O-1-3

SUMMIT COUNTY
DEPARTMENT OF HIGHWAYS

RELOCATION OF HIGHLAND RD. C.H. 111

VAUGHN ROAD

LINE DATA

BEGIN PROJECT .... STA. 18+50
END PROJECT .... STA. 38+00
NET LENGTH .... 1950 L.F. OR 0.369 MILES

CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
TOWNSHIP LINE
SECTION LINE
RIGHT-OF-WAY
FENCE LINE
TREES AND/OR SHRUBS
RIVER
PAVED GUTTER
RIP RAP
GUARD RAIL: EXISTING
GUARD RAIL: PROPOSED
GENERAL POLES
TELEPHONE POLES
POWER POLES
DUMPED ROCK
JUTE MATTING
SOD DITCHES
SEED & MULCH DITCHES
CENTER LINE
RIGHT-OF-WAY WITHOUT LIMITED ACCESS

UTILITIES AFFECTED BY THIS PROJECT

THE WESTERN RESERVE TELEPHONE COMPANY

THE CLEVELAND ILLUMINATING COMPANY

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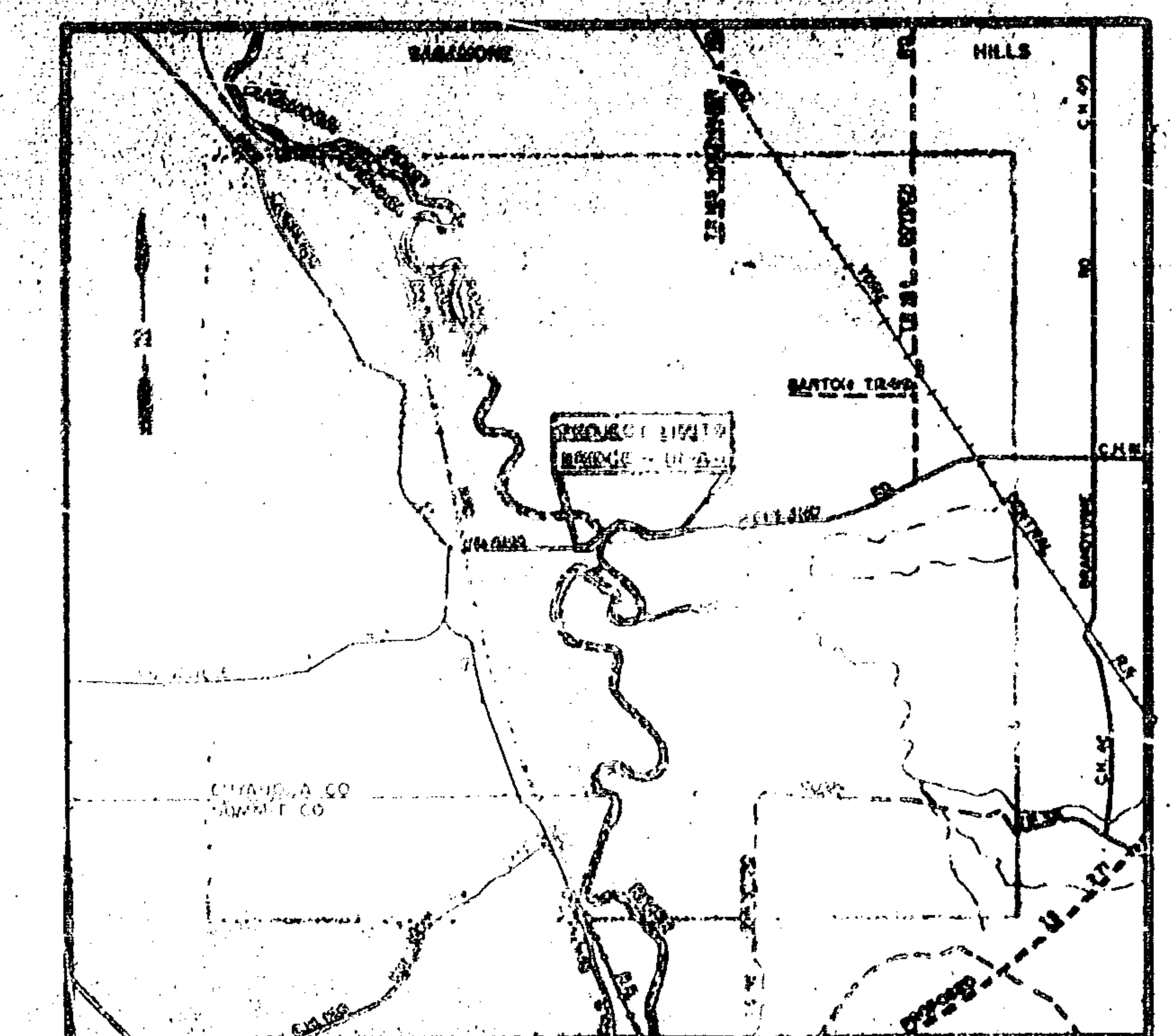


LOCATION PLAN

SCALE OF MILES

PORTION TO BE IMPROVED
COUNTY HIGHWAYS
TOWNSHIP ROADS

SCALE

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, (JANUARY 1, 1967 EDITION), INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS PROJECT.

THE RIGHT-OF-WAY FOR THIS PROJECT WILL BE PROVIDED BY CUYAHOGA AND SUMMIT COUNTIES.

WE, THE COMMISSIONERS OF CUYAHOGA AND SUMMIT COUNTIES, IN JOINT FORMAL SESSION HEREBY APPROVE THESE PLANS AND CERTIFY THAT THE NECESSARY RIGHT-OF-WAY IS AVAILABLE.

BOARD OF COMMISSIONERS - SUMMIT COUNTY

DATE: FEB. 16, 1967 *[signatures]* John Poda

BOARD OF COMMISSIONERS - CUYAHOGA COUNTY

DATE: FEB. 16, 1967 *William [illegible]* *[signatures]*

WE HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT, WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DETOURS WILL BE PROVIDED BY CUYAHOGA AND SUMMIT COUNTIES.

DATE: *Feb. 20* 1967 *Ralph Van Brimmer*
RALPH VANBRIMMER REG. P.E. NO. 2212 SUMMIT COUNTY ENGINEER

DATE: *March 15* 1967 *A. S. Porter*
ALBERT S PORTER REG. P.E. NO 150 CUYAHOGA COUNTY ENGINEER

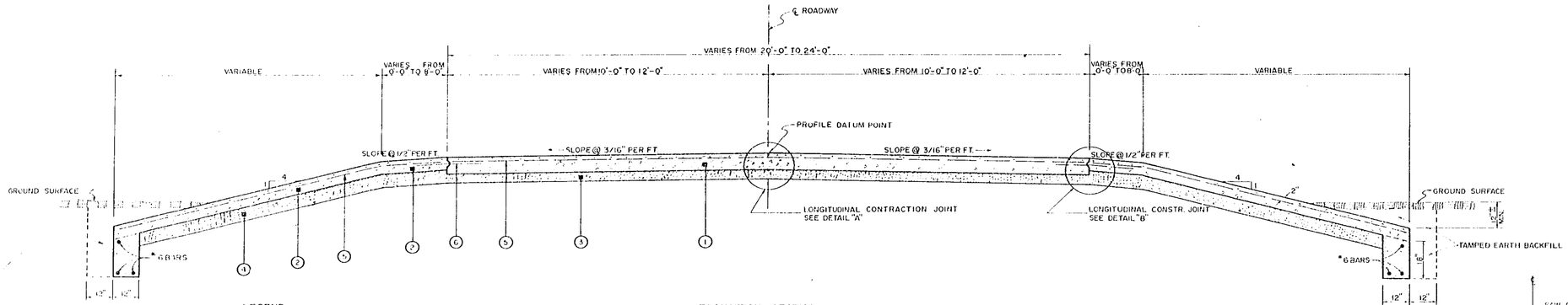
FILED FOR RECORD *[signature]* DATE *[illegible]* 1967
SUMMIT COUNTY AUDITOR

FILED FOR RECORD .... DATE .... 19..
CUYAHOGA COUNTY AUDITOR

B-155 BRIDGE [illegible]

TYPICAL SECTIONS

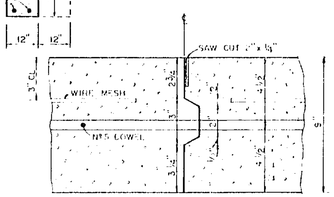
TYPE 451 ON 310



LEGEND

1 ITEM 451 – 9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
2 ITEM 451 – 6" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
3 ITEM 310 – 3" SUBBASE
4 ITEM 310 – 6" SUBBASE
5 ITEM – 6 x 6 – 4/4 WELDED WIRE FABRIC
6 ITEM – #5 DEFORMED BARS 30" LONG @ 30" %
7 ITEM 411 – 6" STABILIZED CRUSHED AGGREGATE SHOULDERS

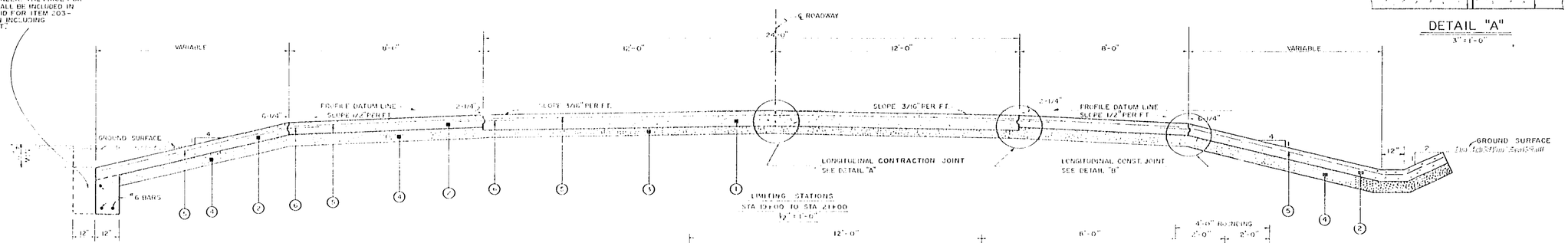
TRANSITION SECTION
LIMITING STATIONS
STA 18+50 TO STA 19+00
1/2" = 1'-0"

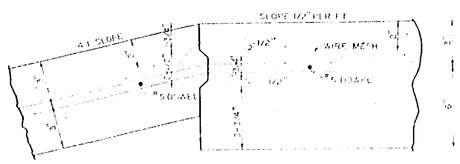


DETAIL "A"
3" = 1'-0"

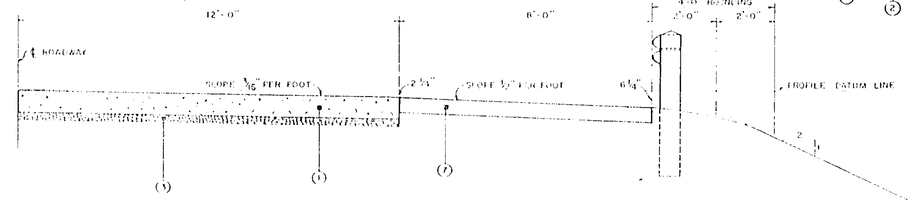
CONTRACTOR SHALL BE PAID FOR EXCAVATION 12" OUTSIDE OF CONCRETE FLOOD MATS AS SHOWN HEREIN DOTTED LINES AND ON CROSS SECTIONS. CONTRACTOR SHALL BACKFILL SAME AS ORIGINAL GROUND SURFACE OR AS DIRECTED BY THE ENGINEER. THE PRICE FOR BACKFILL SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 203-EXCAVATION INCLUDING EMBANKMENT.

TYPE 451 ON 310





DETAIL "B"
3" = 1'-0"



LIMITING STATIONS
STA 21+00 TO STA 22+77.75
1/2" = 1'-0"

HIGHLAND RD. C.H. III

TYPICAL SECTIONS

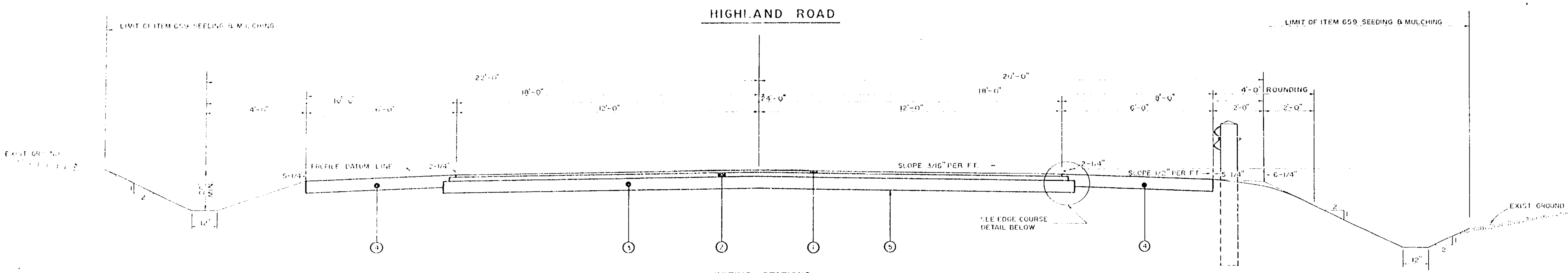
SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY B.J. CAMPBELL	SCALE AS SHOWN
SUBMITTED BY B.J. CAMPBELL	DATE 6/14/66
APPROVED BY	FIELD BOOK
	TRACED BY J.R. COX

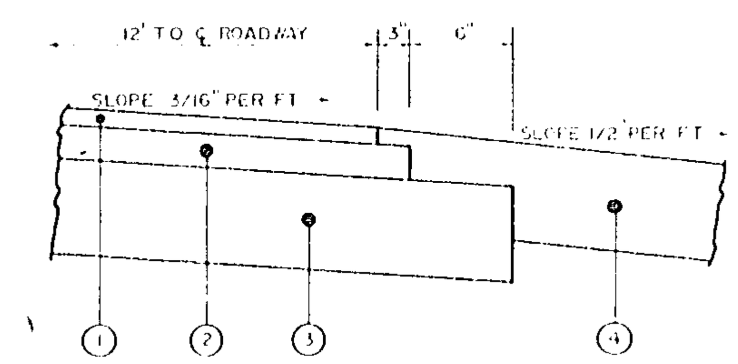
TYPICAL SECTIONS

TYPE 404 ON 301

HIGHLAND ROAD



LIMITING STATIONS
STA. 24+82.25 TO STA. 38+00



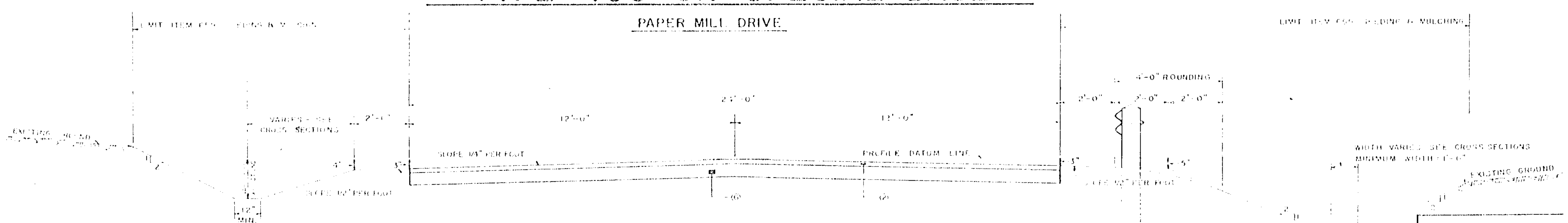
EDGE COURSE DETAIL
1-1/2"=1'-0"

LEGEND

1. ITEM 404 1" TYPE 404 ASPHALT CONCRETE (75-85)
2. ITEM 403 2" TYPE 403 ASPHALT CONCRETE (75-85)
3. ITEM 301 6" TYPE 301 BITUMINOUS AGGREGATE BASE
4. ITEM 411 6" STABILIZED CRUSHED AGGREGATE SHOULDERS
5. ITEM 408 PRIME COAT (PRIMER "L" @ 0.30 GAL./SQ.YD.)
6. ITEM SPECIAL 6" LIME FLYASH STABILIZED AGGREGATE BASE

TYPE 403 ON SPECIAL BASE

PAPER MILL DRIVE



LIMITING STATIONS
STA. 0+08 TO STA. 1+44.02
STA. 2+75.46 TO STA. 7+50

HIGHLAND RD. C.H. 111
PAPER MILL DRIVE
TYPICAL SECTIONS

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY
SUBMITTED BY
APPROVED BY
SCALE
DATE
FIELD BOOK
TRACED BY

GENERAL NOTES

SPECIFICATIONS
THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, (JANUARY 1, 1967 EDITION) SHALL GOVERN THE CONSTRUCTION OF THIS PROJECT. REFERENCE MADE TO NUMERICAL SECTIONS IN THE CONTEXT OF THESE PLANS SHALL BE DEEMED TO REFER TO THE ABOVE DEPARTMENT OF HIGHWAYS SPECIFICATIONS.

SMALL DRAINS
WHERE DRAINS FROM DOWNSPOUTS, FIELD DRAINS, ETC., ARE ENCOUNTERED AND NOT SHOWN ON THE PLANS, THEY SHALL BE GIVEN AN UNOBSTRUCTED OUTLET AT THE DIRECTION OF THE ENGINEER. AN ESTIMATED QUANTITY OF 50 LIN. FT. OF 6" VP (SEC. 706.08) HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS PURPOSE.

FIELD OFFICE
THE CONTRACTOR SHALL PROVIDE A SUITABLE FIELD OFFICE IN ACCORDANCE WITH SEC. 105.152 HAVING A MINIMUM FLOOR AREA OF 100 SQUARE FEET. THE CONTRACTOR SHALL HAVE ELECTRICITY, HEAT AND A TELEPHONE INSTALLED AND MAINTAINED DURING THE CONSTRUCTION OF THIS PROJECT.

BERMS AND SLOPES
BERMS, SLOPES AND ROUNDINGS SHALL BE FINISHED IN ACCORDANCE WITH STANDARD DRAWING MC-1 EXCEPT WHERE OTHERWISE SHOWN ON THE CROSS SECTIONS. ALL SLOPES IN TRANSITIONS FROM CUT TO FILL SHALL BE MADE IN A MANNER TO BLEND WITH THE SURROUNDING TERRAIN AS DIRECTED BY THE ENGINEER.

EXISTING UTILITIES
THE LOCATION, TYPE, SIZE AND/OR DEPTH OF ALL EXISTING UTILITIES ARE SHOWN AS ACCURATELY AS AVAILABLE INFORMATION PERMITS. THE COUNTY OF SUMMIT WILL NOT BE RESPONSIBLE FOR VARIATIONS FOUND DURING CONSTRUCTION.

PAVEMENT EDGE ELEVATIONS
PROPOSED EDGE OF PAVEMENT ELEVATIONS ON INTERSECTIONS MAY BE ADJUSTED BY THE ENGINEER DURING CONSTRUCTION TO FACILITATE DRAINAGE AND/OR TO PROVIDE A SMOOTH TRANSITION BETWEEN THE PROPOSED PAVEMENT AND EXISTING PAVEMENT.

UTILITY ADJUSTMENT
ANY AND ALL WORK REQUIRED FOR REMOVING, RELOCATING AND CONSTRUCTION OF NEW FACILITIES WILL BE DONE BY AND AT THE EXPENSE OF THE RESPECTIVE OWNERS, UNLESS OTHERWISE NOTED ON THE PLANS.

PROPERTY MARKERS
ALL IRON PIPES OR MARKERS WITHIN THE LIMITS OF THE PROJECT SHALL BE PRESERVED AND ADJUSTED TO THE NEW GRADE BY THE CONTRACTOR, AT THE DIRECTION OF THE ENGINEER. THE COST OF ADJUSTING OR RESETTING MARKERS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 203, "EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION."

MONUMENT ASSEMBLIES
MONUMENT ASSEMBLIES SHALL BE FURNISHED AND PLACED IN ACCORDANCE WITH STD. DRAWING MC-1, DATED 6-1-65.

SPECIAL LIME-FLYASH STABILIZED AGGREGATE BASE
THIS 6" BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SUPPLEMENTAL SPECIFICATIONS ATTACHED TO THE FORM OF PROPOSAL.

MAINTAINING TRAFFIC
TRAFFIC SHALL BE MAINTAINED OVER EXISTING HIGHLAND ROAD AND VAUGHN ROAD UTILIZING THE EXISTING ALIGNMENT AND STRUCTURES UNTIL GRADING AND PAVING OPERATIONS REQUIRE THAT IT BE CLOSED TO THRU TRAFFIC.

THE CONTRACTOR SHALL OBTAIN THE WRITTEN PERMISSION OF THE SUMMIT COUNTY ENGINEER BEFORE CLOSING THE ROAD TO TRAFFIC. THE SUMMIT COUNTY ENGINEER WILL BE RESPONSIBLE FOR COORDINATING DETOURS WITH THE CUYAHOGA COUNTY ENGINEER, AND IN ADDITION WILL SET-UP AND MAINTAIN ALL DETOURS.

GUARD RAIL ADJUSTMENT
THE STATIONING OF INDIVIDUAL RUNS OF GUARD RAIL SHALL BE ADJUSTED, IF NECESSARY, BY THE ENGINEER AT THE TIME OF CONSTRUCTION TO ACCOMMODATE THE STANDARD PANEL LENGTHS FURNISHED.

FINAL PAYMENT
FINAL PAYMENT FOR THE FOLLOWING ITEMS:

203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
203 EMBANKMENT
203 WATER
601 DUMPED ROCK FILL, TYPE "A"

SHALL BE BASED ON THE QUANTITY AS SHOWN ON THESE PLANS AND IN THE PROPOSAL, CHECKED DURING CONSTRUCTION TO INSURE THAT THE COMPLETED WORK CONFORMS TO THE PLANS AND IS WITHIN THE TOLERANCES ALLOWED UNDER SECTIONS 203.06 AND 601.07. FINAL MEASUREMENTS WILL NOT BE TAKEN.

SEEEDING, FERTILIZER AND LIME
QUANTITIES FOR THESE ITEMS ARE CALCULATED FOR THE SOIL AREAS BETWEEN THE WORK LIMITS SHOWN ON THE ROADWAY CROSS SECTIONS, AND THE CHANNEL CROSS SECTIONS. SEED MIXTURE FOR SHOULDERS, DITCHES AND AREAS IN FRONT OF RESIDENCES SHALL BE AS FOLLOWS:

CREEPING RED FESCUE	20 %
KENTUCKY BLUE GRASS	20 %
KENTUCKY 31 FESCE	45 %
RED TOP	10 %
ALSIKE CLOVER	5 %

SLOPES AND OTHER AREAS, EXCEPT THOSE MENTIONED ABOVE SHALL BE SEEDED WITH THE FOLLOWING MIXTURE:

KENTUCKY BLUE GRASS	20 %
KENTUCKY 31 FESCUE	45 %
RED TOP	10 %
YELLOW BLOSSOM SWEET CLOVER	25 %

DRY COMMERCIAL FERTILIZER SHALL BE APPLIED AT THE RATE OF 20 LBS. PER 1000 SQUARE FEET.
LIQUID FERTILIZER SHALL BE APPLIED AT THE RATES PRESCRIBED IN SECTION 659.08.
AGRICULTURAL LIMING MATERIAL SHALL BE APPLIED AT THE RATE OF 100 LBS. PER 1000 SQUARE FEET.

REMOVAL OF EXISTING PIPE
THE REMOVAL OF EXISTING PIPE DRAINS WITHIN THE LIMITS OF PROPOSED EXCAVATION ITEMS SHALL BE INCLUDED FOR PAYMENT IN THE UNIT PRICES BID FOR THE RESPECTIVE EXCAVATION ITEMS, UNLESS OTHERWISE ITEMIZED IN THE PLANS.

CONSTRUCTION OF THE PAPER MILL ROAD
THE FIRST PHASE OF CONSTRUCTION FOR THIS PROJECT FOLLOWING CLEARING AND GRUBBING OPERATIONS SHALL BE THE CONSTRUCTION OF THE PAPER MILL ROAD.

AFTER THE ROADWAY HAS BEEN BROUGHT TO SUBGRADE, SIX INCHES (6") OF ITEM 411, STABILIZED CRUSHED AGGREGATE SHALL BE APPLIED TO THE ROADWAY AREA AND COMPACTED.

THE ROAD SHALL THEN BE OPENED TO TRAFFIC AND MAINTAINED BY THE CONTRACTOR, UNTIL SUCH A TIME THAT FINAL PAVING OPERATIONS DICTATE THAT IT BE CLOSED TO APPLY THE LIME-FLYASH STABILIZATION PROCESS AND THE ASPHALT CONCRETE.

THE CONTRACTOR SHALL GIVE THE ENGINEER SEVEN (7) DAYS ADVANCED NOTICE OF ANY CONTEMPLATED CLOSING DATE FOR THIS ROAD; SO THAT THE PAPER MILL CAN ADJUST THEIR TRUCK DELIVERY SCHEDULE IF REQUIRED.

ITEM 203 EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCT'N
ITEM 203 EMBANKMENT
THE QUANTITIES SHOWN IN THE GENERAL SUMMARY AND IN THE PROPOSAL REFLECT THE TOTAL QUANTITIES OF EXCAVATION AND EMBANKMENT REQUIRED FOR HIGHLAND RD., PAPERMILL DR. AND CUYAHOGA RIVER CHANNEL WORK.

THE TOTAL ESTIMATED QUANTITIES WERE ARRIVED AT AS FOLLOWS:

	EXCAVATION	EMBANKMENT
HIGHLAND RD.	3,411 C.Y.	11,300 C.Y.
PAPERMILL DR.	172 C.Y.	2,893 C.Y.
CUY. RIVER CHANNEL	18,591 C.Y.	13,787 C.Y.
TOTALS	22,174 C.Y.	27,980 C.Y.

CHANNEL EXCAVATION SHALL BE USED IN THE CHANNEL EMBANKMENT; HOWEVER, THE REMAINING SURPLUS CHANNEL EXCAVATION MAY BE USED IN THE ROADWAY EMBANKMENTS ONLY IF IT IS FOUND TO BE SUITABLE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 203.08.

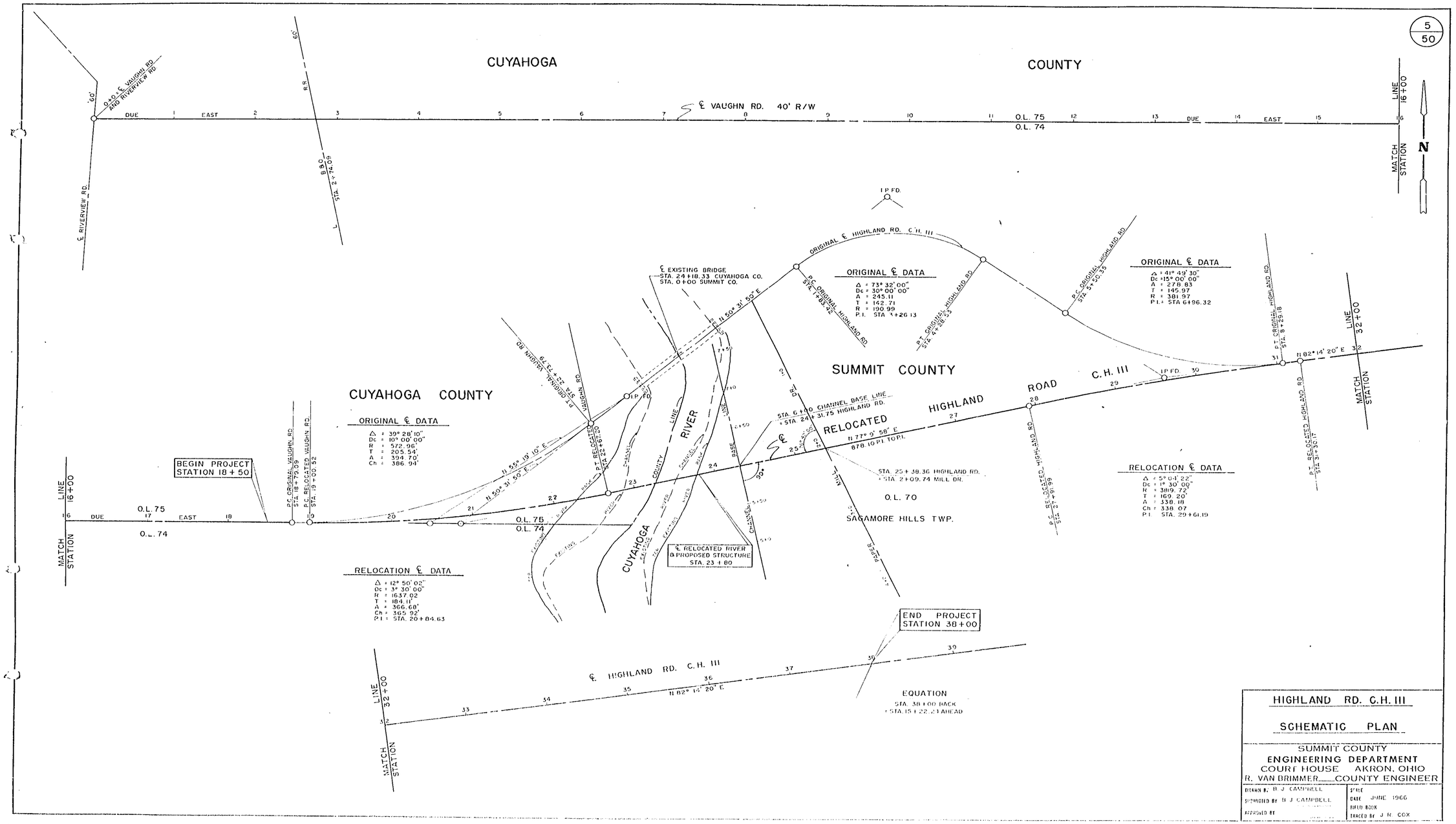
GENERAL SUMMARY

CUYAHOGA COUNTY			SUMMIT COUNTY			TOTAL	DESCRIPTION
ITEM	QUANT.	UNIT	ITEM	QUANT.	UNIT	QUANT.	
							ROADWAY
201	50%	LUMP	201	50%	LUMP	SUM	CLEARING & GRUBBING
202	0	LUMP	202	100%	LUMP	SUM	EXISTING STRUCTURES REMOVED AS PER PLAN
202	0	LIN FT	202	66	LIN FT	66	PIPE REMOVED, AS PER PLAN
202	1000	SQ YD	202	1911	SQ YD	2911	EXISTING PAVEMENT REMOVED & DISPOSED OF
203	9527	CU YD	203	12647	CU YD	22174	EXCAVATION NOT INCLUDING EMBANKMENT CONSTRUCTION
203	12613	CU YDS	203	15367	CU YDS	27980	EMBANKMENT
203	0.063	M.G.	203	0.077	M.G.	0.140	WATER
203	2514	SQ YD.	203	7936	SQ YD.	10450	SUBGRADE PREPARATION
604	1	EACH	604	1	EACH	2	MONUMENT ASSEMBLIES, AS PER PLAN
606	430	LIN FT	606	1633	LIN FT	2063	GUARD RAIL, TYPE 4
614	50%	LUMP	614	50%	LUMP	SUM	MAINTAINING TRAFFIC
659	0.176	TON	659	0.621	TON	0.797	COMMERCIAL FERTILIZER (12-12-12)
659	0.878	TON	659	3.104	TON	3.982	AGRICULTURAL LIMING
659	1951	SQ YD	659	6897	SQ YD	8848	SEEDING & MULCHING
							DRAINAGE
601	0	LIN FT	601	146	LIN FT	146	PAVED GUTTER, MODIFIED AS PER PLAN
602	0	CU YD	602	36	CU YD	36	CONCRETE MASONRY, AS PER PLAN
603	35	LIN FT	603	35	LIN FT	~~70~~ 72	72" CONDUIT, TYPE F, AS PER PLAN
603	0	LIN FT	603	84	LIN FT	84	72" X 44" CONDUIT, TYPE F, AS PER PLAN
603	0	LIN FT	603	116	LIN FT	116	12" CONDUIT, TYPE F, WITH CLASS B BACKFILL
603	25	LIN FT	603	25	LIN FT	50	6" CONDUIT, TYPE E, AS DIRECTED BY THE ENGINEER
							EROSION CONTROL
601	240	SQ YD	601	295	SQ YD	535	RIPRAP, 6" REINFORCED CONCRETE, AS PER PLAN
601	719	CU YD	601	719	CU YD	1438	DUMPED ROCK FILL, TYPE A, AS PER PLAN
601	0	CU YD	601	42	CU YD	42	DUMPED ROCK CHANNEL PROTECTION, AS PER PLAN
660	0	SQ YD	660	1128	SQ YD	~~1128~~ 500	SODDED DITCHES, AS PER PLAN
							PAVEMENT
301	0	CU YD	301	766	CU YD	766	BITUMINOUS AGGREGATE BASE (T-6") (702.01)(85-100)
310	100	CU YD	310	0	CU YD	100	SUBBASE (T=3") (703.08 OR 703.10)
310	190	CU YD	310	0	CU YD	190	SUBBASE (T=6") (703.08 OR 703.10)
403	0	CU YD	403	346	CU YD	346	ASPHALT CONCRETE (T=2) (70-85)
404	0	CU YD	404	126	CU YD	126	ASPHALT CONCRETE (T=1) (70-85)
408	0	GALLON	408	1718	GALLON	1718	BITUMINOUS PRIME COAT (702.03, PRIMER "L") (0.25 GAL./SQ. YD.)
411	50	CU YD	411	335	CU YD	385	STABILIZED CRUSHED AGGREGATE (T=6")
451	1130	SQ YD	451	0	SQ YD	1130	9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN
451	1,088	SQ YD	451	0	SQ YD	1088	6" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT, AS PER PLAN
611	67	SQ YD	611	67	SQ YD	134	REINFORCED CONCRETE APPROACH SLABS (T=13")
SPECIAL	0	SQ YD	SPECIAL	1628	SQ YD	1628	6" LIME-FLYASH STABILIZED AGGREGATE BASE

BRIDGE III-A-1
GENERAL SUMMARY
GENERAL NOTES

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY J.R. COX	SCALE
SUBMITTED BY R. J. CAMPBELL	DATE SEPT. 1966
	FIELD BOOK
APPROVED BY	TRACED BY



