10-67 Engineer of Bridges
- Approved R. E. Bath  
Date 7-11-67 Engineer of Location and Design
- Approved R. E. Shultz  
Date 7-11-67 Deputy Director of Design and Construction
- Approved T. H. Borrell  
Date 7-12-67 Deputy Director of Right of Way
- Approved Thomas M. Maffei  
Date 7-18-67 Deputy Director of Planning and Programming
- Approved \_\_\_\_\_  
Date \_\_\_\_\_ First Assistant Director
- Approved R. E. Macketer  
Date 7-18-67 Director of Highways

CONVENTIONAL SIGNS

COUNTY LINE	_____
CORPORATION LINE	_____
CENTER LINE	_____
FENCE LINE	_____
RAILROAD	_____
POWER POLES	⊗ ⊗ ⊗ ⊗ ⊗
TELEPHONE POLES	⊗ ⊗ ⊗ ⊗ ⊗
TREES OR STUMPS (EXISTING)	⊙ ⊙ ⊙ ⊙ ⊙
TREES OR STUMPS (TO BE REMOVED)	⊗ ⊗ ⊗ ⊗ ⊗

INDEX OF SHEETS

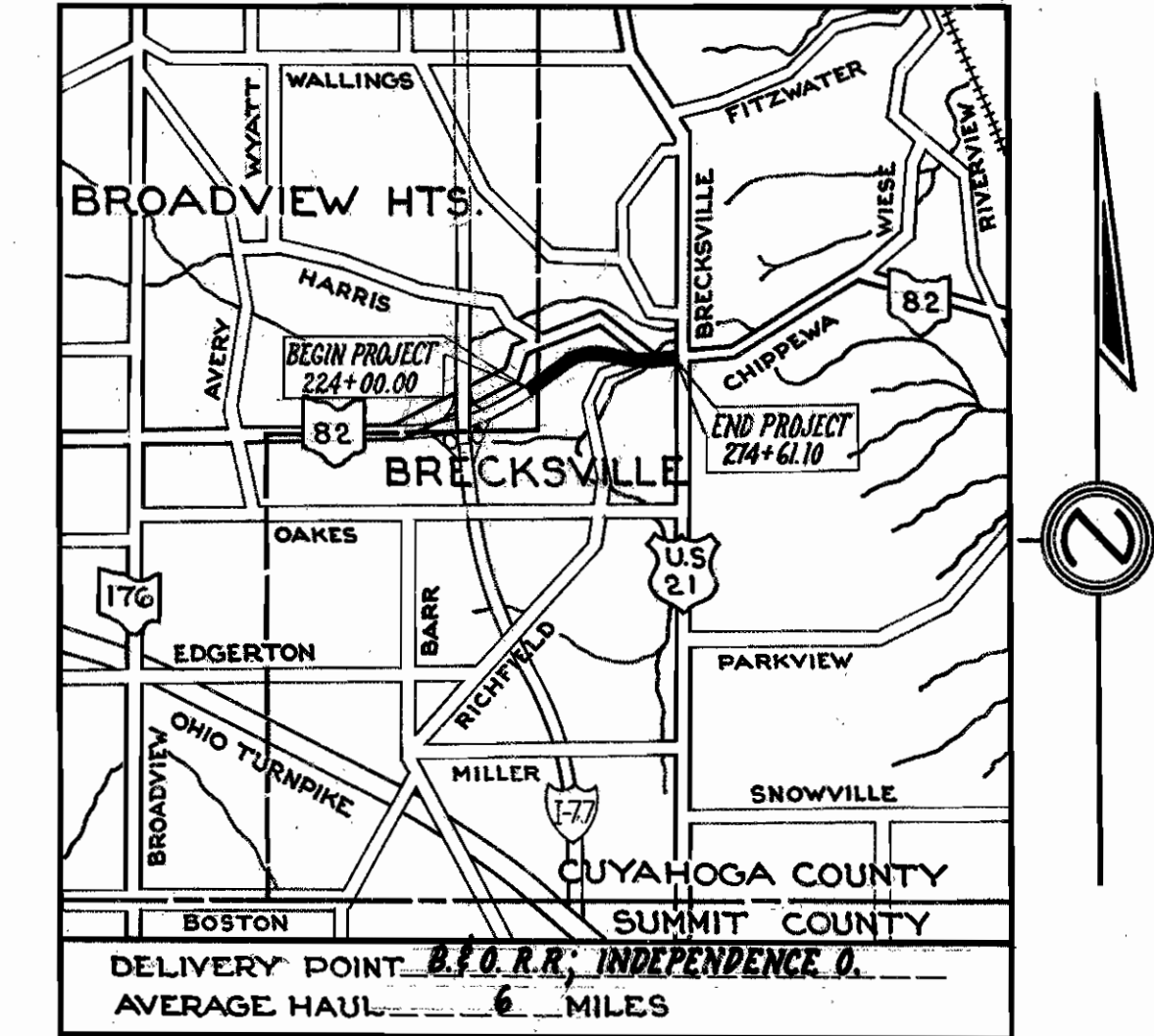
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LINE DATA

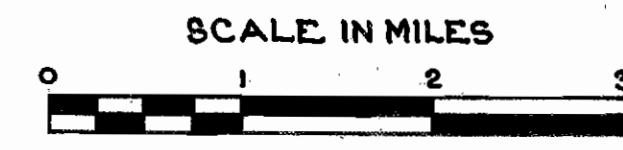
BEGIN PROJECT	STA. 224+00.00
END PROJECT	STA. 274+59.12
NET LENGTH OF PROJECT	= 5059.12 L.F. = 0.958 MI.
ADD FOR APPROACHES	
WESTERLY CONNECTION TO EXISTING ROYALTON ROAD	= 777.00 L.F.
EASTERLY CONNECTION TO EXISTING ROYALTON ROAD	= 1354.12 L.F.
RELOCATED HIGHLAND ROAD	= 757.22 L.F.
ELM STREET CONNECTION	= 309.58 L.F.
S.R. 82	= 422.00 L.F.
NET LENGTH OF WORK	= 8679.04 L.F. = 1.643 MI.

DESIGN DESIGNATION

ADT 1964	6,140
ADT 1986	25,210
DHV	2,521
DIR. DIST.	67%
TRUCK TRAFFIC	6%
DESIGN SPEED	50 M.P.H.



