

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED FEDERAL AID HIGHWAY

GENERAL NOTES AND INDEX OF SHEETS, SHEET NO. 8
SUMMARY OF QUANTITIES, SHEETS NO. 9 & 10

F.A. ROUTE 885 (F.A. 5) (ILL. 146)
SECTION 104(W,RS); 104BY; 104A-BY
PROJECT TQF-F-885(1)
UNION COUNTY
GRADING & PAVING
C-99-207-76

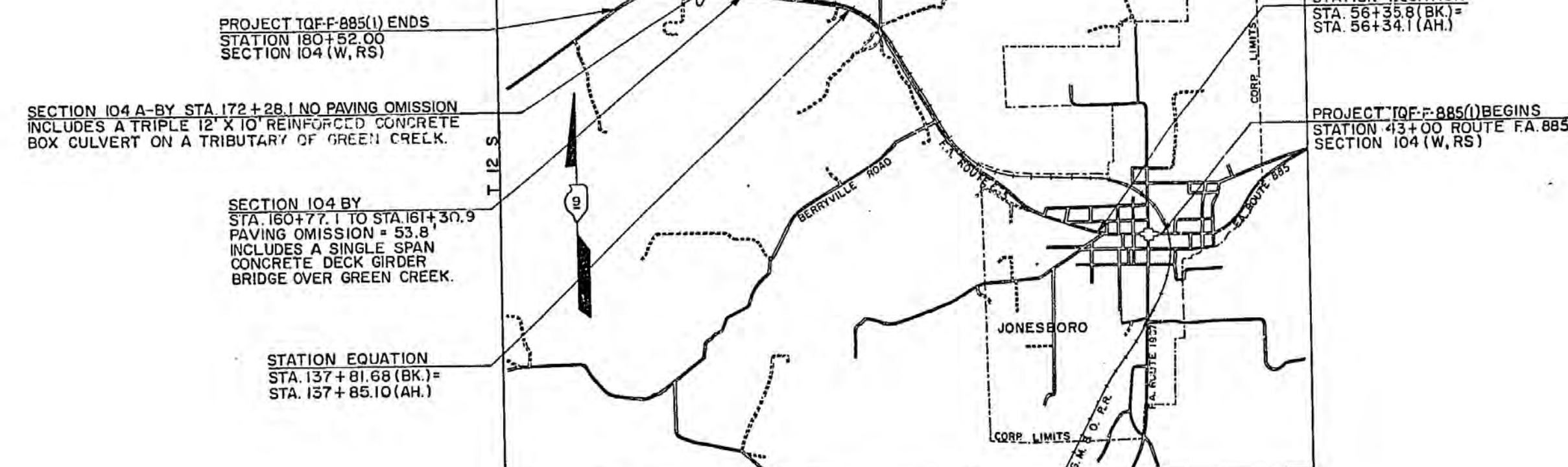
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 885	*	UNION	146	1
* 104(W,RS); 104BY; 104A-BY				

P-99-222-65



LOCATION OF SECTION INDICATED THUS: —

DESIGN DESIGNATION
961 (94)-AREA SERVICE-177-(BIT-20)



LAYOUT
SCALE 1 INCH = 2000 FT.
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

NET LENGTH OF SECTIONS (104(W,RS) = 13,696.48 FT. 2.594 MILES
(104 BY) = 53.80 FT. 0.010 MILES
TOTAL LENGTH OF PROJECT = 13,750.28 FT. 2.604 MILES

JOHN M. HANISTER
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILL. 1015
John M. Hanister

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Jan 4 1977
EXAMINED Feb. 1 1977
PASSED Feb. 1 1977
APPROVED Feb. 1 1977

DISTRICT ENGINEER
ENGINEER OF PLANS AND CONTRACTS
ENGINEER OF DESIGN
DIRECTOR OF HIGHWAYS

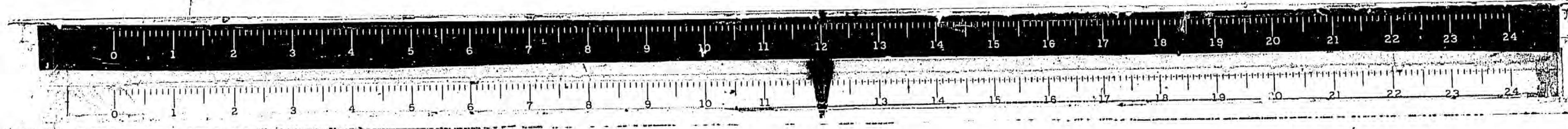
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR DATE

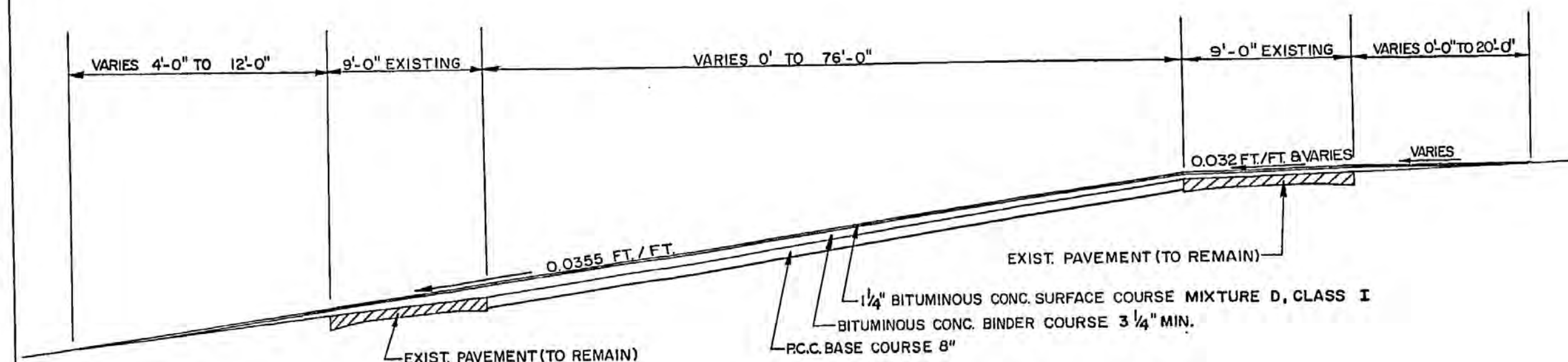
HURST-ROSCH ENGINEERS, INC.
1400 E. TREMONT, HILLSBORO, ILL.

CONTRACT NO. 32562

UNION COUNTY SECTION * F. A. ROUTE 885
* 104(W,RS); 104BY; 104A-BY

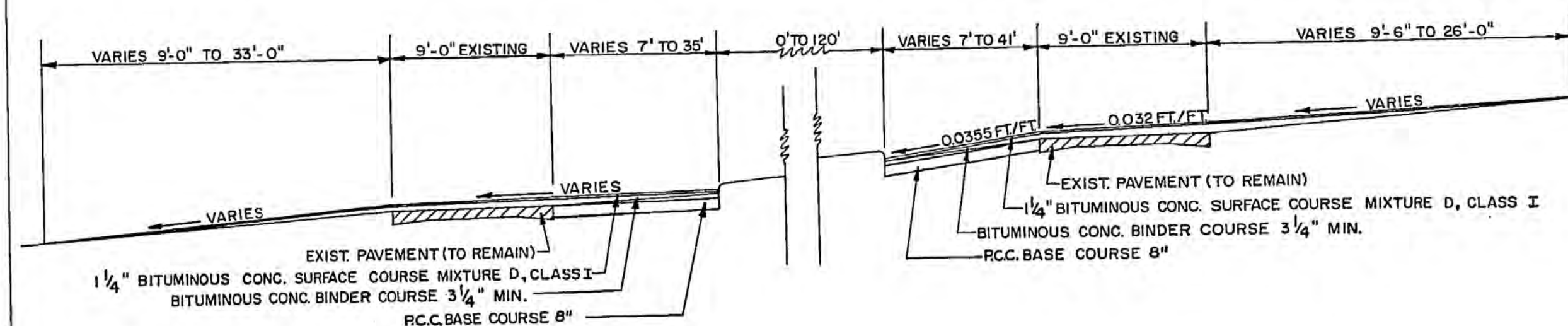


ROUTE	SECTION	COUNTY	TOTAL SHEET
FA 885	104(WRS)	UNION	146 2
F.H.W.A. REG. 4	ILLINOIS PROJECT	RF-1611	

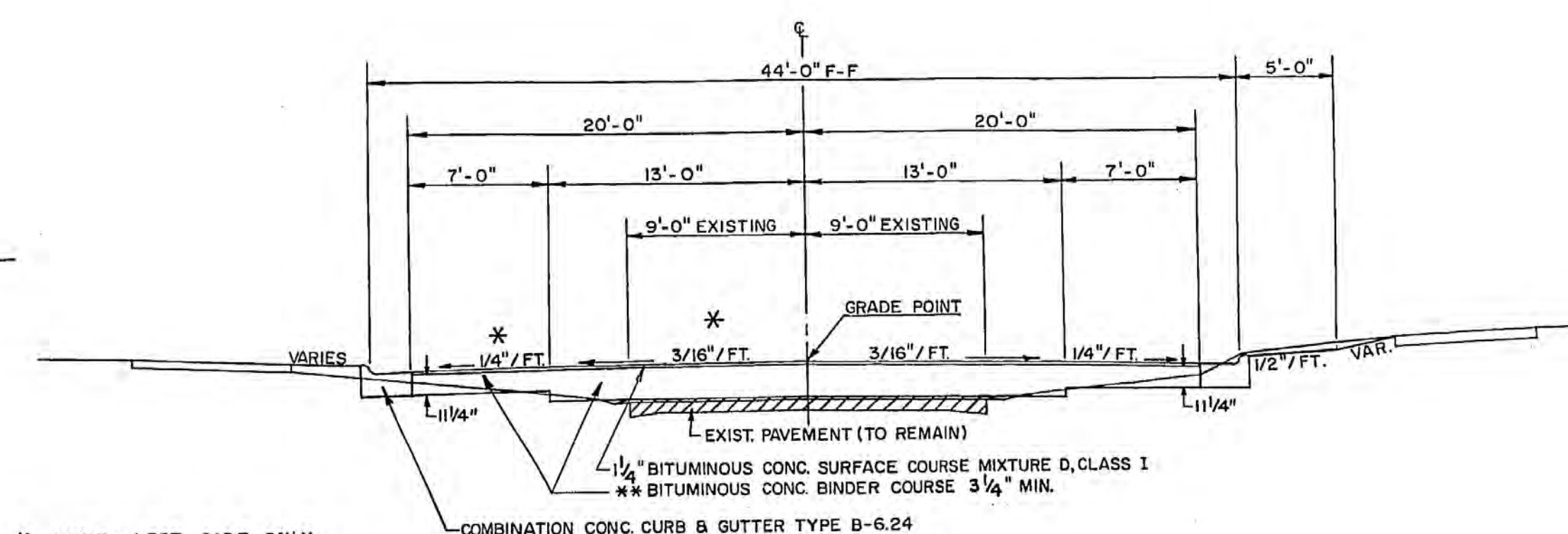


TYPICAL SECTION
STA. 43+00 TO STA. 43+90.5
STA. 45+59.8 TO STA. 46+23

THE THICKNESS OF BITUMINOUS MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE BITUMINOUS MIXTURE IS PLACED.

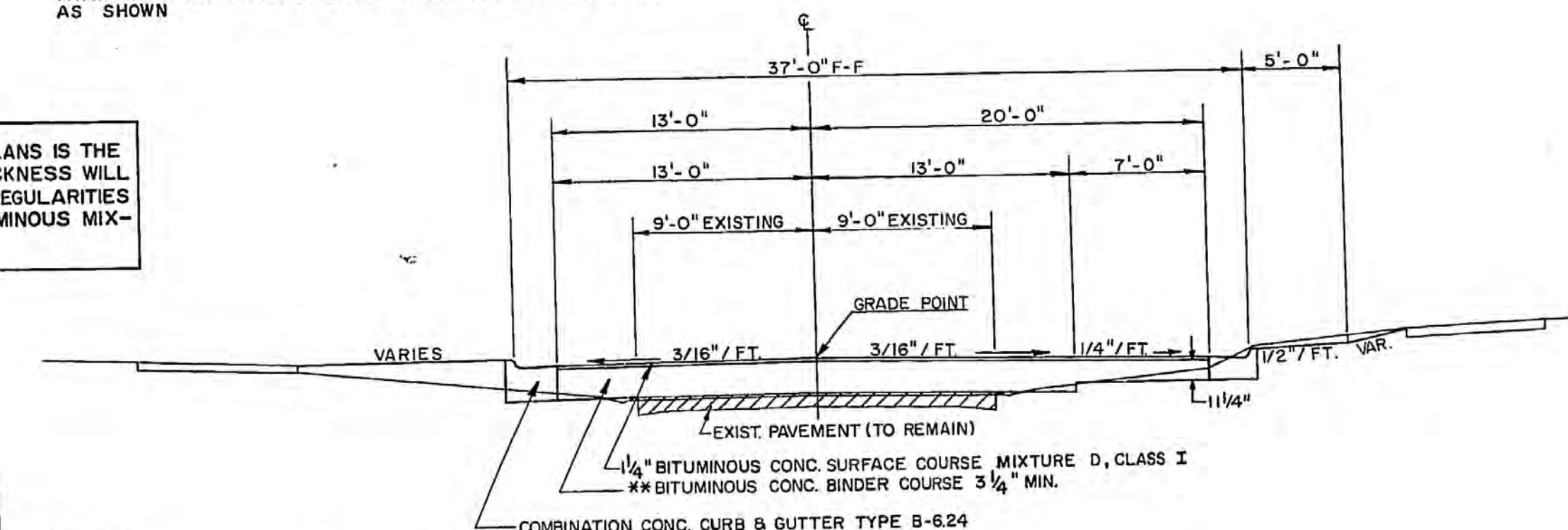


TYPICAL SECTION
STA. 43+90.5 TO STA. 45+59.8



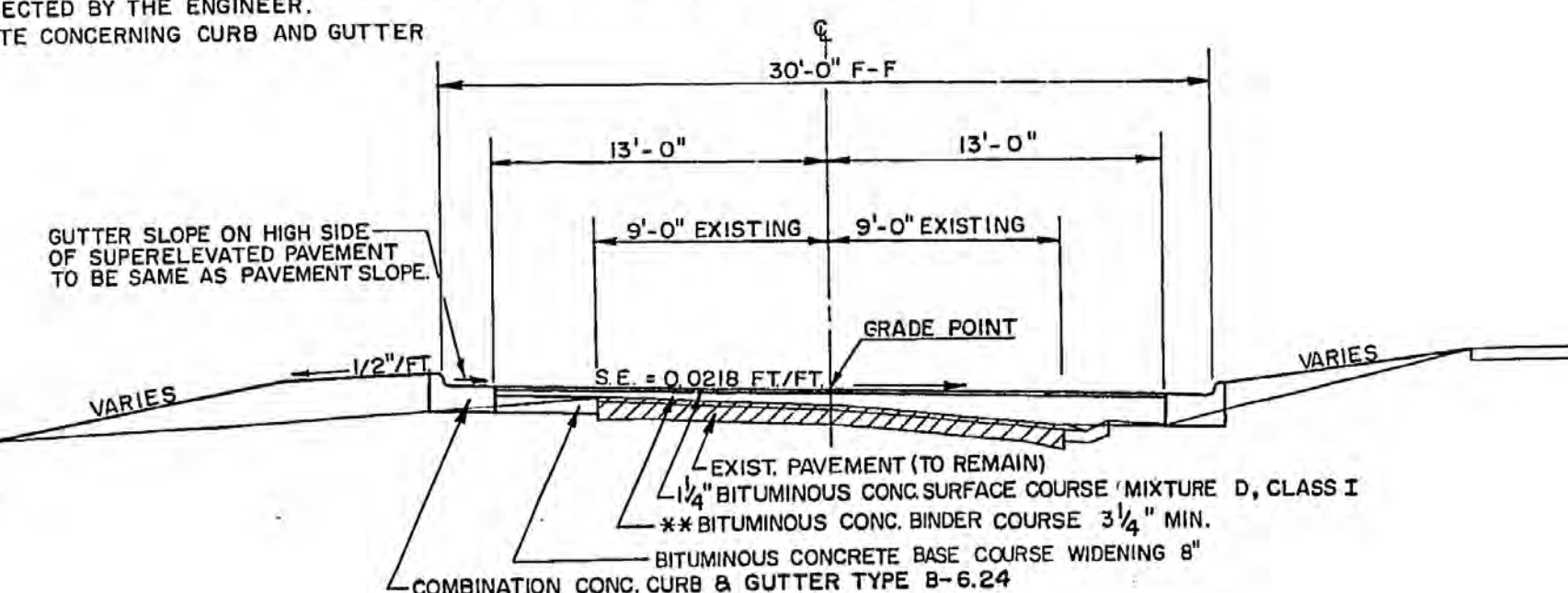
* NOTE - LEFT SIDE ONLY
STATION 48+00 - 49+00
PAVEMENT AND PARKING LANE TRANSITION TO 1/2"/FT.
STATION 49+00 - 50+50
PAVEMENT AND PARKING LANE AT CROSSLOPE OF 1/2"/FT.
STATION 50+50 - 51+18
PAVEMENT AND PARKING LANE TRANSITION TO CROSSLOPE
AS SHOWN

TYPICAL SECTION
STA. 46+23 TO STA. 51+25

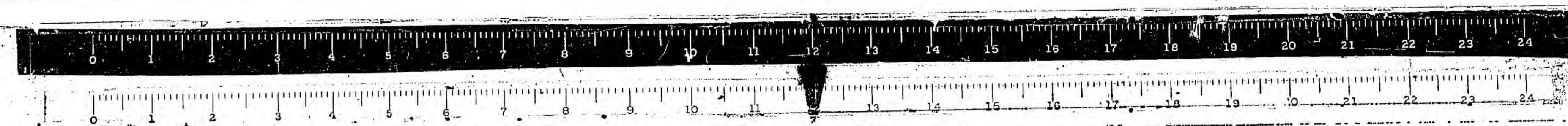


**NOTE:
AT LOCATIONS WHERE BITUMINOUS CONCRETE BINDER COURSE IS CONSTRUCTED OUTSIDE THE EXISTING EDGE OF PAVEMENT AND FUNCTIONS AS A BASE, THE MINIMUM THICKNESS SHALL BE 1 1/4".
THE MAXIMUM THICKNESS OF EACH LIFT OF BINDER COURSE SHALL BE AS DIRECTED BY THE ENGINEER.
SEE GENERAL NOTE CONCERNING CURB AND GUTTER "T" DIMENSION.

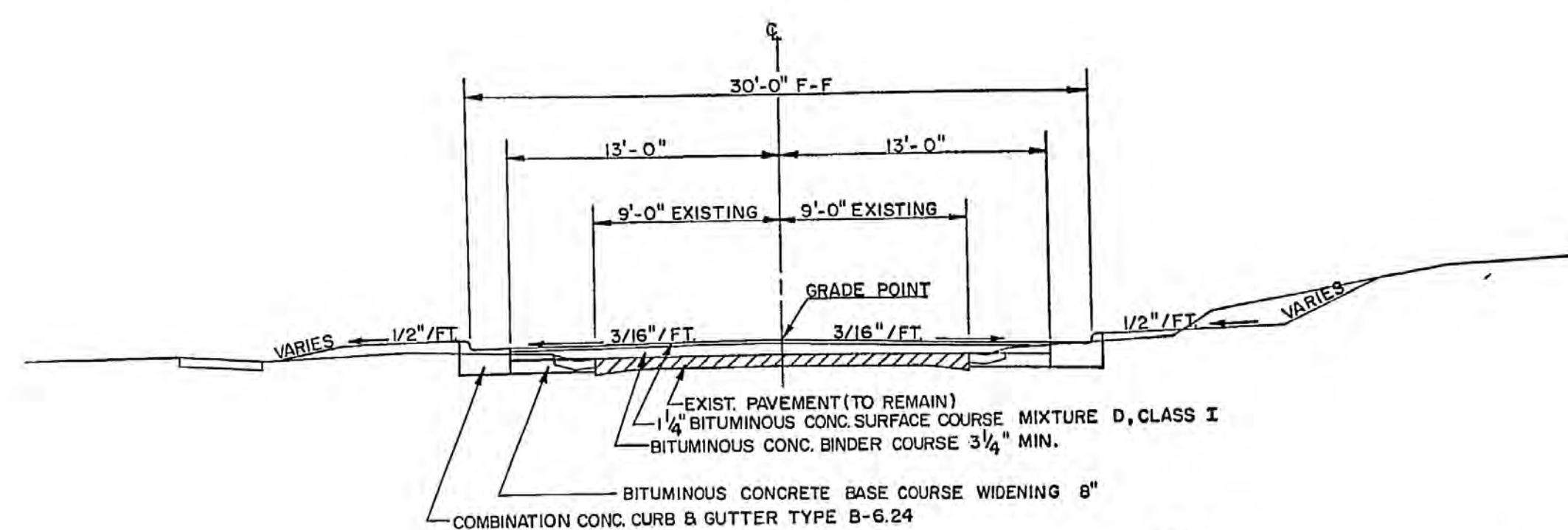
TYPICAL SECTION
STA. 51+25 TO STA. 52+19.0



TYPICAL SECTION
STA. 52+63.8 TO STA. 56+99.1
SUPERELEVATION TRANSITION STA. 52+63.8 TO STA. 53+63.8
STA. 56+00.8 (BK) TO STA. 56+99.1 (AH.)

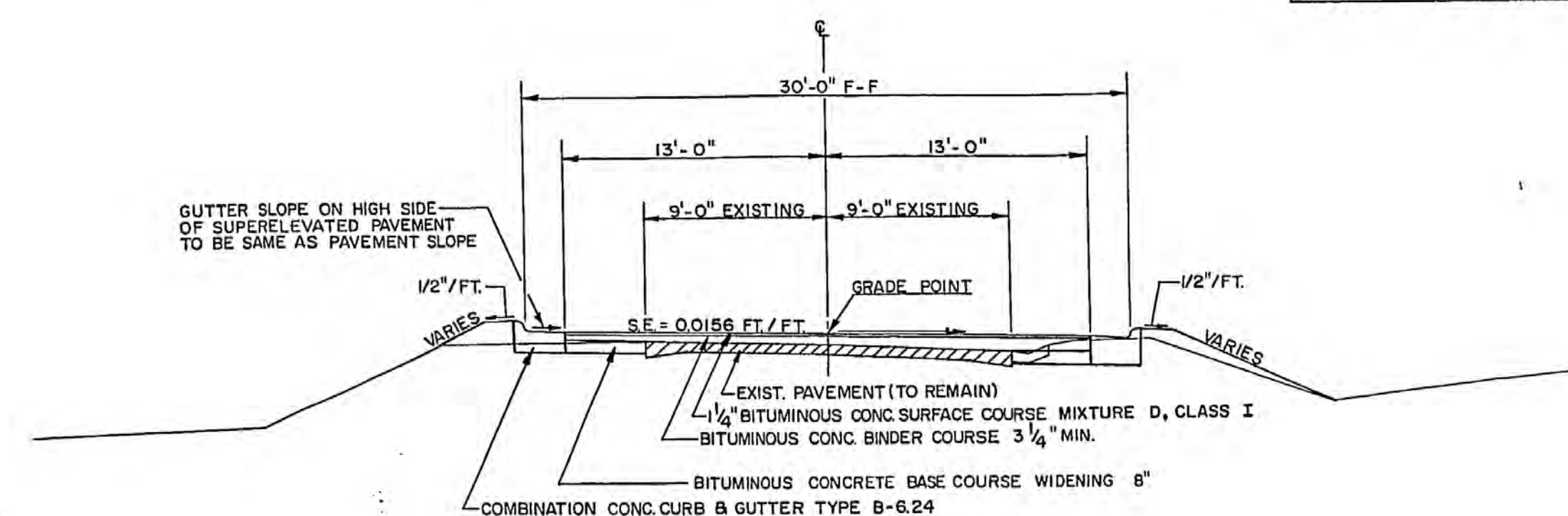


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 885	104 (W.R.S.)	UNION	146	3
ILLINOIS	PROJECT	RF-1611		

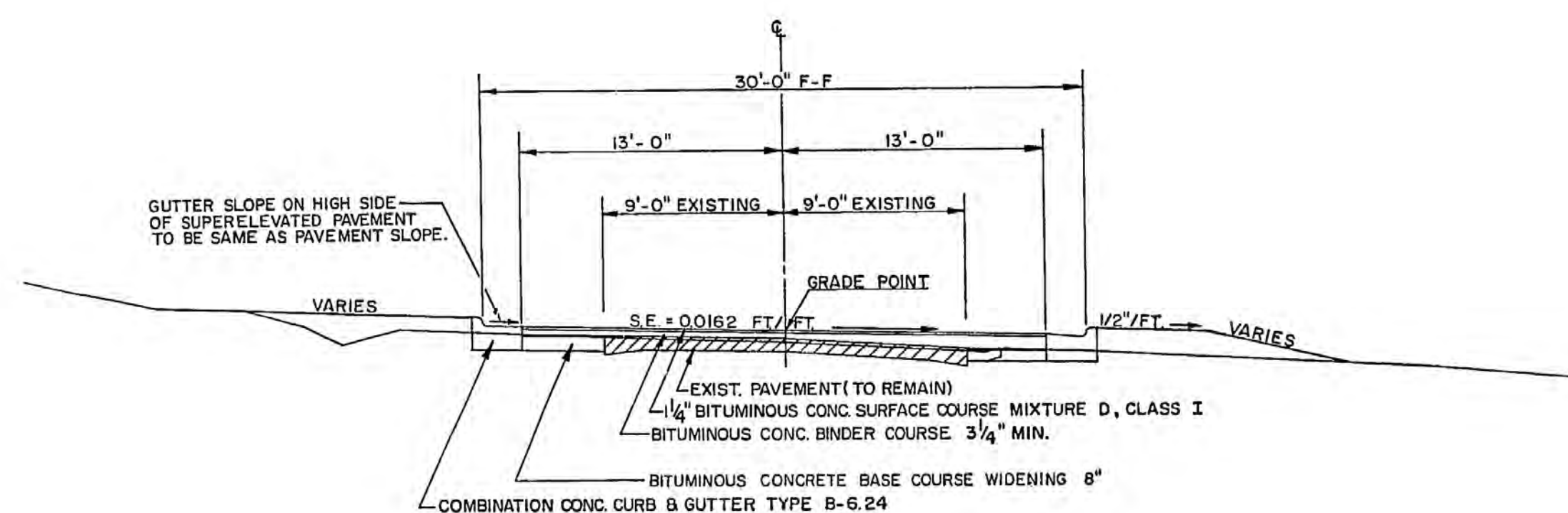


TYPICAL SECTION
STA. 52+19.0 TO STA. 52+63.8
STA. 56+99.1 TO STA. 67+37.8
STA. 76+59.0 TO STA. 90+10.8
STA. 99+64.2 TO STA. 101+71.0

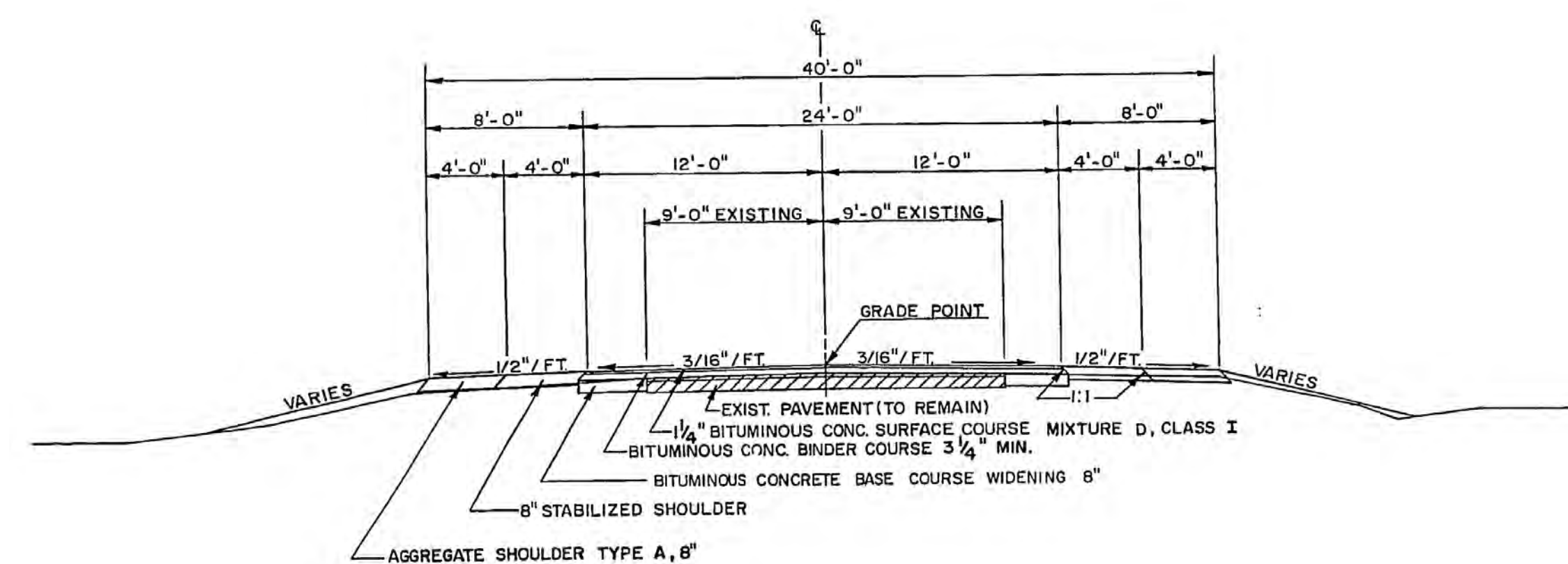
NOTE:
BASE COURSE MATERIAL ON THE RIGHT
SIDE FROM STATION 52+19.0 TO STATION
52+63.8 IS BITUMINOUS CONCRETE
BINDER COURSE.



TYPICAL SECTION
STA. 90+10.8 TO STA. 99+64.2
SUPERELEVATION TRANSITION STA. 90+10.8 TO STA. 91+10.8
STA. 98+64.2 TO STA. 99+64.2



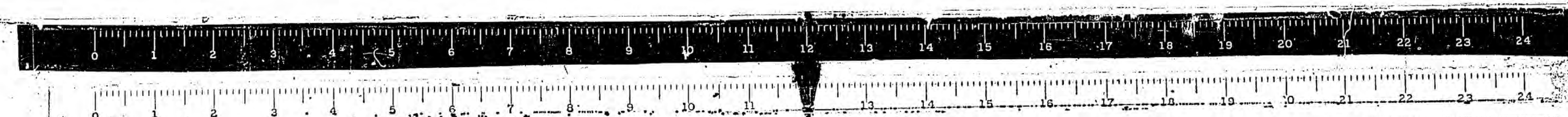
TYPICAL SECTION
STA. 67+37.8 TO STA. 76+59.0
SUPERELEVATION TRANSITION STA. 67+37.8 TO STA. 68+37.8
STA. 75+59.0 TO STA. 76+59.0



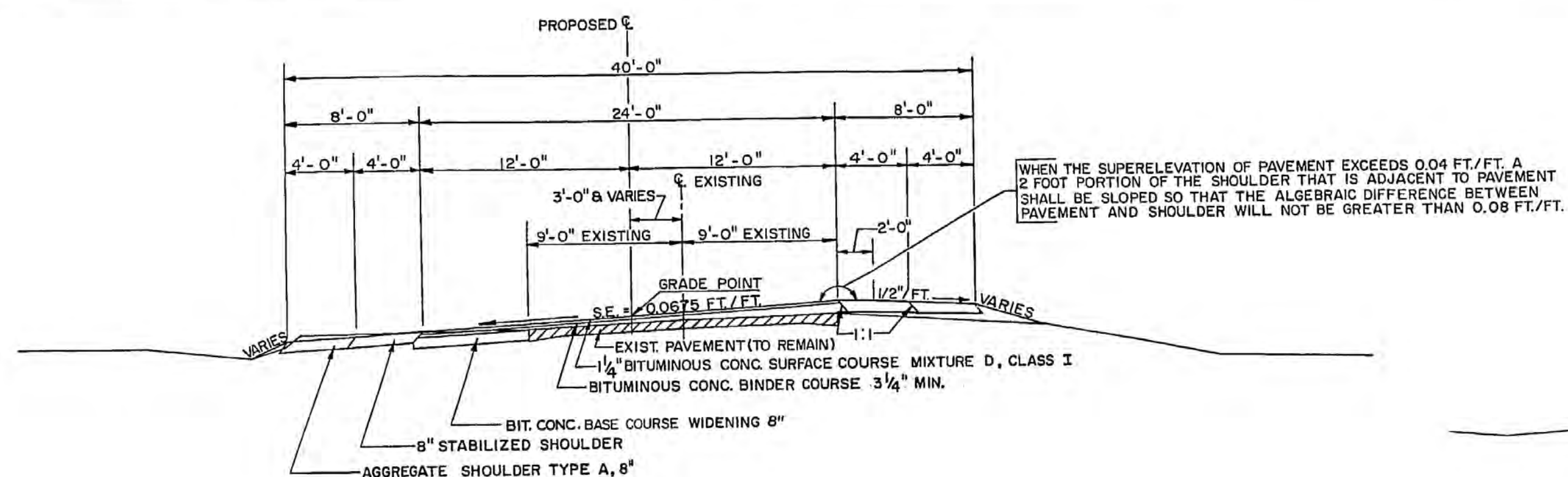
TYPICAL SECTION
STA. 101+71 TO STA. 119+88.1
STA. 142+75 TO STA. 154+50
STA. 157+50 TO STA. 160+77.1
STA. 161+30.9 TO STA. 166+59.04

BRIDGE SEC. 104 BY
STA. 160+77.1 TO STA. 161+30.9

NOTE:
SEE SHEET NO. 83 FOR DETAILS OF
WIDENING & TRANSITIONS FROM
STA. 119+31.19 TO STA. 139+64.12

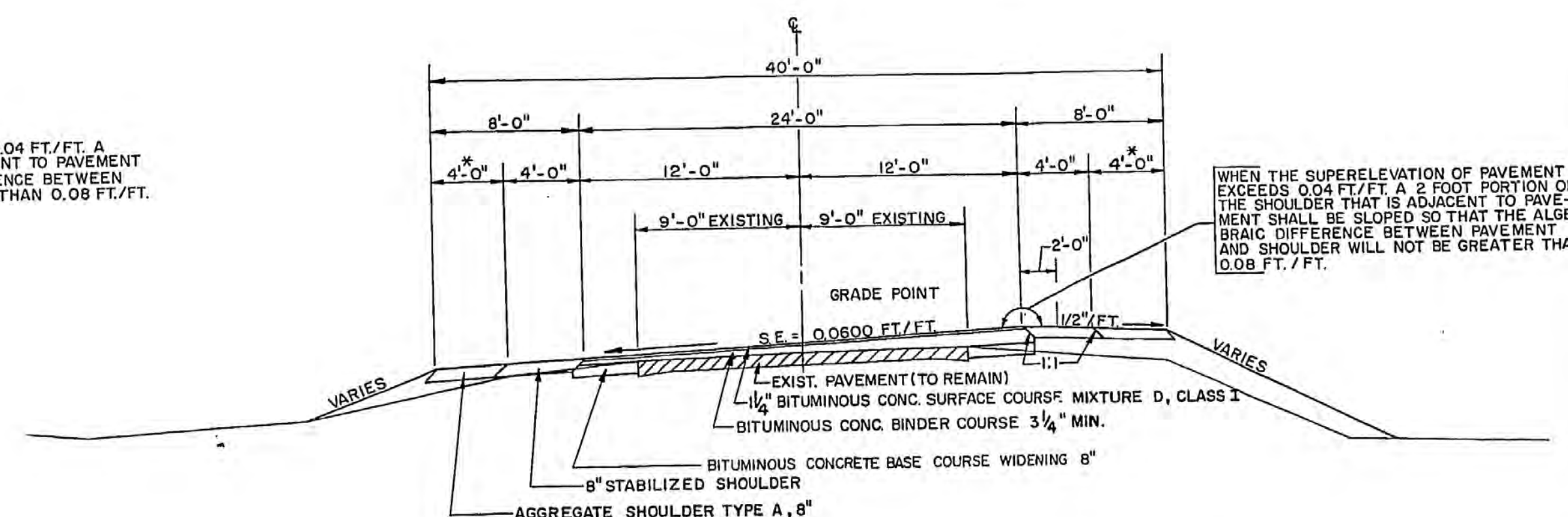


RTE.	SECTION	COUNTY	TOTAL SHEET
F.A. 885	104 (W,RS)	UNION	146
ILLINOIS	PROJECT	RF-181	1



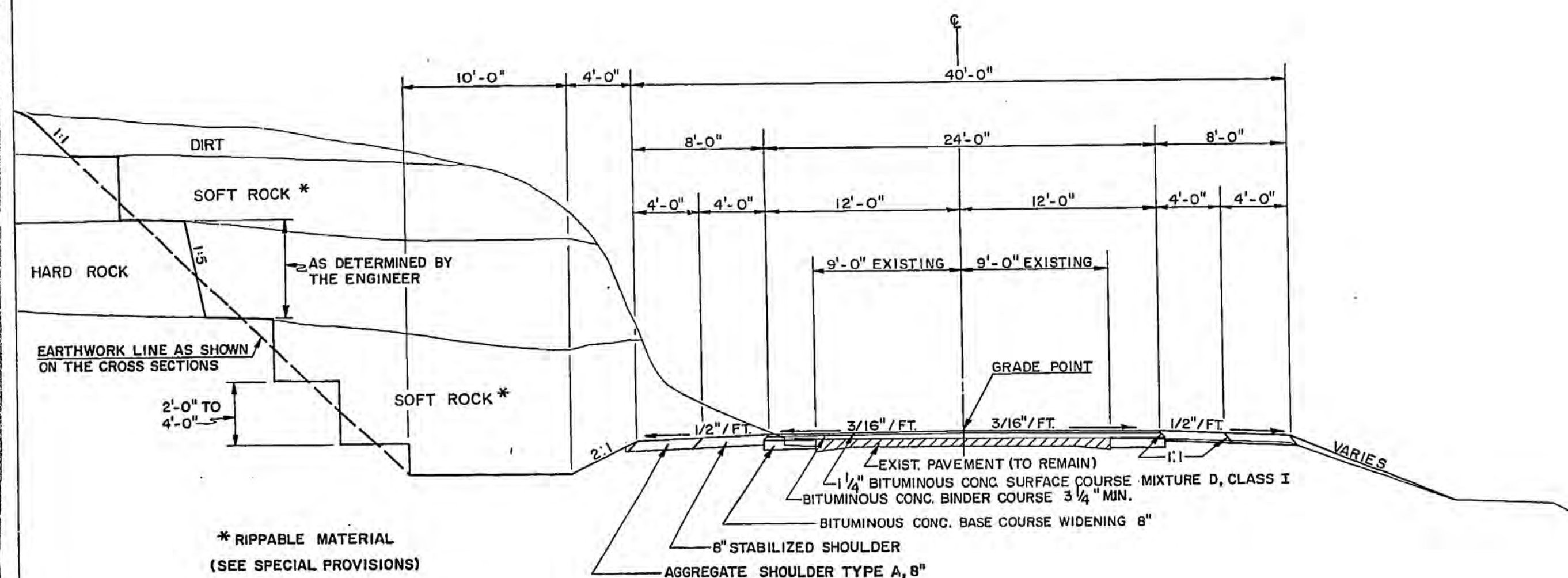
TYPICAL SECTION
STA. 119+88.1 TO STA. 139+07.12
SUPERELEVATION TRANSITION STA. 119+88 TO STA. 121+71
STA. 137+20.7(BK) TO STA. 139+07.12 (AH.)

NOTE:
SEE SHEET NO. 83 FOR DETAILS OF
WIDENING & TRANSITIONS FROM
STA. 119+31.10 TO STA. 139+64.12

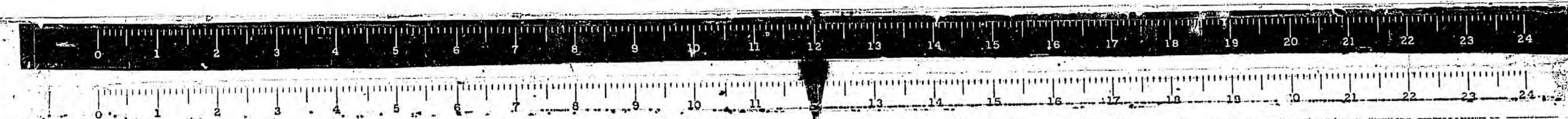


TYPICAL SECTION
STA. 166+59.04 TO STA. 180+52
SUPERELEVATION TRANSITION STA. 166+59.04 TO STA. 168+34.04

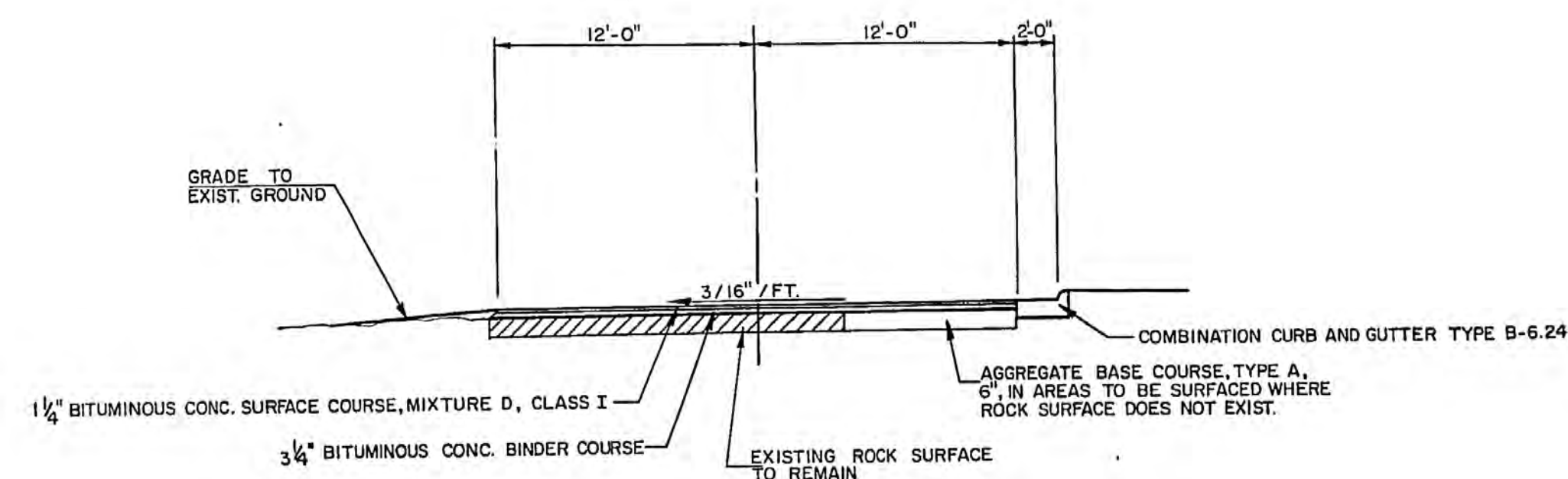
* NOTE:
TRANSITION AGGREGATE SHOULDER WIDTH IN
THE LAST 50' TO MATCH EXISTING SHOULDER
AT STA. 180+52.



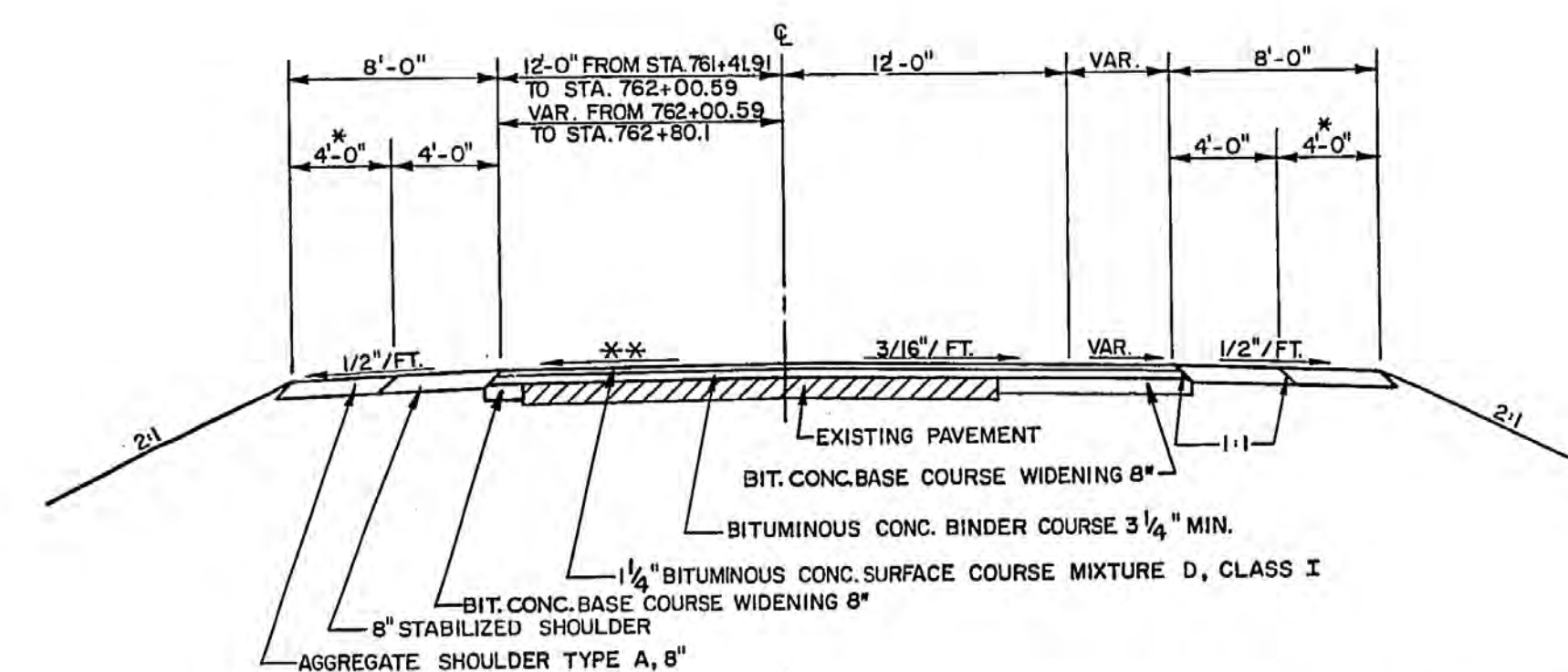
TYPICAL SECTION
STA. 139+07.12 TO STA. 142+75
STA. 154+50 TO STA. 157+50



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.885	104(W,RS)	UNION	148	5
F.H.W.A. REG. 4	ILLINOIS PROJECT	RF-161		



TYPICAL SECTION
WILLARDS FERRY RD.
FOR PLAN SEE SHEETS 25 AND 26



* NOTE:
TRANSITION SHOULDER WIDTH TO MATCH
EXISTING SHOULDER FROM STA. 761+41.91
TO STA. 761+00

* * - 3/16" / FT. FROM STA. 761+40 TO STA. 762+03
VARIABLE SLOPE FROM STA. 762+03 TO STA. 762+80.1

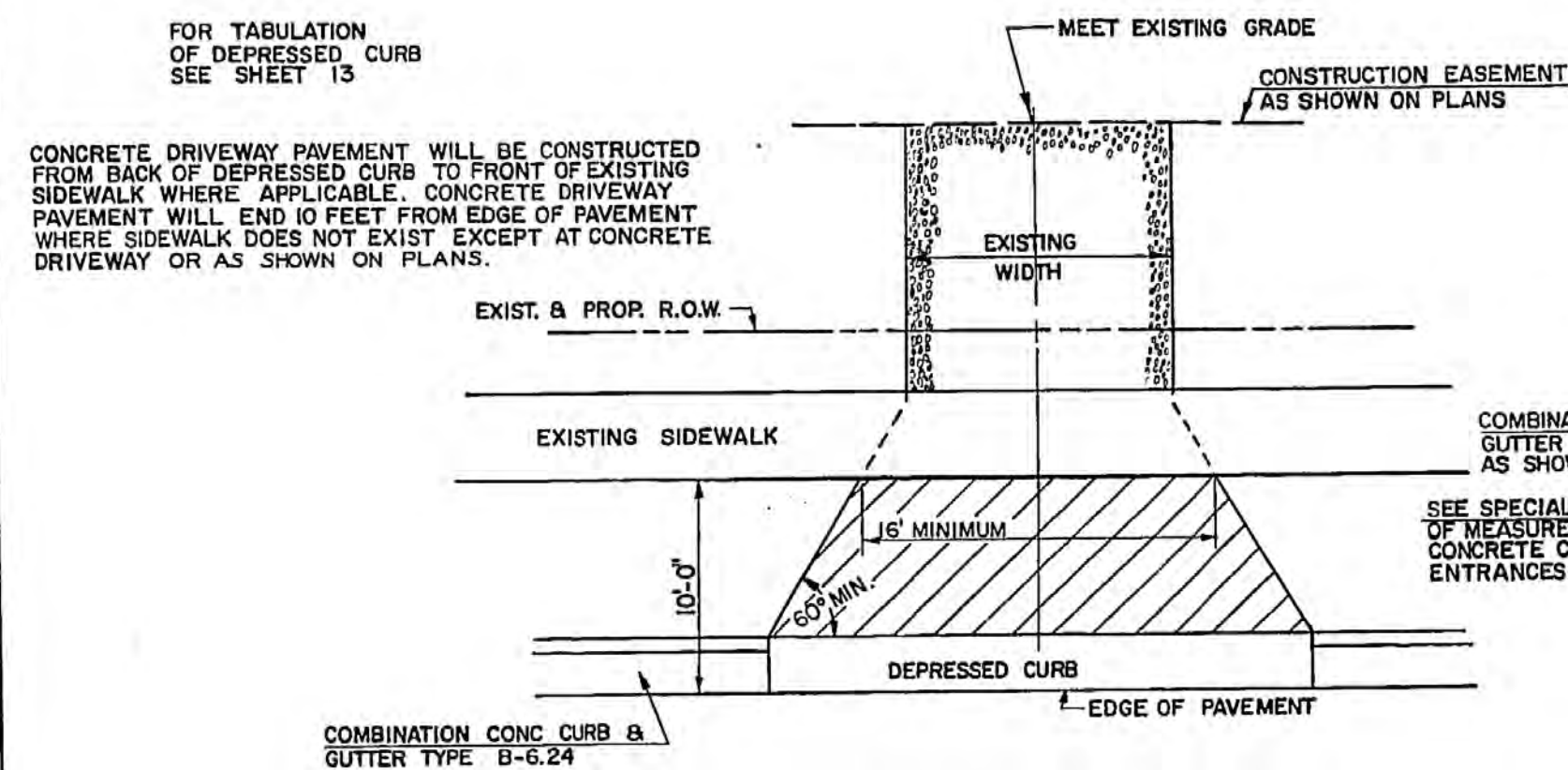
TYPICAL SECTION
ILL. RTE. 127
STA. 761+00 TO STA. 762+80.1

Rev. 2-10-77

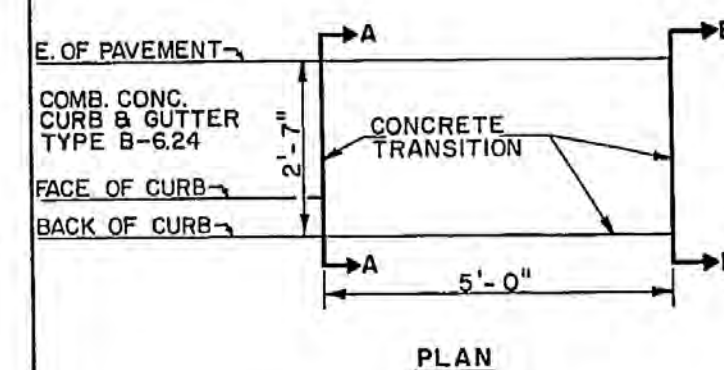


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 685	04WRS	UNION	146	6
FHWA. REG. 4 ILLINOIS PROJECT RF-161 ()				

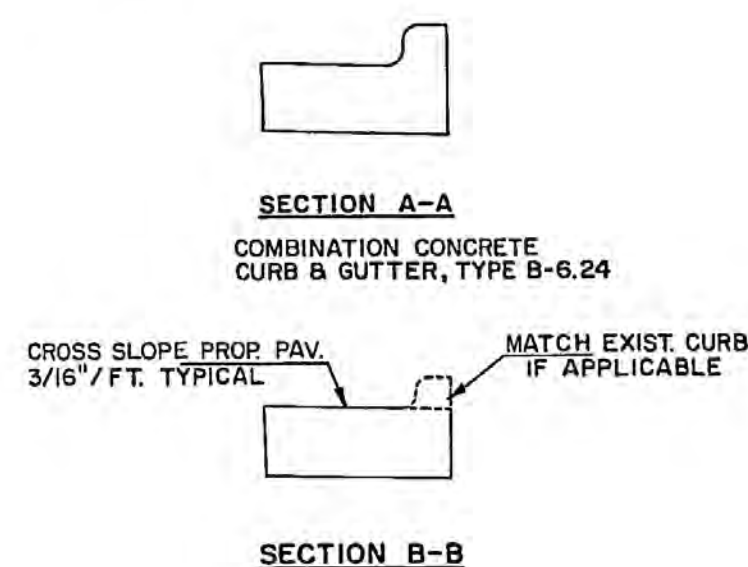
NOTE:
TEMPORARY RUNOFF RAMPS WILL BE REQUIRED BEHIND DEPRESSED CURB WHEN DEPRESSED CURB IS HIGHER THAN EXISTING ENTRANCE.
SEE SPECIAL PROVISIONS FOR DETAILED REQUIREMENTS.



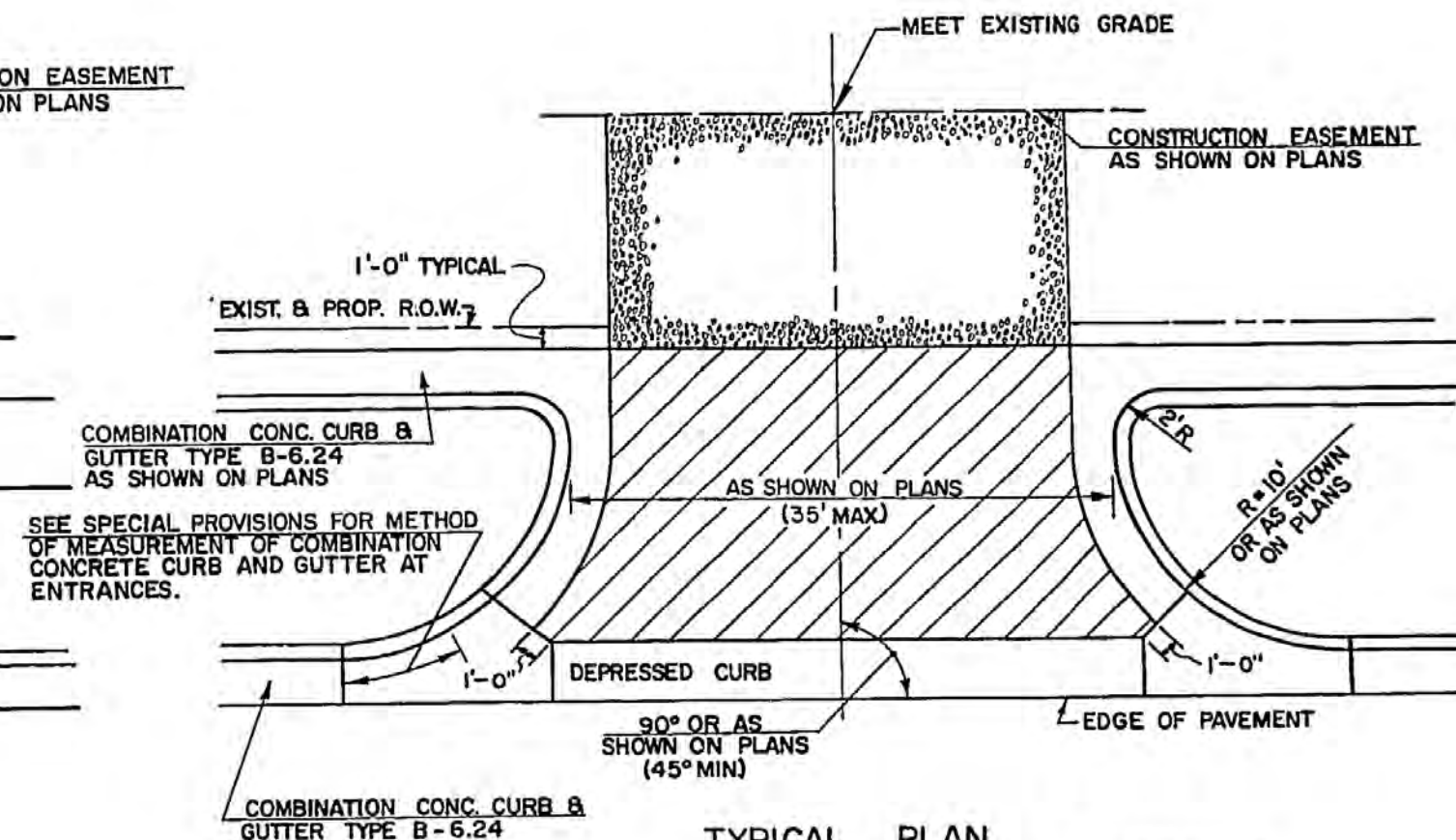
TYPICAL PLAN
DRIVEWAY PAVEMENT AT PRIVATE ENTRANCE



NOTE:
CURB & GUTTER TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24.



DETAILS
CURB & GUTTER TRANSITION

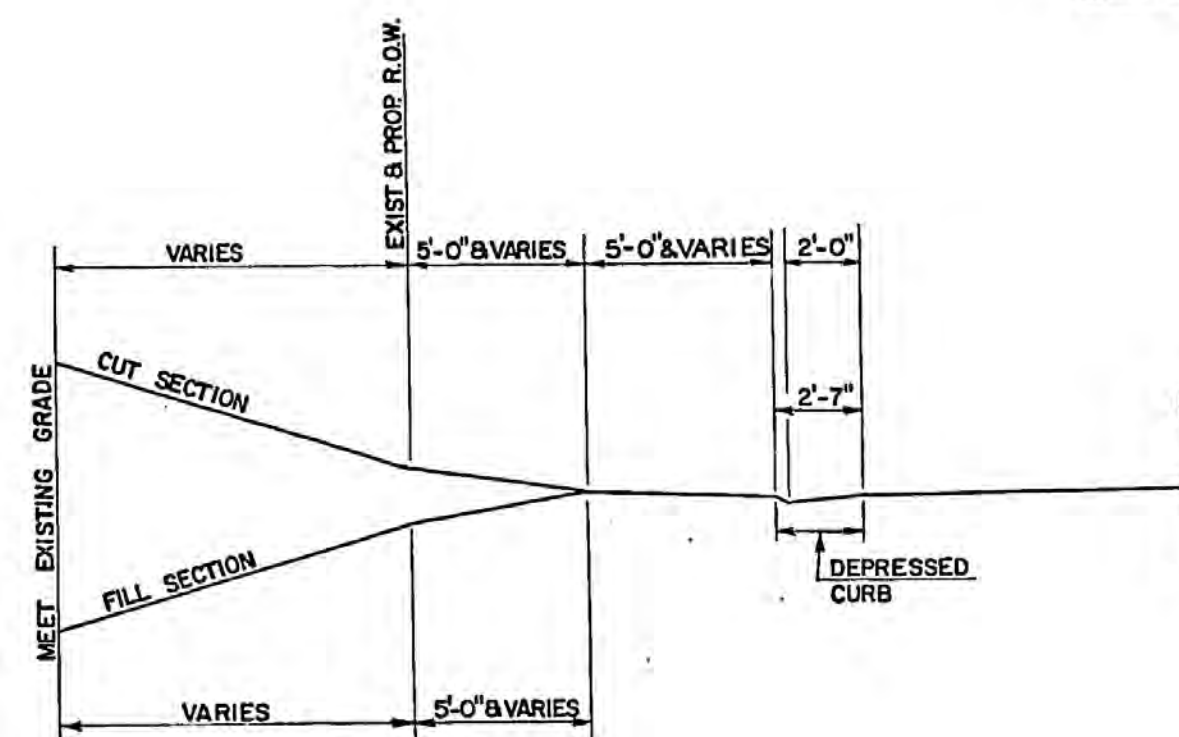


TYPICAL PLAN
DRIVEWAY PAVEMENT AT COMMERCIAL ENTRANCE

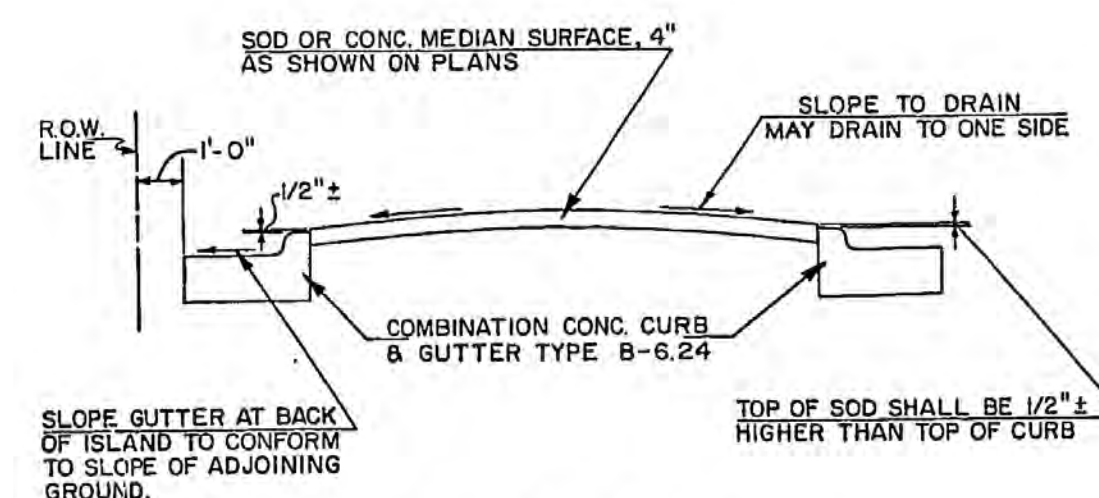
PC. DRIVEWAY PAVEMENT (6") FOR PRIVATE ENTRANCE
PC. DRIVEWAY PAVEMENT (7") FOR COMMERCIAL ENTRANCE

SIDE STREET PAVEMENT AS NOTED

- APPROXIMATE REPLACEMENT IN KIND AS FOLLOWS:
- (1) UNPAVED (EARTH, GRAVEL, STONE, ETC.)-REPLACE WITH AGGREGATE SURFACE COURSE TYPE A - 6" THICK PRIVATE ENTRANCE 8" THICK COMMERCIAL ENTRANCE
 - (2) BITUMINOUS PAVING - REPLACE WITH BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE D, CLASS I, 2" THICK AGGREGATE BASE COURSE TYPE A, 6" THICK.
 - (3) P.C.C. PAVING - REPLACE WITH P.C.C. DRIVEWAY PAVEMENT (6") FOR PRIVATE ENTRANCE REPLACE WITH P.C.C. DRIVEWAY PAVEMENT (7") FOR COMMERCIAL ENTRANCE

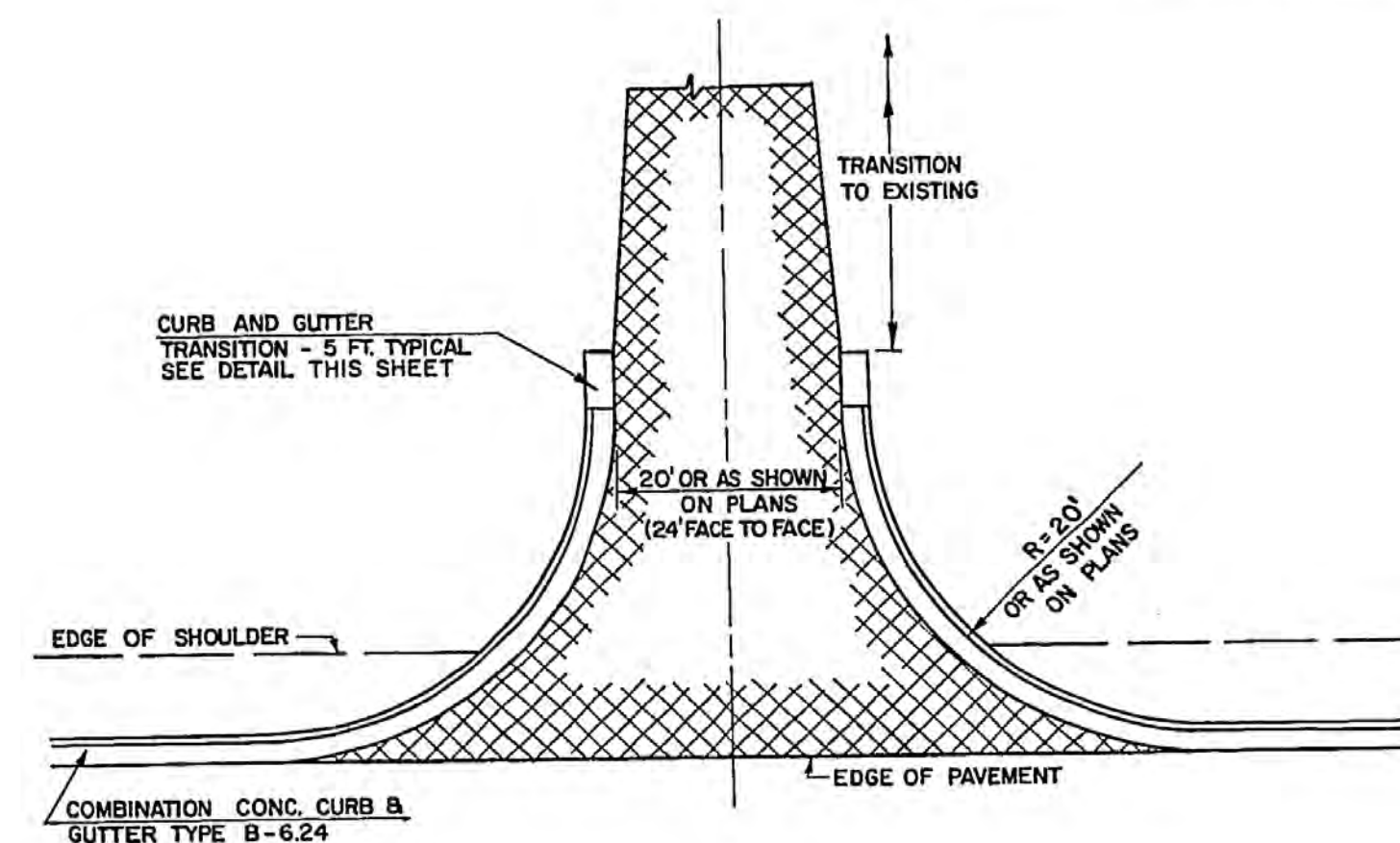


DRIVEWAY GRADES
PRIVATE AND COMMERCIAL ENTRANCES
MAXIMUM BREAK IN GRADE TO BE 6%



TYPICAL DETAIL
URBAN TRAFFIC ISLAND

NOTE:
THE ISLAND IN THE INTERSECTION OF ILLINOIS ROUTE 146 AND ILLINOIS ROUTE 127 SHALL CONFORM TO THIS DETAIL, WITH CONC. MEDIAN SURFACE, 4". THIS ISLAND SHALL HAVE M-6.06 COMBINATION CONC. CURB & GUTTER.



TYPICAL PLAN
PAVEMENT AT SIDE STREET INTERSECTIONS

1 1/4" BIT. CONC. SURFACE COURSE, MIXTURE D, CLASS I
BIT. CONC. BINDER COURSE 1 1/4" MINIMUM THICKNESS
(ALSO USED TO CORRECT GRADE AS REQUIRED)

ILLINOIS STREET SOUTH, 0+20-0+47
ILLINOIS STREET NORTH, 0+20-0+47
LOCUST STREET SOUTH, 0+13-0+39.1
LOCUST STREET NORTH, 0+20-0+47

1 1/4" BIT. CONC. SURFACE COURSE, MIXTURE D, CLASS I
3 1/4" BIT. CONC. BINDER COURSE
BIT. CONC. BASE COURSE WIDENING, 8"

MARKET STREET, 1+42.02-2+26.52
THIRD STREET, 0+13-0+60
ENTRANCE TO WILLARDS FERRY ROAD
LEFT OF STA. 73+10.93, 0+13-0+34.24

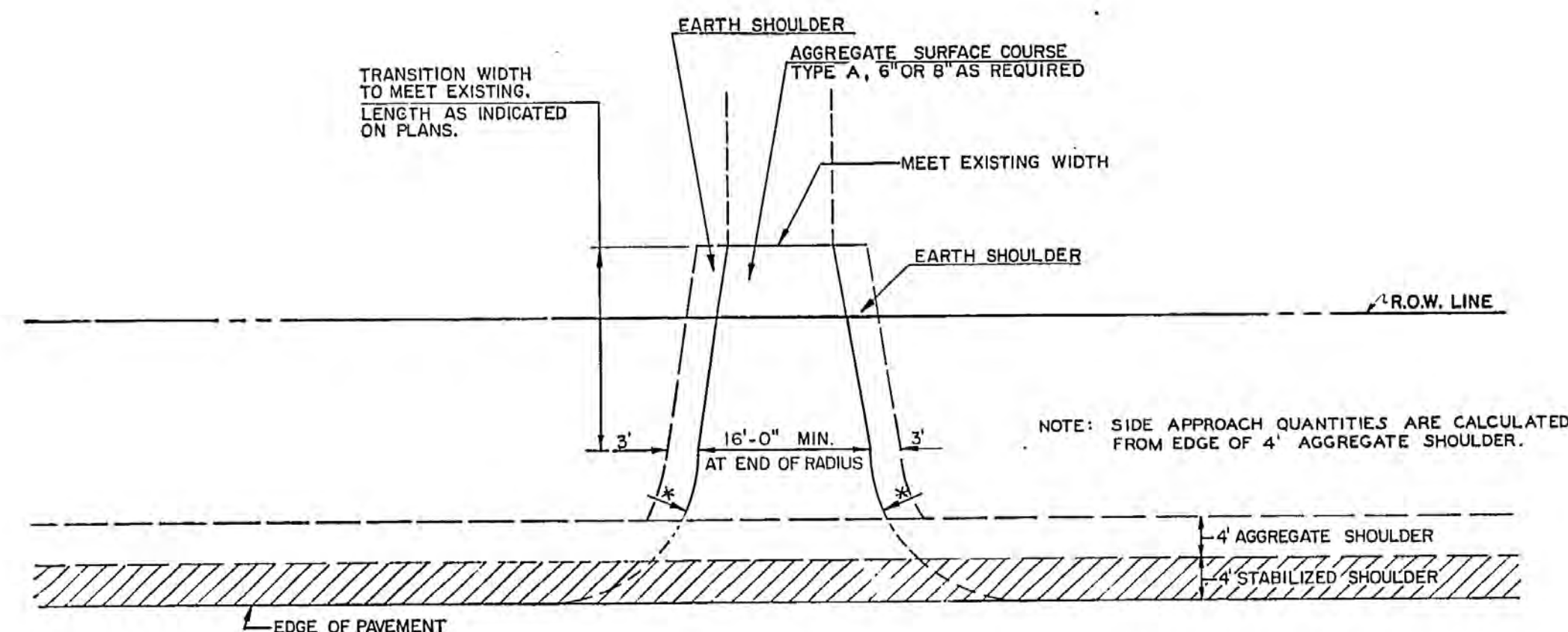
1 1/4" BIT. CONC. SURFACE COURSE, MIXTURE D, CLASS I
BIT. CONC. BINDER COURSE, THICKNESS AS REQUIRED

ILLINOIS STREET SOUTH, 0+47-0+52
ILLINOIS STREET NORTH, 0+47-0+52
LOCUST STREET SOUTH, 0+39.1-1+00
LOCUST STREET NORTH, 0+47-0+55
ELM STREET SOUTH, 0+13.2-0+54
ELM STREET NORTH, 0+13.2-0+50
COOK AVENUE, 0+13.6-0+50
MARKET STREET, 2+26.52-2+44.57
MISSISSIPPI STREET, 0+13-0+90
BERRYVILLE ROAD, 0+13-0+55

NOT TO SCALE

TYPICAL SECTIONS URBAN ENTRANCES & SIDE STREETS

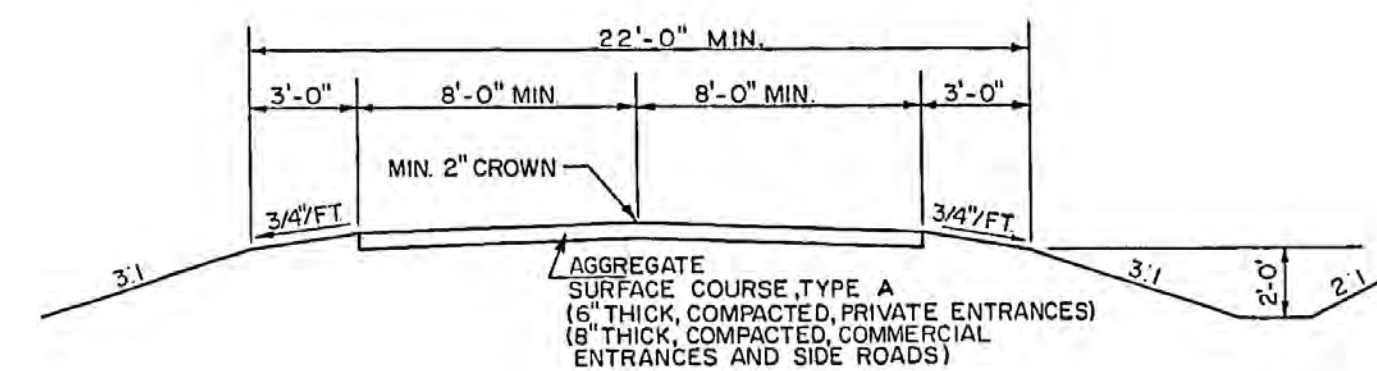
FA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 885	104 (W, RS)	UNION	146	7
ILLINOIS PROJECT R.F. - 161.1				



DETAIL
FOR RURAL-TYPE UNPAVED ROADS & ENTRANCES

NOTE: SEE SPECIAL PROVISIONS FOR RUNOFF
RAMPS AT SIDE APPROACHES.

* 15' R. OR AS SHOWN
ON THE PLANS.



TYPICAL SECTION
FOR RURAL-TYPE UNPAVED ROADS & ENTRANCES

PREPARED BY: Harry R. [Signature]
District Design Engineer

EXAMINED BY: Sam [Signature]
District Construction Engineer

EXAMINED BY: Paul L. [Signature]
District Maintenance Engineer

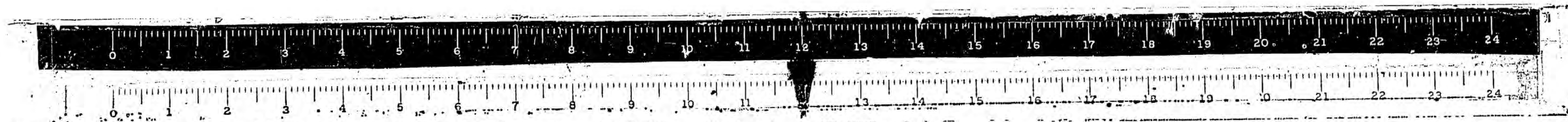
EXAMINED BY: A. E. [Signature]
District Traffic Engineer

EXAMINED BY: R. M. [Signature]
District Materials Engineer

EXAMINED BY: [Signature]
District Land Acquisition Engineer

APPROVED Jan. 4 1977
Date J. F. Newton
District Engineer

TYPICAL SECTIONS - RURAL ENTRANCES AND SIDE ROADS



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.885	104WRS	UNION	146	8
F.H.W. A. REG. 4 ILLINOIS PROJECT RF-1611				

GENERAL NOTES

THE CENTERLINE OF CONSTRUCTION IN SOME INSTANCES VARIES FROM THE TRANSITLINE. FOR CENTERLINE OF CONSTRUCTION, SEE STATION CROSS SECTIONS.

MULCHING OF SEEDED AREAS IN ACCORDANCE WITH THE FOLLOWING METHODS WILL BE REQUIRED:

FOR ALL CLASS II SEEDING WHERE THE SEEDED SLOPES ARE 3:1 OR GENTLER, THE MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE AND IN ACCORDANCE WITH ALL THE REQUIREMENTS OF METHOD 3 OF SECTION 643 OF THE STANDARD SPECIFICATIONS.

FOR ALL CLASS III SEEDING WHERE THE SEEDED SLOPES ARE STEEPER THAN 3:1 THE MULCH SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE IN ACCORDANCE WITH ALL THE REQUIREMENTS OF METHOD 1 OF SECTION 643 OF THE STANDARD SPECIFICATIONS, AND A MULCH NET AS DESCRIBED IN THE SPECIAL PROVISIONS SHALL BE USED TO HOLD THE MULCH IN PLACE AGAINST THE SEEDED SOIL.

FOR ALL CLASS III SEEDING THE MULCH SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE AND IN ACCORDANCE WITH ALL THE REQUIREMENTS OF METHOD 1 OF SECTION 643 OF THE STANDARD SPECIFICATIONS.

TREES SHALL BE PRESERVED THROUGHOUT THIS SECTION AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.

TRIM EDGES OF EXISTING BITUMINOUS CONCRETE SURFACE FLUSH WITH EXISTING CONCRETE PAVEMENT PRIOR TO CONSTRUCTING NEW BASE COURSE WIDENING.

CHANGES IN THE VERTICAL OR HORIZONTAL DIMENSIONS OF GUTTERS, CURBS OR CURBS AND GUTTERS, WHERE TRANSITIONS FROM ONE TYPE TO ANOTHER ARE SHOWN ON THE PLANS, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR THE TYPE DESIGNATED IN THE SCHEDULE ON THE PLANS.

ADDITIONAL WIDTH OF GUTTER FLAG, AT NUMEROUS LOCATIONS AS INDICATED ON THE PLANS, SHALL BE POURED MONOLITHIC WITH THE NORMAL GUTTER FLAG AND WILL NOT BE MEASURED NOR PAID FOR SEPARATELY.

FORMS FOR CONCRETE CURB AND COMBINATION CONCRETE CURB AND GUTTER SHALL BE OF METAL ONLY, EXCEPT THAT WOOD FORMS MAY BE USED ON SHORT RADIUS CURVES.

ALL PIPE CULVERTS DESIGNATED ON THE PLANS (RCCP) SHALL BE "REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE" CONFORMING TO THE REQUIREMENTS OF ARTICLE 709.03 OF THE STANDARD SPECIFICATIONS.

ALL STORM SEWERS SHALL BE "REINFORCED CONCRETE CULVERT, STORM DRAIN AND SEWER PIPE" CONFORMING TO THE REQUIREMENTS OF SECTION 605 OF THE STANDARD SPECIFICATIONS.

AT ALL LOCATIONS WHERE A HIGH TYPE PAVEMENT JOINS AN EXISTING HIGH TYPE PAVEMENT, A SAWED JOINT SHALL BE CONSTRUCTED. THE COST OF THIS JOINT WILL BE INCIDENTAL TO THE TYPE OF PAVEMENT BEING CONSTRUCTED.

PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE OF CURB, AND MEDIAN SURFACE.

IF SO DIRECTED BY THE ENGINEER, DITCHES ADJACENT TO EMBANKMENTS SHALL BE CONSTRUCTED PRIOR TO STARTING THE CONSTRUCTION OF THE EMBANKMENT FILL.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

EXCAVATION REQUIRED IN THE PERFORMANCE OF WORK DESCRIBED IN SECTION 616 OF THE STANDARD SPECIFICATIONS IS INCLUDED IN THE EARTHWORK BALANCES AS EARTH EXCAVATION.

LEVELING BINDER (MACHINE METHOD) SHALL BE USED TO CORRECT SAGS AND IRREGULARITIES IN THE EXISTING PAVEMENT AT LOCATIONS AS DIRECTED BY THE ENGINEER. IT IS NOT THE INTENTION THAT LEVELING BINDER (MACHINE METHOD) BE USED CONTINUOUSLY THROUGHOUT THE JOB. THE QUANTITY SHOWN IN THE PLANS IS AN ESTIMATE ONLY.

THE "L" DIMENSION ON ALL CURB AND GUTTER SHALL BE A MINIMUM OF 9" OR AS DIRECTED BY THE ENGINEER.

ON ALL SUPERELEVATED CURVES WHERE THE PROPOSED SUPERELEVATION IS TO BE STEEPER THAN THE EXISTING SUPERELEVATION, THE PROPOSED BASE COURSE WIDENING SHALL BE CONSTRUCTED WITH A SLOPE CONFORMING TO THE EXISTING RATE OF SUPERELEVATION ON THE HIGH SIDE OF THE PAVEMENT AND THE RATE OF THE PROPOSED SUPERELEVATION ON THE LOW SIDE OF THE PAVEMENT. ON SUPERELEVATED CURVES WHERE THE PROPOSED SUPERELEVATION IS TO BE FLATTER THAN THE EXISTING SUPERELEVATION, THE PROPOSED BASE COURSE WIDENING SHALL BE CONSTRUCTED WITH A SLOPE CONFORMING TO THE EXISTING RATE OF SUPERELEVATION ON THE LOW SIDE OF THE PAVEMENT AND THE RATE OF THE PROPOSED SUPERELEVATION ON THE HIGH SIDE OF THE PAVEMENT.

PATCHING OF EXISTING PAVEMENT BEFORE RESURFACING IN ACCORDANCE WITH SECTION 620 OF THE STANDARD SPECIFICATIONS WILL BE REQUIRED AS DIRECTED BY THE ENGINEER. THE QUANTITIES SHOWN IN THE PLANS ARE ESTIMATES ONLY.

EXISTING PAVEMENT, DRIVEWAY PAVEMENT, CURB, SIDEWALK, BITUMINOUS CONCRETE AND GUTTER WHICH ARE TO BE REMOVED DURING CONSTRUCTION ARE NOT GENERALLY NOTED ON THE PLANS BUT ARE TABULATED ON SHEET 14.

OPENINGS SUITABLE FOR THE PLACEMENT OF POLES OR POSTS WILL BE CONSTRUCTED IN THE CONCRETE MEDIAN SURFACE OF THE FOUR PROPOSED ISLANDS, STATION 43+35 TO STATION 46+10, ACCORDING TO THE FOLLOWING REQUIREMENTS:

- 1) LEAVE A 12" DIAMETER HOLE FOR REPLACEMENT OF ALL 6" x 6" WOOD POSTS.
- 2) THE ENGINEER WILL CONTACT THE DISTRICT BUREAU OF TRAFFIC AND THEY WILL RESET, OR SUPERVISE THE RESETTING OF, ALL "STOP" SIGNS AT THE TIME THE MEDIAN SURFACE IS POURED. THE CONTRACTOR SHALL COOPERATE WITH THE BUREAU OF TRAFFIC IN THIS ACTIVITY.
- 3) THE ENGINEER WILL CONTACT THE CITY OF JONESBORO AND DETERMINE THEIR PLANS FOR PLACEMENT OF POLES FOR DECORATIVE LIGHTS. SLEEVES SHALL BE PLACED IN THE CONCRETE MEDIAN SURFACE TO ACCOMMODATE THE PLANNED LOCATION AND SIZE OF THESE POLES.

AGGREGATE SURFACE COURSE TYPE B SHALL BE USED AS DIRECTED BY THE ENGINEER FOR MAINTENANCE PURPOSES. THE GRADATION SHALL BE CA1, CA5 OR CA6 AS DIRECTED BY THE ENGINEER. A QUANTITY OF 100 TONS HAS BEEN ESTIMATED FOR THIS WORK.

THE FOLLOWING CONSTANTS WERE USED IN THE CALCULATION OF QUANTITIES FOR THIS PROJECT:

BITUMINOUS CONCRETE SURFACE COURSE, 1 1/4" THICK	- 0.07 TONS PER SQUARE YARD
BITUMINOUS CONCRETE BINDER COURSE, 3 1/4" THICK	- 0.1788 TONS PER SQUARE YARD
LEVELLING BINDER	- 0.0412 TONS PER SQUARE YARD
BITUMINOUS MATERIALS (PRIME COAT)	
EXISTING BITUMINOUS BASE	- 0.05 GALLONS PER SQUARE YARD
CONCRETE PAVEMENT	- 0.10 GALLONS PER SQUARE YARD
AGGREGATE BASE	- 0.30 GALLONS PER SQUARE YARD
AGGREGATE (PRIME COAT)	
BITUMINOUS AND CONCRETE SURFACE	- 3 POUNDS PER SQUARE YARD
AGGREGATE SURFACE	- 5 POUNDS PER SQUARE YARD
NITROGEN FERTILIZER NUTRIENT	- 80 POUNDS PER ACRE OF SEEDING OR SODDING
PHOSPHORUS FERTILIZER NUTRIENT	- 320 POUNDS PER ACRE OF SEEDING OR SODDING
POTASSIUM FERTILIZER NUTRIENT	- 160 POUNDS PER ACRE OF SEEDING OR SODDING
SUPPLEMENTAL WATERING	- 6 GALLONS PER SQUARE YARD OF SODDING (2 APPLICATIONS)
AGRICULTURAL GROUND LIMESTONE	
SODDING AND CLASS II SEEDING	- 2 TONS PER ACRE
CLASS III SEEDING	- 4 TONS PER ACRE

ANY ASPHALT SURFACE ADJACENT TO CURB, CURB AND GUTTER, OR GUTTER REMOVAL SHALL BE SAWED AT THE LINE OF REMOVAL TO PREVENT ANY REMOVAL OF THE ASPHALT SURFACE IN THE TRAFFIC LANE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE REMOVAL ITEM.

WHEREVER IN THESE PLANS, REFERENCE IS MADE TO STABILIZED SHOULDERS, IT SHALL BE INTERPRETED TO BE BITUMINOUS SHOULDERS.

REVISIONS IN THE END TREATMENT FOR STEEL PLATE BEARING GUARD RAIL HAVE BEEN PROVIDED ON THIS IMPROVEMENT. THE REVISIONS ARE REFLECTED IN THE SUMMARY OF QUANTITIES ONLY. FOR DETAILS SEE SHEETS 146A,B,C.

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- 5 TYPICAL SECTIONS, ILLINOIS ROUTE 127 & WILLARDS FERRY ROAD
- 6 DETAILS OF URBAN ENTRANCES AND URBAN TRAFFIC CONTROL ISLANDS
- 7 TABULATION OF SIDE STREET PAVEMENT TREATMENT
- 8 DETAILS OF RURAL ENTRANCES
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- 58-59 STORM SEWER PROFILES - STA. 83+50 TO STA. 94+22
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- 78-81 DETAILS OF STEPS
- 82 PIPE CULVERT SECTIONS, STA. 94+22 (ILL. RTE. 146) AND STA. 762+04 (ILL. RTE. 127)
- 83 PAVEMENT WIDENING TRANSITION DETAILS, STA. 119+31.10 TO STA. 139+64.12 (ILL. RTE. 146)
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- 87 CONCRETE BOX CULVERT EXTENSIONS, STA. 82+02, LEFT AND RIGHT
- 88 CONCRETE BOX CULVERT EXTENSION, STA. 125+06, LEFT SIDE ONLY
- 89-90 CONCRETE BOX CULVERT EXTENSIONS, STA. 138+27.96, LEFT AND RIGHT
- 91 CONCRETE BOX CULVERT EXTENSIONS, STA. 154+16, LEFT AND RIGHT
- 92 CONCRETE BOX CULVERT EXTENSIONS, STA. 173+86.5, LEFT AND RIGHT
- 93-100 BRIDGE WIDENING PLANS, STA. 160+77.7 TO STA. 161+30.3 (SECTION 104 A-BY)
- 101-103 CONCRETE TRIPLE BOX CULVERT EXTENSIONS, STA. 172+28.1 (SECTION 104 A-BY)
- 104-113 R.O.W. PLANS
- 114-146 CROSS SECTIONS
- 146A,B,C TRAFFIC BARRIER TERMINAL DETAILS

STANDARD DRAWINGS

* 1527-7	2222-3	2306-4
1683-3	2230-10 (MOD.)	
1686-3		2309-3
1744-4		2311-5
2113-1	2298-4	2312-5
2116-2	2299-7	
2117-1	2300-1	
2122-7	2302-3	2325-3
2130-4	2303-4	2356
2213-4	2304-4	
2214-4	2305-3	
2217-3	2262-2	
1976		

* ON STD. 1527, VOID THE NOTE "FOR OPTIONAL PRECAST CONCRETE FLAT SLAB TOP REFER TO STANDARD 2354."

LEGEND

THIS PARTIAL LEGEND IS INTENDED TO SUPPLEMENT STANDARD 1686, WHICH IS PART OF AND INCLUDED IN THESE PLANS.

- SODDING
- PROPOSED R.O.W. MARKER
- EXISTING R.O.W. MARKER
- EXISTING PAVEMENT TO REMAIN - CROSS SECTIONS

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GENERAL NOTES, INDEX OF SHEETS AND LEGEND

SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES				ROAD STA. 43+00 TO 51+50.49	ROAD STA. 51+50.49 TO 160+77.1 161+30.9 TO 180+52	BRIDGE STA. 160+77.1 TO 161+30.9 AND 172+28.5	SPECIALTY ITEM			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	NON PART.	(CULV)					
				6706 S20	6706 S20	X081 S30	X028 S30	Y060	Y031 S11	
201001	TREE REMOVAL (6 TO 15 INCH DIAMETER)	IN DIA	65		65					
201002	TREE REMOVAL (OVER 15 INCH DIAMETER)	IN DIA	264		264					
201003	TREE REMOVAL, SPECIAL (6 TO 15 INCH DIAMETER)	IN DIA	14		14					
201004	TREE REMOVAL, SPECIAL (OVER 15 INCH DIAMETER)	IN DIA	512		512					
201005	TREE REMOVAL, ACRES	ACRE	2.4		2.4					
202001	EARTH EXCAVATION	CU YD	7,816	267	7,549					
X04348	EARTH EXCAVATION, SPECIAL	CU YD	11,918		11,918					
203001	CHANNEL EXCAVATION	CU YD	770				770			
210001	TRENCH BACKFILL	CU YD	2,172	268	1,904					
X21901	BITUMINOUS SHOULDERS (8")	SQ YD	7,051		7,051					
215021	AGGREGATE SHOULDERS, TYPE A (8")	SQ YD	6,794		6,794					
301024	AGGREGATE BASE COURSE, TYPE A (6")	SQ YD	157	14	143					
304004	PORTLAND CEMENT CONCRETE BASE COURSE 8"	SQ YD	957		957					
306007	BITUMINOUS CONCRETE BASE COURSE WIDENING, 8 INCHES	SQ YD	10,642		10,642					
402004	AGGREGATE SURFACE COURSE, TYPE B	TON	1,226	100	1,126					
406001	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	3,792	154	3,441					
406003	AGGREGATE (PRIME COAT)	TON	66	3	4					
406004	MIXTURE FOR CRACKS, JOINTS AND FLANGWAYS	TON	5	1	4					
406005	LEVELING BINDER (MACHINE METHOD)	TON	324		324					
406007	BITUMINOUS CONCRETE BINDER COURSE	TON	13,313	2198	10,709					
X40615	BITUMINOUS CONCRETE SURFACE COURSE MIXTURE D, CLASS 1	TON	3,139	178	2,732		29			
501022	CONCRETE REMOVAL	CU YD	44				37	7		
501026	EXPANSION BOLTS 3/4 INCH	EACH	428		158		118	152		
503002	CLASS X CONCRETE HEADWALLS	CU YD	2.7	0.3		2.4				
503004	PROTECTIVE COAT	SQ YD	47			47				
504003	CLASS X CONCRETE	CU YD	579.5		99.8	41.1	252.8	185.8		
504007	CLASS X CONCRETE (MISCELLANEOUS)	CU YD	5.6		5.6					
505006	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	1,273				1,273			
402001	AGGREGATE SURFACE COURSE, TYPE A	TON	967	10	957					
408014	PROTECTIVE COAT	SQ YD	4,340	371	3,792					
511025	PIPE CULVERTS, TYPE 1, 15"	LIN FT	598		598					
511026	PIPE CULVERTS, TYPE 1, 18"	LIN FT	50		50					
511047	PIPE CULVERTS, TYPE 1 RCCP 18"	LIN FT	14		14					
511050	PIPE CULVERTS, TYPE 1 RCCP 30"	LIN FT	20		20					
512001	REINFORCEMENT BARS	POUND	62,780		13,930	2,820	21,570	24,460		
514001	NAME PLATES	EACH	2				1	1		
* 601001	STONE RIPRAP	SQ YD	12				12			
603005	STORM SEWERS, TYPE 1, 12"	LIN FT	2,836	212	2,624					
603006	STORM SEWERS, TYPE 1, 15"	LIN FT	1,959	436	1,523					
603007	STORM SEWERS, TYPE 1, 18"	LIN FT	793	50	743					
609014	CAST IRON WATER MAIN, MECHANICAL JOINT 4"	LIN FT	13						13	
610001	WATER SERVICE LINE 1/2"	LIN FT	12						12	
610002	WATER SERVICE LINE 3/4"	LIN FT	16						16	
610003	WATER SERVICE LINE 1"	LIN FT	16						16	
610004	WATER SERVICE LINE 1 1/4"	LIN FT	15						15	
612150	INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID	EACH	1			1				
612154	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	4			4				
612160	INLETS, TYPE A, TYPE 8 GRATE	EACH	1	1						
612168	INLETS, TYPE A, TYPE 15 FRAME AND LID	EACH	6	1	5					
612233	MANHOLES TO BE ADJUSTED	EACH	10	2	8					
612291	VALVE VAULTS TO BE ADJUSTED	EACH	8	5	3					
612399	INLETS, SPECIAL, TYPE 1	EACH	8	2		6				
612400	INLETS, SPECIAL, TYPE 3, 5'	EACH	50	7	43					
612402	INLETS, SPECIAL, TYPE 3, 6'	EACH	11		11					
616029	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	LIN FT	268		268					
616041	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	LIN FT	12,431	1,129	11,302					
616065	COMBINATION CONCRETE CURB AND GUTTER, TYPE H-6.06	LIN FT	45		45					
616202	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	1,145		1,057					
617001	PAVEMENT REMOVAL	SQ YD	742		742					
617002	DRIVEWAY PAVEMENT REMOVAL	SQ YD	251	148	103					
617003	CURB REMOVAL	LIN FT	688	54	306					
617004	GUTTER REMOVAL	LIN FT	8,289	1,059	7,230					
617005	COMBINATION CURB AND GUTTER REMOVAL	LIN FT	194		194					
617006	SIDEWALK REMOVAL	SQ FT	3,588	1,340	2,248					
617007	BITUMINOUS CONCRETE REMOVAL	SQ YD	1,707	301	566					
620001	PAVEMENT REMOVAL AND REPLACEMENT TYPE 1, 8 INCH	SQ YD	94		94					
620002	PAVEMENT REMOVAL AND REPLACEMENT TYPE 11, 8 INCH	SQ YD	329	42	287					
612114	MANHOLE, TYPE A, 4'-DIAMETER, TYPE 15 FRAME AND LID	EACH	1		1					

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.885	104(W,RS)	UNION	146	9
F.H.W.A. REG 4 ILLINOIS PROJECT RF-161(1)				

SUMMARY OF QUANTITIES

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SUMMARY OF QUANTITIES (CONT.)

SUMMARY OF QUANTITIES (CONT.)

PROJECT NO.	SHEET NO.	UNION	SHEETS	10
FA.885104(WRS)			146	
F.H.W.A. REG. 4	ILLINOIS	PROJECT	RF-1611	1

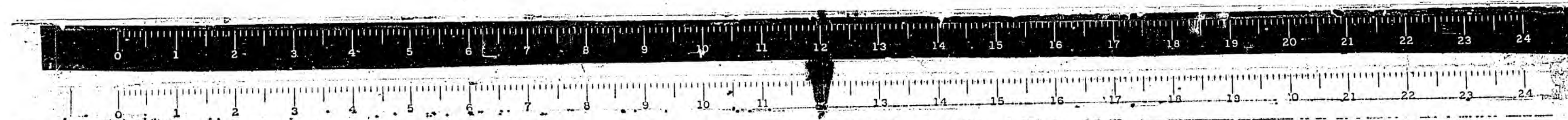
		ROAD STA.		BRIDGE STA.			
		43+00 TO 51+50.49		51+50.49 TO 160+77.1 161+30.9 TO 180+52		160+77.1 TO 161+30.9 AND 172+28.5	
						SPECIALTY ITEM	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	NON PART.	(CULV)		
CONSTRUCTION TYPE CODE				6706	6706	X081	Y060
SAFETY CLASSIFICATION CODE				S20	S20	S30	Y031
620003	PAVEMENT REMOVAL AND REPLACEMENT TYPE III, 8 INCH	SQ YD	413	78	140	273	
623002	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	883	92		805	
623003	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	850	1,646		758	
624003	PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH	SQ FT	4,345		2,699		
624006	PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL	SQ FT	275	147	128		
628001	STEEL PLATE BEAM GUARDRAIL, SINGLE RAIL	LIN FT	3,337.5		3,337.5		
633001	METAL PLATE GUARDRAIL REMOVAL	LIN FT	1,615		1,615		
639001	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	5		5		
640001	FIRE HYDRANTS TO BE MOVED	EACH	4	1	3		
* 642002	SEEDING, CLASS II	ACRE	7.0		7.0		
* 642003	SEEDING, CLASS III	ACRE	1.3		1.3		
* 642004	NITROGEN FERTILIZER NUTRIENT	POUND	664		664		
* 642005	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2,656		2,656		
* 642006	POTASSIUM FERTILIZER NUTRIENT	POUND	1,328		1,328		
* 642007	AGRICULTURAL GROUND LIMESTONE	TON	33		33		
* 643001	MULCH	TON	17		17		
* 644001	SODDING	SQ YD	6,451	594	5,857		
* 644002	SUPPLEMENTAL WATERING	UNIT	40	4	36		
* 644003	NITROGEN FERTILIZER NUTRIENT	POUND	107	10	97		
* 644004	PHOSPHORUS FERTILIZER NUTRIENT	POUND	426	39	387		
* 644005	POTASSIUM FERTILIZER NUTRIENT	POUND	203	20	183		
* 644006	AGRICULTURAL GROUND LIMESTONE	TON	2.8	1	1.8		
646001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1		1		
646003	ENGINEER'S FIELD LABORATORY	EACH	1		1		
628015	TEMPORARY GUARDRAIL	LIN FT	53			53	
620067	RELOCATE EXISTING FLASHING BEACON, SPAN WIRE MOUNTED	L SUM	1				
X06048	RELOCATE EXISTING SCHOOL CROSSING EQUIPMENT	L SUM	1				
X50201	STRUCTURE EXCAVATION	CU YD	1,201		191	1,010	
X62824	TRAFFIC BARRIER TERMINAL, TYPE I	EACH	11		11		
* X61302	PAPER YARN MULCH NET	SQ YD	4,166		4,166		
* X64303	EROSION CONTROL FABRIC	SQ YD	3,859		3,859		
X64701	PAVEMENT MARKING TAPE	LIN FT	2,560	388	12	2,160	
XZ1014	TRAFFIC CONTROL AND PROTECTION, STANDARD 2309	EACH	1			1	
XZ1086	TRAFFIC CONTROL AND PROTECTION, STANDARD 2311	L SUM	1			1	
XZ1087	TRAFFIC CONTROL AND PROTECTION, STANDARD 2312	L SUM	1			1	
TS0103	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	LIN FT	33,081	610	615	31,856	
XZ1278	EXCESS BITUMEN REMOVAL	UNIT	25			25	
X06049	WATER METER VAULTS	EACH	10				10
XZ1198	WATER METERS TO BE MOVED	EACH	3				3
X06059	WELDED STEEL GAS MAIN 4"	LIN FT	50				50
X06051	LINE STOPPERS 4"	EACH	2				2
X04941	WATERPROOFING MEMBRANE SYSTEM	SQ YD	243				
X05194	PORTLAND CEMENT MORTAR FAIRING COURSE	LIN FT	318			243	
X51301	FURNISHING STEEL PILES HP8X36	LIN FT	977			318	
X51310	TEST PILE STEEL HP8 X 36	EACH	5			768	209
513026	DRIVING STEEL PILES	LIN FT	977			4	1
X51159	END SECTIONS 30"	EACH	2			768	209
XZ1100	TRAINEES	HOUR	1,000				
TS0107	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	LIN FT	94	94			
TS0108	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	LIN FT	100	100			

*Construction Type Code Y005

*Construction Type Code Y005

SUMMARY OF QUANTITIES

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F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.	SHEET NO.
FA.885	104(W,RS)	UNION	146	11
IHW.A REQ. 4 ILLINOIS PROJECT REF. 1611				

PAVEMENT QUANTITIES

LOCATION	BITUMINOUS CONCRETE SURFACE COURSE MIXTURE D, CLASS I	BITUMINOUS CONCRETE BINDER COURSE	PORTLAND CEMENT CONCRETE BASE COURSE 8"	BITUMINOUS CONCRETE BASE COURSE WIDENING 8"	STABILIZED SHOULDER, 8"	AGGREGATE SHOULDER, TYPE A, 8"	AGGREGATE SURFACE COURSE TYPE B	BITUMINOUS MATERIAL (PRIME COAT)	AGGREGATE (PRIME COAT)	AGGREGATE BASE COURSE TYPE A, 6"	REMARKS
	TON	TON	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	TON	GALLON	TON	SQ. YD.	
41+80 - 43+00	15.9	12.3						24.0	0.4		
43+00 - 46+50	183.8	393.7	957					172.5	3.9		
46+50 - 51+50.49	177.6	2,988.2						154.6	3.1		
51+50.49 - 56+99.1	157.1	946.6		169.2				150.4	2.9		
56+99.1 - 66+00	224.3	811.0		1,334.2				246.9	4.7		
66+00 - 72+00	155.9	796.6		533.3				251.4	3.7		
72+00 - 78+00	153.9	702.8		601.7				269.0	3.7	72	INCLUDES WILLARDS FERRY ROAD
78+00 - 84+00	122.3	576.8		533.3			12	151.0	2.6		
84+00 - 90+00	125.5	568.3		533.3			145	165.0	2.8		
90+00 - 96+00	124.9	588.8		533.3			69	161.9	2.7		
96+00 - 101+83	129.0	561.0		518.2				190.1	2.9		
101+83 - 117+00	284.3	737.6		1,137.8	1,348.0	1,308.3		354.0	6.1		
117+00 - 132+00	281.2	1,137.0		1,101.0	1,333.3	1,248.5		350.0	6.0		
132+00 - 147+00	280.5	950.4		1,119.6	1,330.3	1,330.3		349.2	6.0		
147+00 - 160+77.10	261.1	634.9		1,033.3	1,224.1	1,214.5		321.3	5.5		
160+77.10 - 161+30.90	PAVING OMISSION FOR BRIDGE (SEE BRIDGE PLANS FOR QUANTITIES)			1,177.3	1,394.8	1,254.6		366.1	6.3		PAVING OMISSION
161+30.90 - 177+00	297.1	1,180.0			419.9	438.1		115.0	2.7		
177+00 - 180+52	126.0	517.4		316.2			1,000				TO BE USED FOR MAINTENANCE AS REQUIRED
TOTAL	3,100	13,313	957	10,642	7,051	6,794	1,226	3,792	66	72	

A NON-PARTICIPATING

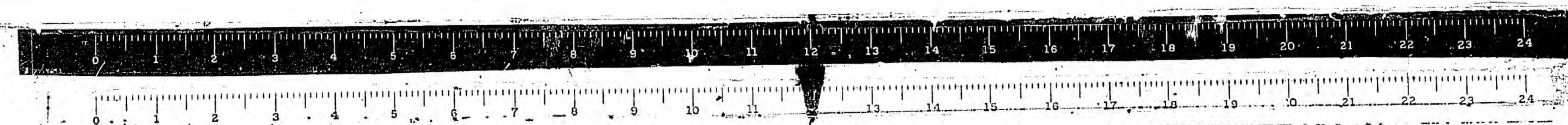
EARTHWORK SUMMARY

LOCATION	EARTH EXCAVATION C.Y.	EARTH EXCAVATION SPECIAL C.Y.	COMPACTED EMB. C.Y.	LOOSE EMB. C.Y.	EXCESS C.Y.	NEED C.Y.	STRUCTURE EXCAVATION C.Y.	WASTE C.Y.	REMARKS
							CUT	FILL	
ILLINOIS ROUTE 146									
BALANCE NO. 1 STA. 46+50 TO STA. 77+15 MARKET ST. & THIRD ST.	1837		1458				191	191	STRUCTURE EXCAVATION FOR RETAINING WALL "A"
BALANCE NO. 2 STA. 77+15 TO STA. 93+00	1847		1496			98			OBTAIN 98 C.Y. FROM BALANCE NO. 4
BALANCE NO. 3 STA. 93+00 TO STA. 139+00	2572		2813			1085			OBTAIN 1085 C.Y. FROM BALANCE NO. 4
BALANCE NO. 4 STA. 139+00 TO STA. 143+00	200	5193	142					4025	98 C.Y. TO BALANCE NO. 2 1085 C.Y. TO BALANCE NO. 3 185 C.Y. TO BE USED IN THIS BALANCE 4025 C.Y. TO BE WASTED
BALANCE NO. 5 STA. 143+00 TO STA. 154+00	400		1488						OBTAIN 1535 C.Y. FROM BALANCE NO. 6
BALANCE NO. 6 STA. 154+00 TO STA. 158+00	42	6725	600					2342	1535 C.Y. TO BALANCE NO. 5 780 C.Y. TO BE USED IN THIS BALANCE 2110 C.Y. TO BALANCE NO. 7 2342 C.Y. TO BE WASTED
BALANCE NO. 7 STA. 158+00 TO STA. 180+52	859		2284			2110			OBTAIN 2110 C.Y. FROM BALANCE NO. 6
TOTAL	7816	11,918					1,201	1,010	STRUCTURE EXCAVATION FOR SECTION 104-BY

SECTION 104A-BY - 770 C.Y. CHANNEL EXC. - WASTE

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EARTHWORK SUMMARY AND PAVEMENT QUANTITIES



DRIVEWAY PAVEMENT MATERIALS

FA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 885	04 (W, RS)	UNION	146	12
DRW. REQ. 4	ILLINOIS PROJECT	RF-161		

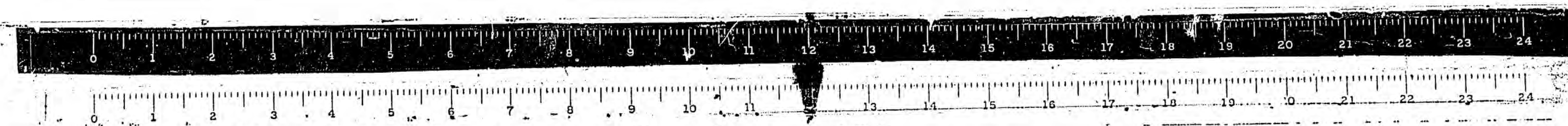
LOCATION	RT./LT.	C.E./P.E.	P.C.C. DRIVEWAY PAVEMENT, 7" S.Y.	P.C.C. DRIVEWAY PAVEMENT, 6" S.Y.	BIT. CONC. SURF. CSE. MIXTURE D, CLASS I TON	AGGREGATE SURF. COURSE TYPE A TON	AGGREGATE BASE COURSE TYPE A, 6" S.Y.	REMARKS
ILL. ROUTE 146								
46+92	RT.	C.E.	24.4					
47+00	LT.	C.E.	13.7					
47+58	RT.	C.E.	14.8		1.5		13.3	
47+61	LT.	C.E.	4.1					
49+28	RT.	P.E.		28.9				
49+51	LT.	P.E.		20.1				
50+39	LT.	P.E.		19.0				
50+42	RT.	C.E.	35.4					
51+64	LT.	C.E.	57.6					
52+05	LT.	C.E.	43.2					
52+46	LT.	C.E.	83.2					
53+52	LT.	C.E.	45.9					
58+20	LT.	P.E.		21.3				
59+18.5	LT.	P.E.		21.3	2.4		21.0	
59+93	RT.	C.E.	31.4					
60+31	LT.	P.E.		53.5				
60+58	RT.	C.E.	31.4					
61+17	RT.	P.E.		33.6				
61+22	LT.	P.E.		28.1				
62+52	LT.	P.E.		25.8				
63+30.5	LT.	P.E.		25.8				
64+00	LT.	P.E.		23.5				
64+39.5	LT.	P.E.		23.5				
65+45	RT.	P.E.		16.5				
65+75	LT.	P.E.		21.3				
66+04	RT.	P.E.		16.5				
66+37	LT.	P.E.		19.0				
66+61	LT.	P.E.		19.0				
66+72	RT.	P.E.		16.5				
67+88	RT.	P.E.		16.5		3.9		
67+96	LT.	P.E.		19.0				
68+66	LT.	P.E.		21.3				
0+45 MISS. ST.	RT.	P.E.				4.7		
0+57 MISS. ST.	LT.	P.E.				23.6		
69+86	LT.	P.E.		40.5				
69+94	RT.	P.E.		16.5		5.2		
70+88	LT.	P.E.				6.0		
70+92	RT.	P.E.		16.5		0.9		
73+21	RT.	C.E.	30.3			36.3		
74+23	RT.	C.E.	98.3					
74+65	RT.	C.E.	101.3					
74+24	LT.	C.E.						
75+32	RT.	C.E.	33.2			30.9		
75+84	LT.	C.E.	48.6			29.9		
76+60	RT.	P.E.		16.5				
77+96	RT.	P.E.		20.1	0.5		4.3	
78+02	LT.	P.E.		16.5		39.0		
78+61	RT.	P.E.		26.7				
81+07	LT.	P.E.		16.5		6.2		
81+40	LT.	P.E.		18.5		14.5		
83+90	RT.	C.E.	35.4			16.8		
85+00	RT.	P.E.		16.5		11.5		
* 51+34	RT.	P.E.		10.0		10.0		
* 63+30.5	RT.	P.E.		16.5				SEE NOTE ON PLANS
* 72+15	LT.	P.E.				4.1		
* 78+13	LT.	P.E.		16.5				
* 0+31 ELM ST. LT.	RT.	P.E.		13.4				

*-ENTRANCES LISTED OUT OF ORDER BY STATIONING

LOCATION	RT./LT.	C.E./P.E.	P.C.C. DRIVEWAY PAVEMENT, 7" S.Y.	P.C.C. DRIVEWAY PAVEMENT, 6" S.Y.	BIT. CONC. SURF. CSE. MIXTURE D, CLASS I TON	AGGREGATE SURF. COURSE TYPE A TON	AGGREGATE BASE COURSE TYPE A, 6" S.Y.	REMARKS
ILL. ROUTE 146								
* 98+45	LT.	P.E.		16.5		13.4		
* 100+14	LT.	P.E.		16.5				
* 115+54	LT.	P.E.				12.8		
* 117+91	LT.	P.E.				11.7		
* 118+58	LT.	P.E.				12.8		
92+92	LT.	P.E.		16.5		14.5		
93+75	LT.	P.E.		16.5		18.0		
95+31	LT.	P.E.		16.5		11.2		
95+42	RT.	P.E.		16.5		12.1		
95+55	LT.	P.E.		16.5		11.4		
96+50	LT.	P.E.		18.4	5.2		46.0	
113+25	LT.	C.E.				22.9		
114+96	LT.	C.E.				33.2		
119+61	LT.	P.E.				12.8		
122+96	LT.	C.E.				35.3		
124+57	LT.	C.E.				35.3		
125+63	LT.	P.E.				26.0		
125+63	RT.	S.R.				37.6		
147+39	LT.	P.E.				9.1		
150+41	RT.	S.R.				7.4		
160+35	LT.	P.E.				8.8		
165+00	LT.	C.E.				24.1		
165+17	RT.	C.E.				35.3		
167+27	LT.	C.E.				35.3		
169+50	LT.	C.E.				35.3		
170+15	RT.	C.E.				8.0		
173+21	RT.	P.E.				33.6		
173+46	LT.	C.E.				35.3		
174+36	LT.	C.E.				36.8		
174+36	RT.	C.E.				36.8		
175+83	LT.	C.E.				36.8		
175+83	RT.	C.E.				36.8		
176+50	LT.	C.E.				22.9		
TOTALS			850	883	10	967	85	

NOTE: QUANTITIES FOR ENTRANCES TO FRONTAGE ROAD LEFT OF STATION 83+00 TO STATION 92+26 ARE INCLUDED IN ROADWAY PAVEMENT QUANTITIES. (6" BIT. CONC. BINDER CSE. AND 1 1/4" BIT. CONC. SURF. CSE. MIX. D, CLASS I.)