HIGHLAND RD. C.H. III

SCHEMATIC PLAN

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

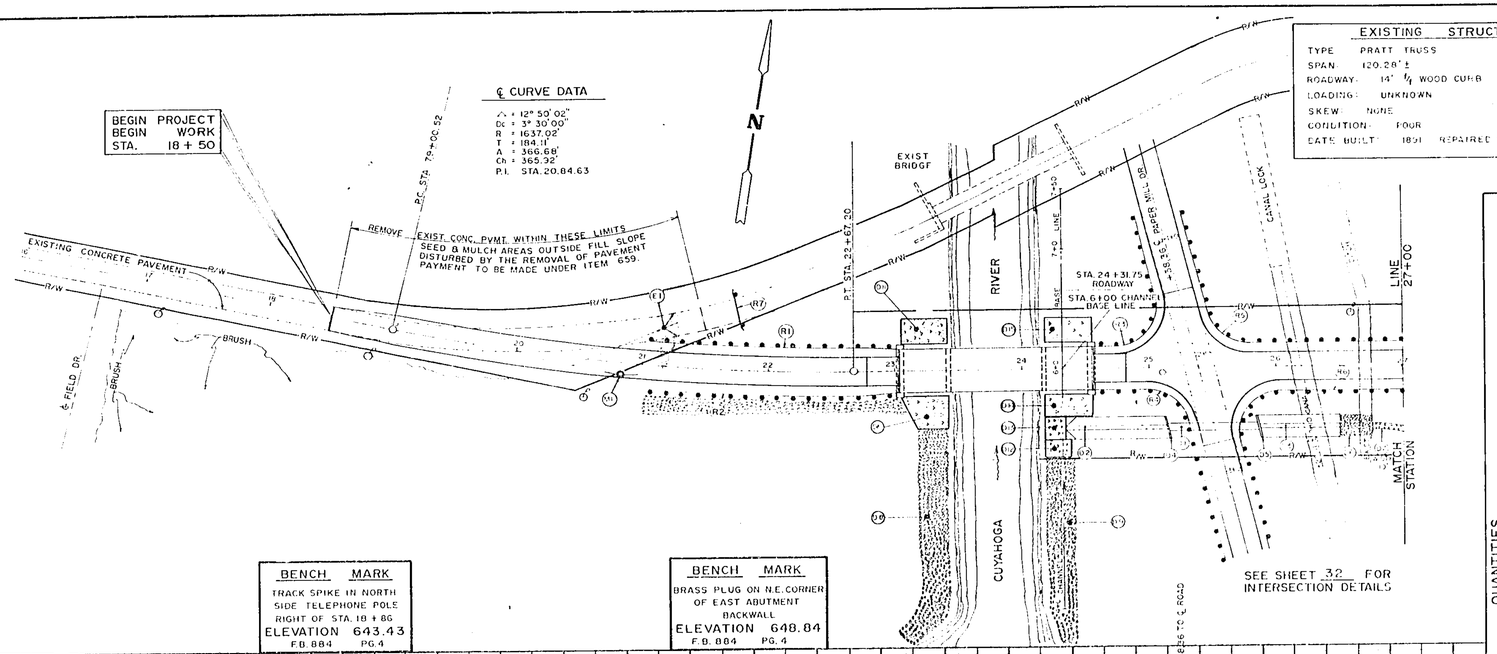
DRAWN BY B. J. CAMPBELL	SCALE
SUBMITTED BY B. J. CAMPBELL	DATE JUNE 1966
APPROVED BY	FIELD BOOK
	TRACED BY J. R. COX

EXISTING STRUCTURE

TYPE: PRATT TRUSS
SPAN: 120.28' ±
ROADWAY: 14' ⅊ WOOD CURB
LOADING: UNKNOWN
SKEW: NONE
CONDITION: POOR
DATE BUILT: 1891 REPAIRED 1919

PROPOSED STRUCTURE

TYPE: PRESTRESSED REINFORCED CONCRETE BOX BEAM
SPANS: 37'-74'-37' ℄ BEARINGS
ROADWAY: 36'-0" ⅊ GUARDRAIL
LOAD FREQUENCY: S-15-60
SKEW: NONE
WEARING SURFACE: ASPHALT CONCRETE
APPROACH SLABS: AS-1-54 (25' LONG)
ALIGNMENT: TANGENT



QUANTITIES

REF NO.	STATION TO STATION	ESTIMATED 601 CLEARING & GRUBBING SUBSIDIARY LUMP SUM	202 REMOVING STRUCTURE OR OBSTRUCTION SQ. YD.	601.04 SELECTED BORROW (T.6) CU. YD.	601.08 UNCLASSIFIED EXCAVATION (PONDED CONDITION) CU. YD.	601.09 CHANNEL CLEANOUT LIN. FT.	601.07 DUMPED ROCK TYPE "A" CU. YD.	603 CONCRETE ENCASEMENT (ANGLES) LINEAL FEET	606 GUARD RAIL TYPE 4 LIN. FT.	608 SODDED DITCH SQ. YD.	604 MONUMENT ASSEMBLIES EACH	SEE SHEET NO.
1	18+50 TO 19+86	1						70.72				33
2	19+86 TO 20+50											33
3	20+50 TO 21+75											33
4	21+75 TO 22+67											33
5	22+67 TO 23+00											33
6	23+00 TO 23+50											33
7	23+50 TO 24+00											33
8	24+00 TO 24+50											33
9	24+50 TO 25+00											33
10	25+00 TO 25+50											33
11	25+50 TO 26+00											33
12	26+00 TO 26+50											33
13	26+50 TO 27+00											33
14	27+00 TO 27+50											33
15	27+50 TO 28+00											33
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51	45+50 TO 46+00											33
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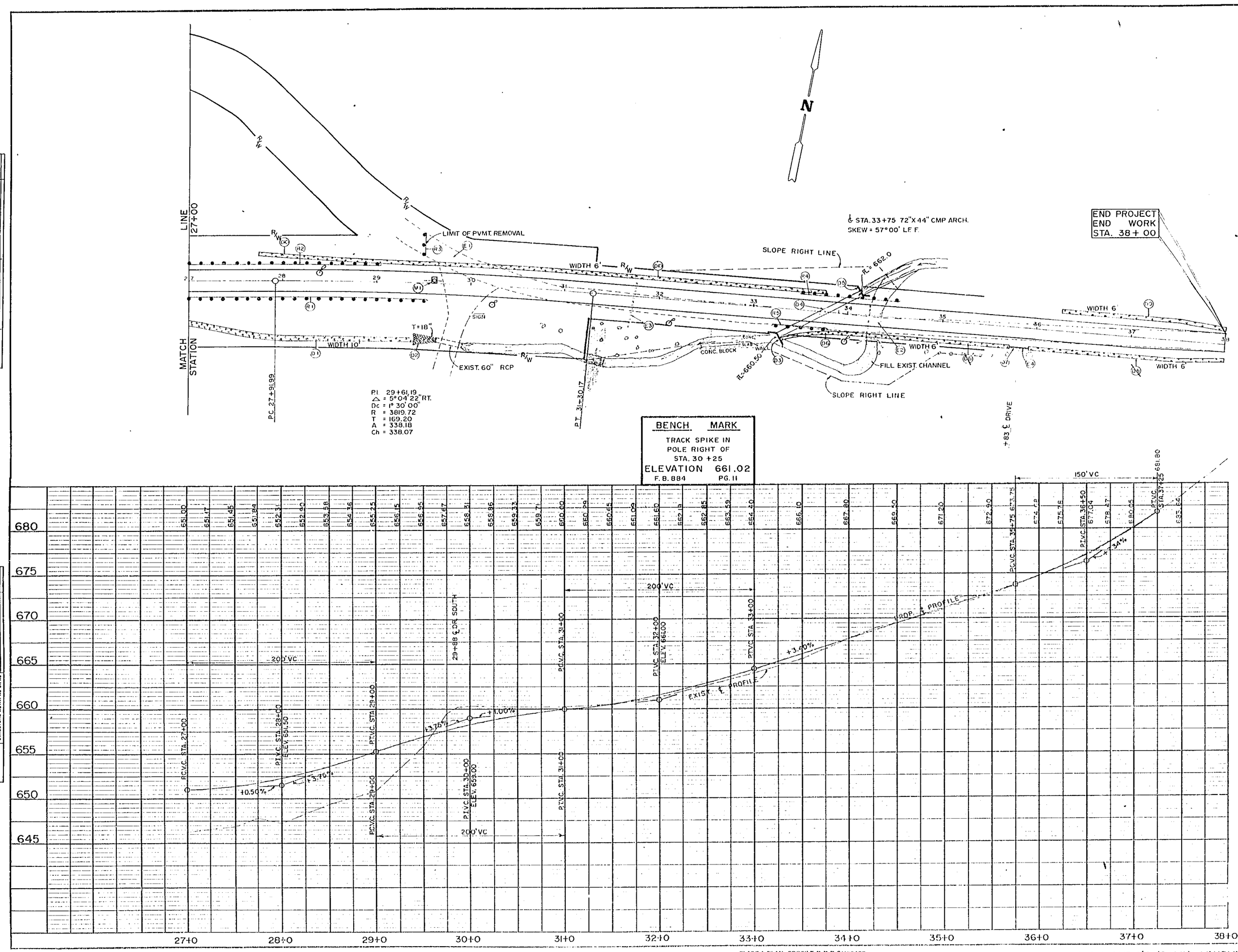
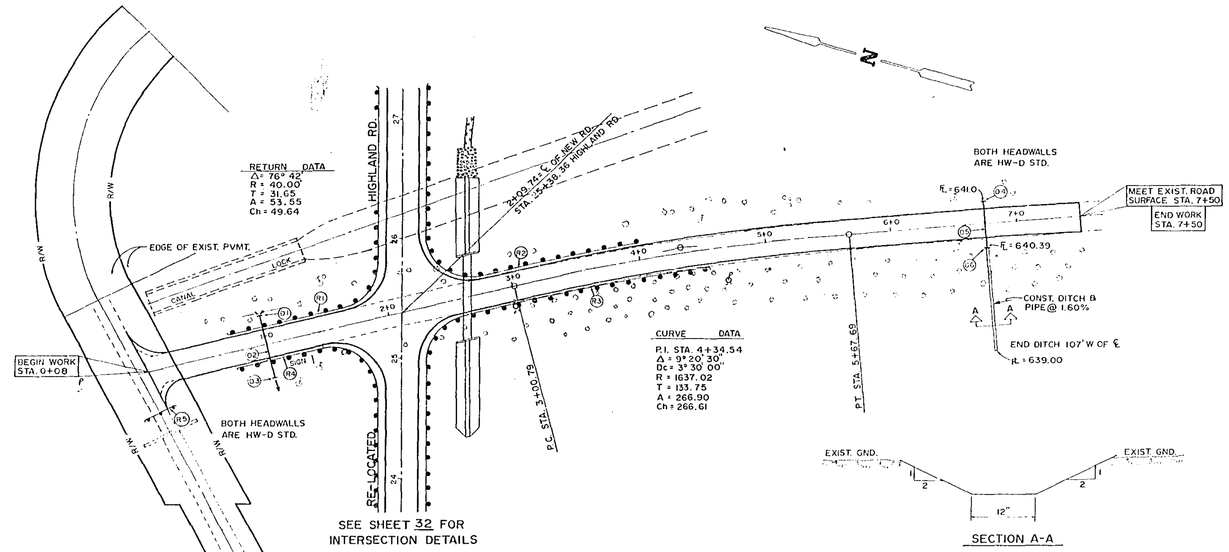


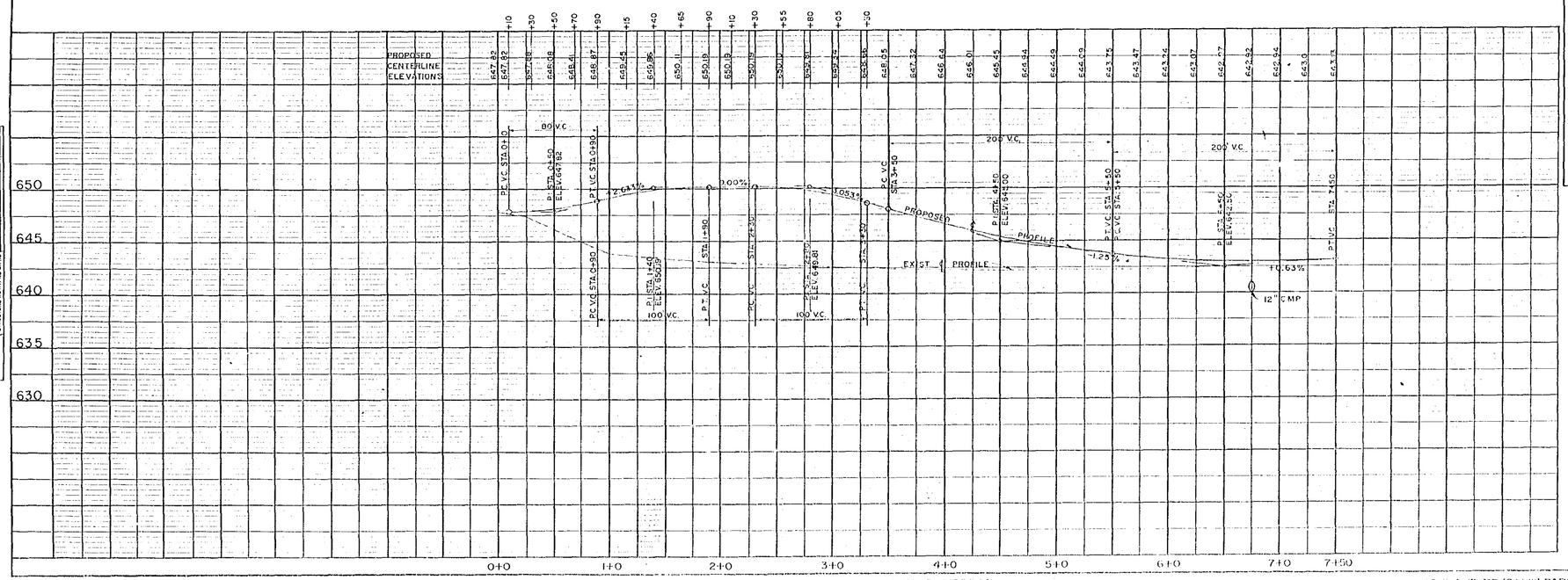
QUANTITIES

REF NO	STATION TO STATION	SIDE	202 EXIST. CHANNEL DISPOSED SQ. YD.	202 EXISTING STRUCTURE REMOVED LUMP SUM	202 PIPE REMOVED LIN. FT.	601.08 DUMPED CHANNEL PROTECTION CU. YD.	602 MASONRY CU. YD.	603 72"X44" CONC. ARCH PIPE W/CLASS "B" BACKFILL LIN. FT.	603 72" CONDUIT W/CLASS "B" BACKFILL LIN. FT.	606 GUARD RAIL TYPE "A" LIN. FT.	660 SODDED DITCHES SQ. YD.	604 MONUMENT ASSEMBLIES EACH	SEE SHEET NO.
E-1	28+50 TO 38+00	LT	(911)										
E-2	28+50 TO 31+73	RT											
E-3	31+73 TO 33+91	RT											
R-1	27+00 TO 28+50	RT			50								
R-2	28+50 TO 29+65	RT			16								
R-3	29+19 TO 29+65	LT											
R-4	33+75 TO 34+10.22	RT											
R-5	33+75 TO 34+10.22	LT											
R-6	27+00 TO 28+50	RT				14					267		33
R-7	28+50 TO 29+65	LT											34
R-8	29+19 TO 29+65	RT											
R-9	33+75 TO 35+75	RT											33
R-10	33+75 TO 35+75	LT											
R-11	35+25 TO 38+00	RT											33
R-12	35+25 TO 38+00	LT											33
R-13	27+75 TO 33+75	LT											33
R-14	27+75 TO 33+75	RT											33
R-15	27+00 TO 28+50	RT					15.4						
R-16	28+50 TO 29+65	RT											
R-17	29+19 TO 29+65	LT											
R-18	33+75 TO 34+50	RT					15.4						
R-19	33+75 TO 34+50	LT											
R-20	33+75 TO 34+50	RT											
32-1	29+61.19 (P.I.)	LT											
R-1	27+00 TO 28+50	RT								350			
R-2	27+00 TO 28+50	LT								200			
R-3	28+50 TO 29+65	RT								100			
R-4	31+50 TO 34+50	LT								100			
R-5	33+25 TO 33+75	RT								50			

PLAN			
NOTE BOOK	SURVEYED	BY	DATE
	PLOTTED		
	ALIGNMENT CHECKED		
NO.	RT OF WAY CHECKED		

PROFILE			
NOTE BOOK	SURVEYED	BY	DATE
	PLOTTED		
	B.M.s NOTED		
NO.	STRUCTURE DATA TS OKTD		





QUANTITIES						
ESTIMATED						SEE SHEET NO
REF NO	STATION TO STATION	603 12" CONDUIT TYPE-2 WITH CLASS 'B' BACKFILL LIN. FT.	606 GUARD RAIL TYPE-4 LIN. FT.	602 MASONRY CU. YD.		
D-1	1+00	LT	58		1.3	
D-2	1+00	RT			1.3	
D-3	1+00	LT	58		1.3	
D-4	6+75	RT	58		1.3	
D-5	6+75					
D-6	6+75	RT				
R-1	0+75 TO 1+66.60	LT		9.2		
R-2	2+75.46 TO 4+00	LT		12.5		
R-3	2+50.88 TO 4+00	RT		1.9		
R-4	0+00 TO 1+44.07	RT		6.5		
R-5	0+00 – 50' WEST	RT		2.5		

PLAN
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PLOTTED: ...
ALIGNMENT CHECKED: ...
NOTE BOOK ...
NO. ...
BY
DATE

PROFILE
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PLOTTED: ...
GRADES CHECKED: ...
BRIDGE NOTED: ...
STRUCTURE NOTATNS CKTD
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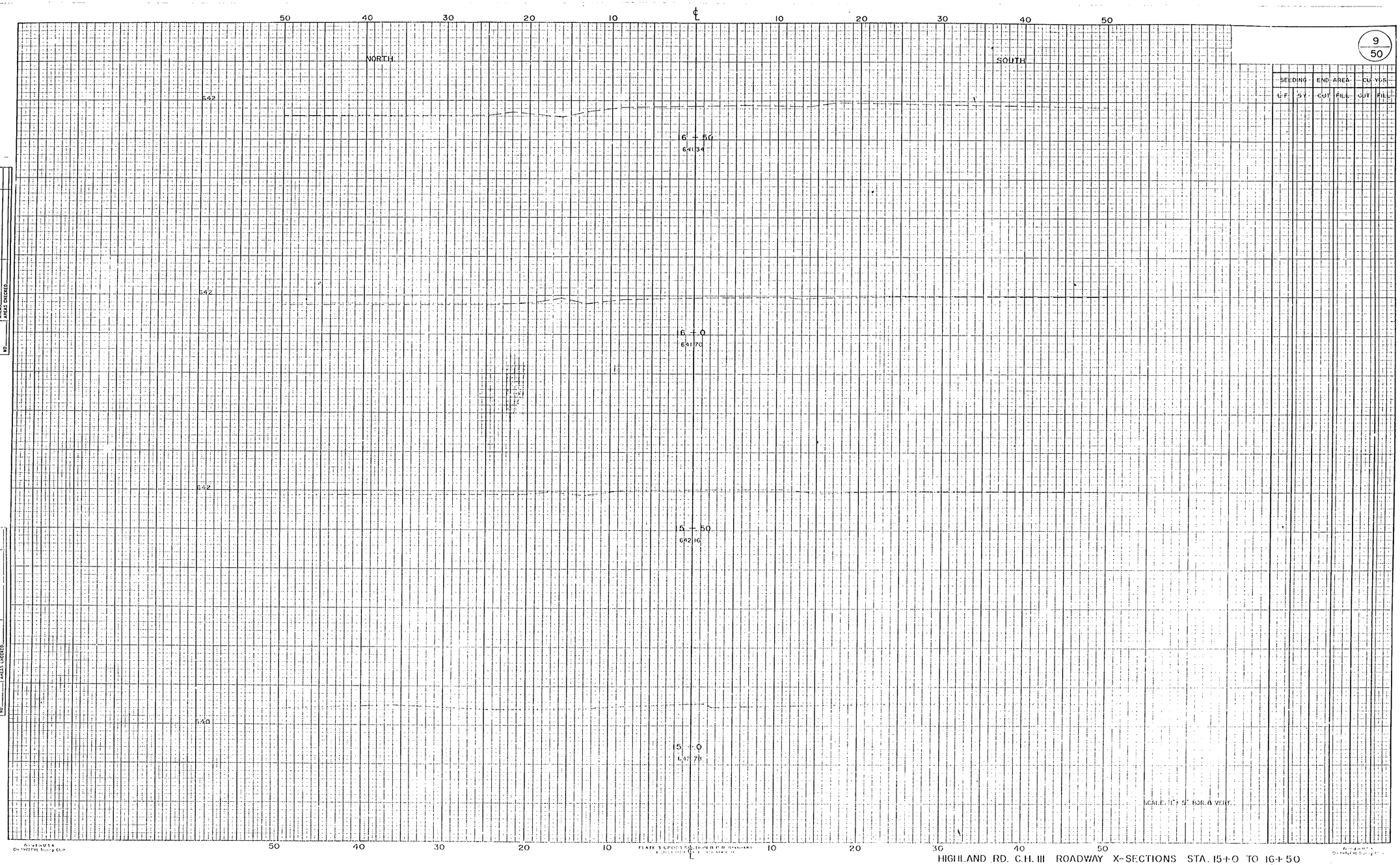
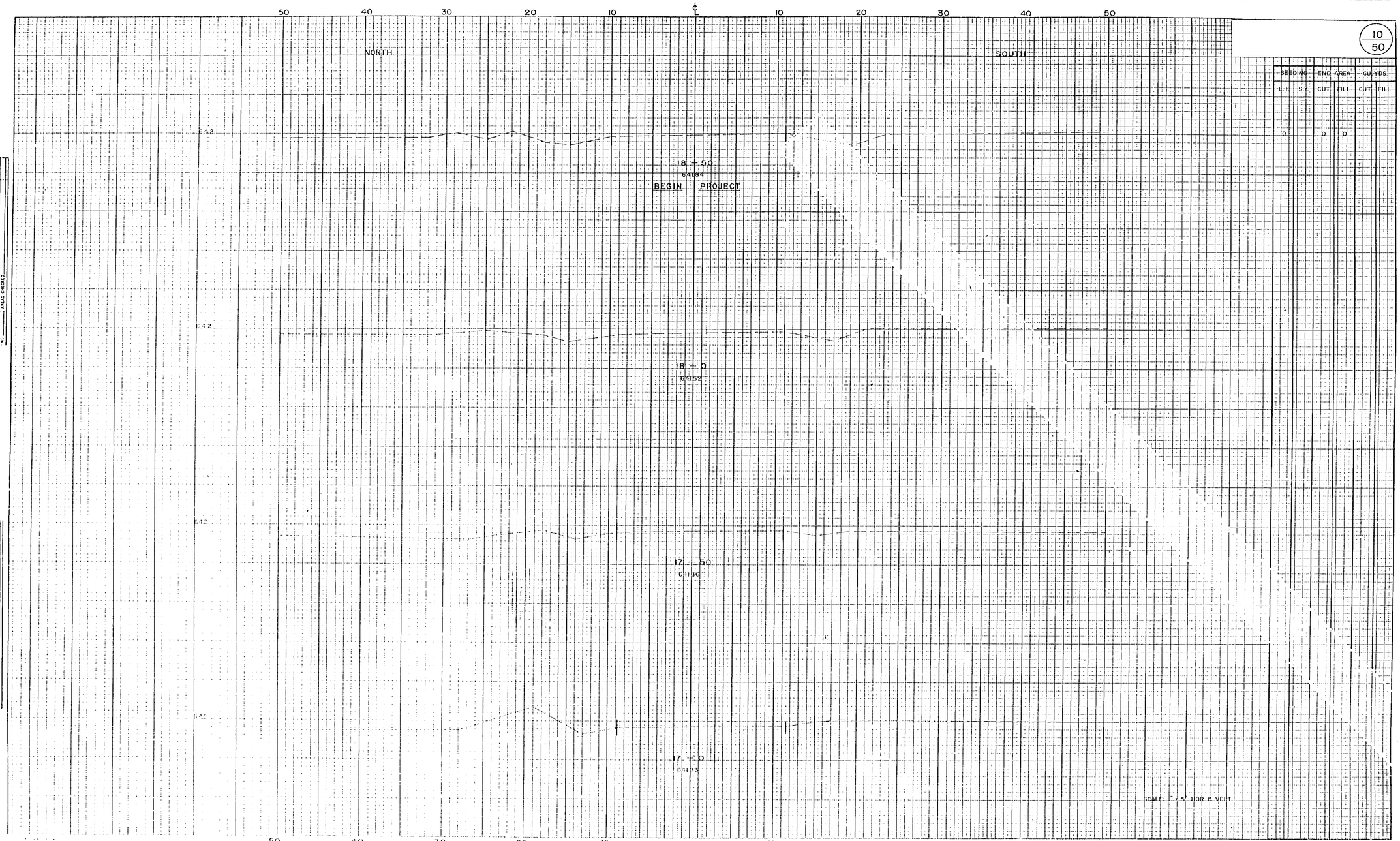
DATE

HIGHLAND RD.(C.H.III) PAPER MILL DR.-PLAN & PROFILE STA.0+0 TO STA 7+50



HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 15+0 TO 16+50



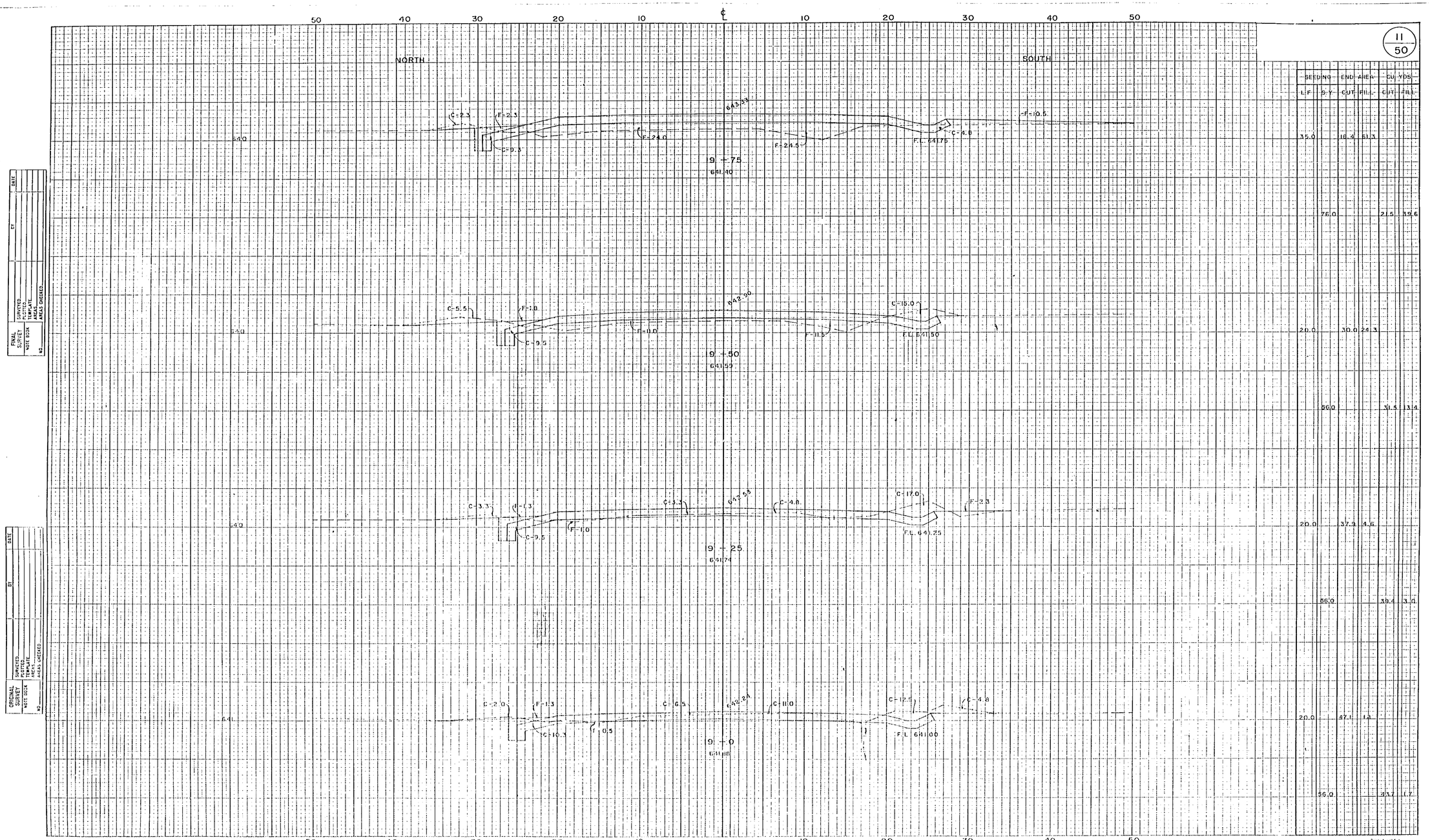
SEEDING		END AREA		CU. YDS.	
L.F.	S.Y.	CUT	FILL	CUT	FILL
0		0	0		

FINAL SURVEY: SUPERVISED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO.

ORIGINAL SURVEY: SUPERVISED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO.

PLATE 3 CROSS SECTION B.P.R. STANDARD

HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 17+0 TO 18+50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F-2.3
C-9.3
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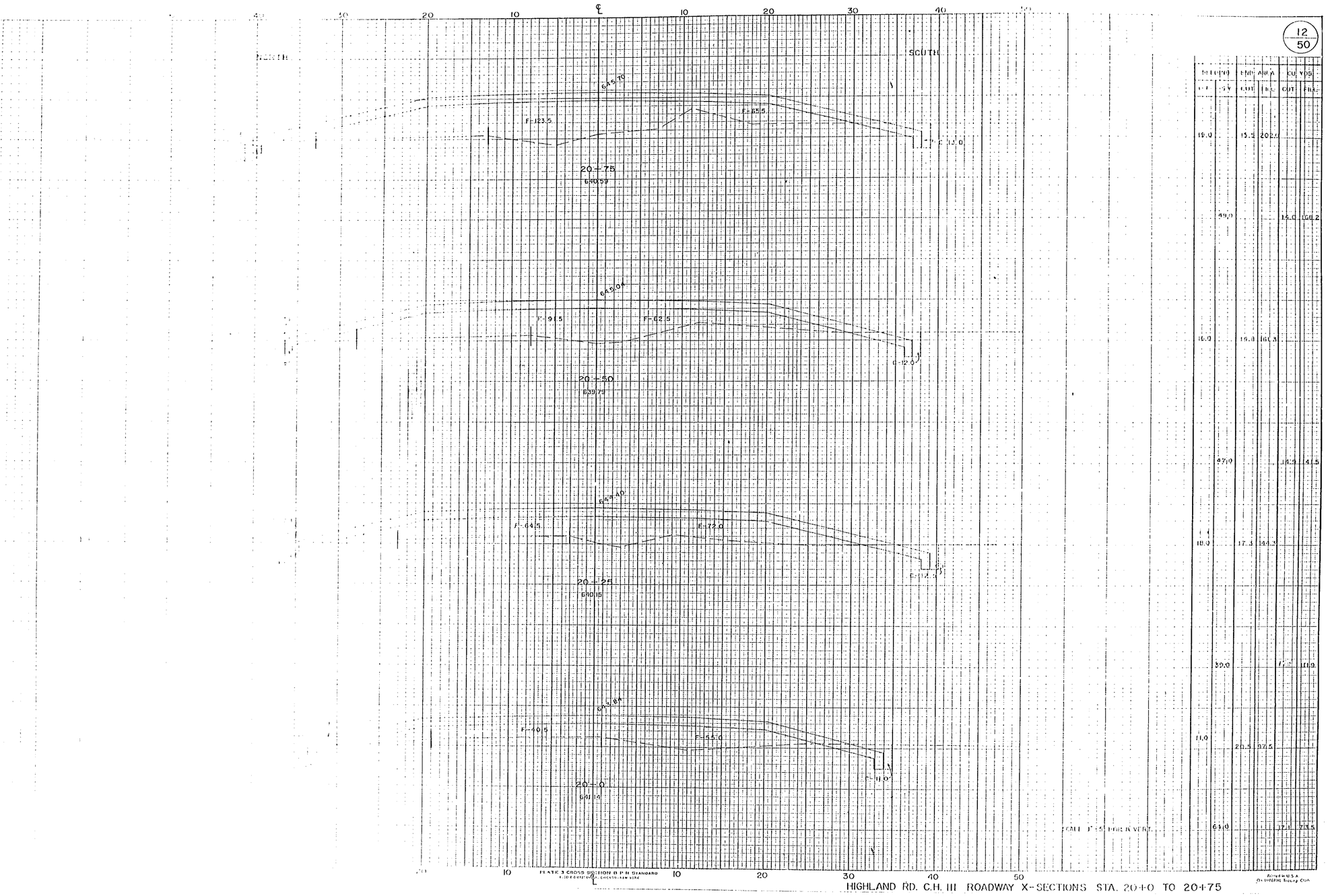
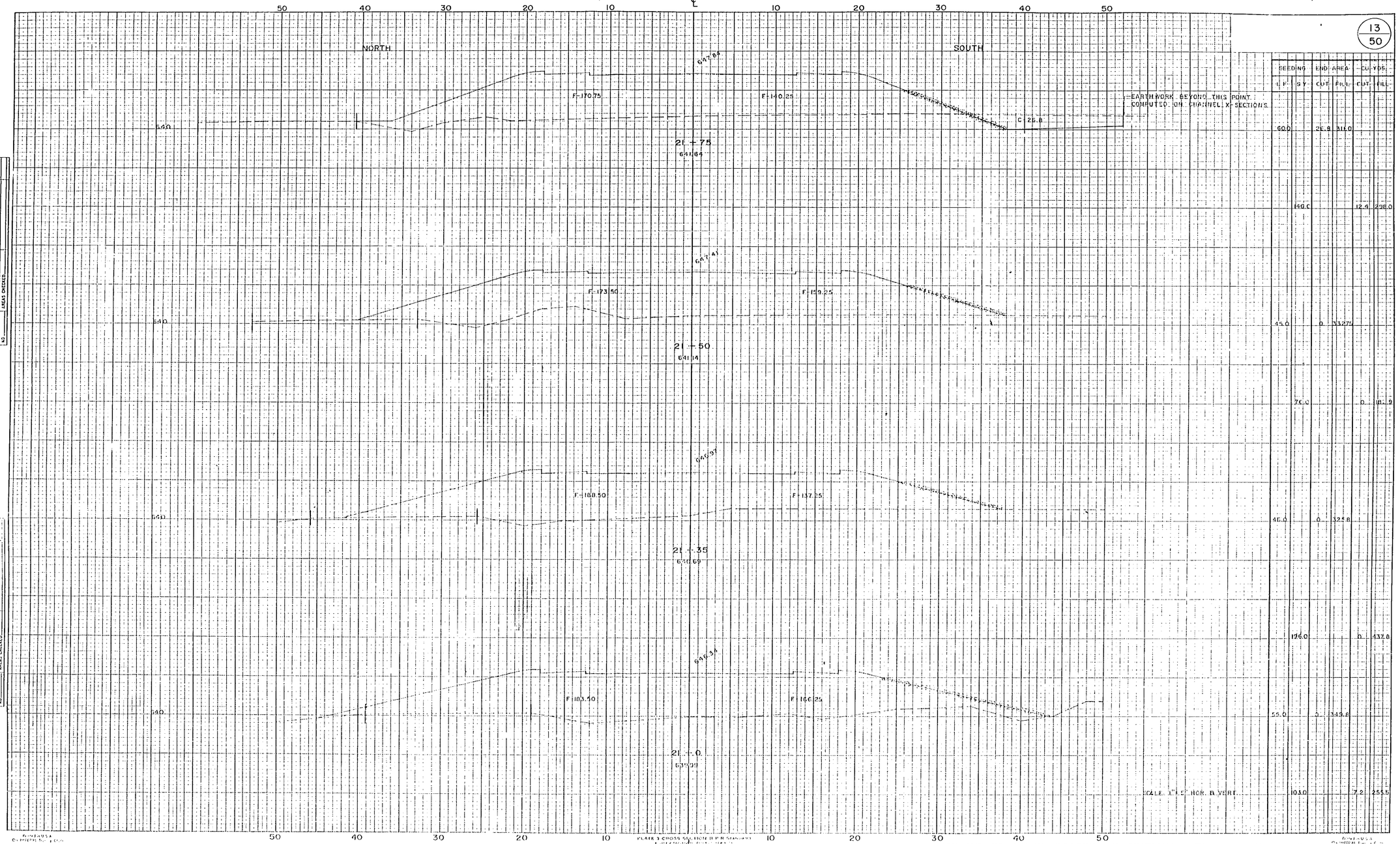
643.53
F-24.5
F-10.5
C-4.0
F.L. 641.75
9 + 75
641.40
C-5.5
F-1.8
C-9.5
F-11.0
642.00
F-11.5
C-15.0
F.L. 641.50
9 + 50
641.59
C-3.3
F-1.3
C-9.5
F-1.0
C-3.3
642.53
C-4.8
C-17.0
F-2.3
F.L. 641.25
9 + 25
641.74
C-2.0
F-1.3
C-10.3
F-0.5
C-6.5
642.24
C-11.0
C-12.5
C-4.8
F.L. 641.00
9 + 0
641.88
SEEDING END AREA CU. YDS.
L.F. S.Y. CUT FILL CUT FILL
35.0 16.4 51.3
75.0 21.5 39.6
20.0 30.0 24.3
56.0 31.5 3.4
20.0 37.9 4.6
56.0 38.4 3.0
20.0 37.1 1.9
56.0 33.7 1.7
FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
PLATE 1 CROSS SECTION N.P.D. Standard
HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 19+0 TO 19+75