**LOCATION PLAN**



PORTION TO BE IMPROVED \_\_\_\_\_  
STATE ROADS \_\_\_\_\_  
OTHER ROADS \_\_\_\_\_

SCALES  
PLAN \_\_\_\_\_ 1" = 50'  
PROFILE HORIZONTAL \_\_\_\_\_ 1" = 50'  
PROFILE VERTICAL \_\_\_\_\_ 1" = 10'

SUPPLEMENTAL PRICES OF STANDARD CONSTRUCTION DRAWINGS

BP-1	6-1-65	FAC-2	6-1-65	MH-1	6-1-65
BP-2	1-10-67	GR-1	1-1-67	MH-1A	8-1-66
BP-3	1-10-67	GR-2A	1-1-67	SP-53	6-30-61
BP-4	1-10-67	HW-3	6-1-65	CB-6	6-1-65
BP-5	6-1-65	HW-E	6-1-65		
BP-6	6-1-65	T-2A	6-1-65		
BP-7	1-1-66	L-1	6-1-65		
CB-22A&B	6-1-65				
CB-3	6-1-65	MC-1	6-1-65		
CB-3A	6-1-65	MC-3	5-1-66		
CB-5	6-1-65	MC-4	6-1-65		
F-1	6-1-65				
FAC-1	6-1-65	MC-6	6-1-65		

SUPPLEMENTAL SPECIFICATIONS

801	1-1-67
814	1-1-67
1001	3-21-66
806	1-1-67

FILE NO.	CUYAHOGA COUNTY	CUY. 82-12.40
DATE OF LETTING	19 _____	
CONTRACT NO.	_____	

341 1391

**DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS**

APPROVED: \_\_\_\_\_  
DIVISION ENGINEER

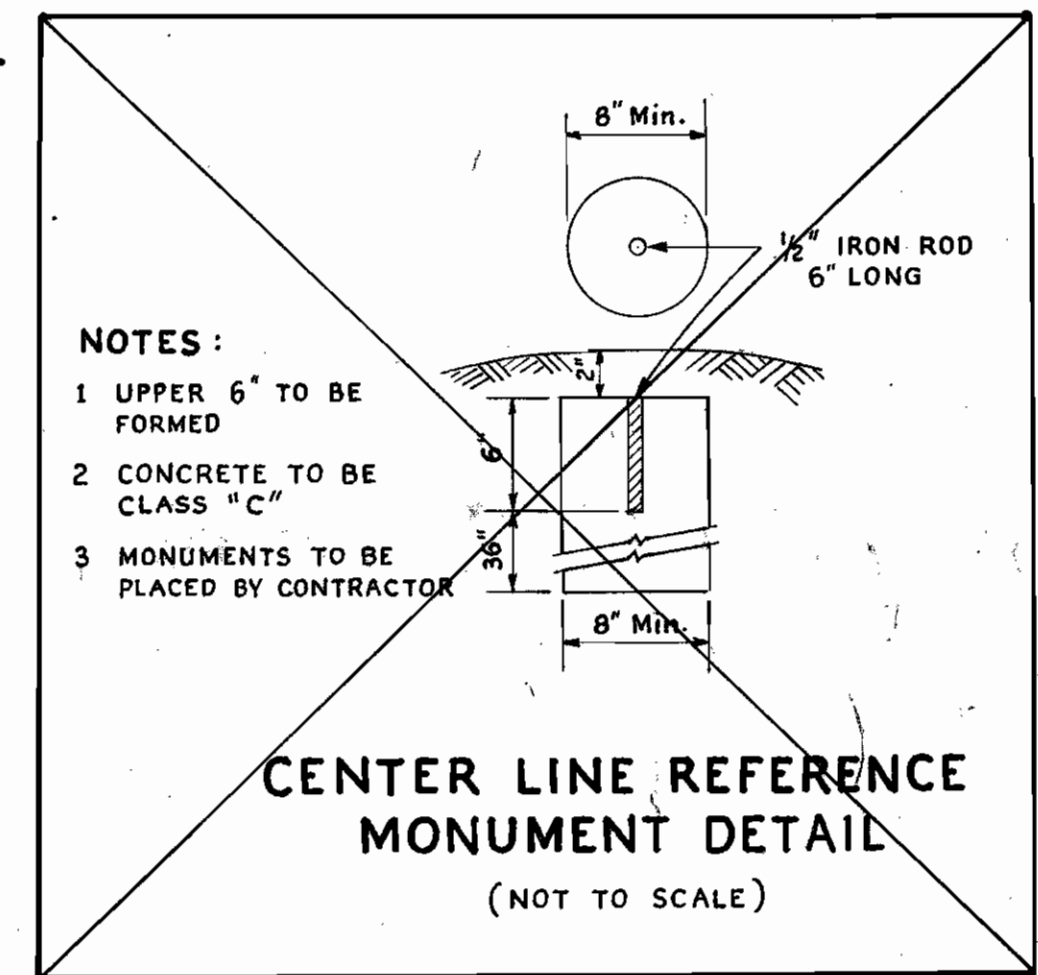
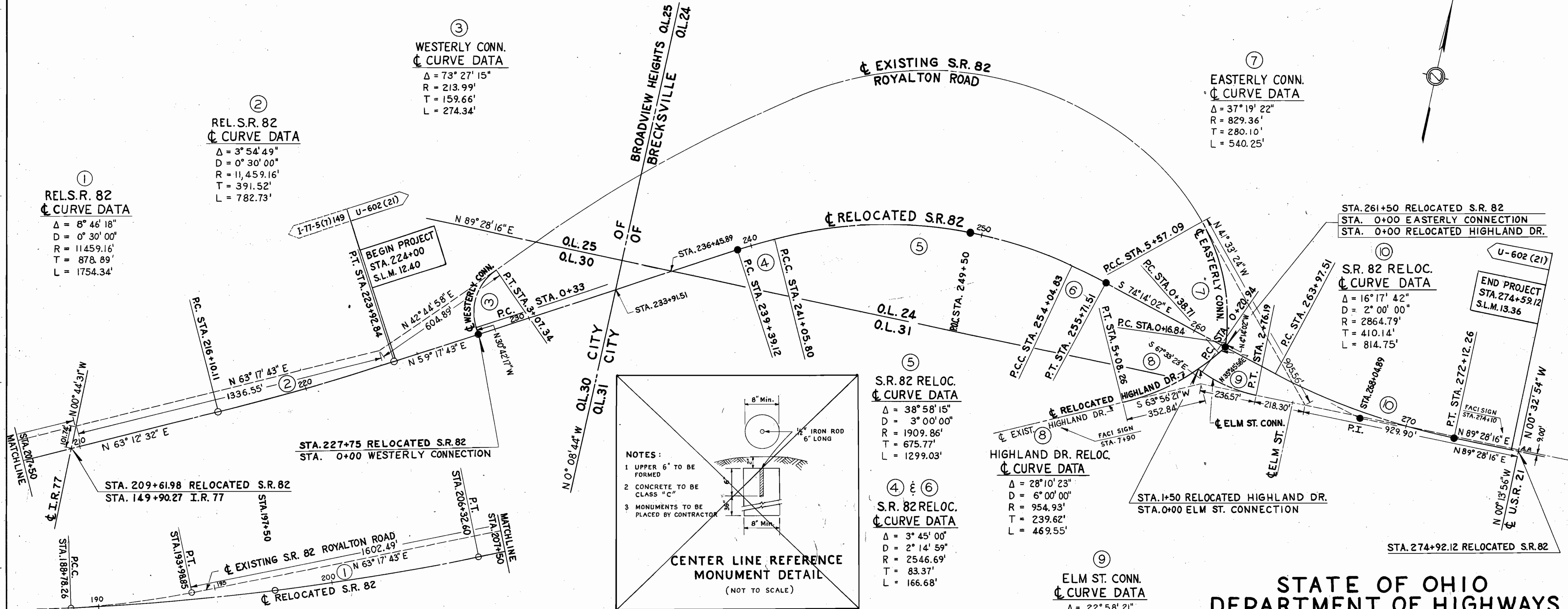
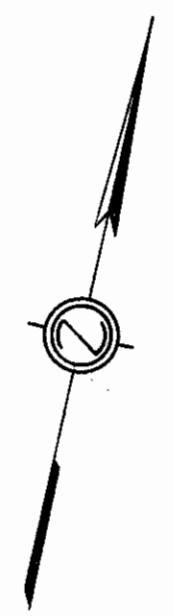
DATE \_\_\_\_\_

