AS - BUILT

INDEX OF SHEETS

Sheet No. 1 Title
Sheet No. 2 – 2.13 Typical Sections and Details
Sheet No. 3 – 3.1 Estimate of Quantities
Sheet No. 3A – 3D Miscellaneous Quantities
Sheet No. 4 – 4.12 Right of Way Plat
Sheet No. 5 – 5.8 Plan and Profile
Sheet No. 6 – 6.14 Standard Detail Drawings
Sheet No. – Sign Plates
Sheet No. – Structure Plans
Sheet No. 9 – 9.21 Computer Earthwork Data
Sheet No. 9.22 – 9.62 Cross Sections

TOTAL SHEETS = 143

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HAYWARD - C.T.H. "K"

S.T.H. "77"
SAWYER COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8530-05-71	MA 047(20)	1

8530-05-71 MA 047(20) D8
HAYWARD - CTH K
STH 77 SAWYER COUNTY
JAMES PETERSON SONS INC

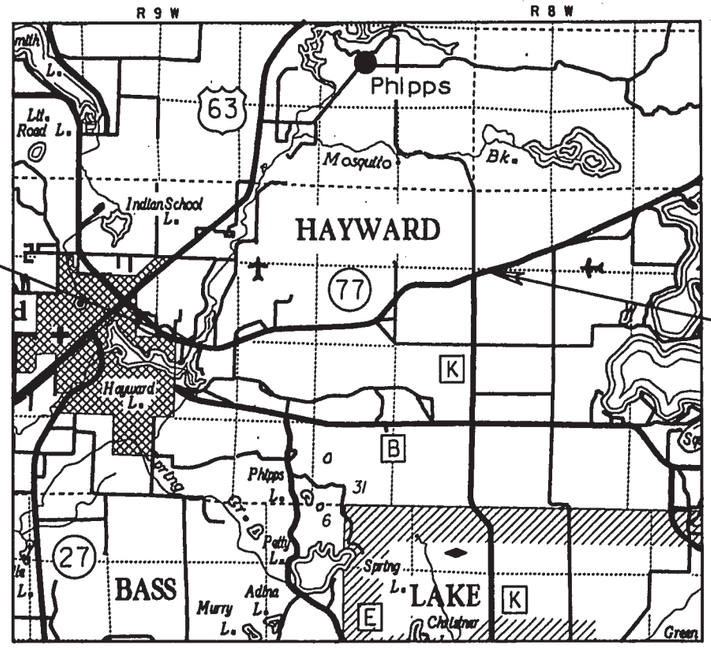
GR, MARCH EXC, B, B SPEC, ASP CONC PAVE
TYPE C1, C & G, SAL ASP PAVE, C P

PROJECT ENGINEER: BRENDAN DIRKES
DATE COMPLETED: OCT. 20TH, 1993

STATE PROJECT NUMBER
8530-05-71



GN



BEGIN PROJECT
STA. 58+06
Y 311163.74
X 1629856.77

END PROJECT
STA. 302+00

LAYOUT
SCALE 0 MI.

TOTAL NET LENGTH OF CENTERLINE = 4.620 MI.

THE COORDINATES SHOWN ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE SYSTEM, NORTH ZONE.

DESIGN DESIGNATION

A.D.T.	(1991)	=	1750
A.D.T.	(2011)	=	2300
D.H.V.		=	400
D.		=	50-50
T.		=	7.5%
V.		=	55/60 MPH
ESALS		=	708,100

CONVENTIONAL SIGNS

COUNTY LINE
CORPORATE LIMITS
PROPERTY LINE
LOT LINE
LIMITED HIGHWAY EASEMENT
EXISTING RIGHT OF WAY
NEW RIGHT OF WAY
REFERENCE LINE
SLOPE INTERCEPT
ORIGINAL GROUND
MARSH OR ROCK PROFILE
CULVERT IN PLACE
CULVERT REQUIRED
CULVERT REQUIRED (Profile)

COMBUSTIBLE FLUIDS (UNDER PRESSURE)
UNDERGROUND UTILITIES
GAS G
ELECTRIC E
TELEPHONE T
SERVICE PEDESTAL TP
CABLE MARKER
POWER POLE
TELEPHONE POLE
RAILROADS
MARSH
WOODED AREA

ORIGINAL PLANS PREPARED BY
OWEN AYRES & ASSOCIATES INC.
CONSULTING ENGINEERS
EAU CLAIRE WISCONSIN

WISCONSIN RICHARD A. STARKOWSKI E-17177 EAU CLAIRE WIS. PROFESSIONAL ENGINEER

DATE 7/26/90

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Surveyor OA & A INC District Checker T.E.M.
Designer OA & A INC C.O. Checker JEG
District Supervisor J.A.H. C.O. Coordinator PETP

APPROVED:
DATE: 10/29/91 Gene McDonald
DISTRICT CHIEF DESIGN ENGINEER

APPROVED:
DATE: 4/3/92 Robert W. Berg
REGIONAL CHIEF ROAD DESIGN ENGINEER

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

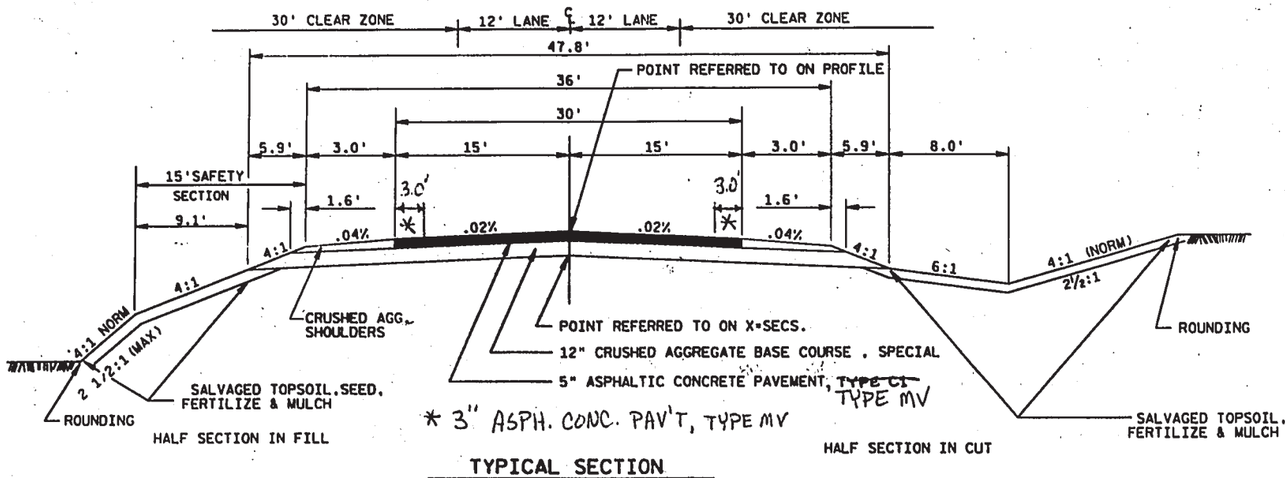
APPROVED:
DATE: _____
DIVISION ADMINISTRATOR

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: 08095TIT

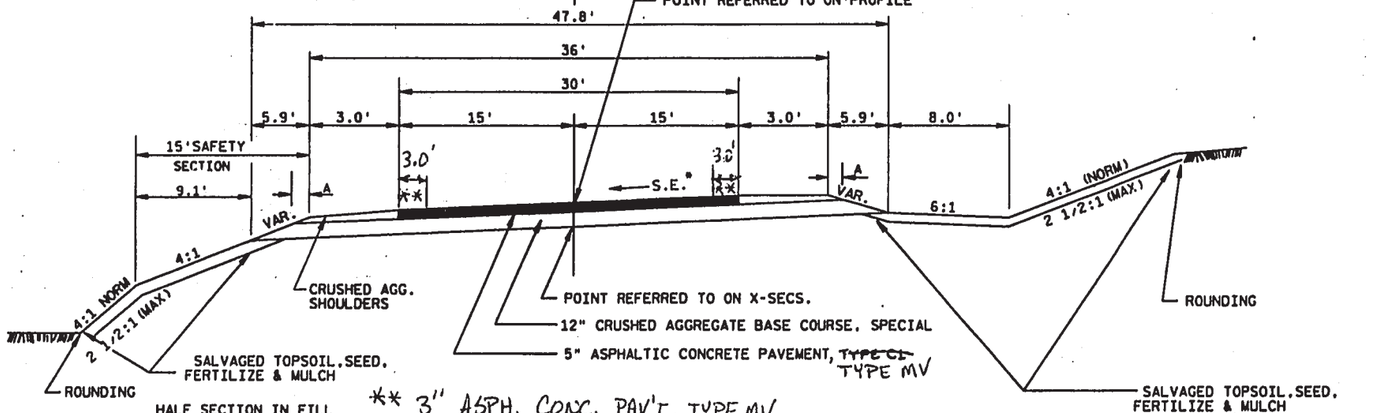
WISDOT/CADDS SHEET 10

STATE PROJECT NUMBER	SHEET NO.
9530-05-71	2
TYPICAL SECTIONS	



TYPICAL SECTION

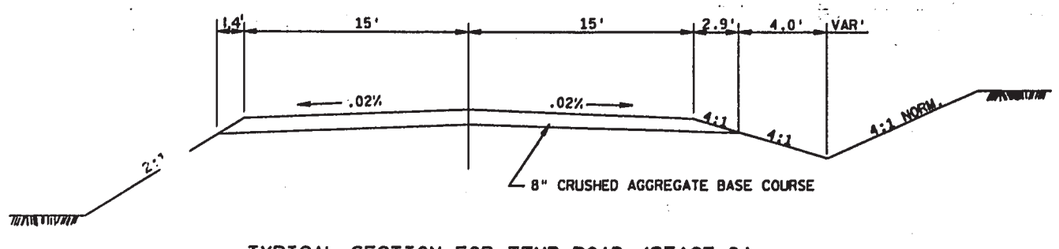
CLEAR ZONE ON OUTSIDE OF CURVE	
62+63 - 80+72 RT	36'
104+76 - 114+76 LT.	36'
174+46 - 185+91 RT.	40'
206+89 - 220+15 LT.	40'
237+28 - 243+61 RT.	38'



TYPICAL SUPERELEVATED SECTION

*CROSS SLOPES SHOWN ON CROSS SECTIONS

P.I. STA.	S.E.	A
71+99.22	0.045%	1.7'
109+81.20	0.045%	1.7'
159+15.04	0.021%	1.6'
180+46.68	0.059%	1.7'
213+97.12	0.059%	1.7'
240+48.15	0.058%	1.7'
262+39.76	0.020%	1.6'



TYPICAL SECTION FOR TEMP ROAD (STAGE 2)

GENERAL NOTES

WHEN THE QUANTITY OF THE ITEM OF BASE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS THE ENGINEER.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

SALVAGED TOPSOIL SHALL BE PLACED ON THE SLOPES, TO THE POINT OF INTERCEPT WITH THE ORIGINAL GROUND SHOWN ON THE CROSS SECTIONS, TO A DEPTH OF 3 INCHES AT THE TIME OF PLACEMENT.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCLUSIVE OF THE ROADBED, SHALL BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.

NO TREES ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

SEED MIXTURE NO. 20 SHALL BE USED THROUGHOUT THE PROJECT.

SILT FENCE TO BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION. THE LOCATION FOR EBS SHALL BE DETERMINED BY THE ENGINEER.

THE EXACT LOCATION OF ENTRANCES SHALL BE DETERMINED IN THE FIELD.

ALL AT GRADE INTERSECTIONS SHALL BE TYPE "C" UNLESS OTHERWISE NOTED ON THE PLANS. AIRPORT RD. INTERSECTION SHALL BE TYPE "B". WHEELER RD. RT., PENINSULA RD., AND C.T.H. "K" INTERSECTIONS SHALL BE TYPE "D".

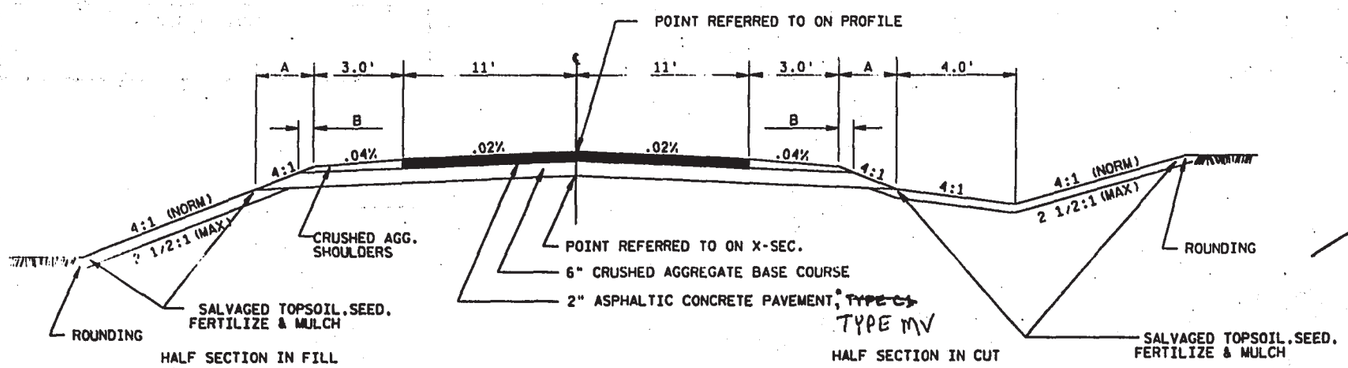
SHRINKAGE IS ESTIMATED AT 30%.

STANDARD DETAIL DRAWINGS

8A5-8A	INLET COVERS.
8C1-4	INLETS, TYPE 1, 2, AND 3.
8D1-11	CONCRETE CURB, CONCRETE CURB AND GUTTER, AND PAVEMENT TIES.
8E7-1	EROSION MAT
8E9-3	SILT FENCE
8F1-10A	APRON ENDWALLS FOR CULVERT PIPE
8F1-10B	APRON ENDWALLS FOR PIPE ARCH AND ELIPTICAL PIPE.
9A1-8A	AT-GRADE SIDE ROAD INTERSECTIONS, TYPES "B", "C", & "D".
14B15-1A	CLASS "A" STEEL PLATE BEAM GUARD, INSTALLATION & ELEMENTS.
14B17-1	CLASS "A" STEEL PLATE BEAM GUARD END TREATMENT WITH ANCHORAGE FOR STEEL PLATE BEAM GUARD.
14B18-1A	CLASS "A" STEEL PLATE BEAM GUARD (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS).
15A2-2	DELINEATOR POSTS, MARKER POSTS, AND DELINEATORS.
15C2-2	BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES.
15C8-4a	PAVEMENT MARKING
15C12-1	TRAFFIC CONTROL FOR LANE CLOSURE

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.1
TYPICAL SECTIONS	

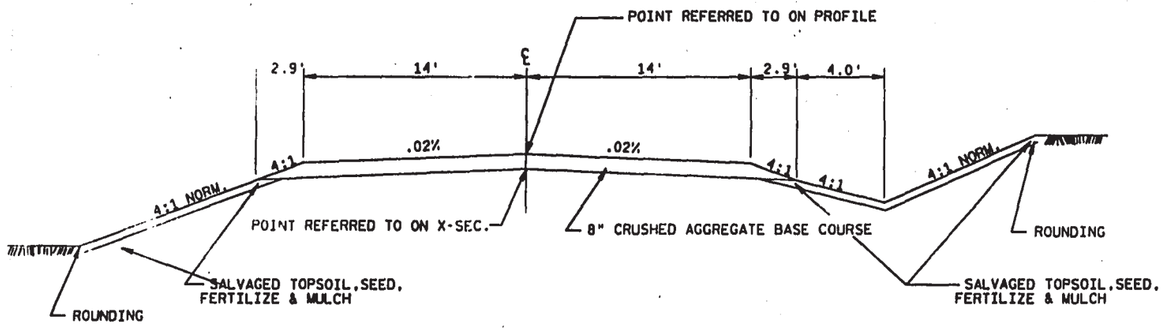


TYPICAL SECTION FOR SIDE ROADS

(ASPHALTIC)

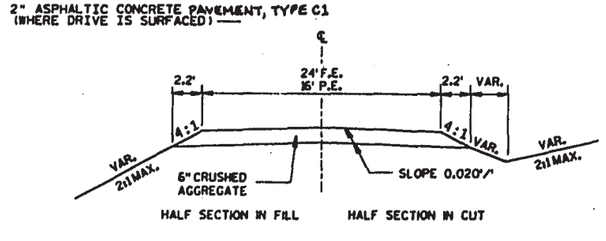
* 3" THICK FOR C.T.H. "K"

DIM.	2" ASPHALT	3" ASPHALT
A	2.6'	3.0'
B	0.4'	0.8'

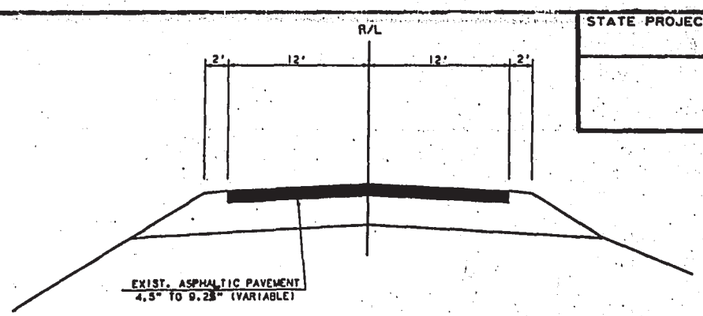


TYPICAL SECTION FOR SIDE ROADS

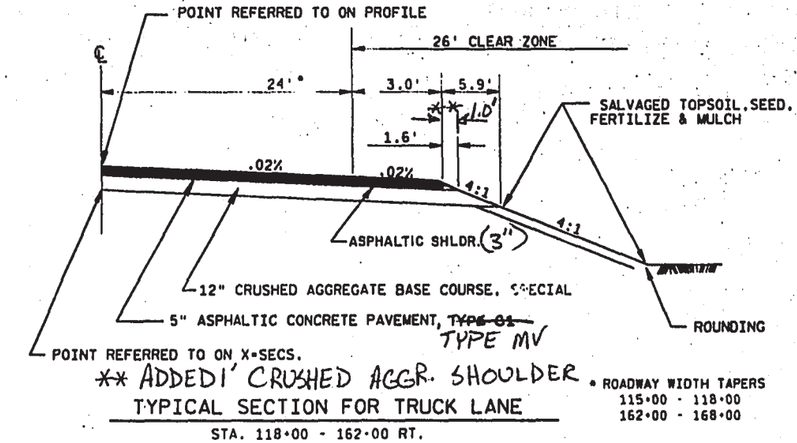
(CR. AGG.)



TYPICAL SECTION FOR PRIVATE ENTRANCES



EXIST. SECTION STH 77

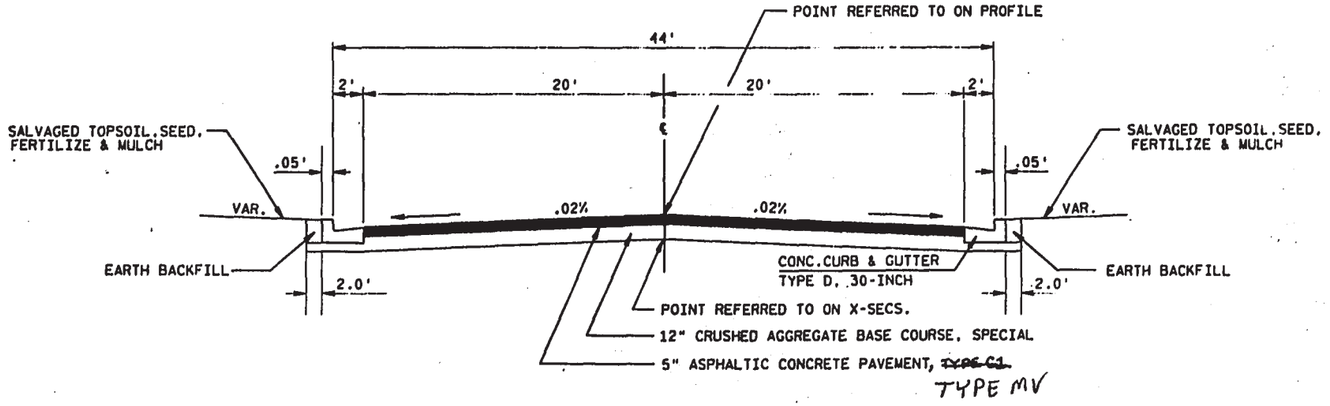


** ADDED 1' CRUSHED AGGR. SHOULDER

TYPICAL SECTION FOR TRUCK LANE

STA. 118+00 - 162+00 RT.

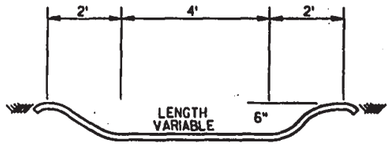
* ROADWAY WIDTH TAPERS
115+00 - 118+00
162+00 - 168+00



TYPICAL URBAN SECTION

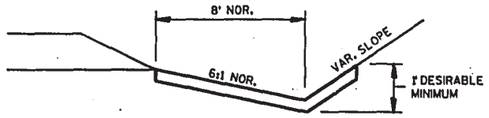
STA. 58+06 - 62+50 LT.
STA. 58+06 RT. - 8+00 LT., DUFFY ROAD

TYPICAL SECTIONS

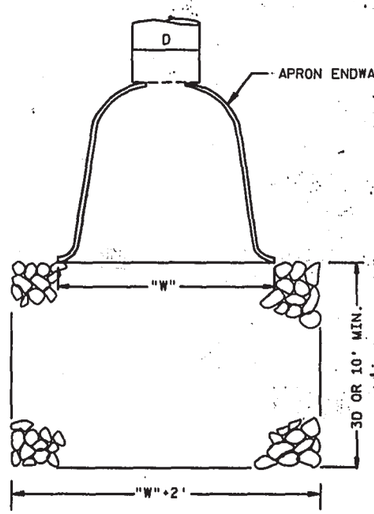


CURB AND GUTTER DRAIN

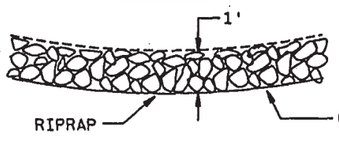
(SOD FLUME)



SOD DETAIL FOR DITCHES

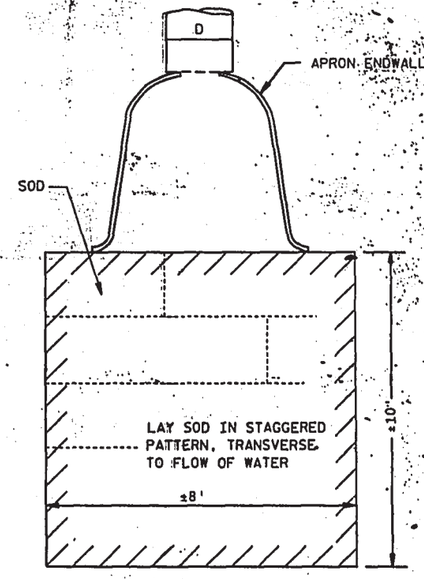


PLAN VIEW

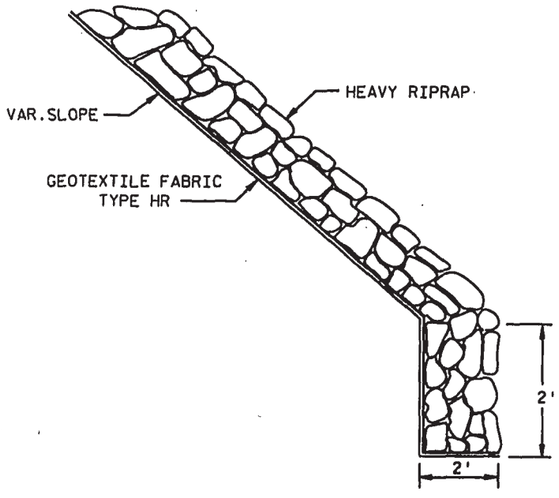


END VIEW

RIPRAP DISCHARGE APRON

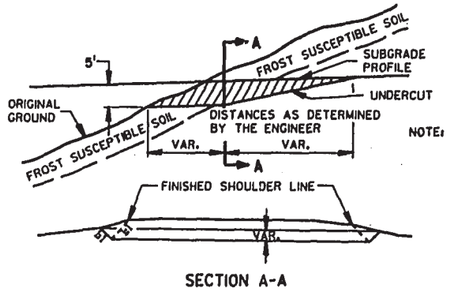


SOD DISCHARGE APRON



TOE OF FILL
HEAVY RIPRAP

STA. 58+06 - 59+30 RT.
STA. 58+06 - 59+00 LT.



SECTION A-A

CROSS SECTION SHOWING UNDERCUT

DETAIL FOR EXCAVATION BELOW SUBGRADE AT CUTS

NOTE: EXACT LOCATIONS AND EXTENT OF E.B.S. SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER.

BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.

THE FILL SECTION WITHIN 100'OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.