STATION	END AREA		CU. YDS.	
CUT	FILL	CUT	FILL	CUT	FILL
19.0		15.5	208.0		
	49.0			15.0	160.2
16.0		16.0	161.3		
	27.0			14.5	41.5
18.0		17.5	141.3		
	39.0			17.1	111.9
11.0		20.5	97.5		
	64.0			17.1	73.5

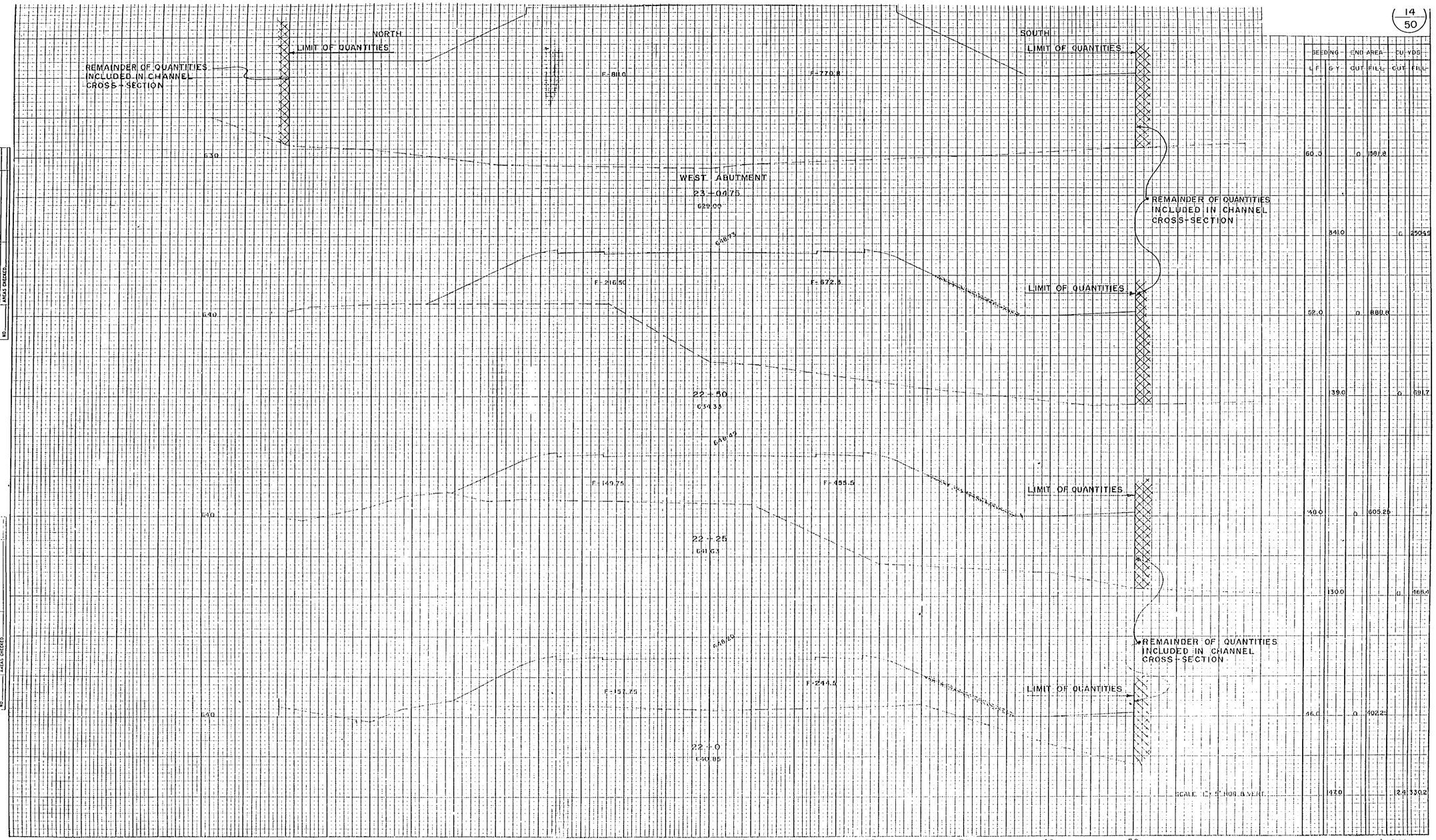


	SEEDING	END AREA		CU. YDS.	
L.F.	S.Y.	CUT	FILL	CUT	FILL
50.0		26.8	311.0		
100.0				12.4	298.0
45.0		0	332.7		
70.0				0	18.9
45.0		0	325.8		
136.0				0	437.8
55.0		0	345.8		
103.0				7.2	255.5

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

ORIGINAL GROUND	SURVEYED	BY	DATE
	PLOTTED		
	TEMPLATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		

HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 21+0 TO 21+75



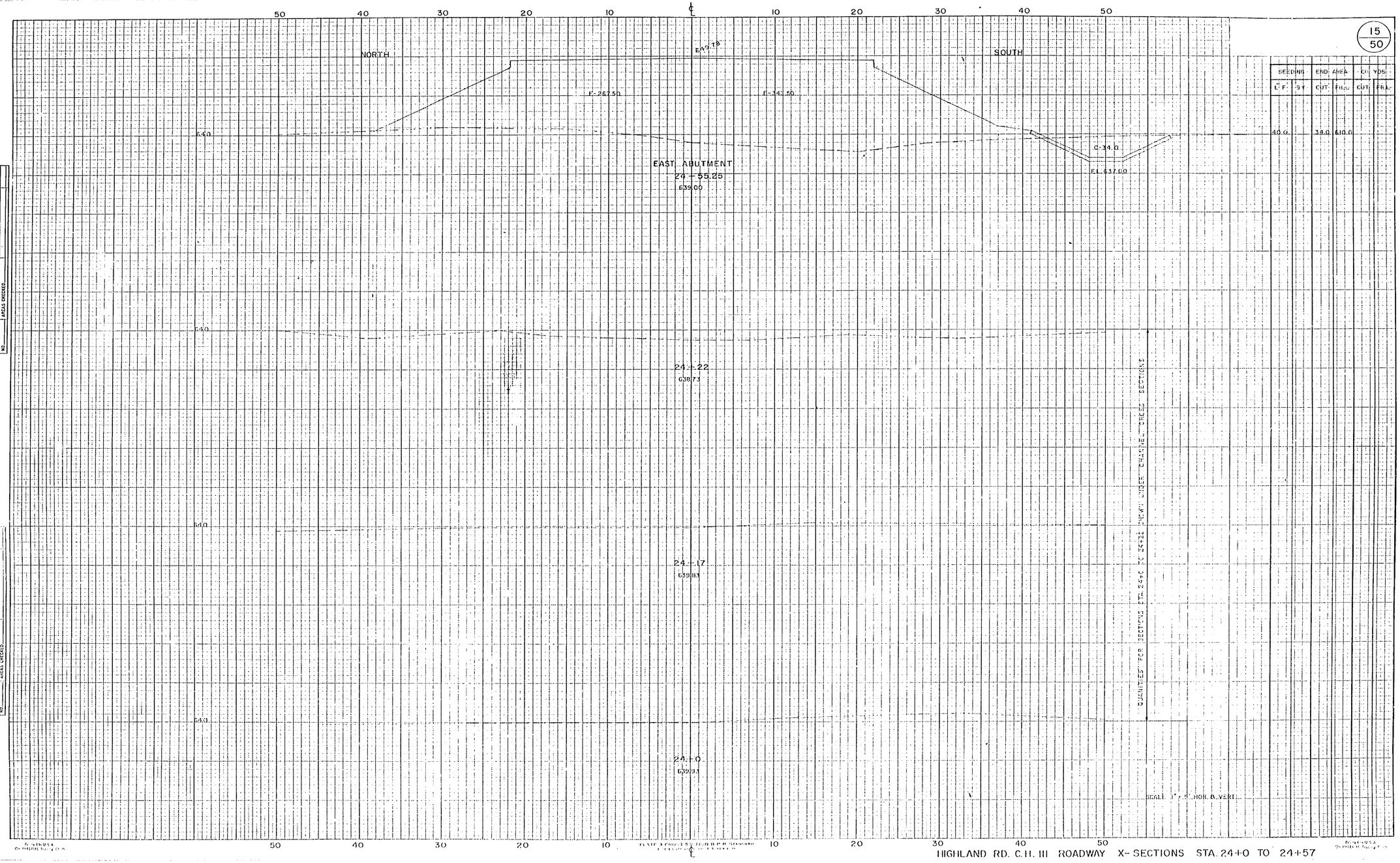
SEEDING	END AREA		CU. YDS.	
L.F.	S.Y.	CUT	FILL	CUT	FILL
60.0		0	581.8		
54.0				C	250.9
52.0		0	880.8		
39.0				0	591.7
40.0		0	605.25		
130.0				0	468.4
46.0		0	402.2		
42.0				24.330.2	

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TOPOGRAPHY		
	AREAS		
NO.	AREAS CHECKED		

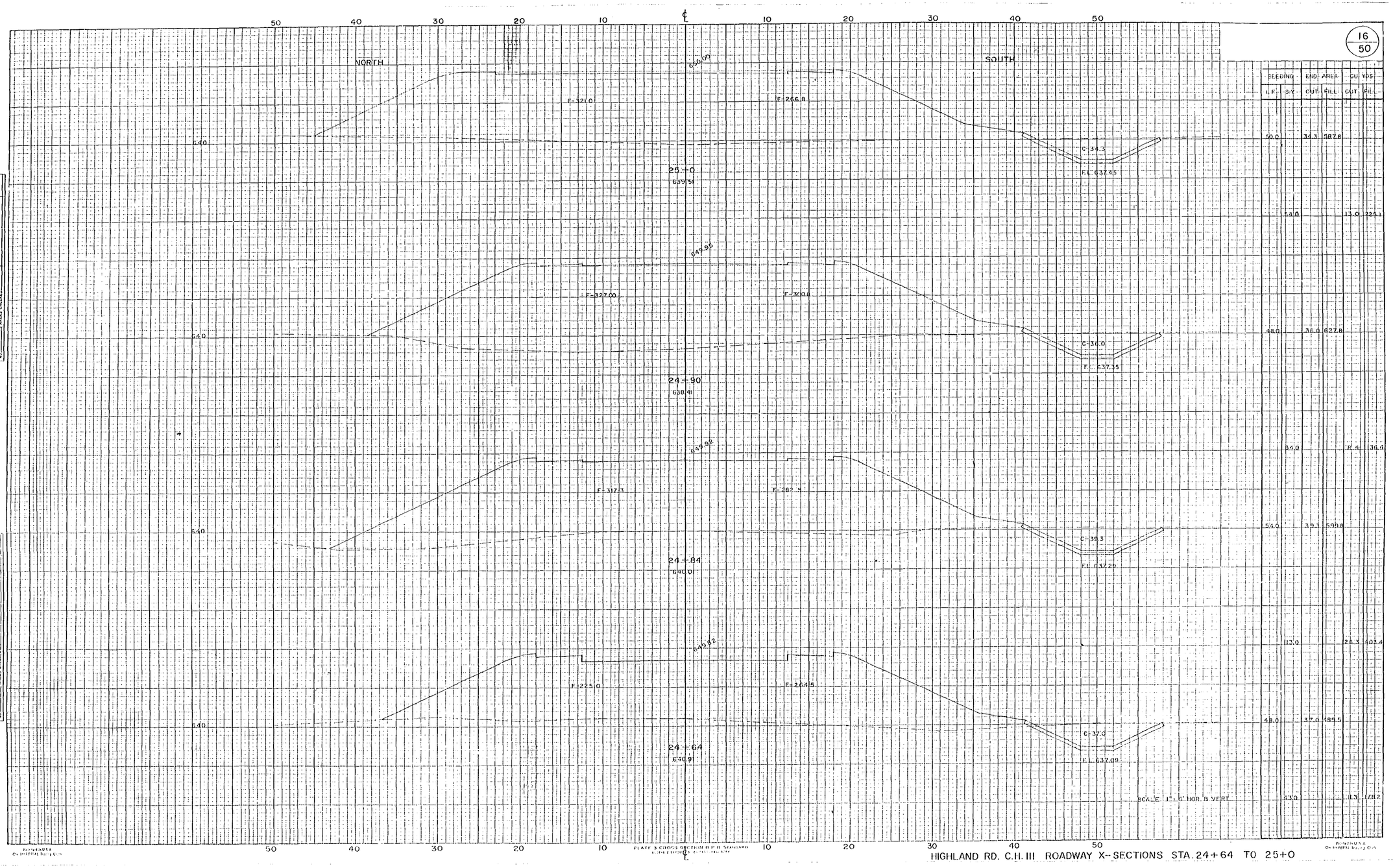
FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TOPOGRAPHY		
	AREAS		
NO.	AREAS CHECKED		

PLATE 3 CROSS SECTION B.P.R. Standard

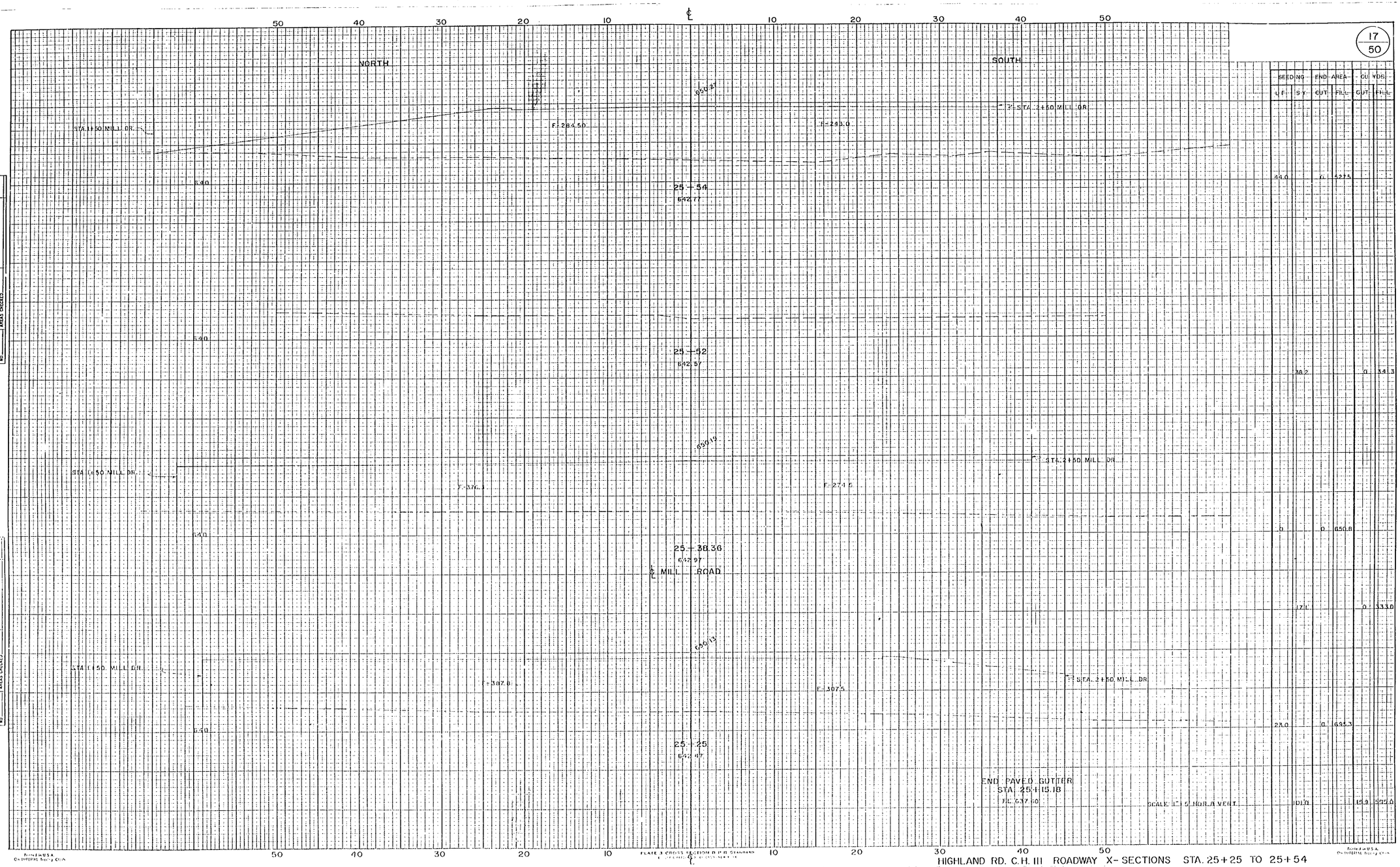
HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 22+0 TO 23+77

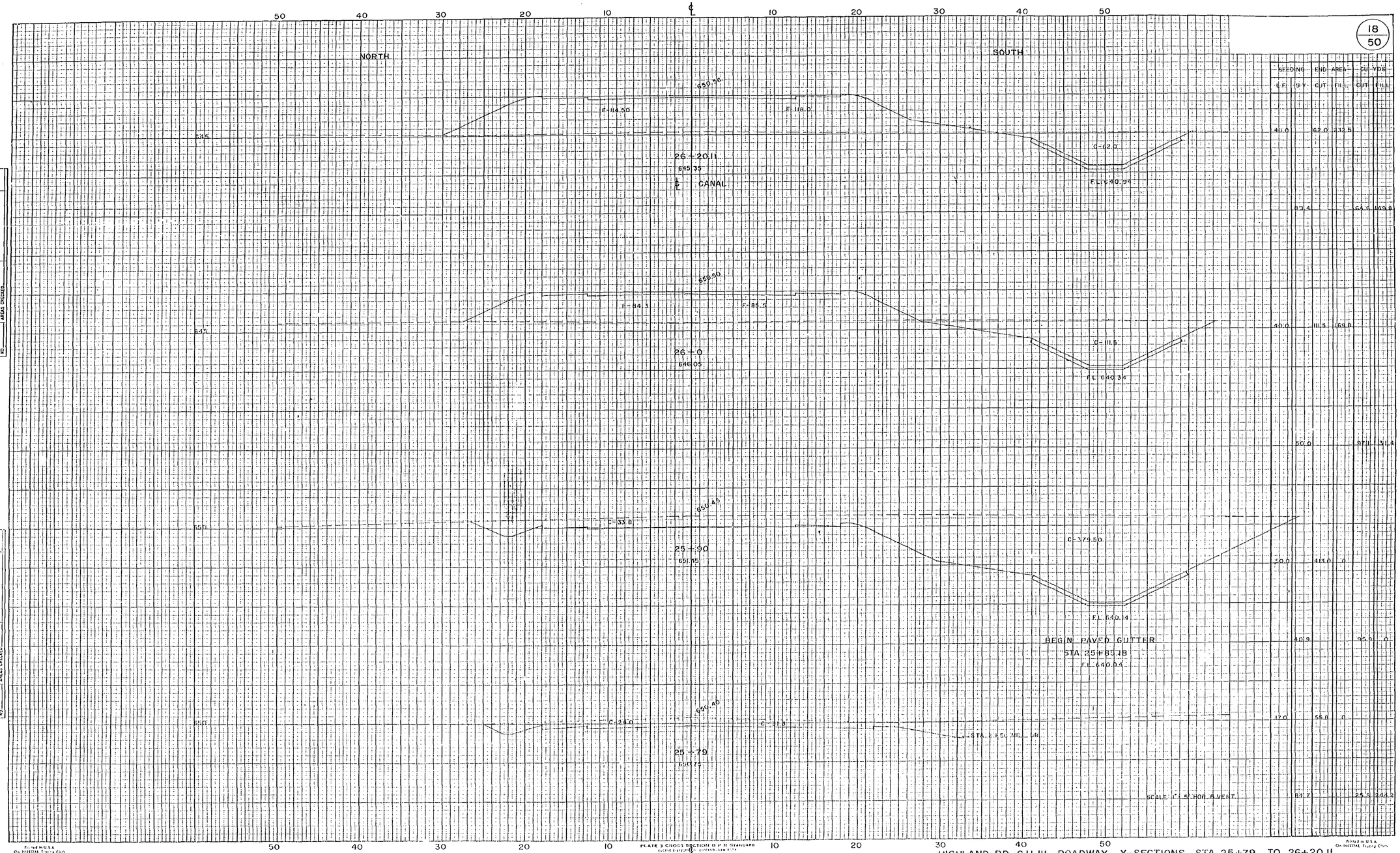


HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 24+0 TO 24+57

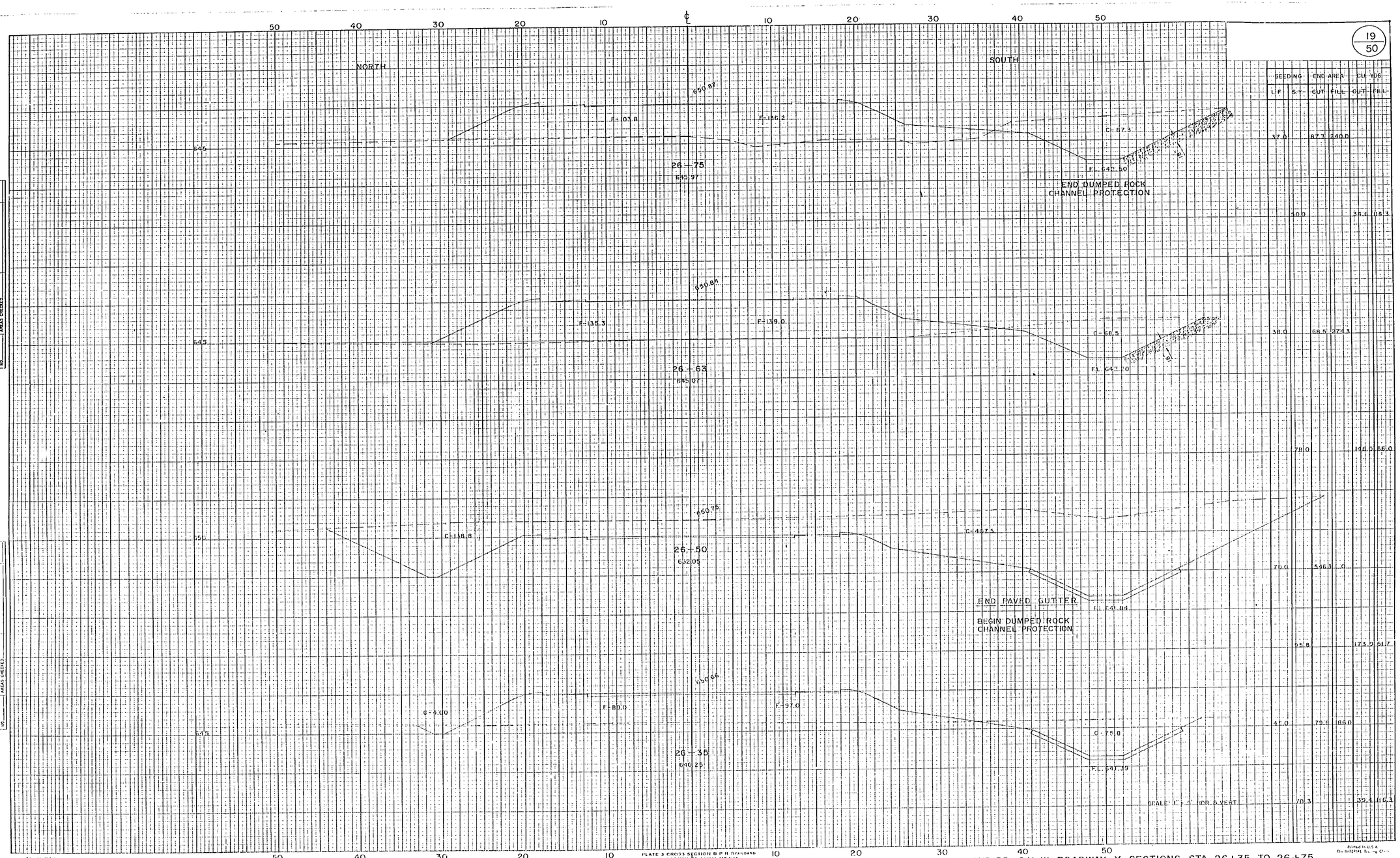


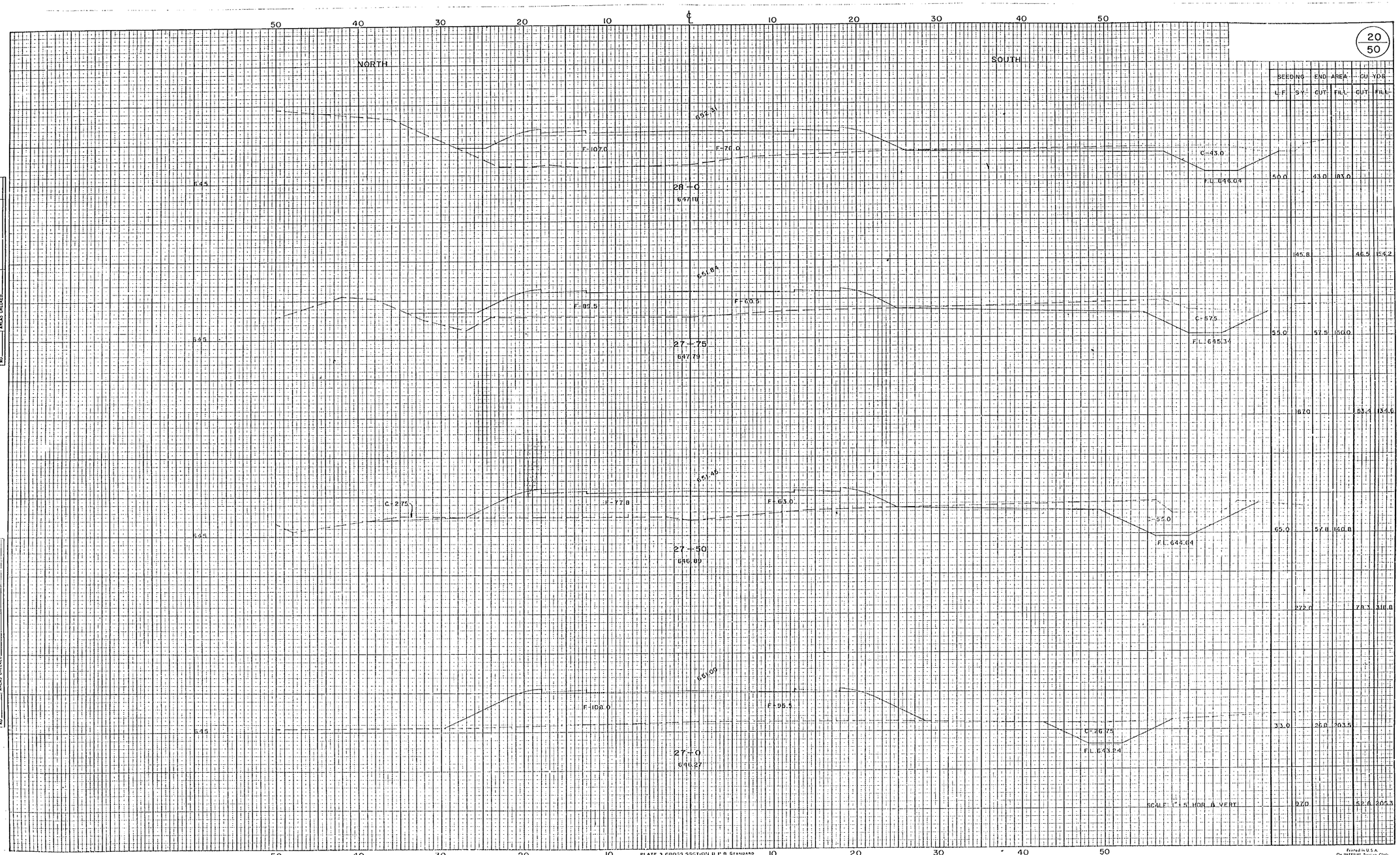
HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 24+64 TO 25+0


17/50
NORTH
SOUTH
℄
50 40 30 20 10 10 20 30 40 50
STA. 1+50 MILL DR.
F-284.50
F-283.0
P-STA. 2+50 MILL DR.
650.31
25-54
642.77
25-52
642.57
650.19
STA. 1+50 MILL DR.
F-376.1
F-271.6
STA. 2+50 MILL DR.
25-38.36
642.97
℄ MILL ROAD
650.13
STA. 1+50 MILL DR.
F-387.8
F-307.5
STA. 2+50 MILL DR.
25-25
642.87
END PAVED GUTTER
STA. 25+15.18
FL 637.60
SCALE 1" = 5' HOR. & VERT.
640
640
640
640
SEEDING
LF
SY
END AREA
CUT
FILL
CU YDS.
CUT
FILL
44.0
0
4275
38.2
0
34.3
0
0
650.8
17.4
0
333.0
23.0
0
695.3
101.0
15.9
295.0
FINAL SURVEY
SUBMITTED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED
NO.
BY
DATE
ORIGINAL SURVEY
SUBMITTED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED
NO.
BY
DATE
Printed in U.S.A.
On Imperial Tracing Cloth
PLATE 3 CROSS SECTION O.P.R. STANDARD
HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 25+25 TO 25+54

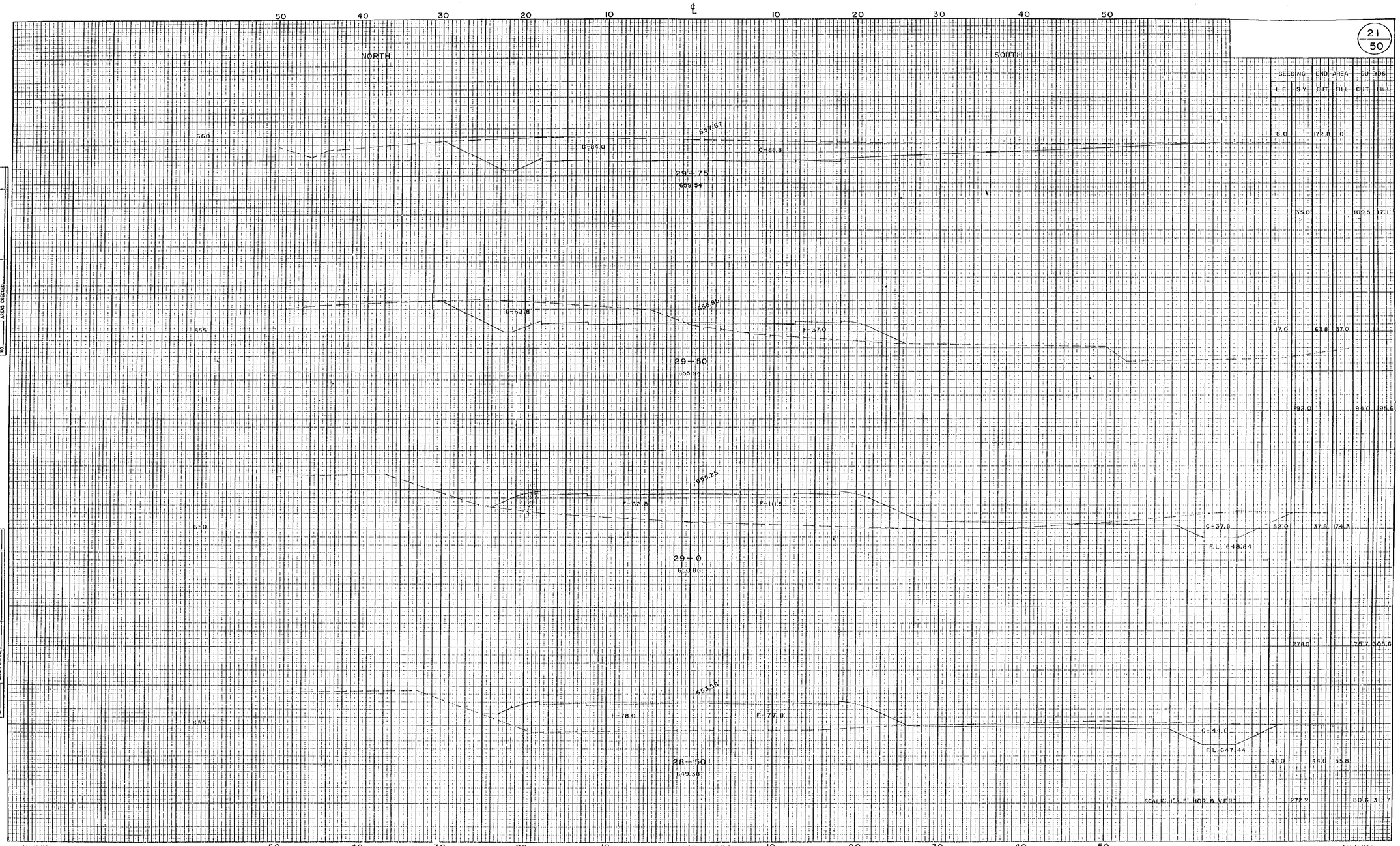


HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 25+79 TO 26+20.11


19
50
NORTH
SOUTH
℄
50 40 30 20 10 10 20 30 40 50
650.97
F-103.8
F-136.2
C-87.5
F.L. 642.50
END DUMPED ROCK
CHANNEL PROTECTION
26-75
645.97
650.84
F-135.3
F-179.0
C-68.5
F.L. 642.70
26-63
645.07
650.75
C-118.8
C-107.5
26-50
652.05
END PAVED GUTTER
F.L. 641.84
BEGIN DUMPED ROCK
CHANNEL PROTECTION
650.66
C-8.00
F-88.0
F-97.0
C-75.8
26-35
646.25
F.L. 641.39
SCALE 1" = 5' HOR. & VERT.
SEEDING
END AREA
CU. YDS.
L.F.
S.Y.
CUT
FILL
CUT
FILL
37.0
87.3
240.0
40.0
38.6
68.3
38.0
68.5
274.3
78.0
146.5
66.0
70.0
546.3
0
55.8
173.9
51.7
41.0
79.8
86.0
70.3
39.4
116.3
FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE
ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE
PLATE 3 CROSS SECTION B.P.R. STANDARD
HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 26+35 TO 26+75



HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 27+0 TO 28+0



SEEDING		END AREA		CU. YDS.	
L.F.	S.Y.	CUT	FILL	CUT	FILL
6.0		172.8	0		
	35.0			109.5	17.1
17.0		63.8	37.0		
	92.0			91.0	95.6
		27.8	0		76.7	305.6
		27.2		80.6	313.7

21/50

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

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK NO. — BY — DATE

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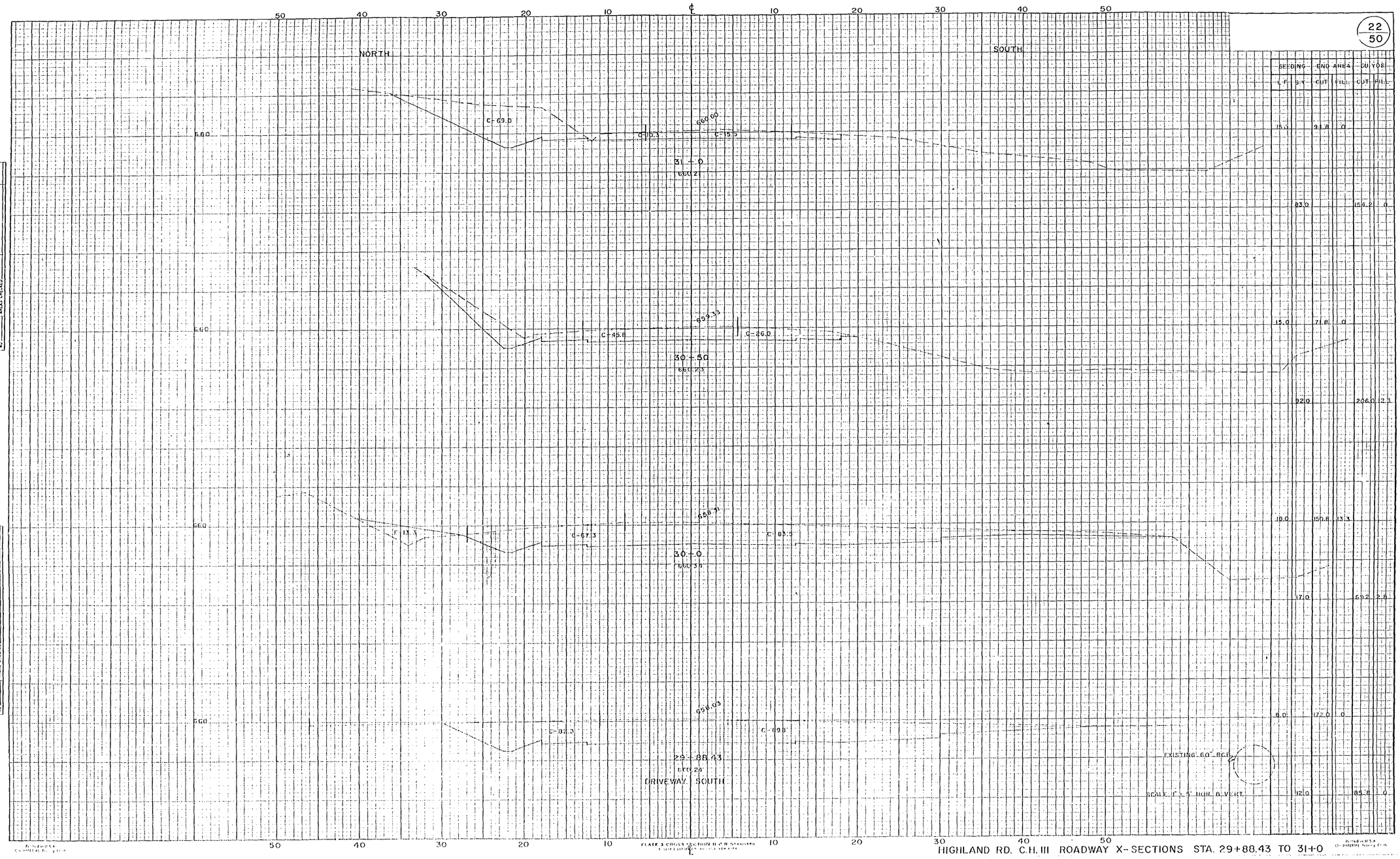
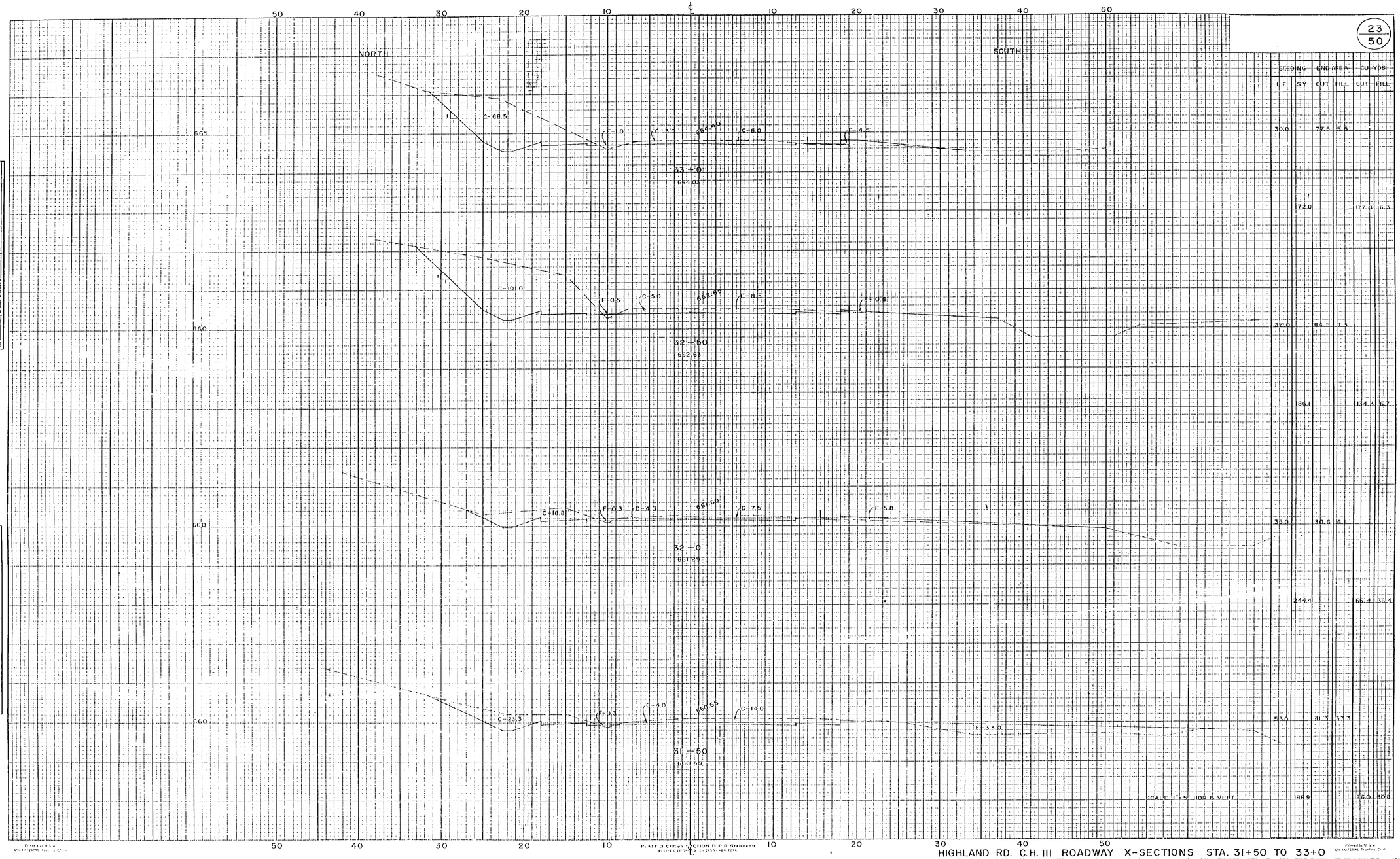
PLATE 3 CROSS SECTION B & O R R Standard

HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 28+50 TO 29+75

Printed in U.S.A. On IMPERIAL Tracing Cloth


22/50
NORTH
SOUTH
℄
50 40 30 20 10 10 20 30 40 50
SEEDING END AREA CU YDS
L.F. S.Y. CUT FILL CUT FILL
5.60
C-69.0
C-15.5
C-15.5
600.00
31-0
660.2
15.0 91.8 0
83.0 159.2 0
5.60
C-45.8
C-26.0
599.33
30-50
660.73
15.0 71.8 0
92.0 206.0 2.1
5.60
F-11.3
C-67.3
C-82.0
599.91
30-0
660.37
18.0 150.8 13.3
17.0 69.2 2.8
5.60
C-82.3
C-69.8
598.05
29-88.43
660.28
8.0 172.0 0
12.0 85.8 0
EXISTING 60" RCP
DRIVEWAY SOUTH
SCALE 1" = 5' HOR. & VERT.
FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
PLATE 3 CROSS SECTION B.C.R. STANDARD
HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 29+88.43 TO 31+0



	SEEDING		END AREA		CU YDS	
	L.F.	S.Y.	CUT	FILL	CUT	FILL
	30.0		77.5	5.5		
		72.0			177.8	6.5
	32.0		114.5	1.3		
		86.1			134.3	6.7
	35.0		30.6	6.		
		244.4			66.4	30.4
	53.0		41.3	33.3		
		88.9			126.0	30.8

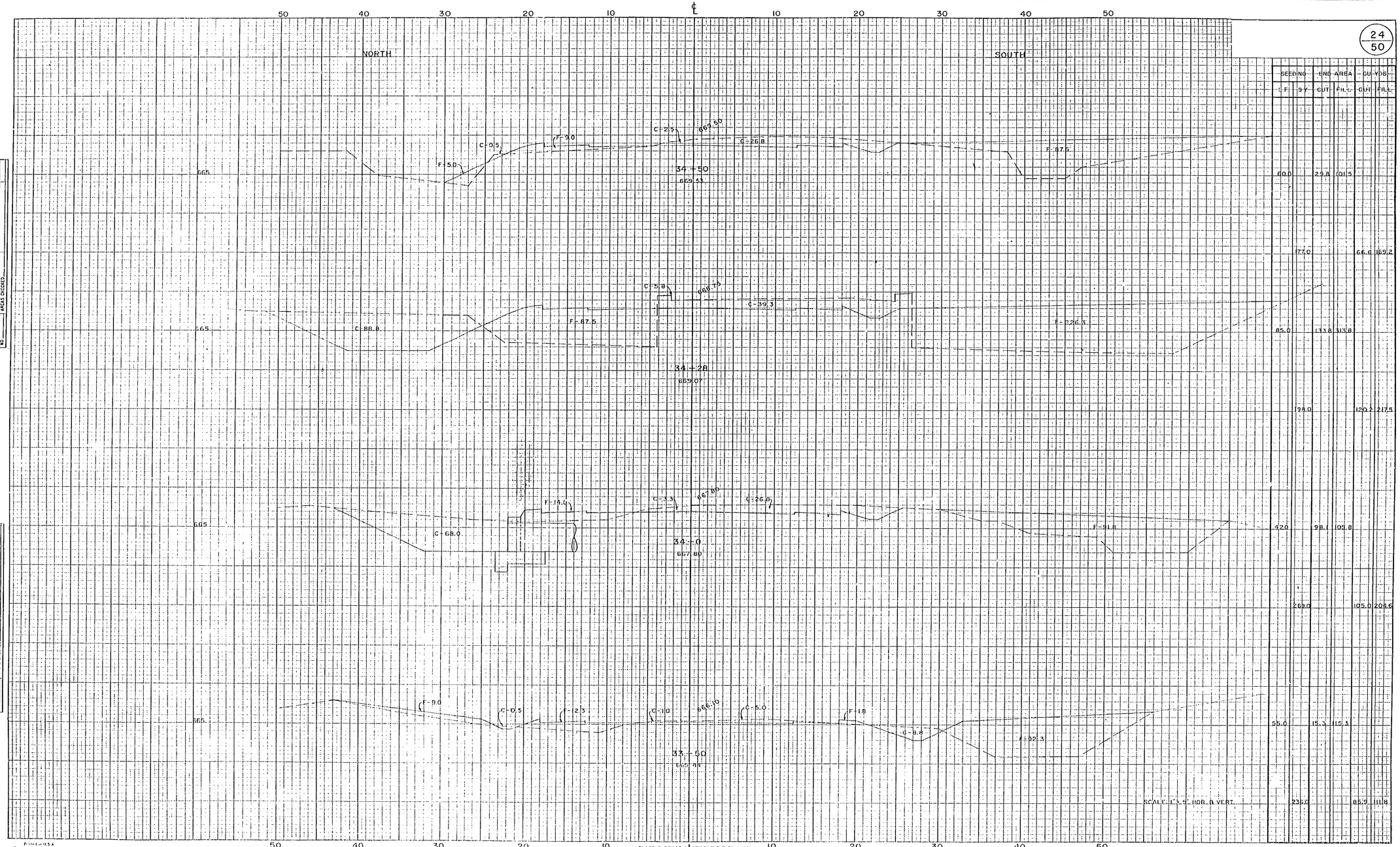
FIELD SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TRIAL LINE		
NOTE BOOK		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TRIAL LINE		
NOTE BOOK		
NO.	AREAS CHECKED	

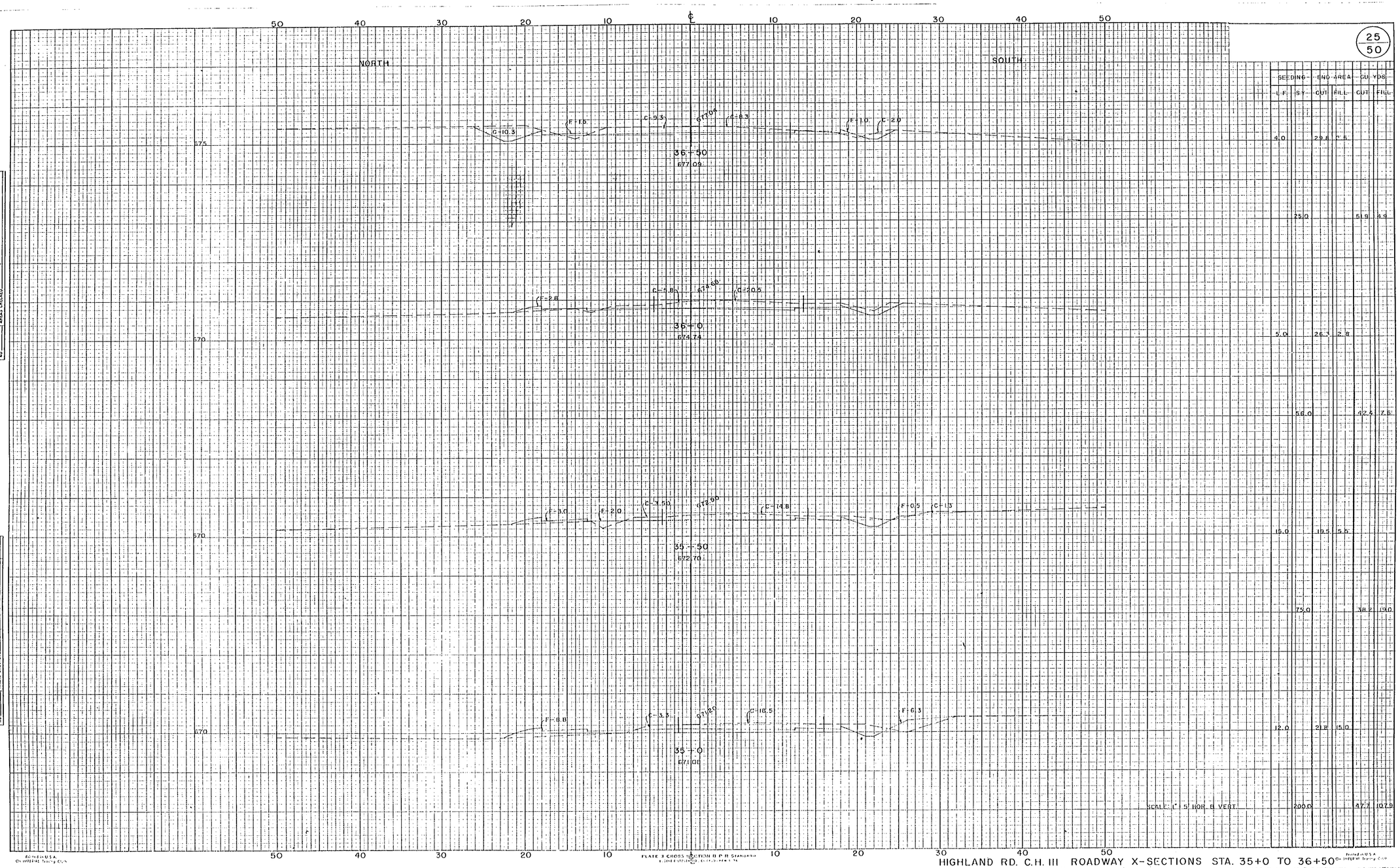
23/50

PLATE 3 CROSS SECTION B.P.R. Standard

HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 31+50 TO 33+0



HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 33+50 TO 34+50



SEEDING L.F.	SEEDING S.Y.	END AREA CUT	END AREA FILL	CU. YDS. CUT	CU. YDS. FILL
4.0		29.8	2.5		
	25.0			51.9	4.9
5.0		26.3	2.8		
	56.0			42.4	7.5
15.0		19.5	5.5		
	75.0			38.2	19.0
12.0		21.2	15.0		
	200.0			47.7	107.9

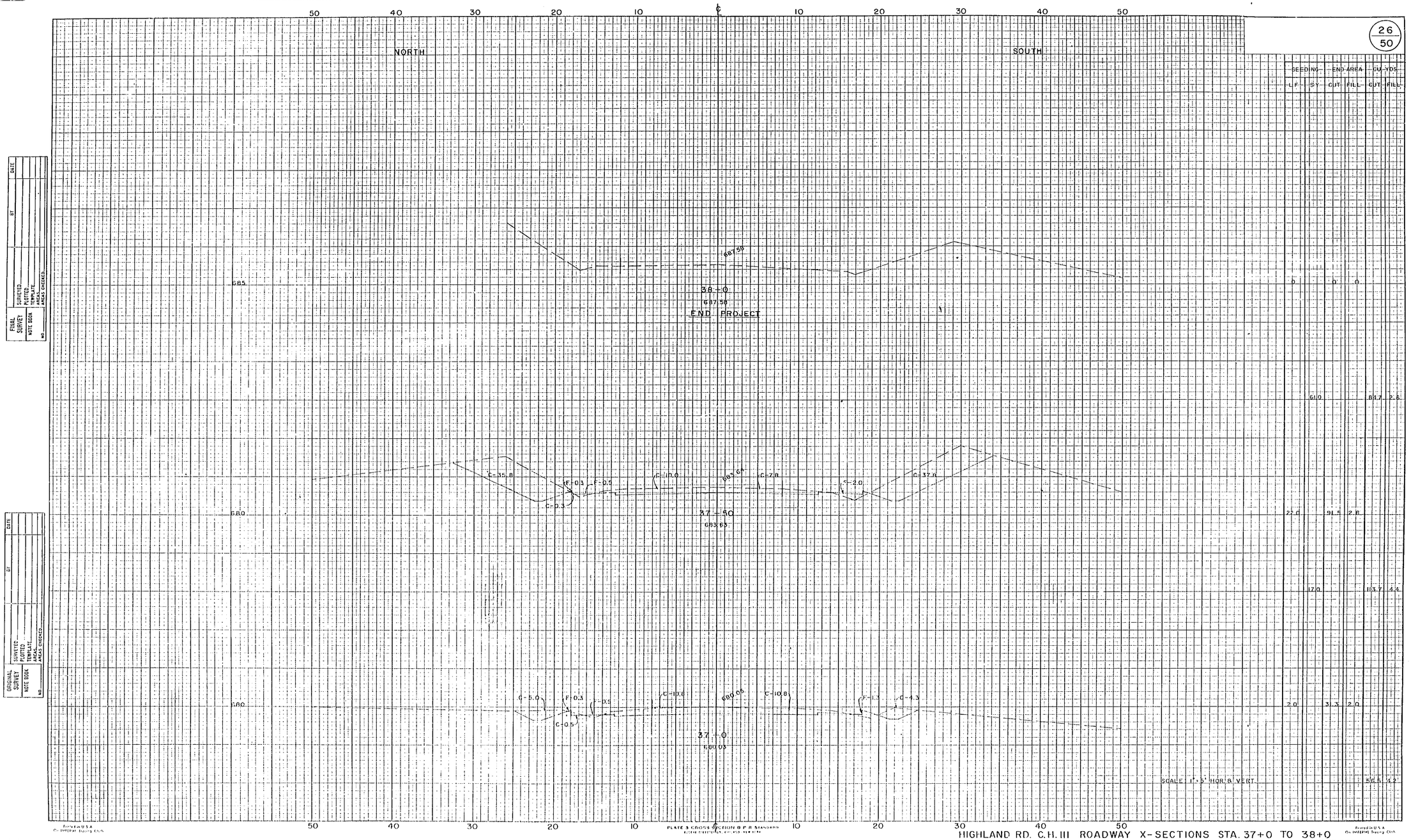
FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO		

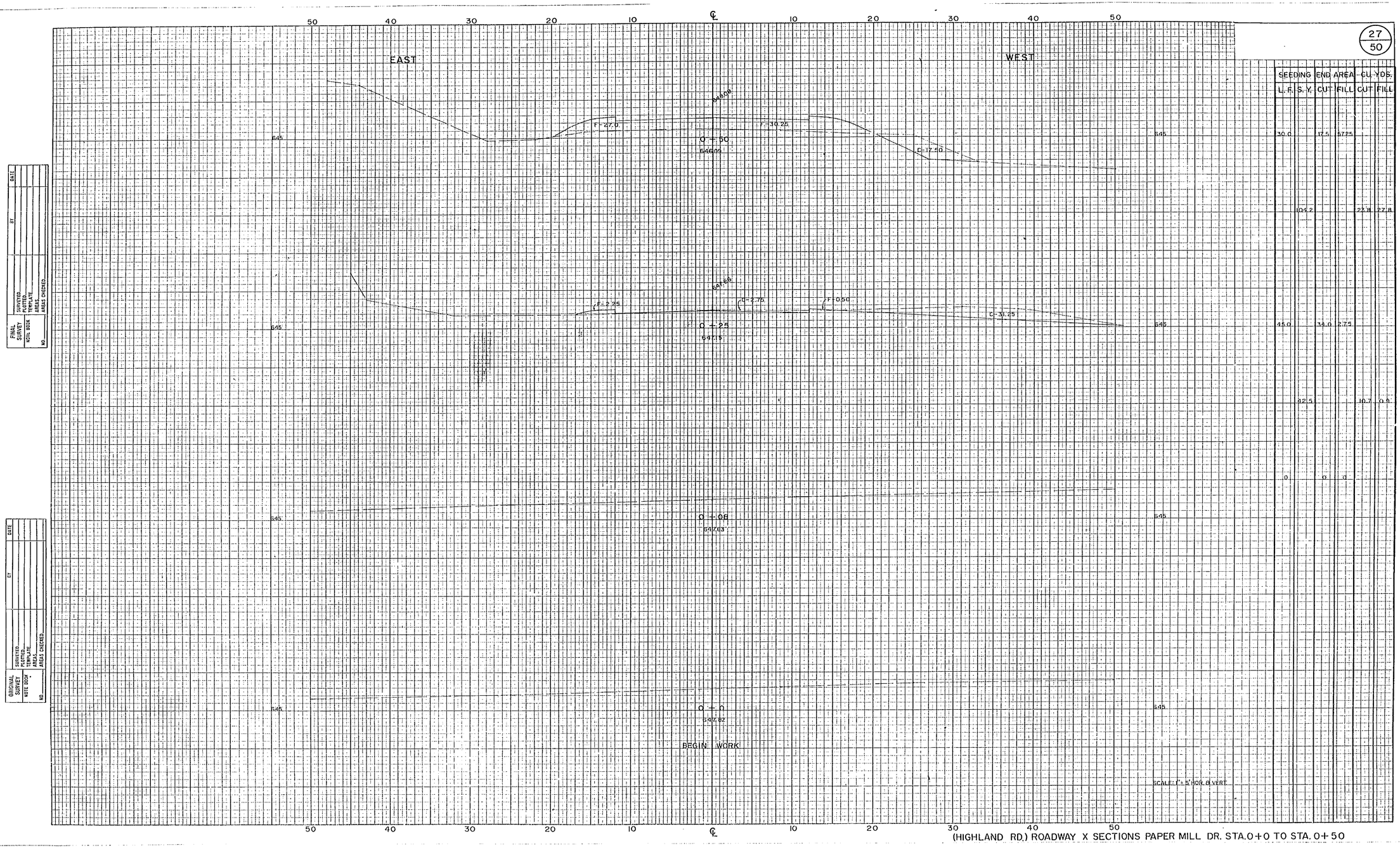
PLATE 3 CROSS SECTION B.P.R. STANDARD

HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 35+0 TO 36+50

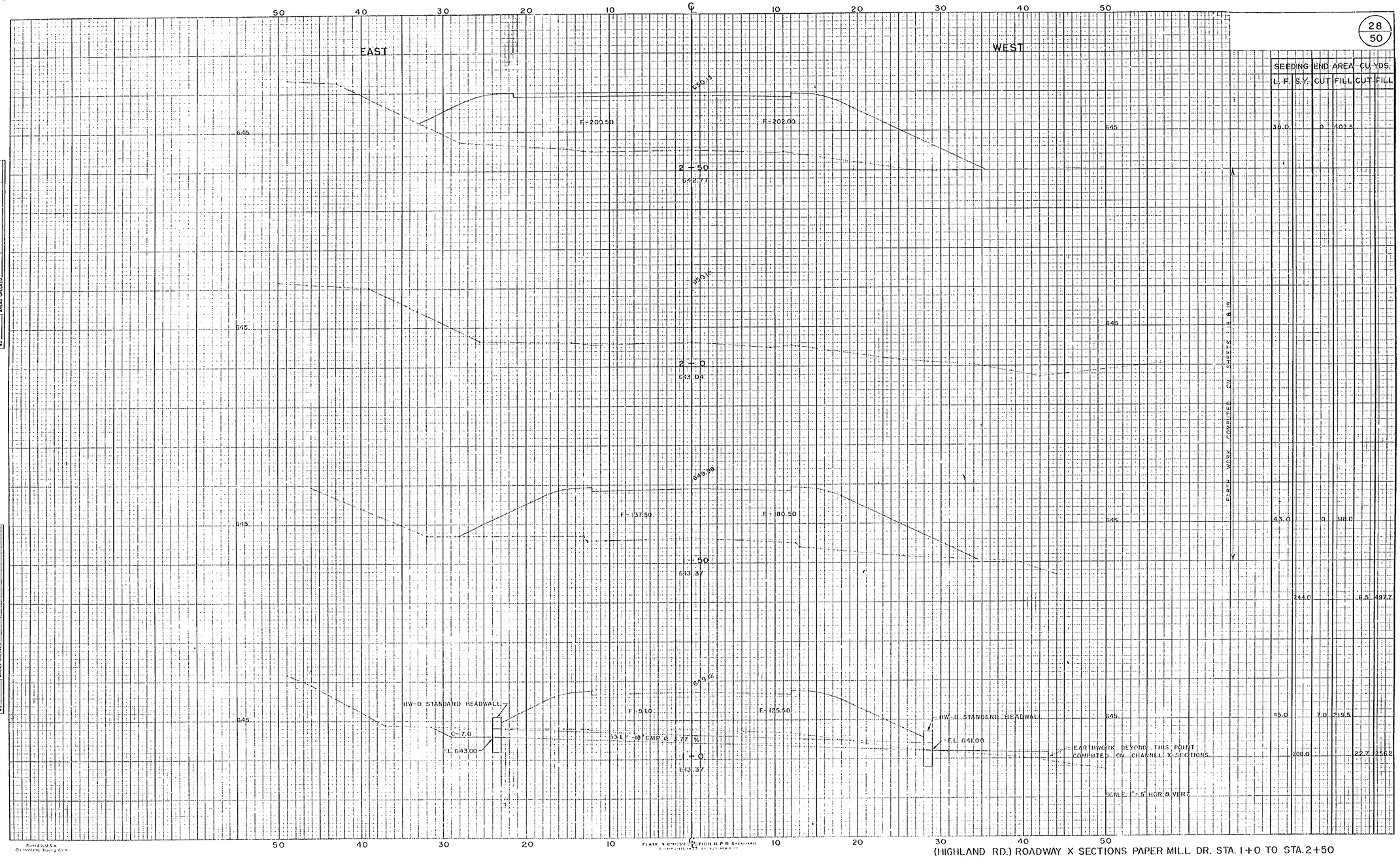
Printed in U.S.A. by Imperial Tracing Cloth



HIGHLAND RD. C.H. III ROADWAY X-SECTIONS STA. 37+0 TO 38+0



(HIGHLAND RD.) ROADWAY X SECTIONS PAPER MILL DR. STA.0+0 TO STA. 0+50



28
50

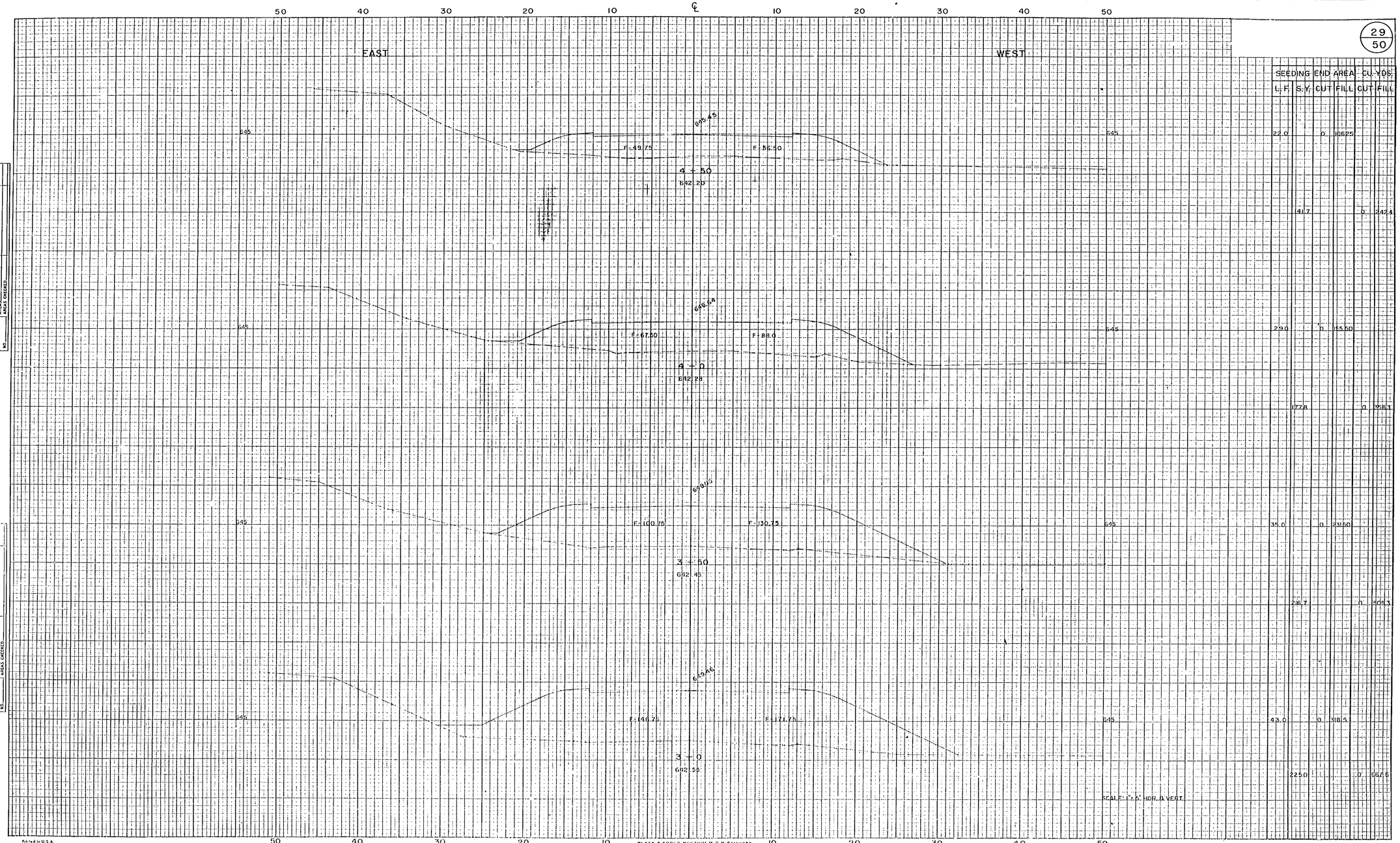
SEEDING		END AREA - CU. YDS.			
L.F.	S.Y.	CUT	FILL	CUT	FILL
36.0		0	402.5		
43.0		0	118.0		
244.0				6.5	497.7
45.0		7.0	219.5		
208.0				22.7	256.2