# CENTERLINE PLAT

SCALE: 1" = 200'

FED. RD. DIVISION	STATE	PROJECT	2
2	OHIO		124

CUYAHOGA COUNTY  
CUY. 82-12.40



- NOTES:
- 1 UPPER 6" TO BE FORMED
  - 2 CONCRETE TO BE CLASS "C"
  - 3 MONUMENTS TO BE PLACED BY CONTRACTOR

①  
RELS. S.R. 82  
CURVE DATA  
Δ = 8° 46' 18"  
D = 0° 30' 00"  
R = 11459.16'  
T = 878.89'  
L = 1754.34'

②  
REL. S.R. 82  
CURVE DATA  
Δ = 3° 54' 49"  
D = 0° 30' 00"  
R = 11,459.16'  
T = 391.52'  
L = 782.73'

③  
WESTERLY CONN.  
CURVE DATA  
Δ = 73° 27' 15"  
R = 213.99'  
T = 159.66'  
L = 274.34'

⑦  
EASTERLY CONN.  
CURVE DATA  
Δ = 37° 19' 22"  
R = 829.36'  
T = 280.10'  
L = 540.25'

⑤  
S.R. 82 RELOC.  
CURVE DATA  
Δ = 38° 58' 15"  
D = 3° 00' 00"  
R = 1909.86'  
T = 675.77'  
L = 1299.03'

④ & ⑥  
S.R. 82 RELOC.  
CURVE DATA  
Δ = 3° 45' 00"  
D = 2° 14' 59"  
R = 2546.69'  
T = 83.37'  
L = 166.68'

⑧  
HIGHLAND DR. RELOC.  
CURVE DATA  
Δ = 28° 10' 23"  
D = 6° 00' 00"  
R = 954.93'  
T = 239.62'  
L = 469.55'

⑨  
ELM ST. CONN.  
CURVE DATA  
Δ = 22° 58' 21"  
D = 9° 00' 00"  
R = 636.62'  
T = 129.36'  
L = 255.25'

⑩  
S.R. 82 RELOC.  
CURVE DATA  
Δ = 16° 17' 42"  
D = 2° 00' 00"  
R = 2864.79'  
T = 410.14'  
L = 814.75'

- LEGEND
- EXISTING MONUMENTS
  - STD. MONUMENT ASSEMBLIES TO BE PROVIDED

MONUMENTS			
MUNICIPALITY	STATION	ITEM - 604	
		STANDARD MONUMENT ASSEMBLY	CENTERLINE REFERENCE MONUMENT
		EACH	
CITY OF BROADVIEW HTS.	227 + 75.00	1	
CITY OF BROADVIEW HTS. TOTAL:		1	
CITY OF BRECKSVILLE	239 + 39.12	1	
	249 + 50.00	1	
	255 + 71.51	1	
	261 + 50.00	1	
	268 + 04.89	1	
CITY OF BRECKSVILLE TOTAL:		6	

THIS IMPROVEMENT HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY FROM STATION 195+00 TO STATION 268+00, BY ACTION OF THE DIRECTOR OF HIGHWAYS AND RECORDED IN VOLUME 51, PAGE 1027, OF THE DIRECTOR'S JOURNAL PURSUANT TO LAW.

SIGNED Charles W. Jurick  
DATE 4-12-67 DIVISION DEPUTY DIRECTOR  
OHIO DEPARTMENT OF HIGHWAYS

## STATE OF OHIO DEPARTMENT OF HIGHWAYS

CUY. 82 -12.40

CENTER LINE SURVEY  
CITY OF BROADVIEW HEIGHTS  
CITY OF BRECKSVILLE  
CUYAHOGA COUNTY

SCALE: 1" = 200' 1967

SURVEYOR'S CERTIFICATE:  
I hereby certify that this plat is a correct plat of the center line survey for the above titled project as surveyed and planned.

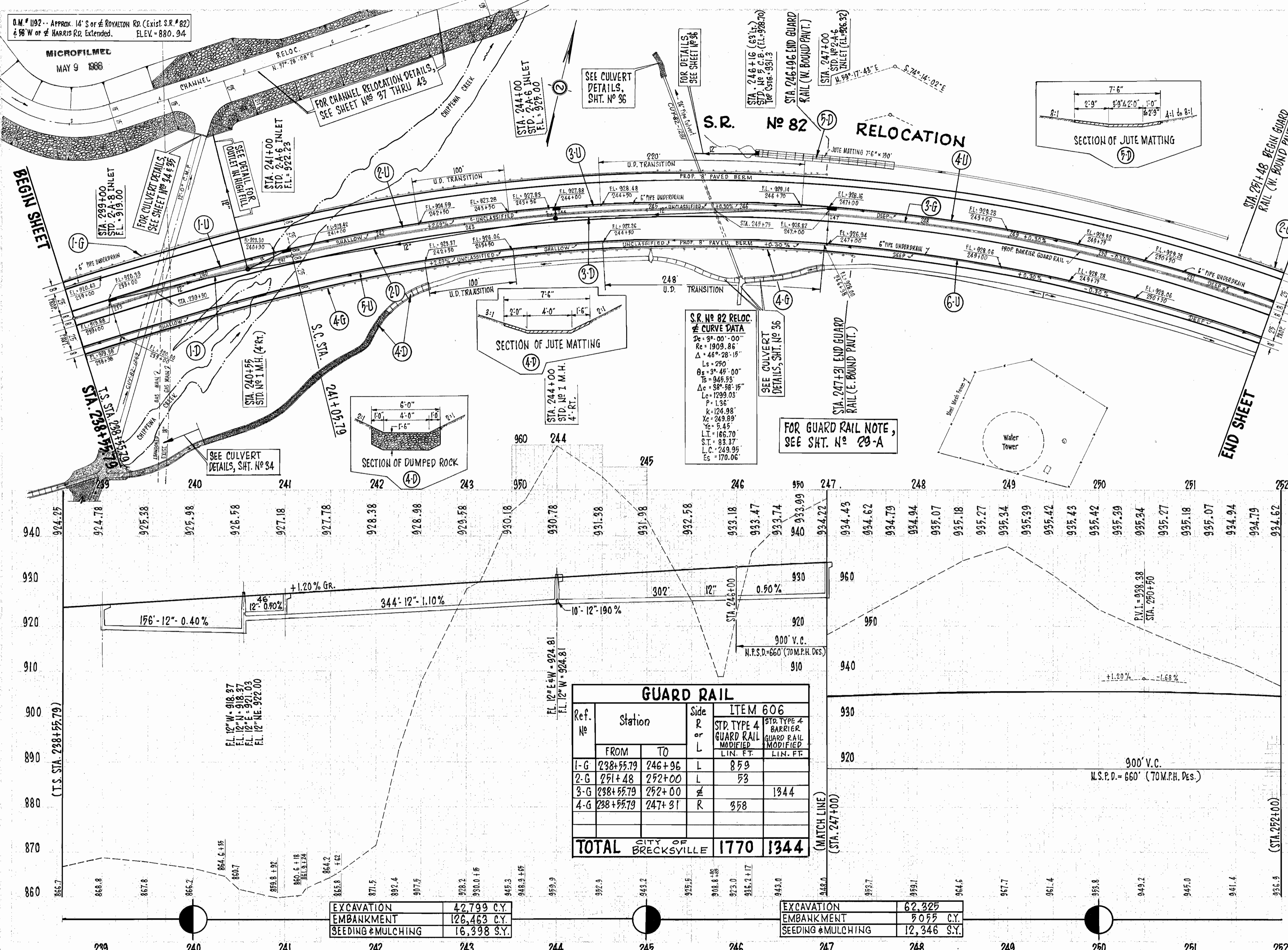
BY Howard P. Reue DATE 3/22 1967  
REGISTERED SURVEYOR NO. 3111 Rev. 7-31-67

O.M. # 1192 - APPROX. 14' S of ROYALTON RD. (EXIST. S.R. # 82)  
 & 98' W of HARRIS RD. EXTENDED. ELEV. = 880.94

MICROFILMED  
 MAY 9 1988

CUYAHOGA COUNTY  
 CUY - 82 - 12.40

18  
 124



Ref. No	Station	Side	ITEM 606	
			STD. TYPE 4 GUARD RAIL MODIFIED	STR. TYPE 4 BARRIER GUARD RAIL MODIFIED
	FROM	TO	LIN. FT.	LIN. FT.
1-G	238+55.79	246+96	L	859
2-G	251+48	252+00	L	53
3-G	238+55.79	252+00	R	1344
4-G	238+55.79	247+31	R	358
<b>TOTAL</b>			<b>CITY OF BRECKSVILLE</b>	<b>1770 1344</b>

EXCAVATION	42,799 C.Y.
EMBANKMENT	126,463 C.Y.
SEEDING & MULCHING	16,398 S.Y.

EXCAVATION	62,325
EMBANKMENT	5055 C.Y.
SEEDING & MULCHING	12,346 S.Y.

Ref. No	Station	Side	ITEM 604		ITEM 603		ITEM 601			
			STD. NO. 1 M.H.	2-A-6 SHOULDER INLET	12" CONDUIT TYPE B	12" CONDUIT TYPE C	STD. NO. 5 DUMPED ROCK	JUTE MATTING CHANNEL PROTECTION		
	FROM	TO	EACH	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EA. CH.	SQ. YDS.	CU. YDS.
1-D	239+00	241+00	R	1	60	202				
2-D	240+55	244+00	R	1	98	344	10			
3-D	244+00	247+00	R	1	70	168	6	42	125	87
4-D	239+50	242+50	R	1						
5-D	246+16	247+66	L	1						
<b>TOTAL</b>			<b>CITY OF BRECKSVILLE</b>	<b>2</b>	<b>3</b>	<b>168</b>	<b>404</b>	<b>167</b>	<b>87</b>	<b>87</b>

Ref. No	Station	Side	ITEM 605		ITEM 603	
			6" PIPE UNDERDRAIN SHALLOW	6" PIPE UNDERDRAIN DEEP	12" CONDUIT TYPE B	12" CONDUIT TYPE C
	FROM	TO	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.
1-U	238+55.79	241+00	L	223	10	
2-U	241+00	244+00	L	140	10	
3-U	244+00	246+70	L	220	10	
4-U	247+00	252+00	L	490	10	32
5-U	238+55.79	245+98	R	394	10	32
6-U	247+00	252+00	R	500		
<b>TOTAL</b>			<b>CITY OF BRECKSVILLE</b>	<b>797</b>	<b>990</b>	<b>64</b>