DRIVEWAY PAVEMENT QUANTITIES



CURB, CURB & GUTTER & SIDEWALK QUANTITIES

A NON-PARTICIPATING

R.O.W. MARKERS

* LISTED OUT OF ORDER BY STATIONING

REMOVAL QUANTITIES												
RDWY.	STATION TO STATION	RT. LT.	PAVEMENT REMOVAL	DRIVEWAY PAVEMENT REMOVAL	GUTTER REMOVAL	SIDEWALK REMOVAL	CURB REMOVAL	COMB. CURB & GUTTER REMOVAL	PAVEMENT REMOVAL REPLACEMENT			REMARKS
			S.Y.	S.Y.	L.F.	S.F.	L.F.	L.F.	TYPE I S.Y.	TYPE II S.Y.	TYPE III S.Y.	
ILL. 146	43+10 - 46+30							840				
	43+42 - 43+72						98					
	44+60 - 44+92	RT.					66				60	
	44+64 - 44+89	RT.										
NON-PARTICIPATING	44+68 - 44+99	LT.					69				80	
	44+69 - 44+94	LT.					95					
	45+85 - 46+16											
	46+13 - 46+90	RT.		148								
	46+15 - 48+67	LT.										
	46+20 - 46+26	LT.				99						246
	46+20 - 51+64	RT.			543	96						
	46+21 - 51+91	LT.			570							
	47+04 - 47+77	RT.				218	54					REMOVE EXIST. RET. WALL AS CURB REMOVAL
	48+18 - 48+35	RT.				136						PAVEMENT REMOVAL FOR STORM SEWER
	48+23 - 48+33									11		
	48+28 - 48+35	LT.				56						
	48+37 - 48+62	RT.									55	PAVEMENT REMOVAL FOR STORM SEWER
	48+42 - 48+63	RT.								11		
	48+71 - 48+88	LT.				155						
	48+71 - 48+83	RT.				120						
	49+08 - 49+47	RT.				120						
	50+00									10		PAVEMENT REMOVAL FOR STORM SEWER
	50+90 - 52+07	RT.				645				10		PAVEMENT REMOVAL FOR STORM SEWER
	51+00									11	33	PAVEMENT REMOVAL FOR STORM SEWER
	51+96 - 52+54											LOCUST STREET
	52+00 - 52+30	RT.										
	52+38 - 52+51	RT.					52					
	52+52 - 61+72	RT.			920							
	54+41 - 54+77	RT.				136						
	54+76 - 55+09	RT.									75	ELM STREET
	54+88 - 55+08	RT.								10		PAVEMENT REMOVAL FOR STORM SEWER
	55+08 - 55+87	RT.				554	72					REMOVE EXIST. RET. WALL AS CURB REMOVAL
	56+23 - 56+52	LT.				280						
	55+15 - 57+00	LT.					234					60 COOK AVENUE
	56+23 - 67+50	LT.			1177							INCLUDES COOK AVENUE
	57+93 - 57+98	RT.				56						
	58+80 - 59+63	LT.				352						
	59+60									10		PAVEMENT REMOVAL FOR STORM SEWER
	60+00 - 60+58	LT.				136						
	60+20 - 60+42	LT.		103								
	60+32 - 60+51									13		PAVEMENT REMOVAL FOR STORM SEWER
	61+72 - 61+94	RT.						64				MARKET STREET
	61+81 - 62+80	RT.			99							MARKET STREET
	61+81 - 62+81	RT.	427									MARKET STREET
	61+97 - 62+96	RT.						130				PAV'T REMOV. SEE NOTE ON SHEET 24
	62+96 - 71+36	RT.	315		840							PAVEMENT REMOVAL FOR STORM SEWER
	63+00									10		THIRD STREET
	63+05 - 64+26	RT.									260	
	63+90 - 64+10	LT.				80						PAVEMENT REMOVAL FOR STORM SEWER
	64+02 - 64+18									12		PAVEMENT REMOVAL FOR STORM SEWER
	65+25	LT.								10		
	65+59 - 65+86	LT.				108						
	66+19 - 69+63	LT.				165						
	67+00									10		PAVEMENT REMOVAL FOR STORM SEWER
	67+59									10		PAVEMENT REMOVAL FOR STORM SEWER
	70+42 - 70+48	LT.				24						
	75+60 - 83+21	LT.			761							PAVEMENT REMOVAL FOR STORM SEWER
	76+44 - 83+19	RT.			675							PAVEMENT REMOVAL FOR STORM SEWER
	78+31									10		PAVEMENT REMOVAL FOR STORM SEWER
	80+00									10		
	82+00 - 180+52								94	120	240	PAVEMENT REMOVAL FOR STORM SEWER
	84+23									10		PAVEMENT REMOVAL FOR STORM SEWER
	88+20									10		
	88+49 - 99+98	RT.			1149							PAVEMENT REMOVAL FOR STORM SEWER
	89+48									10		PAVEMENT REMOVAL FOR STORM SEWER
	90+53									11		PAVEMENT REMOVAL FOR STORM SEWER
	100+77									10		PAVEMENT REMOVAL FOR STORM SEWER
	138+15 - 145+78	LT.				763						
	140+41 - 145+87	RT.				546						
	155+04 - 157+50	LT.				246						
	177+65 - 178+55	RT.										126 E.A. RTE. 144
TOTAL			742	251	8289	3588	688	194	94	329	413	1707

THERMOPLASTIC PAVEMENT MARKING - LINE 4"

STATION TO STATION DASHES LIN. FT.

4" YELLOW SKIP-DASH CENTERLINE

41+80 - 43+00	3	45
46+50 - 54+00	19	285
57+00 - 73+00	40	600
75+75 - 82+50	17	255
86+00 - 93+50	19	285
95+75 - 125+00	73	1095
135+50 - 160+77.7	63	945
161+30.3 - 163+00	4	60
761+40 - 762+60	3	45

4" YELLOW NO PASSING ZONE LEFT

54+00 - 62+25		826.7
73+00 - 86+00		1300
93+50 - 106+25		1275
125+00 - 138+50		1346.6
163+00 - 180+52		1752

4" YELLOW NO PASSING ZONE RIGHT

47+50 - 57+00		951.7
70+25 - 75+75		550
82+50 - 95+75		1325
113+75 - 135+50		2175
160+00 - 180+52		1999.4
761+40 - 762+60		120

4" WHITE EDGELINE

101+71 - 180+52		15275
TOTAL		32,511

Δ NON-PARTICIPATING

NOTE: ADDITIONAL NON-PARTICIPATING PAVEMENT MARKINGS WILL BE REQUIRED AT THE TOWN SQUARE. CONTACT DISTRICT TRAFFIC ENGINEER FOR LAYOUT DETAILS. QUANTITIES FOR THIS LAYOUT HAVE BEEN INCLUDED IN THE "SUMMARY OF QUANTITIES".

Rev. 2-18-77

REMOVAL QUANTITIES & THERMOPLASTIC PAVEMENT MARKING - LINE

BRIDGE, CULVERT AND STORM SEWER SCHEDULE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.885	04WRS	UNION	146	15
F.H.W.A. REG. 4 ILLINOIS PROJECT R.F. 1611				

STATION NO.	TYPE	STANDARD AND DESIGN NUMBER	CLASS X CONCRETE CU. YDS.	REINFORCEMENT BARS LBS.	PIPE CULVERTS		STORM SEWERS			PIPE CULVERTS		INLETS				SPEC.		SPEC 3		EXPANSION BOLTS 3/4" EACH	CLASS X CONCRETE (MISC.) CU. YDS.	CLASS X CONCRETE (HDWL.) CU. YDS.	TRENCH BACKFILL CU. YDS.	END SECTIONS 30'	MANHOLE TYPE A-15	REMARKS
					TYPE I		TYPE I			TYPE I		TYPE I		TYPE I		TYPE I		TYPE I								
					15"	18"	12"	15"	18"	18"	30"	A-3	A-8	A-15	A-1C	TYPE I	5 FT.	6 FT.	5 FT.							
ILLINOIS RTE. 146																										
RT. STA. 47+80 TO STA. 48+35								52										1								
LT. STA. 48+35								76	52									2								
RT. STA. 48+35								22	32																	
RT. STA. 48+35 TO STA. 50+00									164																	
LT. STA. 50+00									45																	
RT. STA. 50+00 TO STA. 51+00									96																	
LT. STA. 51+00									45																	
RT. STA. 51+00								62																		
RT. STA. 51+00 TO STA. 51+99																										
RT. STA. 51+99									84																	
RT. STA. 51+99 TO STA. 52+60									58																	
LT. STA. 52+60								34	46																	
RT. STA. 52+60 TO STA. 53+00									36																	
RT. STA. 53+00 TO STA. 53+25									20																	
RT. STA. 53+25 TO STA. 53+60									30																	
RT. STA. 53+60 TO STA. 53+80									16																	
RT. STA. 53+80 TO STA. 54+60									76																	
RT. STA. 54+60 TO STA. 55+10									48																	
RT. STA. 55+10								20	32																	
RT. STA. 55+10 TO STA. 55+40								28																		
RT. STA. 55+40 TO STA. 56+00								56																		
RT. STA. 57+15 TO STA. 58+30								110																		
RT. STA. 58+30 TO STA. 59+60								126																		
LT. STA. 59+60									31																	
RT. STA. 59+60 TO STA. 60+30								66																		
LT. STA. 60+30									39																	
RT. STA. 60+30 TO STA. 61+71.3								136																		
RT. STA. 61+71.3 TO STA. 61+89.6								22																		
RT. STA. 61+89.6 TO STA. 62+49									58																	
RT. STA. 62+49 TO STA. 62+70								24																		
RT. STA. 62+70 TO STA. 63+00								26																		
LT. STA. 63+00									31																	
RT. STA. 63+00 TO STA. 63+94									92																	
LT. STA. 63+94									44																	
RT. STA. 63+94								22	32																	
RT. STA. 63+94 TO STA. 65+25																										
LT. STA. 65+25									30																	
RT. STA. 65+25 TO STA. 67+00																										
LT. STA. 67+00									30																	
RT. STA. 67+00 TO STA. 67+60																										
LT. STA. 67+60									30																	
RT. STA. 67+60 TO STA. 68+59																										
STA. 67+96								24																		
RT. STA. 68+59																										
STA. 68+66								24																		
RT. STA. 69+70 TO STA. 70+50									76																	
STA. 69+86								22																		
RT. STA. 70+50 TO STA. 71+23									68																	
STA. 70+88								14																		
RT. STA. 71+23 TO STA. 71+70									42																	
RT. STA. 71+70 TO STA. 72+17									44																	
RT. STA. 72+17 TO STA. 72+47									28																	
RT. STA. 72+47 TO STA. 73+00									48																	
RT. STA. 73+00 TO STA. 74+99									194																	
RT. STA. 74+99 TO STA. 78+30									327																	
LT. STA. 78+30									31																	
RT. STA. 78+30 TO STA. 80+00									164																	
LT. STA. 80+00									31																	
RT. STA. 80+00 TO STA. 81+95.5									190																	
LT. STA. 82+08.5 TO STA. 83+35									121																	
STA. 82+02			36.8		4350																					
RT. STA. 83+35 TO STA. 84+22									64	31																

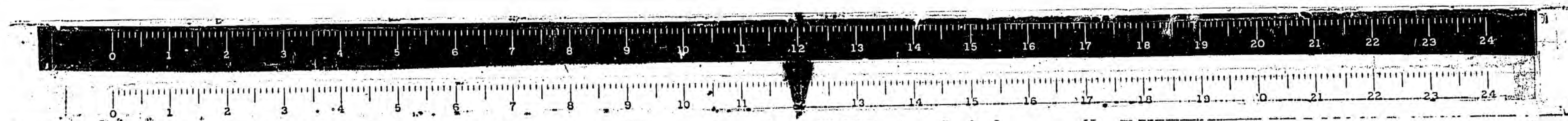
BRIDGE, CULVERT AND STORM SEWER SCHEDULE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA.885	104WKS	UNION	146	16
I.H.W.A. REG. 4 ILLINOIS PROJECT RF-161 ()				

STATION NO.	TYPE	STANDARD AND DESIGN NUMBER	CLASS X CONCRETE CU. YDS.	REINFORCEMENT BARS LBS.	PIPE CULVERTS		STORM SEWERS			PIPE CULVERTS		INLETS						EXPANSION BOLTS 3/4 "	CLASS X CONCRETE (MISC.) CU. YDS.	CLASS X CONCRETE (HDWL.) CU. YDS.	TRENCH BACKFILL CU. YDS.	END SECTIONS 30'	MANHOLE TYPE A-15	REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
					TYPE 1		TYPE 1			TYPE 1 R.C.C.P.	SPEC.				SPEC. 3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
					15"	18"	12"	15"	18"		18"	30"	A-3	A-8	A-15	A-1C	TYPE 1								5 FT.	6 FT.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
ILLINOIS RTE. 146 (CONT.)										18"	30"																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

* LISTED OUT OF ORDER BY STATIONING

BRIDGE, CULVERT & STORM SEWER SCHEDULE



SODDING & FERTILIZER QUANTITIES									
ROADWAY	STA. TO STA.	RT. LT.	SODDING SQ. YD.	NITROGEN FERT. LB.	PHOSPHORUS FERT. LB.	POTASSIUM FERT. LB.	AGR. GRD. LIMESTONE TON	ESTIMATED SUPPLEMENTAL WATERING UNITS	REMARKS
ILLINOIS ROUTE 146									
	43+00 - 46+12	RT.							
	43+00 - 46+12	LT.							
	46+12 - 48+52.6	RT.	136	2.2	8.8	4.4	0.1	1	
	46+12 - 48+52.6	LT.	91	1.3	5.2	2.6	0.1	1	
	48+52.6 - 51+25	LT.	148	2.4	9.6	4.8	0.1	1	
	48+52.6 - 52+19	RT.	311	5.1	20.4	10.2	0.1	2	
	51+25 - 54+88.75	LT.	377	6.2	24.8	12.4	0.2	2	
	52+19 - 54+88.75	RT.	253	4.2	16.8	8.4	0.1	2	
	54+88.75 - 55+88.00	LT.	143	2.4	9.6	4.8	0.1	1	
	54+88.75 - 62+51.24	RT.	743	12.3	49.2	24.6	0.3	4	
	55+88.00 - 73+10.93	LT.	1468	24.3	97.2	48.6	0.6	9	
	62+51.24 - 64+10	RT.	605	10.0	40.0	10.0	0.2	4	
	64+10 - 68+77.4	RT.	475	7.9	31.6	15.8	0.2	3	
	68+77.4 - 75+30	RT.	1331	22.0	88.0	44.0	0.5	8	
	73+10.93 - 75+30	LT.	380	6.3	25.2	12.6	0.2	2	

NOTE: EROSION CONTROL FABRIC, AS SPECIFIED IN THE SPECIAL PROVISIONS, SHALL BE PLACED ON ALL SEEDED AREAS IN THE FOLLOWING AREAS.

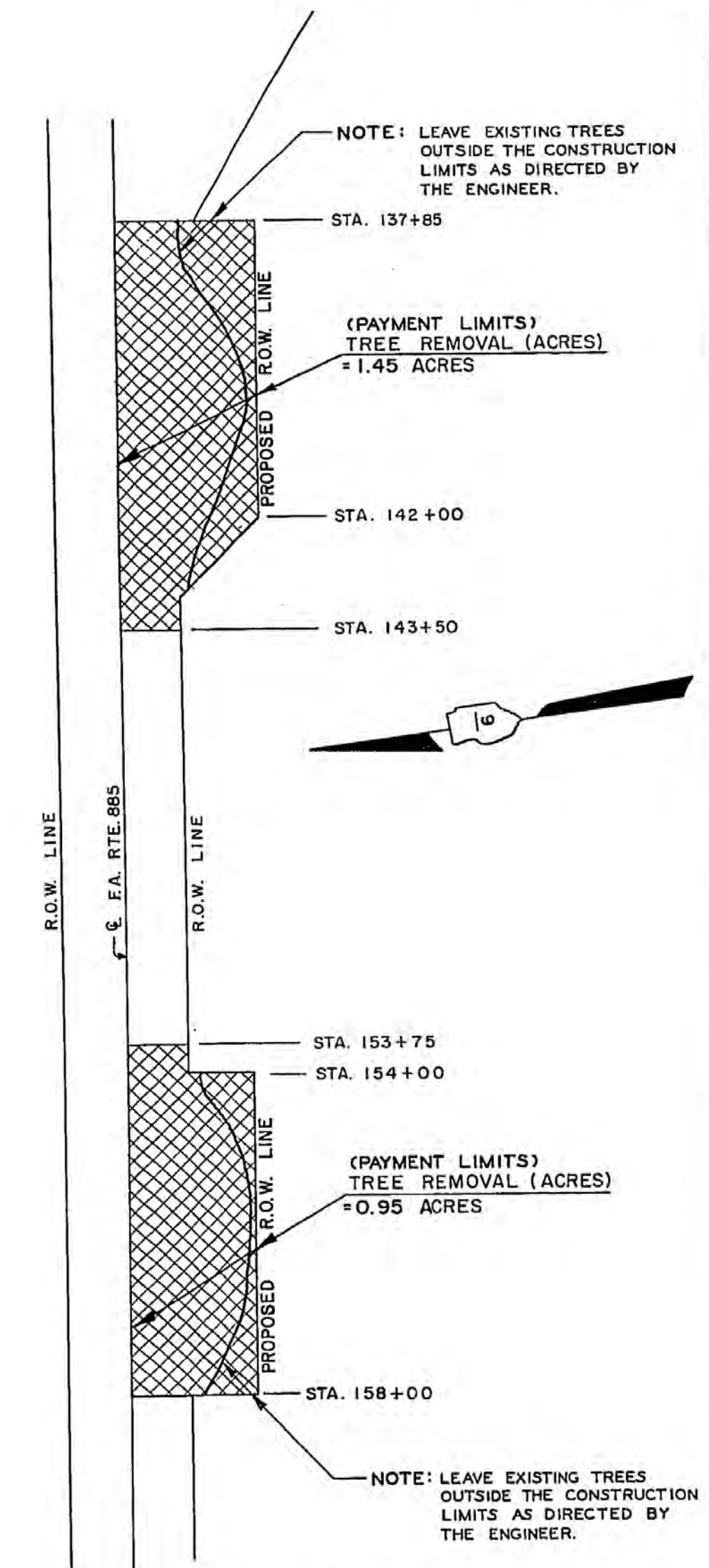
RIGHT OF STATION	81+00	TO STATION	82+15
LEFT OF STATION	82+00	TO STATION	84+00
RIGHT OF STATION	85+00	TO STATION	90+00
LEFT OF STATION	90+00	TO STATION	93+75
LEFT OF STATION	109+50	TO STATION	110+35
RIGHT OF STATION	112+00	TO STATION	113+00
RIGHT OF STATION	137+50	TO STATION	138+65
RIGHT OF STATION	142+25	TO STATION	144+00
RIGHT OF STATION	154+50	TO STATION	156+50
RIGHT OF STATION	170+50	TO STATION	172+00
RIGHT OF STATION	178+75	TO STATION	180+52

[illegible]

NOTE: TRIM ALL REMAINING TREES CLOSE TO THE ROADWAY IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.



NO SCALING



— NOTE: LEAVE EXISTING TREES
OUTSIDE THE CONSTRUCTION
LIMITS AS DIRECTED BY
THE ENGINEER.

— STA. 137+85

(PAYMENT LIMITS)
TREE REMOVAL (ACRES)
= 1.45 ACRES

— STA. 142 + 00

— STA. 143+50

STA. 153+75

- STA. 154+00

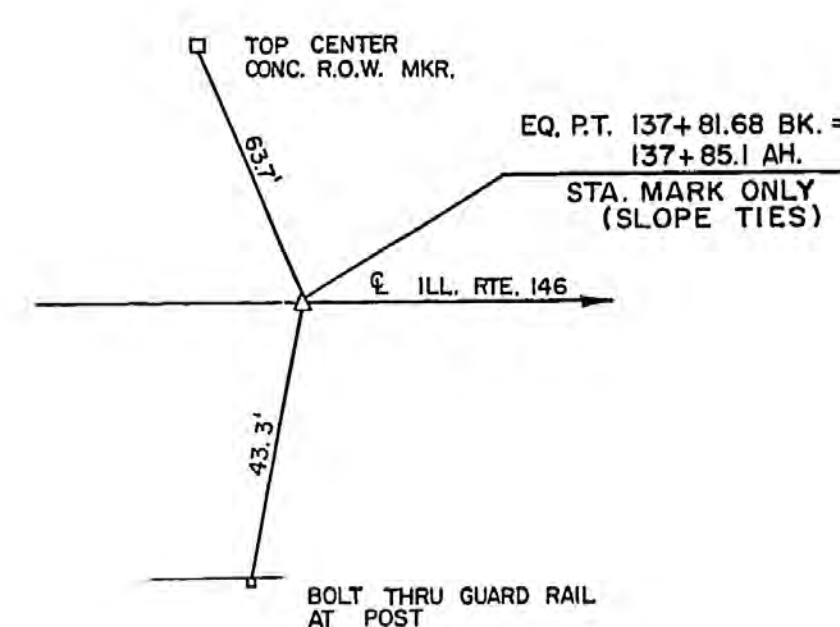
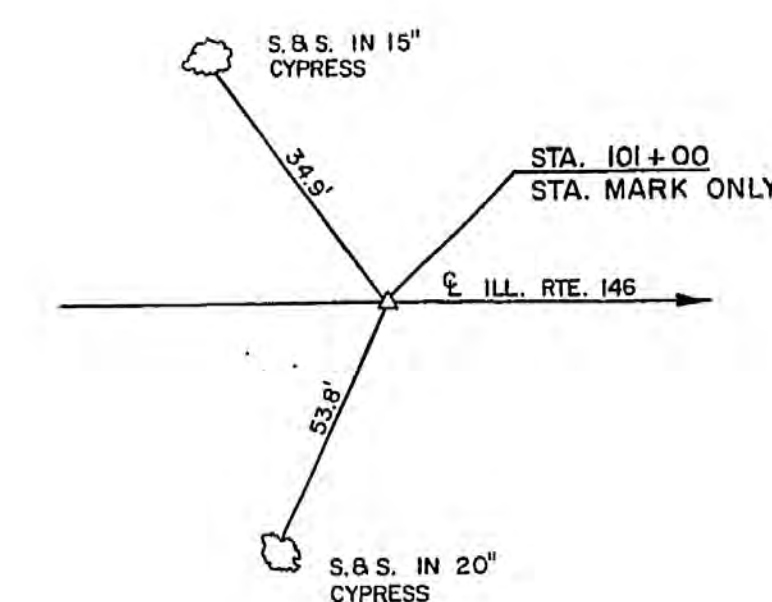
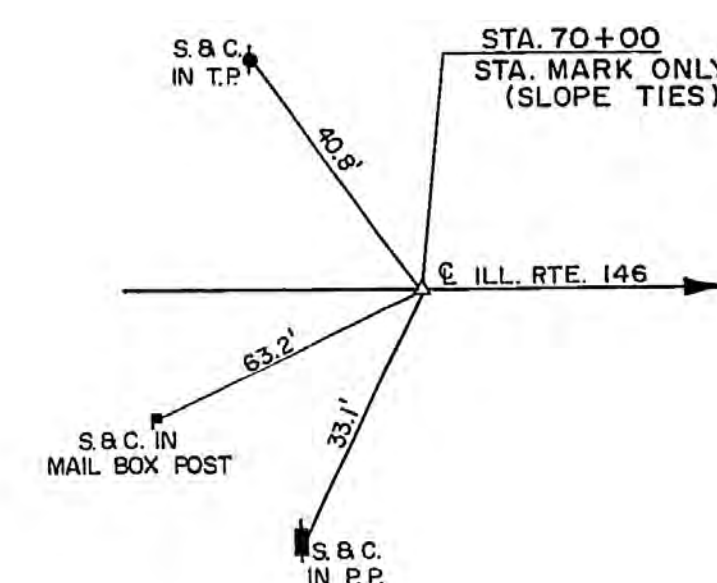
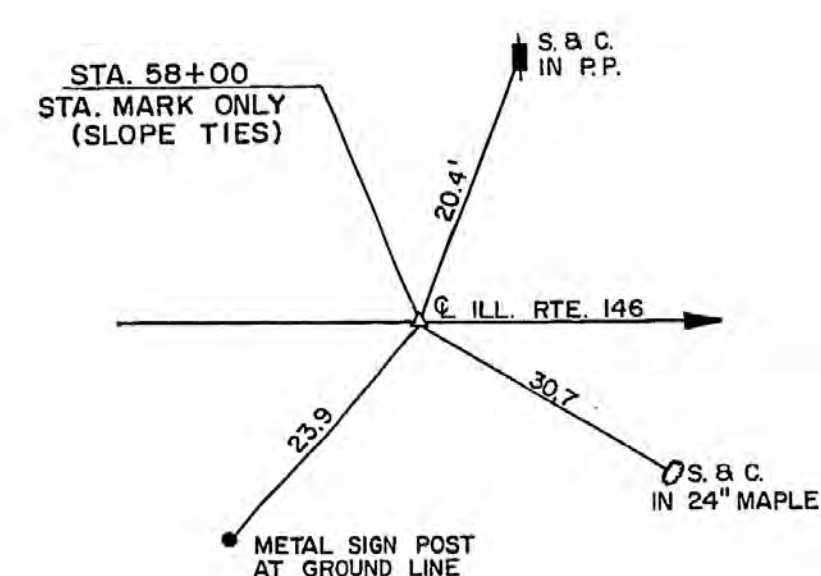
(PAYMENT LIMITS)
TREE REMOVAL (ACRES)
= 0.95 ACRES

STA. 158+00

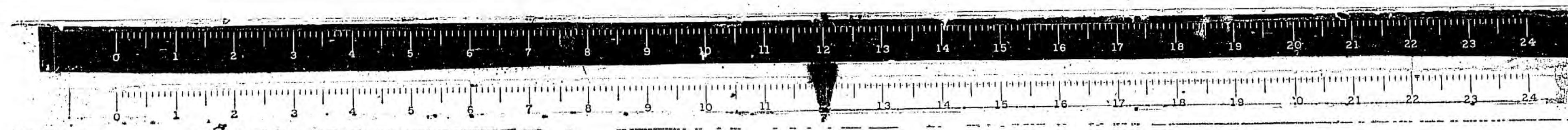
NOTE: LEAVE EXISTING TREES
OUTSIDE THE CONSTRUCTION
LIMITS AS DIRECTED BY
THE ENGINEER.

TREE REMOVAL QUANTITIES AND SCHEMATIC PLAN

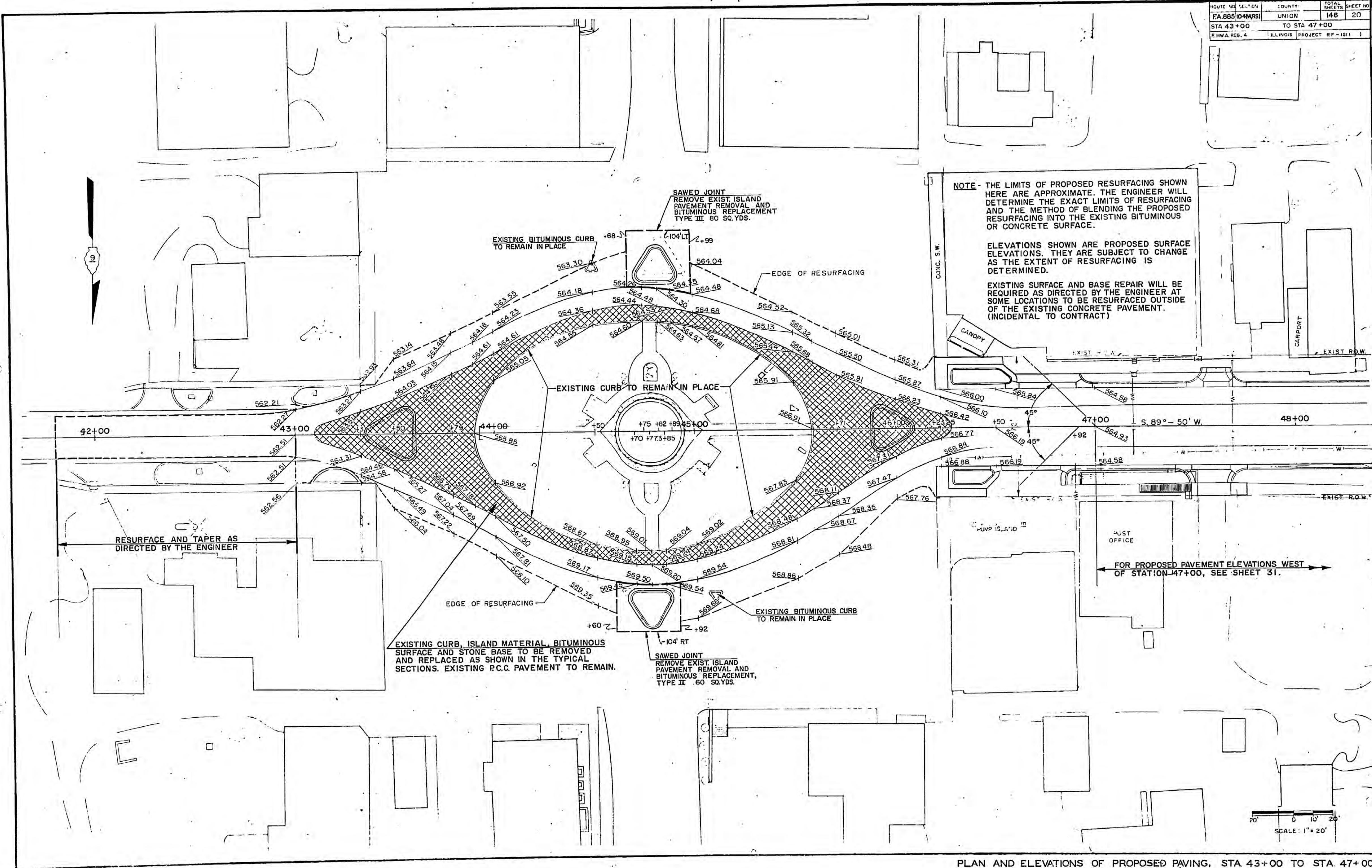
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.885	041W/RS	UNION	146	19
F.H.W.A. REG. 4 ILLINOIS PROJECT RT-161 ()				



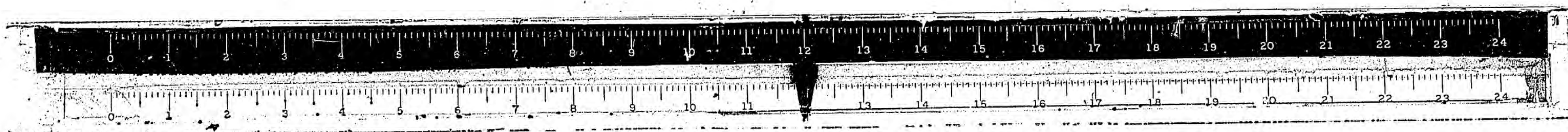
TIES

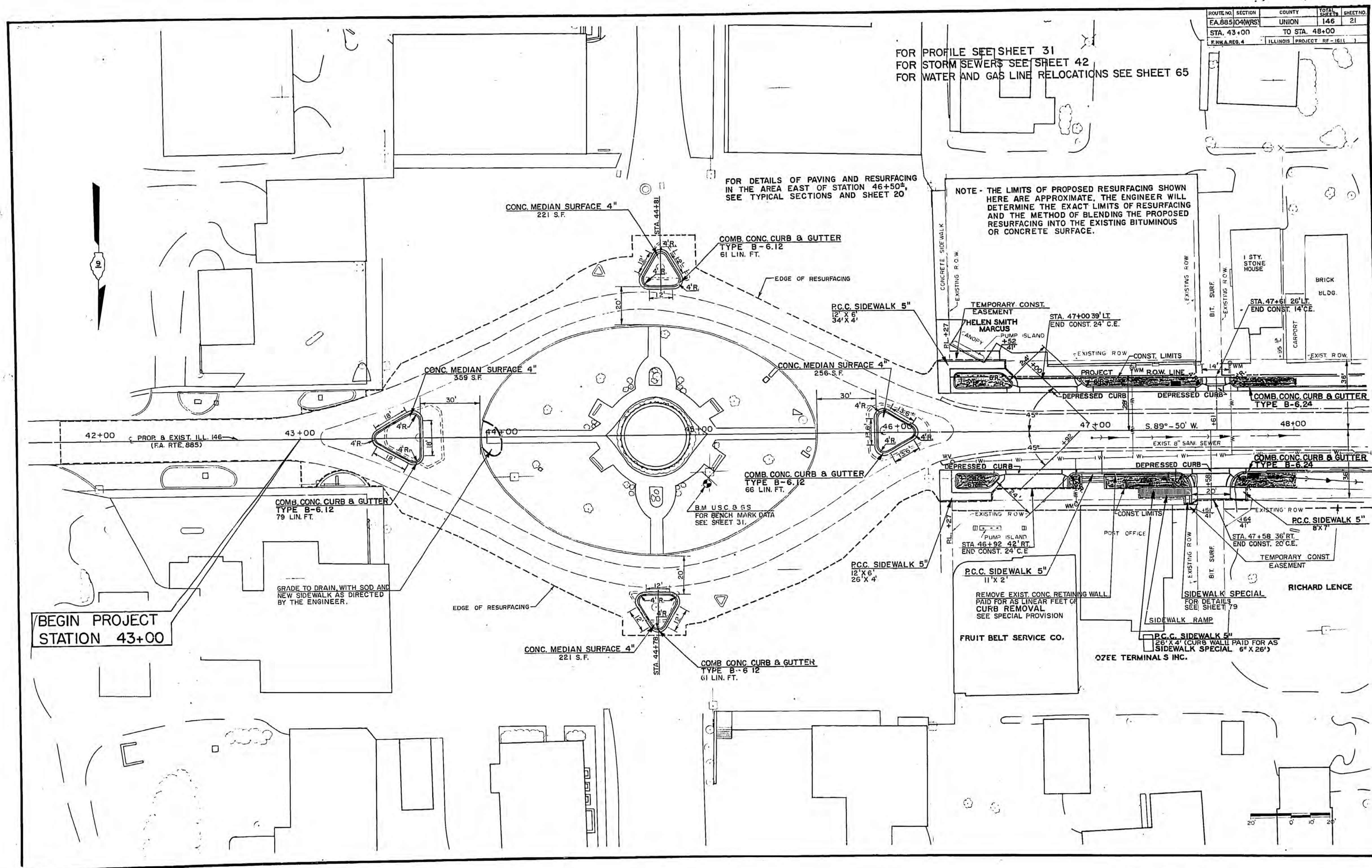


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA.885	104WRS	UNION	146	20
STA 43+00	TO STA 47+00			
ILLINOIS	PROJECT RF-1011			

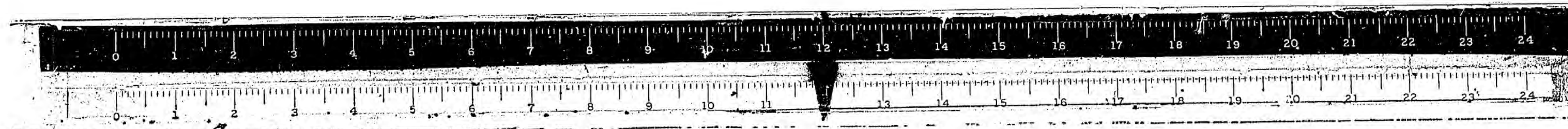


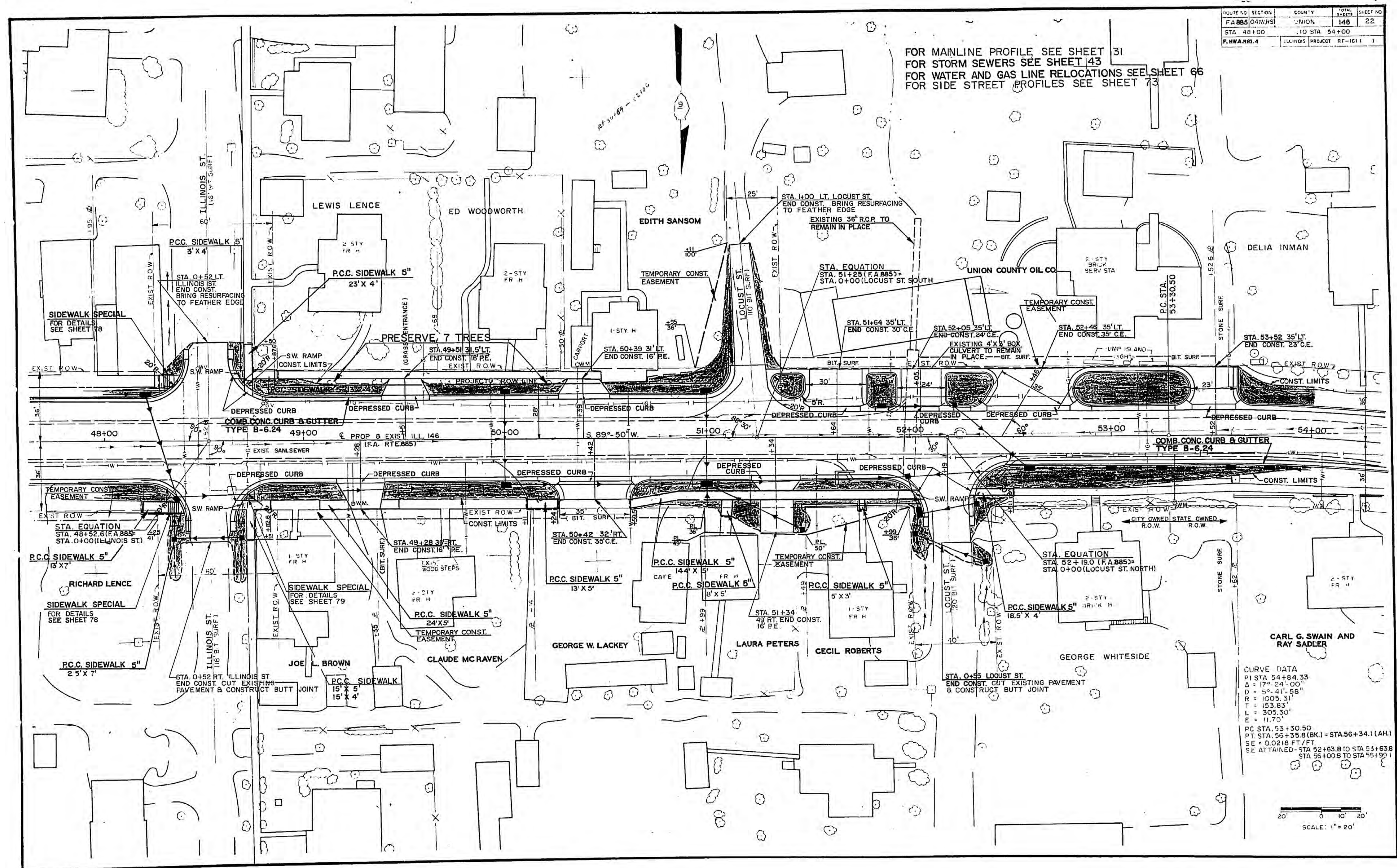
PLAN AND ELEVATIONS OF PROPOSED PAVING, STA 43+00 TO STA 47+00



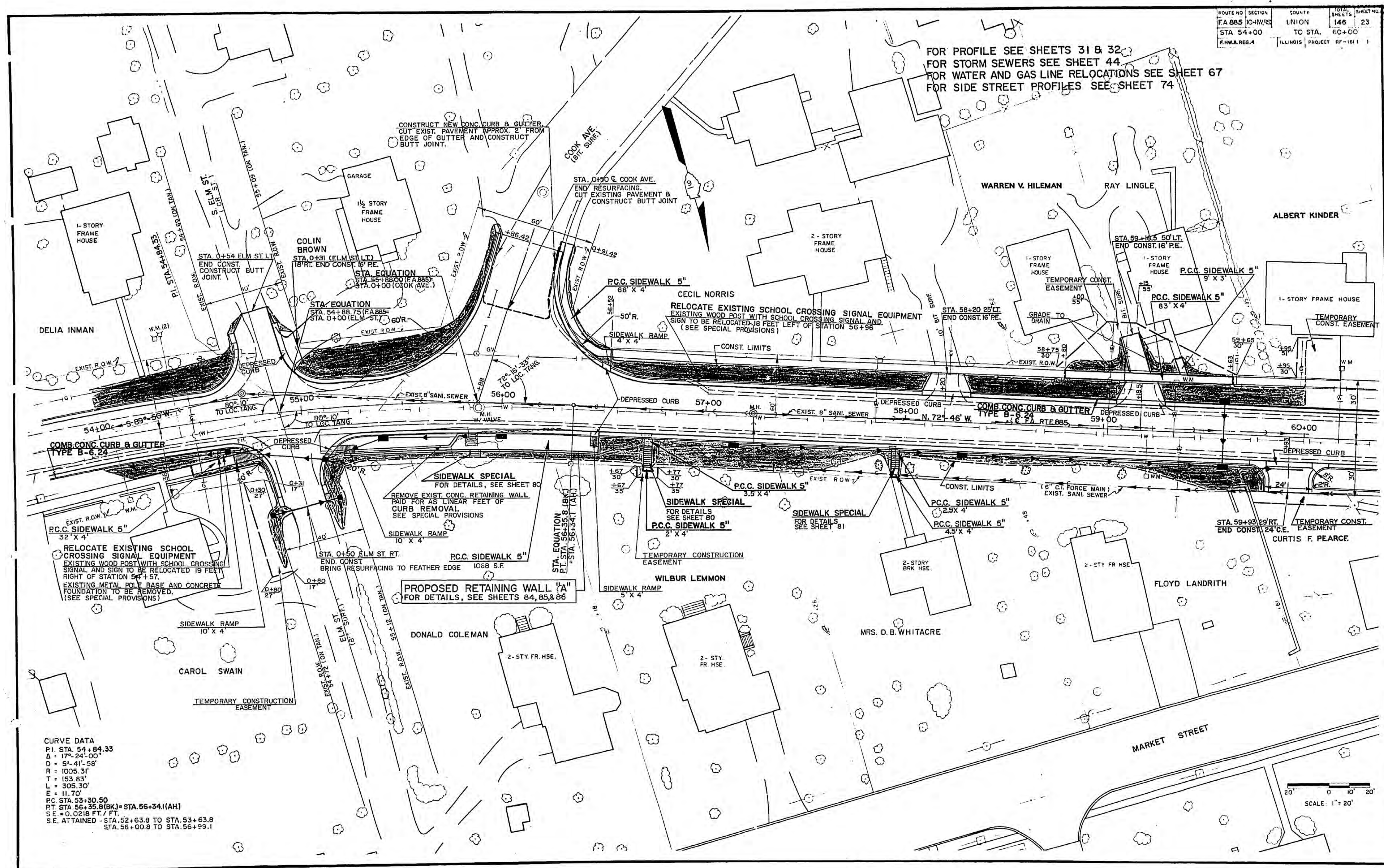


STA. 43+00 TO STA. 48+00

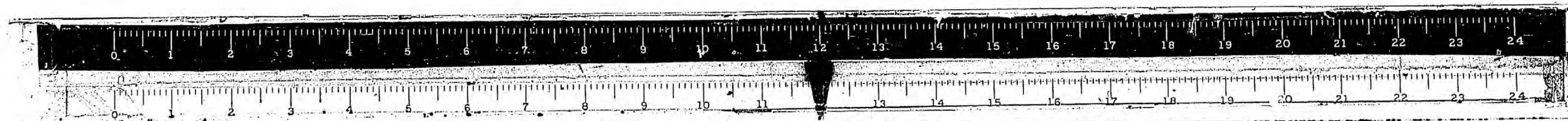




STA. 48+00 TO STA. 54+00

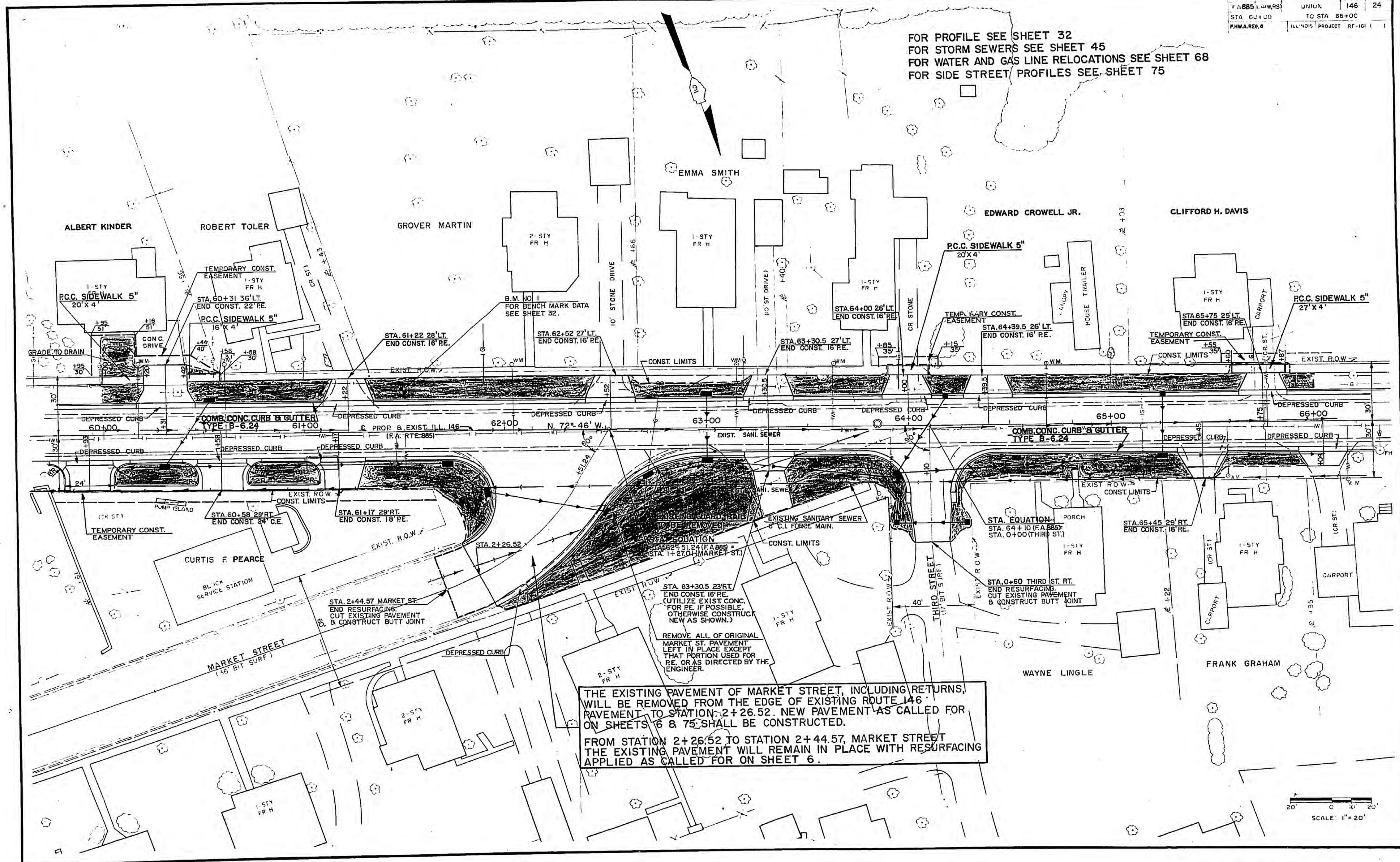


STA. 54+00 TO STA. 60+00

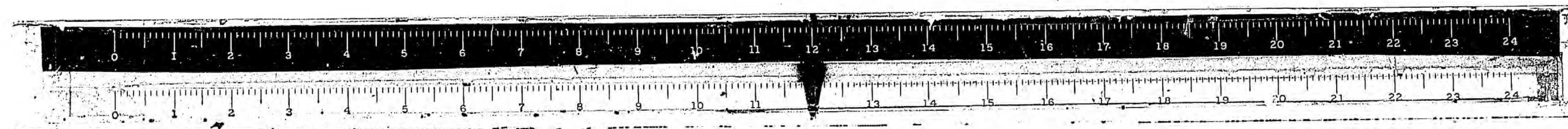


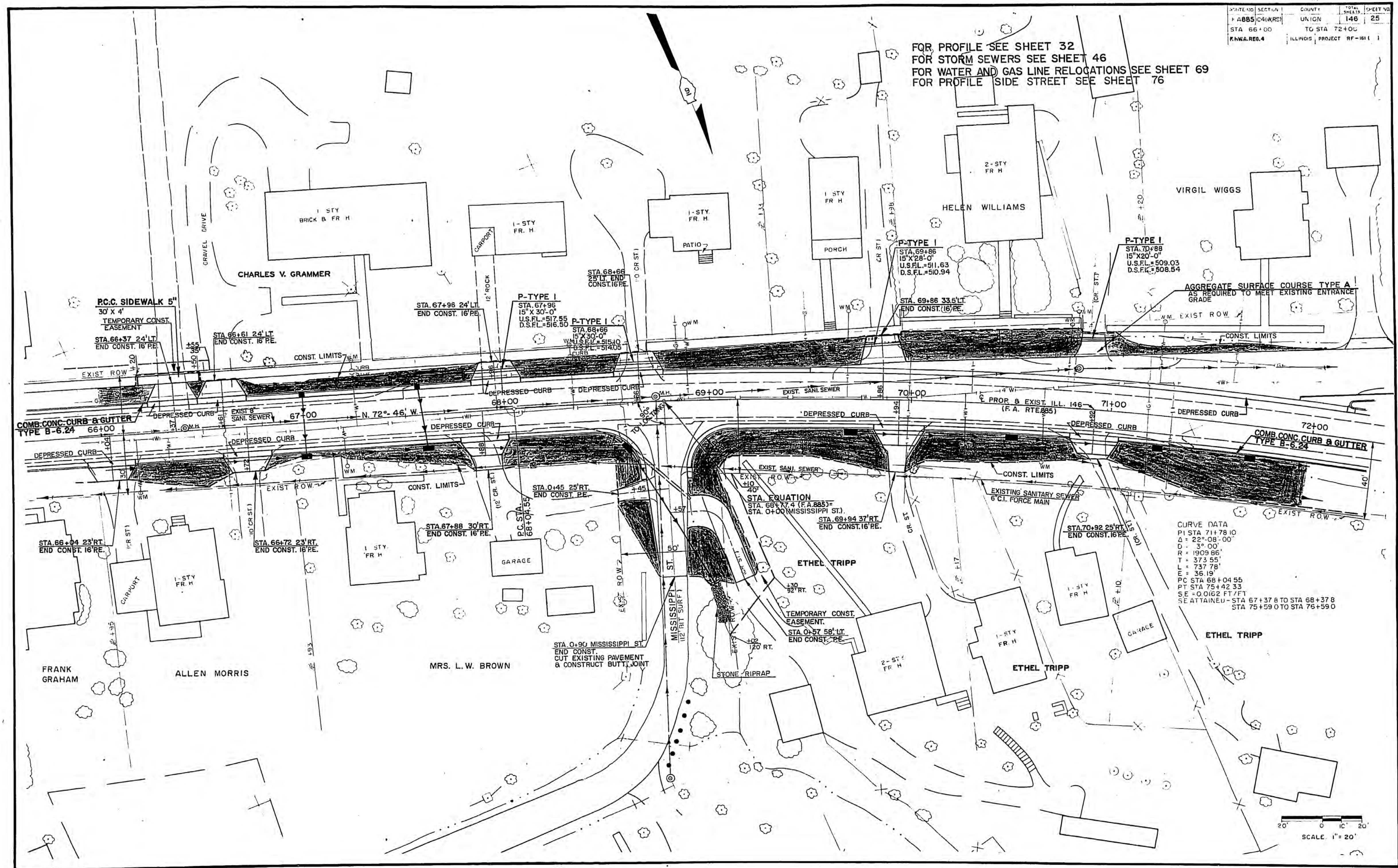
ROUTE NO. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 885 (H.W. 85)	UNION	146	24
STA. 60+00	TO STA. 66+00		
F.H.W.A. REG. 4	ILL. HO'S PROJECT	RF-161 (1)	

FOR PROFILE SEE SHEET 32
 FOR STORM SEWERS SEE SHEET 45
 FOR WATER AND GAS LINE RELOCATIONS SEE SHEET 68
 FOR SIDE STREET PROFILES SEE SHEET 75

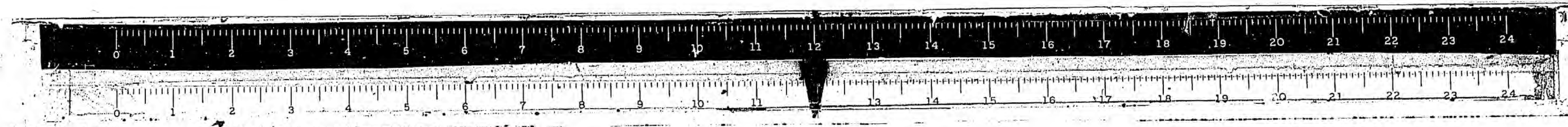


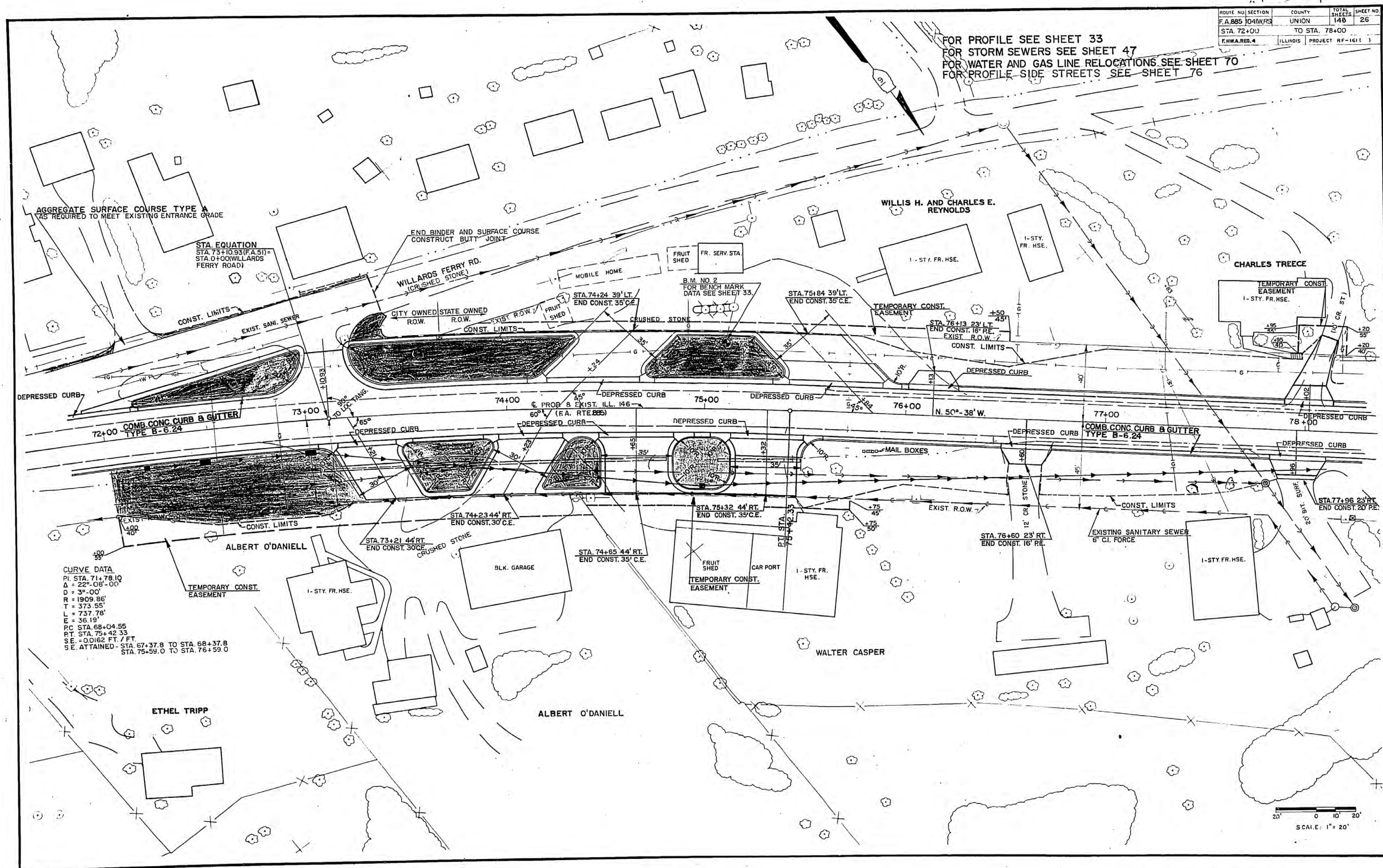
STA. 60+00 TO STA. 66+00



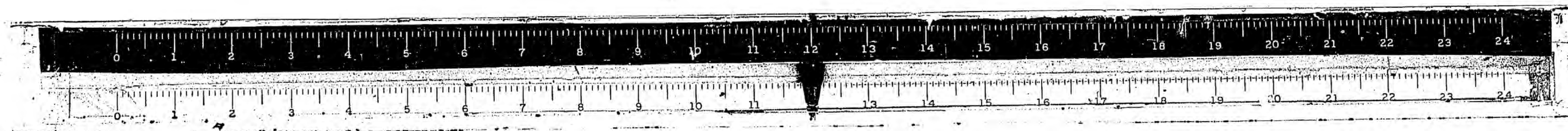


STA. 66+00 TO STA. 72+00



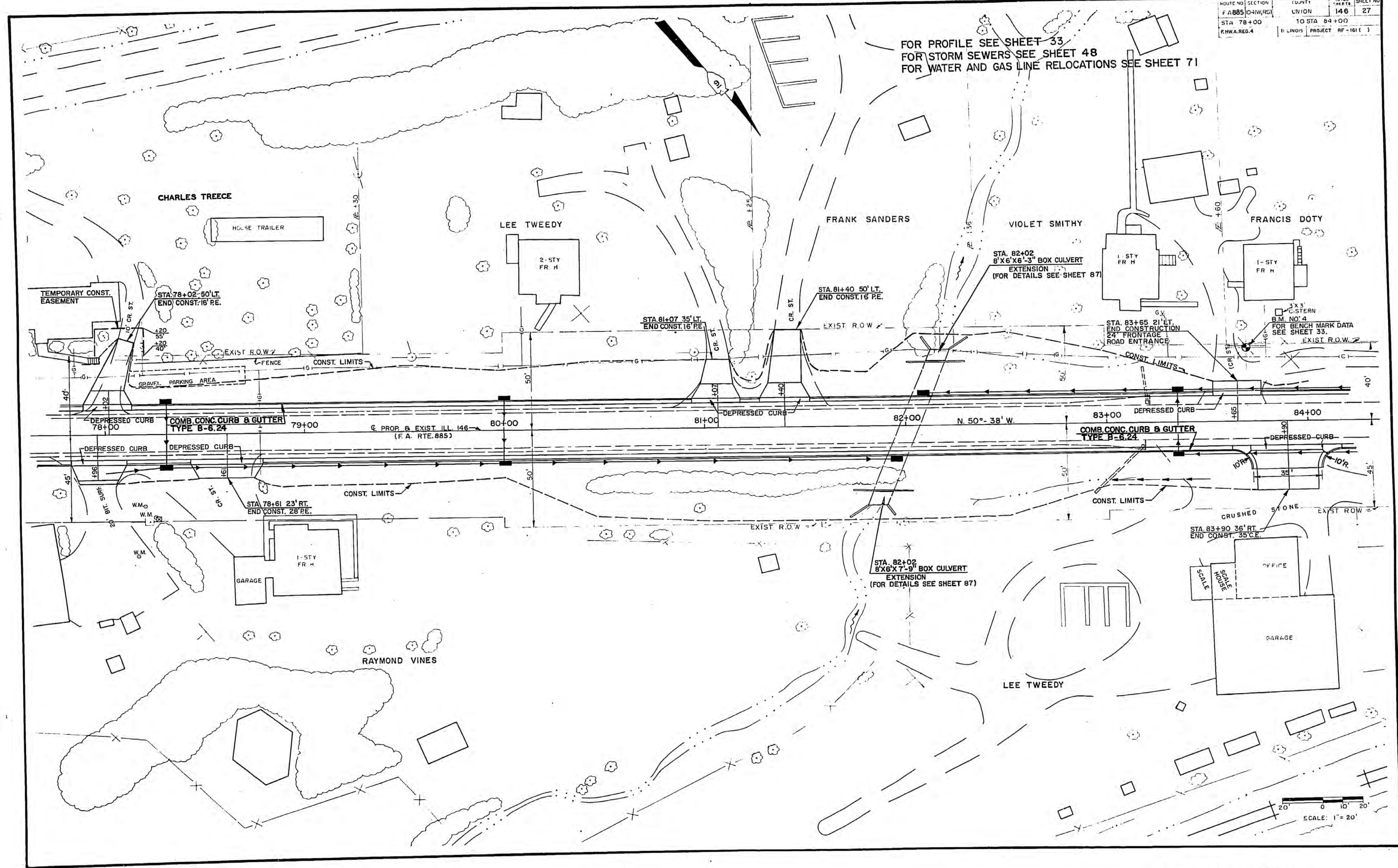


STA. 72+00 TO STA. 78+00



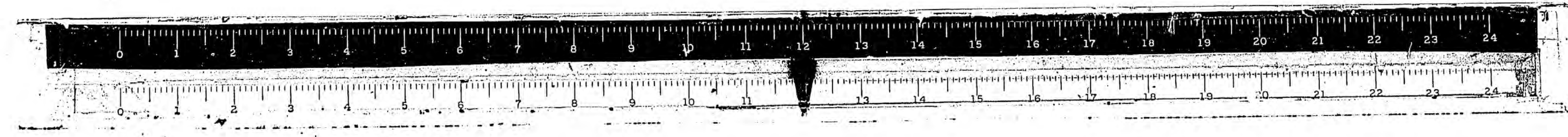
1115 STA. 79-51

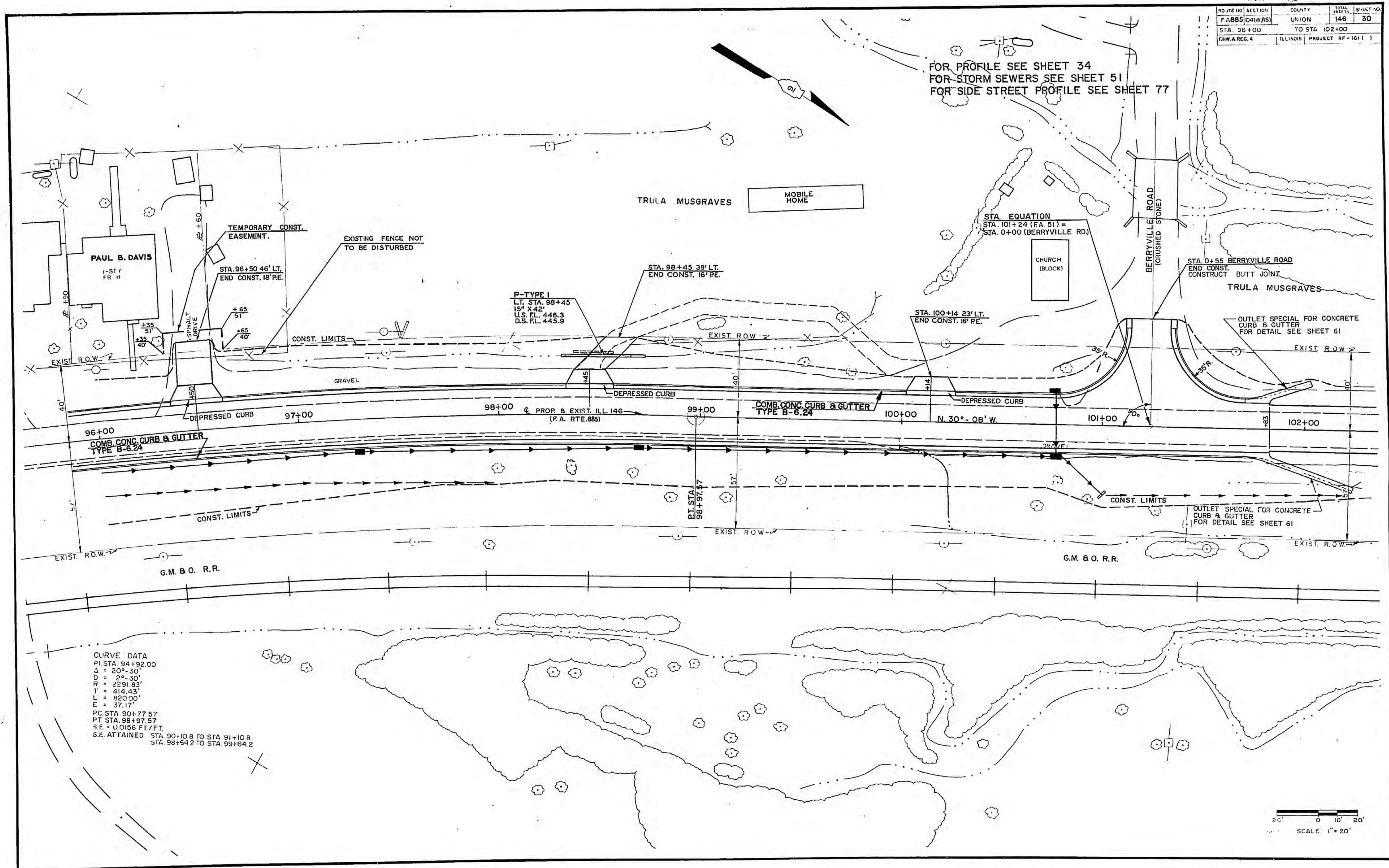
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F 1885	10-W.R.D.	UNION	146	27
STA 78+00		TO STA 84+00		
ILLINOIS PROJECT	RF-161			



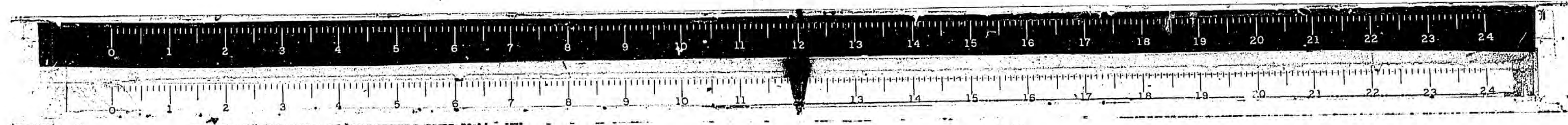
FOR PROFILE SEE SHEET 33
 FOR STORM SEWERS SEE SHEET 48
 FOR WATER AND GAS LINE RELOCATIONS SEE SHEET 71

STA. 78+00 TO STA. 84+00

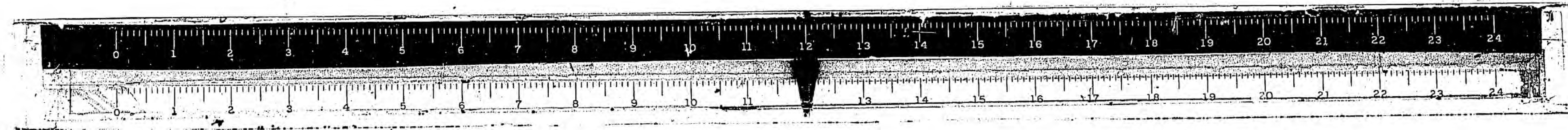
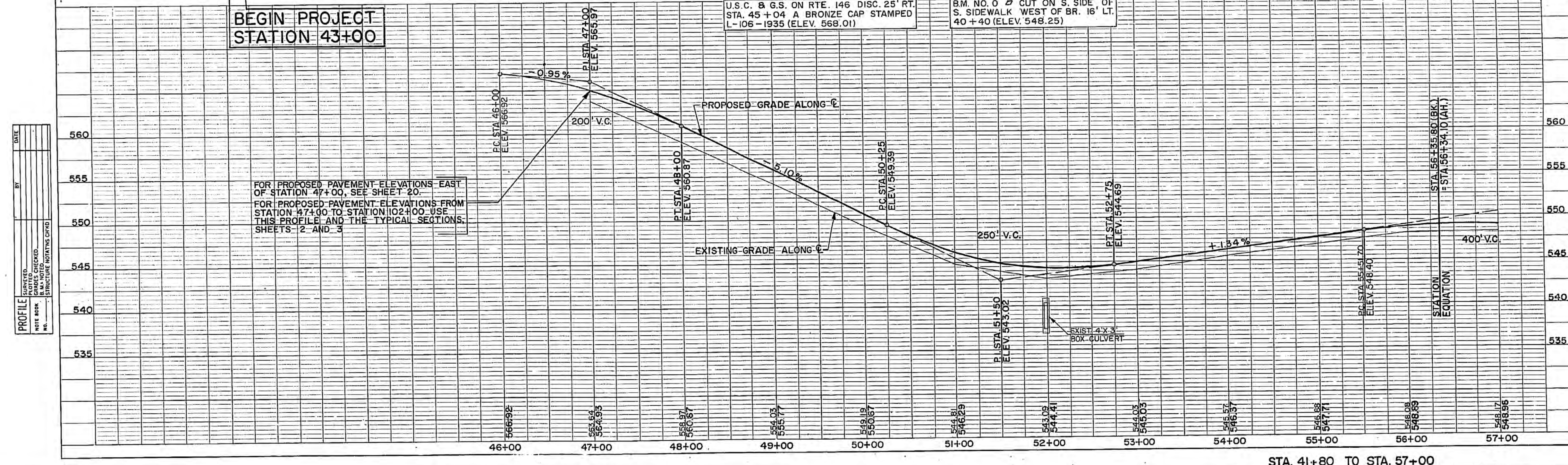
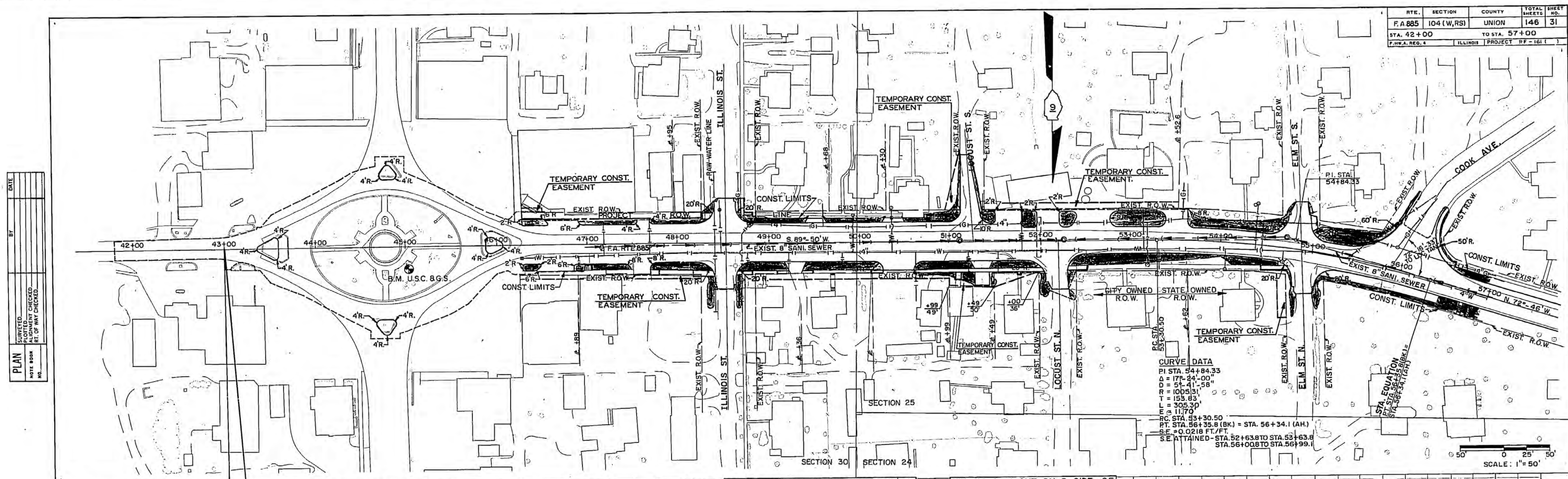




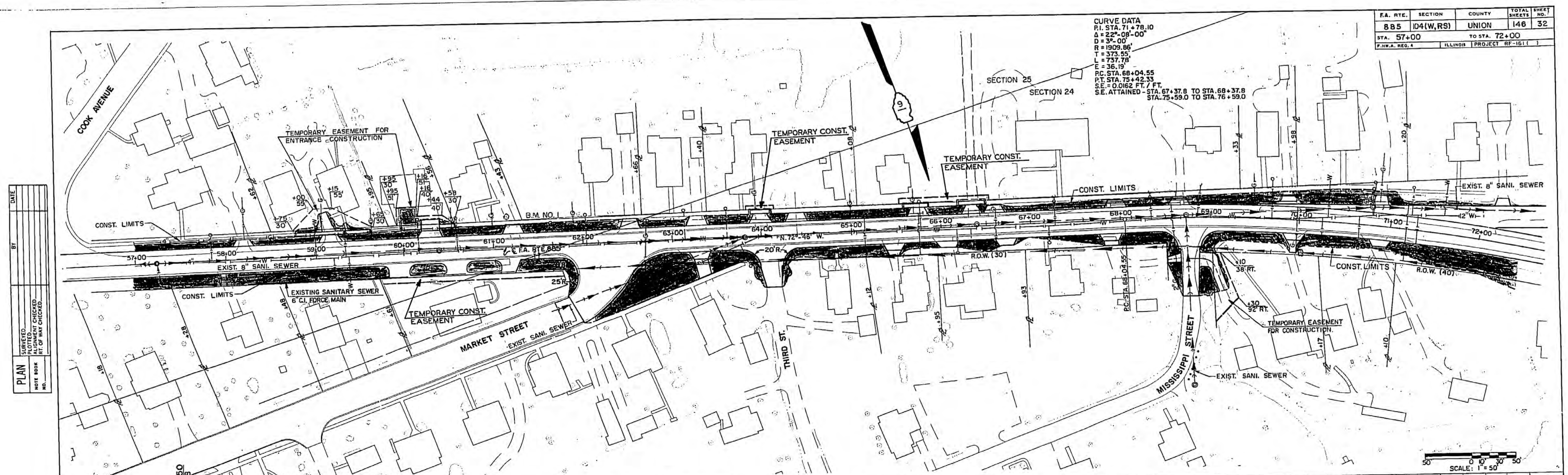
STA. 96+00 TO STA. 102+00



X-618 STA 42+57

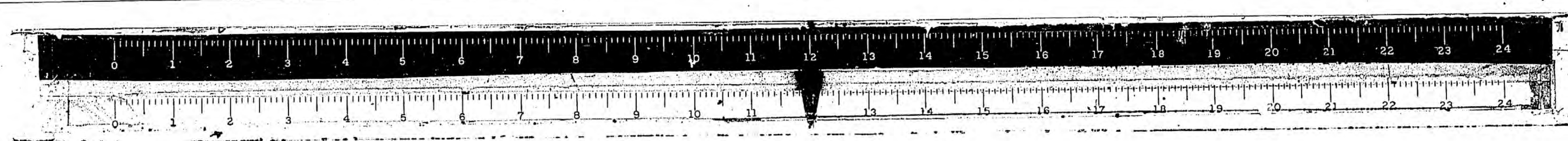
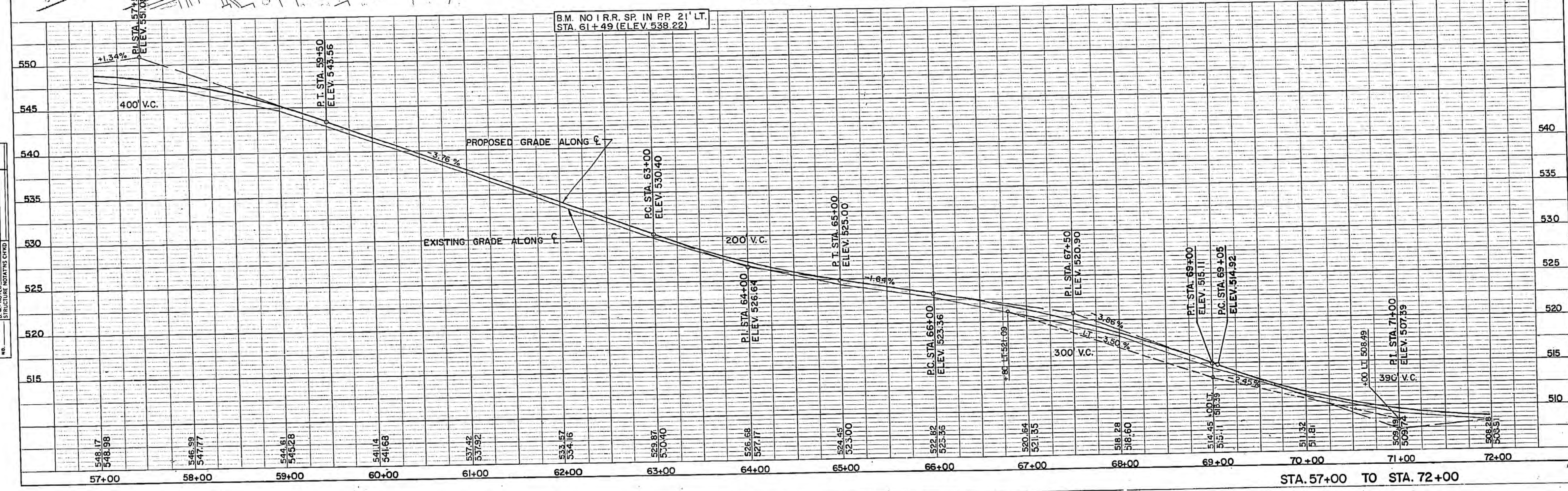


K-618 STA. 57-72
SCALE: 50' TO 1"

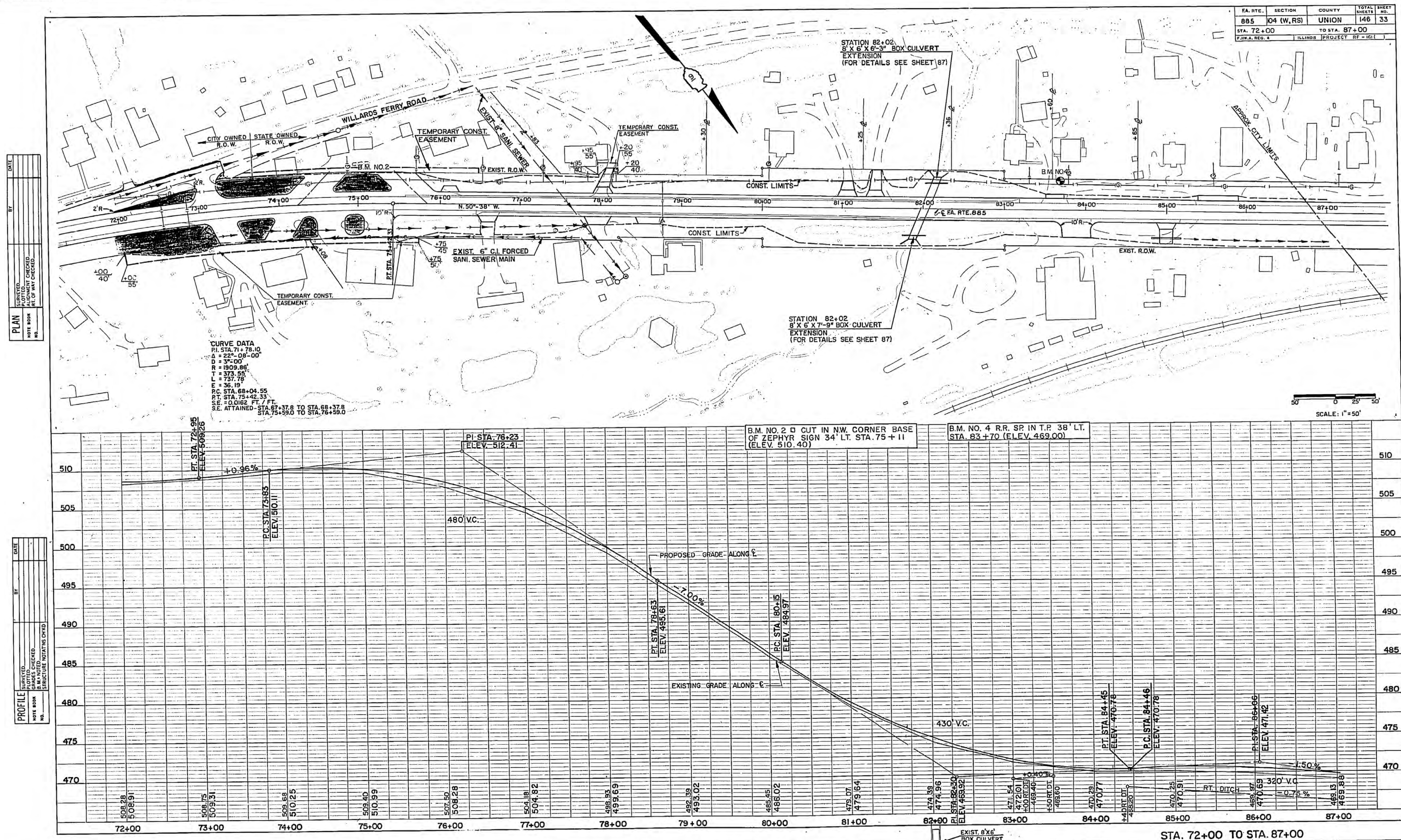


PLAN	DATE
DESIGNED	
PLOTTED	
CHECKED	
DATE	
BY	
NO.	

PROFILE	DATE
DESIGNED	
PLOTTED	
CHECKED	
DATE	
BY	
NO.	

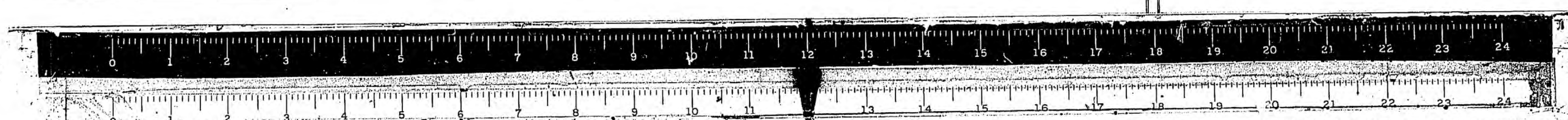


X-615 STA. 72-
SCALE 50' TO 1"



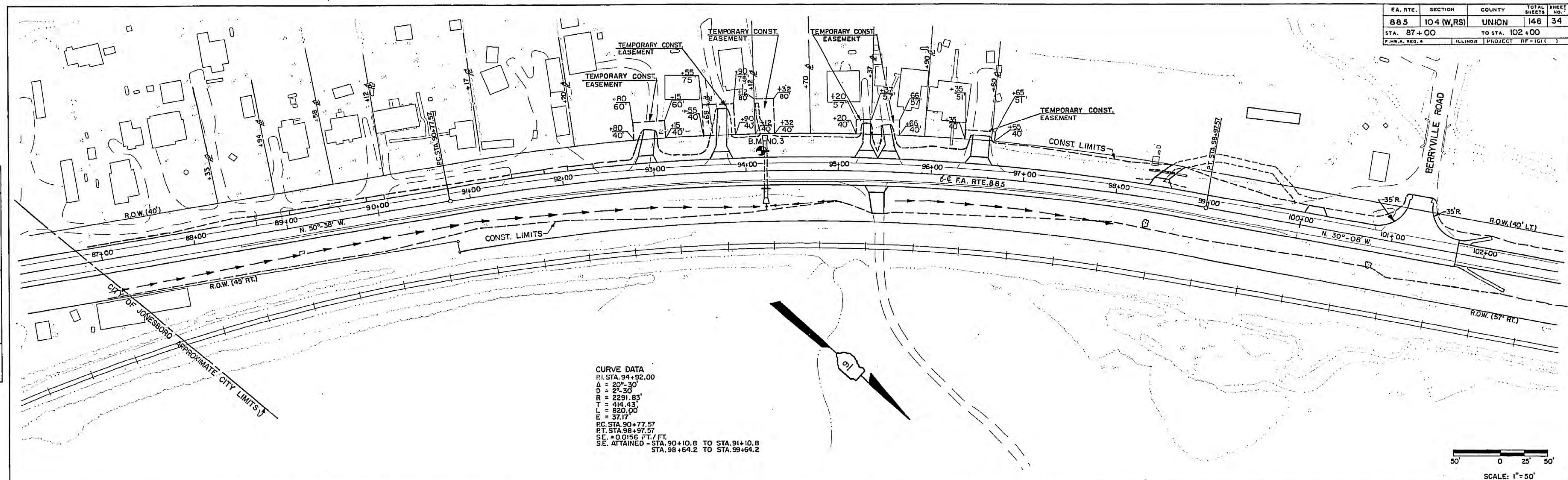
PLAN	DATE
BY	
CHECKED	
NOTED	
REVISION	

PROFILE	DATE
BY	
CHECKED	
NOTED	
REVISION	



X-618 STA. 87-11
SCALE 1"=50'

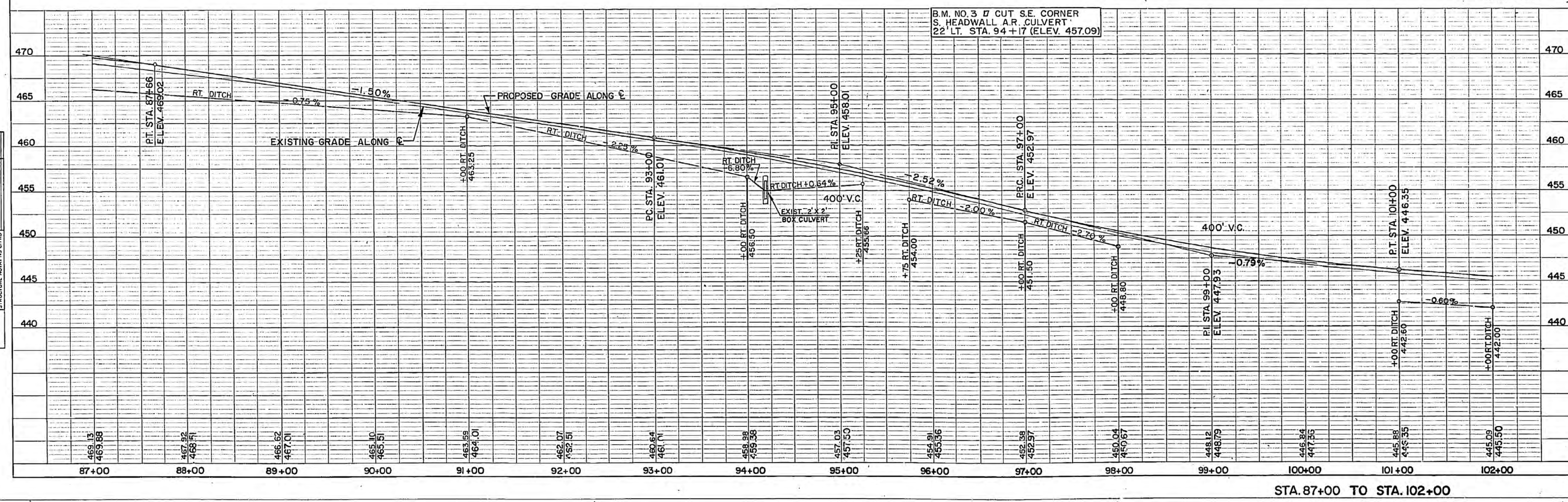
PLAN	DATE	BY
DESIGNED		
PLOTTED		
CHECKED		
DATE		



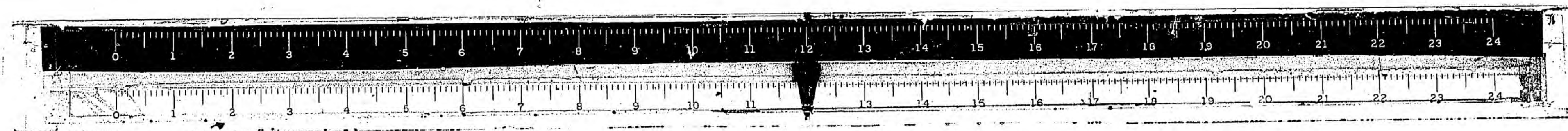
CURVE DATA
P.I. STA. 94+92.00
Δ = 20° 30'
D = 25.30'
R = 2291.83'
T = 418.43'
L = 820.00'
E = 37.17'
P.C. STA. 90+77.57
P.T. STA. 99+97.57
S.E. = 0.0158 FT./FT.
S.E. ATTAINED - STA. 90+10.8 TO STA. 91+10.8
STA. 98+64.2 TO STA. 99+64.2

SCALE: 1"=50'

PROFILE	DATE	BY
DESIGNED		
PLOTTED		
CHECKED		
DATE		



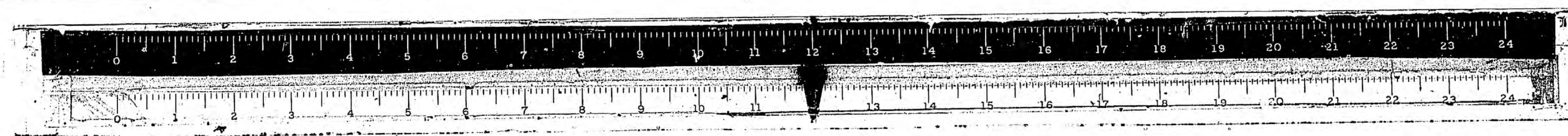
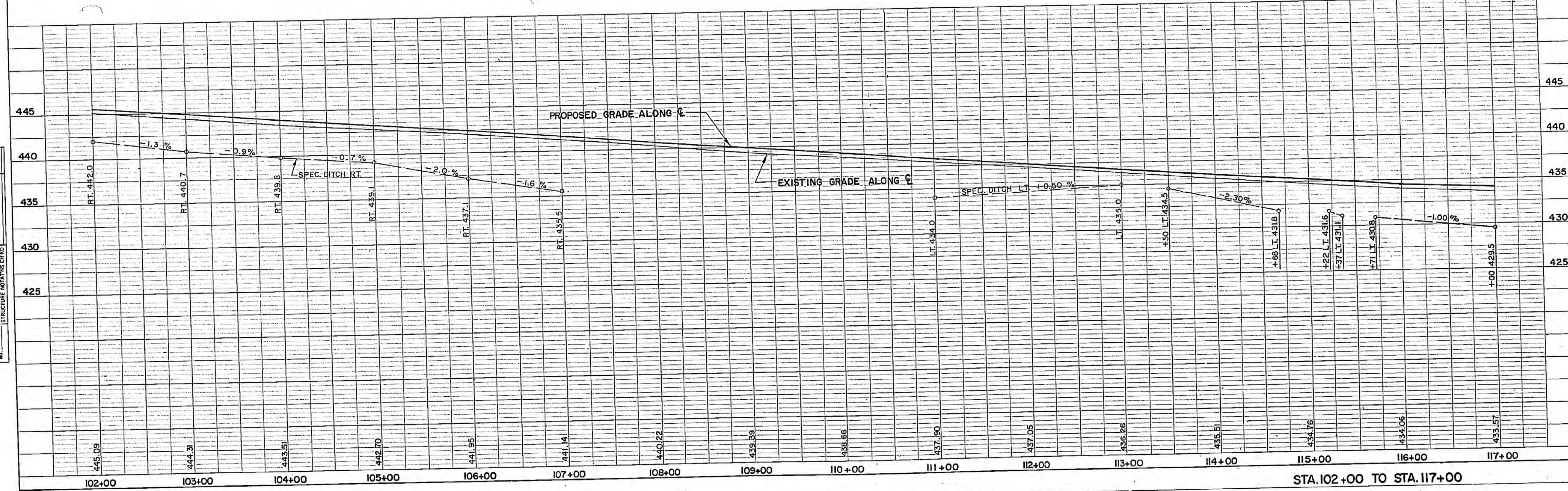
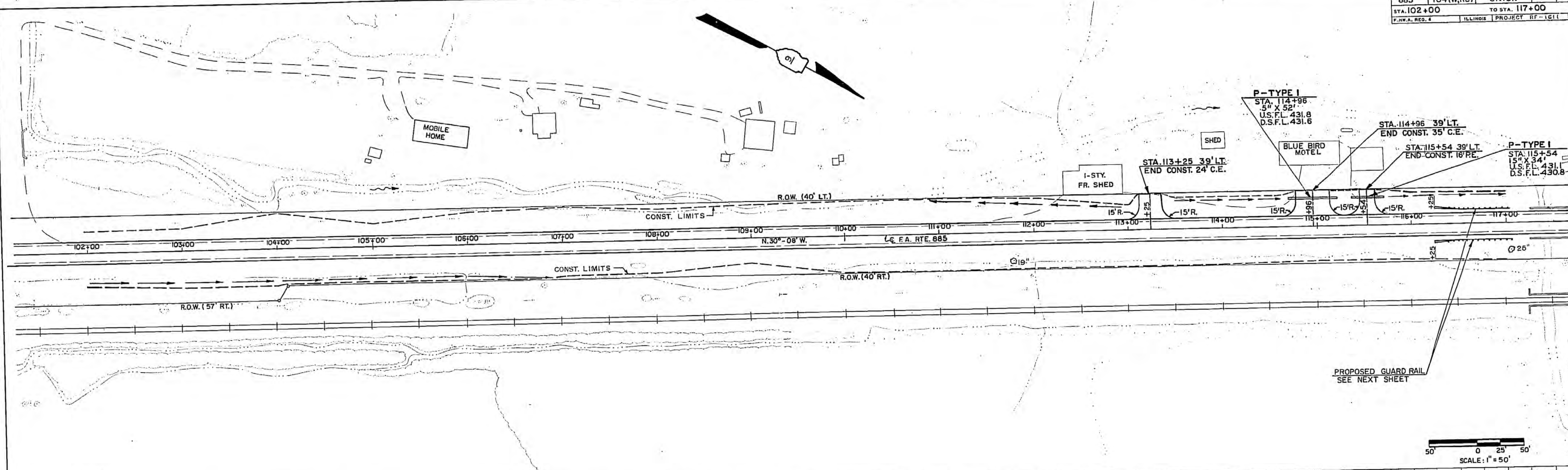
STA. 87+00 TO STA. 102+00



FA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	104(W,RS)	UNION	146	35
STA. 102+00		TO STA. 117+00		
F.H.W.A. REG. #		ILLINOIS	PROJECT RF-1611	

PLAN	DATE	
	BY	
SURVEYED	PLANNED	
	NOTED	
NO.	NOTED	
	NOTED	

PROFILE	DATE	
	BY	
SURVEYED	PLANNED	
	NOTED	
NO.	NOTED	
	NOTED	



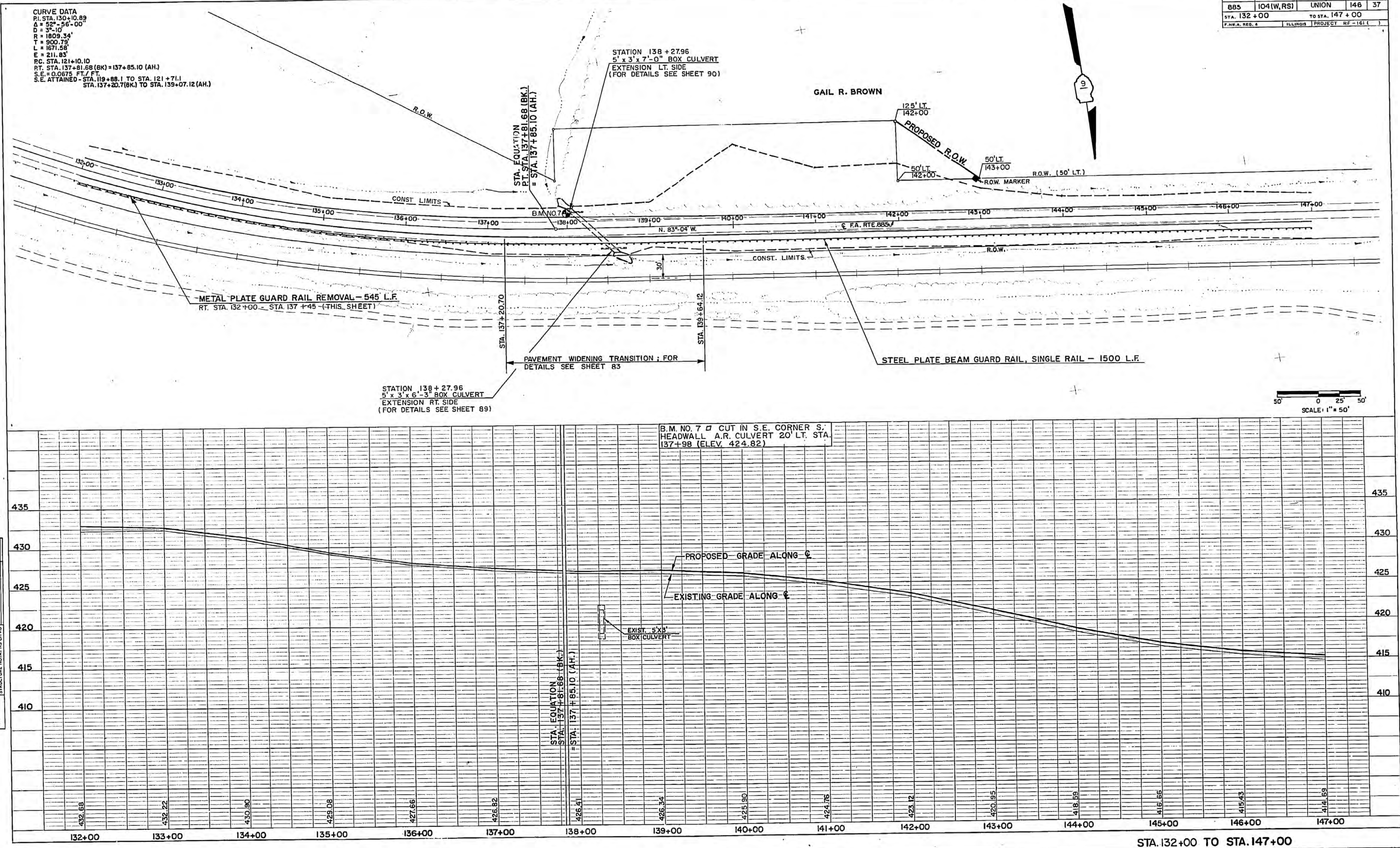
X-618 STA. 132-147
SCALE 50' TO 1"

CURVE DATA
P.I. STA. 130+00.89
Δ = 52°-56'-00"
D = 5°-10'
R = 1809.34'
T = 900.73'
L = 167.58'
E = 211.83'
RC. STA. 121+10.10
RT. STA. 137+81.68 (BK.) = 137+85.10 (AH.)
S.E. = 0.0075 FT./FT.
S.E. ATTAINED - STA. 119+88.1 TO STA. 121+71.1
STA. 137+20.7 (BK.) TO STA. 138+07.12 (AH.)

FA. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
885	104(W,RS)	UNION	146 37
STA. 132+00		TO STA. 147+00	
P.H.A. REG. 4		ILLINOIS PROJECT RF-161 ()	

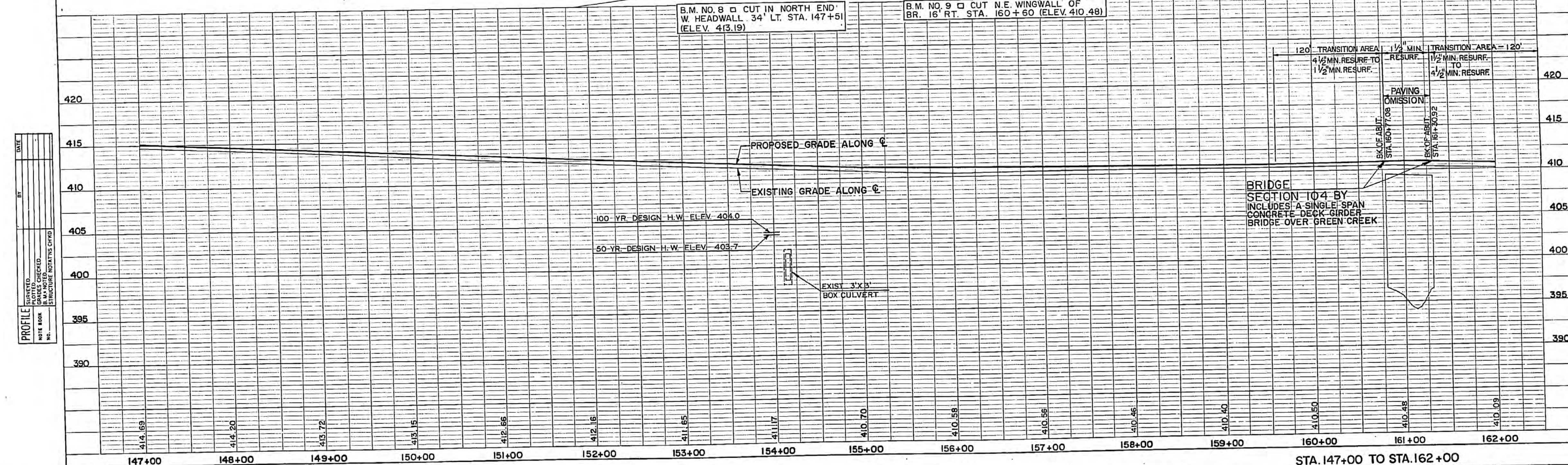
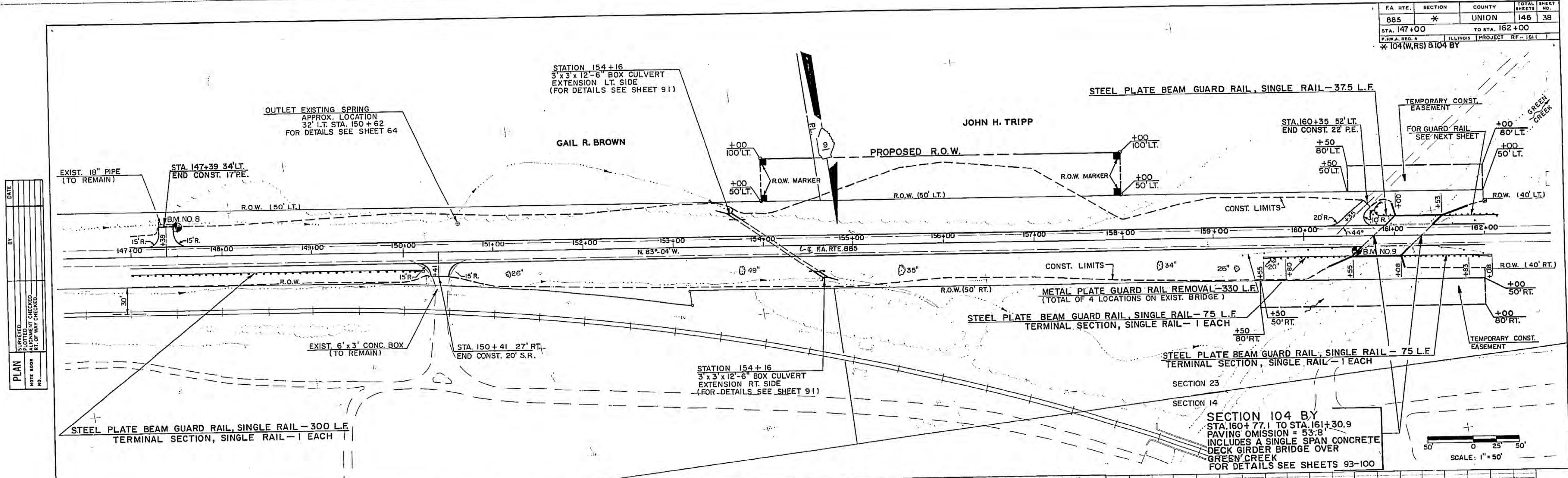
PLAN	DATE	BY
SURVEYED		
ADJUSTMENT CHECKED		
NOTE BOOK		
RE.		

PROFILE	DATE	BY
DESIGNED		
PLOTTED		
ADJUSTMENT CHECKED		
NOTE BOOK		
RE.		



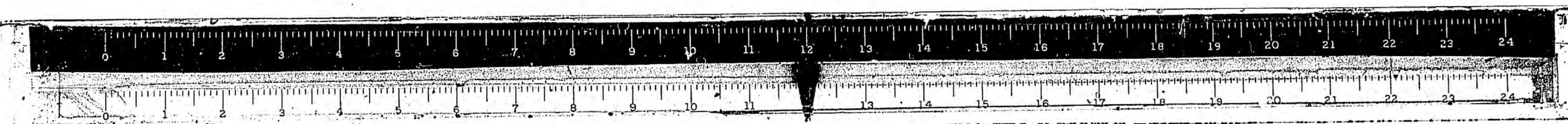
X-615 31A.141-102
SCALE 50' TO 1"

FA. RTE.	SECTION	COUNTY	TOTAL SHEETS
885	*	UNION	148 38
STA. 147+00 TO STA. 162+00			
* 104(W.RS) 8104 BY			

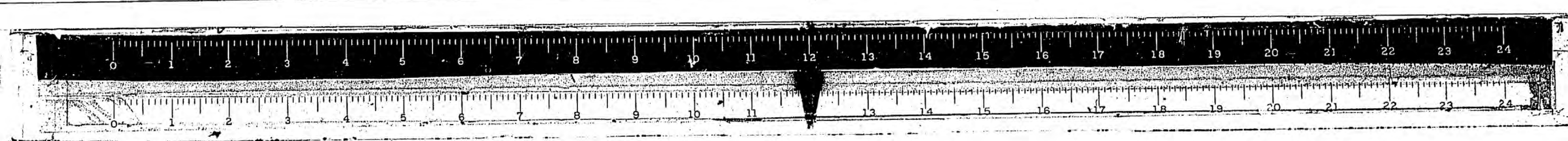
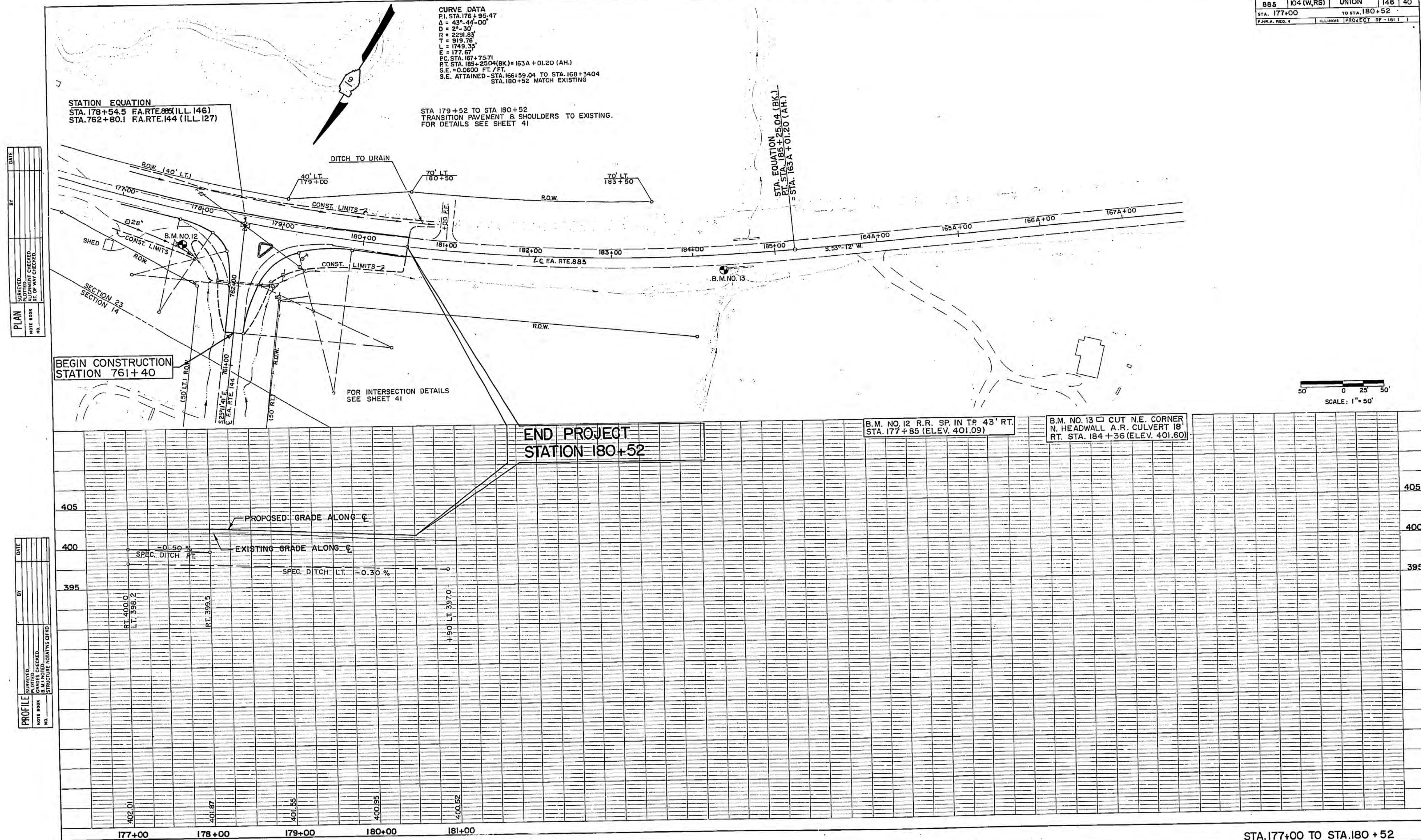


PLAN	DATE
BY	
CHECKED	
APPROVED	
NOTE BOOK	
NO.	

PROFILE	DATE
BY	
CHECKED	
APPROVED	
NOTE BOOK	
NO.	