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

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
	PLOTTED		
	TEMPLATE		
	AREAS		
NO	AREAS CHECKED		

Printed in U.S.A.
Q-INTERNAL Tracing Cloth

(HIGHLAND RD.) ROADWAY X SECTIONS PAPER MILL DR. STA. 1+0 TO STA. 2+50



29
50

SEEDING		END AREA - CU. YDS.			
L.F.	S.Y.	CUT	FILL	CUT	FILL
22.0		0	106.25		
	41.7			0	242.4
29.0		0	155.50		
	177.8			0	988.1
35.0		0	231.50		
	216.7			0	606.3
43.0		0	318.5		
	225.0			0	667.6

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

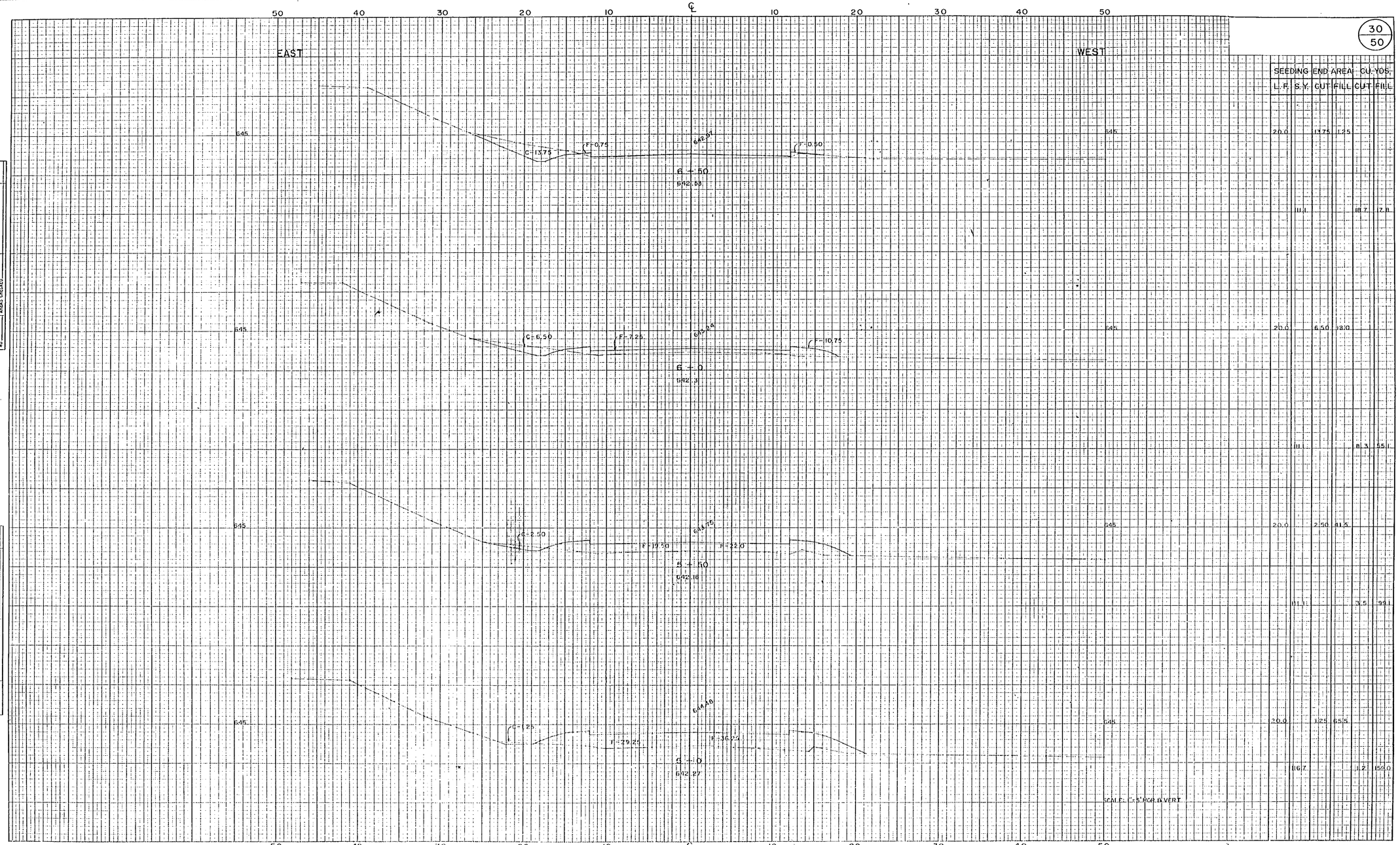
ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
AREAS CHECKED
NO.
BY
DATE

Printed in U.S.A.
On IMPERIAL Tracing Cloth

PLATE 3 CROSS SECTION R.P.N. STANDARD
ELIZABETHTOWN, KENTUCKY

(HIGHLAND RD.) ROADWAY X SECTIONS PAPER MILL DR. STA. 3+0 TO 4+50

Printed in U.S.A.
On IMPERIAL Tracing Cloth



30
50

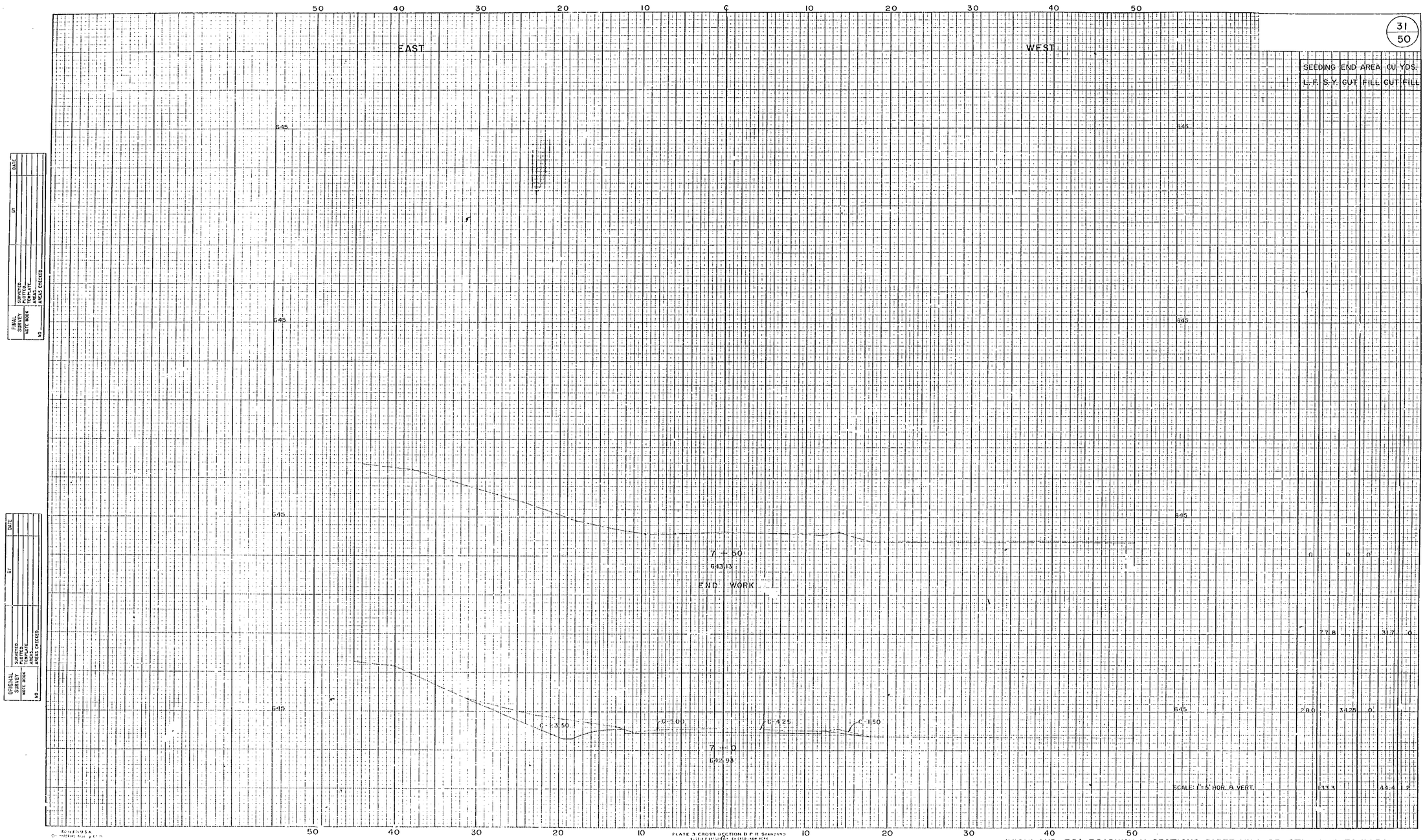
SEEDING END AREA: CU. YDS.					
L.F.	S.Y.	CUT	FILL	CUT	FILL
20.0		13.75	1.25		
	11.1			18.7	7.8
20.0		6.50	18.0		
	11.1			8.3	55.1
20.0		2.50	81.5		
	11.11			3.5	99.1
20.0		1.25	65.5		
	11.6.7			1.2	155.0

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

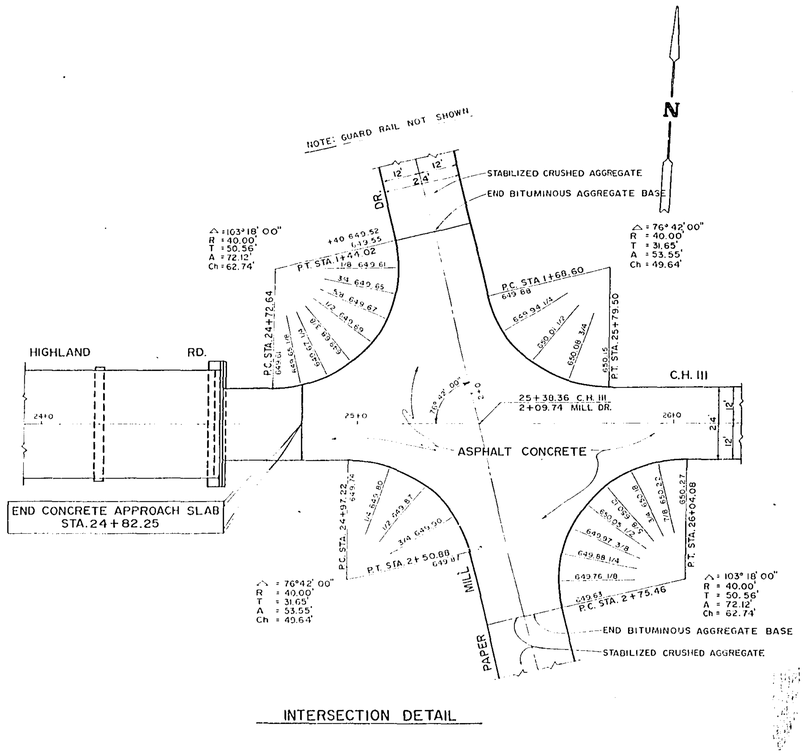
ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

PLATE 3 CROSS SECTION B P R R STANDARD

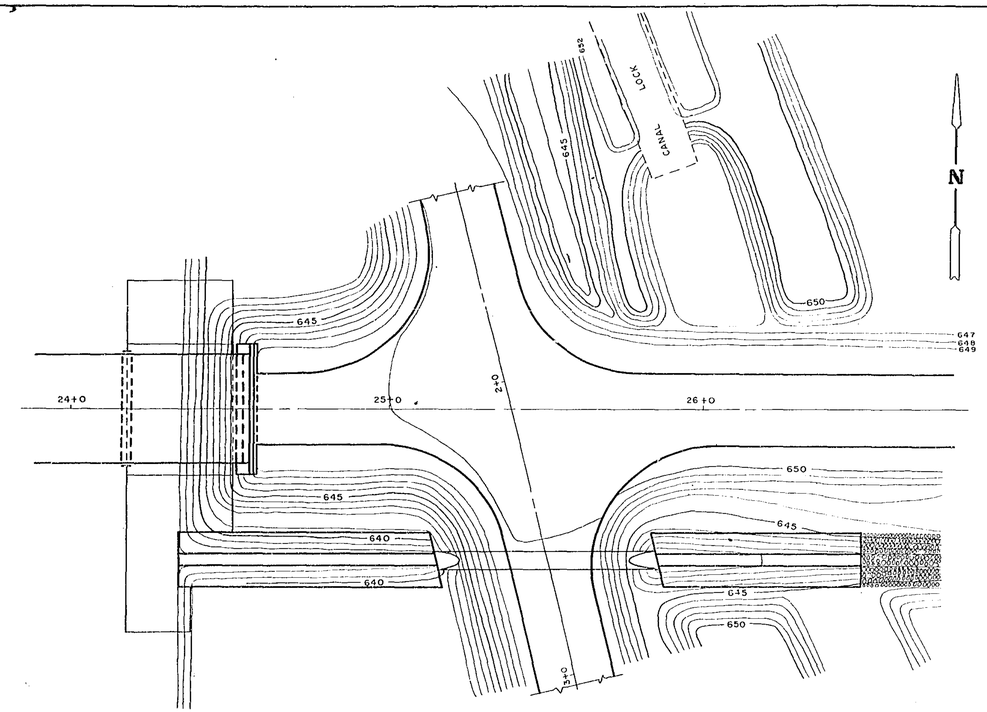
(HIGHLAND RD.) ROADWAY X SECTIONS PAPER MILL DR. STA. 5+0 TO STA. 6+50



(HIGHLAND RD.) ROADWAY X SECTIONS PAPER MILL DR. STA. 7+00 TO 7+50

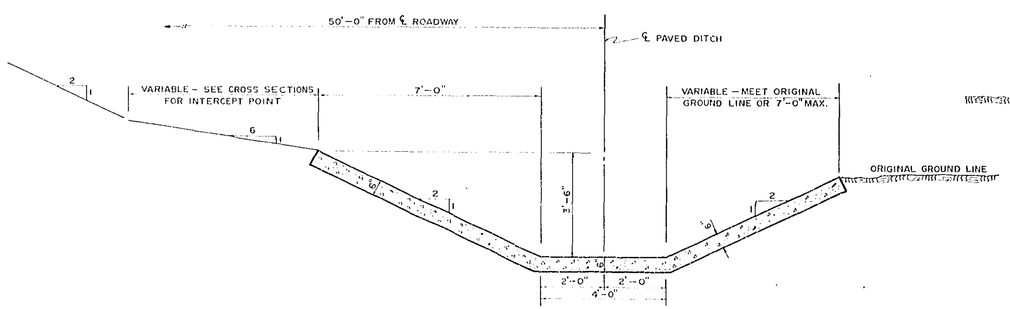


INTERSECTION DETAIL



INTERSECTION GRADING PLAN

SCALE 1" = 20'



TYPICAL SECTION

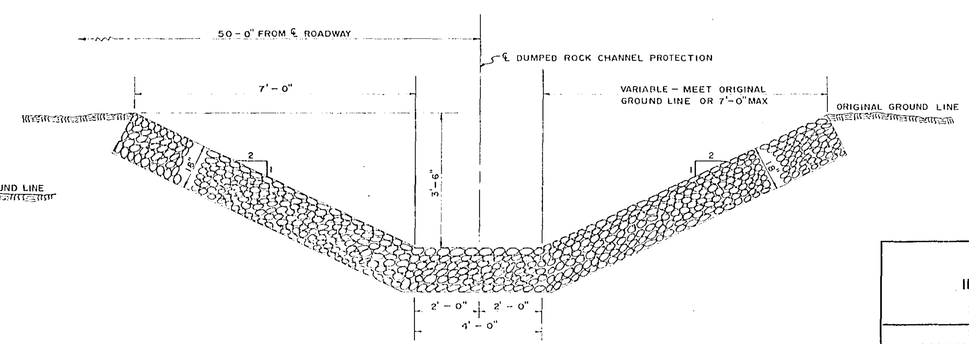
PAVED GUTTER

SCALE 1/2" = 1'-0"

LIMITING STATIONS

STA. 24+34 TO STA. 25+15.18

STA. 25+85.18 TO STA. 26+50



TYPICAL SECTION

DUMPED ROCK CHANNEL PROTECTION

SCALE 1/2" = 1'-0"

LIMITING STATIONS

26+50 TO 26+75

BRIDGE III-A-1

INTERSECTION AND

SPECIAL DETAILS

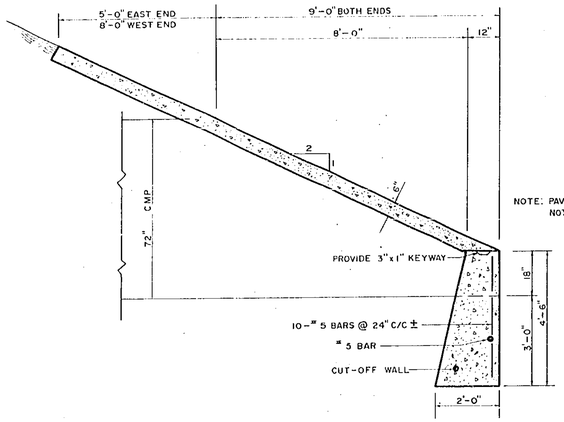
SUMMIT COUNTY

ENGINEERING DEPARTMENT

COURT HOUSE AKRON, OHIO

R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY B. CAMPBELL	SCALE AS SHOWN
SUBMITTED BY B. CAMPBELL	DATE JUNE 23, 1966
APPROVED BY	FIELD BOOK
	TRACED BY J.R. COX

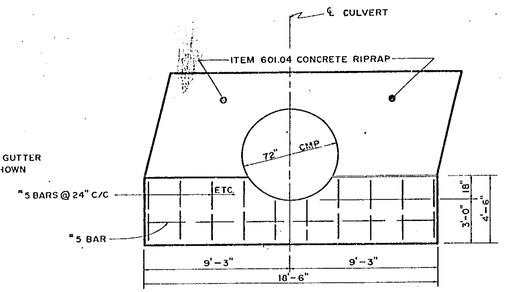


PARTIAL ELEVATION

SCALE: 1/2" = 1'-0"

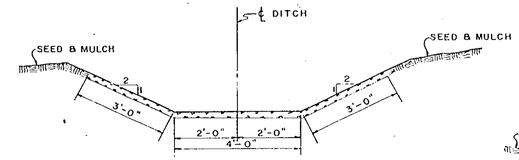
NOTE: PAVED GUTTER NOT SHOWN

NOTE: REINFORCING STEEL CLEARANCE IS 3" UNLESS OTHERWISE SHOWN

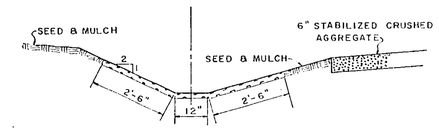


END ELEVATION

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



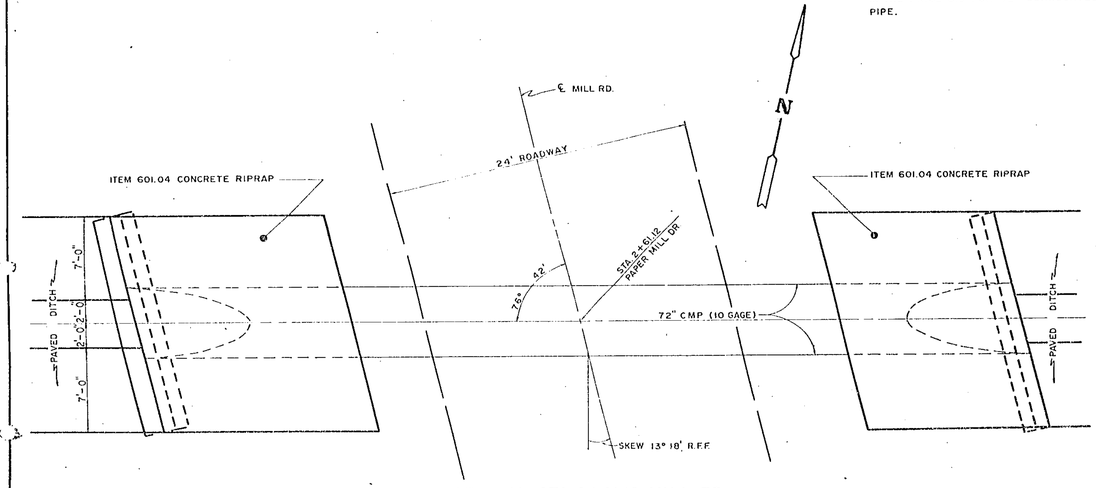
TYPICAL SECTION
10' SODDED DITCH
LIMITING STATIONS
26+75 TO 29+40



TYPICAL SECTION
6' SODDED DITCH

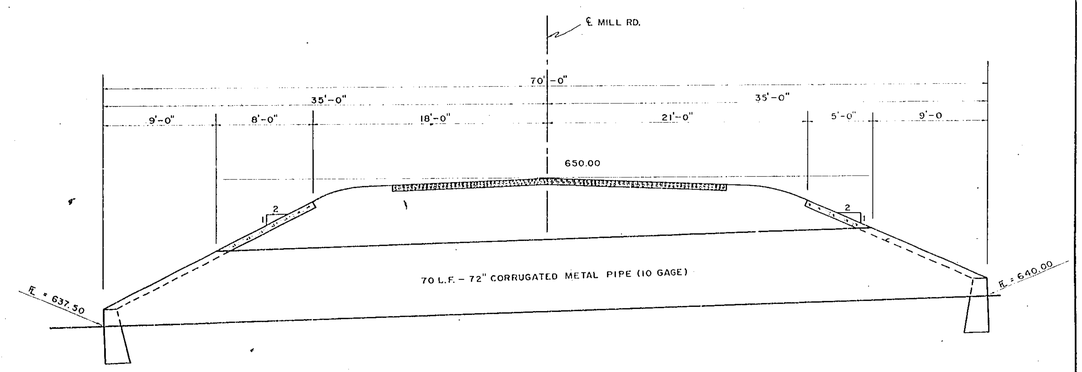
CONCRETE SHALL BE CLASS "C".

CUT-OFF WALL: COST OF THE REINFORCED CONCRETE CUT-OFF WALLS SHALL BE INCLUDED IN THE PRICE BID FOR 72" CORRUGATED METAL PIPE.



CULVERT PLAN STA. 2+61.12 MILL RD.

SCALE: 1" = 5'-0"



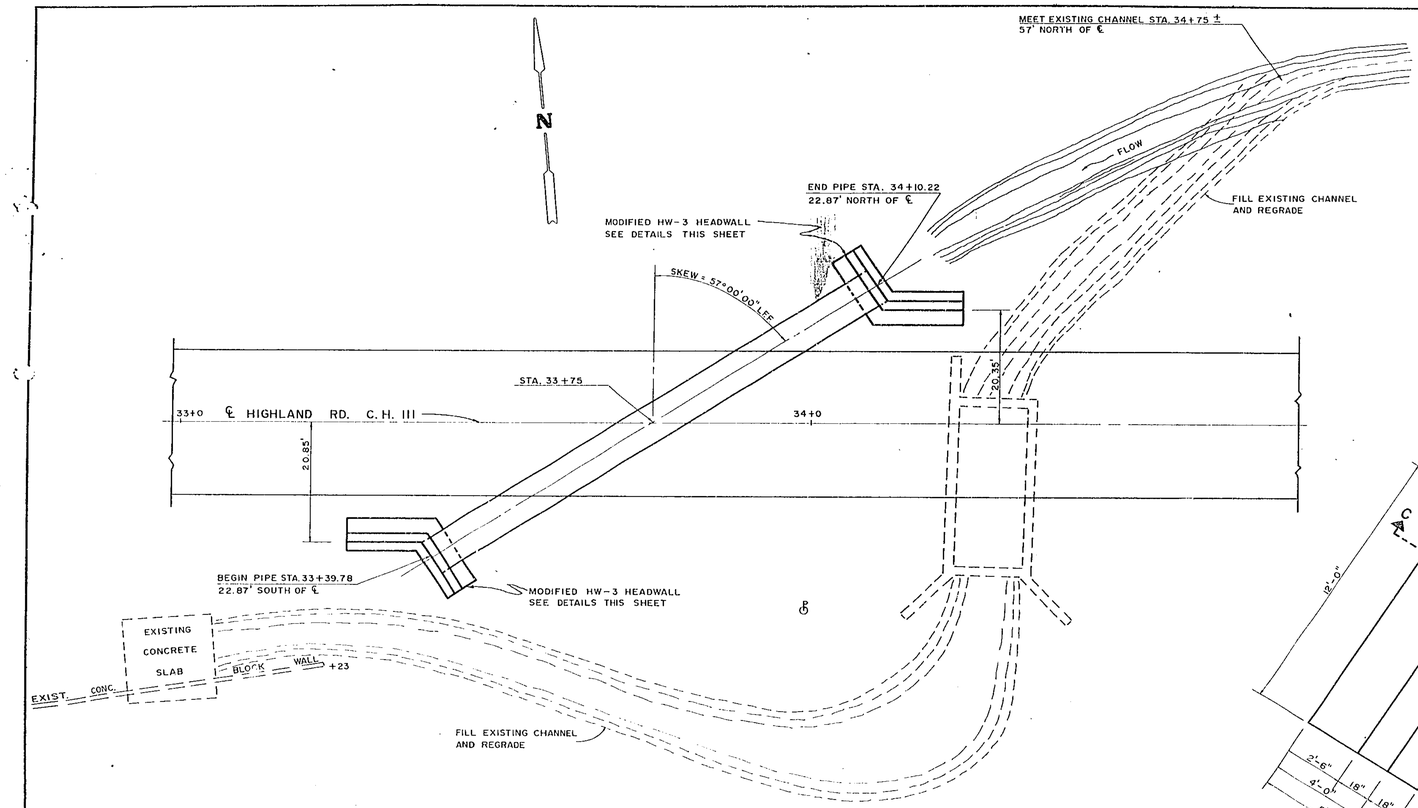
LONGITUDINAL SECTION
THRU 72" CMP STA. 2+61.12

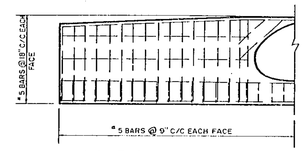
SCALE: 1" = 5'-0" SKEW = 13° 18' L.F.F.

BRIDGE 111-A-1
CULVERT DETAILS
STA. 2+61.12 PAPER MILL DRIVE

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

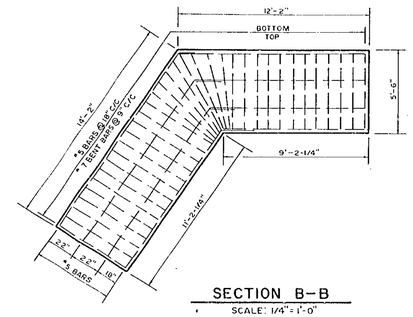
DRAWN BY B.J. CAMPBELL	SCALE AS SHOWN
SUBMITTED BY B.J. CAMPBELL	DATE AUG. 1966
APPROVED BY	FIELD BOOK
	TRACED BY J.R. COX





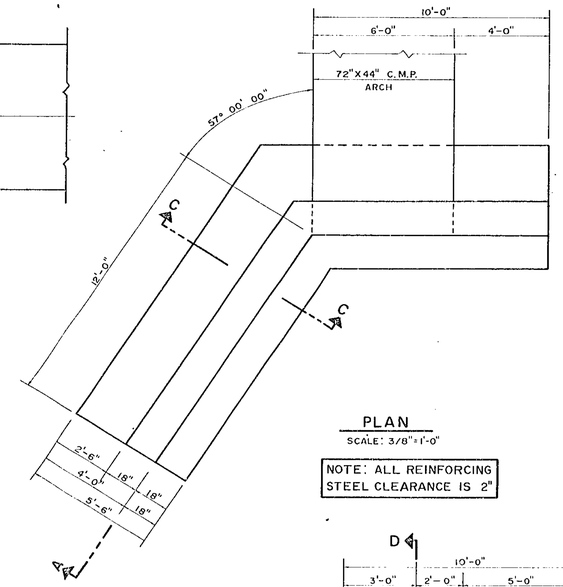
HALF SECTION A-A

SCALE: 1/4" = 1'-0



SECTION B-B

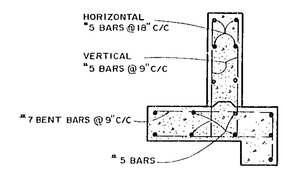
SCALE: 1/4" = 1'-0"



PLAN

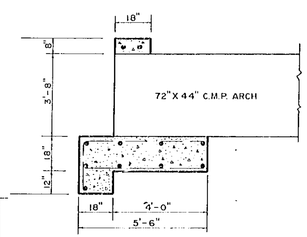
SCALE: 3/8" = 1'-0"

NOTE: ALL REINFORCING STEEL CLEARANCE IS 2"



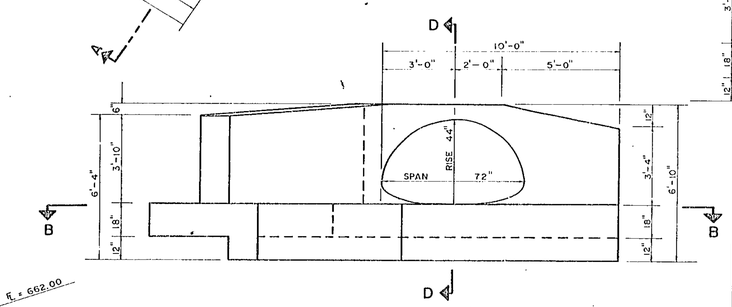
SECTION C-C

SCALE: 3/8" = 1'-0"



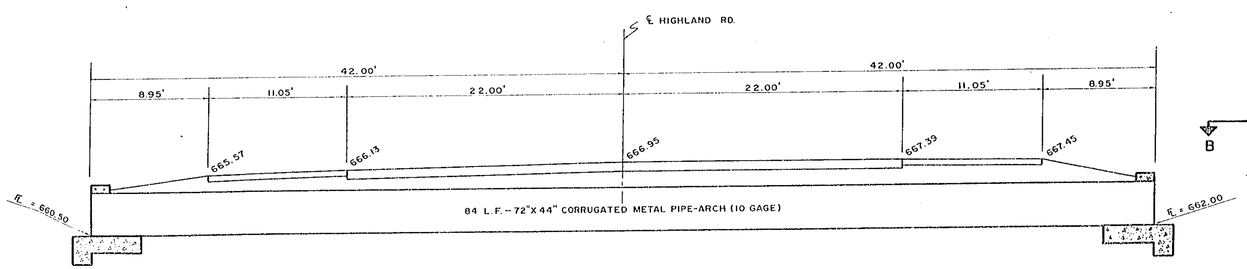
SECTION D-D

SCALE: 3/8" = 1'-0"



ELEVATION

SCALE: 3/8" = 1'-0"



LONGITUDINAL SECTION

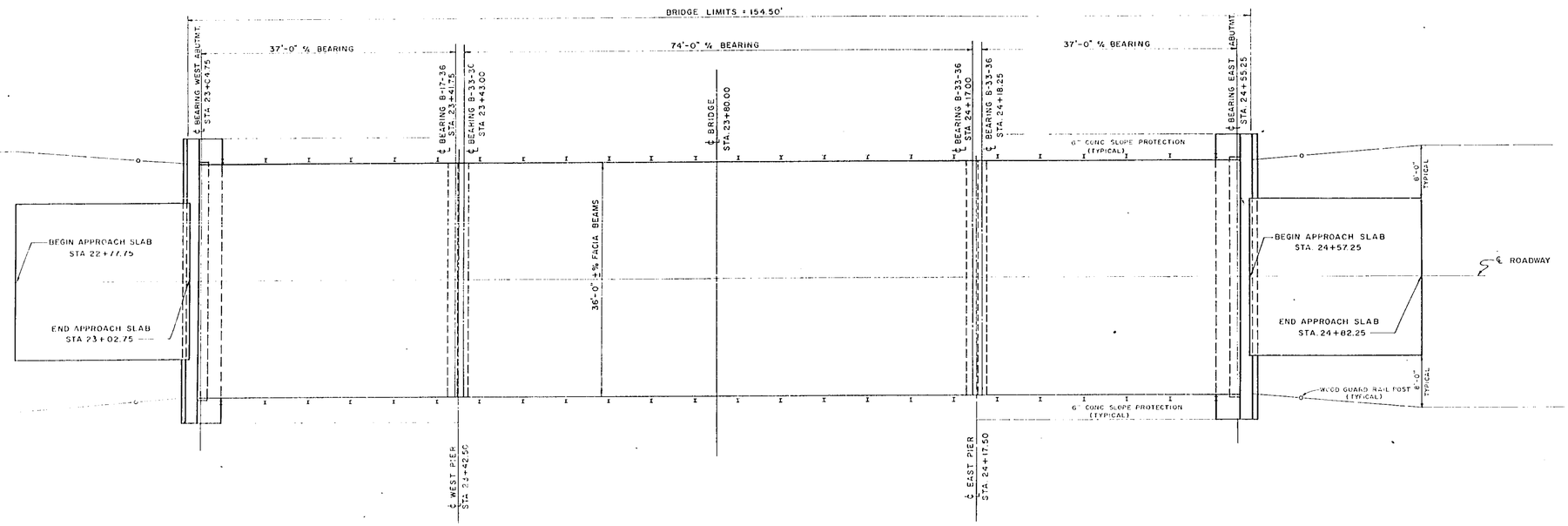
SCALE: 1" = 5'-0"