PLAN & PROFILE - S.R. No 82 RELOCATION - T.S. STA. 238+55.79 to STA. 252+00

Rev. 7-31-77

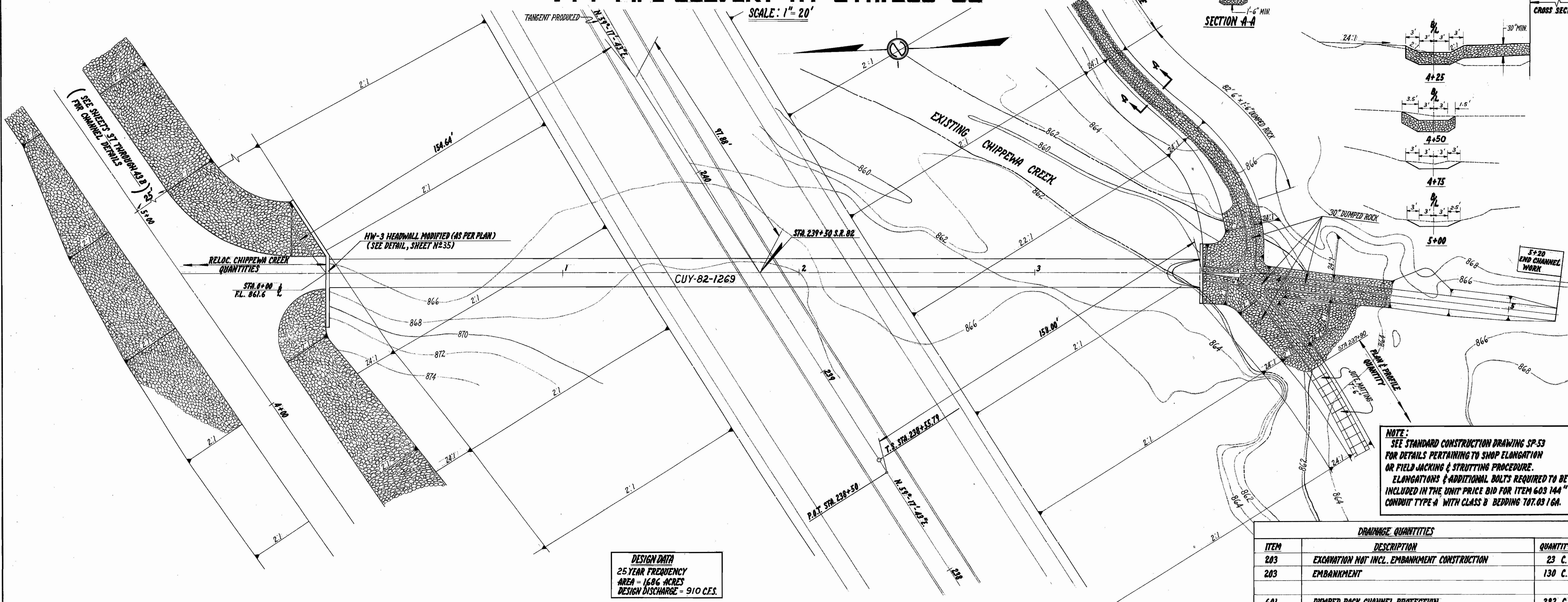
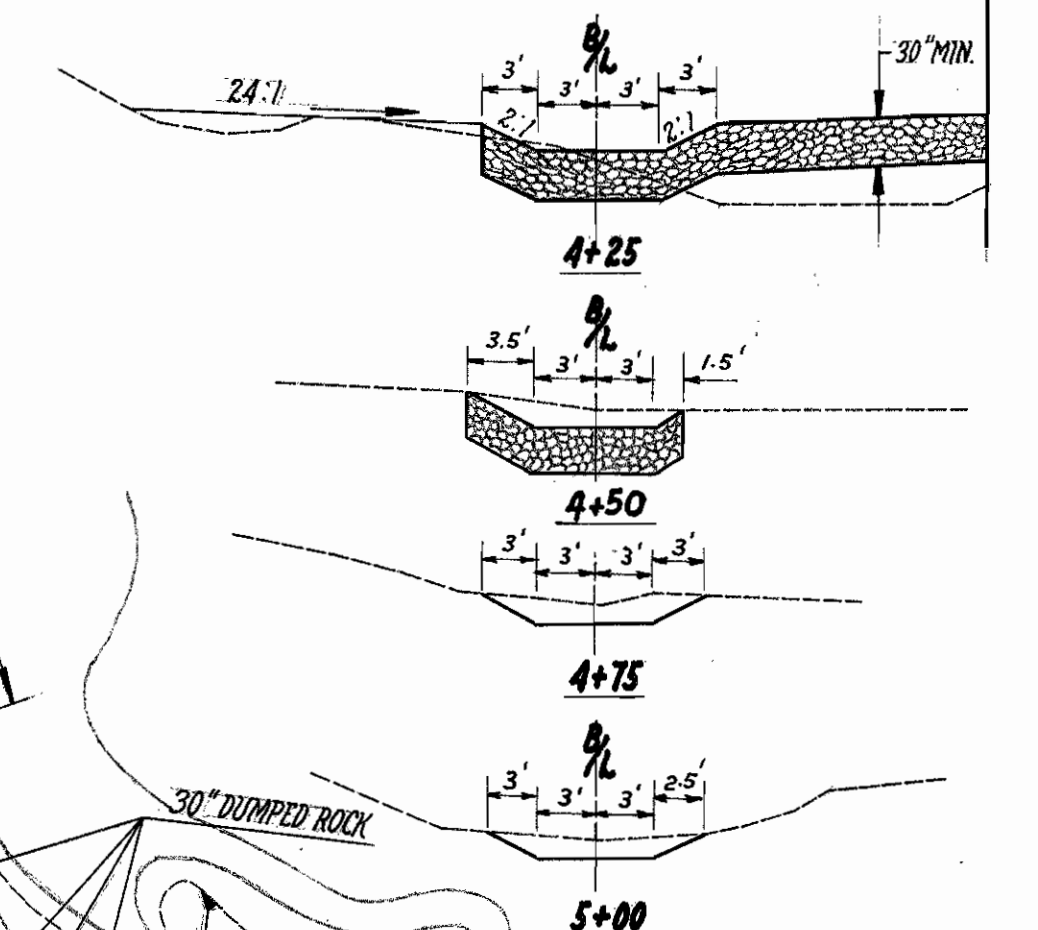
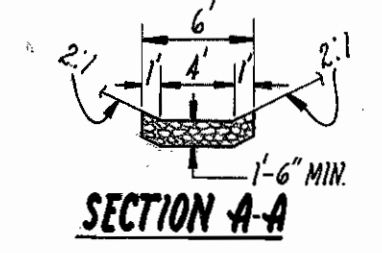
# CULVERT DETAILS