UTILITIES

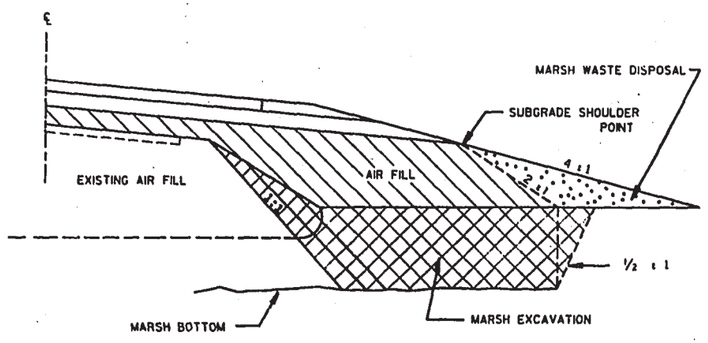
NORTHERN STATES POWER CO.
P.O. BOX 8
100 BARSTOW STREET
EAU CLAIRE, WI. 54702
HARRY PETERSON 715-839-2577

GTE NORTH, INC.
20 S. WILSON STREET
RICE LAKE, WI. 54868
GARY SCHIEFFER 715-234-5528

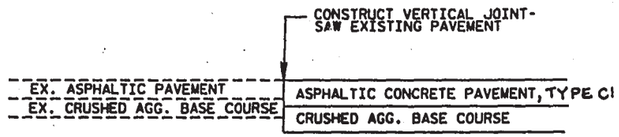
JUMP RIVER ELECTRIC CO-OP
1102 W. 9th. STREET NORTH
BOX 99
LADYSMITH, WI. 54848
BERNIE RYDLUND 715-532-5524

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

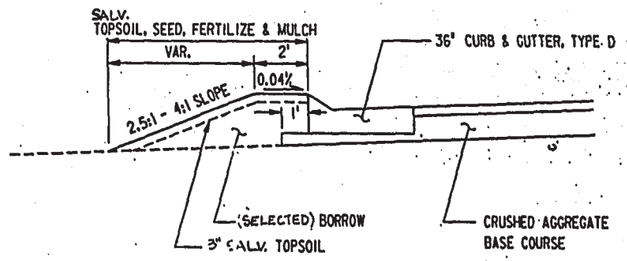
STATE PROJECT NUMBER	SHEET NO.
8530-05-71	23
TYPICAL SECTIONS	



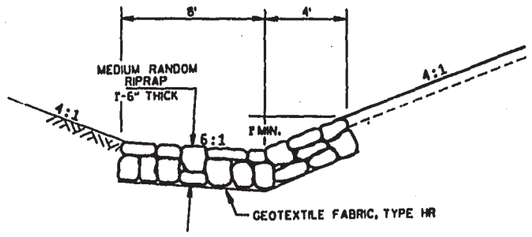
TYPICAL MARSH EXCAVATION FOR RECONSTRUCTION



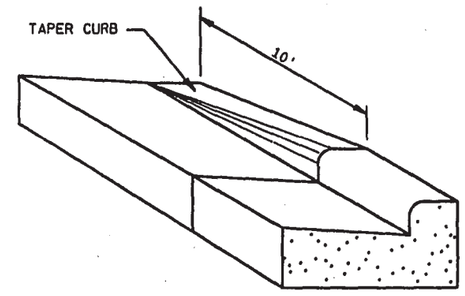
TYPICAL JOINT DETAIL



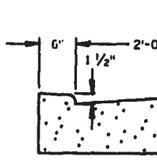
TYPICAL FOR SLOPE TREATMENT BEHIND
CURB & GUTTER AT SIDEROAD INTERSECTIONS



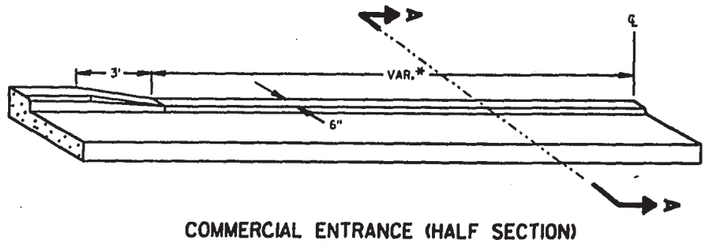
RIPRAP DITCH DETAIL



DETAIL OF CURB & GUTTER TERMINI

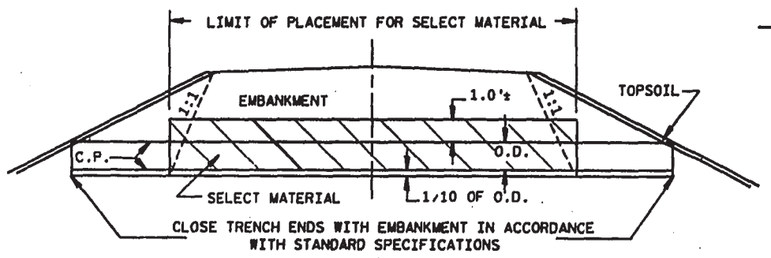


SECTION A-A



COMMERCIAL ENTRANCE (HALF SECTION)

*SEE CURB & GUTTER DETAIL FOR WIDTH



CULVERT BACKFILL DETAIL
(ONLY AT MARSH LOCATIONS)

FILE NAME: HDGN1

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	24

CURB AND GUTTER DETAIL

SUBSET:STH77
FILE NAME:08095CG

NO. OF PRINTS: DATE:
39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

SURVEY PLOT; DATE:
PREL.: DATE:
FINAL: DATE:
LEVELS ON 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,

BOWLING ALLEY

PARKING

55+15 LT.
INL. 3-H LT.
FLOW LINE EL. 1194.16
TOP OF BOX EL. 1193.49
DISCH. EL. 1190.70
15'-12" R.C.P.S.S.
DISCH. END 1190.25
CONC. APRON ENDWALL REQ'D.

RIPRAP W/FABRIC

117' BM. GD.

EXIST. BM. GD.

CONC. CURB & GUTTER 30"-INCH, TYPE D REQ'D.

SLOPE INTERCEPT

P.C. 62+63.34

63-00 80'

62-50 50'

END C. & G. 62+50

140' TAPER

S.T.H. "77"

129' BM. GD.

EXIST. BM. GD.

RIPRAP W/FABRIC

59+42 RT.
INL. 3-H RT.
FLOW LINE EL. 1194.20
TOP OF BOX EL. 1193.53
DISCH. EL. 1190.70
15'-12" R.C.P.S.S.
DISCH. END 1190.25
CONC. APRON ENDWALL REQ'D.

SLOPE INTERCEPT

CONC. CURB & GUTTER 30"-INCH, TYPE D REQ'D.

75' TAPER

GATE

SIGN

BLDG

TANK

62+92.20 70'

62+58.00= 10+01.47 SD. RD.

SLOPE INTERCEPT

NAMEKAGON RIVER

H. WALKER

DUFFY RD.

GATE

BLDG

STEEL PLATE BEAM GUARD, CL. A REQ'D.
STA. 58+04 - 59+21 LT.
STA. 58+04 - 59+33 RT.
END OF BEAM GUARD TAPER & ANCHORAGES SHALL BE 3' BEHIND CURB.

N

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.5
EROSION CONTROL PLAN FOR	
S.T.H. 77	SAWYER COUNTY

N

BEGIN PROJECT
STA. 58+06

P.C. 62+63.34

71+29.87 =
10+00.00 SD. RD.

AIRPORT RD.

MATCH LINE 76+00

62+58.00 =
10+01.47 SD.RD.

P.I. 71+99.22

S.T.H. "77"

DUFFY RD.

WHEELER RD.

P.T. 80+72.48

85+07.72 =
10+01.72 SD. RD.

MATCH LINE 76+00

104+46.09 =
10+03.32 SD. RD.

MATCH LINE 106+00

P.C. 104+76.48

SEE CROSS SECTIONS FOR BERM

HILLTOP PLACE

LEGEND

- SOD
- SILT FENCE
- RIPRAP
- REINFORCED SODDING
- EROSION MAT
- FLOW DIRECTION
- CULVERT PIPE
- SILT FENCE W/RIPRAP DITCH CHECK

FILE NAME:08095ER1
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

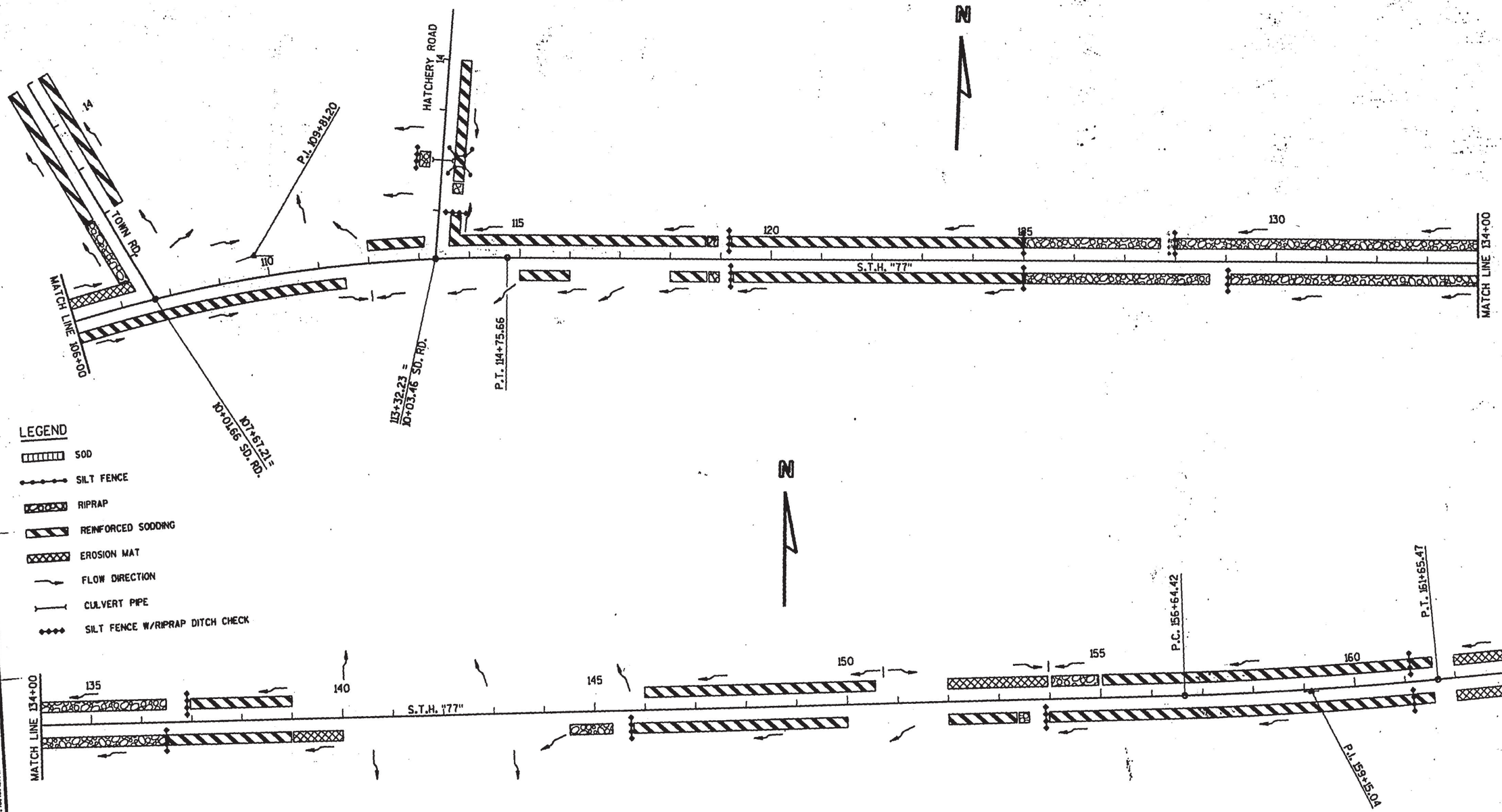
STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.6

EROSION CONTROL PLAN
FOR
S.T.H. 77 SAWYER COUNTY

SUBSET:STH77
FILE NAME:08095ER2

LEGEND

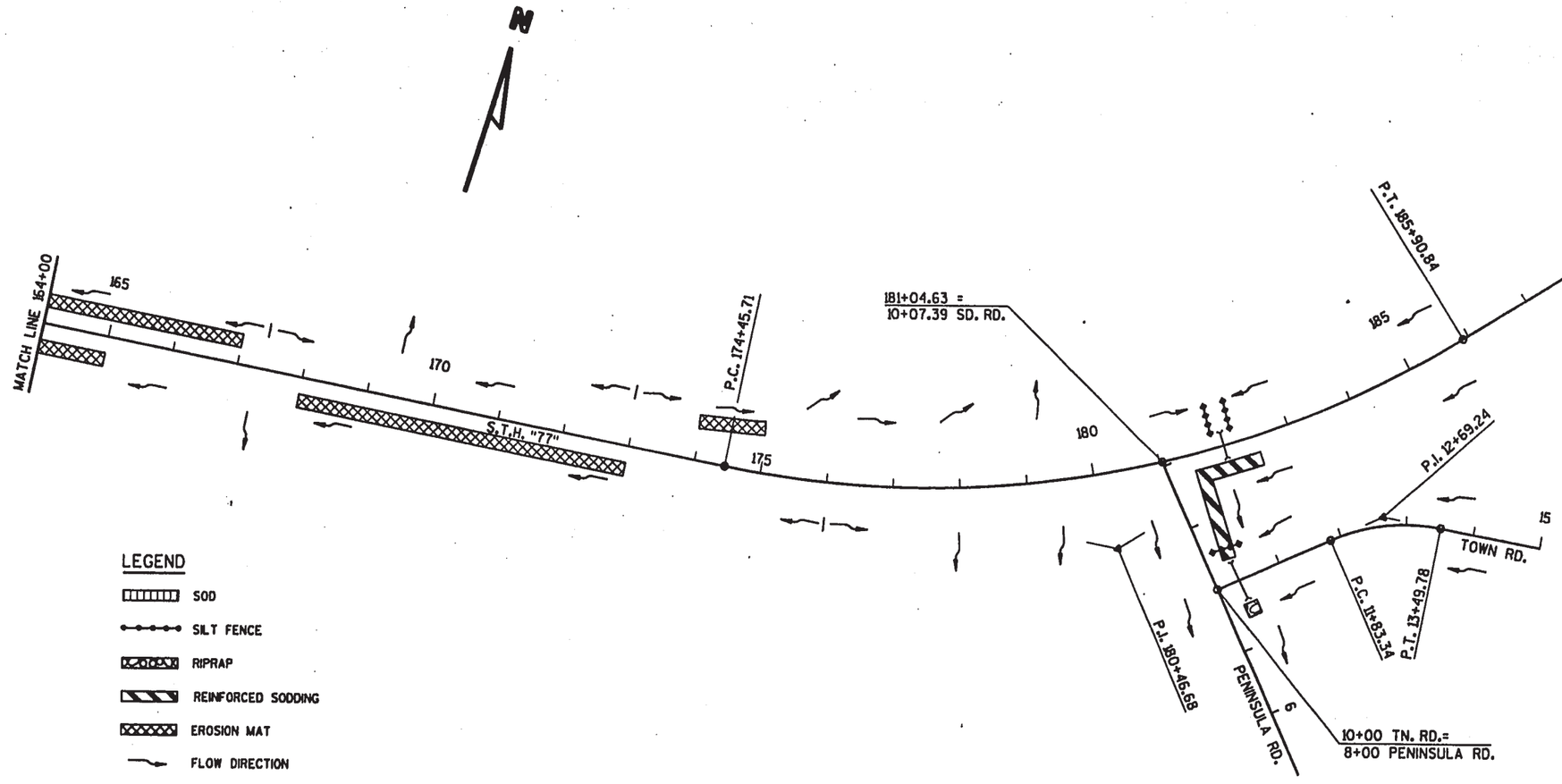
- SOD
- SILT FENCE
- RIPRAP
- REINFORCED SODDING
- EROSION MAT
- FLOW DIRECTION
- CULVERT PIPE
- SILT FENCE W/RIPRAP DITCH CHECK



WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	21

EROSION CONTROL PLAN
FOR
S.T.H. 77 SAWYER COUNTY



LEGEND

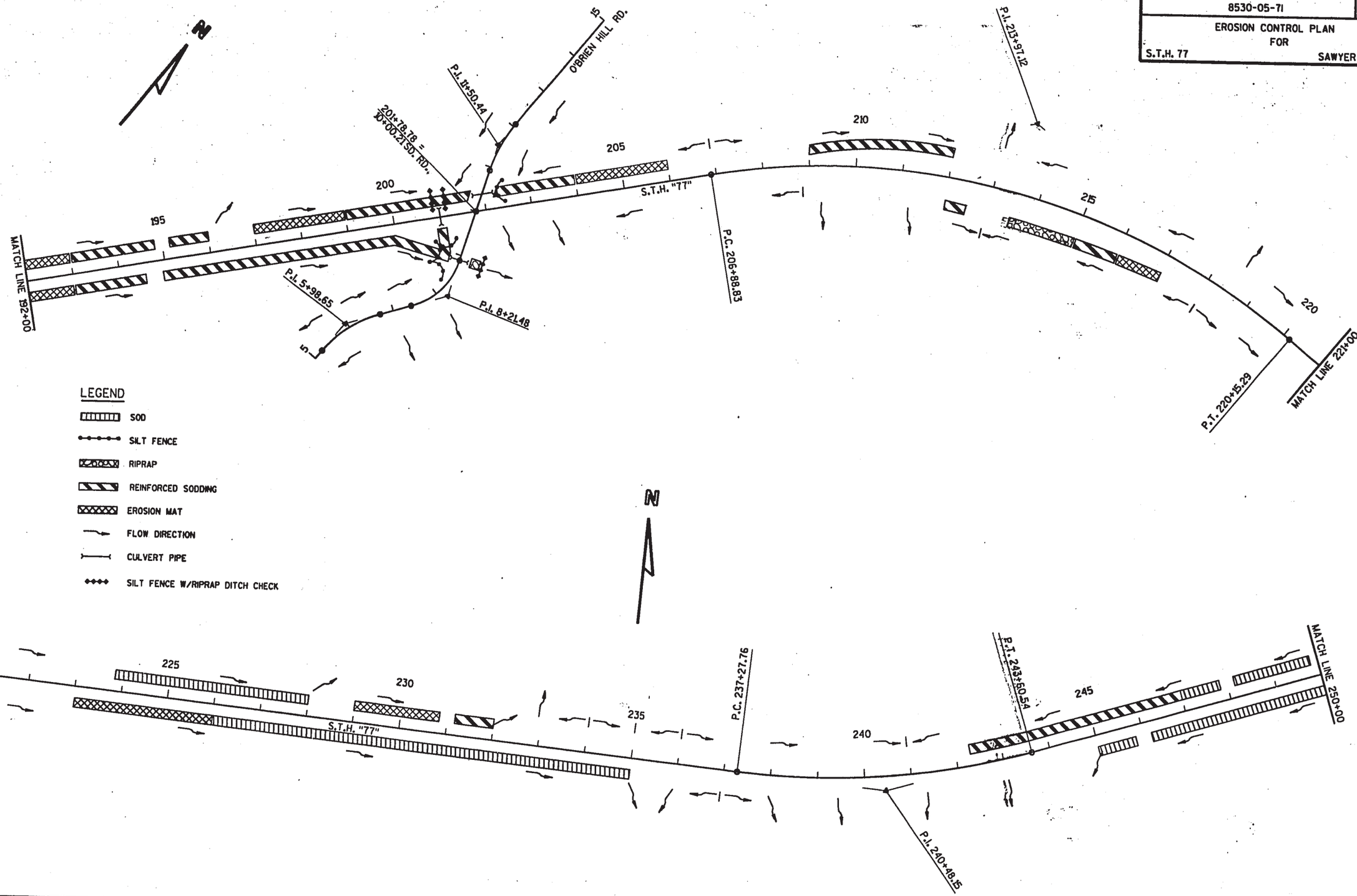
- SOD
- SILT FENCE
- RIPRAP
- REINFORCED SODDING
- EROSION MAT
- FLOW DIRECTION
- CULVERT PIPE
- SILT FENCE W/RIPRAP DITCH CHECK

FILE NAME:08095ER3
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STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.8

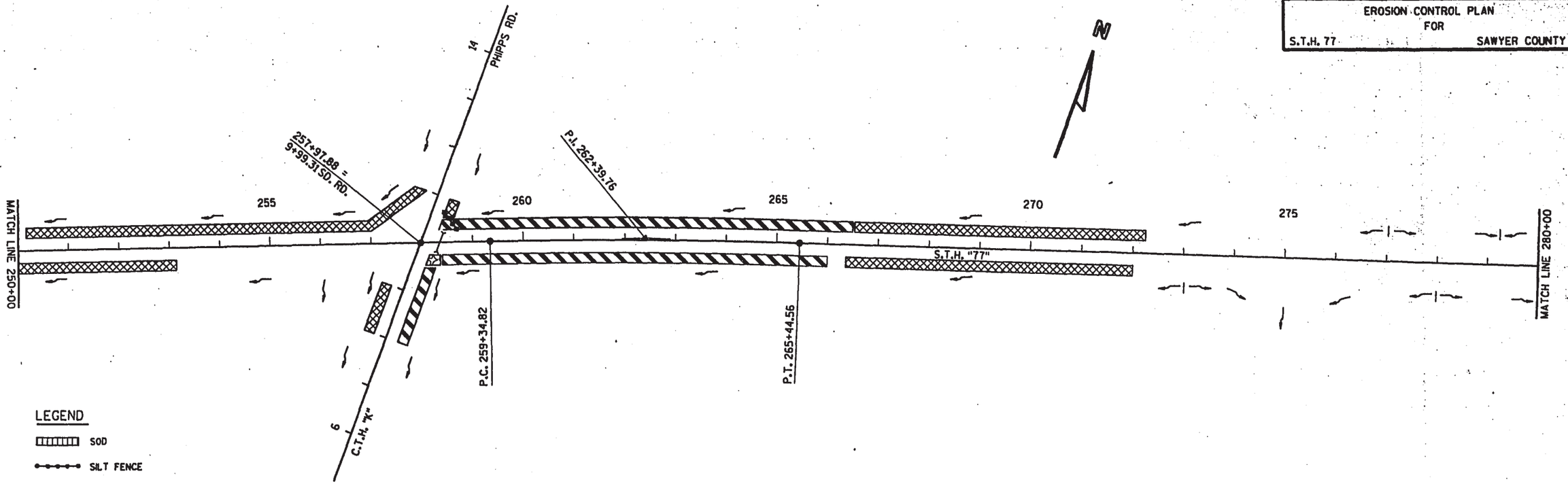
EROSION CONTROL PLAN
FOR
S.T.H. 77 SAWYER COUNTY

SUBSET:STH77
FILE NAME:08095ER4
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STATE PROJECT NUMBER	SHEET NO.
8530-05-71	29

EROSION CONTROL PLAN
FOR
S.T.H. 77 — SAWYER COUNTY

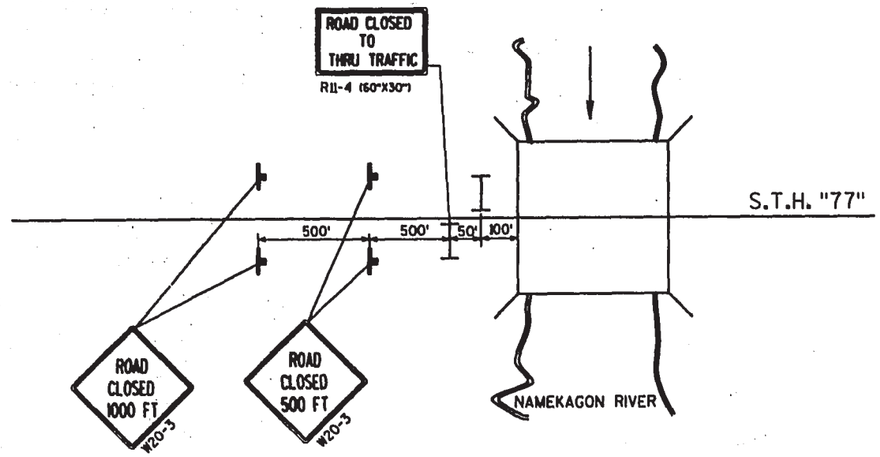


FILE NAME=D8095ER5
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.10

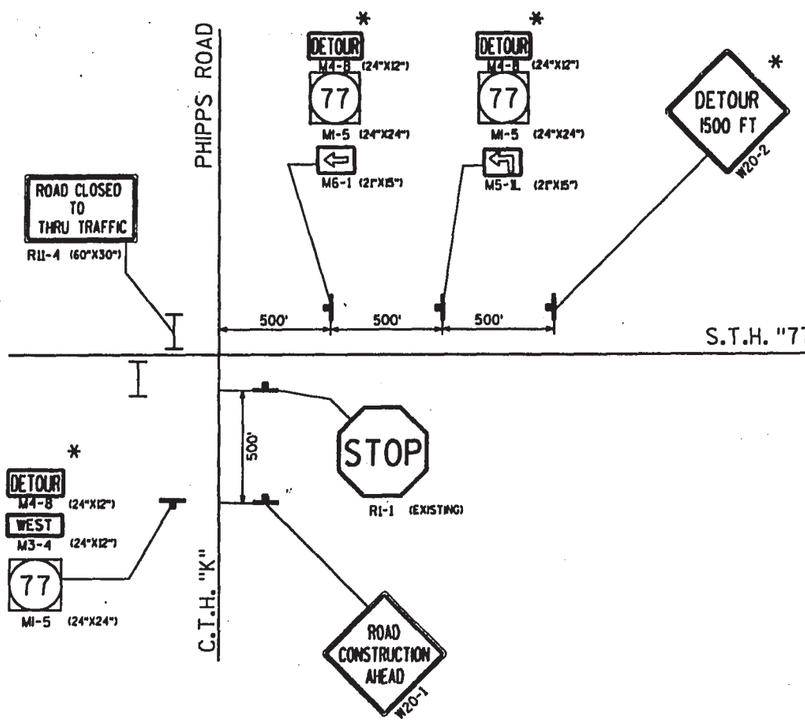
TRAFFIC CONTROL PLAN
STAGE I

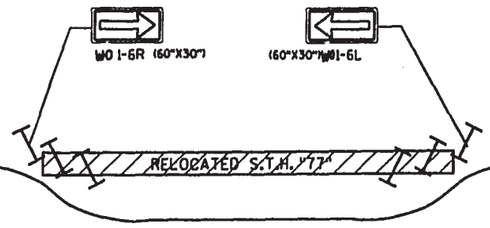
S.T.H. "77" SAWYER COUNTY



TYPICAL SIGNING AT BEGINNING OF PROJECT

NAMEKAGON RIVER





TYPICAL SIGNING FROM C.T.H. "K" TO END OF PROJECT

TRAFFIC CONTROL FOR TEMPORARY ROAD CLOSURES

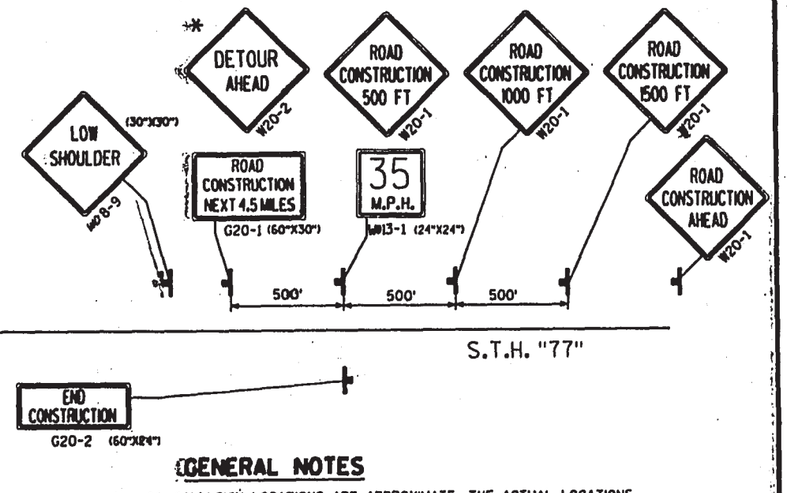
SEE S.D.D. FOR ROAD CLOSURES (DETAIL 3)