HIGHLAND RD. C.H. III

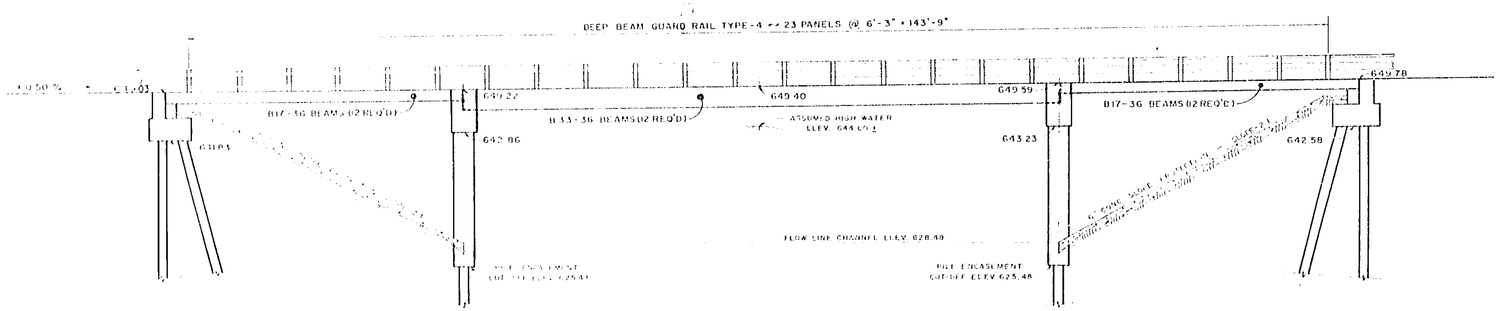
CULVERT DETAILS

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY B.J. CAMPBELL	SCALE AS SHOWN
SUBMITTED BY B.J. CAMPBELL	DATE AUGUST 1966
APPROVED BY	FIELD BOOK
	TRACED BY J.R. COX



PLAN
SCALE 1/8" = 1'-0"



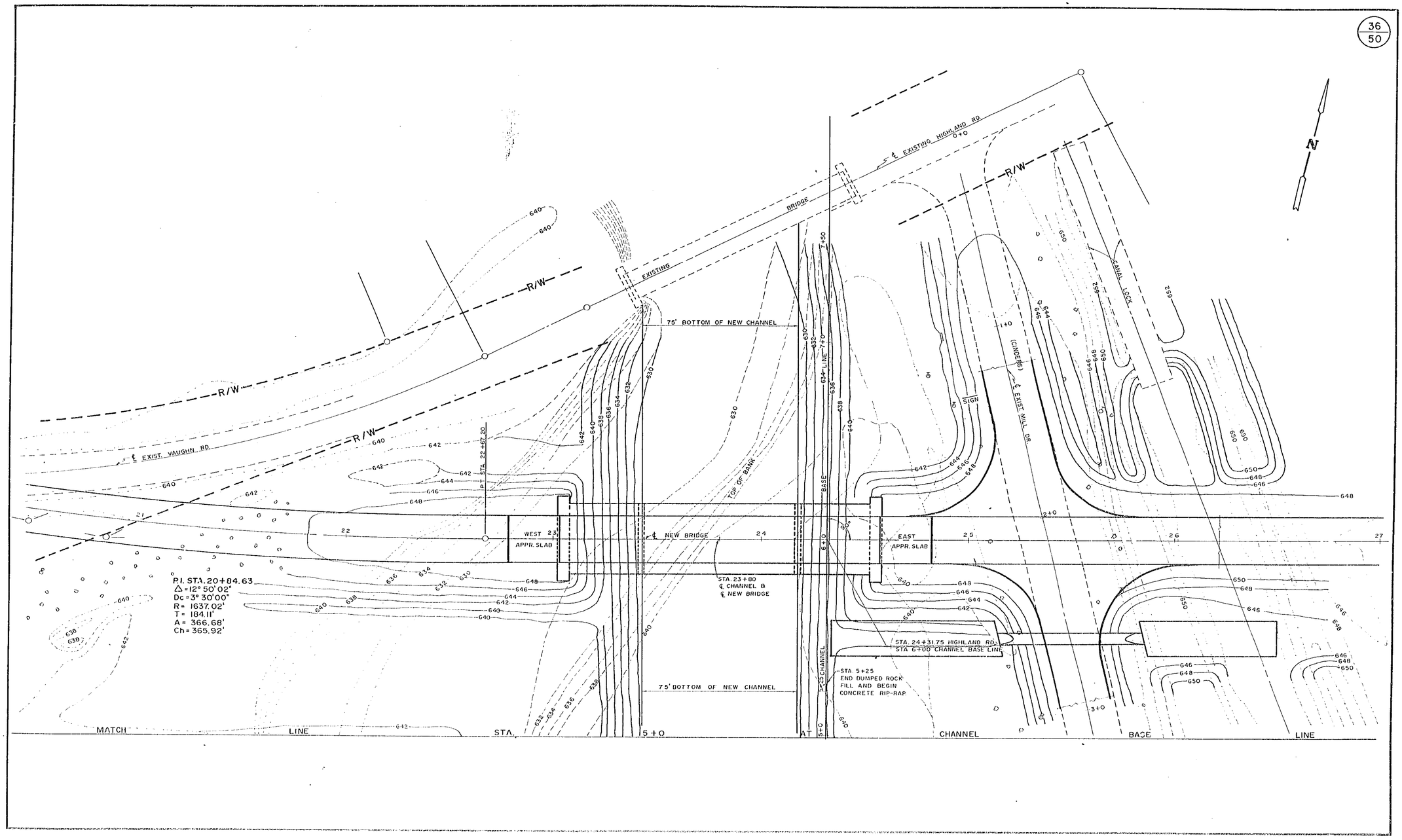
ELEVATION
SCALE 1/8" = 1'-0"

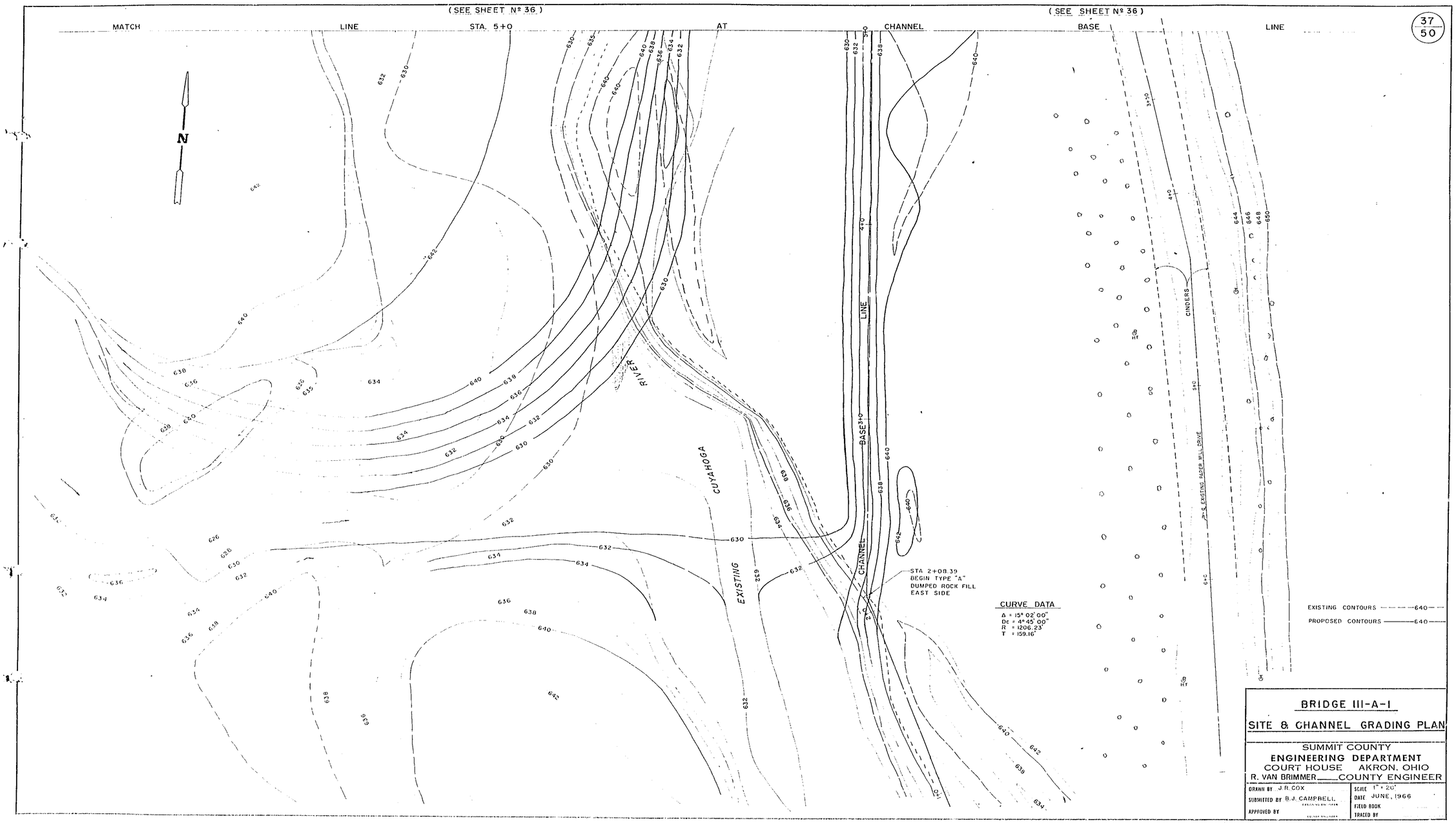
GENERAL PLAN

BRIDGE III-A-1

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY B. J. CAMPBELL	SCALE 1/8" = 1'-0"
SUBMITTED BY B. J. CAMPBELL	DATE JUNE, 1966
APPROVED BY	FIELD BOOK
	TRACED BY R. A. F.


N
℄ EXISTING HIGHLAND RD
0+0
BRIDGE
EXISTING
R/W
75' BOTTOM OF NEW CHANNEL
℄ EXIST. VAUGHN RD.
STA. 22+67.20
P.I. STA. 20+84.63
Δ=12° 50' 02"
Dc=3° 30' 00"
R= 1637.02'
T= 184.11'
A= 366.68'
Ch= 365.92'
WEST
APPR. SLAB
℄ NEW BRIDGE
STA. 23+80
℄ CHANNEL @
℄ NEW BRIDGE
TOP OF BANK
7+50
LINE
7+0
6+0
BASE
5+0 CHANNEL
EAST
APPR. SLAB
STA. 24+31.75 HIGHLAND RD.
STA. 6+00 CHANNEL BASE LINE
STA. 5+25
END DUMPED ROCK
FILL AND BEGIN
CONCRETE RIP-RAP
75' BOTTOM OF NEW CHANNEL
℄ EXIST MILL DR.
(CINDERS)
SIGN
CANAL LOCK
MATCH LINE STA. 5+0 AT CHANNEL BASE LINE

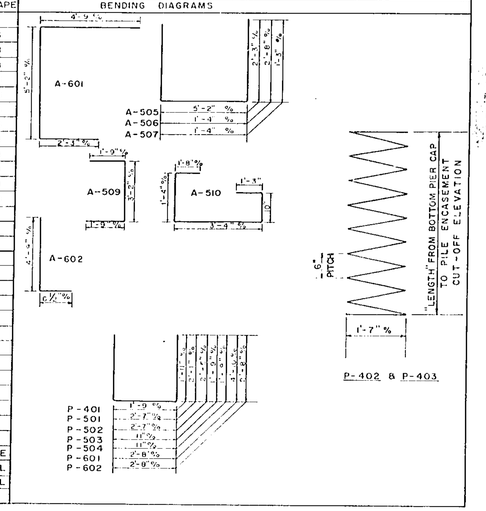

(SEE SHEET Nº 36)
MATCH LINE STA. 5+0 AT
CHANNEL
(SEE SHEET Nº 36)
BASE LINE
N
CUYAHOGA RIVER
EXISTING CHANNEL
BASE LINE
STA 2+08.39
BEGIN TYPE "A"
DUMPED ROCK FILL
EAST SIDE
CURVE DATA
Δ = 15° 02' 00"
Dc = 4° 45' 00"
R = 1206.23'
T = 159.16'
CINDERS
EXISTING PAPER MILL DRIVE
EXISTING CONTOURS 640
PROPOSED CONTOURS 640
BRIDGE III-A-1
SITE & CHANNEL GRADING PLAN
SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER
DRAWN BY J.R. COX
SUBMITTED BY B.J. CAMPBELL
APPROVED BY
SCALE 1" = 20'
DATE JUNE, 1966
FIELD BOOK
TRACED BY

REINFORCING STEEL LIST

MARK	Nº	LENGTH	WEIGHT	SHAPE
ABUTMENTS				
A-801	24	43'-4"	2777	S
A-601	62	12'-0"	1117	B
A-602	50	5'-3"	394	B
A-501	30	15'-6"	485	S
A-502	4	9'-6"	40	S
A-503	2	25'-0"	52	S
A-504	18	13'-2"	247	S
A-505	62	9'-6"	614	B
A-506	28	6'-6"	190	B
A-507	28	3'-8"	107	B
A-509	50	6'-6"	339	B
A-510	34	8'-1"	286	B
PIERS				
P-901	8	38'-4"	1043	S
P-902	42	14'-8"	2095	S
P-701	72	4'-0"	589	S
P-601	8	12'-2"	146	B
P-602	8	7'-10"	94	B
P-603	40	5'-7"	335	S
P-501	132	6'-7"	906	B
P-502	132	7'-3"	998	B
P-503	98	4'-3"	434	B
P-504	98	4'-3"	434	B
P-505	36	13'-10"	519	S
P-401	48	5'-6"	176	B

MARK	DIA	LENGTH	TURNS	WEIGHT	SHAPE
P-402	1'-7"	17'-4 5/8"	41	691	SPIRAL
P-403	1'-7"	17'-9"	39	706	SPIRAL

BENDING DIAGRAMS



BAR SIZE

BAR SIZE IS INDICATED IN THE BAR MARK. THE FIRST DIGIT WHERE THREE DIGITS ARE USED, AND THE FIRST TWO DIGITS WHERE FOUR ARE, INDICATE THE BAR SIZE NUMBER. FOR EXAMPLE, A 700 IS A Nº 7 SIZE BAR AND A 1014 IS A Nº 10 SIZE.

SPIRAL REINFORCING BARS

THE "LENGTH" SHOWN IN THE STEEL LIST FOR THE SPIRAL BARS IS THE DISTANCE FROM THE PILE ENCASEMENT CUT-OFF ELEVATION TO THE BOTTOM OF THE PIER CAP.

THE "NO. OF TURNS" SHOWN IS THE "LENGTH" DIVIDED BY THE PITCH, PLUS 3 TURNS (TOTAL NUMBER OF CLOSED COILS), EXPRESSED AS THE NEAREST WHOLE NUMBER. SPIRAL REINFORCING BARS SHALL NOT HAVE DEFORMATIONS BUT SHALL IN OTHER RESPECTS CONFORM TO ITEM 509, 1-1/2 CLOSED COILS SHALL BE PROVIDED AT THE ENDS OF EACH SPIRAL UNIT.

GENERAL SUMMARY

CUYAHOGA COUNTY			SUMMIT COUNTY			TOTAL	DESCRIPTION
ITEM	QUANT	UNIT	ITEM	QUANT	UNIT	QUANT	
202	50 %	LUMP SUM	202	50 %	LUMP SUM	LUMP	PORTIONS OF EXISTING STRUCTURE REMOVED & DISPOSED OF
503	96	CU YDS	503	96	CU YDS	192	UNCLASSIFIED EXCAVATION
505	50 %	LUMP SUM	505	50 %	LUMP SUM	LUMP	FIRST TEST PILE
507	1,343	LIN FT	507	1,343	LIN FT	2,686	14" CAST-IN-PLACE REINFORCED CONCRETE PILES
509	7907	LBS	509	7907	LBS	15,814	REINFORCING STEEL
511	46	CU YDS	511	46	CU YDS	92	CLASS "C" CONCRETE FOR ABUTMENTS
511	25	CU YDS	511	25	CU YDS	50	CLASS "C" CONCRETE FOR PIERS
512	303	SQ YDS	512	303	SQ YDS	606	TYPE C WATERPROOFING
515	12	Eo.,LIN.FT	515	12		24	B-17-36 PRESTRESSED CONCRETE BRIDGE MEMBERS
515	6			6		12	B-33-36 PRESTRESSED CONCRETE BRIDGE MEMBERS
517	154.5	LIN FT	517	154.5	LIN FT	309	RAILING (AS PER PLAN)
518	50 %	LUMP SUM	518	50 %	LUMP SUM	LUMP	POROUS BACKFILL
601	201.5	SQ YDS	601	201.5	SQ YDS	403	CONCRETE SLOPE PROTECTION
404	22	CU.YDS.	404	22	CU.YDS.	44	TYPE 404 ASPHALT CONCRETE
503	50 %	LUMP SUM	503	50 %	LUMP SUM	LUMP	COFFERDAMS CRIBS, AND SHEETING

STRUCTURAL NOTES

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO THE REQUIREMENYS OF "DESIGN SPECIFICATIONS FOR HIGHWAY STRUCTURES" OF THE STATE OF OHIO, DEPARTMENT OF HIGHWAYS, DATED 9-1-57, TOGETHER WITH CURRENT REVISIONS THEREOF.

DESIGN DATA

DESIGN LOADING - S15-60

CONCRETE CLASS C - BASIC UNIT STRESS 1,333 P.S.I.
CONCRETE CLASS E - BASIC UNIT STRESS 1,133 P.S.I.

STRUCTURAL STEEL - ASTM A36 - BASIC UNIT STRESS 20,000 P.S.I.
REINFORCING STEEL - ASTM A15, A160 DEFORMED OR INTERMEDIATE GRADE. BASIC UNIT STRESS 20,000 P.S.I. EXCEPT, SPIRAL REINFORCEMENT MAY BE PLAIN, STRUCTURAL GRADE WITH BASIC UNIT STRESS OF 18,000 P.S.I.

REMOVAL OF EXISTING STRUCTURE

WHEN NO LONGER NEEDED TO MAINTAIN TRAFFIC THE SUPERSTRUCTURE OF THE EXISTING BRIDGE SHALL BE REMOVED. THE EXISTING FORTY (40) STRINGERS SHALL BECOME THE PROPERTY OF SUMMIT AND CUYAHOGA COUNTIES AND SHALL BE SALVAGED AND STOCK PILED BY THE CONTRACTOR AT A LOCATION DESIGNATED BY THE ENGINEER WITHIN THE PROJECT LIMITS. THE REMAINDER OF THE EXISTING SUPERSTRUCTURE SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN ANY MANNER SAID CONTRACTOR DEEMS SUITABLE.
THE EXISTING ABUTMENTS SHALL REMAIN IN PLACE, UNDISTURBED. PAYMENT UNDER ITEM 202.

MORTARING OF SHEAR KEYS

AFTER TRANSVERSE TIE RODS HAVE BEEN PLACED AND TIGHTENED, SHEAR KEYS BETWEEN THE BEAMS SHALL BE FILLED WITH LOW-SLUMP NON-SHRINKING PORTLAND CEMENT MORTAR. MORTAR SHALL BE TAMPED INTO THE KEYWAYS IN A MANNER THAT INSURES COMPLETE AND SOLID FILLING. PAYMENT FOR THIS WORK TO BE INCLUDED IN THE PRICE BID FOR ITEM 515.

FINAL PAYMENT

FINAL PAYMENT FOR ITEM 503, "UNCLASSIFIED EXCAVATION" SHALL BE BASED ON THE QUANTITY SHOWN ON THESE PLANS AND IN THE PROPOSAL. FINAL MEASUREMENTS WILL NOT BE TAKEN.

PAYMENT FOR PRESTRESSED CONCRETE BRIDGE MEMBERS

SHALL INCLUDE PAYMENT FOR DOWEL PINS, DOWEL PIN HOLES, ELASTOMERIC BEARING PADS, DIAPHRAGMS, TIE RODS, JOINT SEALER, PREMOLDED EXPANSION JOINT FILLER, REINFORCING BARS, MORTARING OF SHEAR KEYS AND ALL OTHER ITEMS INCIDENTAL TO THE INSTALLATION OF ALL PRESTRESSED CONCRETE BRIDGE MEMBERS REQUIRED TO COMPLETE THIS PROJECT.

PILES

PILES SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 30 TONS PER PILE FOR THE ABUTMENTS AND 50 TONS PER PILE FOR THE PIERS.

UTILITY LINES

ALL EXPENSE INVOLVED IN RELOCATION (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE OWNER(S). THE CONTRACTOR AND OWNER(S) ARE REQUESTED TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ELASTOMETRIC BEARING PADS

ELASTOMETRIC BEARING PADS OF 50, 60 AND 70 HARDNESS SHALL CONFORM TO SEC. 711.23. PADS SHALL BE FURNISHED WITH 2" DIAMETER HOLES ACCURATELY POSITIONED FOR ANCHOR DOWELS WHERE REQUIRED.

TRANSVERSE TIE RODS

TRANSVERSE TIE RODS SHALL BE PROVIDED THROUGH THE DIAPHRAGMS IN THE POSITIONS INDICATED, EACH TIE SHALL BE EQUIVALENT TO A 1" DIAMETER MILD STEEL ROD, AS PER SEC. 711.01, TIGHTENED TO 18,000 POUNDS. TENSION MAY BE APPLIED BY A TORQUE OF APPROXIMATELY 300 FOOT POUNDS WITH THE THREADS LUBRICATED.

RAILING

GUARD RAIL POSTS ON BRIDGE SHALL BE SPACED AT 6'-3" C/C. POSTS SHALL BE LOCATED SO THAT INSERTS CLEAR ENDS OF BEAMS BY 6" MINIMUM. POSTS SHALL BE SET NORMAL TO THE BRIDGE BEAMS.

GALVANIZING

ALL ANCHOR BOLTS, STUDS, INSERTS, BOLTS, NUTS, RODS, GUARD RAIL AND 6 WF 15.5 GUARD RAIL POSTS SHALL BE GALVANIZED AS PER SEC. 711.02.

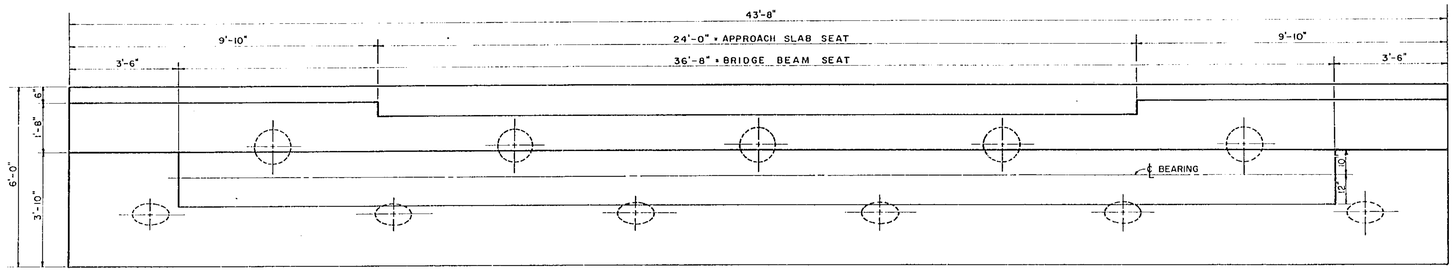
EXCAVATION QUANTITY

INCLUDES THE REMOVAL OF FILL MATERIAL REQUIRED FOR CONSTRUCTION OF THE ABUTMENTS AND THE REMOVAL OF FILL MATERIAL ABOVE THE LEVEL OF THE EARTH BENCH.

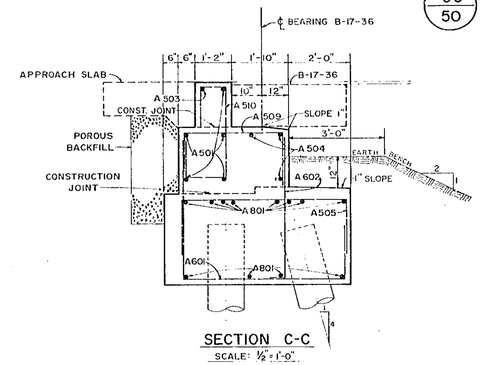
BRIDGE III-A-1
REINFORCING STEEL LIST
& STRUCTURAL NOTES

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

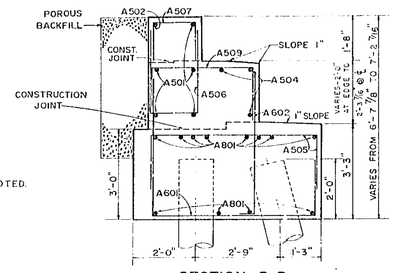
DRAWN BY R.A.F.	SCALE AS SHOWN
SUBMITTED BY B.J. CAMPBELL, ASSISTANT ENGINEER	DATE JUNE 1966
APPROVED BY, DEPUTY ENGINEER	FIELD BOOK
	TRACED BY



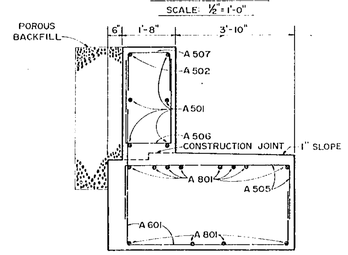
PLAN
SCALE: ½" = 1'-0"



SECTION C-C
SCALE: ½" = 1'-0"



SECTION B-B
SCALE: ½" = 1'-0"



SECTION A-A
SCALE: ½" = 1'-0"

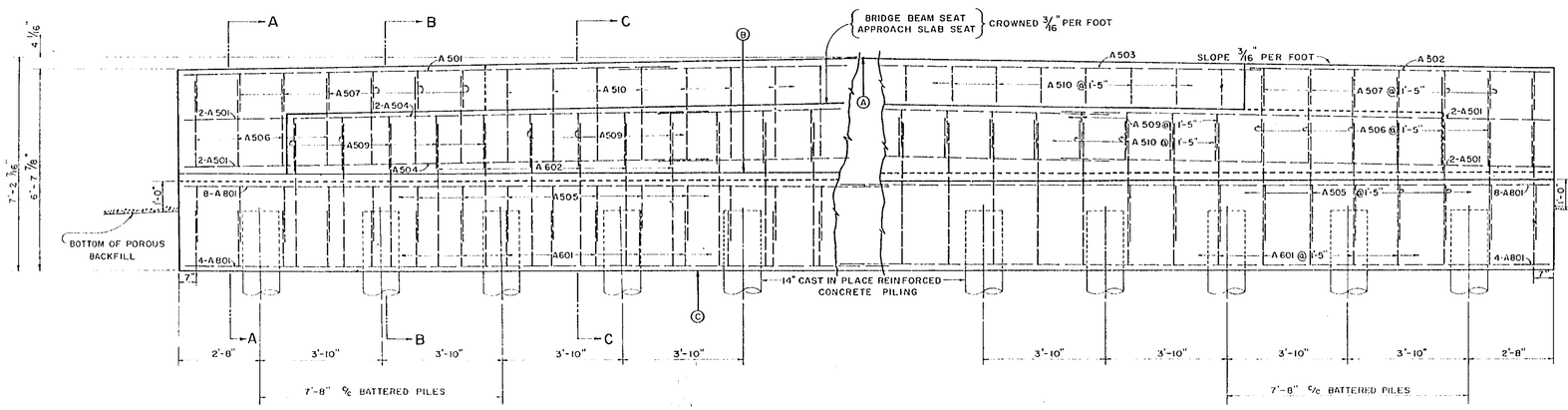
ELEVATIONS			
ABUTMENT	Ⓐ	Ⓑ	Ⓒ
WEST	649.03	645.08	641.83
EAST	649.78	645.83	642.58

NOTES:

REINFORCING STEEL CLEARANCE SHALL BE 2" UNLESS OTHERWISE NOTED.

PILE BATTER: FRONT ROW OF PILES SHALL BE BATTERED ONE (1) HORIZONTAL TO FOUR (4) VERTICAL.

REINFORCING STEEL SHALL BE POSITIONED IN ABUTMENT SO AS NOT TO INTERFERE WITH DOWEL HOLES.



FRONT ELEVATION
SCALE: ½" = 1'-0"

REAR ELEVATION
SCALE: ½" = 1'-0"

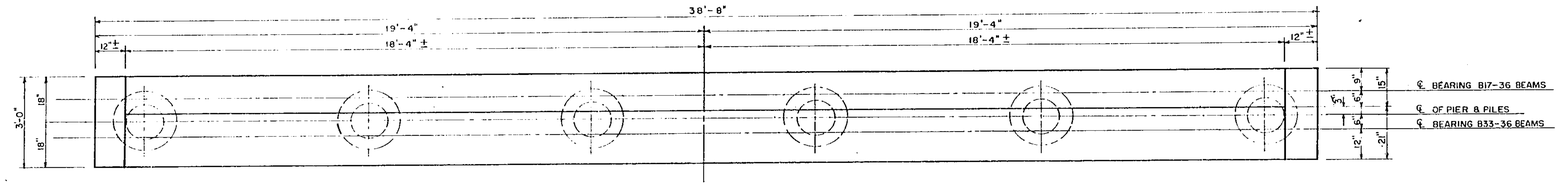
BRIDGE III-A-1

ABUTMENT DETAIL

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

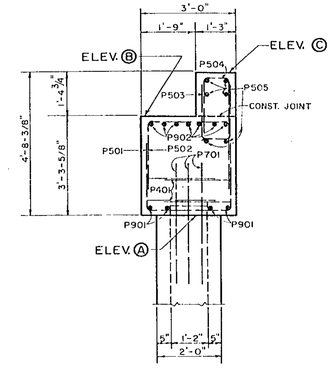
DRAWN BY R.A.F.	SCALE AS SHOWN
SUBMITTED BY B.J. CAMPBELL ENGINEERING FACILITIES	DATE JUNE, 1966
APPROVED BY COUNTY ENGINEER	FIELD BOOK
	TRACED BY

ELEVATIONS			
ELEVATION	Ⓐ	Ⓑ	Ⓒ
WEST	642.86	646.16	647.56
EAST	643.23	646.53	647.93



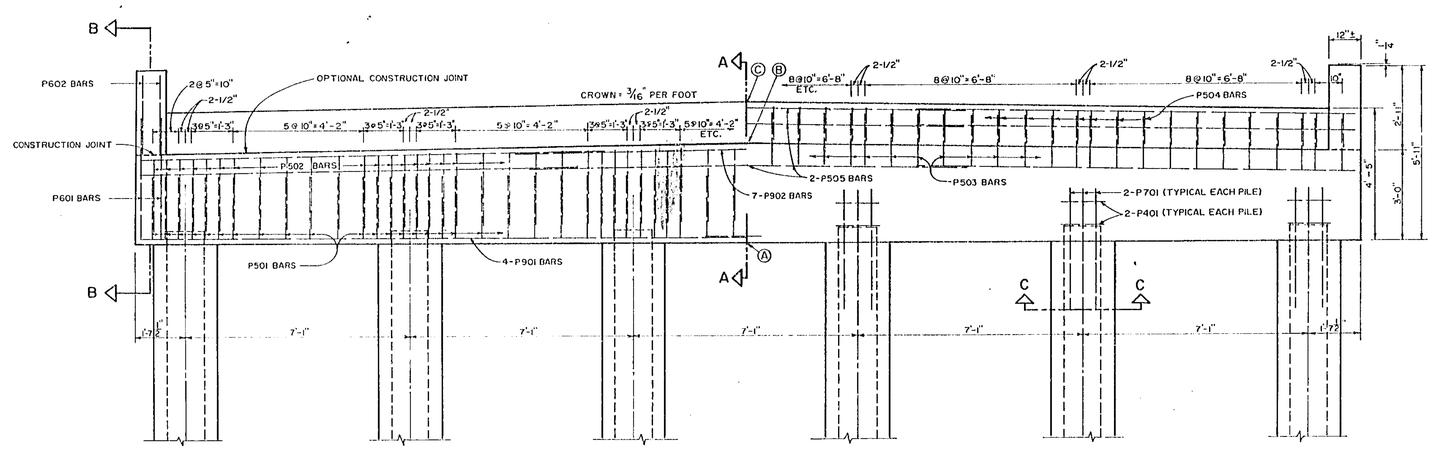
PLAN

SCALE: 1/2" = 1'-0"



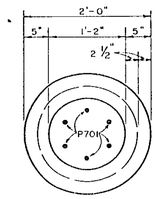
SECTION A-A

SCALE - 1/2" = 1'-0"



ELEVATION

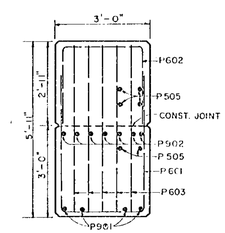
SCALE: 1/2" = 1'-0"



SECTION C-C

"CAST-IN-PLACE PILE"

SCALE: 1" = 1'-0"



SECTION B-B

SCALE - 1/2" = 1'-0"

-NOTE-

REINFORCING STEEL CLEARANCE SHALL BE 2" UNLESS OTHERWISE NOTED

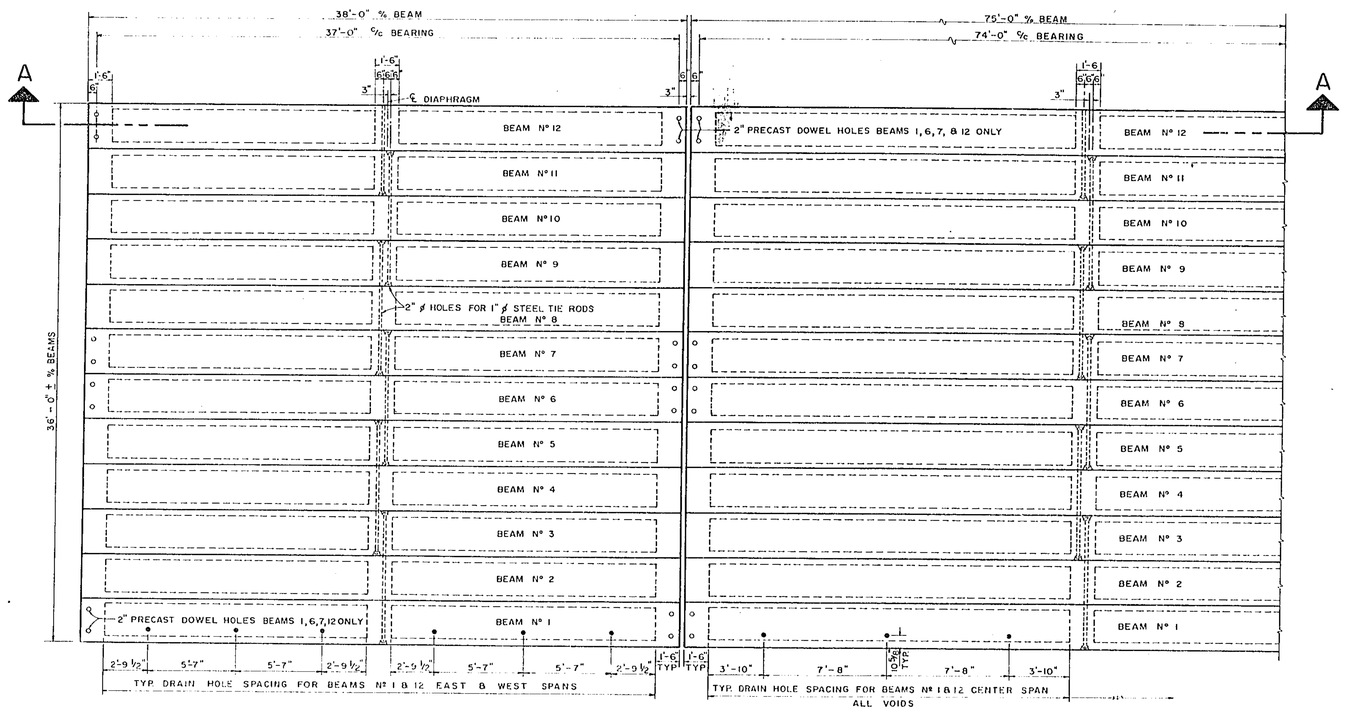
REINFORCING STEEL IN PIERS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH DOWEL HOLES.