## 144" PIPE CULVERT AT STA. 239+50

FED. RD. DIVISION	STATE	PROJECT
2	OHIO	

CUYAHOGA COUNTY  
CUT. 82-12.40

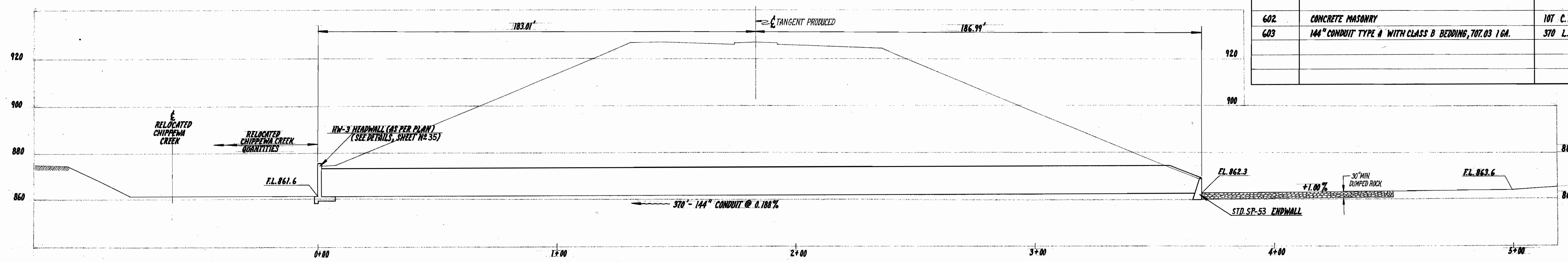
S.R. 82  
CROSS SECTIONS



**DESIGN DATA**  
25 YEAR FREQUENCY  
AREA = 16.86 ACRES  
DESIGN DISCHARGE = 910 CFS.

**NOTE:**  
SEE STANDARD CONSTRUCTION DRAWING SP-53 FOR DETAILS PERTAINING TO SHOP ELONGATION OR FIELD JACKING & STRUTTING PROCEDURE. ELONGATIONS & ADDITIONAL BOLTS REQUIRED TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 603 144\"/>

DRAINAGE QUANTITIES		
ITEM	DESCRIPTION	QUANTITY
203	EXCAVATION NOT INCL. EMBANKMENT CONSTRUCTION	23 C.Y.
203	EMBANKMENT	130 C.Y.
601	DUMPED ROCK CHANNEL PROTECTION	292 C.Y.
602	CONCRETE MASONRY	107 C.Y.
603	144" CONDUIT TYPE A WITH CLASS B BEDDING, 707.03 16A.	370 L.F.



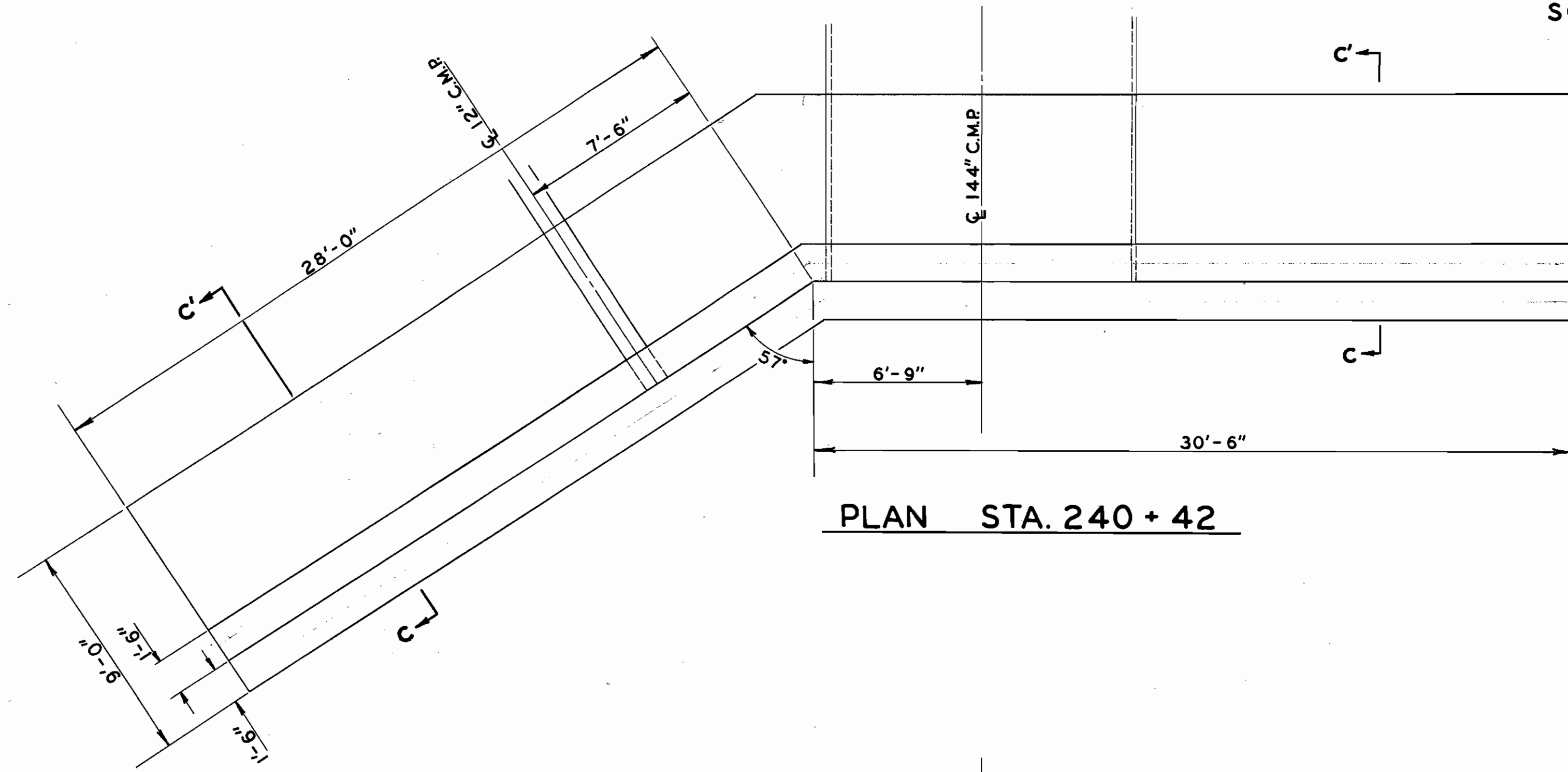
# CULVERT DETAILS

SCALE: 1/4" = 1'-0"

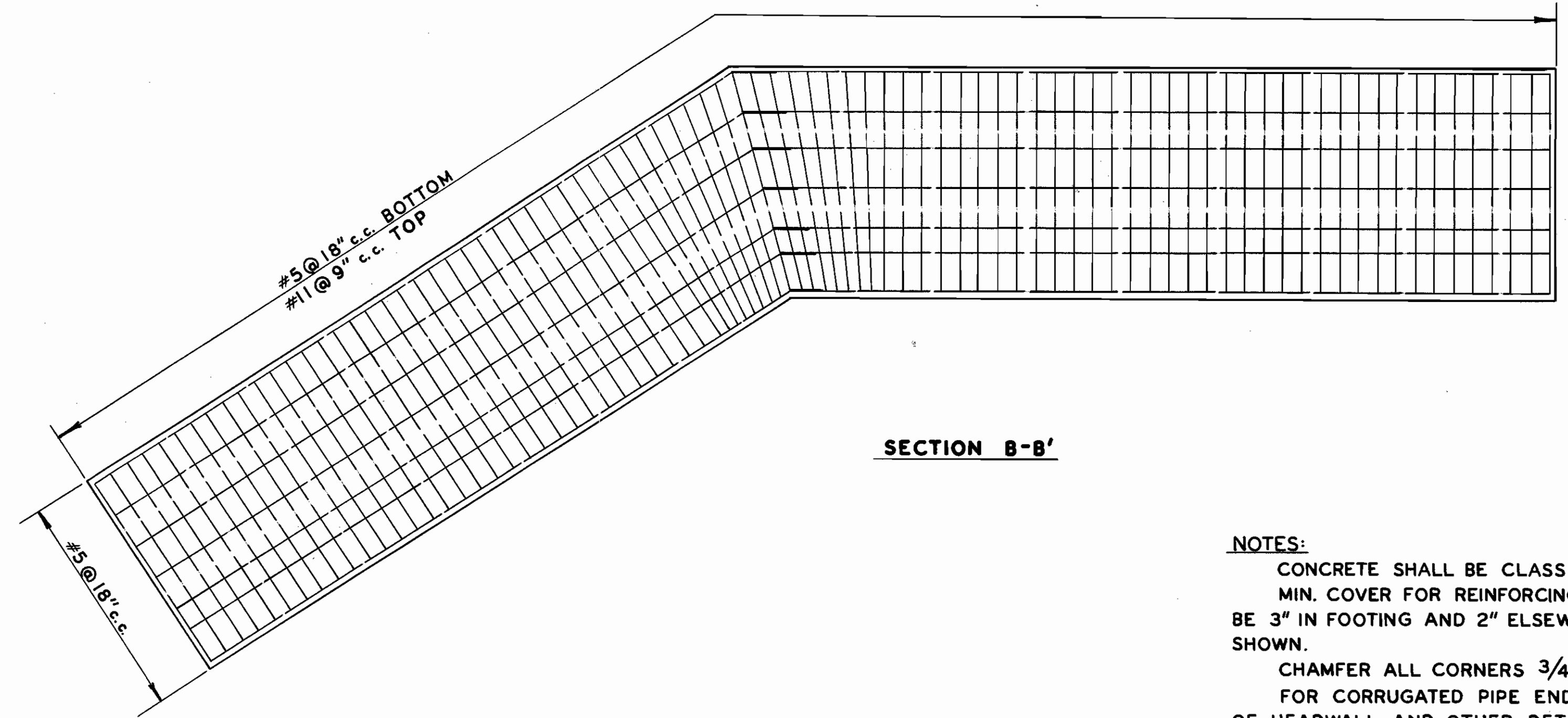
FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

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CUYAHOGA COUNTY  
CUY. 82-12.40

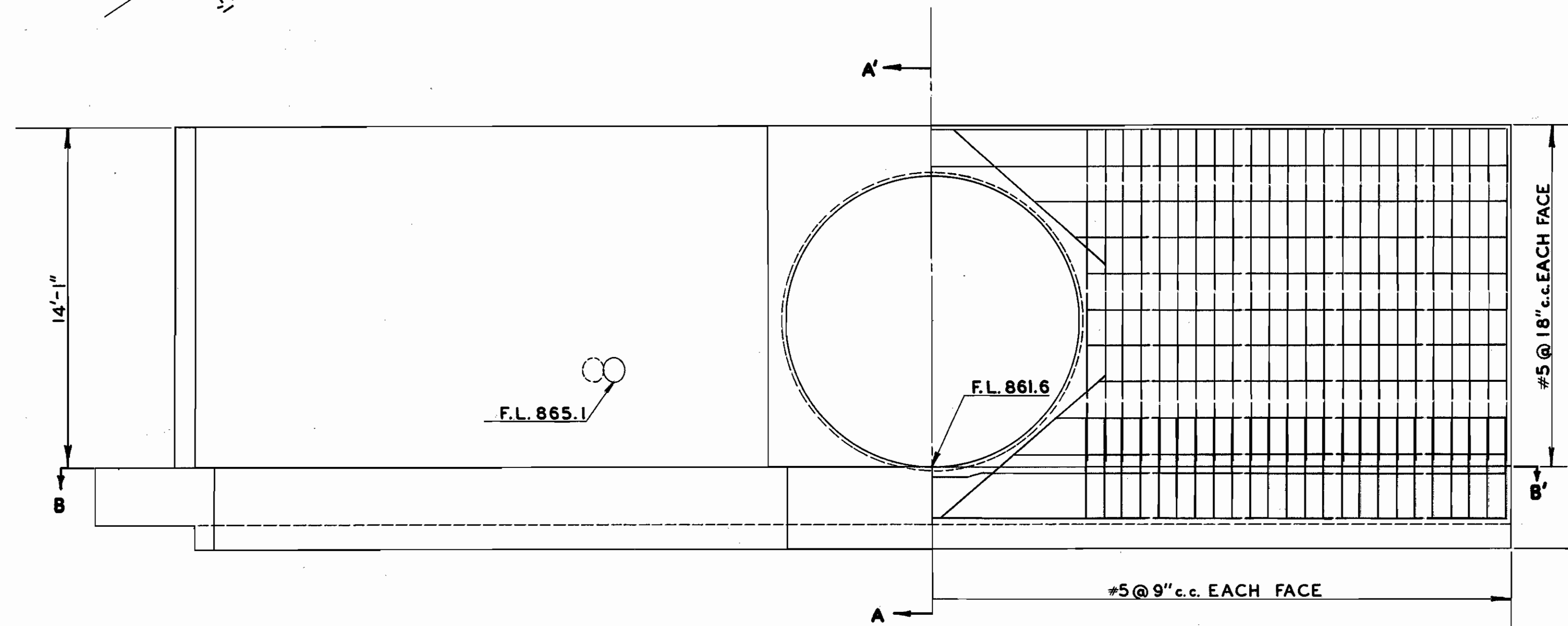


PLAN STA. 240 + 42

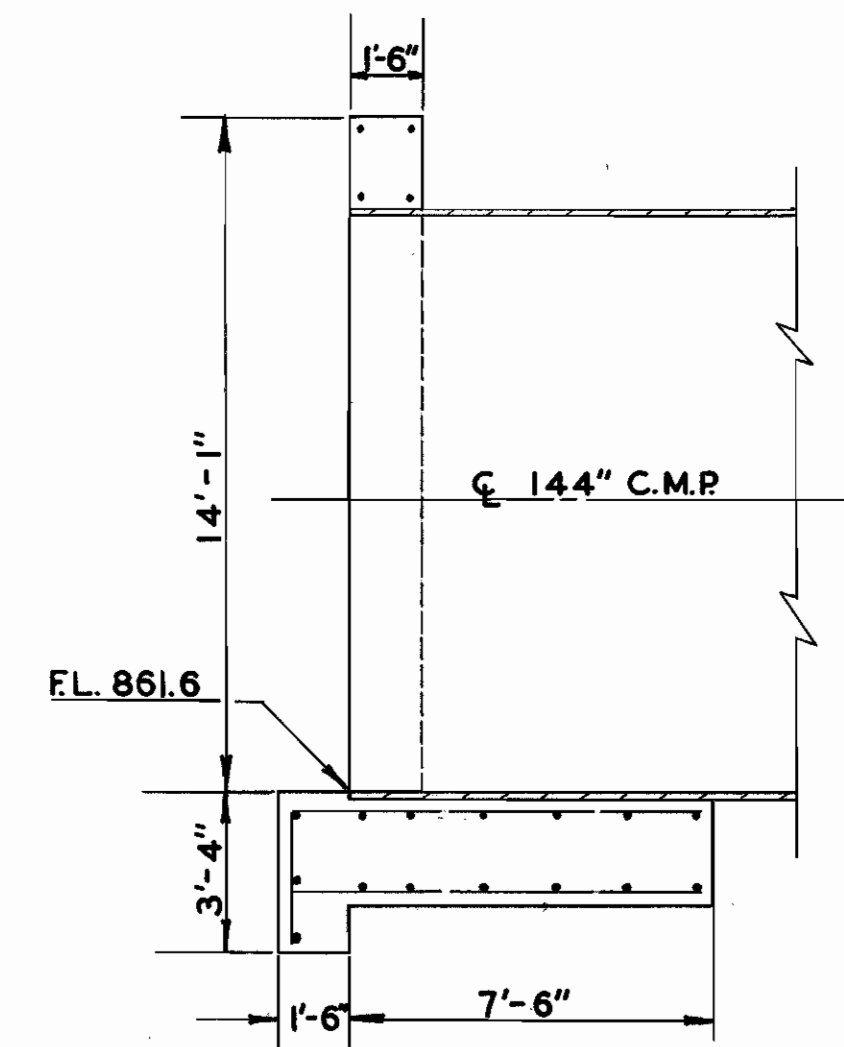


SECTION B-B'

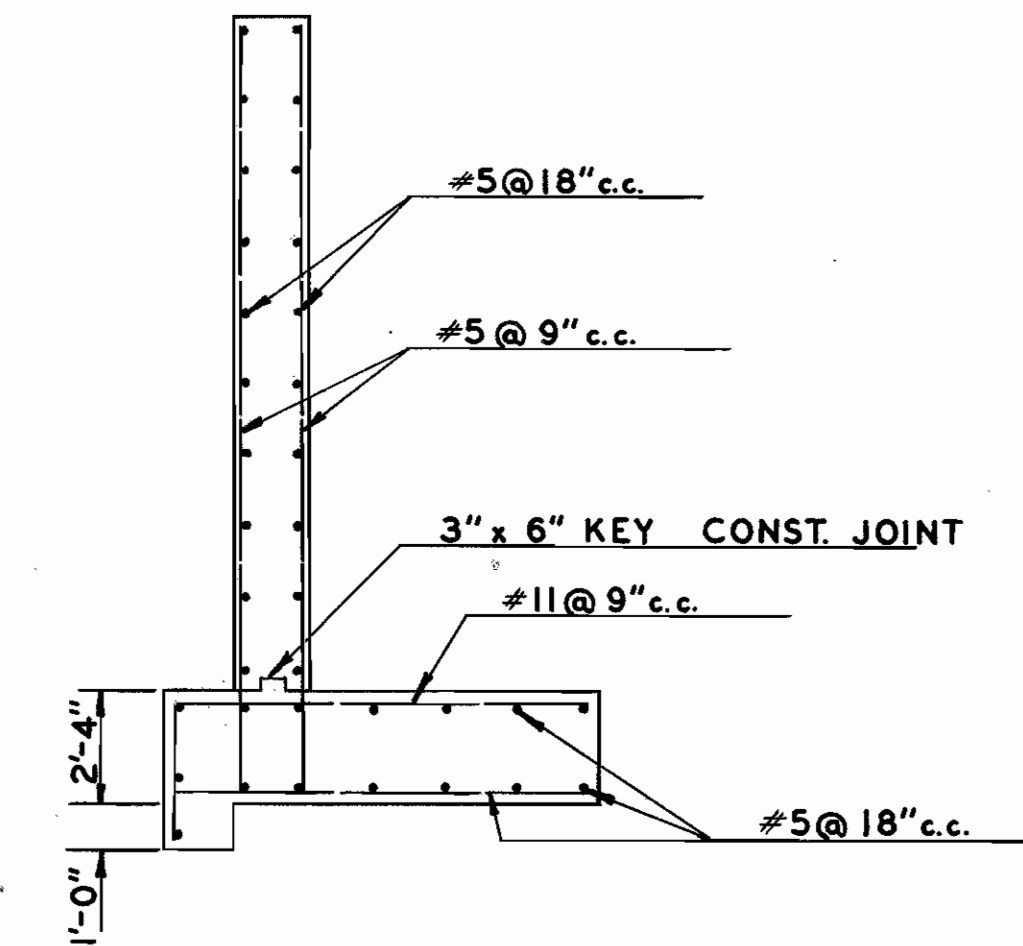
**NOTES:**  
CONCRETE SHALL BE CLASS "C"  
MIN. COVER FOR REINFORCING BARS SHALL BE 3" IN FOOTING AND 2" ELSEWHERE OR AS SHOWN.  
CHAMFER ALL CORNERS 3/4".  
FOR CORRUGATED PIPE END TREATMENT OF HEADWALL AND OTHER DETAILS NOT SHOWN REFER TO STANDARD DRAWING HW-3.



ELEVATION STA. 240 + 42



SECTION A-A'



SECTION C-C'

ESTIMATED QUANTITIES	
CONCRETE	90 C.Y.
REIN. STEEL	9750 LBS.