INDEX OF SHEETS ON SHEET 2.

FEDERAL AID ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 94	1977-083-R	COOK	245	1
FED. ROAD DIV. NO. 5	ILL. ROUTE	PROJECT I-94-2(141)39		

P-91-424-77

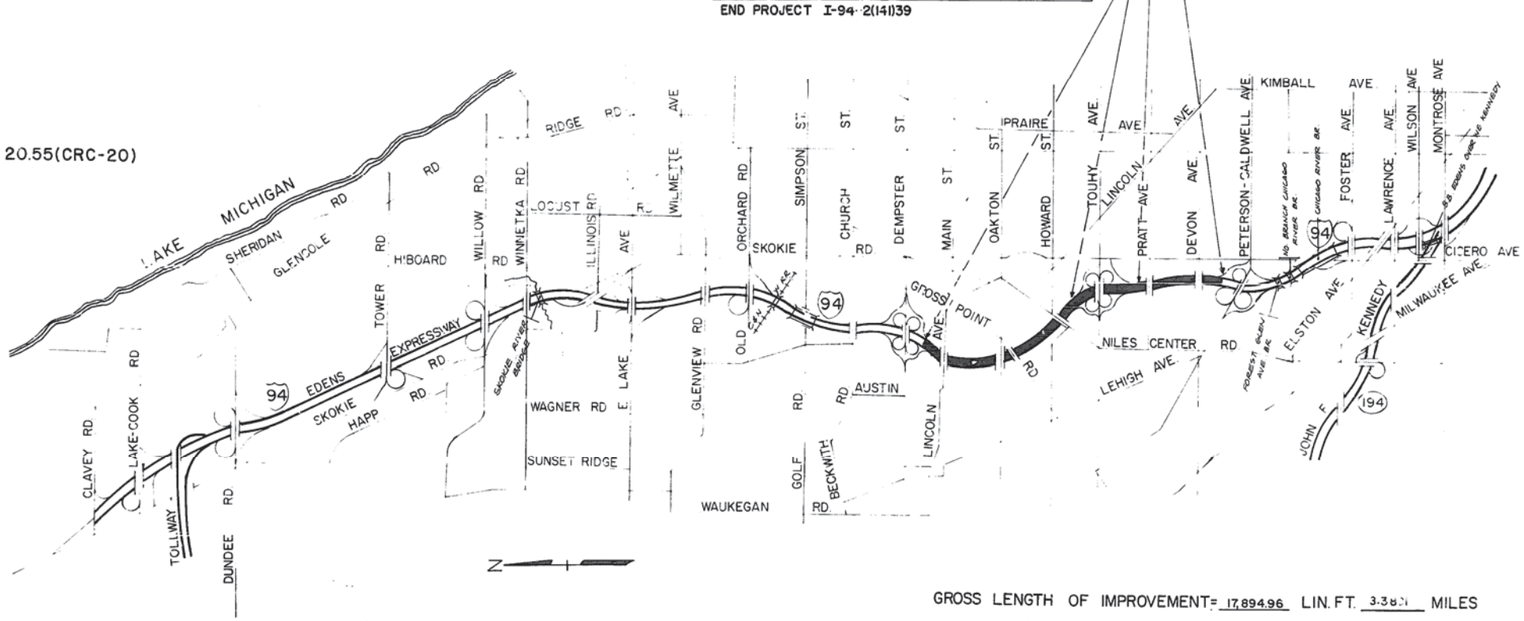
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY
F.A.I. ROUTE 94 EDENS EXPRESSWAY
SECTION 1977-083-R
PROJECT I-94-2(141)39
EXPRESSWAY RECONSTRUCTION
COOK COUNTY
C-91-098-77

BEGIN PROJECT I-94-2(141)39

BEGINNING OF IMPROVEMENT (SECTION 1977-083-R) STATION 15+00 ℄ EDENS EXPRESSWAY
STATION EQUATION: 63+00 BACK 62+00 FORWARD
STATION EQUATION: 95+84.01 BACK 95+89.05 FORWARD
END OF IMPROVEMENT (SECTION 1977-083-R) STATION 193+00 ℄ EDENS EXPRESSWAY

END PROJECT I-94-2(141)39

DESIGN DESIGNATION:
12,864(1995) TRUNK 20.55(CRC-20)



GROSS LENGTH OF IMPROVEMENT= 17,894.96 LIN. FT. 3.389 MILES
NET. LENGTH OF PROJECT = 17,894.96 LIN. FT. 3.389 MILES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED _____
RECOMMENDED _____
PASSED _____
APPROVED _____

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

_____
DIVISION ADMINISTRATOR

Kam Gupta (Schaumburg)

CONTRACT NO.

COOK COUNTY SECTION 1977-083-R F.A.I. ROUTE 94

F. A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1977-083-R	COOK	245	2
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

INDEX OF SHEETS

REVISIONS	
NAME	DATE
R.G.M	4/28/78

ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY

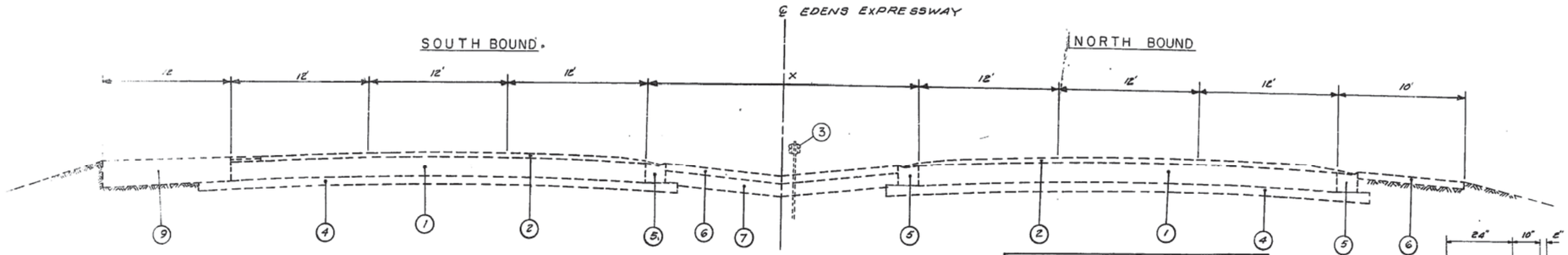
INDEX OF SHEETS

SCALE: VERT. HORIZ.

DRAWN BY

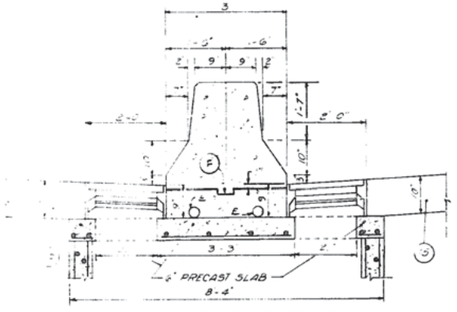
DATE

CHECKED BY

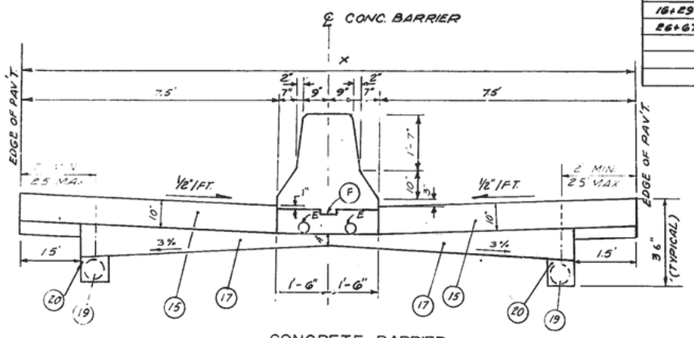


TYPICAL EXISTING CROSS SECTION

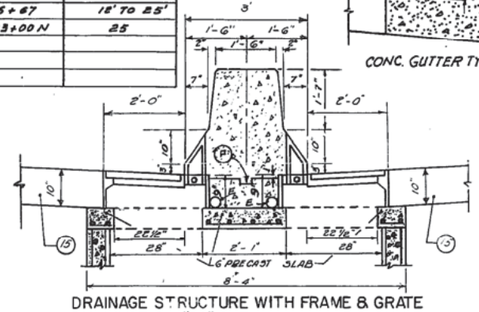
MEDIAN WIDTHS	
LOCATION	WIDTH (x)
15+00 N TO 16+29	12'
16+29 TO 26+67	12' TO 25'
26+67 TO 193+00 N	25



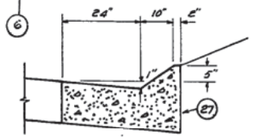
DRAINAGE STRUCTURE WITH FRAME & GRATE
TYPE "V", DETAIL S-1



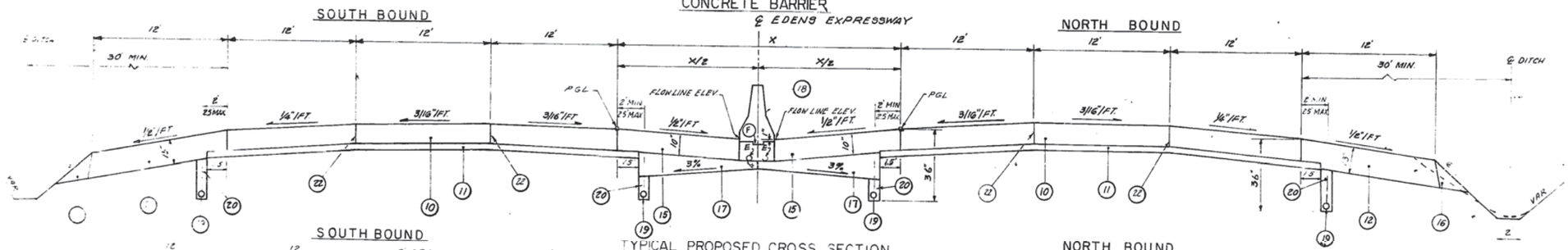
CONCRETE BARRIER



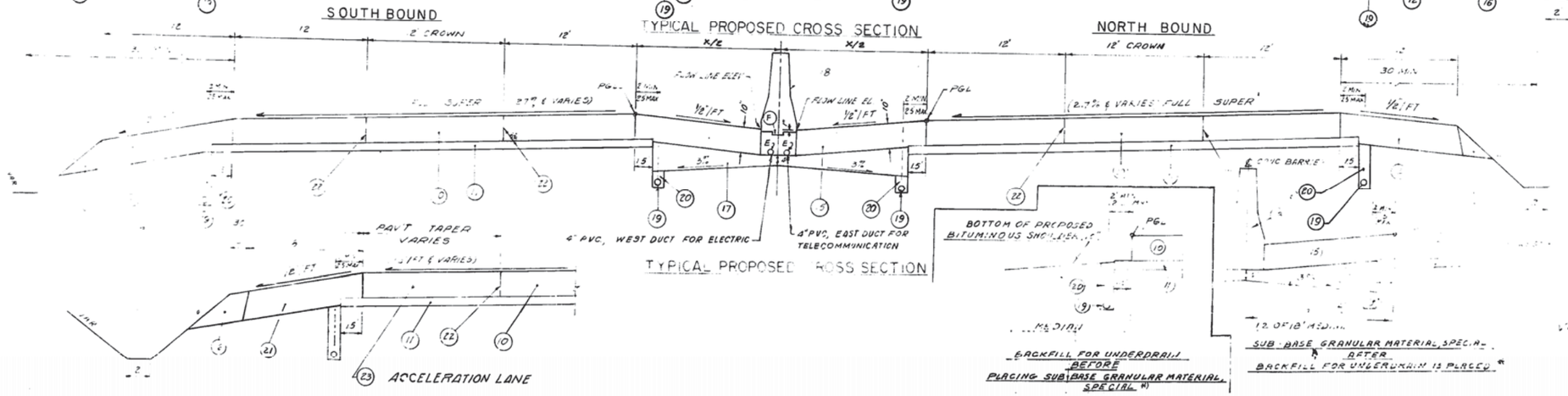
DRAINAGE STRUCTURE WITH FRAME & GRATE
TYPE "VB", DETAIL S-2



CONC. GUTTER TYPE-E



TYPICAL PROPOSED CROSS SECTION

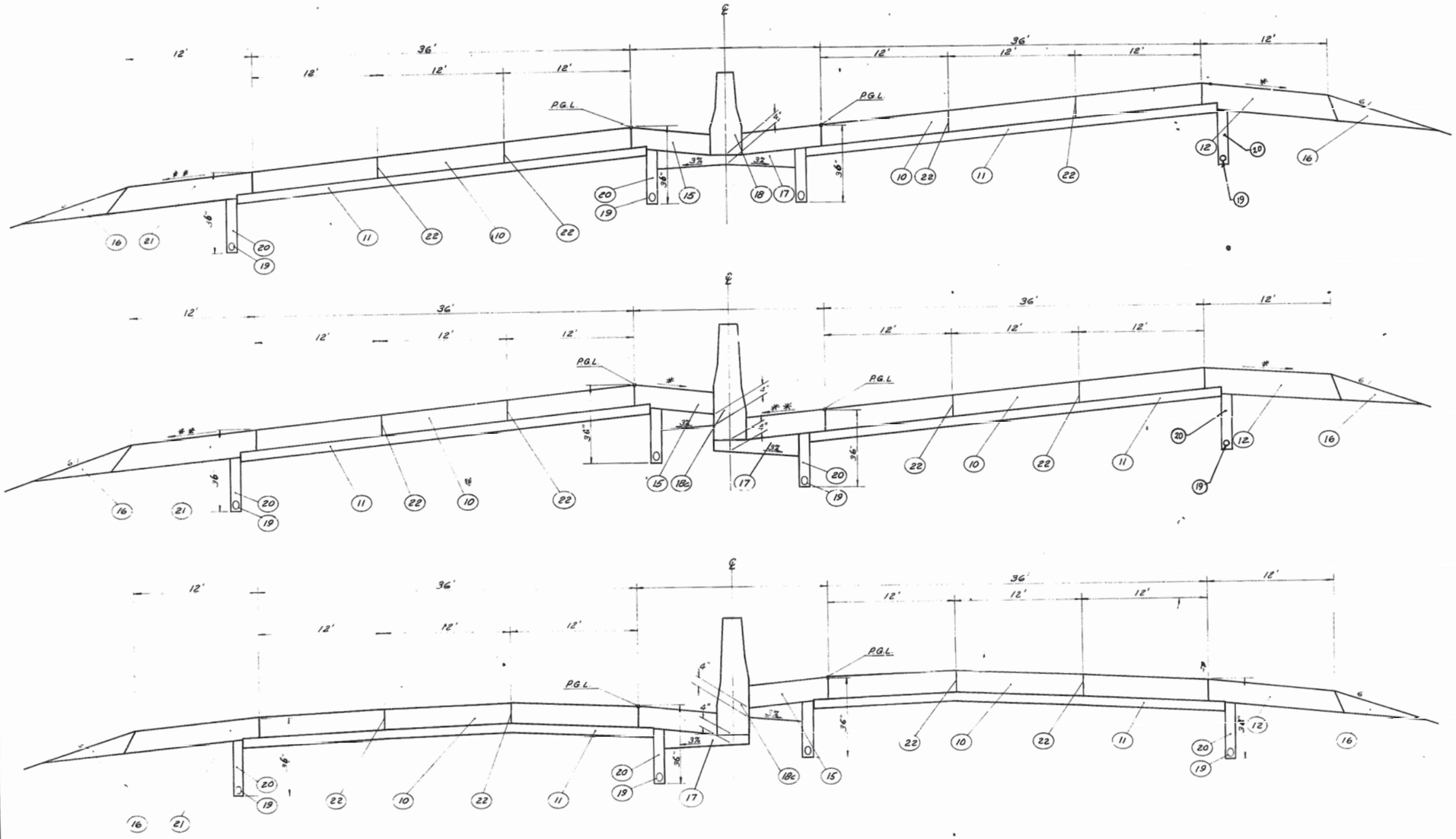


TYPICAL PROPOSED CROSS SECTION

(1) P.C. CONCRETE PAVEMENT (10")
(2) BITUMINOUS CONCRETE SURFACE (1½" BINDER & 1½" SURFACE COURSE)
(3) STEEL PLATE BEAM GUARD RAIL, SINGLE AND DOUBLE RAIL, TO BE REMOVED
(4) SUB-BASE GRANULAR MATERIAL, TYPE A (6")
(5) CONCRETE GUTTER 21" V-TYPE
(6) BITUMINOUS CONC SHOULDER (12")
(7) GRAVEL OR CRUSHED STONE SHOULDER (6")
(9) BITUMINOUS BASE COURSE (1½", TO BE REMOVED)
PGL - PROPOSED GRADE LINE

(10) CONTINUOUSLY REINF P.C.C. PAVEMENT (10")
(11) STABILIZED SUB-BASE (6")
(12) BITUMINOUS BASE COURSE (3½", NORTHBOUND)
(E) 4" Ø PVC DUCT (SEE TYPICAL CROSS SECTION BELOW FOR DUCT LOCATION ON THIS SHEET & LIGHTING PLAN)
(F) OPTIONAL CONSTRUCTION JOINT & REINFORCING
(15) BITUMINOUS SHOULDER (10')
(16) AGGREGATE SHOULDER TYPE-B
(17) SUB-BASE GRANULAR MATERIAL, SPECIAL
(18) CONCRETE BARRIER
(19) PIPE UNDERDRAIN (4")
(20) BACKFILL FOR UNDERDRAIN
(21) STABILIZED SHOULDER (6" FOR TAPER)
(22) JOINT
(23) FOR PLAN VIEW
(27) CONC. GUTTER TYPE-E (SEE PLANS FOR LOCATION)
EDGE OF PAVEMENT

I. A. No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
94	P517-083-R	COOK	245	17
STA		TO STA		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



LEGEND

(10) Continuously Reinforced P.C.C. Pavement (10")
(11) Stabilized Sub-Base (4")
(12) Bituminous Base Course (13") Northbound
(15) Bituminous Shoulder (10")
(16) Aggregate Shoulder, Type B
(18) Concrete Barrier Wall, Type 1
(18b) Concrete Barrier Wall, Type 2 (not shown)
(18c) Concrete Barrier Wall, Type 3
(19) Pipe Underdrain (4")
(20) Backfill for Pipe Underdrain
(21) Bituminous Shoulder (13") Southbound
(22) Construction Joint

* When the superelevation rate of the pavement is between 0.00 ft./ft. and 0.03 ft./ft., the shoulder shall be sloped at 0.04 ft./ft. When the superelevation rate of the pavement exceeds 0.03 ft./ft., the shoulder shall be sloped so that the algebraic difference between pavement and shoulder will not be greater than 0.07 ft./ft.

** Bituminous shoulder slope shall be the same as the superelevation rate but not less than 1/2"/ft.

See additional Typical Section sheets for details not shown.

(17) Sub-Base Granular Material, Special

NOTE:

The Median sub-grade shall drain as shown on this typical sections. Changes in the median drainage ~~will require an increase in the thickness of Sub-Base Granular Material, Special, and~~ will be allowed when approved by the Engineer. However, the creation of undrained areas in the subgrade due to over excavation will not be allowed, and such areas will be filled with earth meeting the approval of the Engineer and compacted in accordance with Art. 207.05 of the STANDARD SPECIFICATIONS.

No additional compensation will be allowed for increases in the thickness of Sub-Base Granular Material, Special or for filling undesignated areas with earth.

TYPICAL SECTION - SUPERELEVATED PAVEMENT
(NORTHBOUND PROFILE GRADE ELEV. = SOUTHBOUND PROFILE GRADE ELEV.)

TYPICAL SECTION - SUPERELEVATED PAVEMENT
(NORTHBOUND PROFILE GRADE ELEV. ≠ SOUTHBOUND PROFILE GRADE ELEV.)

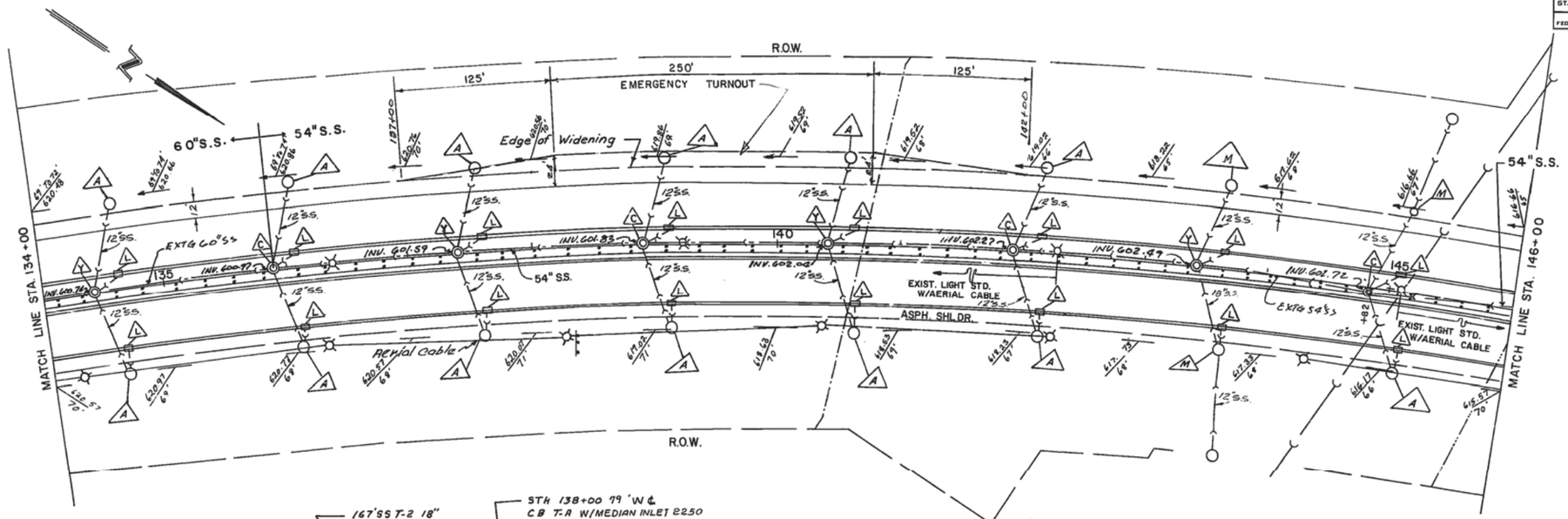
TYPICAL SECTION - NORMAL CROWN PAVEMENT
(NORTHBOUND PROFILE GRADE ELEV. ≠ SOUTHBOUND PROFILE GRADE ELEV.)

REVISIONS	
NAME	DATE
V.H	1-15-79
R.G.M	1-18-79

ILLINOIS DIVISION OF HIGHWAYS
EDENS EXPRESSWAY
TYPICAL SECTIONS
SUPERELEVATED & NORMAL CROWN PAVEMENT

SCALE VERT. / HOR.
DATE
DRAWN BY L.S. Peart
CHECKED BY

F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
94	1977-083-R	COOK	245	34
STA. 134+00		TO STA 146+00		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



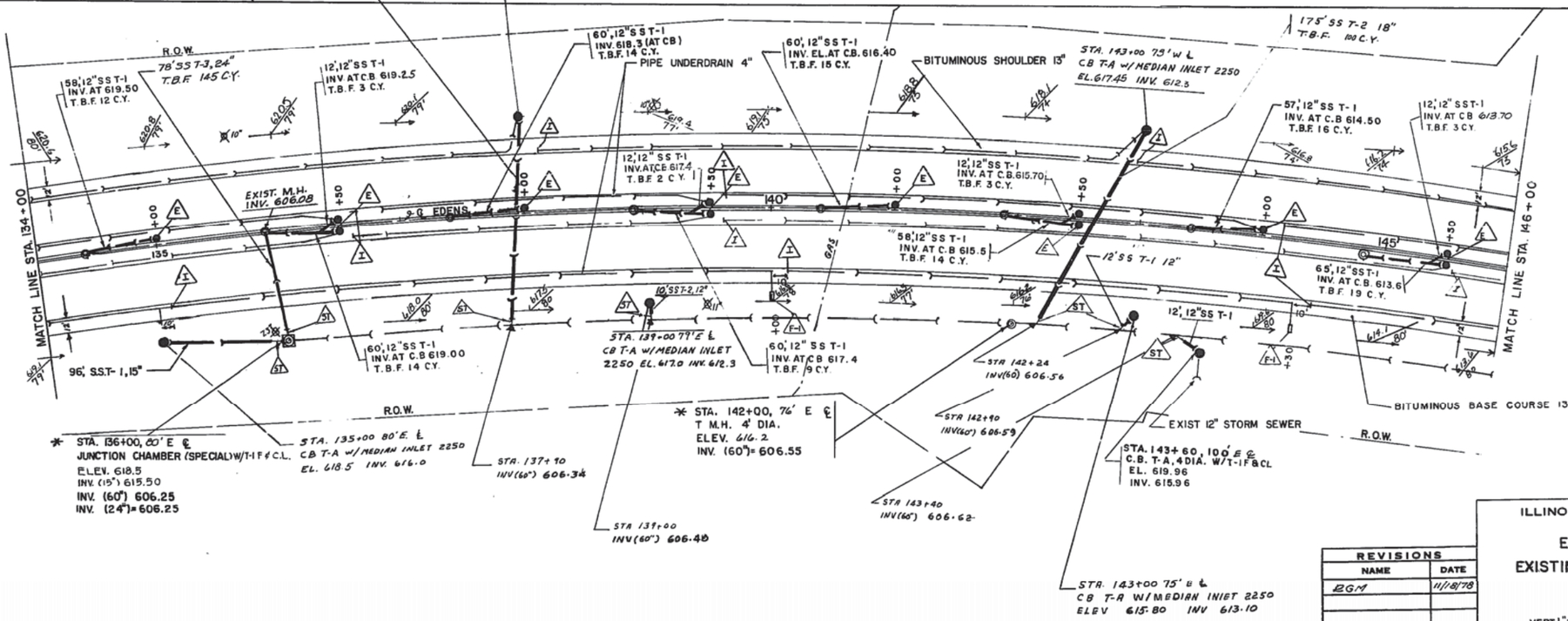
EXISTING

CONCRETE BARRIER TYPE 3
STA. 120+00 TO 148+25.9

PROPOSED
TOP OF FRAME ELEVATION
(FLOW LINE)

STATION	E
135+00	(W) 622.49
136+50	(W) 622.01
136+50	(E) 622.79
138+00	(W) 621.31
139+50	(W) 620.40
139+50	(E) 621.33
141+00	(W) 619.44
142+50	(W) 618.48
142+50	(E) 619.86
144+00	(W) 617.52
145+50	(W) 616.56
145+50	(E) 618.39

BACKFILL FOR UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN)	
STA 134+00 TO 146+00	
S.B. WEST SIDE	= 55.37 CY
MEDIAN (BOTH SIDES)	= 129.64 CY
N.B EAST SIDE	= 55.37 CY



PROPOSED IMPROVEMENT

ST DESIGNATES EXIST 6' STUB OF PROPOSED STORM SEWER SIZE

X TO BE BUILT BY OTHERS

REVISIONS	
NAME	DATE
BGM	11/18/78

ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY

EXISTING & PROPOSED PLANS

SCALE: VERT 1"=50'
HORIZ 1"=50'

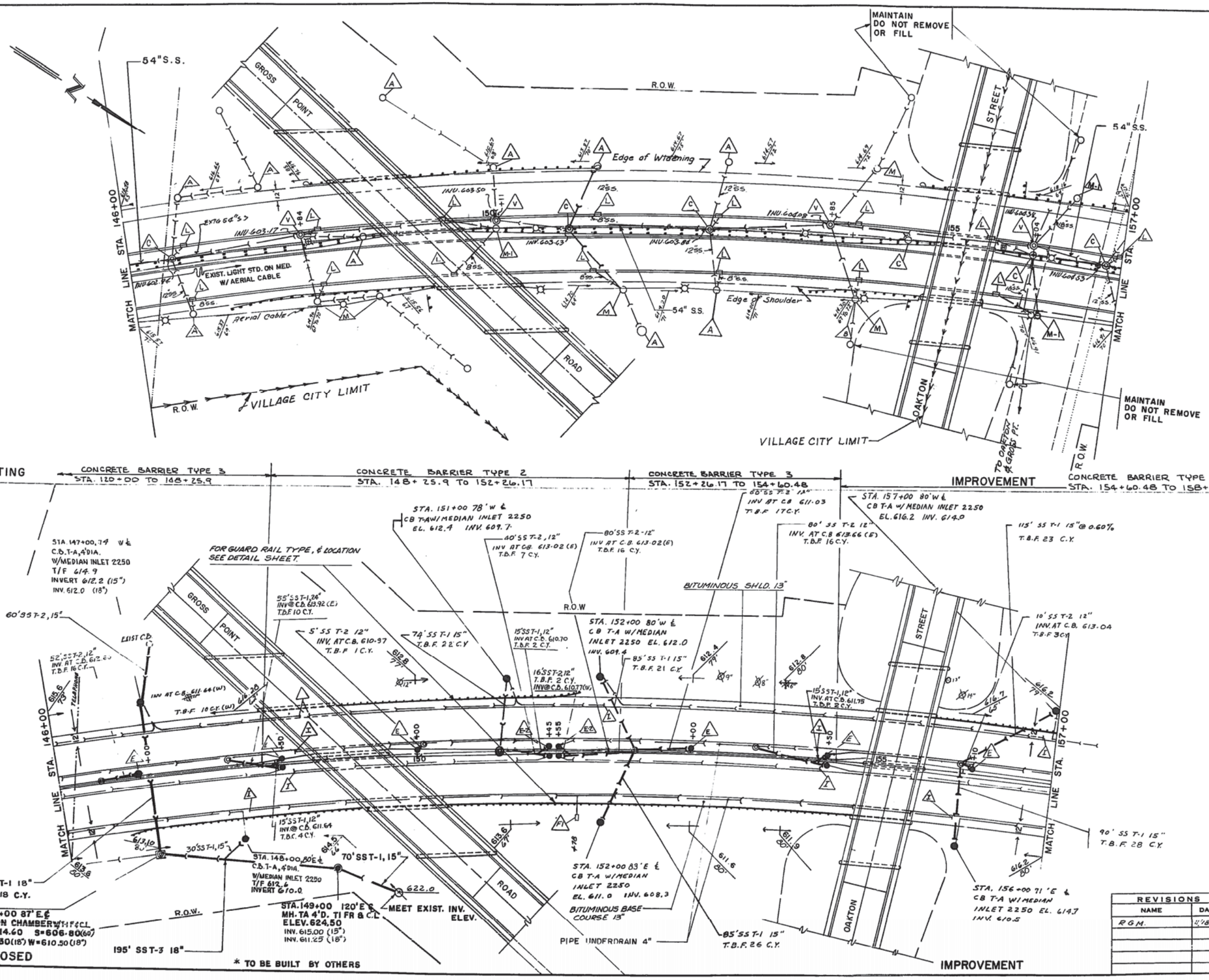
DATE

DRAWN BY

CHECKED BY

Rev. 7/3/79

F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
94	1977-083-R	COOK	245	35
STA 146+00		TO STA 157+00		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



PROPOSED

TOP OF FRAME ELEVATION

(FLOW LINE)

STATION	E	E-Z
146+90	(W)615.68	
148+50	(W) 614.64	
148+50	(E)616.92	
150+00	(W)613.97	
151 + 45		(W)613.77
151 + 45		(E) 616.02
151 + 55		(W)613.77
151 + 55		(E) 616.02
153+00	(W)614.03	
154 + 50	(W)614.75	
154 + 50	(E)616.66	
156 + 10	(W)616.04	

BACKFILL FOR UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN) STA 146+00 TO 157+00	
MEDIAN BOTH SIDES =	118.56 C.Y.
N.B. EAST SIDE	51.22 C.Y.
S.B. WEST SIDE	51.22 C.Y.

REVISIONS	
NAME	DATE
R.G.M.	9/18/78

ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY

EXISTING & PROPOSED PLANS

SCALE VERT / HORIZ

DRAWN BY

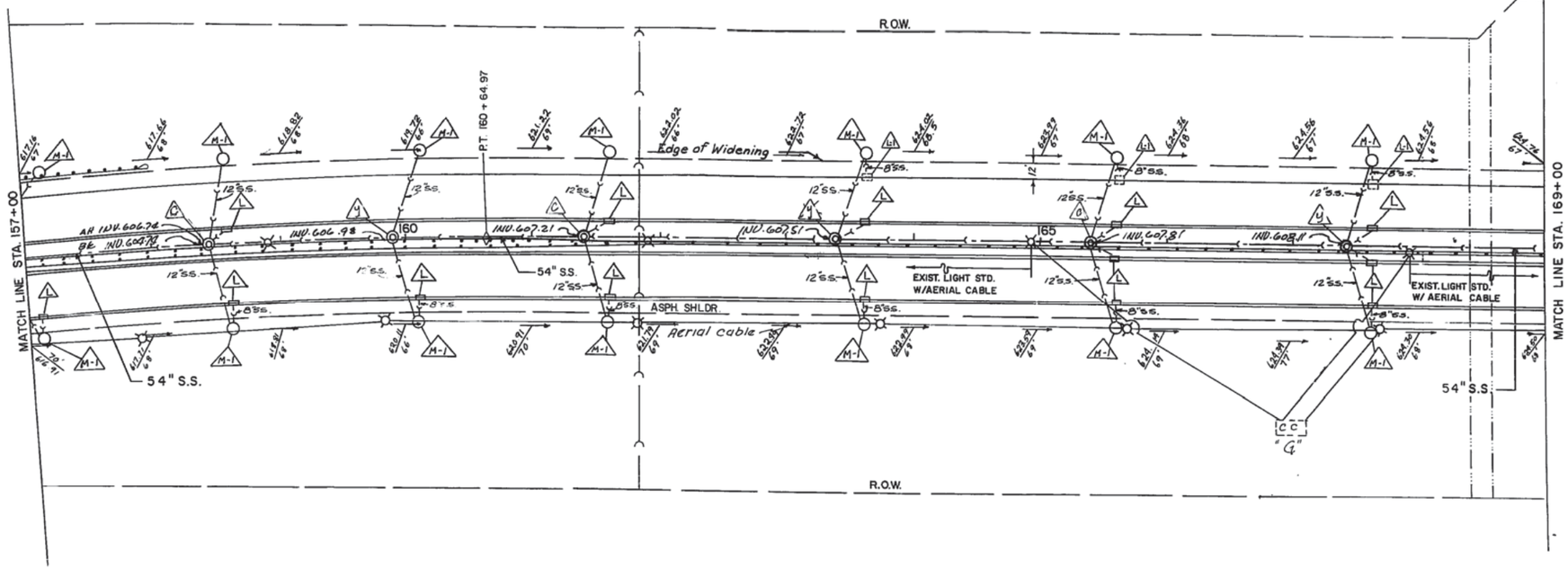
DATE

CHECKED BY

Rev. 2-13-79

F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
94	1977-083-R	COOK	245	36
STA. 157+00		TO STA 169+00		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

CURVE DATA
Δ 54°51'30"
D 1°36'
T 1858.58'
L 3428.65'
E 453.58'
R 3581.10'
S 0.02'/'



EXISTING

CONCRETE BARRIER TYPE 2 STA. 154+60.48 TO 158+49.62

CONCRETE BARRIER TYPE 3 STA. 158+49.62 TO 168+00

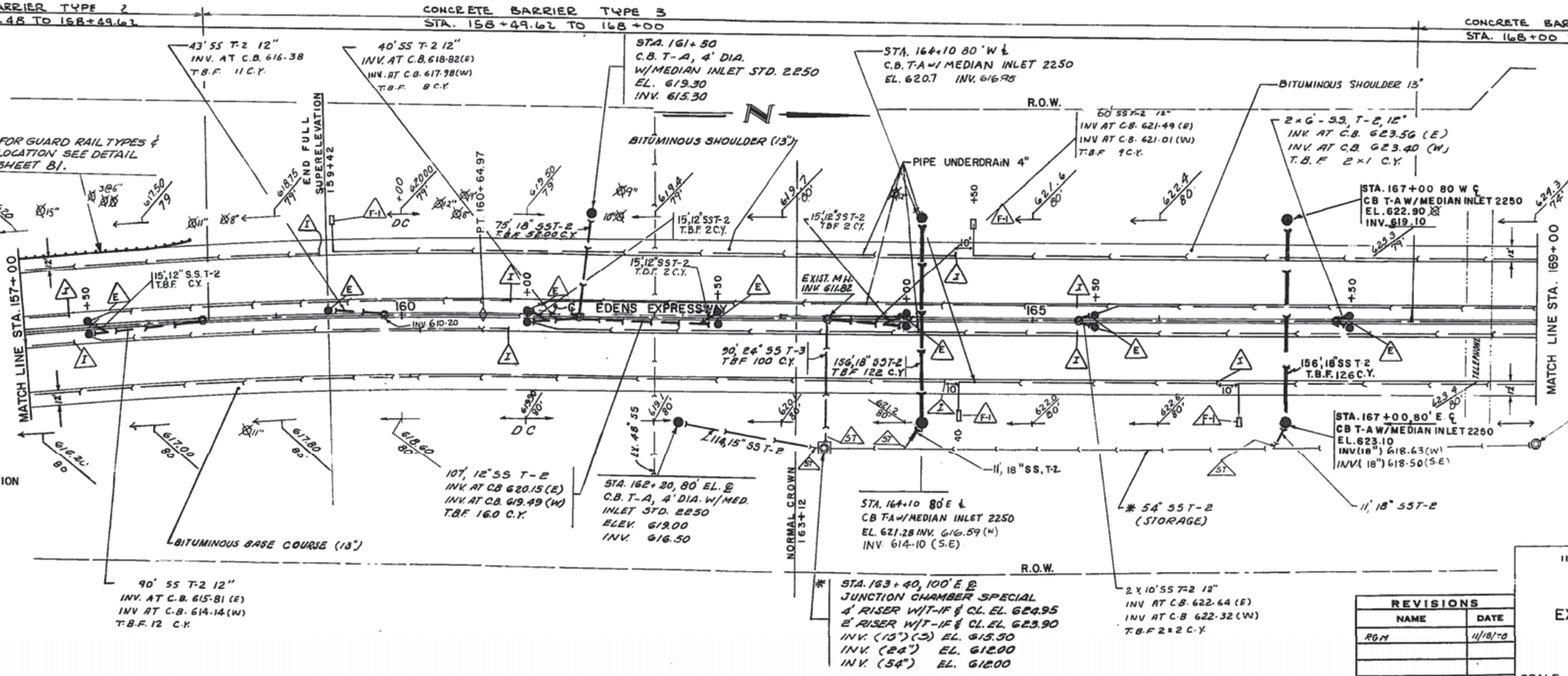
CONCRETE BARRIER TYPE 1 STA. 168+00 TO 177+00

PROPOSED
TOP OF FRAME ELEVATION
(FLOW LINE)

STATION	E
157+50	(W) 617.14
157+50	(E) 618.81
159+42	(W) 619.38
161+00	(W) 620.98
161+00	(E) 621.82
162+50	(W) 622.49
162+50	(E) 623.15
164+00	(W) 624.01
164+00	(E) 624.49
165+50	(W) 625.32
165+50	(E) 625.64
167+50	(W) 626.40
167+50	(E) 626.56

BACKFILL FOR UNDERDRAIN (INCIDENTAL TO PIPE UNDERDRAIN) STA. 157+00 TO 169+00	
S.B. WEST SIDE	= 55.37 C.Y.
MEDIAN (BOTH SIDES)	= 129.64 C.Y.
N.B. EAST SIDE	= 55.37 C.Y.

NO SUPERELEVATION CORRECTION



PROPOSED IMPROVEMENT

REVISIONS	
NAME	DATE
RGM	11/18/76

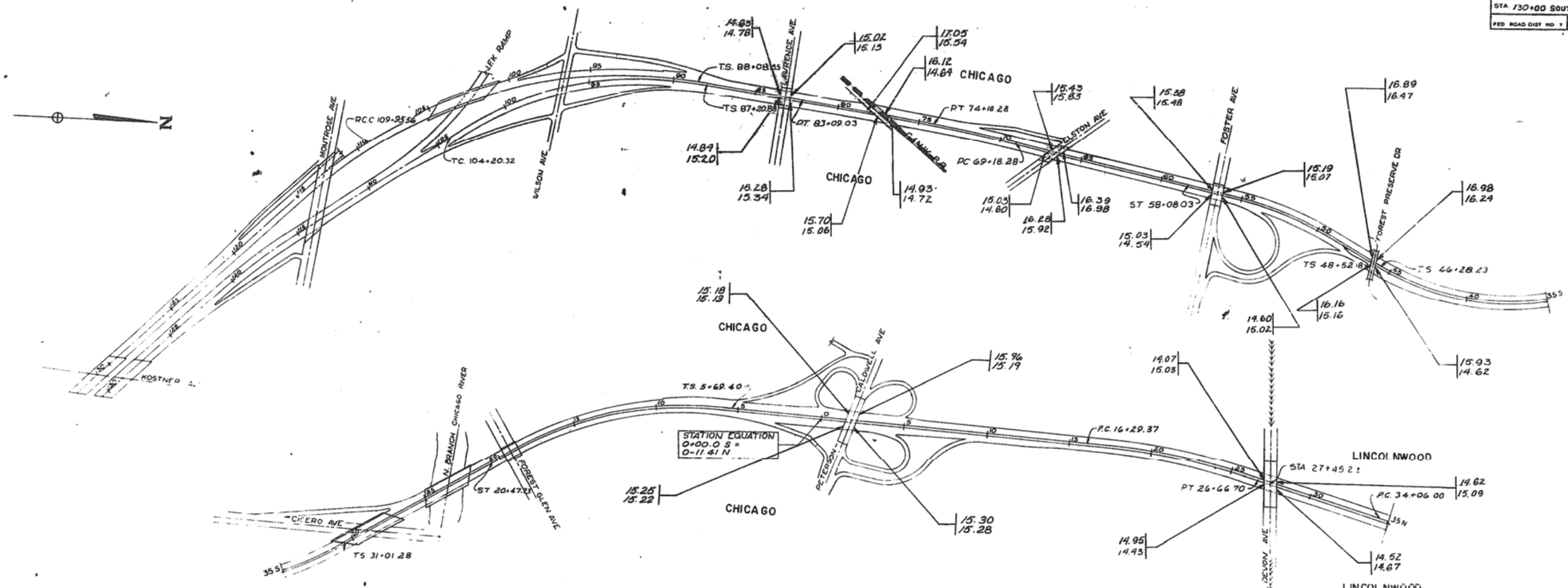
ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY
EXISTING & PROPOSED PLANS

SCALE: VERT 1" = 50'
HORIZ 1 = 50'
DATE
DRAWN BY
CHECKED BY

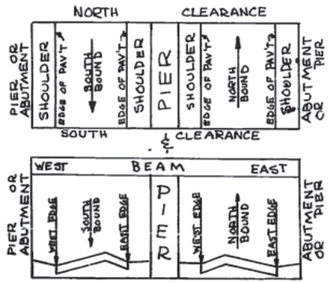
Rev. 2-13-79

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1978-083-R	COOK.	245	394
STA 130+00 SOUTH	TO STA 95+00 NORTH			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



LEGEND:

WEST EDGE OF PAVEMENT
EAST EDGE OF PAVEMENT



REVISIONS	
NAME	DATE
S H	1-18-79

ILLINOIS DIVISION OF HIGHWAYS
EDENS EXPRESSWAY

PROPOSED BRIDGE CLEARANCES

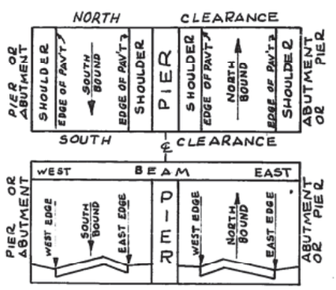
SCALE VERT
HORIZ
DRAWN BY
DATE
CHECKED BY

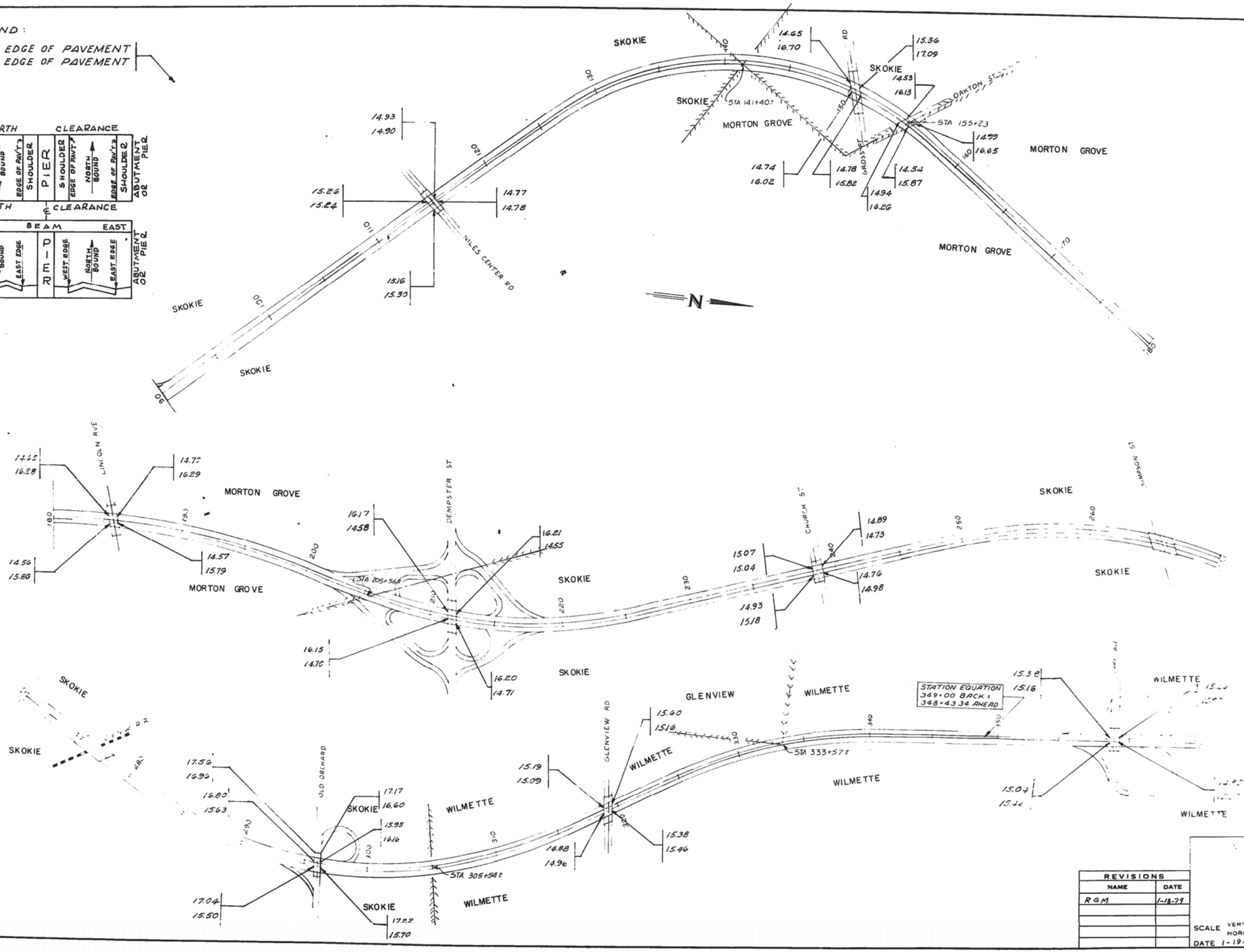
F.A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
94	1978-083-R	Cook	245	39B
STA		TO STA		
FED. ROAD DIST. NO. 1	ILLINOIS		FED. AID PROJECT	

LEGEND :

WEST EDGE OF PAVEMENT

EAST EDGE OF PAVEMENT





REVISIONS	
NAME	DATE
RGM	1-18-79

EDENS EXPRESSWAY

PROPOSED BRIDGE CLEARANCES

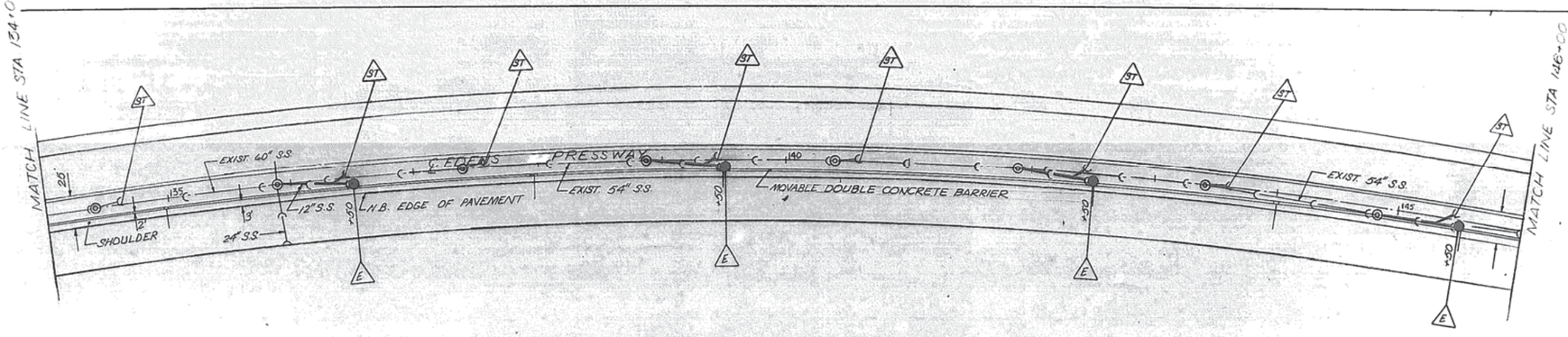
SCALE VERT NONE HORIZ

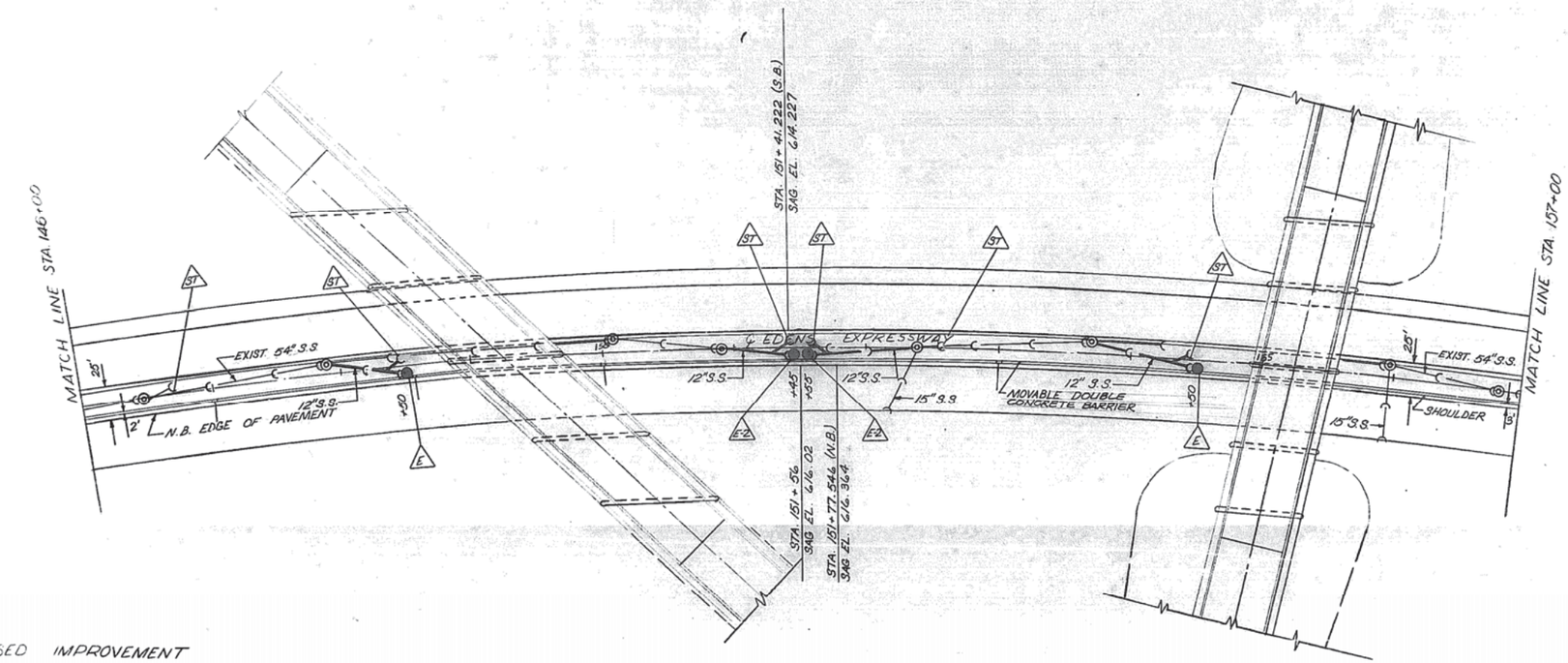
DRAWN BY RGM

DATE 1-19-79

CHECKED BY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEETS
94	1977 1033-A	Cook	245	466
STA.	134+00	TO STA.	157+00	
FED. ROAD DIST. NO. 1	ILLINOIS		PROJECT	





PROPOSED IMPROVEMENT

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY

INTERIM DRAINAGE

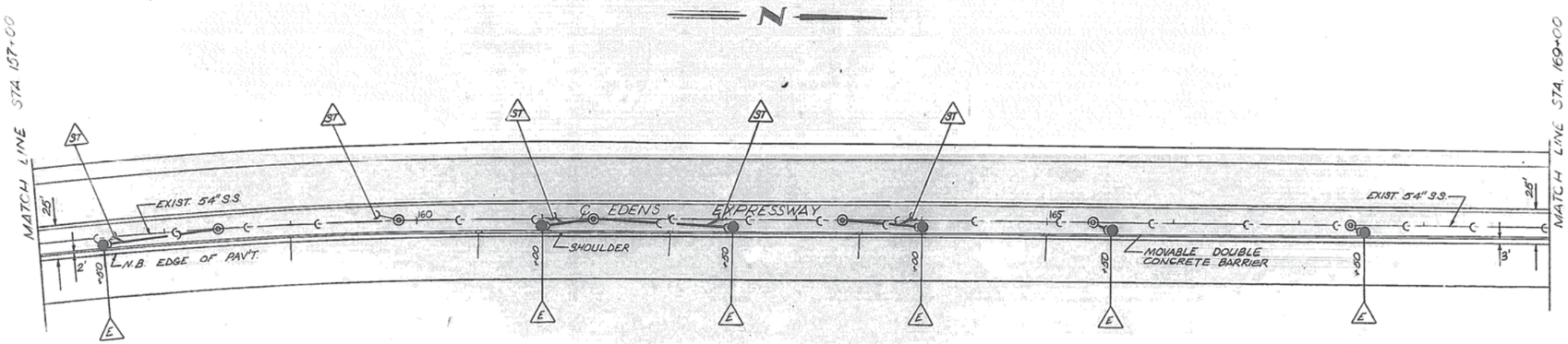
SCALE VERT
HORIZ

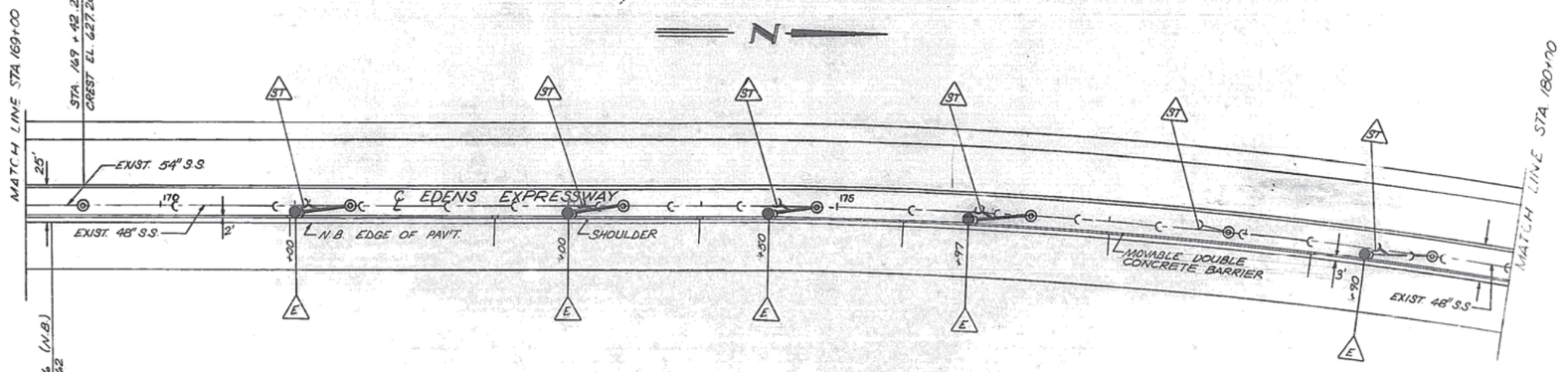
DRAWN BY

DATE Oct 8 1979

CHECKED

94	1977 FAP-2	COOK	245 -U,H
STA.	157+00		180+00





PROPOSED IMPROVEMENT

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY

INTERIM DRAINAGE

SCALE VERT

HORIZ

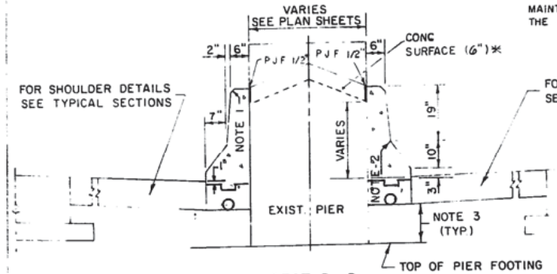
DRAWN BY

DATE MAY 3 1977

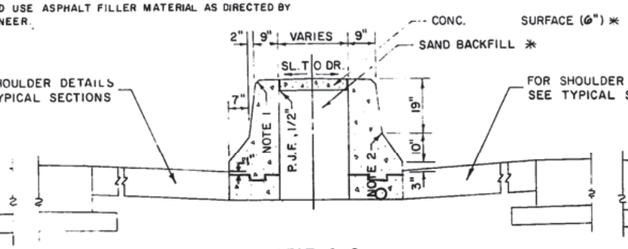
CHECKED BY

NOTES

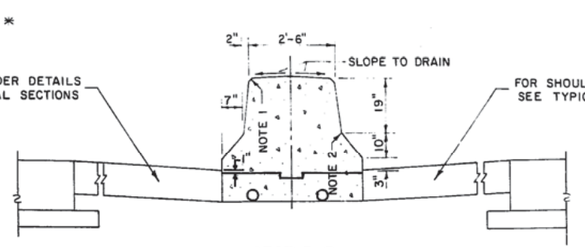
PIER FILLER MATERIAL TO BE CONCRETE IF MINIMUM 6" THICKNESS WILL BE MAINTAINED. IF 6" MINIMUM THICKNESS CANNOT BE MAINTAINED USE ASPHALT FILLER MATERIAL AS DIRECTED BY THE ENGINEER.



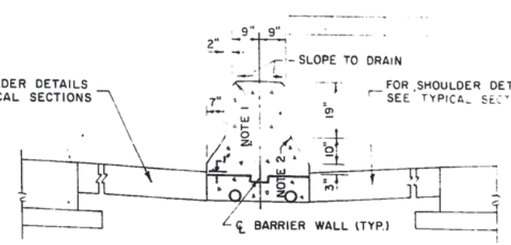
SECT. D-D
CONCRETE BARRIER - TYPE 2



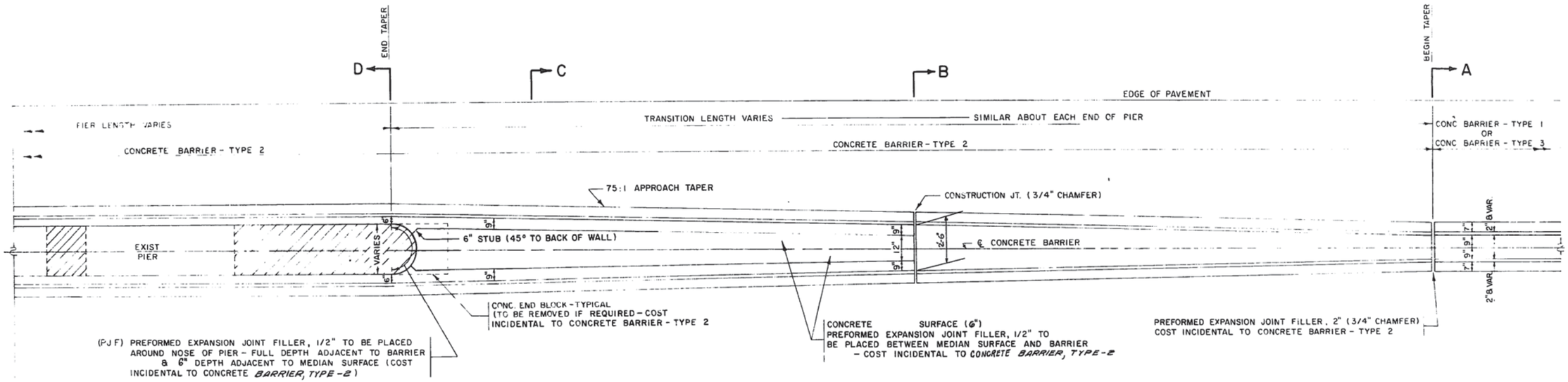
SECT. C-C
CONCRETE BARRIER - TYPE 2



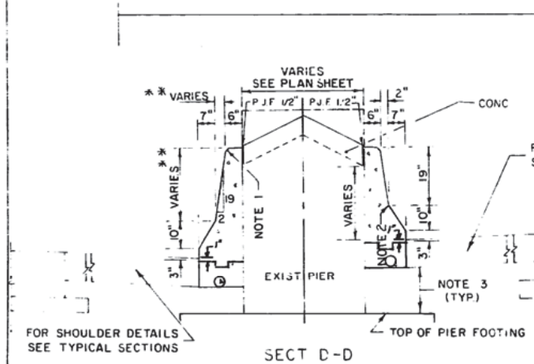
SECT. B-B
CONCRETE BARRIER - TYPE 2



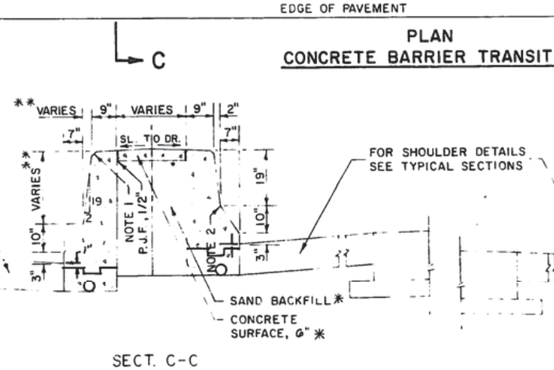
SECT. A-A
CONCRETE BARRIER - TYPE 1



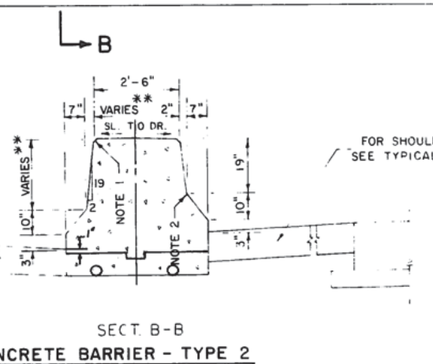
PLAN
CONCRETE BARRIER TRANSITION



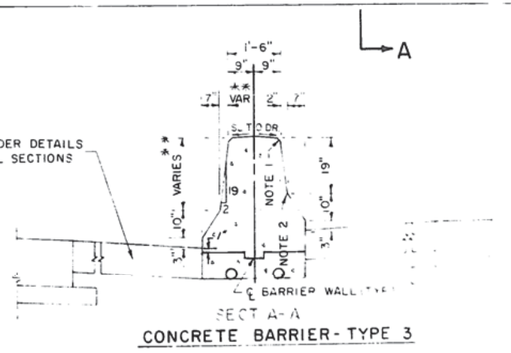
SECT. D-D
CONCRETE BARRIER - TYPE 2



SECT. C-C
CONCRETE BARRIER - TYPE 2



SECT. B-B
CONCRETE BARRIER - TYPE 2



SECT. A-A
CONCRETE BARRIER - TYPE 3

FOR KEYWAY(F) DIMENSIONS SEE TYPICAL SECTION

NOTE 1 – 3/4" CHAMFER OR 1" RADIUS (OPTIONAL)
NOTE 2 – 10" RADIUS (OPTIONAL)

NOTE 3 – EXTEND BOTTOM OF BARRIER WALL TO FOOTING ONLY WHEN DEPTH IS 6" OR LESS, OTHERWISE MAINTAIN SAME DEPTH AS BOTTOM OF SHOULDER

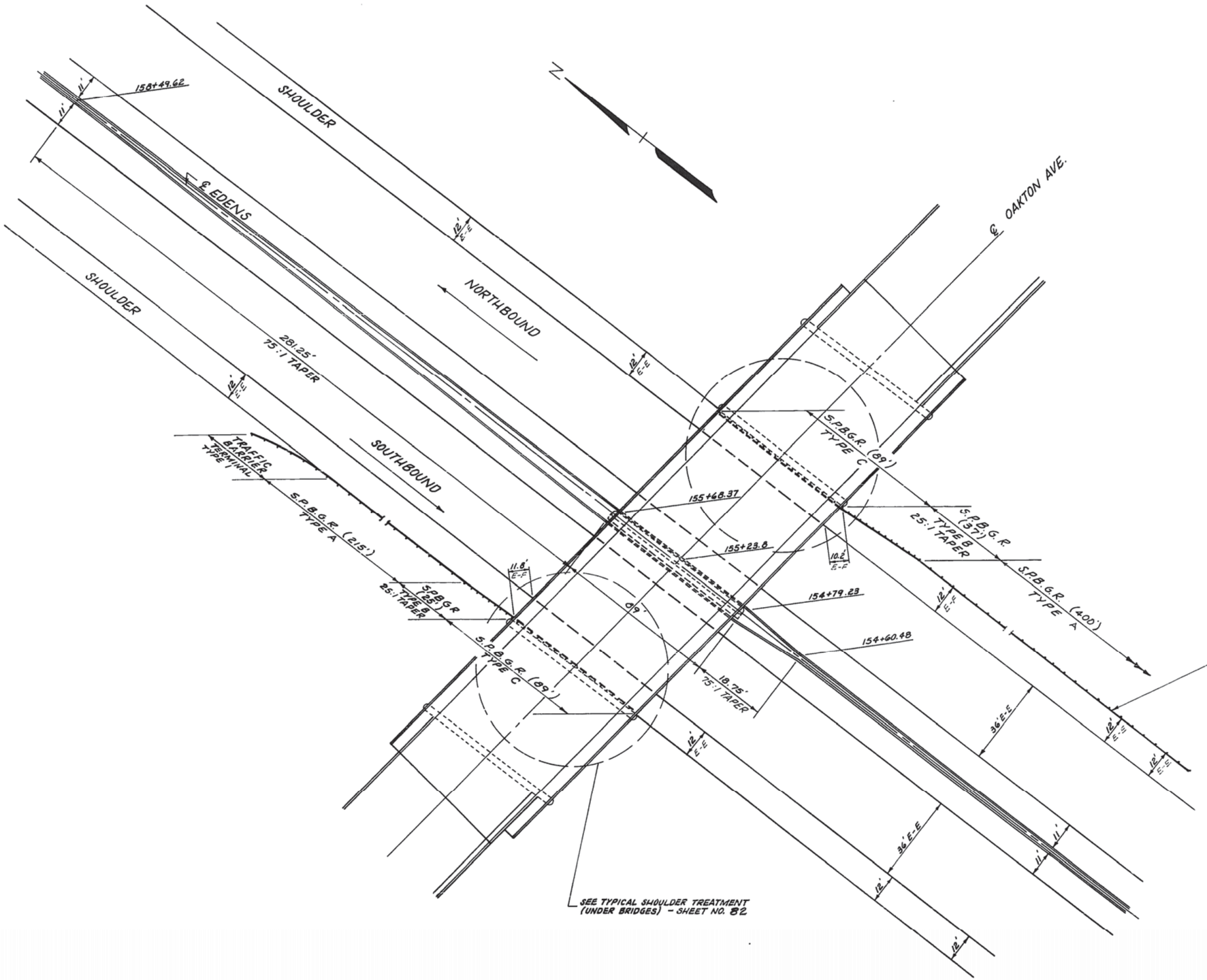
GENERAL NOTE – FOR UNDERDRAIN DETAILS SEE TYPICAL SECTIONS

** MAINTAIN SLOPE OF FACE AS SHOWN ON DETAIL. HEIGHT AND WIDTH OF WALL INCREASE WHERE A DIFFERENCE IN MEDIAN EDGE-OF-PAVEMENT GRADE ELEVATION EXISTS

* COST OF THESE ITEMS SAND BACKFILL, CONCRETE SURFACE (6") AND PIER FILLER MATERIAL) WILL BE INCIDENTAL TO CONCRETE BARRIER, TYPE - 2

REVISIONS	
NAME	DATE
VH	1-16-79
CA	1-18-79

F. A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
94	1977-083-R	COOK	245	81
STA.		TO STA		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



CONTINUOUS RUN OF GUARD RAIL TYPE A, BETWEEN GROSS POINT ROAD AND OAKTON STREET ALONG SHOULDER ON NORTH BOUND LANES.

NOTE: DO NOT SCALE

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY

PROPOSED CONCRETE BARRIER & GUARD RAIL DETAIL AT OAKTON AVE. BRIDGE

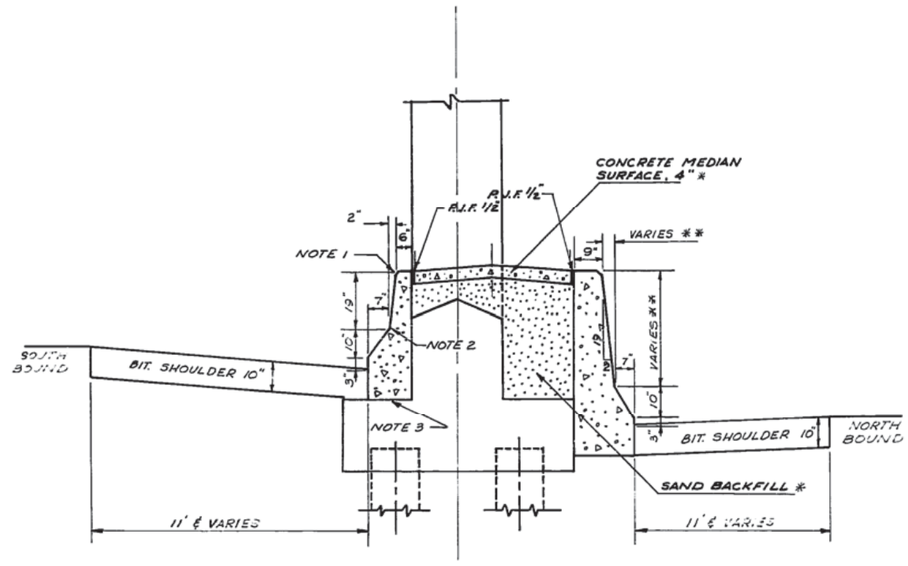
SCALE: VERT. } NONE
HORIZ. }

DRAWN BY

DATE

CHECKED BY

F. A. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1977.083.R	Cook	145	83
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



DETAIL SHOWING BARRIER WALL AT BRIDGE PIER
OAKTON STREET
GROSS POINT

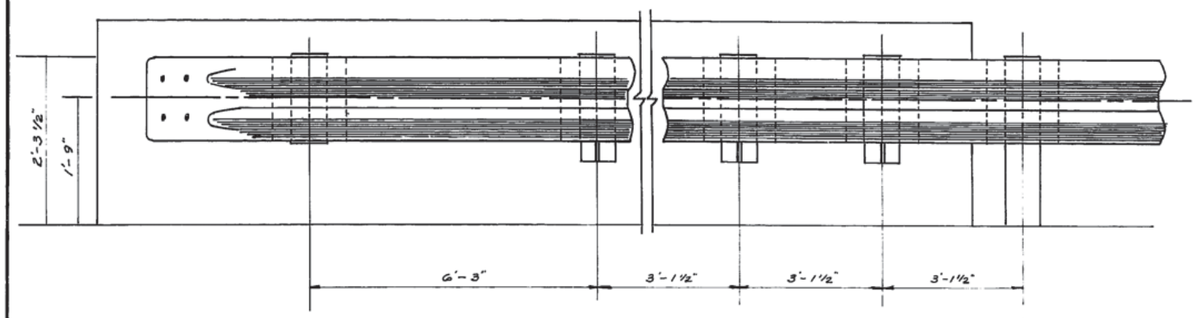
* COST OF THESE ITEMS, SAND BACKFILL, CONCRETE MEDIAN SURFACE 4", AND FIBER EXPANSION MATERIAL WILL BE INCIDENTAL TO CONCRETE BARRIER, TYPE 2.

** MAINTAIN SLOPE OF FACE AS SHOWN IN DETAIL, HEIGHT AND WIDTH OF WALL INCREASE WHERE A DIFFERENCE IN MEDIAN EDGE-OF-PAVEMENT GRADE ELEVATION EXISTS.

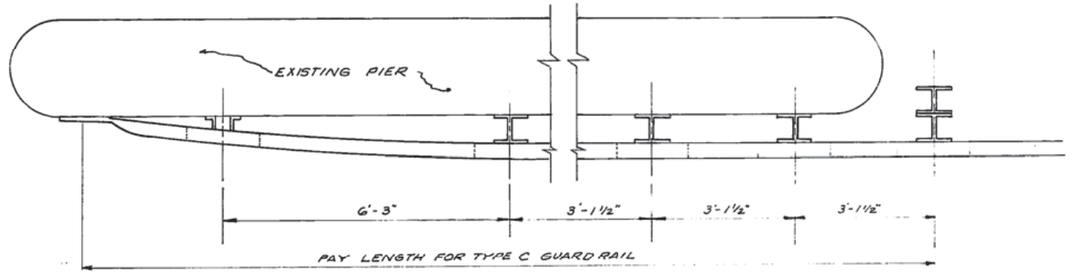
NOTE 1 - 3/4" CHAMFER OR 1" RADIUS (OPTIONAL)

NOTE 2 - 10" RADIUS (OPTIONAL)

NOTE 3 - EXTEND BOTTOM OF BARRIER WALL TO FOOTING ONLY WHEN DEPTH IS 6" OR LESS, OTHERWISE MAINTAIN SAME DEPTH AS BOTTOM OF SHOULDER.



TYPE C GUARD RAIL | TYPE B GUARD RAIL



PROPOSED END TREATMENT FOR TYPE C GUARDRAIL

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS

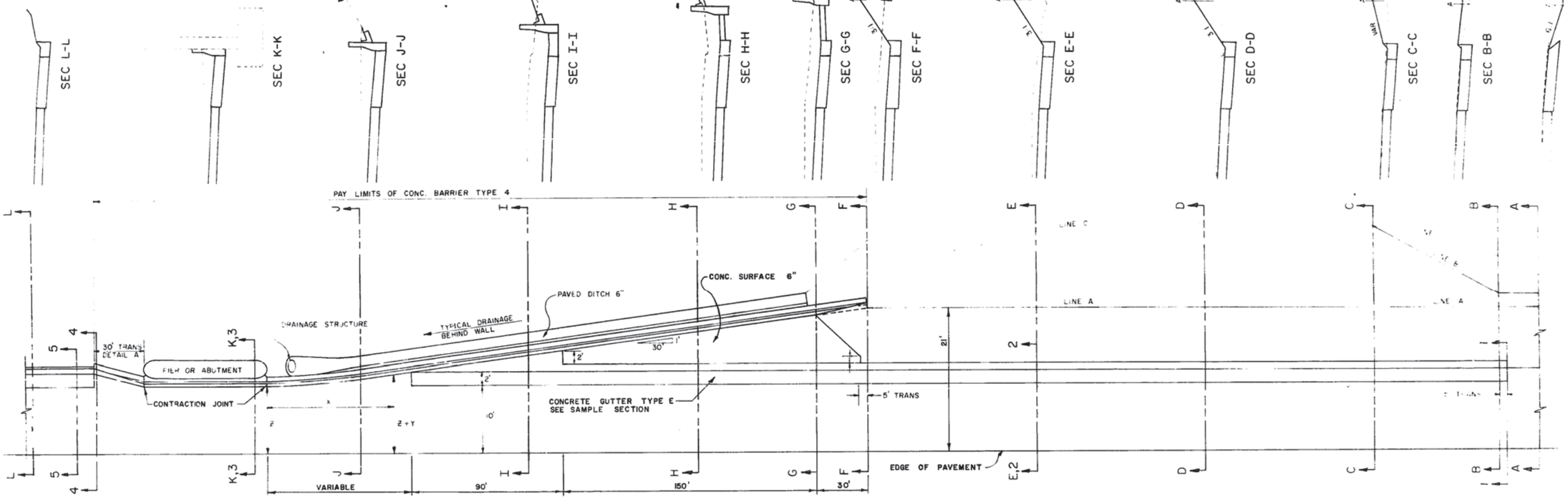
EDENS EXPRESSWAY

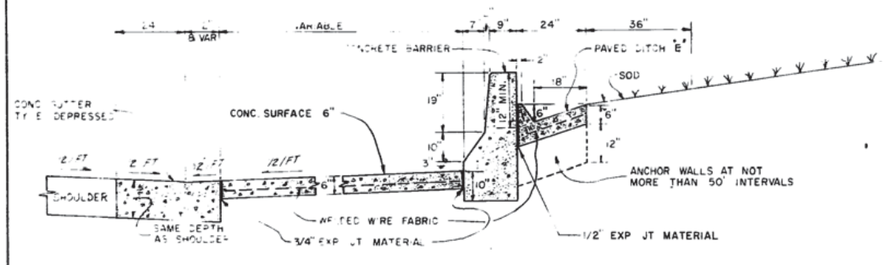
TYPICAL DETAILS FOR CONCRETE BARRIER & GUARD RAIL AT BRIDGES

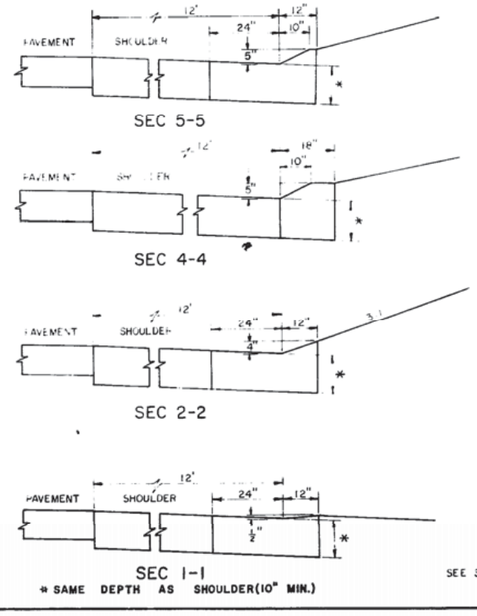
SCALE: VERT. HORIZ. DRAWN BY

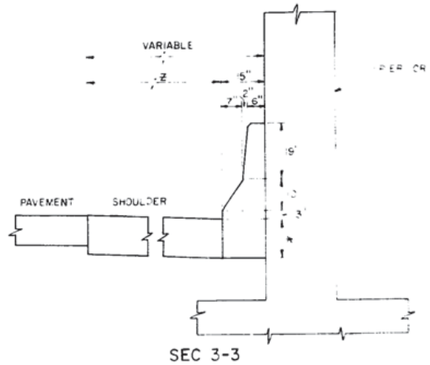
DATE CHECKED BY

94	1977 083-R	COOK	245	84





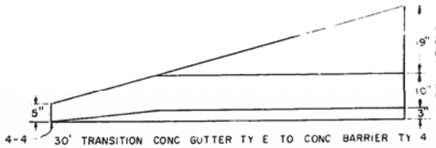




X	Y
25	021
50	083
75	167
100	250
125	333
150	417
175	500
200	583
225	667
250	750
275	833
300	917
325	000
350	083
375	167
400	250

X = DISTANCE FROM FILL OR ABUTMENT
Y = OFFSET DISTANCE FROM TOP OF SLOPE
Z = DISTANCE TO BASE OF CONC. BARRIER FROM EDGE OF PAVEMENT OR ABUTMENT
Z+Y = OFFSET FROM EDGE OF PAVEMENT TO BASE OF CONC. BARRIER

NOTES:
CROSS SECTIONS SHOWN ON THIS SHEET ARE REPRESENTATIVE OF SLOPE TREATMENT WITHIN PRACTICAL LIMITATIONS. GRADING OF SLOPE SHALL BE COMPLETED PRIOR TO EXCAVATION FOR CONCRETE BARRIER, TO PREVENT BARRIER FROM BEING MOVED BY EQUIPMENT. PAVED DITCH "E", SHALL BE EXCAVATED IN COMPLETED SLOPE. FILL MATERIAL, SHALL NOT BE PLACED, ADJACENT TO PAVED DITCH "E" (EXCLUDING TOP SOIL).
CONTRACTION JOINTS, SHALL BE PLACED AS INDICATED IN THE SPECIAL DETAILS FOR CONCRETE BARRIER, SHOWN ELSEWHERE IN THE PLANS AND AS DIRECTED BY THE ENGINEER.
PAVED DITCH "E" SHALL BE PAID FOR PER LINEAR FOOT.
WELDED WIRE FABRIC SHALL BE 6"X 6' MESH # 4 GAGE, 58 LBS, PER 100 SQ FT. CONFORMING TO THE REQUIREMENTS OF AASNTO. M-55
EXPANSION JOINT MATERIAL SHALL BE PREFORMED EXPANSION JOINT FILLER.
THE COST OF FURNISHING AND PLACING THE EXPANSION JT MATERIAL AND THE WELDED WIRE FABRIC WILL BE CONSIDERED INCIDENTAL TO THE PAVED DITCH "E" & CONC. SURFACE 6".
PLACE PGE AT STA. 58+00 LT. TO STA 58+32 LT. 1' ± IN DEPTH OR AS DIRECTED BY THE ENGINEER, FROM E.O.P. TO BACK OF CONC. BARRIER. CONNECT THE PIPE UNDERDRAIN TO THE MAINLINE AT THE LOWEST POINT



DETAIL A

REVISIONS	
NAME	DATE
VH	1-12-79

ILLINOIS DIVISION OF HIGHWAYS
EDENS EXPRESSWAY
DETAIL OF CONCRETE BARRIER TYPE 4A
SCALE VERT.
DRAWN
DATE

SECTION	COUNTY	TOTAL SHEET	SHEET
94 1977-083-RC	COOK	245	85
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJ. NO.	

NOTES

a) IN PLACES INDICATED ON THE PLANS THE CONTRACTOR SHALL CONNECT THE PROPOSED UNDERDRAIN PIPE WITH PROPOSED STORM SEWER PIPE IN OPENINGS PREPARED FOR THIS PURPOSE (USING MORTAR), ALL AS SHOWN ON THE DETAIL DRAWING AND AS DIRECTED BY THE ENGINEER.

IN PLACES INDICATED ON THE PLANS, WHERE OUTLETS OF PIPE UNDERDRAIN AT MEDIAN ARE PROVIDED FROM TWO DIRECTIONS, THE CONNECTIONS OF PIPE UNDERDRAIN WITH PROPOSED STORM SEWER PIPE ARE SIMILAR TO IN THE DETAIL "PIPE UNDERDRAIN CONNECTION WITH PROP. S.S PIPE AT MEDIAN" SHOWN, ALL AS DIRECTED BY THE ENGINEER.

THIS WORK WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR PIPE UNDERDRAIN 4", WHICH PRICE SHALL INCLUDE ALL LABOR, TOOLS AND MATERIALS NECESSARY FOR THE COMPLETION OF THE WORK.

b) THE REMOVAL OF THE EXISTING FRAME AND GRATE, THE REMOVAL OF THE BRICK COURSES ON TOP OF THE EXISTING CATCH BASIN, THE REMOVAL OF THE C.B. TO THE DEPTH, INDICATED ON THE PLAN, THE SAND FILL, WILL NOT BE PAID SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH FOR "EXISTING CATCH BASIN TO BE FILLED MAINTAINING FLOW".

PLAN OF PROPOSED REINFORCED CONCRETE SLAB SHOWING REINFORCEMENT

EDGE OF EXISTING PAVEMENT AND PROP. RESURFACING

DO NOT APPLY

EDGE OF EXISTING PAVEMENT (PROP. RESURFACING)

PROP. B.T. CONC. SURFACE CRS., 1½"
PROP. BIT. CONC. BINDER CRS., 1½"
EXIST. BIT. CONC. SURFACE CRS.
EXIST. BIT. CONC. BINDER CRS.

18'-0" MEDIAN

9'-0"

EXIST. BIT. CONC. SHLD. TO BE REMOVED

EXIST. GRAVEL OR CRASHED STONE SHLD. TO BE REMOVED

EDGE OF PROP CONTINOUSLY REINFORCED P.C.C. PAVEMENT, 10"

EXISTING FRAME & GRATE TO BE REMOVED

PROP. BITUMINOUS SHOULDER 10"

PIPE UNDERDRAIN

PROP. CONC. WALL

EXISTING CATCH BASIN SHALL BE REMOVED TO THE INDICATED DEPTH, THE REMAINING PART OF THE EXISTING CATCH BASIN SHALL BE FILLED WITH SAND AND AFTER CONSTRUCTION OF THE PROPOSED LATERAL STORM SEWER CONNECTION AND PIPE UNDERDRAIN THE REMAINING SPACE LEFT SHALL BE FILLED WITH SAND.

PROP. S.B. GRANULAR MATERIAL, SPECIAL SEE ALSO TYPICAL CROSS SECTION

PIPE UNDERDRAIN, 4"

SEE "EXISTING MANHOLE TREATMENT AT THE MEDIAN" DETAIL "C"

PROP. REINFORCED CONC. SLAB, 6"

OUTLET FOR PROP. 2" STORM SEWER FROM PROP. CATCH BASIN TYPE A WITH FLAT SLAB TOP SEE ALSO DETAIL G

BULKHEAD (MORTAR)

FOR DETAILS SEE "PIPE UNDERDRAIN CONNECTION WITH PROP. S.S. PIPE AT MEDIAN" BELOW

EXIST. STORM SEWER PIPE TO BE REMOVED

STORM SEWER CONNECTION, 12"

PROPOSED LATERAL

EXIST. SUB BASE 6

PROP. SUB-BASE GRANULAR MATERIAL, SPECIAL SEE ALSO TYPICAL CROSS SECTION

PROP. PIPE UNDERDRAIN THRU ABANDONED STRUCTURE SEE DETAIL BELOW

REMOVE ALL EXISTING BRICK COURSES ON TOP OF THE EXISTING STRUCTURE

MIN. 2' MAX. 2'-5"

SEE NOTE 2

2'-6"

3'-0"

6" - #4 BAR SPACING @ CENTER TO CENTER

SECTION A-A

BILL OF MATERIALS FOR ONE REINFORCED CONCRETE SLAB

NOTES

1. THE CONTRACTOR SHALL REMOVE AND DISPOSE ALL DEBRIS AND FOREIGN MATERIAL FOUND IN THE EXISTING DRAINAGE STRUCTURE BEFORE IT IS MANUALLY FILLED WITH SAND AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AS SPECIFIED IN STORM SEWER TO BE CLEANED SPECIAL PROVISIONS.

CONCRETE SHALL BE PLACED IN THE FORMS AS WATER TIGHT AS POSSIBLE WITH SPADING AND CAREFUL HANDLING. NO EXTRA COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR SHALL PUT THE VARIOUS ITEMS OF THE ALTERNATE PROPOSALS IN THE ORDER OF THE ABANDONED STRUCTURE SO THAT THE PIPE WORK IS IN THE COMPLETED PART OF THE SLAB. REMAINING STEP OCCUPIED PARTS OF THE SLAB IN THE CENTER SHALL BE BULKHEADED AS NECESSARY AS DIRECTED BY THE ENGINEER.

LABOR, EQUIPMENTS WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM

REINFORCED CONCRETE SLAB COVER

PIPE UNDERDRAIN CROSSING ABANDONED STRUCTURE

SECTION II-II

HALF OF DETAIL "A-1" (TYPICAL)

EXISTING CATCH BASIN TO BE FILLED MAINTAINING FLOW

PLAN

SECTION III-III

HALF OF DETAIL "B" (TYP. CAL)

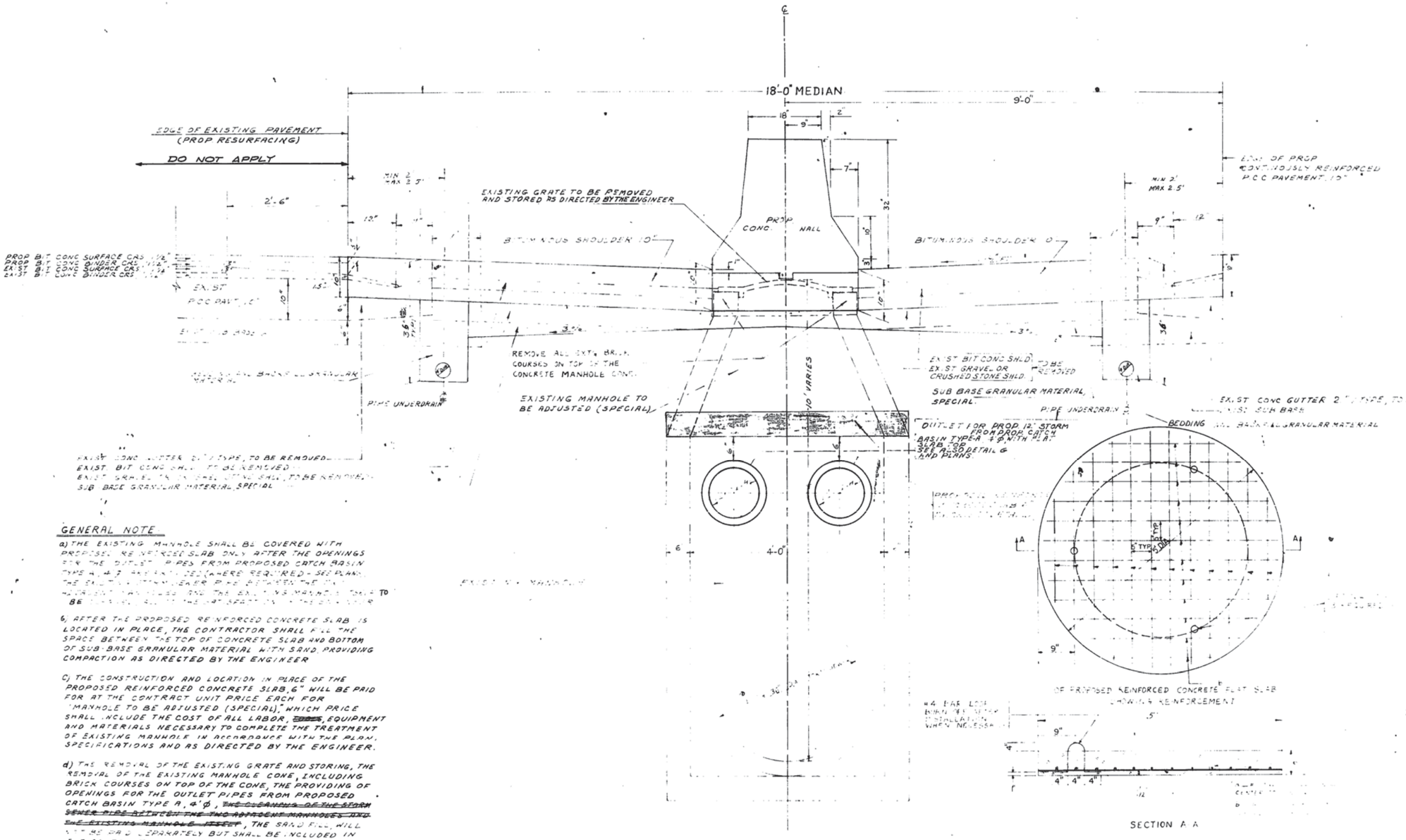
PIPE UNDERDRAIN CONNECTION WITH PROP STORM SEWER PIPE AT MEDIAN DETAIL - (TYPICAL)

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS
EDENS EXPRESSWAY
REC. DISTRICT V.
EXISTING CATCH BASIN TO BE FILLED PROVIDING REINFORCED CONCRETE SLAB COVER (DETAIL A-1)
EXISTING CATCH BASIN TO BE FILLED MAINTAINING FLOW (DETAIL B)

SCALE VERT / HORIZ — DRAWN BY
DATE — CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1977-083R	COOK	245	86
STA	TO STA			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



PROPOSED REINFORCED CONCRETE FLAT SLAB
SHOWING REINFORCEMENT

GENERAL NOTE

a) THE EXISTING MANHOLE SHALL BE COVERED WITH PROPOSED REINFORCED SLAB ONLY AFTER THE OPENINGS FOR THE OUTLET PIPES FROM PROPOSED CATCH BASIN TYPE A, 4' Ø AND/OR 5' (WHERE REQUIRED - SEE PLANS) THE EXISTING MANHOLE AND THE EXISTING MANHOLE TO BE ADJUSTED (SPECIAL) AND THE EXISTING MANHOLE AND THE EXISTING MANHOLE TO BE ADJUSTED (SPECIAL) AT THE LOCATIONS SHOWN ON THE PLANS.

b) AFTER THE PROPOSED REINFORCED CONCRETE SLAB IS LOCATED IN PLACE, THE CONTRACTOR SHALL FILL THE SPACE BETWEEN THE TOP OF CONCRETE SLAB AND BOTTOM OF SUB-BASE GRANULAR MATERIAL WITH SAND, PROVIDING COMPACTION AS DIRECTED BY THE ENGINEER

c) THE CONSTRUCTION AND LOCATION IN PLACE OF THE PROPOSED REINFORCED CONCRETE SLAB, 6" WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "MANHOLE TO BE ADJUSTED (SPECIAL)," WHICH PRICE SHALL INCLUDE THE COST OF ALL LABOR, ~~TOOLS~~, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE TREATMENT OF EXISTING MANHOLE IN ACCORDANCE WITH THE PLAN, SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

d) THE REMOVAL OF THE EXISTING GRATE AND STORING, THE REMOVAL OF THE EXISTING MANHOLE CONE, INCLUDING BRICK COURSES ON TOP OF THE CONE, THE PROVIDING OF OPENINGS FOR THE OUTLET PIPES FROM PROPOSED CATCH BASIN TYPE A, 4' Ø, ~~THE CLEANING OF THE STORM SEWER PIPE BETWEEN THE TWO ADJACENT MANHOLES AND THE EXISTING MANHOLE INSERT~~, THE SAND FILL, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH FOR "MANHOLE TO BE ADJUSTED (SPECIAL)".

e) THE REMOVAL OF THE EXISTING STORM SEWER PIPE FROM THE REMOVED STRUCTURE TO THE EXISTING "MANHOLE TO BE ADJUSTED (SPECIAL)", THE PLUGING OF THE EXISTING OUTLET OPENING FOR THE REMOVED STORM SEWER PIPE, ALL AS DIRECTED BY THE ENGINEER, WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH FOR "MANHOLE TO BE ADJUSTED (SPECIAL)".

TREATMENT OF EXISTING MANHOLE UNDER PROPOSED CONCRETE WALL IN THE MEDIAN

REVISIONS	
NAME	DATE

EDENS EXPRESSWAY
EXPRESSWAY RECONSTRUCTION
MANHOLE TO BE ADJUSTED (SPECIAL)
(TREATMENT OF EXISTING MANHOLE IN THE MEDIAN - DETAIL "C")

SCALE: AS NOTED — DRAWN BY:
DATE: — CHECKED:

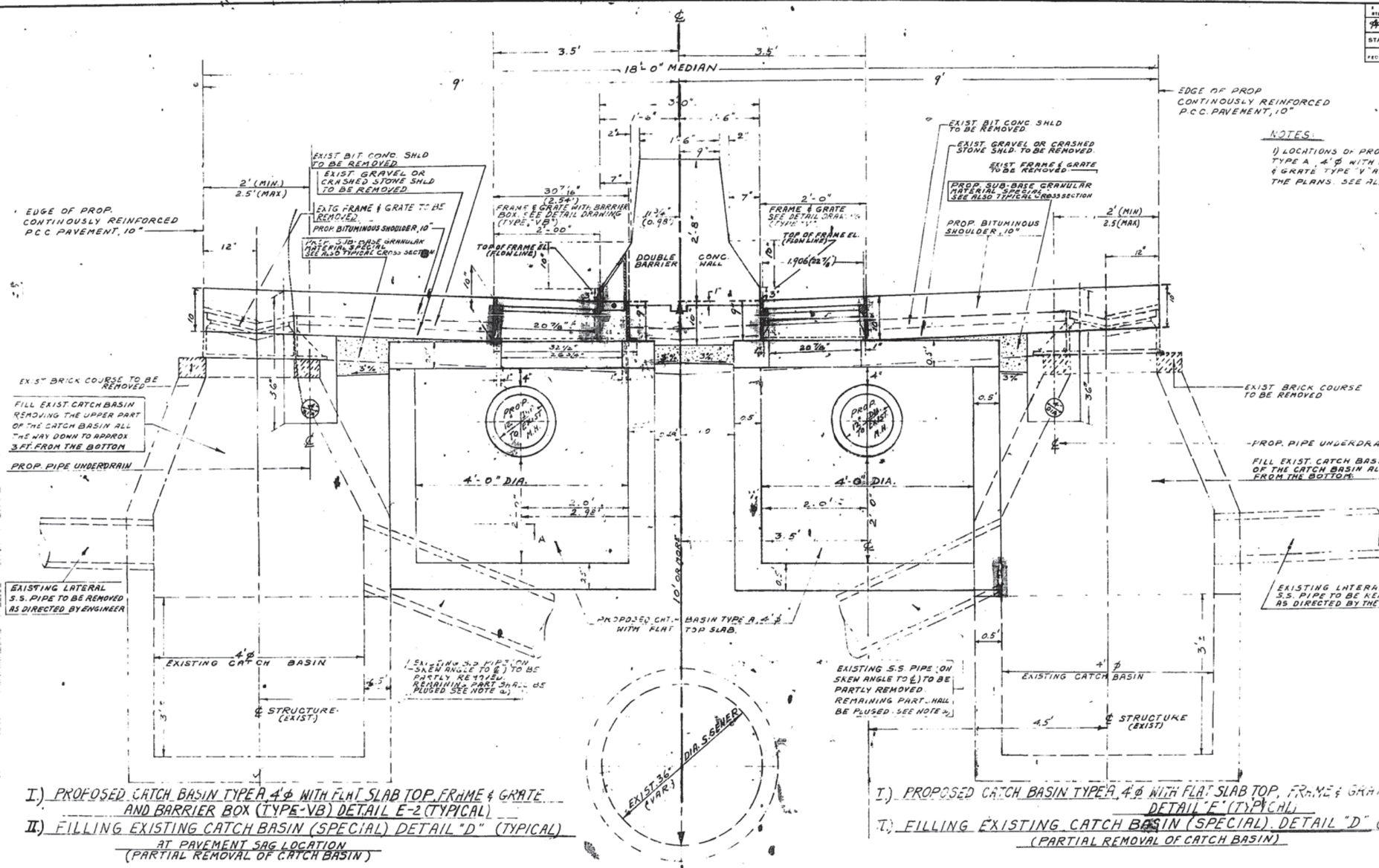
F.A.S. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
14	*	COOK	245	87
STA 15+00		TO STA 193+00		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

* 1977-083-R

NOTES:

a) THE CONTRACTOR SHALL REMOVE A PART OF THE EXISTING CATCH BASIN'S WALL TO PROVIDE SPACE FOR THE CONSTRUCTION OF A PROPOSED CATCH BASIN TYPE A 4'Ø WITH FLAT TOP SLAB.
IF DURING THE CONSTRUCTION THE CONTRACTOR ASSERTAINS THAT SOME EXISTING STORM SEWER PIPES, CONNECTING ABANDONED CATCH BASIN WITH EXISTING MANHOLE, ARE LOCATED IN THE CONSTRUCTION AREA AND ARE IN THE WAY, THE CONTRACTOR SHALL REMOVE THE NECESSARY PORTION OF THE EXISTING PIPE, PLUG THE OPENING OF THE REMAINING STORM SEWER PIPE AND THE OUTLET OPENING IN THE EXISTING MANHOLE, USING BRICKS AND MORTAR.
AFTER THE PROPOSED CATCH BASIN IS CONSTRUCTED THE CONTRACTOR SHALL FILL THE SPACE BETWEEN THE NEW STRUCTURE AND REMAINING ABANDONED CATCH BASIN AND UNDISTURBED EXISTING GROUND MATERIAL RESPECTIVELY WITH COMPACTED SAND.
ALL THE WORKS MENTIONED ABOVE SHALL BE DONE AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER.
THE PARTIAL REMOVAL OF THE EXISTING CATCH BASIN'S WALL, REMOVAL OF THE EXISTING STORM SEWER PIPES, PLUGING, SAND FILL WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH FOR "FILLING EXISTING CATCH BASIN (SPECIAL)"

b) LOCATIONS OF PROPOSED CATCH BASIN TYPE A, 4'Ø WITH FLAT TOP AND FRAME & GRATE TYPE V-VB AS SHOWN ON THE PLANS.



NOTES:

1) LOCATIONS OF PROPOSED CATCH BASIN TYPE A, 4'Ø WITH FLAT TOP AND FRAME & GRATE TYPE V AS SHOWN ON THE PLANS. SEE ALSO DETAIL "G"

I.) PROPOSED CATCH BASIN TYPE A 4'Ø WITH FLAT SLAB TOP, FRAME & GRATE AND BARRIER BOX (TYPE V-VB) DETAIL E-2 (TYPICAL)

II.) FILLING EXISTING CATCH BASIN (SPECIAL) DETAIL "D" (TYPICAL) AT PAVEMENT SAG LOCATION (PARTIAL REMOVAL OF CATCH BASIN)

I.) PROPOSED CATCH BASIN TYPE A 4'Ø WITH FLAT SLAB TOP, FRAME & GRATE AS PER "V" DETAIL "E" (TYPICAL)

II.) FILLING EXISTING CATCH BASIN (SPECIAL) DETAIL "D" (TYPICAL) (PARTIAL REMOVAL OF CATCH BASIN)

NOTE: FOR DETAIL "E" & DETAIL "E-2"

PRECAST REINFORCED CONCRETE FLAT SLAB TOP SHALL CONFORM TO THE REQUIREMENTS OF THE APPLICABLE PORTIONS OF SECTION 505 OF THE STANDARD SPECIFICATIONS AND STATE STANDARD 2354.
IN CASES WHERE PRECAST REINFORCED CONCRETE FLAT SLAB TOP FOR CATCH BASINS AT BARRIER WALL, AS SHOWN ON THE PLAN, REQUIRE OPENING OF 2'-2 3/4" DIA, STANDARD 2354 SHALL ALSO BE UTILIZED, CHANGING THE OPENING FROM 2' TO 2'-2 3/4" AND ADJUSING THE LOCATIONS OF THE REINFORCEMENT BARS AFFECTED, ALL AT NO EXTRA COST, AND AS DIRECTED BY THE ENGINEER.

HALF OF DETAIL "D" (TYPICAL)
HALF OF DETAIL "E-2" (TYPICAL)

NOTE FOR CATCH BASIN TYPE-C (SYMBOL E-1 & E3)

THE LOCATION OF CATCH BASIN TYPE D, 8 FT. DIAMETER, IS SIMILAR TO THE LOCATION OF CATCH BASIN TYPE-A, 4 FT. DIAMETER (DETAIL E AND E-2) WITH THE EXCEPTION THAT THE DISTANCE FROM THE FLOW LINE AT EDGE OF WALL TO THE ℄ OF PROPOSED CATCH BASIN, TYPE-D IS 15FT.

HALF OF DETAIL "D" (TYPICAL)
HALF OF DETAIL "E" (TYPICAL)

REVISIONS	
NAME	DATE
R&M	12-04-78

ILLINOIS DEPARTMENT OF TRANSPORTATION
EDENS EXPRESSWAY
PROPOSED CATCH BASIN TYPE-D (SYMBOL E-1 & E3)
EXISTING CATCH BASIN TO BE FILLED (SPECIAL) (DETAIL "D")
PROPOSED CATCH BASIN TYPE A, 4' DIA., WITH FLAT SLAB TOP AND FRAME AND GRATE TYPE V AND VB (DETAILS "E" AND "E-2")
SCALE: VERT. HORIZ.
DATE: OCT. 3 1977
DRAWN BY A.ST
CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	1977-083-R	COOK	245	124
STA.	99+00 N	TO STA.	192+00	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

MATCH LINE STA. 5+00 N

MATCH LINE STA. 131+00 N

Niles Center Rd
RBN-11
STA. 115+40
EXISTING

CARPENTER RD.

INSTALL NEW STEEL BREAKAWAY POST AND FOUNDATIONS.

EXIT 39A
WEST
Touhy Ave
NEXT RIGHT

RGM-9
STA. 124+80
INSTALL RELOCATED SIGN PANEL AND EXIT PANEL.

30'

EXIT 39A
WEST
Touhy Ave
NEXT RIGHT

RGM-9
STA. 125+00
RELOCATE EXISTING SIGN PANEL AND EXIT PANEL, REMOVE CONCRETE FOUNDATIONS AND POST.

100 105 110 115 120 125 130

Niles Center Rd
RBN-10
STA. 114+55
EXISTING

GROSS PT. RD.

Gross Point Rd
RBN-13
STA. 149+30, EXISTING

Gross Point Rd
RBN-12
STA. 149+30
EXISTING

Oakton St
RBN-15
STA. 155+80
EXISTING

OAKTON ST.

EXIT 39A-B
Touhy Ave
1 MILE

RBM-4
STA. 155+65
EXISTING

N

135 140 145 150 155 160

20'

55'

MATCH LINE STA. 131+00 N

EXIT 37A-B
ILLINOIS 58
Dempster St
1¼ MILES

RGM-10
STA. 139+00
INSTALL EXISTING SIGN PANEL AND EXIT PANEL FROM STA. 139+25. INSTALL NEW BREAKAWAY SIGN POST AND CONCRETE FOUNDATION.

EXIT 37A-B
ILLINOIS 58
Dempster St
1¼ MILES

RGM-10
STA. 139+25
RELOCATE EXISTING SIGN PANEL AND EXIT PANEL TO STA. 139+00 NB. REMOVE EXISTING SIGN SUPPORTS, STEEL AND CONCRETE FOUNDATIONS.

Oakton St
RBN-14
STA. 154+65
EXISTING

MATCH LINE STA. 164+00

LINCOLN AVE.

Lincoln Ave
RBN-17
STA. 184+40, EXISTING

165 170 175 180 185 190

MATCH LINE STA. 164+00

30'

Lincoln Ave
RBN-16
STA. 183+70
EXISTING

MATCH LINE STA. 192+00

EXIT 37B
ILLINOIS 58
Dempster St
NEXT RIGHT

RGM-11
STA. 177+00
RELOCATE EXISTING SIGN PANEL AND EXIT PANEL. REMOVE EXISTING CONCRETE FOUNDATIONS AND POST

EXIT 37B
ILLINOIS 58
Dempster St
NEXT RIGHT

RGM-11
STA. 175+00
INSTALL RELOCATED SIGN PANEL AND EXIT PANEL, INSTALL NEW CONCRETE FOUNDATION AND BREAKAWAY SIGN POST.

N

REVISIONS	
NAME	DATE

ILLINOIS DIVISION OF HIGHWAYS

EDENS EXPRESSWAY (I-94)

SCALE: VERT.
HORIZ.

DRAWN BY

DATE

CHECKED BY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-94	1977-083 R	COOK	245	169
	50 STA.			
FED. ROAD DIST. NO. 9	ILLINOIS	PROJECT		

REVISIONS

4/78 A

(E) 2 FT OF 3 IN P.DUCT

(E) 2 FT OF 3 IN P.DUCT

(E) 2 FT OF 3 IN G.S. CONDUIT PUSHED

(E) 2 FT OF 3 IN G.S. CONDUIT PUSHED

6 FT OF 3 IN G.S. CONDUIT IN TRENCH

6 FT OF 3 IN G.S. CONDUIT IN TRENCH

(E) 2 FT OF 1¼ IN P.DUCT

(E) 2 FT OF 3 IN P.DUCT

(E) 2 FT OF 3 IN P.DUCT

TO STRUCTURE

& REMOVE TYPE 2 CABINET (E)

(E) 2 FT OF 1½ IN. G.S. CONDUIT ATTACHED TO STRUCTURE

REMOVE TYPE 2 CABINET ATTACHED TO STRUCTURE

STANDARD INDUCTION LOOP CENTERED ON LANE 2

11 FT OF 1½ IN. G.S. CONDUIT IN TRENCH

11 FT OF 1¼ IN G.S. CONDUIT IN TRENCH

4 FT OF 1¼ G.S. CONDUIT ATTACHED TO STRUCTURE

INSTALL JUNCTION BOX TYPE J

OAKTON STREET

EDENS

EDENS

EAST

INSTALL JUNCTION BOX

(E) 4 FT OF 1½ IN. G.S. CONDUIT ATTACHED TO STRUCTURE

(E) 4 FT OF 1½ IN. G.S. CONDUIT ATTACHED TO STRUCTURE

FT OF 1½ IN G.S. CONDUIT IN TRENCH

FT OF 1½ IN G.S. CONDUIT IN TRENCH

NORTH ELEVATION

Note: INSTALL EXISTING SERVICE ON NEW POLE

SCHEDULE OF QUANTITIES

	SQ.YD.	BITUMINOUS CONC. SURFACE REMOVAL & REPLACEMENT
	LIN.FT.	G.S. CONDUIT PUSHED, 2 IN.
	LIN.FT.	G.S. CONDUIT PUSHED, 3 IN.
8	LIN.FT.	G.S. CONDUIT ATTACHED TO STRUCTURE, 1-1/4 IN.
	LIN.FT.	G.S. CONDUIT ATTACHED TO STRUCTURE, 2 IN.
	LIN.FT.	ELECTRICAL CABLE IN CONDUIT, NO. 4, 2/C
	LIN.FT.	ELECTRICAL CABLE IN CONDUIT, NO. 12, 2/C
320	LIN.FT.	ELECTRICAL CABLE IN CONDUIT, NO. 14, 2/C
	LIN.FT.	ELECTRICAL CABLE IN CONDUIT, NO. 19, 5/C
2946	LIN.FT.	ELECTRICAL CABLE IN CONDUIT, NO. 19, 10/C
	LIN.FT.	ELECTRICAL CABLE IN CONDUIT, NO. 2, 1/C
	LIN.FT.	ELECTRICAL CABLE IN CONDUIT, NO. 0, 1/C
	EACH	SERVICE INSTALLATION, TYPE C
	EACH	CONCRETE FOUNDATION, TYPE A
	EACH	CONCRETE FOUNDATION, TYPE D
	EACH	HANDHOLE
	EACH	HEAVY DUTY HANDHOLE
139	LIN.FT.	TRENCH AND BACKFILL
	EACH	TONE EQUIPMENT, 3 FREQUENCY TRANSMITTER
2	EACH	TONE EQUIPMENT, 3 FREQUENCY MINI-TRANSMITTER
	EACH	TONE EQUIPMENT, 3 FREQUENCY RECEIVER
	EACH	TONE EQUIPMENT, POWER SUPPLY
	EACH	TONE EQUIPMENT, MOUNTING FRAME
	EACH	TONE EQUIPMENT, HINGED SWING RACK ENCLOSURE
	EACH	INDUCTION LOOP DETECTOR, POWER SUPPLY
	EACH	INDUCTION LOOP DETECTOR, SENSOR UNIT
	EACH	DIGITAL LOOP DETECTOR, SENSOR UNIT (2 CHANNEL)
	EACH	DIGITAL LOOP DETECTOR, SENSOR UNIT (4 CHANNEL)
	LIN.FT.	POLYETHYLENE DUCT, 1-1/4 IN.
	LIN.FT.	POLYETHYLENE DUCT, 2 IN.
110	LIN.FT.	POLYETHYLENE DUCT, 3 IN.
	EACH	CABINET HOUSING EQUIP., E.S.P. 3
	EACH	LOOP TEST
	EACH	CABINET HOUSING EQUIP., PED. MOUNTED, E.S.P. 4
	EACH	CABINET HOUSING EQUIP., PED. MOUNTED, E.S.P.
	EACH	CABINET HOUSING EQUIP., POLE MOUNTED, E.S.P.
	EACH	CABINET HOUSING EQUIP., POLE MOUNTED, E.S.P.
	EACH	CABINET HOUSING EQUIP., ATTACHED TO STRUC., E.S.P.
1	EACH	CABINET HOUSING EQUIP., ATTACHED TO STRUC., E.S.P.
78	LIN.FT.	INDUCTION LOOP
	CU.YD.	REMOVE AND REPLACE PORTLAND CEMENT CONCRETE
	EACH	FLASHING BEACON AND FLASHER CONTROLLER
	EACH	STEP-DOWN TRANSFORMER
	EACH	TRAFFIC CONTROL SIGNAL HEAD AND PEDESTAL
	EACH	CABINET HOUSING EQUIPMENT, RELOCATION
2	EACH	CABINET HOUSING EQUIPMENT, REMOVAL
	EACH	UPRIGHT PEDESTAL SERVICE INSTALLATION
	LIN.FT.	G.S. CONDUIT IN TRENCH, 2 IN.
122	LIN.FT.	G.S. CONDUIT IN TRENCH, 3 IN.
1	EACH	JUNCTION BOX, TYPE J

LEGEND

- INDUCTION LOOP
- CABINET
- JUNCTION BOX
- PULL POINT
- SERVICE INSTALLATION
- HANDHOLE
- HEAVY DUTY HANDHOLE
- POLYETHYLENE DUCT
- CONDUIT
- FENCE
- GUARD RAIL
- FLASHER
- METERING SIGNAL LIGHT
- (E) EXISTING FACILITY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
CHICAGO AREA EXPRESSWAY SURVEILLANCE PROJECT

OAKTON STREET INSTALLATION

SECTION					TOTAL SHEETS	SHEET NO.
7 083 R						
ROUTE NO.	COUNTY	SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY
	COOK	NONE	4/78			

W & E CO. 10-9156