BRIDGE III-A-1

PIER DETAIL

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER ___ COUNTY ENGINEER

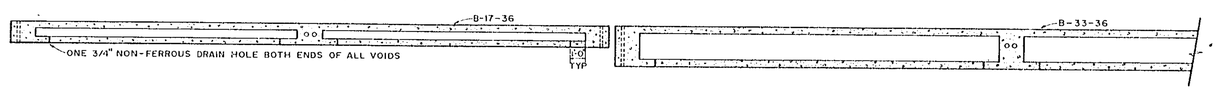
DRAWN BY B.J. CAMPBELL	SCALE AS SHOWN
SUBMITTED BY B.J. CAMPBELL	DATE JUNE, 1966
APPROVED BY	FIELD BOOK
	TRACED BY R.A. FULLER



PLAN

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

NOTE:
REINFORCING STEEL IN ABUTMENTS AND PIERS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH DOWEL HOLES.



SECTION A-A

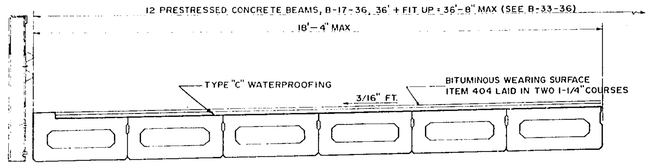
SCALE: 1/4" = 1'-0"

SUPERSTRUCTURE

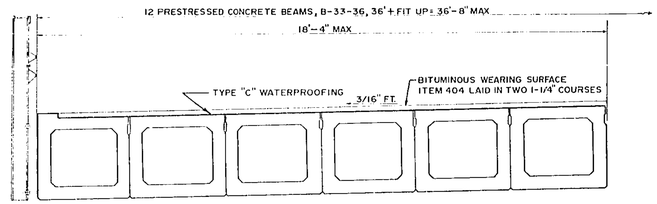
CENTER & END SPAN DETAILS

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY R. A. F.	SCALE AS SHOWN
SUBMITTED BY B. J. CAMPBELL	DATE JUNE, 1966
APPROVED BY	FIELD BOOK
	TRACED BY

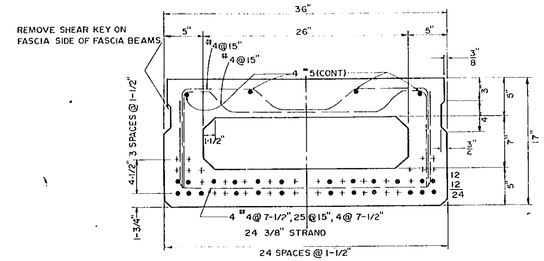


TRANSVERSE SECTION-SPANS-1&3

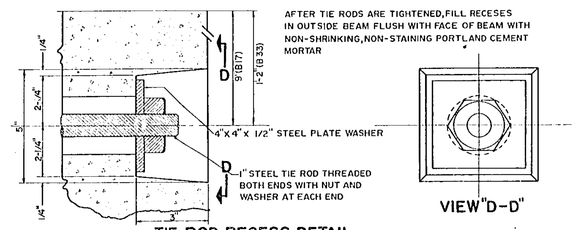


TRANSVERSE SECTION-SPAN-2

SHEAR KEY DETAIL

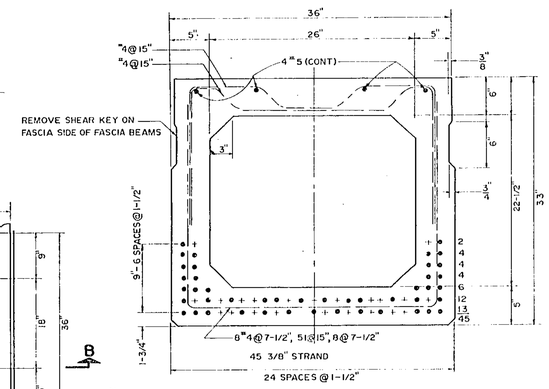


TYPICAL BEAM SECTION B-17-36

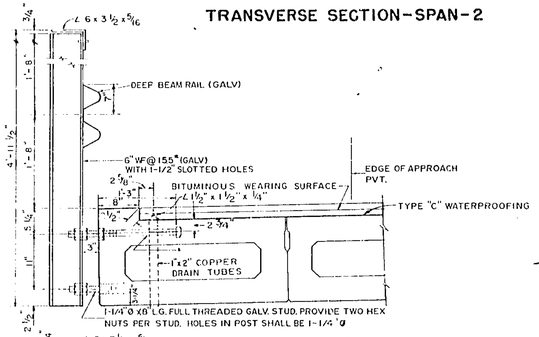


TIE ROD RECESS DETAIL

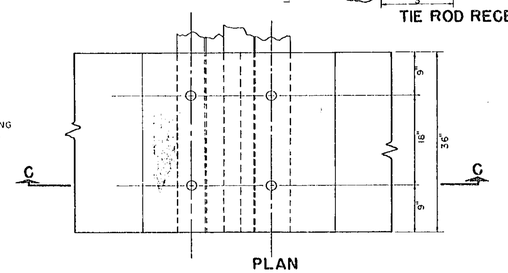
VIEW "D-D"



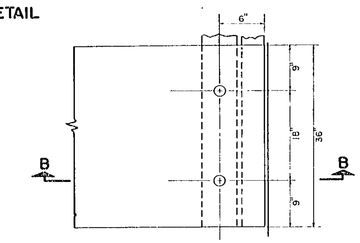
TYPICAL BEAM SECTION B-33-36



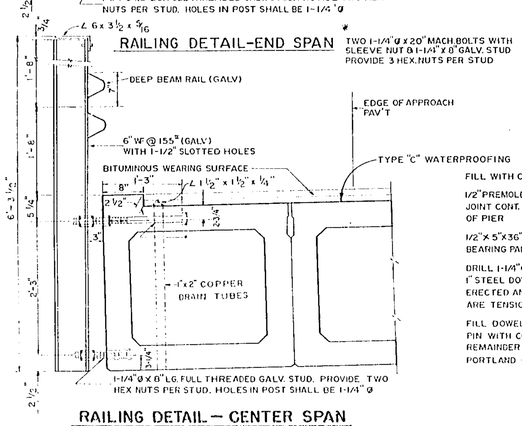
RAILING DETAIL-END SPAN



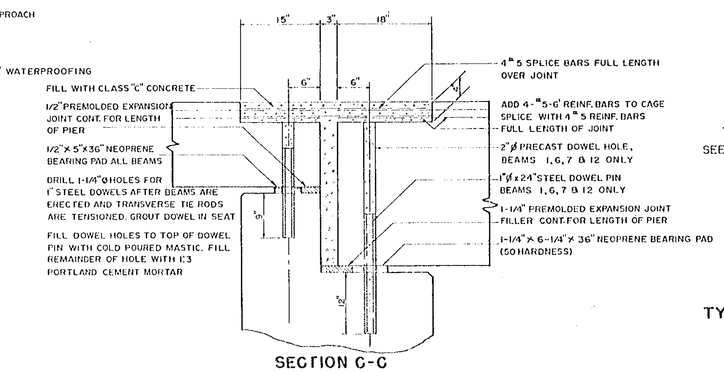
PLAN



PLAN

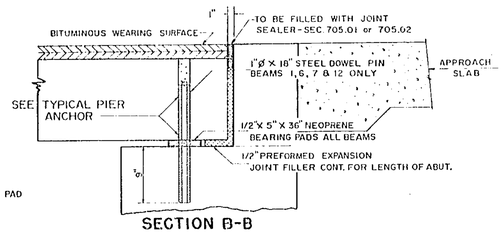


RAILING DETAIL - CENTER SPAN



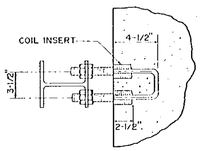
SECTION C-C

TYPICAL PIER ANCHOR DETAIL



SECTION B-B

TYPICAL ABUTMENT ANCHOR DETAIL



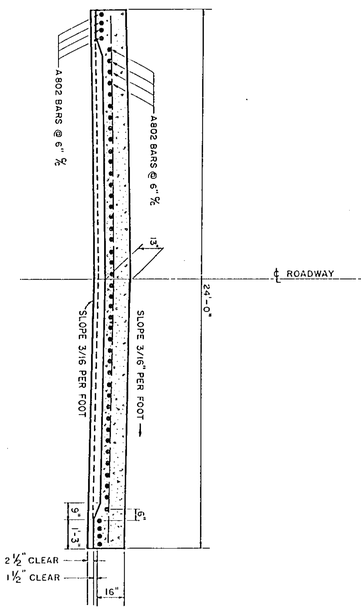
COIL INSERT DETAIL

BRIDGE III-A-1

DETAILS

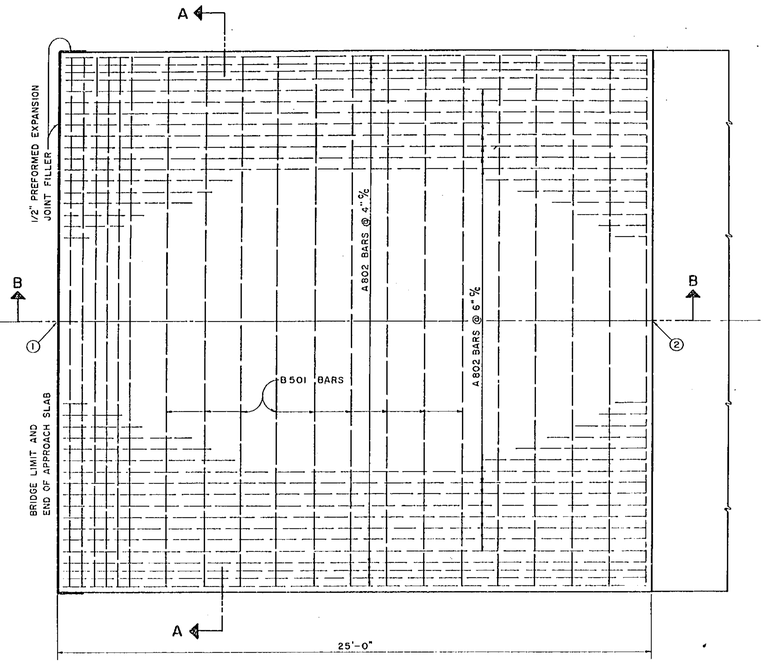
SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY J.R. COX	SCALE AS SHOWN
SUBMITTED BY B. J. CAMPBELL	DATE JULY 1966
APPROVED BY	FIELD BOOK
	TRACED BY



SECTION A-A

SCALE: 3/8" = 1'-0"

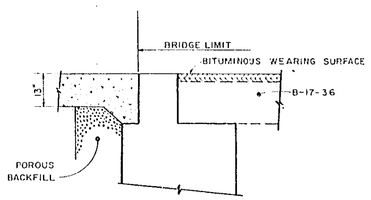


PLAN

SCALE: 3/8" = 1'-0"

CONCRETE: SHALL BE CLASS "C" OR CLASS "D"

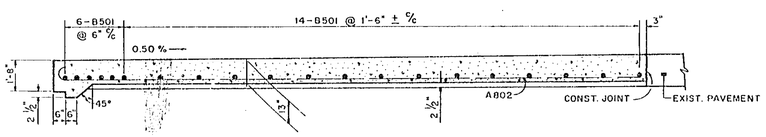
PREFORMED EXPANSION JOINT FILLER: AT THE EDGES OF THE APPROACH SLAB SHALL BE INCLUDED WITH THE APPROACH SLAB FOR PAYMENT



TYPICAL SECTION – APPROACH SLAB AT BRIDGE

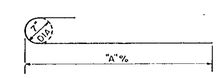
SCALE: 1/2" = 1'-0"

REINFORCING STEEL								
LENGTH	THICK-NESS	A 802					B 501	
		SPACING	MARK	LENGTH	DIMENSION "A"	Nº REQ'D.	LENGTH	Nº REQ'D.
WEST	13"	VARIES	A 802	25'-7"	24'-6"	50	23'-6"	20
EAST	13"	VARIES	A 802	25'-7"	24'-6"	50	23'-6"	20



SECTION B-B

SCALE: 3/8" = 1'-0"



LIMITING STATIONS AND ELEVATION DATA					
APPROACH SLAB	STATION BEGIN	STATION END	CROWN ELEV ①	CROWN ELEV ②	CONCRETE SQ. YDS.
WEST	22+77.75	23+02.75	648.89	649.02	66.7
EAST	24+57.25	24+82.25	649.79	649.92	66.7

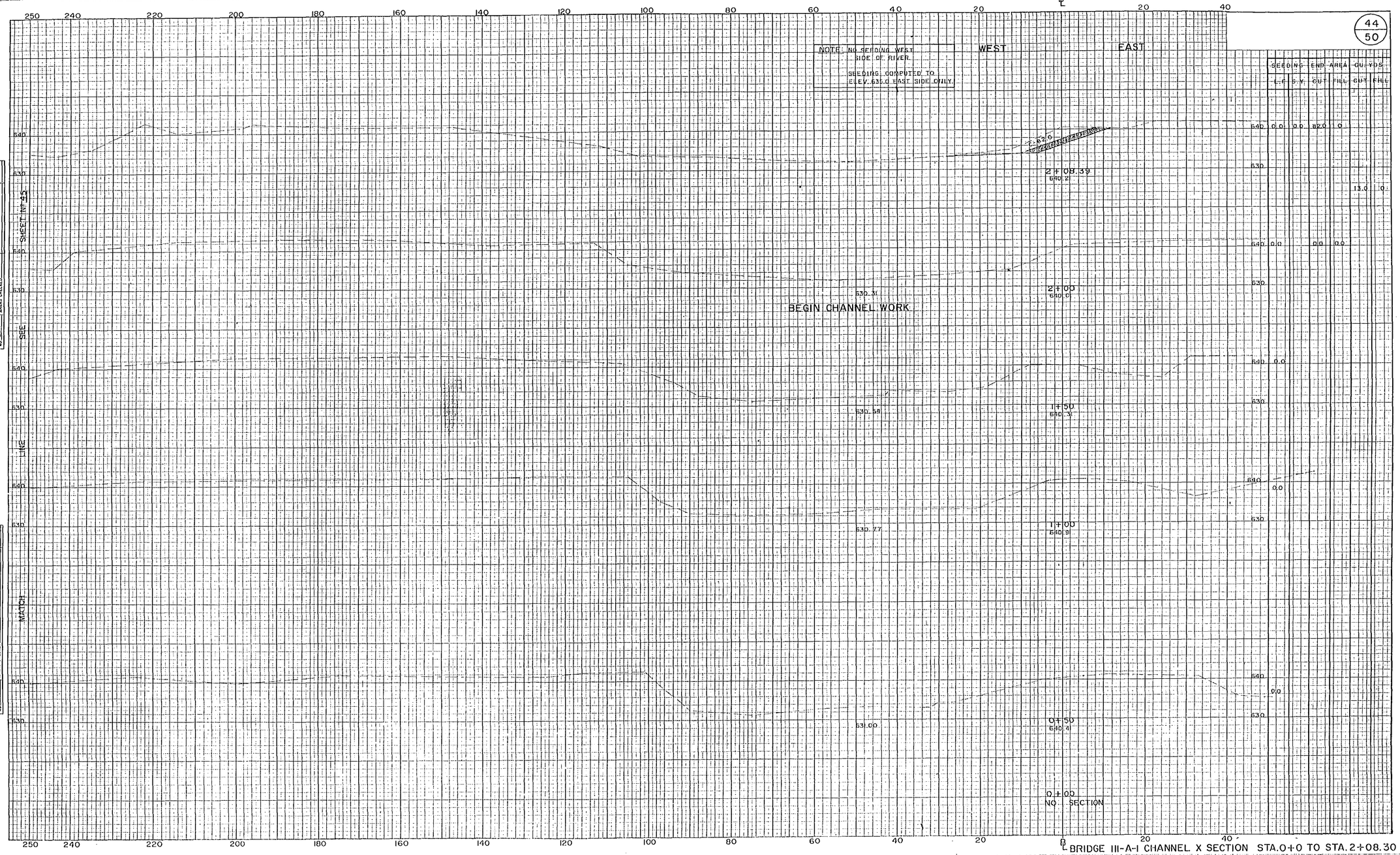
BRIDGE III-A-1

APPROACH SLAB DETAILS

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VAN BRIMMER COUNTY ENGINEER

DRAWN BY R.A.F.
SUBMITTED BY B.J. CAMPBELL
APPROVED BY

SCALE AS SHOWN
DATE JUNE, 1966
FIELD BOOK
TRACED BY

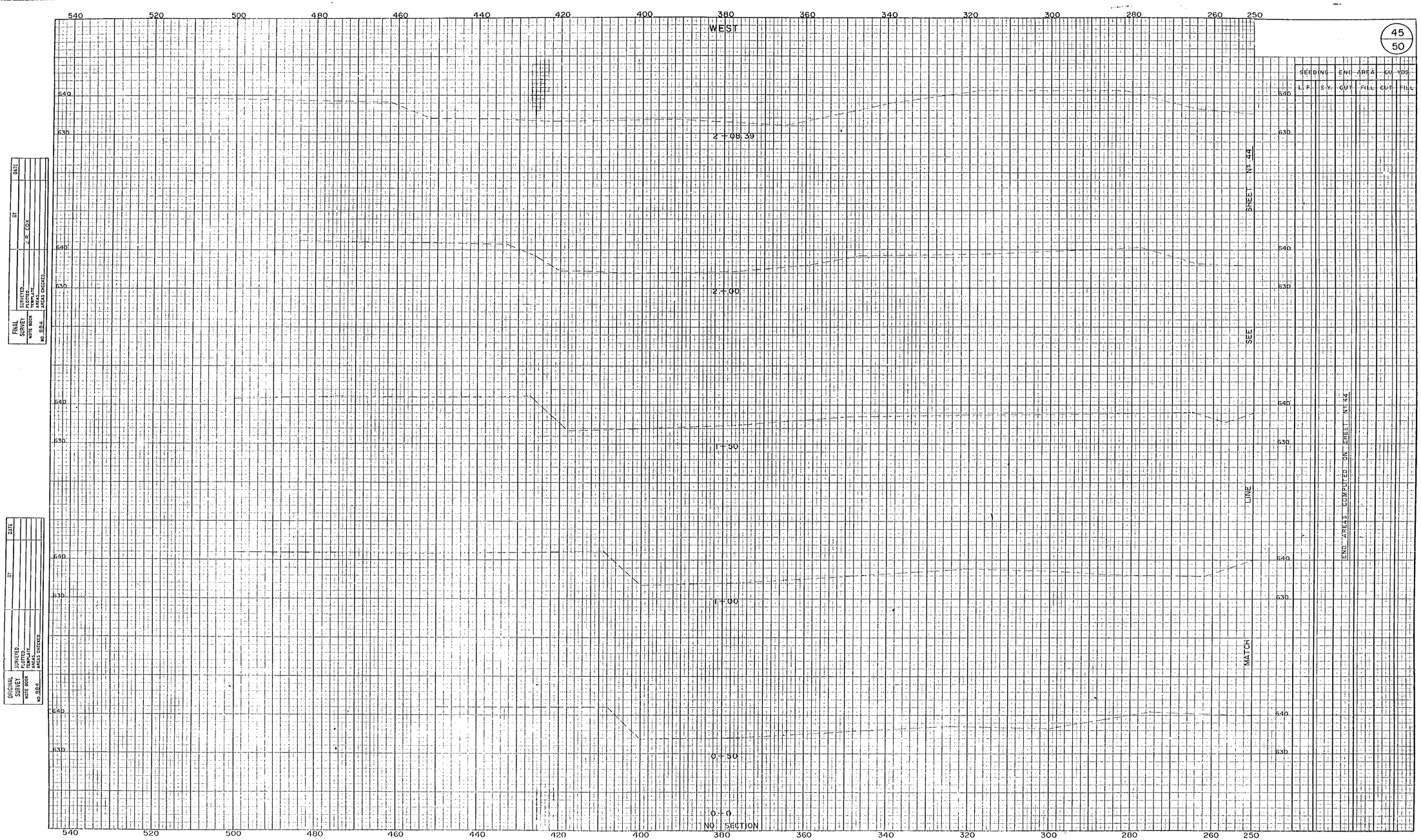


	SEEDING		END AREA CU. YDS.			
	L.F.	S.Y.	CUT	FILL	CUT	FILL
640	0.0	0.0	82.0	0		
630						
					13.0	0
640	0.0		0.0	0.0		
630						
640	0.0					
630						
640						
	0.0					
630						
640						
	0.0					
630						

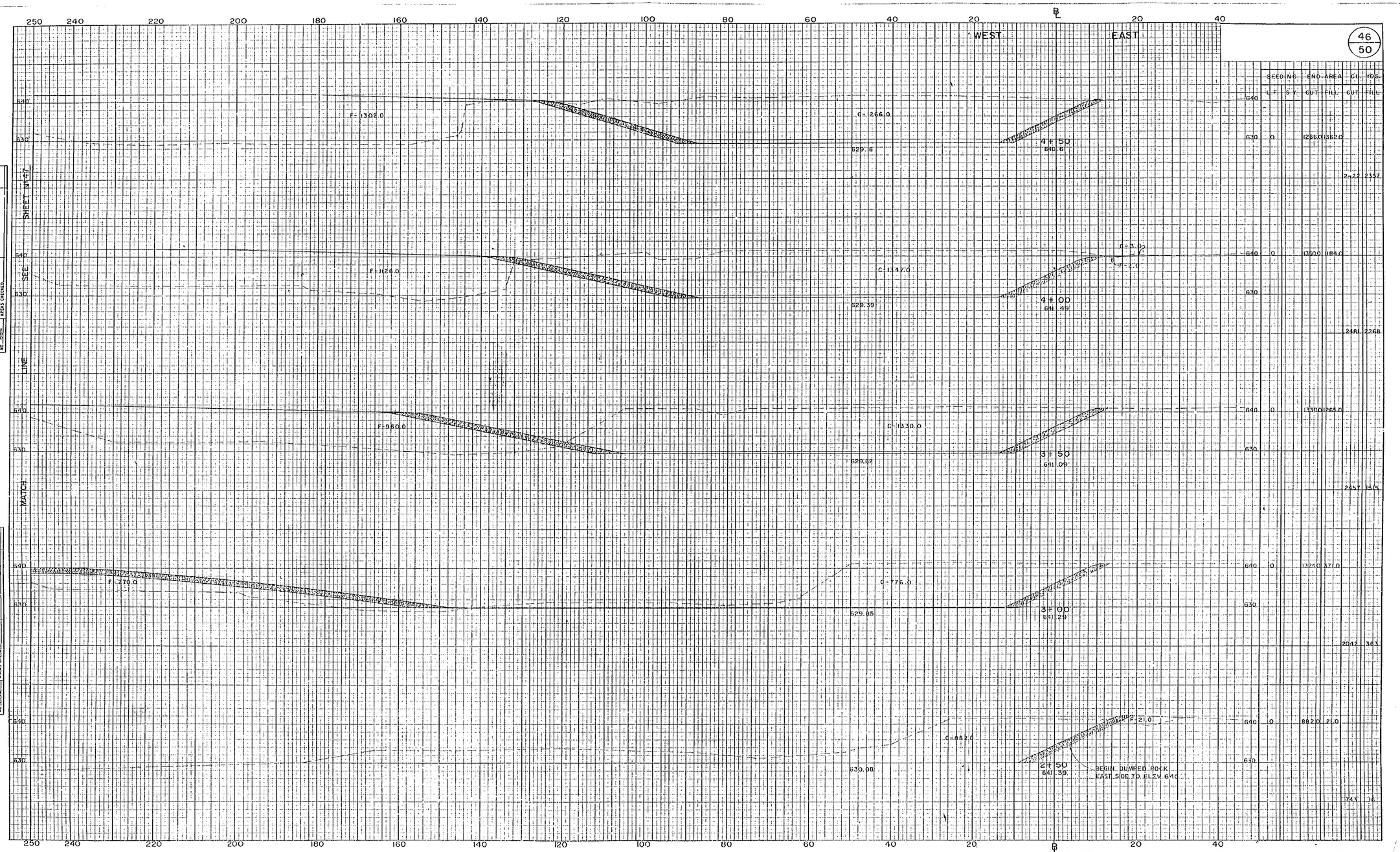
FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO. 884		

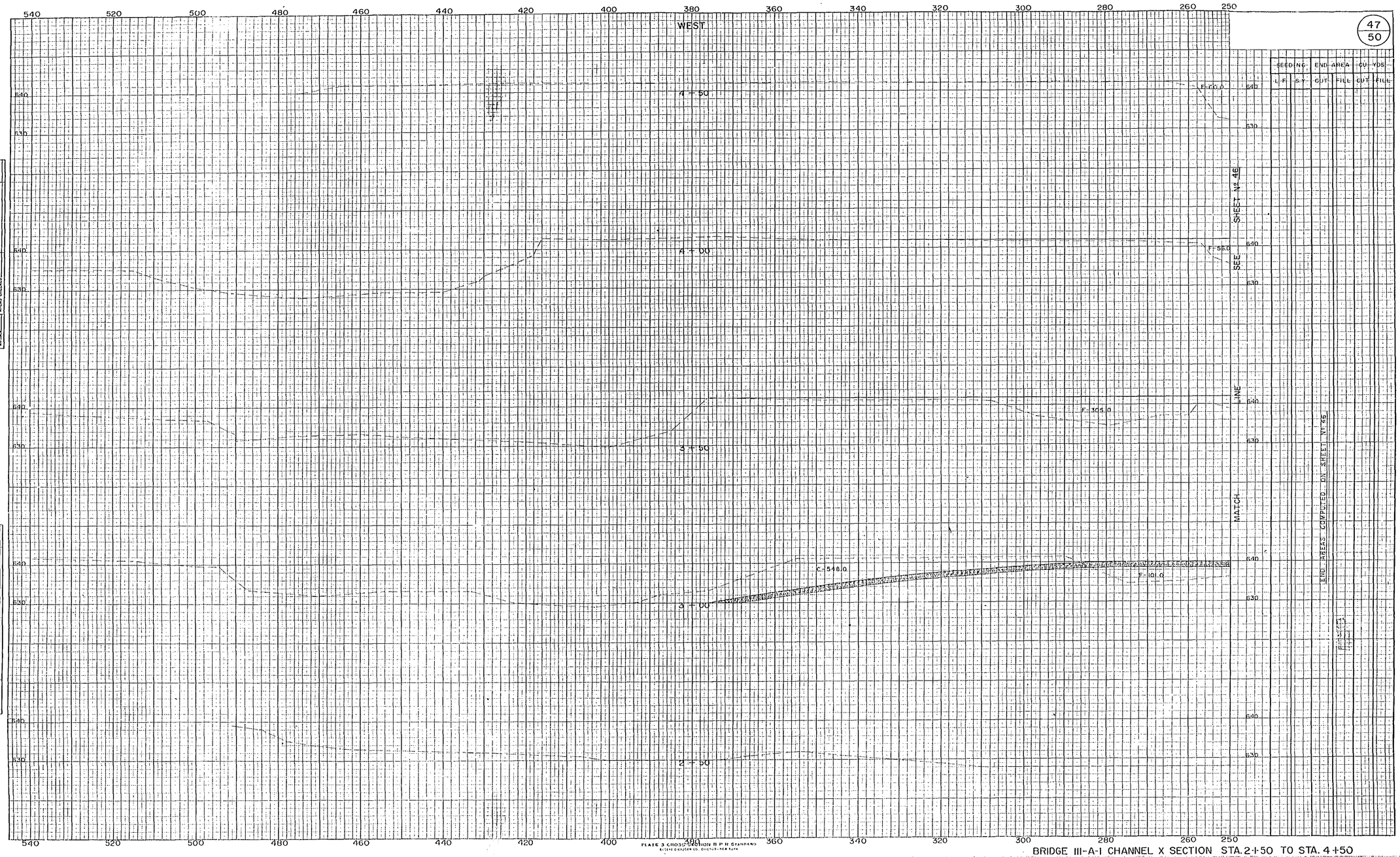
ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO. 886		

℄ BRIDGE III-A-1 CHANNEL X SECTION STA. 0+0 TO STA. 2+08.30

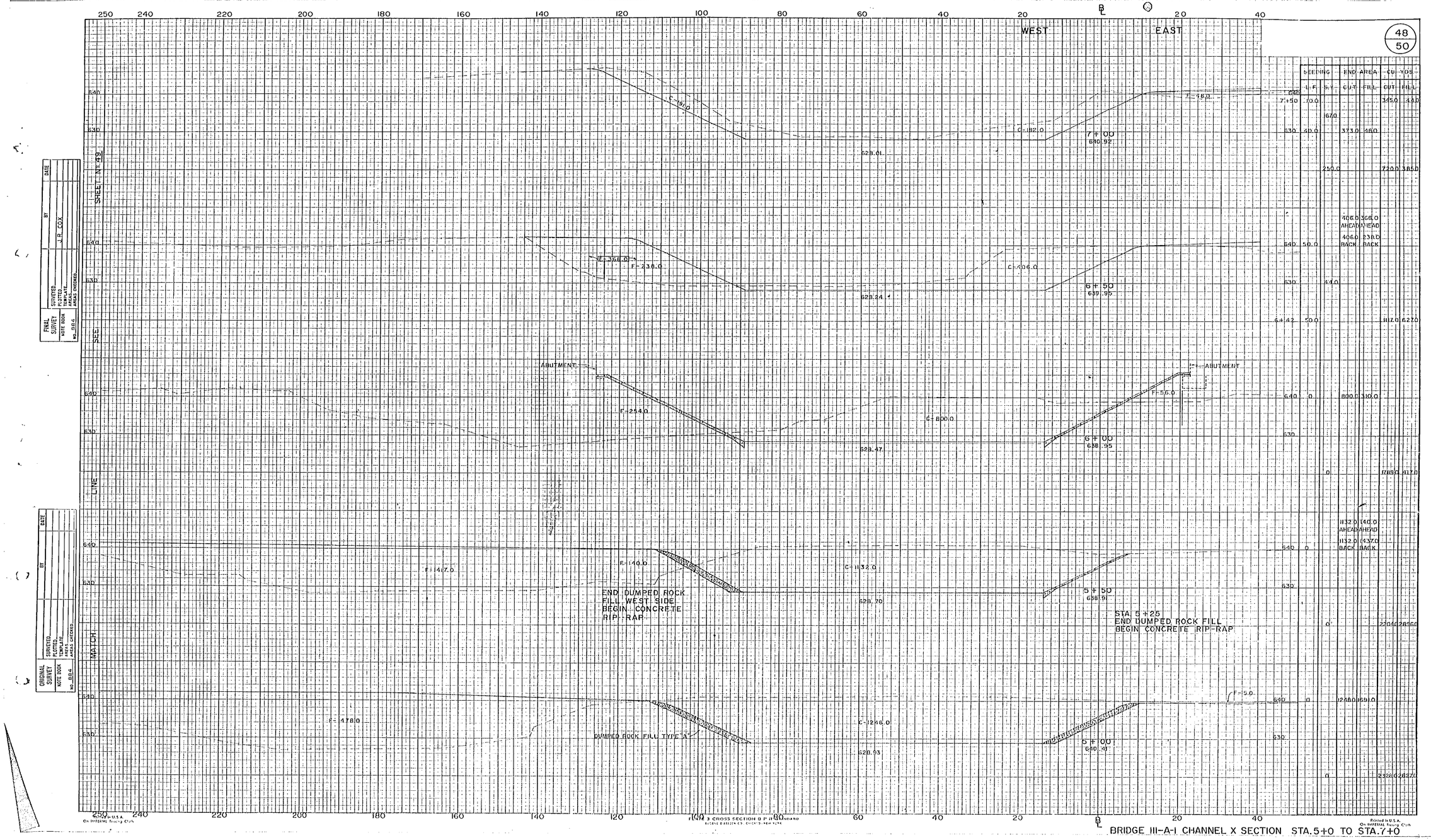


BRIDGE III-A-I CHANNEL X SECTION STA.0+0 TO STA.2+08.39

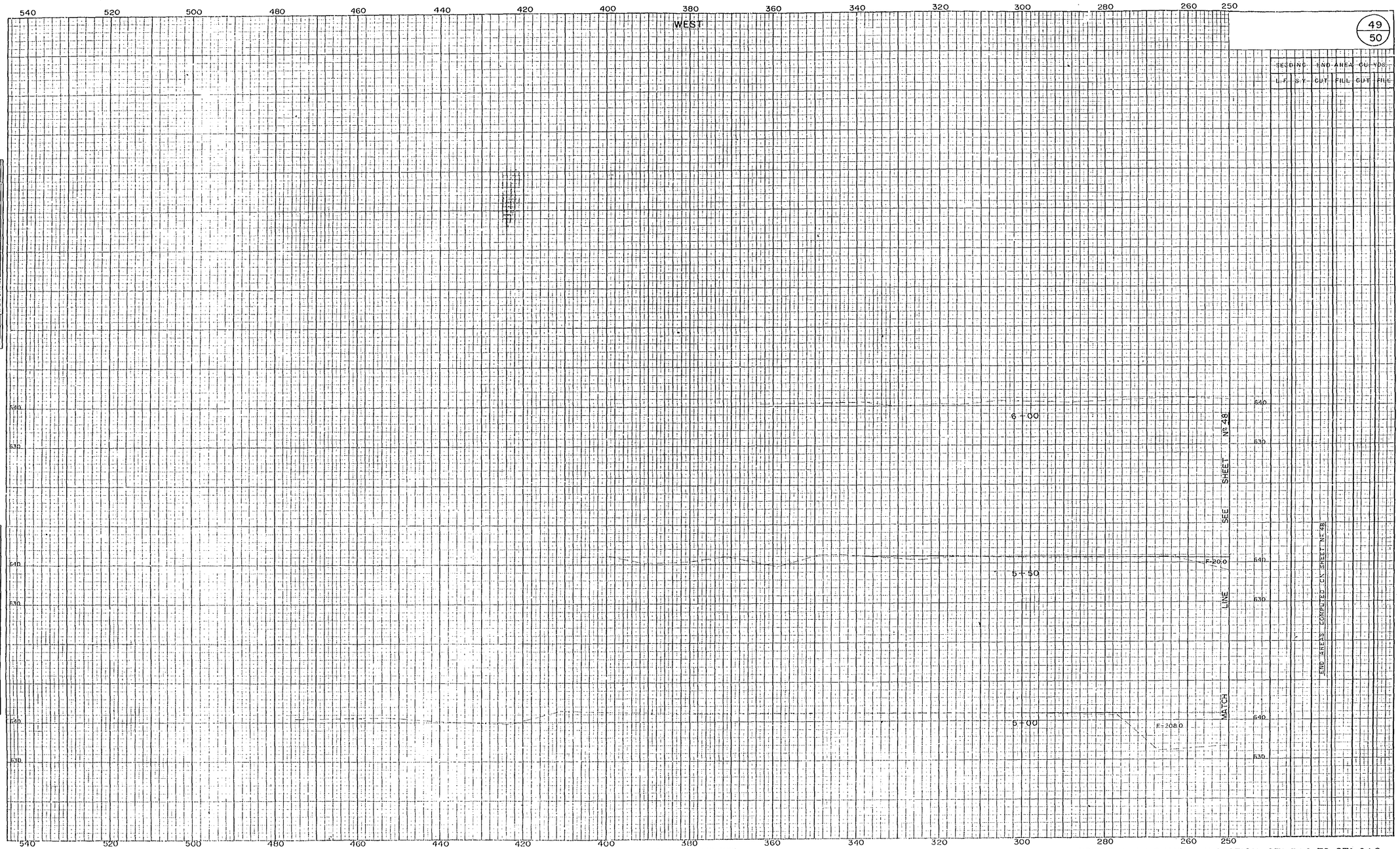

WEST
EAST
℄
46
50
SEEDING
END-AREA CU. YDS.
L.F.
S.Y.
CUT
FILL
CUT
FILL
640
630
F-1302.0
C-266.0
629.6
4+50
640.6
1256.0
1352.0
2-22 2157
F-1126.0
C-1347.0
C-3.0
F-2.0
629.59
4+00
641.89
1350.0
1184.0
24RL 2268
F-960.0
C-1330.0
629.62
3+50
641.09
1300.0
1265.0
2457 1515
F-270.0
C-776.0
629.85
3+00
641.29
1325.0
37.0
2042 363
F-21.0
C-882.0
630.08
2+50
641.39
BEGIN DUMPED ROCK
EAST SIDE T.O. ELEV. 640
882.0
21.0
743 16
250
240
220
200
180
160
140
120
100
80
60
40
20
20
40
BRIDGE III-A-1 CHANNEL X SECTION STA. 2+50 TO STA. 4+50
SHEET No. 47
SEE
LINE
MATCH
FINAL SURVEY
NOTE BOOK
NO. 886
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE
ORIGINAL SURVEY
NOTE BOOK
NO. 858
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE



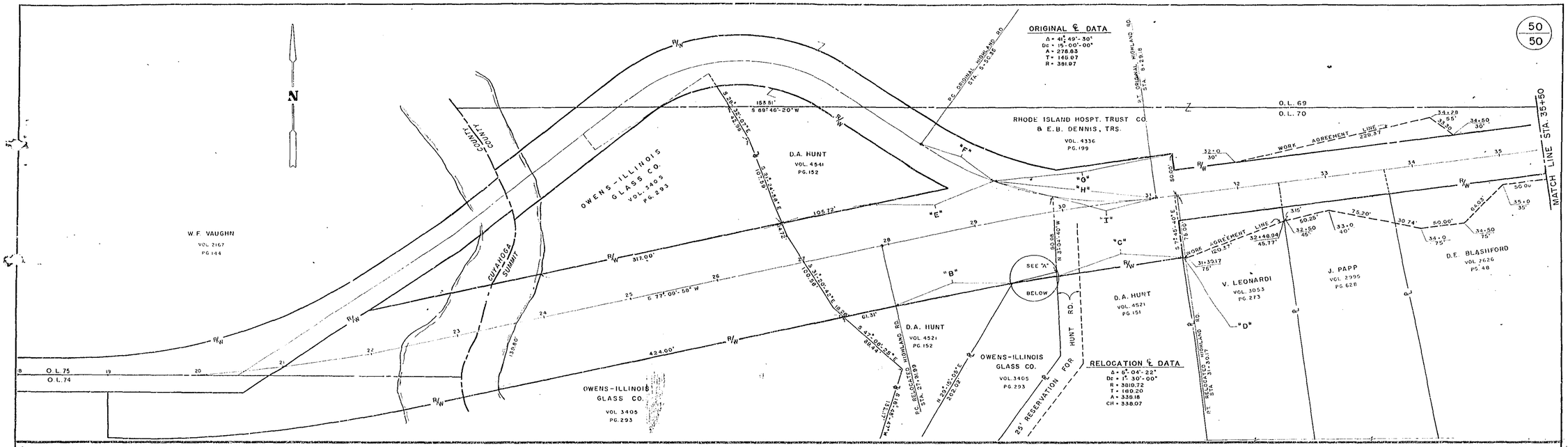
BRIDGE III-A-1 CHANNEL X SECTION STA. 2+50 TO STA. 4+50



BRIDGE III-A-I CHANNEL X SECTION STA.5+0 TO STA.7+0



BRIDGE III-A-1 CHANNEL X SECTION STA.5+0 TO STA.6+0

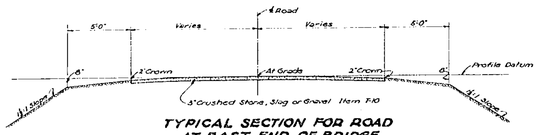


BRIDGE 111-A-1

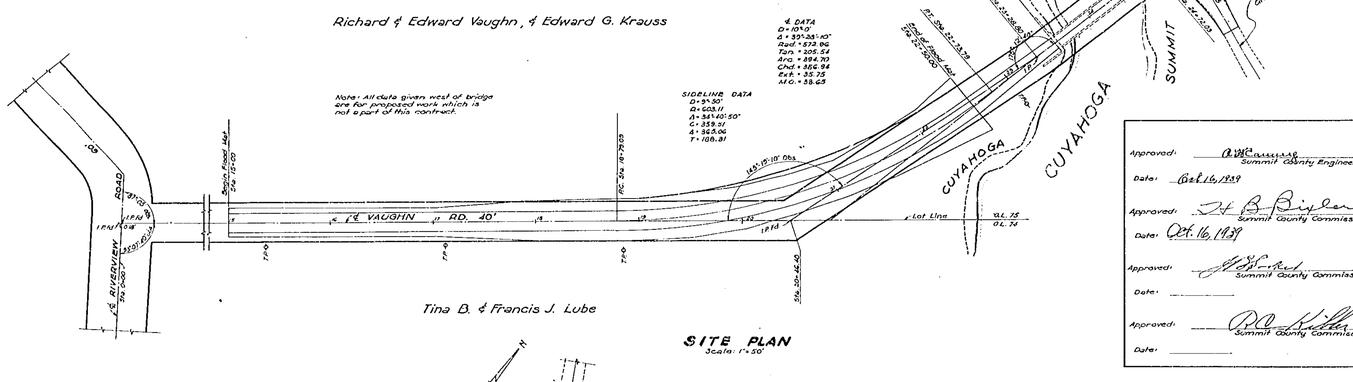
RIGHT-OF-WAY PLAN

SUMMIT COUNTY
ENGINEERING DEPARTMENT
COURT HOUSE AKRON, OHIO
R. VANBRIMMER COUNTY ENGINEER

DRAWN BY R.A.F.	SCALE 1" = 50'-0"
SUBMITTED BY B.J. CAMPBELL, ASSISTANT ENGINEER	DATE SEPT 1966
APPROVED BY COUNTY ENGINEER	FIELD BOOK
	TRACED BY



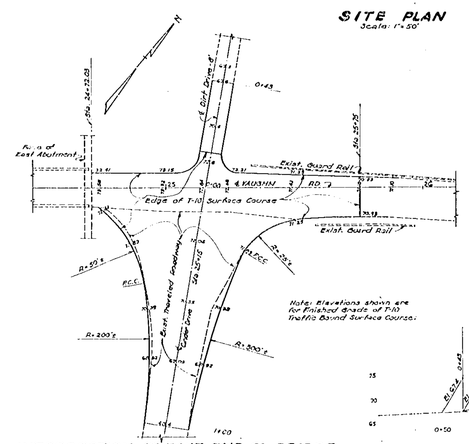
TYPICAL SECTION FOR ROAD AT EAST END OF BRIDGE
Scale: 1/4"=1'0"



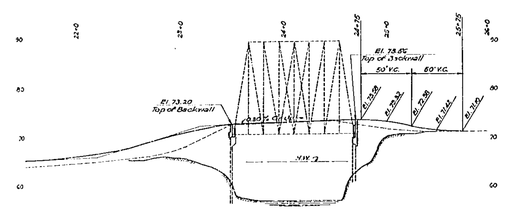
SITE PLAN
Scale: 1" = 50'

ESTIMATED QUANTITIES

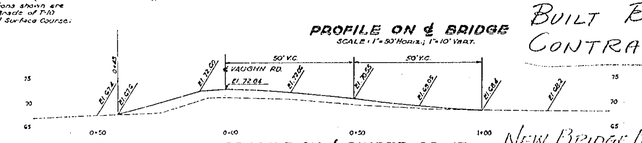
Item No		
E-1	Roadway Embankment	400 Cu. Yds.
E-2	Excavation for Structures	25 Cu. Yds.
T-10	Traffic Bound Surface Course	46 Cu. Yds.
S-1	Concrete for Structures (1:2:4 Mix)	22 Cu. Yds.
S-3	Type "A" Waterproofing	21 Sq. Yds.
S-4	Reinforcing Steel (M-71 Int. Gr.)	1200 Lbs.
S-7 (Sp)	Structural Steel	27500 Lbs.
S-8 (Sp)	Painting	Lump Sum
S-7 (Sp)	Roller Assembly - Complete in Place	Lump Sum
S-18 (Sp)	4" Creosoted Strip Floor	Lump Sum
S-22 (Sp)	Removal of Portions of Existing Structure	Lump Sum
Sp1	Skilled Labor	150 Hrs.
Sp1	Common Labor	150 Hrs.
Sp1	Premium on Industrial Insurance	Lump Sum
Sp1	Lights - Signs - Barricades	Lump Sum



INTERSECTION AT EAST END OF BRIDGE
Scale: 1" = 20'



PROFILE ON ℄ BRIDGE
SCALE: 1" = 50' Horiz.; 1" = 10' Vert.



PROFILE ON ℄ CINDER DRIVE
Scale: 1" = 20' Horiz.; 1" = 10' Vert.

BUILT BY CONTRACT

NEW BRIDGE BUILT 1967 ON NEW ALIGNMENT
2400' EAST OF RIVERVIEW RD.

COUNTY OF CUYAHOGA
JOHN O. McWILLIAMS
COUNTY ENGINEER
BRIDGE DEPT.

Approved: Harry R. Lonie Jr. — Land Department
Date: 9-28-39

Approved: C. W. Young — Road Department
Date: 9/28/39

Approved: Martin E. Friedman — Bridge Department
Date: 9-28-39

Approved: A. S. Potts — Chief Deputy Engineer
Date: 9/30/39

Approved: John O. McWilliams — County Engineer
Date: 9/30/39

Approved: J. A. Reynolds — County Commissioner
Date: 9/28/39

Approved: Geo. J. Norman — County Commissioner
Date: 9-4-39

Approved: J. J. Curry — County Commissioner
Date: 9/27/39

Approved: A. W. Mc Cauley — Summit County Engineer
Date: Oct. 16, 1939

Approved: H. B. Bigelow — Summit County Commissioner
Date: Oct. 16, 1939

Approved: H. S. Reed — Summit County Commissioner
Date: ____

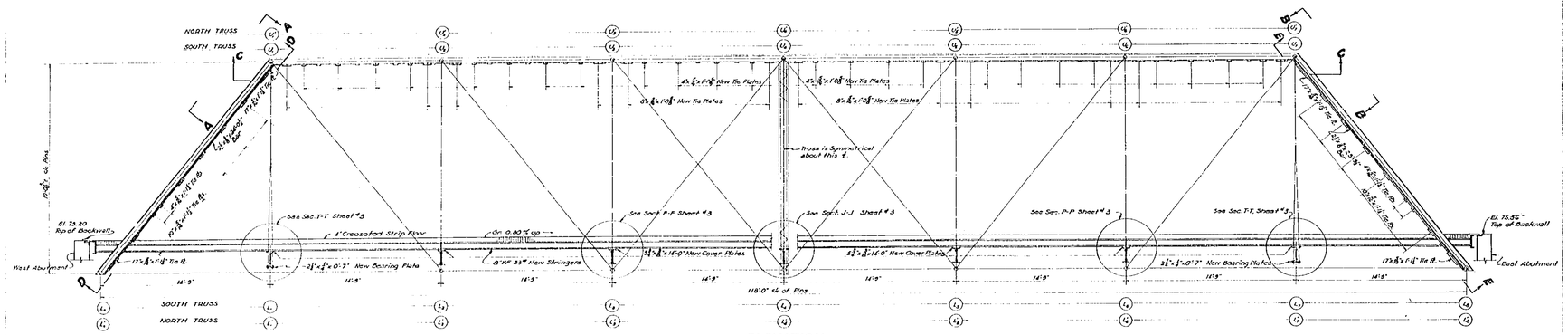
Approved: R. A. Kelly — Summit County Commissioner
Date: ____

VAUGHN ROAD
BRECKSVILLE VILLAGE
BRIDGE REPAIRS
BRIDGE OVER CUYAHOGA RIVER

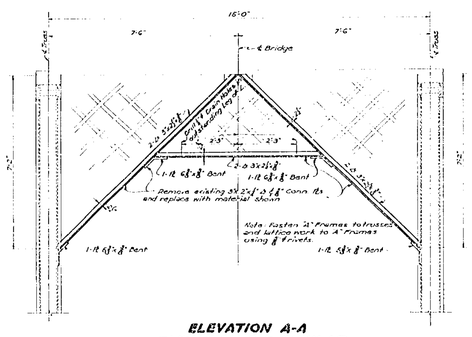
CONTOUR F-58 REPORT NO. 6466 BRIDGE NO. 110

NO. B-155 (1/5)

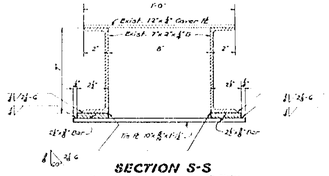
SCALE Indicated DATE 9-15-39
DRAWN BY K.G.P. H.B.R. CHECKED BY R.M. REVISED ____



ELEVATION
Scale: 1/8"=1'-0"

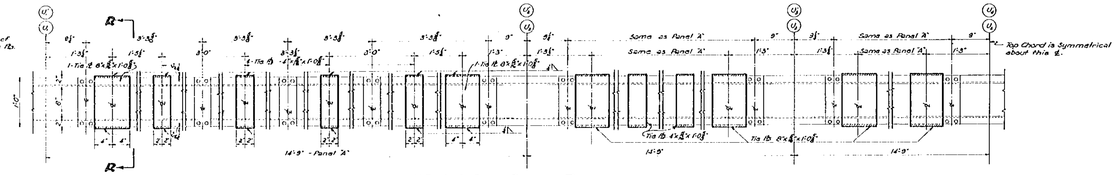


ELEVATION A-A
ELEVATION B-B SIMILAR
Scale: 1/4"=1'-0"

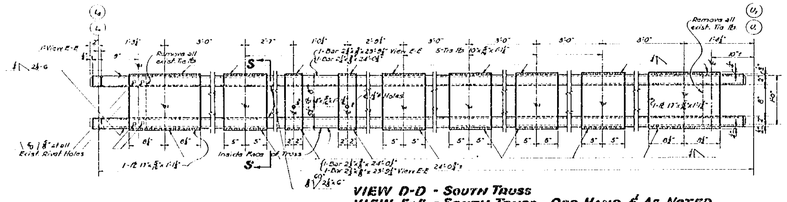


SECTION S-S
Above Section is Typical for all Tie Plates at Bott. Flange of End Posts
Scale: 3"=1'-0"

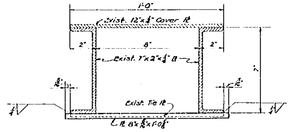
Note: Straighten Existing 1" ϕ Pipe Railing as directed by Engineer. Included for payment in Item 5-7 of "Structural Steel."



VIEW C-C - SOUTH TRUSS
SHOWING TOP CHORD BOTTOM FLANGE TIE PLATES
Scale: 1"=1'-0"
NORTH TRUSS SIMILAR



VIEW D-D - SOUTH TRUSS
VIEW E-E - SOUTH TRUSS - OPP HAND ℄ AS NOTED
SHOWING END POST BOTTOM FLANGE TIE PLATES
VIEW D-D & E-E FOR NORTH TRUSS ARE SIMILAR
Scale: 1"=1'-0"



SECTION R-R
Above Section is Typical for all Tie Plates at Bott. Flange of Top Chord
Scale: 3"=1'-0"

Note: All measurements referring to exist structure or to new material shall be checked by contractor in field.

VAUGHN ROAD

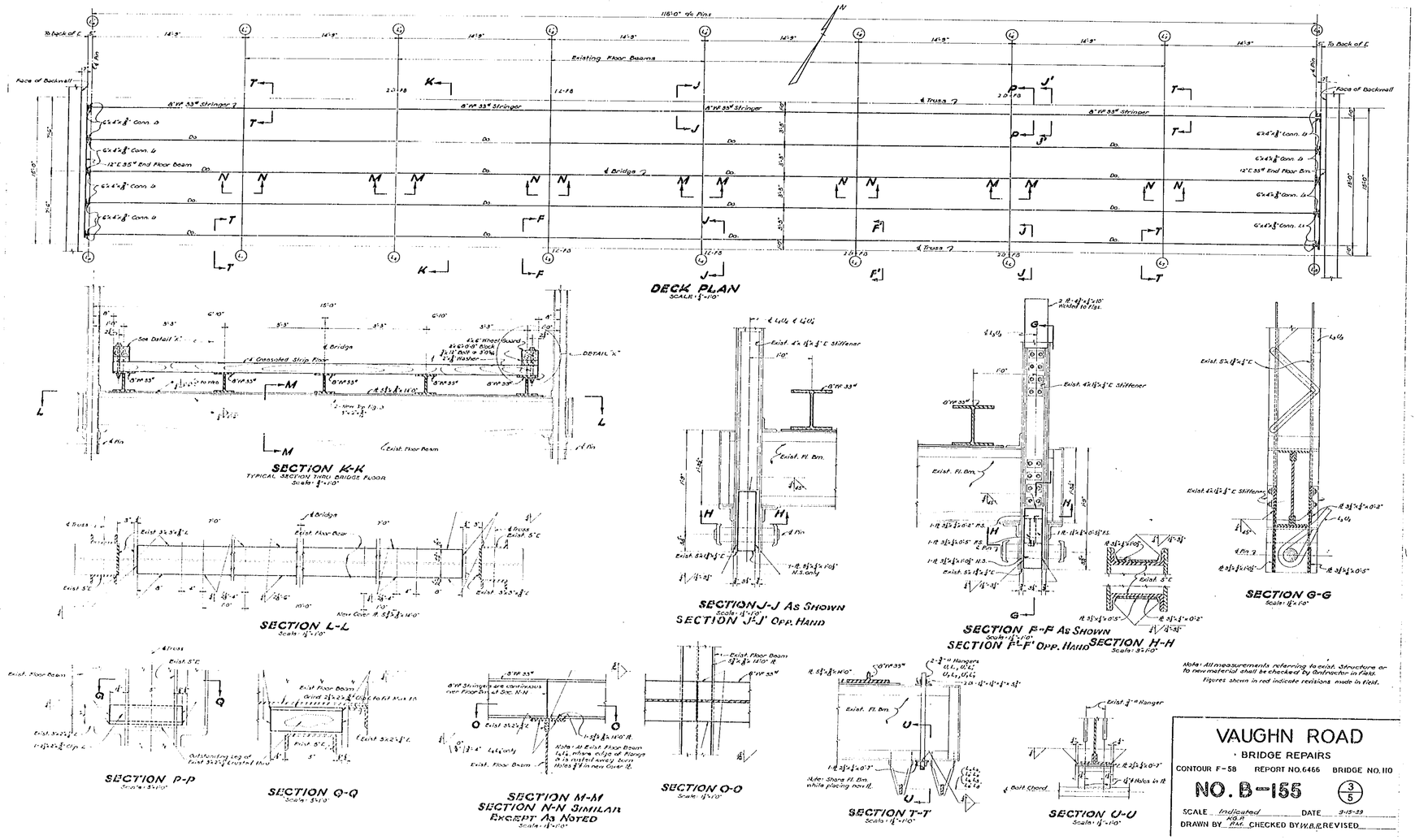
BRIDGE REPAIRS

CONTOUR F-58 REPORT NO. 6466 BRIDGE NO. 110

NO. B-155 (2/5)

SCALE Indicated K.G.R. DATE 9-15-89

DRAWN BY RM CHECKED BY W.B.R. REVISED



VAUGHN ROAD

· BRIDGE REPAIRS

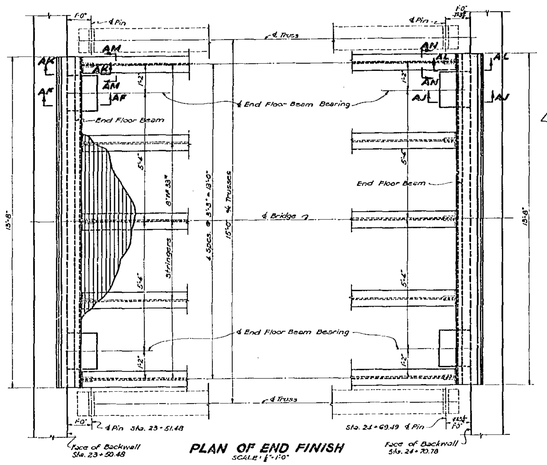
CONTOUR F-58 REPORT NO. 6466 BRIDGE NO. 110

NO. B-155

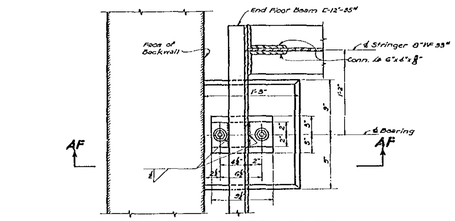
3/5

SCALE Indicated DATE 3-13-59

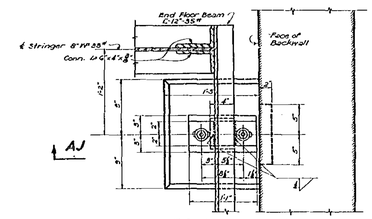
DRAWN BY R.G.B. CHECKED BY R.M. REVISED



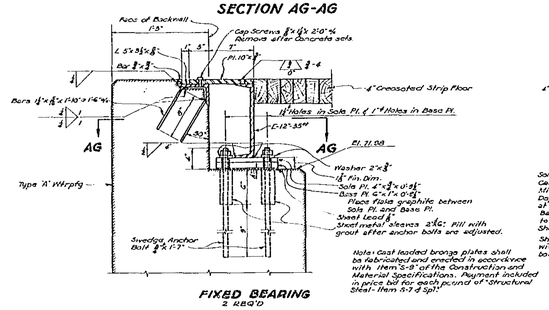
PLAN OF END FINISH
SCALE: 1/4"=1'0"



SECTION AG-AG

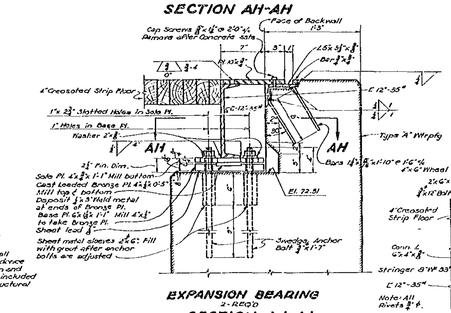


SECTION AH-AH



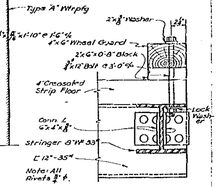
FIXED BEARING
2 REQ'D
SECTION AF-AF

Note: Cast loaded bronze plates shall be fabricated and erected in accordance with Item 5-8.1 of the Construction and Material Specifications. Payment included in price bid for each pound of "Structural Steel - Item 5-7.4 Spl."

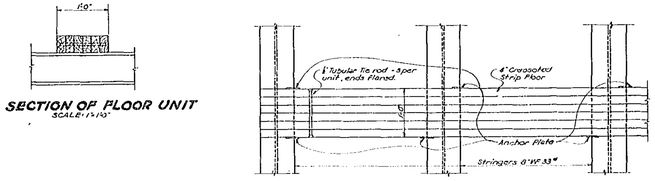


EXPANSION BEARING
2-REQ'D
SECTION AJ-AJ

END FINISH AND
BEARING DETAILS FOR END FLOOR BEAMS
SCALE: 1/4"=1'0"

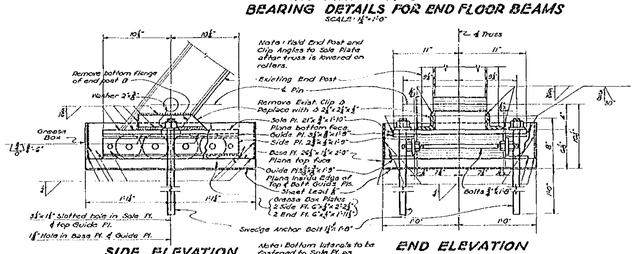


SEC. AM-AM
SEC. AN-AN SIMILAR BUT OPP HAND
Scale: 1/4"=1'0"



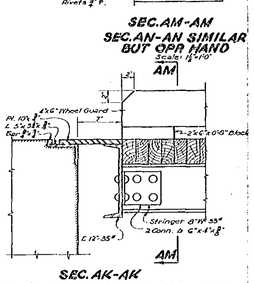
SECTION OF FLOOR UNIT
SCALE: 1"=1'0"

PLAN OF FLOOR UNIT
SCALE: 1"=1'0"

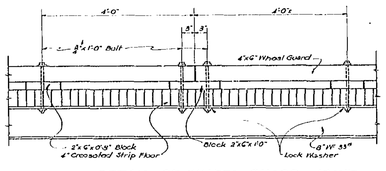


SIDE ELEVATION

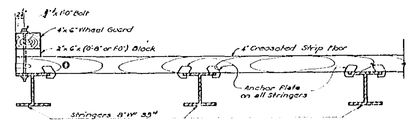
END ELEVATION



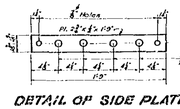
SEC. AK-AK
SEC. AL-AL SIMILAR BUT OPP HAND
SCALE: 1/4"=1'0"



DETAIL OF WHEEL GUARD JOINT
SCALE: 1"=1'0"



ELEVATION OF FLOOR UNIT
SCALE: 1"=1'0"



DETAIL OF SIDE PLATE

Note: Provide an Alemite fitting and a 8 ga. galv. sheet metal cover over each grease box as directed by the engineer. Payment included in the price bid for "Roller Assembly - Turning Kit Complete in Place, Item 5-7.4 Spl."

DETAIL OF ROLLER
COLD ROLLED STEEL

Note: Figures shown in red indicate revisions made in field.

ROLLER ASSEMBLY DETAIL
SCALE: 1/2"=1'0"
2-REQ'D

VAUGHN ROAD

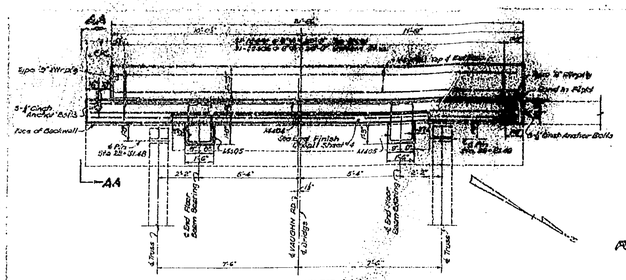
BRIDGE REPAIRS

CONTOUR F-58 REPORT NO. 6466 BRIDGE NO. 110

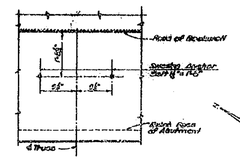
NO. B-155 (4/5)

SCALE Indicated DATE 9-16-89

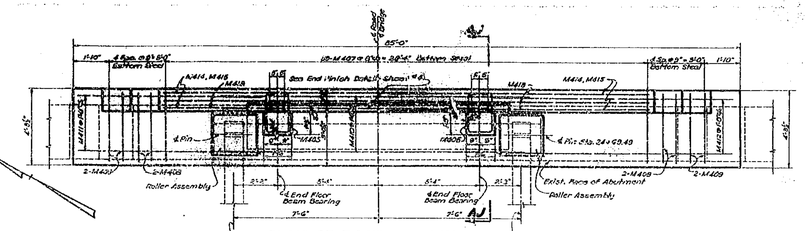
DRAWN BY W.D.R. CHECKED BY R.M. REVISED



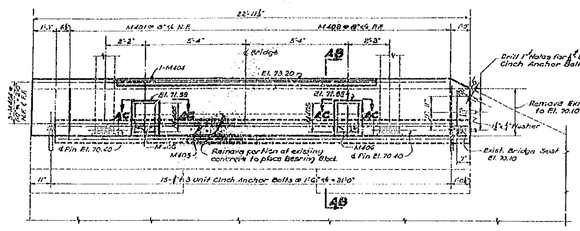
PLAN OF WEST BACKWALL
ANCHOR BOLTS NOT SHOWN
Scale: 1/8"=1'0"



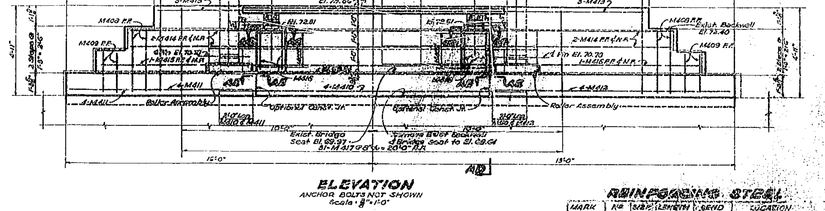
ANCHOR BOLT TEMPLATE FOR ROLLER ASSEMBLY
Scale: 1/4"=1'0"



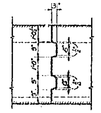
PLAN OF EAST BACKWALL
ANCHOR BOLTS NOT SHOWN
Scale: 1/8"=1'0"



ELEVATION
ANCHOR BOLTS NOT SHOWN
Scale: 1/8"=1'0"

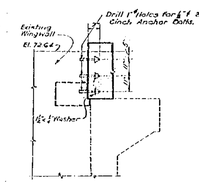


ELEVATION
ANCHOR BOLTS NOT SHOWN
Scale: 1/8"=1'0"

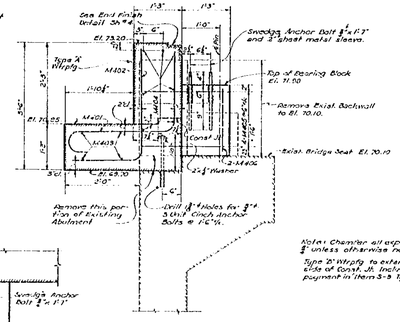


SECTION AB-AB
Scale: 1/8"=1'0"

Note: All dowel holes to be drilled in accordance with Item S-23 of the Specifications.
Payment for drilling all dowel holes included for payment in "Item S-33 of Spl-Removal of Portions of Existing Structures."
Payment for all cinch anchor assemblies included in price bid for each lb. of "Structural Steel-Item S-7 of Spl."

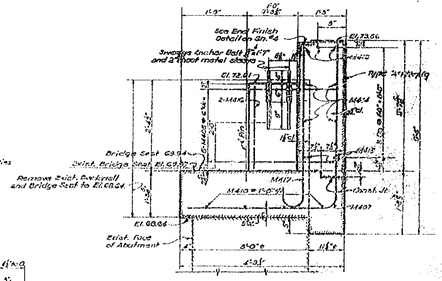


ELEVATION AA-AA
Scale: 1/8"=1'0"

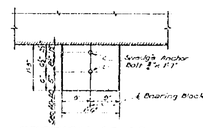


SECTION AB-AB
Scale: 1/8"=1'0"

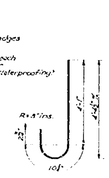
Note: Chamfer all exposed edges 3/4" unless otherwise noted.
Type "B" Wrpfg to extend 1'-0" each side of Const. Jt. Included for payment in "Item S-9 Type A Waterproofing"



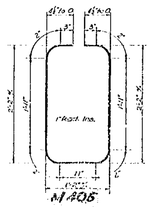
SECTION AD-AD
Scale: 1/8"=1'0"



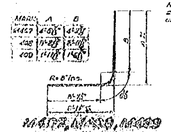
SECTION AC-AC
SEC. AO-AO AS SHOWN & NOTED
REINF. STEEL NOT SHOWN
Scale: 1/8"=1'0"



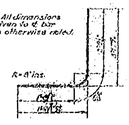
M417



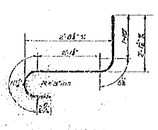
M406



M407, M410, M419



M408



M401

Note: All dimensions are given to ℄ bar unless otherwise noted.

Note: Figures shown in red indicate revisions made in field.

REINFORCING STEEL

MARK	NO.	SIZE	LENGTH	BEND	LOCATION
M401	81	#7	8'-6"	Shown	West Abutment Backwall
M402	31	"	4'-9"	"	" " " "
M403	4	"	22'-2"	0	" " " "
M404	2	"	22'-8"	0	" " " "
M405	10	"	8'-11"	Shown	" " " "
M406	4	"	11'-9"	0	" " " "
M407	33	"	8'-3"	Shown	East " " "
M408	4	"	7'-0"	Shown	" " " "
M409	1	"	5'-9"	"	" " " "
M410	4	"	16'-2"	0	" " " "
M411	4	"	9'-2"	0	" " " "
M412	4	"	12'-7"	0	" " " "
M413	6	"	13'-9"	0	" " " "
M414	8	"	15'-3"	0	" " " "
M415	4	"	12'-9"	0	" " " "
M416	4	"	2'-5"	0	" " " "
M417	81	"	6'-2"	Shown	" " " "

VAUGHN ROAD

BRIDGE REPAIRS

CONTOUR F-68 REPORT NO. 6155 BRIDGE No. 110

NO. B-155

SCALE: Indicated DATE: Oct-68
DRAWN BY: WEA CHECKED BY: CMS REVISED: