S-12

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Sheet No.	3A	Miscellaneous Quantities
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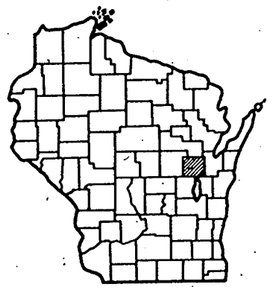
Sheet No.	5 - 5.4	Plan and Profile STA. 10+47 - STA. 143+00
Sheet No.	6 - 6.7	Standard Details
Sheet No.	—	Structure Plans
Sheet No.	—	Computer Earthwork Data
Sheet No.	8 - 8.30	Cross Sections

TOTAL SHEETS = 51



STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED

NEW LONDON - FREEDOM ROAD

WEST SECTION

C.T.H. "S"

OUTAGAMIE COUNTY

STATE PROJECT NUMBER

6038-1-71,.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6038-1-71	RS 0379(6)	1
6038-1-72	"	2

RECEIVED

JUL 7 - 1976

OUTAGAMIE COUNTY
HIGHWAY COMMISSION

"S" - 12

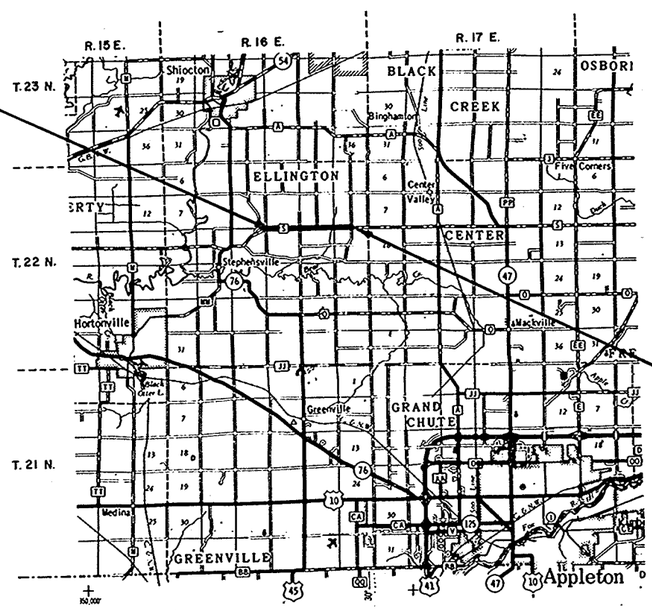
Scales
Plan 1 in. = 100 ft.
Profile Hor. 1 in. = 100 ft. Vert. 1 in. = 10 ft.
Cross Sections Hor. 1 in. = 5 ft. Vert. 1 in. = 5 ft.

Design Designation

A.D.T.	1976	= 600
A.D.T.	1996	= 920
D.H.V.		= 966
D.		= 50%
T.		= 5%
V.		= 50 M.P.H.

BEGINNING OF PROJECT 6038-1-71,72
STA. 10+47
N = 205,740
E = 2,377,400
47' E. OF THE S.W. COR. SEC. 10
T.22 N., R16E
= STA. 116+07.5 OF PROJ. S0379(5)

N



Layout
Scale 0 1 2 Miles

Total Net Length of Centerline = 2.510 Mi. RURAL

END OF PROJECT 6038-1-71,72
STA. 143+00
N = 205,820
E = 2,390,720
191.65' EAST OF THE SOUTH 1/4
CORNER OF SECTION 12, T.22 N, R16 E.

Conventional Signs

County Line		Culverts in Place	
Township or Range Line		Culverts Required	
Section Line		Drop Inlet	
New Right of Way Line		Power Pole	
Present Right of Way Line		Telephone or Telegraph Pole	
Wire Fence	x (type) x	Right of Way Markers	
Corporate or City Limits		Reference Stake for Hubs Only	+61.7
Property Line	P.L.	Marsh	25.9
Traveled Way or P.E.		Hedge	
Railroads		Trees	
Base or Survey Line		Ground Elevation	Datum Line 25
Caution Symbol (combustible fluids under pressure)	CAUTION	Grade Elevation	Datum Line 76.00

PROFESSIONAL ENGINEER

APPROVED FOR
COUNTY HIGHWAY COMMISSION OF
OUTAGAMIE COUNTY
12/30/75 Date
BY Signature of Official

ORIGINAL
PLANS PREPARED BY
RICE, AND ORTH, INC.
12/29/1975 Date
Signature

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
Surveyor
Designer
District Checker R.G.P.
C.O. Checker R.A.H.

Correct:
Date 2/4/76 District Engineer

Recommended for Approval:
Date 4/8/76 Chief of Facilities Development

Approved:
Date 4/9/76 State Highway Engineer

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 5 WISCONSIN DIVISION

Approved:
Date Division Engineer

Catalog No. 2120-0110

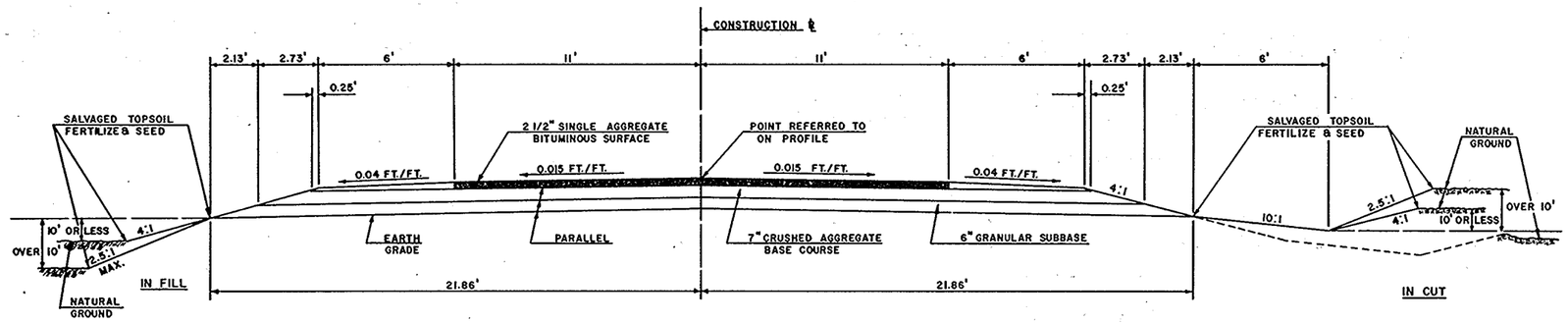
Proj. 1717-76 "S" West Section

"S" - 12

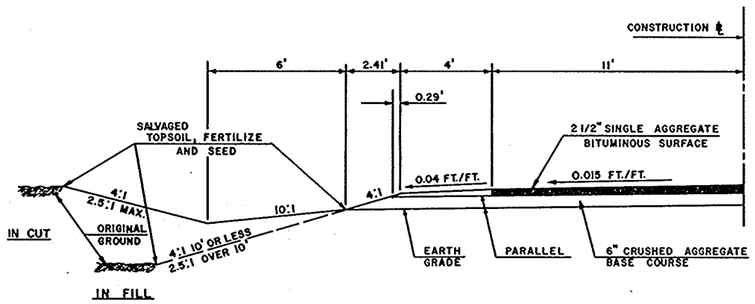
3/10/76

PROJECT DESIGNATION	SHEET NO.
6038-1-71,72	2

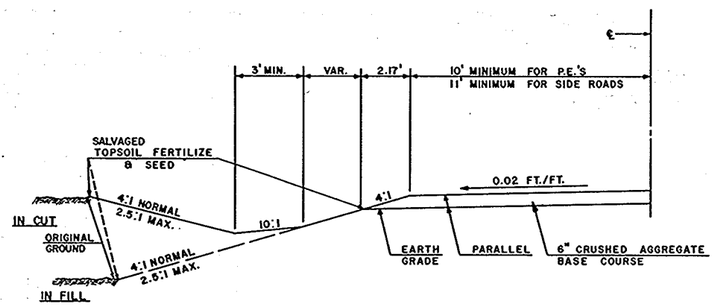
TYPICAL CROSS SECTIONS
FOR
C.T.H. "S" OUTAGAMIE COUNTY



TYPICAL SECTION



TYPICAL 1/2 CROSS SECTION FOR BITUMINOUS SIDE ROADS



TYPICAL 1/2 CROSS SECTION FOR PRIVATE ENTRANCES AND AGGREGATE SURFACE SIDE ROADS

GENERAL NOTES

ALL EXISTING CULVERT PIPES LOCATED ON THE PROJECT SHALL BE REMOVED, AND REPLACED AS SHOWN ON THE PLANS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

CUBIC YARDS OF FILL SHOWN ON THE PLAN SHEETS PERTAINS TO EMBANKMENT CONSTRUCTED FROM COMMON EXCAVATION WITH A SHRINKAGE OF 25% AND ROCK EXCAVATION WITH EXPANSION OF 5% BASED ON THE VOLUME OF THE FILL.

UTILITY COMPANIES SHALL ADJUST OR MOVE ALL PRIVATELY OWNED FACILITIES WHICH INTERFERE WITH THE NEW CONSTRUCTION.

THE EXACT LOCATION FOR PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

INLET AND DISCHARGE ELEVATIONS SHOWN ON THE PLAN SHEETS ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD. EXACT LOCATION OF THE MAINLINE AND PRIVATE ENTRANCE CULVERT PIPES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

SALVAGED TOPSOIL SHALL BE PLACED AS REQUIRED TO AN APPROXIMATE DEPTH OF 3 INCHES OR AS DIRECTED BY THE ENGINEER IN THE FIELD.

SEED MIXTURE NUMBER 1 SHALL BE USED.

WHEN THE QUANTITY OF THE ITEM OF CRUSHED AGGREGATE BASE COURSE OR BITUMINOUS SURFACE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

CERTAIN UNDERGROUND UTILITY STRUCTURES HAVE BEEN LOCATED ON THESE PLANS. THESE LOCATIONS SHALL NOT BE TAKEN AS CONCLUSIVE. VERIFICATION AS TO THE LOCATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITY STRUCTURES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT.

ALL INTERSECTIONS SHALL BE TYPE "C" EXCEPT AS NOTED.

ALL LANDMARK REFERENCE MONUMENTS TO BE TYPE "A"

BEARINGS SHOWN ON PLAN & PROFILE SHEETS ARE THE MAGNETIC BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE.

STANDARD DETAIL DRAWINGS

EROSION MAT	8E7-1
APRON ENDWALLS FOR CULVERT PIPE & PIPE ARCH	8F1-6
DESIGN DETAILS FOR SIDE ROAD AT-GRADE INTERSECTIONS	9A1-2
CLASS "A" STEEL PLATE BEAM GUARD	14B2-4a
CONSTRUCTION BARRICADE & STANDARD SIGNS	15C1-4
LANDMARK REFERENCE MONUMENTS	16A1-2
MARSH EXCAVATION	23A1-1

STANDARD ABBREVIATIONS

UNCL.	=	UNCLASSIFIED EXCAVATION	W.E.	=	WOODS ENTRANCE
C.	=	CUT	BIT. CONC.	=	BITUMINOUS CONCRETE PAVEMENT
F.	=	FILL	S.E.	=	SUPERELEVATION
M.E.	=	MARSH EXCAVATION	E.B.S.	=	EXCAVATION BELOW SUBGRADE
B.	=	BORROW	MON.	=	MONUMENT
C.P.	=	CULVERT PIPE	R.L.	=	REFERENCE LINE
R.C.	=	REINFORCED CONCRETE	℄	=	CENTERLINE
C.M.	=	CORRUGATED METAL	R.C.C.P.	=	REINFORCED CONCRETE CULVERT PIPE
P.O.T.	=	POINT ON TANGENT	C.M.C.P.	=	CORRUGATED METAL CULVERT PIPE
C.Y.	=	CUBIC YARD	CULT.	=	CULTIVATED
D.G.	=	DITCH GRADE	R/W	=	RIGHT OF WAY
V.C.	=	VERTICAL CURVE	P.L.	=	PROPERTY LINE
B.M.	=	BENCH MARK	INL.	=	INLET
P.E.	=	PRIVATE ENTRANCE	DIS.	=	DISCHARGE
F.E.	=	FIELD ENTRANCE	℄	=	REFERENCE LINE
			T.	=	TRANSIT LINE

UTILITIES LOCATED WITHIN THIS PROJECT

WISCONSIN-MICHIGAN POWER COMPANY
MR. O.R. BOLL 414-734-1411
807 SOUTH ONEIDA STREET
APPLETON, WISCONSIN 54911

WISCONSIN TELEPHONE COMPANY
MR. KENNETH ZULEGER 414-734-2634
221 WEST WASHINGTON ST.
APPLETON, WISCONSIN 54911

ESTIMATE OF QUANTITIES

6038-1-71 CONTRACT 1 – GRADE, SUBBASE & BASE COURSE (SHAPING & COMPACTING)

6038-1-72 CONTRACT 2 – BASE COURSE (PRODUCING & HAULING) S.A.B.S. (PRODUCING & HAULING)

STATE PROJECT NUMBER	SHEET NO.
6038-1-71,72	3

CONTRACT NO.	STATION TO STATION	ITEM NO. / UNIT	NET LENGTH OF CENTER LINE	CLEARING		GRUBBING		EXCAVATION			GRANULAR SUBBASE COURSE, 6-INCH		FINISHING ROADWAY	PRODUCING & HAULING CRUSHED AGGREGATE BASE COURSE	SHAPING & COMPACTING CRUSHED AGGREGATE BASE COURSE	PRODUCING & HAULING SINGLE AGGREGATE BITUMINOUS SURFACE	PLACING SINGLE AGGREGATE BITUMINOUS SURFACE	BITUMINOUS MATERIAL FOR SURFACE COURSE	CULVERT PIPE CLASS III				APRON ENDWALLS FOR CULVERT PIPE				ANCHORAGES FOR STEEL PLATE BEAM GUARD	STEEL PLATE BEAM GUARD, CLASS-A	LANDMARK REFERENCE MONUMENTS	SALVAGED TOPSOIL	MULCHING	EROSION MAT
																			18-INCH	24-INCH	30-INCH	36-INCH	18-INCH	24-INCH	30-INCH	36-INCH						
				20101	20102	20104	20105	20502	20501	20505	21220		21301	90001	90001	90002	90002	40602	52003	52005	52007	52009	52061	52063	52065	52067	61406	61408	62101	62505	62702	62802
				STA.	IN. DIA.	STA.	IN. DIA.	CU. YD.	CU. YD.	CU. YD.	SQ. YD.		L.S.	TON	TON	TON	TON	TON	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EACH	LIN. FT.	EACH	SQ. YD.	SQ. YD.	SQ. YD.
1	STA. 10+47 – STA. 143+00		13,252.98	15	189	15	189	4,990	44,635	767	61,240		1		24,080		5210		524	72	160	76	32	2	4	4	4	908	24	65,000	11,300	5,600
														24,080		5210		313													
2	STA. 10+47 – STA. 143+00		13,252.98																												
	PROJECT TOTALS		13,252.98	15	189	15	189	4,990	44,635	767	61,240		1	24,080	24,080	5,210	5,210	313	524	72	160	76	32	2	4	4	4	908	24	65,000	11,300	5,600

CONTRACT NO.	FERTILIZER	SEEDING	FIELD OFFICE, TYPE – "A"					
	62901	63002	64201					
	CWT.	LB.	L.S.					
1	42	877	1					
	42	877	1					

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

PROJECT DESIGNATION	SHEET NO.
6038-1-71,72	3A

CLEARING & GRUBBING

STATION TO STATION	CLEARING 16 DIA. STA.		GRUBBING 16 DIA. STA.	
10+00 - 26+00	32		32	
26+00 - 30+00		4		4
30+00 - 114+00	36		36	
114+00 - 122+00		8		8
122+00 - 129+00	14		14	
129+00 - 132+00		3		3
132+00 - 143+00	107		107	

GRANULAR SUBBASE COURSE, 6-INCH

	SQ. YD.
GRANULAR SUBBASE COURSE	61,240
TOTAL	61,240

CRUSHED AGGREGATE BASE COURSE

LOCATION	TONS
MAINLINE	23,070
SIDE ROADS & INTERSECTIONS	630
PRIVATE ENTRANCES & FIELD ENTRANCES	380

SINGLE AGGREGATE BITUMINOUS SURFACE

LOCATION	TONS
MAINLINE	4,780
SIDE ROADS & INTERSECTIONS	430

CROSS DRAIN & P.E. CULVERT PIPES

STATION	LOCATION	DIA. INCH	LENGTH LIN. FT.	TYPE	ENDWALLS
49+90	℄	2-30"	160'	C.P.	4
62+2270	MARKET RD. LT.	18"	48'	C.P.	2
81+00	℄	36"	48'	C.P.	2
88+78.64	THOMPSON RD. LT.	18"	56'	C.P.	2
89+00	P.E. RT.	36"	28'	C.P.	2
94+56	℄	24"	72'	C.P.	2
140+50	℄	18"	56'	C.P.	2
13 P.E.'S @ 18"X28'			364'	C.P.	26

STEEL PLATE BEAM GUARD - CLASS A

STATION - STATION	LOCATION	LIN.FT.	ANCHORAGES
STA. 24+00 - STA. 30+04	LT.	604	2
STA. 25+00 - STA. 28+04	RT.	304	2

LANDMARK REFERENCE MONUMENTS

STATION	LOCATION	DESCRIPTION	MONUMENTS REQUIRED
STA. 10+00	SURVEY ℄	S.W. CORNER SECTION 10	4
STA. 37+46.80	SURVEY ℄	S. 1/4 CORNER SECTION 10	4
STA. 62+27.72	SURVEY ℄	S.W. CORNER SECTION 11	4
STA. 88+78.57	SURVEY ℄	S. 1/4 CORNER SECTION 11	4
STA. 114+93.21	SURVEY ℄	S.W. CORNER SECTION 12	4
STA. 141+08.35	SURVEY ℄	S. 1/4 CORNER SECTION 12	4

MULCHING

STATION TO STATION	LOCATION	SQ. YD.
13+00 - 17+00	RT.	1300
24+00 - 28+00	LT & RT.	3300
28+00 - 50+00	LT.	1000
54+00 - 56+00	LT.	600
97+50 - 99+00	RT.	400
99+00 - 104+00	LT & RT.	2200
133+00 - 136+00	LT & RT.	1600
136+00 - 139+00	LT.	900

EROSION MAT

STATION TO STATION	LOCATION	SQ. YD.
10+47 - 14+00	LT. & RT.	600
30+00 - 34+00	LT. & RT.	700
60+00 - 63+00	LT.	200
63+00 - 78+00	LT. & RT.	2600
96+00 - 97+50	RT.	150
96+50 - 98+00	LT.	150
126+00 - 133+00	LT. & RT.	1200

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	ACRES REQUIRED
1	4.1	MANNING H. NELSON	FEE	0.41
2	4.1	NILES E. KETTNER	FEE	3.12
3	4.1	CLEMENT KELLY & WIFE	FEE	0.73
4	4.1	ANTHONY W. GASCHLER & WIFE	FEE	0.07
5	4.1 4.2 4.3	WIS-MICHIGAN POWER CO.	RELEASE OF RIGHTS	—
6	4.1	MERLYN J. KETTNER & WIFE	FEE	0.46

LEGEND
* ------ POWER POLES ------ (5)

N

REVISION DATE		PROJECT I.D. 6038-1-00	SHEET NUMBER	TOTAL SHEETS
		FEDERAL PROJECT DESIGNATION	4.1	

PLAT OF RIGHT OF WAY REQUIRED
C.T.H. "S" OUTAGAMIE, COUNTY

SCALE 0 200 400 Ft. DATE

Const. Project 6038-1-71 4

TOWN OF ELLINGTON

SW—SW | SE—SW | SW—SE | SE—SE

NW—NW | NE—NW | NW—NE | NE—NE

KELLY ROAD 10+00.00 N.01°01' W.

MARKET ROAD 62+27.70 N.92°01' W.

BEGIN PROJECT 6038-1-00 STA. 10+47

T. 22 N. R. 16 E. (9, 10, 16, 15)

MANNING H. NELSON (1)

CLEMENT KELLY & WIFE (3)

ANTHONY W. GASCHLER & WIFE (4)

KENNETH FISCHER

MERLYN J. KETTNER & WIFE (6)

NILES E. KETTNER (2)

T. 22 N. R. 16 E. (10, 11, 15, 14)

P.L. 660'

P.L. 24+17

P.L. 37+46.63

42.35'

P.C.=35+22.46

P.T.=39+70.79

P.C.=57+89.87

CURVE 1
L=352.32'
LC=352.31'
LCB=N 89°52'32"E
R=22877.06'

CURVE 2
L=358.91'
LC=358.90'
LCB=N 89°52'08"E
R=22963.31'

CONST. R.L.
P.O.T.=34+82.36

CONST. R.L.
P.O.T.=55+83.24

S. 89°41' E.

N. 89°12' E.

C.T.H. S

S. 01°01' E.

PI = 37+46.63
I = 178°-52'-45"
Δ = 1°-07'-15"
D = 0°-15'
T = 224.17'
L = 448.33'
E = 1.10'
R = 22918.31'

P.T = 62+27.70
I. = 182°-11'-20"
Δ = 2°-11'-20"
D = 0°-15'
T = 437.83'
L = 875.56'
E = 4.18'
R = 22918.31'

NOTE:
BEARINGS SHOWN ON THIS PLAT ARE THE MAGNETIC BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE

LINE SHIFT DIAGRAM

NOT TO SCALE

SURVEY ℄
P.I. =10+00
S.W. COR.
SEC. 10

CONST. R.L.
P.I. =10+00

SURVEY ℄
P.O.T. =34+82.35

CONST. R.L.
P.O.T. =34+82.36

SURVEY ℄
P.I. = 37+46.80
I = 181°17' 35"
S.1/4 COR.
SEC. 10

P.C. CONST. R.L. 35+22.46

P.I. CONST. R.L. I 178°52' 45"

P.T. CONST. R.L. 39+70.79

7.46'

224.17'

224.17'

8.25'

8.25'

90°

90°

SURVEY ℄
P.O.T. = 55+83.42

P.C. CONST. R.L. 57+83.87

437.83'

CONST. R.L.
P.O.T. = 55+83.24

8.252'

SURVEY ℄
P.I.=62+27.72
I = 177°48' 40"
SE COR.
SEC. 10

91°05' 40"

P.I. CONST. R.L.
I = 182° 11' 20"

Catalog No. 2130-C175

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	ACRES REQUIRED
5	4.1 4.2 4.3	WIS-MICHIGAN POWER CO.	RELEASE OF RIGHTS	—
7	4.2 4.3	WISCONSIN TELEPHONE CO.	RELEASE OF RIGHTS	—
8	4.2	RONALD VOIGHT & WIFE STANLEY VOIGHT & WIFE	FEE	0.13
9	4.2	EDWARD A. RATHSACK & WIFE	FEE	0.83
10	4.2	EDWARD A. BAUM & WIFE	FEE	0.03
11	4.2	ROBERT J. NUSSBAUM & WIFE	FEE	1.60
12	4.2	LEWIS E. BAIRD & WIFE	FEE	0.30..
13	4.2	JOHN NUSSBAUM	FEE	0.11
14	4.2	PAUL G. JOHNSON & WIFE	FEE	0.24
15	4.2	WILLIAM J. DOBRINSKA & WIFE	FEE	0.88

LEGEND

POWER POLE ⑤

N

REVISION DATE		PROJECT I. D. 6038-1-00	SHEET NUMBER	TOTAL SHEETS
		FEDERAL PROJECT DESIGNATION	4.2	

PLAT OF RIGHT OF WAY REQUIRED
C.T.H. "S" OUTAGAMIE COUNTY.

SCALE 0 200 400 Ft. DATE

Const. Project 6038-1-71 4.1

TOWN OF ELLINGTON

SW-SW | SE-SW | SW-SE | SE-SE

MARKET ROAD 62+27.70 — N 02°01' W

P.T. = 66+65.43

RONALD VOIGHT & WIFE STANLEY VOIGHT & WIFE ⑧

EDWARD A. BAUM & WIFE ⑩

P.L. 75+52

THOMPSON ROAD 89+78.66 — N 01°52' W

LEWIS E. BAIRD & WIFE ⑫

P.L.

PAUL G. JOHNSON & WIFE ⑭

P.L. 114+93.31

CURVE 3
L=362.83'
LC=362.83'
LCB=N 88°35'16"E
R=22868.31'

T 22 N, R 16 E: 10 11 15 14 — T 22 N, R 16 E: 11 14 — T 22 N, R 16 E: 11 12 14 13

C.T.H. 'S'

N 88°08' E — N 87°39' E

CONST. R.L. P.I. = 88+78.64 I = 180° 29' 20"

CONST. R.L. P.O.T. = 98+94.41

CONST. R.L. P.I. = 114+93.31 I = 179° 17' 11"

CURVE 4
L=368.68'
LC=368.67'
LCB=N 88°35'35"E
R=22973.31'

EDWARD A. RATHSACK & WIFE ⑨

ROBERT J. NUSSBAUM & WIFE ⑪

JOHN NUSSBAUM ⑬

WILLIAM J. DOBRINSKA & WIFE ⑮

MARKET ROAD 62+27.70 — S 01°01' E

NW-NW | NE-NW | NW-NE | NE-NE

P.I = 62+27.70
I. =182°-11'-20"
Δ = 2°-11'-20"
D = 0°-15'
T = 437.83'
L = 875.56'
E = 4.18'
R = 22918.31'

LINE SHIFT DIAGRAM

NOT TO SCALE

NOTE:
BEARINGS SHOWN ON THIS PLAT ARE THE MAGNETIC BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE

Catalog No. 2130-C175

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	ACRES REQUIRED
7	4.2 4.3	WISCONSIN TELEPHONE CO.	RELEASE OF RIGHTS	
16	4.3	HAROLD ORT & WIFE	FEE	0.83
17	4.3	RAYMOND ORT & WIFE	FEE	0.30
18	4.3	CHARLES McCANDLESS & WIFE	FEE	0.43
19	4.3	KENNETH G. SIMON & WIFE	FEE	0.07
20	4.3	GERALD ORT & WIFE	FEE	0.04
5	4.1 42 4.3	WIS-MICHIGAN POWER CO.	RELEASE OF RIGHTS	—

REVISION DATE	PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
	6038-1-00		
	FEDERAL PROJECT DESIGNATION	4.3	

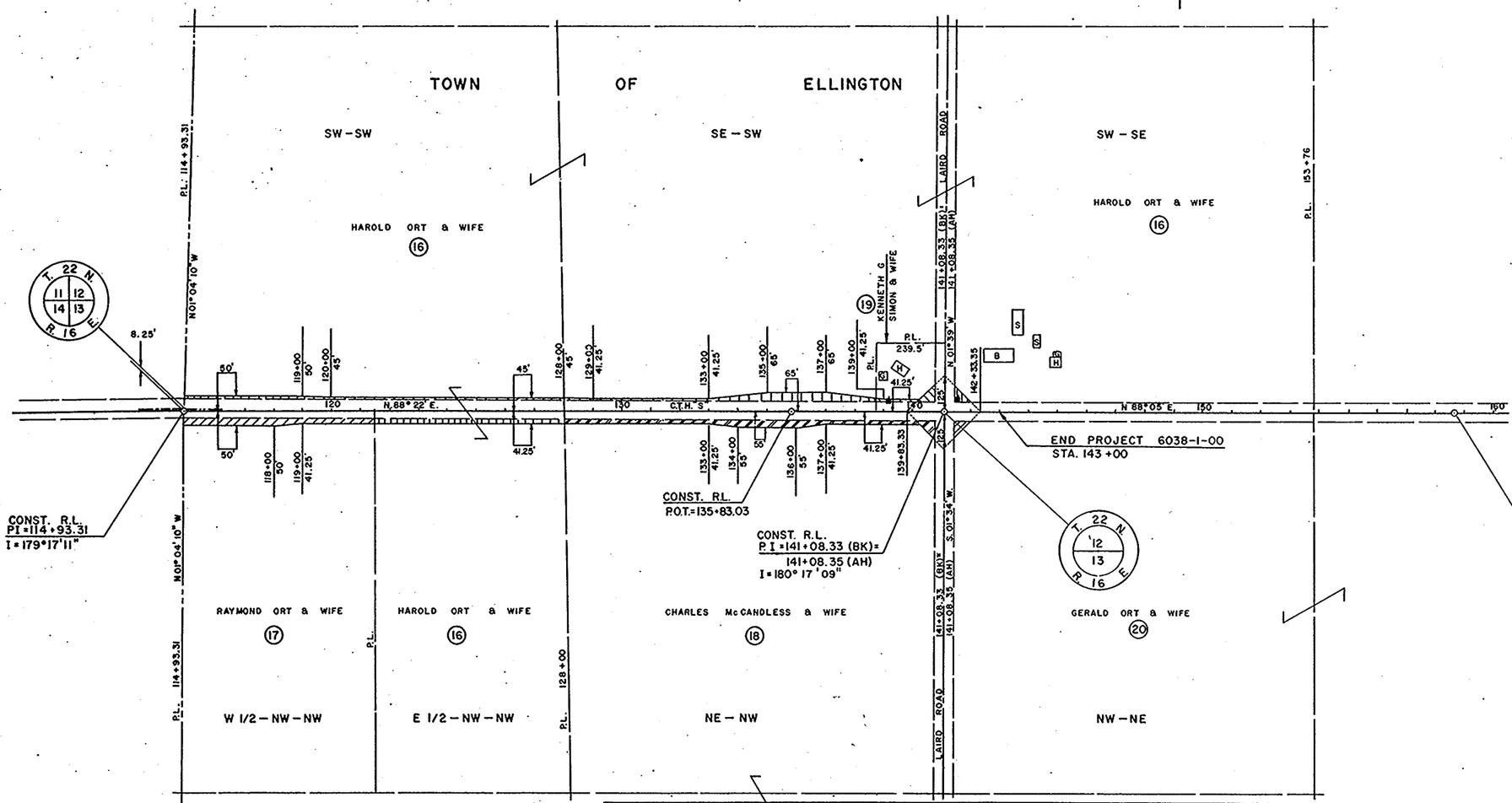
PLAT OF RIGHT OF WAY REQUIRED
C.T.H. "S" OUTAGAMIE COUNTY

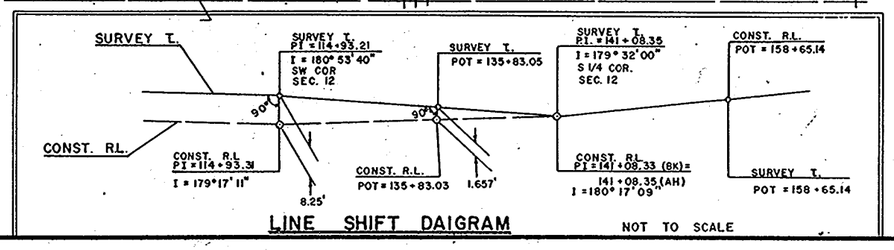
SCALE 0 200 400 Ft. DATE

Const. Project 6038-1-71 4.2

N

LEGEND
POWER POLES (5)





LINE SHIFT DAIGRAM NOT TO SCALE

NOTE:
BEARINGS SHOWN ON THIS PLAT ARE THE MAGNETIC BEARINGS OF EACH TANGENT TO THE NEAREST MINUTE

STATE PROJECT NUMBER	SHEET NO.
6038-1-71,72	5

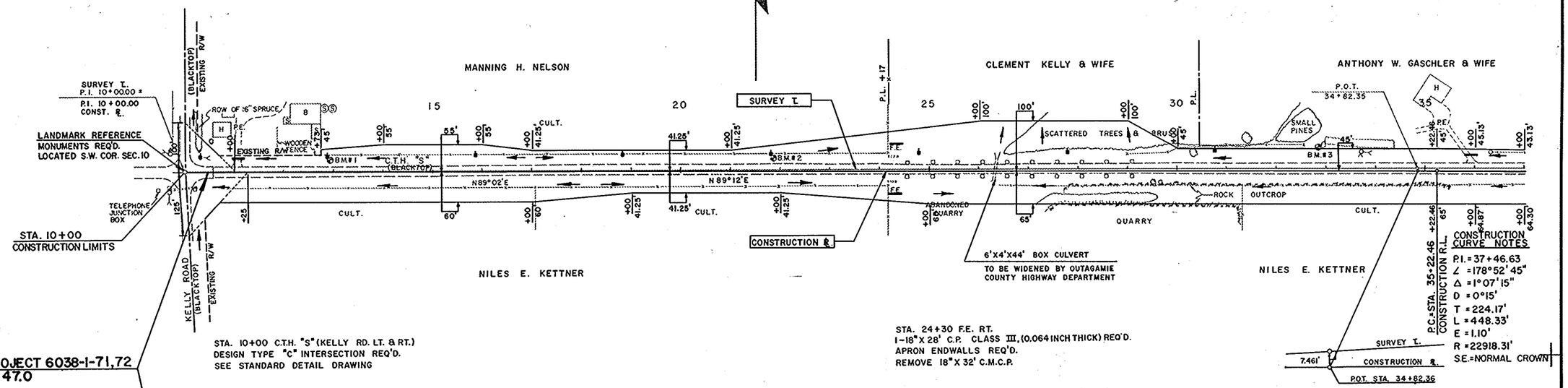
BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
1	12+85	SPIKE IN POWER POLE	33' LT.	827.01
2	21+80	SPIKE IN POWER POLE	33' LT.	831.03
3	32+95	SPIKE IN 8" ELM	45' LT.	877.19

STA. 11+05 P.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 18"X20' C.M.C.P.

STA. 24+30 F.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 16"X20' C.M.C.P.

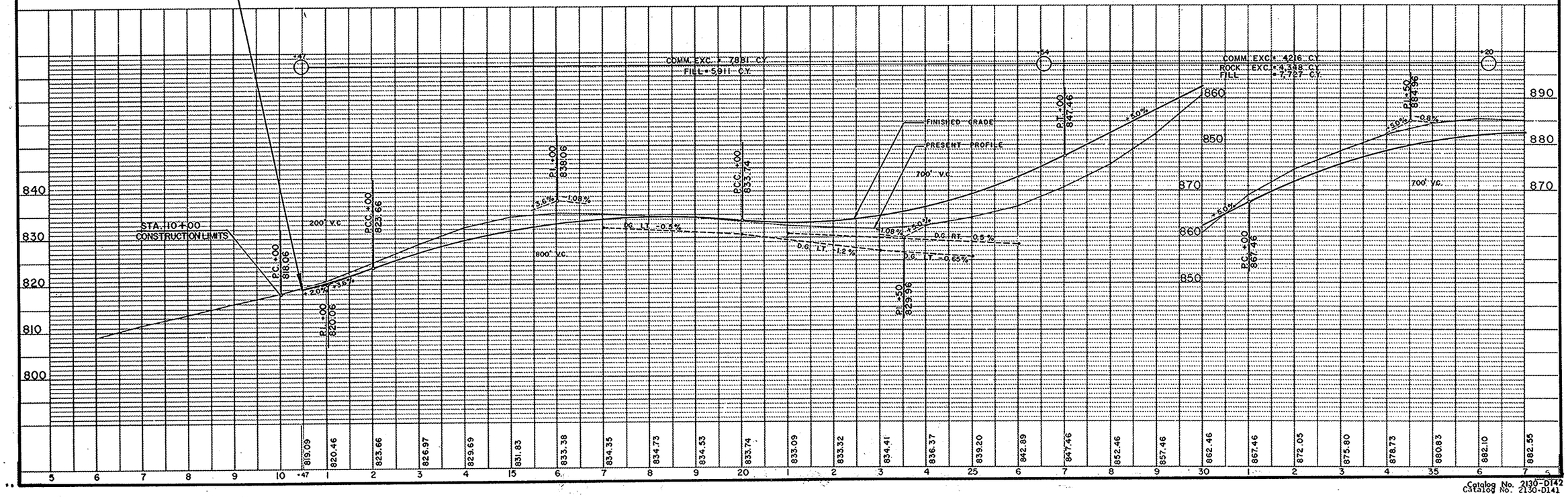
STA. 36+00 P.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.



STA. 10+00 C.T.H. "S" (KELLY RD. LT. & RT.)
DESIGN TYPE "C" INTERSECTION REQ'D.
SEE STANDARD DETAIL DRAWING

STA. 24+30 F.E. RT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 18"X32' C.M.C.P.

BEGIN PROJECT 6038-1-71,72
STA. 10+47.0



Catalog No. 2130-0142
Catalog No. 2130-0141

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
4	41+55	SPIKE IN POWER POLE	33' LT.	876.48
5	51+50	SPIKE IN POWER POLE	33' LT.	864.96
6	64+80	SPIKE IN POWER POLE	33' LT.	849.63

STATE PROJECT NUMBER	SHEET NO.
6038-1-71,72	5.1

STA. 36+00 P.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.

STA. 43+25 P.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 18"X20' C.M.C.P.

STA. 56+50 P.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 18"X20' C.M.C.P.

STA. 62+27.70 (MARKET RD. LT.)
1-18"X48' C.P. CLASS III, (0.064 IN. THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 18"X28' C.M.C.P.

ANTHONY W. GASCHLER & WIFE

KENNETH FISCHER

MERLYN J. KETTNER & WIFE

NILES E. KETTNER

RONALD VOIGHT & WIFE
STANLEY VOIGHT & WIFE

EDWARD A. RATHSACK & WIFE

SURVEY P.I. 37+46.80
∠ = 181°17'35"

LANDMARK REFERENCE
MONUMENTS REQ'D.
LOCATED S 1/4 COR. SEC. 10

P.L. + 46.63

P.L. + 71

SURVEY ℄

CONSTRUCTION ℄

C.T.H. "S" (BLACKTOP)

S 89°41' E

B.M. #4

B.M. #5

B.M. #6

TELEPHONE JUNCTION BOX

P.E.

CULT.

EXISTING R/W

SURVEY P.O.T. 55+83.42

CONSTR. P.O.T. 55+83.24

P.C. = STA. 57+99.87

SURVEY P.I. 62+27.72
∠ = 177°48'40"

LANDMARK REFERENCE
MONUMENTS REQ'D.
LOCATED S.W. COR. SEC. 11

16"X20' C.M.C.P. (REMOVE)

P.T. = STA. 66+65.43
CONSTRUCTION R.L.

EXISTING R/W MARKET ROAD (BLACKTOP)

P.C. = STA. 35+22.46
CONSTRUCTION R.L.

P.T. = STA. 39+70.79
CONSTR. R.L.

CONSTRUCTION CURVE NOTES

P.I. = 37+46.63
∠ = 178°-52'-45"
Δ = 1°-07'-15"
D = 0°-15'
T = 224.17'
L = 448.33'
E = 1.10'
R = 22918.31'
S.E. = NORMAL CROWN

CONSTRUCTION CURVE NOTES

P.I. = 62+27.70
∠ = 182°-11'-20"
Δ = 2°-11'-20"
D = 0°-15'
T = 437.83'
L = 875.56'
E = 4.18'
R = 22918.31'
S.E. = NORMAL CROWN

P.I. (CONSTR.) STA. 37+46.63

P.I. (CONSTR.) STA. 62+27.70

91°05'40"

STA. 62+27.70 C.T.H. "S" (MARKET RD. LT. & RT.)
DESIGN TYPE "C" INTERSECTION REQ'D.
SEE STANDARD DETAIL DRAWING

COMM. EXC. = 2,033 C.Y.
ROCK EXC. = 642 C.Y.
FILL = 2,199 C.Y.

COMM. EXC. = 6,957 C.Y.
FILL = 5,218 C.Y.

700' V.C.

500' V.C.

PRESENT PROFILE

FINISHED GRADE

0.8%

2.8%

O.G. RT. +0.3%

O.G. LT. +0.3%

O.G. LT. +1.7%

O.G. RT. +2.2%

STA. 49+90
2-30" x 80' C.P. CLASS III, (0.079 INCH THICK) REQ'D
INL. 864.00 DIS. 863.5
APRON ENDWALLS REQ'D.
REMOVE 2-30" x 34' CMCP's

PROFILES ON MARKET RD. STA. 62+27.70 LT. & RT.

NORTH

CONSTRUCTION ℄

1.5%

5%

PRESENT PROFILE

FINISHED GRADE

855.8
854.8
855.18
854.8
853.2

300' 200' 100' 25' 0 25' 100' 200' 300'

P.I. = 885.50

P.C. = 867.76

P.T. = 855.76

BENCH MARKS

NO.	STATION	DESCRIPTION		ELEV.
7	75+50	SPIKE IN 24" ELM	70' RT.	816.89
8	88+65	SPIKE IN POWER POLE	140' RT.	803.54

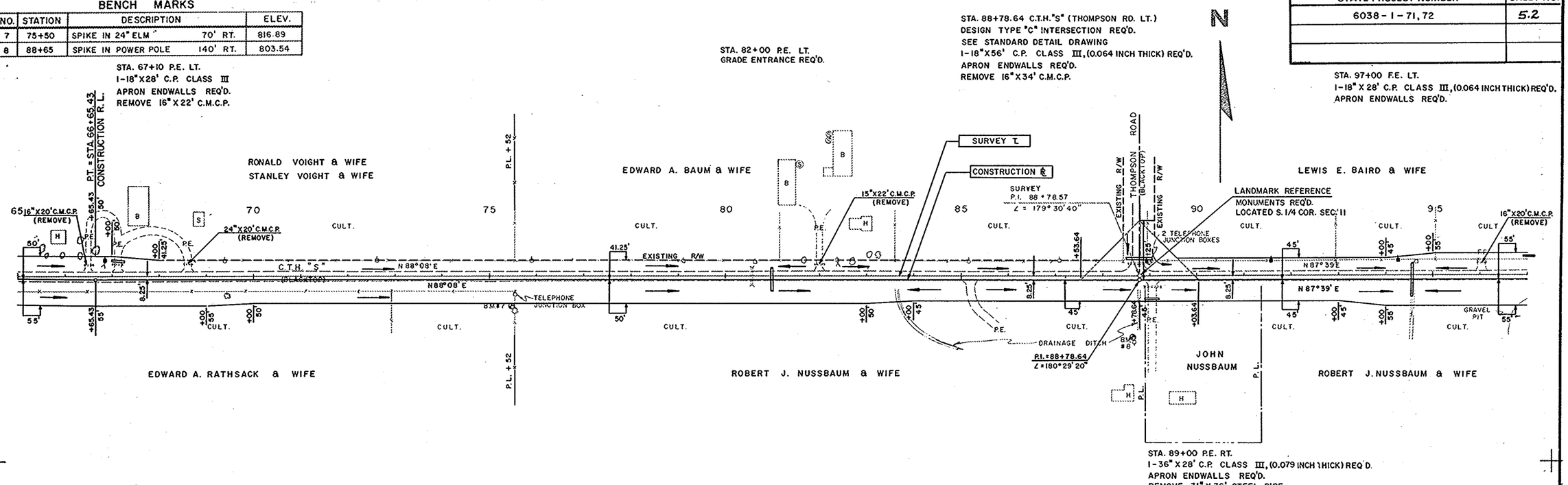
STATE PROJECT NUMBER	SHEET NO.
6038 - 1 - 71, 72	5.2

STA. 67+10 P.E. LT.
1-18"X28' C.P. CLASS III
APRON ENDWALLS REQ'D.
REMOVE 16"X22' C.M.C.P.

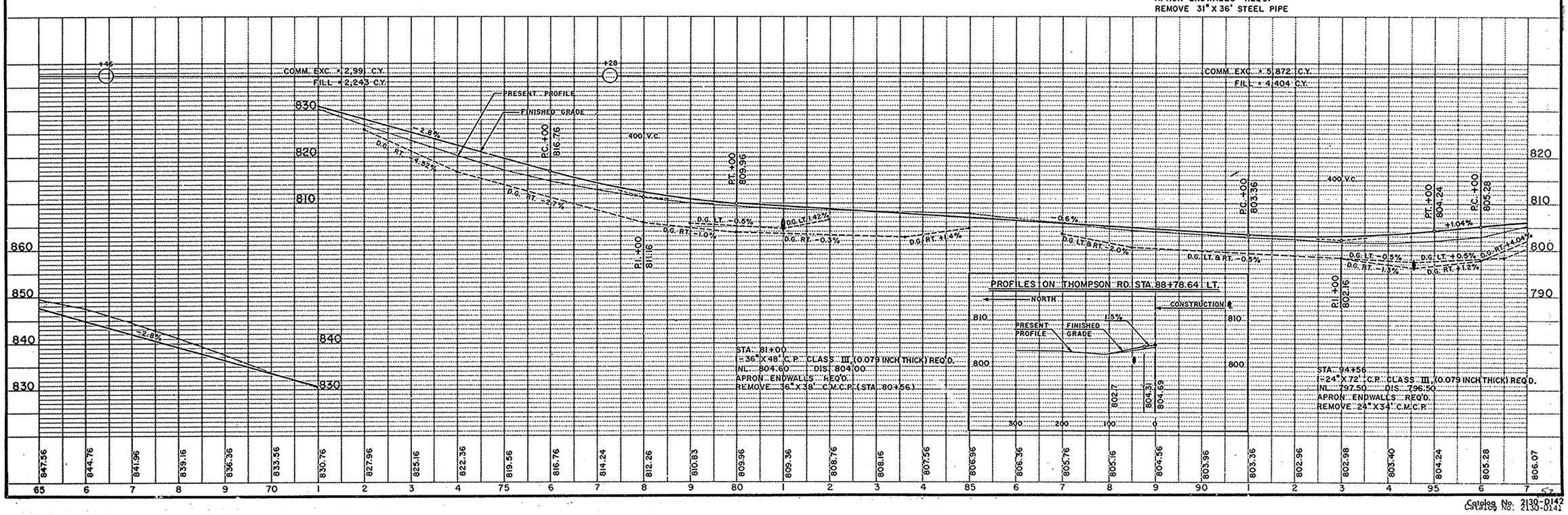
STA. 82+00 P.E. LT.
GRADE ENTRANCE REQ'D.

STA. 88+78.64 C.T.H."S" (THOMPSON RD. LT.)
DESIGN TYPE "C" INTERSECTION REQ'D.
SEE STANDARD DETAIL DRAWING
1-18"X56' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 16"X34' C.M.C.P.

STA. 97+00 P.E. LT.
1-18"X 28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.



STA. 89+00 P.E. RT.
1-36" X 28' C.P. CLASS III, (0.079 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 31" X 36' STEEL PIPE



BENCH MARKS

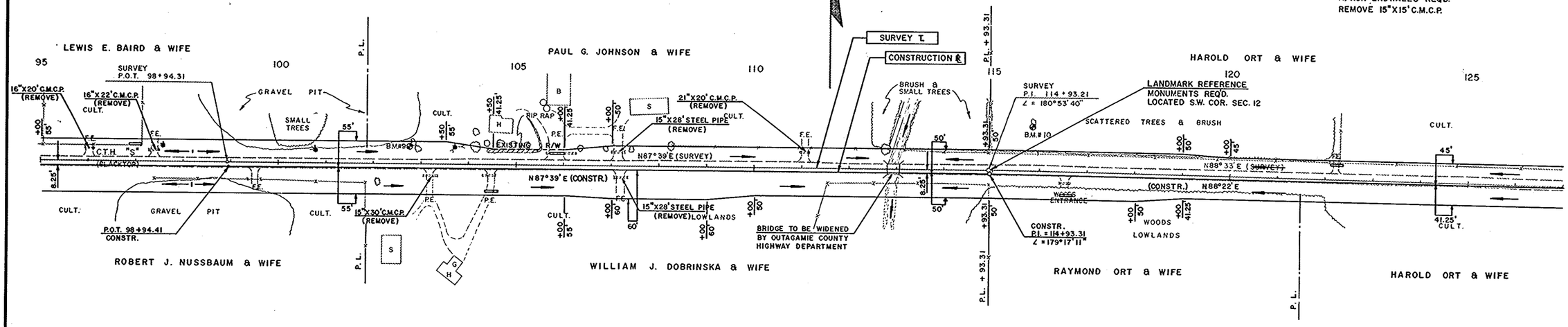
NO.	STATION	DESCRIPTION	ELEV.
9	102+85	SPIKE IN 10" TREE 45' LT.	805.27
10	115+85	SPIKE IN 24" BOX ELDER 100' LT.	778.10

STATE PROJECT NUMBER	SHEET NO.
6038-1-71,72	5.3

STA. 97+00 F.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.

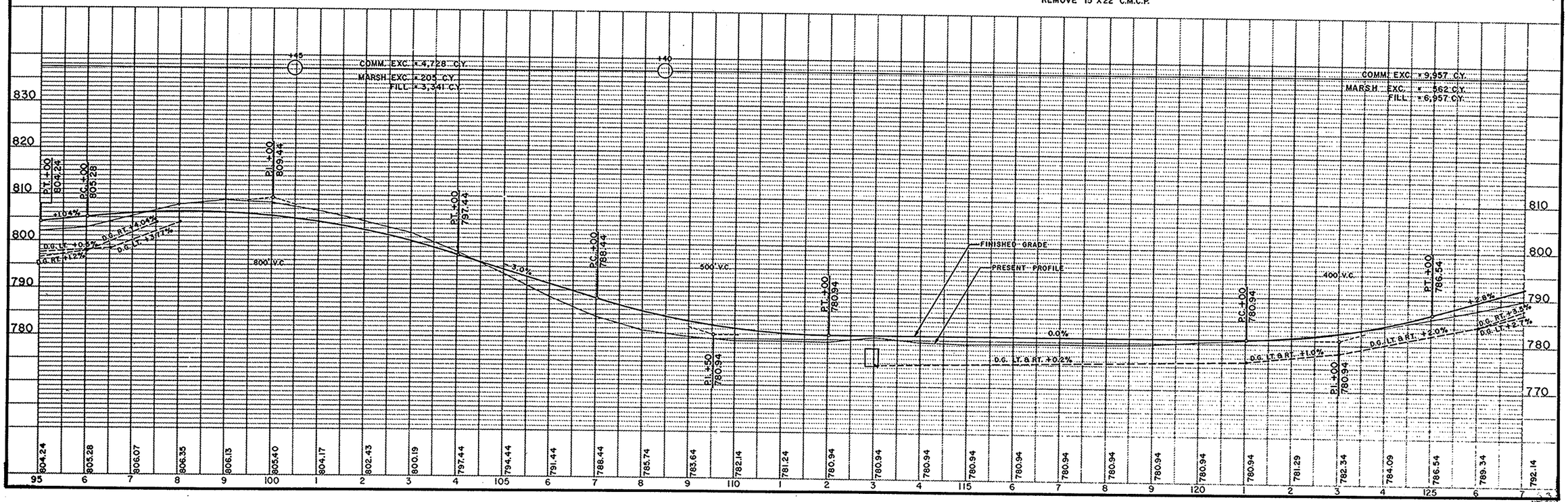
STA. 105+80 P.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 15"X64' C.M.C.P.

STA. 122+20 F.E. LT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 15"X15' C.M.C.P.



STA. 104+50 P.E. RT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 15"X28' C.M.C.P.

STA. 116+50 W.E. RT.
1-18"X28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 15"X22' C.M.C.P.



BENCH MARKS			
NO.	STATION	DESCRIPTION	ELEV.
11	127+95	SPIKE IN 18" MAPLE 80' RT.	793.98
12	136+20	SPIKE IN 10" ELM 100' RT.	813.66

STATE PROJECT NUMBER	SHEET NO.
6038 - 1 - 71, 72	5.4

STA. 141 +08 C.T.H. "S" (LAIRD RD. LT. & RT.)
DESIGN TYPE "C" INTERSECTION REQ'D.
SEE STANDARD DETAIL DRAWING

N

KENNETH G. SIMON & WIFE

HAROLD ORT & WIFE

HAROLD ORT & WIFE

SURVEY ℄
CONSTRUCTION ℄

EQUATION

SURVEY P.O.T. 135 + 83.05

P.I. = 141+08.33 BK. ∠ = 179° 32'00" SURVEY ℄
P.I. = 141+08.35 AH. ∠ = 179° 42'51" CONSTRUCTION ℄

P.L. 138+68.38

TELEPHONE JUNCTION BOX

LANDMARK REFERENCE MONUMENTS REQ'D. LOCATED S. 1/4 COR. SEC. 12

SURVEY ℄ & CONSTRUCTION ℄

FARM YARD

P.E.

EXISTING R/W N 88°05' E.

EXISTING R/W

TELEPHONE JUNCTION BOX

EXISTING R/W (BLACKTOP)

EXISTING R/W

125 130 135 140 145

C.T.H. "S" (BLACKTOP)

(SURVEY) N88°33'E

(CONSTR.) N88°22'E

CULT.

15"X20' C.M.C.P. (REMOVE)

15"X29' R.C.C.P. (REMOVE)

15"X20' C.M.C.P. (REMOVE)

15"X20' C.M.C.P. (REMOVE)

TREES & BRUSH

BM.# 11

BM.# 12

HAROLD ORT & WIFE

CHARLES MC CANDLESS & WIFE

GERALD ORT & WIFE

P.L. 120+00

SURVEY ℄
CONSTRUCTION ℄
1.657'
P.O.T. 135 + 83.03

LAIRD ROAD (BLACKTOP)

EXISTING R/W

EXISTING R/W

END PROJECT 6038-1-71,72
STA. 143+00

STA. 127+85 F.E. RT.
1-18" X 28' C.P. CLASS III, (0.064 INCH THICK) REQ'D.
APRON ENDWALLS REQ'D.
REMOVE 15"X20' C.M.C.P.

STA. 136+30 F.E. RT.
GRADE ENTRANCE REQ'D.

PRESENT PROFILE
FINISHED GRADE
P.I. +50 815.94
P.C.C. +00 806.94
P.C. +00 803.34
MEET EXISTING +00 804.49
P.I. +80 799.34
900' V.C.
-2.0%
-2.08%
+2.8%
-2.06%
B.T. +00 786.34
D.C. LT. & RT. +2.0%
D.C. LT. +2.1%
D.C. RT. +3.0%
D.C. RT. +3.88%
D.C. LT. +5.9%
D.C. LT. +6.82%

PROFILES ON LAIRD RD. STA. 141+08.33 LT. & RT.
NORTH
CONSTRUCTION ℄
1.5%
1.5%
FINISHED GRADE
PRESENT PROFILE
806.21
804.86
805.24
804.86
802.21
300' 200' 100' 25' 0 25' 100' 200' 300'

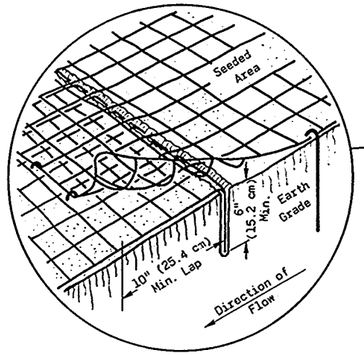
STA. 140+50
1-18" X 56' C.P. CLASS III (0.064 INCH TH(CK) REQ'D.
INL. 803.00 DIS. 802.5
APRON ENDWALLS REQ'D.
REMOVE 15"X40' C.M.C.P.

820 810 800 790 780 770 830 820 810 800 790

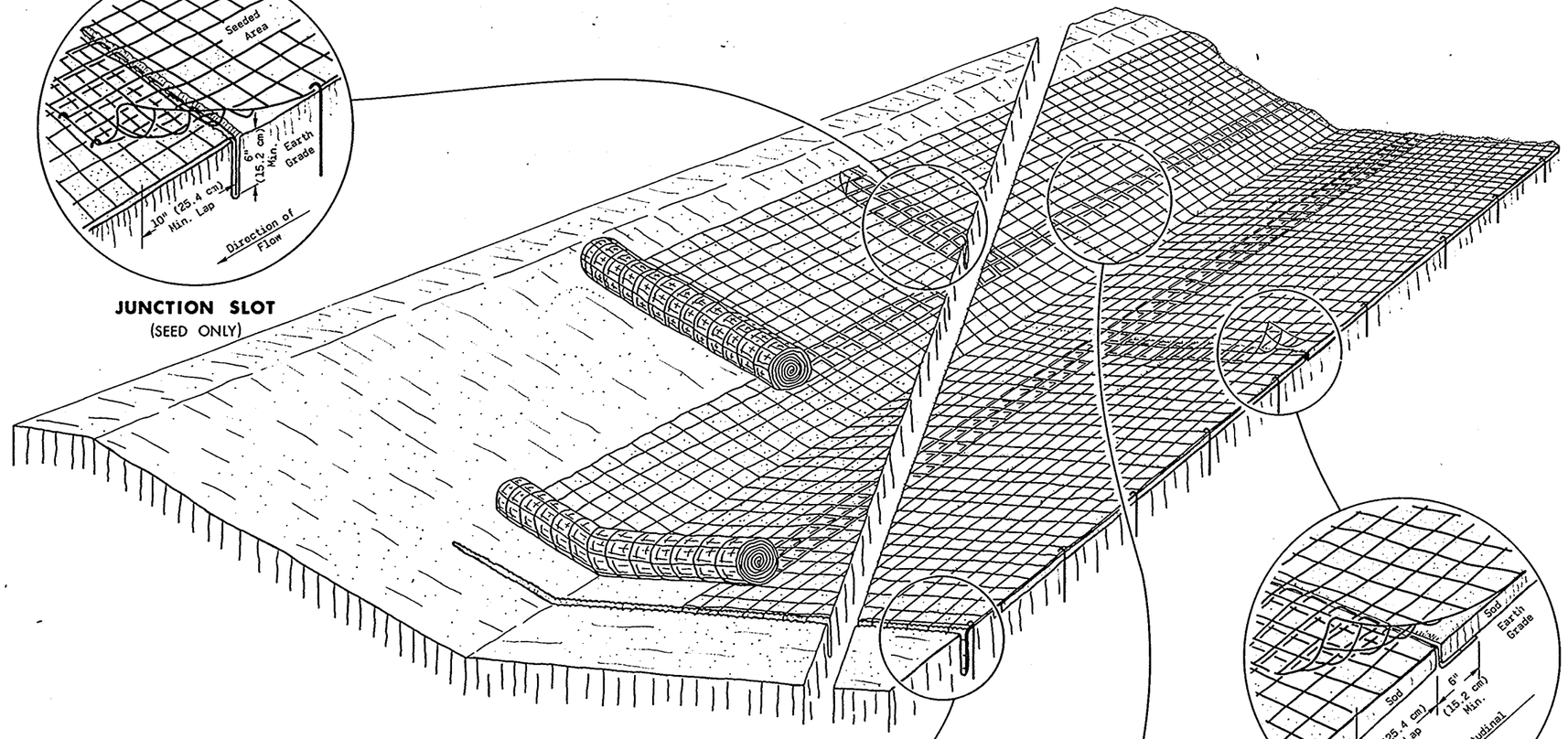
786.34 789.34 792.14 794.94 797.74 800.54 803.34 805.87 807.87 809.34 810.27 810.67 810.54 809.87 808.67 806.94 805.35 804.32 804.49

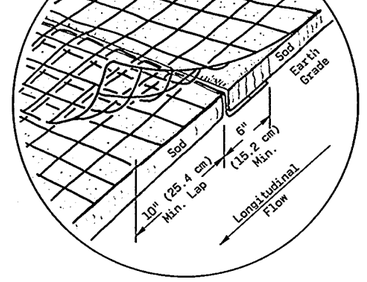
125 6 7 8 9 130 1 2 3 4 135 6 7 8 9 140 1 2 3 4 145

54

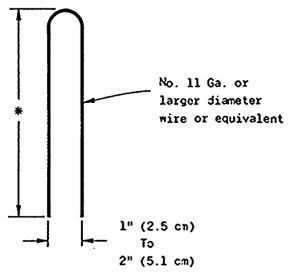


JUNCTION SLOT
(SEED ONLY)



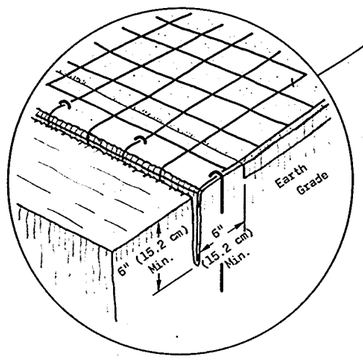


JUNCTION SLOT
(SOD ONLY)

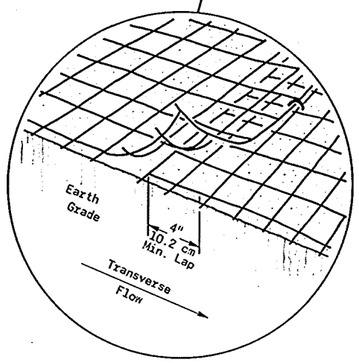


DETAIL OF TYPICAL STAPLE

*6" (15.2 cm) Min for firm soils
12" (30.5 cm) Min for loose soils
8" (20.3 cm) Min. where both sod and mats are being used.



ANCHOR SLOT
AT BEGINNING AND END OF EROSION MAT
(SEED AND SOD)



LAP JOINT
(SEED AND SOD)

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Variations in the dimensions or materials shown hereon shall be permitted if they provide equivalent protection and material strength and if prior approval of the Engineer is obtained.

Lap Joints shall not be placed in the botton of V-shaped ditches.

Junction Slots on adjacent strips of Matting shall be staggered a minimum of 4 feet (1.219 m) apart.

Edges of the Erosion Mat shall be impressed in the soil.

Erosion Mat shall be measured and payed for in accordance with the Standard Specifications.

EROSION MAT OVER SOD

a. Only Jute Fabric will be permitted over sod.
b. Wood Stakes for Sod may be omitted by the Engineer if the existing slope and soil conditions so warrant.
c. The width of Erosion Mat shall always equal the Sod width.
d. Sod strips may be placed either longitudinally or transversely to the flow line of the Ditch.

EROSION MAT OVER SEEDING

Junction or Anchor Slots shall be at minimum intervals of 100 feet (30.48 m) on grades up to and including 3 percent, and 50 feet (15.24 m) on grades exceeding 3 percent.

METHOD OF DIMENSIONING
1'-0" (30.5 cm)
1'-0" (30.5 cm)
BASIS: 1 In. = EXACTLY 25.4 mm

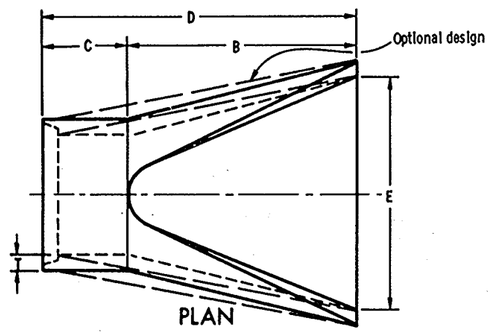
EROSION MAT

State of Wisconsin
Department of Transportation
Division of Highways

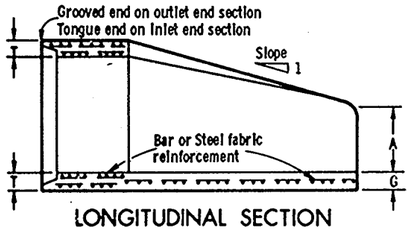
RECOMMENDED FOR APPROVAL:
12-3-73 DATE — CHIEF OF FACILITIES DEVELOPMENT
APPROVED
1-15-74 DATE — STATE HIGHWAY ENGINEER

S.D.D. 8E7-1

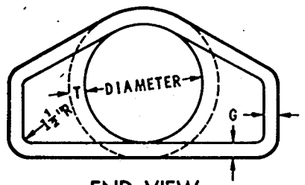
S.D.D. 8E7-1



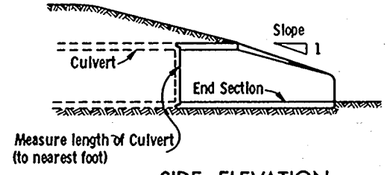
PLAN



LONGITUDINAL SECTION



END VIEW

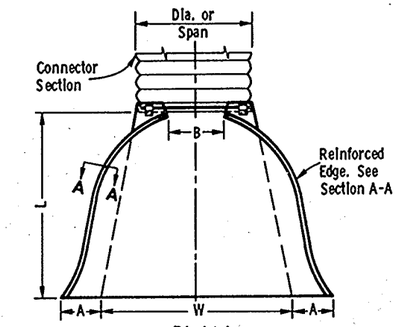


SIDE ELEVATION

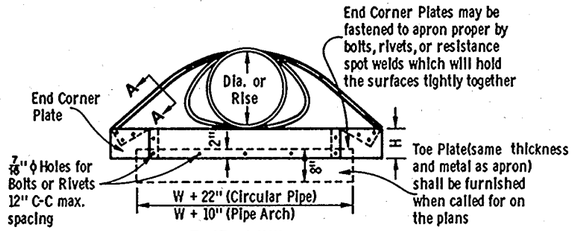
DIA.	APPROX. WEIGHT/ SECTION	T	A	B	C	D	E	G	APPROX. SLOPE
12"	530	2"	4"	24"	48 7/8"	72 7/8"	24"	2"	3 to 1
15"	740	2 1/4"	6"	27"	46"	73"	30"	2 1/4"	↑
18"	990	2 1/2"	9"	27"	46"	73"	36"	2 1/2"	↓
21"	1,280	2 3/4"	9"	36"	37 1/2"	73 1/2"	42"	2 3/4"	↑
24"	1,520	3"	9 1/2"	43 1/2"	30"	73 1/2"	48"	3"	↓
27"	1,930	3 1/4"	10 1/2"	49 1/2"	24"	73 1/2"	54"	3 1/4"	↑
30"	2,190	3 1/2"	12"	54"	19 3/4"	73 3/4"	60"	3 1/2"	↓
36"	4,100	4"	15"	63"	34 3/4"	97 3/4"	72"	4"	↑
42"	5,380	4 1/2"	21"	63"	35"	98"	78"	4 1/2"	↓
48"	6,550	5"	24"	72"	26"	98"	84"	5"	3 to 1
54"	8,040	5 1/2"	27"	65"	**33 1/4" - *35"	**98 1/4" - *100"	90"	5"	2 2/3 to 1
60"	8,730	6"	*30" - *35"	60"	39"	99"	96"	5"	2 to 1
66"	10,630	6 1/2"	**24" - *30"	**72" - *78"	**21" - *27"	↑	102"	5 1/2"	↑
72"	12,520	7"	**24" - *36"	78"	21"	↓	108"	6"	↓
78"	14,430	7 1/2"	**24" - *36"	78"	21"	99"	114"	6 1/2"	2 to 1
84"	18,160	8"	36"	90 1/2"	21"	111 1/2"	120"	6 1/2"	1 1/2 to 1

**Minimum
*Maximum

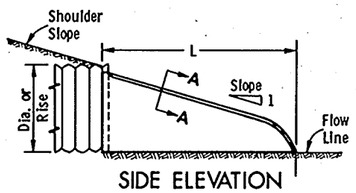
REINFORCED CONCRETE APRON ENDWALLS



PLAN



END VIEW



SIDE ELEVATION

D PIPE DIAM.	MIN. METAL THICKNESS	MIN. ALUM. THICKNESS	DIMENSIONS A ± 1"	B MAX.	H ± 1"	L ± 1 1/2"	W ± 2"	APPROX. SLOPE
12"	0.064	0.060	6"	6"	6"	21"	24"	2 1/2 to 1
15"	↑	↑	7"	8"	↑	26"	30"	↑
18"	↓	↓	8"	10"	↓	31"	36"	↓
21"		0.060	9"	12"		36"	42"	
24"	0.064	0.075	10"	13"	6"	41"	48"	
30"	0.079	0.075	12"	16"	8"	51"	60"	
36"	0.079	0.105	14"	19"	9"	60"	72"	
42"	0.109	↓	16"	22"	11"	69"	84"	2 1/2 to 1
48"	↑		18"	27"	12"	78"	90"	2 1/4 to 1
54"		0.105	↑	30"	↑	84"	102"	2 to 1
60"		NA		33"		87"	114"	1 3/4 to 1
66"		↑		36"		87"	120"	1 1/2 to 1
72"				39"		87"	126"	1 1/3 to 1
78"	↓	↓	↓	42"	↓	87"	132"	1 1/4 to 1
84"	0.109	NA	18"	45"	12"	87"	138"	1 1/8 to 1

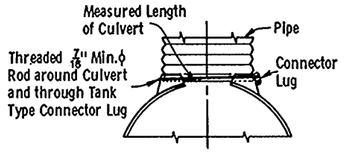
NOTE: All splices to be lap riveted or bolted

METAL OR ALUMINUM APRON ENDWALLS FOR CIRCULAR PIPES

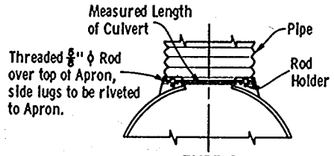
PIPE – ARCH DIMENSIONS SPAN	RISE	MIN. METAL THICK.	DIMENSIONS A ± 1"	B MAX.	H ± 1"	L ± 1 1/2"	W ± 2"	APPROX. SLOPE
17"	13"	0.064	7"	9"	6"	19"	30"	2 1/2 to 1
21"	15"	↑	7"	10"	↑	23"	36"	↑
24"	18"	↓	8"	12"	↓	28"	42"	↓
28"	20"	0.064	9"	14"		32"	48"	
35"	24"	0.079	10"	16"	6"	39"	60"	
42"	29"	0.079	12"	18"	8"	46"	75"	
49"	33"	0.109	13"	21"	9"	53"	85"	↓
57"	38"	↑	18"	26"	12"	63"	90"	2 1/2 to 1
64"	43"		18"	30"	12"	70"	102"	2 1/4 to 1
71"	47"		18"	33"	12"	77"	114"	2 1/4 to 1
77"	52"	↓	18"	36"	12"	77"	126"	2 to 1
83"	57"	0.109	18"	39"	12"	77"	138"	2 to 1

NOTE: All splices to be lap riveted or bolted

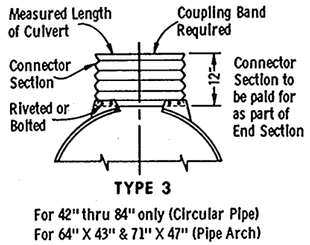
METAL APRON ENDWALLS FOR PIPE ARCHES



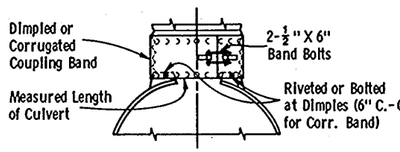
TYPE 1
For 12" thru 24" only (Circular Pipe)



TYPE 2
For 30" and 36" only (Circular Pipe)
For 17" X 13" thru 57" X 38" only (Pipe Arch)



TYPE 3
For 42" thru 84" only (Circular Pipe)
For 64" X 43" & 71" X 47" (Pipe Arch)



TYPE 5
Alternate for
All sizes Corrugated Circular Pipe and Pipe Arch

NOTE: Dimpled Band fits over Outside of Endwall, and Corr. Band fits Inside Endwall. Dimpled Band may be used with Helically Corrugated Pipe

CONNECTION DETAILS

CIRCULAR PIPE

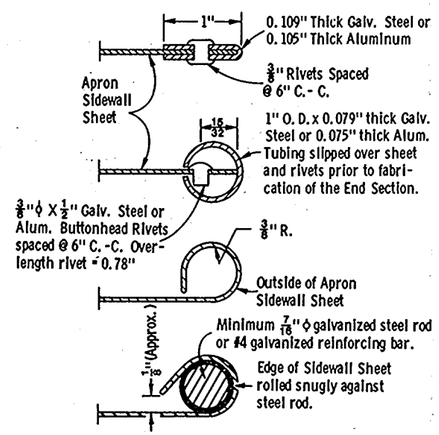
For Circumferentially Corrugated Pipe use Endwall Connection Details 1, 2, 3, or 5 as applicable.

For Helically Corrugated Pipe use Endwall Connection Details 1, 2 or 5.

For Helically Corrugated Pipes with two Circumferential Corrugations at each end use Endwall Connection Details 1, 2, or 3

PIPE ARCH

Use Endwall Connection Details 2, 3, or 5 as applicable.



SECTION A-A

GENERAL NOTES

Details of construction, materials, and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Variations of the dimensions and designs shown hereon will be permitted providing equivilent capacity and structural integrity are attained, and prior approval of the Engineer is obtained.

Concrete culvert endwalls may not be used with galvanized steel or aluminum culvert pipe or vice versa.

Galvanized steel or aluminum endwalls shall normally be installed on culvert pipe of the same metal. The use of galvanized steel endwalls on aluminum pipes is permitted, provided the two metals at the joint interface are kept separated by a suitable insulating material approximately 1/16" thick or greater. Such material would be an asphalt impregnated fabric, a sheet plastic, a rubber gasket or other nondegradable material of substantial strength.

When two or more pipe arches with apron endwalls are to be laid adjacent to each other, they shall be separated by the following amount.

Pipes: Total width of apron endwall less the diameter of pipe plus 6 inches.
Pipe Arches: Total width of apron endwall less the span dimension of the pipe arch plus 6 inches.

APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

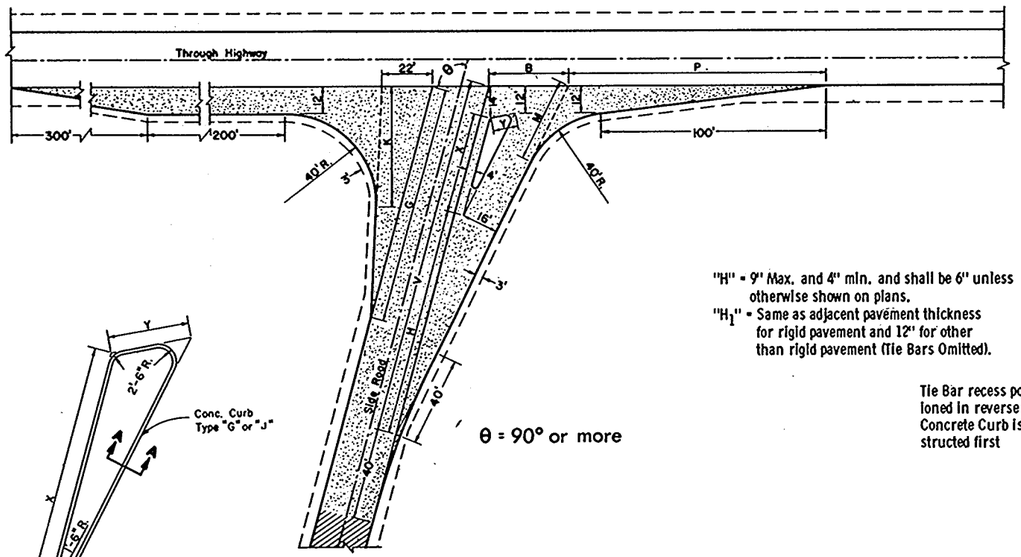
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
7-29-75 DATE — CHIEF OF FACILITIES DEVELOPMENT

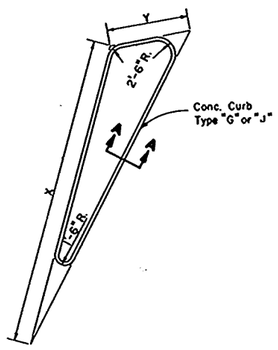
APPROVED
7-29-75 DATE — STATE HIGHWAY ENGINEER

S.D.D. 8F1-6

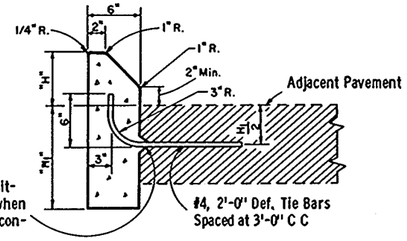
S.D.D. 8F1-6



θ = 90° or more

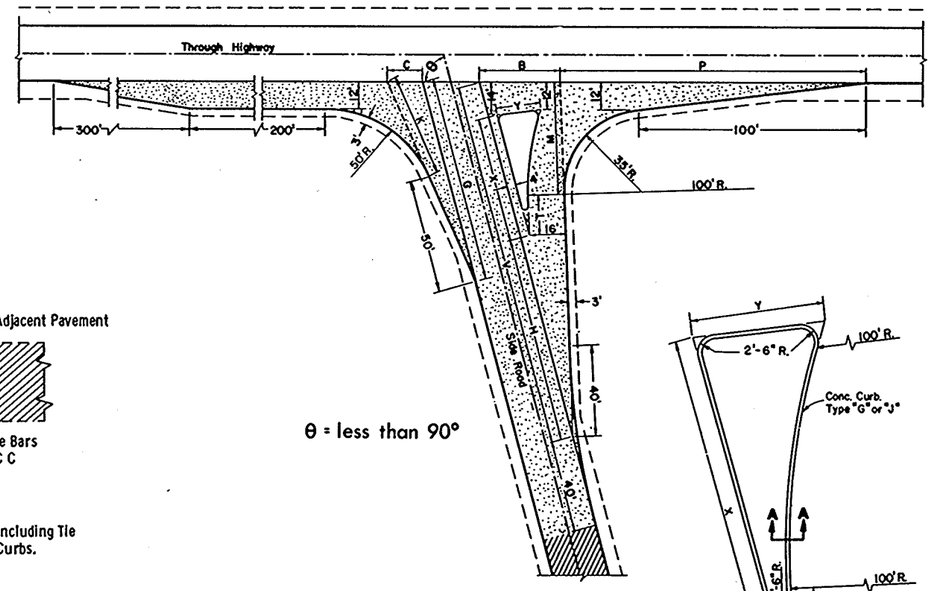


"H" = 9" Max. and 4" min. and shall be 6" unless otherwise shown on plans.
"H_1" = Same as adjacent pavement thickness for rigid pavement and 12" for other than rigid pavement (Tie Bars Omitted).

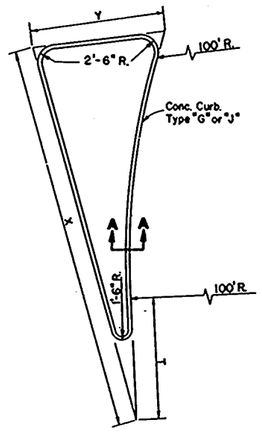


SECTION **A - A**

Note: To be measured and paid for as Type "G" (Including Tie Bars) or Type "J" (Excluding Tie Bars) Concrete Curbs.



θ = less than 90°



TABLES OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(Values for Angles not shown shall be interpolated)

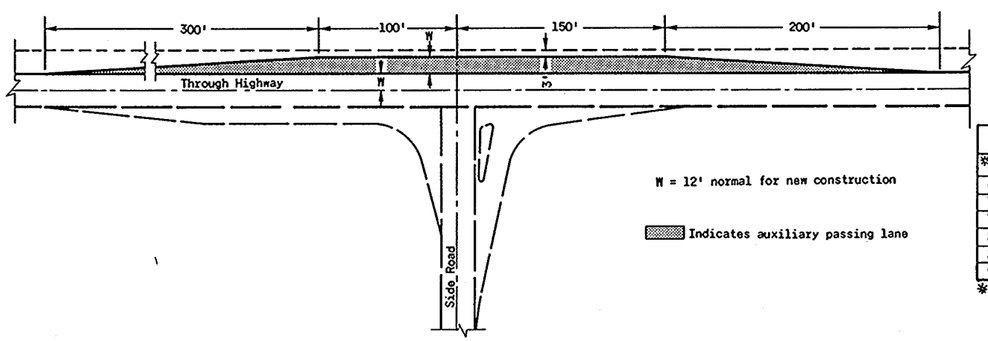
θ	G	K	B	V	H	X	Y	P	M
90	90	43.8	33.9	156.0	94	48.0	11.0	125.0	44.2
95	94	46.7	34.0	156.7	96	47.0	11.0	121.3	41.9
100	98	50.0	34.4	157.4	98	45.9	11.0	117.7	39.7
105	102	53.8	35.2	158.3	100	44.9	11.2	114.2	37.8
110	106	58.2	36.4	159.2	102	43.7	11.4	110.6	36.2
115	110	63.4	38.4	161.8	104	42.6	11.7	107.1	34.8
*120	114	69.4	40.1	161.2	106	41.4	12.2	103.4	33.7

*Maximum angle of intersection

θ	C	G	K	B	V	X	Y	H	P	M	T
*60	19.7	76.3	38.6	41.5	169.9	67.4	29.3	84	144.5	58.8	21.6
65	17.8	82.6	40.6	39.4	166.9	63.6	25.0	86	141.2	54.9	20.7
70	15.8	87.2	43.1	37.4	164.1	59.7	21.9	88	136.8	51.4	19.2
75	15.7	90.9	45.6	35.7	161.4	55.9	19.3	90	132.7	48.2	17.4
80	15.9	94.9	48.3	34.4	158.9	51.9	17.0	92	128.8	45.3	14.9
85	16.2	99.3	51.4	33.4	156.4	48.0	15.0	94	125.2	42.7	10.4

*Desirable Minimum angle of intersection

TYPE "A" SIDE ROAD INTERSECTION DETAILS



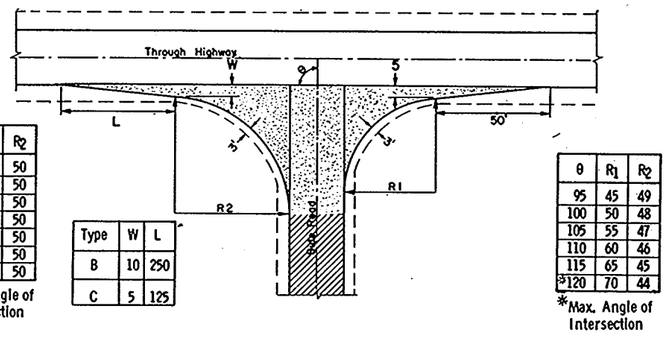
W = 12' normal for new construction

Indicates auxiliary passing lane

PASSING LANE DETAIL

θ	R_1	R_2
*60	40	50
65	40	50
70	40	50
75	40	50
80	40	50
85	40	50
90	40	50

*Min. Angle of Intersection



Type	W	L
B	10	250
C	5	125

θ	R_1	R_2
95	45	49
100	50	48
105	55	47
110	60	46
115	65	45
*120	70	44

*Max. Angle of Intersection

TYPE "B" & "C" SIDE ROAD INTERSECTION DETAILS

GENERAL NOTES

Designs may be used interchangeably in combination or separately for any one complete intersection depending upon intersection angle and surfacing of each approach roadway.

Details on this drawing are for minimum design only, and not applicable to special conditions, as shown elsewhere on the plans.

SIDE ROAD SURFACING NOTE

If the side road is not presently paved, pavement shall be placed to the limits shown. In the case where the construction limits are beyond the paving limits, gravel or crushed stone surfacing shall be placed between the paving limits and construction limits.

If the side road is presently paved, new pavement shall be placed to the limits of design as shown and beyond, if necessary, to meet existing pavement.

If side road is the construction project, the intersection surfacing shall be the same as for the project.

New Pavement

Existing Surface

LAYOUT DETAILS FOR AT-GRADE SIDE ROAD INTERSECTIONS

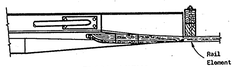
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
4-11-73 DATE — CHIEF of FACILITIES DEVELOPMENT

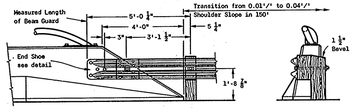
APPROVED
4-17-73 DATE — STATE HIGHWAY ENGINEER

S.D.D. 9A1-2

S.D.D. 9A1-2



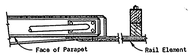
PLAN VIEW



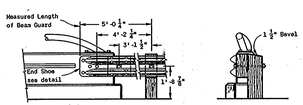
FRONT ELEVATION END ELEVATION

STRUCTURE MOUNTING DETAIL

SLOPING TYPE PARAPET WALL



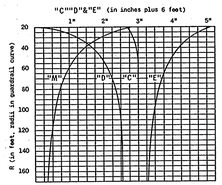
PLAN VIEW

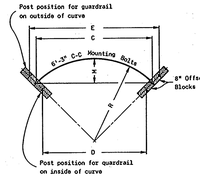


FRONT ELEVATION END ELEVATION

STRUCTURE MOUNTING DETAIL

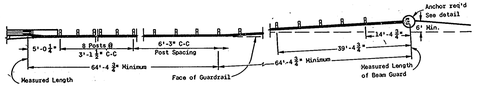
VERTICAL TYPE PAPAPET WALL



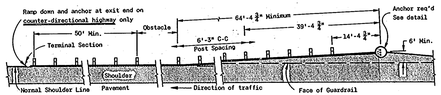


CHORD LENGTHS FOR POST SPACING AND MIDDLE ORDINATES FOR BEAM CURVING

CURVE DATA FOR POST SPACING AND BEAM CURVING

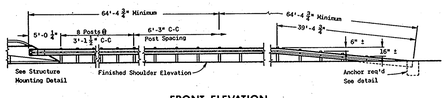


PLAN VIEW



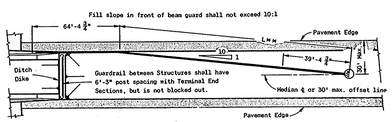
PLAN VIEW

TYPICAL INSTALLATION AT LOCATIONS OTHER THAN STRUCTURES



FRONT ELEVATION

TYPICAL INSTALLATION AT STRUCTURES



PLAN VIEW

MEDIAN PROTECTION

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

The exact location of the beginning and end of each Guardrail installation shall be as shown on the plans or as directed by the Engineer.

Square anchor alternates will be permitted. Square anchors shall be a minimum of 24 inches x 24 inches.

The shoulder widening to accommodate the anchored end of the guardrail shall be accomplished at the rate of widening not to exceed 15 to 1.

Upon approval of the Engineer, the 6 foot anchor offset may be reduced to nothing for replacement installations where existing conditions will not permit the desirable offset. However, when no offset greater than or equal to 3 feet can be provided, the minimum length of guardrail in advance of an obstacle (obstacle to anchor) shall be 150 feet.

The minimum clearance from the front face of guardrail to obstacle shall be 3 feet unless otherwise shown on contract plans. When clearance is less than 3 feet post spacing shall be reduced to 3 feet - 1½ inches C.C.

The "Post Footing Details At Piers" shall be used when guardrail posts are over structure footings and less than 3 feet - 6 inches of earth is provided over the top of the footing.

NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO PLATES. AND BOTH PLATES ARE REQUIRED WHEN THIS STANDARD IS CALLED FOR IN THE PLANS.

CLASS "A"
STEEL PLATE BEAM GUARD &
STEEL PLATE BEAM MEDIAN GUARD

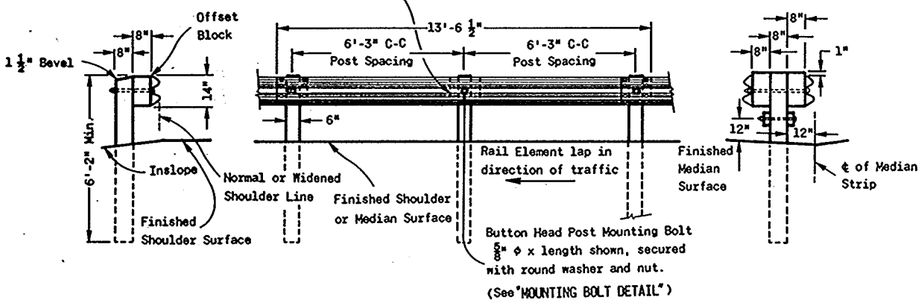
State of Wisconsin
Department of Transportation
Division of Highways

S.D.D. 14 B 2-4a

S.D.D. 14 B 2-4a

One foot long section of rail element, with a $\frac{3}{4}$" slotted hole for mounting, shall be placed behind the continuous rail element at the intermediate posts.

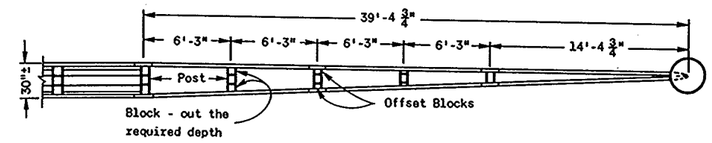
Sawed and treated timber posts and offset blocks shall be furnished and placed in accordance with Standard Specifacations. Posts shall be 6" x 8" x 6'-6" and have 6" x 8" x 14" offset blocks.



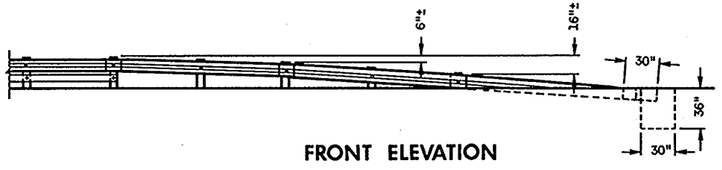
END ELEVATION — FRONT ELEVATION — END ELEVATION

STEEL PLATE BEAM GUARD — **STEEL PLATE BEAM MEDIAN GUARD**

STEEL PLATE BEAM GUARD OR STEEL PLATE BEAM MEDIAN GUARD



PLAN VIEW

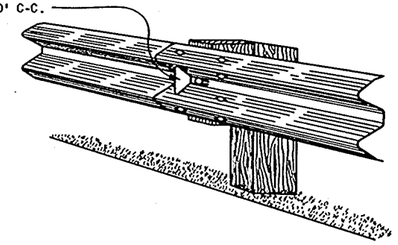


FRONT ELEVATION

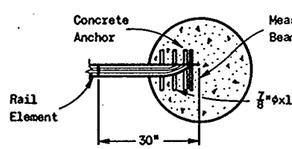
ANCHOR DETAIL FOR DOUBLE RAIL ELEMENT INSTALLATION

NOTE: (DIVIDED HIGHWAYS) Reflector spacing shall be 50' C-C on installations less than 200' long, with a minimum of 3 reflecters on any installation. For installations 200' or longer, spacing shall be 100' C-C.

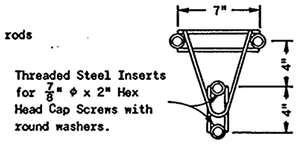
(COUNTER-DIRECTIONAL HIGHWAYS) Reflector spacing shall be 25' C-C on installations less than 200' long, with a minimum of 6 reflectors on any installation, and every other reflectorized surface shall be reversed. For installations 200' or longer, spacing shall be 50' C-C.



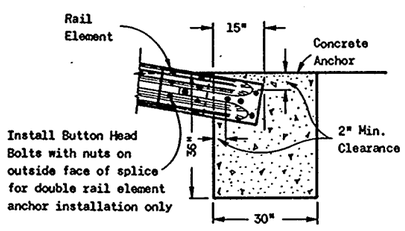
TYPICAL INSTALLATION



PLAN VIEW



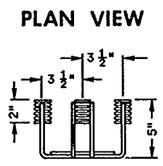
PLAN VIEW



SECTION VIEW

ANCHOR DETAIL

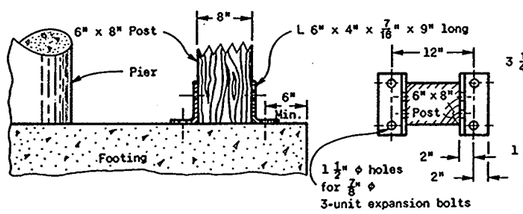
SINGLE RAIL ELEMENT INSTALLATION



ELEVATION

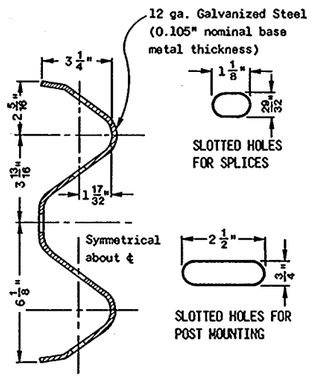
4 BOLT INSERT ASSEMBLY

NOTE: Installation of 4 Bolt Insert Assembly (with Cap Screws inserted) to be part of Bridge Contract.

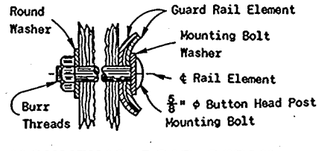


SECTION VIEW — **PLAN VIEW** — **ELEVATION**

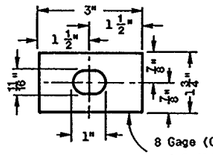
POST FOOTING DETAIL AT PIERS



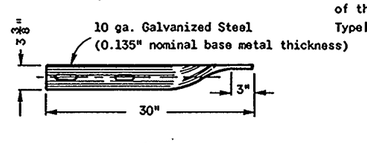
SECTION THRU RAIL ELEMENT

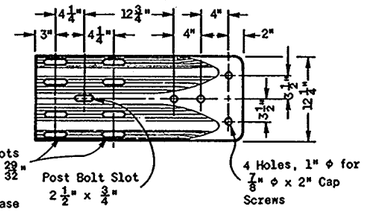


MOUNTING BOLT DETAIL



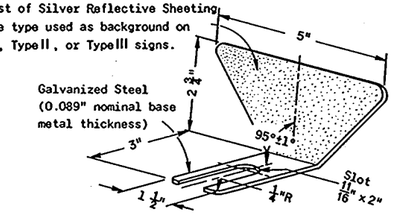
MOUNTING BOLT WASHER



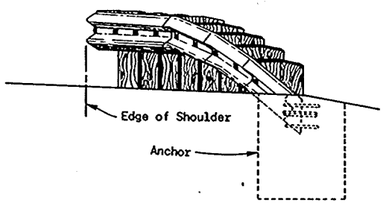


END SHOE DETAIL

The reflectorized surface shall consist of Silver Reflective Sheeting of the type used as background on TypeI, TypeII, or TypeIII signs.

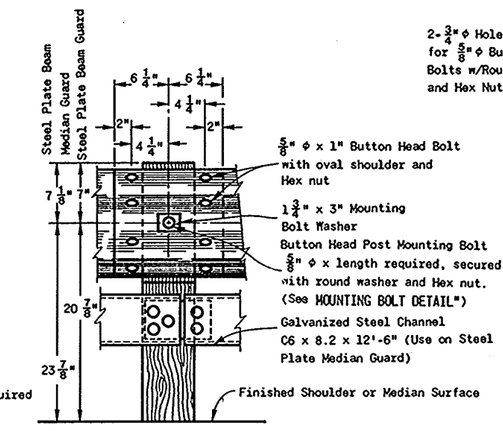


REFLECTOR DETAIL

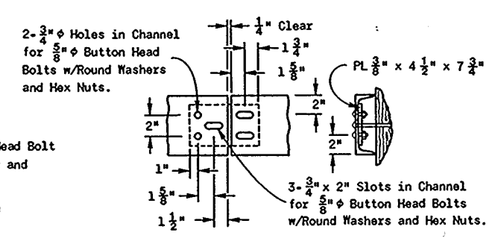


TYPICAL TERMINAL END ELEVATION

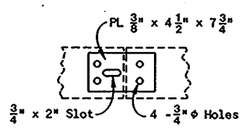
NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO PLATES. AND BOTH PLATES ARE REQUIRED WHEN THIS STANDARD IS CALLED FOR IN THE PLANS.



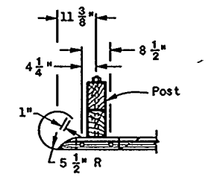
RAIL ELEMENT SPLICING AND POST MOUNTING DETAIL



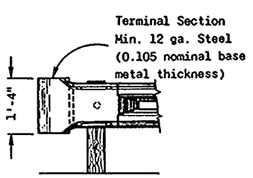
RUB RAIL SPLICE DETAIL



SPLICE PLATE



PLAN VIEW



FRONT ELEVATION

TERMINAL SECTION DETAILS

CLASS "A"
STEEL PLATE BEAM GUARD &
STEEL PLATE BEAM MEDIAN GUARD

State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL
5-7-76 DATE — CHIEF of FACILITIES DEVELOPMENT

APPROVED
5-11-76 DATE — STATE HIGHWAY ENGINEER

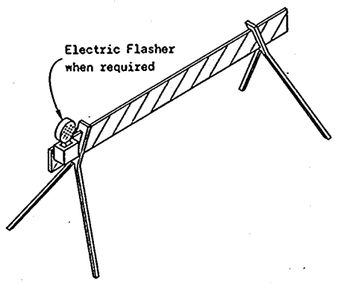
S.D.D. 14 B 2-4b

S.D.D. 14 B 2-4b

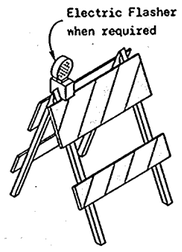
TABLE OF BARRICADE CHARACTERISTICS

BARRICADE TYPE	I	II	III
Height	3'(91.4 cm) Min.		5'(152.4 cm) Min.
*Rail Width	8"(20.3 cm) Min. to 12"(30.5 cm) Max.		
Rail Length	2'(61.0 cm) Min. to Variable Maximum		
**Stripe Width	6" (15.2 cm) at 45° Angle		
Stripe Colors	Reflectorized Orange & White		

* Nominal dimensions when barricade is constructed of lumber.
** May be 4"(10.2 cm) for rail lengths less than 3'(91.4 cm).



TYPICAL TYPE I BARRICADE



TYPICAL TYPE II BARRICADE

W20-3

48"(121.9 cm) x 48"(121.9 cm)

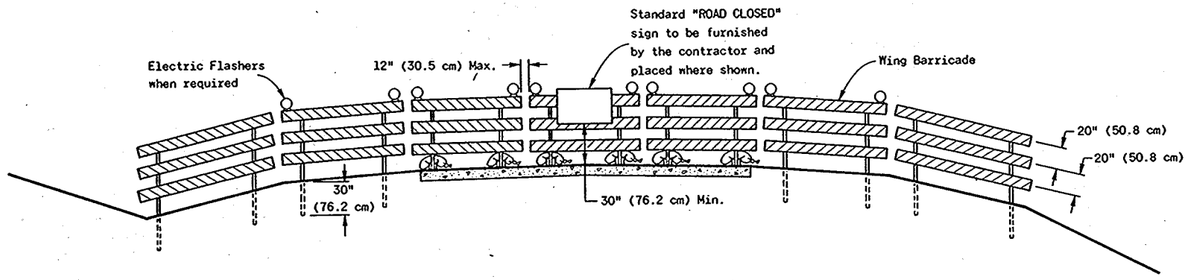
Black Lettering on Reflective
Orange Background
Letter Series "D"
Letter height 7" (17.8 cm)

R11-2

48"(121.9 cm) x 30"(76.2 cm)

Black Lettering on Reflective
White Background
Letter Series "D"
Letter height 8" (20.3 cm)

STANDARD SIGNS-TYPE II



TYPICAL INSTALLATION SHOWING TYPE III BARRICADE

CONSTRUCTION BARRICADES

GENERAL NOTES

The contractor shall furnish, erect and maintain Barricades and Signs. Details regarding location, spacing, dimensions, fabrication, material, sign lettering, lighting devices and color of Barricades and Signs shall conform to this drawing, the Wisconsin Manual on Uniform Traffic Control Devices, the Standard Specifications, Special Provisions and/or plans.

Type III Barricades and Signs shall be erected at the termini of projects and at other road or street locations where it is necessary to control or eliminate public access to the con - struction area.

Type I and II Barricades shall be used on projects when traffic is to be maintained through the construction area.

The actual field location of barricade installations and advance signs shall be as directed by the Engineer.

CONSTRUCTION BARRICADES
& STANDARD SIGNS

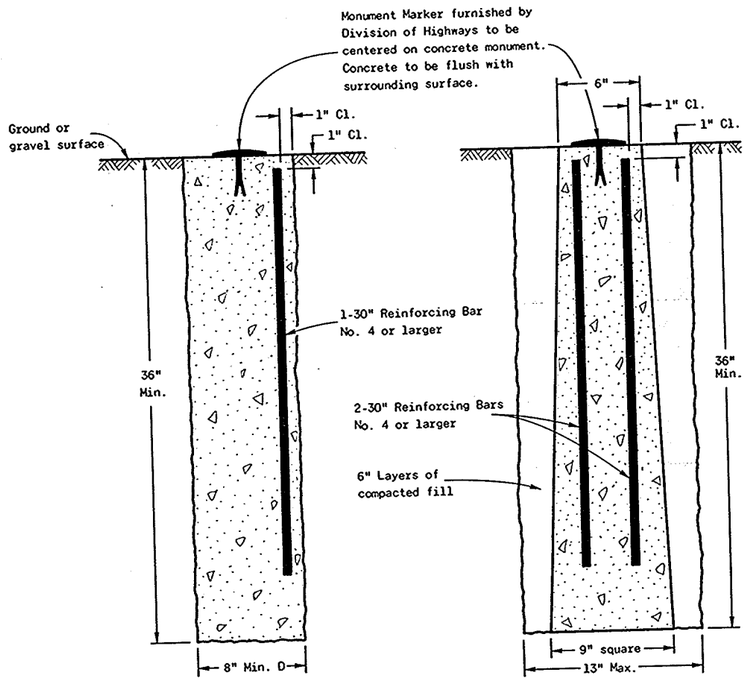
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
6-6-75 DATE — CHIEF of FACILITIES DEVELOPMENT

APPROVED
6-6-75 DATE — STATE HIGHWAY ENGINEER

S.D.D. 15C1-4

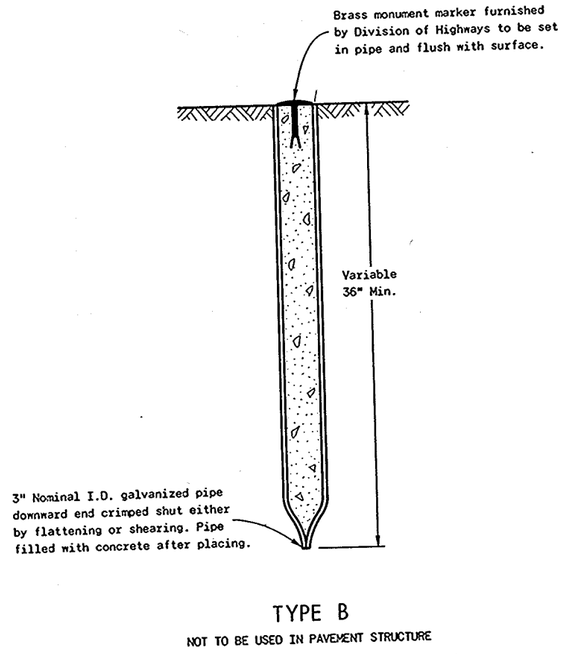
S.D.D. 15C1-4



CAST-IN-PLACE CONCRETE MONUMENT

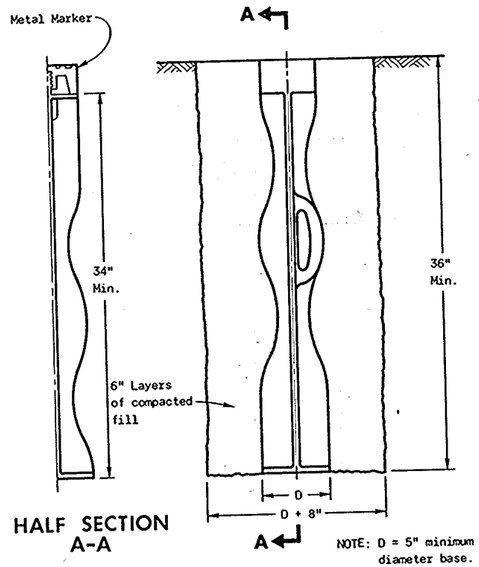
PRECAST CONCRETE MONUMENT

TYPE A



TYPE B

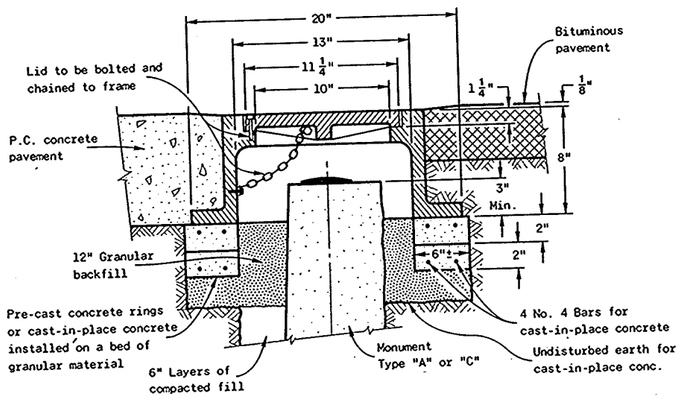
NOT TO BE USED IN PAVEMENT STRUCTURE



METAL MONUMENT

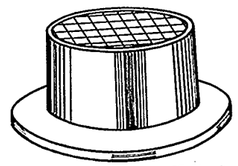
(Includes Marker)

TYPE C



DETAIL OF MONUMENT COVER

INSTALLATION IN PAVEMENT OVER A MONUMENT



(Approximate weight - 95 lbs.)

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

Detailed dramings of proposed alternate designs for Metal Monuments or Monument Covers shall be submitted to the Engineer for approval.

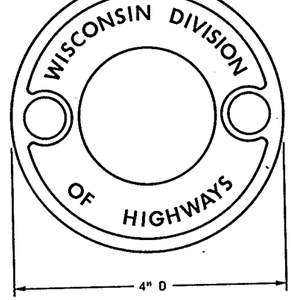
The installed Metal Monument must be easily detected with a dip needle. Inert permanent magnets shall be attached near the top and bottom of those Monuments constructed of a metal alloy which is not attractive to a dip needle.

Type A and Type C Monuments are equal alternates unless otherwise specified on the plan or by special provision.

When Landmark Reference Monument and Cover is specified, contractor shall furnish and install Monument and Monument Cover in conformance with details on this drawing and pertinent requirements of Section 611 of the Standard Specifications.

The Monument Cover shall be a "Non-Rocking" type. Adjustment of the Cover to grade may be accomplished by the use of mortar and brick, or by either pre-cast or cast-in-place Reinforced Concrete Grade Rings.

Monuments shall be located and placed at the direction of the Engineer.



TOP LEGEND FOR MARKER

LANDMARK REFERENCE MONUMENTS

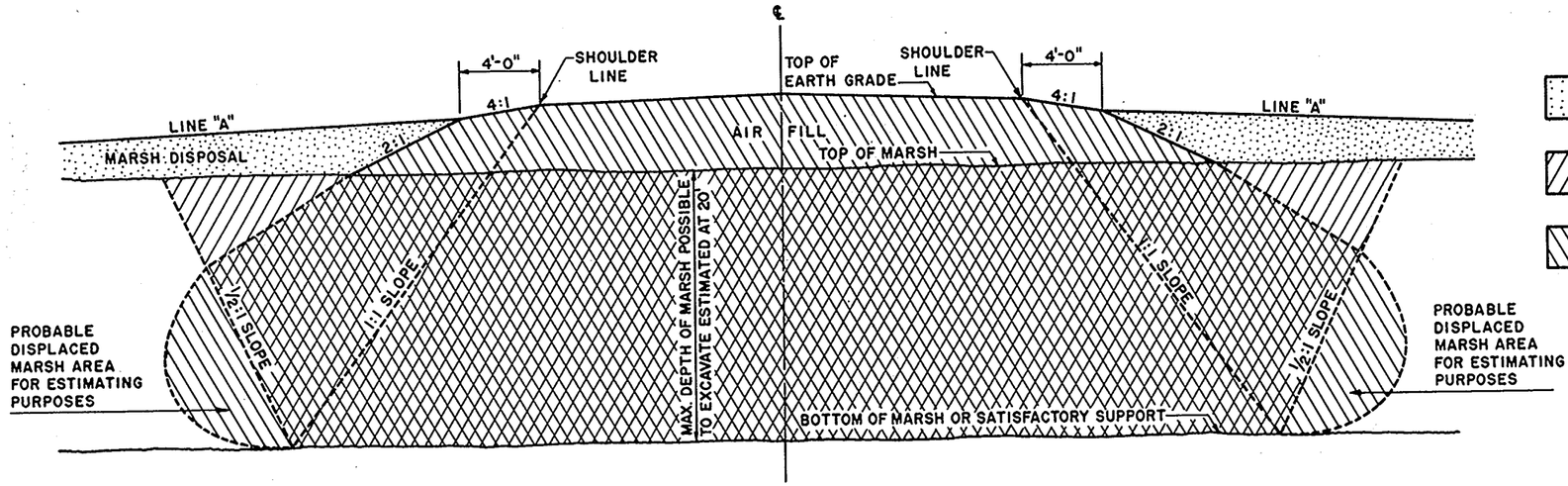
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL:
2-15-74 DATE — CHIEF of FACILITIES DEVELOPMENT

APPROVED
3-21-74 DATE — STATE HIGHWAY ENGINEER

S.D.D. 16A1-2

S.D.D. 16A1-2



COMPLETE MARSH EXCAVATION

MARSH DISPOSAL PERMITTED IN THIS AREA UNLESS OTHERWISE PROVIDED IN THE CONTRACT

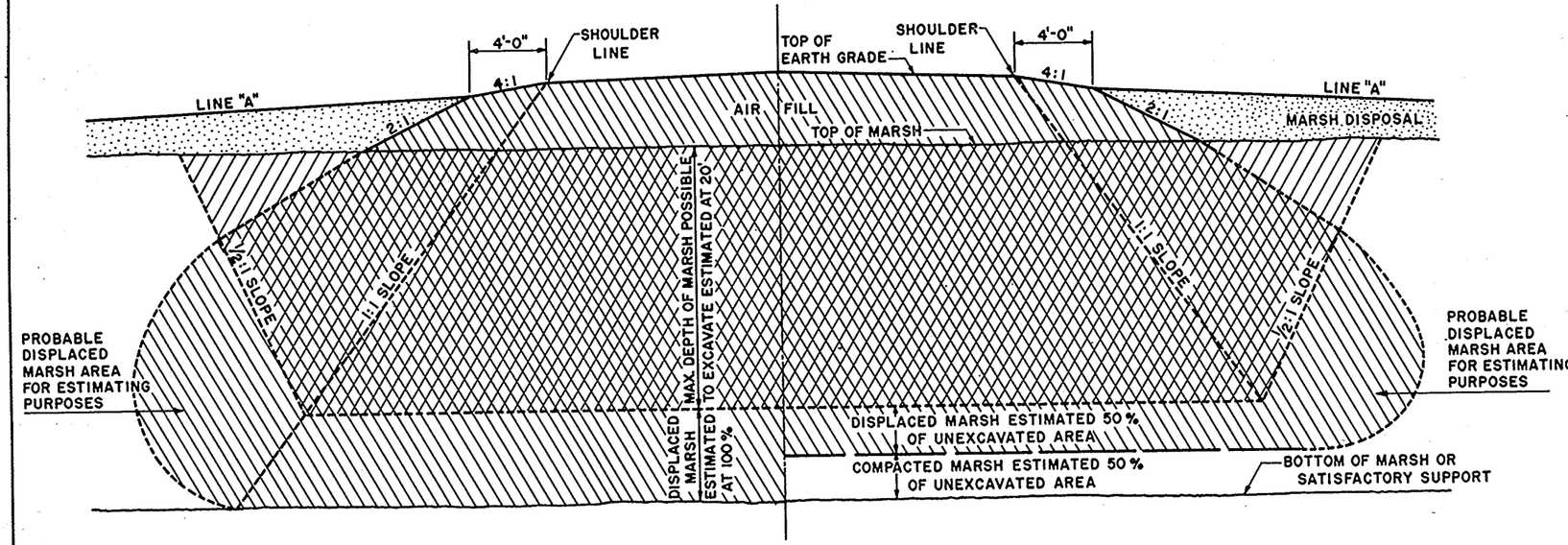
EXCAVATION

BACKFILL

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ANY MATERIAL TEMPORARILY PLACED ABOVE THE LINE MARKED "LINE A" IS TO BE REMOVED UPON COMPLETION OF THE AIR FILL.



PARTIAL EXCAVATION
PLUS 100% DISPLACEMENT

PARTIAL EXCAVATION
PLUS 50% DISPLACEMENT

MARSH EXCAVATION

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

DATE 2/11/52 — CONSTRUCTION ENGINEER

APPROVED:

DATE 2/11/52 — STATE HIGHWAY ENGINEER

DRAWN LJD
CHECKED

S.D.D. 23A1-1

S.D.D. 23A1-1

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ##	8

SURVEY ℄

CONSTRUCTION ℄

STATION	DISTANCE	CURVE DATA	YARDAGE EXCAVATION SAND	GRAVEL	SUB	FILL
12+00						
	828					
	820					
11+72	28					
	47		6		8	
11+25						
	41		42		8	
11+00	25					
	820					
	817					
0+47						
	820					
	815					
10+29						
	820					
	815					
10+00						
	820					
	815					

SCALE 1" = 5'

SHEET TOTAL	798	63	12

KE PRINTED IN U.S.A.

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ES	8.1

SURVEY L

CONSTRUCTION RL

STATION	DISTANCE	COURSE	COURSE DIST.	YARDAGE EXCAVATION	YARDAGE SALV. GRAN SUB.	YARDAGE FILL
16+00						
855		2	821		40	
		3				
830			156		40	
		4				
			591		40	
		6				
			395		40	
15+00		16				
840						
835						
830						
14+00						
835						
830						
13+00						
830						
825						

SCALE 1" = 5'

SHEET TOTAL 4935 160

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ☰	82

SURVEY ℄

CONSTRUCTION RL

STATION	DISTANCE	COMMON SURFACE	YARDAGE EXCAVATION SALV. GRAN. SUB.	YARDAGE FILL
21+00				
835				
830				
	6			
		761	40	
	7			
		829	40	4
20+00	8			
835		95	40	16
	9			
830		136	40	30
	20			
		115	40	40
	21			
19+00				
835				
830				
18+00				
835				
830				
17+00				
835				
830				

SCALE 1" = 5'

SHEET TOTAL ---- 1526 200 92

NOTE BOOK
NO.
AREAS
AREAS CHECKED

M&S PAVE 3, CROSS SECTION

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ET	8.3

SURVEY ℄ CONSTRUCTION ℄

STATION	DISTANCE	CONTROL POINT	YARDAGE EXCAVATION SALV. GRAN. SUB.	YARDAGE FILL
26+00				
	21			
835				
		7.6	40	79
830				
	22			
		12.9	40	289
25+00	23			
835				
		17.9	40	952
830	24			
		14.4	40	1243
	25			
		9.1	40	2055
24+00	26			
835				
830				
23+00				
835				
830				
22+00				
835				
830				

826.56 827.03 828.23 829.87 830.37 828.87 826.57

SCALE 1" = 5'

SHEET TOTAL 60.4 200 4316

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ET2	8.4

17/43

SURVEY ℄

CONSTRUCTION RL

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

STATION	DISTANCE	YARDAGE EXCAVATION CLEARING CHANGE	SALV. GRAN. SUB.	FILL
30+00				
860				
855	20			
	33		40	2767
	27			
			40	3059
28+00	28			
860			40	2299
855	29			
	20		40	938
	30			
850				
845				
28+00				
850				
845				
840				
835				
27+00				
840				
835				
830				
825				
SHEET TOTAL		53	160	9059

SCALE 1" = 5'

NOTE BOOK TEMPLATE
HOR. SCALE
NO. AREAS CHECKED

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ETC	8.5

SURVEY 1

CONSTRUCTION RL

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

STATION	DISTANCE	CUM. CROSS SECTION	YARDAGE EXCAVATION ROCK	YARDAGE EXCAVATION SALV. GRAN. SUB.	FILL
30+00					
30		553	170	40	157
31		787	464	40	
32		467	667	40	
33		560	993	40	
34		748	1086	40	
35					
SHEET TOTAL		3124	3400	200	157

SCALE: 1" = 5'

K+E PLATE 3, CROSS SECTION KEUFFEL & ESSER CO.