LOCATIONS

DUFFY ROAD
AIRPORT ROAD
WHEELER ROAD, RT.
WHEELER ROAD, LT.
RED PINE LANE
HILLTOP PLACE
TOWN ROAD, STA. 107+67.21 LT.
HATCHERY ROAD
PENINSULA ROAD
REINKE ROAD
O'BRIEN HILL ROAD (2 ROADS)

LEGEND

- POST MOUNTED SIGNS. WARNING SIGNS INCLUDING ROAD CONSTRUCTION, LANE CLOSED, AND CURVE OR TURN SIGNS TO HAVE TYPE "A" FLASHER.
- TEMPORARY DELINEATOR POST WITH DOUBLE DELINEATOR.
- REFLECTORIZED PLASTIC DRUM WITH TYPE "C" STEADY BURN LIGHT.
- TYPE III BARRICADE WITH TYPE "A" FLASHERS, (TWO EACH BARRICADE). WARNING SIGN OR SIGNS TO BE MOUNTED ON BARRICADE WHERE INDICATED ON PLANS.
- WORK AREA
- * BY OTHERS



GENERAL NOTES

11. ALL SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
22. DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTORS METHODS OR SEQUENCE OF OPERATION.
33. ROAD MACHINERY, TRUCK ENTRANCE, FLAGMAN AHEAD, ECT., SIGNS SHALL BE USED AS NEEDED AND SHALL BE REMOVED OR COVERED AT NIGHT, WEEKENDS OR WHEN THE ACTIVITY OR CONDITION DOES NOT EXIST. NO FLASHER SHALL BE USED WITH A COVERED SIGN.
44. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
55. TRAFFIC CONTROL PLANS ARE NOT DRAWN TO SCALE.
66. USE EXISTING STOP SIGNS IN TRAFFIC CONTROL.
77. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

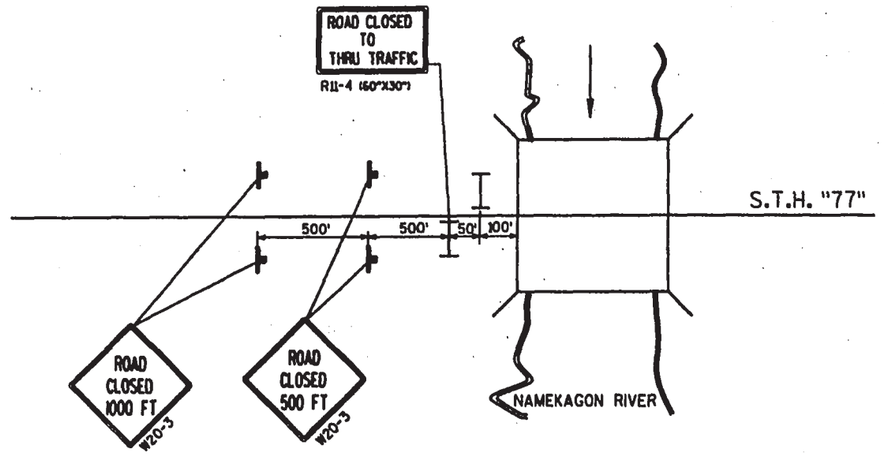
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: MDGN108095SG2

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.11

TRAFFIC CONTROL PLAN
STAGE 2

S.T.H. "77" SAWYER COUNTY



N

TRAFFIC CONTROL FOR TEMPORARY ROAD CLOSURES

SEE S.D.D. FOR ROAD CLOSURES (DETAIL 3)

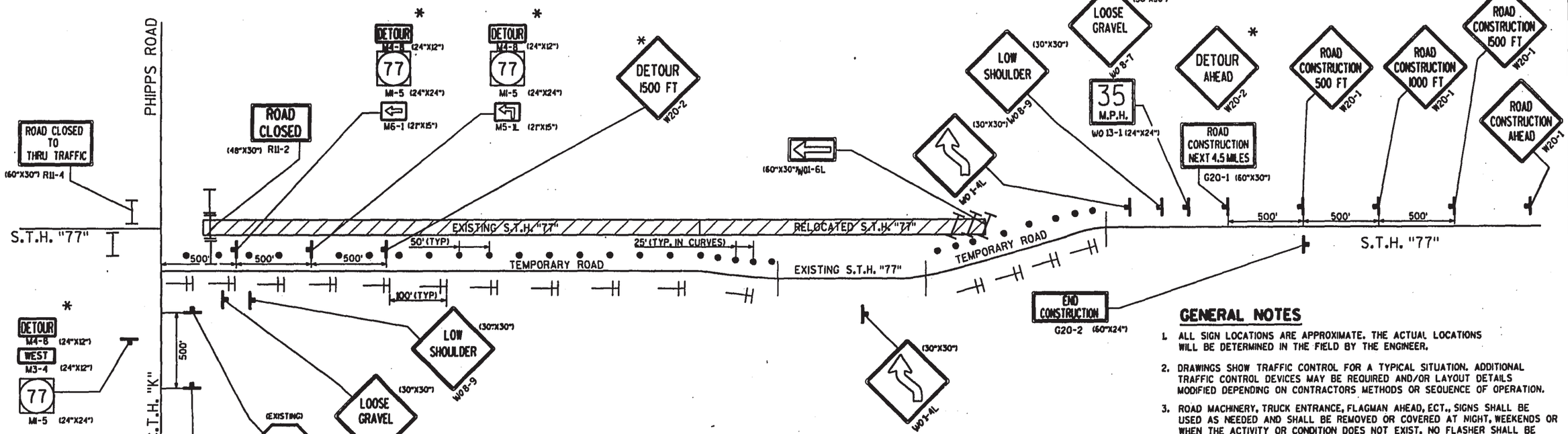
LOCATIONS

DUFFY ROAD
AIRPORT ROAD
WHEELER ROAD, RT.
WHEELER ROAD, LT.
RED PINE LANE
HILLTOP PLACE
TOWN ROAD, STA. 107+67.21 LT.
HATCHERY ROAD
PENINSULA ROAD
REINKE ROAD
O'BRIEN HILL ROAD (2 ROADS)

LEGEND

- POST MOUNTED SIGNS. WARNING SIGNS INCLUDING ROAD CONSTRUCTION, LANE CLOSED, AND CURVE OR TURN SIGNS TO HAVE TYPE "A" FLASHER.
- TEMPORARY DELINEATOR POST WITH DOUBLE DELINEATOR.
- REFLECTORIZED PLASTIC DRUM WITH TYPE "C" STEADY BURN LIGHT.
- TYPE III BARRICADE WITH TYPE "A" FLASHERS. (TWO EACH BARRICADE). WARNING SIGN OR SIGNS TO BE MOUNTED ON BARRICADE WHERE INDICATED ON PLANS.
- WORK AREA
- * BY OTHERS

TYPICAL SIGNING AT BEGINNING OF PROJECT



TYPICAL SIGNING FROM C.T.H. "K" TO END OF PROJECT

GENERAL NOTES

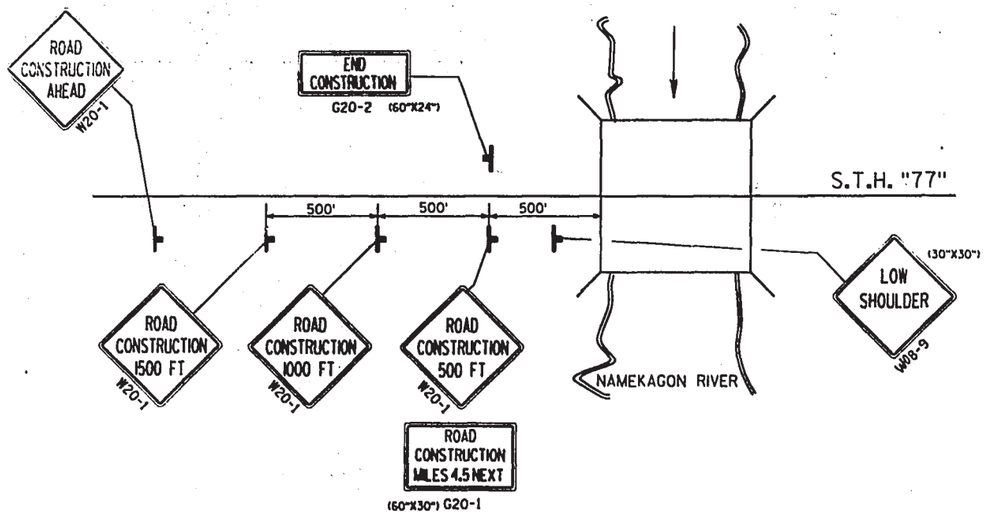
1. ALL SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTORS METHODS OR SEQUENCE OF OPERATION.
3. ROAD MACHINERY, TRUCK ENTRANCE, FLAGMAN AHEAD, ECT., SIGNS SHALL BE USED AS NEEDED AND SHALL BE REMOVED OR COVERED AT NIGHT, WEEKENDS OR WHEN THE ACTIVITY OR CONDITION DOES NOT EXIST. NO FLASHER SHALL BE USED WITH A COVERED SIGN.
4. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
5. TRAFFIC CONTROL PLANS ARE NOT DRAWN TO SCALE.
6. USE EXISTING STOP SIGNS IN TRAFFIC CONTROL.
7. "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUN IS ORANGE.

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.12

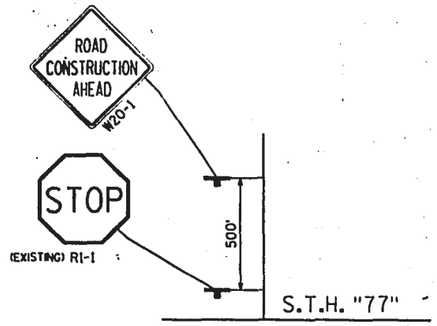
TRAFFIC CONTROL PLAN
STAGE 3

S.T.H. "77" SAWYER COUNTY



TYPICAL SIGNING AT BEGINNING OF PROJECT

NAMEKAGON RIVER

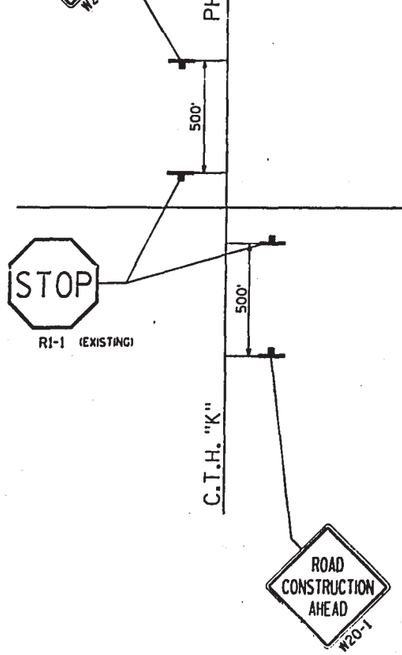


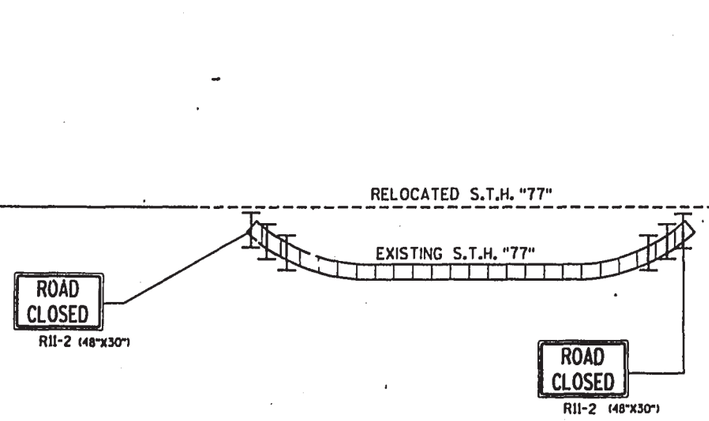
TYPICAL SIDE ROAD DETAIL



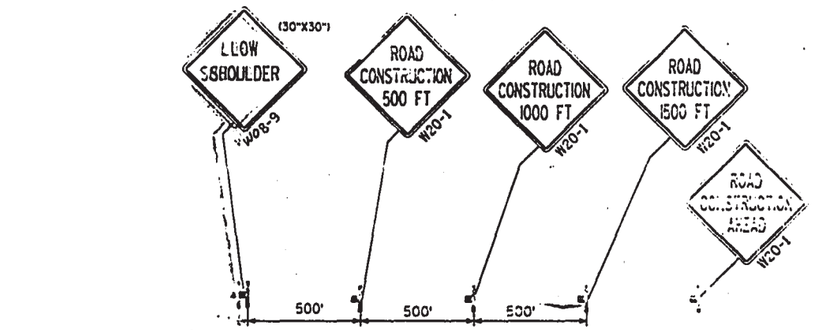
LEGEND

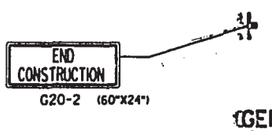
- POST MOUNTED SIGNS. WARNING SIGNS INCLUDING ROAD CONSTRUCTION, LANE CLOSED, AND CURVE OR TURN SIGNS TO HAVE TYPE "A" FLASHER.
- TEMPORARY DELINEATOR POST WITH DOUBLE DELINEATOR.
- REFLECTORIZED PLASTIC DRUM WITH TYPE "C" STEADY BURN LIGHT.
- TYPE III BARRICADE WITH TYPE "A" FLASHERS. (TWO EACH BARRICADE). WARNING SIGN OR SIGNS TO BE MOUNTED ON BARRICADE WHERE INDICATED ON PLANS.
- WORK AREA





TYPICAL SIGNING FROM C.T.H. "K" TO END OF PROJECT





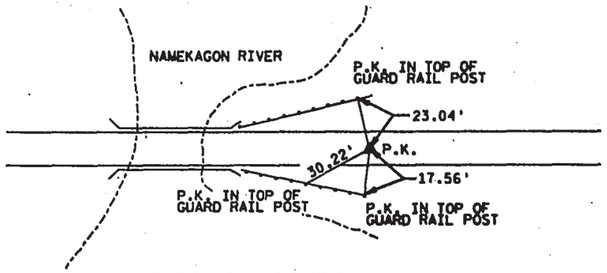
GENERAL NOTES

1. ALL SIGN LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTORS METHODS OR SEQUENCE OF OPERATION.
3. ROAD MACHINERY, TRUCK ENTRANCE, FLAGMAN AHEAD, ECT., SIGNS SHALL BE USED AS NEEDED AND SHALL BE REMOVED OR COVERED AT NIGHT, WEEKENDS OR WHEN THE ACTIVITY OR CONDITION DOES NOT EXIST. NO FLASHER SHALL BE USED WITH A COVERED SIGN.
4. EXISTING TRAFFIC SIGNS MAY REQUIRE RELOCATION DURING STAGES OF CONSTRUCTION AND SHALL BE LOCATED AS REQUIRED BY THE ENGINEER IN THE FIELD.
5. ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
6. TRAFFIC CONTROL PLANS ARE NOT DRAWN TO SCALE.
7. USE EXISTING STOP SIGNS IN TRAFFIC CONTROL.
8. "W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUN IS ORANGE.

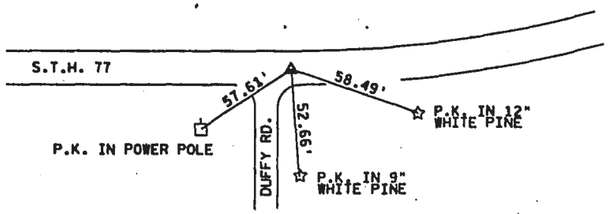
STATE PROJECT NUMBER	SHEET NO.
8530-05-71	2.13

ALIGNMENT TIES

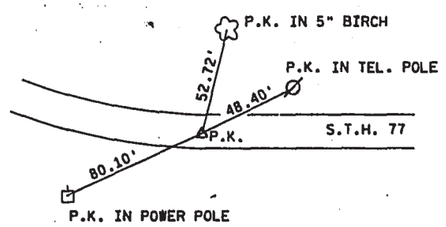
S.T.H. 77



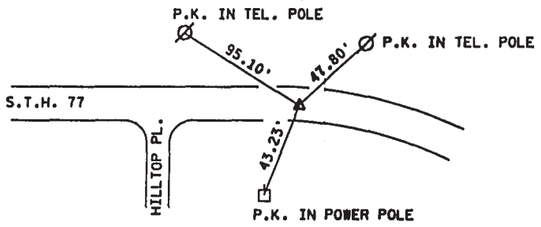
P.O.L. STA. 59+17.94



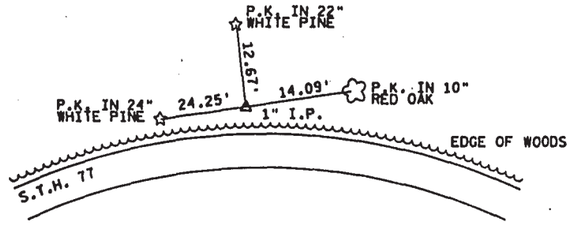
P.C. STA. 62+63.34



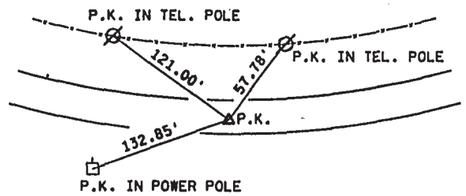
P.T. STA. 80+72.48



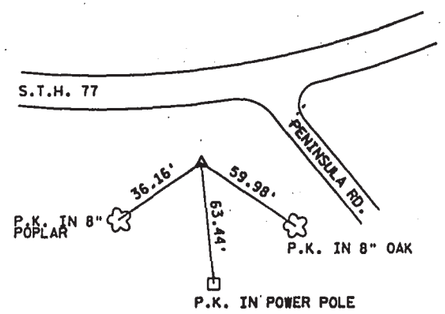
P.C. STA. 104+75.90



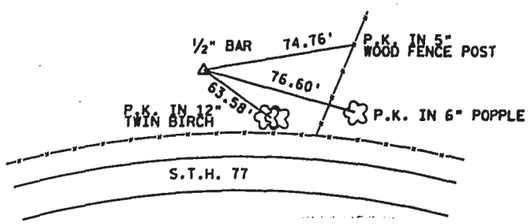
P.I. STA. 109+81.20



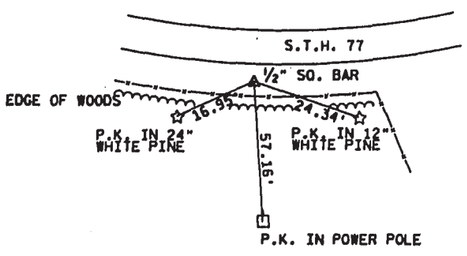
P.I. STA. 159+15.04



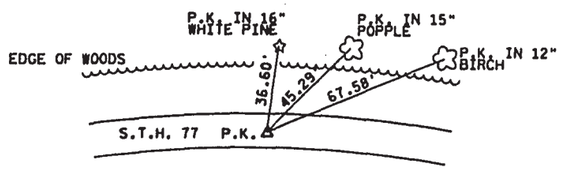
P.I. STA. 180+46.68



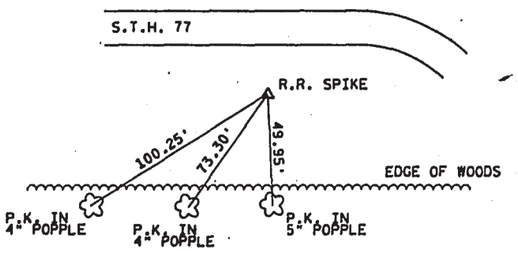
P.I. STA. 213+97.12



P.I. STA. 240+48.15



P.I. STA. 262+39.76



P.I. STA. 294+10.34

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

DATE 04/20/92

ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8530-05-71 QUANTITY
20101	CLEARING	STA.	217.00	217.00
20104	GRUBBING	STA.	217.00	217.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	92,084.00	92,084.00
20505	MARSH EXCAVATION	C.Y.	4,104.00	4,104.00
20801	BORROW EXCAVATION	C.Y.	77,872.00	77,872.00
20811	SELECTED BORROW EXCAVATION	C.Y.	4,587.00	4,587.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
21401	OBLITERATING OLD ROAD	STA.	30.00	30.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	16,530.00	16,530.00
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL.	2,700.00	2,700.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	1,565.00	1,565.00
41010	SALVAGED ASPHALTIC PAVEMENT	TON	20,043.00	20,043.00
41103	ASPHALTIC SURFACE, DETOURS	TON	500.00	500.00
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	928.00	928.00
52005	CULVERT PIPE, CLASS III, 24-INCH	L.F.	602.00	602.00
52007	CULVERT PIPE, CLASS III, 30-INCH	L.F.	86.00	86.00
52010	CULVERT PIPE, CLASS III, 42-INCH	L.F.	74.00	74.00
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	56.00	56.00
52063	APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	22.00	22.00
52065	APRON ENDWALLS FOR CULVERT PIPE, 30-INCH	EACH	2.00	2.00
52068	APRON ENDWALLS FOR CULVERT PIPE, 42-INCH	EACH	2.00	2.00
52084	TEMPORARY CULVERT PIPE, 24-INCH	L.F.	46.00	46.00
52136	CORRUGATED STEEL PIPE ARCH, 21X15-INCH	L.F.	98.00	98.00
52162	STEEL APRON ENDWALLS FOR PIPE ARCH, 21X15-INCH	EACH	6.00	6.00
52260	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 12-INCH	EACH	2.00	2.00

Sheet 3

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8530-05-71 QUANTITY
60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	1,037.00	1,037.00
60170	CONCRETE CURB AND GUTTER, 36-INCH, TYPE D	L.F.	616.00	616.00
60601	RIPRAP	C.Y.	79.00	79.00
60602	HEAVY RIPRAP	C.Y.	172.00	172.00
60604	MEDIUM RANDOM RIPRAP	C.Y.	2,200.00	2,200.00
60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH	L.F.	30.00	30.00
61122	INLETS, TYPE 3	EACH	2.00	2.00
61167	INLET COVERS, TYPE H	EACH	2.00	2.00
61406	ANCHORAGES FOR STEEL PLATE BEAM GUARD	EACH	2.00	2.00
61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	246.00	246.00
61801	MAINTENANCE AND REPAIR OF HAUL ROADS	L.S.	1.00	1.00
61910	MOBILIZATION	L.S.	1.00	1.00
62301	CALCIUM CHLORIDE SURFACE TREATMENT	TON	30.00	30.00
62401	WATER	MGAL	500.00	500.00
62505	SALVAGED TOPSOIL	S.Y.	141,000.00	141,000.00
62702	MULCHING	S.Y.	181,400.00	181,400.00
62803	EROSION MAT, DELIVERED	S.Y.	8,100.00	8,100.00
62804	EROSION MAT, INSTALLED	S.Y.	8,100.00	8,100.00
62815	SILT FENCE, DELIVERED	L.F.	3,360.00	3,360.00
62816	SILT FENCE, INSTALLED	L.F.	3,360.00	3,360.00
62817	SILT FENCE MAINTENANCE	L.F.	3,360.00	3,360.00
62819	MOBILIZATIONS, EROSION CONTROL	EACH	4.00	4.00
62902	FERTILIZER, TYPE A	CWT.	143.00	143.00
63002	SEEDING	LB.	4,900.00	4,900.00
63101	SODDING	S.Y.	3,841.00	3,841.00
63102	REINFORCED SODDING	S.Y.	18,100.00	18,100.00
64202	FIELD OFFICE, TYPE B	L.S.	1.00	1.00
64210	FIELD LABORATORY	L.S.	1.00	1.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	8530-05-71 QUANTITY
64313	TRAFFIC CONTROL, DRUMS	DAYS	1,890.00	1,890.00
64318	TRAFFIC CONTROL, BARRICADES, TYPE III	DAYS	3,740.00	3,740.00
64321	TRAFFIC CONTROL, WARNING LIGHTS, TYPE A	DAYS	10,445.00	10,445.00
64323	TRAFFIC CONTROL, WARNING LIGHTS, TYPE C	DAYS	1,890.00	1,890.00
64326	TRAFFIC CONTROL, SIGNS	DAYS	7,660.00	7,660.00
64406	PAVEMENT MARKING, EPOXY, 4-INCH	L.F.	71,266.00	71,266.00
64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	127.00	127.00
64506	GEOTEXTILE FABRIC, TYPE HR	S.Y.	5,921.00	5,921.00
64601	SAWING EXISTING PAVEMENT	L.F.	134.00	134.00
90001	CRUSHED AGGREGATE BASE COURSE, SPECIAL	TON	81,800.00	81,800.00
90391	ASPHALTIC CONCRETE PAVEMENT, TYPE C1	TON	26,090.00	26,090.00
90656	TEMPORARY DELINEATORS	EACH	28.00	28.00
90726	LOCATING NO PASSING ZONES	MI.	5.00	5.00
90999	ON-THE-JOB TRAINING	HRS.	200.00	200.00

Sheet 3.1

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	3A

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

CLEARING AND GRUBBING

LOCATION	CLEAR STA.	GRUB STA.
58+00-80+00	22	22
7+50-9+50, DUFFY RD.	2	2
10+00-12+00, AIRPORT RD.	2	2
85+00-89+00	4	4
91+00-158+00	67	67
6+50-9+50, HILLTOP PLACE	3	3
10+00-15+00, TOWN RD. @ 107+67 LT.	5	5
10+00-14+00, HATCHERY RD.	4	4
175+00-179+00	4	4
8+00-10+00, PENINSULA RD.	2	2
10+00-14+00, REINKE RD.	4	4
183+00-200+00	17	17
5+00-7+00, O'BRIEN HILL RD.	2	2
202+00-206+00	4	4
217+00-218+00	1	1
221+00-235+00	14	14
237+00-294+00	57	57
8+00-10+00, C.T.H. "K"	2	2
10+00-11+00; PHIPPS RD.	1	1

OBLITERATING OLD ROAD

LOCATION	STA.
10+00-13+00, REINKE RD.	3
6+00-8+00, O'BRIEN HILL RD.	2
271+00-296+00	25

CRUSHED AGGREGATE BASE COURSE

LOCATION	BASE TON	P.E. & F.E. TON	SHOULDER MATERIAL TON
58+06-62+50		143	
DUFFY RD.	400	39	10
62+50-115+00		294	1,365
AIRPORT RD.	340		10
WHEELER RD., RT.	283		10
WHEELER RD., LT.	205		
RED PINE LA.	145		
HILLTOP PLACE	525		
TOWN RD. @107+67	755		
HATCHERY RD.	537	122	28
115+00-168+00		526	940
PENINSULA RD.	366		14
REINKE RD.	640		
O'BRIEN HILL RD., LT.	450	45	
O'BRIEN HILL RD., RT.	910	120	
C.T.H. "K"	290		10
PHIPPS RD.	108		
168+00-302+00		680	3,420
TEMP. RD., 258+00-276+00	2,280		
TEMP. RD., 295+00-302+00	520		

CRUSHED AGGREGATE BASE COURSE, SSPECIAL

LOCATION	TON
58+06-62+50	1,510
62+50-115+00	16,890
115+00-168+00	20,300
168+00-302+00	43,100

ASPHALTIC CONCRETE PAVEMENT, TYPE C1

LOCATION	THICKNESS	SURFACE TON
58+06-62+50	5"	5832
DUFFY RD.	2"	988
62+50-115+00	5"	50001
AIRPORT RD.	2"	1005
WHEELER RD., RT.	2"	888
WHEELER RD., LT.	2"	399
RED PINE LA.	2"	399
HILLTOP PLACE	2"	339
TOWN RD. @107+67	2"	339
HATCHERY RD.	2"	1248
115+00-168+00	5"	64488
ASPHALTIC SHOULDER, 115+00-168+00 RT.	5"	4460
PENINSULA RD.	2"	1009
O'BRIEN HILL RD., LT.	2"	339
O'BRIEN HILL RD., RT.	2"	339
C.T.H. "K"	3"	1228
PHIPPS RD.	2"	339
168+00-302+00	5"	127730

ASPHALTIC MATERIAL FOR TACK COAT

LOCATION	GAL.
58+06-62+50	556
62+50-115+00	5928
115+00-168+00	7786
168+00-302+00	13340

REINFORCED CONCRETE PIPE, CL.III, STORM SEWER, 12-INCH

LOCATION	LIN. FT.	APRON ENDWALLS EACH
59+16 LT.	115	1
59+42 RT.	115	1

SALVAGED ASPHALTIC PAVEMENT

LOCATION	TON
58+06-62+50	359
62+50-115+00	4,235
115+00-168+00	4,276
168+00-302+00	10,809
DUFFY RD.	59
AIRPORT RD.	46
WHEELER RD., RT.	46
HATCHERY RD.	107
PENINSULA RD.	60
C.T.H. "K"	46

EARTHWORK SUMMARY

UNCL. EXCAV.	92,084 C.Y.
FILL (30% SHR.)	129,529 C.Y.
MARSH EXCAV. (50% SHR.)	4,104 C.Y.
BORROW EXCAV.	77,872 C.Y.
SELECTED BORROW	4,587 C.Y.
WASTE	1,500 C.Y.

FILES ON: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

INLETS & INLET COVERS

LOCATION	INL. TYPE 3 EA.	INL. COVER TYPE H EA.
59+16, 18.5' LT.	1	1 (LT.)
59+42, 19.4' RT.	1	1 (RT.)

TEMPORARY CULVERT PIPE, 24-INCH

LOCATION	LIN. FT.
258+75	46

STEEL PLATE BEAM GUARD, CL. A

LOCATION	BEAM GD. LIN. FT.	ANCHORAGES EA.
58+04-59+21 LT.	117	1
58+04-59+33 RT.	129	1

CALCIUM CHLORIDE SURFACE TREATMENT

LOCATION	TON
MAINLINE, UNDISTRIBUTED	22
TEMPORARY ROAD	8

CONCRETE CURB AND GUTTER, 30-INCH, TYPE D

LOCATION	LIN. FT.
58+06-62+50 LT.	444
58+06 RT.-8+00 LT., DUFFY RD.	593

CONCRETE CURB AND GUTTER, 36-INCH, TYPE D

LOCATION	LIN. FT.
AIRPORT RD. INTERSECTION	158
WHEELER RD. INTERSECTION RT.	150
PENINSULA RD. INTERSECTION	152
C.T.H. "K" INTERSECTION	156

RIPRAP AND GEOTEXTILE FABRIC, TYPE R

LOCATION	RIPRAP CU. YD.	FABRIC SQ. YD.
59+16 LT., PIPE DISCH.	6	17
59+42 RT., PIPE DISCH.	6	17
94+60 LT., PIPE DISCH.	4	13
11+25 RT., HATCHERY RD., PIPE DISCH.	2	9
119+00 LT., PIPE DISCH.	2	9
119+00 RT., PIPE DISCH.	2	9
153+78 RT., PIPE DISCH.	2	9
8+90 RT., O'BRIEN HILL RD., PIPE DISCH.	3	11
258+75 RT., PIPE DISCH.	3	11
292+80 LT., PIPE DISCH.	3	11
10+27, REINKE RD., PIPE DISCH.	3	11
DITCH CHECKS (EROSION CONTROL)	43	--

HEAVY RIPRAP AND GEOTEXTILE FABRIC, TYPE HR

LOCATION	RIPRAP CU. YD.	FABRIC SQ. YD.
58+06-59+00 LT., SLOPES	70	153
58+06-59+30 RT., SLOPES	102	213

MEDIUM RANDOM RIPRAP AND GEOTEXTILE FABRIC, TYPE HR

LOCATION	RIPRAP CU. YD.	FABRIC SQ. YD.
94+60-99+00 RT., DITCH	293	738
98+25-99+00 RT., BEHIND BERM	50	130
99+00-100+00 LT., DITCH	67	172
12+00-13+00 LT., TOWN RD., DITCH	67	172
125+00-127+70 LT., DITCH	180	455
125+00-128+68 RT., DITCH	246	619
128+04-136+50 LT., DITCH	565	1,415
129+10-136+50 RT., DITCH	494	1,239
144+50-145+35 RT., DITCH	57	147
154+00-155+00 LT., DITCH	67	172
12+00 LT., HATCHERY RD., PIPE DISCH.	14	41
213+50-215+00 RT., DITCH	100	255

SALVAGED TOPSOIL, SEEDING, FERTILIZER AND MULCHING

LOCATION	SALV. TOPSOIL SQ. YD.	SEEDING MIX #20 LB.	FERT. TYPE "A" CWT	MULCH SQ.YD.
58+06-302+00	112,750	3,505	97.4	133,600
DUFFY RD.	512	24	0.6	890
AIRPORT RD.	302	15	0.4	560
WHEELER RD.	488	24	0.6	870
HILLTOP PLACE	2,295	76	1.8	2800
TOWN ROAD @107+67	1,718	68	1.6	2500
HATCHERY RD.	2,184	34	0.8	2900
PENINSULA RD.	607	26	0.6	970
REINKE RD.	1,143	50	1.2	1830
O'BRIEN HILL RD. RT.	1,561	66	1.6	2450
O'BRIEN HILL RD. LT.	747	31	0.7	1140
C.T.H. "K"	376	16	0.4	590
ROAD OBLITERATION, REINKE RD.	1,150	38	0.9	1410
ROAD OBLITERATION, O'BRIEN HILL RD.	667	24	0.6	890
ROAD OBLITERATION, 271+00-296+00	12,500	413	9.6	15280
BORROW PIT		390	21.2	
TEMP.EROSION CONTROL (UNDISTRIBUTED)	2,000	100	3.0	12720

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

SAWING EXISTING PAVEMENT

LOCATION	LIN. FT.
12+00, AIRPORT RD.	22
8+00, WHEELER RD., RT.	22
14+50, HATCHERY RD.	22
7+50, PENINSULA RD.	22
8+00, C.T.H. "K"	22
302+00, MAINLINE	24

REINFORCED SODDING

LOCATION		SQ. YD.
85+75-86+44 RT.	DITCH	92
99+00-102+00 RT.	BEHIND BERM	400
99+00 RT.-6+00 LT., HILLTOP PLACE	DITCH	1,175
100+00-104+00 LT.	DITCH	535
6+00 RT., HILLTOP PLACE-11+50 RT.	DITCH	1,400
12+00-15+00 LT., TOWN RD. @ 107+67	DITCH	400
12+00-15+00 RT., TOWN RD. @ 107+67	DITCH	400
112+00-113+00 LT.	DITCH	133
11+58-14+00 RT., HATCHERY RD.	DITCH	323
10+92 RT., HATCHERY RD.-118+72 LT.	DITCH	724
115+00-116+00 RT.	DITCH	133
118+00-118+75 RT.	DITCH	100
119+21-125+00 LT.	DITCH	772
119+25-125+00 RT.	DITCH	767
136+98-139+00 LT.	DITCH	270
136+50-139+00 RT.	DITCH	335
145+77-150+00 RT.	DITCH	564
146+00-150+56 LT.	DITCH	608
152+00-153+48 RT.	DITCH	200
153+98-161+56 RT.	DITCH	1,015
155+00-161+56 LT.	DITCH	875
8+35 RT.PENINSULA RD.-181+50 RT.	DITCH	333
193+00-194+83 LT.	DITCH	245
193+00-194+56 RT.	DITCH	210
194+94-201+20 RT.	DITCH	835
195+16-196+00 LT.	DITCH	112
199+00-201+73 LT.	DITCH	364
202+23-204+00 LT.	DITCH	236
209+00-212+00 LT.	DITCH	400
212+00-212+50 RT.	DITCH	67
215+00-216+00 RT.	DITCH	133
231+17-232+00 LT.	DITCH	111
242+31-247+00 LT.	DITCH	625
8+00-9+57 RT., C.T.H."K"	DITCH	210
258+75-266+50 LT.	DITCH	1,036
258+75-266+02 RT.	DITCH	970
288+00-289+00 LT.	DITCH	133
292+00-294+00 RT.	DITCH	270
292+75-294+00 LT.	DITCH	167
CULVERT DISCH. APRONS		162
TEMPORARY EROSION CONTROL (UNDISTRIBUTED)		260

SODDING

LOCATION		SQ. YDS.
59+17-59+32 LT., 6' WIDE BEHIND CURB		10
59+67-61+20 LT., 6' WIDE BEHIND CURB		102
61+55-61+87 LT., 6' WIDE BEHIND CURB		21
62+22-62+50 LT., 6' WIDE BEHIND CURB		19
59+44-61+22 RT. SLOPES		444
61+57 RT.-8+67 LT., DUFFY RD.	SLOPES	322
AIRPORT RD., INTERSECTION	FLUMES	23
WHEELER RD., INTERSECTION	FLUMES	30
PENINSULA RD., INTERSECTION	FLUMES	27
C.T.H. "K", INTERSECTION	FLUMES	16
223+83-228+00 LT.	DITCH	556
226+00-235+00 RT.	DITCH	1200
245+00-245+83 RT.	DITCH	111
246+17-250+00 RT.	DITCH	511
247+00-247+84 LT.	DITCH	112
248+16-249+84 LT.	DITCH	224
TEMPORARY EROSION CONTROL (UNDISTRIBUTED)		112

SILT FENCE (SANDY SOILS)

LOCATION		LIN. FT.
58+06-59+40 RT.	TOE	175
58+06-59+10 LT.	TOE	125
70+50-71+80 RT.	TOE	130
73+00-75+00 LT.	TOE	200
78+80-85+00 LT.	TOE	620
82+00-84+50 RT.	TOE	250
92+00-94+10 LT.	TOE	210
94+50-99+00 LT.	TOE	450
289+00-292+50 LT.	TOE	350
290+00-290+50 RT.	TOE	50
TEMPORARY EROSION CONTROL (UNDISTRIBUTED)		210
AT RIPRAP DITCH CHECKS		290
AT CULVERT PIPES		300

PAVEMENT MARKING, EPOXY, 4-INCH

LOCATION	WHITE LANE LINE LIN. FT.	WHITE EDGE LINE LIN. FT.	YELLOW NO PASSING LIN. FT.	YELLOW CENTERLINE LIN. FT.
58+06-302+00		46,350		5,336
118+00-162+00	1,100			
61+00-75+00 RT.			1,400	
62+50-82+00 LT.			1,950	
93+70-110+00 RT.			1,630	
104+00-118+50 LT.			1,450	
131+50-145+00 RT.			1,350	
140+00-156+00 LT.			1,600	
167+00-184+00 RT.			1,700	
177+00-193+00 LT.			1,600	
199+00-217+00 RT.			1,800	
210+00-228+00 LT.			1,800	
230+00-240+00 RT.			1,000	
240+00-252+00 LT.			1,200	

EROSION MAT

LOCATION	SQ. YD.
881+27-82+27 LT.	140
886+00-87+00 LT.	140
886+90-88+00 RT.	150
1106+00-107+30 LT.	175
1139+00-140+00 RT.	140
1152+00-154+00 LT.	270
1162+00-167+00 LT.	670
1162+00-165+00 RT.	400
1168+00-173+00 RT.	670
1174+00-175+00 LT.	140
1191+00-193+00 LT.	270
1191+00-193+00 RT.	270
1197+00-199+00 LT.	270
2204+00-206+00 LT.	270
2216+00-217+00 RT.	140
2223+00-226+00 RT.	400
2229+00-230+83 LT.	250
2250+16 LT.-11+00 LT., PHIPPS RD.	1,040
2250+00-253+16 RT.	425
88+00-9+00 LT., C.T.H. "K"	140
2266+50-272+24 LT.	770
2266+36-272+00 RT.	760
TEMPORARY EROSION CONTROL (UNDISTRIBUTED)	200

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

MINOR SIDE ROAD & ENTRANCE PIPES

STATION	LOCATION	DIA. (IN)	LENGTH (L.F.)	TYPE	RCCP (CLASS)	THICKNESS (INCHES) STEEL	THICKNESS (INCHES) ALUMINUM	END TREATMENT RIPRAP (C.Y.)	END TREATMENT REINF. SOD (S.Y.)	END TREATMENT APRON ENDWALL
9+00										
DUFFY RD.	P.E.,RT.	18	28	C.P.	III	0.064	0.060			2
68+26	P.E.,LT.	18	40	C.P.	III	0.064	0.060		9	2
73+26	P.E.,RT.	18	38	C.P.	III	0.064	0.060		9	2
78+65	P.E.,LT.	18	30	C.P.	III	0.064	0.060		9	2
86+67	P.E.,RT.	18	40	C.P.	III	0.064	0.060			2
89+28	P.E.,RT.	18	28	C.P.	III	0.064	0.060		9	2
11+25										
HATCHERY RD.	F.E.,RT.	24	58	C.P.	III	0.064	0.075	2		2
12+00										
HATCHERY RD.	CL	24	68	C.P.	III	0.064	0.075	14		2
119+00	P.E.,LT.	24	34	C.P.	III	0.064	0.075	2		2
119+00	F.E.,RT.	24	42	C.P.	III	0.064	0.075	2		2
127+87	P.E.,LT.	18	28	C.P.	III	0.064	0.060		9	2
128+89	P.E.,RT.	18	32	C.P.	III	0.064	0.060		9	2
136+74	P.E.,LT.	18	42	C.P.	III	0.064	0.060		9	2
145+56	P.E.,RT.	18	36	C.P.	III	0.064	0.060		9	2
150+78	P.E.,LT.	18	38	C.P.	III	0.064	0.060			2
153+78	P.E.,RT.	18	34	C.P.	III	0.064	0.060	2		2
161+78	P.E.,LT.	18	38	C.P.	III	0.064	0.060			2
161+78	F.E.,RT.	18	36	C.P.	III	0.064	0.060			2
10+27										
REINKE RD.	CL	21x15	42	C.S.P.A.		0.064		3		2
194+75	P.E.,RT.	18	40	C.P.	III	0.064	0.060			2
195+00	P.E.,LT.	18	28	C.P.	III	0.064	0.060			2
8+90										
O'BRIEN HILL RD.	CL	24	66	C.P.	III	0.064	0.075	3		2
10+54										
O'BRIEN HILL RD.	CL	24	68	C.P.	III	0.064	0.075			2
11+50									9	2
O'BRIEN HILL RD.	F.E.,RT.	18	36	C.P.	III	0.064	0.060			2
12+10									9	2
O'BRIEN HILL RD.	P.E.,LT.	18	28	C.P.	III	0.064	0.060			2
222+63	F.E.,RT.	18	38	C.P.	III	0.064	0.060		9	2
223+58	P.E.,LT.	18	36	C.P.	III	0.064	0.060			2
231+00	P.E.,LT.	18	28	C.P.	III	0.064	0.060			2
240+08	P.E.,LT.	18	28	C.P.	III	0.064	0.060		9	2
242+14	P.E.,LT.	18	28	C.P.	III	0.064	0.060		9	2
246+00	P.E.,RT.	18	28	C.P.	III	0.064	0.060			2
248+00	P.E.,LT.	21X15	28	C.S.P.A.	--	0.064	--			2
250+10	P.E.,LT.	21X15	28	C.S.P.A.	--	0.064	--			2
251+47	P.E.,RT.	18	34	C.P.	III	0.064	0.060		9	2
253+33	P.E.,RT.	18	28	C.P.	III	0.064	0.060		9	2
266+19	P.E.,RT.	18	28	C.P.	III	0.064	0.060			2
272+53	P.E.,LT.	18	32	C.P.	III	0.064	0.060		9	2

CROSS DRAINS

STATION	LOCATION	DIA. (IN)	LENGTH (L.F.)	TYPE	RCCP (CLASS)	THICKNESS (INCHES) STEEL	THICKNESS (INCHES) ALUMINUM	END TREATMENT RIPRAP (C.Y.)	END TREATMENT REINF. SOD (S.Y.)	END TREATMENT APRON ENDWALLS
81+77	CL	24	64	C.P.	III	0.064	0.075		9	2
85+94	CL	42	74	C.P.	III	0.109	0.105			2
94+60	CL	30	86	C.P.	III	0.079	0.075	4		2
182+00	CL	24	70	C.P.	III	0.064	0.075			2
201+00	CL	24	70	C.P.	III	0.064	0.075			2
258+75	CL	24	62	C.P.	III	0.064	0.075	3		2
292+80	CL	24	--	--	--			3		2

TEMPORARY DELINEATORS

LOCATION	EACH
STAGE II TRAFFIC CONTROL	
258+00 – 276+00	19
294+00 – 302+00	9

TRAFFIC CONTROL, DRUMS

STAGE	DAYS
II	1890

TRAFFIC CONTROL, BARRICADES, TYPE III

STAGE	DAYS
I	1350
II	1890
III	500

TRAFFIC CONTROL, WARNING LIGHTS, TYPE A

STAGE	DAYS
I	3050
II	4445
III	2950

TRAFFIC CONTROL, WARNING LIGHTS, TYPE C

STAGE	DAYS
II	1890

TRAFFIC CONTROL, SIGNS

STAGE	DAYS
I	1500
II	2310
III	3850

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	5

CURVE DATA

P.I. 71+99.22
Y 310822.13
X 1631207.30
△ = 36°10'58"LT
D = 2°00'
T = 935.88'
L = 1809.14'
E = 148.99'
R = 2864.79'
P.C. 62+63.34
P.T. 80+72.48
S.E. 0.045 ft
L.R. 175'

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
10	57+00	USGS " RSP 1970" 15' RT.	1195.17

BEGIN PROJECT STA. 58+06

NET LENGTH OF CENTERLINE STA. 58+06 - STA. 76+00 = 179⅓ L.F.

CONC. CURB & GUTTER REQ'D. STA. 58+06 RT.- STA. 8+00 LT., DUFFY RD. (SEE CONSTRUCTION DETAIL)

CONC. CURB & GUTTER REQ'D. STA.58+06 - 62+50 LT.

59+50 LT. CONST. C.E.

61+38 LT. CONST. C.E.

61+40 RT. CONST. C.E.

8+50 LT. CONST. C.E.

62+05 LT. CONST. C.E.

68+26 LT. CONST. C.E. 1-18" C.P. REQ'D.

70+16 RT. CONST. P.E.

73+48 LT. OMIT F.E.

73+26 RT. CONST. P.E. 1-18" C.P. REQ'D.

9+00 RT. CONST. P.E. 1-18" C.P. REQ'D.

P.C. 62+63.34

62+58.00 = 10+01.47 SD.RD.

71+29.87 = 10+00.00 SD. RD.

SLOPE INTERCEPT

C. CABRON

A. BOETZER

K. HEINZ

C. JOHNSON

H. WALKER

H. WALKER

C. ANDERSON

BOWLING ALLEY

ABANDONED BRIDGE ABUTMENTS

HENDERSON RIVER

AIRPORT RD.

DUFFY RD.

DUFFY ROAD

AIRPORT ROAD

NEW ⟂ PROFILE

400' V.C.

100' V.C.

YARDAGE SUMMARY

STA.58+06 - 60+27

UNCL. EXC.	2606 C.Y.
FILL	
MAINLINE	1922 C.Y.
DUFFY ROAD	23 C.Y.
SHR.30%	
MARSH EXC.	91 C.Y.
SHR.50%	

1194.77 1195.17 1195.57 1195.97 1196.37 1196.72 1196.97 1197.12 1197.17 1197.17 1197.17 1197.17 1197.17 1197.17 1197.24 1197.45 1197.79 1198.27 1198.82

50 55 60 65 70 75

FILE NAME: HDGN:08095PP1

WISDOT/CADDS SHEET 421

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	5.1

78+65 LT.
CONST. P.E.
1-18" C.P. REQ'D.

90+80 LT.
CONST. P.E.

W. CHRISTIANSON, VDR.
L.C. TO
P. WARNE
&
K. KEIMIG, VDE.

M. METCALF

T. DUFFY

H/ TIFFANY & M. HEISEL, VDR L.C. TO
L. BRIGGS, VDE.

104+46.09
99+99.83 SD. RD.

85+07.72 =
10+91.72 SD. RD.

WHEELER RD.

S.T.H. 77

SLOPE INTERCEPT

C. JOHNSON

R. WADE

R. WADE

H. TIFFANY & M.RISBERG

H. TIFFANY & M.RISBERG

HILLTOP PLACE

P.C. 104+76.48

81+37 RT.
CONST. P.E.

86+67 RT.
CONST. P.E.
1-18" C.P. REQ'D.

89+28 RT.
CONST. P.E.
1-18" C.P. REQ'D.

93+65 RT.
CONST. ENTRANCE TO
RED PINE LANE

NET LENGTH OF CENTERLINE STA.76+00 - STA.106+00 = 3000 L.F.

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
14	106+31	10" ASPEN 70' LT.	1239.81

WHEELER ROAD

EXISTING 24" C.P. TO REMAIN

NEW 6 PROFILE

81+47
1-24" C.P. REQ'D.
SKEW 15° LHF
64' CMCP

85+34
1-42" C.P. REQ'D.
SKEW 20° LHF
88' CMCP

HILLTOP PLACE

94+50
1-30" C.P. REQ'D.
SKEW 20° RHF
86' CP

+0.55 %

YARDAGE SUMMARY	
STA. 69+27 - 106+31	
UNCL. EXC.	
MAINLINE	24684 C.Y.
WHEELER RD.	0 C.Y.
FILL	
MAINLINE	17140 C.Y.
AIRPORT RD.	354 C.Y.
WHEELER RD.	350 C.Y.
SHR. 30%	
MARSH EXC.	4055 C.Y.
SHR. 50%	
BORROW EXC.	4987 C.Y.

1198.82 1199.37 1199.92 1200.47 1201.02 1201.57 1202.12 1202.67 1203.22 1203.77 1204.32 1204.87 1205.42 1205.97 1206.52 1207.07 1207.66 1208.79 1210.61 1213.12 1216.32 1220.17 1224.62 1227.43 1230.39 1232.89 1234.93 1236.52 1237.66 1238.34 1238.57

80 85 90 95 100 105

5.1

FILE NAME: HDGN:08095PP2

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	5.2

DID NOT BUILD P.E.

11+25 RT.
~~CONST. P.E.~~
~~1-24" C.P. REQ'D.~~

118+74
119+00 LT.
CONST. P.E.
1-24" C.P. REQ'D.

118+00 LT.
OMIT P.E.

127+87 LT.
CONST. P.E.
1-18" C.P. REQ'D.

128+89 LT.
OMIT P.E.

128+89 RT.
CONST. P.E.
1-18" C.P. REQ'D.

M. TORNGREN

W. NELSON

SAWYER CO.

R. MARTINSON

SLOPE INTERCEPTS

P. BENDER

D. TWOREK

J. DUFFY

M. HARNDEN

H. TIFFANY & M. RISBERG

HILLTOP PLACE

HATCHERY ROAD

TOWN ROAD LT.

113+75 RT.
BIRKEBEINER TRAIL

119+00 RT.
CONST. P.E.
1-24" C.P. REQ'D.

115+00 – 168+00 RT.
3' ASPHALTIC SHLDR. REQ'D.

124+70-126+70 RT
200' PERFORATED PIPE UNDERDRAIN

NET LENGTH OF CENTERLINE STA.106+00 - STA.134+00= 2800L.F.

CURVE DATA

P.I. 109+81.20
Y 312261.34
X 1634771.88
Δ = 19°59'01"RT
D = 2°00'
L = 999.18'
E = 44.12
R = 2864.79
P.C. 104+76.48
P.T. 114+75.66
S.E. 0.045%
L.R. 175'

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
14	106+31	10" ASPEN 70' RT.	1239.81
15	119+24	10" ASPEN 42' RT.	1256.45
16	129+68	14" WHITE BIRCH 37' RT.	1296.59

YARDAGE SUMMARY
STA 104+81 – 112+05
UNCL. EXC.
MAINLINE 6499 C.Y.
HILLTOP PLACE 5187 C.Y.
FILL
MAINLINE 4626 C.Y.
HILLTOP PLACE 661 C.Y.
TOWN ROAD LT. 3704 C.Y.
SHR.30%

YARDAGE SUMMARY
STA 112+01 – 149+54
UNCL. EXC.
MAINLINE 6682 C.Y.
HATCHERY ROAD 62 C.Y.
E.B.S. UNDISTRIBUTED 1000 C.Y.
FILL
MAINLINE 4116 C.Y.
HATCHERY ROAD 4522 C.Y.
SHR.30%
BORROW 6485 C.Y.

NEW ℄ PROFILE

FILE NAME: HDGN:08095PP3

WISDOT/CADDS SHEET 4R

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	5.3

141+90 LT
CONST. P.E.
1-24" C.P.

136+74 LT.
CONST. P.E.
1-18" C.P. REQ'D.

150+78 LT.
CONST. P.E.
~~1-18" C.P. REQ'D.~~
PIPE NOT REQ'D

161+78 LT.
CONST. P.E.
1-18" C.P. REQ'D.

CURVE DATA

P.I. 159+15.04
Y 312434.11
X 1639712.39
Δ = 3°45'28"LT.
D = 00°45'00"
T = 250.61'
L = 501.05'
E = 4.11'
R = 7639.44'
P.C. 156+64.42
P.T. 161+65.47
S.E.=0.021%
L.R.=175'

D. TWOREK
J. MULLALY
S. JUDD
HANSON ENTERPRISES, INC.
D. MARTINSON
SLOPE INTERCEPTS
SERVICE ROAD
S.T.H. "77"
M. HARNDEN
P. BINDER, VDR.
L.C. TO
J. JOHNSON, VDE.
J. JOHNSON
F. ZIEM
E. MARTINSON

145+56 RT.
CONST. P.E.
1-18" C.P. REQ'D.

OMIT F.E.
@ 153+00 RT.

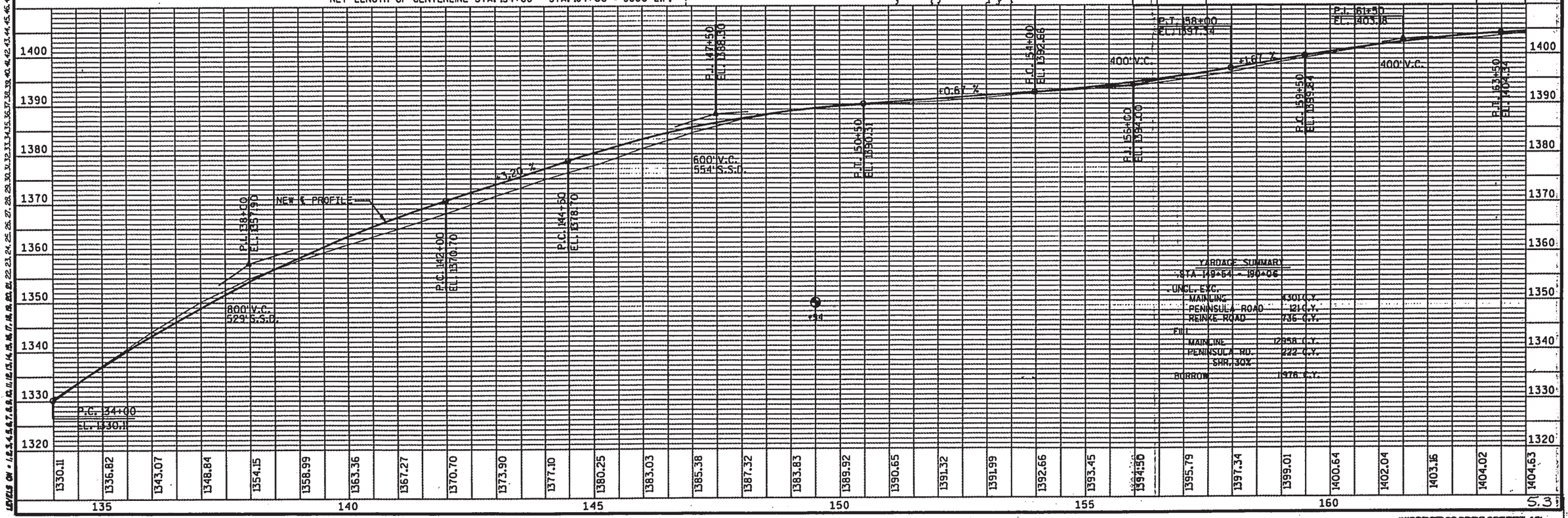
153+78 RT.
CONST. P.E.
1-18" C.P. REQ'D.

161+78 RT.
CONST. F.E.
1-18" C.P. REQ'D.

NET LENGTH OF CENTERLINE STA. 134+00 - STA. 164+00 = 3000 L.F.

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
18	151+54	16" ASPEN 58' LT.	1388.56



YARDAGE SUMMARY
STA 149+54 - 190+06

UNCL. EXC.
MAINLINE 4301 C.Y.
PENINSULA ROAD 121 C.Y.
REINKE ROAD 736 C.Y.

FILL
MAINLINE 12958 C.Y.
PENINSULA RD. 222 C.Y.
SHR. 30% 1976 C.Y.

BORROW

LEVELS GW = 1.2.3.4.5.6.7.8.9.10.11.12.13.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63

FILE NAME: HDGN:08095PP4

WISDOT/CADDS SHEET 48

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	54

167+73 LT.
SNOWMOBILE TR.

169+78 LT.
CONST. P.E.

179+00 LT.
CONST. C.E.

188+69 LT.
CONST. P.E.

D. MARTINSON

R. BUTTERFIELD

T. BUTTERFIELD

V. SEIFERT, JR.
L.C. TO
T. BUTTERFIELD, JOE

SLOPE INTERCEPTS

181+04.63 =
10+07.39 SD. RD.

BLDG

E. MARTINSON

H. THIMKE

G. WUETRICH

J. REINKE

K. LEHMAN

REINKE RD.

PENINSULA RD.

NET LENGTH OF CENTERLINE STA. 164+00 - STA. 190+00 = 2600 L.F.

10+00 REINKE ROAD =
8+00 PENINSULA RD.

CURVE DATA - REINKE RD.

P.I. 12+69.24
Y 312811.54
X 1642195.89
△ = 37°57'12"RT
D = 21°00'00"
T = 85.90'
L = 166.44'
E = 13.20'
R = 272.84'
P.C. 11+83.34
P.T. 13+49.78
S.E. 0.020%
L.R. 50'

CURVE DATA

P.I. 180+46.68
Y 312648.07
X 1641833.20
△ = 42°56'32"LT
D = 3°45'00"
T = 600.96'
L = 1145.13'
E = 113.94'
R = 1527.89'
P.C. 174+45.71
P.T. 185+90.84
S.E.=0.059%
L.R.=175'

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
19	165+02	6" TRIPLE BIRCH 41' RT.	1405.39
21	180+47	8" TWIN ASPEN 92' RT.	1403.88
22	188+47	10" MAPLE 60' RT.	1404.68

REINKE ROAD

PENINSULA ROAD

NEW ℄ PROFILE

10+24
-21°x15" C.S.P.A
42' CSPA

182+00
-25" SPFROD)
70' C.P.

1404.63 1405.21 1405.79 1406.37 1406.95 1407.53 1408.11 1408.69 1409.19 1409.51 1409.67 1409.65 1409.47 1409.11 1408.67 1408.23 1407.87 1407.66 1407.60 1407.70 1407.95 1408.35 1407.79 1408.98 1408.87 1408.47 1407.77 1406.79 1405.54 1404.26 1402.97

165 170 175 180 185 190

FILE NAME: HDGN:08095PP5

WSDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	35

CURVE DATA-SD. RD	CURVE DATA-SD. RD	CURVE DATA-SD. RD
P.I. 5+98.65	P.I. 8+21.48	P.I. 11+50.44
Y 313927.55	Y 314113.71	Y 314432.23
X 1643217.27	X 1643347.74	X 1643222.75
Δ = 34°03'30"RT	Δ = 56°26'52"LT	Δ = 21°51'33"RT
D = 22°55'06"	D = 38°11'50"	D = 19°05'55"
T = 76.57'	T = 80.51'	T = 57.93'
L = 148.61'	L = 147.78'	L = 114.45'
E = 11.46'	E = 20.24'	E = 5.54'
R = 250.00'	R = 150.00'	R = 300.00'
P.C. 5+22.08	P.C. 7+40.97	P.C. 10+92.51
P.T. 6+70.69	P.T. 8+88.75	P.T. 12+06.96
S.E.= 0.020%	S.E.= 0.020%	S.E.= 0.020%
L.R.= 75'	L.R.= 65'	L.R.= 90'/60'

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
23	197+18	10" ASPEN 51' RT.	1399.92
24	211+17	8" CHERRY 74' LT.	1392.88

CURVE DATA
P.I. 213+97.12
Y 315207.64
X 1644081559.07
Δ = 49°44'33"RT
D = 3°45'00"
T = 708.29'
L = 1326.46'
E = 156.19'
R = 1527.89'
P.C. 206+88.83
P.T. 220+15.29
S.E.= 0.059%
L.R.= 175'

NET LENGTH OF CENTERLINE STA. 190+00 - STA. 220+00 = 3000 L.F.

O'BRIEN HILL ROAD

YARDAGE SUMMARY
STA. 190+06 - 216+82
UNCL. EXC.
MAINLINE 1033 C.Y.
O'BRIEN HILL RD. 762 C.Y.
FILL
MAINLINE 43893 C.Y.
O'BRIEN HILL RD. 3189 C.Y.
SHR. 30%
BORROW 5941 C.Y.

FILE NAME: HDGN:08095PP6

WISDOT/CADDS SHEET 35
WISDOT/CADDS SHEET 41

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	5.6

223+58 LT.
CONST. P.E.
1-18" C.P. REQ'D.

231+09 LT.
CONST. P.E.
1-18" C.P. REQ'D.

240+08 LT.
CONST. P.E.
1-18" C.P. REQ'D.

242+14 LT.
CONST. P.E.
1-18" C.P. REQ'D.

248+00 L.T.
CONST. P.E.
1-21"x15"C.S.P.A. REQ'D.

250+10 LT.
CONST. P.E.
1-21"x15"C.S.P.A. REQ'D.

247+00 RT.
OMIT P.E.

246+00 RT.
CONST. P.E.
1-18" C.P. REQ'D.

249+00 RT
CONST. P.E.
1-18" CP

238+00 RT
CONST. P.E.

242+00 RT.
CONST. P.E.

222+63 RT.
CONST. F.E.
1-18" C.P. REQ'D.

CURVE DATA

P.I. 240+48.15
Y 315157.92
X 1646821.98
△ = 22°08'51"LT
D = 3°30'00"
T = 320.39'
L = 632.78'
E = 31.06'
R = 1637.02'
P.C. 237+27.76
P.T. 243+60.54
S.E.= 0.058%
L.R.= 175'

L. JOHNSTON
R. HODD
J. GROESCHL
K. EMERY
M. HANSEN
F. METCALF
J. GROESCHL
F. METCALF

P.T. 220+15.29
P.C. 237+27.76
P.T. 243+60.54

C.T.H. "K"

NET LENGTH OF CENTERLINE STA. 220+00 - STA. 250+00 = 3000 L.F.

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
27	241+39	12" RED PINE 32' RT.	1377.95

YARDAGE SUMMARY
STA. 215+82 - 265+76
UNCL. EXC.
MAINLINE 1427 C.Y.
C.T.H. "K" 236 C.Y.
E.B.S. UNDISTRIBUTED 500 C.Y.
FILL
MAINLINE 1525 C.Y.
C.T.H. "K" 18 C.Y.

NEW ℄ PROFILE
P.T. 222+80
EL. 1393.08
P.C. 230+00
EL. 1387.07
P.T. 232+00
EL. 1384.29
P.T. 234+00
EL. 1383.89
P.C. 239+00
EL. 1382.89
P.T. 241+00
EL. 1382.45
P.T. 243+00
EL. 1383.09
P.C. 246+50
EL. 1384.14
P.C. 248+00
EL. 1384.59
P.C. 249+50
EL. 1386.17
-1.39 %
400' V.C.
-0.20 %
400' V.C.
+0.30 %
300' V.C.
240+45
1-24"x74' CP

1400.47 1399.37 1398.15 1396.80 1395.41 1394.02 1392.63 1391.24 1389.85 1388.46 1387.07 1385.83 1384.89 1384.24 1383.89 1383.69 1383.49 1383.29 1383.09 1382.89 1382.75 1382.74 1382.85 1383.09 1383.39 1383.69 1383.99 1384.32 1384.87 1385.69 1386.66

220 225 230 235 240 245 250

1410 1400 1390 1380

LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: HDGN:08095PP7

WISDOT/CADDS SHEET 42
WISDOT/CADDS SHEET 41

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	5.7

L. THIEDEMAN

V. ISHAM

E. MARPLE

272+53 LT.
CONST. P.E.
1-18" C.P. REQ'D.

C.T.H. "K" / PHIPPS ROAD

S.T.H. 77

CURVE DATA

P.I. 262+39.76
Y 315949.97
X 1648873.76
Δ = 3°02'55"RT.
D = 00°30'00"
T = 304.94'
L = 609.74'
E = 4.06'
R = 11459.16'
P.C. 259+34.82
P.T. 265+44.56
S.E. = 0.020%
L.R. = 175'

J. JALOWITZ SR. VDR.
L.C. TO
L. LA SAVAGE VDE.

NET LENGTH OF CENTERLINE STA. 260+00 - 280+00 = 3000 L.F.

SLOPE INTERCEPTS

OBLITERATE OLD ROAD

J. JALOWITZ JR.

251+47 RT.
CONST. P.E.
1-18" C.P. REQ'D.

G. LAAKSON

L. LIPSKY

253+33 RT.
CONST. P.E.
1-18" C.P. REQ'D.

L. WRING

266+19 RT.
CONST. P.E.
1-18" C.P. REQ'D.

276+75 RT.
CONST. P.E.

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
28	250+98	12" WHITE PINE 36' LT.	1386.92
29	259+11	USGS "UE 7 A" 35' RT.	1384.94
30	262+89	12" WHITE BIRCH 49' LT.	1396.11

P.C. 8+00 EL. 1382.47
P.T. 9+39 EL. 1387.91
P.C. 9+45 EL. 1387.91
P.T. 8+00 EL. 1386.11
P.C. 8+45 EL. 1387.00
P.T. 8+58 EL. 1388.33
P.C. 10+30 EL. 1388.77
P.T. 10+70 EL. 1388.24
P.C. 10+50 EL. 1388.37
P.T. 11+00 EL. 1388.54
P.C. 258+00 EL. 1389.14
P.C. 260+00 EL. 1388.54
P.T. 262+00 EL. 1391.54
P.C. 272+75 EL. 1402.29
P.T. 278+75 EL. 1406.13
P.I. 279+41.58 EL. 1405.29

100' V.C.
300' V.C.
400' V.C.
600' V.C.
+0.20 %
+1.00 %
+0.25 %
NEW K PROFILE

STA. 258+75
T=24' C.P. REQ'D.
64' CP

LEVELS ON • 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: HDGN:08095PP8

WISDOT/CADDS SHEET 48

5.7

STATE PROJECT NUMBER	SHEET NO.
8530-05-71	5.8

E. MARPLE

284+75 LT.
CONST. F.E.

R. TRETTIN

SLOPE INTERCEPTS

P.I. 294+10.34
AZ=179°06'32"

S.H. "77"

OBLITERATE OLD ROAD

OBLITERATE OLD ROAD

J. JALOWITZ JR.

281+95 RT.
OMIT F.E.

R. TRETTIN

FIELD LINE

FIELD LINE

N

BENCH MARKS				
NO.	STA.	DESCRIPTION		ELEV.
32	284+05	16" WHITE PINE	143' RT.	1396.97
33	294+58	14" ASPEN	80' RT.	1406.19
34	305+10	14"ASPEN	48' LT.	1411.89

NET LENGTH OF CENTERLINE STA. 280+00 - STA. 302+00 = 2200 L.F.

YARDAGE SUMMARY
STA. 265+76 292+75
UNCL. EXC.
MAINLINE 10725 C.Y.
TEMPORARY ROAD 182 C.Y.
FILL
MAINLINE 787 C.Y.
TEMPORARY ROAD 1780 C.Y.
SHR. 30%
WASTE (TEMP. ROAD) -1500 C.Y.

YARDAGE SUMMARY
STA. 292+75 302+00
UNCL. EXC. 853 C.Y.
FILL 656 C.Y.
SHR. 30%

292+80
EXISTING 24" C.P.
TO REMAIN
APRON ENDWALL REQ'D.
1-24" x 80' CMCP

NEW ℄ PROFILE

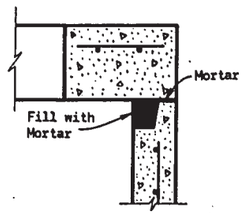
+0.28 %

END PROJECT
STA. 302+00

LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

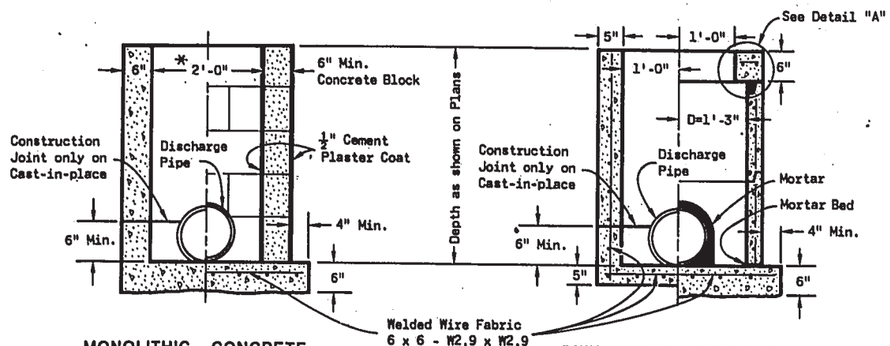
FILE NAME: HDGN:08095PP9

WISDOT/CADDS SHEET 48



DETAIL "A"

*Selection of square or circular design will be based on the pipe sizes and the Inlet Cover being utilized.



MONOLITHIC CONCRETE | CONCRETE BLOCK | REINFORCED CONCRETE | PRECAST REINFORCED CONCRETE

INLETS TYPE 1

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 drawings for proposed alternate designs for underground drainage structures shall be submitted to the Engineer for approval providing that such alternate designs make provision for equivalent capacity and strength.

All Precast Inlet units shall conform to the pertinent requirements of AASHTO Designation M199.

All drainage structures are designated on the plans as "Manholes 1-C", "Catch Basins 1-B", "Inlets 3-H", etc. The first digit designates the masonry portion of the structure, and the following letter designates the type of cover to be used to comprise the complete unit.

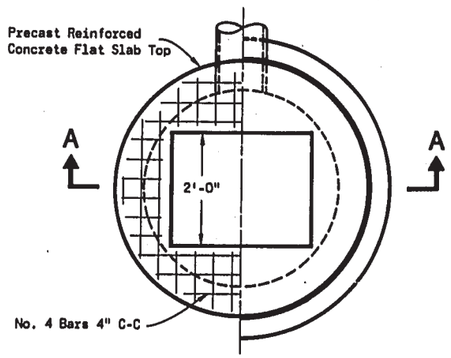
Precast Reinforced Bases shall be placed on a bed of material at least 6 inches in depth, which meets the requirements for Granular Backfill. This bedding shall be compacted and provide uniform support for the entire area of the base.

Precast Reinforced Concrete Flat Slab Tops may be used on the structures. The Tops shall be installed on a bed of mortar.

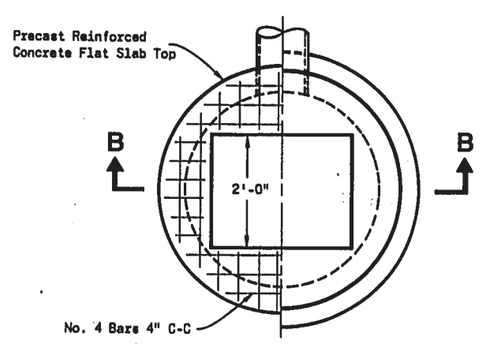
All Bar Steel reinforcement shall be embedded 2 inches clear unless otherwise shown or noted.

Precast Reinforced Concrete Risers shall be placed with tongue down.

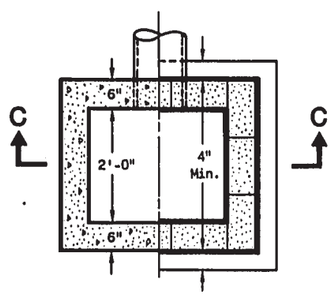
(1) Use 2'-6" opening for Type 2 Inlets and 3'-0" opening for Type 3 Inlets.



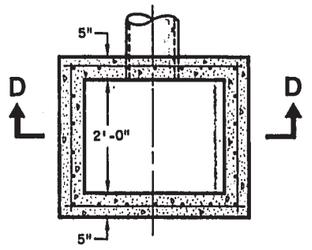
PLAN VIEW



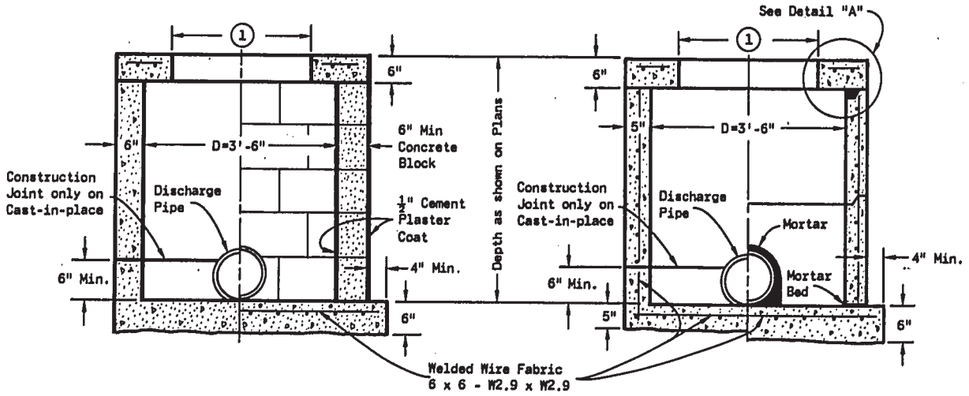
PLAN VIEW



PLAN VIEW



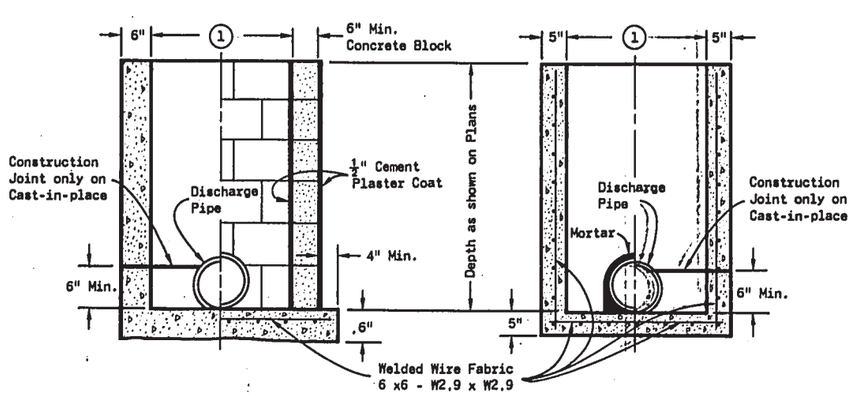
PLAN VIEW



MONOLITHIC CONCRETE | CONCRETE BLOCK | REINFORCED CONCRETE | PRECAST REINFORCED CONCRETE

SECTION A–A

SECTION B–B



MONOLITHIC CONCRETE | CONCRETE BLOCK | PRECAST REINFORCED CONCRETE | REINFORCED CONCRETE

SECTION C–C

SECTION D–D

INLETS TYPE 2 & 3

INLETS TYPE 1, 2 & 3

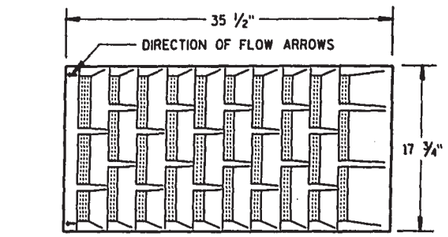
State of Wisconsin
Department of Transportation

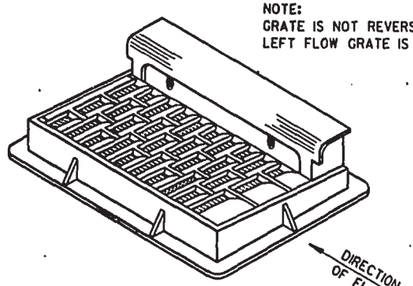
APPROVED 4-13-82 DATE

CHIEF DESIGN ENGINEER

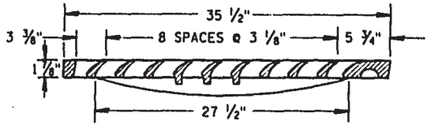
FHWA

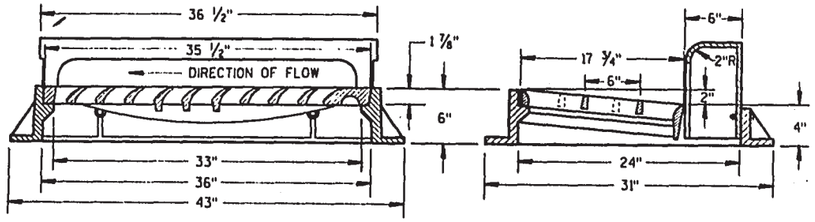
S.D.D. 8 C 1-4





NOTE:
GRATE IS NOT REVERSIBLE.
LEFT FLOW GRATE IS SHOWN

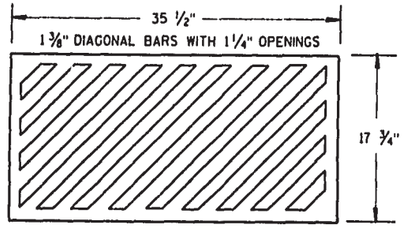




NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

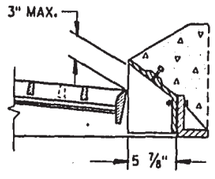
TYPE "H"

(APPROXIMATE WEIGHT 510 LBS.)



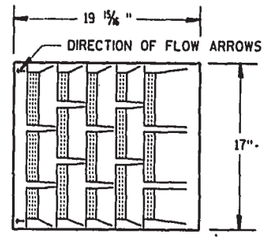
SPECIAL GRATE NO. 1

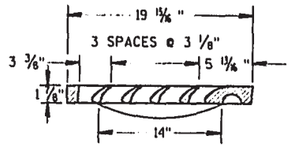
(APPROXIMATE WEIGHT 175 LBS.)
(NOTE AS TYPE H1 ON DRAINAGE TABLE)

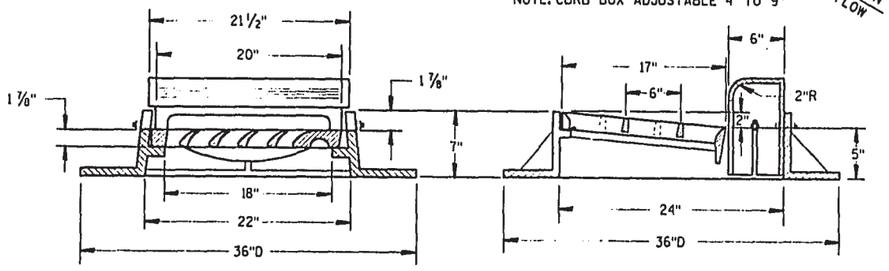


MOUNTABLE CURB BOX FOR TYPE "H" COVER

(FOR USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH)







TYPE "A"

(APPROXIMATE WEIGHT 410 LBS.)

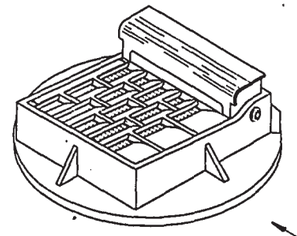
GENERAL NOTES

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

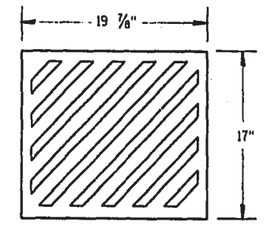
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



NOTE:
GRATE IS NOT REVERSIBLE
LEFT FLOW GRATE IS SHOWN

NOTE: CURB BOX ADJUSTABLE 4" TO 9"

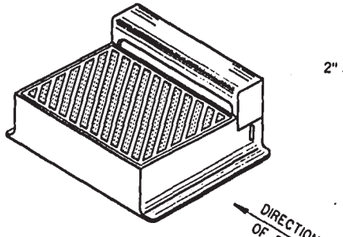
1" DIAGONAL BARS WITH 1 ½" OPENINGS



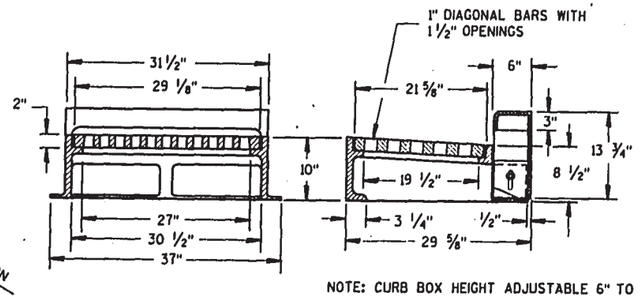
SPECIAL GRATE NO. 1

(APPROXIMATE WEIGHT 85 LBS.)

(NOTE AS TYPE A1 ON DRAINAGE TABLE)



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

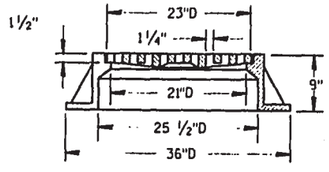


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

(APPROXIMATE WEIGHT 650 LBS.)





TYPE "C"

(APPROXIMATE WEIGHT 365 LBS.)

INLET COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

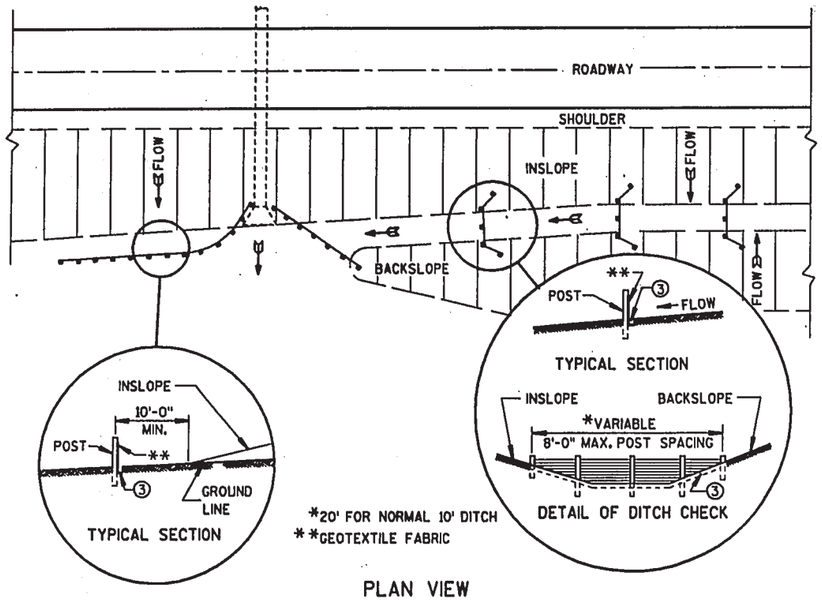
APPROVED 11/30/70
DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

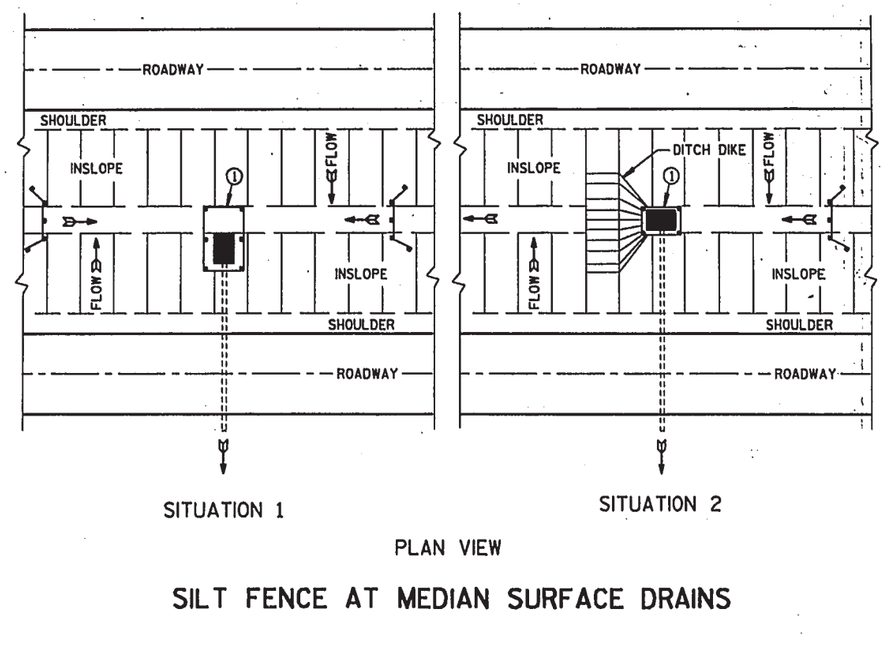
S.D.D. 8 A 5-8a

S.D.D. 8 A 5-8a



PLAN VIEW

TYPICAL APPLICATIONS OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

DETAIL OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

① CROSS BRACE WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS AS DIRECTED BY THE ENGINEER.

② MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.

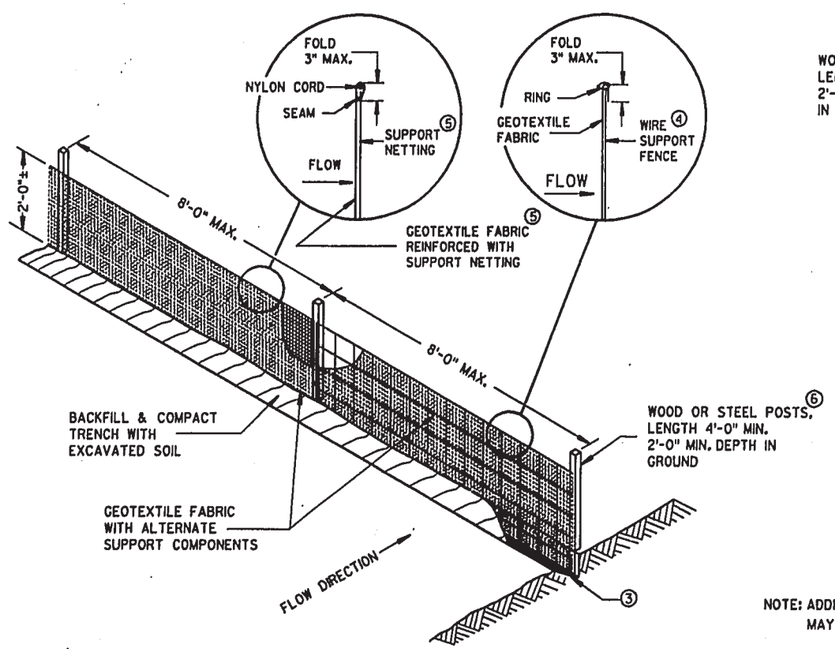
③ EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

④ WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.

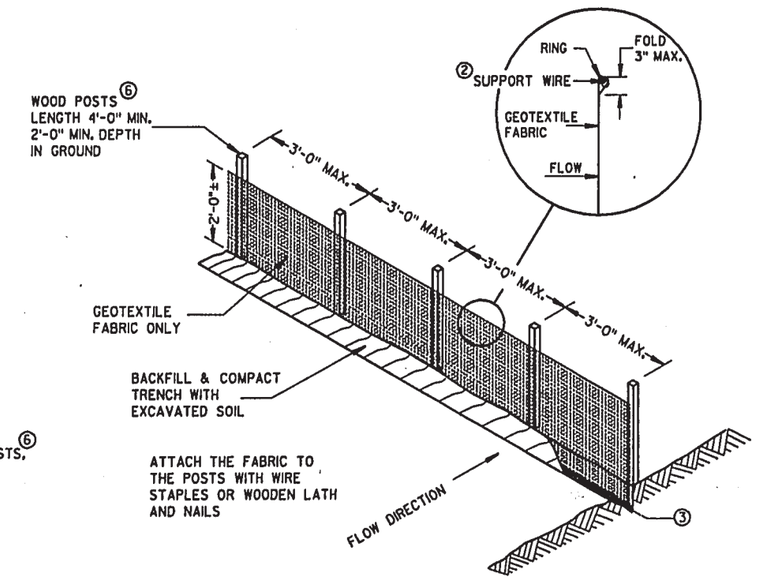
⑤ GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF ¾" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.

⑥ STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.28 LBS/LINEAL FOOT (WITHOUT ANCHOR). FIN ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIA. OR 1½" X 3½" EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OAK OR HICKORY.

ALTERNATES A & B ARE EQUAL AND EITHER MAY BE USED.

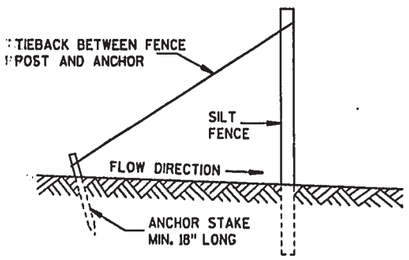


ALTERNATE "A"



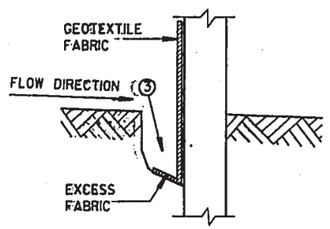
ALTERNATE "B"

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)



TRENCH DETAIL

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 8-31-88 DATE

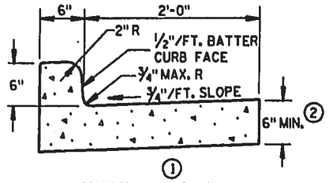
STATE DESIGN ENGINEER FOR HWYS

FHWA

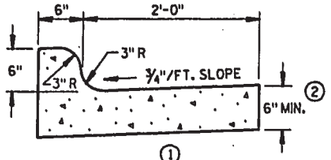
S.D.D. 8 E 9-3

SILT FENCE

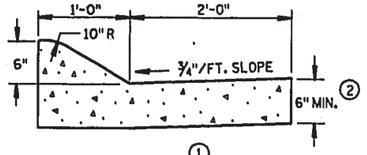
S.D.D. 8 E 9-3



TYPES A & D

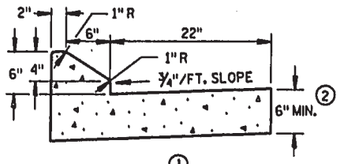


TYPES K & L

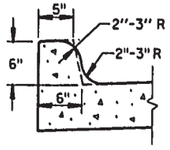


TYPES A & D

CONCRETE CURB & GUTTER 36"

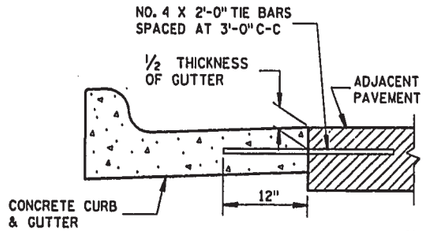


TYPES G & J



OPTIONAL CURB SHAPE FOR TYPES K & L ①

CONCRETE CURB & GUTTER 30"



TYPICAL TIE BAR LOCATION ①

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEALANT IS NOT REQUIRED IN THE JOINTS OF CONCRETE CURB OR CONCRETE CURB & GUTTER EXCEPT AS REQUIRED FOR INTEGRAL GUTTER.

PAVEMENT TIES ARE REQUIRED, WHEN INCLUDED IN THE CONTRACT, WHERE CONCRETE CURB, CONCRETE CURB AND GUTTER OR CONCRETE PAVEMENT IS PLACED ADJACENT TO EXISTING CONCRETE.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. TIE BARS AND A LONGITUDINAL CONSTRUCTION JOINT ARE NOT REQUIRED WITH THIS ALTERNATE.

PAVEMENT JOINTS SHALL BE EXTENDED THROUGH INTEGRAL CURB & GUTTER. JOINTS IN INTEGRAL GUTTER SHALL HAVE THE SAME DIMENSIONS AS THE JOINTS IN THE ADJACENT PAVEMENT. JOINTS IN INTEGRAL CURB SHALL BE ⅛" WIDE.

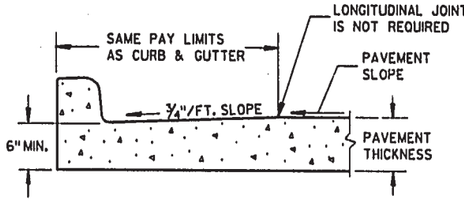
JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE TWO FEET BEHIND THE BACK OF CURBS.

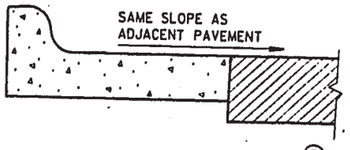
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.

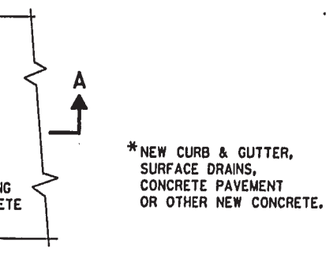


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



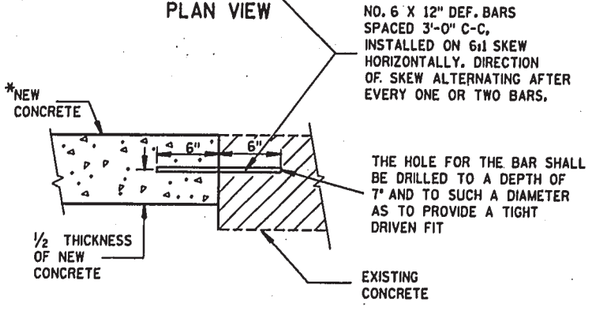
REVERSE SLOPE GUTTER ③

(TYPICAL FOR ALL CURB & GUTTER TYPES)



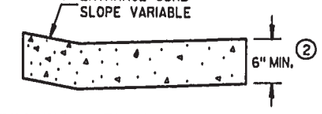
PLAN VIEW

*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



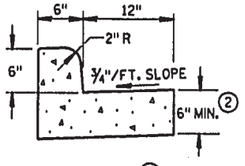
SECTION A-A

PAVEMENT TIES



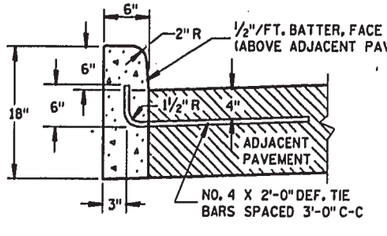
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)

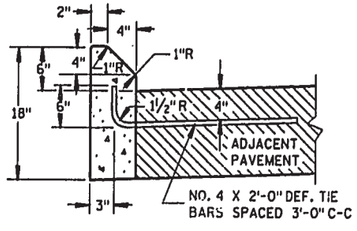


TYPES A & D

CONCRETE CURB & GUTTER 18"



TYPES A & D



TYPES G & J

CONCRETE CURB

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-23-86
DATE

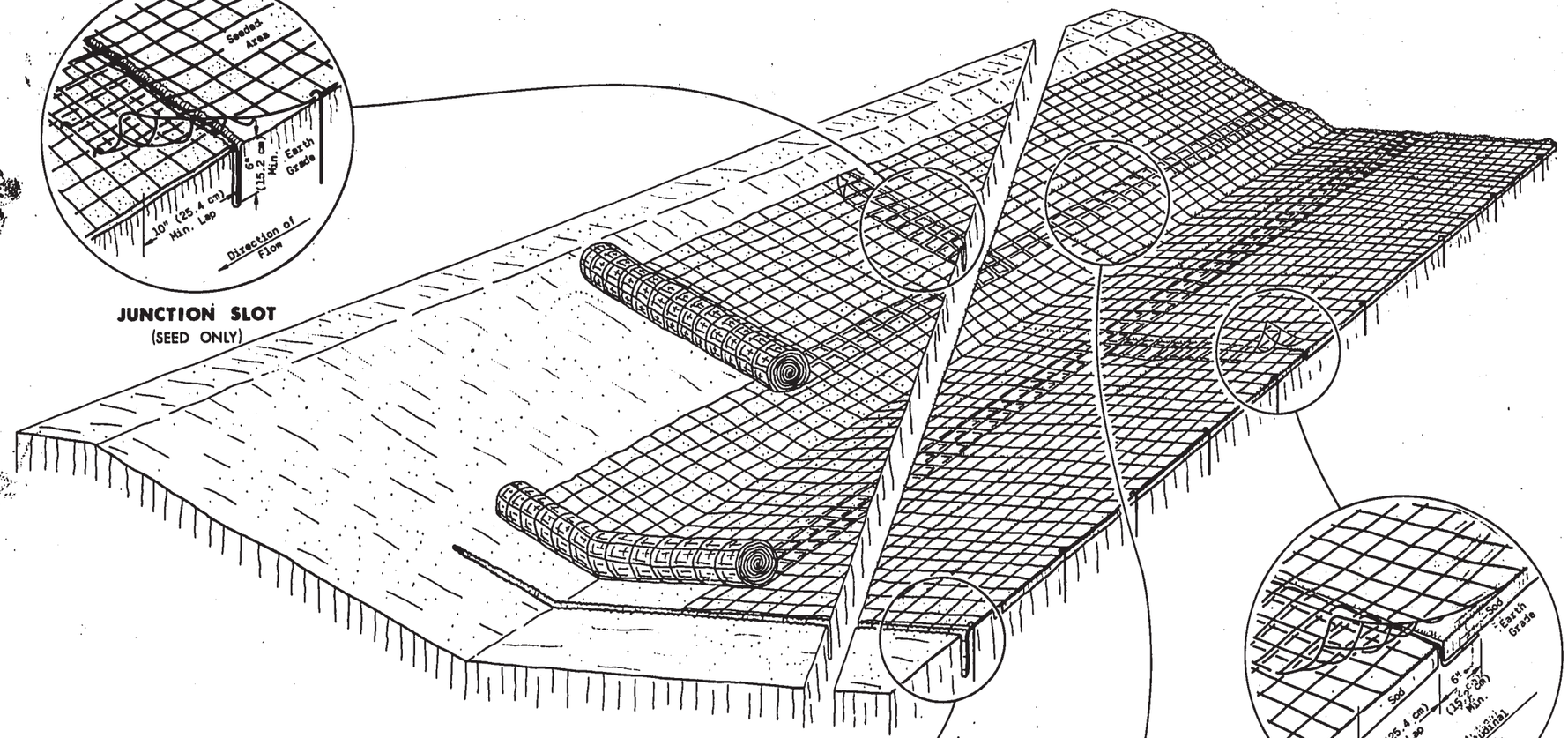
STATE DESIGN ENGINEER FOR HWYS

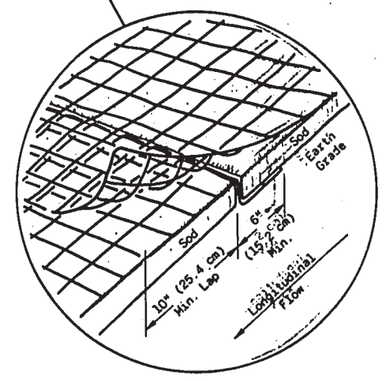
FHWA

S.D.D. 8 D 1-11

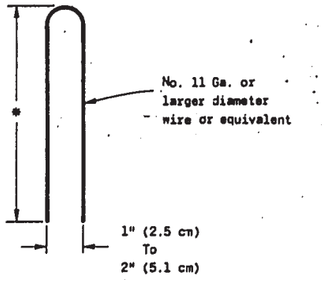
S.D.D. 8 D 1-11

JUNCTION SLOT
(SEED ONLY)



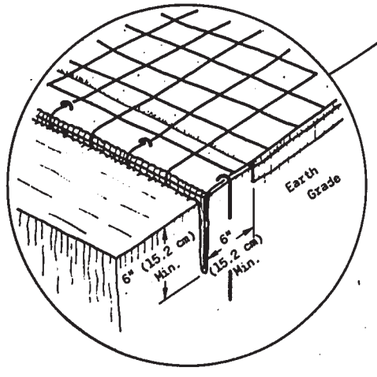


JUNCTION SLOT
(SOD ONLY)

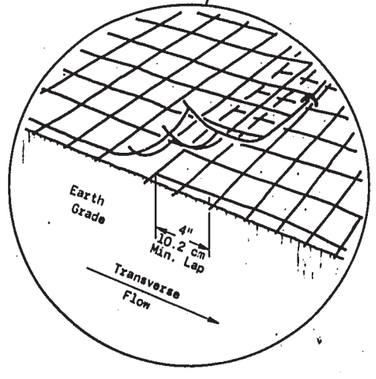


DETAIL OF TYPICAL STAPLE

*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 bottom 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

METAL APRON ENDWALLS

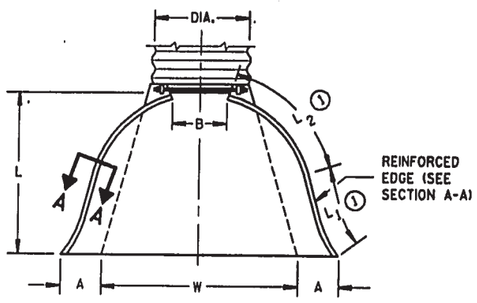
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17½	24	2½ to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21¾	30	2½ to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28¼	36	2½ to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29⅝	42	2½ to 1	1 Pc.
24	.079	.075	10	13	6	41	18	37¼	48	2½ to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52¼	60	2½ to 1	1 Pc.
36	.109	.105	14	19	9	60	24	59¾	72	2½ to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75⅝	84	2½ to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2¼ to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85½	102	2¼ to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1½ to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1½ to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1½ to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1½ to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

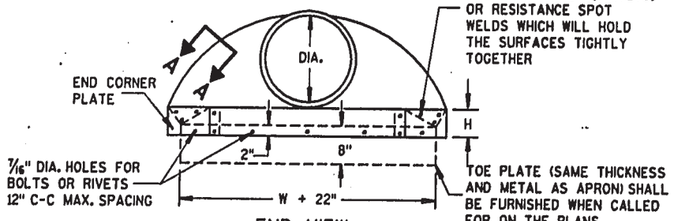
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48⅞	72⅞	24	2	3 to 1
15	2¼	6	27	46	73	30	2¼	3 to 1
18	2½	9	27	46	73	36	2½	3 to 1
21	2¾	9	36	37½	73½	42	2¾	3 to 1
24	3	9½	43½	30	73½	48	3	3 to 1
27	3¼	10½	49½	24	73½	54	3¼	3 to 1
30	3½	12	54	19¾	73½	60	3½	3 to 1
36	4	15	63	34¾	97¼	72	4	3 to 1
42	4½	21	63	35	98	78	4½	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5½	27	65	* 33¼-35 ** 98¼- 100		90	5½	2⅔ to 1
60	6	* ** 30-35	60	39	99	96	5	2 to 1
66	6½	* ** 24-30	* ** 72-78	* ** 21-27	99	102	5½	2 to 1
72	7	* ** 24-36	78	21	99	108	6	2 to 1
78	7½	* ** 24-36	78	21	99	114	6½	2 to 1
84	8	36	90½	21	111½	120	6½	1½ to 1
90	8½	41	87½	24	111½	132	6½	1½ to 1

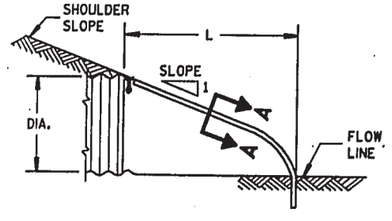
*MINIMUM
**MAXIMUM



PLAN VIEW

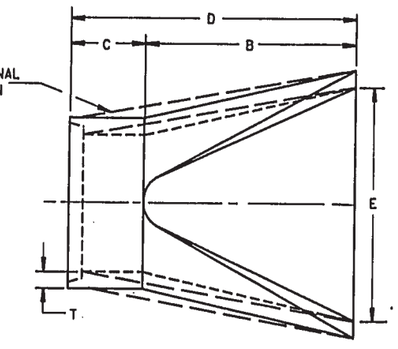


END VIEW

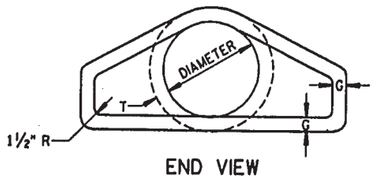


SIDE ELEVATION

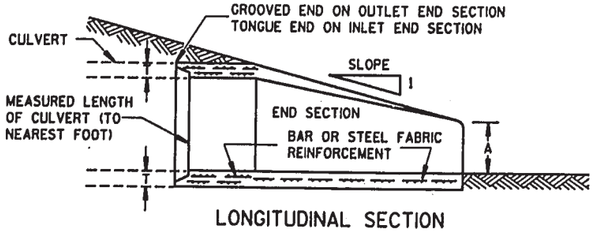
METAL ENDWALLS



PLAN

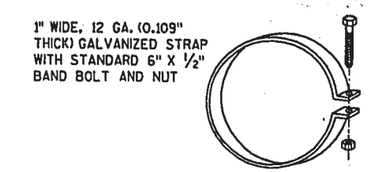


END VIEW



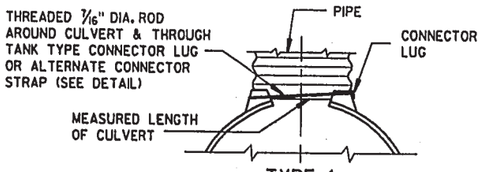
LONGITUDINAL SECTION

CONCRETE ENDWALLS

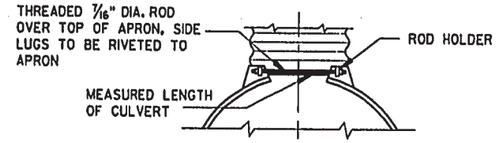


ALTERNATE FOR TYPE 1 CONNECTION

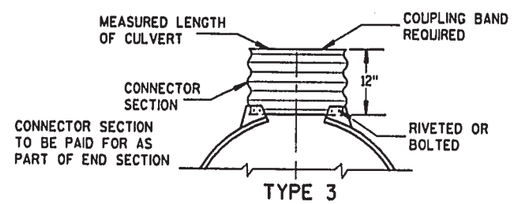
END SECTION CONNECTOR STRAP



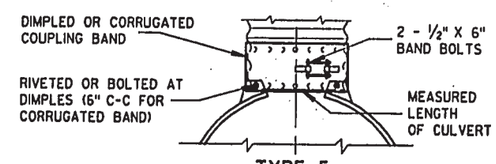
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

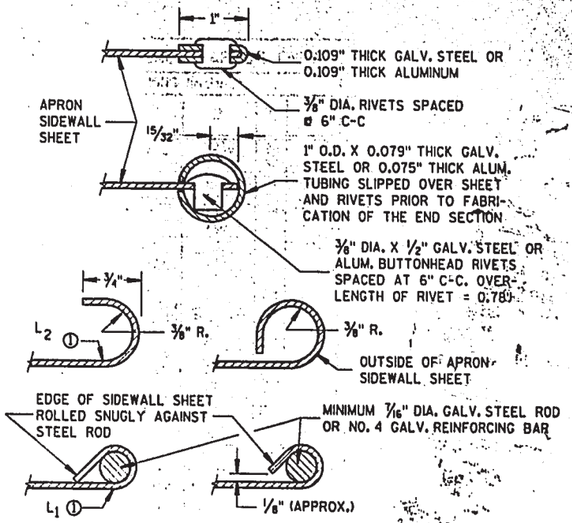
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 13.

CONNECTION DETAILS



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.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER; THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

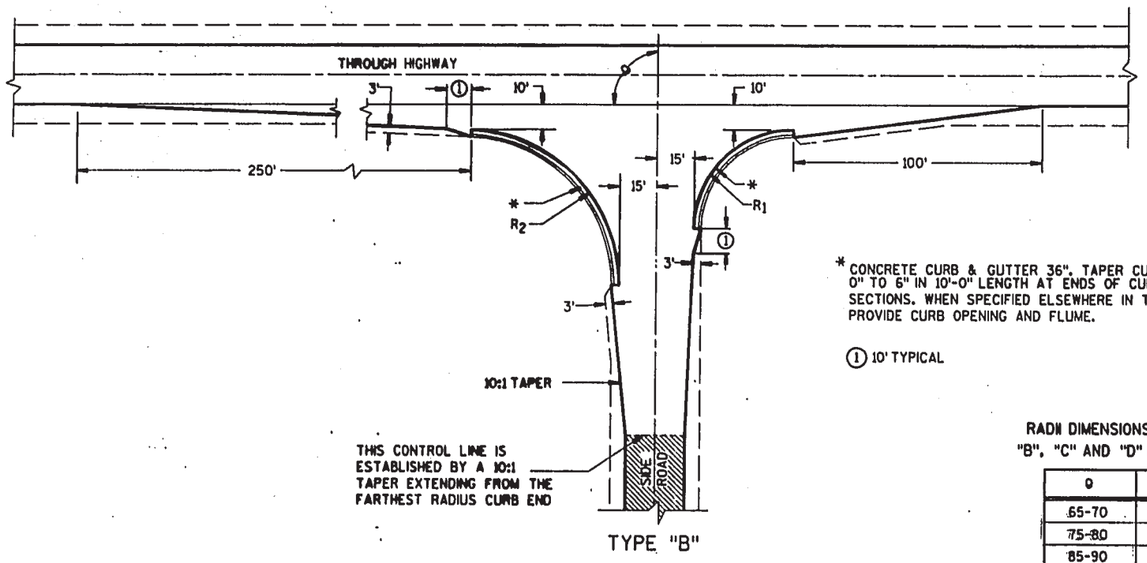
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 12/17/87 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 8 F 1-10a

S.D.D. 8 F 1-10a



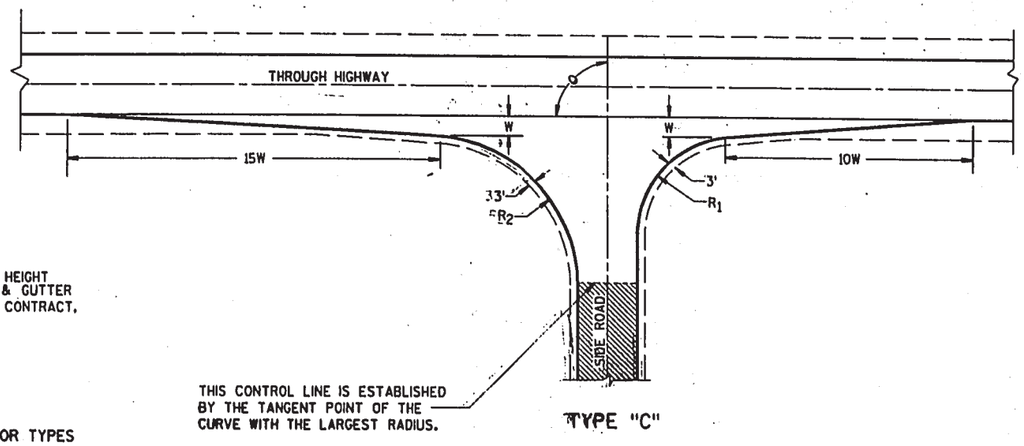
TYPE "B"

* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

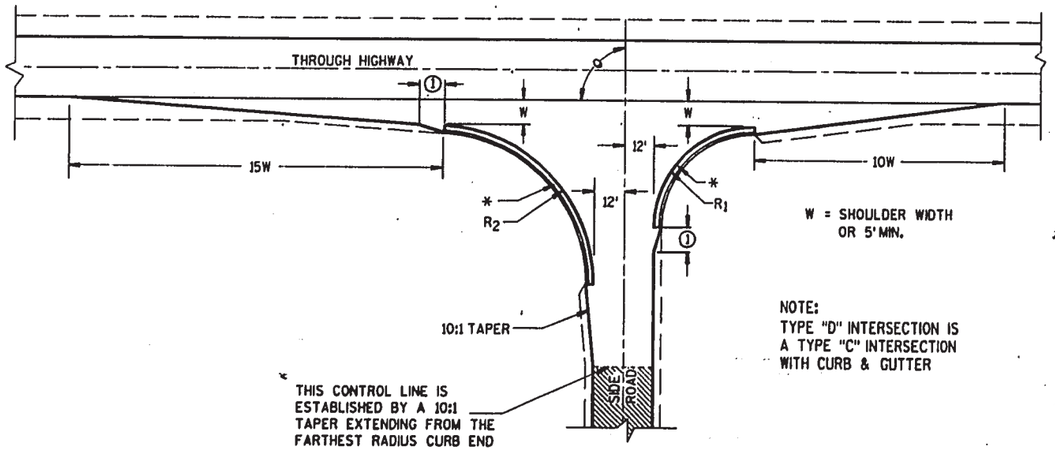
① 10' TYPICAL

RADII DIMENSIONS FOR TYPES "B", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
75-80	40	70
85-90	40	60
100	50	55
105-110	60	45



TYPE "C"



TYPE "D"

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.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN 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.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

▨ EXISTING SURFACE

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B","C" AND "D"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

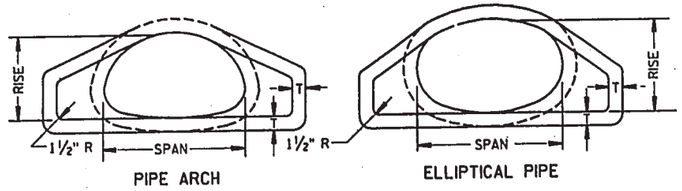
APPROVED 6/22/09
DATE

STATE DESIGN ENGINEER FOR HWYS

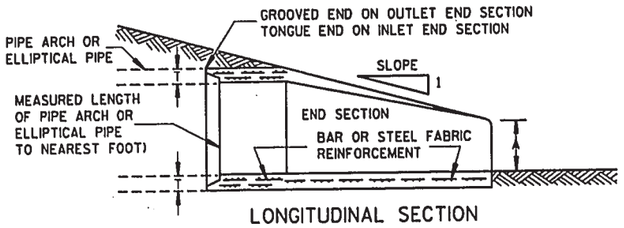
FHWA

S.D.D. 9 A 1-80

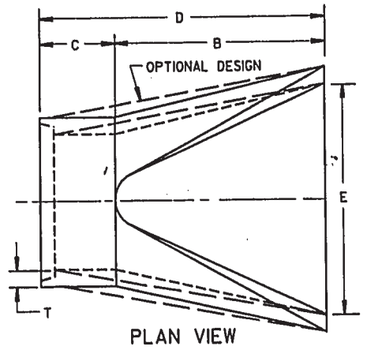
S.D.D. 9 A 1-80



END VIEW

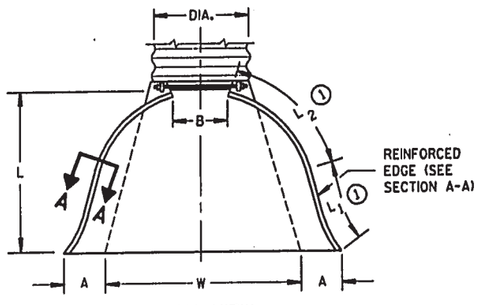


LONGITUDINAL SECTION

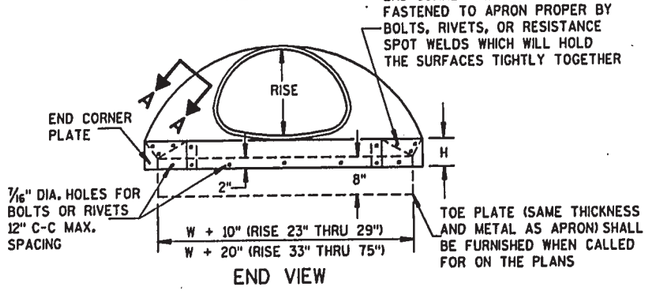


PLAN VIEW

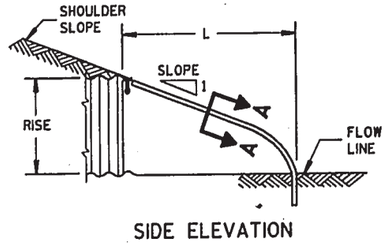
CONCRETE ENDWALLS



PLAN VIEW

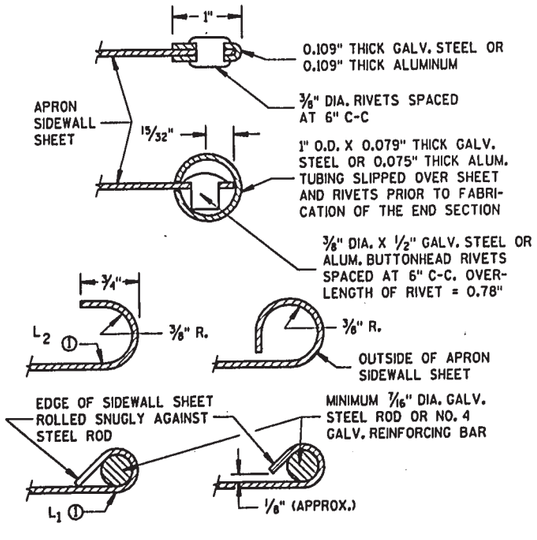


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109	.105	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

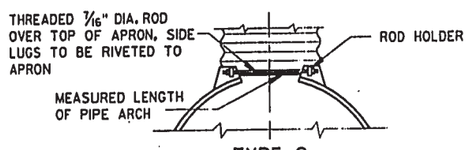
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

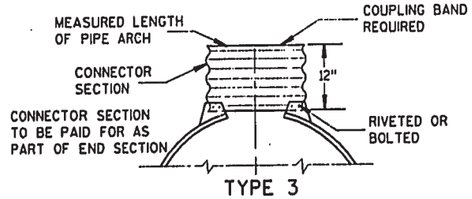
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11 1/8	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

** NOMINAL SIZE



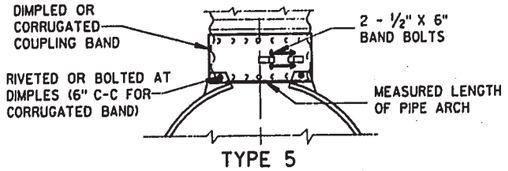
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 71" X 47" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 71" X 47" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 45" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

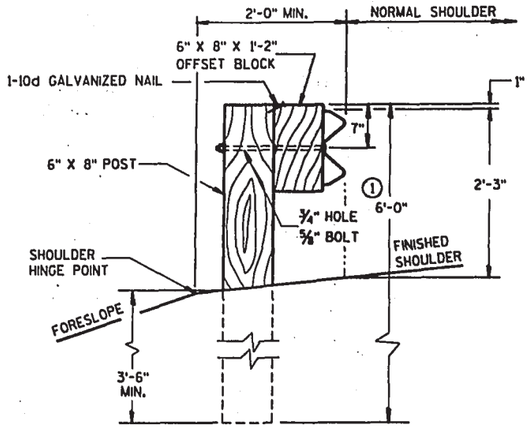
APPROVED 12/17/87
DATE

STATE DESIGN ENGINEER FOR HWYS

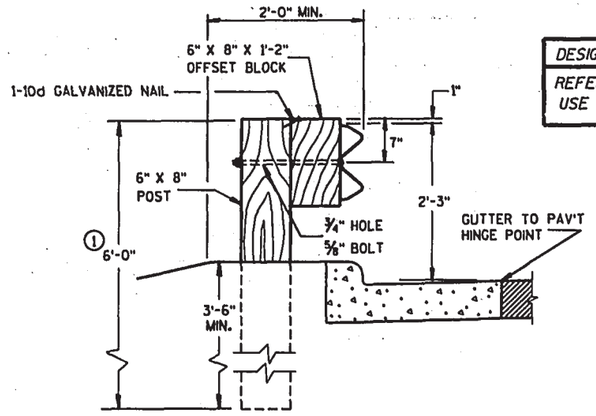
FHWA

S.D.D. 8 F 1-10b

S.D.D. 8 F 1-10b



END VIEW
LOCATED ALONG A ROADWAY SHOULDER



END VIEW
LOCATED ALONG A CURBED ROADWAY

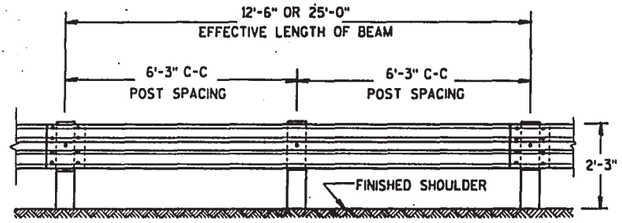
DESIGN NOTE: (WILL NOT APPEAR ON CONTRACT PLANS)
REFER TO PROCEDURE 11-45-1 FOR GUIDANCE ON THE USE OF BEAM GUARD ON CURBED ROADWAYS.

GENERAL NOTES

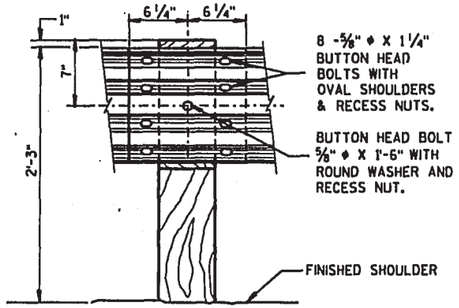
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

① POST LENGTH SHALL BE INCREASED TO PROVIDE A MINIMUM EMBEDMENT OF 3'-6" WHERE THE SHOULDER HINGE POINT IS LOCATED IN FRONT OF THE POST.

② PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.



FRONT VIEW



FRONT VIEW
BEAM SPLICING AND POST MOUNTING DETAIL

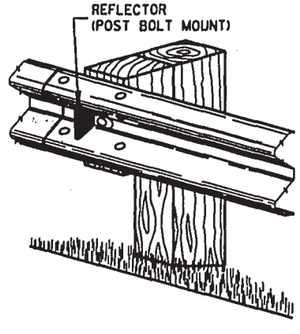
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

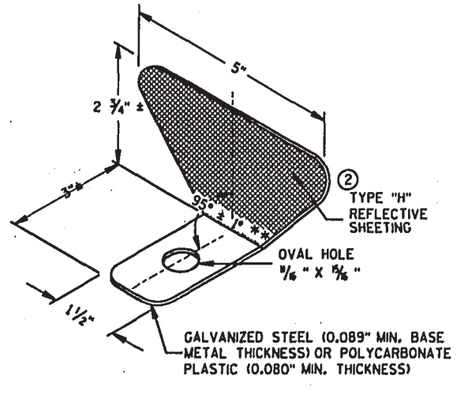
REFLECTOR SPACING

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200' *	25' C-C	1 *	6
	> 200' *	50' C-C	1 *	
TWO WAY TRAFFIC	< 200'	50' C-C	2 **	3
	> 200'	100' C-C	2 **	

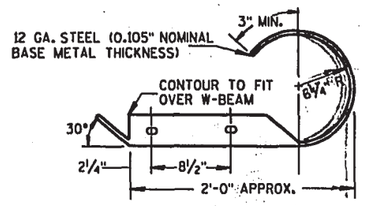
* EVERY OTHER REFLECTOR REVERSED FOR 2-WAY VISIBILITY. CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED RELECTORS.

** ANGLE OF BEND TO BE 90° ± 1° FOR TWO-SIDED REFLECTORS.

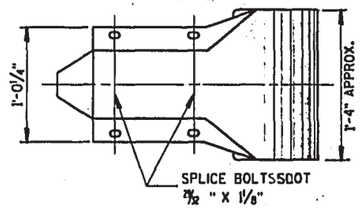




② REFLECTOR DETAIL AND TYPICAL INSTALLATION

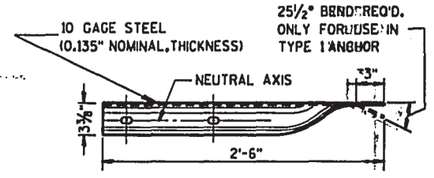


PLAN VIEW

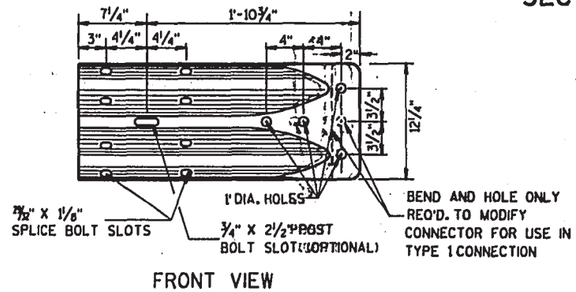


FRONT VIEW

W BEAM END SECTION (ROUNDED)

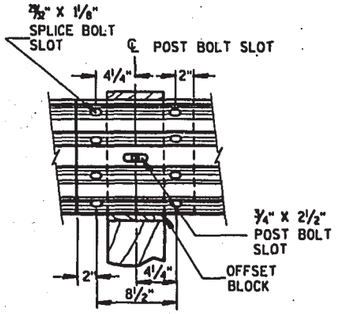


PLAN VIEW

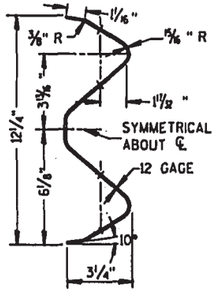


FRONT VIEW

W BEAM TERMINAL CONNECTOR



W BEAM SPLICE



SECTION THRU W BEAM

NOTE:
SHEETS 1b Is OPTIONAL FOR INCLUSION IN PLANS WHEN APPLICABLE.

CLASS "A" STEEL PLATE BEAM GUARD, INSTALLATION & ELEMENTS

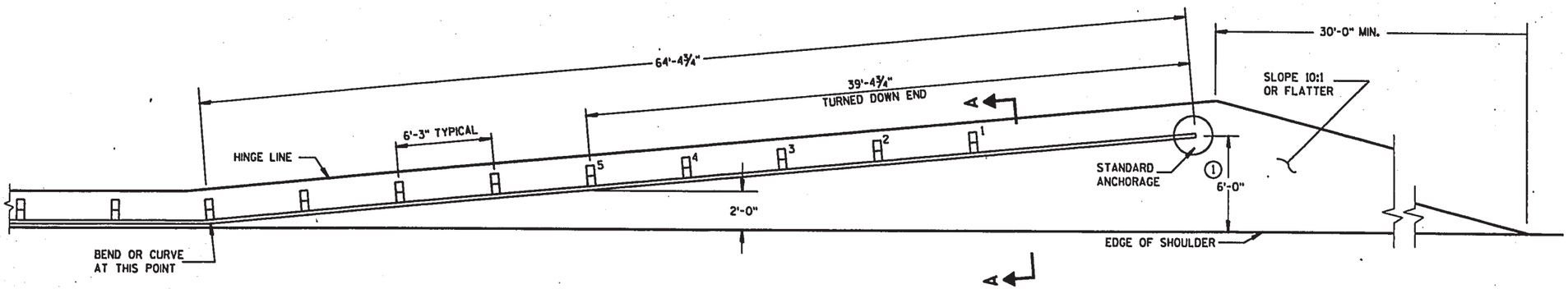
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/12/81
DATE
STATE DESIGN ENGINEER FOR HWYS

FHWA

S.D.D. 14 B 15-1a

S.D.D. 14 B 15-1a

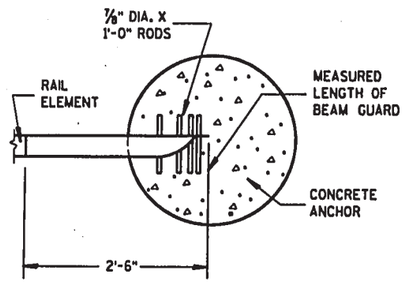


PLAN VIEW

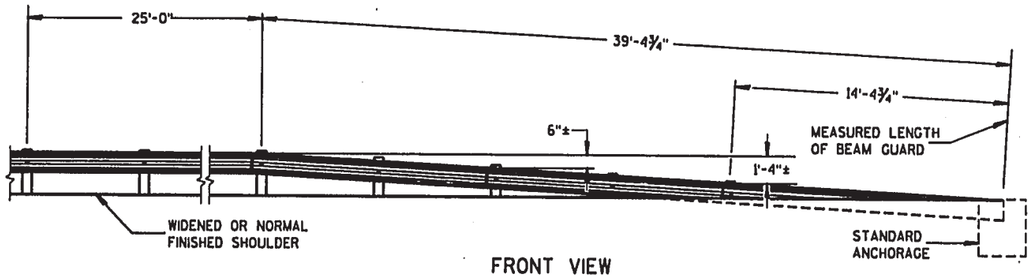
GENERAL NOTES

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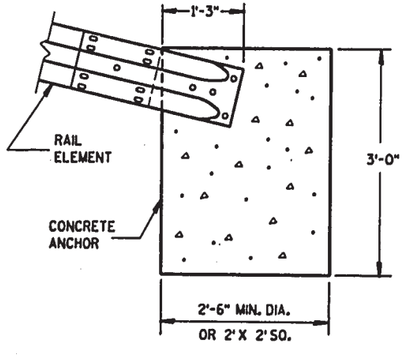
(1) WHEN APPROVED BY THE ENGINEER, THE 6 FOOT OFFSET TO THE ANCHOR MAY BE REDUCED TO 2 FEET WHERE EXISTING CONDITIONS WILL NOT PERMIT THE DESIRABLE OFFSET.