FA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	104 (W,RS)	UNION	146	40
STA. 177+00		TO STA. 180+52		
F.H.W.A. REQ. 4		ILLINOIS	PROJECT RF-161 ()	



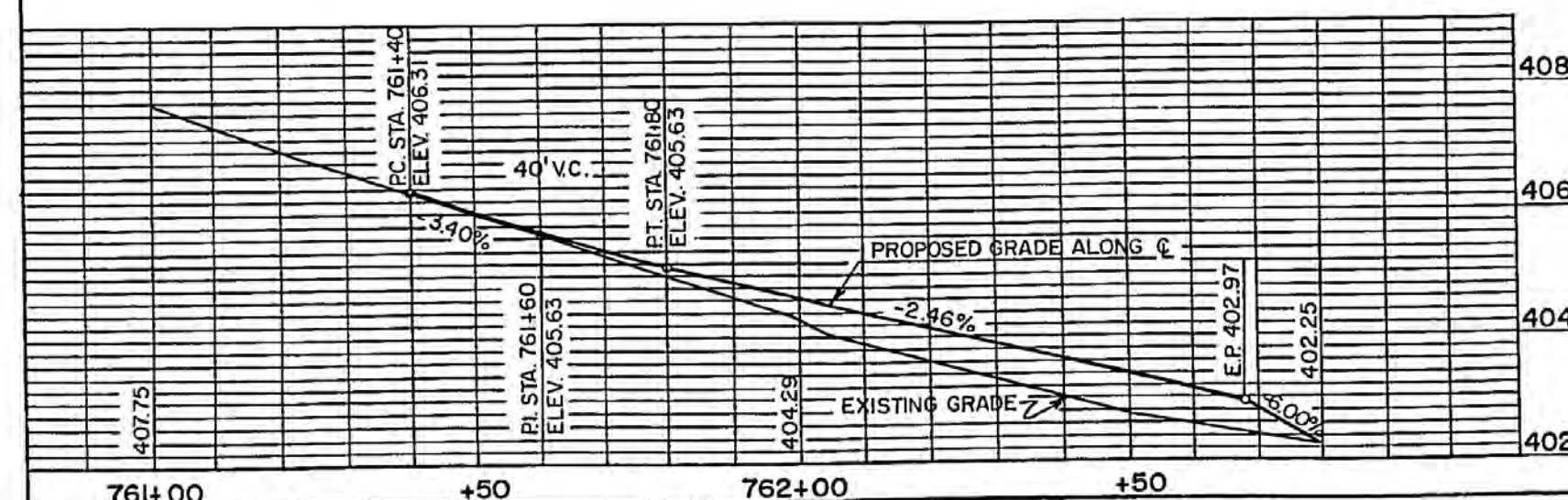
BEGIN CONSTRUCTION
STA. 761+00
F.A. RTE. 144

POINT NO.	ELEVATION
167	403.15
168	403.25
169	403.18
170	403.00
171	403.20
172	404.47
173	406.12
174	404.04
175	403.11
176	402.30
177	402.53
178	402.35

NOTE: THE EXISTING FLASHING BEACON, ACCESSORIES AND POLES SHALL BE REMOVED AND RELOCATED AS SHOWN, USING NEW WOOD POLES AND NEW ANCHORS. THIS WORK WILL BE PAID FOR AS RELOCATE EXISTING FLASHING BEACON, SPAN WIRE MOUNTED, LUMP SUM, TO INCLUDE NEW WOOD POLES AND NEW ANCHORS. SEE SPECIAL PROVISIONS.

3-CENTERED CURVE DATA

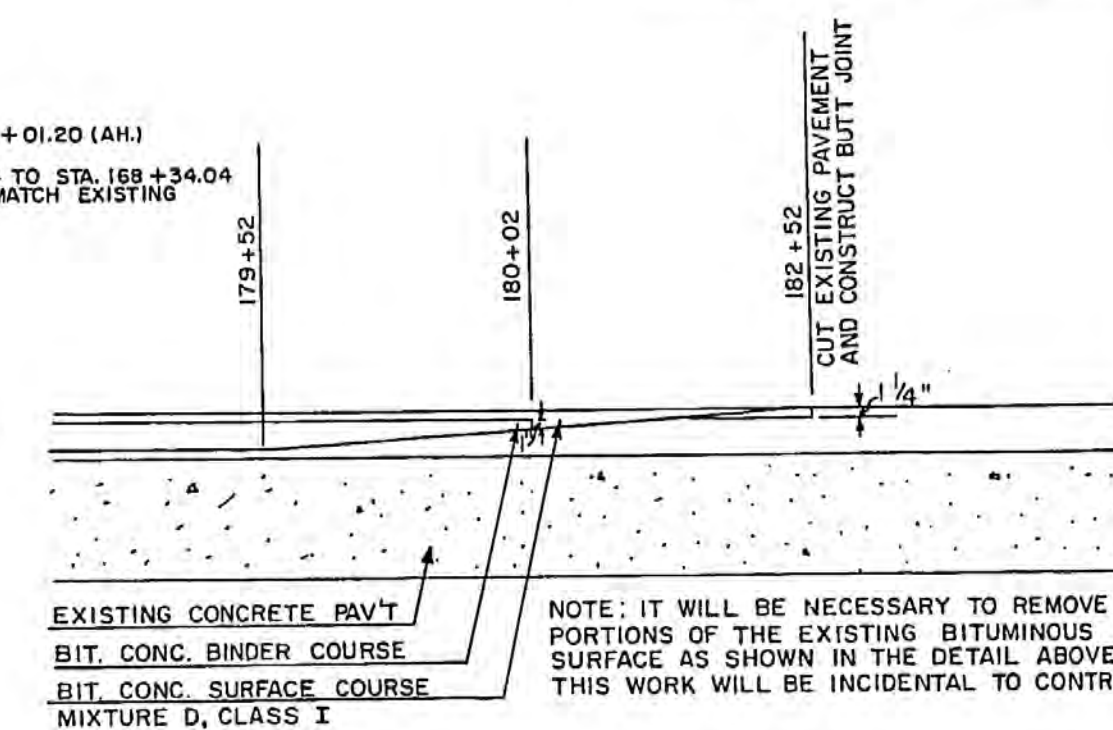
N.E.	N.W.
R ₁ = 120.00'	R ₁ = 180.00'
R ₂ = 40.00'	R ₂ = 75.00'
C = 5.00'	C = 6.61'
Δ = 82°53'28"	Δ = 91°49'12"
θ = 20°21'51"	θ = 20°25'19"
L ₁ = 42.65'	L ₁ = 64.51'
L ₂ = 29.44'	L ₂ = 66.68'
Z = 42.43'	Z = 63.87'



F.A. RTE. 885 CURVE DATA

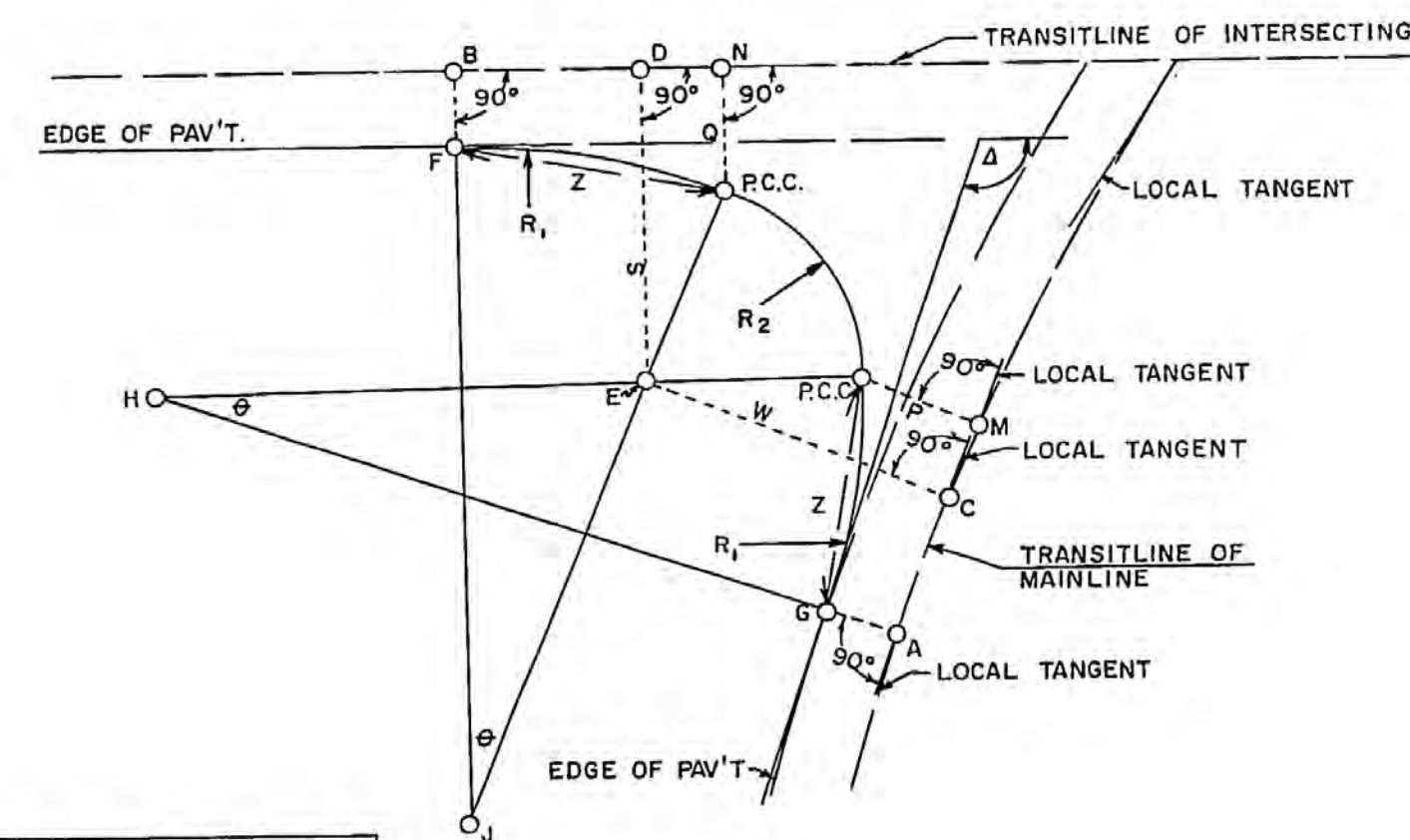
P.I. STA. 176+55.47
Δ = 43°-44'-00"
D = 2°-30'
R = 2291.83'
T = 319.76'
L = 1749.33'
E = 177.67'
P.C. STA. 167+75.71
P.T. STA. 185+25.04 (B.K.) = 163A+01.20 (A.H.)
S.E. = 0.0000 F1/17.7
S.E. ATTAINED - STA. 166+59.04 TO STA. 168+34.04
STA. 180+52 MATCH EXISTING

F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
885	104(W,RS)	UNION	146 41
F.H.W.A. REQ. 4 ILLINOIS PROJECT R.R. 161 ()			



BITUMINOUS SURFACE TRANSITION DETAIL
STATION 179+52 TO STATION 180+52
(NO SCALE)

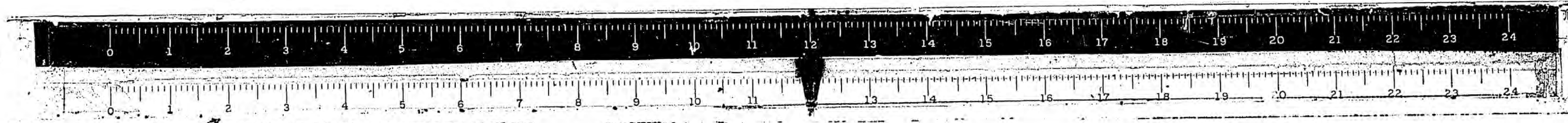
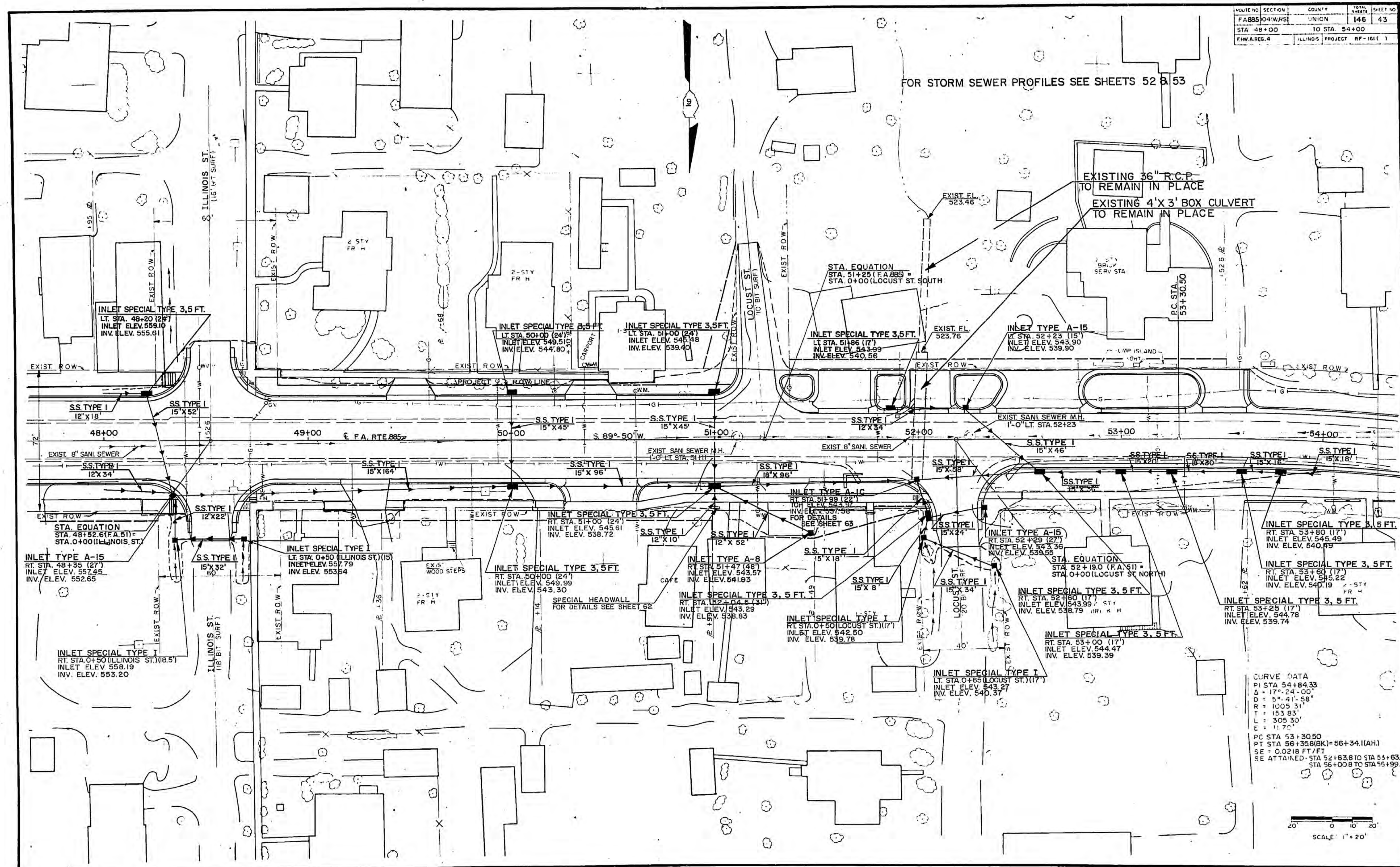
INSTRUCTIONS FOR STAKING CONTROL POINTS FOR THREE CENTERED CURVES

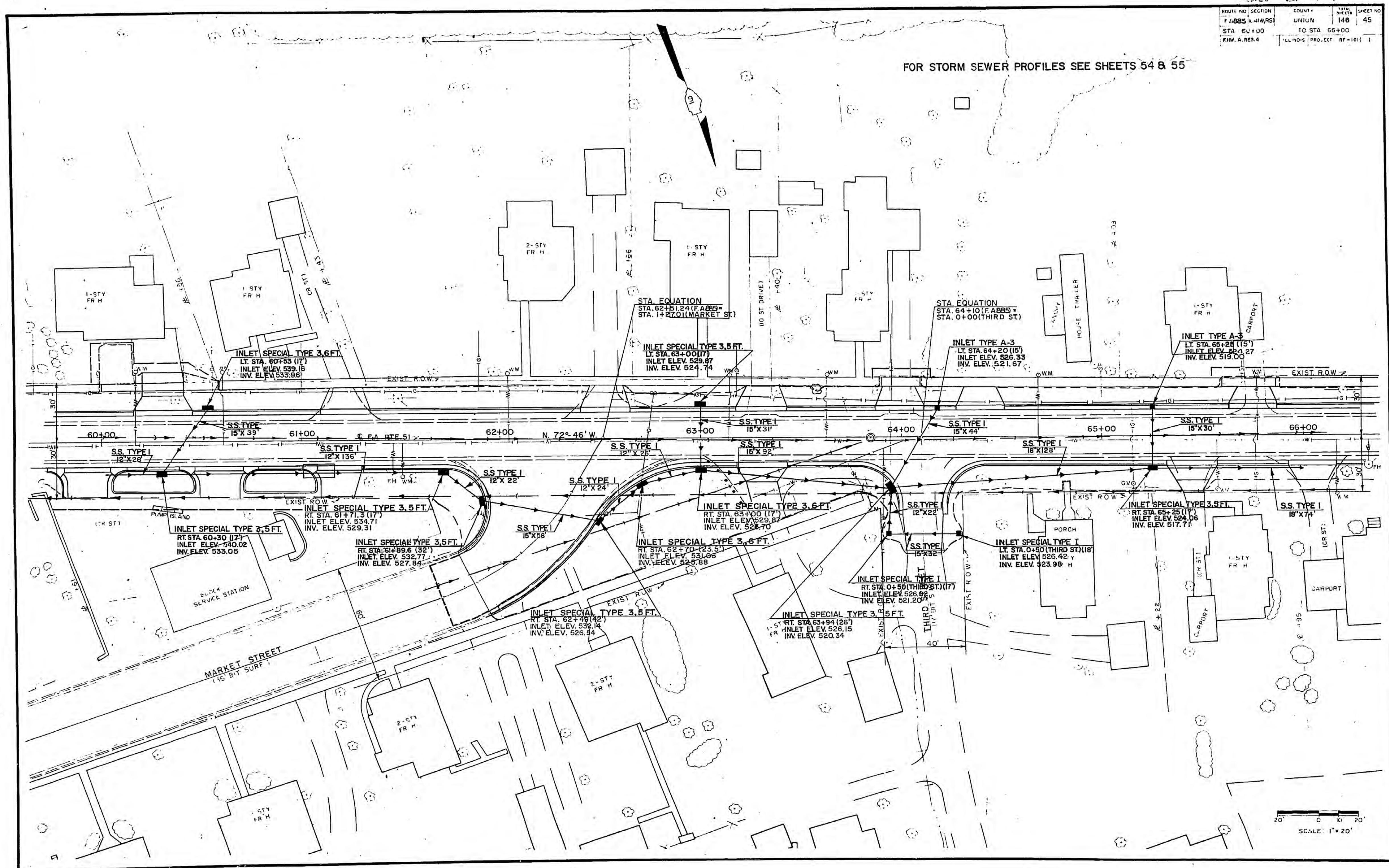


PROCEDURE

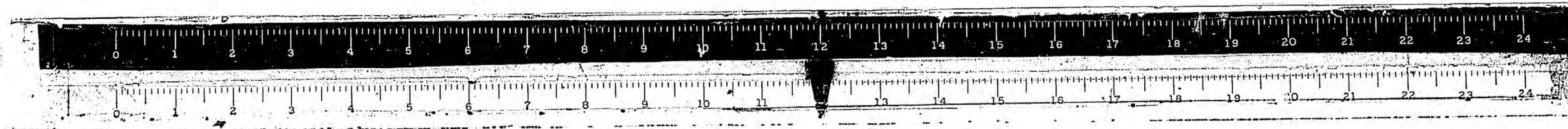
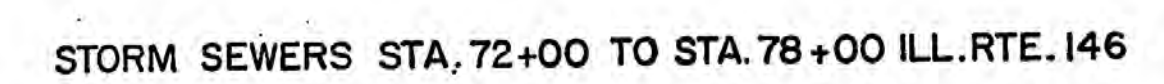
1. LOCATE POINTS A, B, C, D, F, G, M, N FROM INFORMATION ON PLANS.
2. LOCATE POINTS OF COMPOUND CURVE AT DISTANCE Z FROM F & G AND AT DISTANCES P & Q FROM POINTS M & N.
3. LOCATE POINT E AT DISTANCE W FROM C AND DISTANCE S FROM D.
4. LOCATE POINTS H AND J AT DISTANCE R₁ FROM P.C.C. OF CURVES AND FROM POINTS F & G.

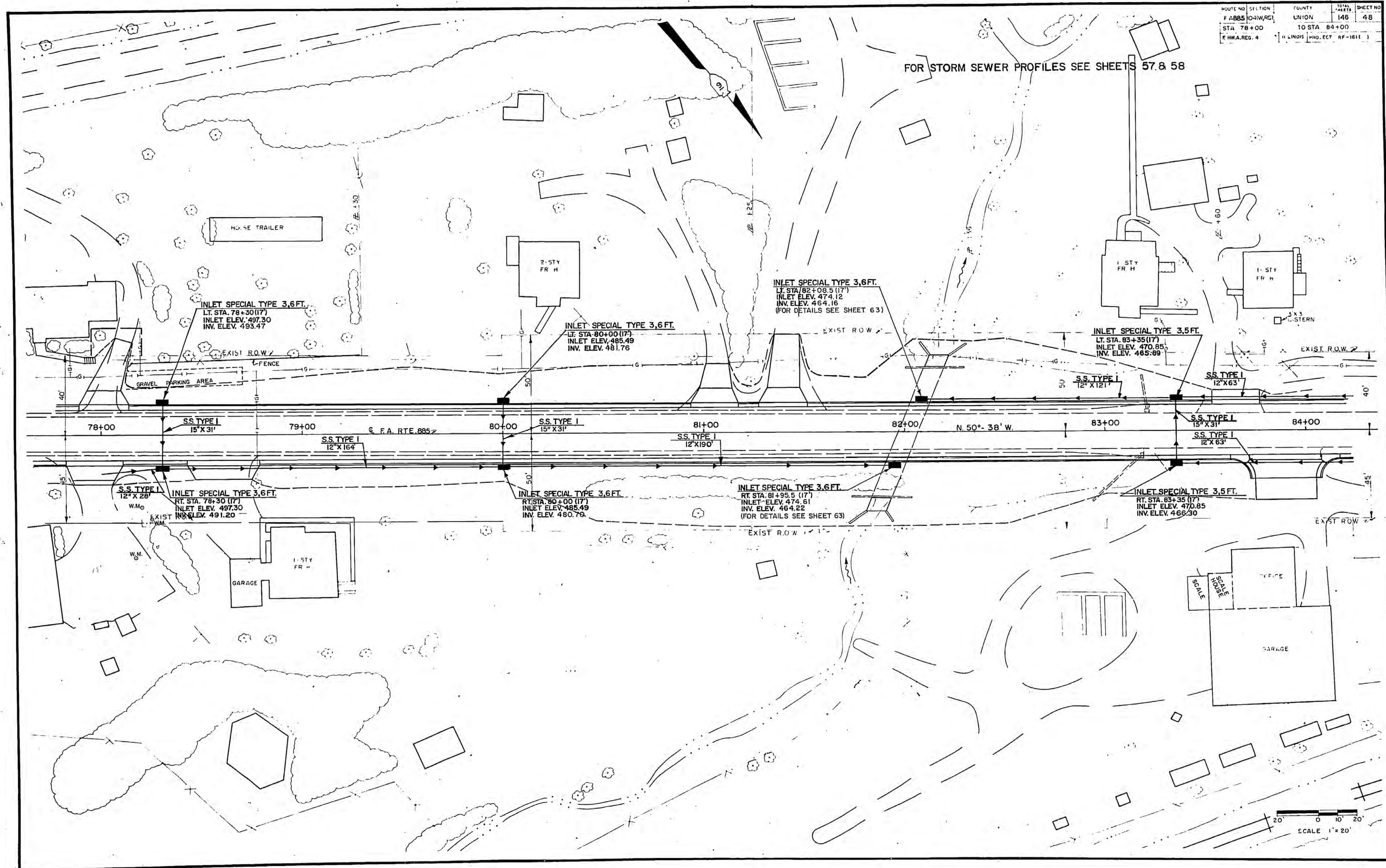
END PROJECT
STA. 180+52





STORM SEWERS STA. 60+00 TO STA. 66+00 ILL. RTE. 146

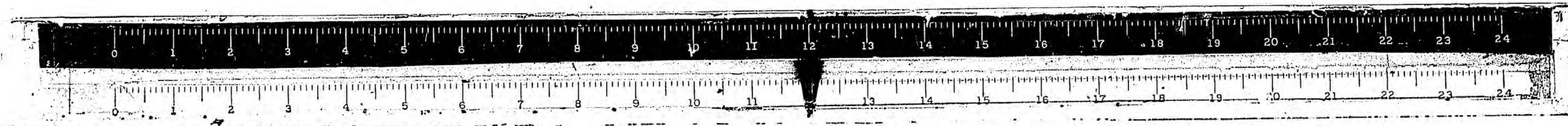




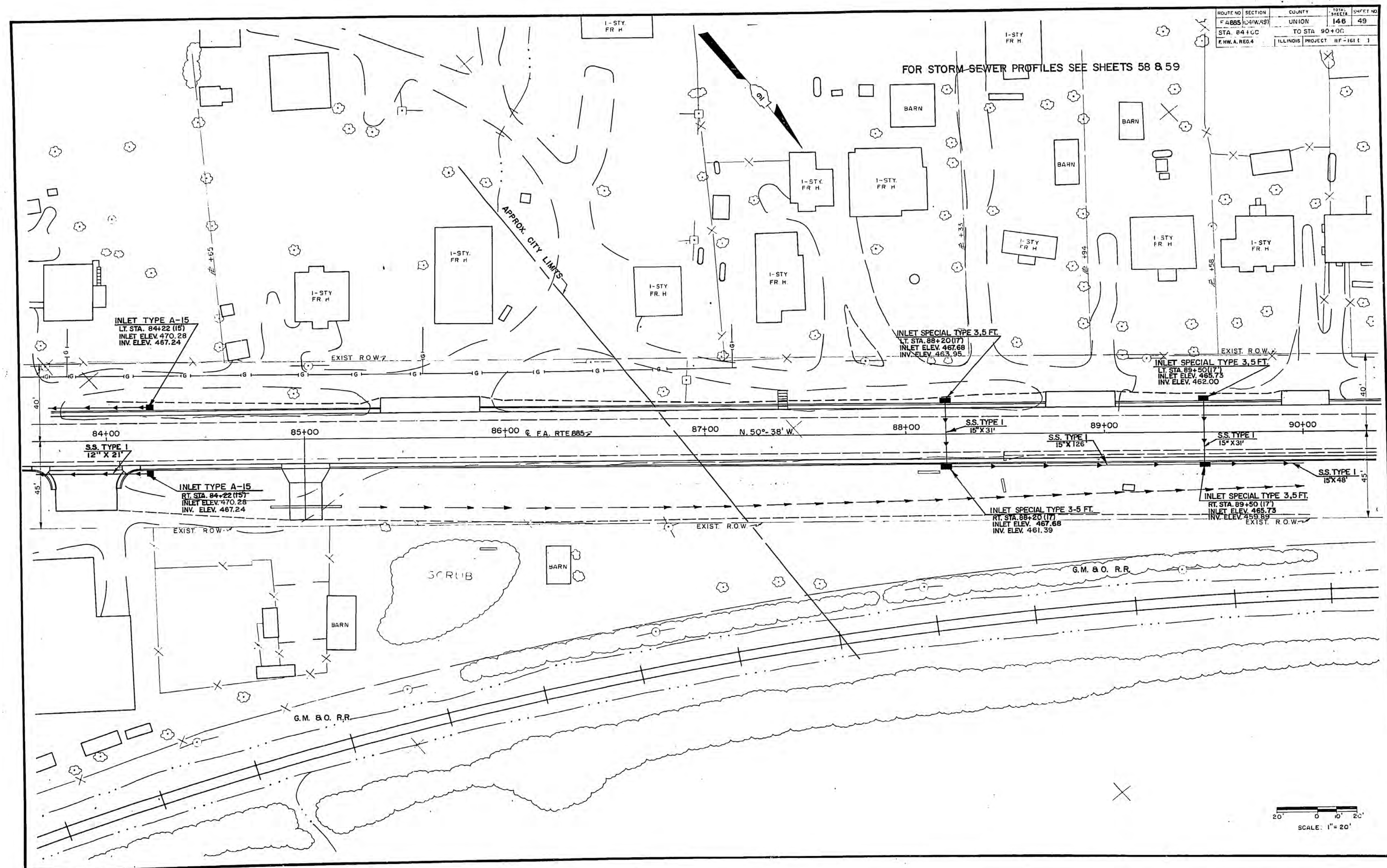
ROUTE NO.	SECTION	COUNTY	TOTAL SHEET NO.
F 1885	104W/RS	UNION	146
STA. 78+00		10 STA. 84+00	48
FWA REG. 4		ILLINOIS PROJECT RP-1611	

FOR STORM SEWER PROFILES SEE SHEETS 57 & 58

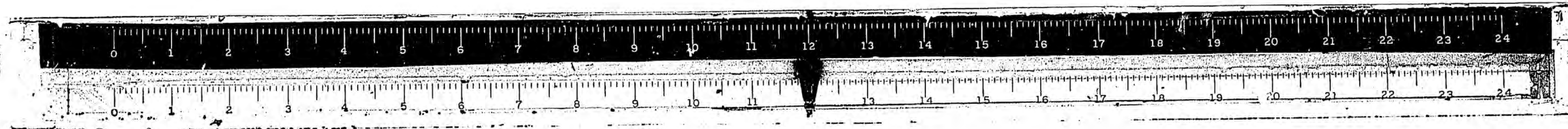
STORM SEWERS STA. 78+00 TO STA. 84+00 ILL. RTE. 146



1. L.I.S. STA. 84-90



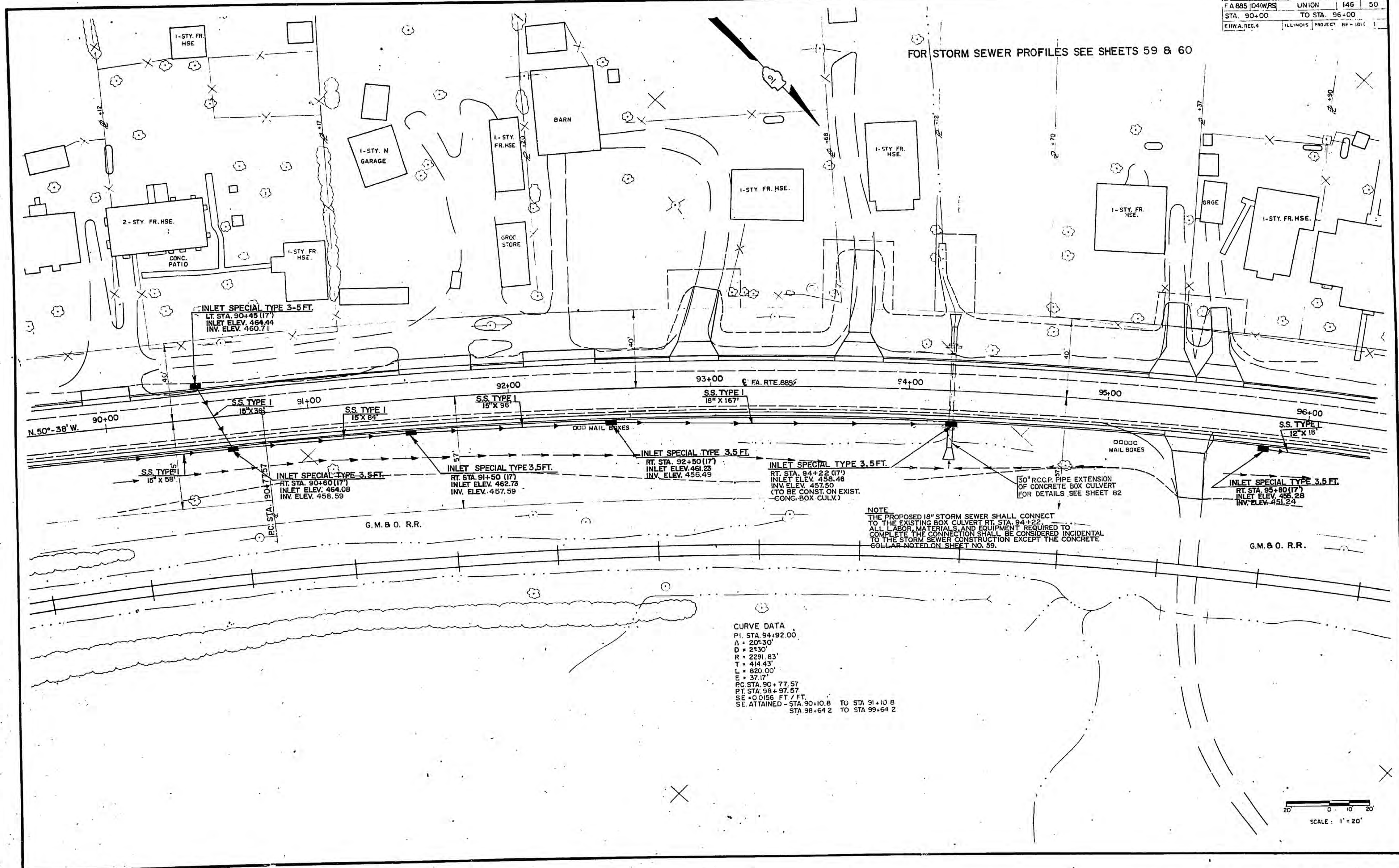
STORM SEWERS STA. 84+00 TO STA. 90+00 ILL. RTE. 146



STATION 90+00 TO 96+00

ROUTE NO. 146	SECTION 146	COUNTY UNION	SHEET NO. 50
STA. 90+00	TO STA. 96+00	ILLINOIS PROJECT	RF-101

FOR STORM SEWER PROFILES SEE SHEETS 59 & 60

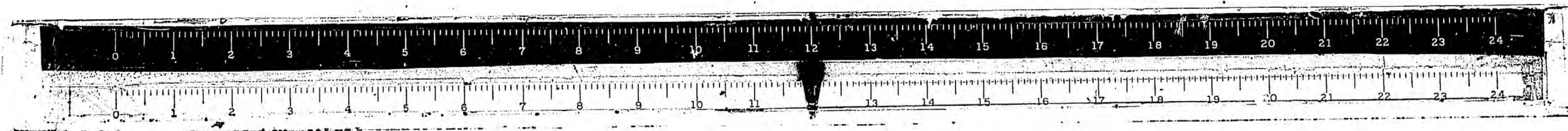


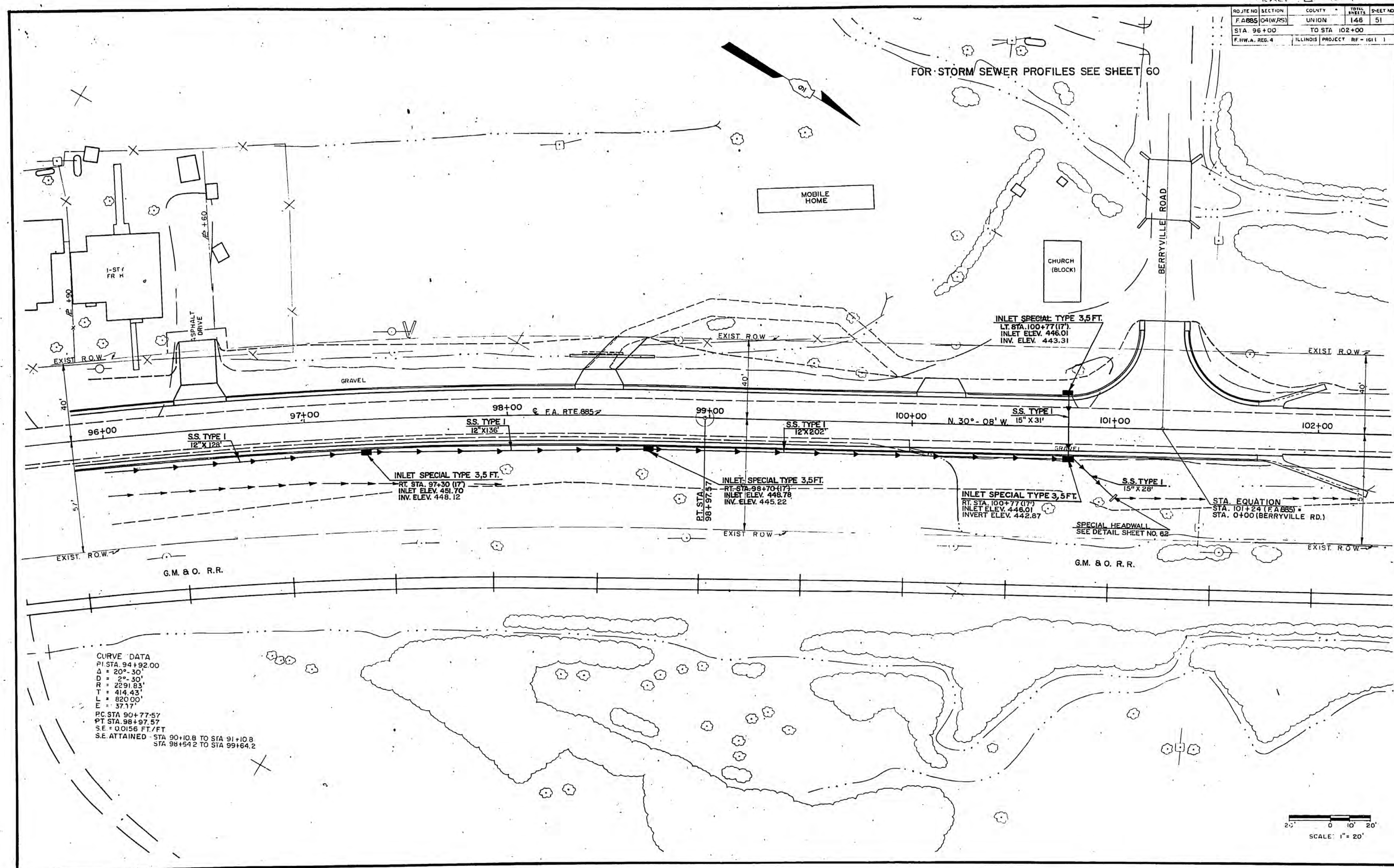
CURVE DATA
 P.I. STA. 94+92.00
 $\Delta = 20^\circ 30'$
 $D = 2530'$
 $R = 2291.83'$
 $T = 414.43'$
 $L = 820.00'$
 $E = 37.17'$
 P.C. STA. 90+77.57
 P.T. STA. 98+97.57
 $SE = 0.0156 \text{ FT./FT.}$
 SE. ATTAINED - STA. 90+10.8 TO STA. 91+10.8
 STA. 98+64.2 TO STA. 99+64.2

NOTE
 THE PROPOSED 18" STORM SEWER SHALL CONNECT TO THE EXISTING BOX CULVERT RT. STA. 94+22. ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO COMPLETE THE CONNECTION SHALL BE CONSIDERED INCIDENTAL TO THE STORM SEWER CONSTRUCTION EXCEPT THE CONCRETE COLLAR NOTED ON SHEET NO. 59.

SCALE: 1" = 20'

STORM SEWERS STA. 90+00 TO STA. 96+00 ILL. RTE. 146

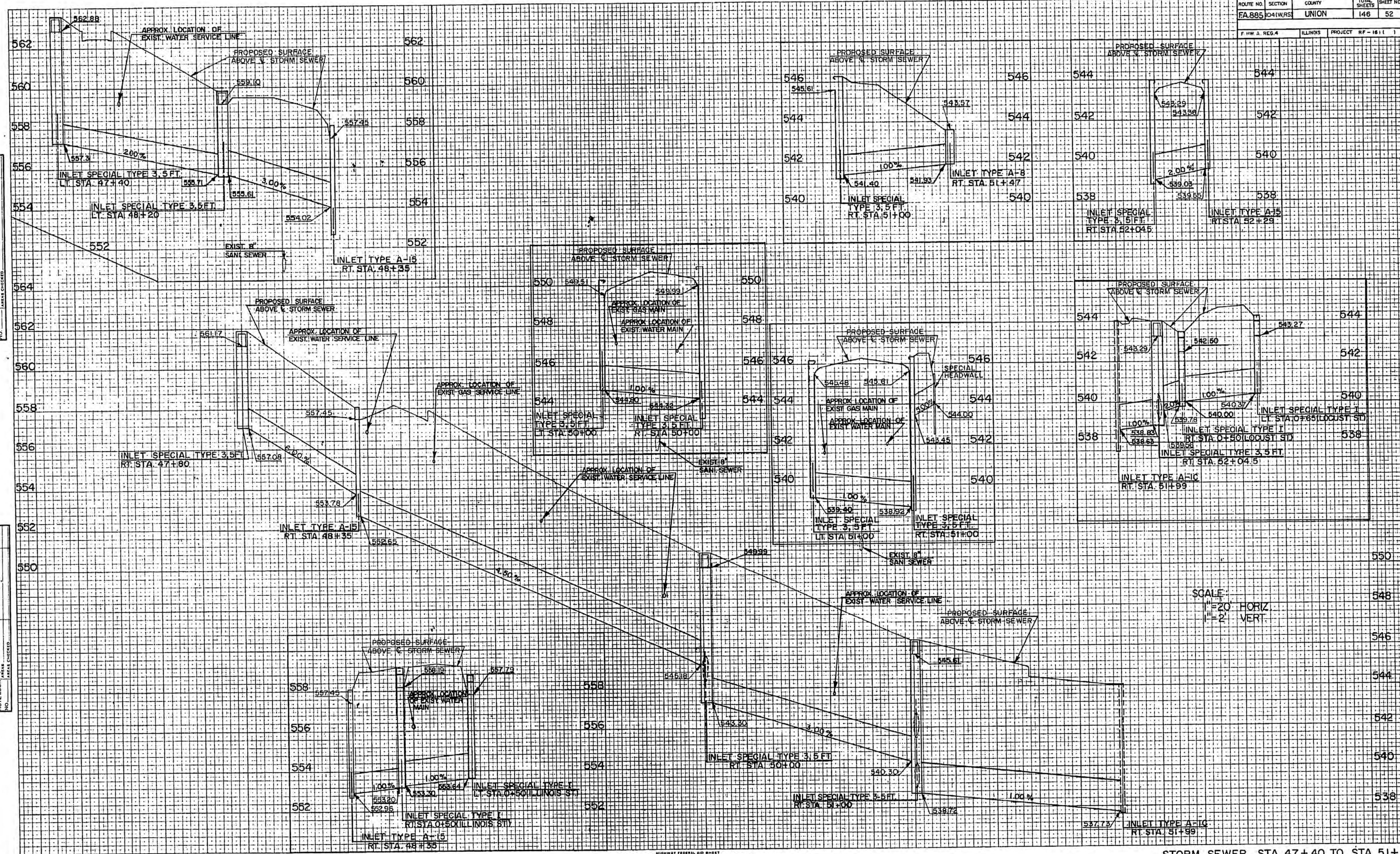




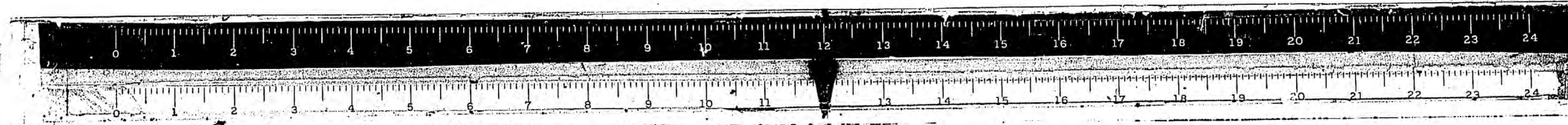
STORM SEWERS STA. 96+00 TO STA. 102+00 ILL. RTE. 146

FINAL	BY	DATE
SURVEY		
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		

ORIGINAL	BY _____	DATE _____
SURVEY		
PLOTTED		
TEMPLATE		
NOTE BOOK	AREAS _____	_____



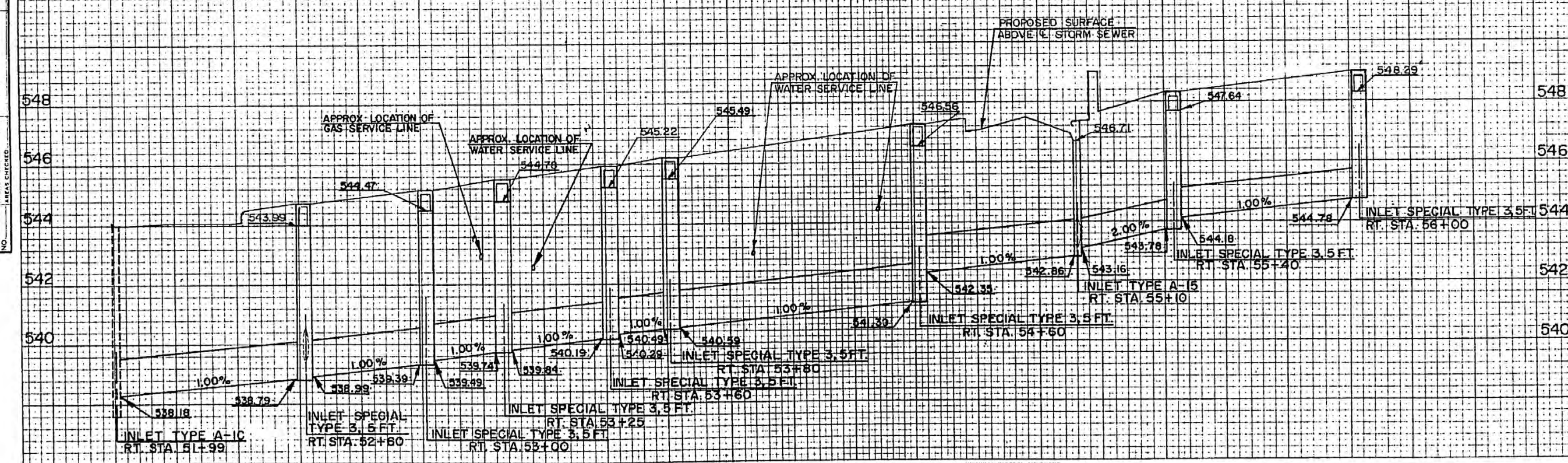
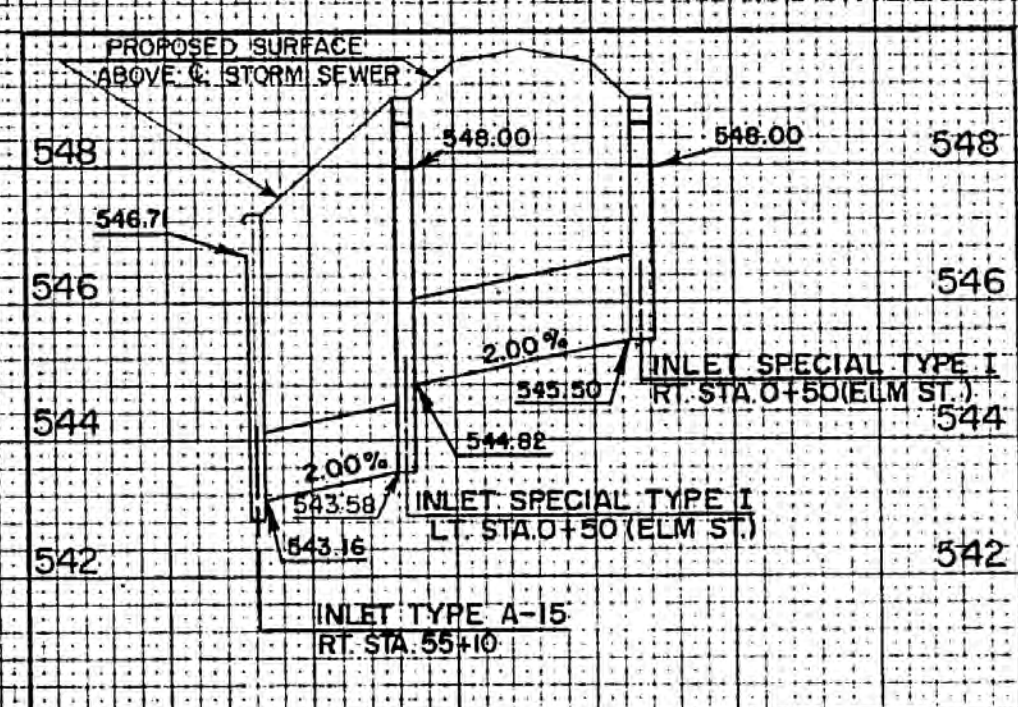
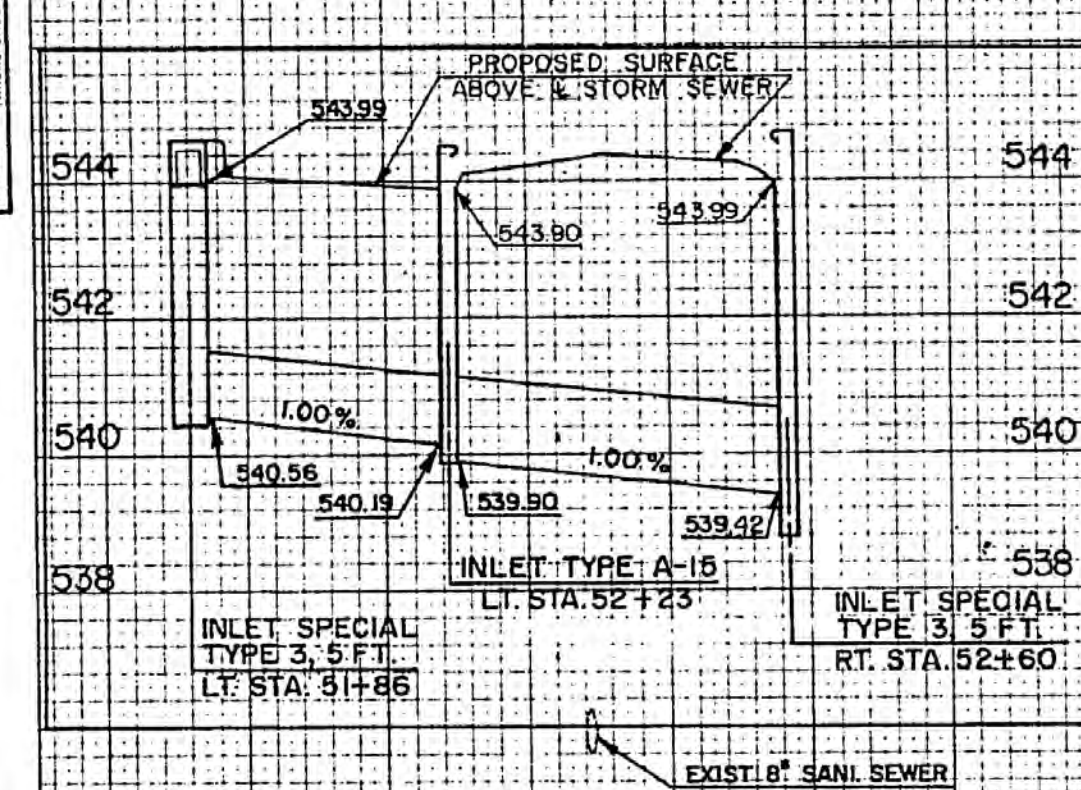
STORM SEWER STA. 47+40 TO STA. 51+99



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA885	041W/RS	UNION	146	53
K.H.W.A. REG. 4 ILLINOIS PROJECT RP-1611				

FINAL SURVEY
DATE
BY
NOTED BY
DATE

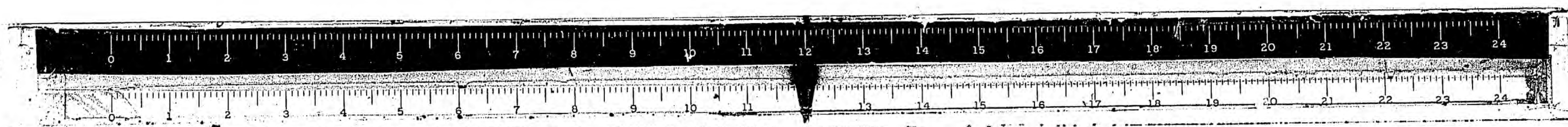
ORIGINAL SURVEY
DATE
BY
NOTED BY
DATE



SCALE
1" = 20' HORIZ.
1" = 2' VERT.

PLATE 3-FULL CROSS SECTION-FULL LINE
INDIANAPOLIS, INDIANA PRINTED IN U.S.A.

STORM SEWER STA. 51+99 TO STA. 56+00



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	104WRS	UNION	148	54
FHW & REG. 4		ILLINOIS	PROJECT	RF-1611

FINAL SURVEY
DATE: _____
BY: _____
NOTE BOOK: _____
DATE: _____
PAGE: _____

ORIGINAL SURVEY
DATE: _____
BY: _____
NOTE BOOK: _____
DATE: _____
PAGE: _____

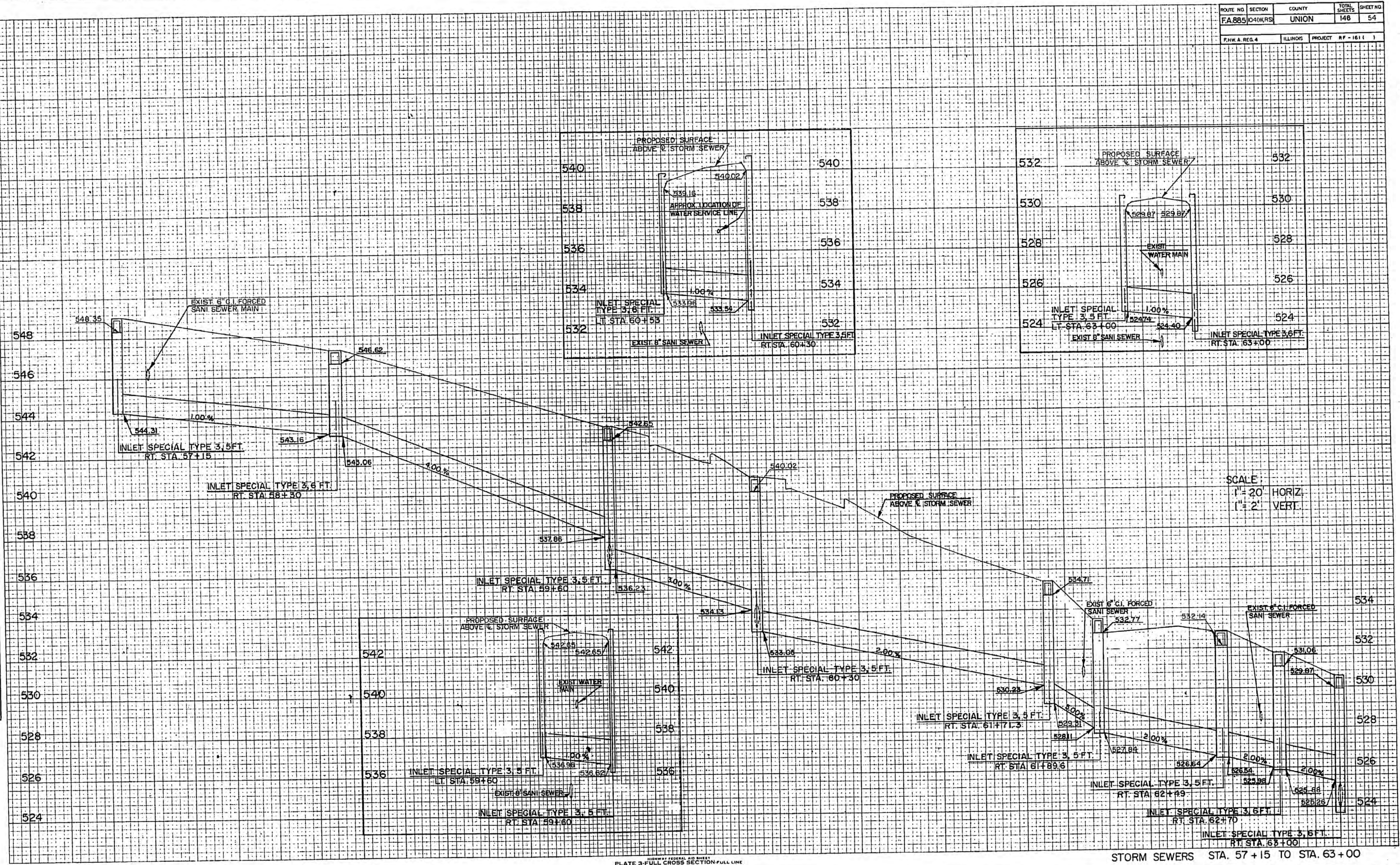
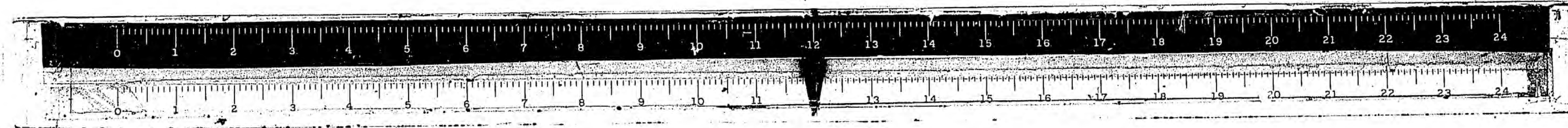


PLATE 3-FULL CROSS SECTION-FULL LINE
INDIANAPOLIS, INDIANA



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA885	04(WRS)	UNION	146	55
F.H.W.A. REG. 4		ILLINOIS	PROJECT	RF - 161 (1)

FINAL
SURVEY
DATE: 10/1/83
BY: [Signature]
CHECKED: [Signature]
APPROVED: [Signature]

ORIGINAL
SURVEY
DATE: 10/1/83
BY: [Signature]
CHECKED: [Signature]
APPROVED: [Signature]

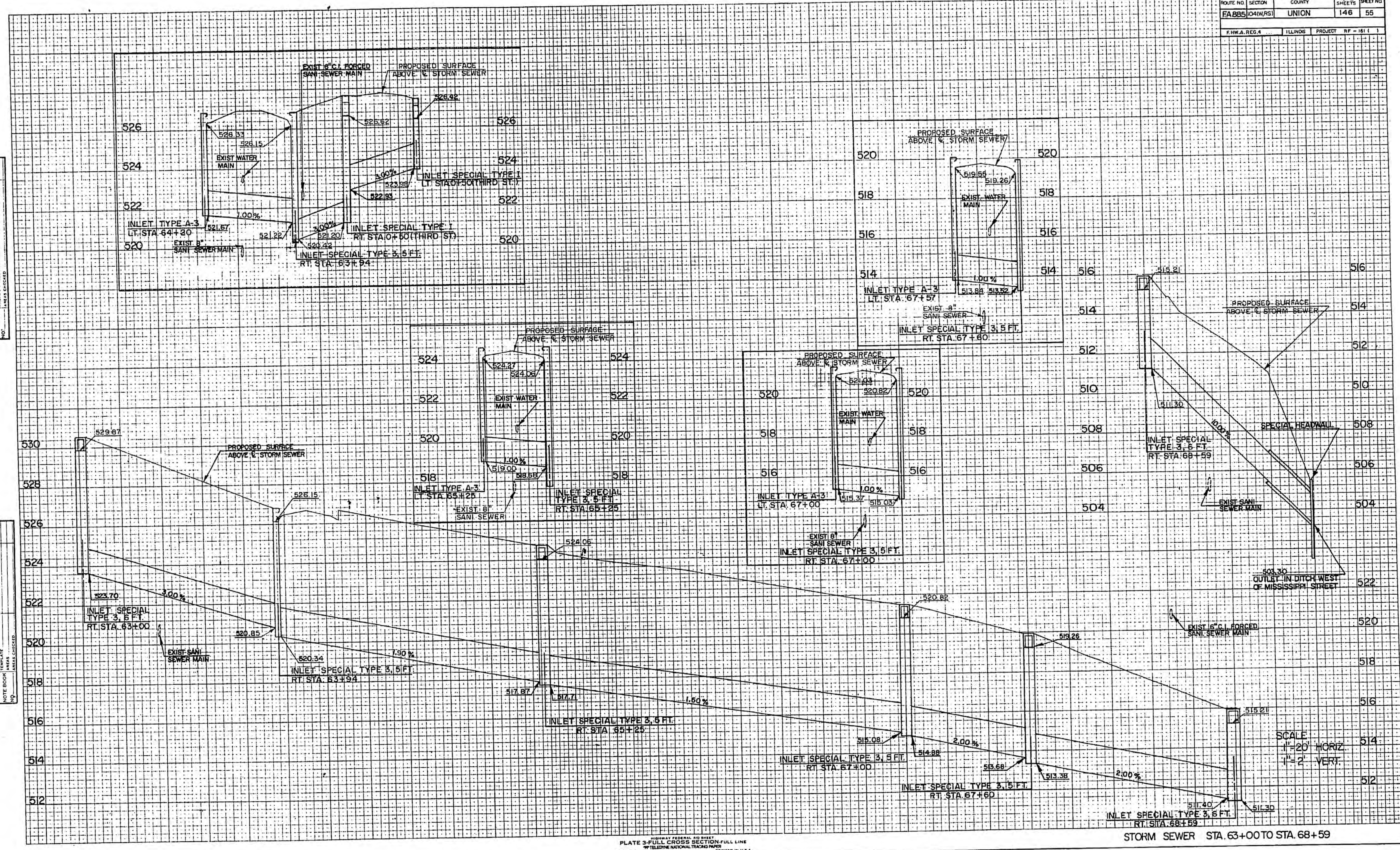
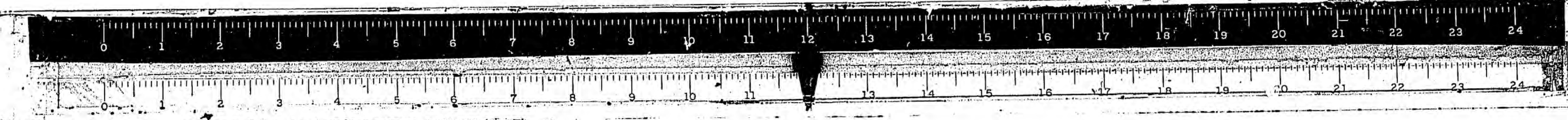


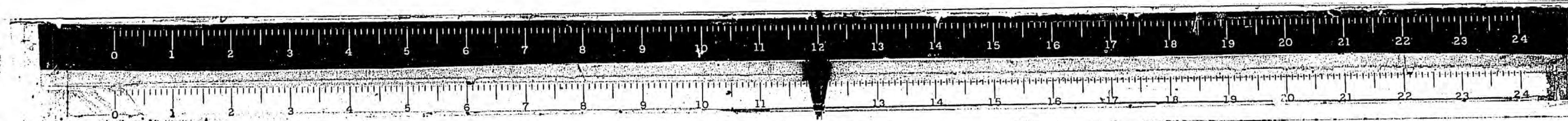
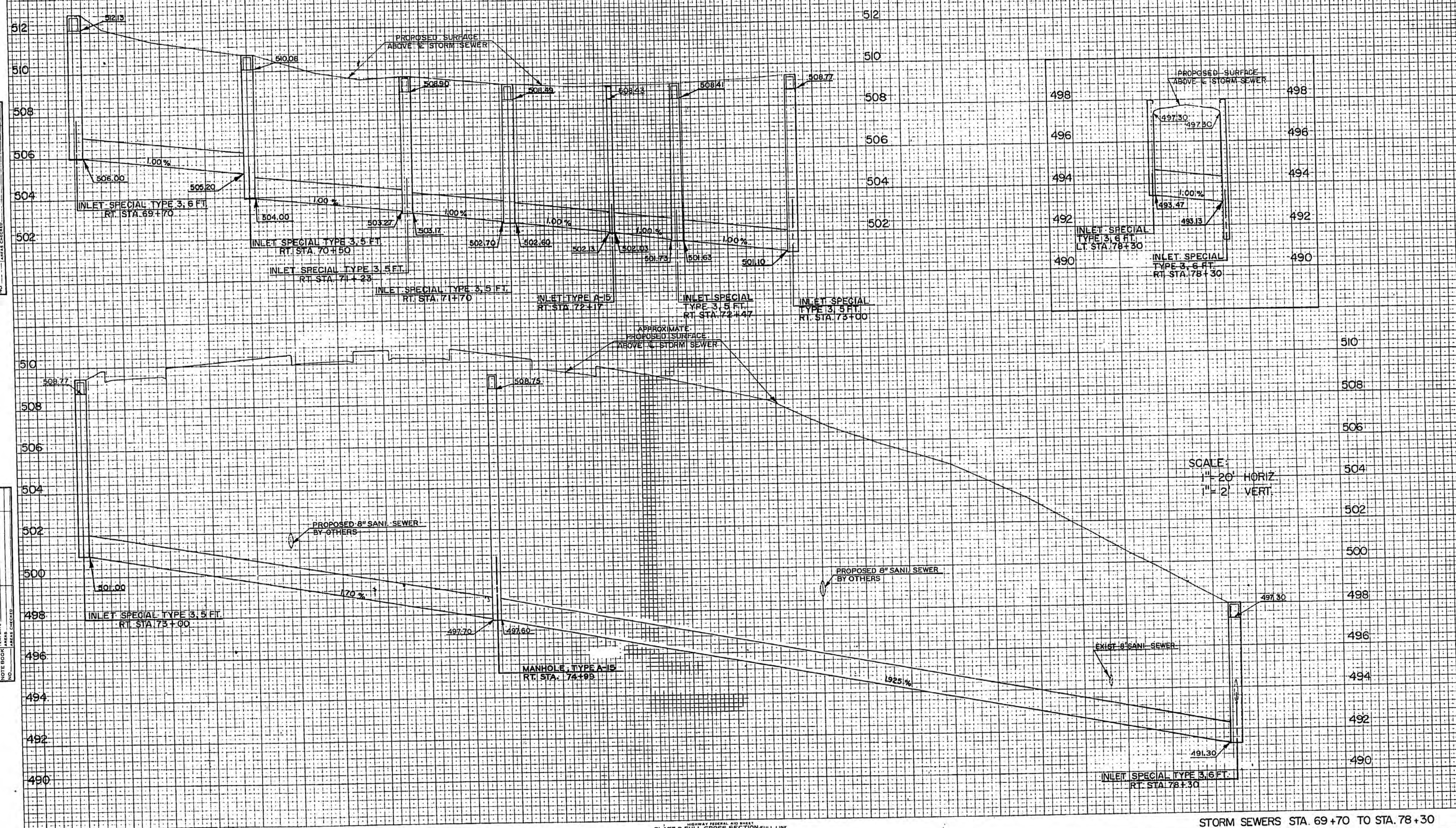
PLATE 3-FULL CROSS SECTION-FULL LINE
INDIANAPOLIS, INDIANA

STORM SEWER STA. 63+00 TO STA. 68+59



[illegible]

ORIGINAL	BY _____	DATE _____
SURVEY		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
146	146	UNION	146	57
F.H.W.A. REG. 4 ILLINOIS PROJECT RF-161				

FINAL SURVEY
 SURVEYED BY
 PLANNED BY
 NOTE BOOK NO.
 DATE CHECKED

ORIGINAL SURVEY
 SURVEYED BY
 PLANNED BY
 NOTE BOOK NO.
 DATE CHECKED

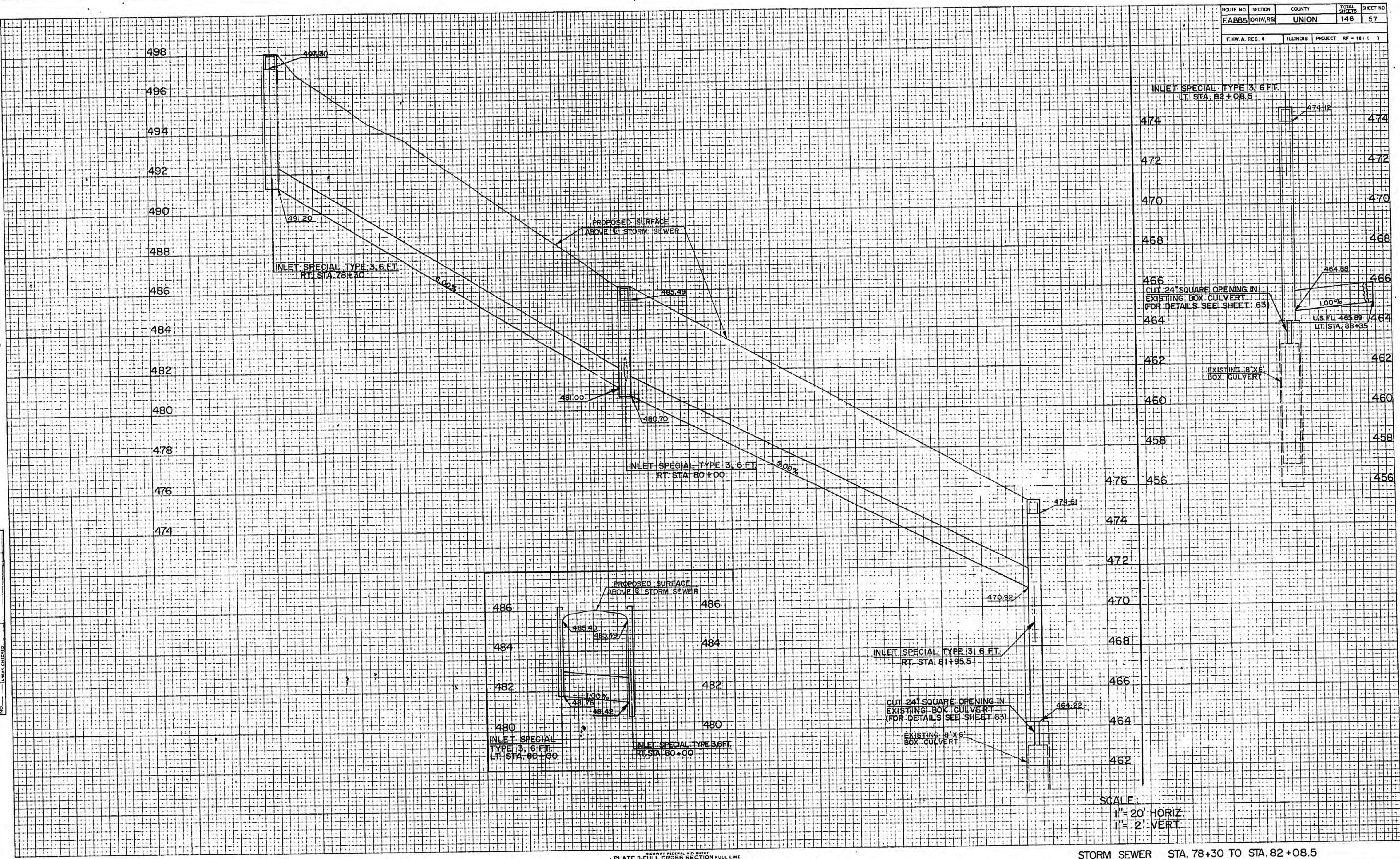
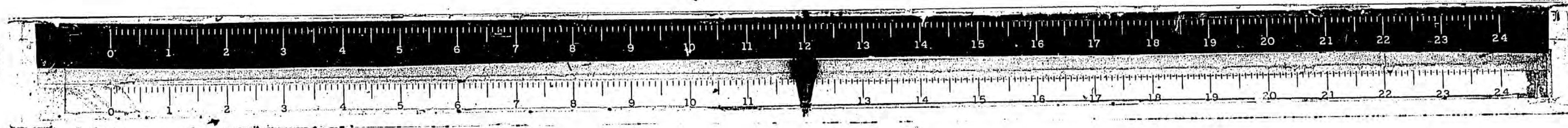


PLATE 3 FULL CROSS SECTION FULL LINE
 REPRODUCED FROM ORIGINAL DRAWING
 PRINTED IN U.S.A.

STORM SEWER STA. 78+30 TO STA. 82+08.5



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	041W,RS	UNION	146	58
ILLINOIS		PROJECT	RF - 1611	

DATE _____ BY _____

FINAL SURVEY

NOTED FOR

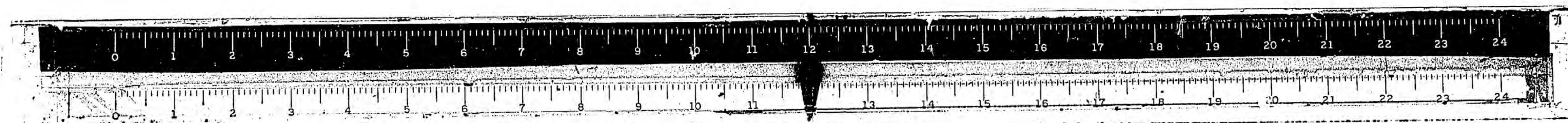
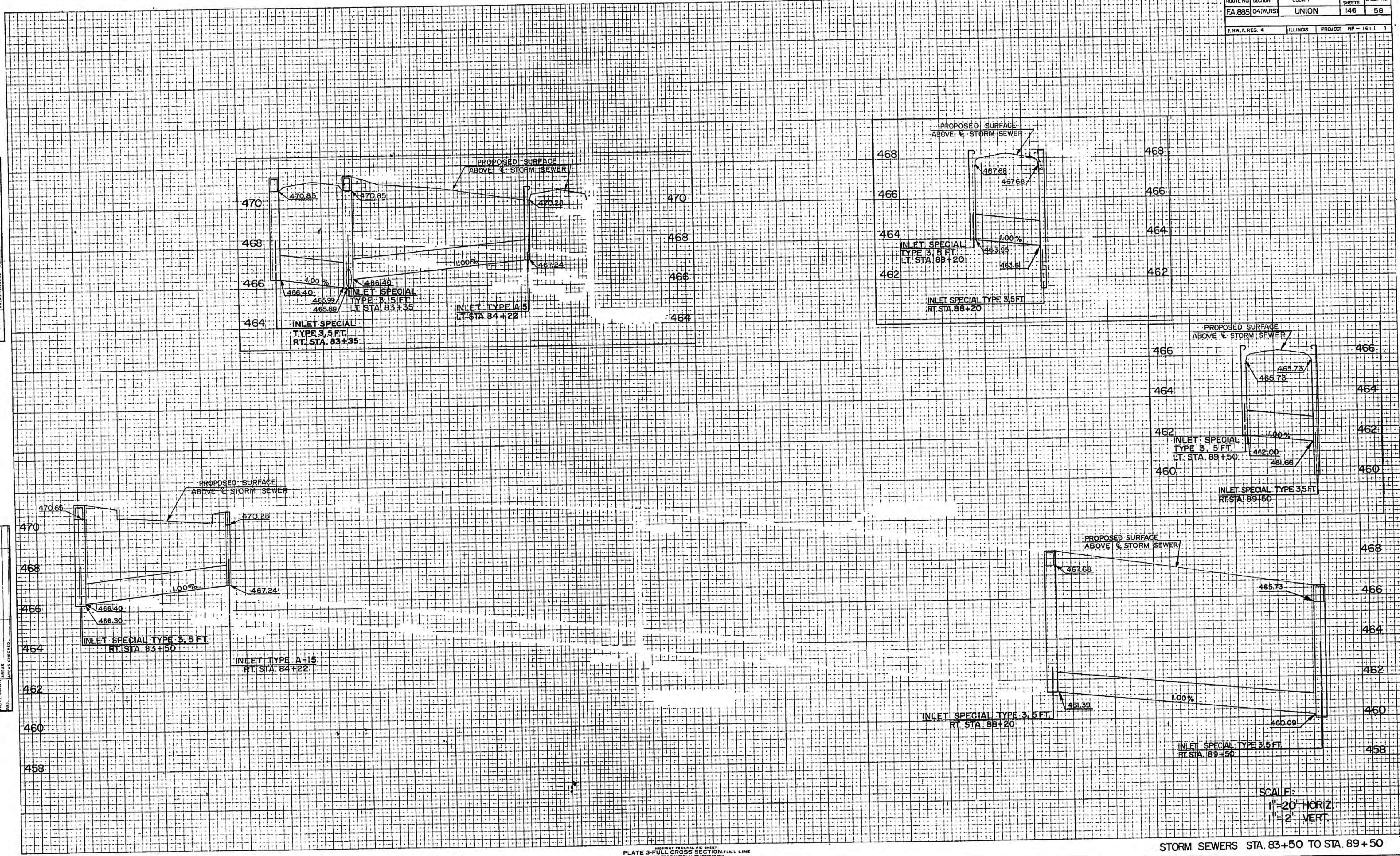
NO. _____

DATE _____ BY _____

ORIGINAL SURVEY

NOTED FOR

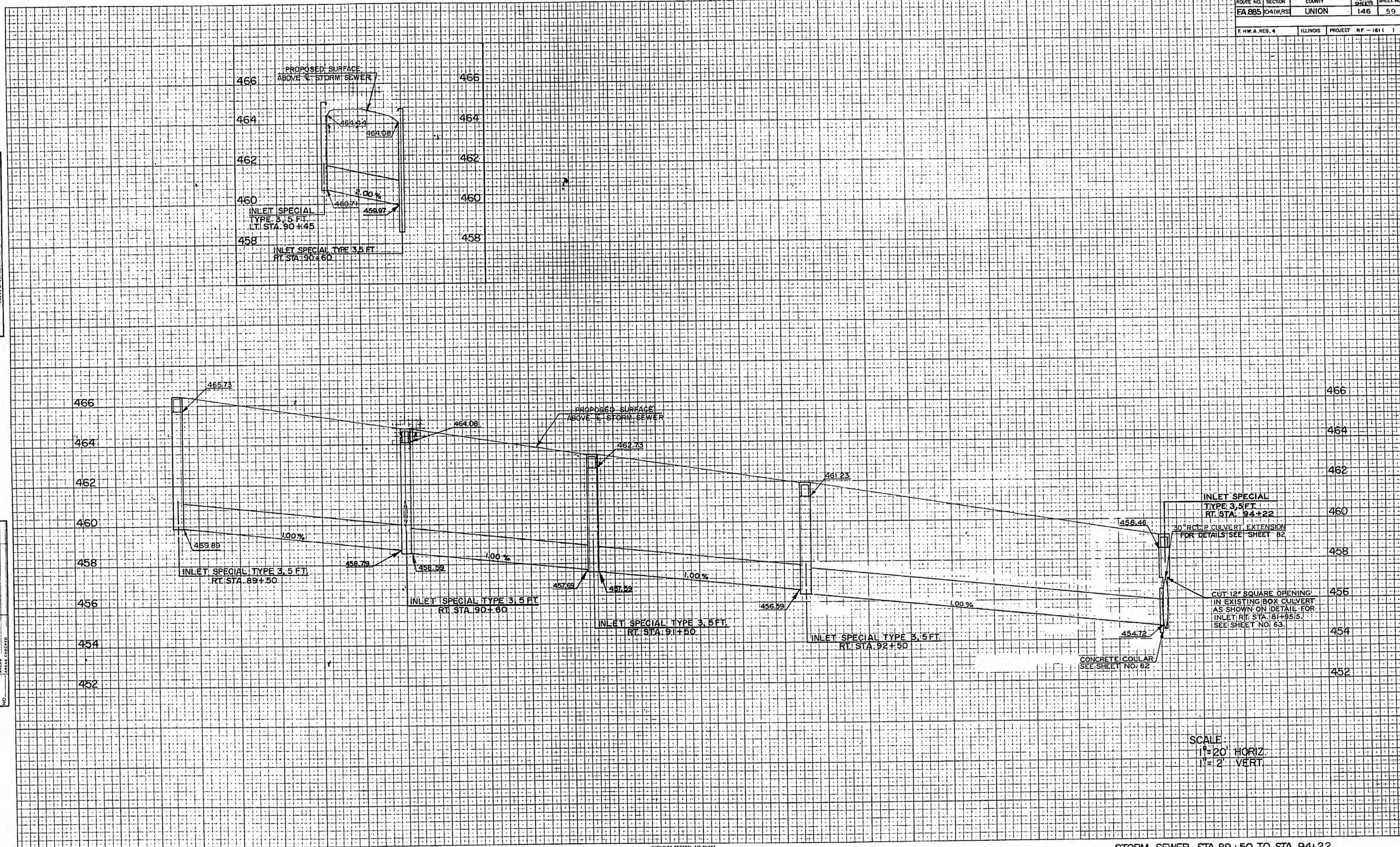
NO. _____



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	1041W/RS	UNION	146	59
F.H.W.A. REG. 4 ILLINOIS PROJECT R.F. - 1811				

DATE	
BY	
INVESTIGATOR	
SURVEY	
NOTED	
NOTED	
NO	

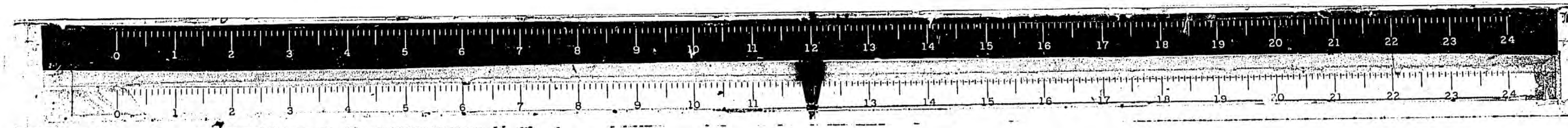
DATE	
BY	
INVESTIGATOR	
SURVEY	
NOTED	
NOTED	
NO	



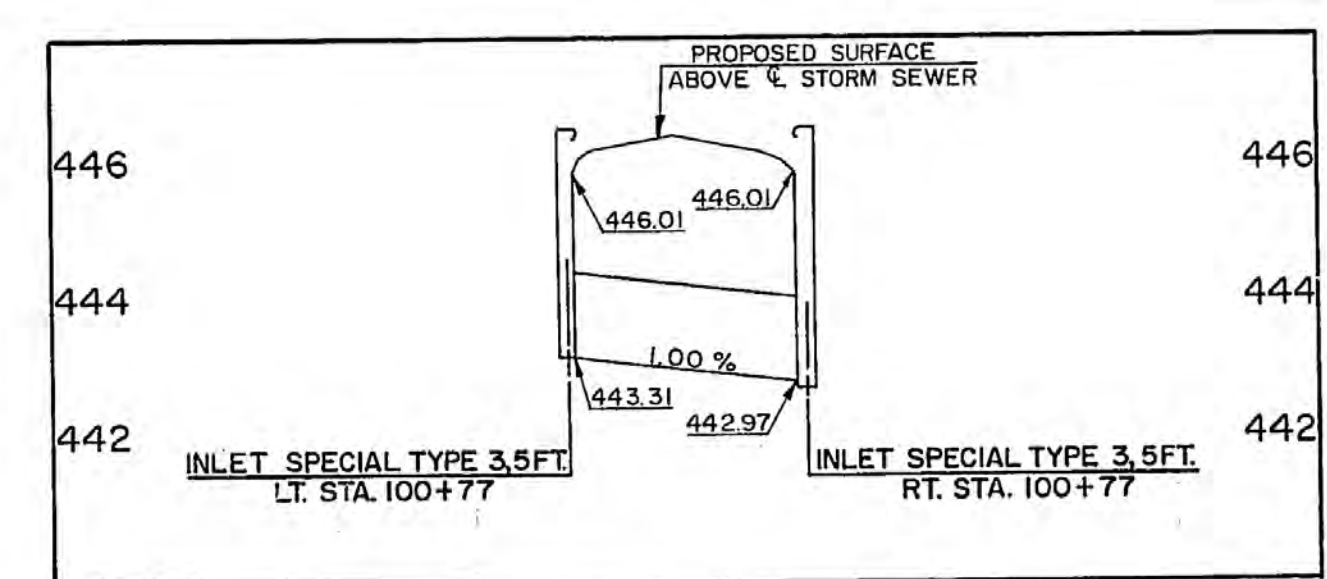
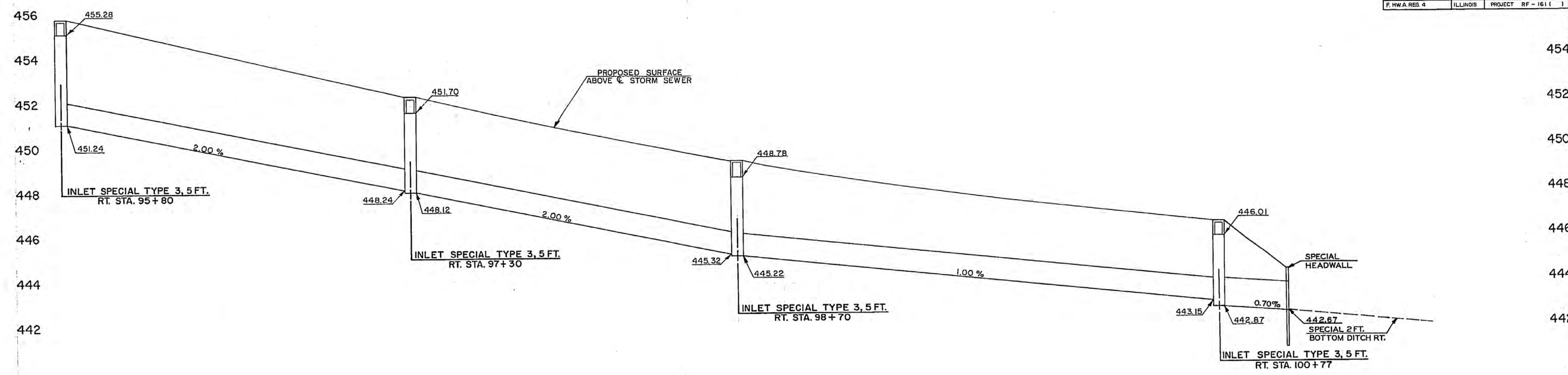
SCALE:
1"=20' HORIZ.
1"=2' VERT.

STORM SEWER STA. 89+50 TO STA. 94+22

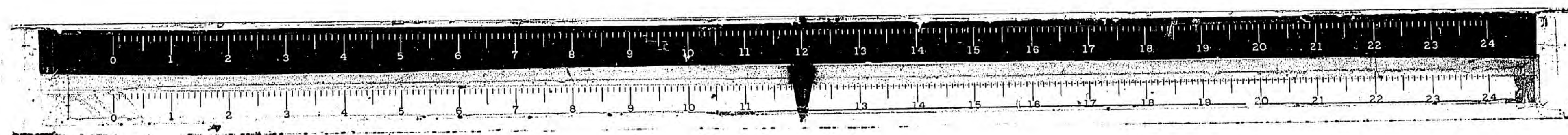
PLATE 3-FULL CROSS SECTION-FULL LINE
INDIANAPOLIS, INDIANA

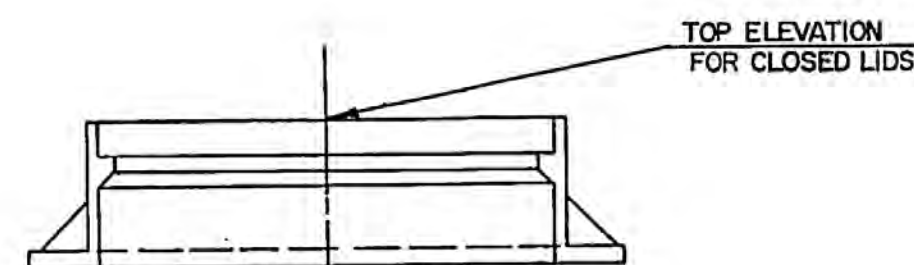


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 085	04WRS	UNION	146	60
F. H. W. A. REG. 4 ILLINOIS PROJECT RF - 161 ()				



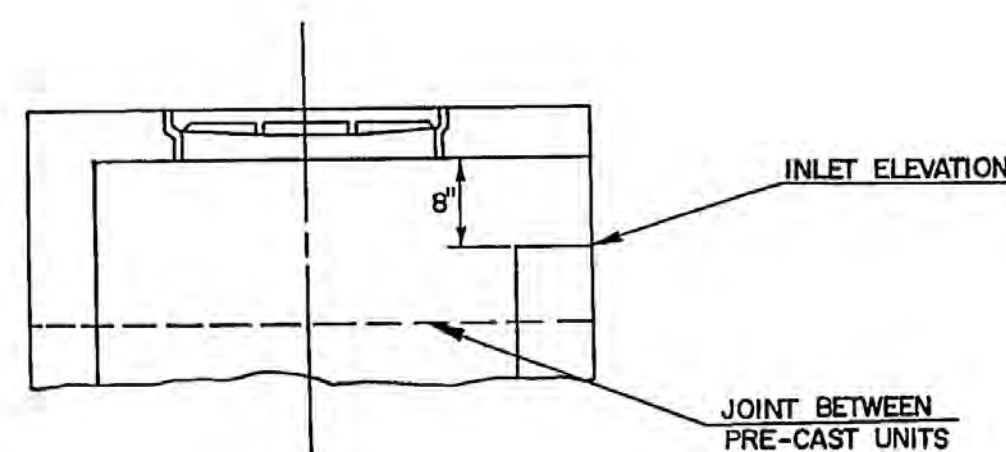
STORM SEWERS STA. 95+80 TO STA. 102+00



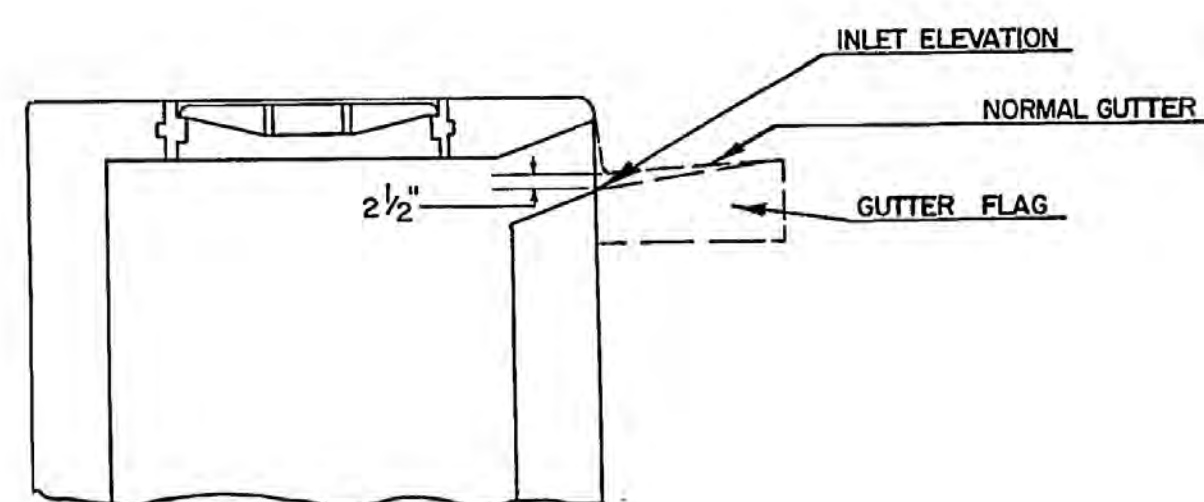


FRAME AND LID TYPE I

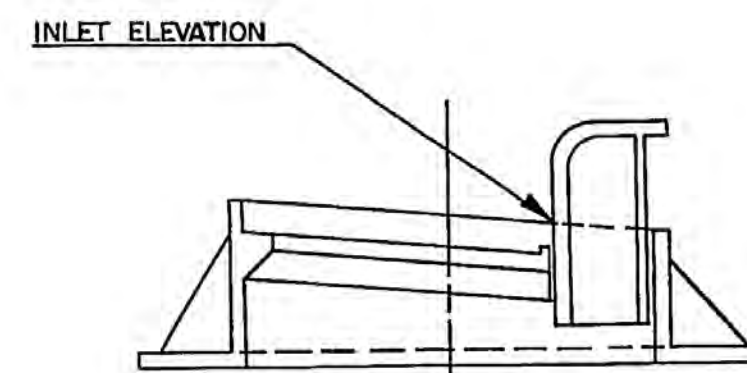
NOTE:
OPENING ON ONE SIDE ONLY FOR INLET SPECIAL TYPE I



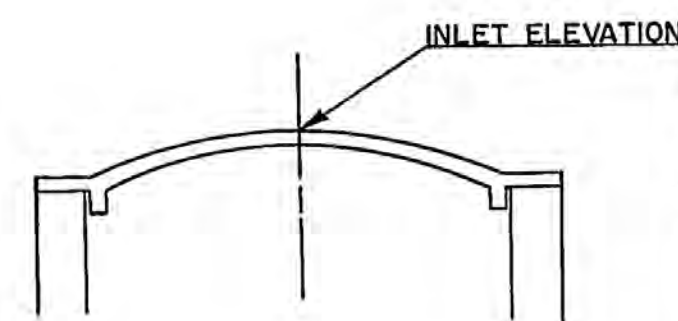
INLET SPECIAL TYPE I



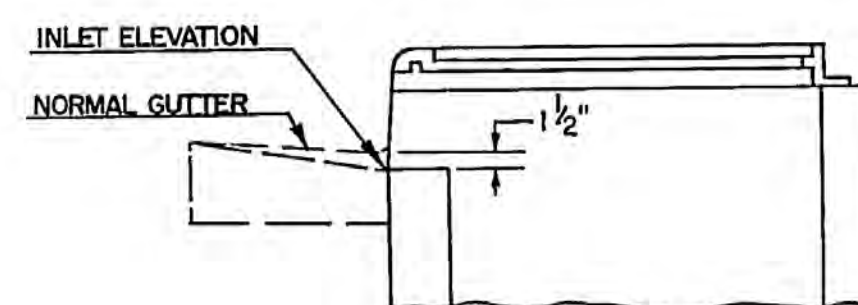
INLET SPECIAL TYPE 3 & 3A



FRAME AND GRATE TYPE 3

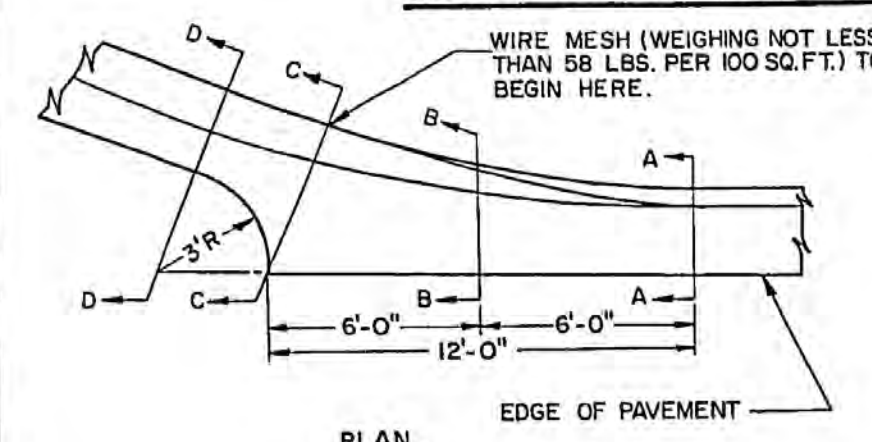


GRATE TYPE 8

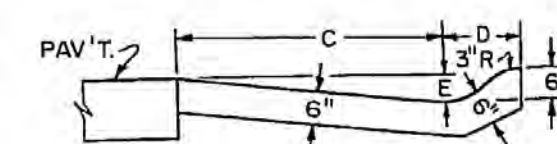


FRAME AND LID TYPE 15
(STD. 2222)

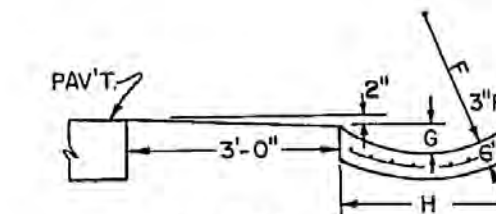
OUTLET SPECIAL FOR CONCRETE CURB AND GUTTER



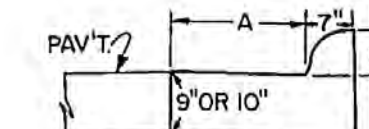
PLAN



SEC. C-C

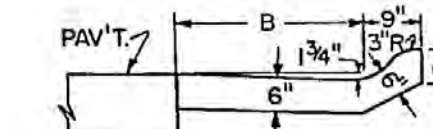


SEC. D-D

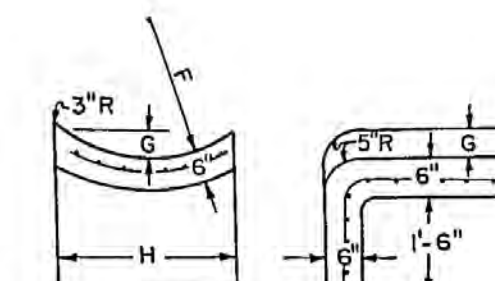


SEC. A-A

SEE STD. 2130



SEC. B-B

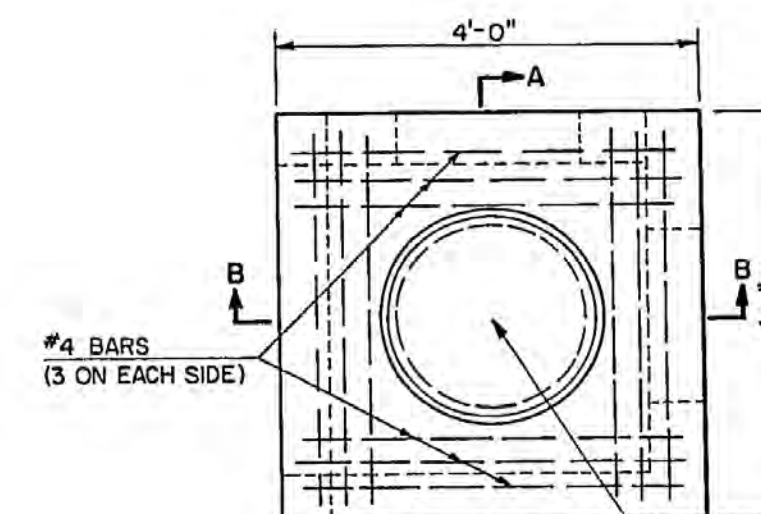


SECTIONS AT END OF OUTLET

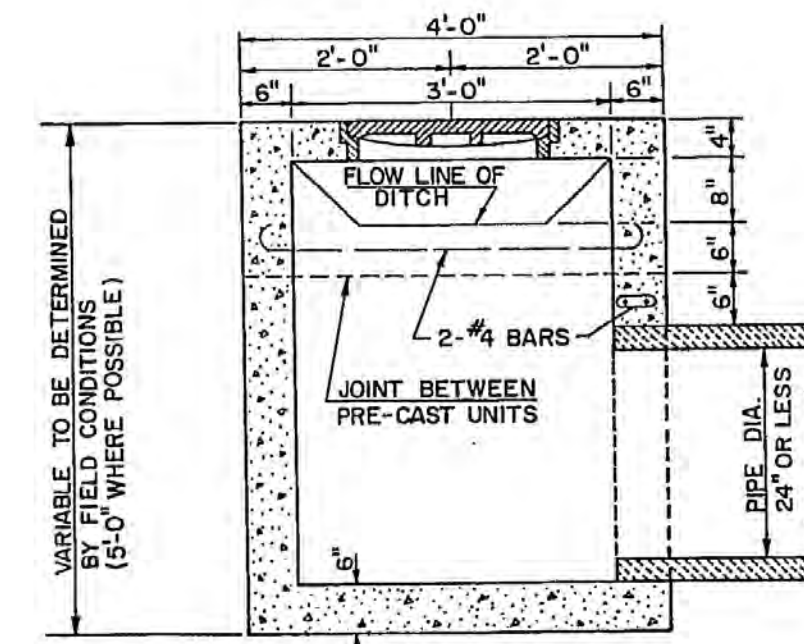
TYPE	A	B	C	D	E	F	G	H	SEC. A-A TO SEC. D-D & CURTAIN WALL CU. YDS.	TROUGH CU. YDS. / LIN. FT.
M-6.06	6"	11"	2'-7 1/2"	8 1/2"	2"	1'-3"	3"	1'-6"	0.7	0.03
B-6.12 OR M-6.12	1'-0"	1'-6"	2'-10 3/4"	10 3/4"	3"	1'-6"	4"	2'-0"	0.9	0.04
B-6.18 OR M-6.18	1'-6"	1'-11"	3'-2"	1'-0"	3"	2'-0"	4"	2'-3"	1.0	0.04
B-6.24 OR M-6.24	2'-0"	2'-5 1/2"	3'-6 1/2"	1'-1 1/2"	4"	2'-0"	5"	2'-6"	1.2	0.05

NOTE:
CLASS "X" CONCRETE SHALL BE USED THROUGHOUT.
GUTTER OUTLET SHALL BE REINFORCED WITH WIRE MESH HAVING A WEIGHT OF AT LEAST 58 POUNDS PER 100 SQ. FT. OUTLET SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CLASS "X" CONCRETE (MISC.) WHICH PRICE SHALL INCLUDE THE COST OF THE WIRE MESH REINFORCEMENT.

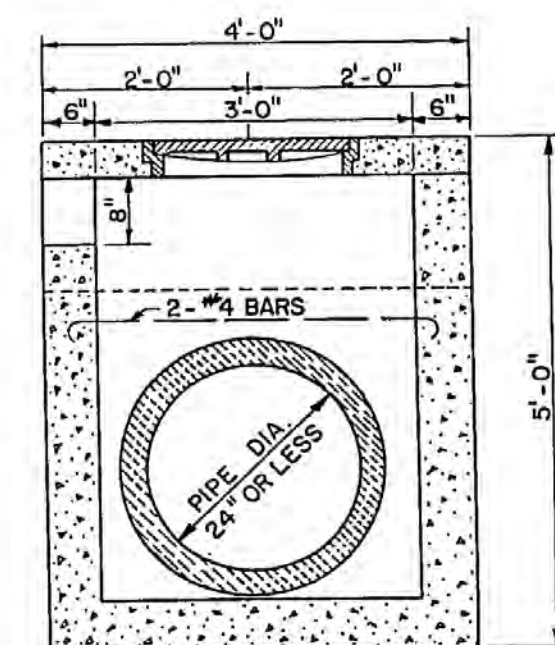
DETAILS OF INLET SPECIAL, TYPE I



PLAN



SEC. B-B



SEC. A-A

CLASS "X" CONCRETE SHALL BE USED THROUGHOUT.

THE INLET SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL, TYPE I, WHICH PRICE SHALL INCLUDE THE COST OF THE CAST IRON FRAME, SPECIAL, TYPE 2, WITH TYPE I CLOSED LID AND REINFORCEMENT BARS AND SHALL BE PAYMENT IN FULL FOR FURNISHING ALL MATERIAL AND FOR CONSTRUCTING THE WORK COMPLETE IN PLACE.

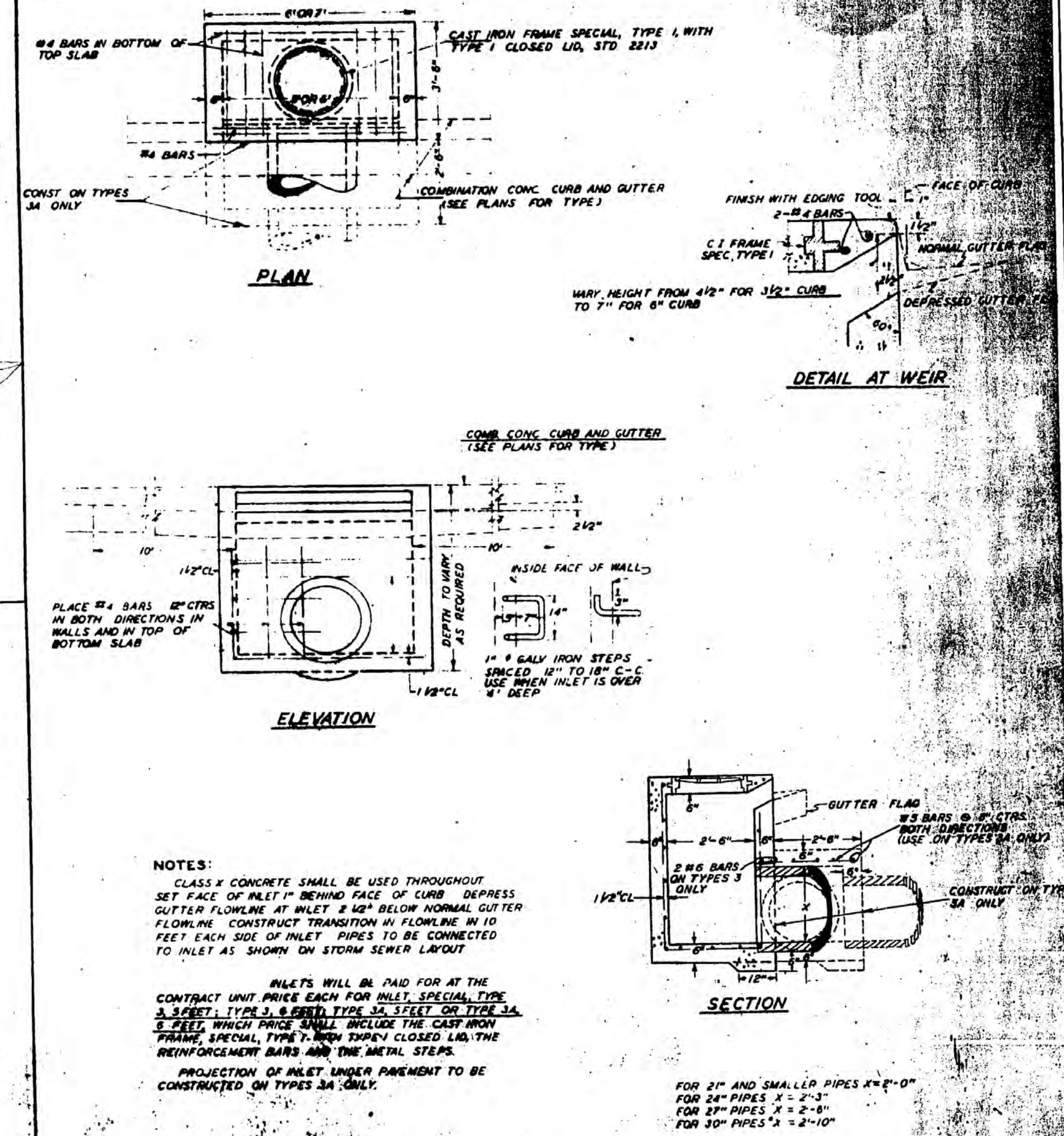
THE INLET MAY BE PRE-CAST OR MAY BE BUILT MONOLITHIC JOINTS AND STEEL BARS IN THE WALLS SHALL BE OMITTED IF BUILT MONOLITHIC, IF PRE-CAST THE JOINTS AND STEEL BARS SHALL BE PLACED AS SHOWN.

THE DEPTH OF THE INLET SHALL BE VARIED TO FIT FIELD CONDITIONS AND STANDARD PIPE LENGTHS WHEN NECESSARY.

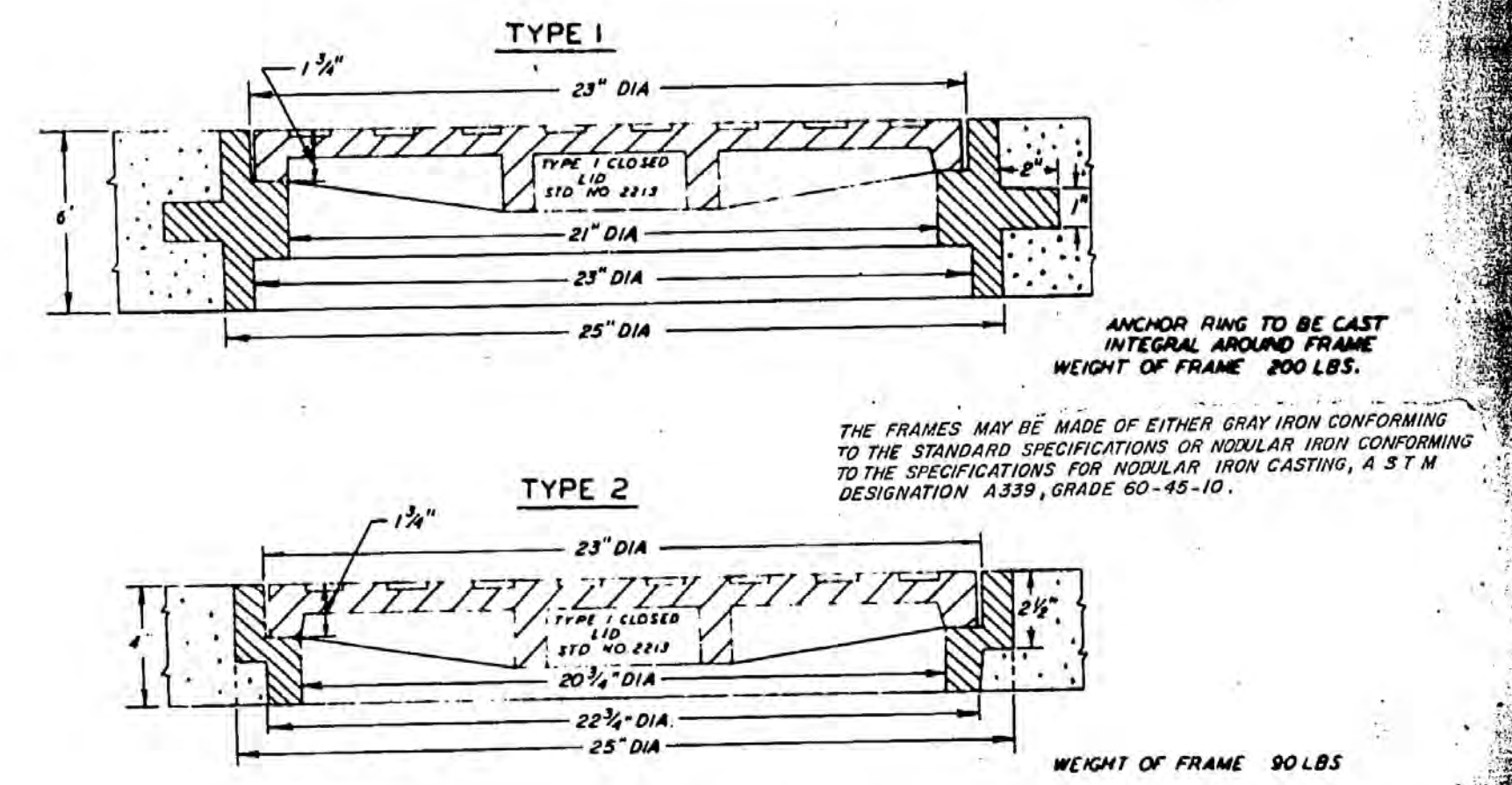
THE LID MAY BE CAST SEPARATELY, OR MONOLITHICALLY WITH THE UPPER SECTION OF THE INLET.

DETAILS OF INLET ELEVATION REFERENCES, SPECIAL OUTLET AND INLET TYPE I

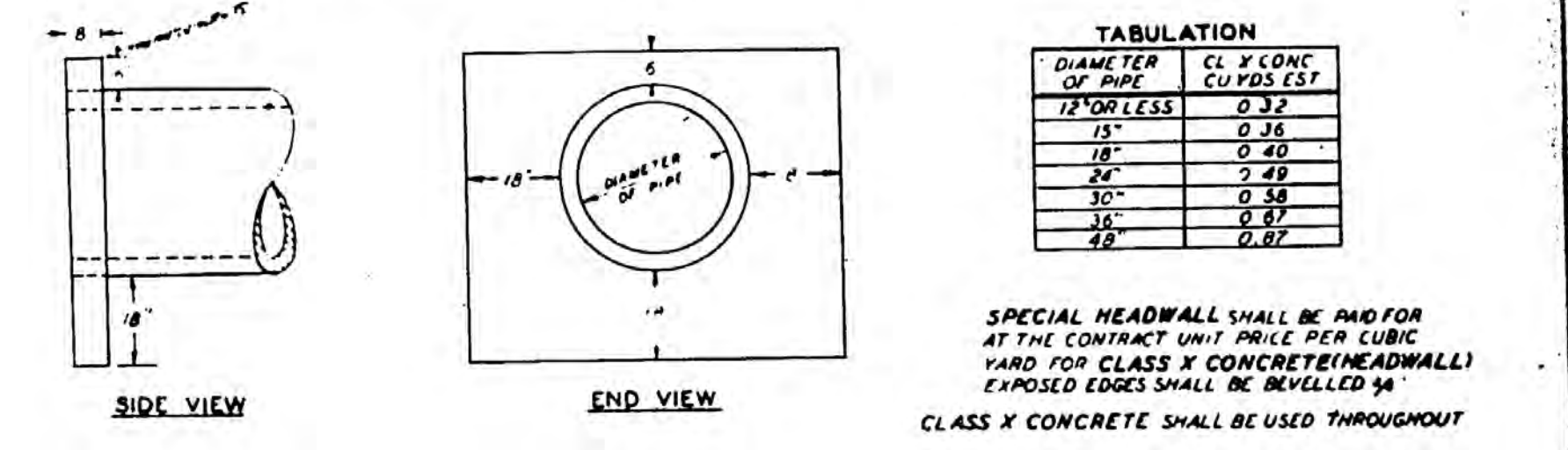
DETAILS OF SPECIAL TYPES 3 & 3A 5 FEET AND 6 FEET



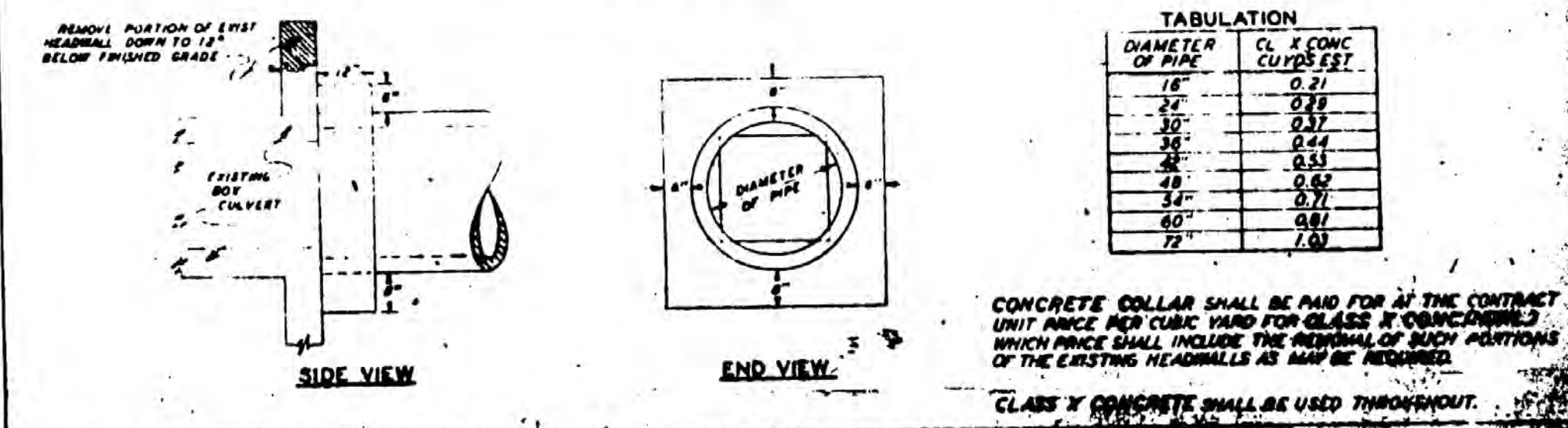
DETAILS OF CAST IRON FRAMES SPECIAL TYPE 1 & TYPE 2 WITH TYPE 1 CLOSED LID



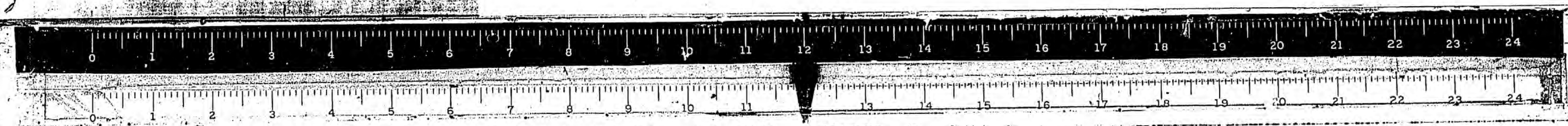
DETAILS OF SPECIAL HEADWALL



DETAILS OF CONCRETE COLLAR

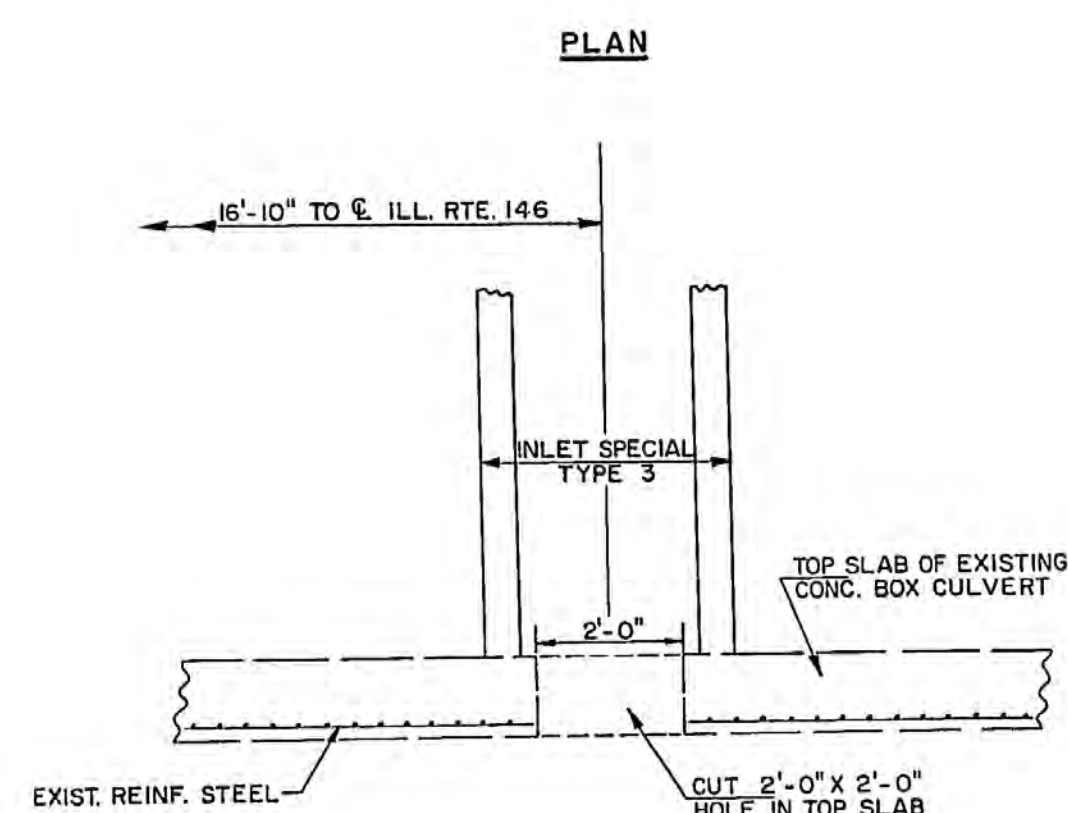
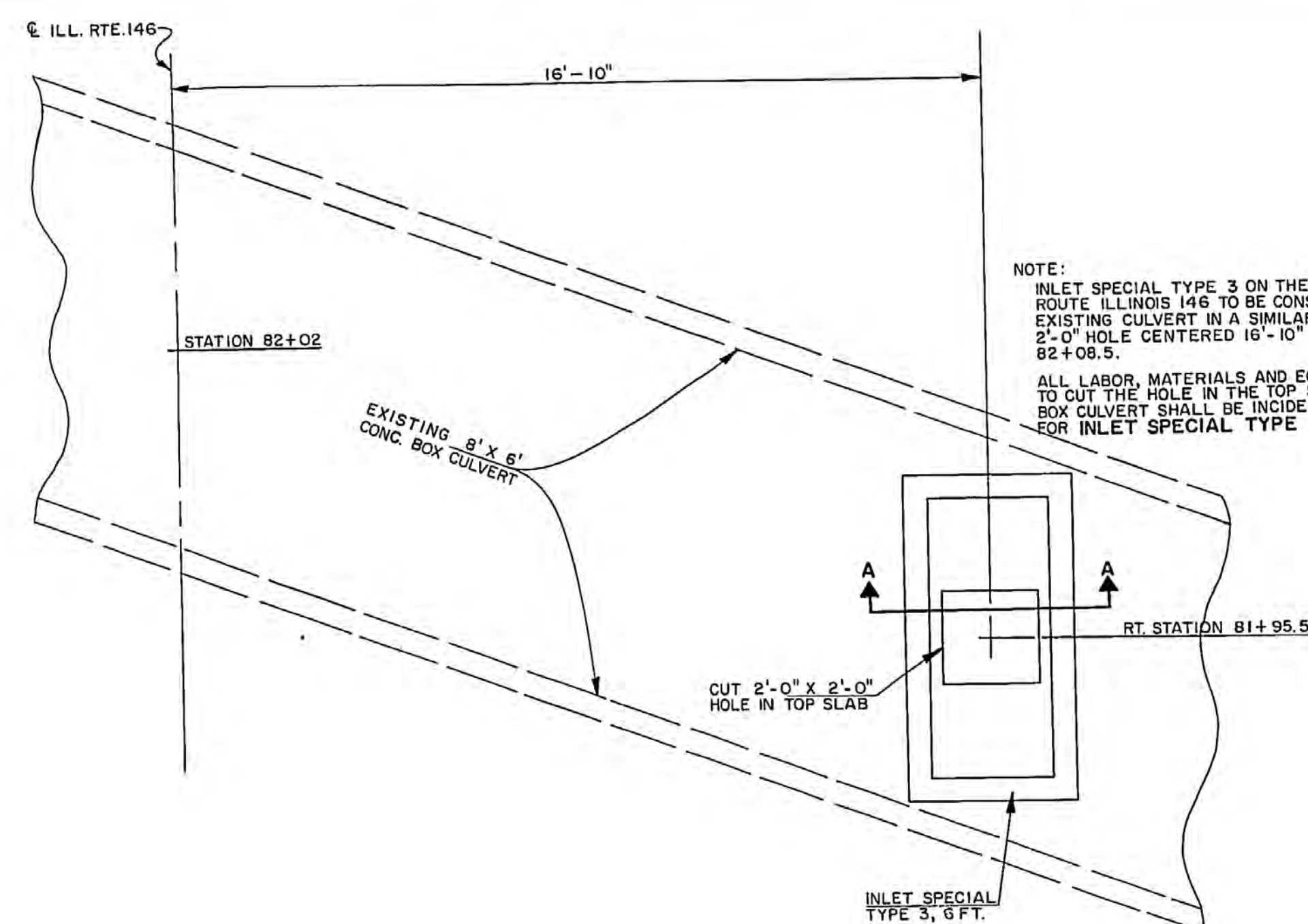


TYPE 3, 3A INLETS, SPECIAL HEADWALL, CONC. COLLAR & CAST IRON FRAMES - DETAILS



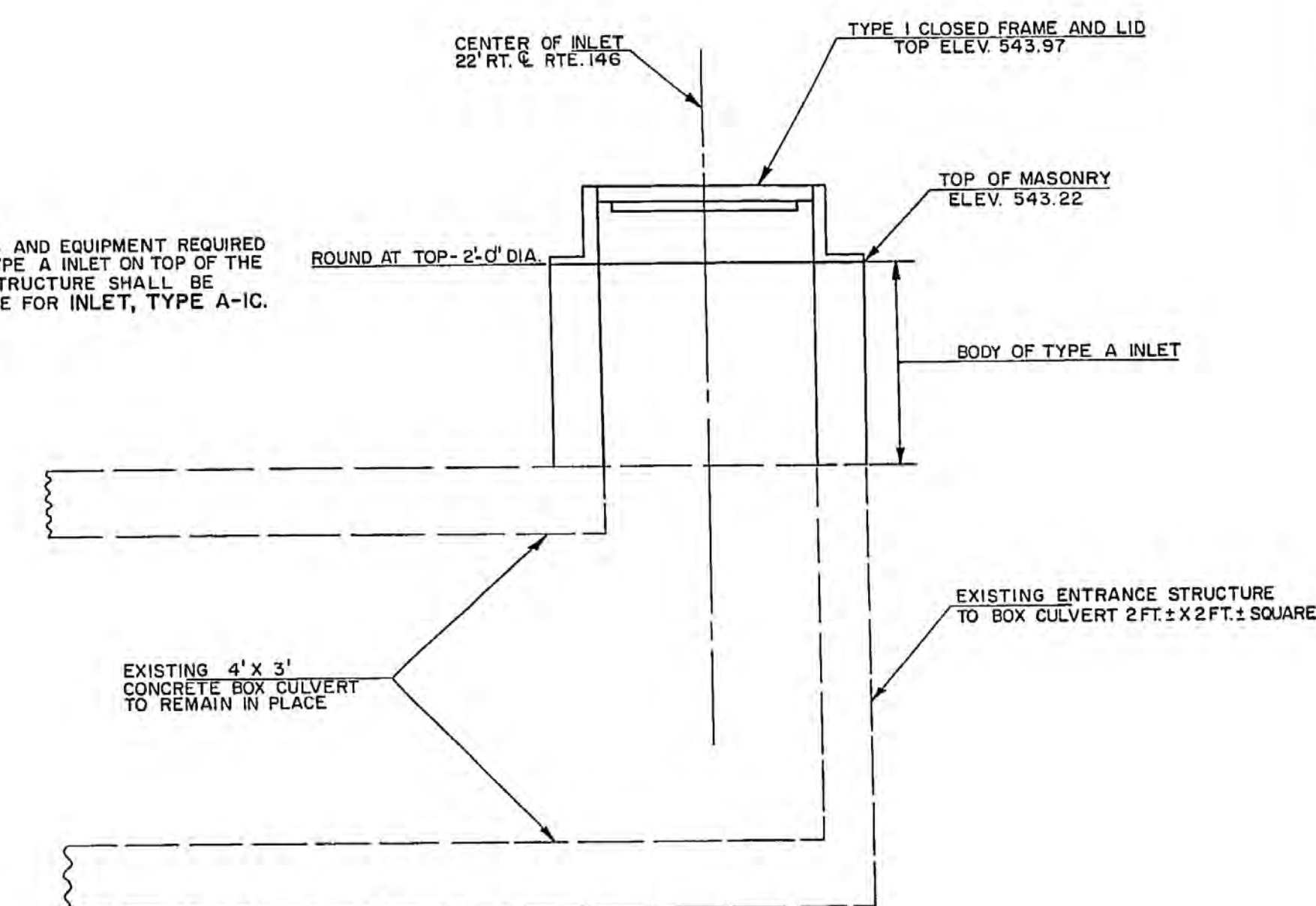
Bad Copy

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.885	1041WRS	UNION	146	63
FHW.A REG. 4 ILLINOIS PROJECT RF - 161 (1)				



DETAIL
INLETS SPECIAL TYPE 3
AT EXISTING CONC. BOX CULVERT
STATION 82+02

NOTE:
ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO CONSTRUCT THE TYPE A INLET ON TOP OF THE CULVERT ENTRANCE STRUCTURE SHALL BE INCLUDED IN THE PRICE FOR INLET, TYPE A-1C.

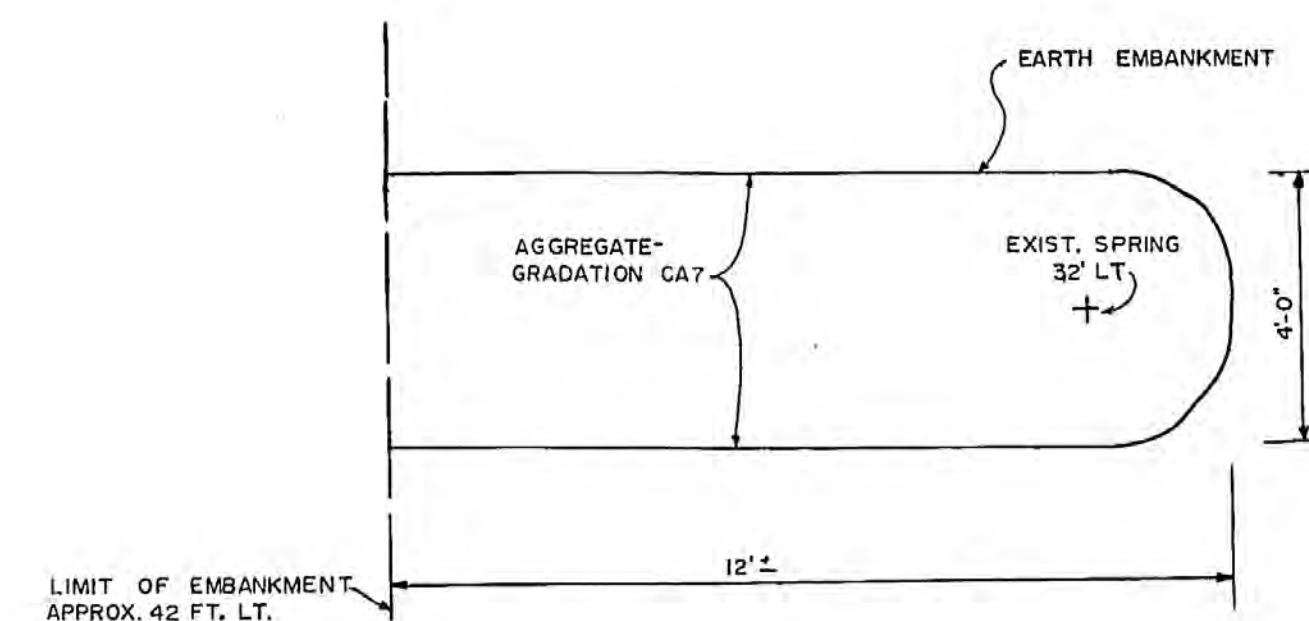


NOTE: BOTTOM PORTION OF TYPE A INLET SHALL BE CONCRETE OR BRICK TRANSITION FROM 2' SQUARE TO 2' ROUND. ENTIRE INLET BODY MAY BE CONSTRUCTED AS A TRANSITION.

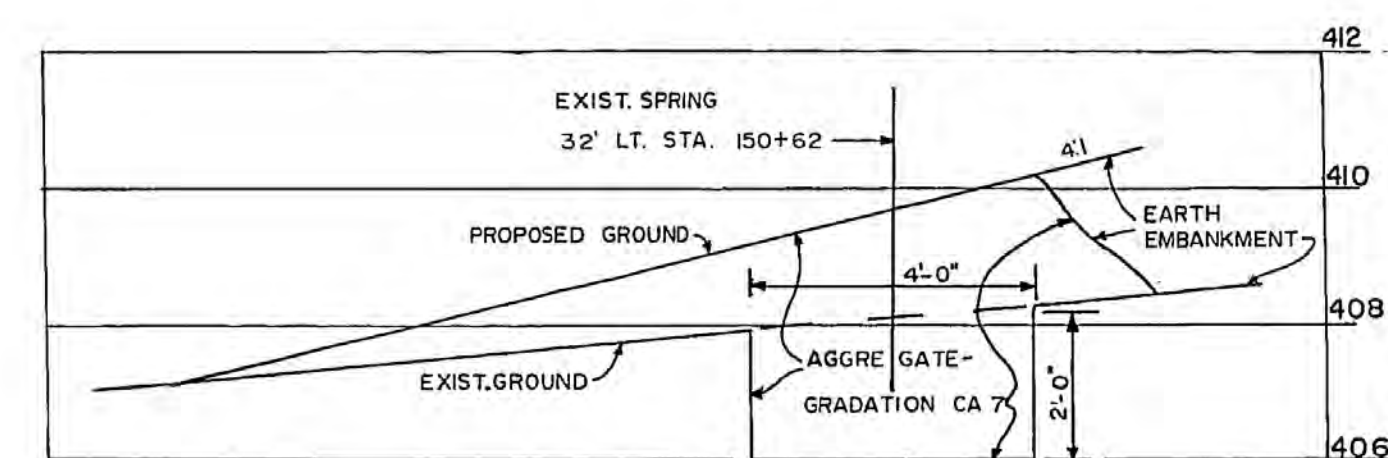
DETAIL
TYPE A INLET
RIGHT OF STATION 51+99
SCALE: 1" = 1'-0"

INLET CONSTRUCTION DETAILS, STA 51+99 & STA 82+02

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 685	CHWRS	UNION	146	64
F.H.W. A. REG. 4		ILLINOIS	PROJECT R.R.-161 (1)	



PLAN



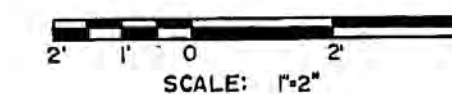
SECTION

NOTE:

SPRING CONTROL FOR THE EXISTING SPRING LEFT OF STATION 150 + 62 SHALL BE AS FOLLOWS:
A HOLE FOUR (4) FEET IN DIAMETER AND AT LEAST 2 FEET DEEP WILL BE DUG AT THE SPRING.
THE HOLE, THE SPACE ABOVE IT, AND A 4 FOOT WIDE DRAIN TO THE EDGE OF THE EMBANKMENT WILL
BE FILLED WITH AGGREGATE, GRADATION CA 7, AS SHOWN. APPROXIMATELY 3 CUBIC YARDS OF AGGREGATE
WILL BE REQUIRED. THE AGGREGATE WILL BE COMPACTED AS DIRECTED BY THE ENGINEER.
EARTH EMBANKMENT WILL BE PLACED AROUND THE AGGREGATE DRAIN.
ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO CONSTRUCT THE SPRING CONTROL WILL NOT BE
MEASURED OR PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO THE EARTHWORK ON THE PROJECT.
IF DIRECTED BY THE ENGINEER, CONSTRUCTION FOR SPRING CONTROL AT THIS LOCATION MAY BE ELIMINATED.

DETAIL

SPRING CONTROL TREATMENT
LEFT OF STATION 150 + 62

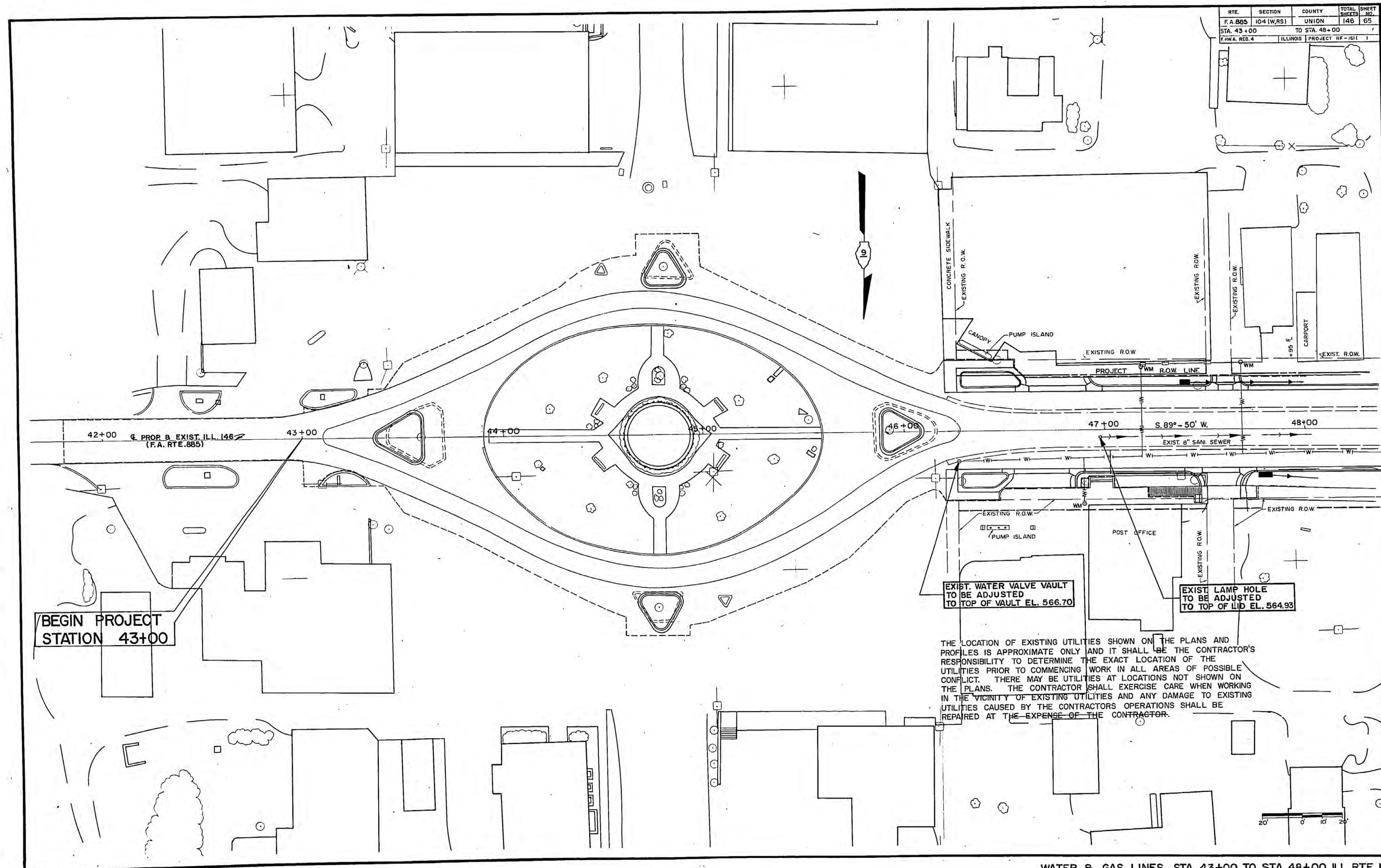


DETAIL OF SPRING CONTROL TREATMENT

X 618 STA 42-48

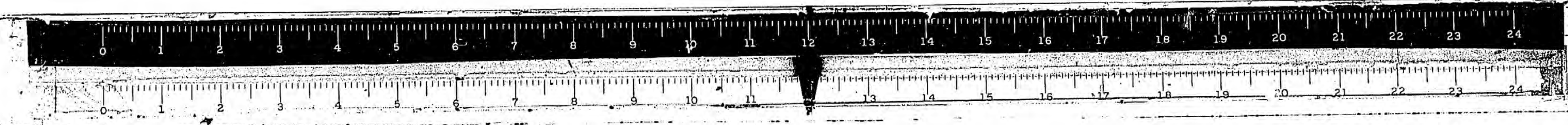
SCALE 20' = 1"

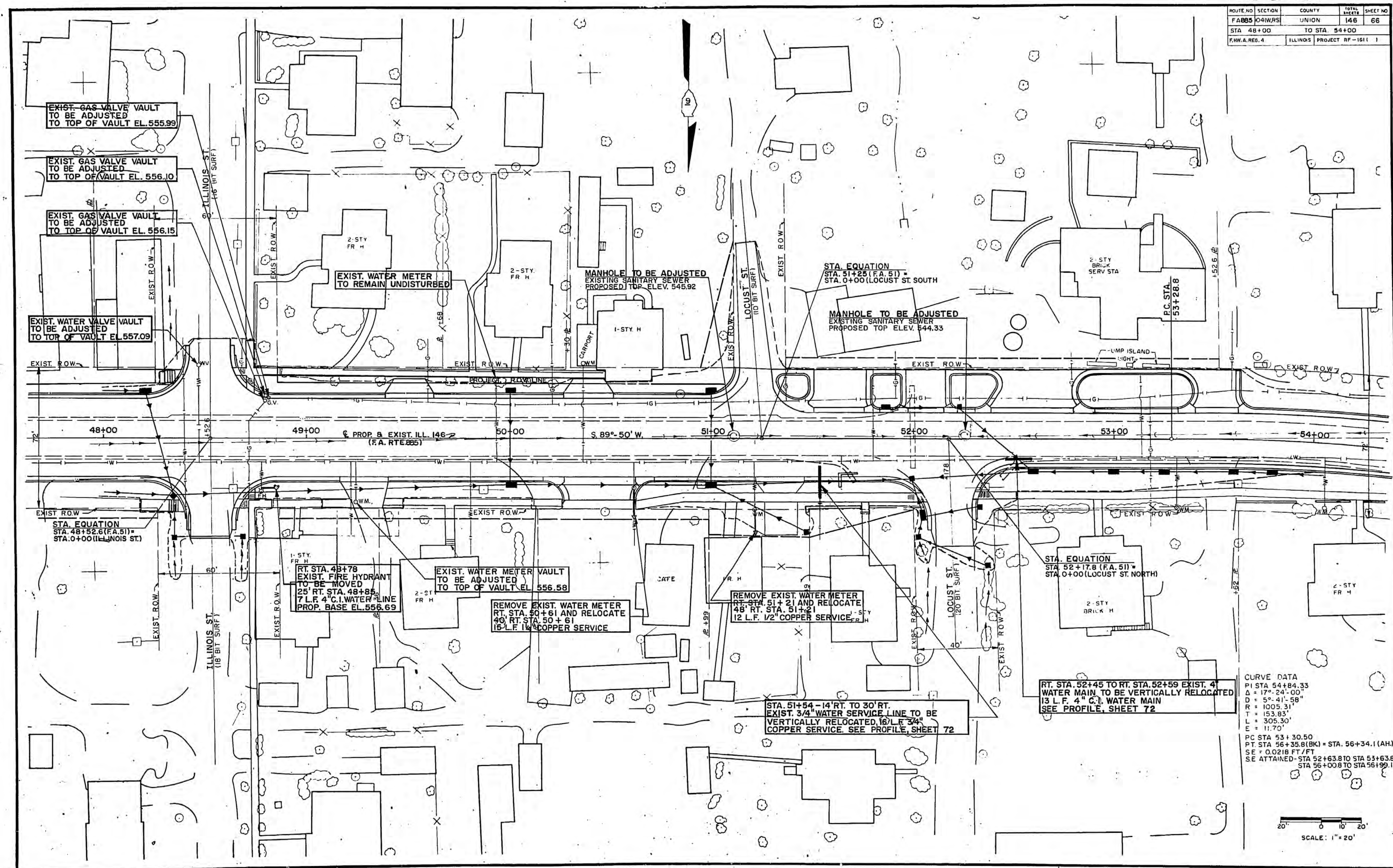
RT.	SECTION	COUNTY	TOTAL SHEET
F.A. 885	104 (WRS)	UNION	146 65
STA. 43+00	TO STA. 48+00		
ILL. A. REG. 4	ILLINOIS PROJECT RF-1011		



THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS AND PROFILES IS APPROXIMATE ONLY AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF THE UTILITIES PRIOR TO COMMENCING WORK IN ALL AREAS OF POSSIBLE CONFLICT. THERE MAY BE UTILITIES AT LOCATIONS NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXERCISE CARE WHEN WORKING IN THE VICINITY OF EXISTING UTILITIES AND ANY DAMAGE TO EXISTING UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

WATER & GAS LINES STA. 43+00 TO STA. 48+00 ILL. RTE. 146



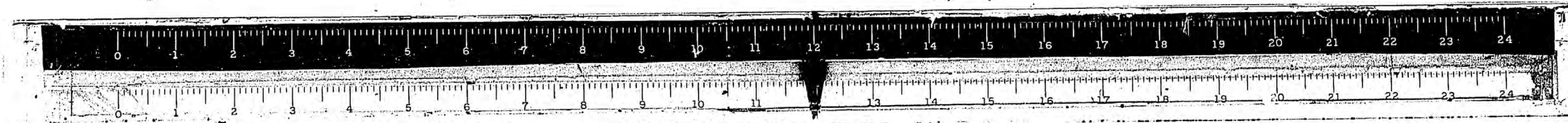


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAB85 104W/RS		UNION	146	66
STA 48+00		TO STA 54+00		
FWA REG. 4		ILLINOIS	PROJECT RF-1511	1

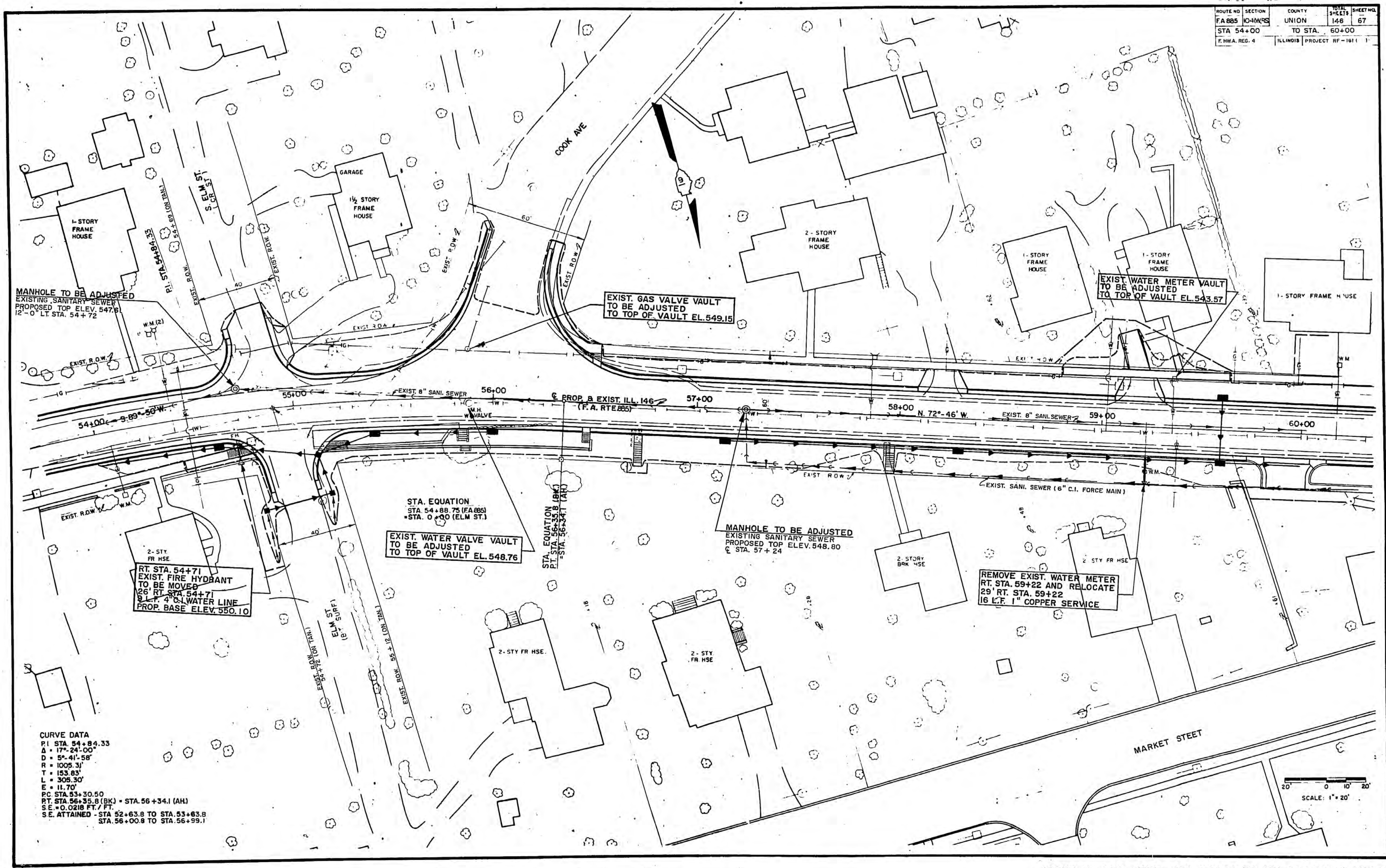
CURVE DATA
PI STA 54+84.33
 $\Delta = 17^{\circ} 24' 00''$
 $D = 5^{\circ} 41' 58''$
 $R = 1005.31'$
 $T = 153.93'$
 $L = 305.30'$
 $E = 11.70'$
PC STA 53+30.50
PT STA 56+35.8(BK) = STA 56+34.1(AH)
SE = 0.0218 FT/FT
SE ATTAINED- STA 52+63.8 TO STA 53+63.8
STA 56+00.8 TO STA 56+99.1

SCALE: 1" = 20'

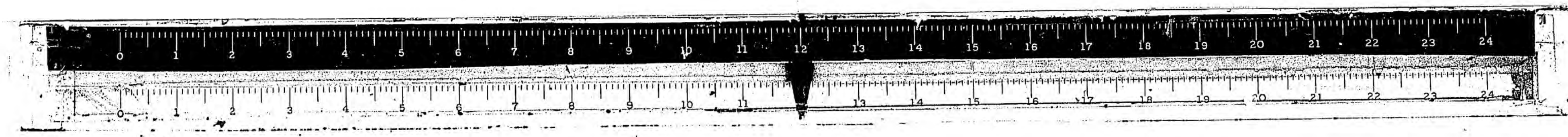
WATER & GAS LINES STA. 48+00 TO STA. 54+00 ILL. RTE. 146



ROUTE NO.	SECTION	COUNTY	UNION	TOTAL SHEETS	SHEET NO.
FA 885	104W/RS	ILLINOIS	PROJECT RF-191	148	67
STA 54+00				TO STA. 60+00	
F.H.W.A. REG. 4					

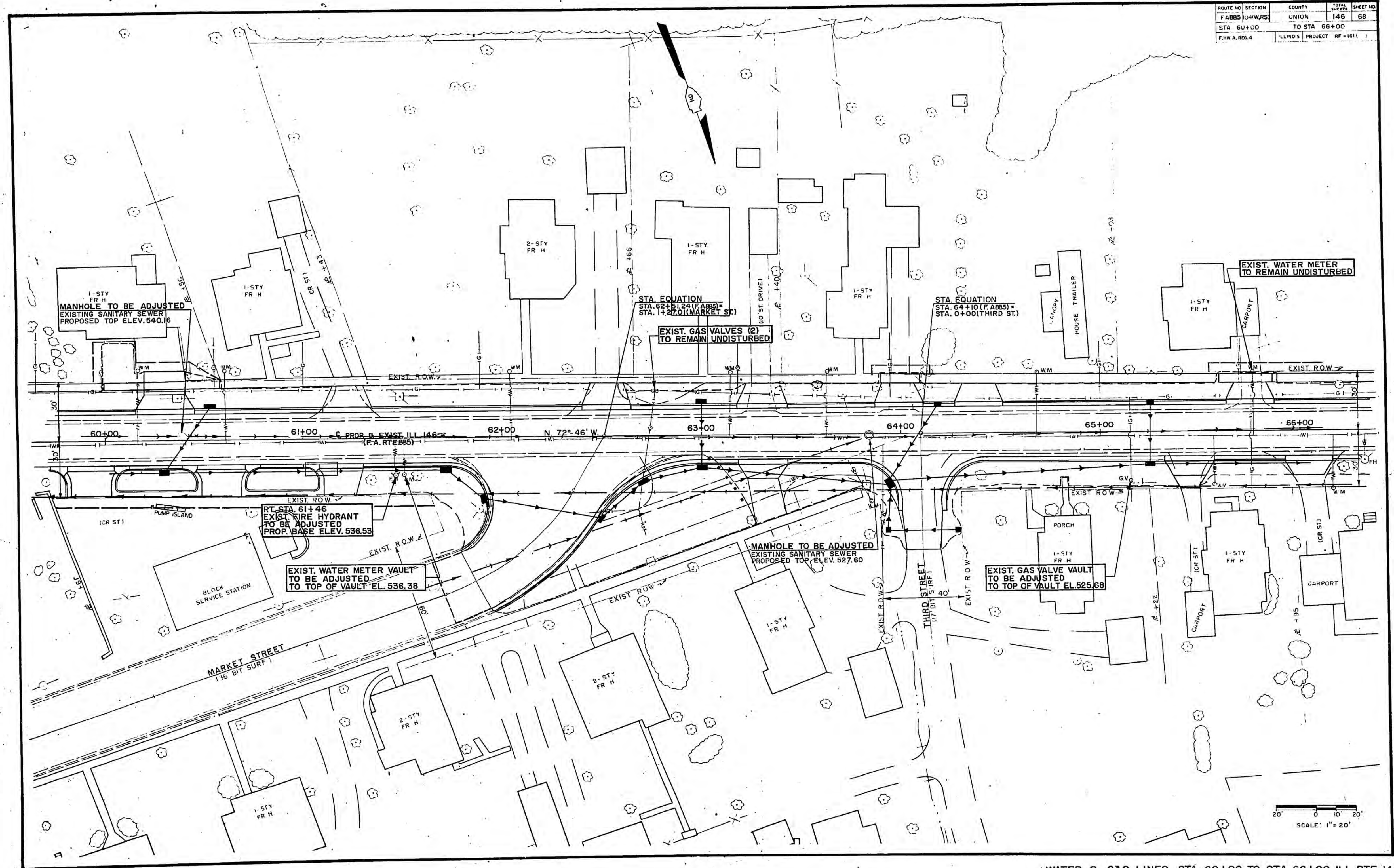


WATER & GAS LINES STA. 54+00 TO STA. 60+00 ILL. RTE. 146



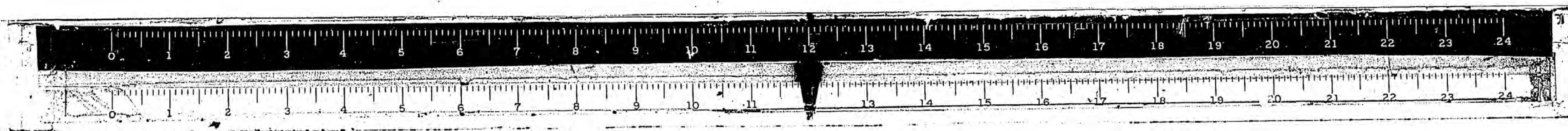
X-615 20' 11"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FABBS	UNION	UNION	148	68
STA 60+00	TO STA 66+00			
F.H.W.A. REG. 4		ILLINOIS PROJECT RF-1611		



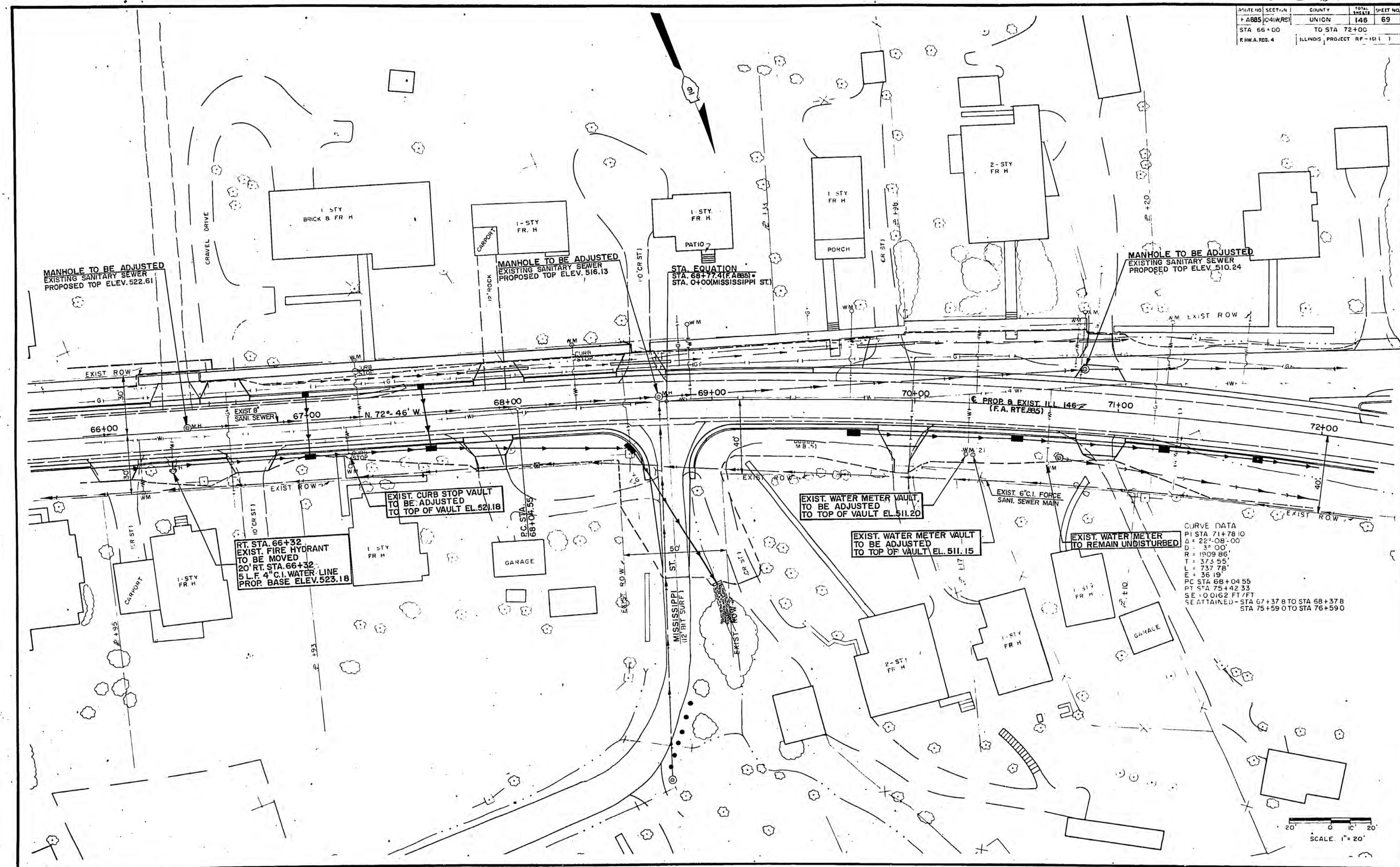
SCALE: 1" = 20'

WATER & GAS LINES STA. 60+00 TO STA. 66+00 ILL. RTE. 146



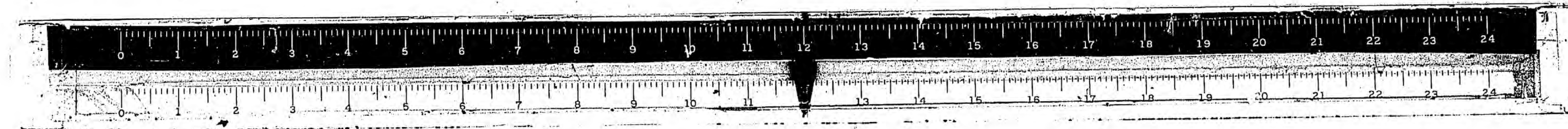
X-615 STA. 66-12
2 TO 1

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
146	146	UNION	146	69
STA 66+00		TO STA 72+00		
FWA REG. 4		ILLINOIS PROJECT RP-101		

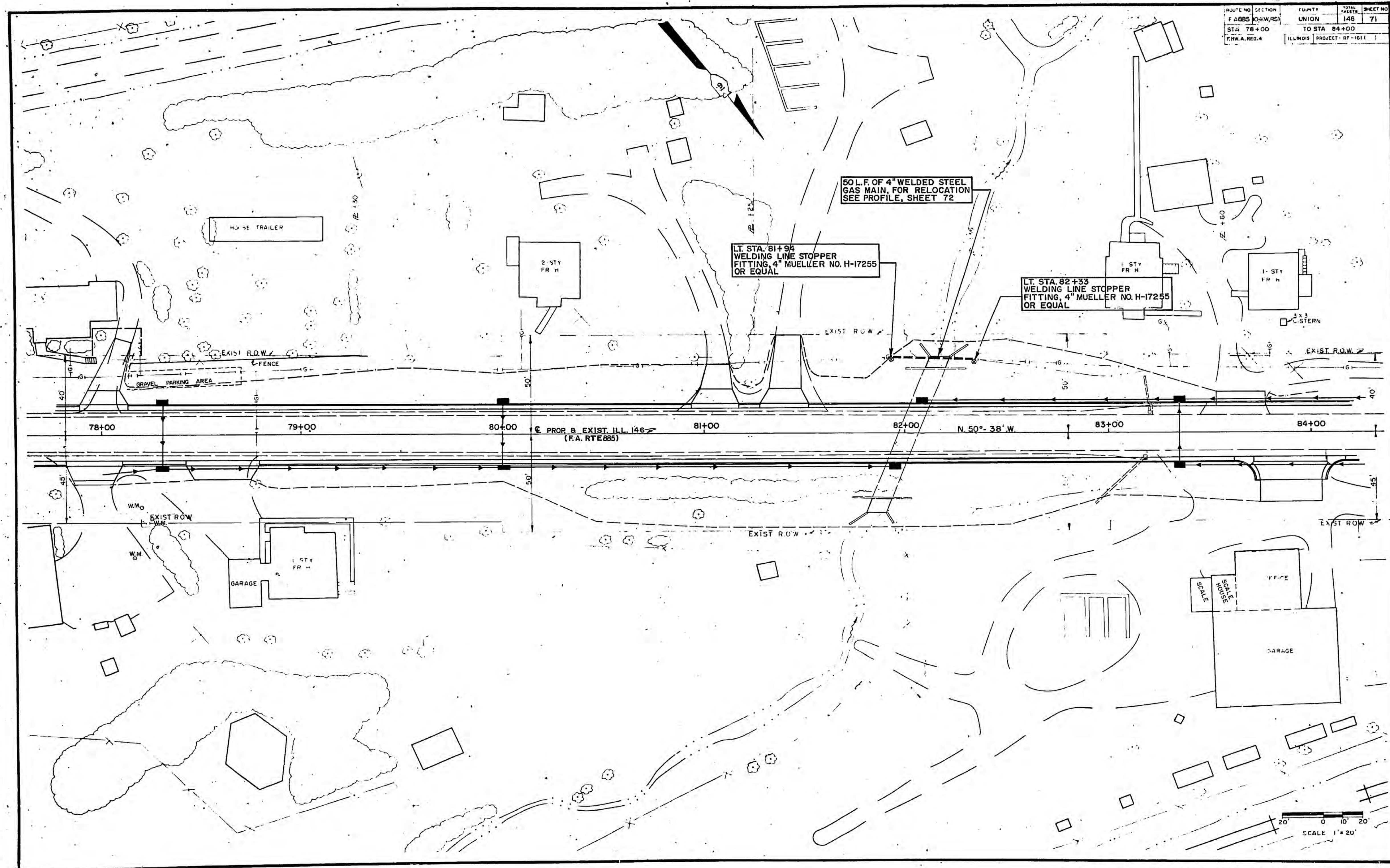


CURVE DATA
 PI STA 71+78.10
 Δ = 22° 08' 00"
 D = 3° 00'
 R = 1009.86'
 T = 373.55'
 L = 737.78'
 E = 36.19'
 PC STA 68+04.55
 PT STA 75+42.33
 SE = 0.0162 FT/FT
 SE ATTAINED - STA 67+37.8 TO STA 68+37.8
 SE ATTAINED - STA 75+59.0 TO STA 76+59.0

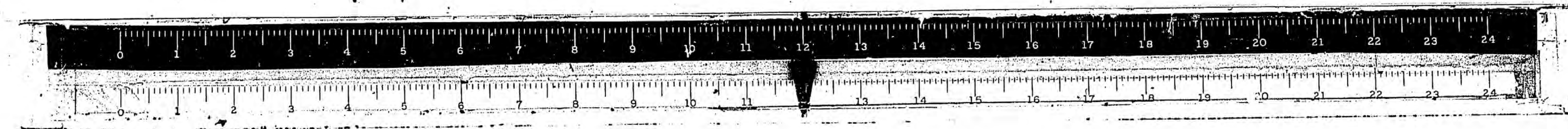
WATER & GAS LINES STA. 66+00 TO STA. 72+00 ILL. RTE. 146



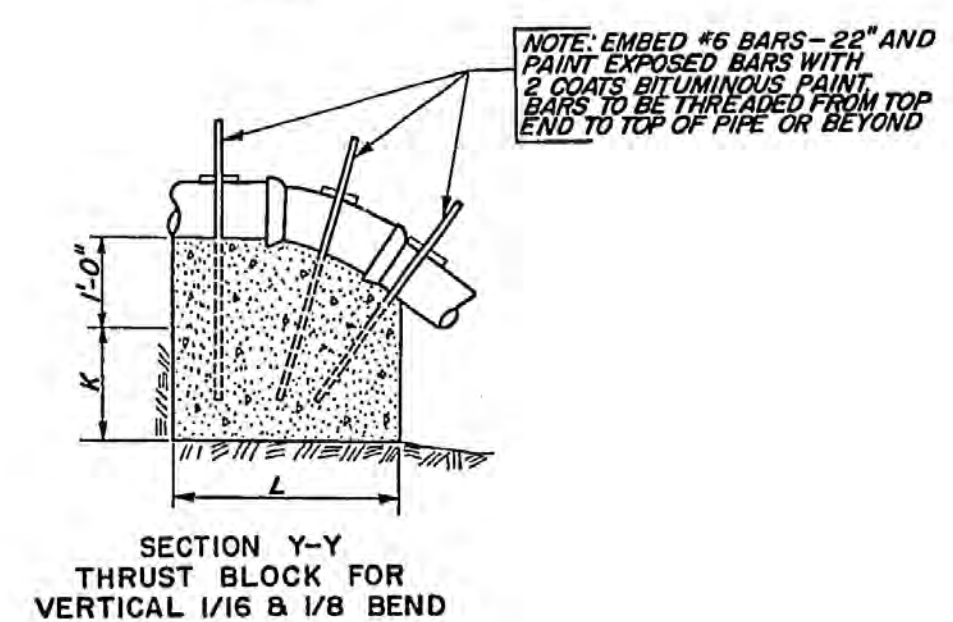
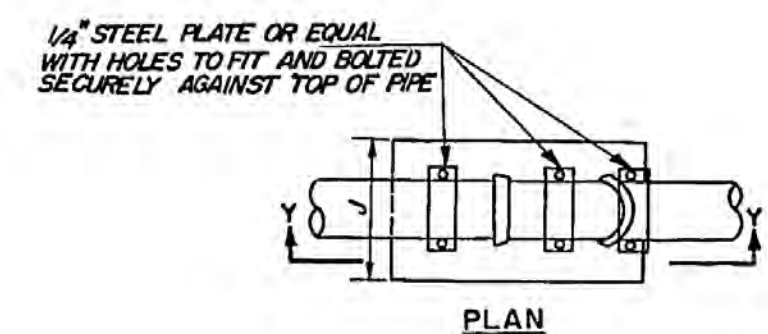
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FABBS HWY, RD		UNION	146	71
STA 78+00		TO STA 84+00		
ILLINOIS	PROJECT: HP-1611			



WATER & GAS LINES STA. 78+00 TO STA. 84+00 ILL. RTE. 146

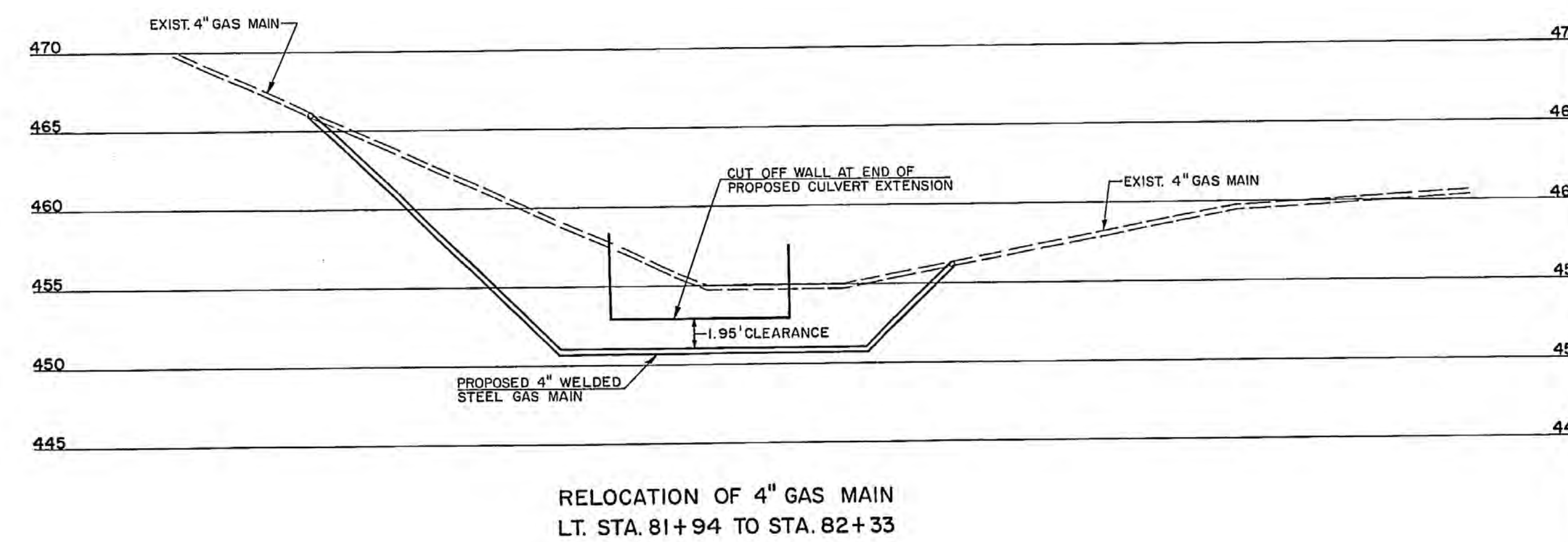
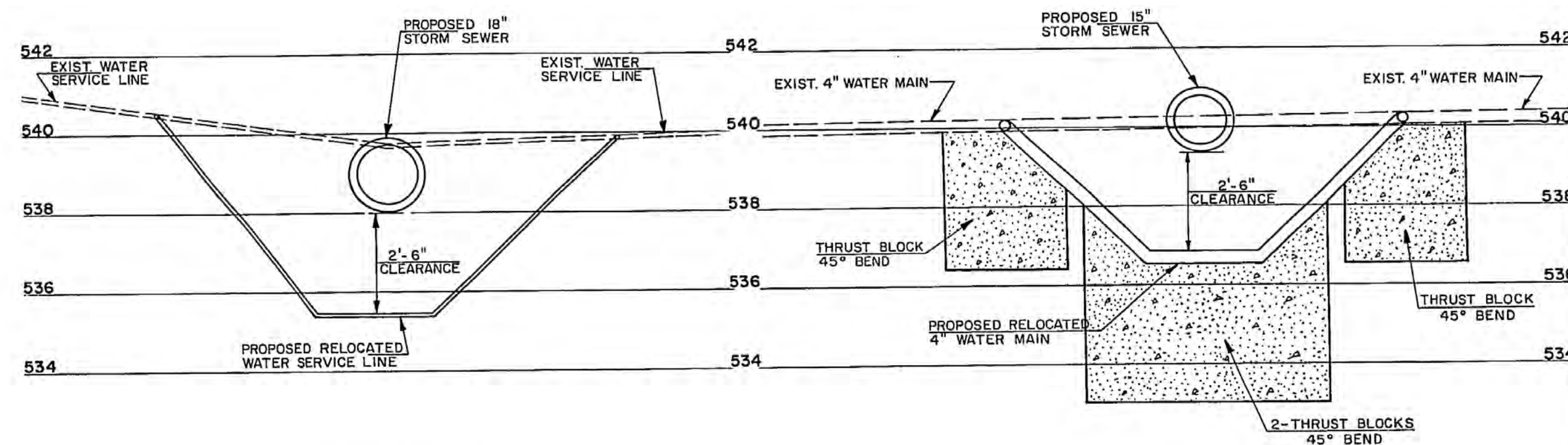
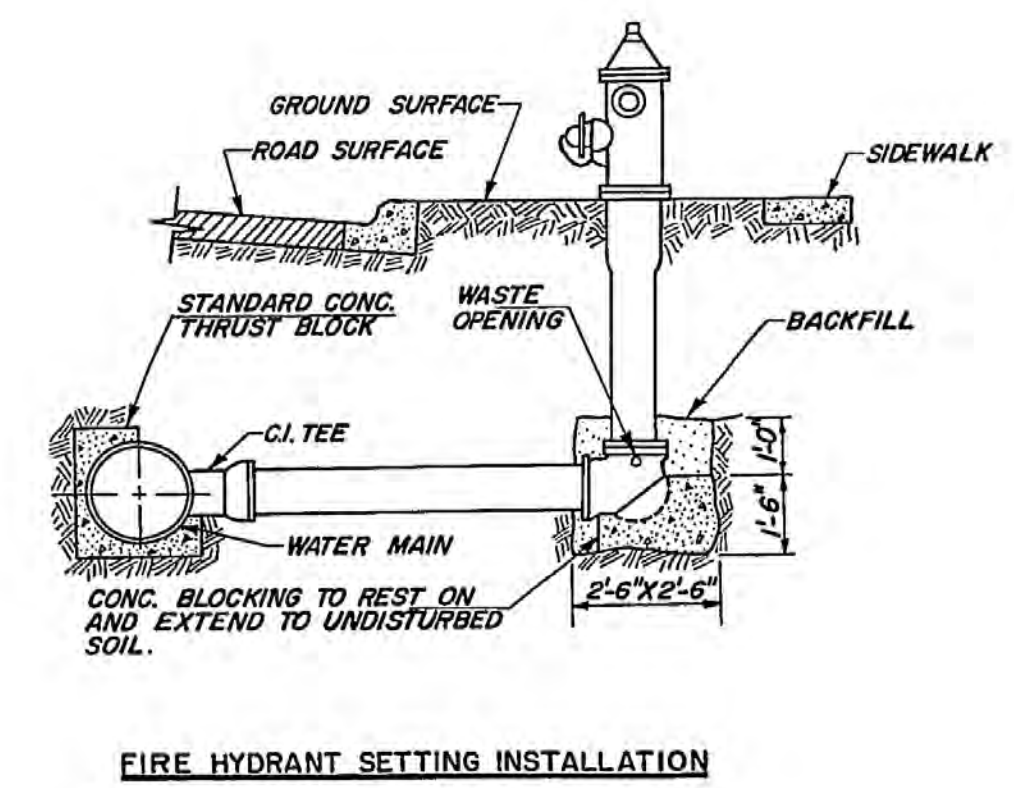


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.B.85	104(W,RS)	UNION	146	72
F.H.W.A. REG. 4		ILLINOIS	PROJECT	RF-161 ()

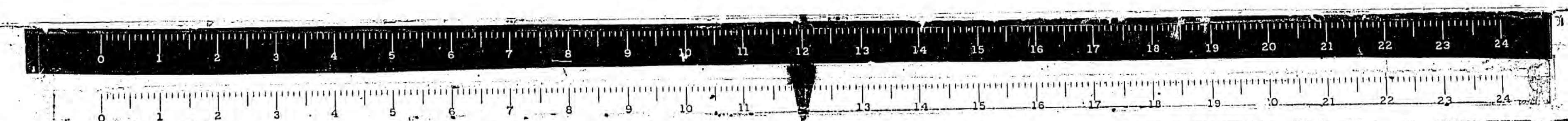


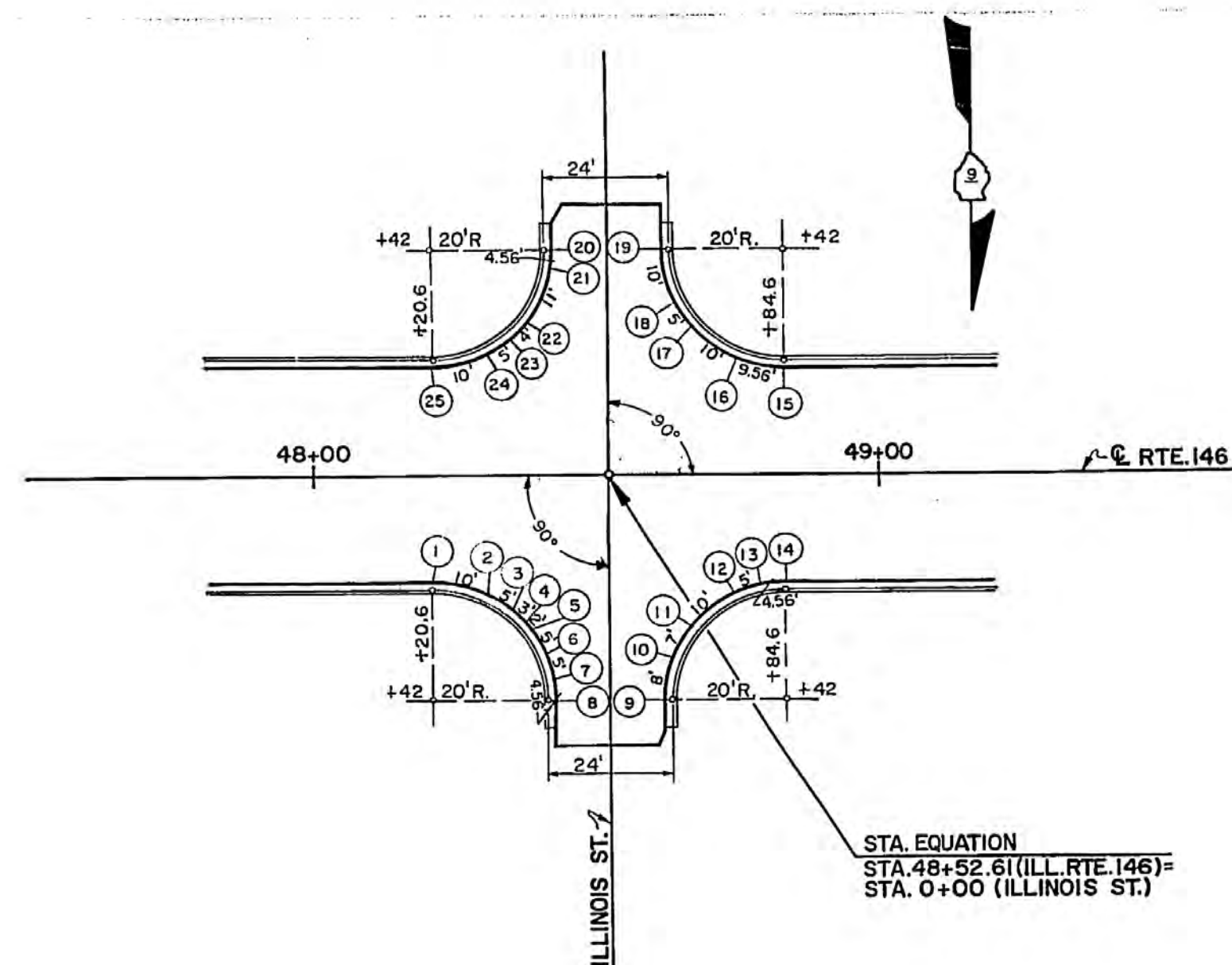
D	A	B	C	E	F	G	L	J	K
4" 8 6"	8"	11"	1'-3"	8"	8"	8"	3'-0"	2'-6"	2'-6"
6"	9"	1'-2"	1'-8"	9"	10"	9"	4'-0"	3'-0"	2'-9"
10"	10"	1'-6"	2'-1"	10"	1'-0"	1'-0"	4'-6"	4'-0"	3'-0"
12"	1'-0"	1'-9"	2'-6"	11"	1'-3"	1'-0"	4'-9"	4'-6"	3'-6"
16"	1'-2"	2'-4"	3'-4"	1'-3"	1'-8"	1'-4"	6'-6"	5'-2"	4'-0"

MEASUREMENTS

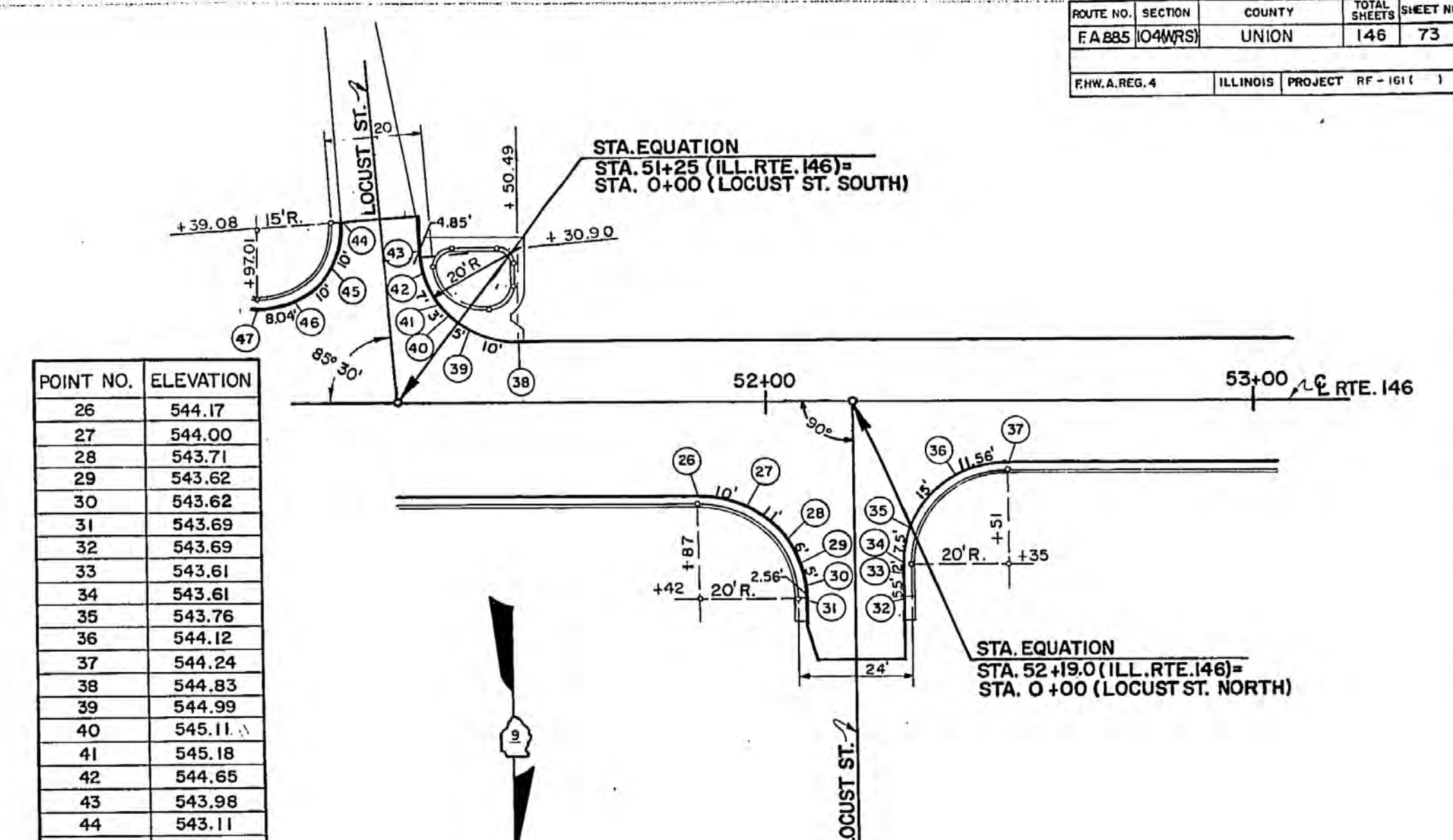


WATER & GAS LINE PROFILES & THRUST BLOCKING DETAILS

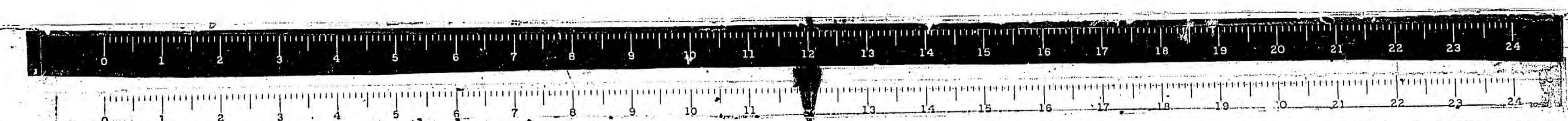
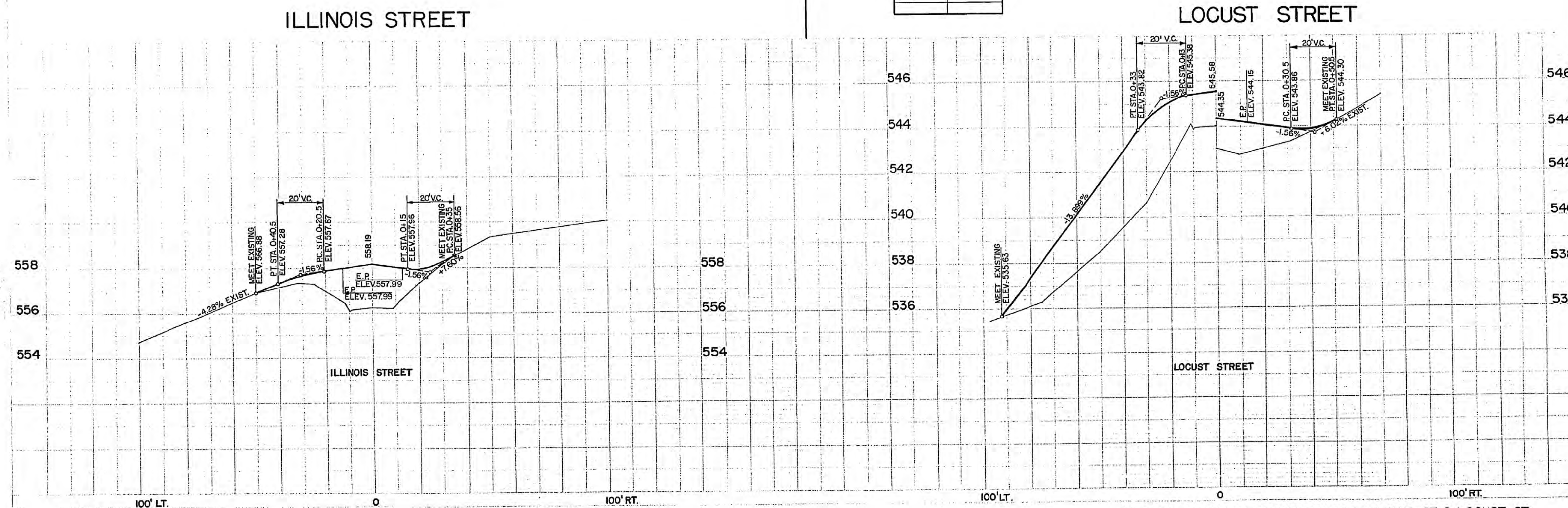




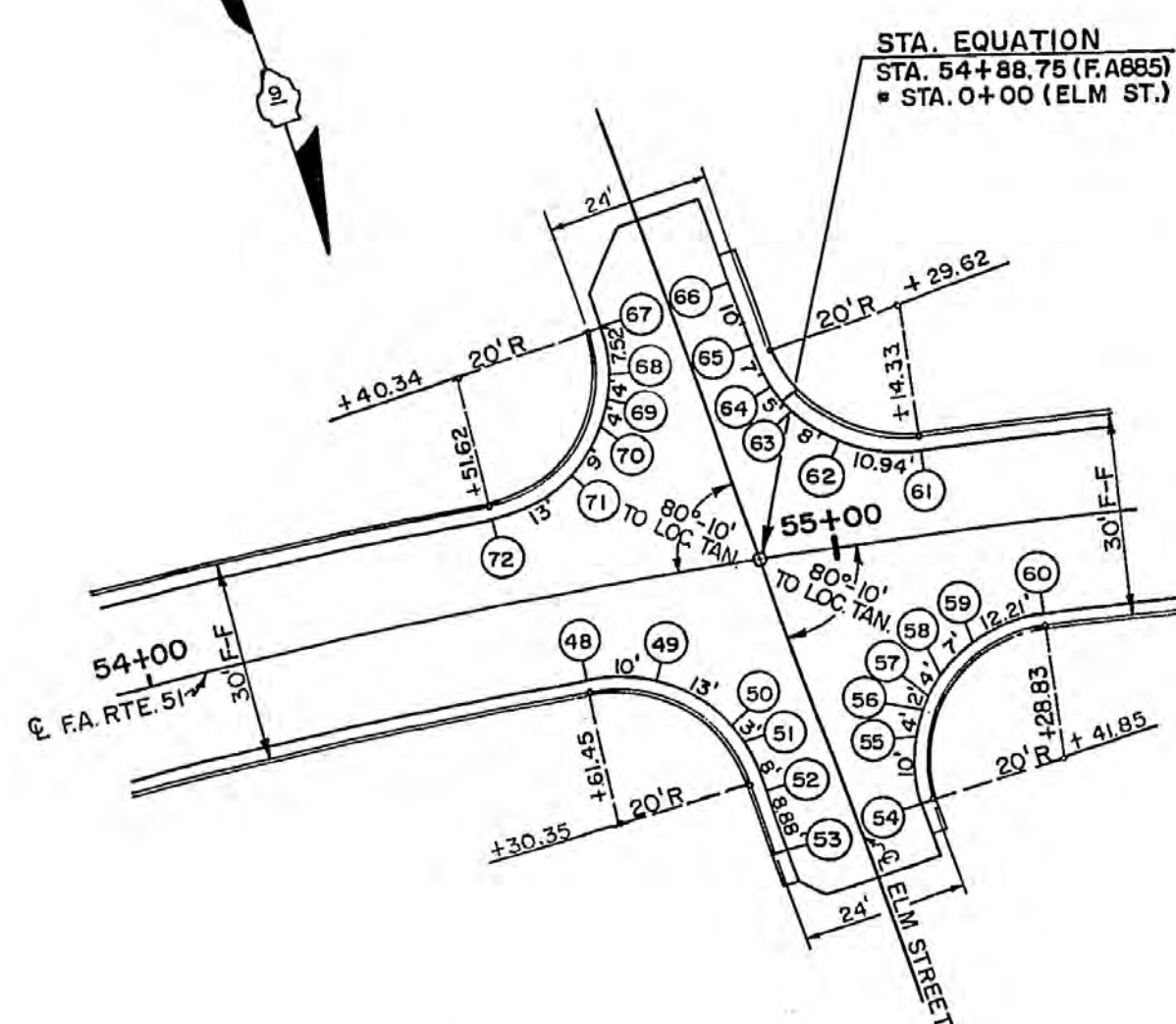
POINT NO.	ELEVATION
1	559.47
2	558.71
3	558.12
4	557.70
5	557.70
6	557.92
7	558.35
8	558.72
9	558.72
10	558.00
11	557.48
12	556.85
13	556.53
14	556.21
15	555.80
16	556.42
17	557.01
18	556.97
19	556.70
20	556.86
21	557.00
22	557.41
23	557.96
24	558.57
25	559.40



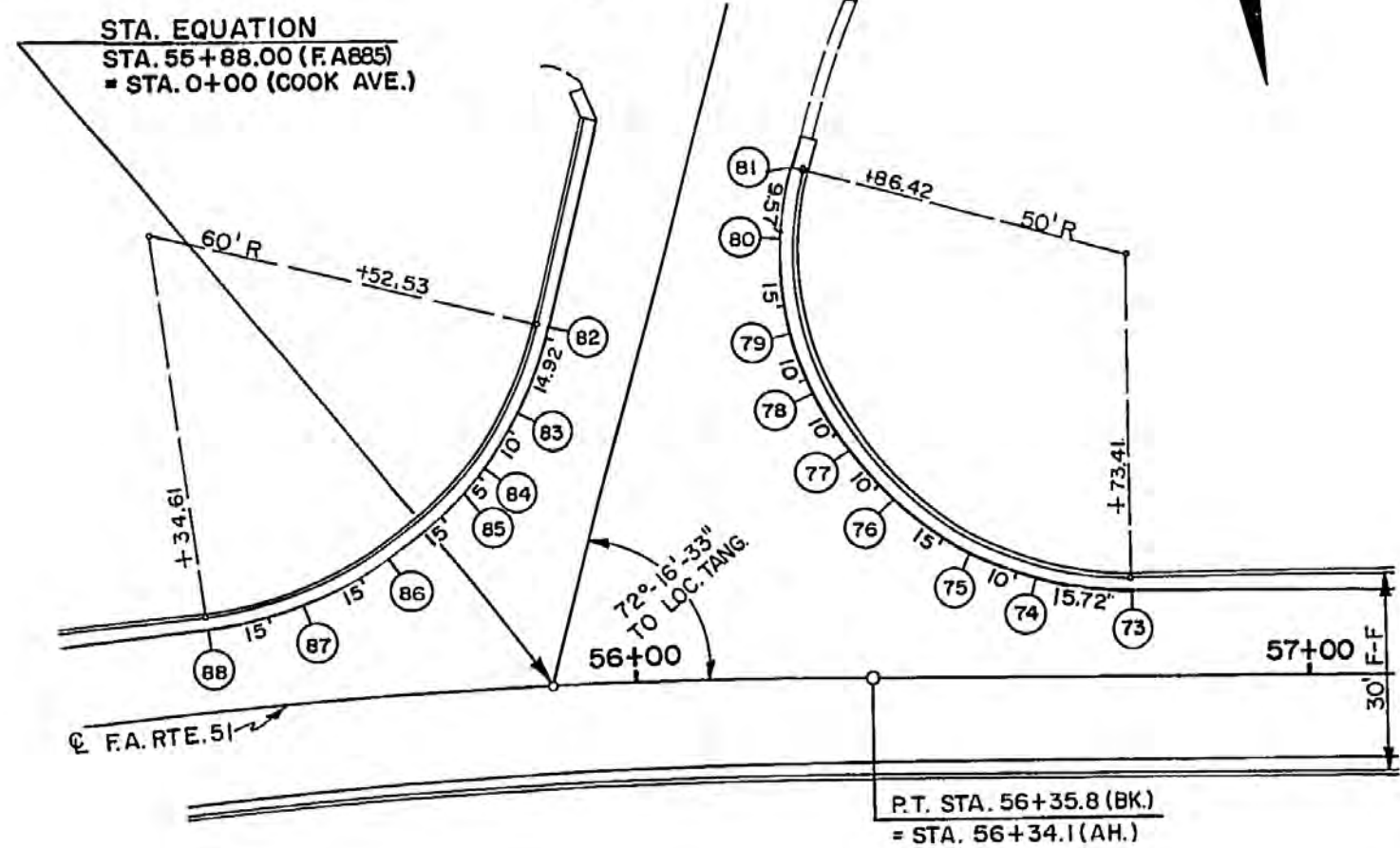
POINT NO.	ELEVATION
26	544.17
27	544.00
28	543.71
29	543.62
30	543.62
31	543.69
32	543.69
33	543.61
34	543.61
35	543.76
36	544.12
37	544.24
38	544.83
39	544.99
40	545.11
41	545.18
42	544.65
43	543.98
44	543.11
45	544.83
46	545.61
47	545.92



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	04M,RS	UNION	146	74
ENR A, REG. 4	ILLINOIS	PROJECT	PF-1611	1



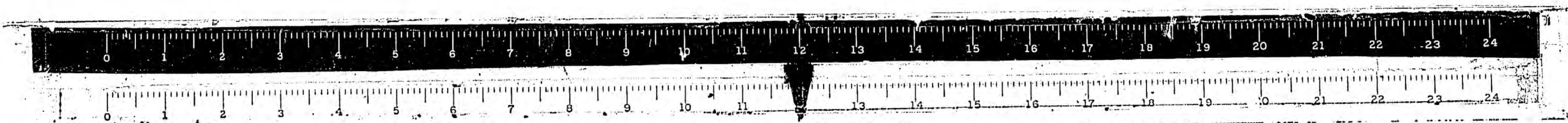
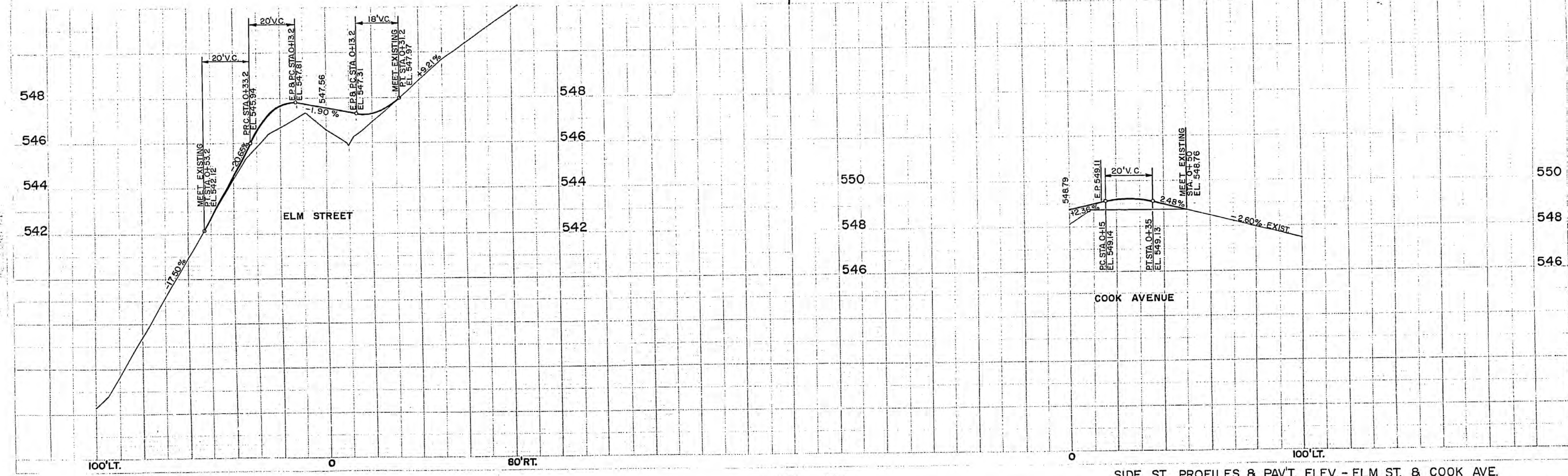
POINT NO.	ELEVATION
48	546.91
49	547.01
50	547.09
51	547.24
52	547.92
53	548.75
54	548.75
55	547.32
56	546.96
57	546.96
58	547.25
59	547.56
60	547.82
61	548.18
62	547.97
63	547.72
64	547.42
65	546.25
66	544.32
67	544.32
68	546.50
69	547.24
70	547.41
71	547.45
72	547.34



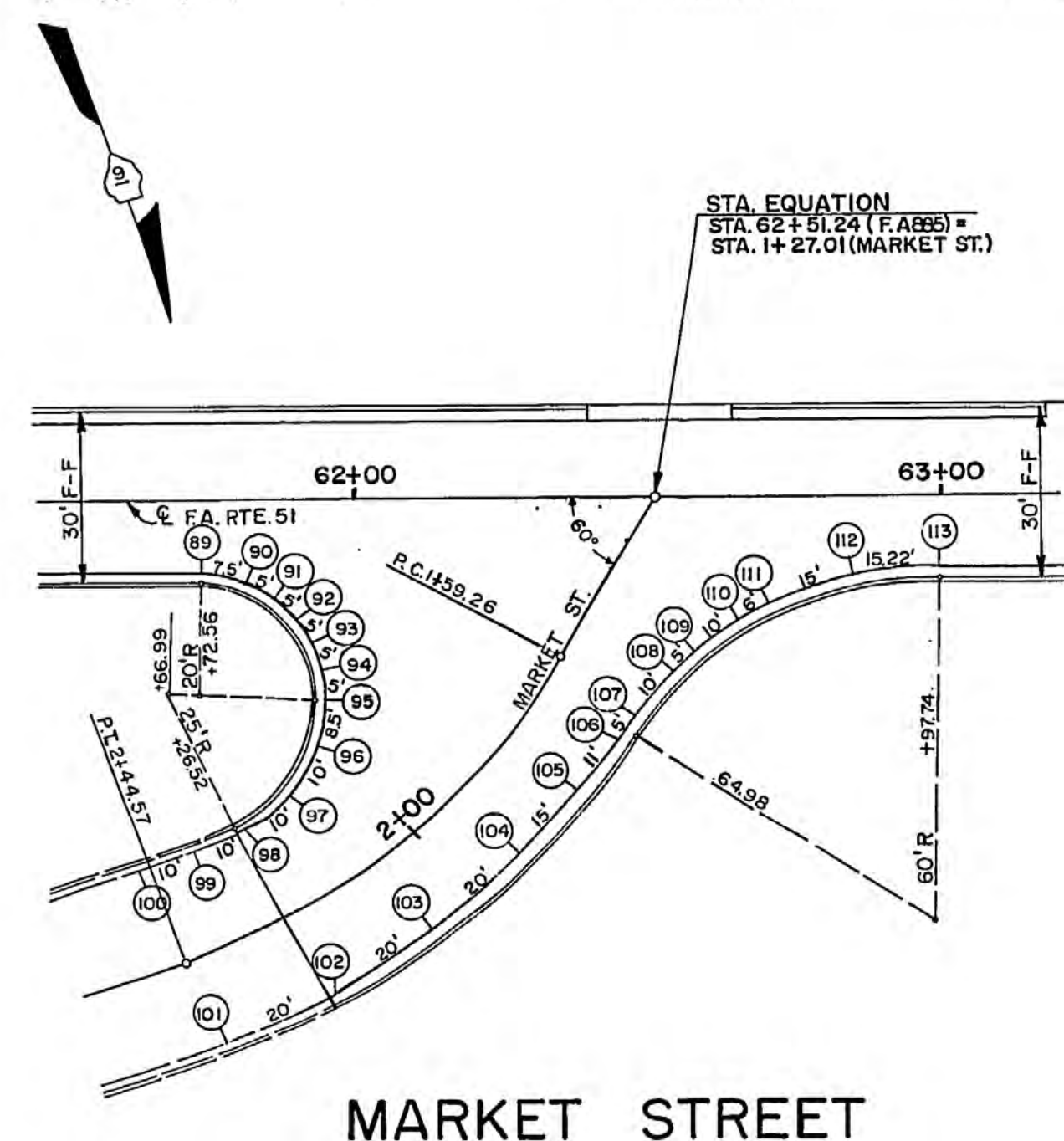
POINT NO.	ELEVATION
73	549.00
74	549.05
75	549.01
76	548.86
77	548.72
78	548.53
79	548.27
80	547.85
81	547.54
82	548.42
83	548.83
84	548.94
85	548.90
86	548.75
87	548.61
88	548.45

ELM STREET

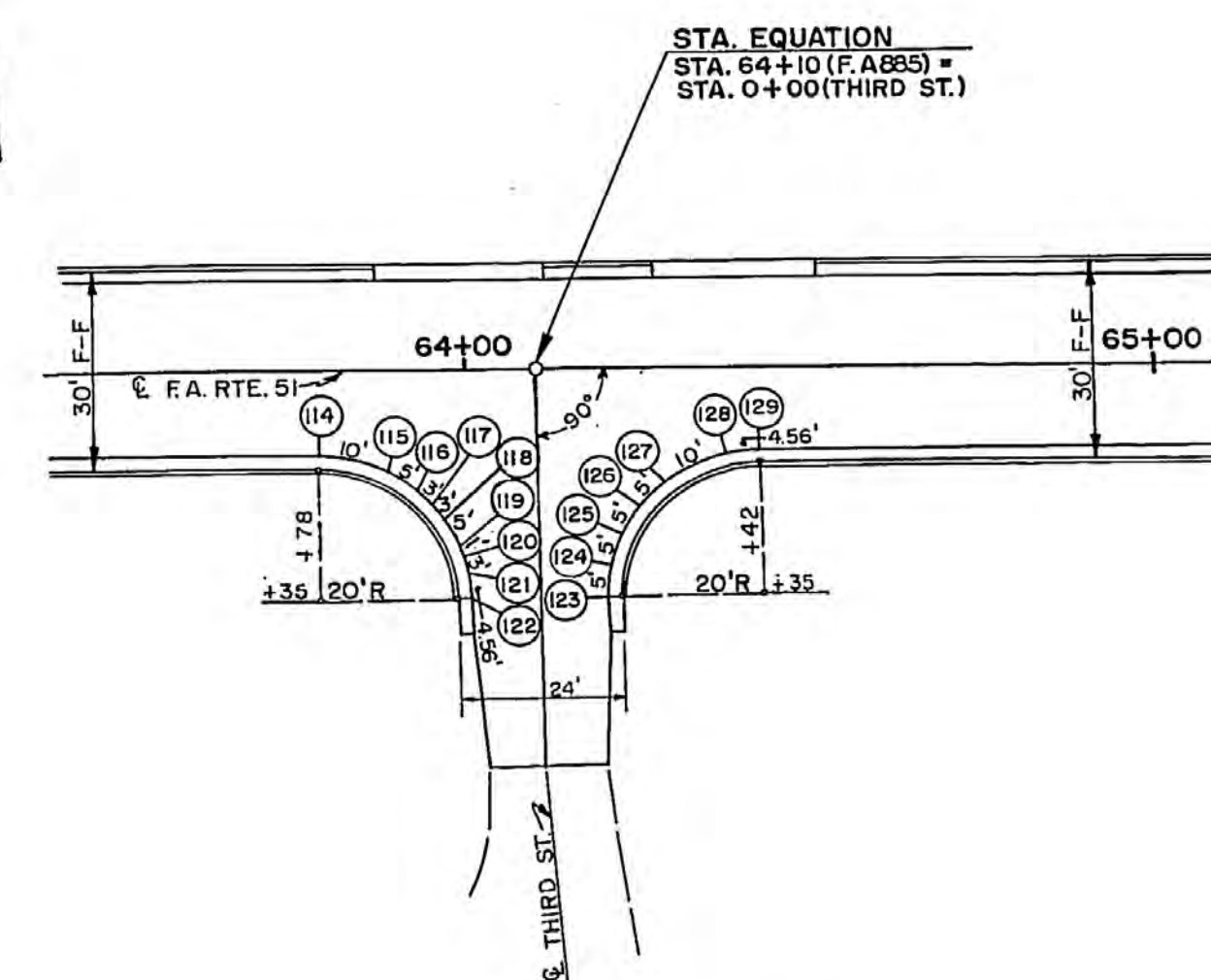
COOK AVENUE



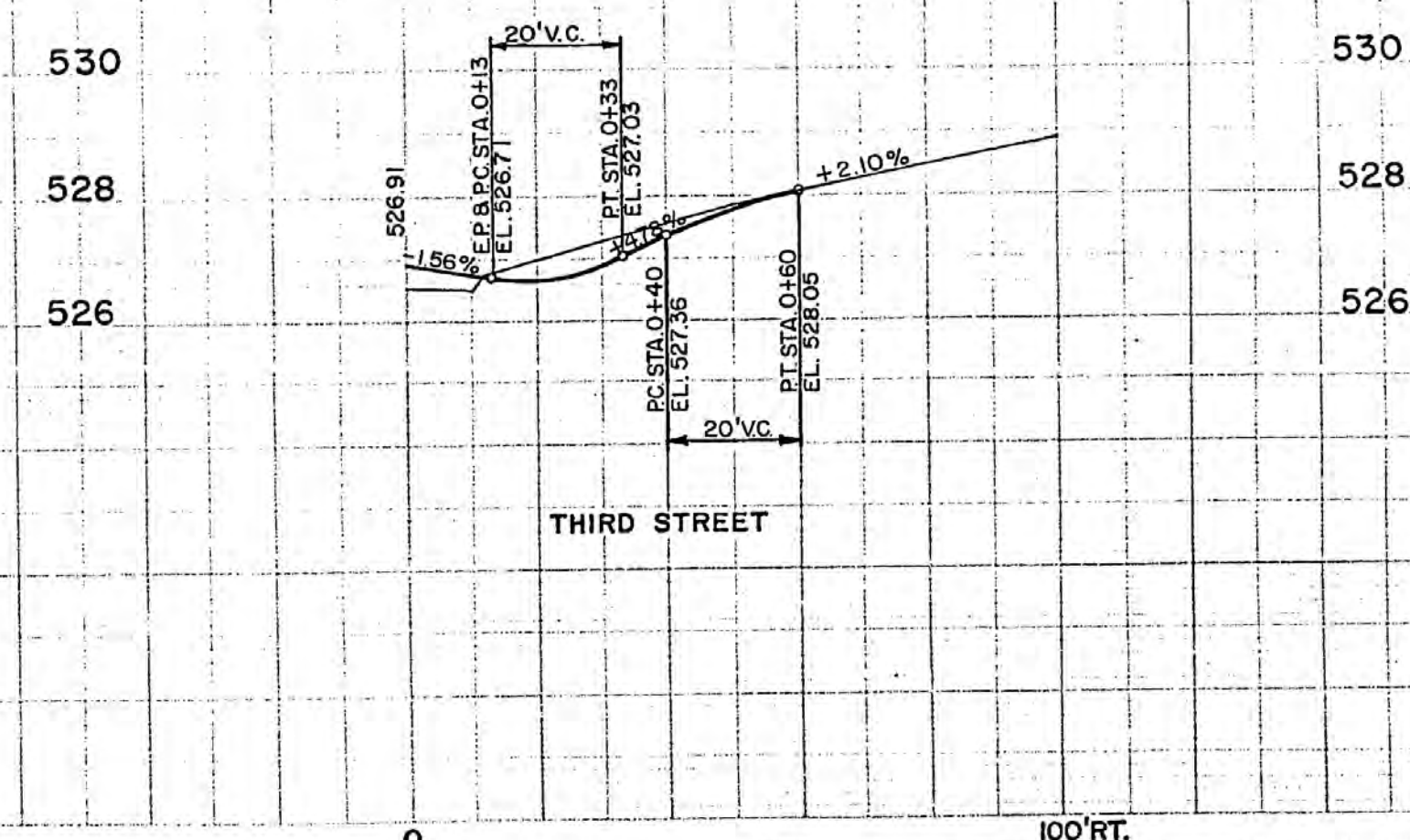
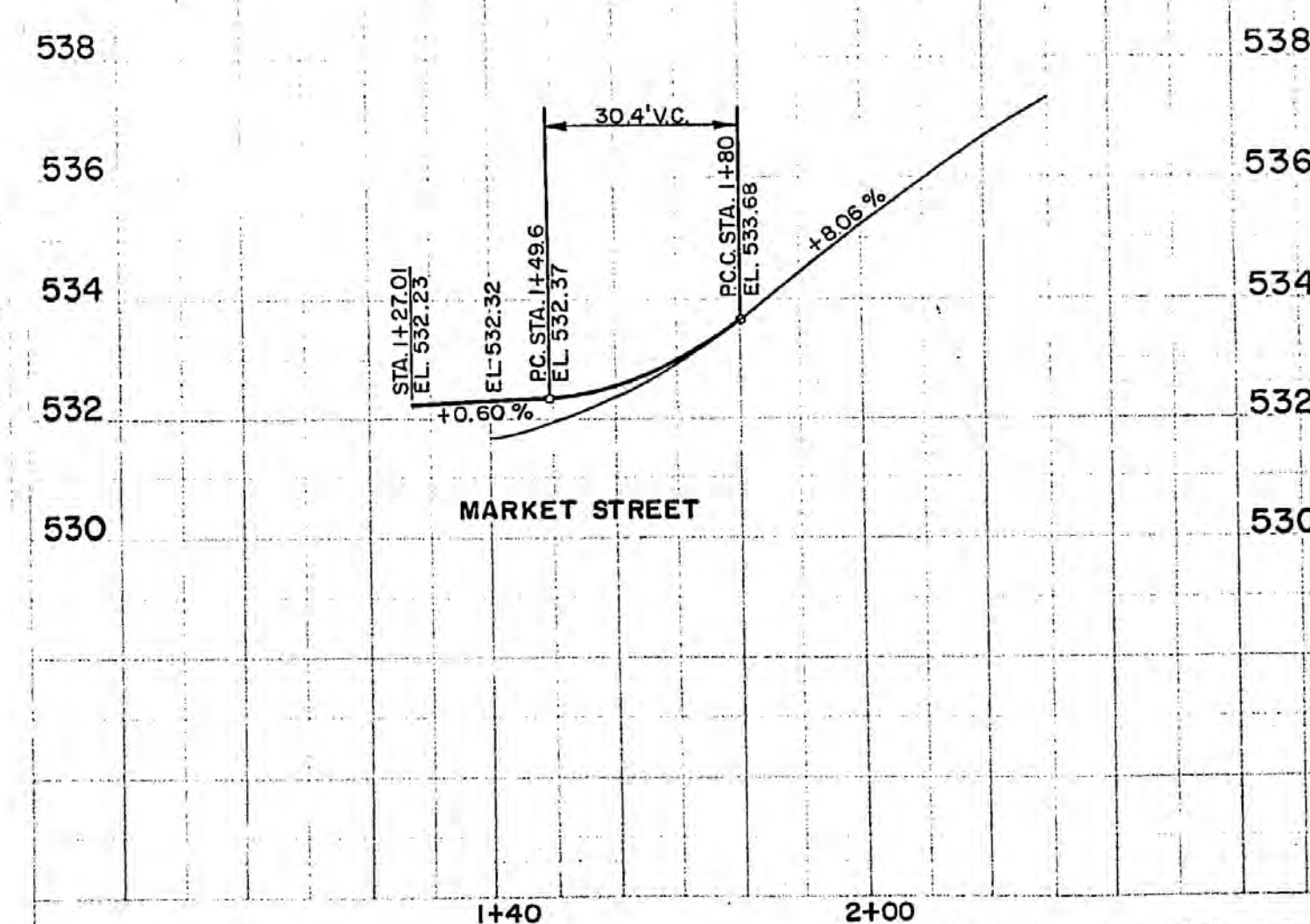
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	104(W,RS)	UNION	146	75
ENR. A. REG. 4	ILLINOIS	PROJECT	RF-1611	1



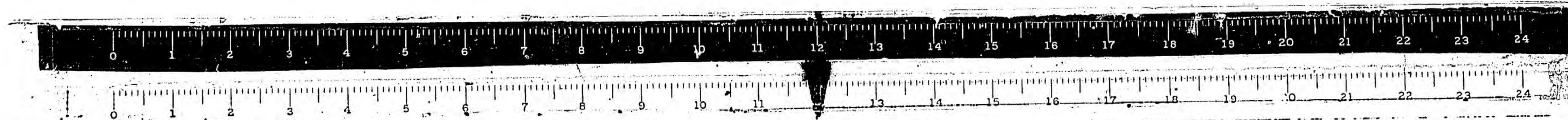
POINT NO.	ELEVATION
89	534.99
90	534.67
91	534.41
92	534.01
93	533.35
94	533.10
95	533.10
96	533.48
97	535.15
98	536.40
99	537.27
100	538.00
101	538.00
102	536.87
103	535.66
104	534.37
105	533.33
106	532.68
107	532.47
108	532.09
109	532.00
110	531.64
111	531.39
112	530.84
113	530.28



POINT NO.	ELEVATION
114	527.59
115	527.24
116	526.98
117	526.77
118	526.48
119	526.48
120	526.53
121	526.67
122	526.97
123	526.97
124	526.65
125	526.45
126	526.32
127	526.23
128	526.03
129	525.93



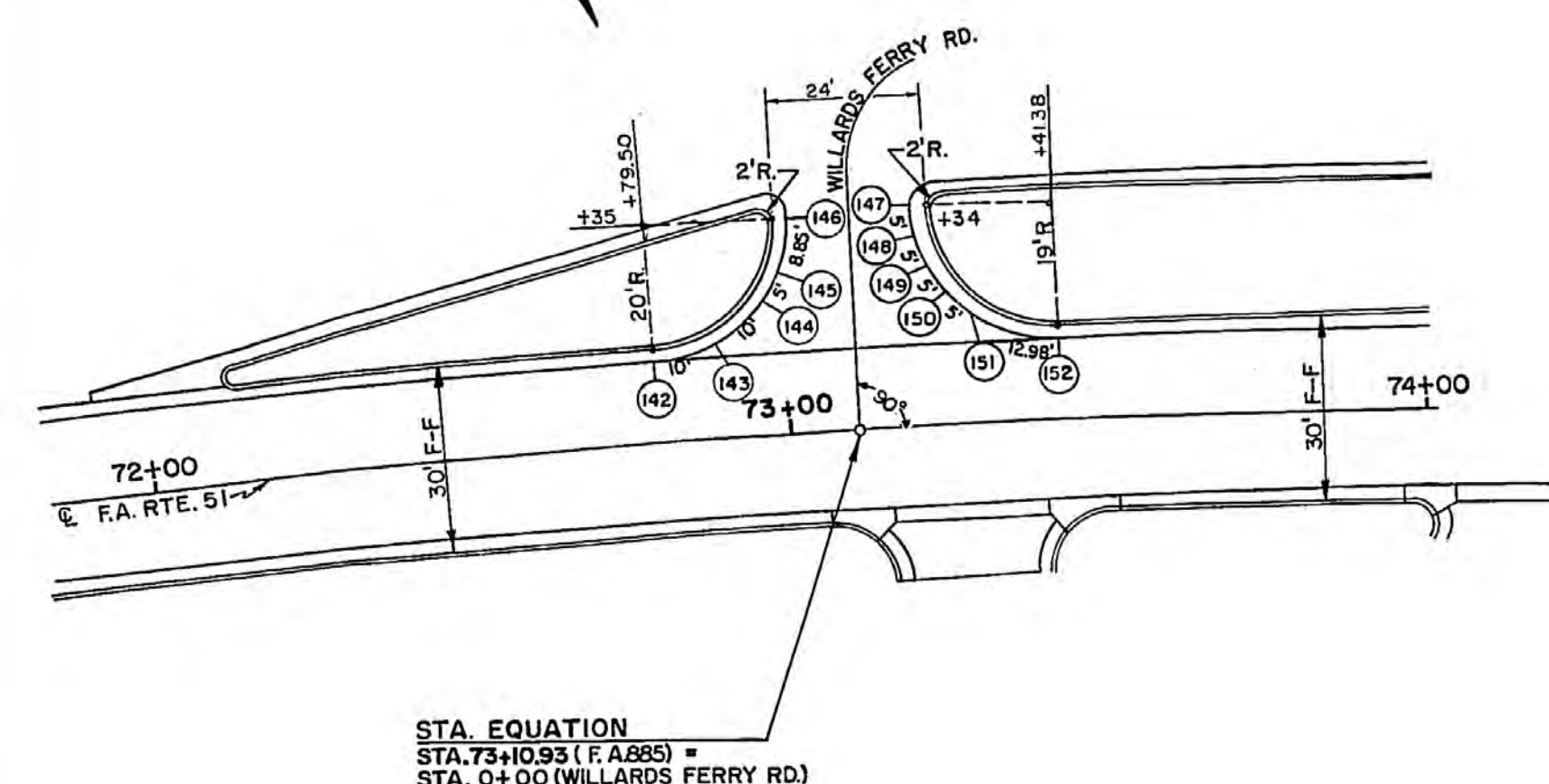
SIDE ST. PROFILES & PAV'T. ELEV. - MARKET ST & THIRD ST.



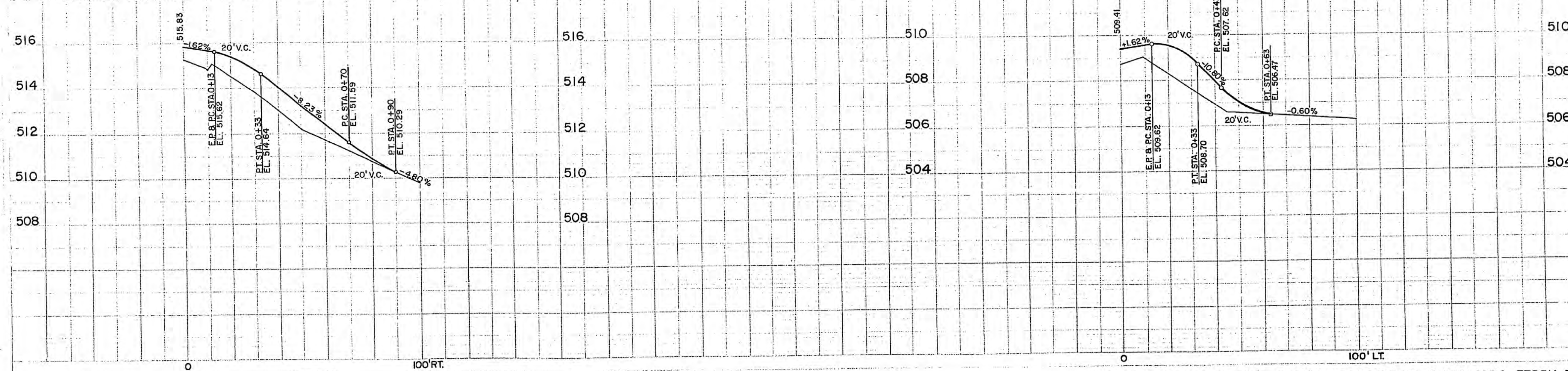
ROUTE NO.	SECTION	COUNTY	TOTAL SHEET NO.
FABBS	041W,RS	UNION	146 76
F.W.A. REG. 4	ILLINOIS	PROJECT	RF - 161 I 1



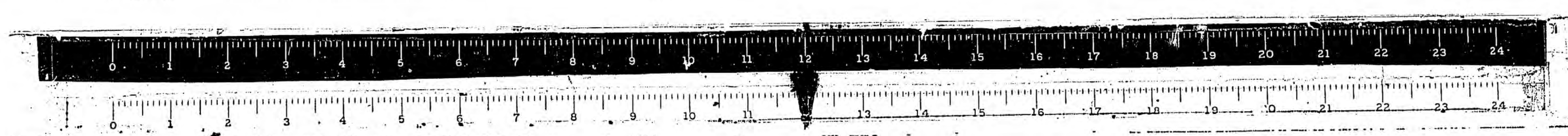
POINT NO.	ELEVATION
130	516.90
131	516.49
132	516.01
133	515.54
134	514.98
135	514.44
136	514.44
137	515.38
138	515.47
139	515.10
140	514.70
141	514.54



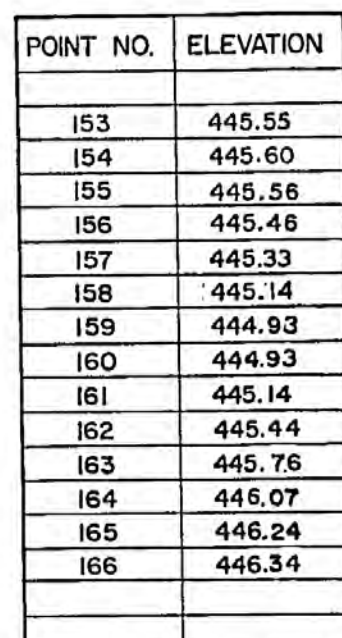
POINT NO.	ELEVATION
142	509.34
143	509.39
144	509.36
145	509.32
146	508.38
147	508.38
148	509.16
149	509.36
150	509.46
151	509.68
152	509.92



SIDE ST. PROFILES & PAV'T ELEV.-MISSISSIPPI ST. & WILLARDS FERRY RD.

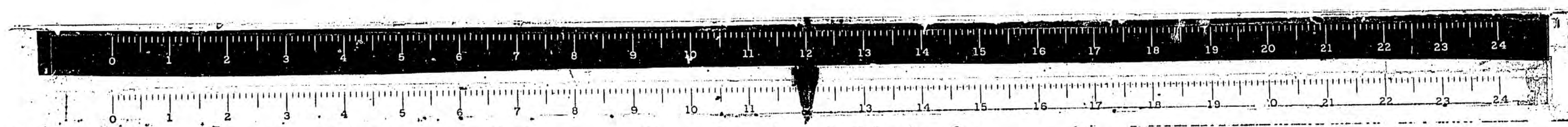


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 885	104(WRS)	UNION	146	77



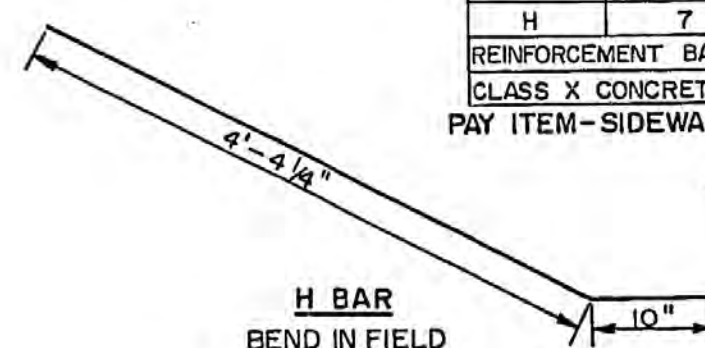
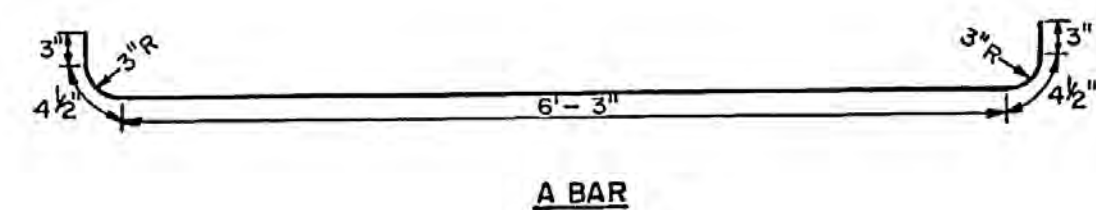
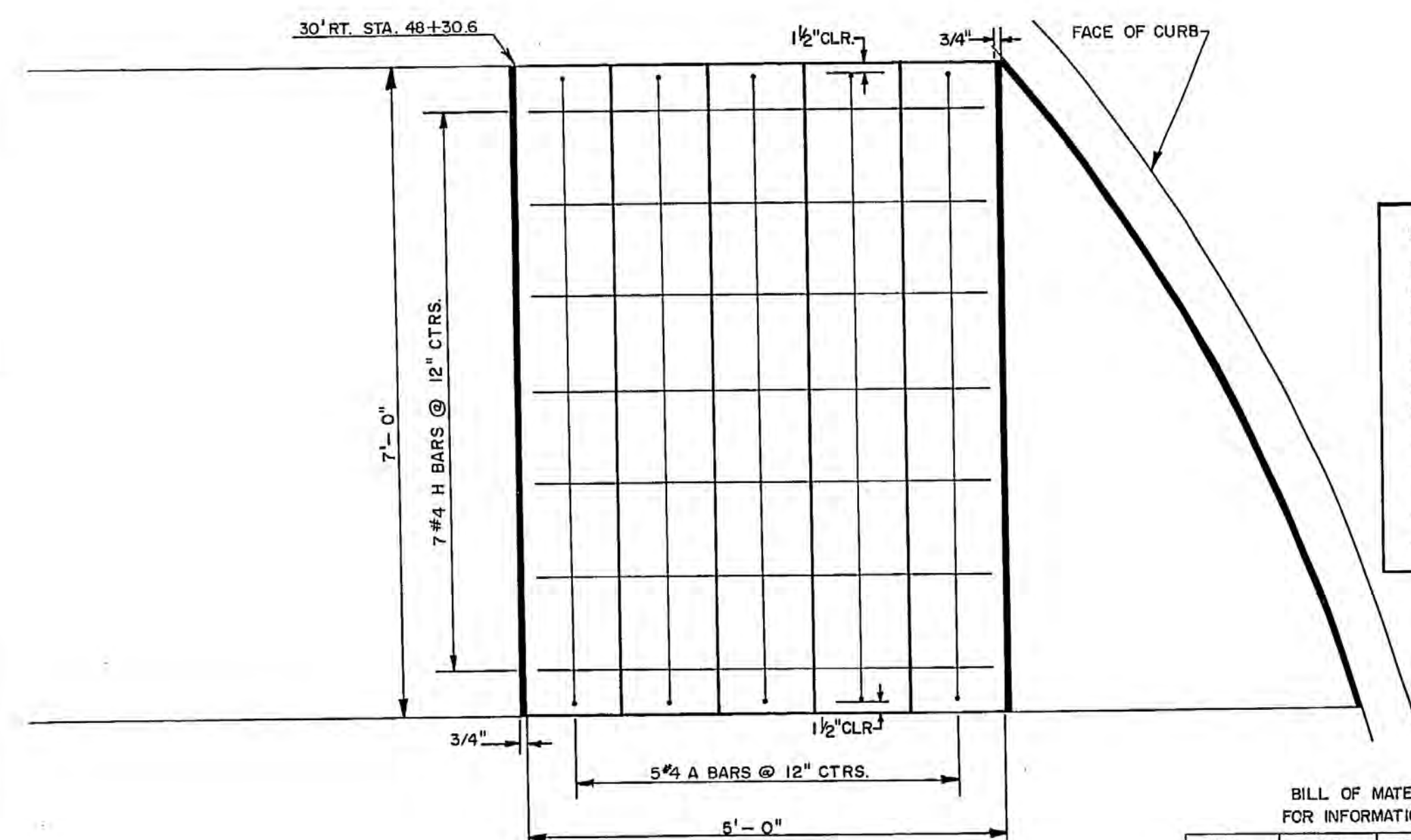
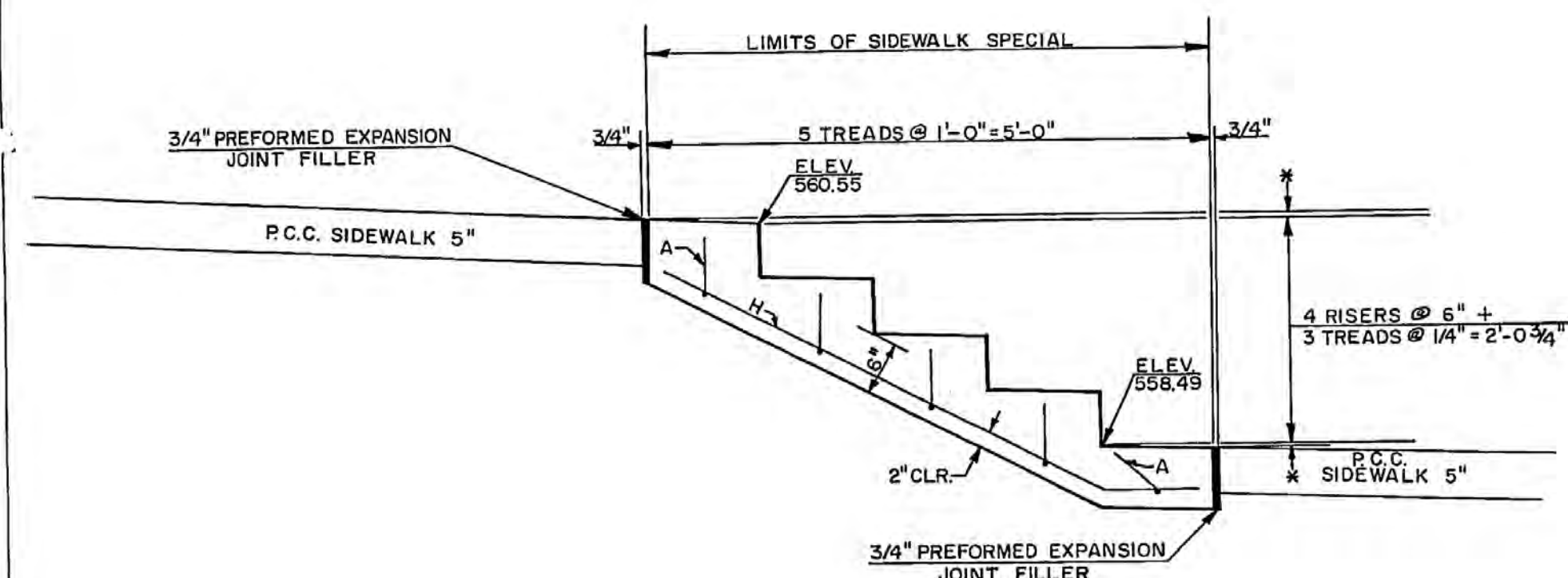
Profile view of Berryville Road. The vertical axis shows elevation in feet, with labels 444, 446, and 448. The horizontal axis shows stationing, with labels 100' LT. and 0. The profile line starts at a 'MEET EXISTING' point at elevation 445.00. It then rises at a 2.29% grade to an 'E.P.' (End of Profile) point at elevation 445.96. The road is labeled 'BERRYVILLE ROAD'.

SIDE ST. PROFILES & PAV'T. - BERRYVILLE RD.



STEP DETAILS

RT. STA. 48+30.6 TO STA. 48+35.6



BILL OF MATERIALS
FOR INFORMATION ONLY

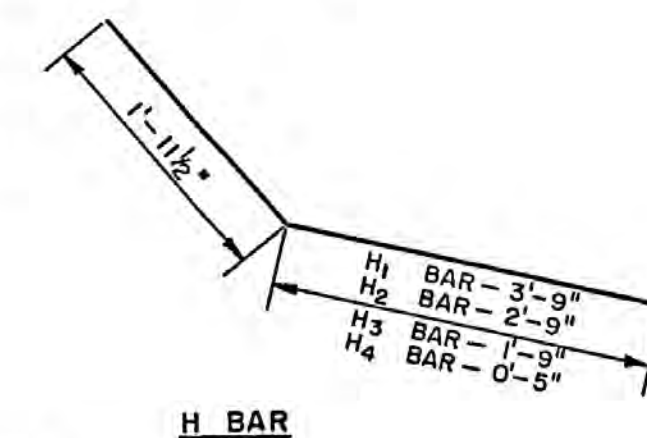
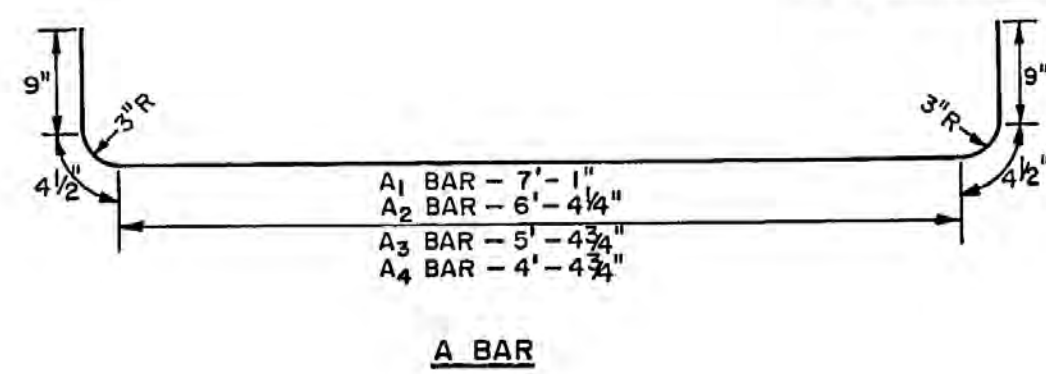
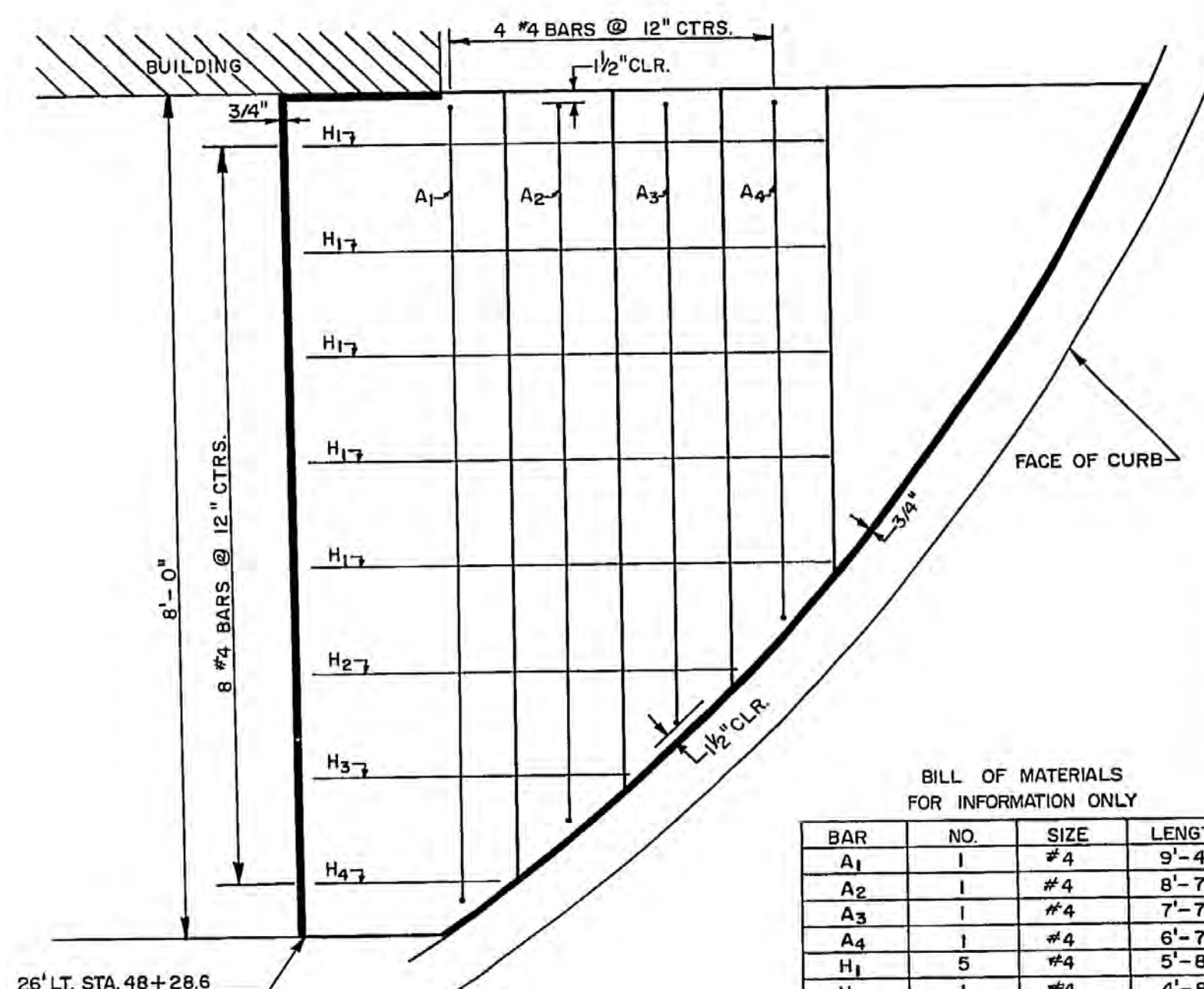
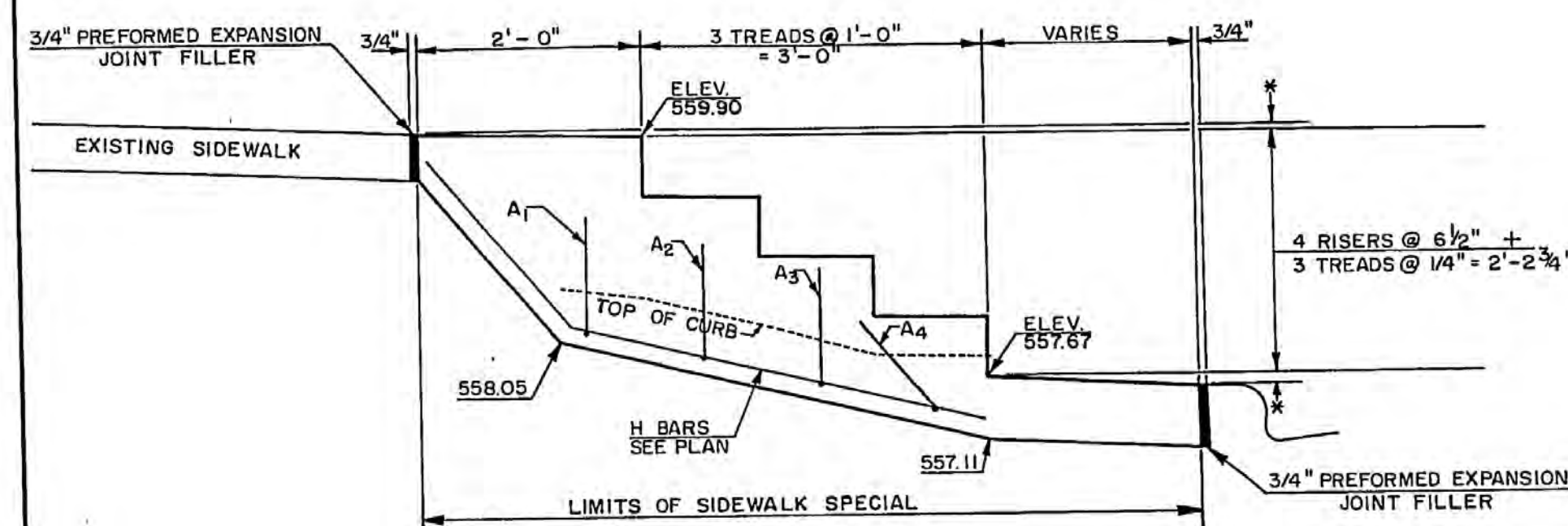
BAR	NO.	SIZE	LENGTH
A	5	#4	7'-6"
H	7	#4	5'-2 1/4"
REINFORCEMENT BARS POUND			49.4
CLASS X CONCRETE CU. YD.			1.0

PAY ITEM-SIDEWALK, SPECIAL- 49.0 S.F.

GENERAL NOTES
CLASS X CONCRETE SHALL BE USED THROUGHOUT. THE STEPS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR SIDEWALK, SPECIAL, PER SQUARE FOOT. THIS PRICE SHALL INCLUDE FURNISHING AND PLACING CLASS X CONCRETE, REINFORCEMENT BARS AND PREFORMED EXPANSION JOINT FILLER. THE DIMENSION SHOWN WITH AN ASTERISK (*) SHALL BE VARIED TO MATCH THE EDGE OF PROPOSED SIDEWALK OR THE ELEVATION OF EXISTING SIDEWALK. THE STEPS SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 624.07 OF THE STANDARD SPECIFICATIONS. THE COST OF FINISHING THE STEPS SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF SIDEWALK, SPECIAL.

STEP DETAILS

LT. STA. 48+28.6 TO STA. 48+36.5



BILL OF MATERIALS
FOR INFORMATION ONLY

BAR	NO.	SIZE	LENGTH
A1	1	#4	9'-4"
A2	1	#4	8'-7 1/2"
A3	1	#4	7'-7 3/4"
A4	1	#4	6'-7 3/4"
H1	5	#4	5'-8 1/2"
H2	1	#4	4'-8 1/2"
H3	1	#4	3'-8 1/2"
H4	1	#4	2'-4 1/2"
REINFORCEMENT BARS POUND			47.8
CLASS X CONCRETE CU. YD.			2.1

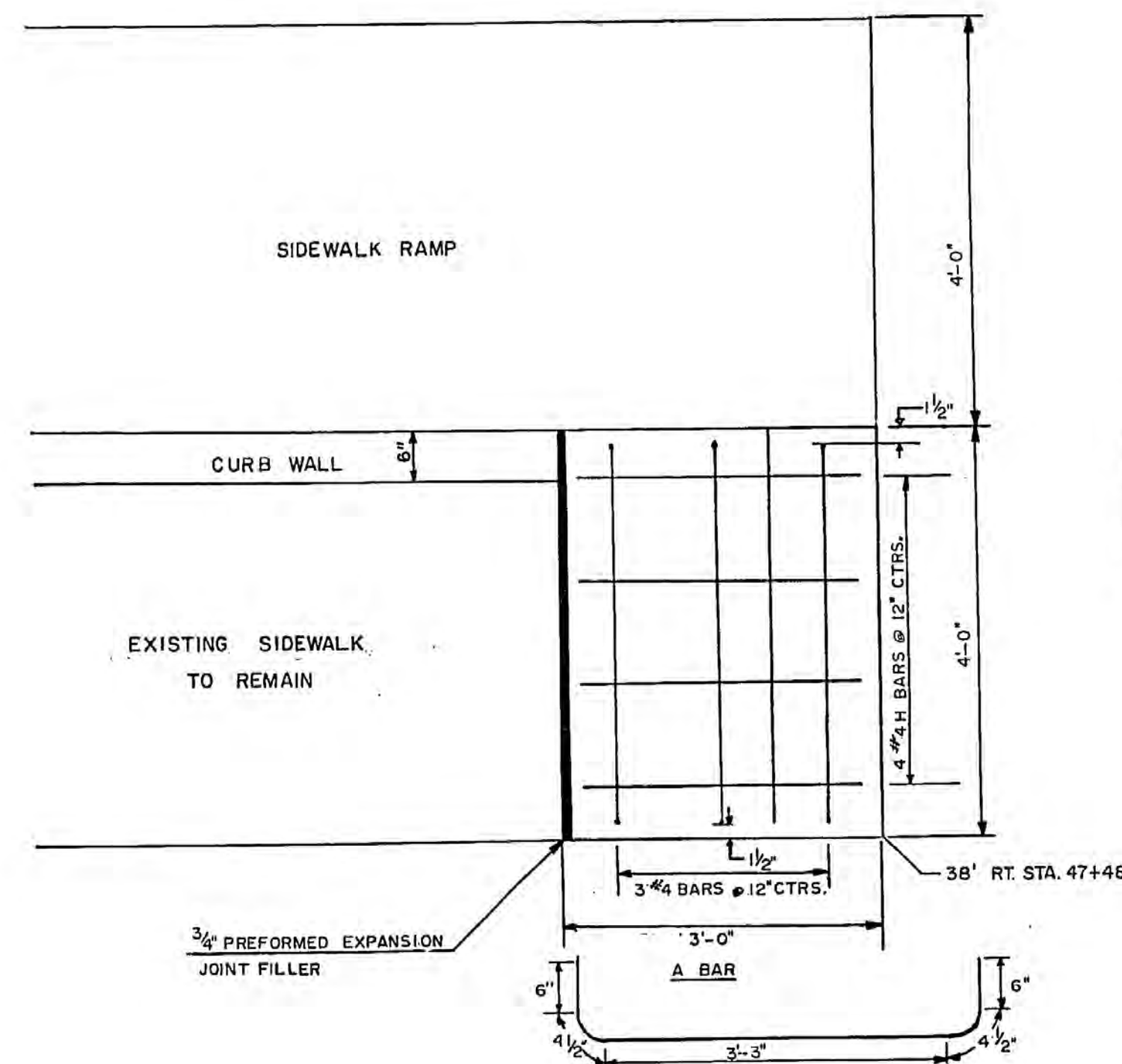
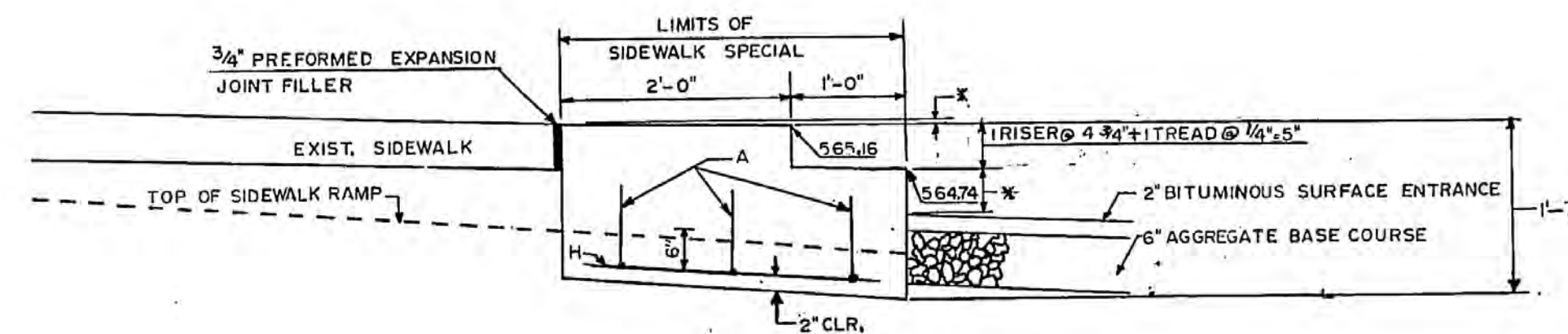
PAY ITEM-SIDEWALK, SPECIAL- 54.7 S.F.

GRAPHIC SCALE: 1" = 1'-0"

STEP DETAILS

STEP DETAILS

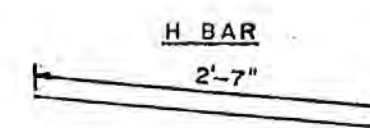
RT. STA. 47+46.5



BILL OF MATERIALS
FOR INFORMATION ONLY

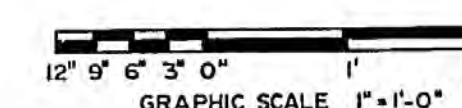
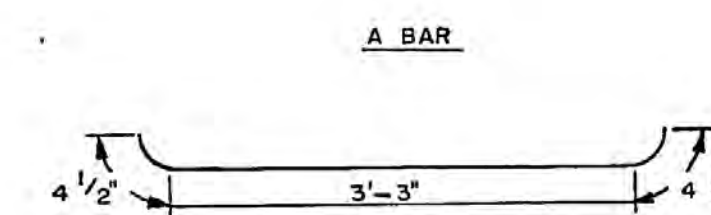
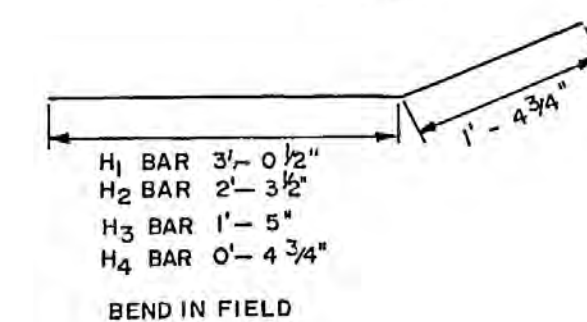
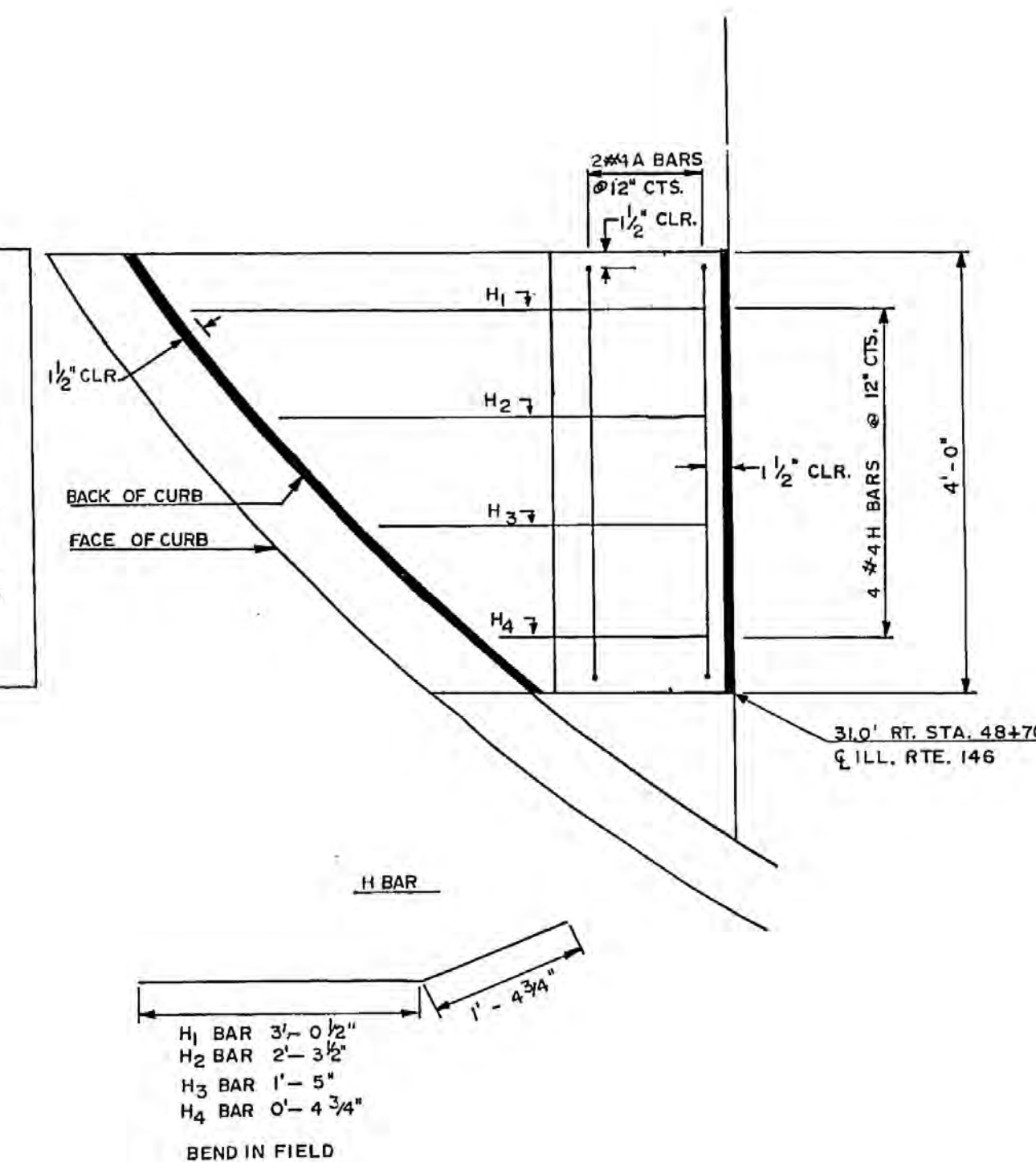
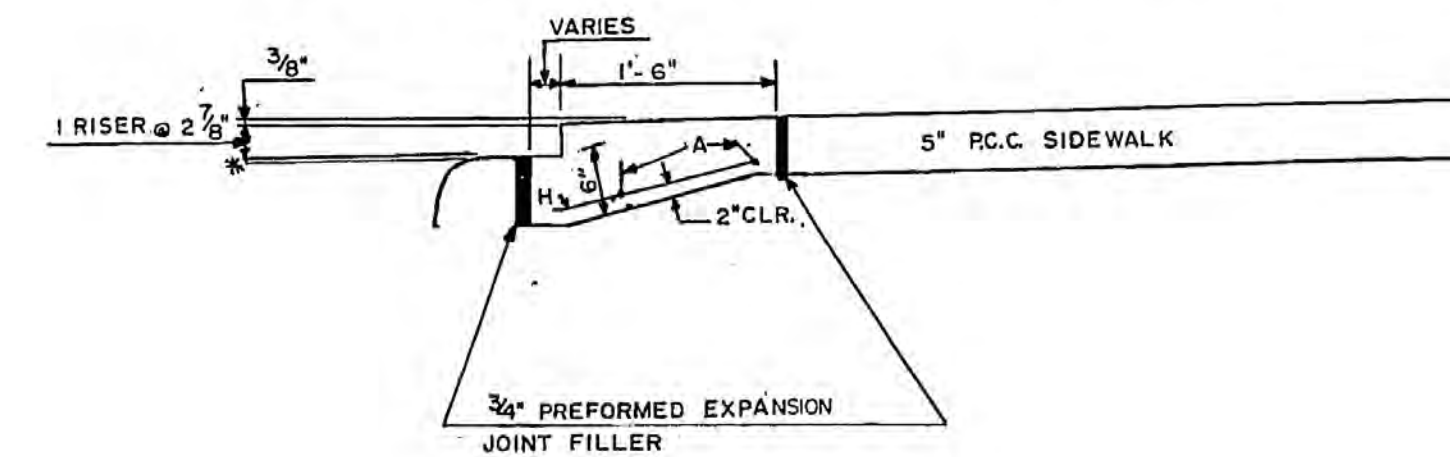
BAR	NO.	SIZE	LENGTH
A	3	4	3'-8 3/4"
H	4	4	2'-8 1/2"
REINFORCEMENT BARS POUND			14.7
CLASS X CONCRETE CU. YD.			0.8

PAY ITEM - SIDEWALK, SPECIAL - 15.2 S.F.



STEP DETAILS

RT. STA. 48+72



BILL OF MATERIALS
FOR INFORMATION ONLY

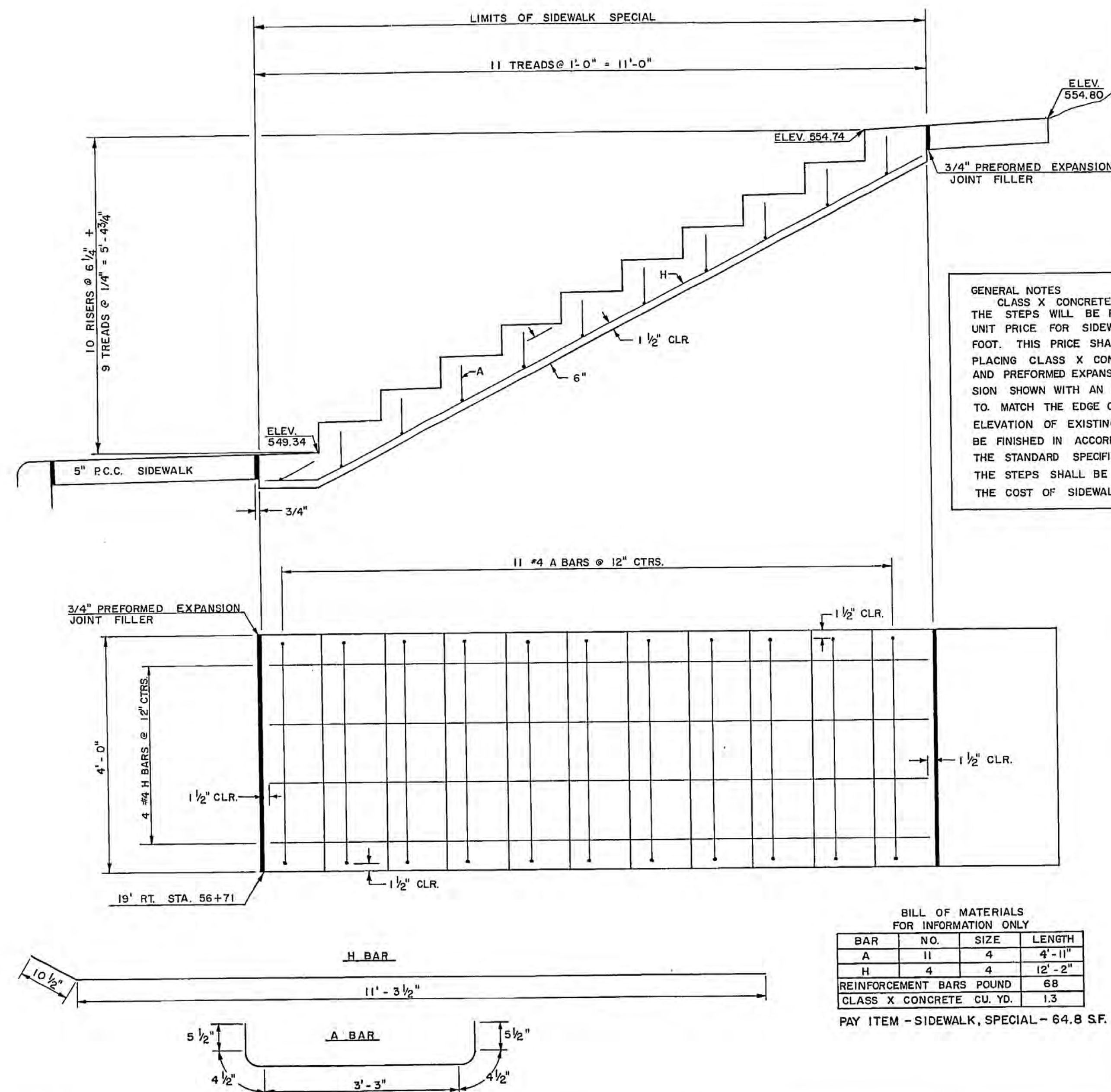
BAR	NO.	SIZE	LENGTH
A	2	#4	4'-0"
H1	1	#4	4'-5 1/4"
H2	1	#4	3'-8 1/4"
H3	1	#4	2'-9 3/4"
H4	1	#4	1'-9 1/2"
REINFORCEMENT BARS POUND			13.6
CLASS X CONCRETE CU. YD.			0.3

PAY ITEM - SIDEWALK, SPECIAL - 15.3 S.F.

STEP DETAILS

STEP DETAIL

RT. STA. 56+73



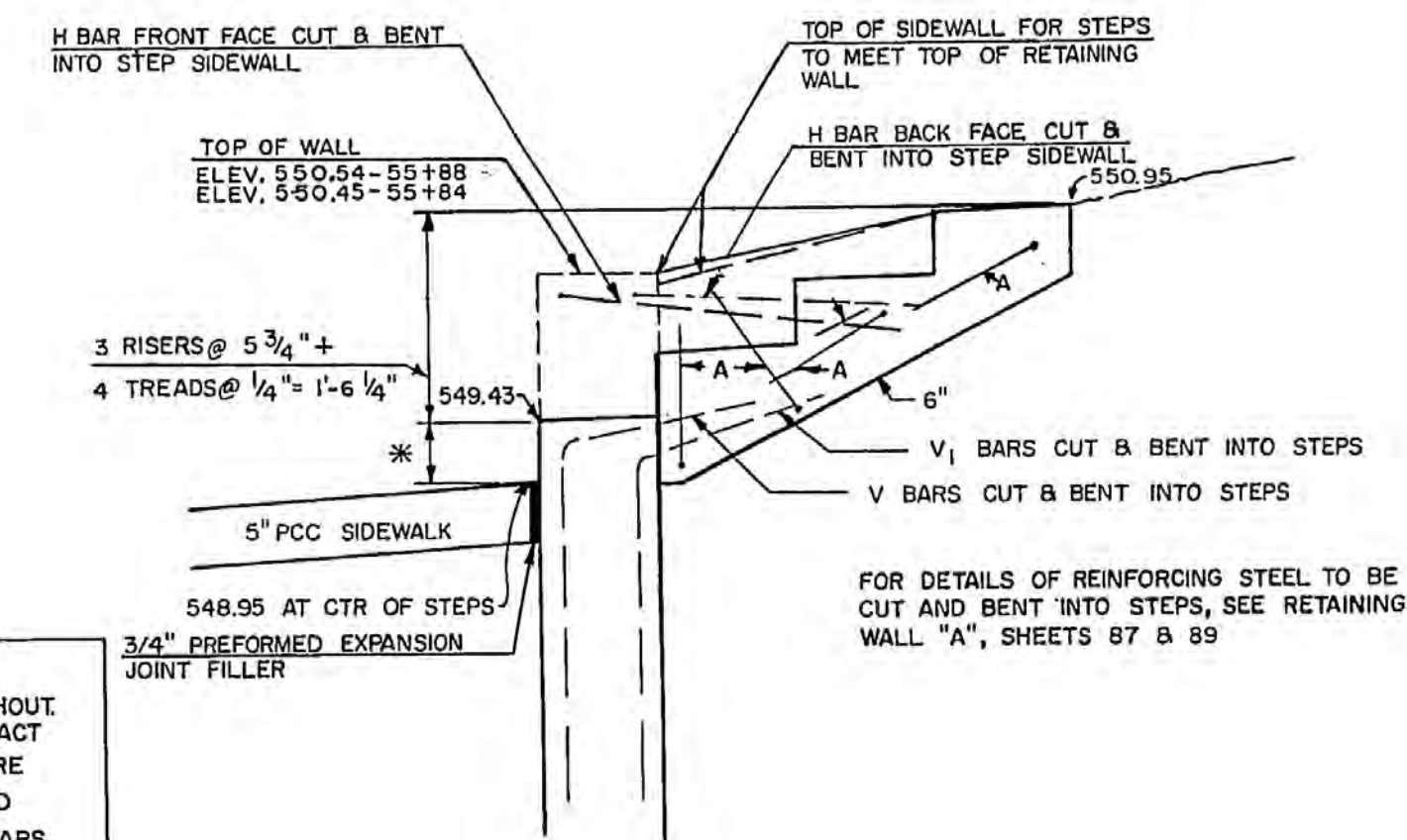
GENERAL NOTES
CLASS X CONCRETE SHALL BE USED THROUGHOUT THE STEPS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR SIDEWALK, SPECIAL, PER SQUARE FOOT. THIS PRICE SHALL INCLUDE FURNISHING AND PLACING CLASS X CONCRETE, REINFORCEMENT BARS AND PREFORMED EXPANSION JOINT FILLER. THE DIMENSION SHOWN WITH AN ASTERISK (*) SHALL BE VARIED TO MATCH THE EDGE OF PROPOSED SIDEWALK OR THE ELEVATION OF EXISTING SIDEWALK. THE STEPS SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 624.07 OF THE STANDARD SPECIFICATIONS. THE COST OF FINISHING THE STEPS SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF SIDEWALK, SPECIAL.

BAR	NO.	SIZE	LENGTH
A	11	4	4'-11"
H	4	4	12'-2"
REINFORCEMENT BARS			68
CLASS X CONCRETE			1.3
PAY ITEM - SIDEWALK, SPECIAL			64.8 S.F.

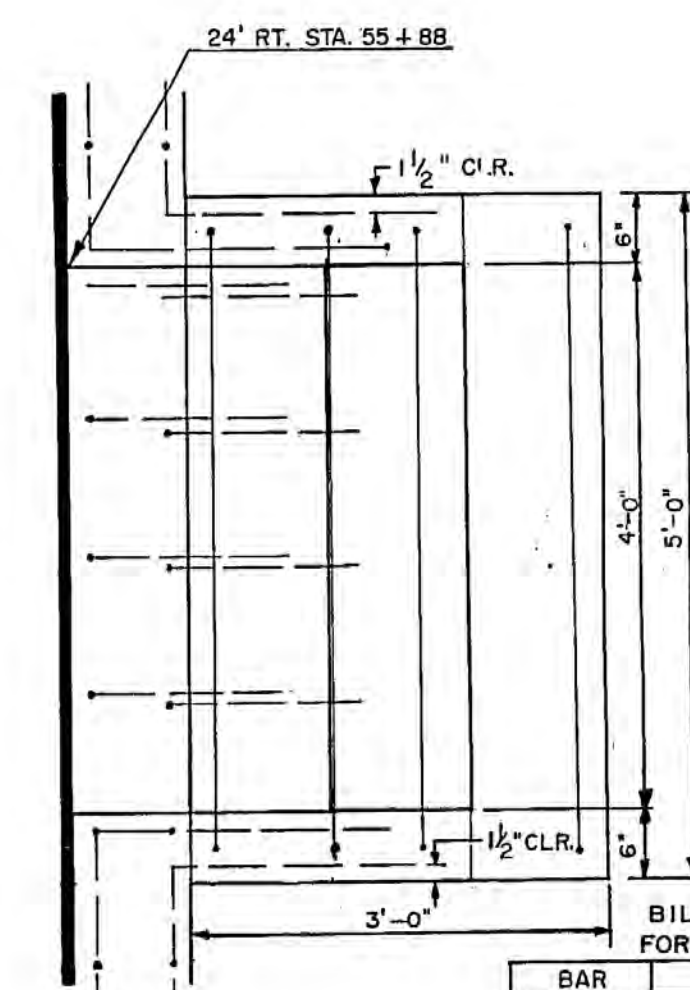
STEP DETAIL

RT. STA. 55+86

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	104WRS	UNION	146	80
ILLINOIS	PROJECT	RF - 1611		



FOR DETAILS OF REINFORCING STEEL TO BE CUT AND BENT INTO STEPS, SEE RETAINING WALL "A", SHEETS 87 & 89



BAR	NO.	SIZE	LENGTH
A	4	4	6'-3"
REINFORCEMENT BARS			16.7
CLASS X CONCRETE			0.4
PAY ITEM - SIDEWALK, SPECIAL			20.8 S.F.

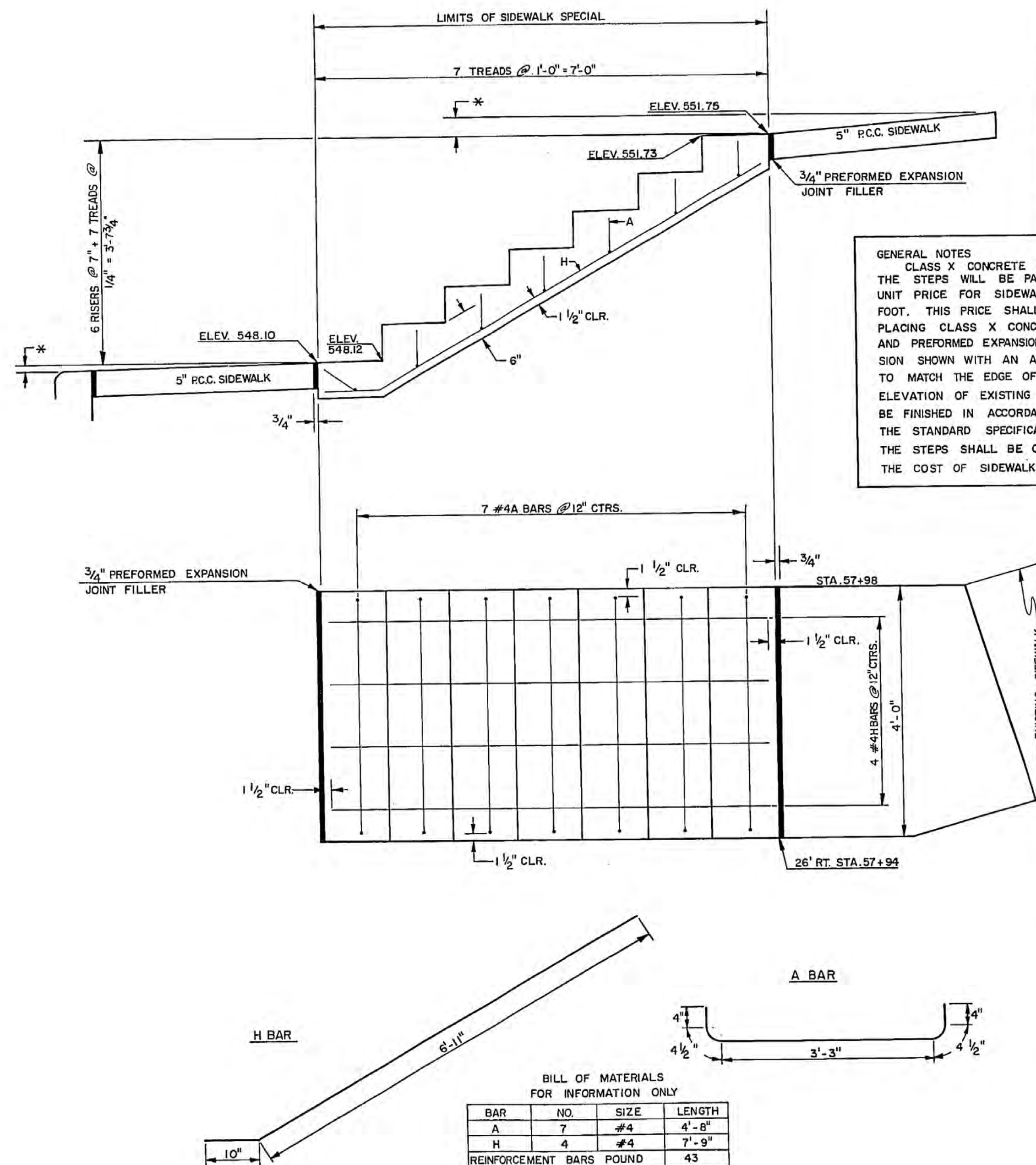
GRAPHIC SCALE: 1" = 1'-0"

STEP DETAILS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 285	04WRS	UNION	146	81
FWA. REQ. 4	ILLINOIS	PROJECT	RF-1611	1

STEP DETAIL

RT. STA. 57+96

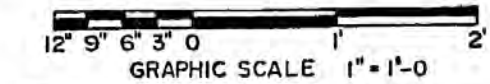


GENERAL NOTES
CLASS X CONCRETE SHALL BE USED THROUGHOUT. THE STEPS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR SIDEWALK, SPECIAL, PER SQUARE FOOT. THIS PRICE SHALL INCLUDE FURNISHING AND PLACING CLASS X CONCRETE, REINFORCEMENT BARS AND PREFORMED EXPANSION JOINT FILLER. THE DIMENSION SHOWN WITH AN ASTERISK (*) SHALL BE VARIED TO MATCH THE EDGE OF PROPOSED SIDEWALK OR THE ELEVATION OF EXISTING SIDEWALK. THE STEPS SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 624.07 OF THE STANDARD SPECIFICATIONS. THE COST OF FINISHING THE STEPS SHALL BE CONSIDERED AS INCIDENTAL TO THE COST OF SIDEWALK, SPECIAL.

BILL OF MATERIALS
FOR INFORMATION ONLY

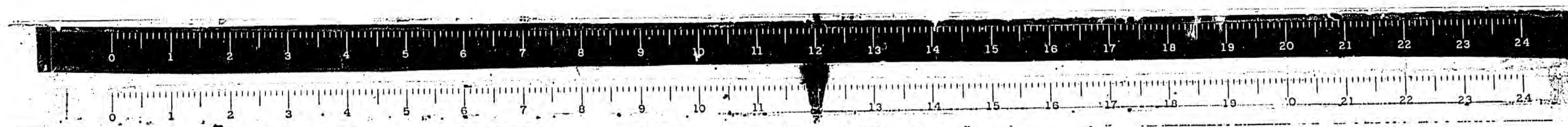
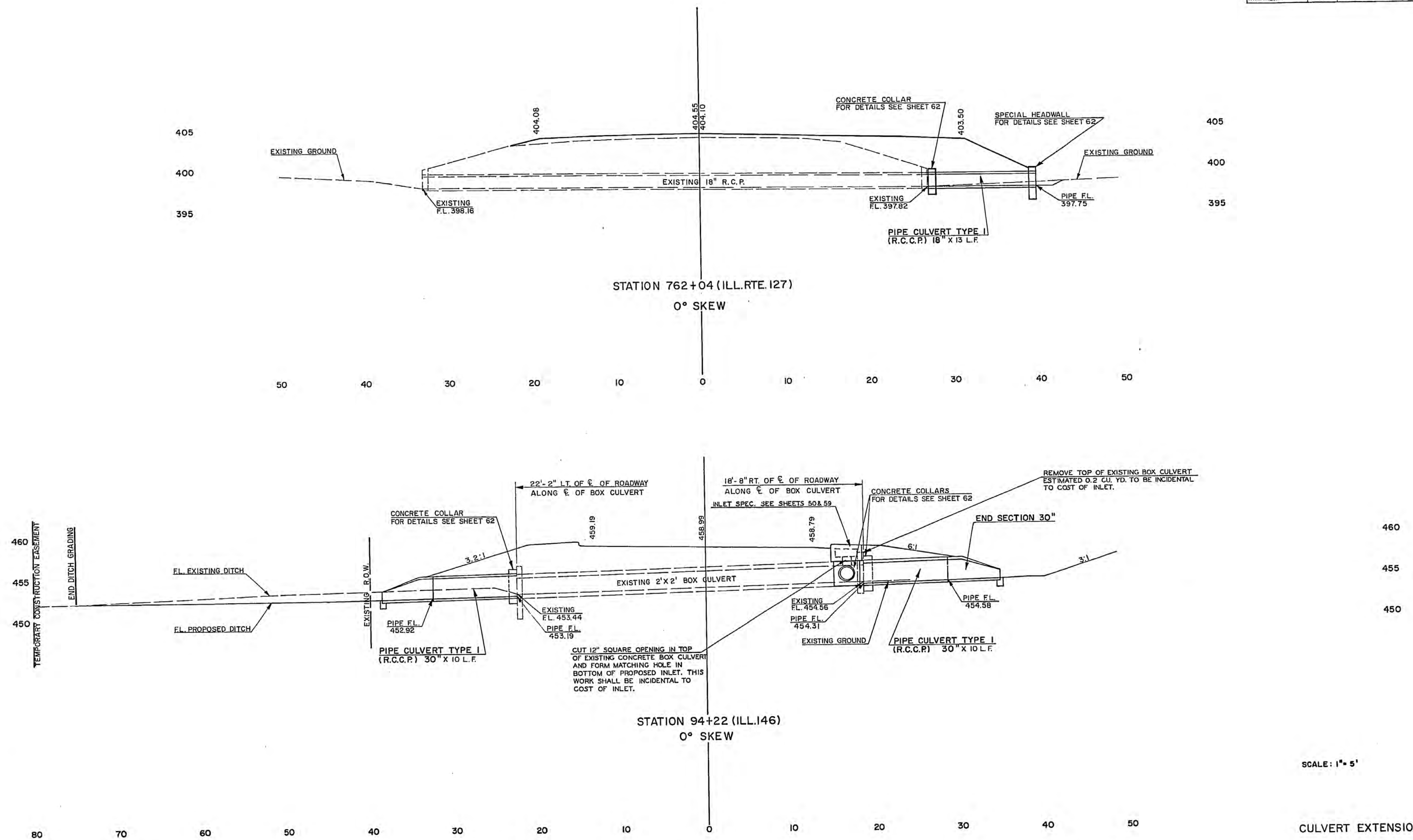
BAR	NO.	SIZE	LENGTH
A	7	#4	4'-8"
H	4	#4	7'-9"
REINFORCEMENT BARS	POUND	43	
CLASS X CONCRETE	CU. YD.	0.9	

PAY ITEM- SIDEWALK, SPECIAL - 41.9 S.F.

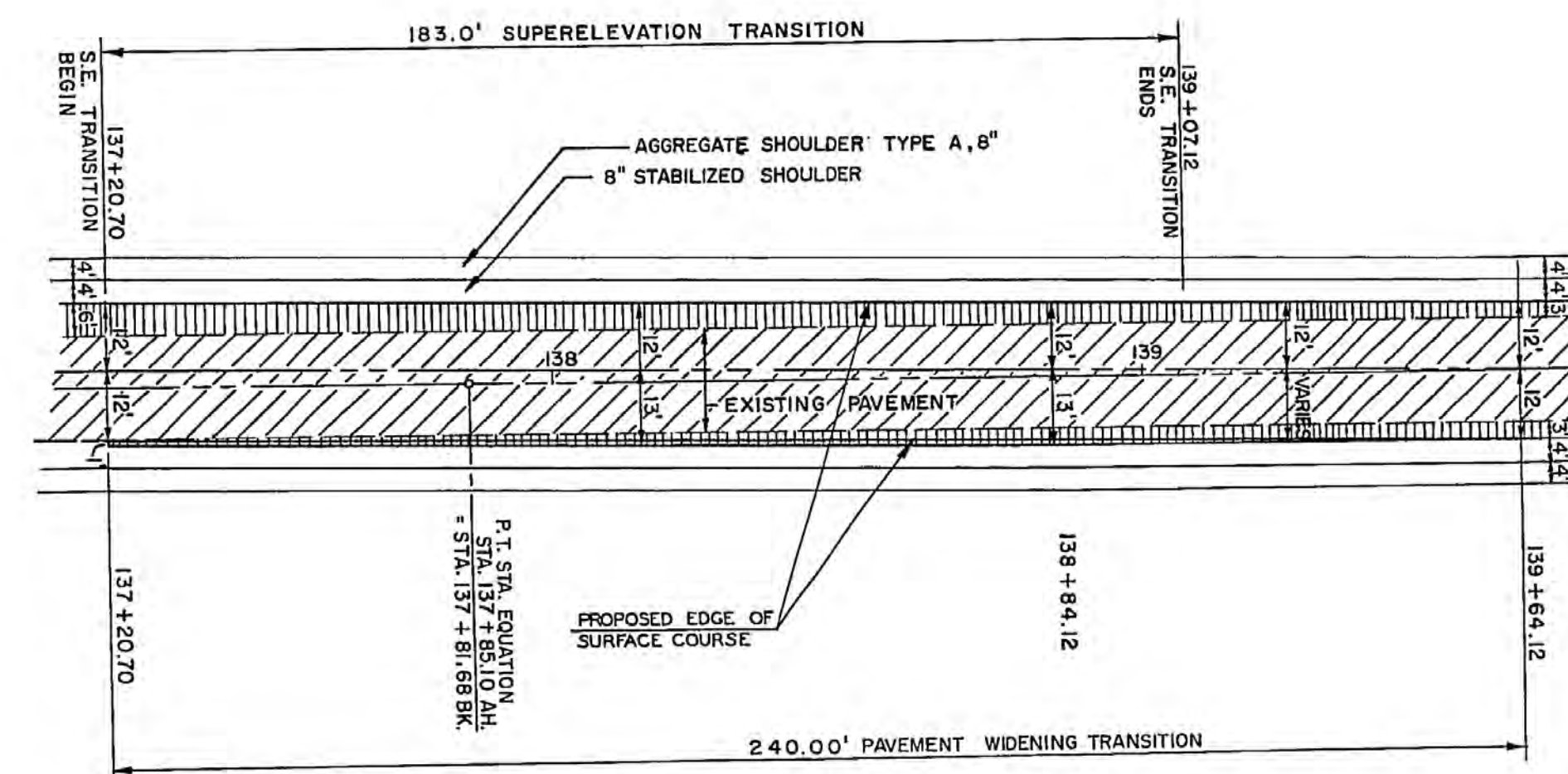
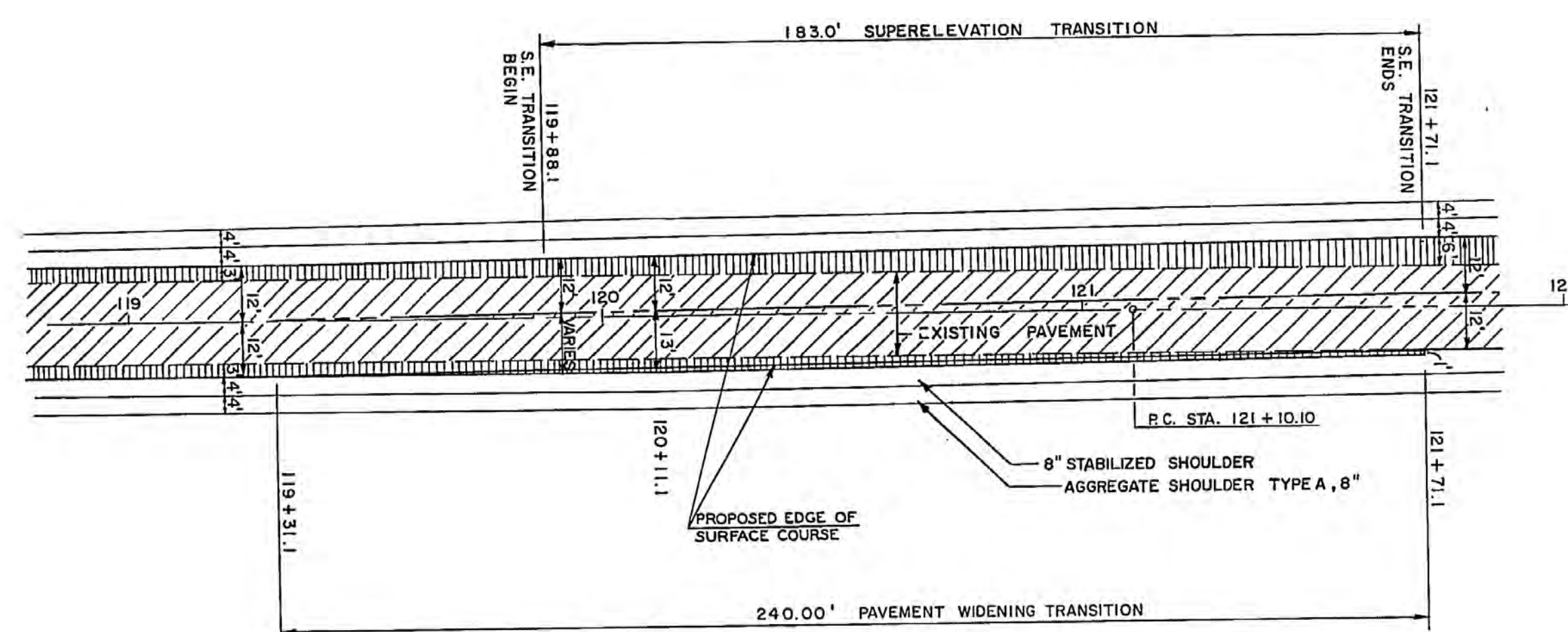


STEP DETAILS

FA. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	104 (W,RS)	UNION	146	82
F.H.W.A. REG. 4 ILLINOIS PROJECT RF-1611				



RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
885	104 (WRS)	UNION	146	83
PHWA REG. A ILLINOIS PROJECT RF-1611				



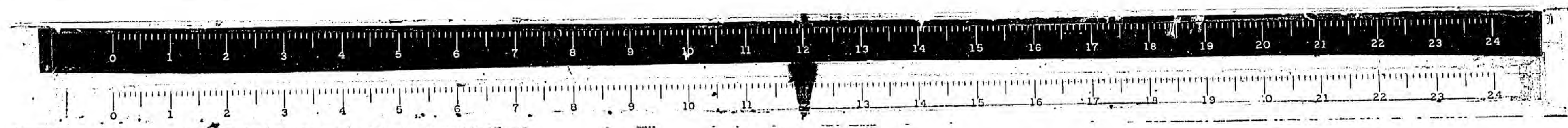
NOTE:

THE BASE COURSE WIDENING THROUGH THIS AREA WILL BE CONSTRUCTED AS SHOWN ON THIS SHEET. EXCEPT SUFFICIENT WIDTH OF BASE COURSE SHALL BE CONSTRUCTED TO PROVIDE FOR A 12'-0" PAVEMENT SURFACE WIDTH ON EITHER SIDE OF THE CENTERLINE. BINDER AND SURFACE COURSES WILL THEN BE CONSTRUCTED ON THE EXISTING PAVEMENT PLUS WIDENING SO AS TO PROVIDE A CONSTANT 24'-0" PAVEMENT SURFACE WIDTH. THE CENTERLINE OF THIS 24'-0" SURFACE WIDTH WILL SHIFT, AS SHOWN, FROM STATION 119+31.1 TO STATION 121+71.1 AND FROM STATION 137+20.07 TO STATION 139+64.12. SHOULDER WIDTHS WILL BE CONSTANT FROM THE EDGE OF PAVEMENT.

LEGEND

- EXISTING PAVEMENT
- BASE COURSE WIDENING (DOES NOT INCLUDE EXTRA WIDTH REQUIRED TO ACCEPT THE BINDER AND SURFACE COURSE THICKNESS.)

PAVEMENT WIDENING TRANSITION DETAILS



[illegible]

NO DRAINS

SECTION 1

8" TOP

3'-0" 3 SPACES @ 6'-7" = 19'-9" 3'-0"

SECTION 2

8" 1'-0" 1'-0" 3'-0" 6'-7" 6'-7" 4'-7" 3'-0"

SECTION 3

1'-0" 1'-6" 2'-0" 2'-0" 3'-0" 3 SPACES @ 6'-7" = 19'-9"

SECTION 4

2'-3" 2'-6" 3'-6" 3'-6" 3'-0" 3 SPACES @ 6'-7" = 19'-9"

SECTION 5

NO DRAINS

SECTION 6

DESIGN STRESSES

$f_s = 20,000$ p.s.i., Reinforcing Steel
 $f_c = 1000$ p.s.i. Walls and Footing
 $n = 10$
 Design Specifications 1973 AASHTO
 and Interims (as applicable)
 Max. Soil Pressure = 1,200 p.s.f.

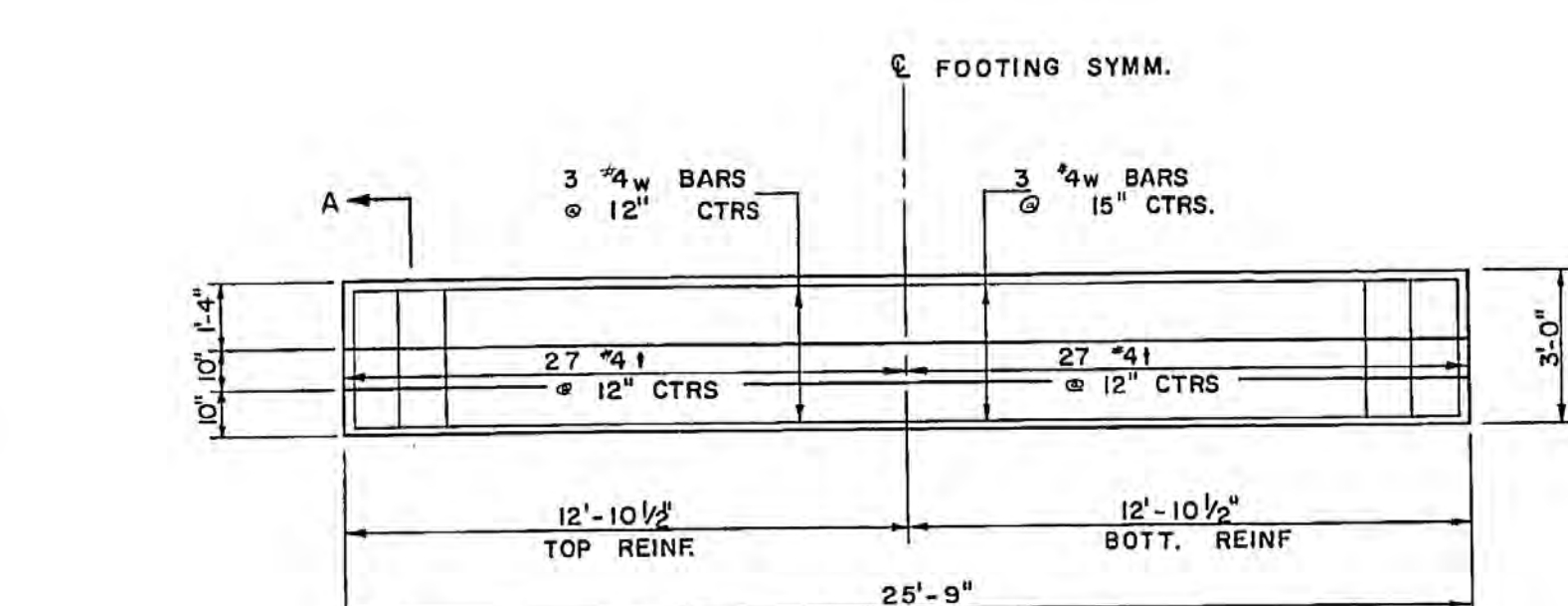
E
 RTE. 146

24'-0"
 13'-0" 2'-0" 9'-0"
 COARSE AGGREGATE TO BE PLACED AT DRAIN LOCATIONS ONLY (INCIDENTAL TO TRENCH BACKFILL)
 LIMITS OF ROADWAY EXCAVATION. (SEE CROSS SECTIONS)
 3" DRAIN
 1/4" / FT
 1/2" / FT
 2'-6" TRENCH BACKFILL
 VARIES (EXIST GROUND)
 PAY LIMITS OF TRENCH BACKFILL
 2'-0" FOOTING WIDTH VARIES 2'-0"
 LIMITS OF STRUCTURE EXCAVATION

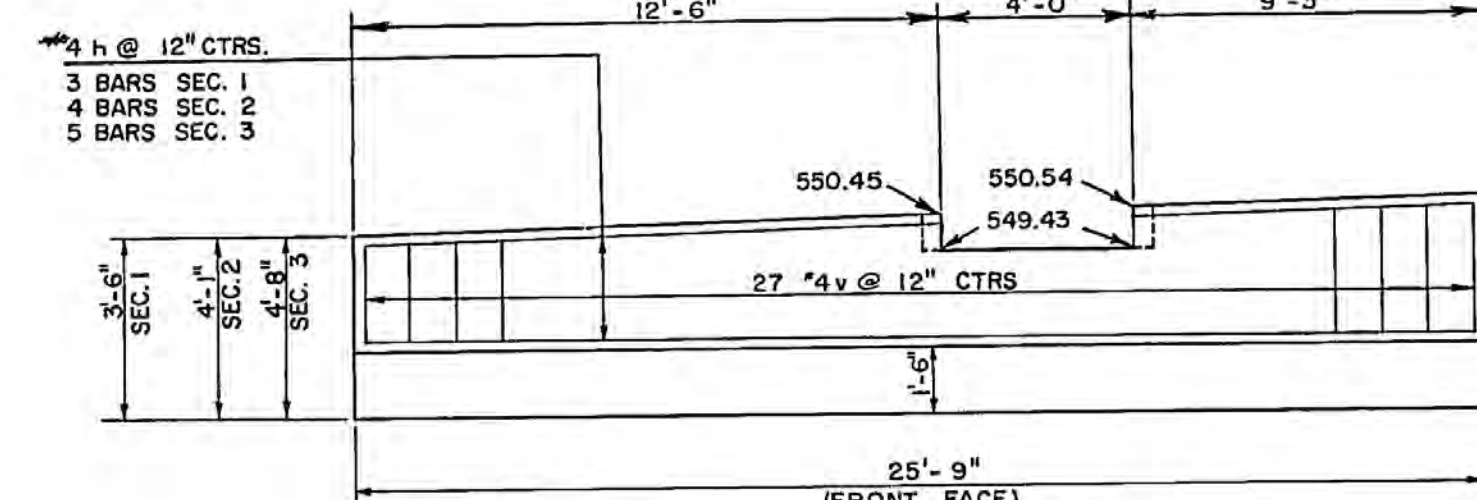
RETAINING WALL
ILLINOIS RTE. 146
SECTION 104 (W,RS)
UNION COUNTY

RETAINING WALL "A"

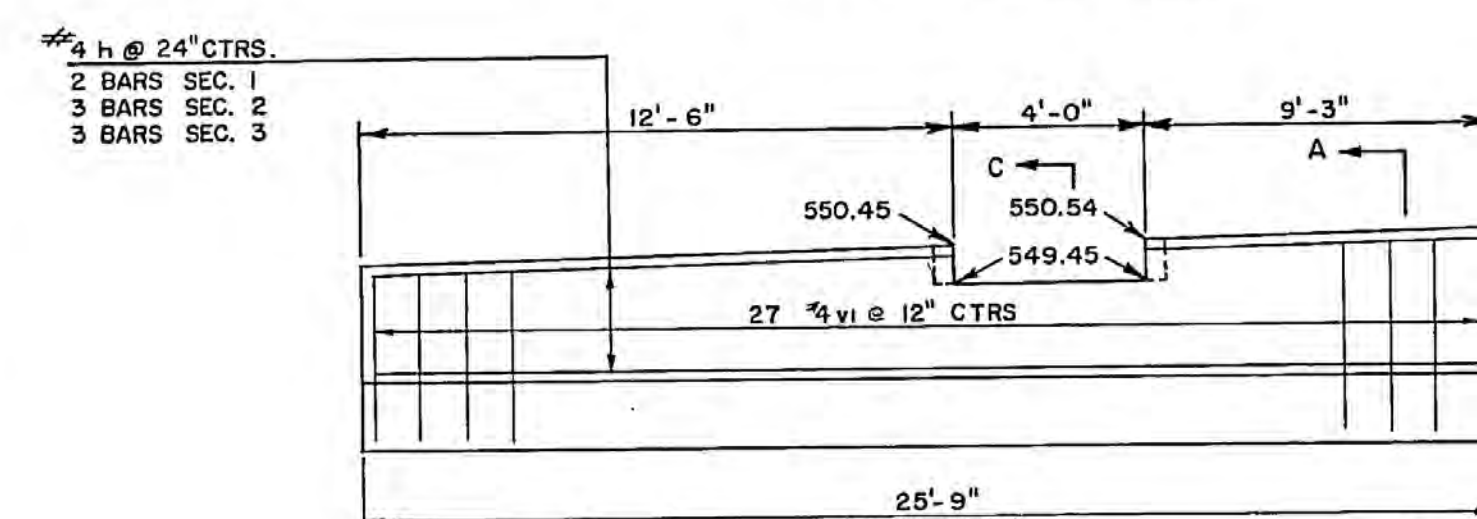
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 885	104(W,RS)	UNION	146	85
F.H.W.A. REG. 4 ILLINOIS PROJECT RF-161 (1)				



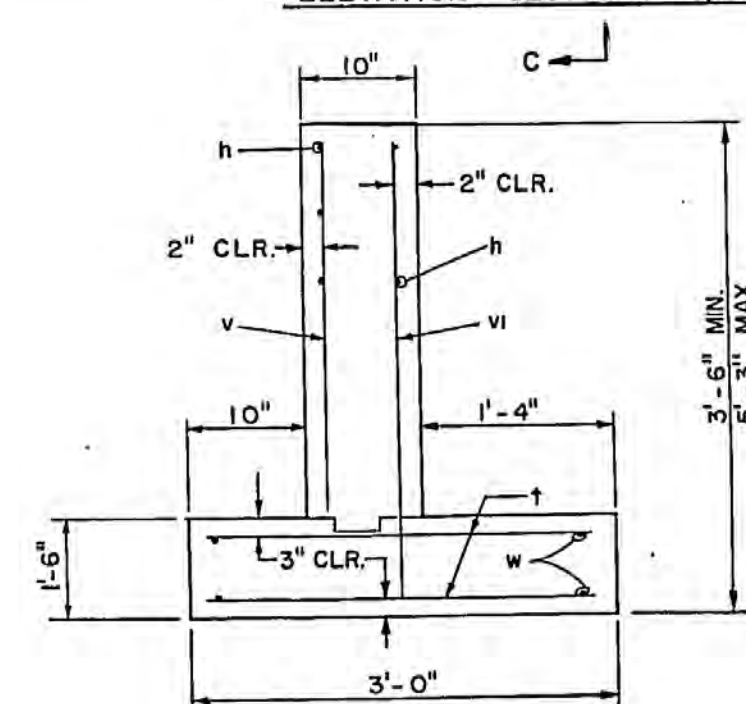
FOOTING PLAN SECTIONS 1, 2 & 3



ELEVATION SECTIONS 1, 2 & 3



ELEVATION SECTIONS 1, 2 & 3

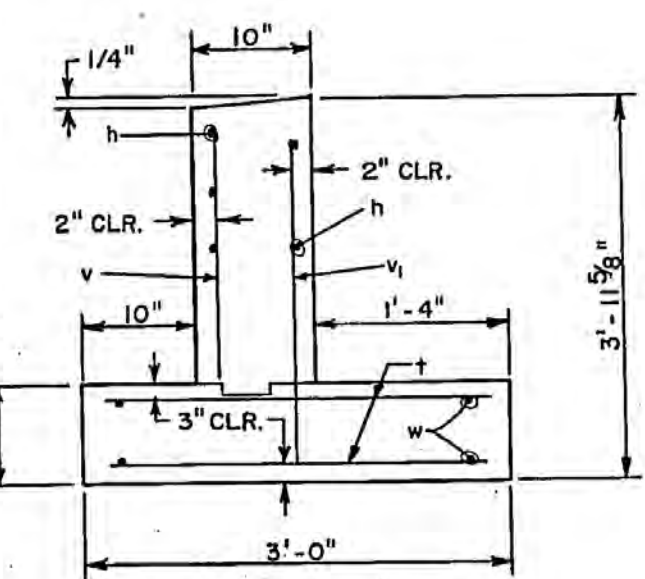


SECTION A-A

NO SCALE

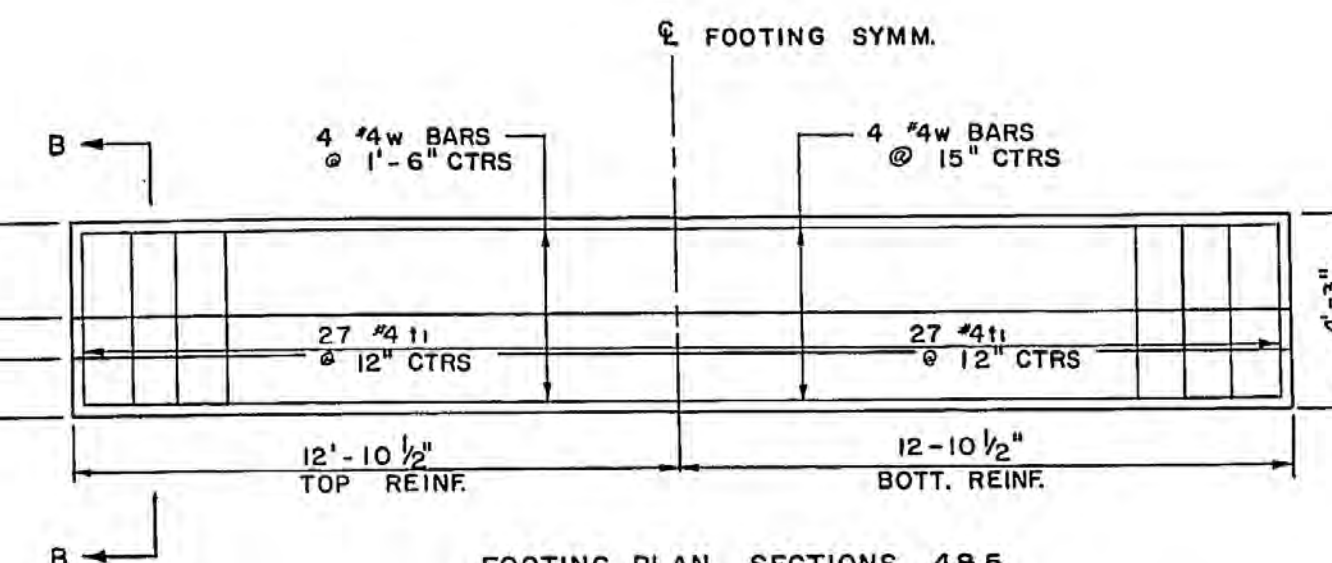
FORM TOP OF WALL FOR STEPS, SECTION 3 ONLY. INSTALL REINFORCING STEEL THRU OPENING, THEN CUT AND BEND INTO STEPS. FOR STEP DETAILS SEE SHEET 81

FORM TOP OF WALL FOR STEPS, SECTION 3 ONLY. INSTALL REINFORCING STEEL THRU OPENING, THEN CUT AND BEND INTO STEPS. FOR STEP DETAILS SEE SHEET 81

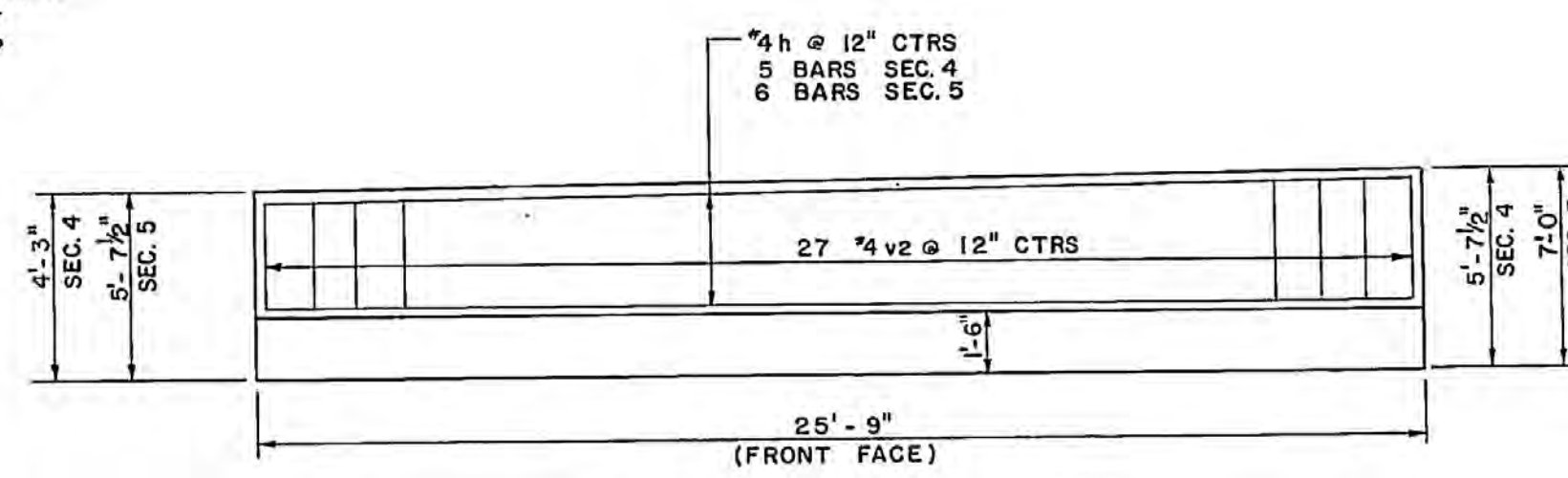


SECTION C-C, WALL SECTION 3

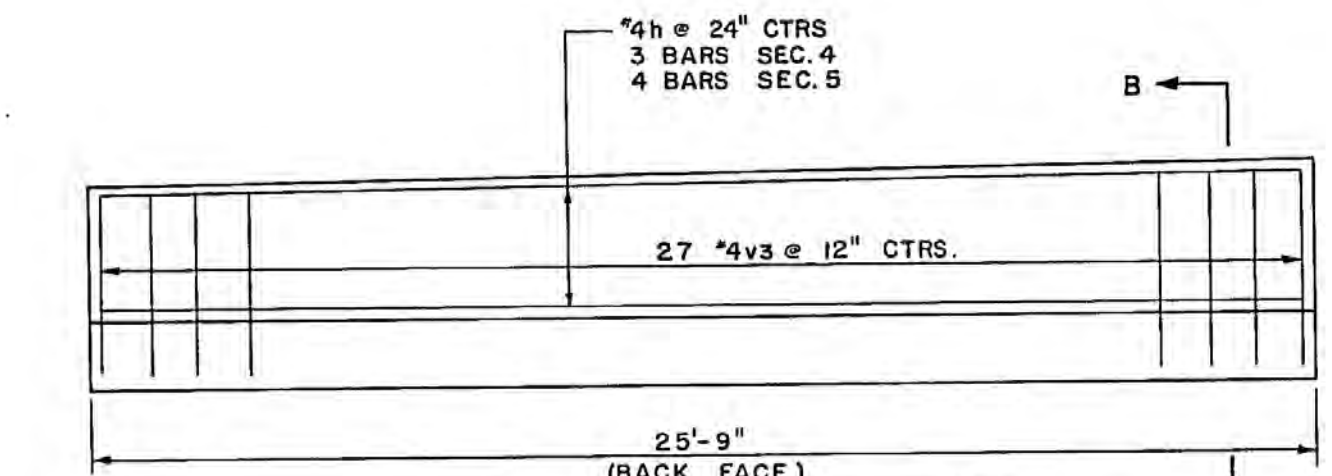
NO SCALE



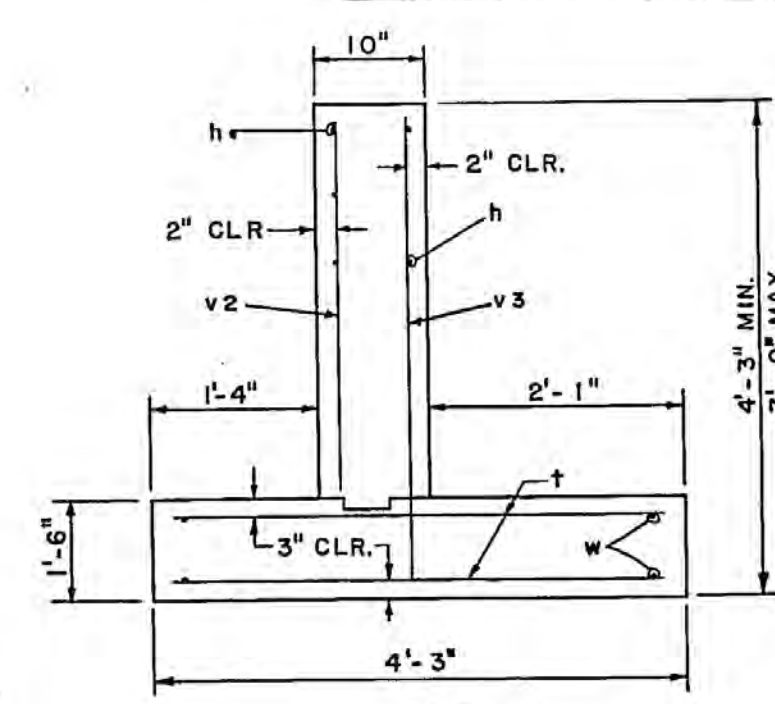
FOOTING PLAN SECTIONS 4 & 5



ELEVATION SECTIONS 4 & 5



ELEVATION SECTIONS 4 & 5



SECTION B-B

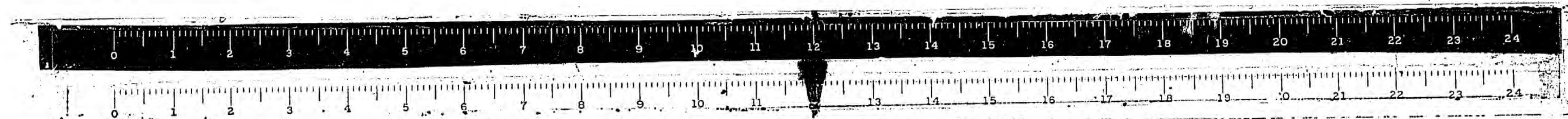
NO SCALE

BILL OF MATERIALS

BAR	NO.	SIZE	LENGTH
h	38	#4	25'-6"
h1	8	#4	7'-3"
t	162	#4	2'-9"
t1	115	#4	4'-0"
v	81	#4	3'-6"
v1	81	#4	4'-9"
v2	54	#4	5'-3"
v3	54	#4	6'-6"
v4	4	#4	6'-0"
v5	4	#4	9'-0"
w	34	#4	25'-6"
w1	8	#4	7'-6"
CLASS "X" CONCRETE			CU. YD. 41.1
REINFORCEMENT BARS			LBS. 2,820
TRENCH BACKFILL			CU. YD. 67
STRUCTURE EXCAVATION			CU. YD. 191

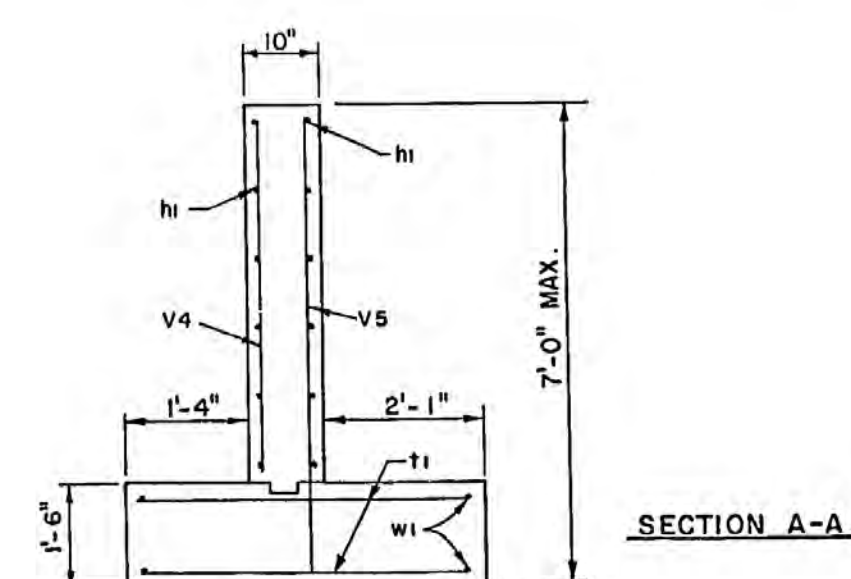
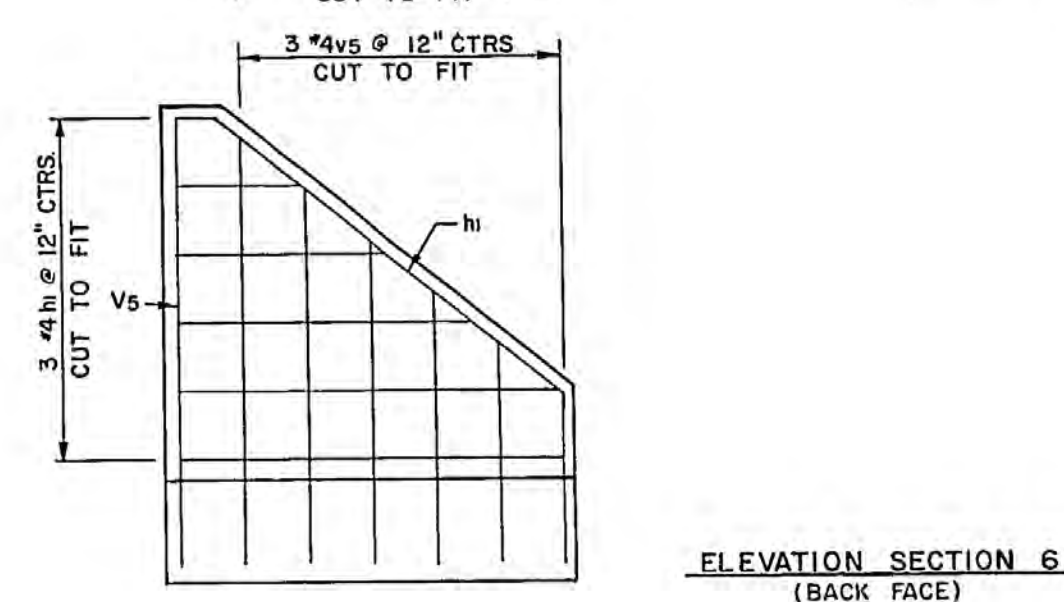
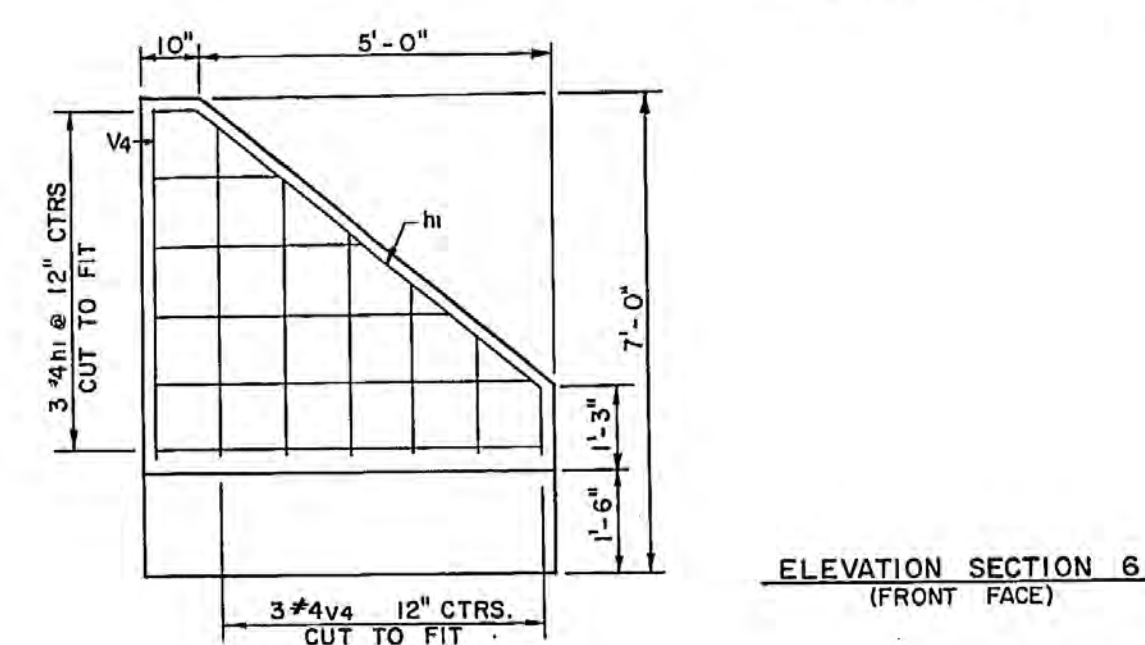
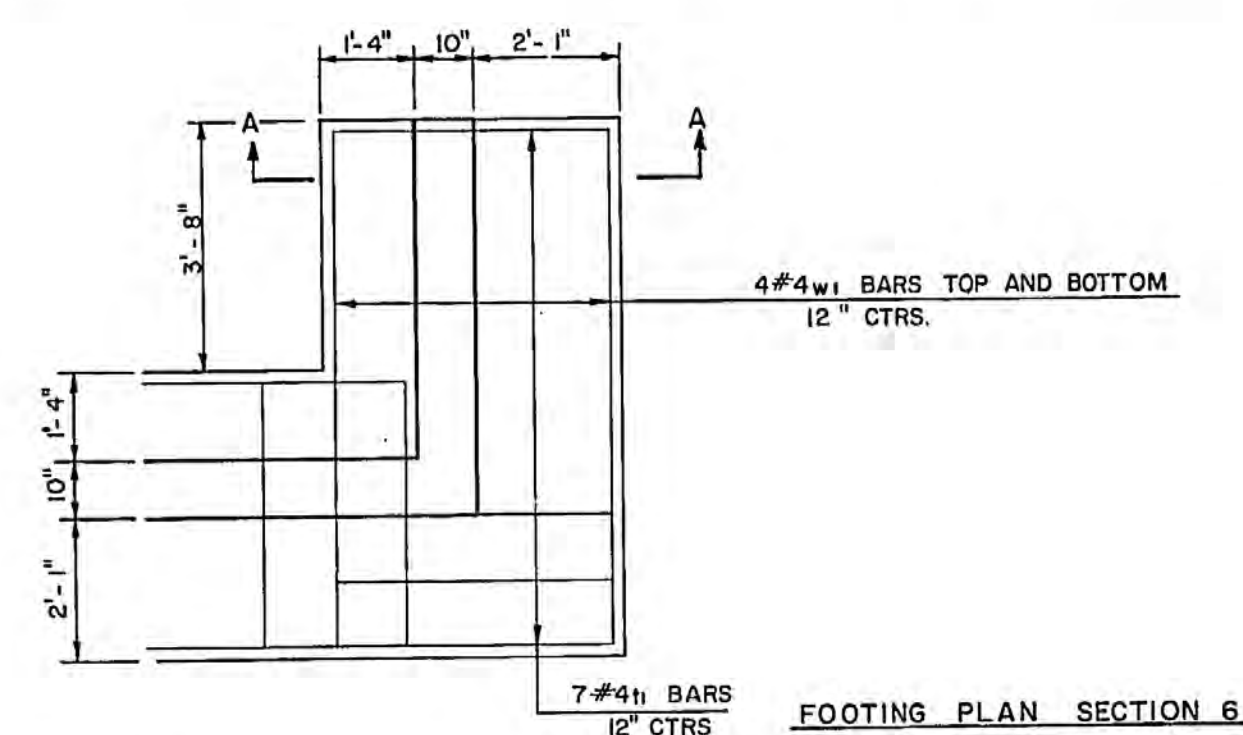
RETAINING WALL
ILLINOIS RTE. 146
SECTION 104 (W,RS)
UNION COUNTY

RETAINING WALL "A"



ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FA.885	104(W,RS)	UNION	146	86
F.H.W.A. REG. 4		ILLINOIS PROJECT RF - 1611		

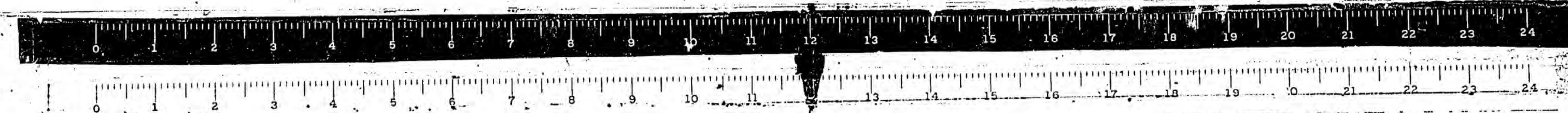
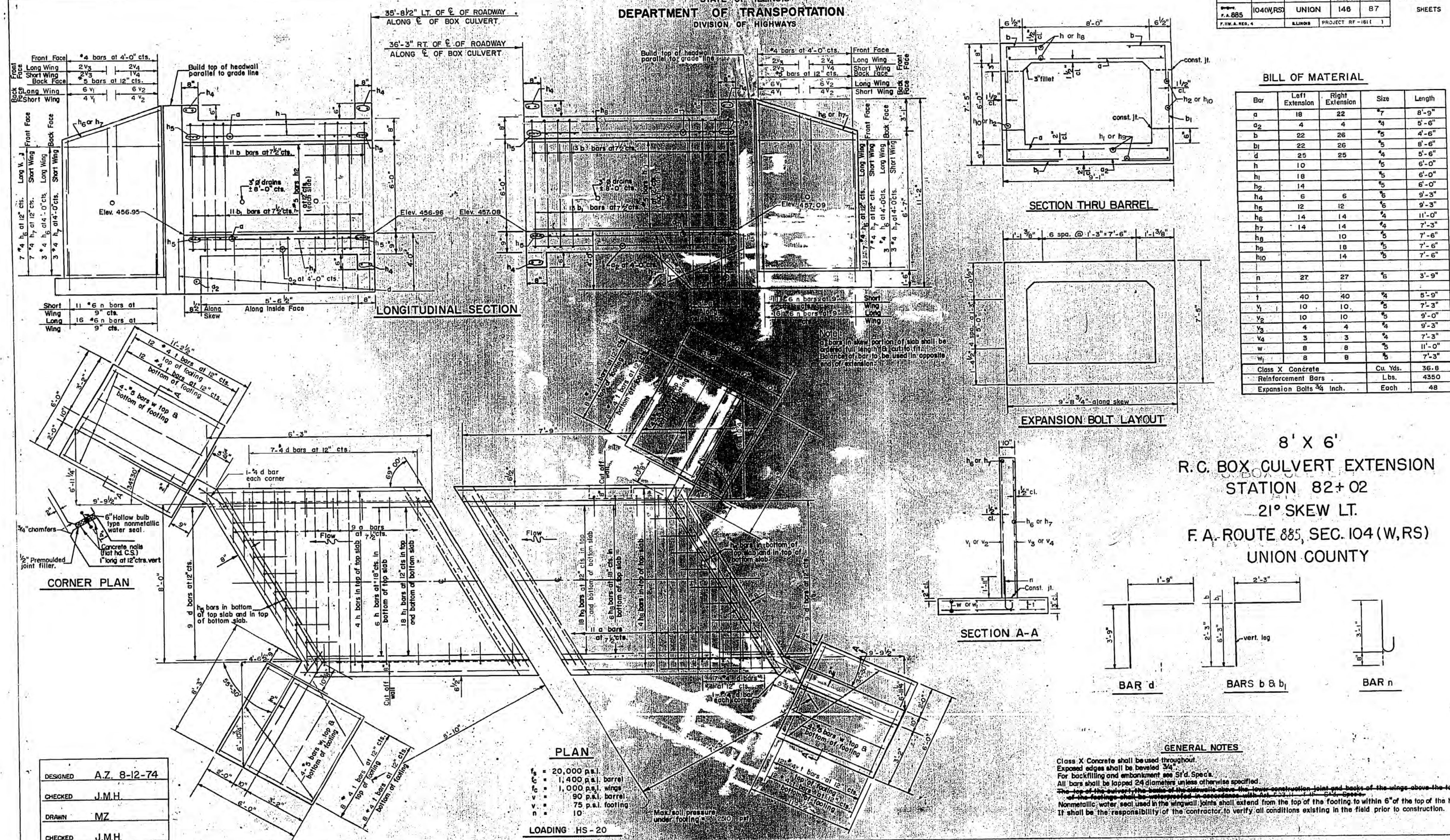
BILL OF MATERIAL SEE
SHEET 85



RETAINING WALL
ILLINOIS RTE. 146
SECTION 104 (W,RS)
UNION COUNTY

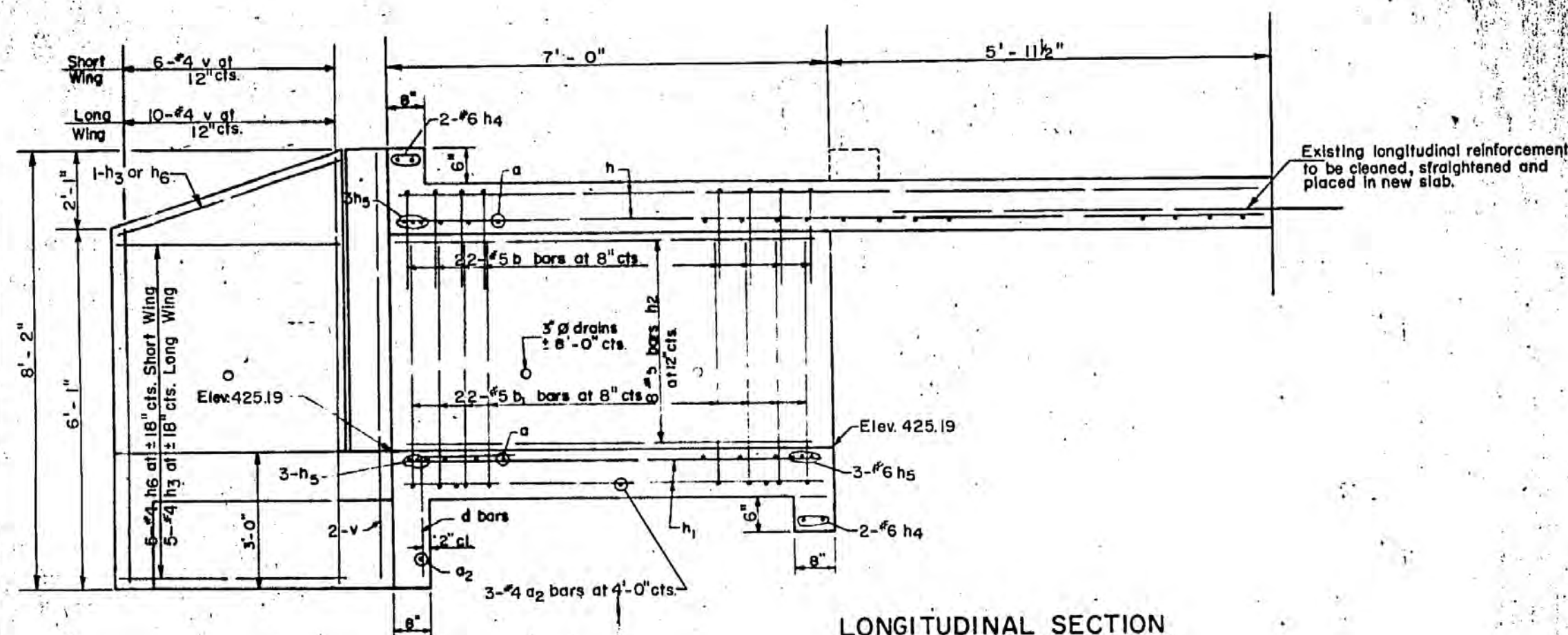
RETAINING WALL "A"



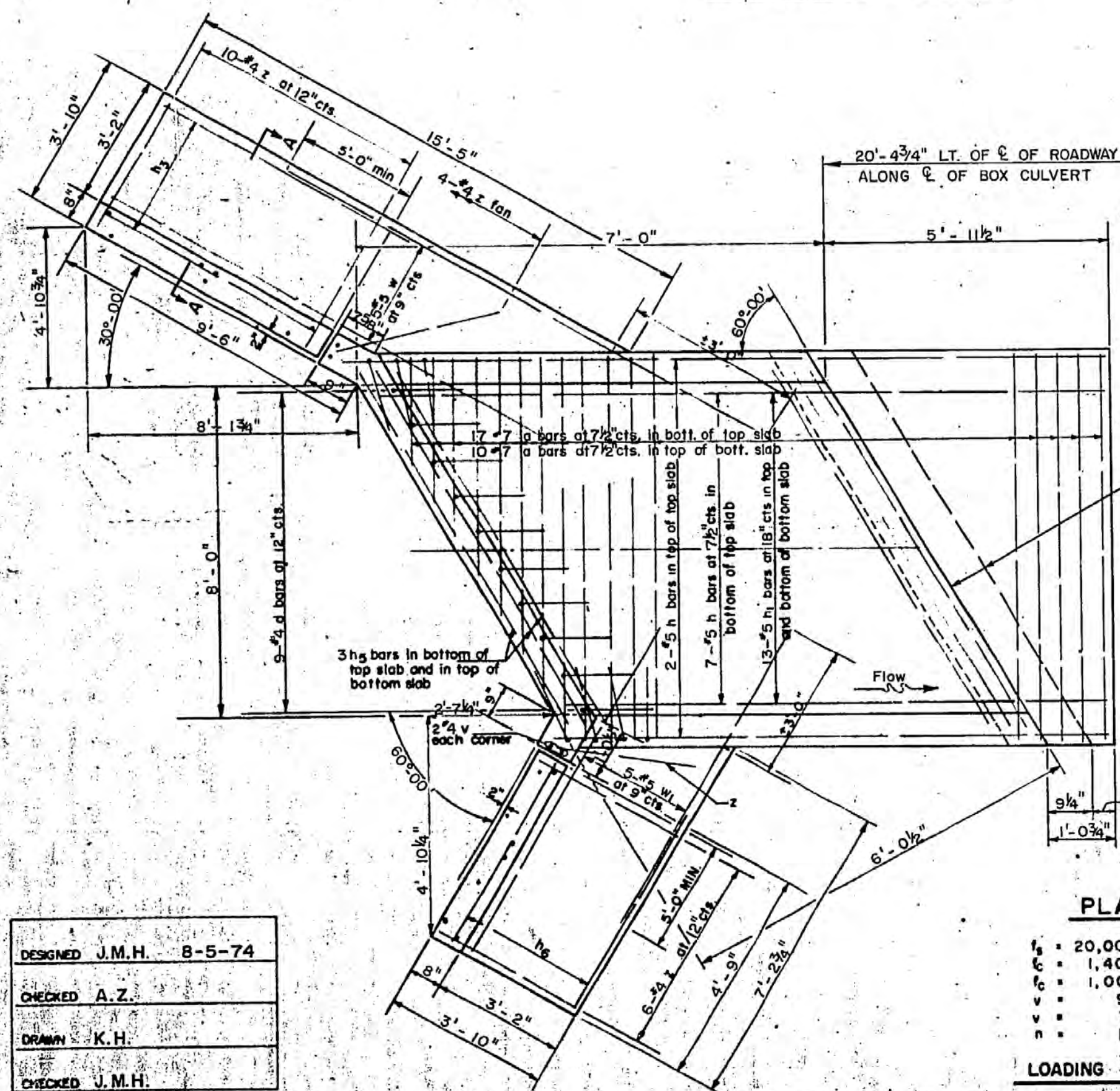


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET
885	104(WRS)	UNION	146	88	1 SHEET
F.H.A. REG. 4	ILLINOIS	PROJECT	HF-101		

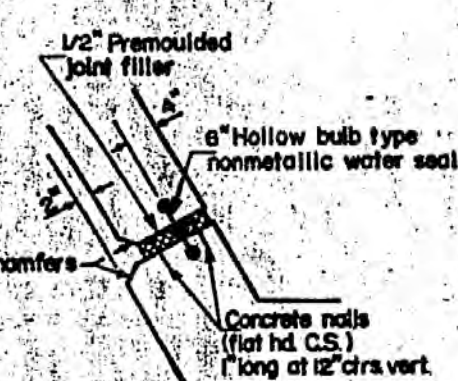


LONGITUDINAL SECTION

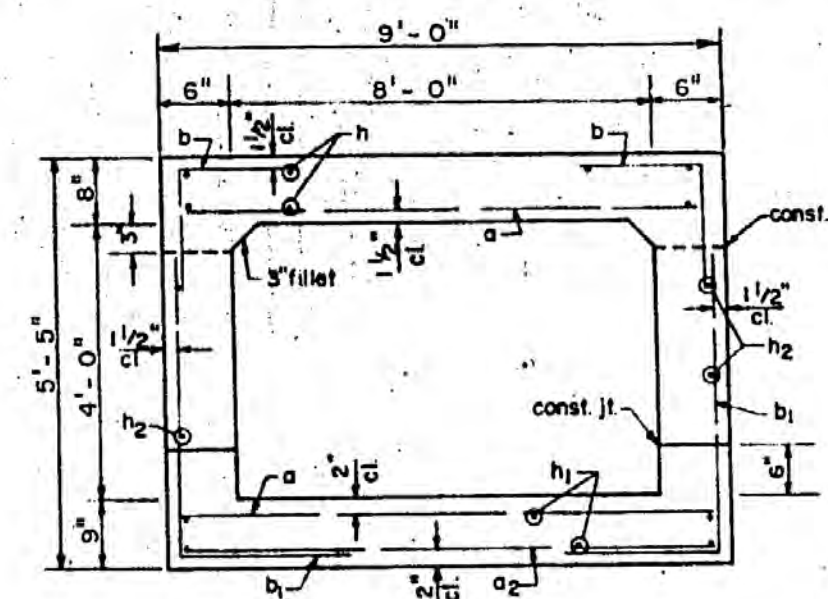


PLAN.

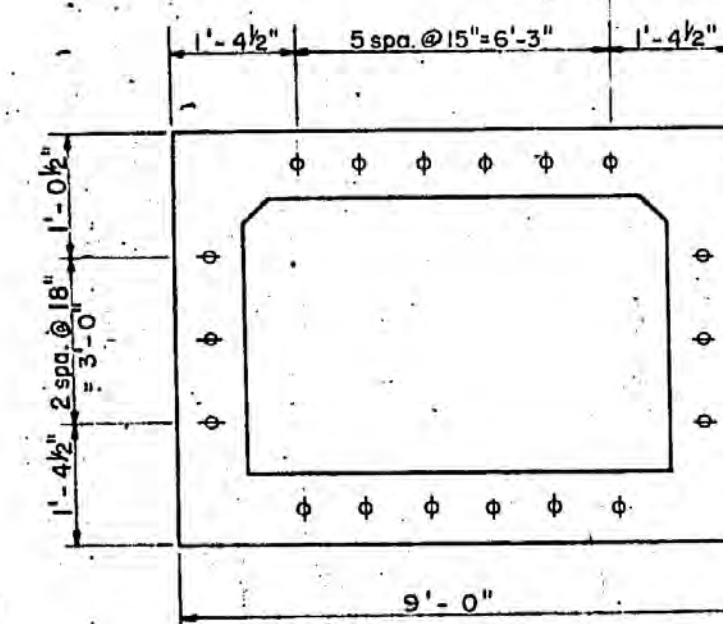
LOADING HS-20
 $f_c = 20,000$ p.s.i.
 $f_t = 1,400$ p.s.i. barrel
 $f_t = 1,000$ p.s.i. wings
 $v = 90$ p.s.i. barrel
 $v = 75$ p.s.i. footing
 $n = 10$
 Max. soil pressure under footing = 175 p.s.i.



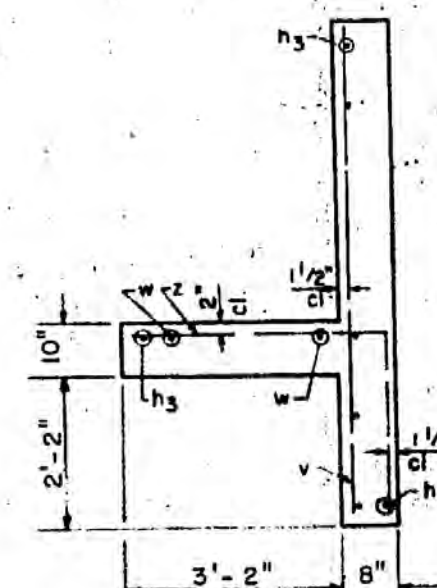
CORNER PLAN



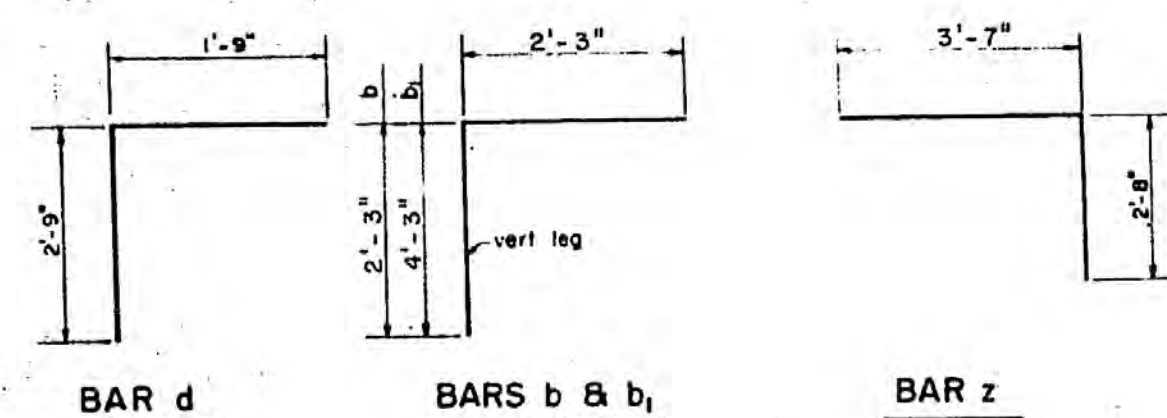
SECTION THRU BARREL



EXPANSION BOLT LAYOUT



SECTION A-A



GENERAL NOTES

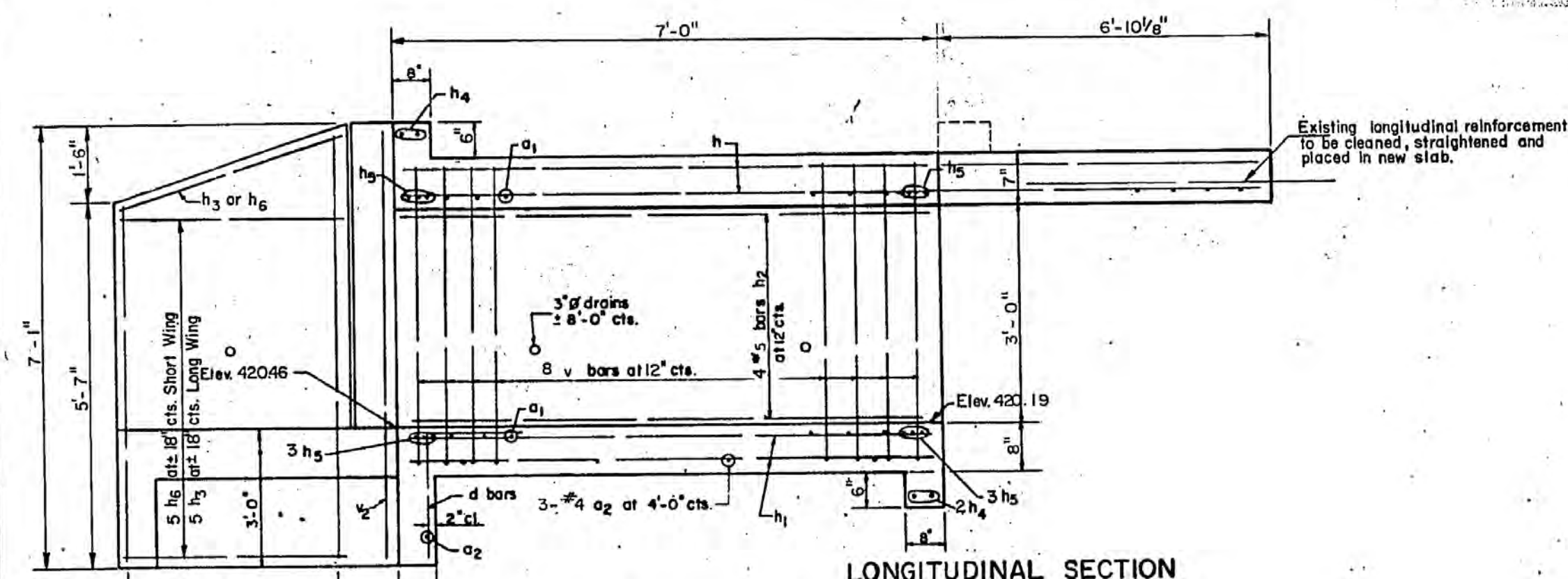
Bars shall be ordered full length and cut to fit. Balance of bar to be used in opposite side of top slab.
 Class X Concrete shall be used throughout.
 Exposed edges shall be beveled 3/4".
 For backfilling and embankment see S.D. Spec's.
 All bars shall be lapped 24 diameters unless otherwise specified.
 The top of the culvert, the base of the side walls, the lower construction joint and backs of the wings above the top of the footing shall be waterproofed with a minimum of 1/2" of concrete.
 Expansion bolts shall extend from the top of the footing to within 6" of the top of the headwall. Expansion bolts shall consist of self drilling expansion shields and 3/4" hooked bolts. Hooked bolts shall extend a minimum of 5" into new concrete.
 It shall be the responsibility of the contractor to verify all conditions existing in the field prior to construction.

DESIGNED J.M.H.	8-5-74
CHECKED A.Z.	
DRAWN K.H.	
CHECKED J.M.H.	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A. 885	104(WRS)	UNION	146	89	2 SHEETS
F.A. 885	ILLINOIS	PROJECT	RF-1611		

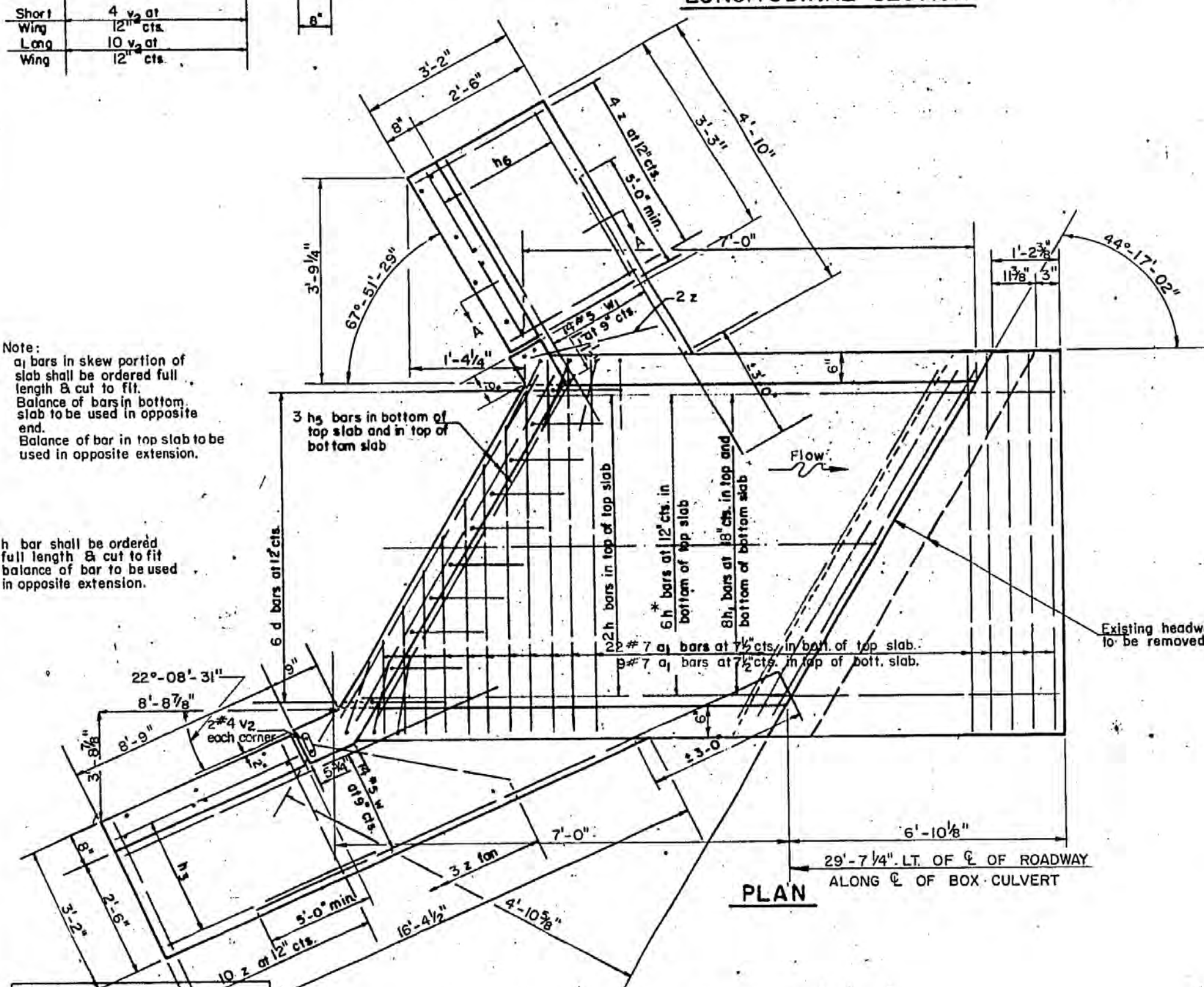


LONGITUDINAL SECTION

Short Wing	4' at 12' cts.
Long Wing	10' at 12' cts.
Wing	12' cts.

Note:
a1 bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bars in bottom slab to be used in opposite end.
Balance of bar in top slab to be used in opposite extension.

* h bar shall be ordered full length & cut to fit balance of bar to be used in opposite extension.



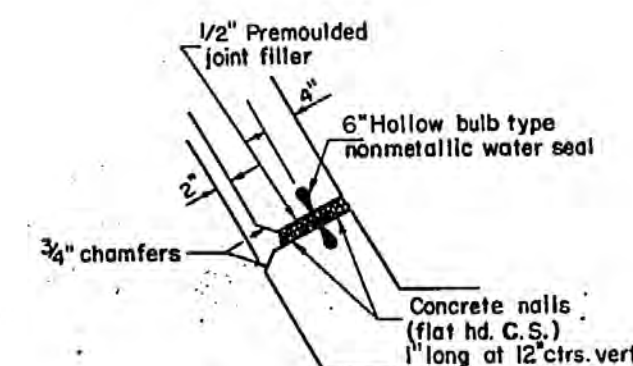
PLAN

DESIGNED	A. Z.	8-1-74
CHECKED	J.M.H.	8-8-74
DRAWN	B.K.	
CHECKED	J.M.H.	

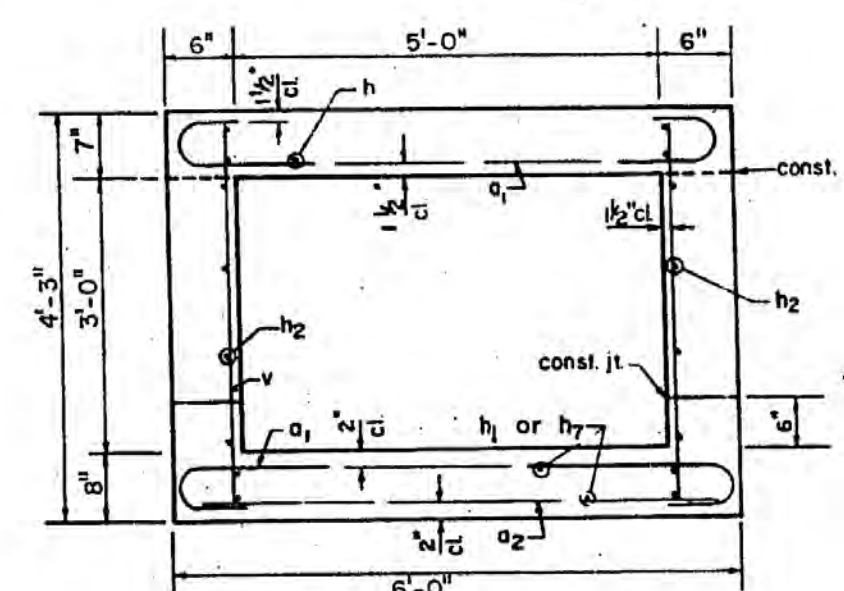
f_c = 20,000 p.s.i.
f_c = 1,400 p.s.i. barrel
f_c = 1,000 p.s.i. wings
v = 90 p.s.i. barrel
v = 75 p.s.i. footing
n = 10

LOADING HS-20

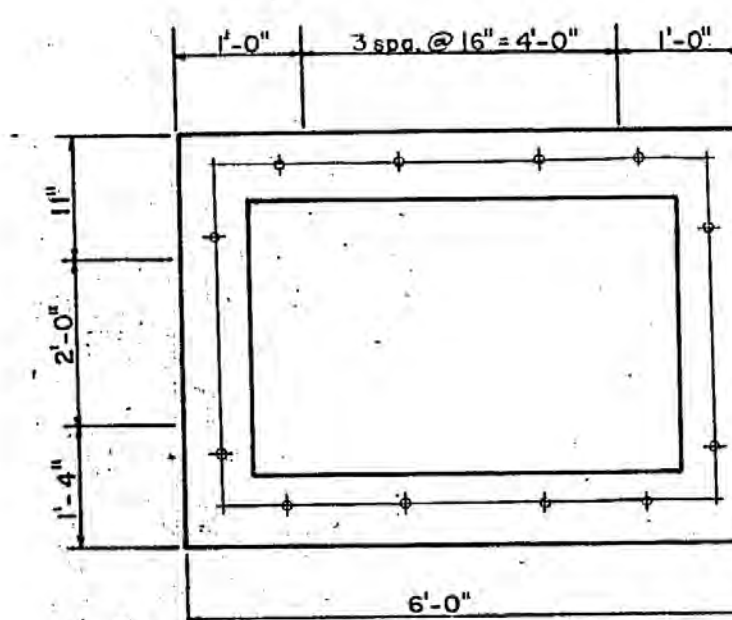
Max. soil pressure under footing = 1568 p.s.f.



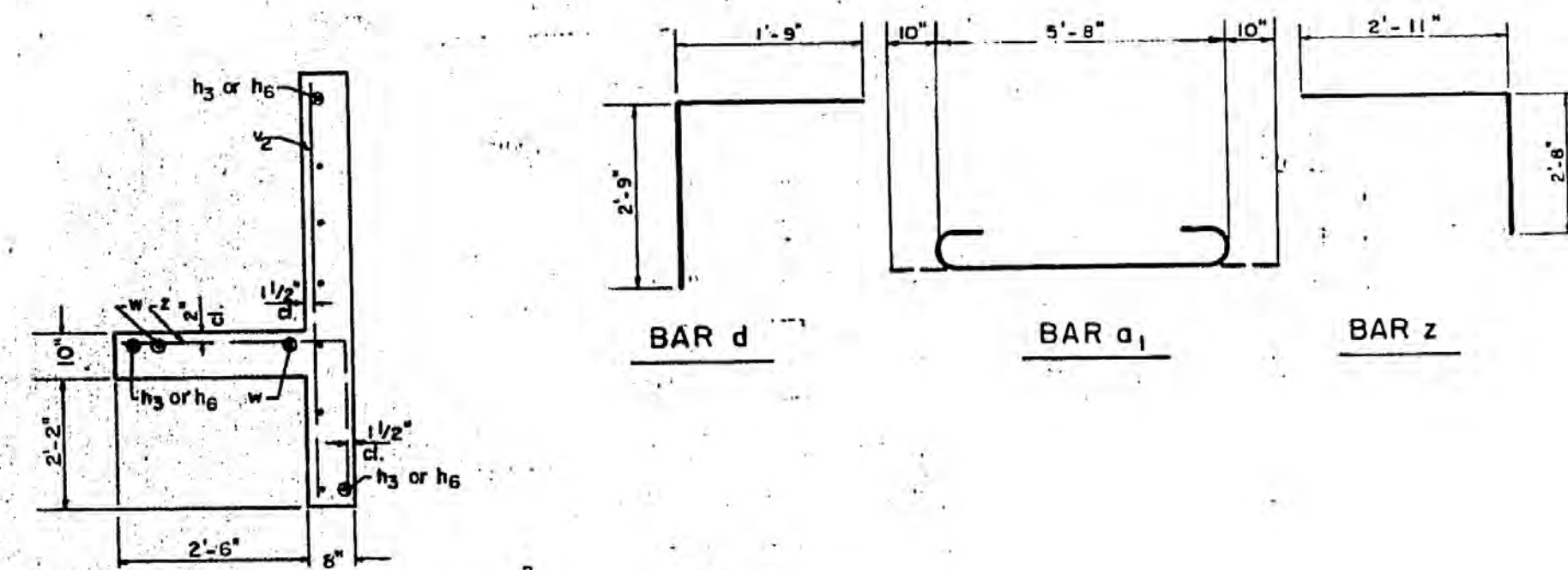
CORNER PLAN



SECTION THRU BARREL



EXPANSION BOLT LAYOUT



SECTION A-A

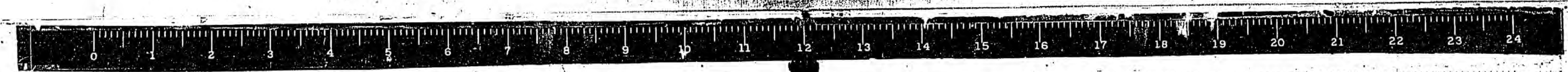
GENERAL NOTES

Class "X" Concrete shall be used throughout.
Exposed edges shall be beveled 3/4".
For backfilling and embankment see S.D. Spec.
All bars shall be lapped 24 diameters unless otherwise specified.
The top of the culvert shall be at the same elevation as the existing headwall.
Nonmetallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.
Expansion bolts shall consist of self drilling expansion shields and 3/4" # hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.
It shall be the responsibility of the contractor to verify all conditions existing in the field prior to construction.

BILL OF MATERIAL

Bar	Number	Size	Length
a1	31	#7	7'-4"
a2	4	#4	5'-3"
d	6	#4	4'-6"
h	8	#5	21'-3"
h1	8	#5	6'-9"
h2	6	#5	6'-9"
h3	8	#4	8'-6"
h4	4	#6	8'-3"
h5	9	#6	8'-3"
h6	8	#4	3'-0"
v	16	#4	4'-0"
v2	18	#4	6'-9"
w	4	#5	16'-6"
w1	4	#5	9'-9"
z	19	#4	5'-7"
Class "X" Concrete	7.5		Cu. Yds.
Reinforcement Bars	1300		Lbs.
Concrete Removal	None		Cu. Yds.
Expansion Bolts 3/4"	12		Each

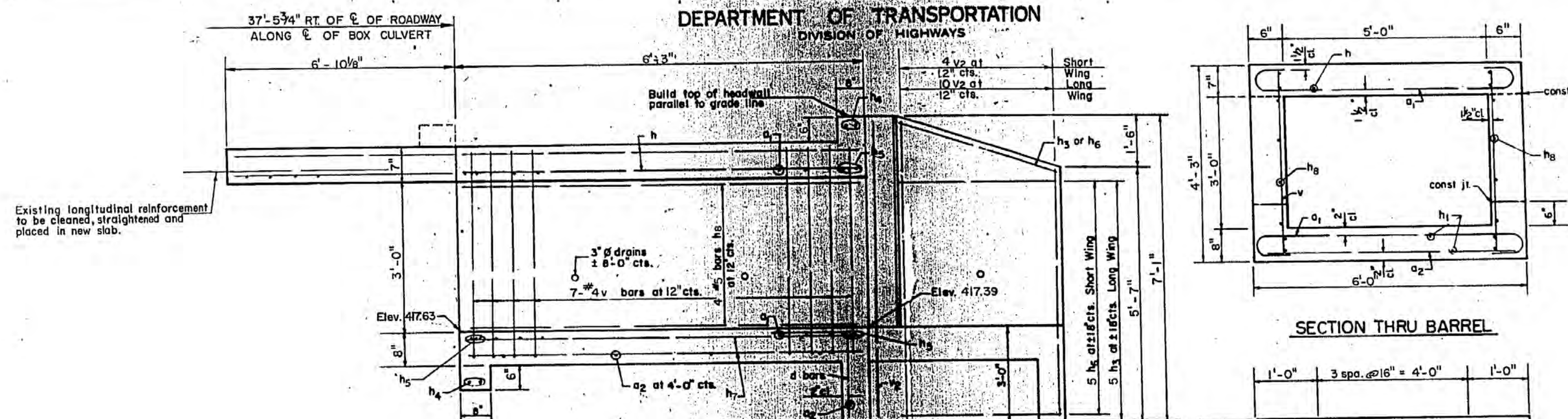
5' X 3'
R.C. BOX CULVERT EXTENSION
STATION 138+27.96
45°-42'-58" SKEW RT.
F.A. ROUTE 885, SEC. 104 (W, RS)
UNION COUNTY



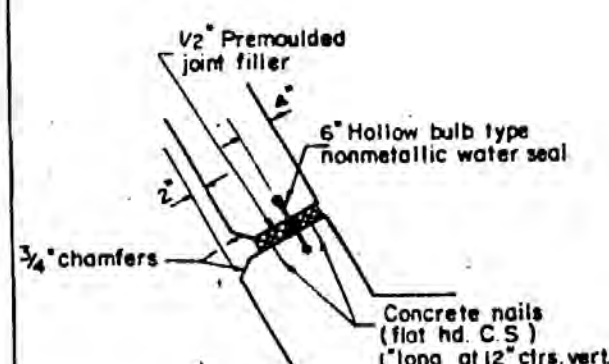
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
885	104(W,RS)	UNION	148	90	2 SHEETS
ILLINOIS	PROJECT	RF-1011	1		

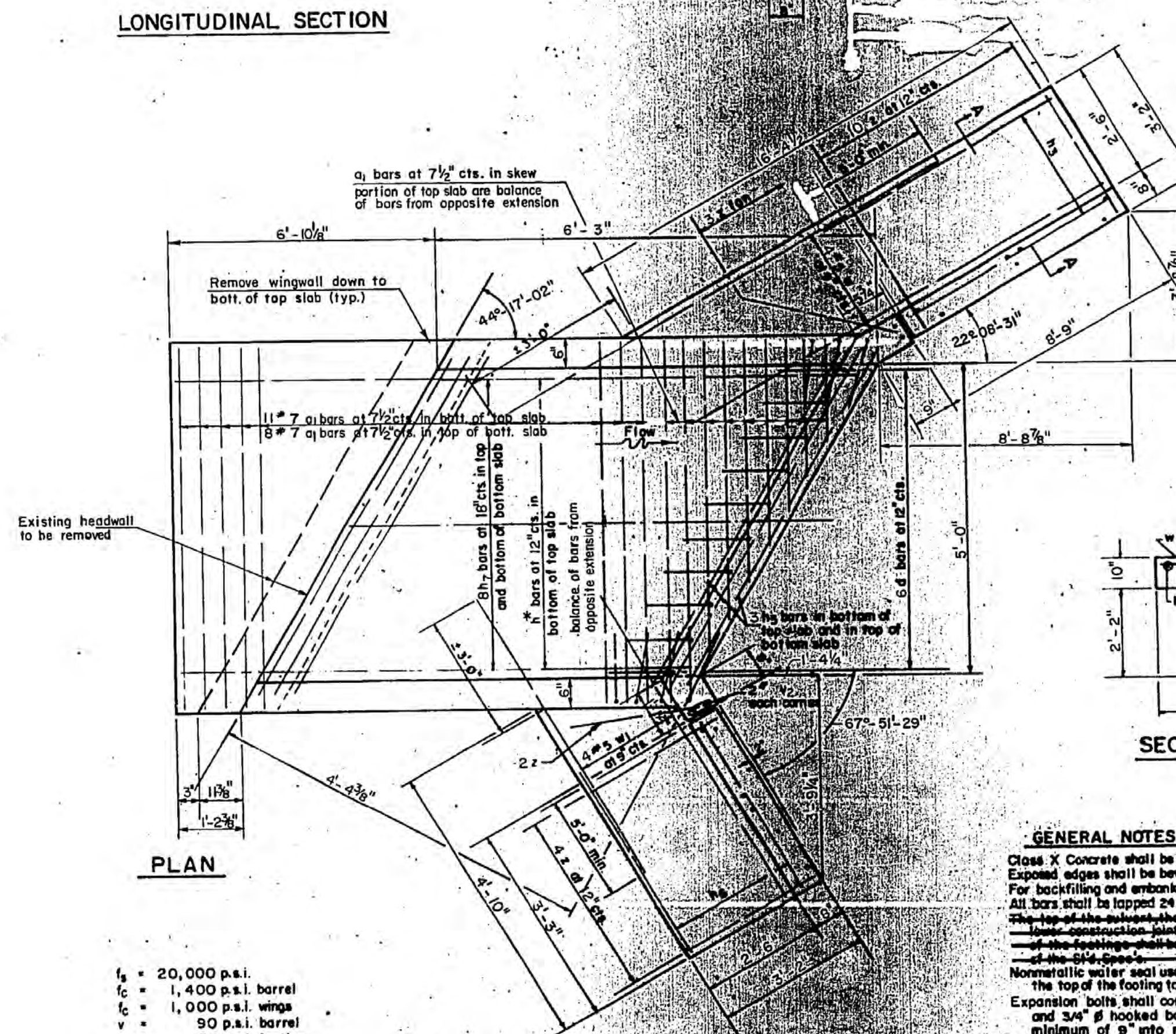


LONGITUDINAL SECTION

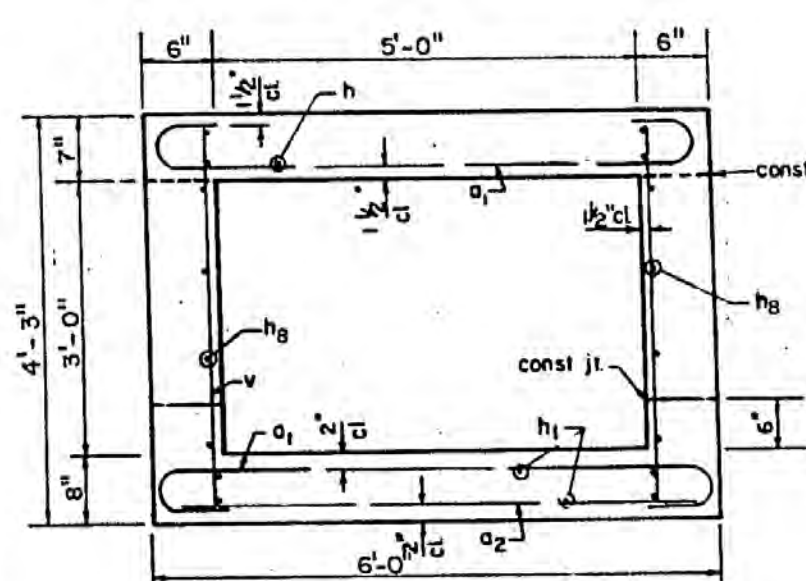


CORNER PLAN

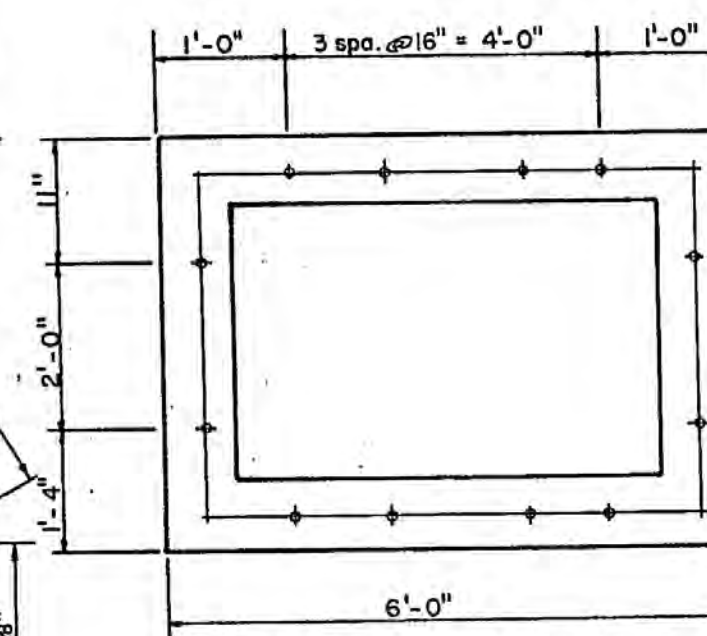
Notes:
a₁ bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar in bottom slab to be used in opposite end bars in skew portion of top slab from opposite extension.
* h bars shall be ordered full length & cut to fit. Balance of bar to be used in opposite extension.



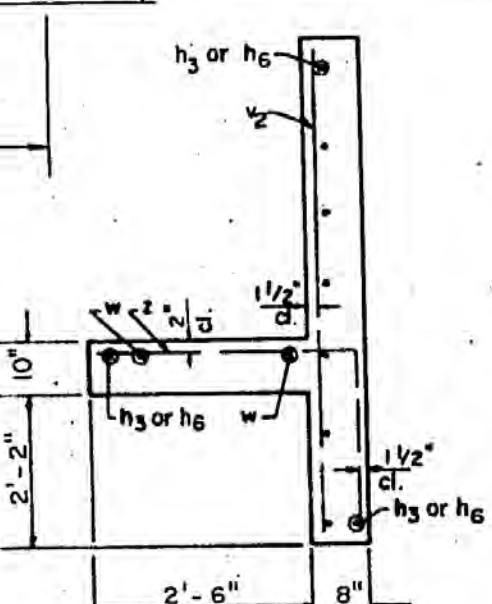
PLAN



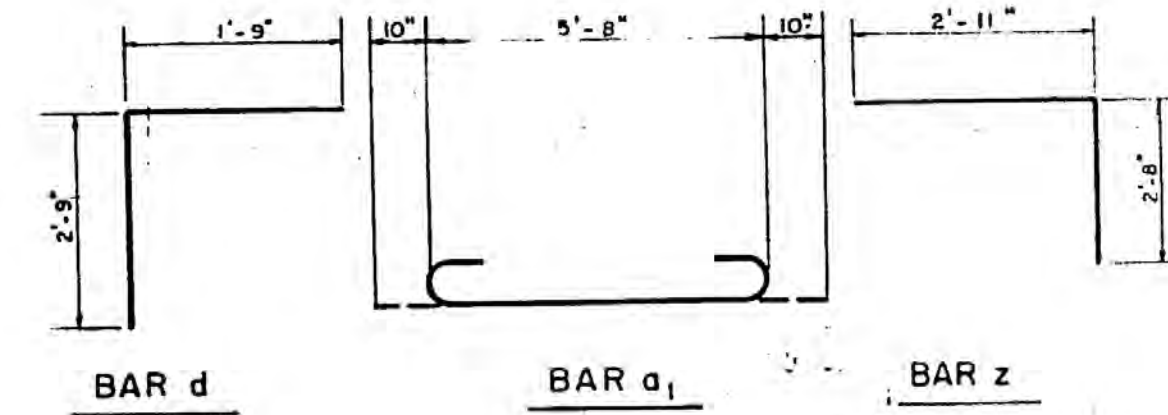
SECTION THRU BARREL



EXPANSION BOLT LAYOUT



SECTION A-A



BAR d

BAR a₁

BAR z

GENERAL NOTES

Class X Concrete shall be used throughout.
Exposed edges shall be beveled 3/4".
For backfilling and embankment see S.D. Spec's.
All bars shall be lapped 24 diameters unless otherwise specified.
The top of the culvert shall be the base of the side walls above the base of the footings.
The footings shall be constructed in accordance with the S.D. Spec's.
Nonmetallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.
Expansion bolts shall consist of self drilling expansion shields and 3/4" hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.
It shall be the responsibility of the contractor to verify all conditions existing in the field prior to construction.

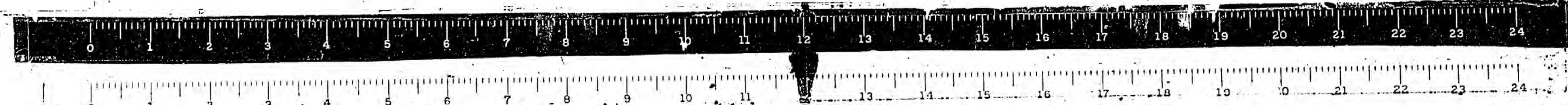
DESIGNED	A. Z. 8-1-74
CHECKED	J.M.H. 8-8-74
DRAWN	B. K.
CHECKED	J.M.H.

f _s	= 20,000 p.s.i.
f _c	= 1,400 p.s.i. barrel
f _c	= 1,000 p.s.i. wings
v	= 90 p.s.i. barrel
v	= 75 p.s.i. footing
n	= 10

LOADING HS-20

Max. soil pressure under footing = 1568 p.s.f.

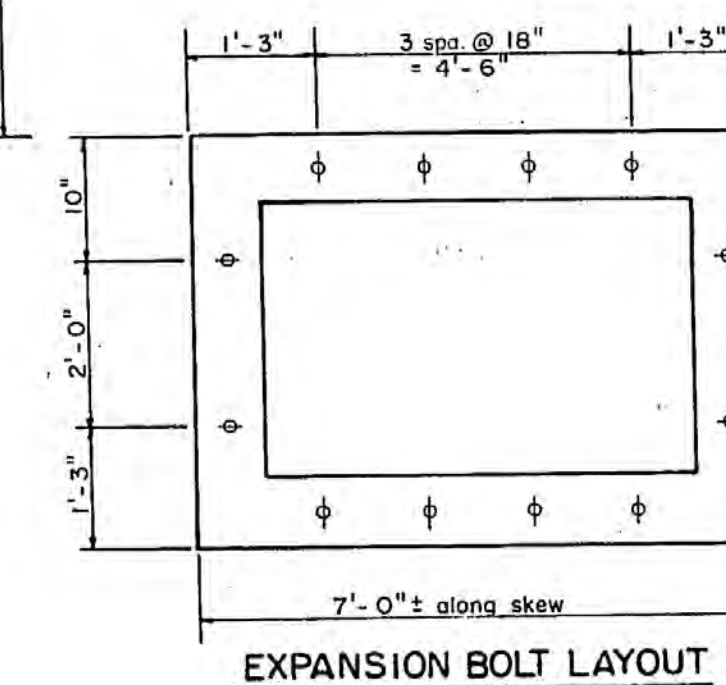
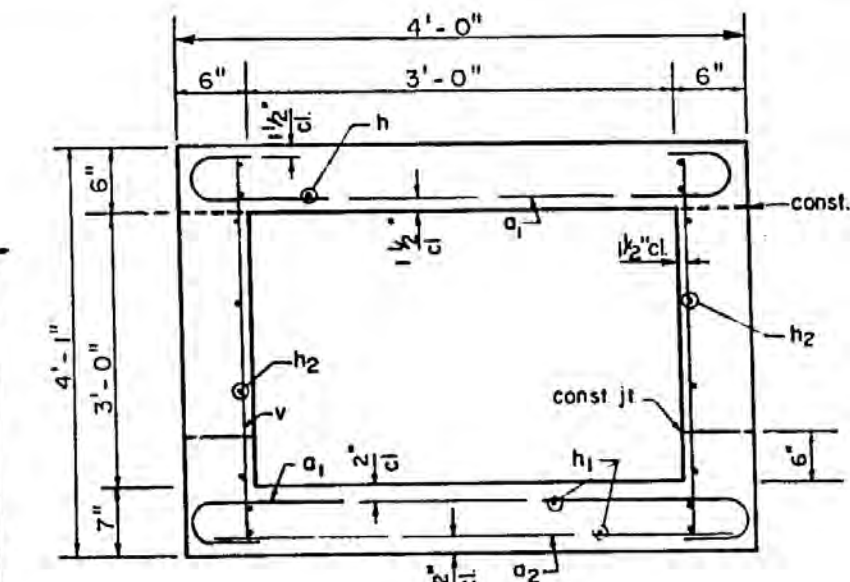
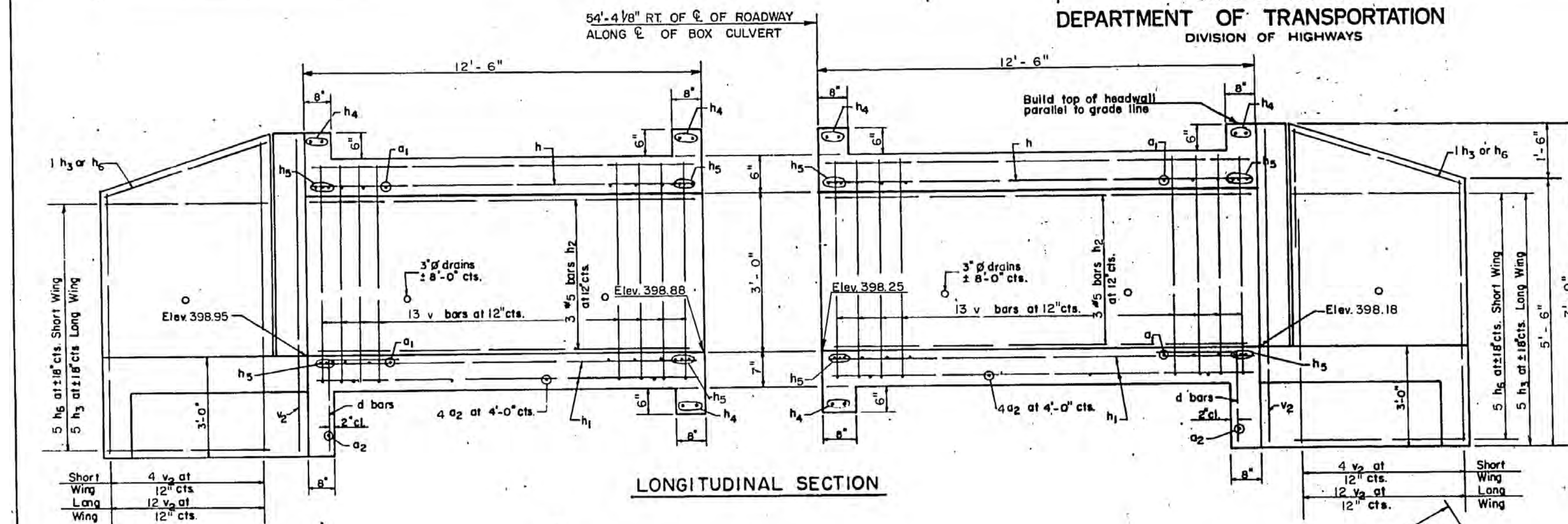
5' X 3'
R.C. BOX CULVERT EXTENSION
STATION 138+27.96
45°-42'-58" SKEW RT.
F. A. ROUTE 885, SEC. 104 (W,RS)
UNION COUNTY



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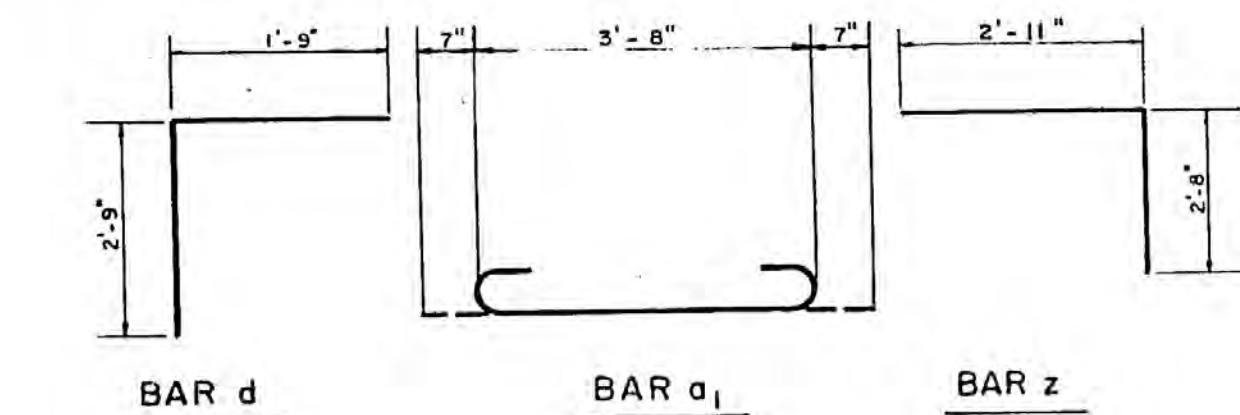
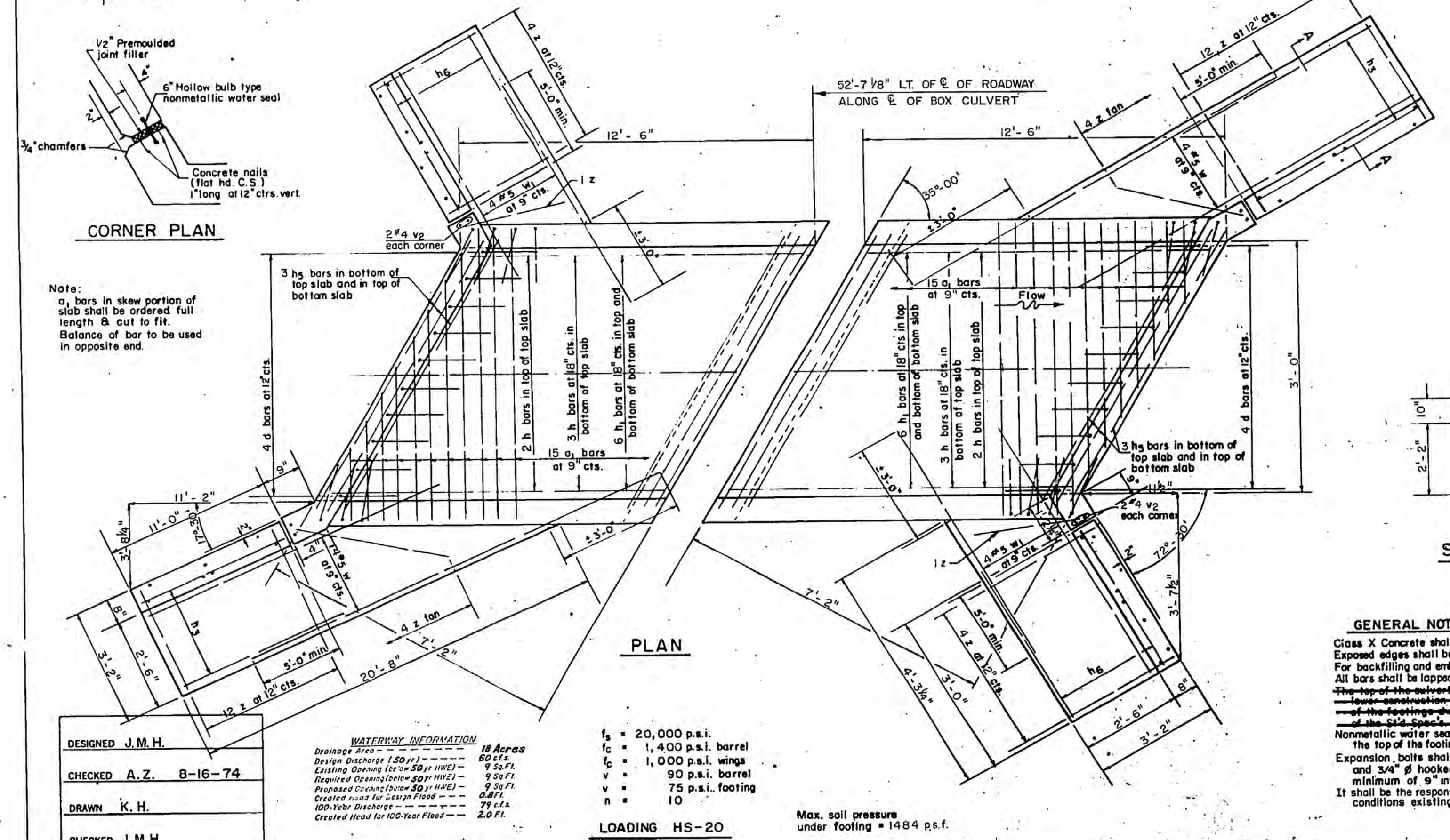
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. I
# 4885	IO4(W,RS)	UNION	146	91	1 SHEET
P.H.W.A. REG. 4	ILLINOIS	PROJECT	RF-1611		



BILL OF MATERIAL

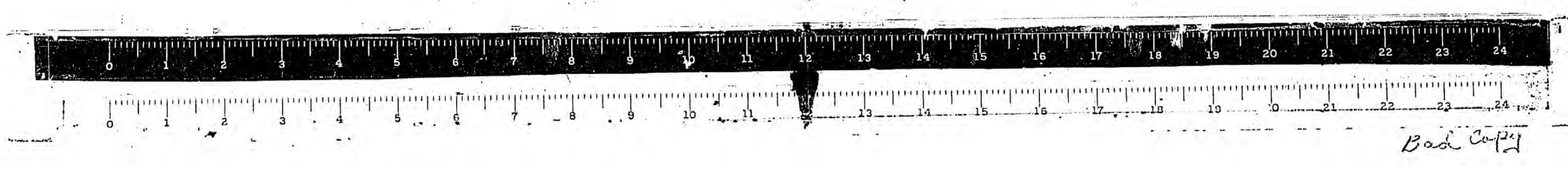
Bar	LT. Extension	RT. Extension	Size	Length
a1	30	30	#5	4'-10"
a2	5	5	#4	3'-3"
d	4	4	#4	4'-6"
h	5	5	#5	12'-3"
h1	6	6	#5	12'-3"
h2	6	6	#5	12'-3"
h3	8	8	#4	10'-9"
h4	6	6	#6	6'-9"
h5	12	12	#6	6'-9"
h6	8	8	#4	2'-9"
v	26	26	#4	3'-9"
v2	20	20	#4	6'-9"
w	4	4	#5	17'-6"
w1	4	4	#5	9'-3"
z	21	21	#4	5'-7"
Class "X" Concrete				Cu. Yds. 16.3
Reinforcement Bars				Lbs. 1,980
Expansion Bolts 3/4 inch				Each 24



GENERAL NOTES
Class X Concrete shall be used throughout.
Exposed edges shall be beveled 3/4".
For backfilling and embankment see S.D. Spec's.
All bars shall be lapped 24 diameters unless otherwise specified.
The top of the culvert shall be finished to the same level as the top of the wingwalls.
The bottom of the culvert shall be finished to the same level as the bottom of the wingwalls.
Nonmetallic water seal used in the wingwall joints shall extend from the top of the footing to within 6" of the top of the headwall.
Expansion bolts shall consist of self drilling expansion shields and 3/4" hooked bolts. Hooked bolts shall extend a minimum of 9" into new concrete.
It shall be the responsibility of the contractor to verify all conditions existing in the field prior to construction.

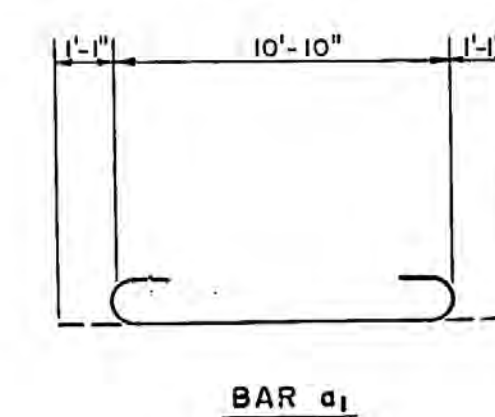
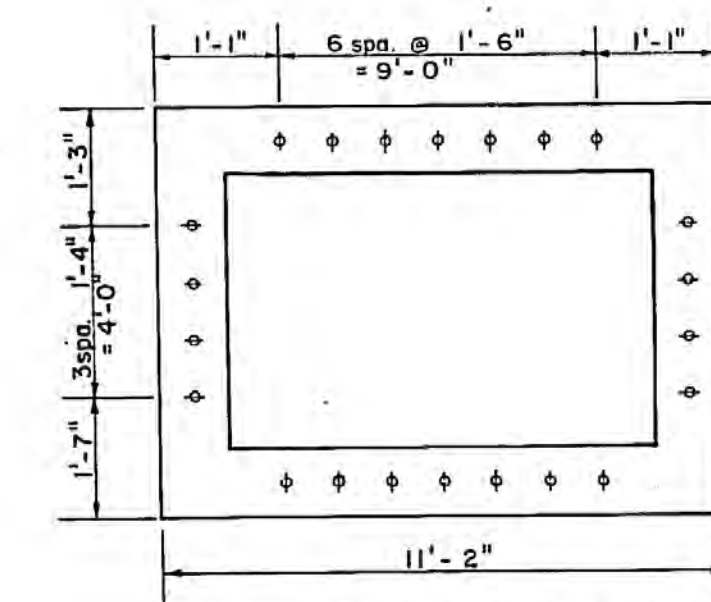
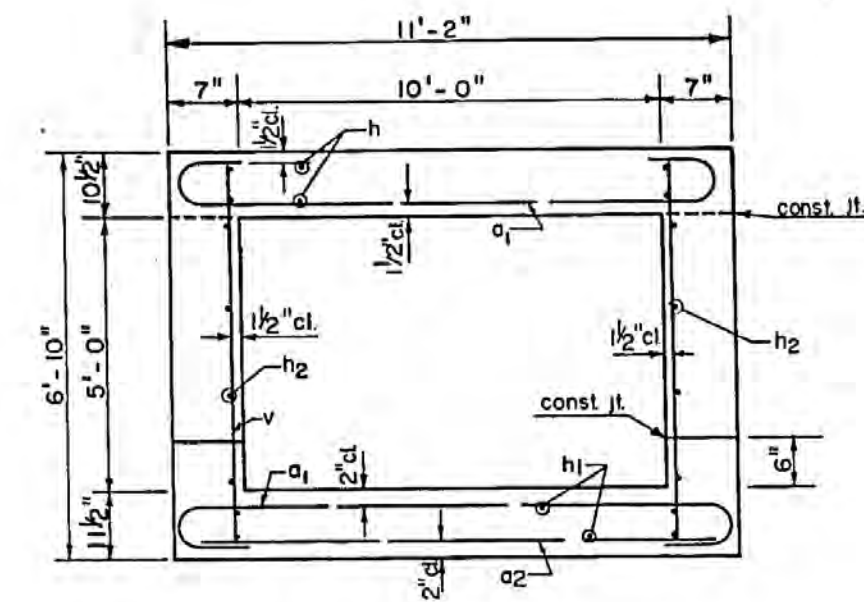
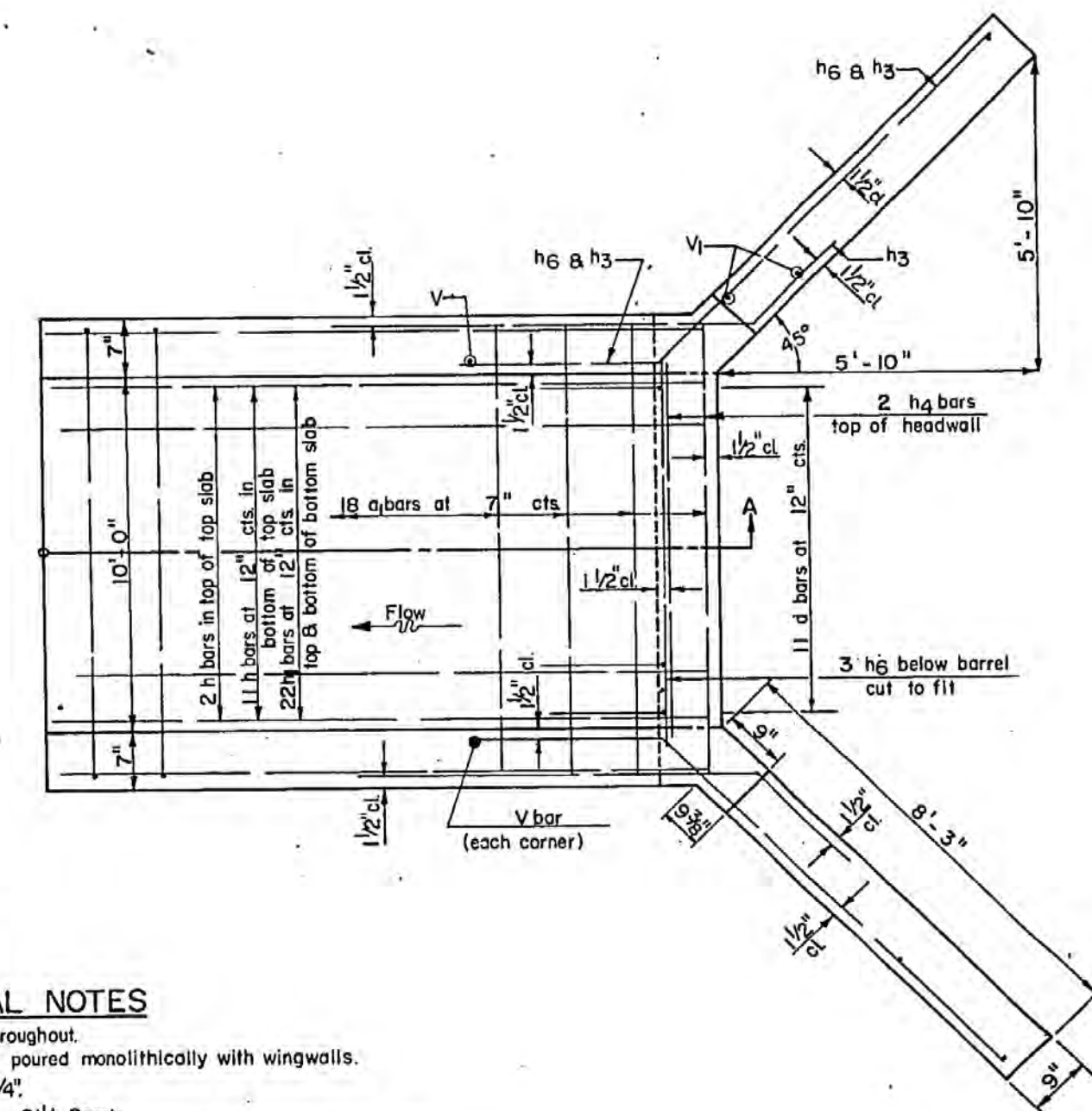
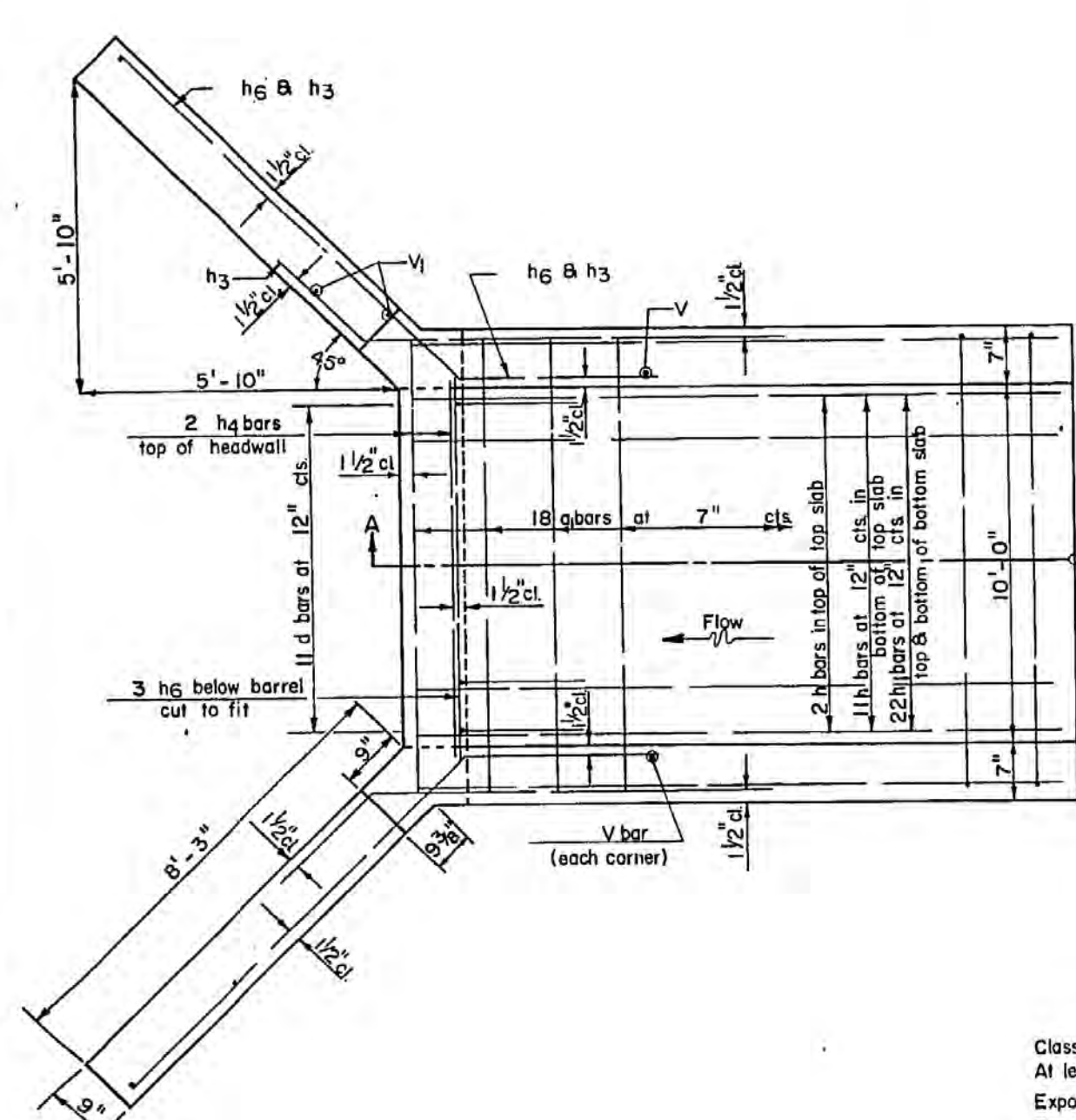
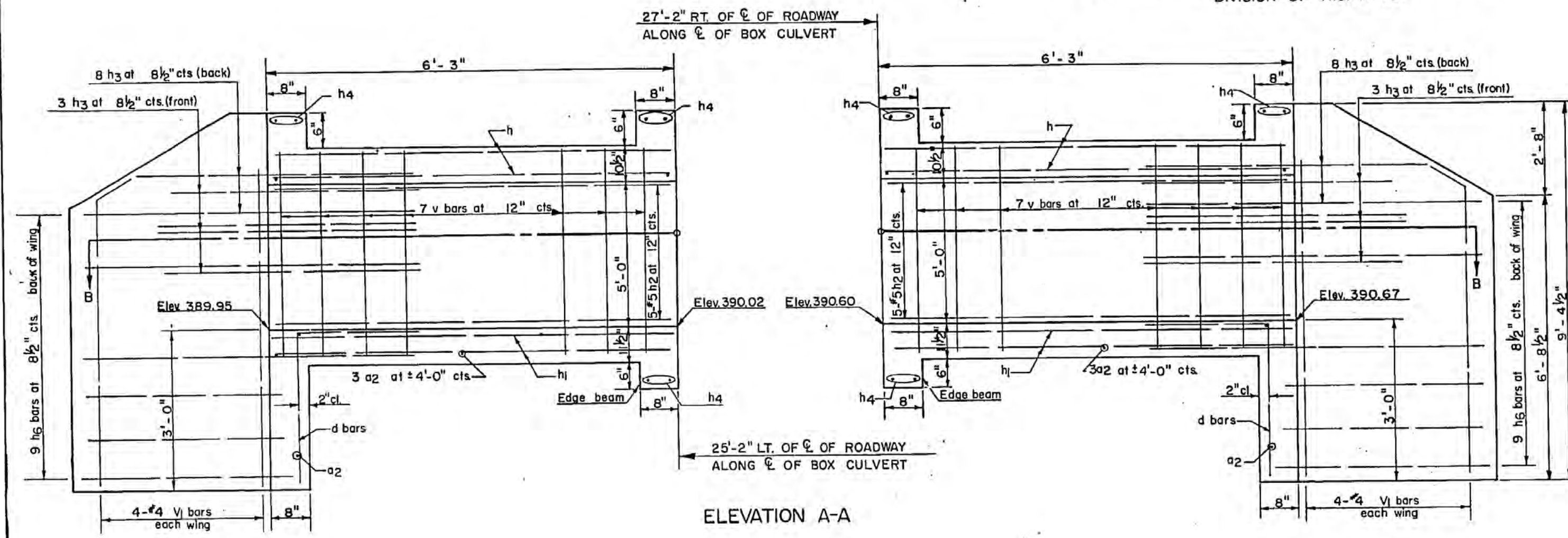
3' X 3'
R.C. BOX CULVERT EXTENSION
STATION 154+16
55° SKEW RT.
F. A. ROUTE 885, SEC. 104 (W,RS)
UNION COUNTY

DESIGNED J.M.H.	WATERWAY INFORMATION	LOADING HS-20	Max. soil pressure under footing = 1484 p.s.f.
CHECKED A.Z. 8-16-74	Drainage Area (18 Acres)		
DRAWN K.H.	Design Discharge (50 yr) = 60 cfs		
CHECKED J.M.H.	Existing Opening (40 yr HWE) = 95 cfs		
	Desired Opening (50 yr HWE) = 95 cfs		
	Proposed Culvert (50 yr HWE) = 95 cfs		
	Desired Head for 50 yr Flood = 0.81 ft		
	100-yr Discharge = 79 cfs		
	Created Head for 100-Year Flood = 2.0 ft		

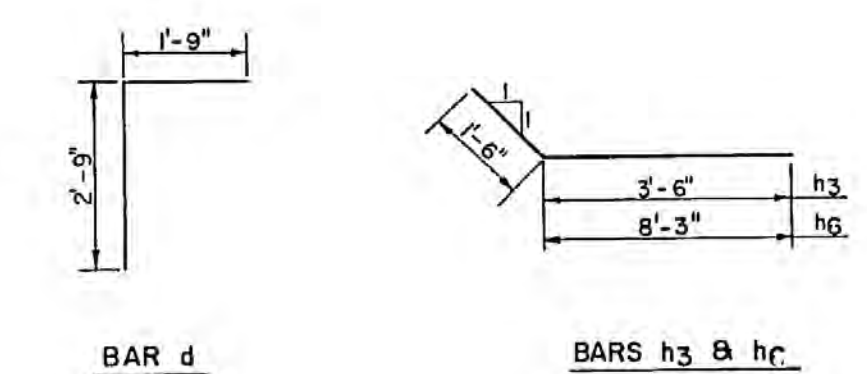


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
F.A. 885	104(W,RS)	UNION	146	92	
F. 100, A. 885-4	ILLINOIS	PROJECT	AF-1511	1	



BILL OF MATERIAL				
Bar	LT. Extension	RT. Extension	Size	Length
a1	18	18	#8	13'-0"
a2	4	4	#4	10'-3"
d	11	11	#4	4'-6"
h	13	13	#6	6'-0"
h1	22	22	#5	6'-0"
h2	10	10	#5	6'-0"
h3	22	22	#7	5'-0"
h4	6	6	#6	10'-11"
h5	18	18	#7	9'-9"
v	16	16	#4	6'-6"
v1	8	8	#4	8'-0"
Class "X" Concrete			Cu Yds.	21.4
Reinforcement Bars			Lbs.	3,590
Expansion Bolts 3/4 inch			Each	44

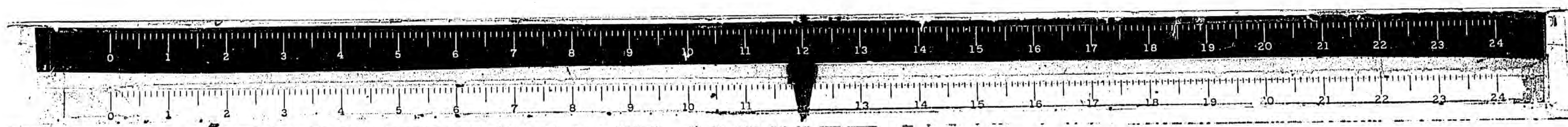


10' X 5'
R.C. BOX CULVERT EXTENSION
STATION 173+86.5
0° SKEW
F. A. ROUTE 885, SEC. 104 (W,RS)
UNION COUNTY

DESIGNED	A. Z.	8-5-74
CHECKED	J. M. H.	
DRAWN	K. H.	
CHECKED	J. M. H.	

GENERAL NOTES
Class "X" Concrete shall be used throughout.
At least six feet of barrel shall be poured monolithically with wingwalls.
Exposed edges shall be beveled 3/4".
For backfilling & embankments see S1d Specs.
Till hook of a bar, if necessary to obtain 1/2" minimum clearance at top of hook.
The top of the culvert shall be constructed in accordance with S1d Specs.
All bars shall be lapped 24 diameters unless otherwise specified.
It shall be the responsibility of the contractor to verify all conditions existing in the field prior to construction.
Expansion bolts shall consist of self drilling expansion shields & 3/4" hooked bolts.
Hooked bolts shall extend a minimum of 9" into new concrete.

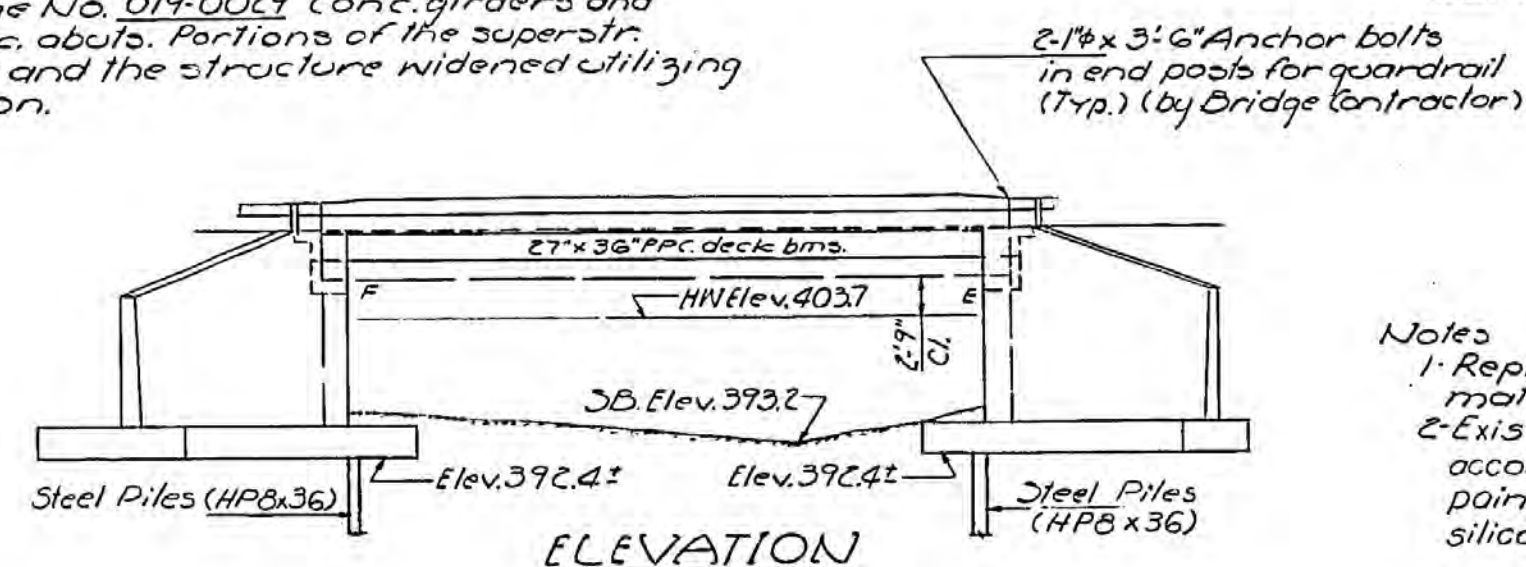
fs = 20,000 psi.
fc = 1,400 psi. Barrel
fc = 1,000 psi. Wing
v = 90 psi. Barrel
v = 75 psi. Footing
n = 10
LOADING HS-20



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R. 1, E. 1, F. A. 885	104BY	Union	146	93
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT.	

SHEET NO. /
8 SHEETS



Notes
1. Replace existing bituminous material of exp. end.
2. Existing Rockers are to be cleaned according to Method II and field painted with two coats of basic lead silico chromate paint. (Cost Incidental).

GENERAL NOTES

The Contractor shall drive one Steel HPBx36 Test Pile at each wing in a permanent location at East Abutment and West Abutment as directed by the Engineer before ordering the remainder of piles.

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

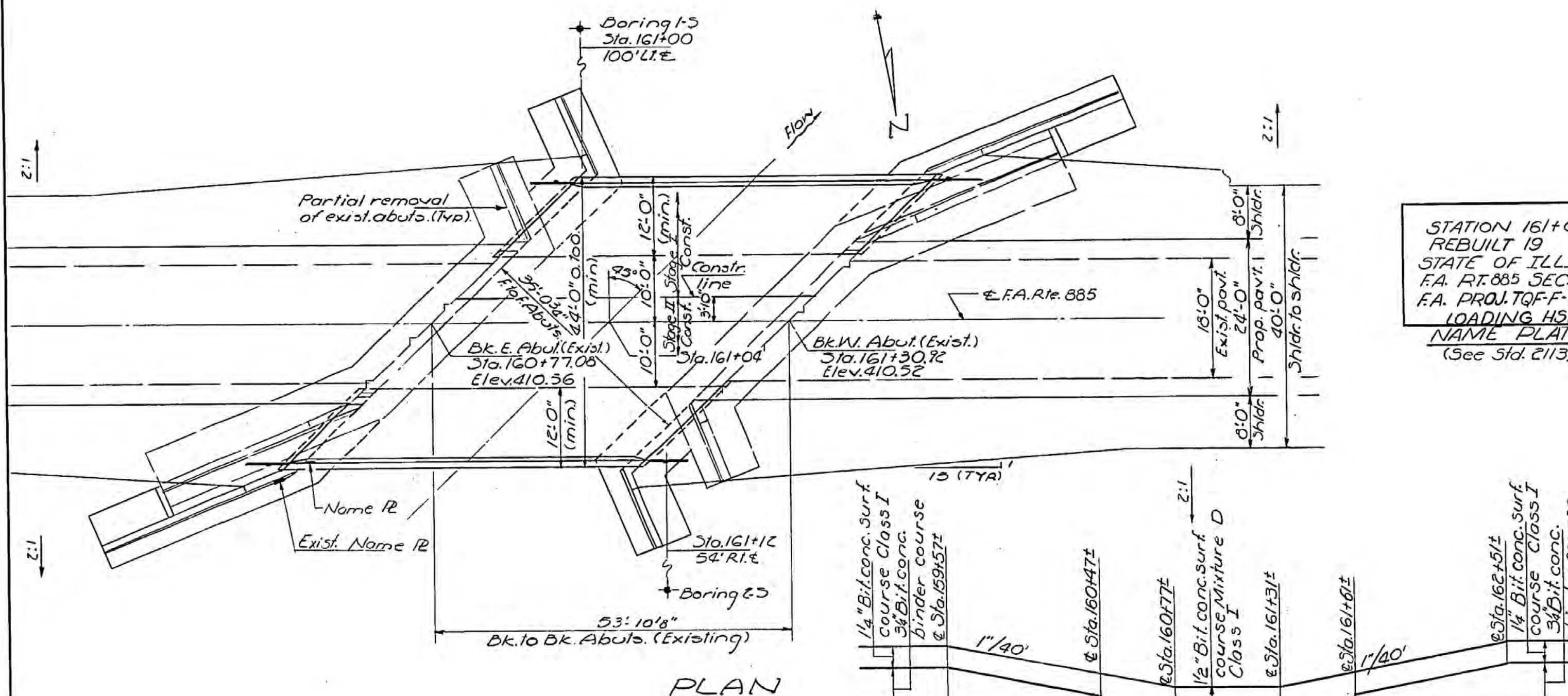
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

The concrete rail section above the mandatory construction joint at the top of beam shall be constructed of Class X Concrete, except the aggregates shall conform to the Requirements of Handrail Concrete.

Expansion bolts shall consist of self drilling expansion anchors and $\frac{3}{4}" \times 12"$ hooked bolts.

Limits of Waterproofing Membrane System shall be six inches beyond the ends of deck beams and face to face of curbs.

Traffic shall be maintained by utilizing stage construction and temporary guardrail.



STATION 161+04.00
REBUILT 19 BY
STATE OF ILLINOIS
F.A. RT.885 SEC.104BY
F.A. PROJ.TQF-F-885(1)
LOADING H520
NAME PLATE
(See Std. 2113)

TOTAL BILL OF MATERIAL

[illegible]

WATERWAY INFORMATION

Drainage Area	3.37 [±] Miles
Design Discharge(50 yr.)	3312 cfs
Existing Opening (below 50 yr. HWE)	429 Sq. Ft.
100 Year Discharge	4161 cfs
Proposed Opening (below 50 yr. HWE)	429 Sq. Ft.
Flood of Record	Elev. 400.40 Date: 196

RESURFACING TRANSITION DESIGN STRESSES

FIELD UNITS

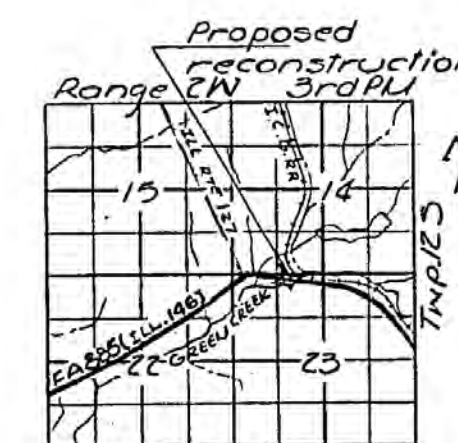
$f'_c = 3500 \text{ psi}$ - Abutts.
 $f_y = 60,000 \text{ psi}$ - Reinf.
 $f_c = 1400 \text{ psi}$ - Curb & Parapet

PRECAST PRESTRESSED UNITS

$f'_c = 5000 \text{ psi}$
 $f'_ci = 4000 \text{ psi}$
 $f'_s = 270,000 \text{ psi} - 7.16\% \text{ strands}$
 $f'_si = 188,700 \text{ psi} - 7.16\% \text{ strands}$

Design Specifications-
1973 AAJHTO, 1974 & 1975 interim specifications

LOADING HS20-44 (New Constr.)

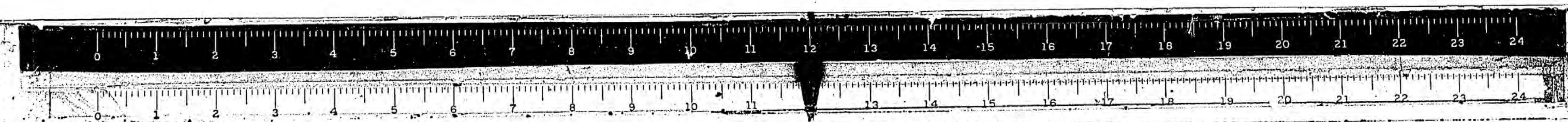


LOCATION
SKETCH

GENERAL PLAN & ELEVATION
F.A. PROJ. 70-F-885 (1)
F.A. RTE 885 (ILL. RTE. 146) OVER GREEN CREEK
F.A. ROUTE 885
SECTION 104BY
UNION COUNTY
STATION 161+04

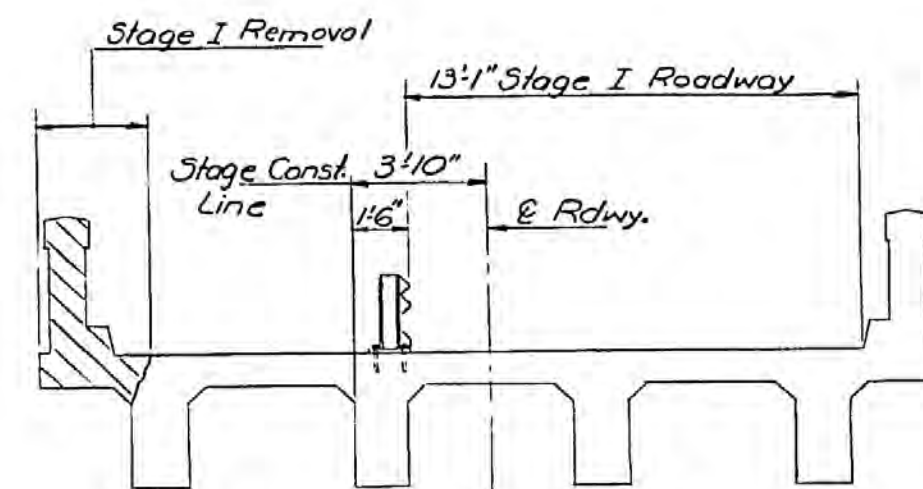
DESIGNED	Y.C. Sanchez
CHECKED	Janet F. Janes
DRAWN	R. Doty
CHECKED	J. F. J.

8-27 1976
EXAMINED *Carl E. Thurmon*
PASSED
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
APPROVED
ENGINEER OF DESIGN

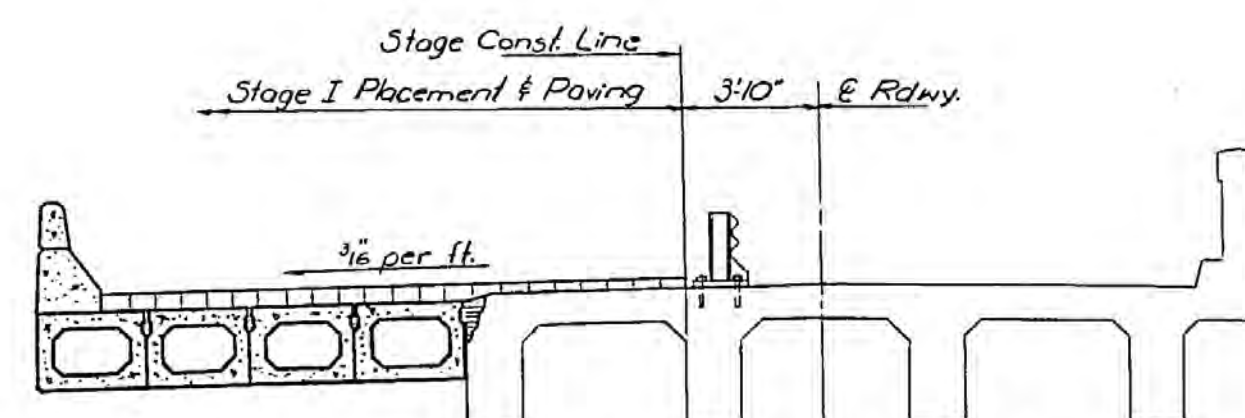


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

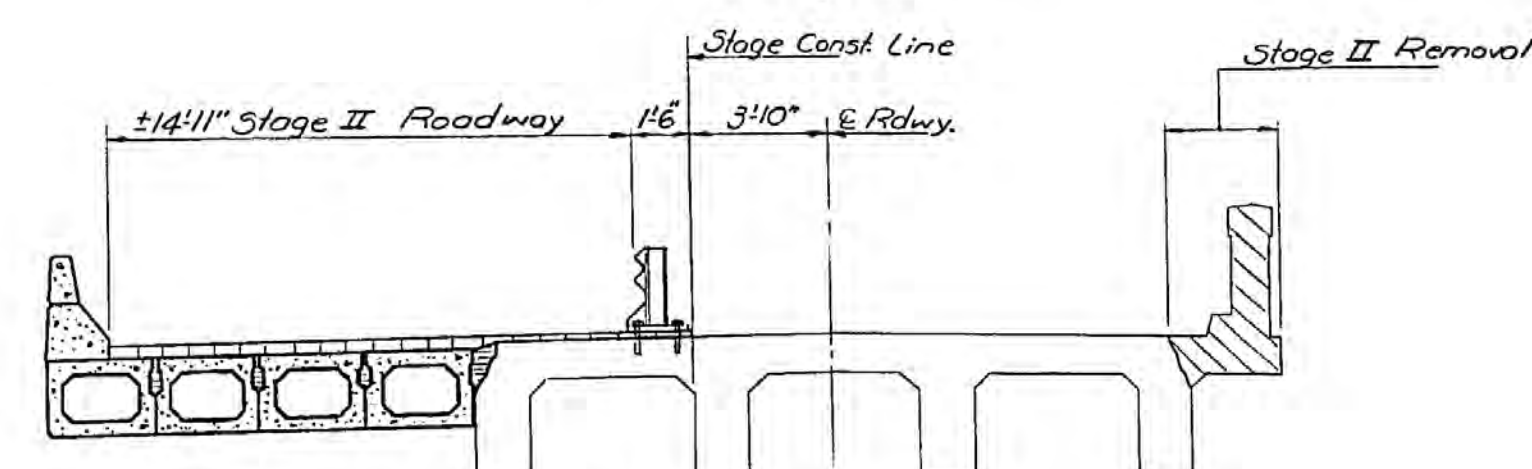
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 2
P.A. 885	104BY	Union	196	94	8 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS PER. AID PROJECT					



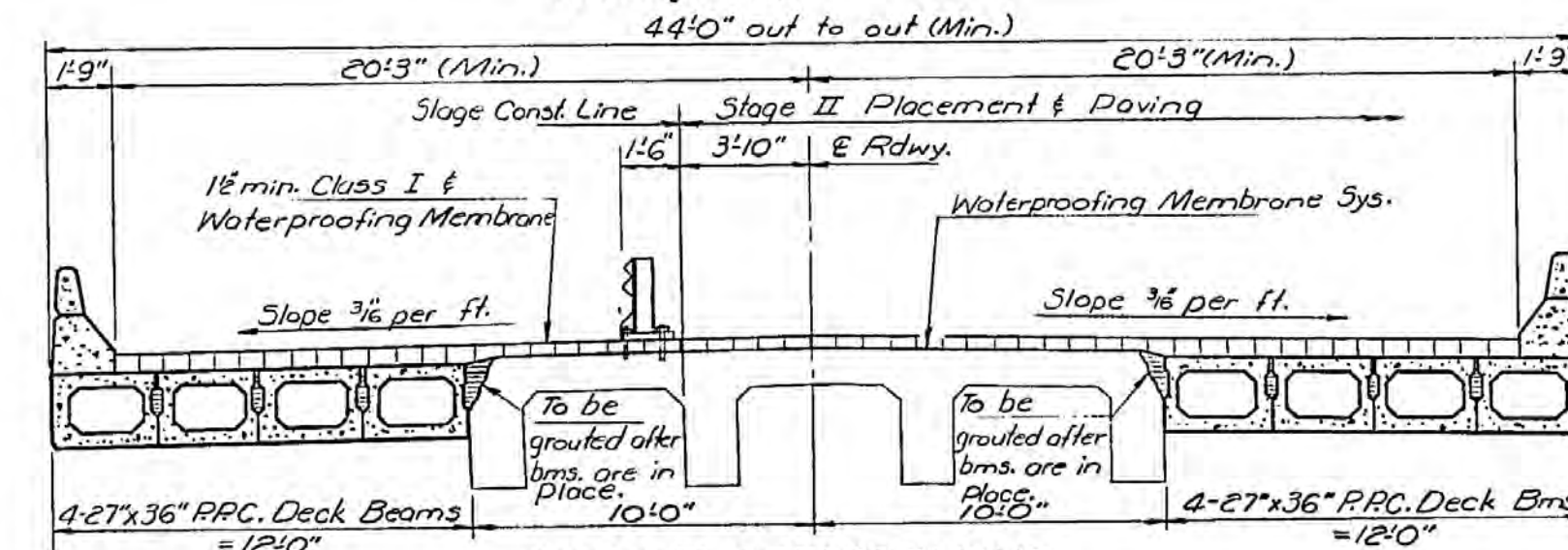
STAGE I REMOVAL
(Looking West)



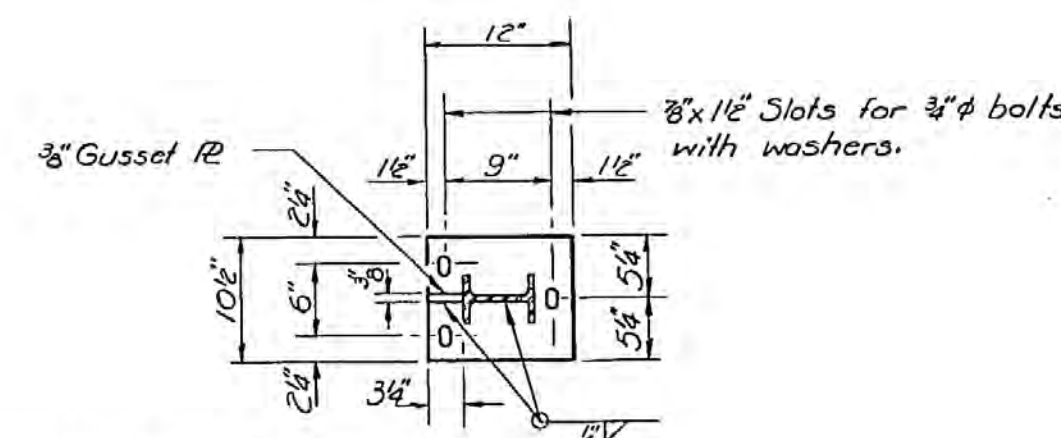
STAGE I REPLACEMENT
(Looking West)



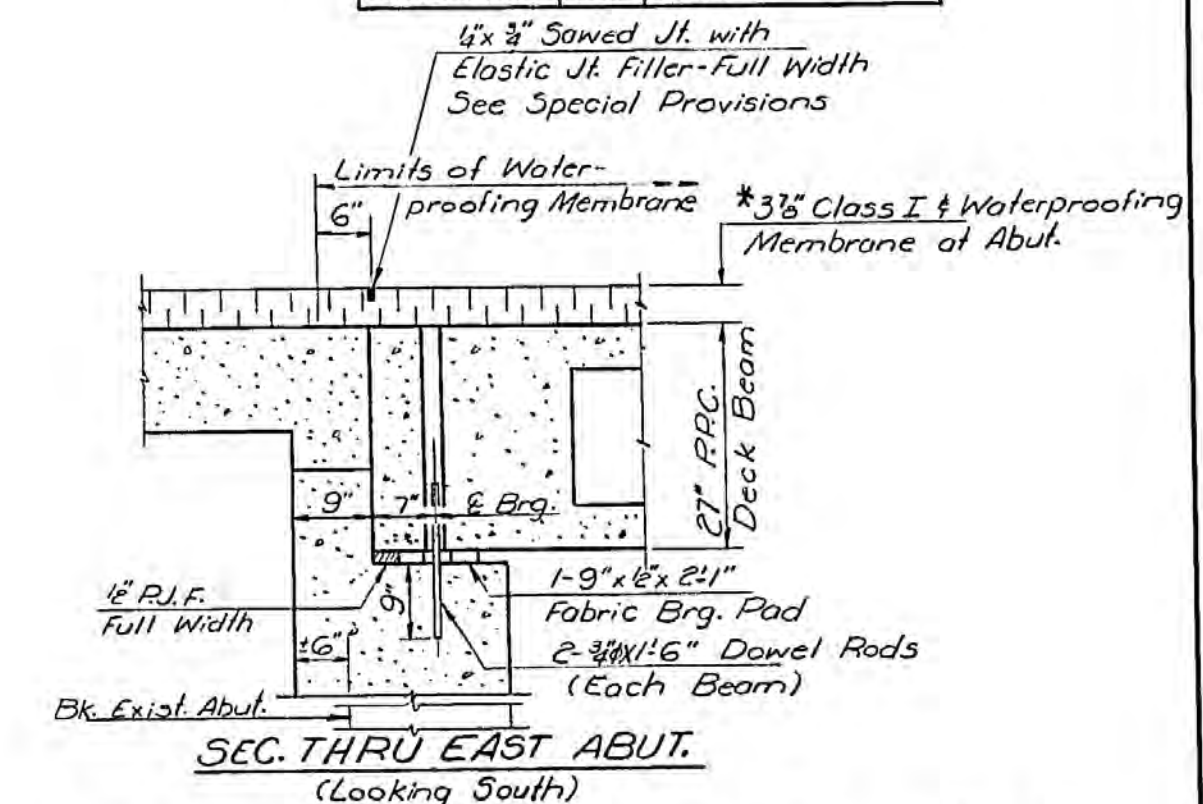
STAGE II REMOVAL
(Looking West)



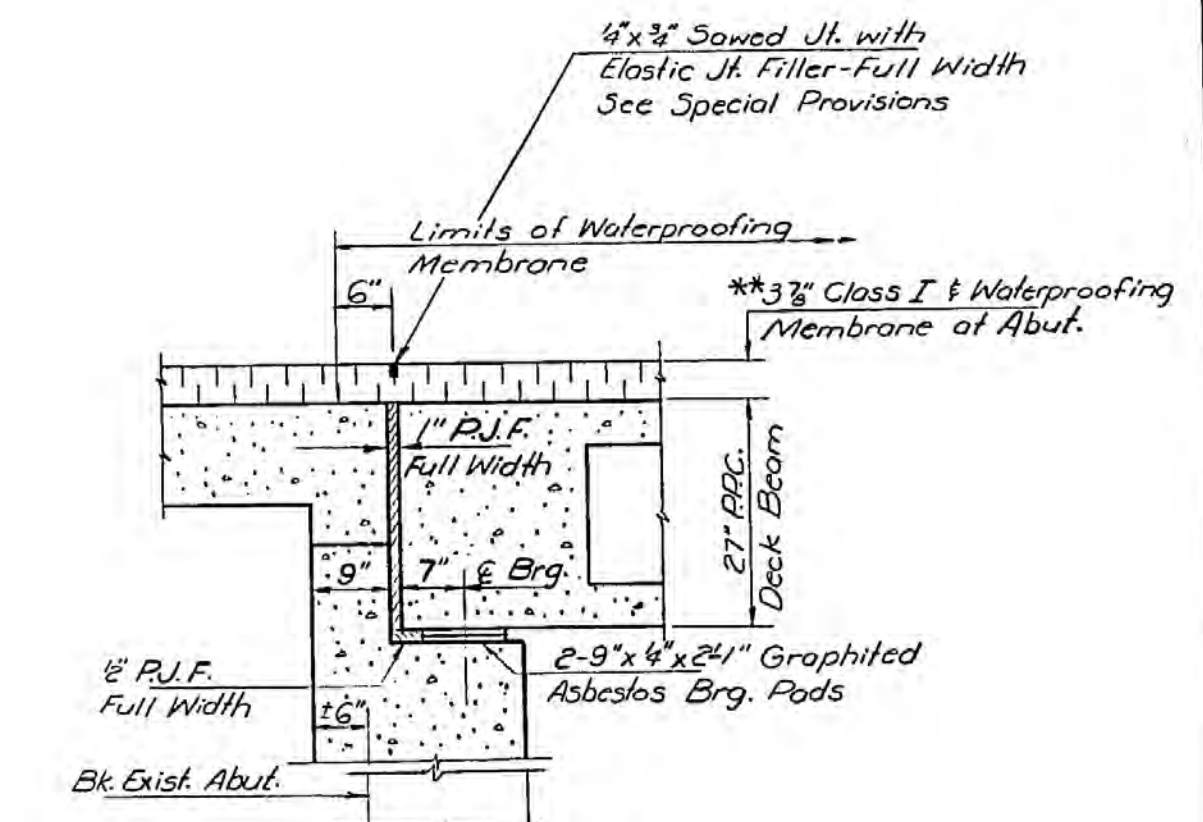
STAGE II REPLACEMENT
(Looking West)



TEMPORARY GUARD RAIL DETAIL
See Special Provisions



* Due to the resurfacing transition, the depth of Class I and Waterproofing of the North side varies from 4' to 4'.



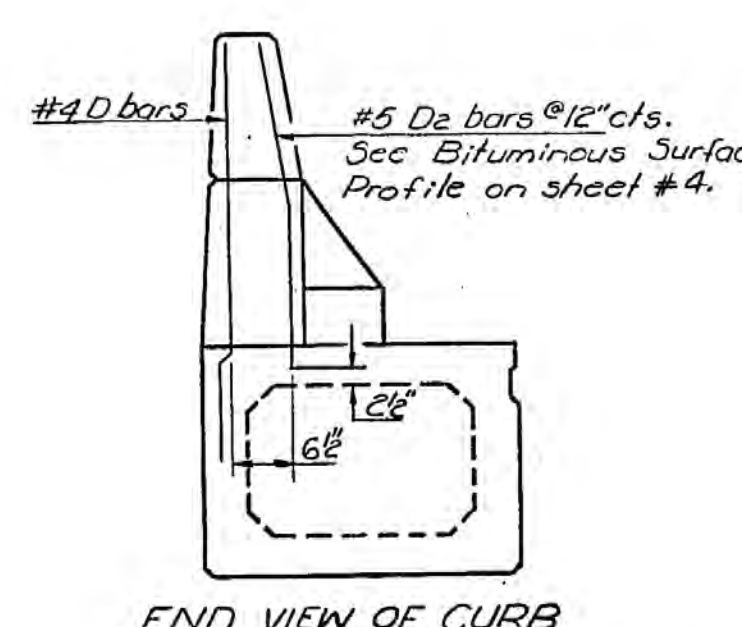
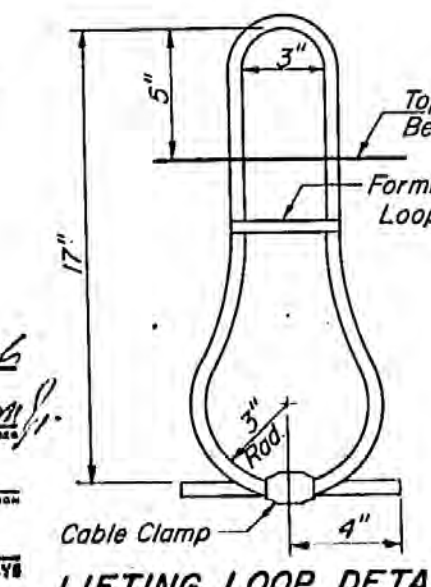
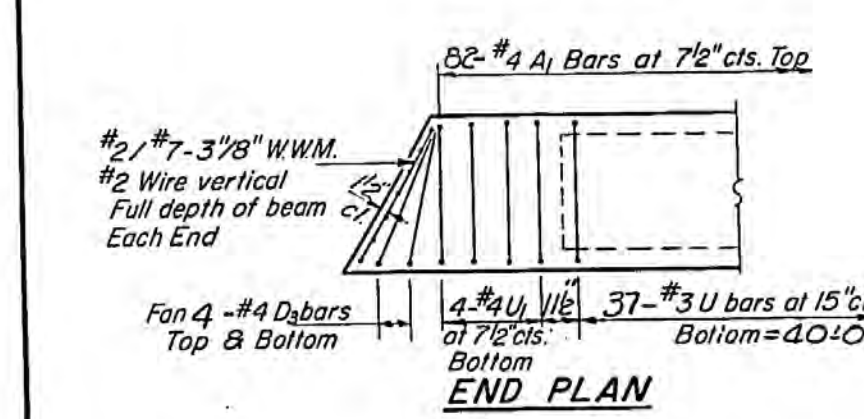
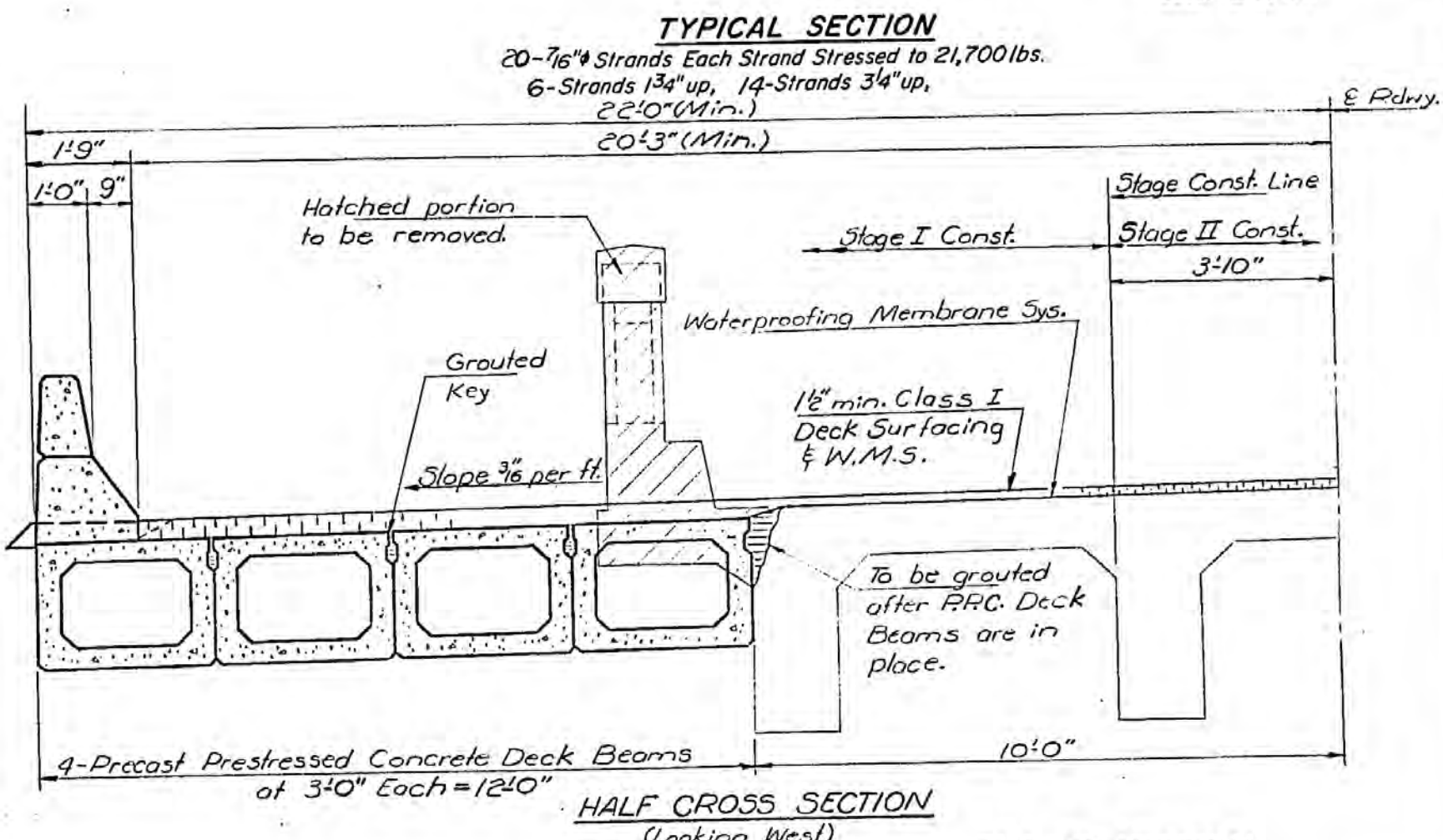
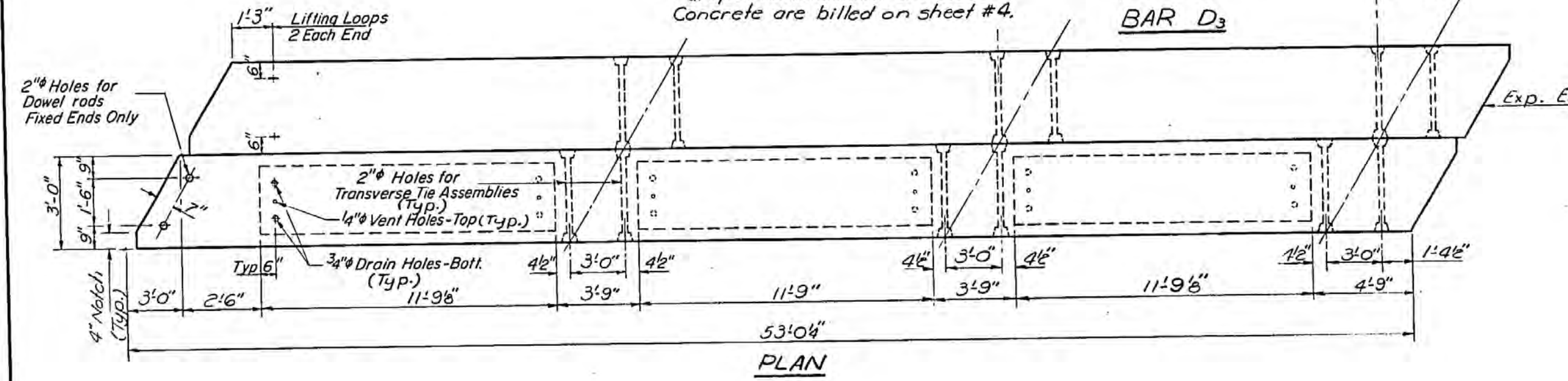
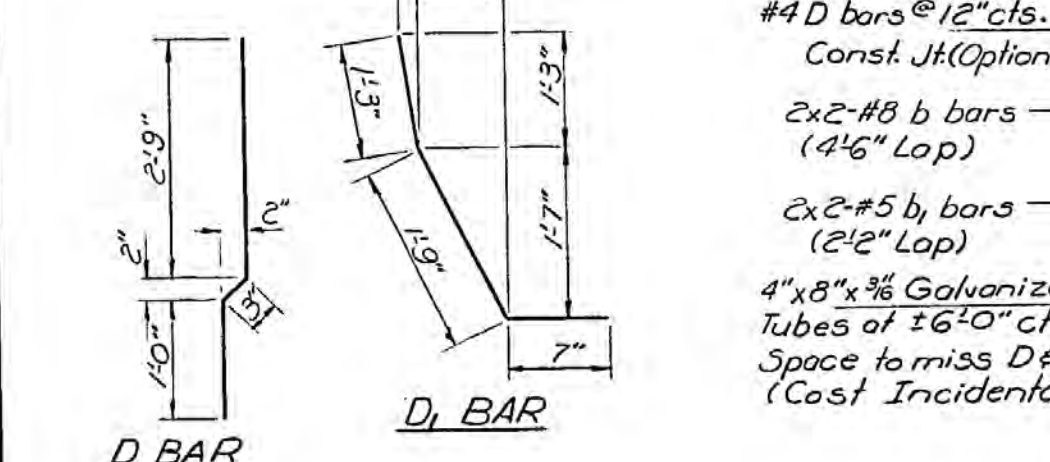
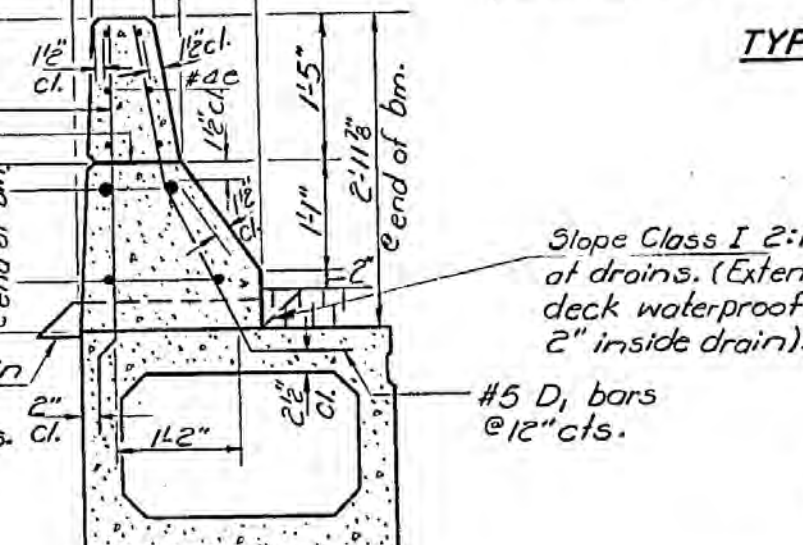
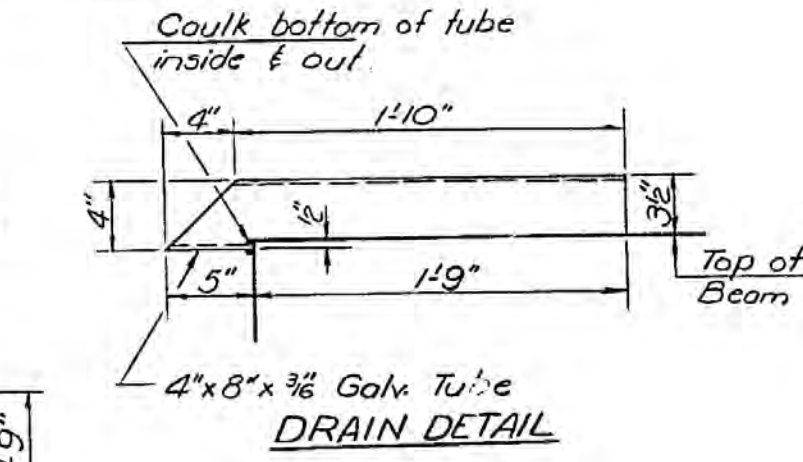
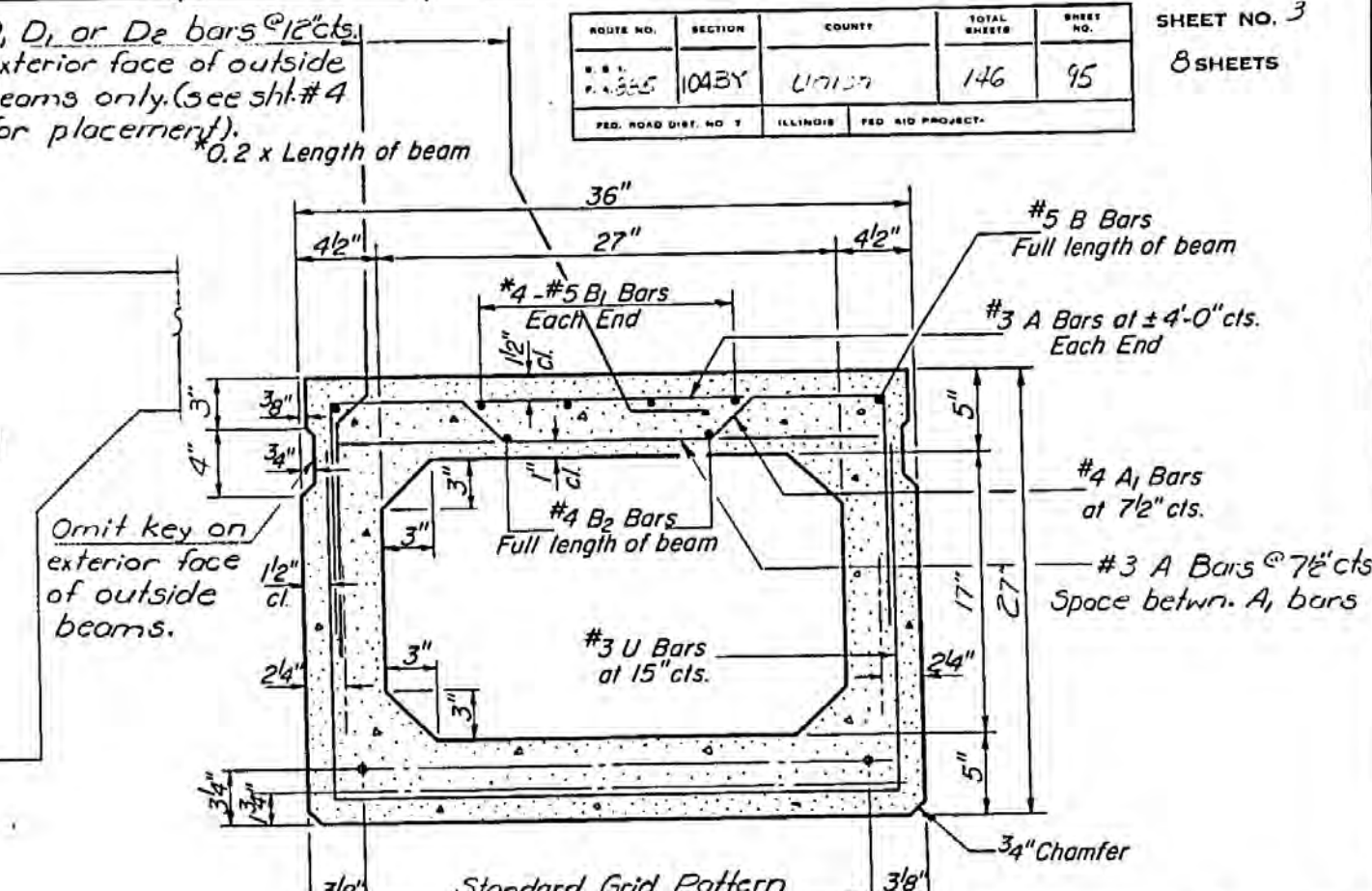
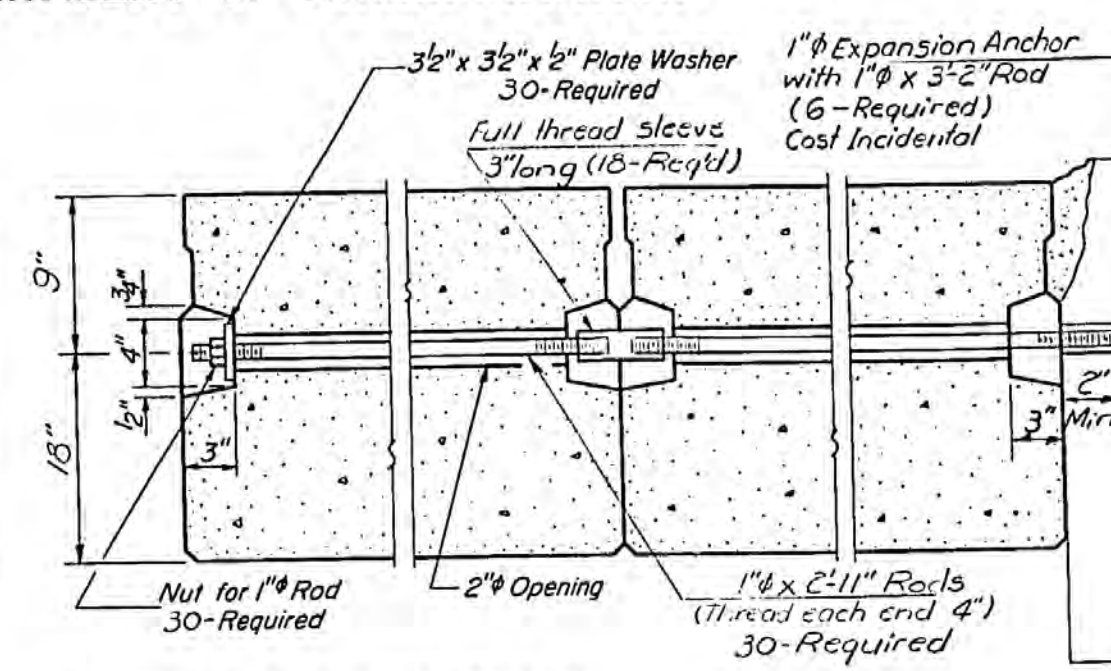
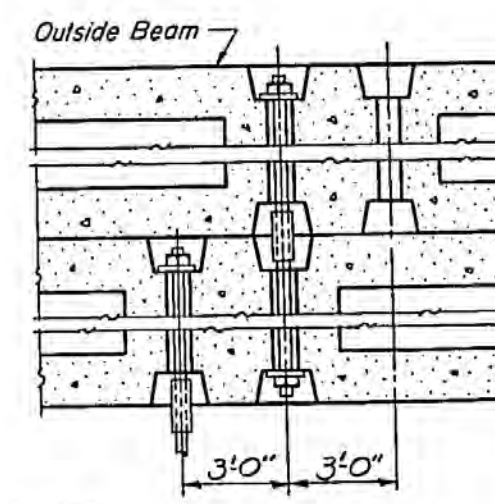
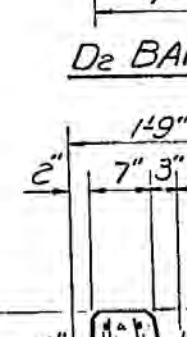
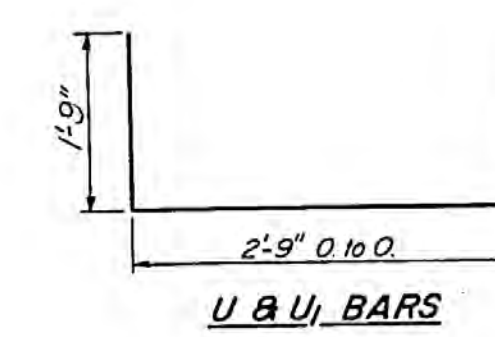
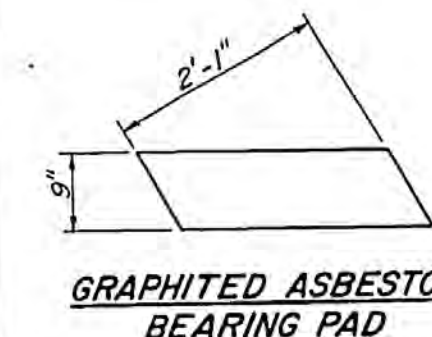
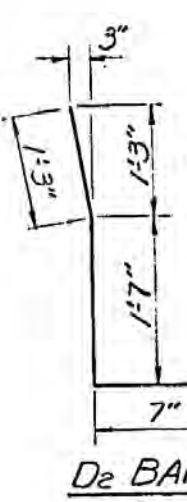
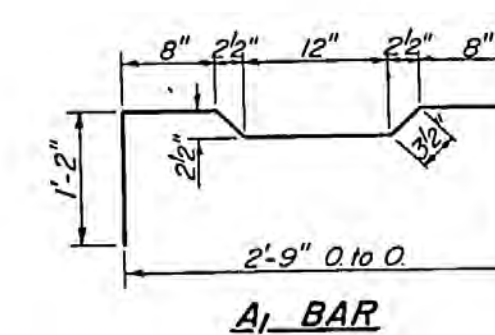
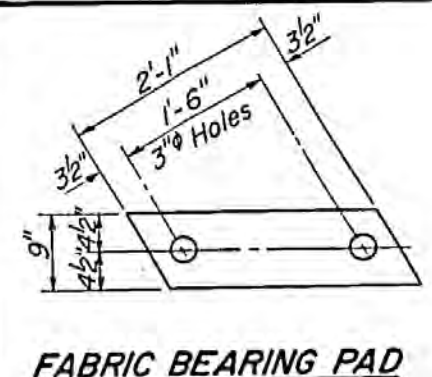
** Due to the resurfacing transition, the depth of Class I and Waterproofing of the South side varies from 4' to 4'.

DESIGNED <i>J.C. Smith</i>	EXAMINED <i>Carl E. Thompson</i>
CHECKED <i>J. J. Smith</i>	PASSED
DRAWN <i>R. D. Smith</i>	APPROVED
CHECKED <i>J. J. Smith</i>	

STAGE CONSTRUCTION DETAILS
F.A. RT. 885 SEC. 104BY
UNION COUNTY
STA. 161+0.00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104BY	104BY	ILLINOIS	146	95



NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be 7/16" and the nominal cross-sectional area shall be 0.115 sq. in. Lifting loops shall be 5/8" diameter, 6x25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 33,000 lbs. The 1/4" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. Longitudinal shear keys shall be packed with a very dry mix of 2-1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the sub-structure and the anchor dowels shall be grouted in place. Bars indicated thus 2x2-#5 etc. indicates 2 lines of bars with 2 lengths per line.

Cost of reinforcement and accessories cast into the beam, of bearing pads, of dowel rods and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b	8	#8	29'3"	
b ₁	8	#5	28'0"	
Precast Prestressed Concrete Deck Beams (27" Depth)		Sq. Ft.	12.73	
Class X Concrete		Cu. Yd.	8.1	
Reinforcement Bars		Pound	860	

For placement of bars b & b₁ see sheet #4.

SUPERSTRUCTURE
F.A. RT885SEC.104BY
UNION COUNTY
STA. 16+04.00

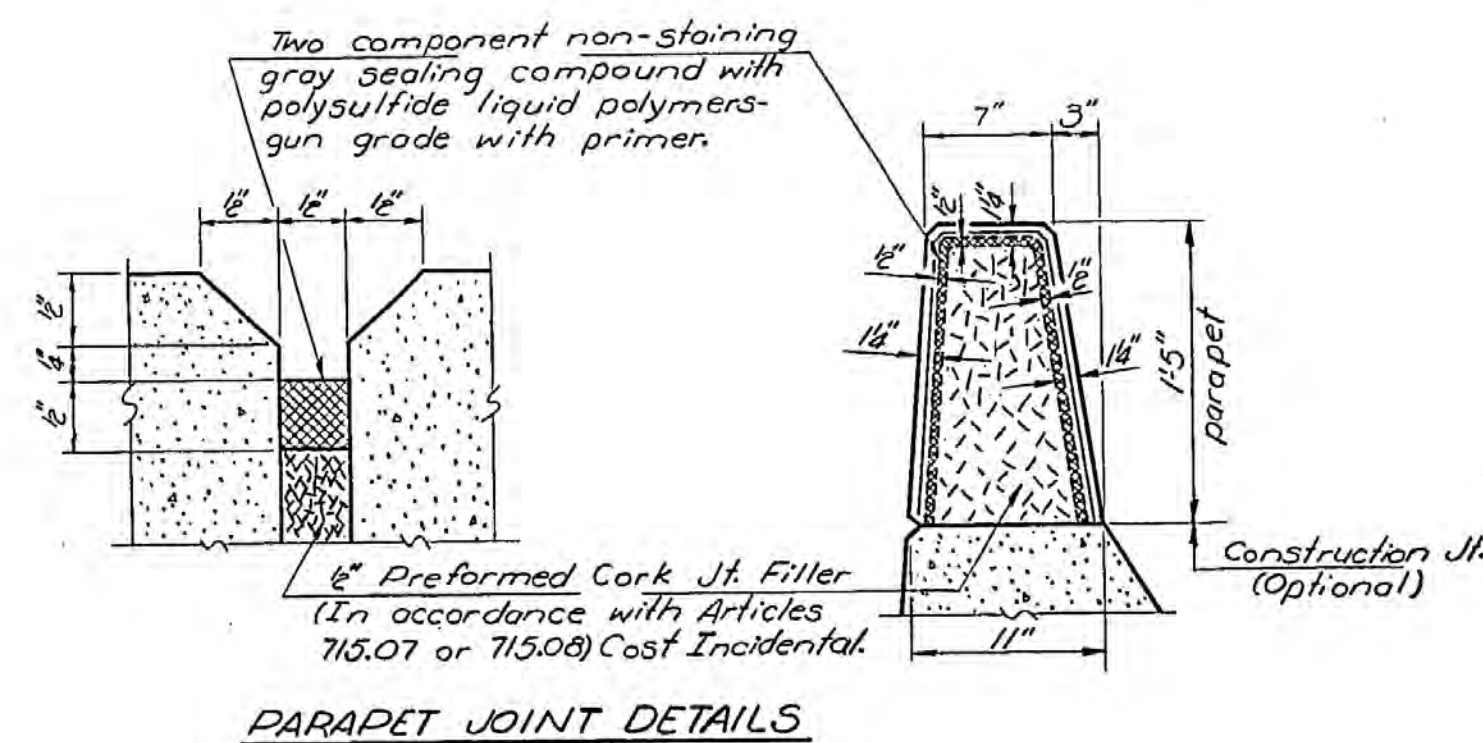
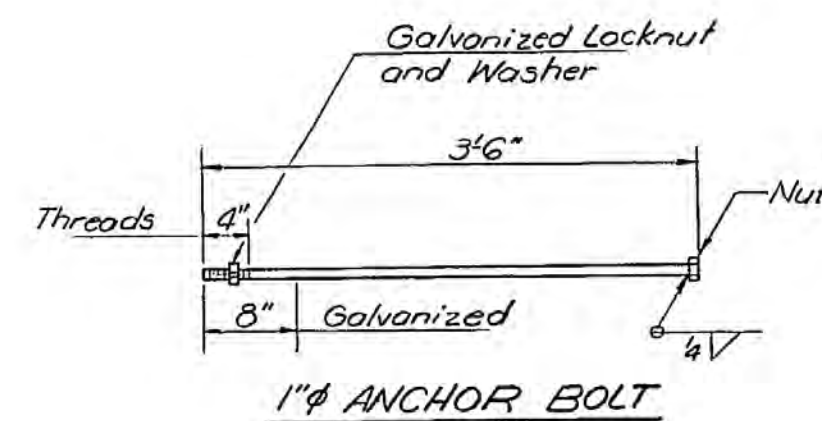
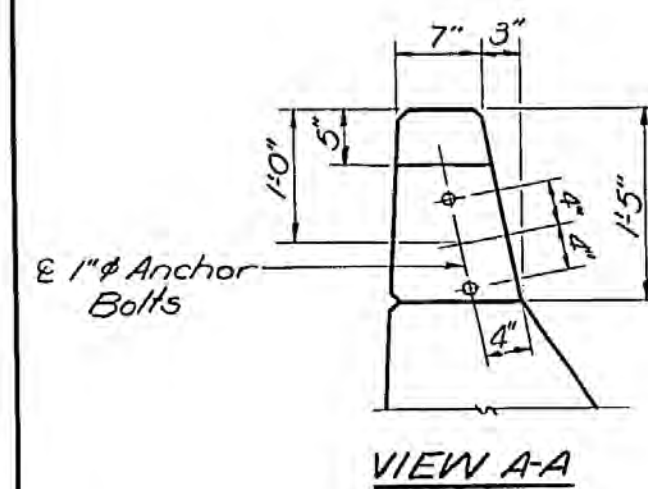
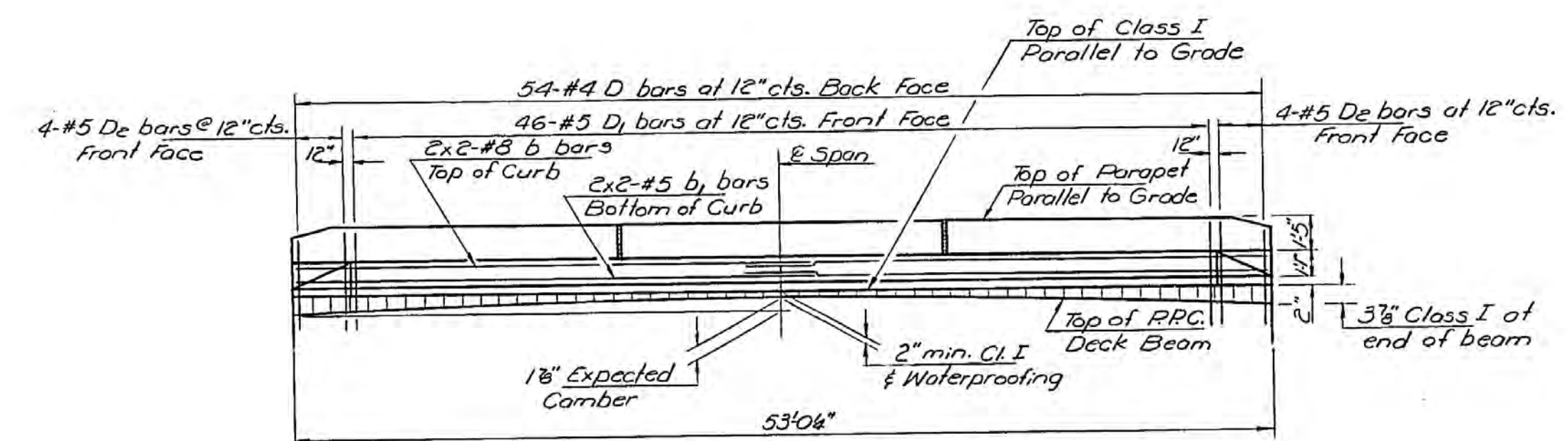
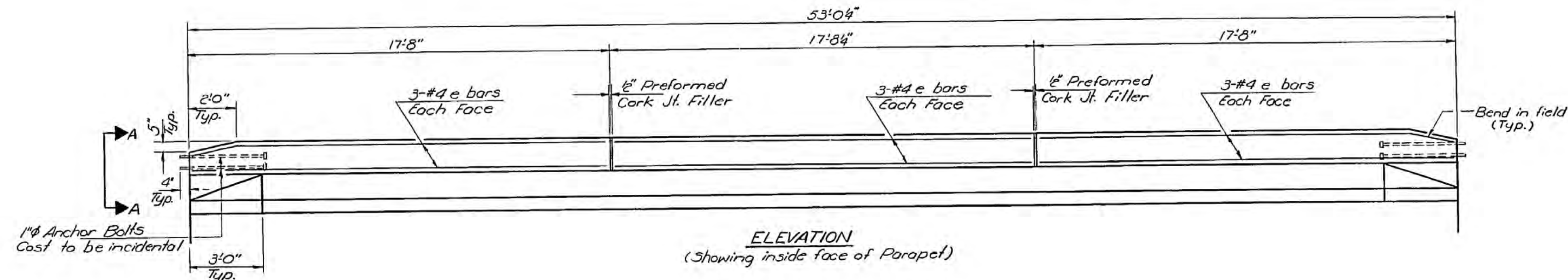
DESIGNED <i>W. J. Smith</i>	EXAMINED <i>W. J. Smith</i>
CHECKED <i>W. J. Smith</i>	PASSED <i>W. J. Smith</i>
DRAWN <i>R. Doty</i>	APPROVED <i>W. J. Smith</i>
CHECKED <i>W. J. Smith</i>	

PD-3-L 9-1-73

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
P.A. 885	104BY	Union	146	96
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

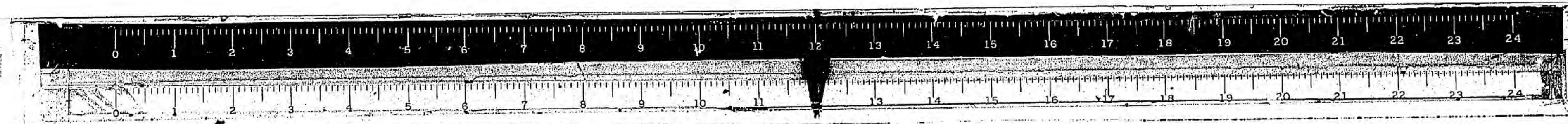
SHEET NO. 4
8 SHEETS



Bar	No.	Size	Length	Shape
e	36	#4	17'-6"	
Class X Concrete			Cu. Yd.	4.1
Reinforcement Bars			Pound	420

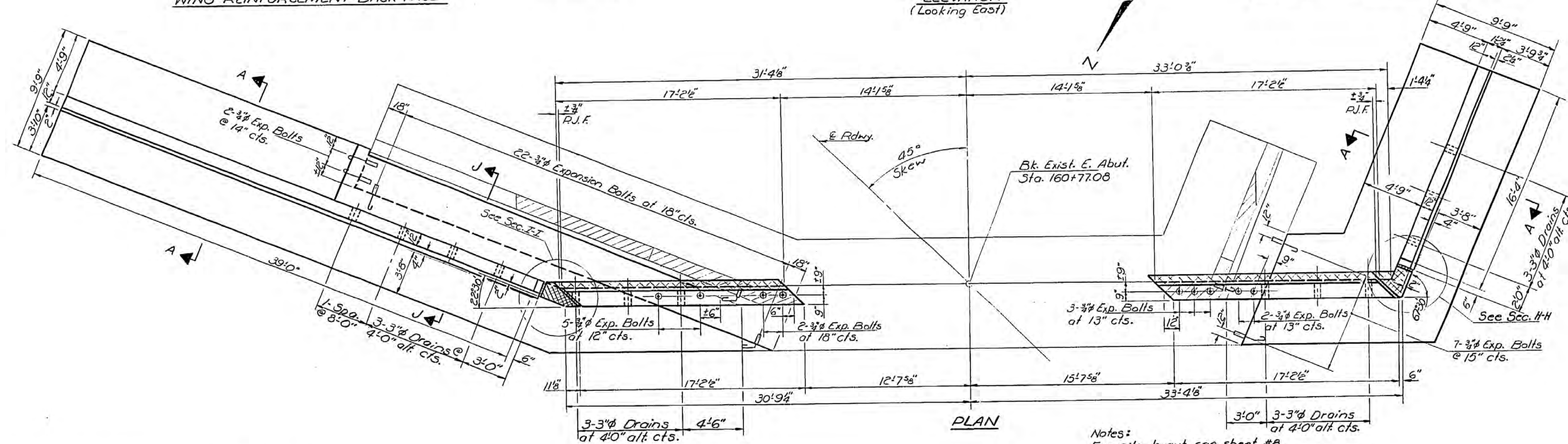
DESIGNED <i>J.L. Swartz</i>	EXAMINED <i>B-27 1976</i>
CHECKED <i>Joel F. Jacobs</i>	PASSED <i>Carl E. Thompson</i>
DRAWN <i>R. Doty</i>	APPROVED <i>DIRECTOR OF DESIGN</i>
CHECKED <i>J.F.J.</i>	DIRECTOR OF HIGHWAYS

PARAPET DETAILS
P.A. 885 SEC. 104BY
UNION COUNTY
STA. 16+04.00



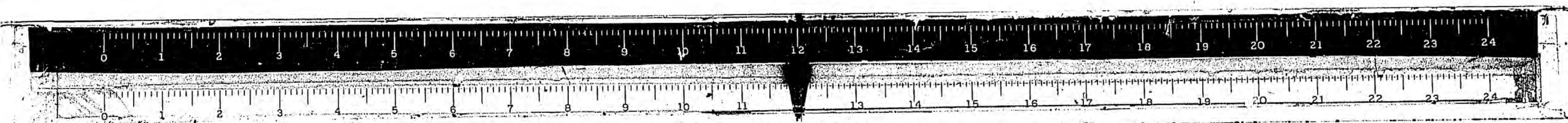
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R. R. 1, P. A. 885	104BY	Union	146	97
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT.	

SHEET NO. 5
8 SHEETS



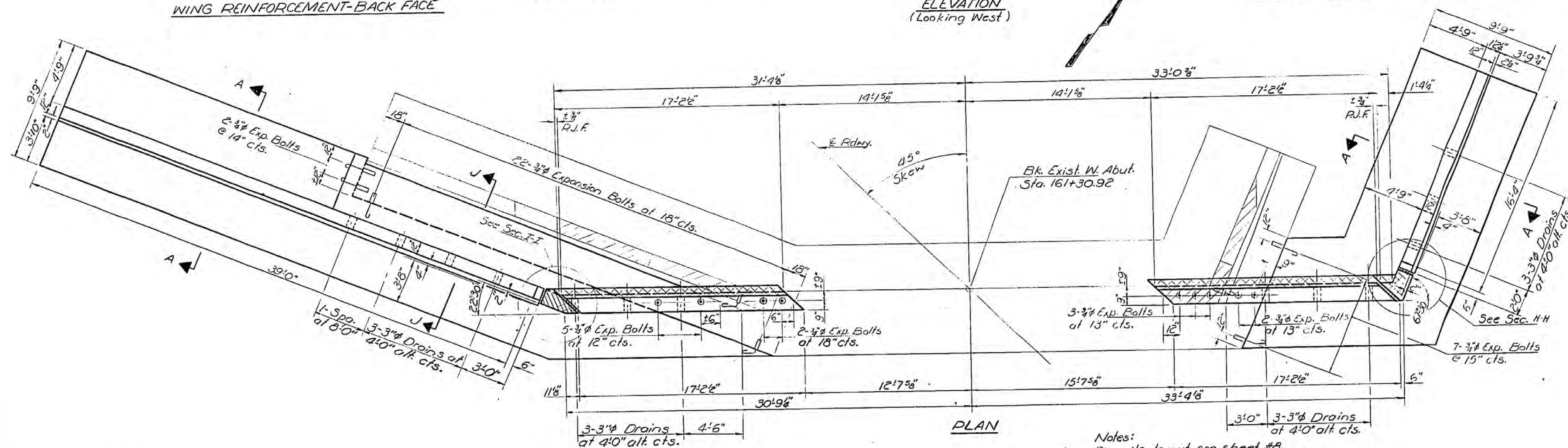
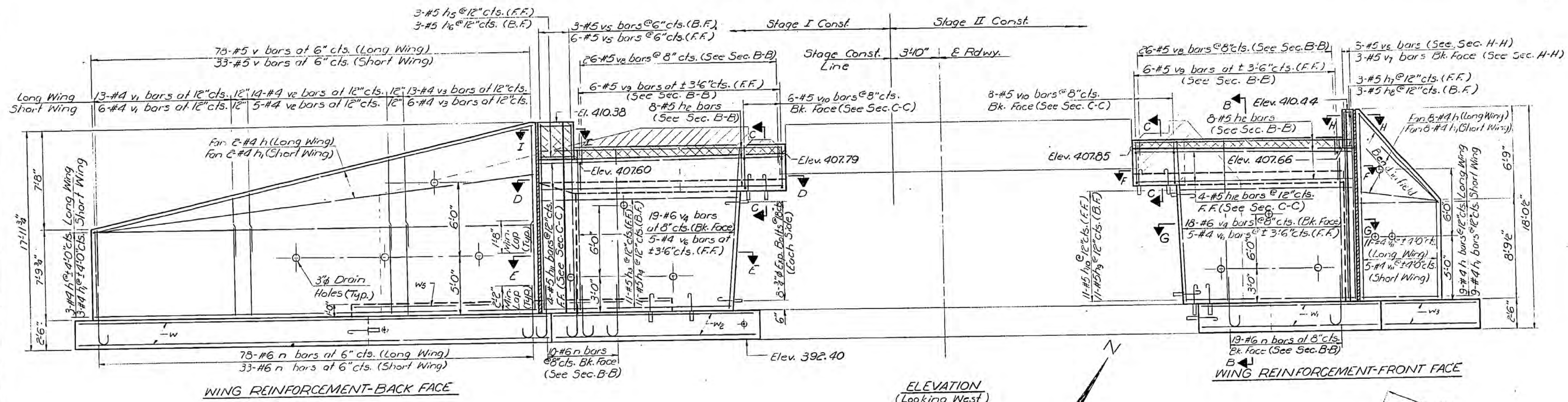
Notes:
For pile layout see sheet #8.
Hatched areas indicate Concrete Removal.
Cross hatched areas are to be poured after beams are in place.
Expansion bolts shall be anchored in sound concrete.
Reinforcement bars extending into removed areas shall be cleaned and incorporated into the new construction.
Reinforcement bars shall conform to the requirements of AASHTO M31, Grade 60.
For Sections A-A thru J-J see sheet #7.

EAST ABUTMENT
F.A. RT.885 SEC.104BY
UNION COUNTY
STA.161+04.00



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 6
U.S. 1	104BY	Union	146	98	8 SHEETS
F.A. 885					
FED. ROAD DIST. NO. 7					



DESIGNED *J.C. Smith*
CHECKED *Donald F. Jacobs*
DRAWN *H. Donly*
CHECKED *J.F.J.*

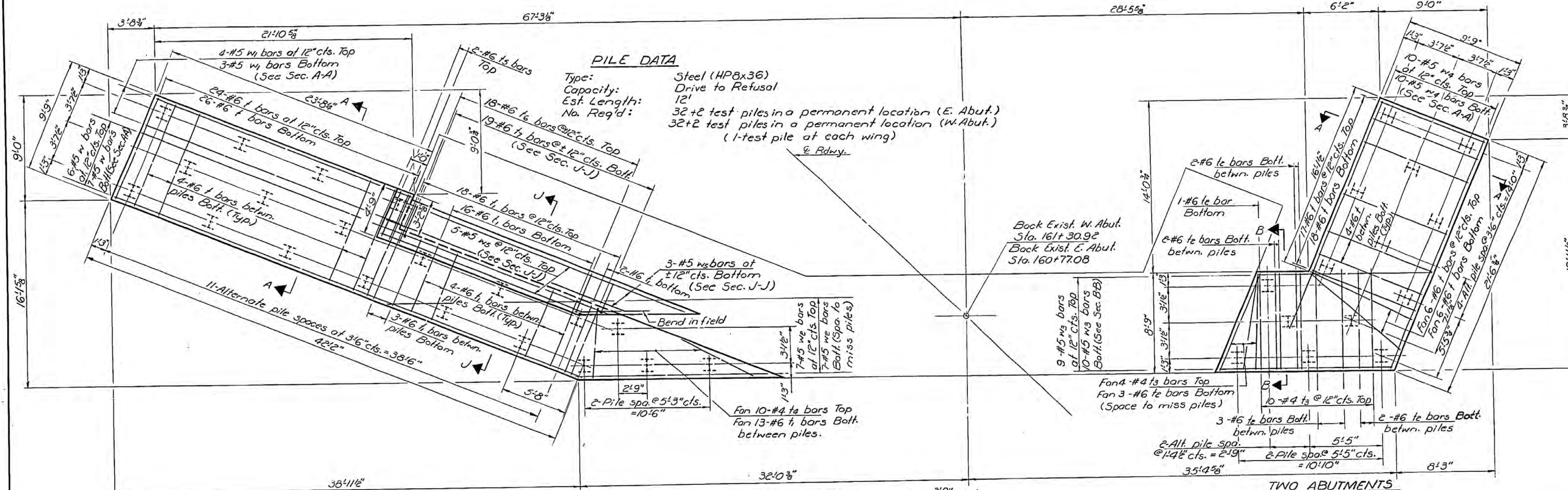
EXAMINED *Carl E. Thumma*
PASSED
APPROVED

Notes:
For pile layout see sheet #8.
Hatched areas indicate Concrete Removal.
Cross hatched areas are to be poured after beams are in place.
Expansion bolts shall be anchored in sound concrete.
Reinforcement bars extending into removed areas shall be cleaned and incorporated into the new construction.
Reinforcement bars shall conform to the requirements of AASHTO M31, Grade 60.
For Sections A-A thru J-J see sheet #7.

WEST ABUTMENT
F.A. 885 SEC. 104BY
UNION COUNTY
STA. 1640+00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
885	104BY	Union	100	8 SHEETS
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



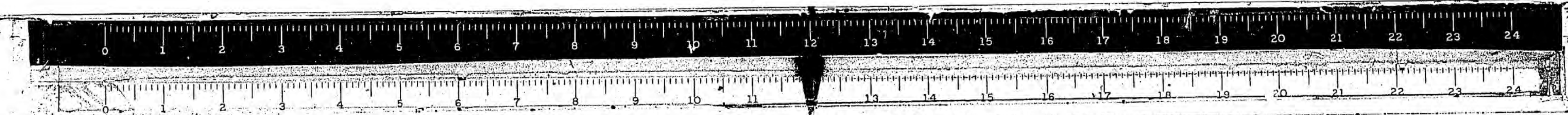
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	44	#4	39'3"		t6	36	#6	4'0"	
h1	44	#4	16'7"		t7	38	#6	5'0"	
h2	32	#5	17'9"		v	22	#5	6'6"	
h3	22	#5	16'0"		v1	34	#4	6'3"	
h4	22	#5	11'11"		v2	38	#4	8'6"	
h5	6	#5	3'10"		v3	34	#4	10'9"	
h6	6	#5	2'11"		v4	74	#6	13'5"	
h7	6	#5	5'11"		v5	34	#5	15'5"	
h8	6	#5	2'6"		v6	20	#4	12'7"	
h9	22	#5	14'0"		v7	6	#5	15'4"	
h10	22	#5	16'6"		v8	104	#5	1'9"	
h11	8	#5	20'3"		v9	24	#5	4'6"	
h12	8	#5	19'9"		v10	28	#5	4'9"	
n	280	#6	5'8"		v11	32	#4	15'4"	
t	194	#6	9'6"		n	26	#5	42'0"	
t1	104	#6	6'3"		w1	14	#5	23'6"	
t2	26	#6	8'6"		w2	28	#5	15'2"	
t3	28	#4	8'6"		w3	38	#5	16'0"	
t4	20	#4	6'3"		w4	40	#5	2'13"	
t5	4	#6	4'6"		w5	16	#5	26'6"	
Class X Concrete								Cu. Yd.	240.6
Reinforcement Bars								Pound	20,290
Concrete Removal								Cu. Yd.	10
Expansion Bolts (3/4")								Each	118
Steel Piles (HP8x36)								Lin. Ft.	768
Test Piles Steel (HP8x36)								Each	4

DESIGNED: Y. S. S. S. S.
CHECKED: J. J. J. J. J.
DRAWN: R. D. D. D. D.
CHECKED: J. J. J. J. J.

EXAMINED: Carl E. J. J. J.
PASSED: J. J. J. J. J.
APPROVED: J. J. J. J. J.
DIRECTOR OF HIGHWAYS

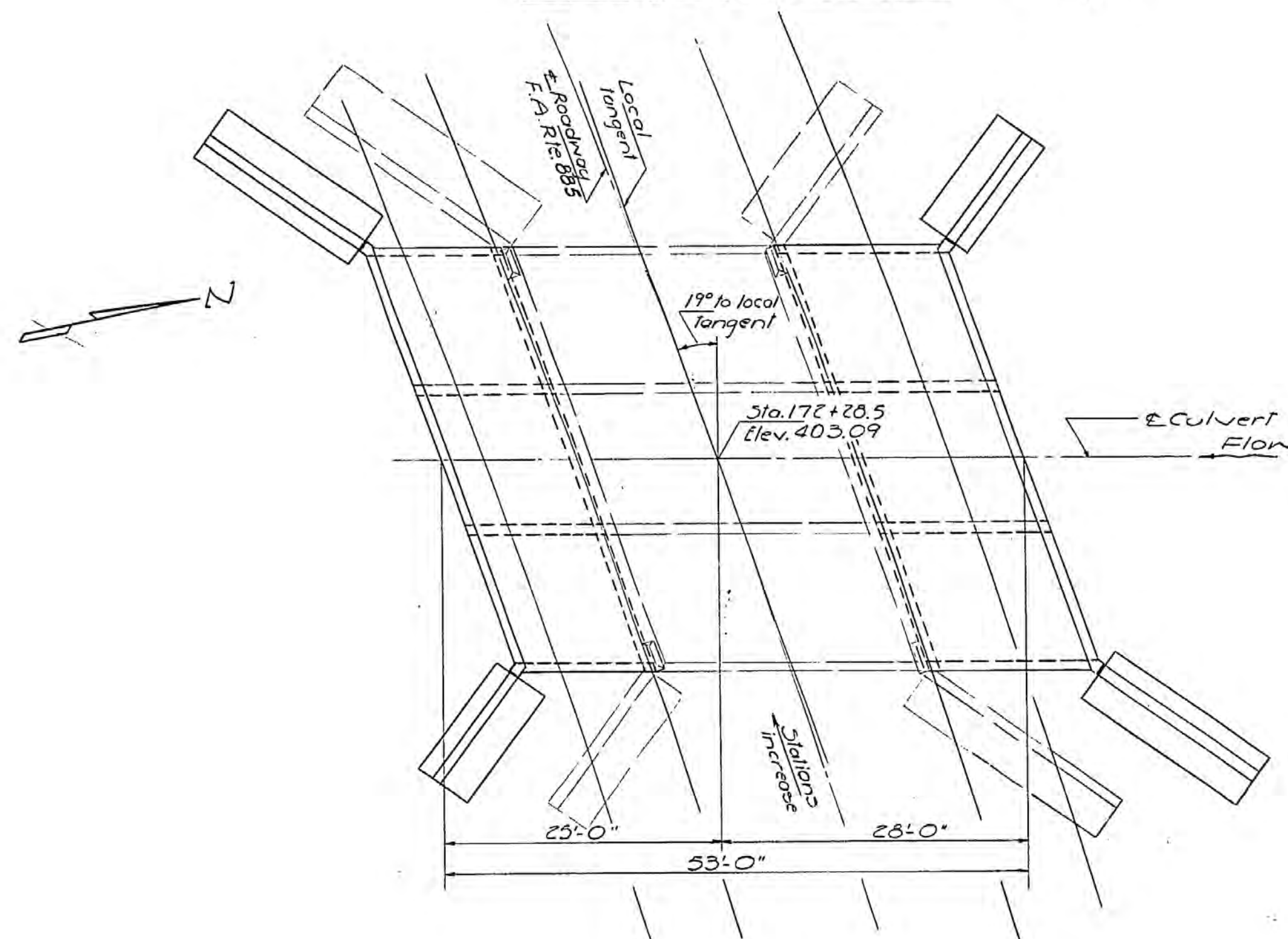
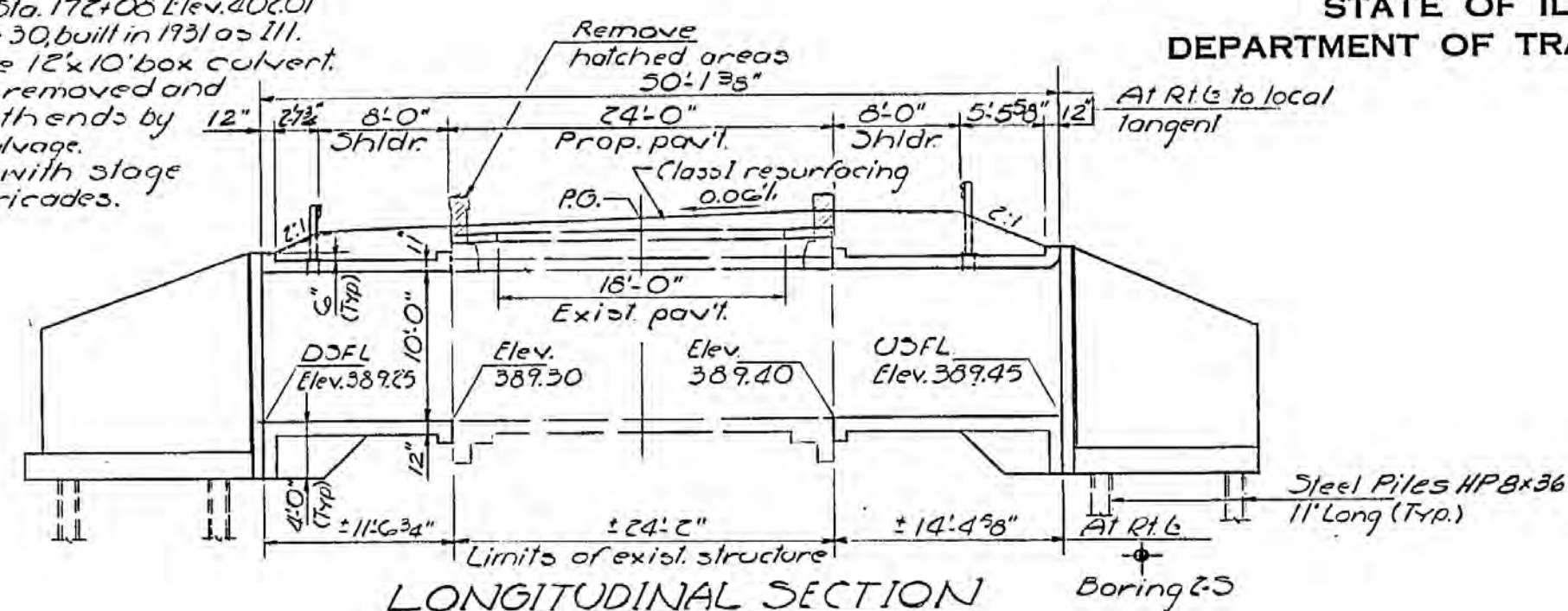
Note:
For Sections A-A, B-B & J-J see sheet #7.

EAST AND WEST
ABUTMENT DETAILS
F.A. RT. 885 SEC. 104BY
UNION COUNTY
STA. 161+0400



Bench Mark - #11 Square cut S.E. corner of S.E. wingwall of culvert, 18' LI of Sta. 172+00 Elev. 402.01
 Exst. Struct. - #091+003 Sta. 172+30, built in 1931 as 111.
 Rte. 146, Section 104A. Triple 12'x10' box culvert.
 The conc. handrail is to be removed and structure extended on both ends by 12'.
 Bridge Contractor, No Salvage.
 Traffic shall be maintained with stage construction utilizing barricades.

Design HWE 400.00
 100-Year HWE 401.30
 All Time HWE 400.40

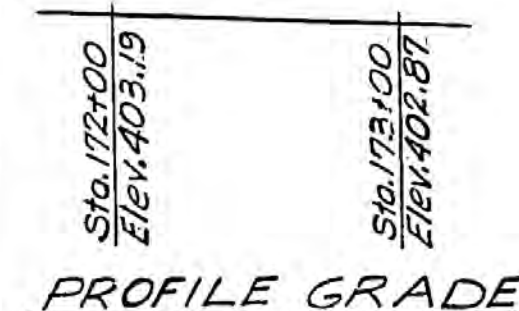


PLAN

Boring 13

DESIGNED *Prakash S. G.*
 CHECKED *Steve A. Meyer*
 DRAWN *L.S.D.*
 CHECKED *SMH*

EXAMINED *Carl E. Hammond*
 PASSED
 APPROVED
 DIRECTOR OF HIGHWAYS

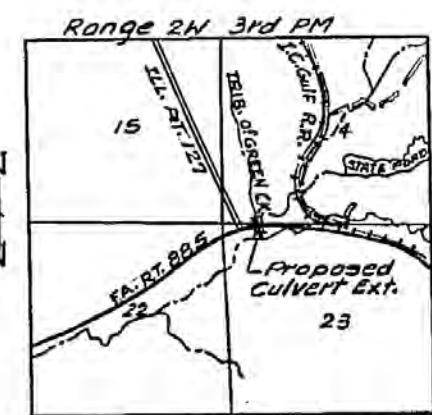


LOAD FACTOR DESIGN STRESSES

$f_c = 3500$ psi
 $f_y = 60,000$ psi (Grade 60)
 $n = 8.5$

Design Specifications
 1973 AASHTO, 14 & 15 Interims.

DESIGN LOADING HSC0-44



LOCATION SKETCH

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

STATION 172+28.50
 REBUILT BY
 STATE OF ILLINOIS
 F.A. 885 SEC. 104A-BY
 F.A. PROJ. TQF-F-885(1)
 LOADING H520

NAME PLATE
 (See Std. 2113)

CURVE DATA

PI Sta. 176+95.47
 $\Delta = 43^\circ 44' 00''$
 $D = 2^\circ 30'$
 $R = 2291.83'$
 $T = 919.76'$
 $L = 1749.33'$
 $E = 177.67'$
 PC Sta. 167+73.71
 PT Sta. 185+55.04 (bkt. Sta. 163+01.50 (ah.)
 $SE = 0.0611$
 SE Attained Sta. 166+59.04 to Sta. 168+34.04
 Sta. 184+66.71 to Sta. 162+178.7 (ah.)

WATERWAY INFORMATION

Drainage Area ----- 2.75 Sq. Miles
 Design Discharge (50 Yr.) ----- 2686 cfs.
 Existing Opening (below 50 Yr. HWE) ----- 360 Sq. Ft.
 Required Opening (below 50 Yr. HWE) ----- 360 Sq. Ft.
 Proposed Opening (below 50 Yr. HWE) ----- 360 Sq. Ft.
 Created Head for Design Flood ----- 1.17 Ft.
 100-Year Discharge ----- 3425 cfs.
 Created Head for 100-Year Flood ----- 1.9 Ft.

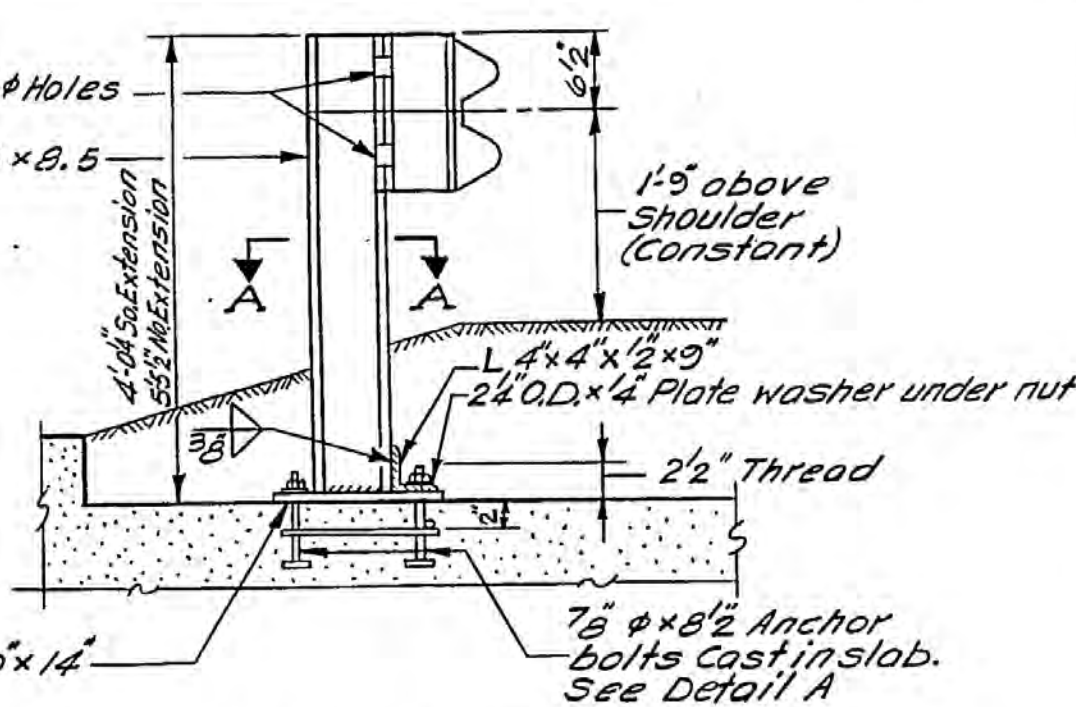
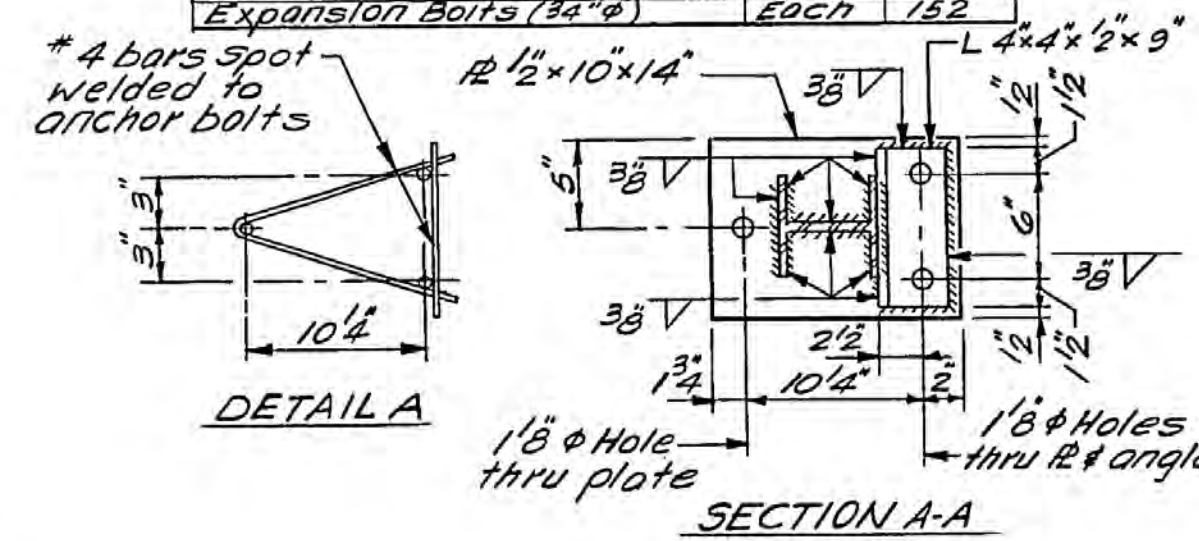
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
104A-BY	Union	146	101	3 SHEETS

GENERAL NOTES

The Contractor shall drive one steel test pile in a permanent location at long wing of the south extension as directed by the Engineer before ordering the remainder of piles.
 It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.
 See Special Provisions for Boring Data.

TOTAL BILL OF MATERIAL

ITEM	Unit	TOTAL
Steel Piles HP8x36	Lin. Ft.	209
Test Piles Steel HP8x36	Each	1
Class X Concrete	Cu. Yds.	185.8
Reinforcement Bars	Lbs.	24460
Name Plates	Each	7
Concrete Removal	Cu. Yds.	7
Expansion Bolts (1/2" x 14")	Each	152



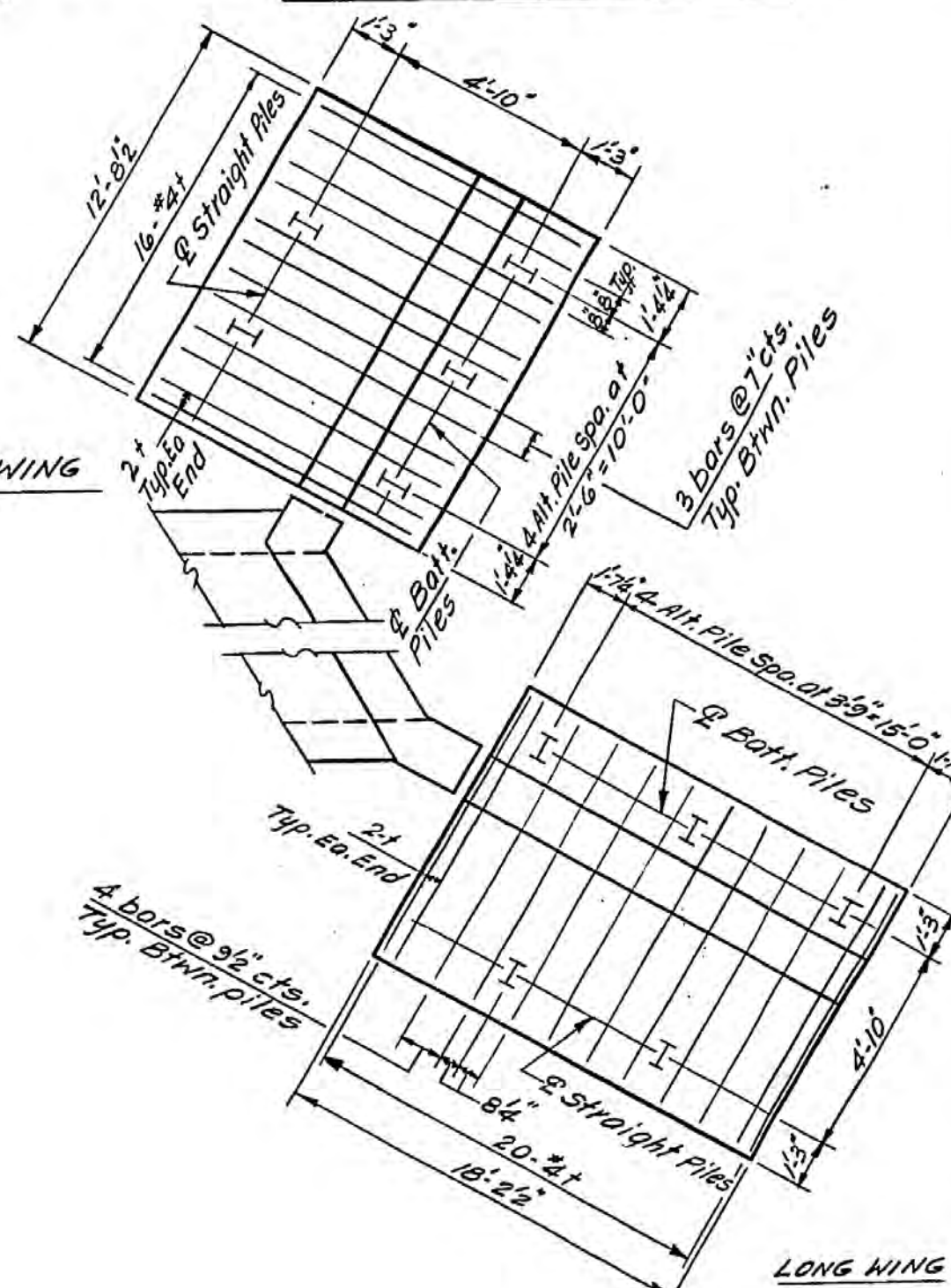
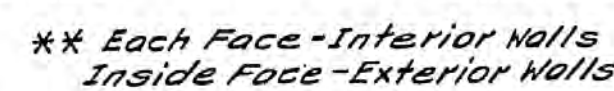
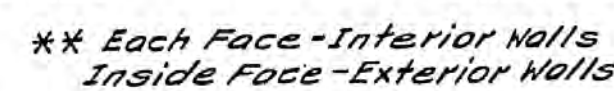
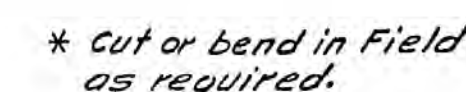
DETAIL OF SPECIAL GUARDRAIL POST

Posts shall be spaced at 16'-3" cts. See Std. 2230-10 for details of rail element. Location of posts to be determined in the field by the Engineer. Cost of anchorage & posts incidental to steel plate beam guardrail. All posts and accessories shall be galvanized in accordance with AASHTO M 111.

PROJECT TQF-F-885(1)
 GENERAL PLAN & ELEVATION
 TRIBUTARY OF GREEN CREEK
 F.A. ROUTE 885
 SECTION 104A-BY
 UNION COUNTY
 STATION 172+28.5

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
E. S. 1, F. & 885	104A-BY	Union	146	102
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 2
3 SHEETS



DETAIL "A"
(Showing Spacing of Piles & Bott. & Bars in Wing Ftg.)

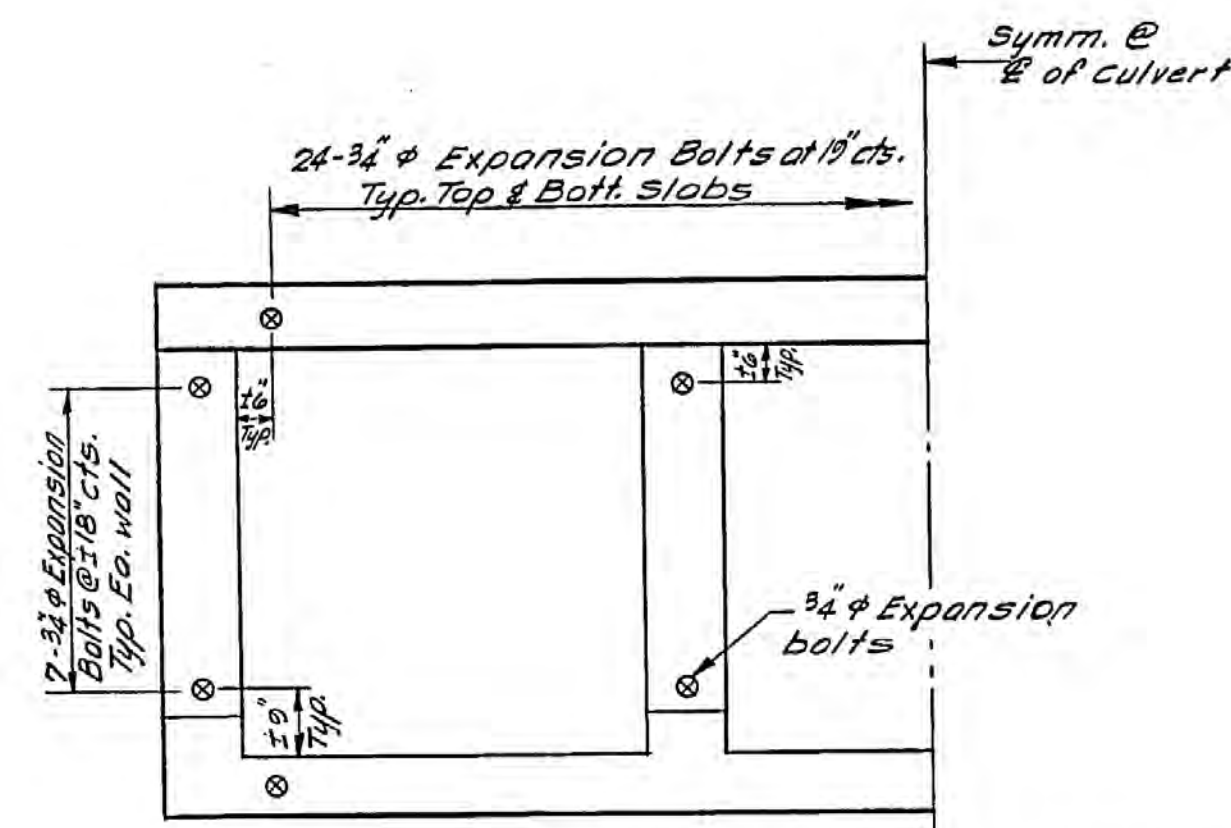
Work this sheet with sheet #3
Hatched areas to be removed.

CULVERT DETAILS
F.A. RT.885 SEC.104 A-BY
UNION COUNTY
STA. 172+28.5

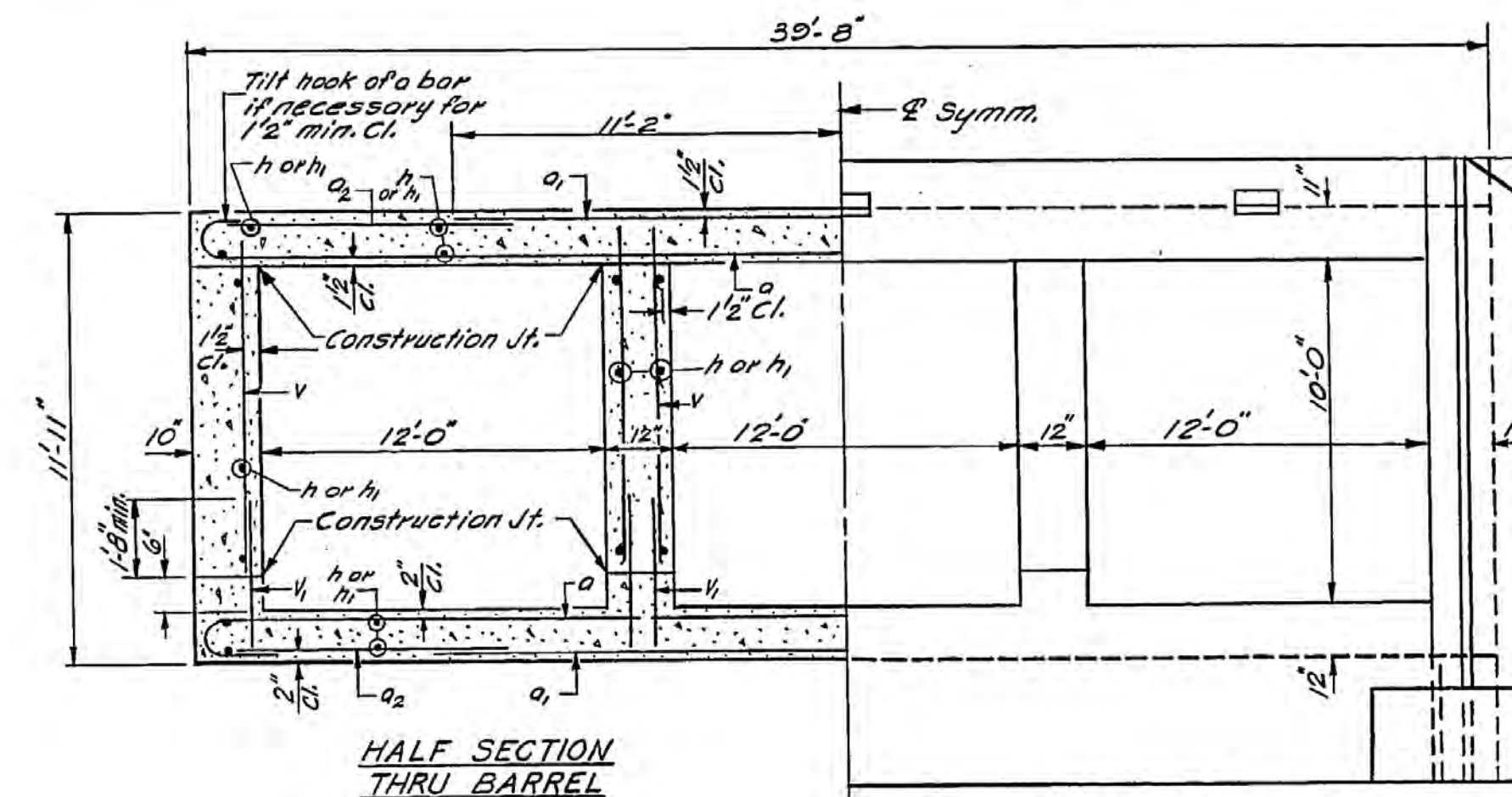
DESIGNED	<i>Paulsen 3. led</i>	EXAMINED	<i>Robert 26</i> 19 <i>40</i> <i>Earl E. Thompson</i>
CHECKED	<i>Stone G. Meyer</i>	PASSED	<i>SHRINKER OF BRIDGE AND TRAFFIC STRUCTURE</i>
DRAWN	<i>LEN</i>	APPROVED	<i>ENGINEER OF DESIGN</i>
CHECKED	<i>SAM</i>		<i>DIRECTOR OF HIGHWAYS</i>

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
RT. 885	104A-BY	Union	146	103	3 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



CROSS SECTION THRU BARREL
(Showing Location of Expansion Bolts)



HALF SECTION
THRU BARREL

HALF END ELEVATION

SOUTH EXTENSION

Bar	Location	No.
h	Top of top slab	39
h	Bottom of top slab	39
h	Top of bottom slab	39
h	Bottom of bottom slab	39
h	Each outside wall	15
h	Each inside wall	30

1 Length each required

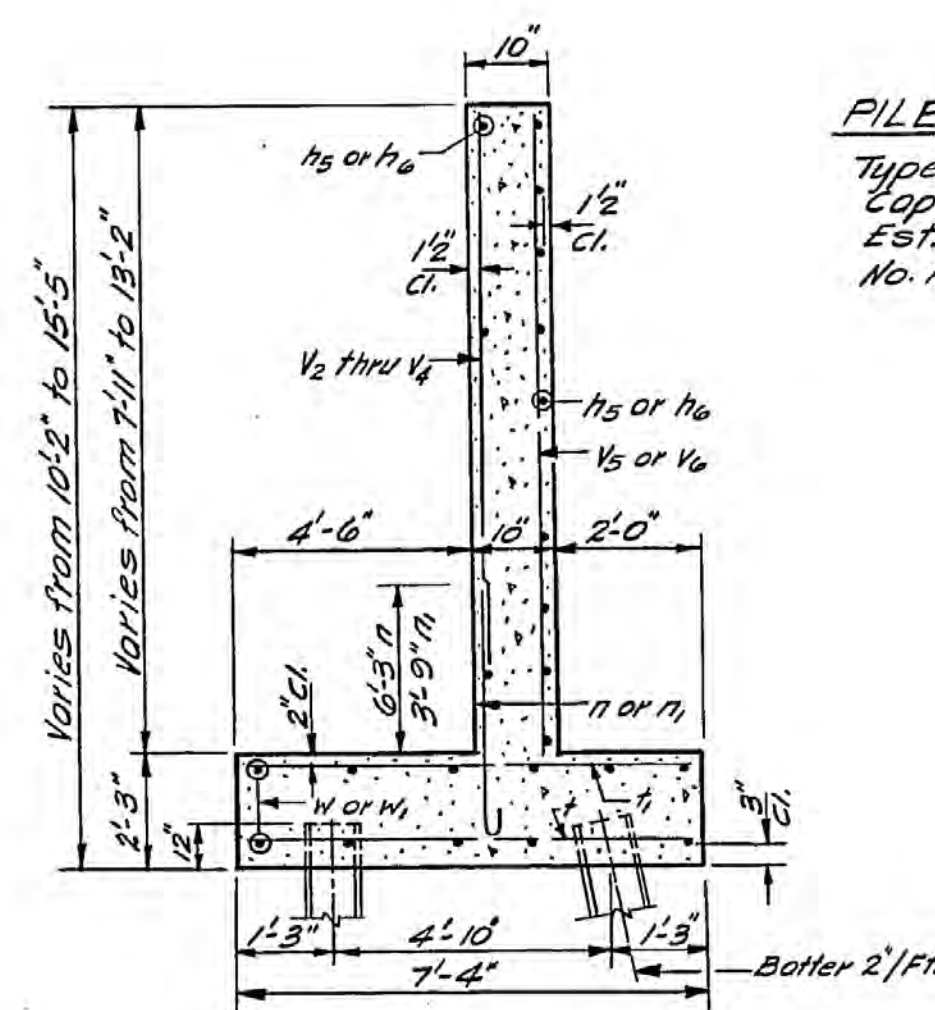
NORTH EXTENSION

Bar	Location	No.
h	Top of top slab	39
h	Bottom of top slab	39
h	Top of bottom slab	39
h	Bottom of bottom slab	39
h	Each outside wall	15
h	Each inside wall	30

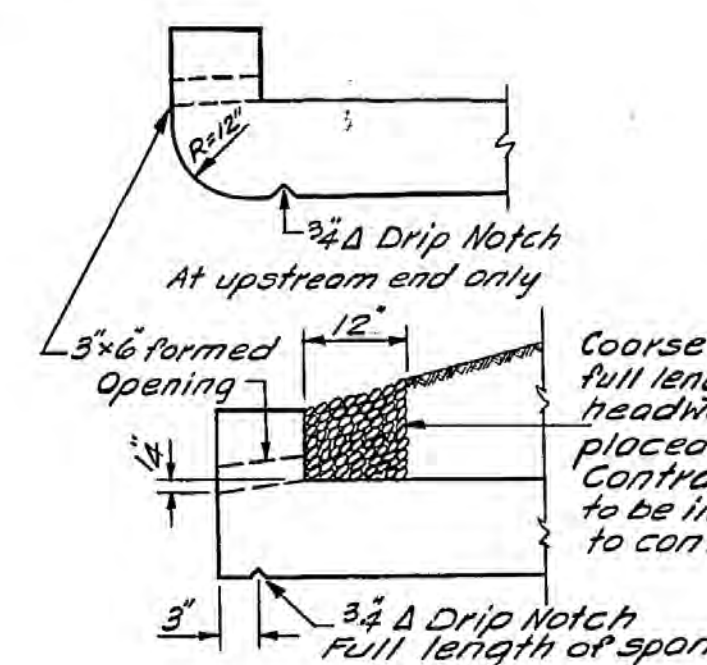
1 Length each required

PILE DATA

Type - Steel HPB x 36
Capacity - Drive to refusal
Est. length - 11 Ft. long
No. Req'd. - 20 including one test pile.



SECTION A-A

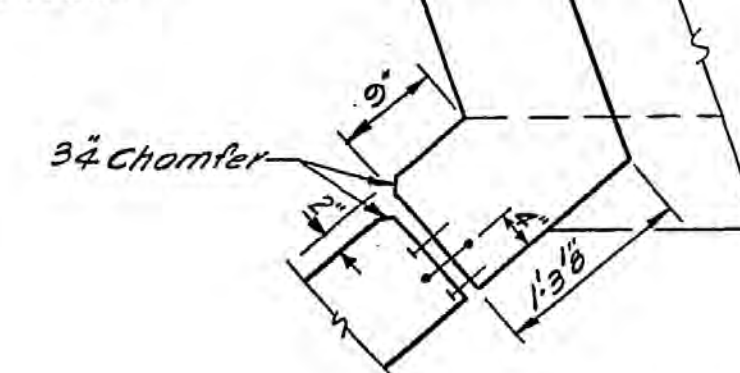


DRAIN DETAIL

6" hollow bulb type
nonmetallic water seal
(6" from top of wall to
top of footing)

1/2" Prem. Jt. Filler

Concrete nails
(Flat Hd. C.S.) 1" long
12 cts. vertical.



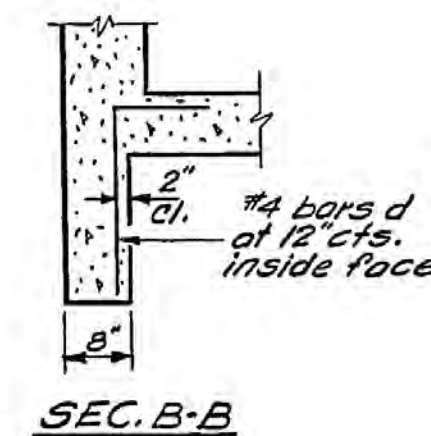
CORNER DETAIL

BILL OF MATERIAL

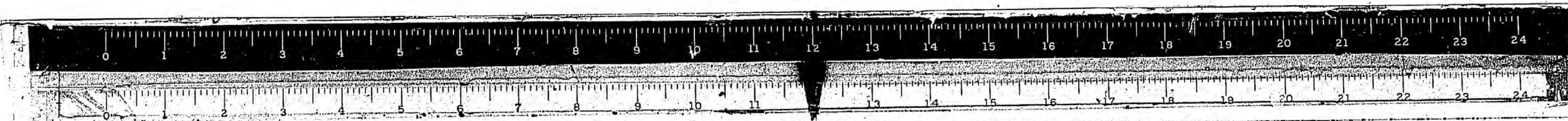
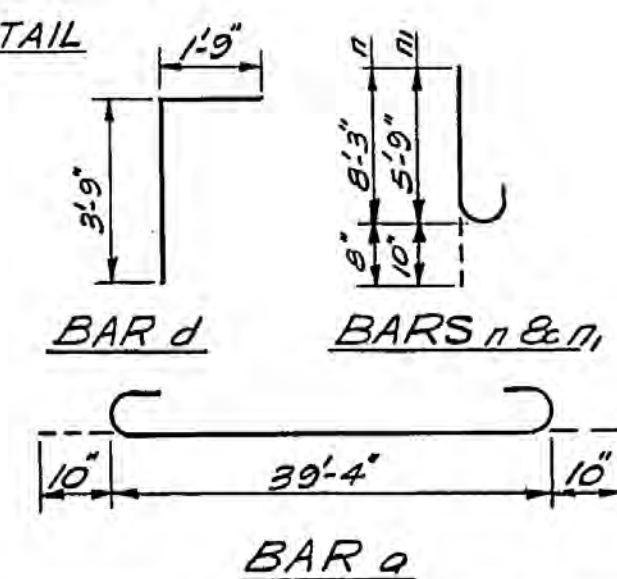
Bar	No.	Size	Length	Bar	No.	Size	Length
a	36	#7	41'-0"	t	72	#4	7'-0"
a1	38	#6	22'-4"	t1	78	#5	7'-0"
a2	14	#4	9'-3"	v	174	#5	10'-3"
				v1	174	#5	2'-6"
d	108	#4	5'-6"	v2	28	#4	8'-3"
h	246	#5	11'-9"	v3	24	#4	6'-0"
h1	246	#5	14'-9"	v4	24	#4	4'-6"
h2	24	#9	41'-6"	v5	18	#4	12'-9"
h3	12	#8	40'-9"	v6	10	#4	9'-6"
h4	12	#6	41'-6"	w	24	#5	17'-9"
h5	42	#4	17'-9"	w1	24	#5	12'-3"
h6	42	#4	12'-3"				
n	84	#6	8'-11"				
n1	72	#7	6'-7"				
Class X Concrete				Cu.Yds. 185.8			
Reinforcement Bars				Lbs. 24460			
Concrete Removal				Cu.Yds. 7			
Expansion Bolts (3/4")				Each 152			
Steel Piles HPB x 36				Lin.Ft. 209			
Test Piles-Steel HPB x 36				Each 1			

CULVERT DETAILS
F.A. RT. 885 SEC. 104A-BY
UNION COUNTY
STA. 172+28.5

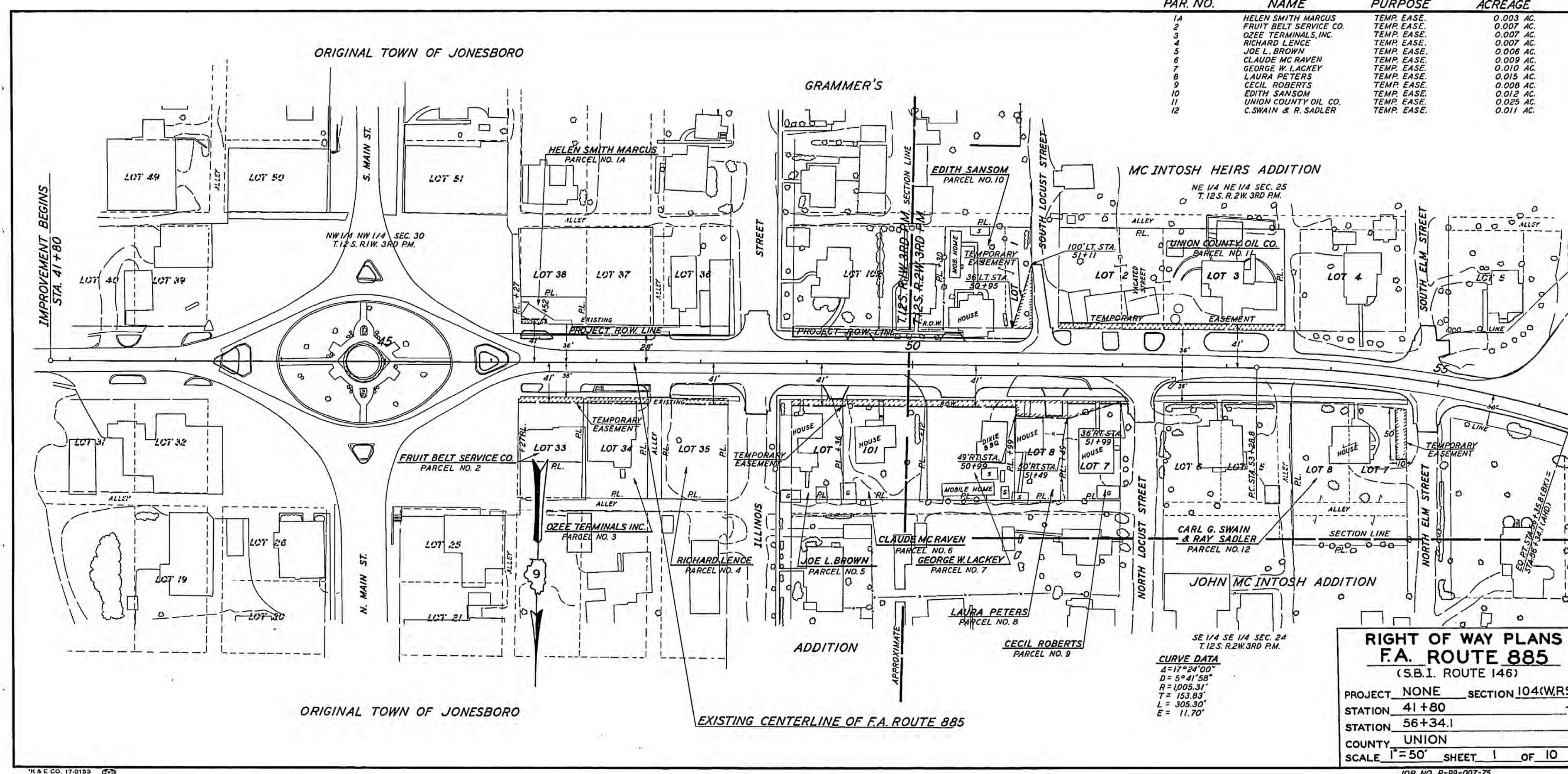
DESIGNED <i>Robert S. W.</i>	EXAMINED <i>Robert S. W.</i>	1976
CHECKED <i>Steve P. W.</i>	PASSED	
DRAWN <i>Leona Heeren</i>	APPROVED	
CHECKED <i>SM</i>		



SEC. B-B

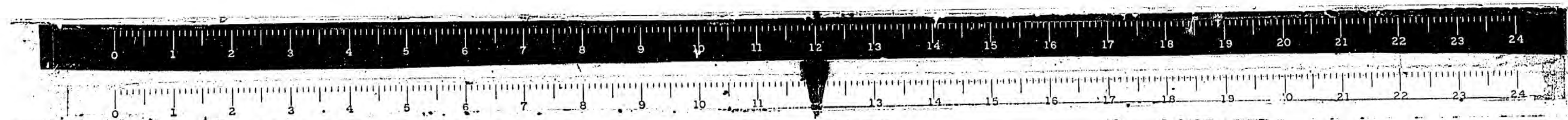


PAR. NO.	NAME	PURPOSE	ACREAGE
1	HELEN SMITH MARCUS	TEMP. EASE.	0.003 AC.
5	FRUIT BELT SERVICE CO.	TEMP. EASE.	0.007 AC.
3	OZZE TERMINALS, INC.	TEMP. EASE.	0.007 AC.
2	RICHARD LENCE	TEMP. EASE.	0.007 AC.
4	JOE L. BROWN	TEMP. EASE.	0.006 AC.
6	CLAUDE MC RAVEN	TEMP. EASE.	0.009 AC.
7	GEORGE W. LACEY	TEMP. EASE.	0.010 AC.
8	LAVRA PETERS	TEMP. EASE.	0.015 AC.
9	CECIL ROBERTS	TEMP. EASE.	0.008 AC.
10	EDITH SANSON	TEMP. EASE.	0.012 AC.
11	UNION COUNTY OIL	TEMP. EASE.	0.025 AC.
12	SWAN, A. & SADDLER	TEMP. EASE.	0.011 AC.



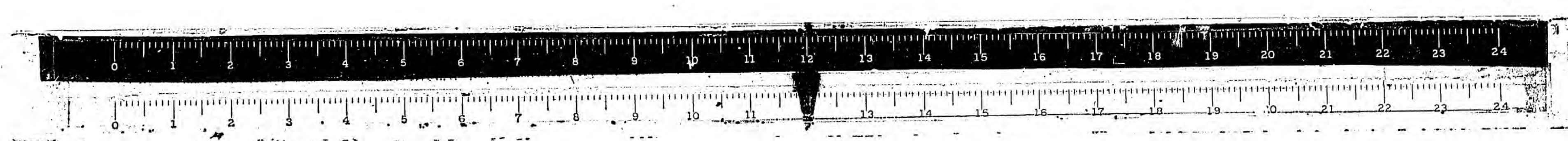
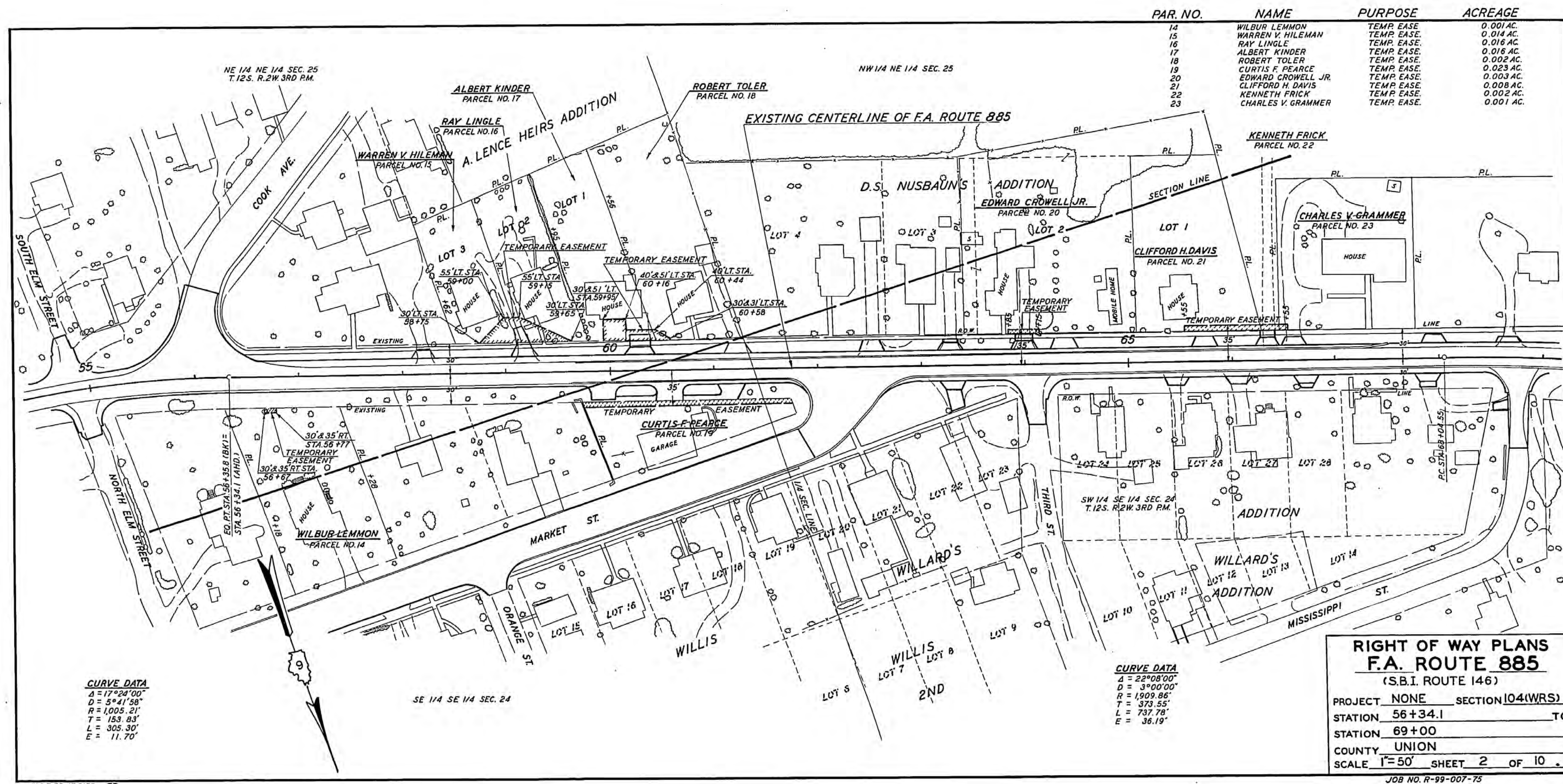
REVISOR BY D.J. WILLIAMS
DATE OCTOBER 15, 1976

DRAWN BY D.J. WILLIAMS
DATE JUNE 18, 1976



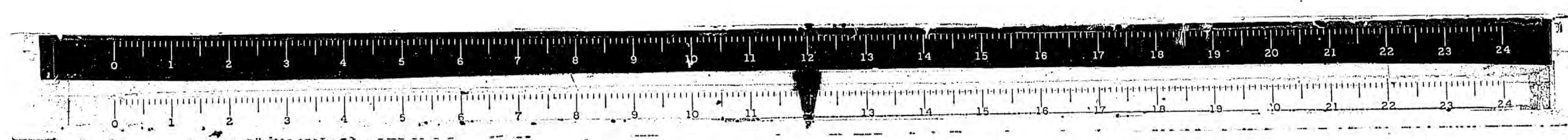
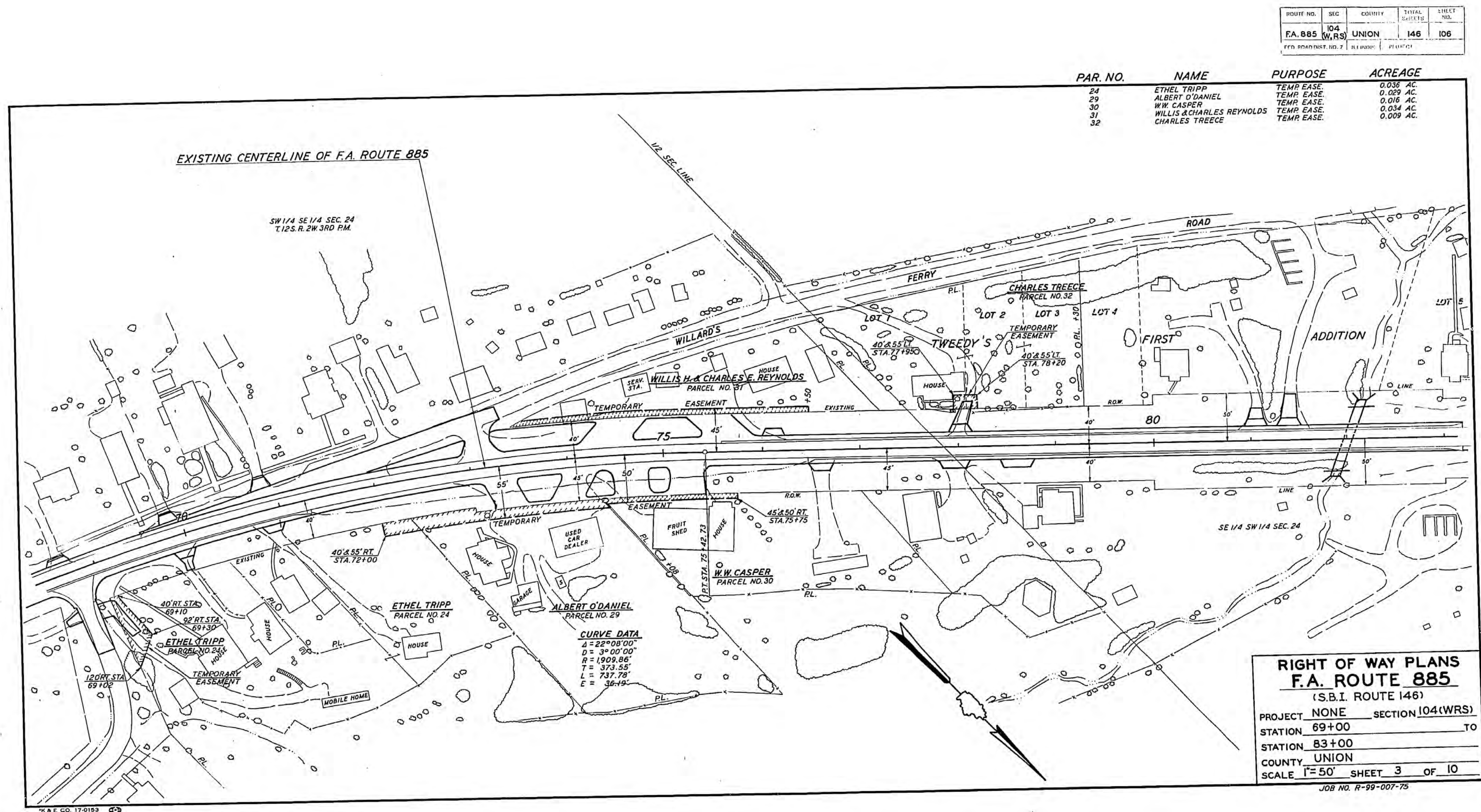
REVISED BY D.J. WILLIAMS
DATE OCTOBER 15, 1976

DRAWN BY D.J. WILLIAMS
DATE JUNE 24, 1976



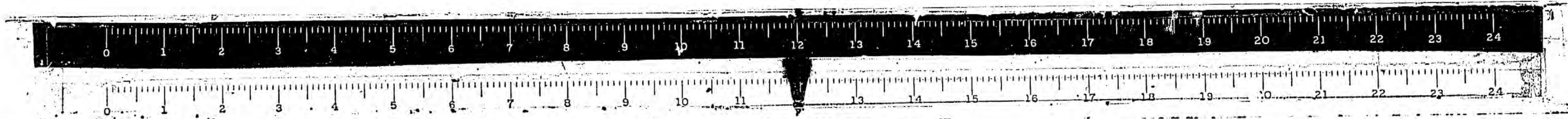
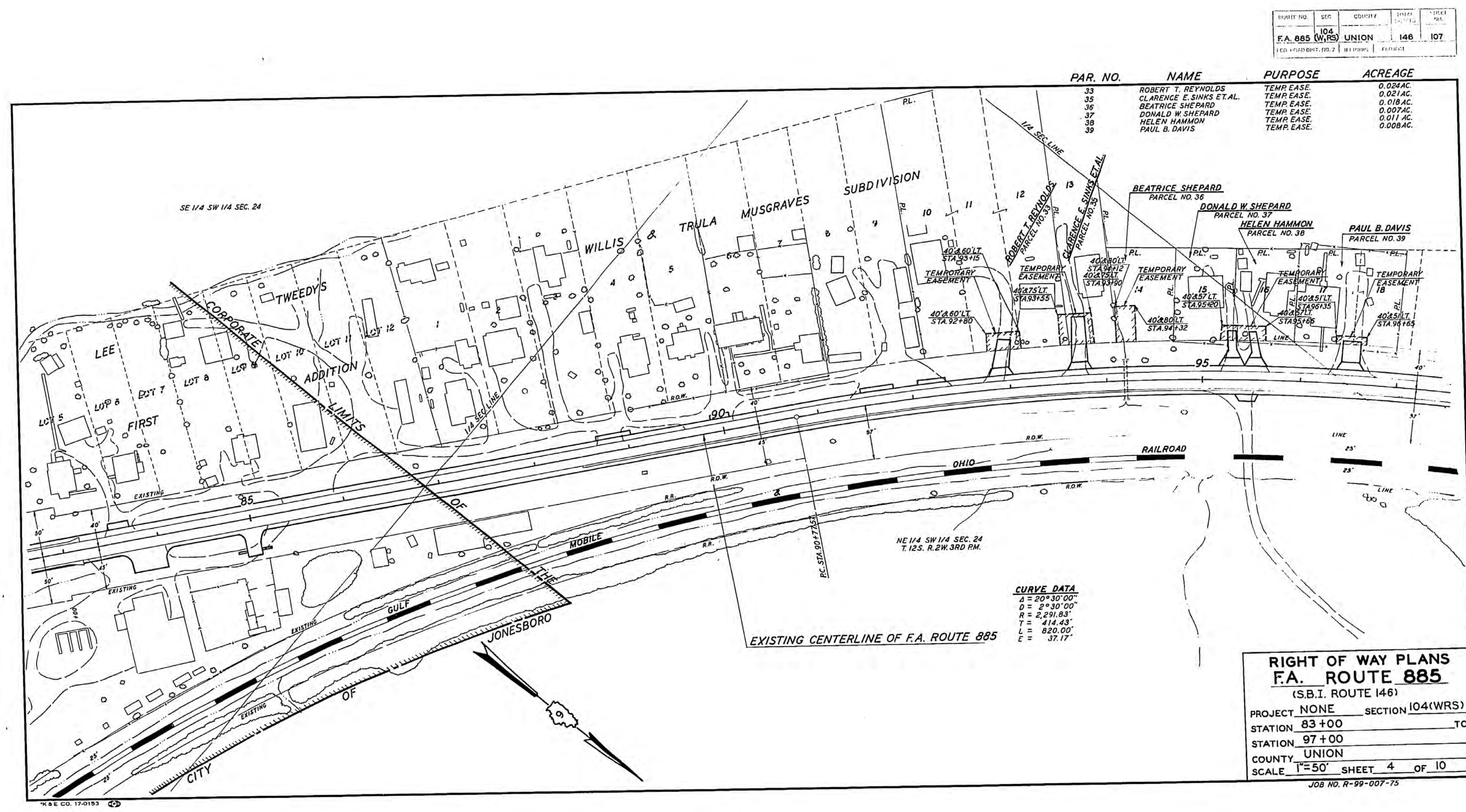
REVISED BY D.J. WILLIAMS
DATE OCTOBER 13, 1976

DRAWN BY D.J. WILLIAMS
DATE JULY 8, 1976



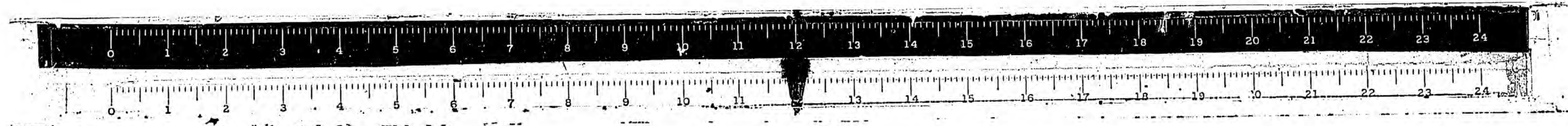
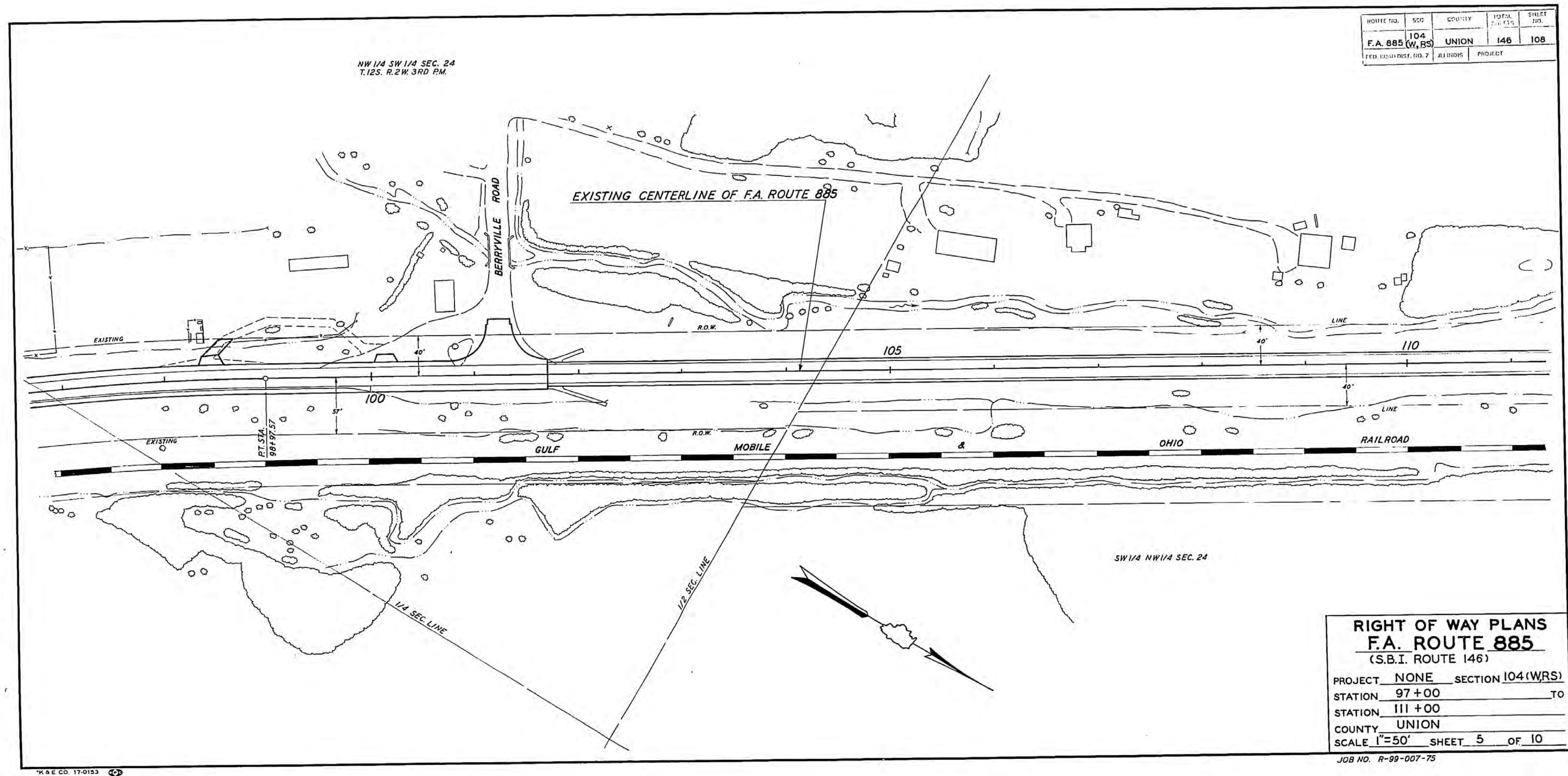
REVISED BY: D.J. WILLIAMS
DATE: SEPTEMBER 14, 1976

DRAWN BY: D.J. WILLIAMS
DATE: JULY 12, 1976



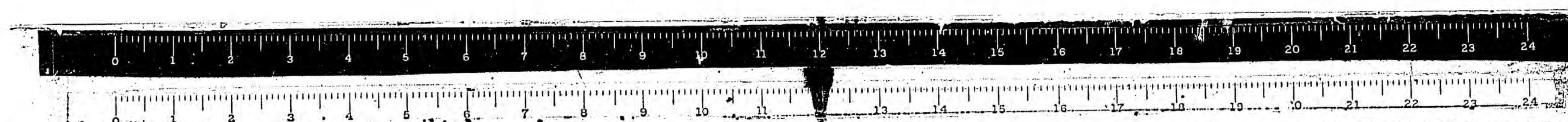
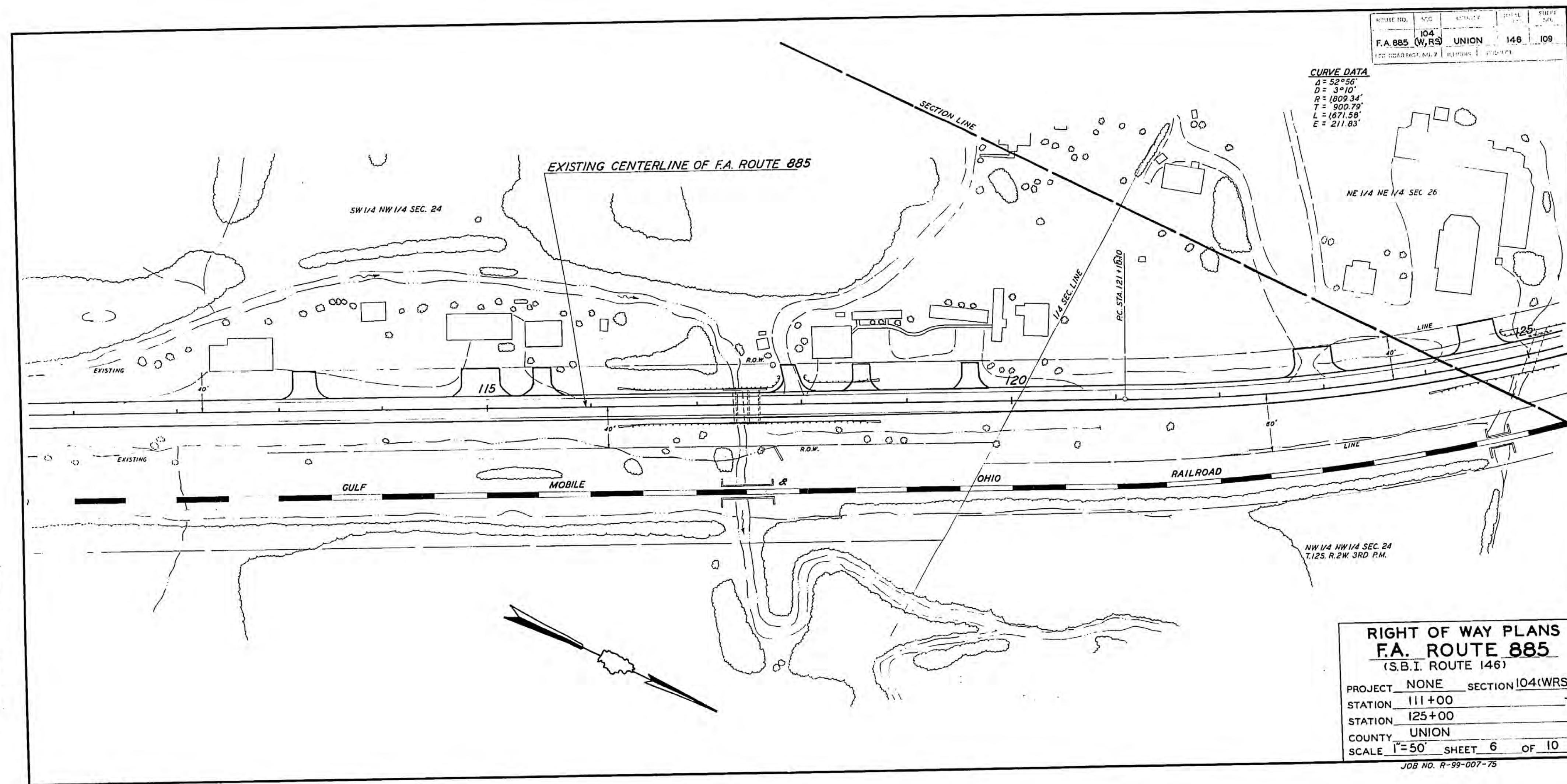
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DATE OCTOBER 15, 1976

DRAWN BY D.J. WILLIAMS
DATE SEPTEMBER 14, 1976



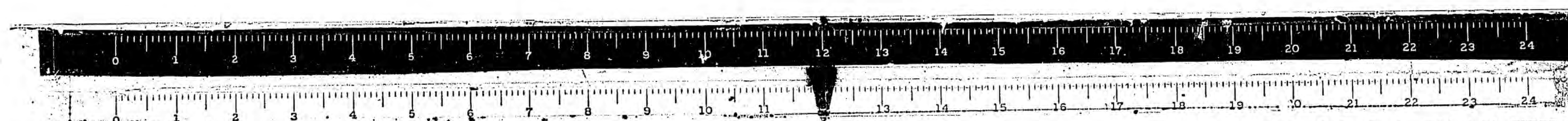
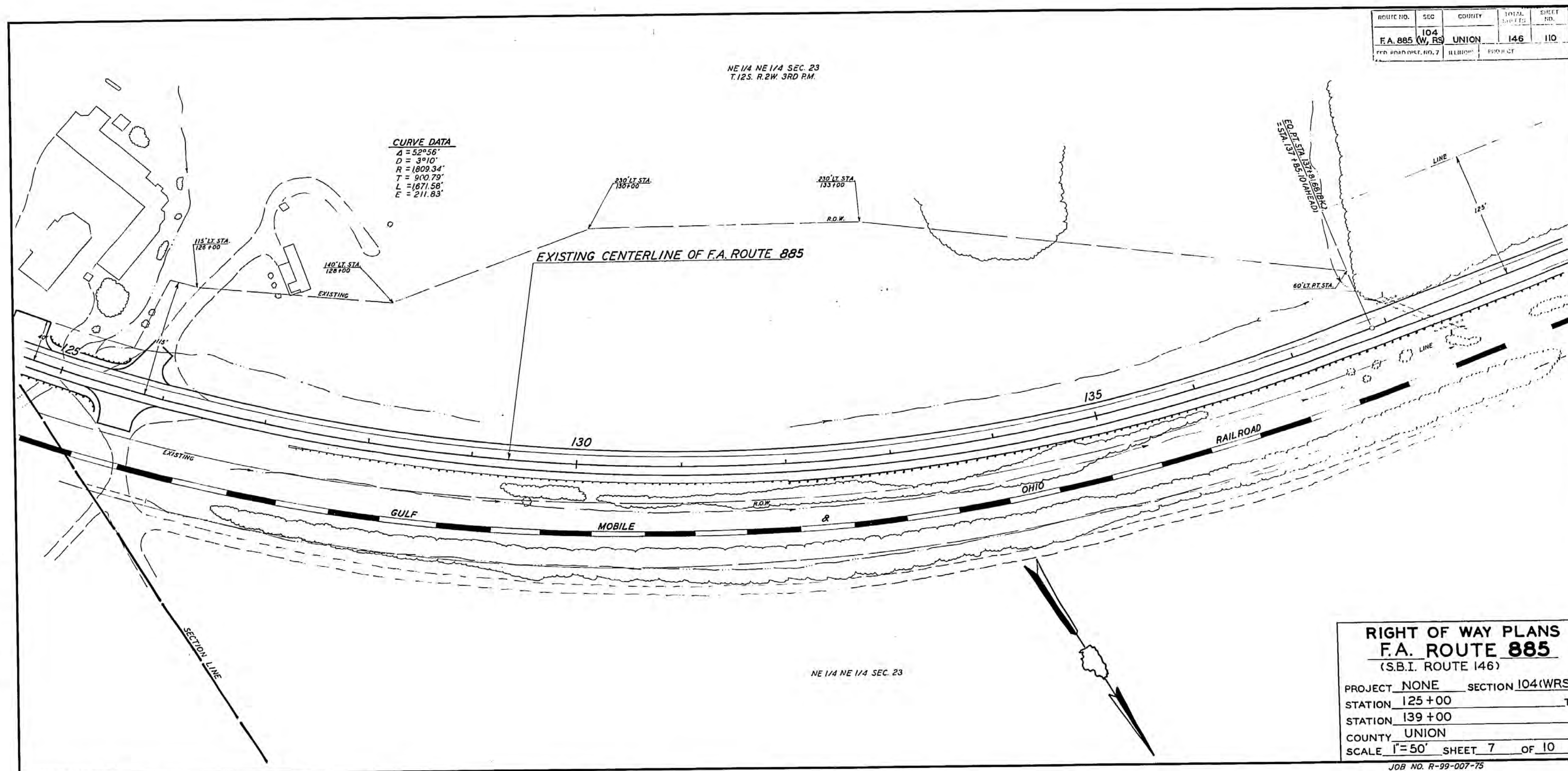
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DATE OCTOBER 15, 1976

DRAWN BY D.J. WILLIAMS
DATE SEPTEMBER 20, 1975



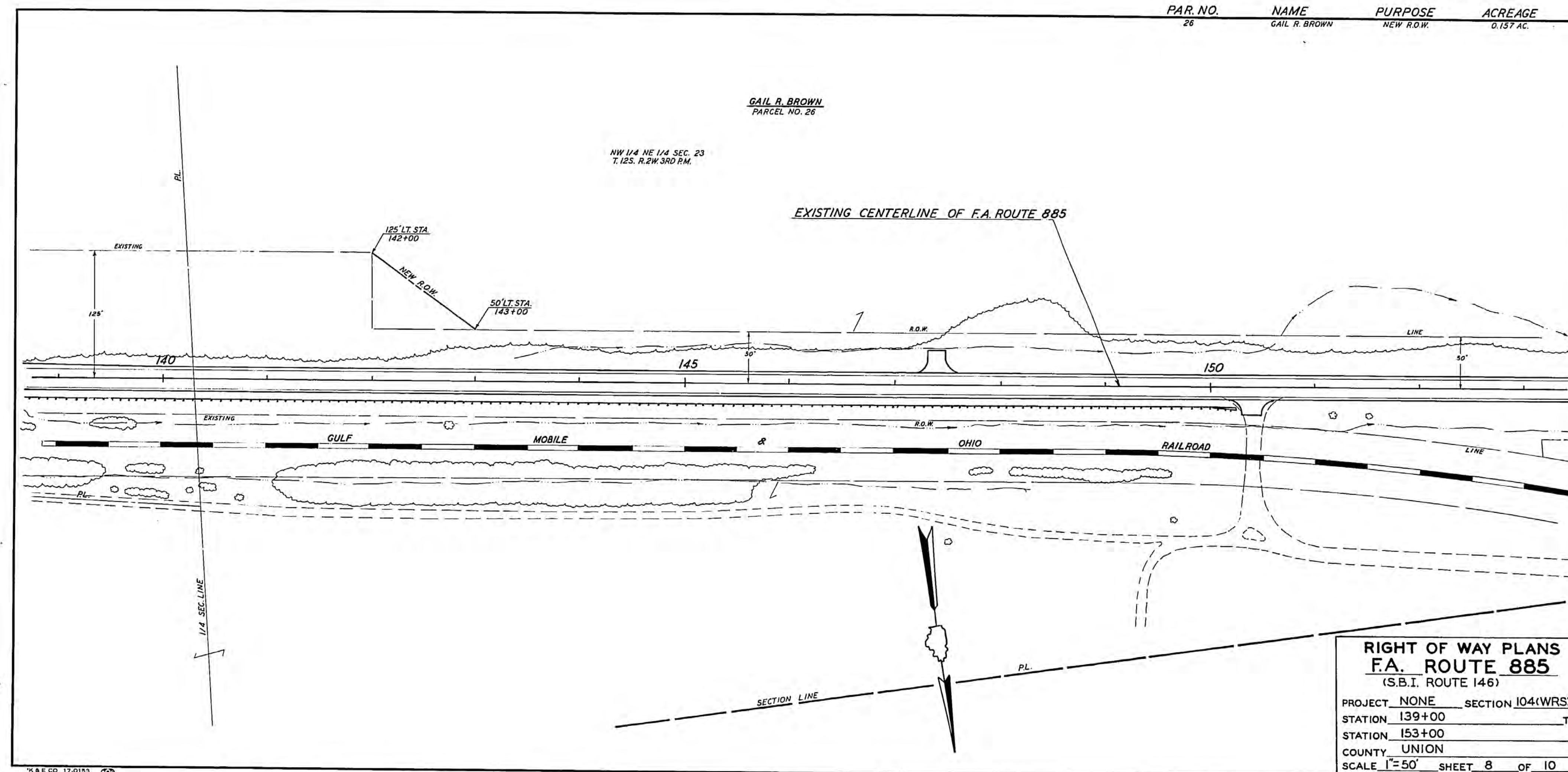
REVISED BY _____
DATE _____

DRAWN BY D.J. WILLIAMS
DATE SEPTEMBER 21, 1976



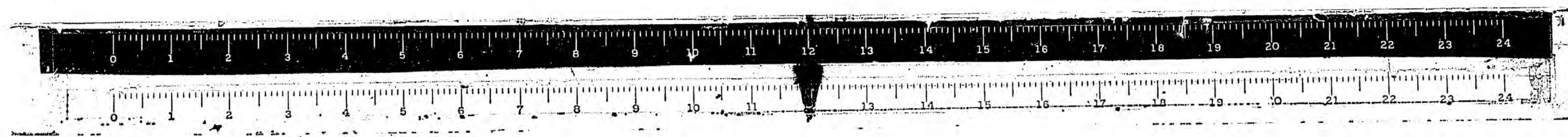
ROUTE NO.	SECTION	COUNTY	TOWNSHIP	RANGE
104	104	UNION	146	111
F.A. 885 (W.R.S.)				
FED. ROAD DIST. NO. 7				

PAR. NO.	NAME	PURPOSE	ACREAGE
26	GAIL R. BROWN	NEW R.O.W.	0.157 AC.



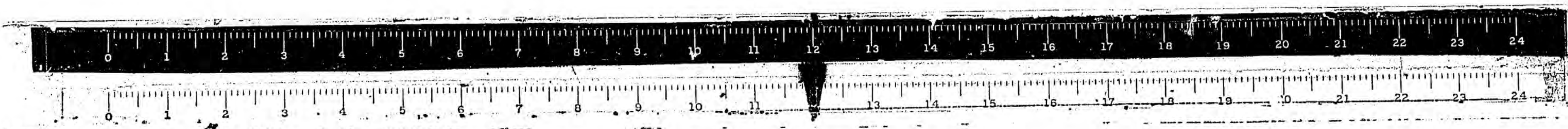
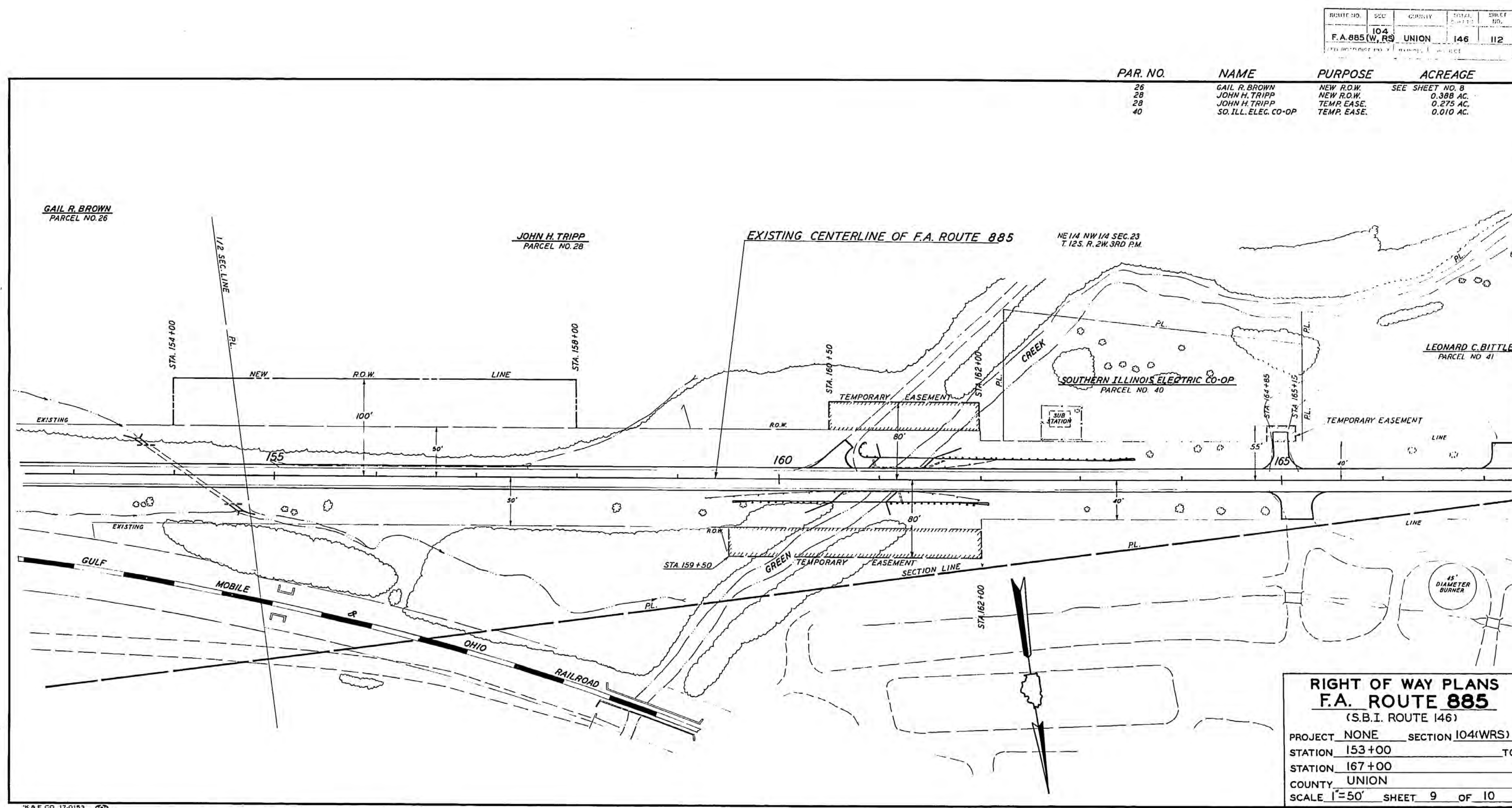
REVISED BY _____
DATE _____

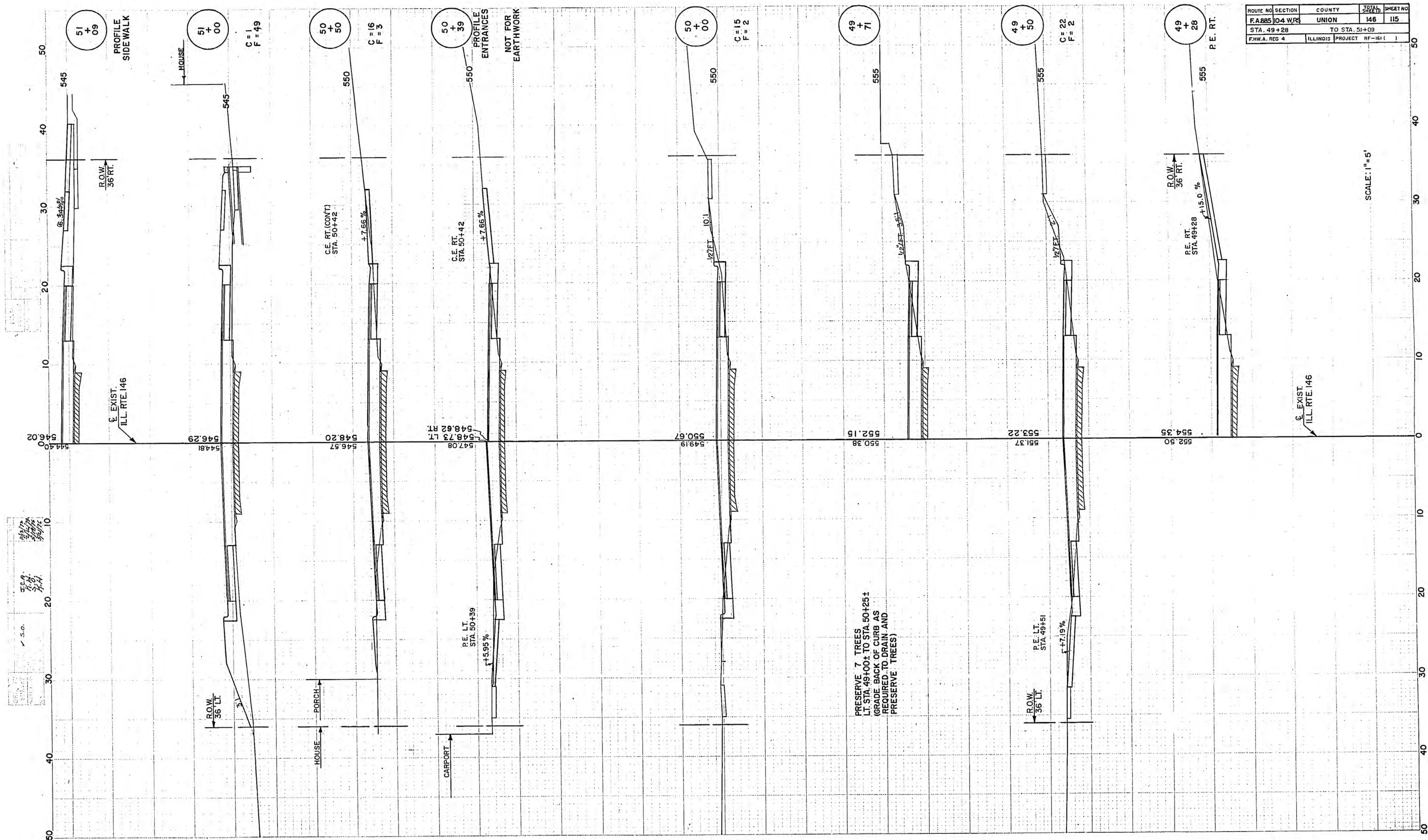
DRAWN BY D.J. WILLIAMS
DATE SEPTEMBER 23, 1976



REVISED BY D.J. WILLIAMS
DATE NOVEMBER 24, 1976

DRAWN BY D.J. WILLIAMS
DATE SEPTEMBER 29, 1976



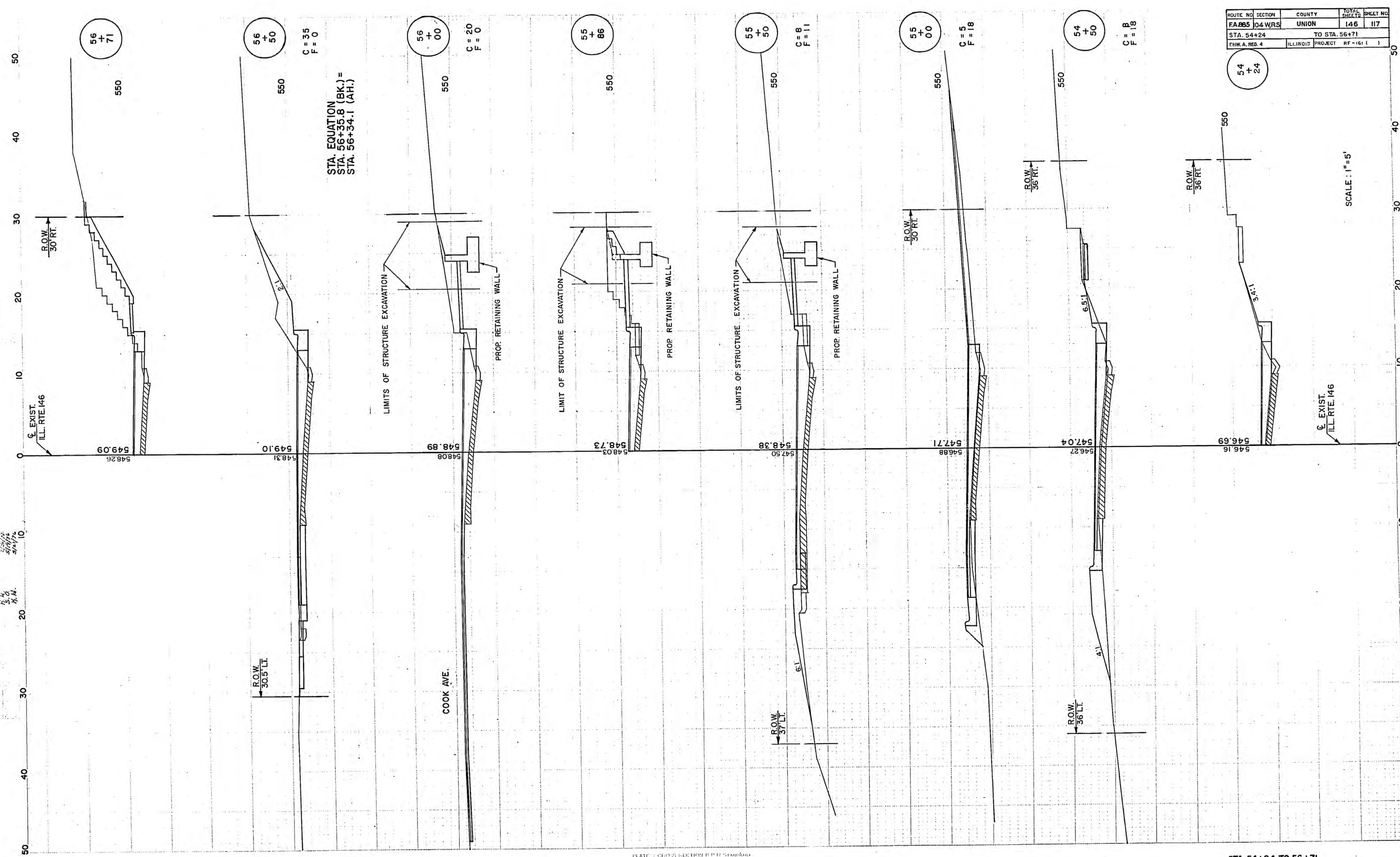


ROUTE NO.	SECTION	COUNTY	SHEET NO.
146	146	146	146
146	146	146	146
146	146	146	146

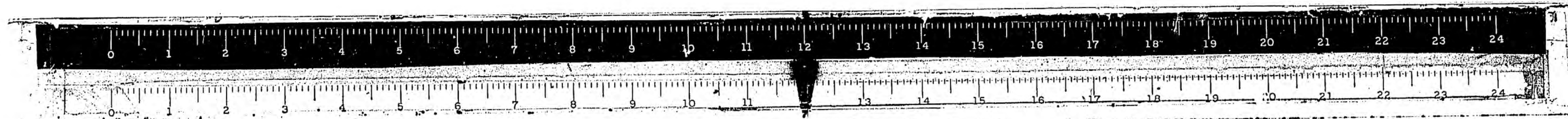
SCALE: 1"=5'

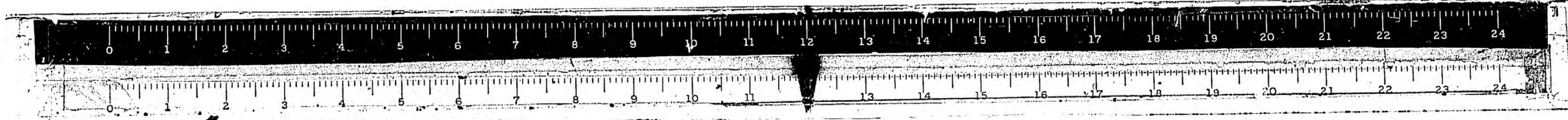
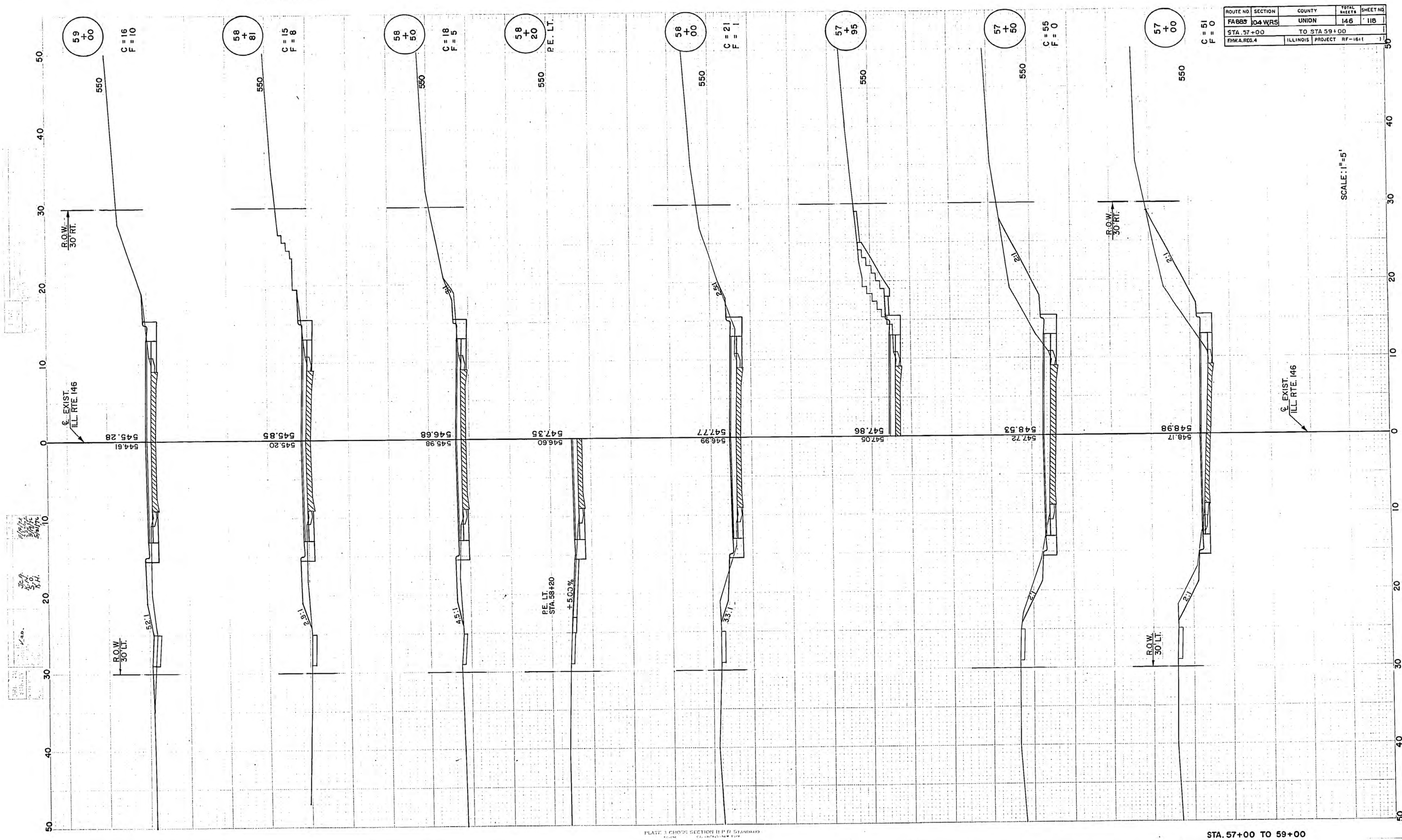
STA. 49+28 TO 51+09

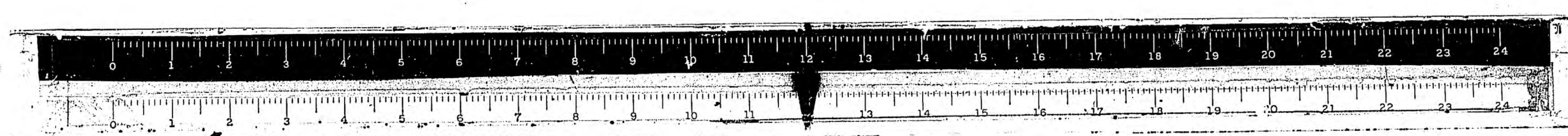
1/11/13
J.C.P.
5/10/13
5/11/13
5/12/13

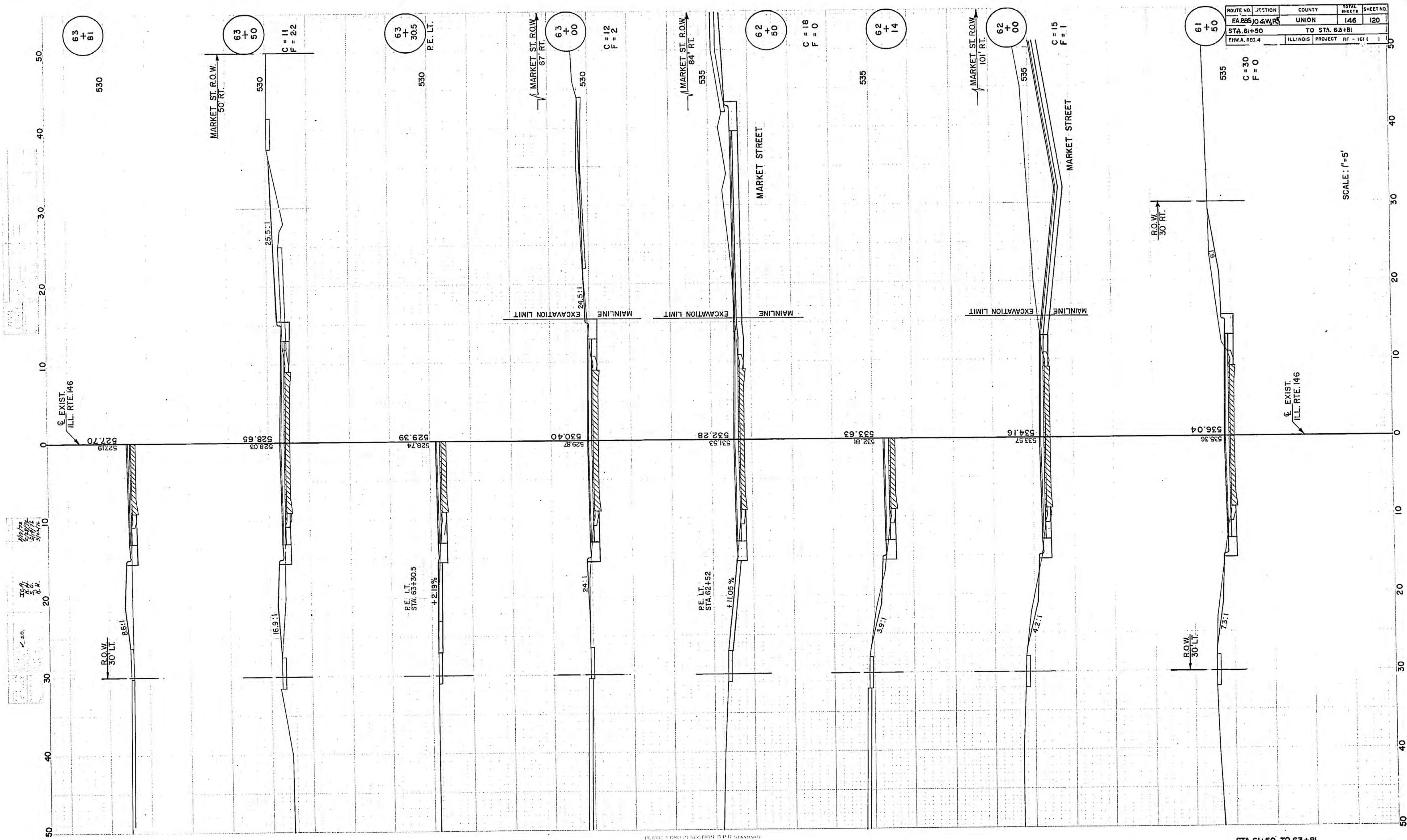


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 265	04 WRS	UNION	146	117
STA. 54+24	TO STA. 56+71			
FWA, RES. 4	ILLINOIS	PROJECT	RF-161	1



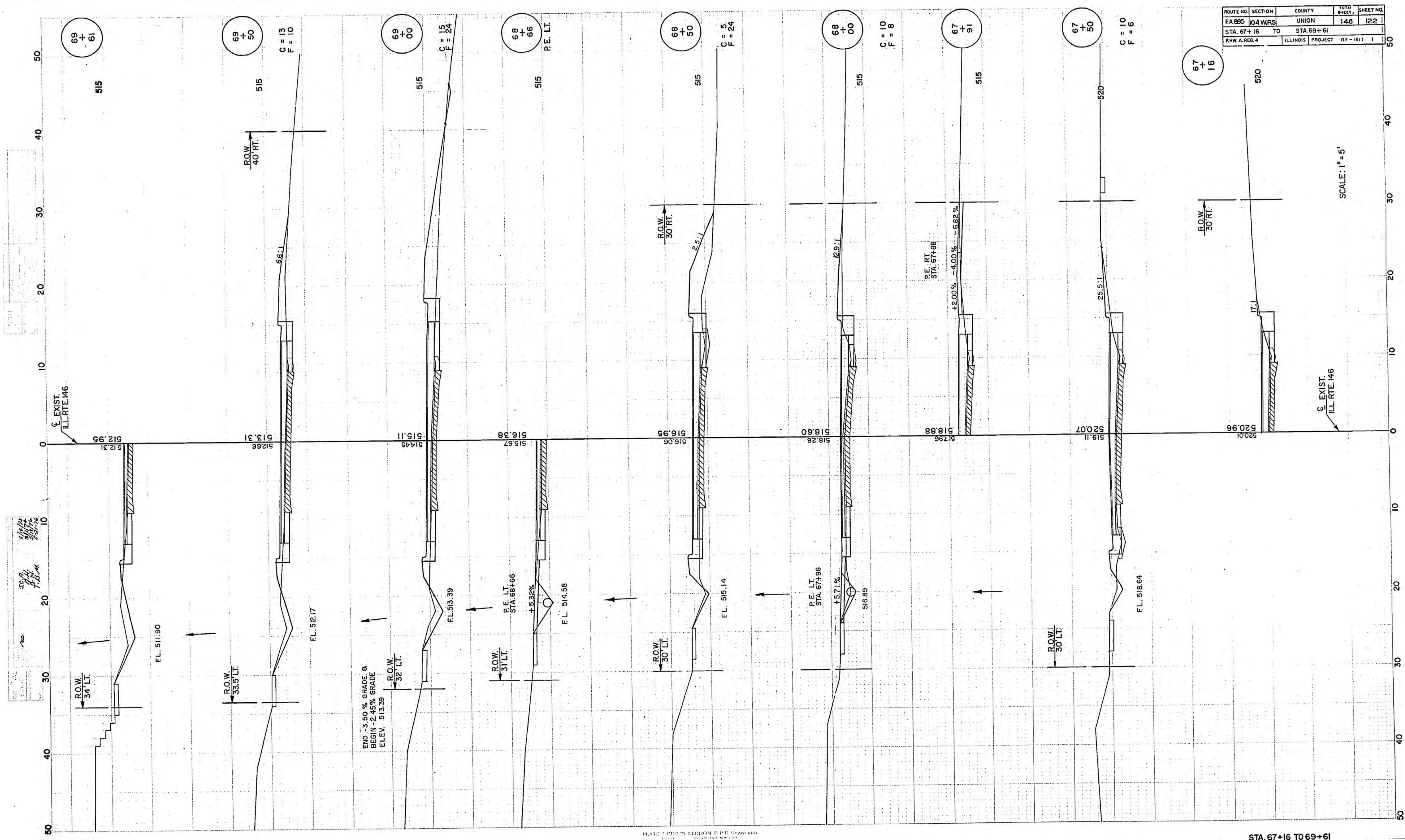


$$59 + 25$$


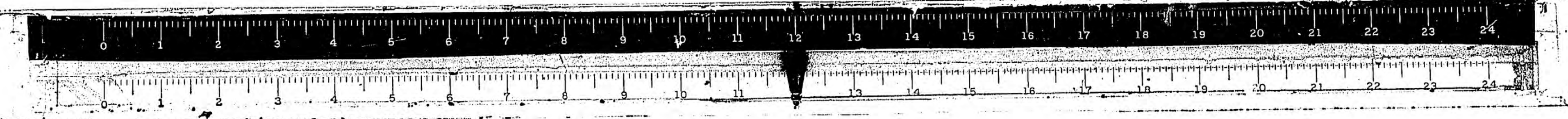


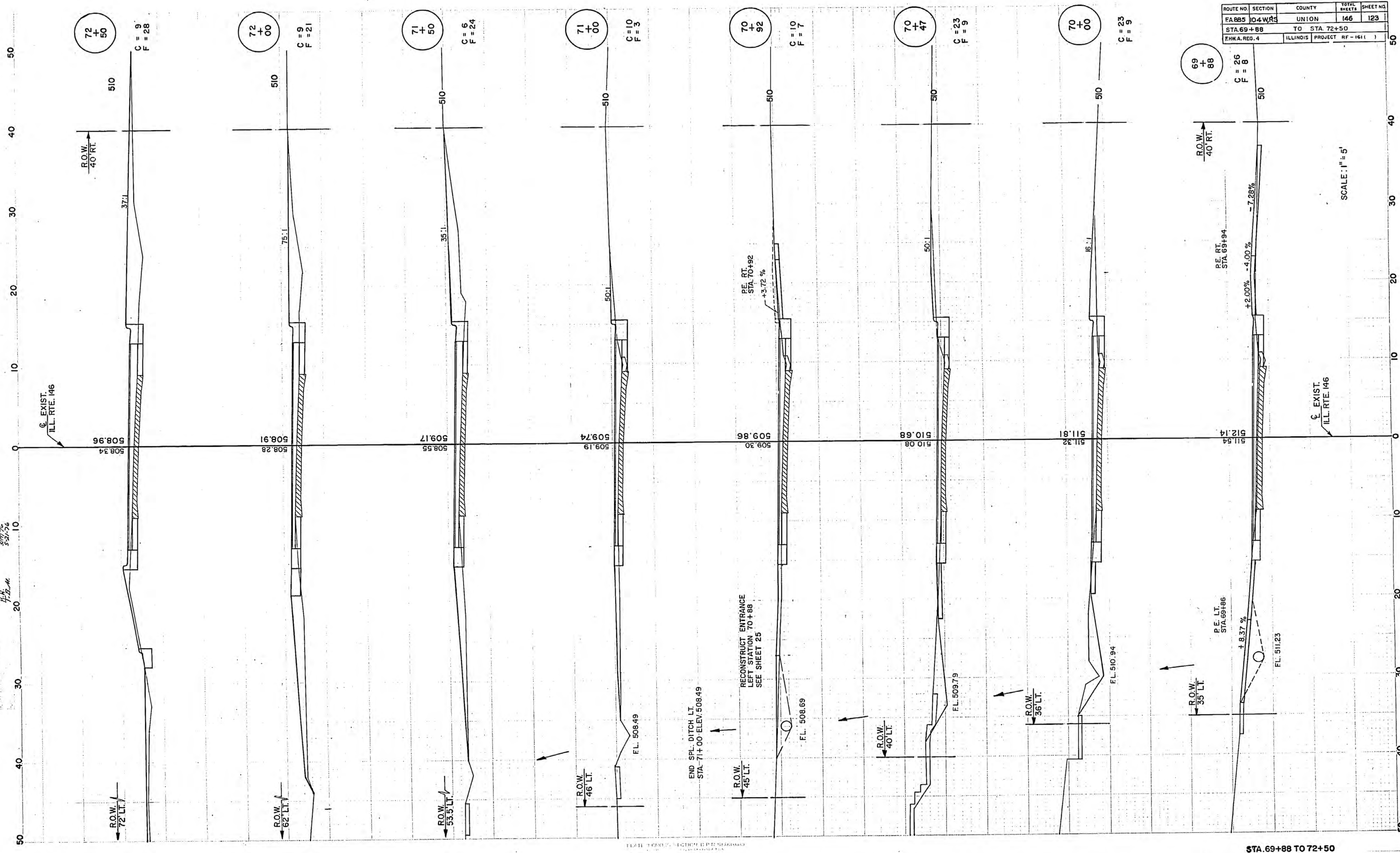
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA 865104WR5	UNION	ILLINOIS	146	120
STA. 61+50	TO STA. 62+81	PROJECT	RF - 101	
FWA, REG. 4				

STA. 61+50 TO 63+81

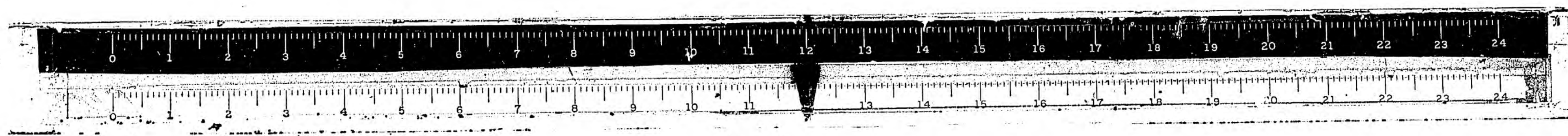


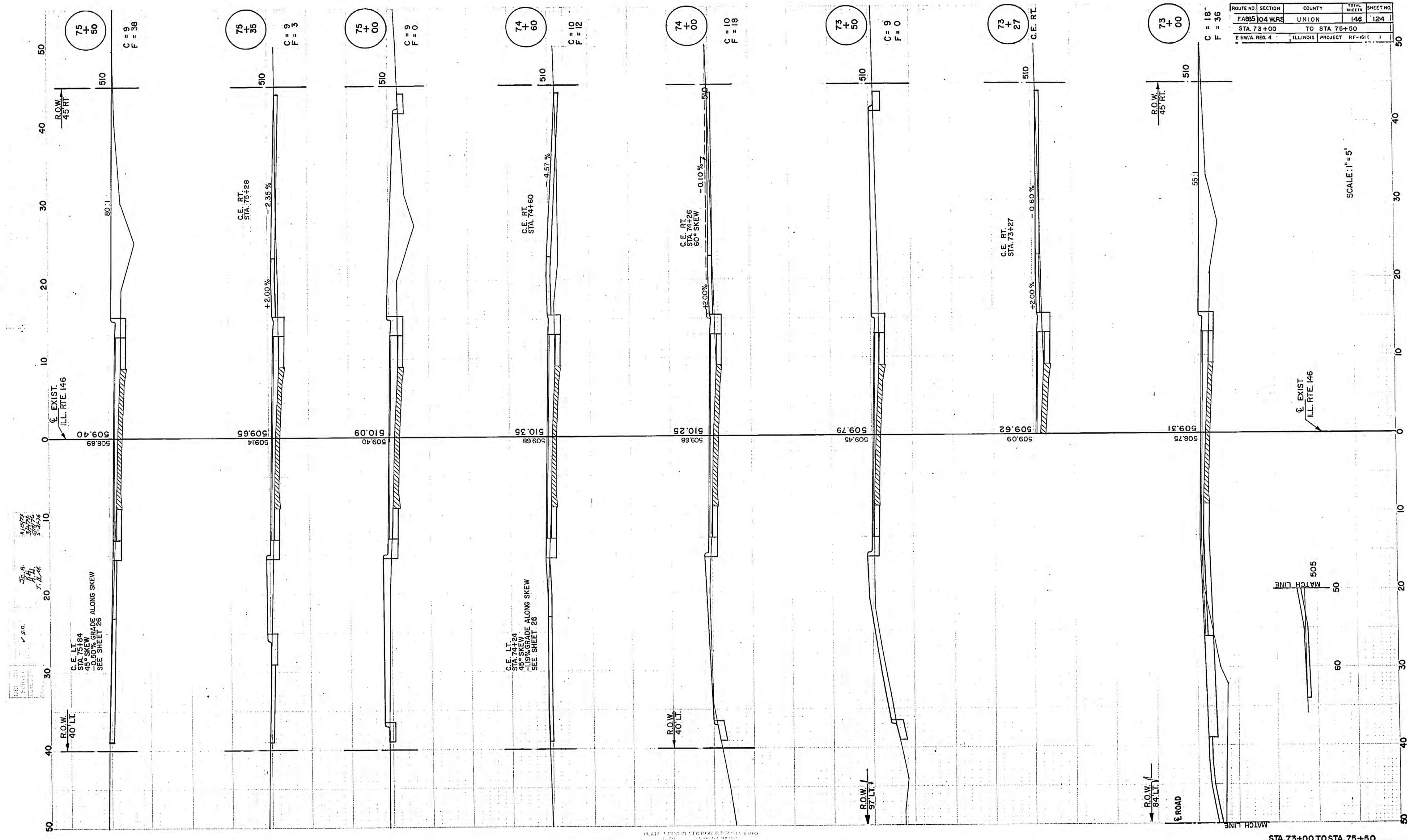
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FA 885	104 WRS	UNION	148	122
STA 67+16	TO	STA 69+61		
FWA RES. 4		ILLINOIS PROJECT	RT - 141	

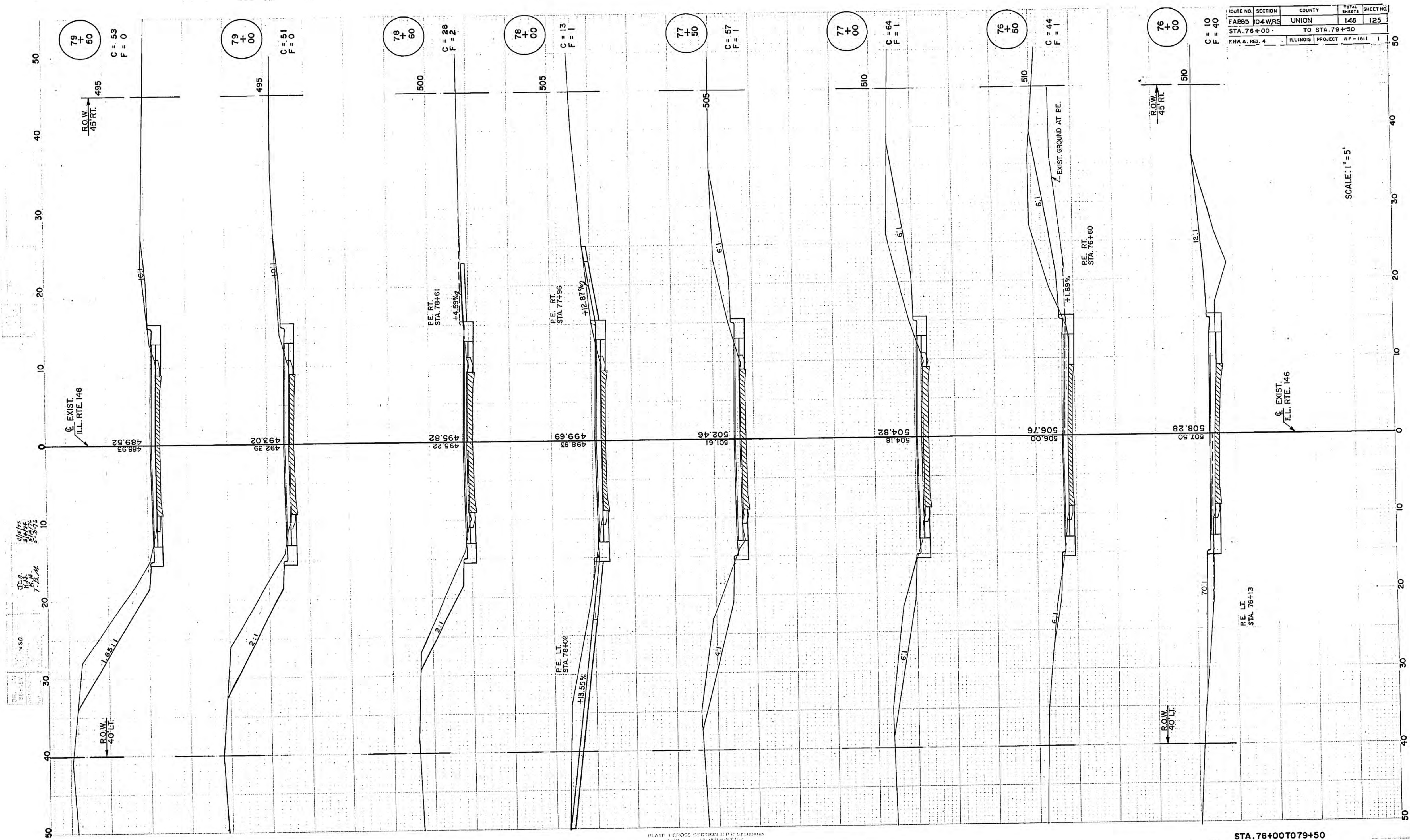




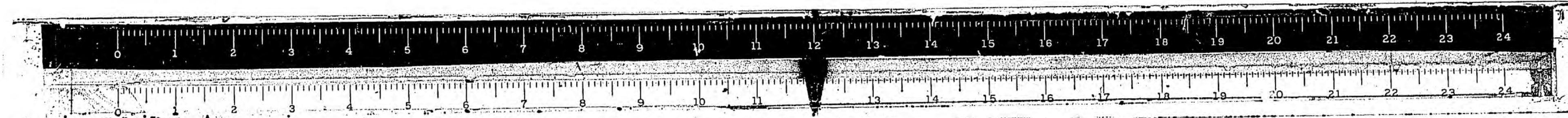
11/9/74
 J.E.D.
 11/17/74
 11/21/74
 11/25/74

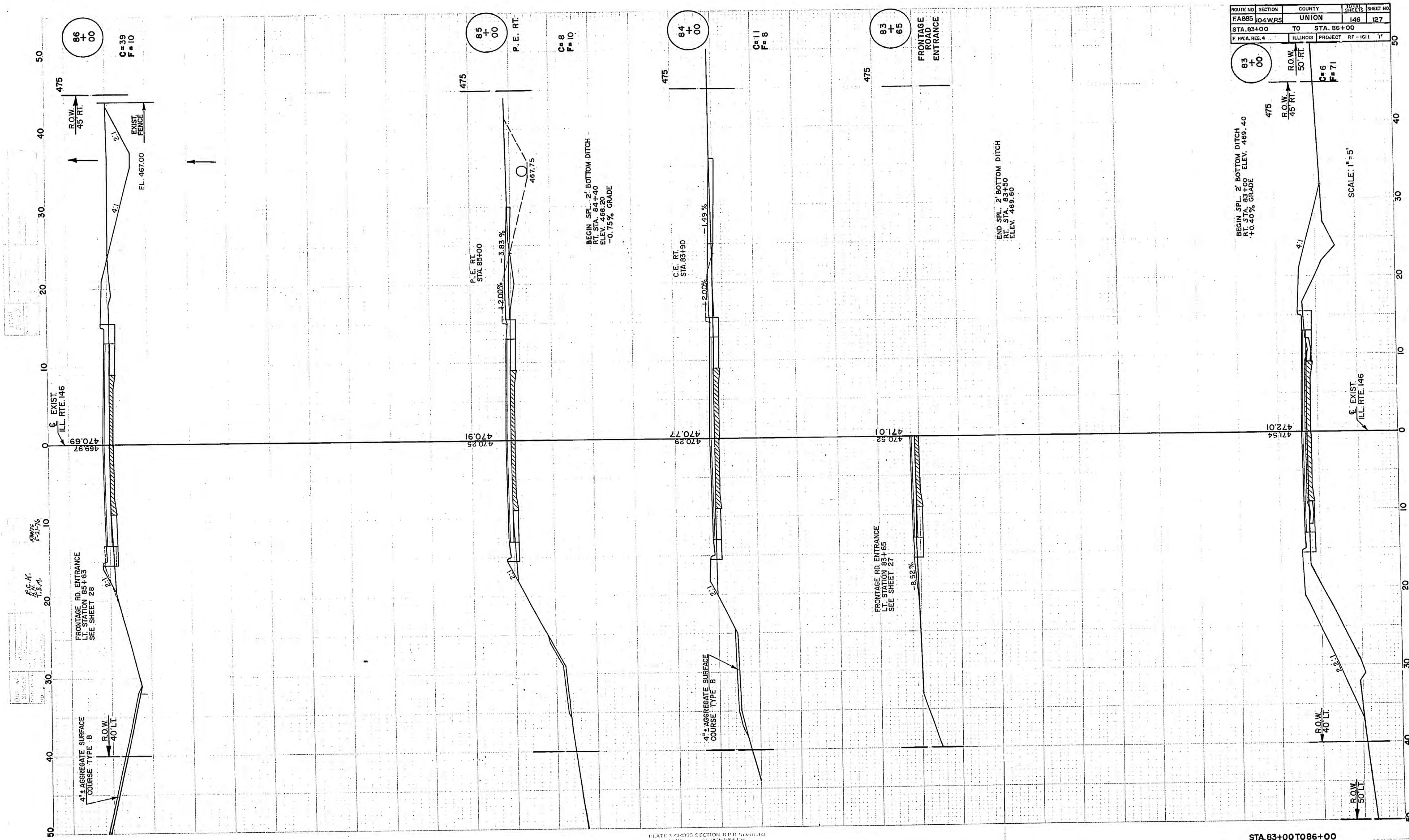




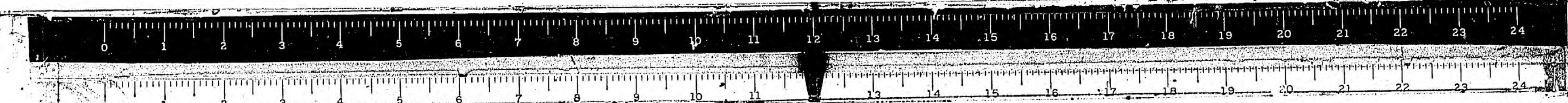


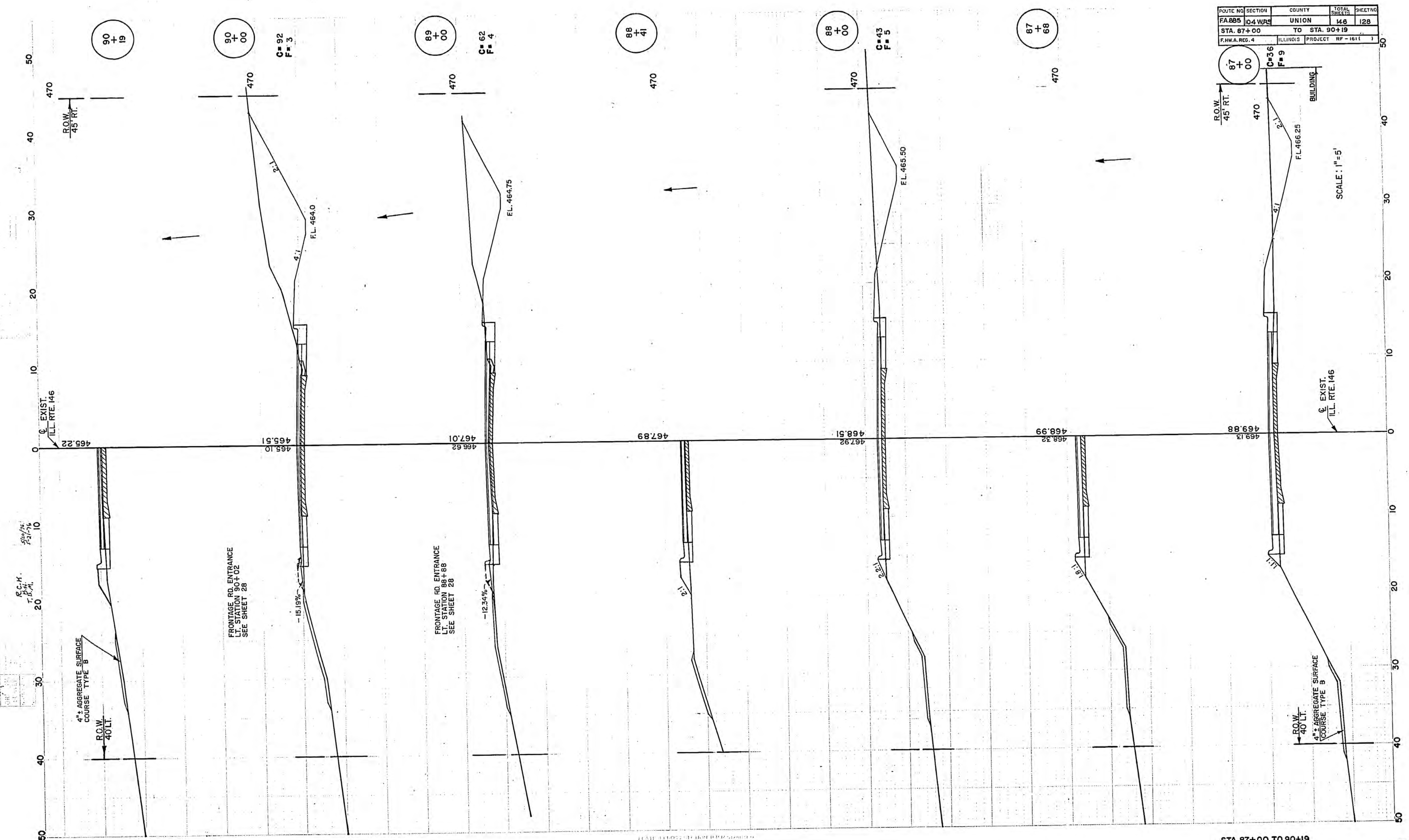
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
146	104 WRS	UNION	146	125
STA. 76+00		TO STA. 79+50		
ENR A. REG. 4	ILLINOIS	PROJECT	RF-161	1





ROUTE NO.	SECTION	COUNTY	TOTAL SHEET NO.
FAB85	04WRS	UNION	146 127
STA. 83+00	TO	STA. 86+00	
F. H&A. RES. 4	ILLINOIS	PROJECT	RF-1611 1'

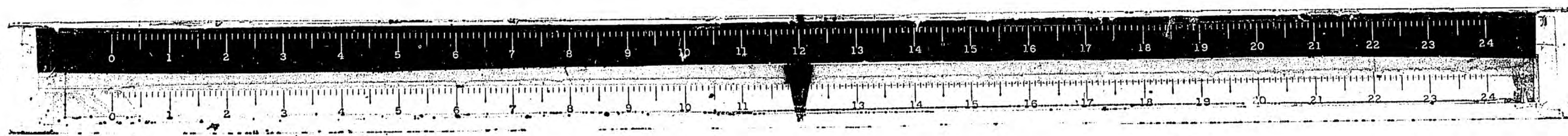


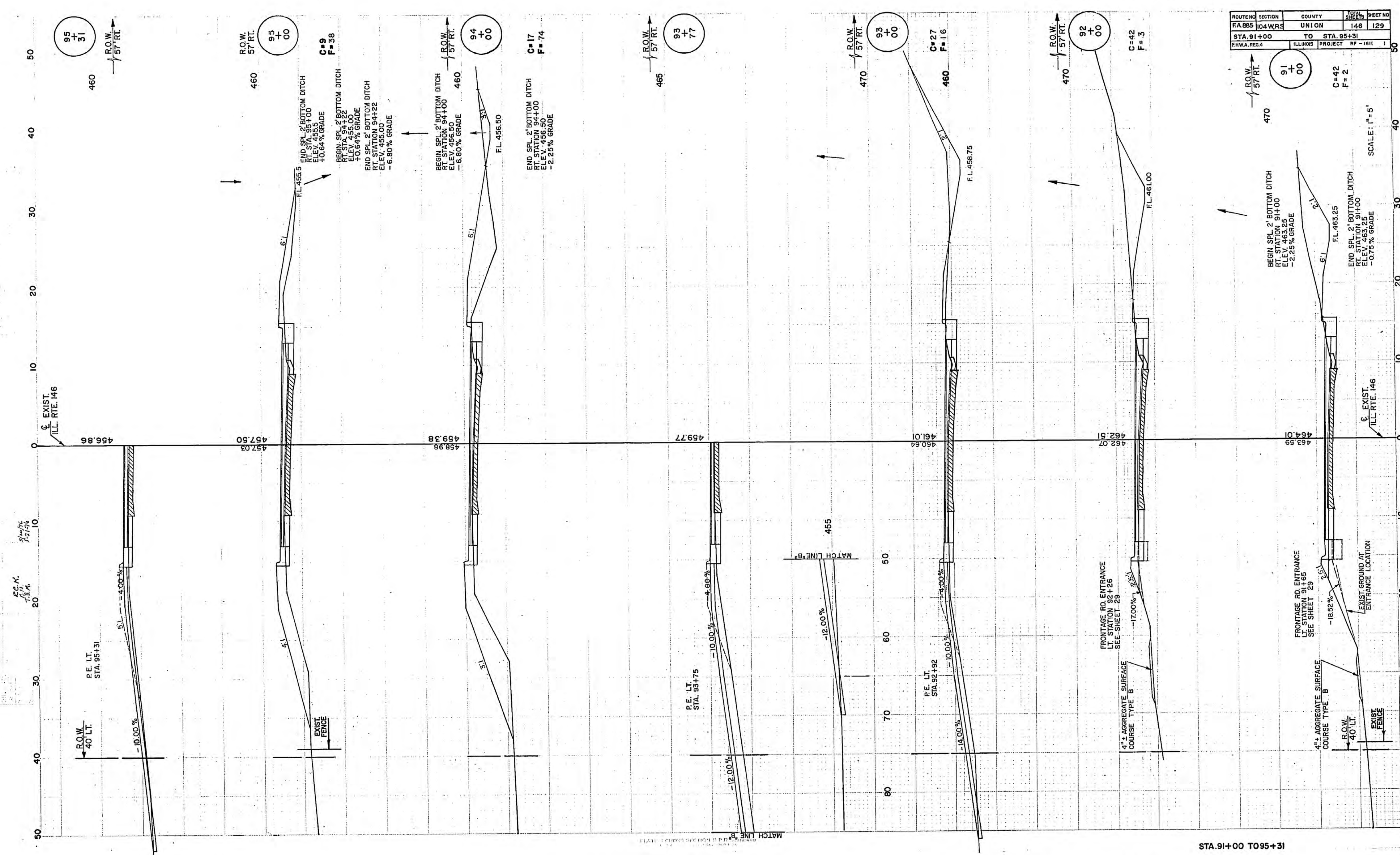


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA885	04 WRS	UNION	148	128
STA. 87+00		TO STA. 90+19		
F.H.W.A. REG. 4		ILLINOIS PROJECT RP-1611		

SCALE: 1"=5'

STA. 87+00 TO 90+19





ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	104 WRS	UNION	146	129
STA. 91+00 TO STA. 95+31				
ILLINOIS PROJECT		RF - 101		

EGM
T.M.

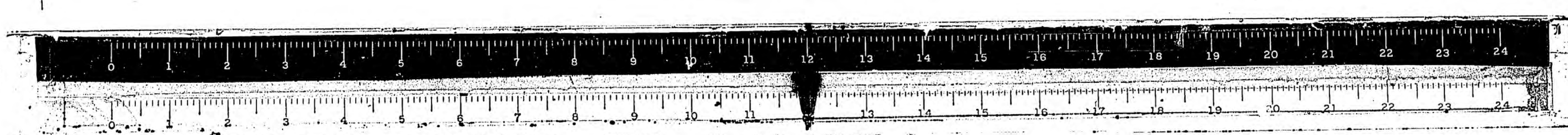
P.E. LT.
STA. 95+31

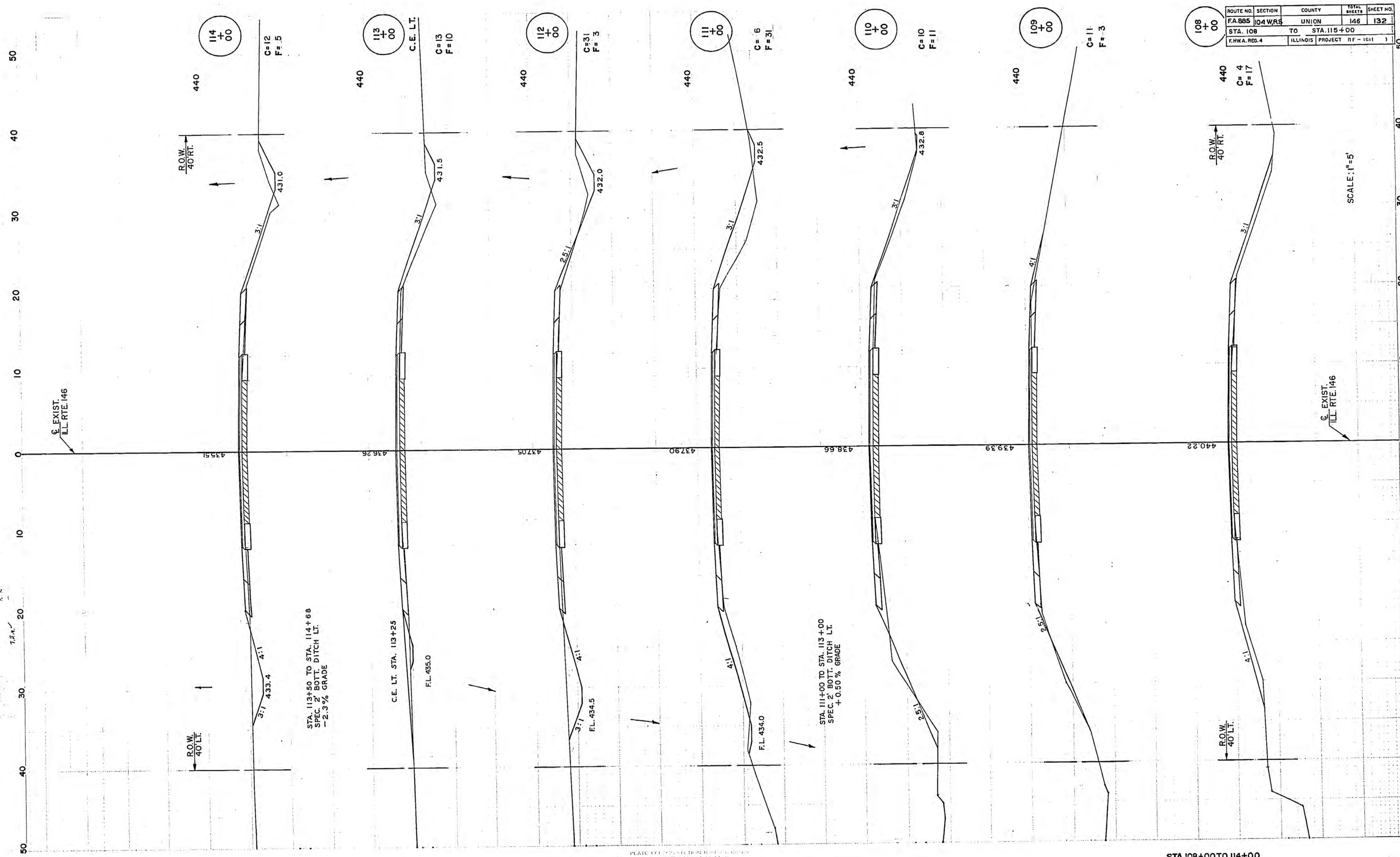
P.E. LT.
STA. 93+75

P.E. LT.
STA. 92+92

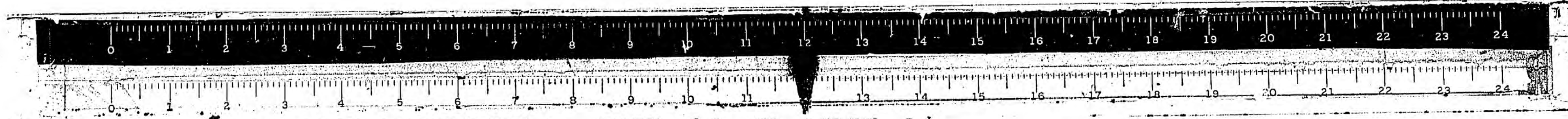
FRONTAGE RD. ENTRANCE
LT. STATION 91+65
SEE SHEET 29

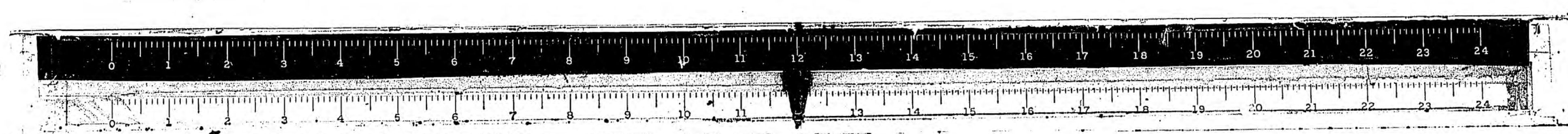
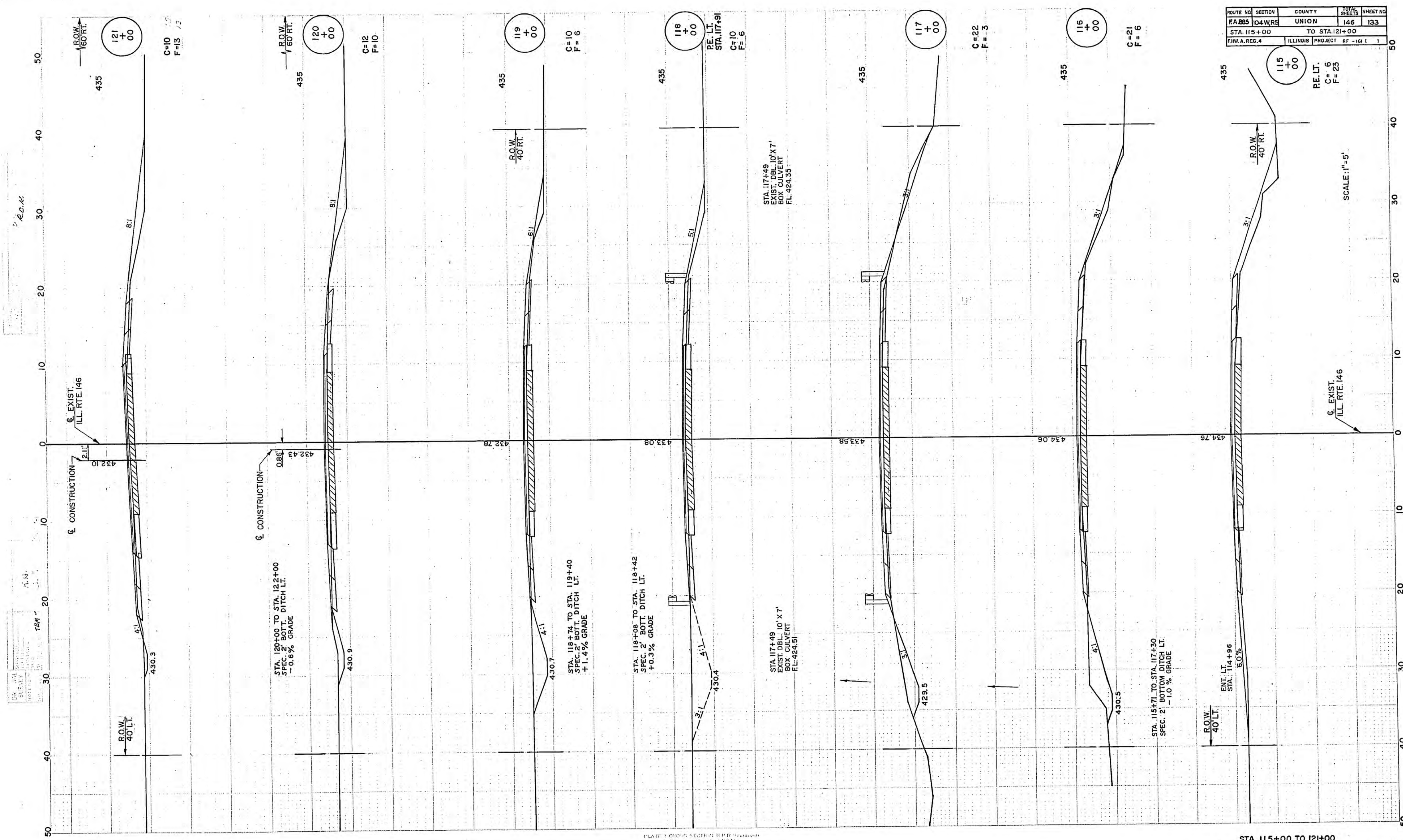
4\"/>

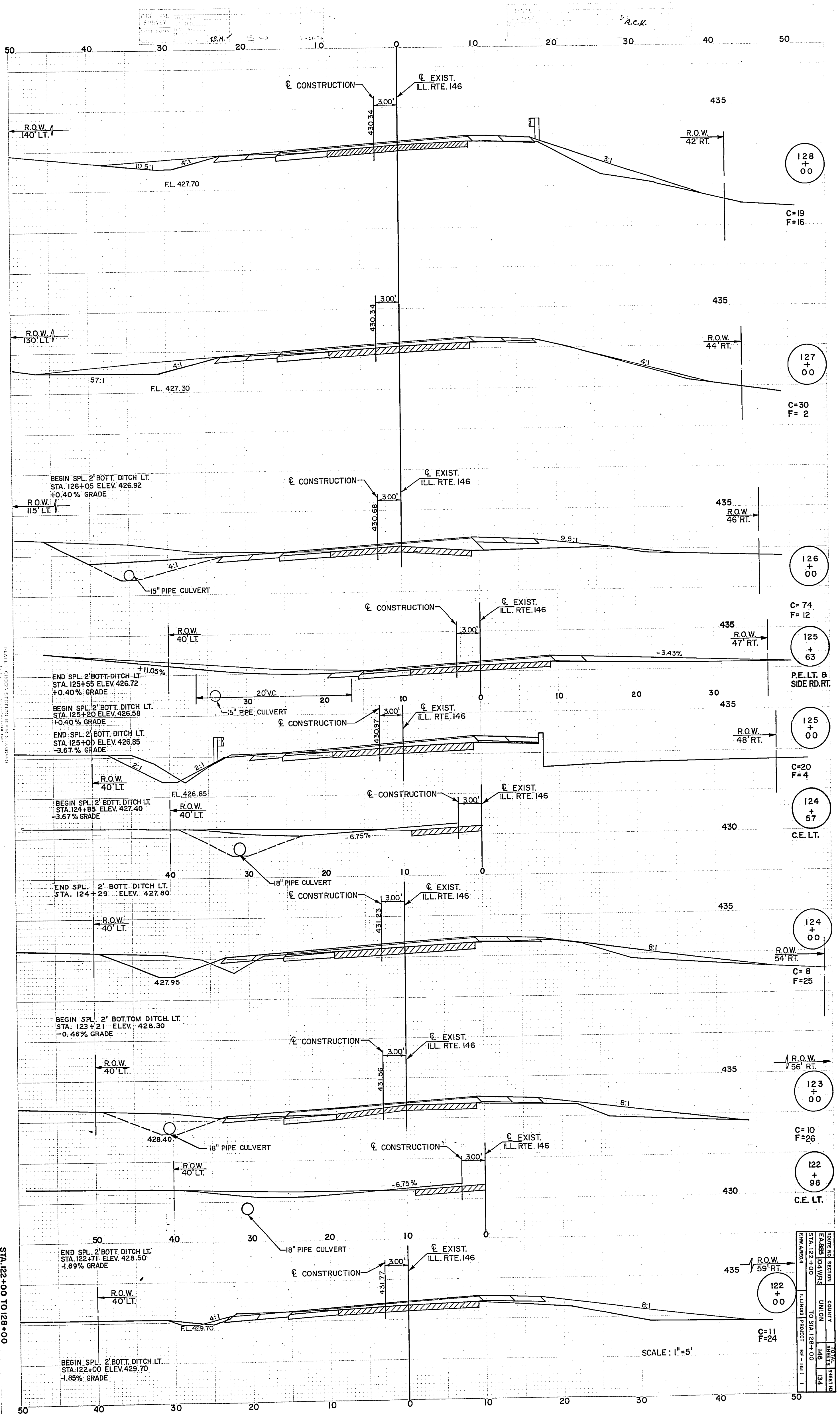




ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	04 WRS	UNION	146	132
STA. 108	TO STA. 115+00			
K.H.W.A. REG. 4	ILLINOIS PROJECT	RT - 161		



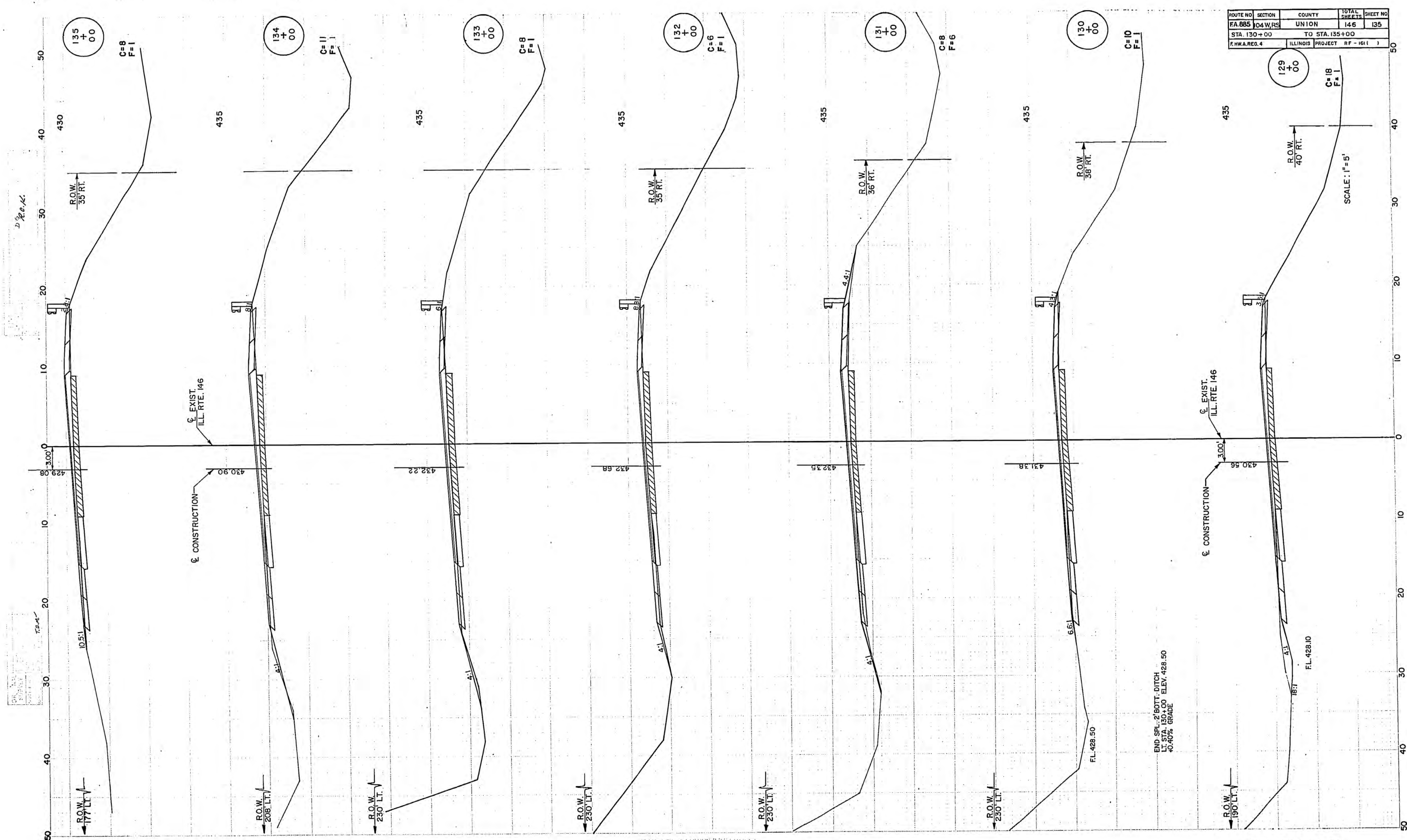




STA. 122+00 TO 128+00

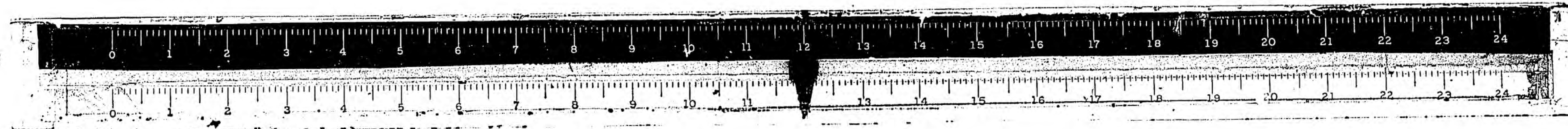
SCALE: 1"=5'

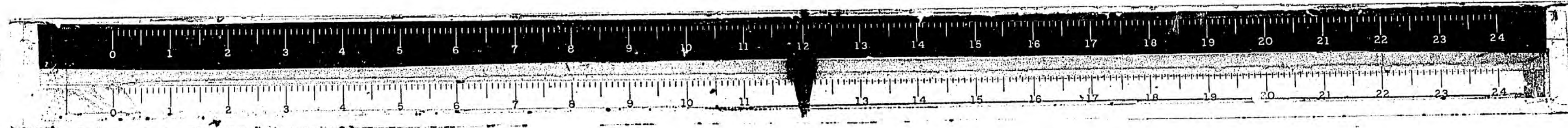
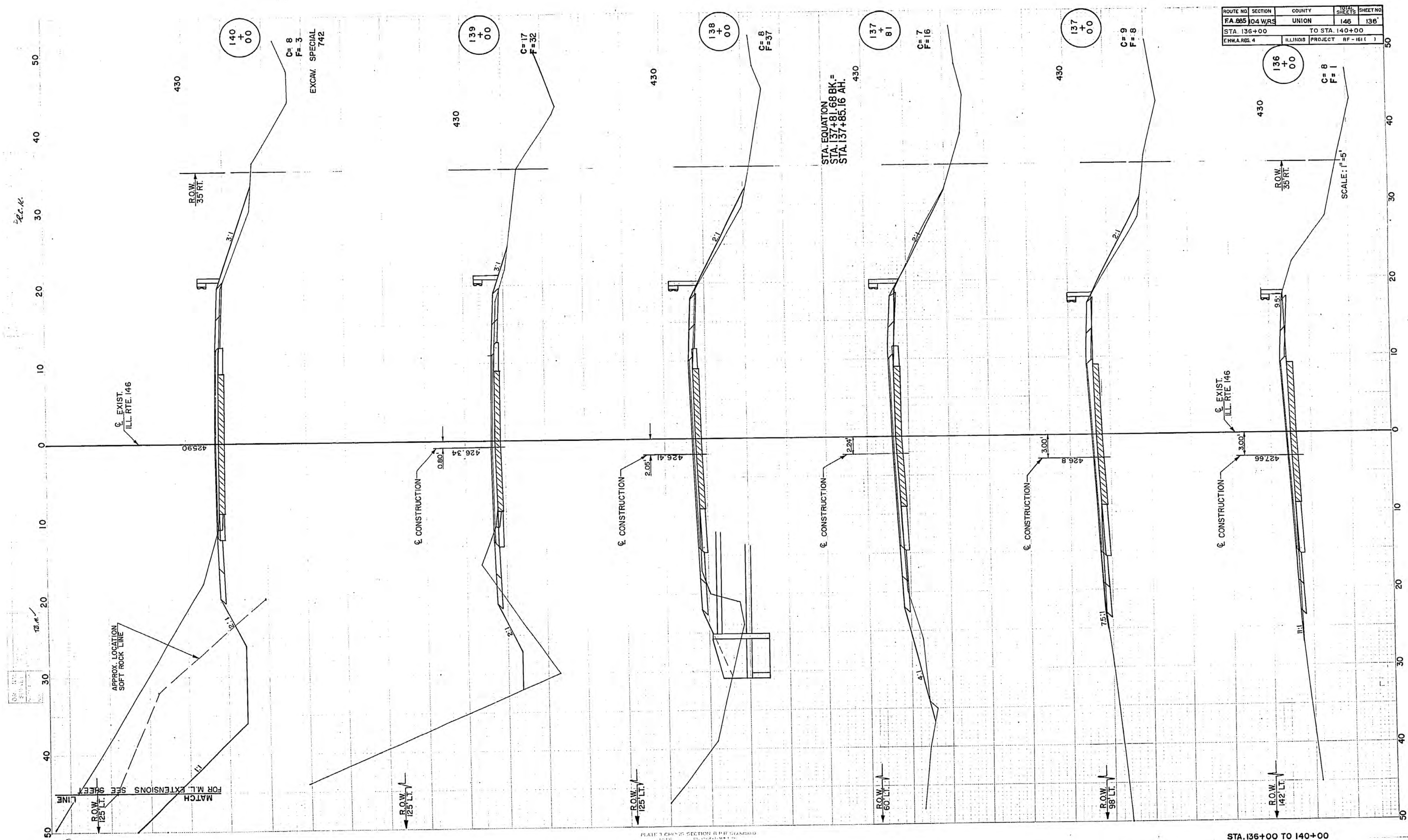
ROUTE NO.	SECTION	COUNTY	SHEET NO.
148	104 W.R.	UNION	124
ILLINOIS PROJECT NO. 1-1611			

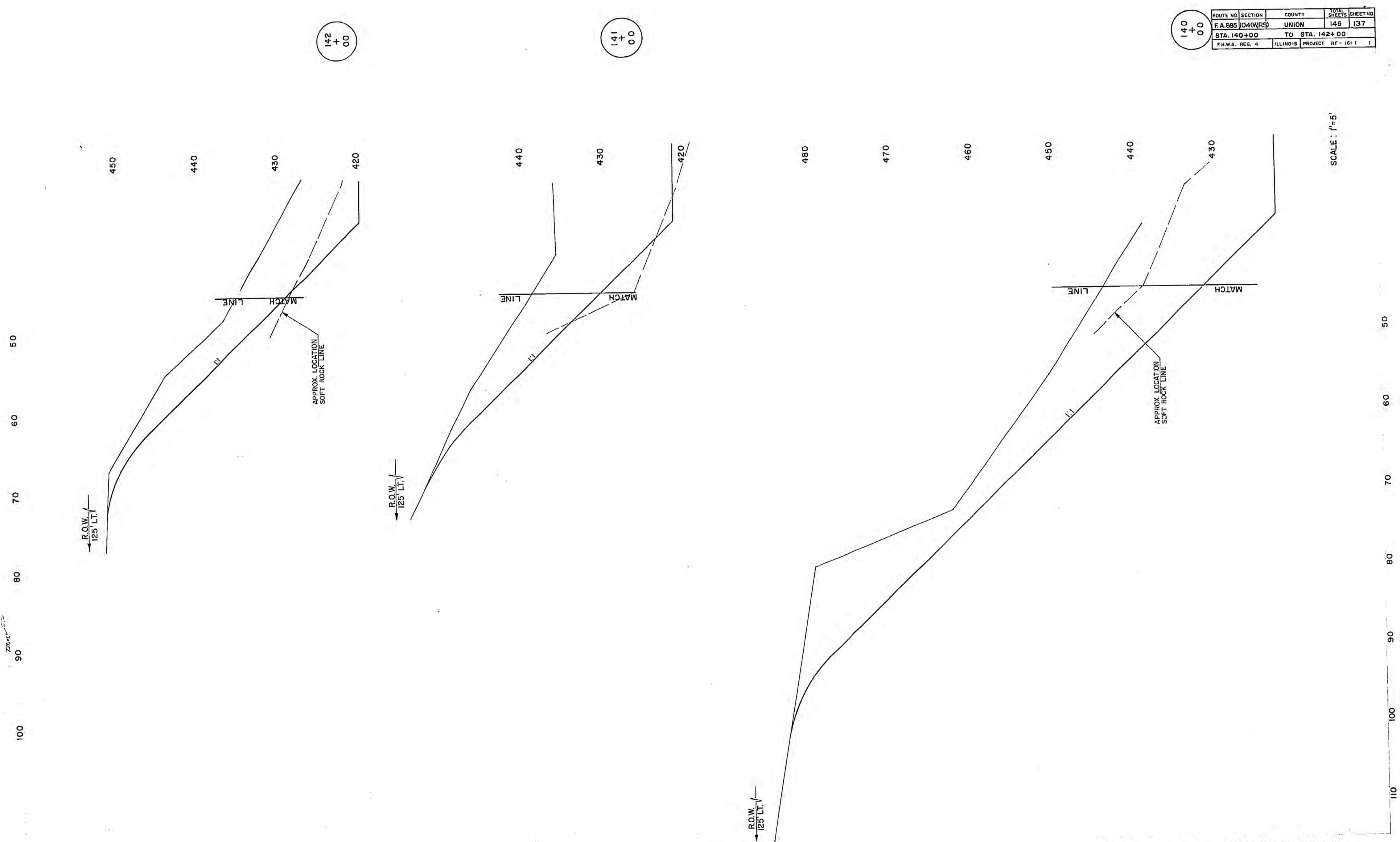


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	104 WRS	UNION	146	135
STA. 130+00		TO STA. 135+00		
I.H.W.A. REG. 4		ILLINOIS PROJECT RF-161		

STA. 129+00 TO 135+00





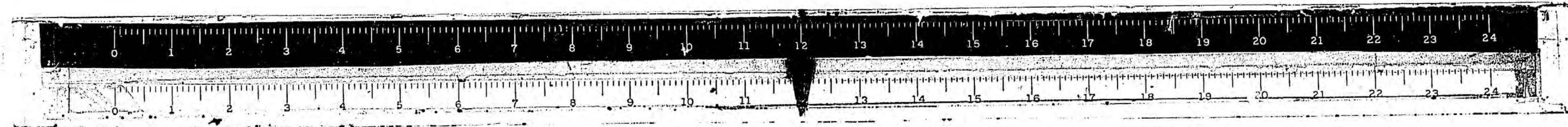


100 90 80 70 60 50

50 60 70 80 90 100 110

SCALE: 1"=5'

M.L. EXTENSION STA. 140+00 TO STA. 142+00

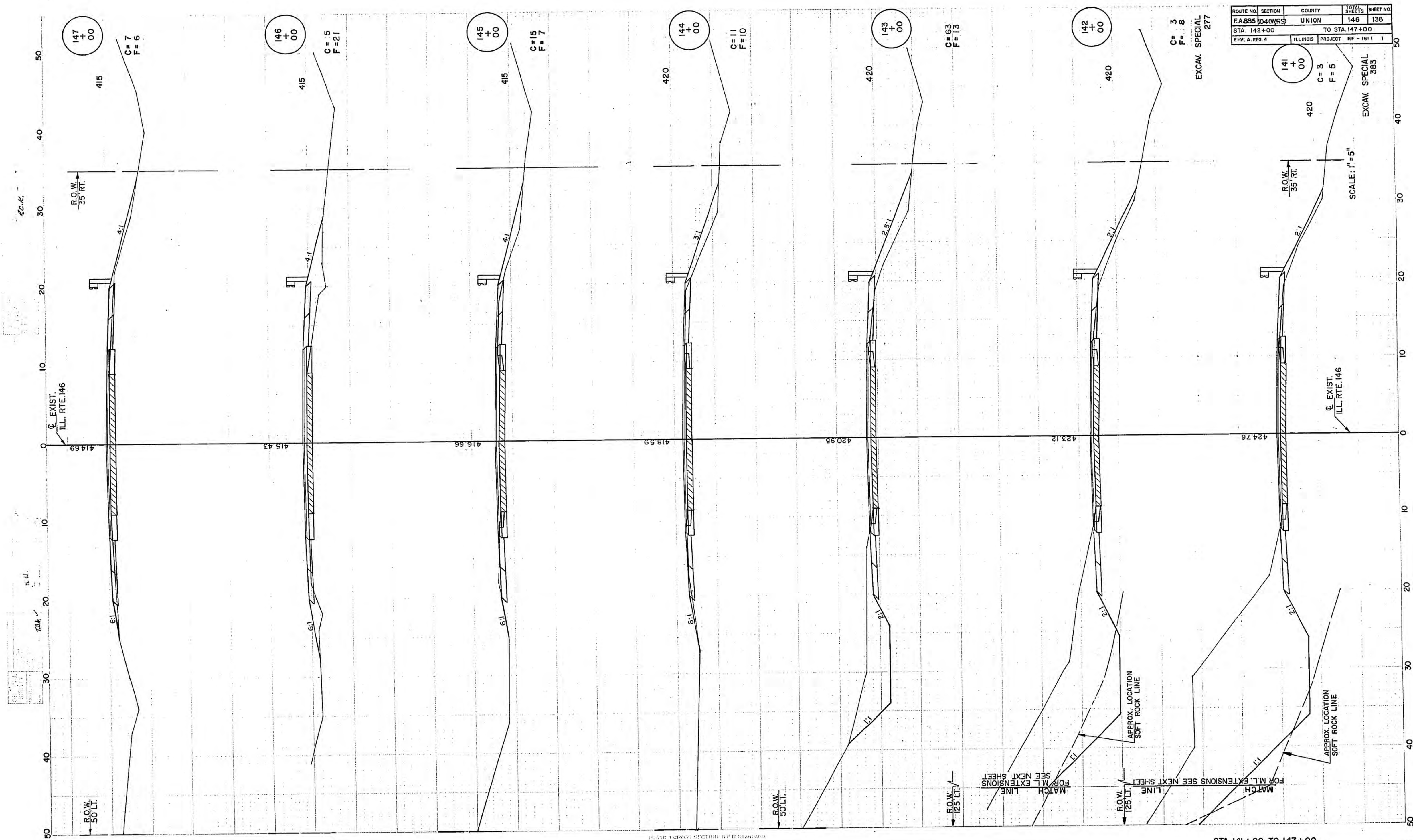


142
+
00

141
+
00

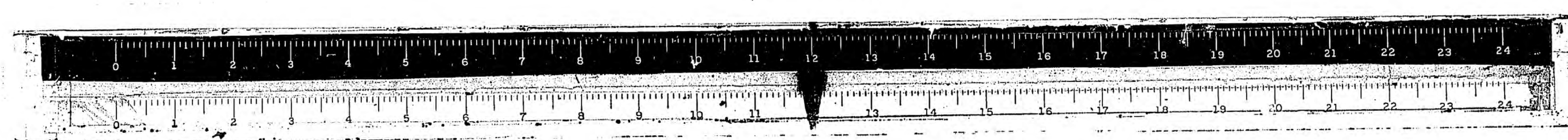
140
+
00

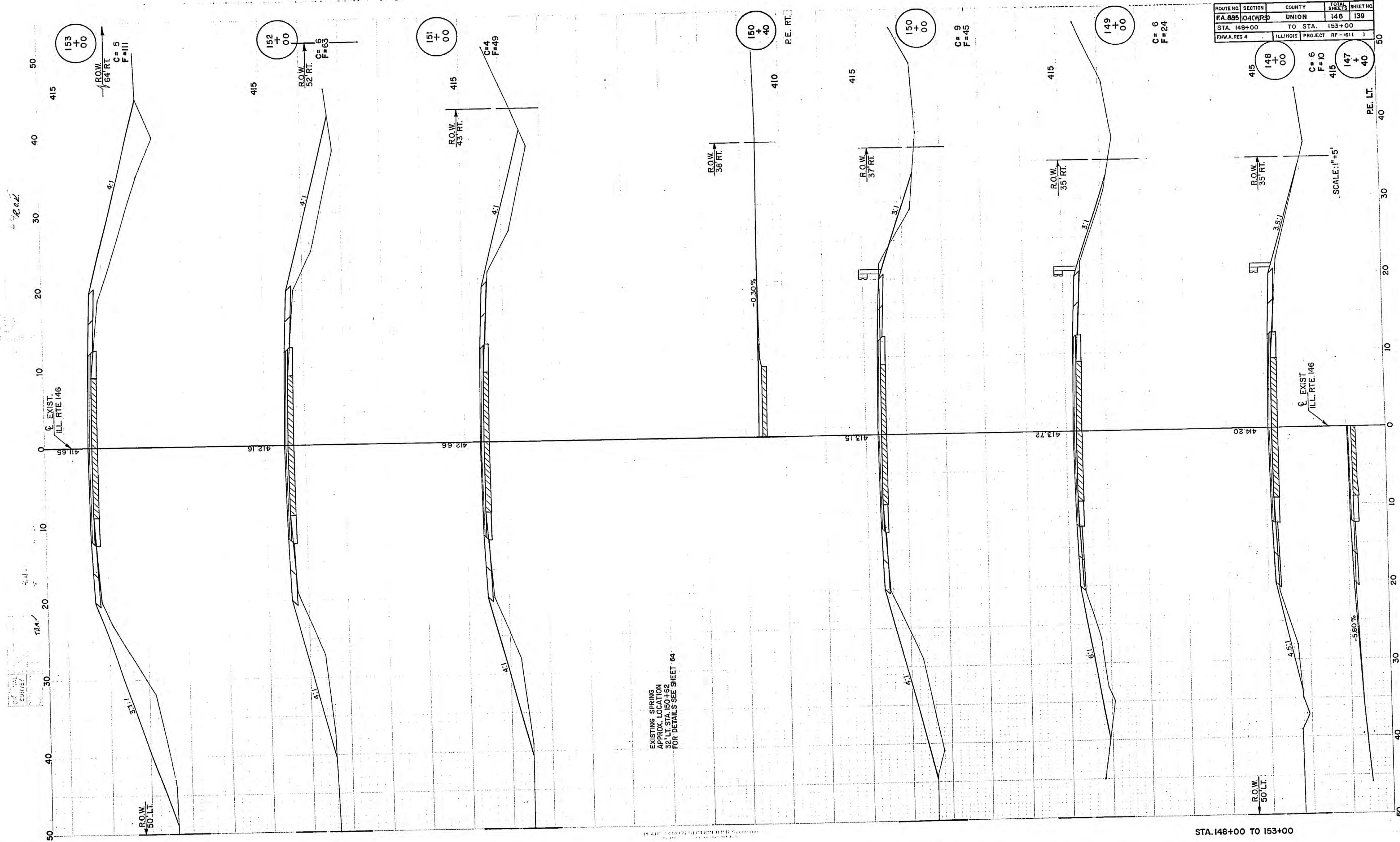
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 885	1040WRS	UNION	146	137
STA. 140+00		TO STA. 142+00		
F.H.W.A. REG. 4	ILLINOIS	PROJECT	RF-161	1

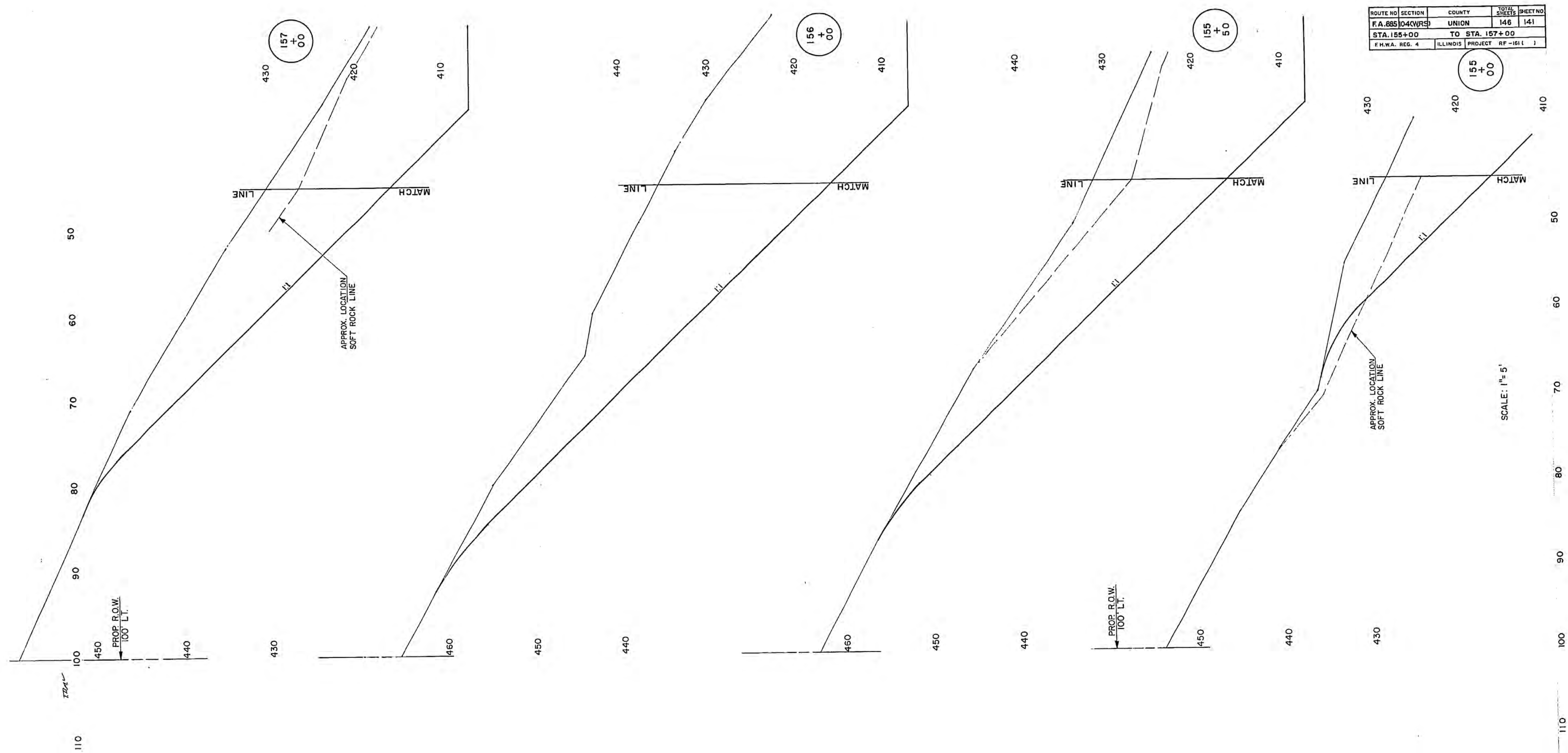


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	1040WRS	UNION	146	138
STA. 142+00		TO STA. 147+00		
KHW, A. REG. #		ILLINOIS	PROJECT	RF - 161.1

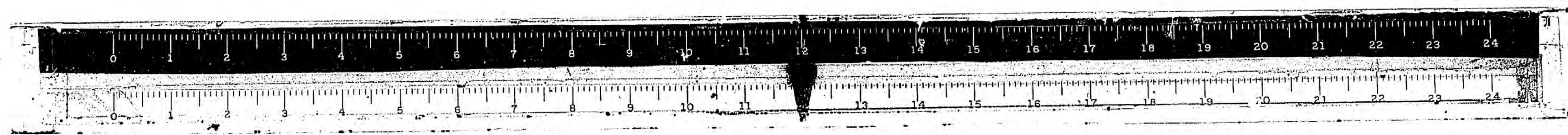
STA. 141+00 TO 147+00

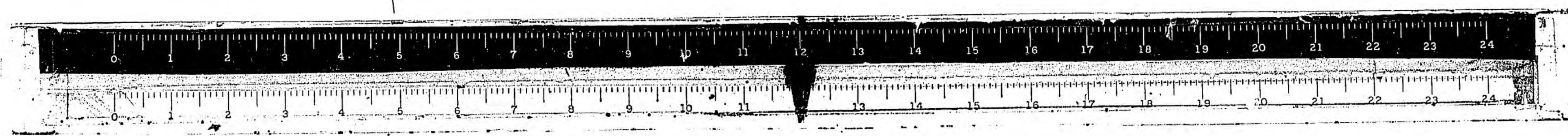
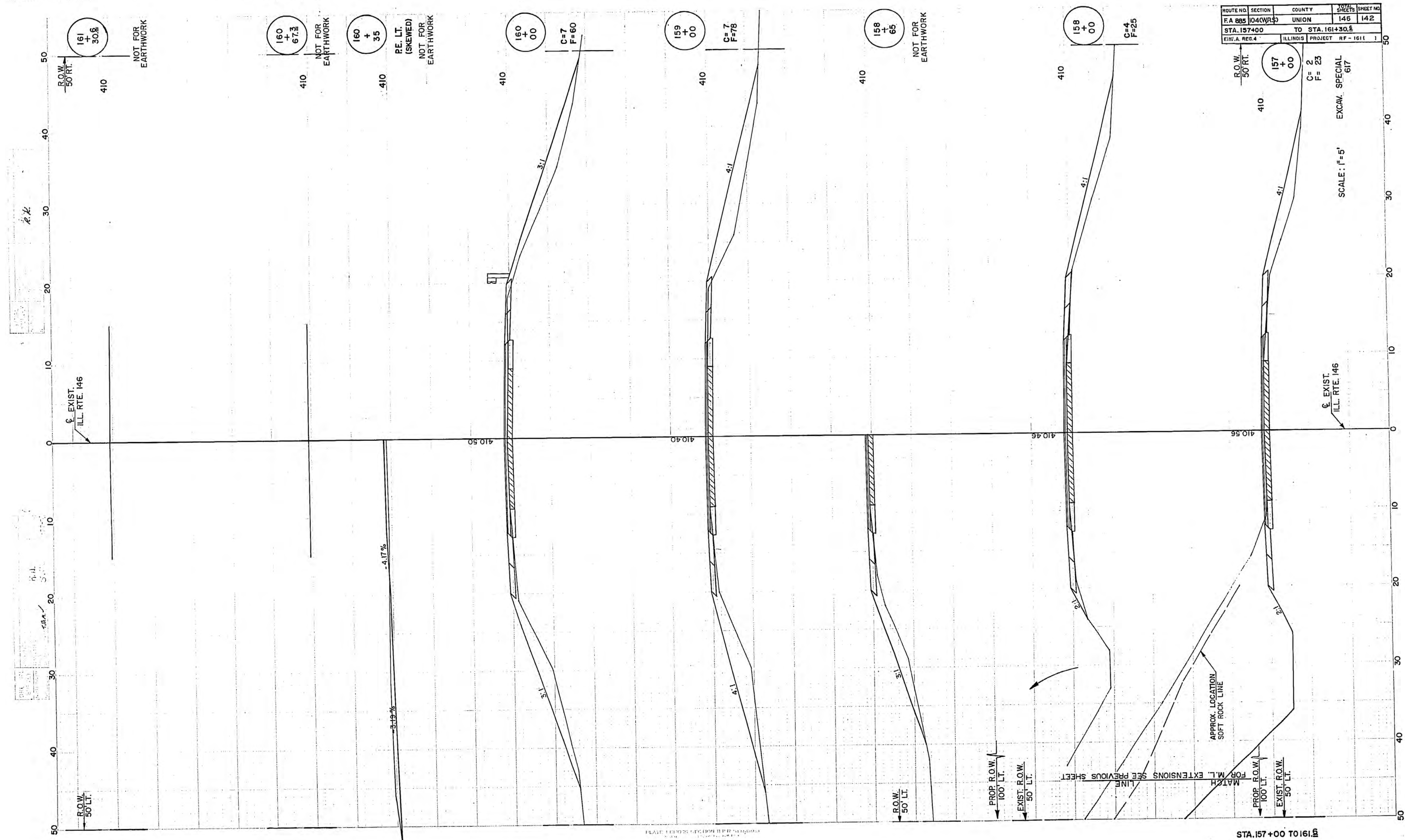


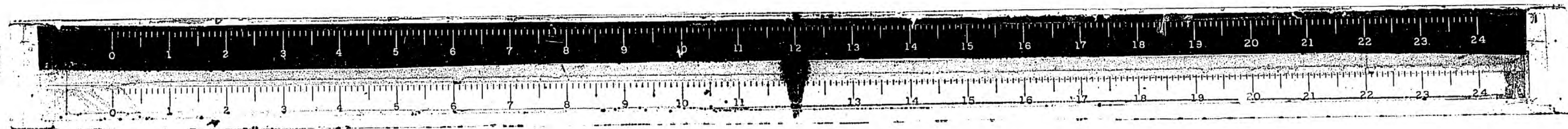


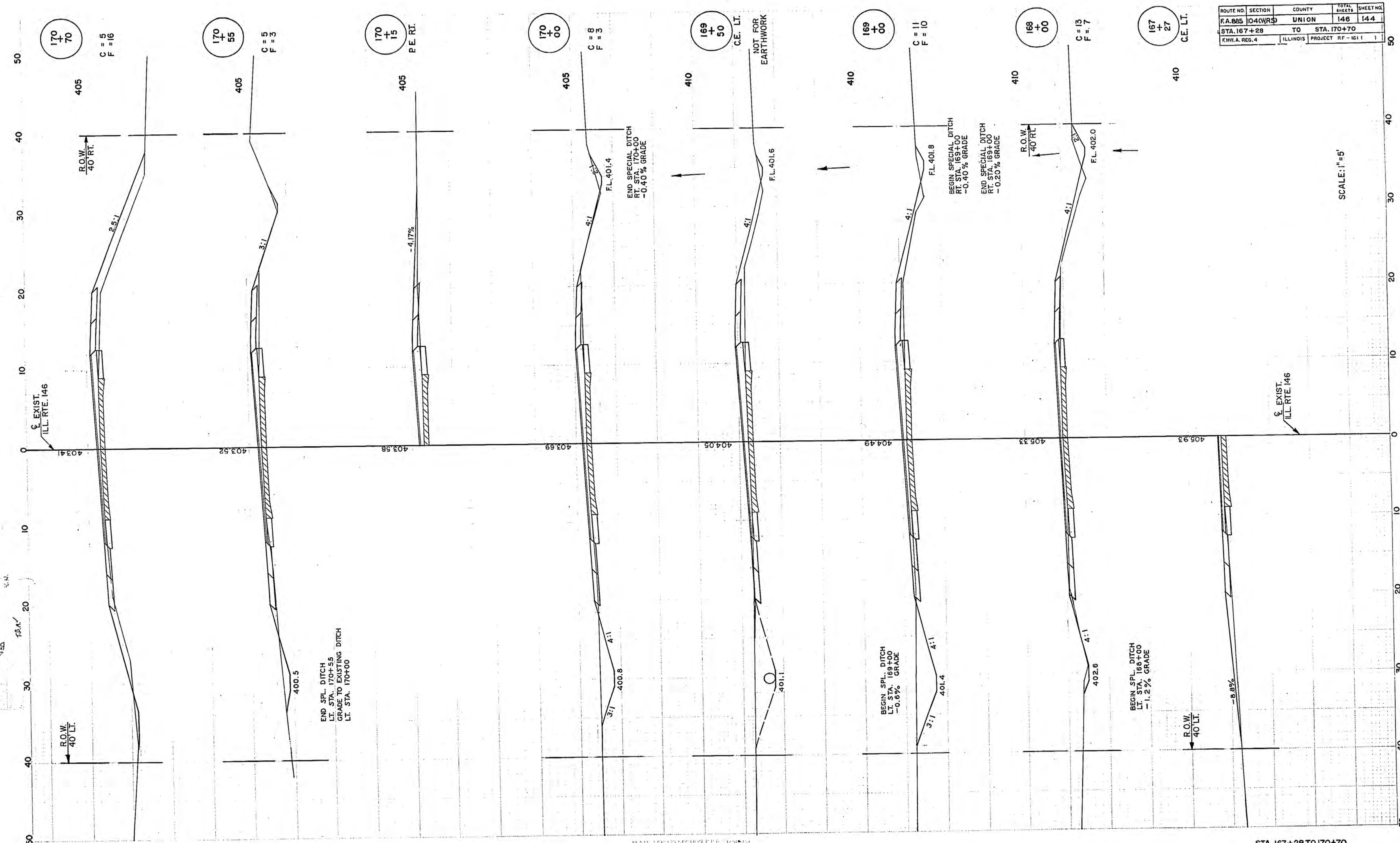


M.L. EXTENSIONS STA. 155+00 TO STA. 157+00





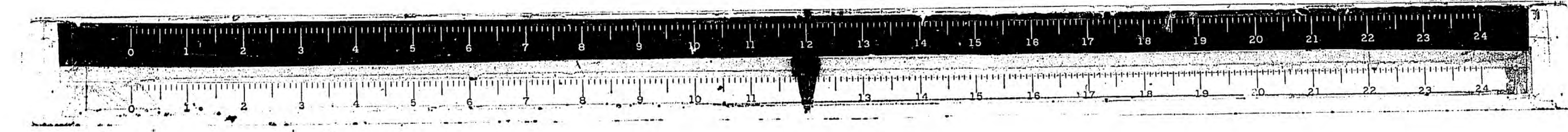
[illegible]

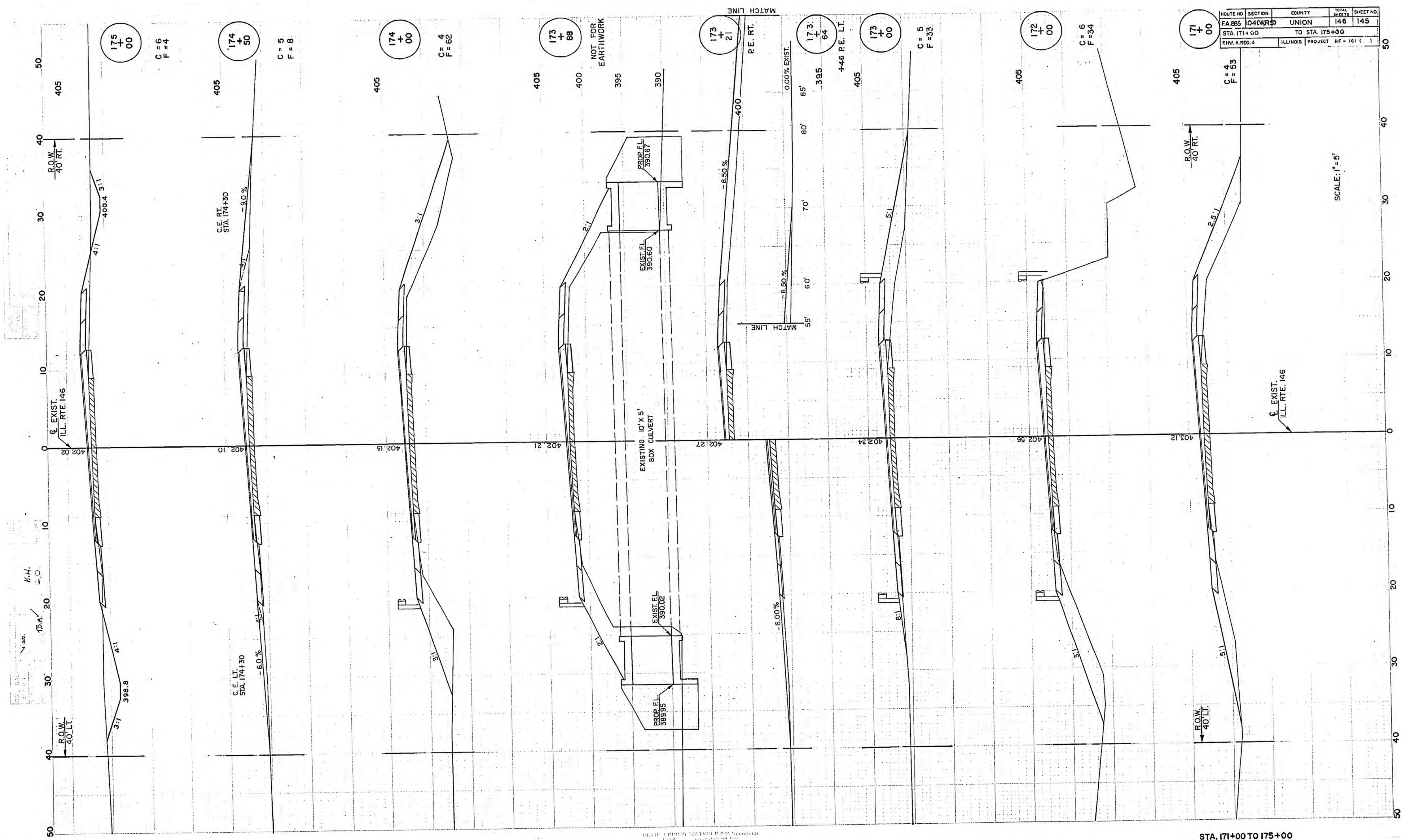


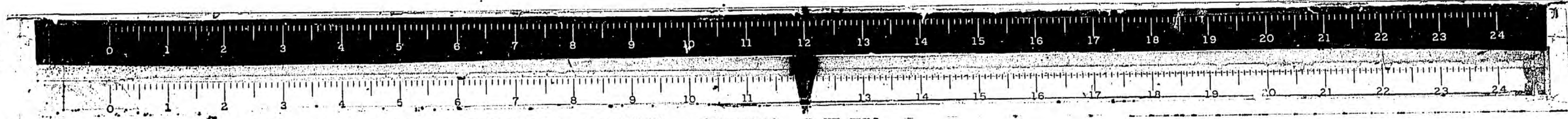
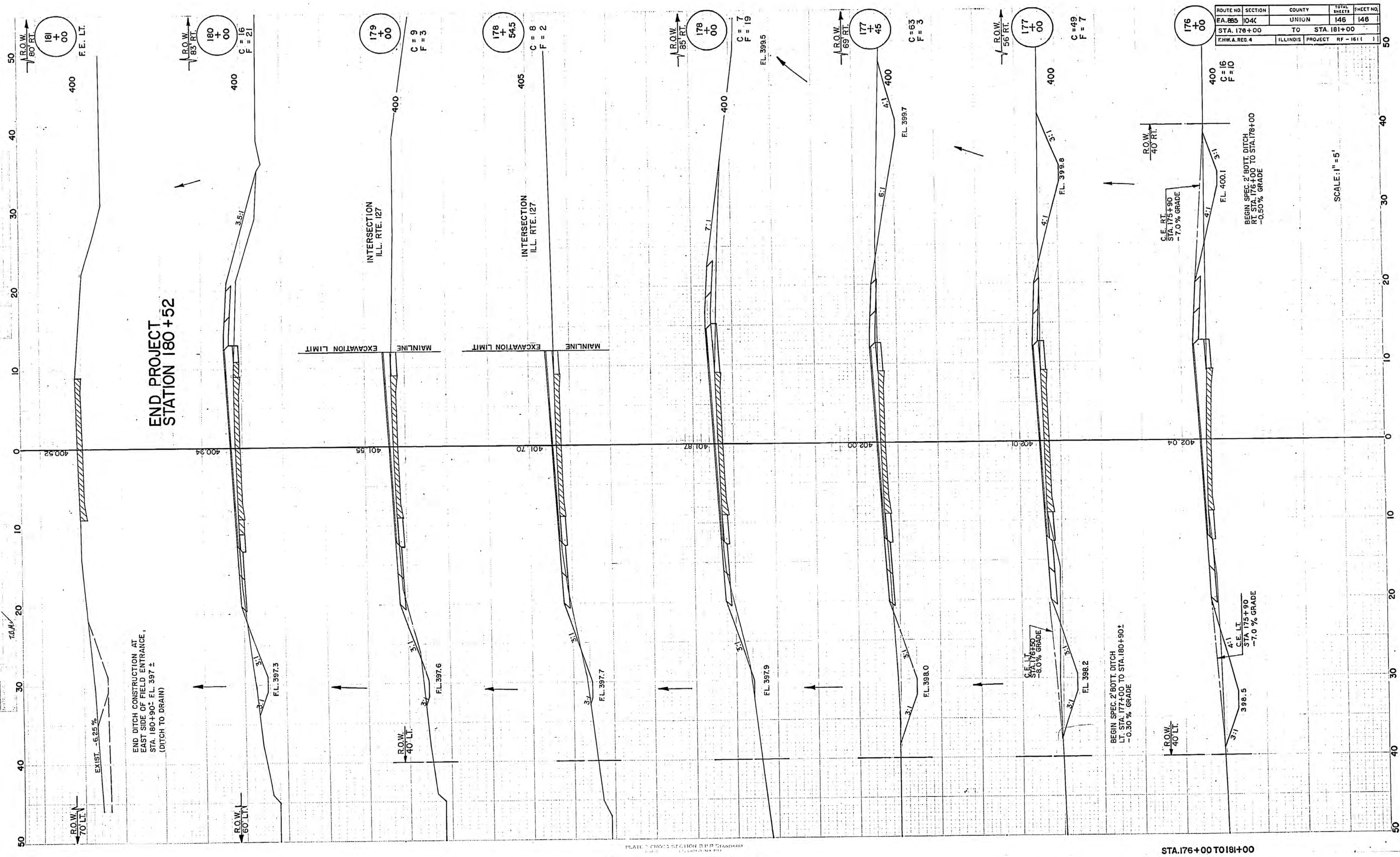
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 855	1040VR3	UNION	146	144
STA. 167+28	TO STA. 170+70			
KHW. A. REG. 4	ILLINOIS	PROJECT RF-161		

SCALE: 1"=5'

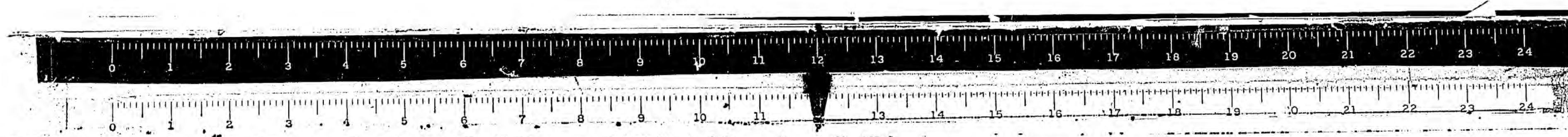
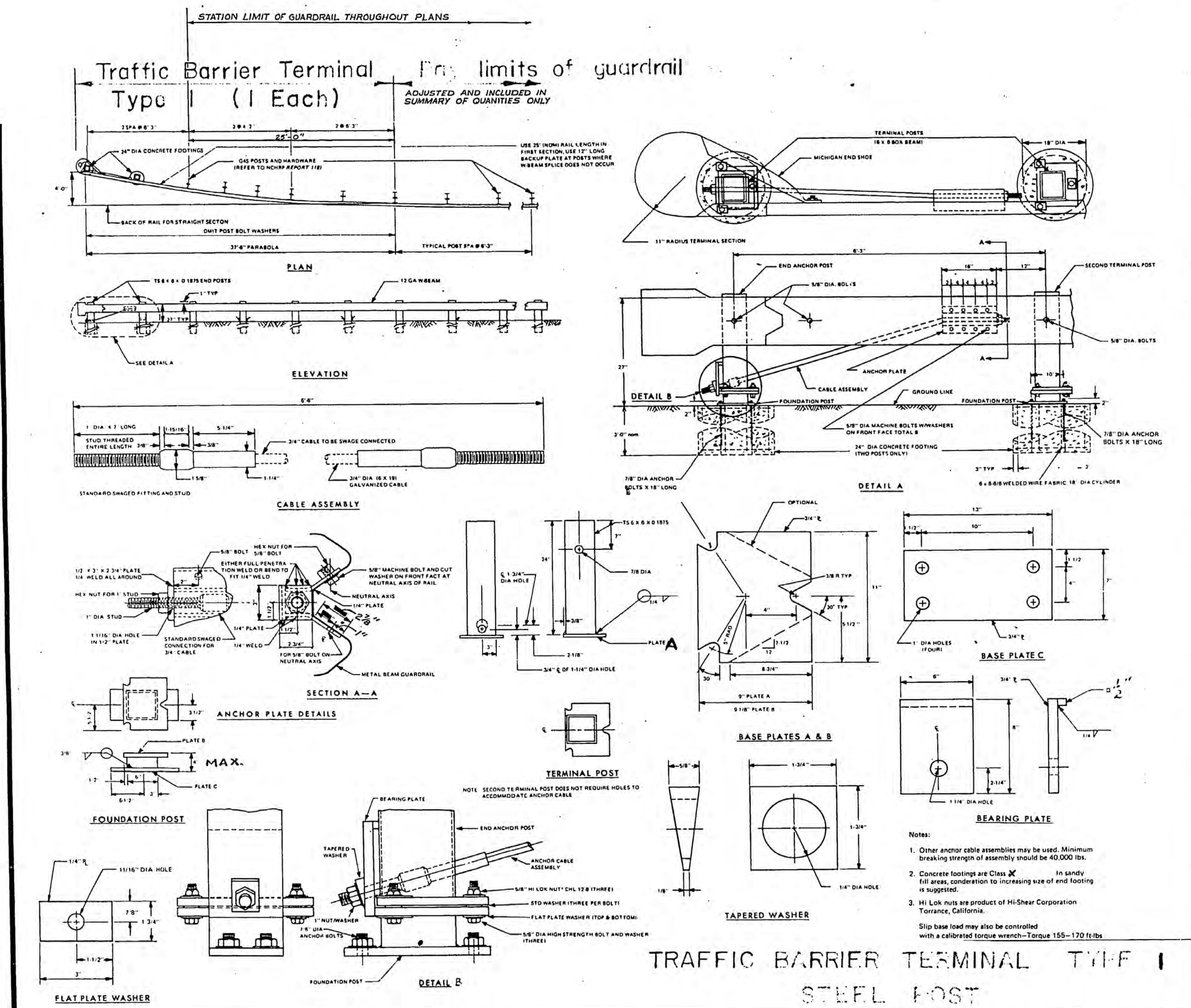
STA. 167+28 TO 170+70



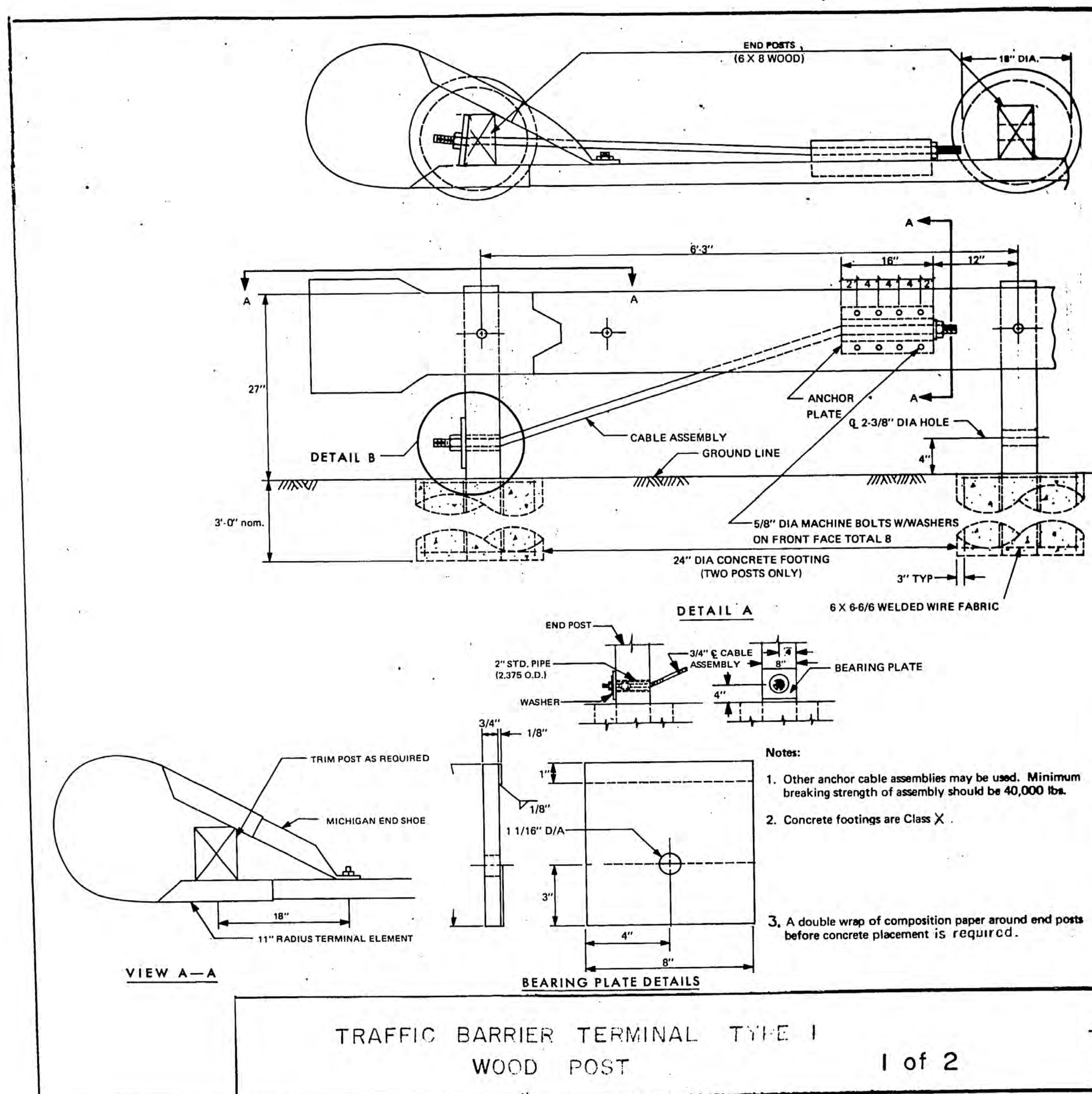




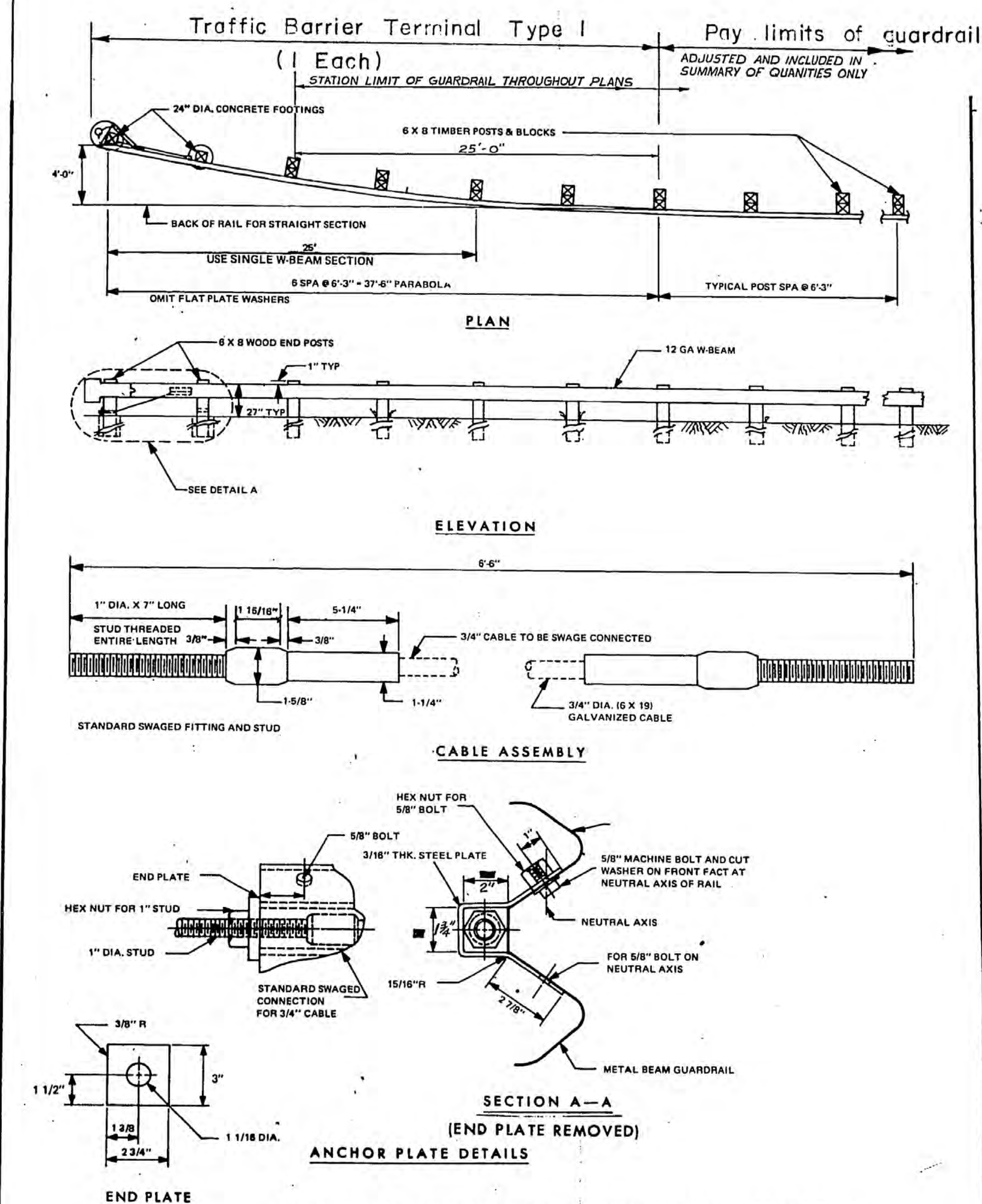
PROJECT NO.	DATE	DESIGNED BY	CHECKED BY	TOTAL SHEETS	SHEET NO.
FA 885 (04/01/81)		UNION		146	146A
146		146		146	146A



ROUTE NO.	SPR.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 885	04(MRS)	UNION	144	144B
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



ROUTE NO.	REG.	COUNTY	TOTAL SHEETS	SHEET NO.
PA 885	104(MR)	UNION	146	146C
FEB. MONTH DIST. NO. 7 ILLINOIS PROJECT				



TRAFFIC BARRIER TERMINAL TYPE I
WOOD POST 2 of 2