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ET	8.6

SURVEY ℄

CONSTRUCTION ℄

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

ROCK

STATION	DISTANCE	GRADE	YARDAGE EXCAVATION ROCK	SALV. GRAN. SUB.	FILL
40+00					
860					
875					
	35				
		3.71	839	40	
	36				
		8.97	543	40	
39+00	37				
885					
		6.51	199	40	
	38				
880					
		2.92	9	40	28
	39				
		5.6		40	102
	40				
38+00					
885					
880					
37+00					
885					
880					
36+00					
890					
885					
SHEET TOTAL			2767	1590 200	128

SCALE 1" = 5'

NOTE BOOK | TEMPLATE | AREAS | AREAS CHECKED | NO.

CONSTRUCTION RL

SURVEY ℄

45+00
875
870
44+00
880
875
43+00
880
875
42+00
880
875
41+00
880
875

SCALE 1" = 5'

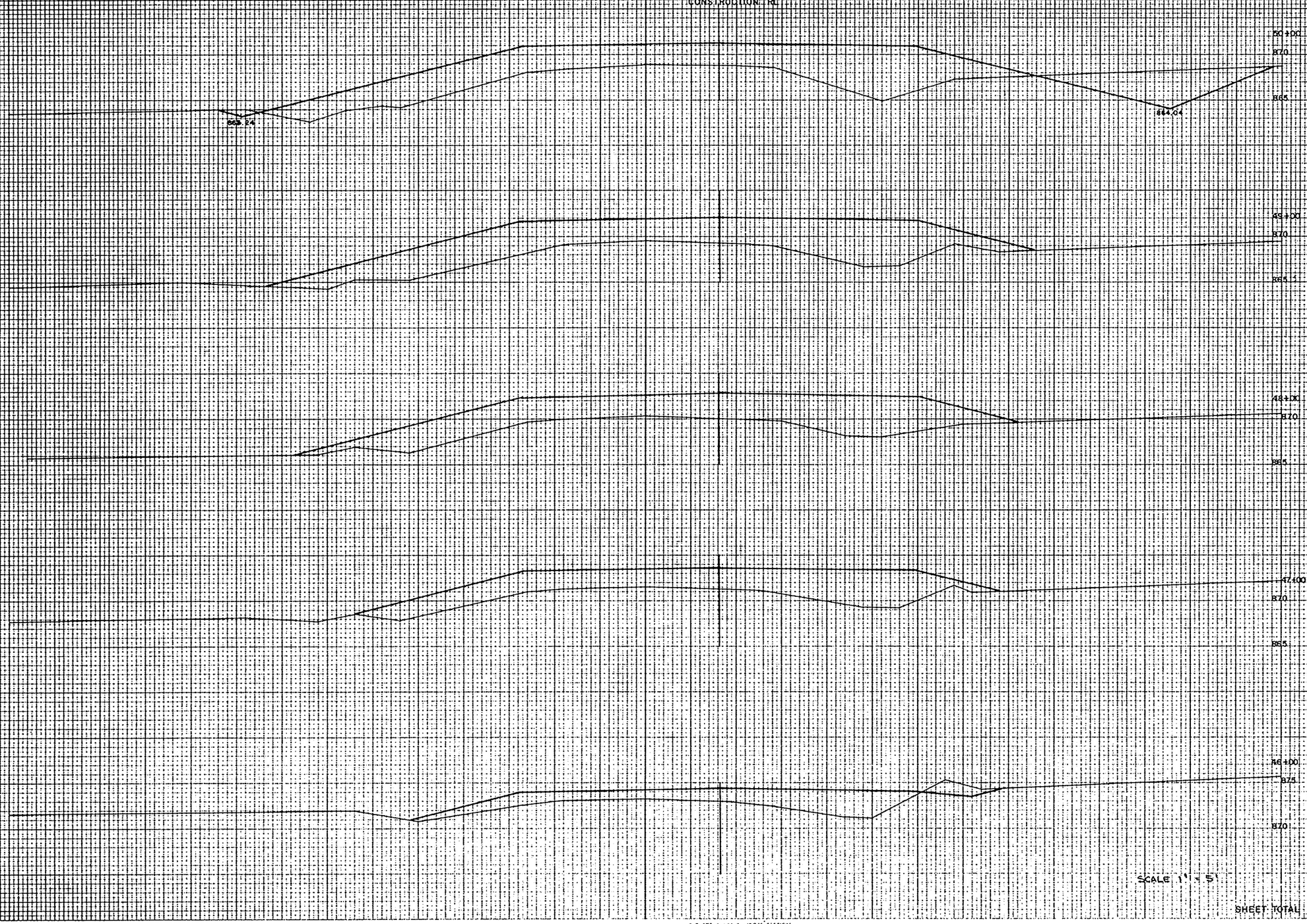
PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ~~22~~	8.7

STATION	DISTANCE	YARDAGE			
		COMMON EXCAVATION		SALV. GRAN. SUB.	FILL
40					
	17			40	228
41					
	18			40	247
42					
	37			40	236
43					
	50			40	226
44					
	96			40	221
45					
SHEET TOTAL		218		200	1160

SURVEY TL

CONSTRUCTION RL

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ☒	8.8



STATION	DISTANCE	YARDAGE EXCAVATION COMMON	YARDAGE EXCAVATION SALV. GRAN BOR.	YARDAGE FILL
SHEET TOTAL		242	200	3384

NOTE BOOK AREAS
NO. AREAS CHECKED

K&E PLATE 3, CROSS SECTION

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ET	8.9

SURVEY ℄

CONSTRUCTION FG

867.14

867.4

868.54

864.34

863.95

864.64

863.54

854.34

STATION	DISTANCE	CUMULATIVE TOTAL	YARDAGE EXCAVATION SALV.	YARDAGE EXCAVATION BORR. SUB.	YARDAGE FILL
55+00					
	50				
		154		40	932
54+00	54				
		17		40	71
	52				
		57		40	430
53+00	53				
		287		40	102
	54				
		604		40	6
52+00	55				

SCALE 1" = 5'

SHEET TOTAL 1319 200 2240

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ☒	8.10

SURVEY ℄

CONSTRUCTION RL

STATION	DISTANCE	YARDAGE EXCAVATION CLASS UNCL.	SALV. GRAN SUB.	FILL
60+00				
	55	1098	40	
56				
	55	905	40	
57				
	55	994	40	
58+00	50			
	55	436	40	6
59				
	55	309	40	44
60				
SHEET TOTAL		3341	200	30

58+00 865 860

57+00 870 865

56+00 870 865

SCALE 1" = 5'

NOTE BOOK AREAS AREAS CHECKED NO.

K&S SHEET 3, CROSS SECTION

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ~~BR~~	8.11

SURVEY ℄

CONSTRUCTION ℄

STATION	DISTANCE	COMBINED	YARDAGE EXCAVATION SALV.	YARDAGE EXCAVATION GRAN.	YARDAGE EXCAVATION SUB.	YARDAGE FILL
64+00						
	50					
845						
		216		40	32	
	61					
		174		40	58	
63+00	62					
855		132		40	146	
	63					
850		174		40	163	
	64					
845						
62+27.72						
855						
850						
62+00						
855						
850						
61+00						
860						
855						

SCALE 1" = 5'

SHEET TOTAL 692 160 415

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ~~22~~	8.12

25/43

SURVEY ℄

CONSTRUCTION RL

STATION	DISTANCE	YARDAGE EXCAVATION COMMON	YARDAGE EXCAVATION SALV. GRAN. SUB.	YARDAGE FILL
64		124	40	53
65		554	40	7
66		1084	40	
67		983	40	
68		512	40	
69				
SHEET TOTAL		3632	200	60

SCALE 1" = 5'

K&E PLATE & CROSS SECTION PAPER & PAD CO

SURVEY PLOTTED
FIELD BOOK COMPUTED
NOTE BOOK AREAS
NO. AREAS CHECKED

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, 72	8.13

SURVEY ℄

CONSTRUCTION RL

816.7

821.22

825.74

SCALE 1"=5'

STATION	DISTANCE	CONSTR. TYPE	YARDAGE EXCAVATION	SALV. GRAN. SUB.	FILL
74+00					
	20				
69					
	15		369	40	3
70					
			74	40	32
71					
			85	40	69
72					
			94	40	233
73+00					
	25				
73			51	40	386
74					
72+00					
	30				
71+00					
	30				
70+00					
	35				
	30				
SHEET TOTAL			747	200	753

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ES	8.14

SURVEY L CONSTRUCTION RL

STATION	DISTANCE	VARIANCE EXCAVATION COARSE GRAVEL	GRAN. SUB.	TOTAL
75+00				
	74			
		26	40	40B
	75			
		27	40	40
76+00	76			
		14	40	40
	77			
		48	40	39
	78			
		28	40	40B
	79			
77+00				
76+00				
75+00				
SHEET TOTAL		140	200	204

SCALE 1" = 5'

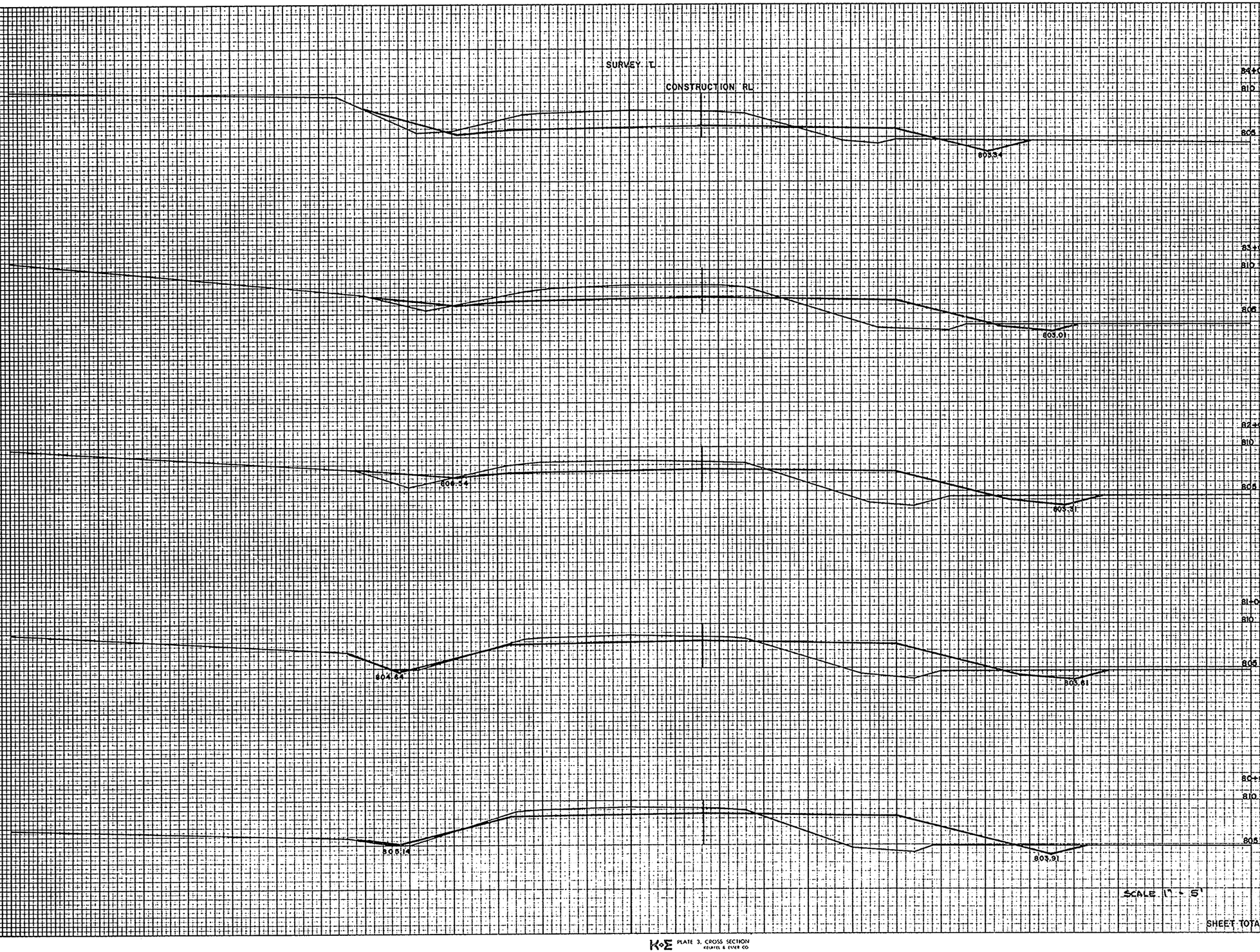
K•E MATE 3. CROSS SECTION
KEUFFEL & ESSER CO

NOTE BOOK AREAS
NO. AREAS CHECKED

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ES	8.15

SURVEY L

CONSTRUCTION RL



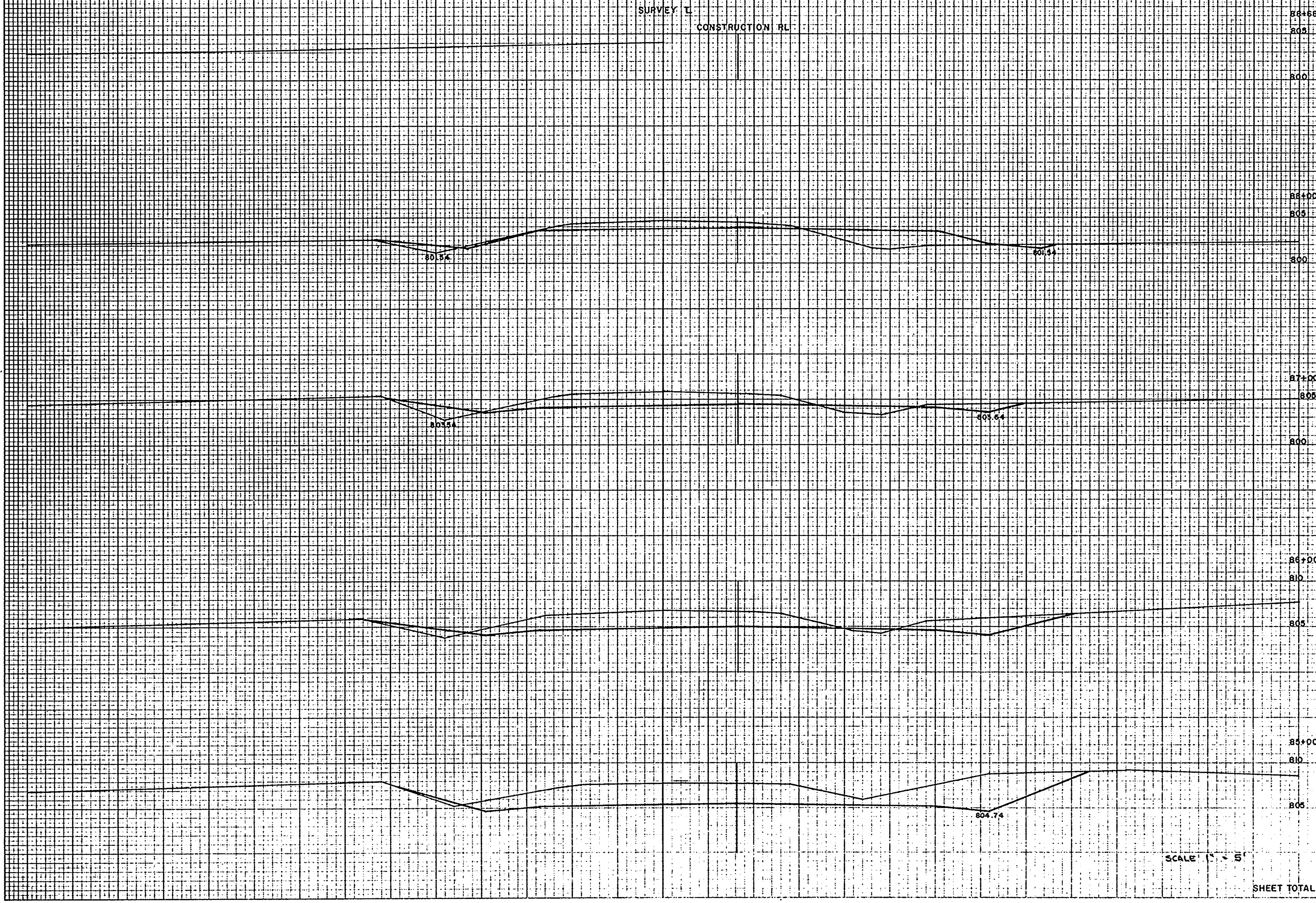
STATION	DISTANCE	CHANGE IN GRADE	YARDAGE EXCAVATION SALV. GRAV. SUB.	YARDAGE FILL
	79			
		28	40	265
	80			
		40	40	236
	81			
		77	40	216
	82			
		119	40	164
	83			
		60	40	127
	84			

SCALE 1" = 5'

SHEET TOTAL 424 200 1041

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71,22	8.16

29/43



STATION	DISTANCE	YARDAGE EXCAVATION COMM. UNCL.	SALV. GRAN. SUB.	FILL
84				
		315	40	44
85				
		354	40	16
86				
		81	40	38
87				
		87	40	82
88				
SHEET TOTAL		917	160	180

K&E PLATE & CROSS SECTION

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, 72	8.17

SURVEY : C

CONSTRUCTION RL

STATION	DISTANCE	YARDAGE EXCAVATION COARSE	CALV. GRAN. SUB.	FILL
88				
	71		40	116
89				
	20		40	137
90				
	48		40	159
91				
	62		40	128
92				
SHEET TOTAL		301	160	521

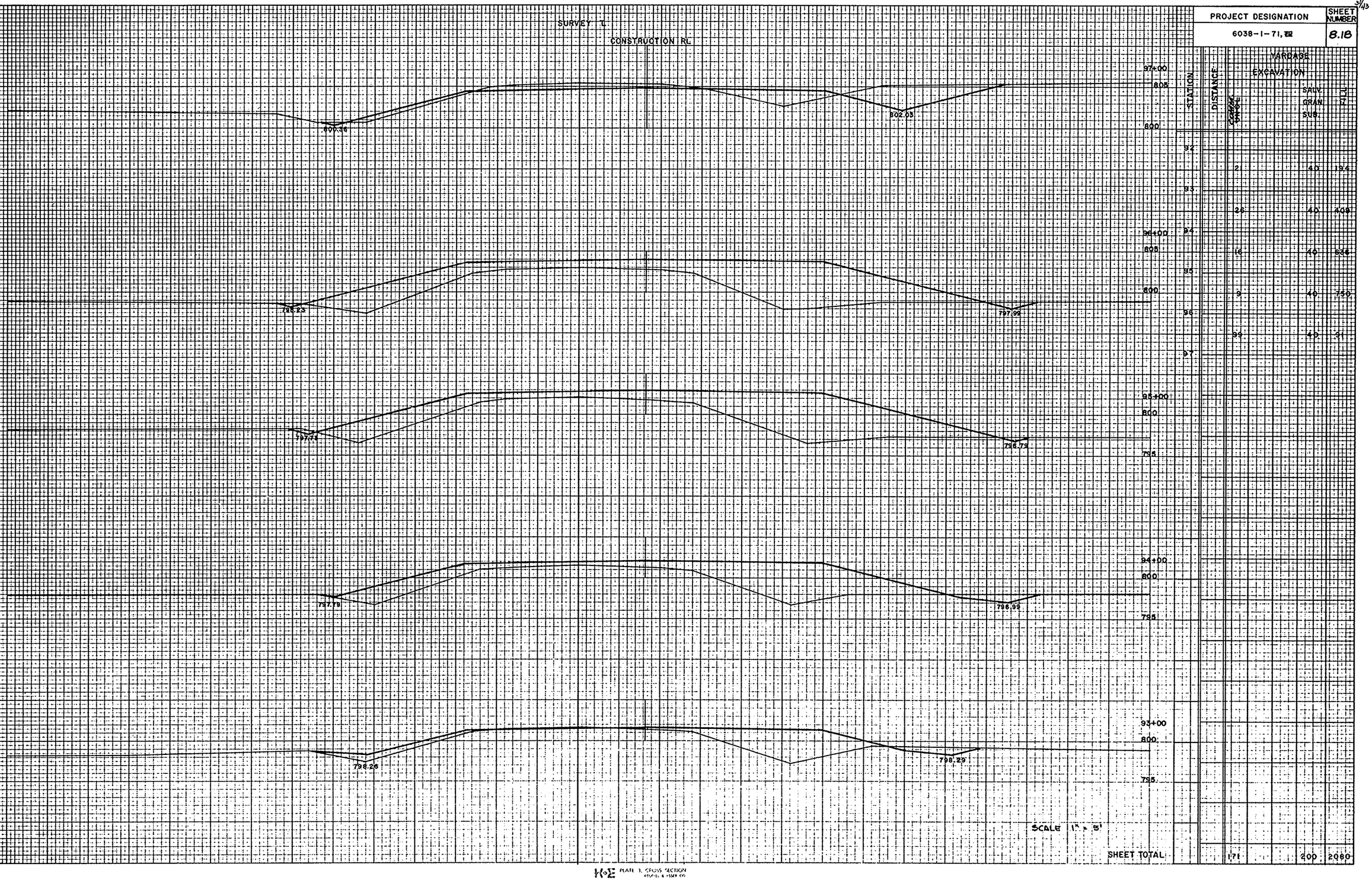
SCALE 1" = 5'

K&E PLATE 3. CROSS SECTION

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ET	8.18

SURVEY ℄

CONSTRUCTION RL



STATION	DISTANCE	COMMON EXCAVATION	VARIABLE EXCAVATION SAND GRAN SUB	FILL
97	34			
	2		40	194
96	34			
	26		40	408
	14		40	546
95				
	9		40	750
94	96			
	99		40	31
93	97			
SHEET TOTAL:		171	200	2080

SCALE 1" = 5'

NOTE BOOK
NO.
AREAS CHECKED
AREAS COMPUTED

H&E PLATE 1, CROSS SECTION
HOWELL & HUSER CO.

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ☒	8.19

SURVEY ℄

CONSTRUCTION RL

604.13

803.03

SCALE 1" = 5'

STATION	DISTANCE	YARDAGE EXCAVATION SALV. GRAN. SUB.	YARDAGE FILL
95+00			
	97		
96+00			
	367	20	81
+70			
	297	12	
98			
	360	32	
+80			
	365	8	
98+00	95		
97+00			
SHEET TOTAL	1699	80	31

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71,72	8.20

SURVEY ℄

CONSTRUCTION RL

STATION	DISTANCE	YARDAGE EXCAVATION	SALV. GRAN. SUB.	FILL
101+00				
	810			
	805			
	99			
800		+51	32	
	+55			
798		983	10	
	100			
		918	14	
	+35			
		1059	26	
100+35	0			
	810			
	805			
800				
100+00				
	810			
	805			
99+65				
	810			
	805			
800				

SCALE 1" = 5'

SHEET TOTAL 2989 90

K+E PLATE 3, CROSS SECTION KEUFFEL & ESSER CO

NOTE BOOK	TRACATE
NO.	AREAS CHECKED

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, [illegible]	8.21

SURVEY T.

CONSTRUCTION RL

STATION	DISTANCE	SCALE	EXCAVATION SALV.	EXCAVATION GRAN. SUB.	FILL
104+00					
	805				
	800				
		10			
	795				
		1166		44	
	+65				
		984		14	
		02			
		1160		40	
103+00		103			
	805				
		713		40	
		04			
	800				
102+00					
	810				
	805				
	800				
	795				
10 +55					
	810				
	805				
	800				

SCALE 1" = 5'

SHEET TOTAL 3605 120

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, F3	8.22

SURVEY ℄

CONSTRUCTION RL

MARSH DISPOSAL

MARSH

MARSH DISPOSAL

MARSH

MARSH DISPOSAL

MARSH

STATION	DISTANCE	COARSE GRADE	MARSH	EXCAVATION SALV. GRAN. SUB.	FILL
108+00					
	760				
	775				
104					
			212	80	48
105+00					
	785				
106			42	40	528
	780				
107			30	40	1092
	775				
108			111	40	1236
109			111	40	1056
107+00					
	795				
	780				
	775				
106+00					
	790				
	785				
	780				
105+00					
	795				
	790				

SCALE 1" = 5'

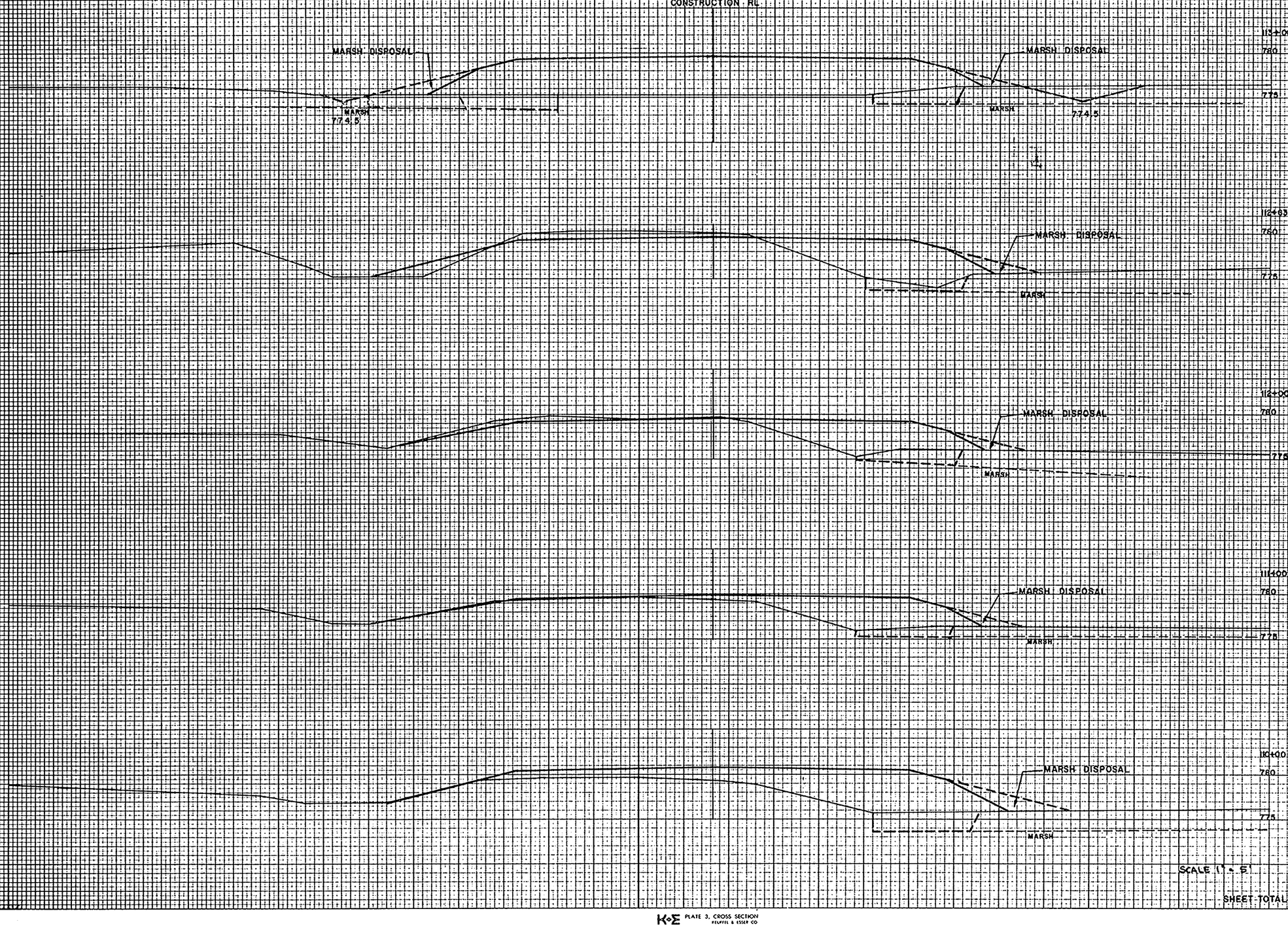
SHEET TOTAL 224 272 200 3870

K+E PLATE 3. CROSS SECTION KEUFFEL & ESSER CO

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, [illegible]	6.23

SURVEY L

CONSTRUCTION RL



STATION	DISTANCE	COARSE SAND	YARDAGE EXCAVATION MARSH	SALV. GRAN. SUB.	FILL
09					
	33		40		656
110					
	33		40		410
112+83					
	17	50	40		300
112					
	27	32	25		198
+13					
	9		7		49
113					
SHEET TOTAL			40	243	152	651

SCALE 1" = 5'

K&E PLATE 3, CROSS SECTION KEUFFEL & ESSER CO

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, ER	8.24

SURVEY ℄

CONSTRUCTION RL

SURVEY	SURVEYED
	PLOTTED
NOTE BOOK	TEMPLATE
NO.	AREAS CHECKED

STATION	DISTANCE	CHAINAGE	YARDAGE EXCAVATION MARSH	SALV. GRAN SUB.	FILL
116+00					
780					
775					
115					
			7	84	38 339
114					
			7	86	40 341
117+00					
115					
780			7	80	40 308
116					
775			11	23	40 260
112					
			23		40 286
118					
116+00					
780					
775					
115+00					
780					
775					
114+00					
780					
775					
SHEET TOTAL			55	232	198 1516

775.5 775.5

775.3 775.3

MARSH 775.1 MARSH DISPOSAL MARSH 775.1

MARSH 774.9 MARSH DISPOSAL MARSH 774.9

774.7 MARSH DISPOSAL MARSH 774.7 MARSH

SCALE 1" = 5'

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ☒	8.25

SURVEY ℄

CONSTRUCTION RL

STATION	DISTANCE	COMM. CODE	YARDAGE EXCAVATION SALV. GRAN. SUB.	YARDAGE FILL
123+00				
765				
780				
	118			
		81	40	305
	119			
		26	40	230
122+00	120			
760				
		101	40	50
	121			
775				
		199	40	114
	122			
		220	40	68
	123			
121+00				
780				
775				
120+00				
780				
775				
119+00				
780				
775				

SCALE 1" = 5'

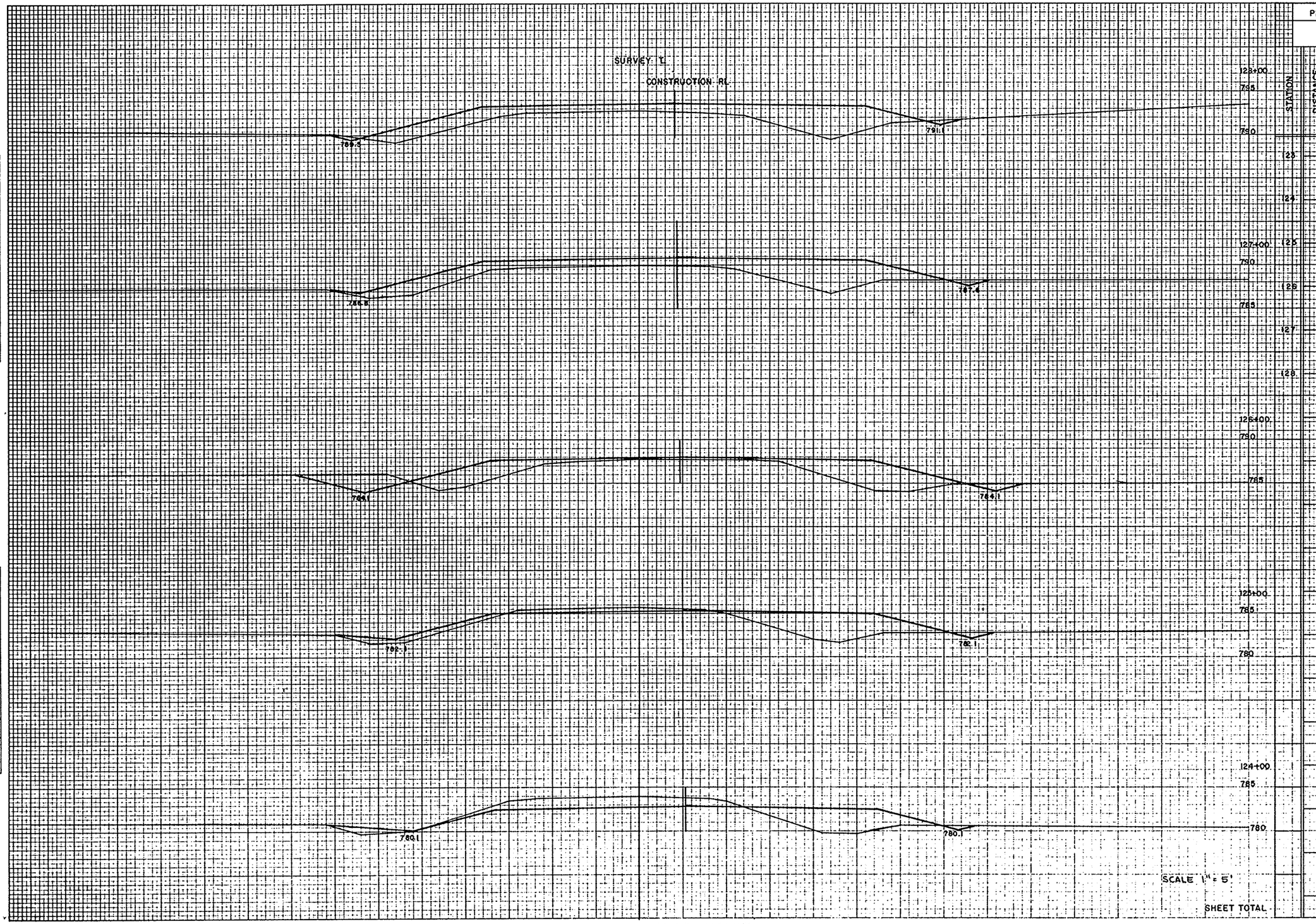
SHEET TOTAL	577	200	907

K+E PLATE 3, CROSS SECTION
KEUFFEL & ESSER CO

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, ☒	8.26

SURVEY ℄

CONSTRUCTION RL



STATION	DISTANCE	CUMM. CROSS	YARDAGE EXCAVATION SALV. GRAN SUB.	YARDAGE FILL
122+00				
	23			
	139		40	113
	24			
	43		40	167
127+00	25			
	12		40	841
	28			
	35		40	921
	27			
	9		40	401
	28			
126+00				
	23			
	139		40	113
	24			
	43		40	167
125+00	25			
	12		40	841
	28			
	35		40	921
	27			
	9		40	401
	28			
124+00				
SHEET TOTAL			236	200 1283

SCALE 1" = 5'

NOTE BOOK	AREAS	AREAS CHECKED
NO.		

K&E PLATE 3 CROSS SECTION

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, 72	8.27

SURVEY ℄

CONSTRUCTION RL

STATION	DISTANCE	YARDAGE EXCAVATION CONCRETE SHEET	SALV. GRAN SUB.	FILL
133+00				
810				
805				
	128			
		52	40	348
	129			
		62	40	232
132+00	130			
810		66	40	79
	13			
805		181	40	21
	132			
800		566	40	5
	133			
131+00				
805				
800				
130+00				
800				
795				
129+00				
795				
790				

786.1

797.3

792.8

794.6

SCALE 1" = 5'

SHEET TOTAL 743 200 686

PROJECT DESIGNATION	SHEET NUMBER
6038-1-71, [illegible]	8.28

SURVEY ℄

CONSTRUCTION ℄

STATION	DISTANCE	YARDAGE EXCAVATION CUBIC YARDS	YARDAGE EMBANKMENT CUBIC YARDS
137+00			
825			
820			
	53		
815		1040	40
	34		
810		1992	40
	66		
		1719	40
	36		
		1693	40
136+00	37		
820			
815			
810			
135+00			
815			
810			
134+00			
815			
810			

SCALE 1" = 5'

SHEET TOTAL 6021 60

AREAS CHECKED

NO.	AREAS CHECKED

K·E PLATE 3, CROSS SECTION KEUFFEL & ESSER CO

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71, 72	8.29

SURVEY T & CONSTRUCTION RL

CONSTRUCTION RL

STATION	DISTANCE	CLASS "C" CONCRETE	YARDAGE EXCAVATION SALV.	GRAN SUB.	FILL
141+08.35					
805					
800					
	(37)				
	163			49	
140+77	136				
805					
	(39)				
	252			40	33
800					
	(40)				
	230			40	72
	93			3	47
140+00	477				
810					
	44			13	7
	(41)				
138+35					
805					
800					
139+00					
815					
810					
805					
138+00					
820					
815					
810					
805					
SHEET TOTAL		2080		164	159

SCALE 1" = 5'

K+E PLATE 3, CROSS SECTION
KEUFFEL & ESSER CO

PROJECT DESIGNATION	SHEET NUMBER
6038-I-71,72	8.30

STATION	DISTANCE	YARDAGE EXCAVATION COMM. UNCL.	SALV. GRAN. SUB.	FILL
141 +083				
		117	37	34
142				
		86	40	92
143				

SURVEY ℄ & CONSTRUCTION GL.

810
805
143+00
800
795
810
142+00
805
800

SCALE 1" = 5'

SHEET TOTAL 203 77 126

K&E PLATE 3, CROSS SECTION KEUFFEL & ESSER CO

NOTE BOOK	TEMPLATE
NO.	AREAS
	AREAS CHECKED