PLAN VIEW IN SECTION

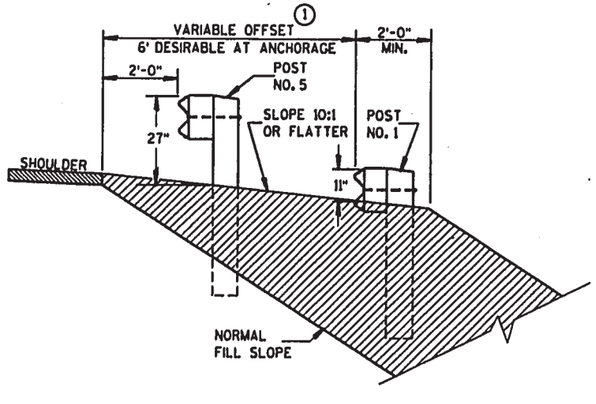


FRONT VIEW



FRONT VIEW IN SECTION

ANCHORAGE FOR STEEL PLATE BEAM GUARD



SECTION A-A

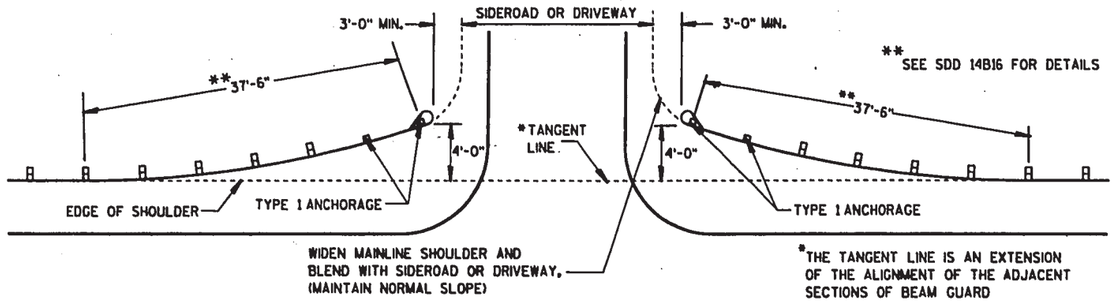
CLASS "A" STEEL PLATE BEAM GUARD
END TREATMENT WITH ANCHORAGE
FOR STEEL PLATE BEAM GUARD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

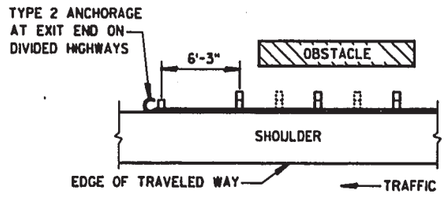
APPROVED
5-13-1
DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

S.D.D. 14 B 17-1

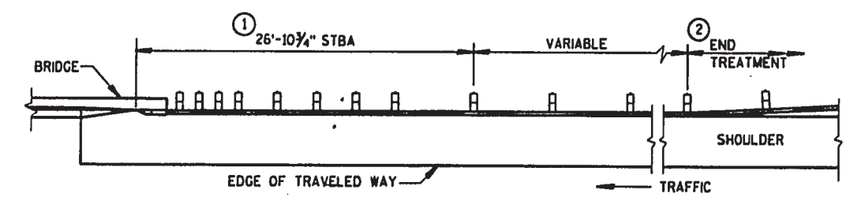
S.D.D. 14 B 17-1



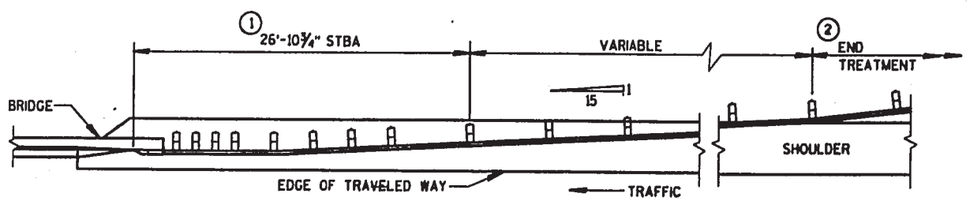
BEAM GUARD AT MINOR SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC



BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT NARROW BRIDGES

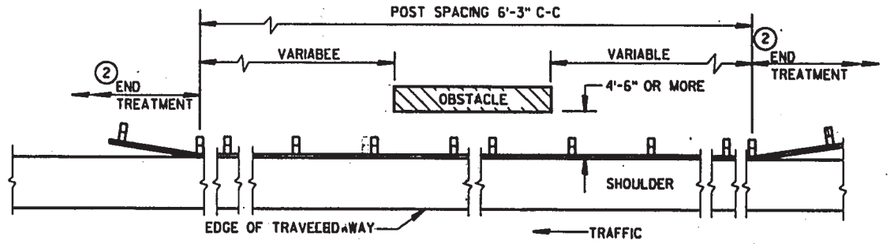
GENERAL NOTES

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.

BEAM GUARD LOCATIONS AND LENGTHS ARE SHOWN ELSEWHERE IN THE PLAN.

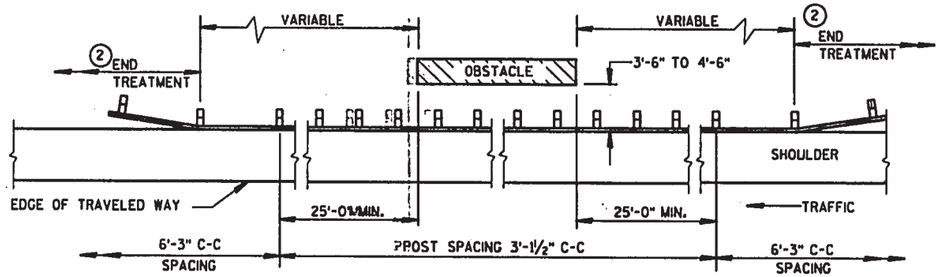
① STEEL THRIE BEAM STRUCTURE APPROACH.

② UNLESS OTHERWISE INDICATED, THE FLARED END TREATMENT WITH A TYPE 1 ANCHORAGE SHALL BE USED TO TERMINATE BEAM GUARD ON THE TRAFFIC APPROACH SIDE OF BRIDGES/OBSTACLES. TYPE 2 ANCHORAGE SHALL BE USED ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 4'-6" OR MORE)



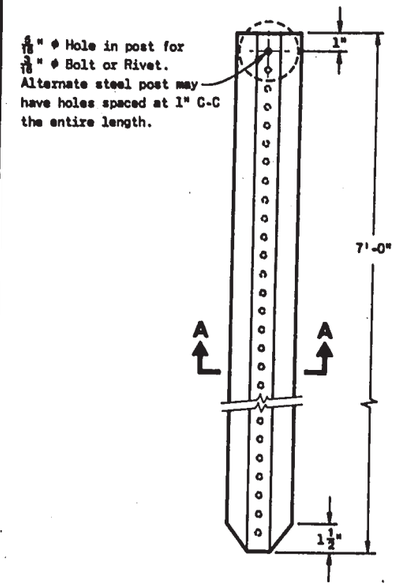
BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")

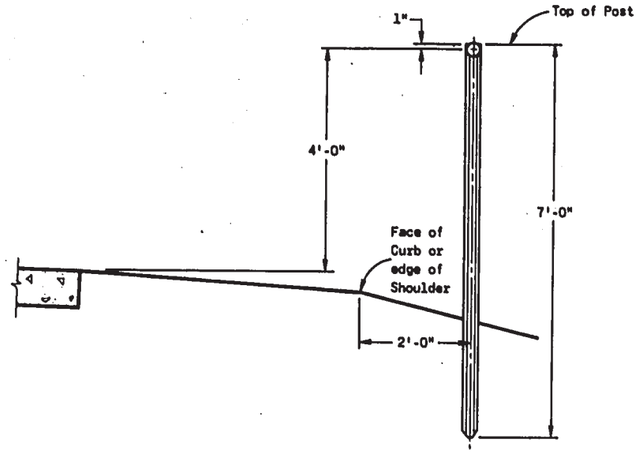
CLASS "A" STEEL PLATE BEAM GUARD (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/91 DATE FHWA	STATE DESIGN ENGINEER FOR HWYS

S.D.D. 14 B 18-1a

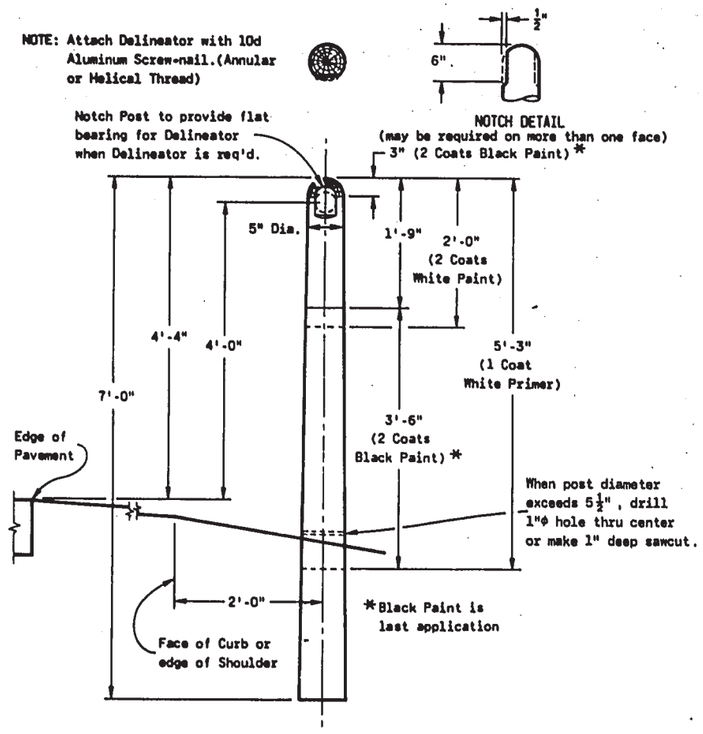
S.D.D. 14 B 18-1a



DELINEATOR POST

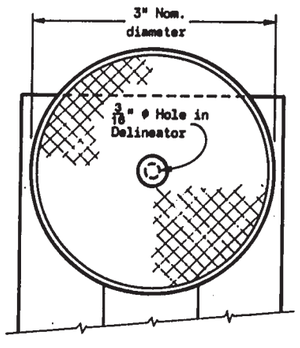


TYPICAL INSTALLATION OF DELINEATOR POSTS



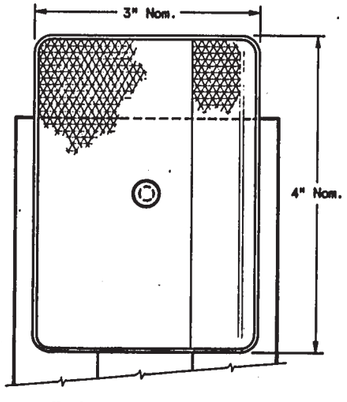
MARKER POST

PLAN VIEW

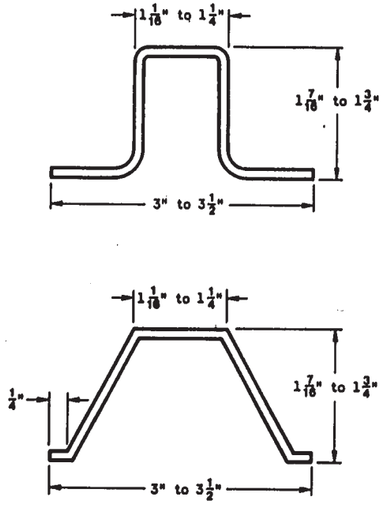


FRONT ELEVATION
3" CIRCULAR TYPE

PLAN VIEW



FRONT ELEVATION
3" X 4" RECTANGULAR TYPE



SECTION A-A
(Minimum weight 2.0 lbs. per ft.)

GENERAL NOTES

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

The rectangular delineator shall consist of an acrylic plastic wide angle reflex reflector housed in a material such as acrylontrile butadiene styrene and shall be permanently sealed against dust, water and vapor, and will not warp, crack or corrode under field conditions.

Detailed requirements for delineators,not shown on this drawing shall conform to Section 633 of the Standard Specifications and the current "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". The reflectors in the delineators shall be clear.

When the cross sectional area of the Marker Post measured at the ground line exceeds 24 square inches ($5\frac{1}{2}$ inch diameter) the post shall be weakened near the ground line by either drilling a 1 inch diameter hole transversely through the center of the post or by making a transverse saw cut to a depth of approximately 1 inch on the side of the post facing traffic. .

MOUNTING DETAILS FOR DELINEATORS

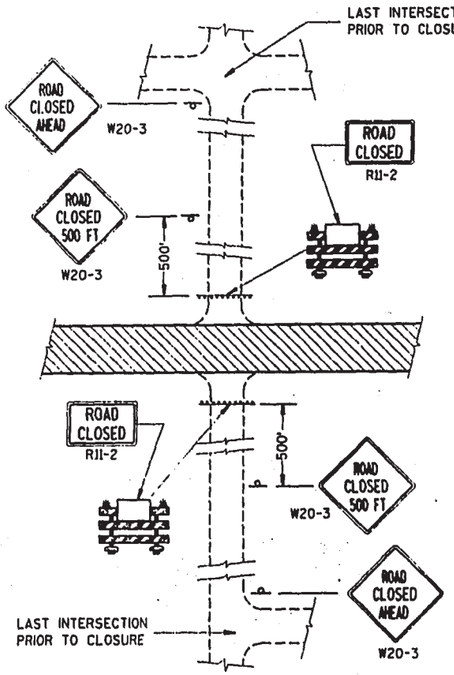
DELINEATOR POSTS
MARKER POSTS AND DELINEATORS

State of Wisconsin
Department of Transportation
Division of Transportation Facilities

APPROVED 5-2-79 DATE
CHIEF DESIGN ENGINEER
FHWA

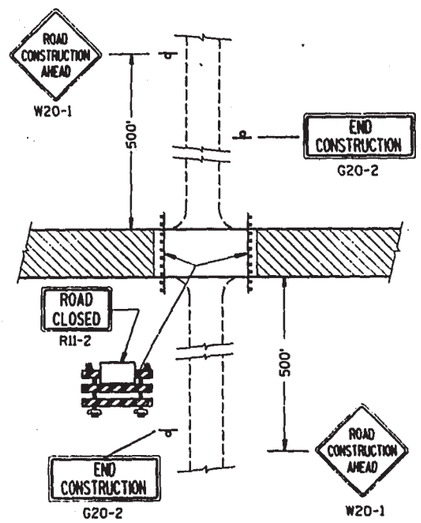
S.D.D. 15 A2-2

S.D.D. 15 A2-2



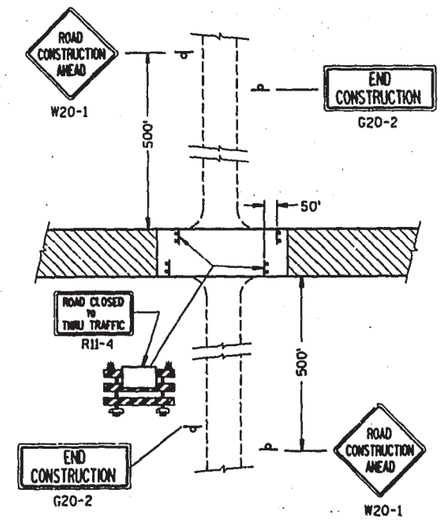
DETAIL 1

(NO ACCESS TO PROJECT)



DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND THEIR LOCATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE WISCONSIN MANUAL OF TRAFFIC CONTROL DEVICES, THE PLANS, SPECIFICATIONS AND CONTRACT.

SIGN AND BARRICADE LOCATIONS MAY BE ADJUSTED IN THE FIELD AS DIRECTED BY THE ENGINEER. ANY EXISTING TRAFFIC SIGNS THAT CONFLICT WITH THIS WORK SHALL BE COVERED AS DIRECTED BY THE ENGINEER. ALL "STOP" OR OTHER REGULATORY SIGNS ON THE SIDE ROADS SHALL NOT BE DISTURBED, EXCEPT WHEN NECESSARY TO COMPLETE THE WORK. THE SIGNS MUST THEN BE IMMEDIATELY REESTABLISHED.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL FOR FULL ROAD CLOSURES. TYPE "A" LOW INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE ROAD CLOSED SIGN (R11-2), ROAD CLOSED ____ MILES AHEAD SIGN (R11-3) AND THE ROAD CLOSED TO THRU TRAFFIC SIGN (R11-4) SHALL BE ATTACHED ONLY TO THE TOP RAIL OF THE TYPE III BARRICADE. THE SIGNS SHALL NOT COVER MIDDLE RAIL.

TYPE "H" REFLECTIVE SHEETING SHALL BE USED ON ALL BARRICADES, TYPE I, II AND III, AND ON ALL R11-2, R11-3 AND R11-4 SIGNS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2, "ROAD CLOSED" SIGNS SHALL BE 48" X 30".
- R11-3, AND R11-4 SIGNS SHALL BE 60" X 30".
- G20-2S SIGNS SHALL BE 60" X 24".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND AT LEAST ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN.

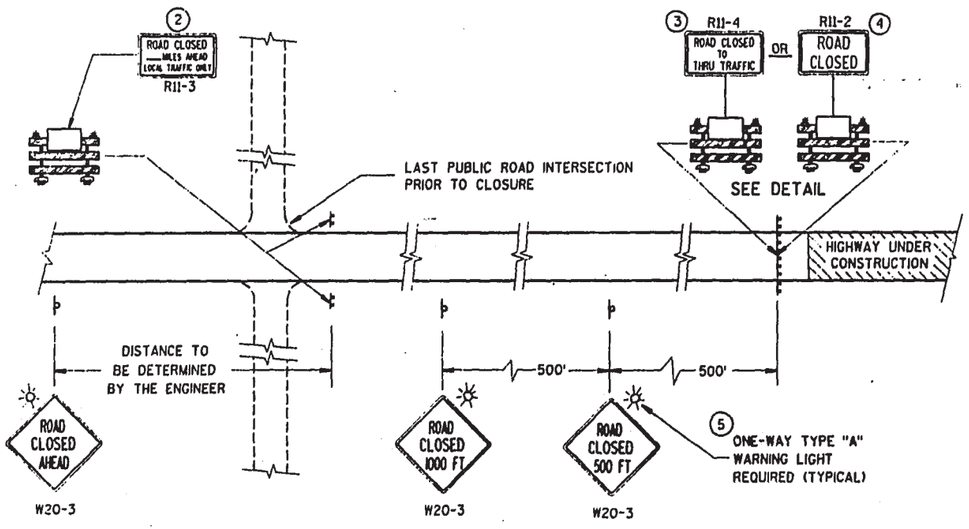
(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT. SEE LANE CLOSURE BARRICADE DETAIL.

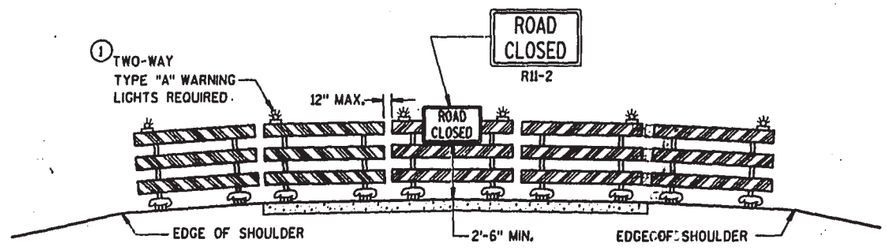
(4) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.

(5) ONE-WAY LIGHTS SHALL BE PROVIDED ON ALL ADVANCE WARNING SIGNS. THE UNIT SHALL BE POSITIONED SUCH THAT THE LIGHT SOURCE IS OUTSIDE THE SIGN FACE AND AT THE TOP OF THE SIGN.

SIDEROAD CLOSURES

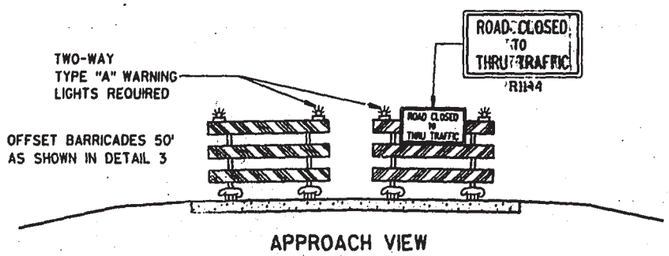


MAINLINE CLOSURE



APPROACH VIEW

ROAD CLOSURE BARRICADE DETAIL



APPROACH VIEW

LANE CLOSURE BARRICADE DETAIL

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES WITH TYPE "H" REFLECTIVE SHEETING
- TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

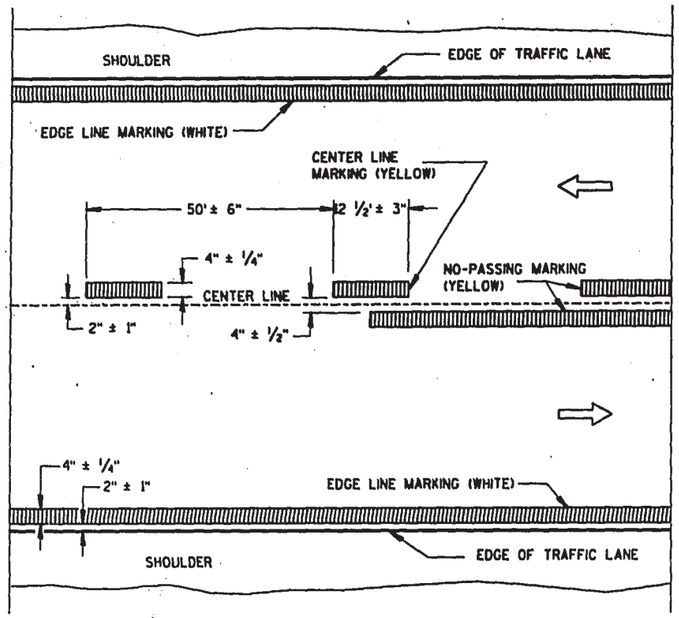
APPROVED
10-31-69
DATE

STATE TRAFFIC ENGINEER FOR HWYS.

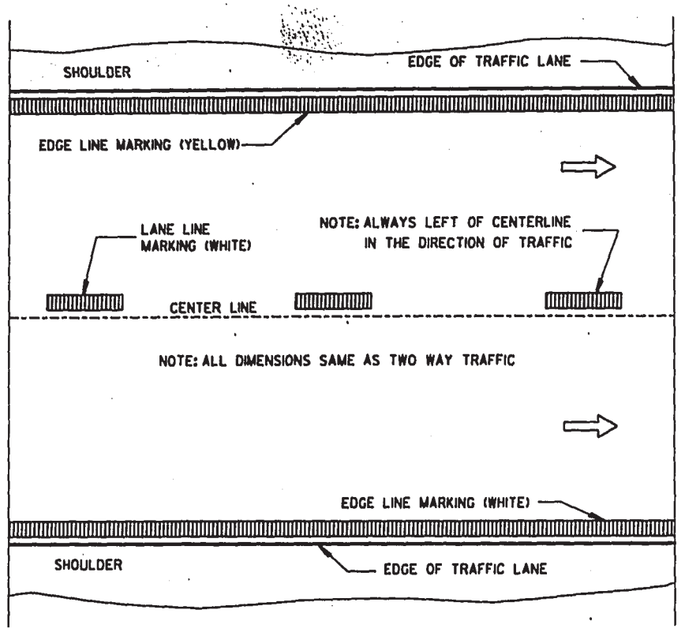
FHWA

S.D.D. 15 C 2-2

S.D.D. 15 C 2-2

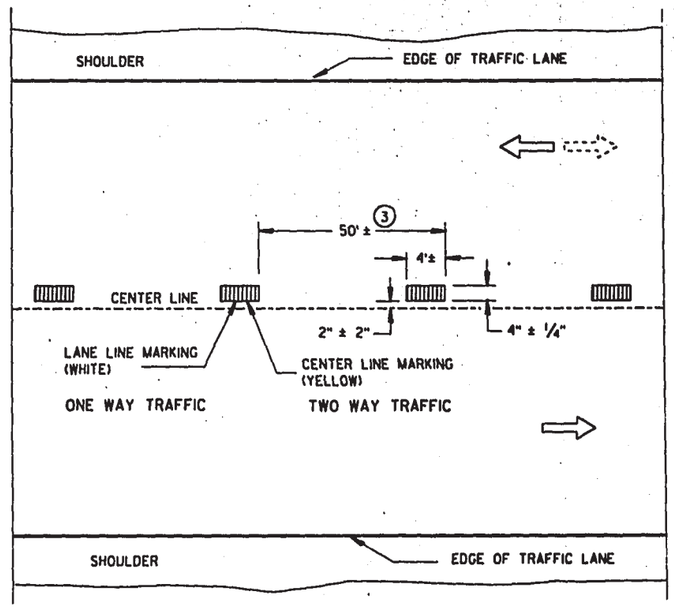


TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TEMPORARY PAVEMENT MARKING

GENERAL NOTES

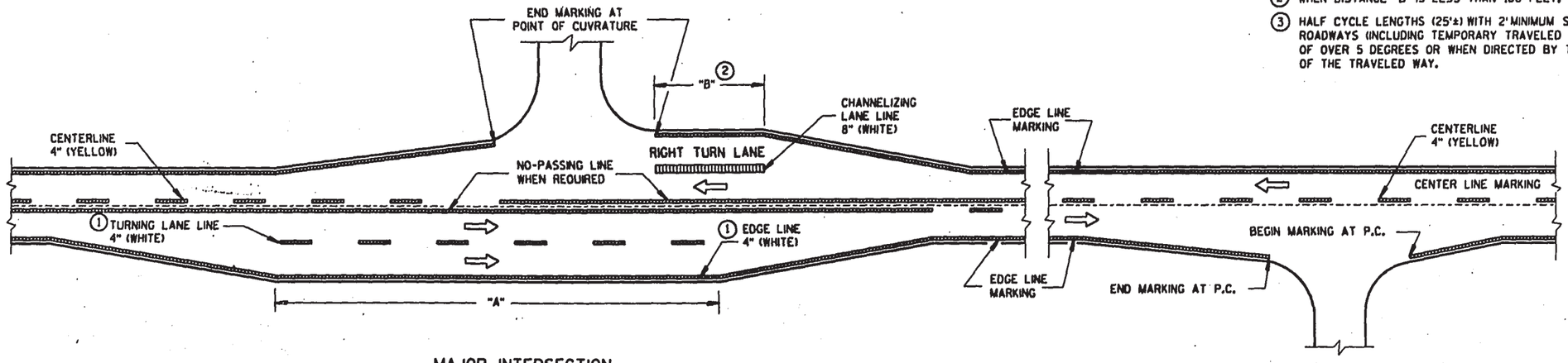
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT TURNING LANE MARKING.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.



MAJOR INTERSECTION

MINOR INTERSECTION

TYPICAL PAVEMENT MARKING FOR RURAL INTERSECTIONS

NOTE: WHEN APPLICABLE, INCLUDE SDD 15C8-4b WITH THIS DRAWING IN PLANS.

PAVEMENT MARKING (MAINLINE & INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 3/17/92 DATE — STATE TRAFFIC ENGINEER FOR HWYS

FHWA

S.D.D. 15 C 8-4a

S.D.D. 15 C 8-4a

TWO-LANE ROADWAY

SYMBOLS

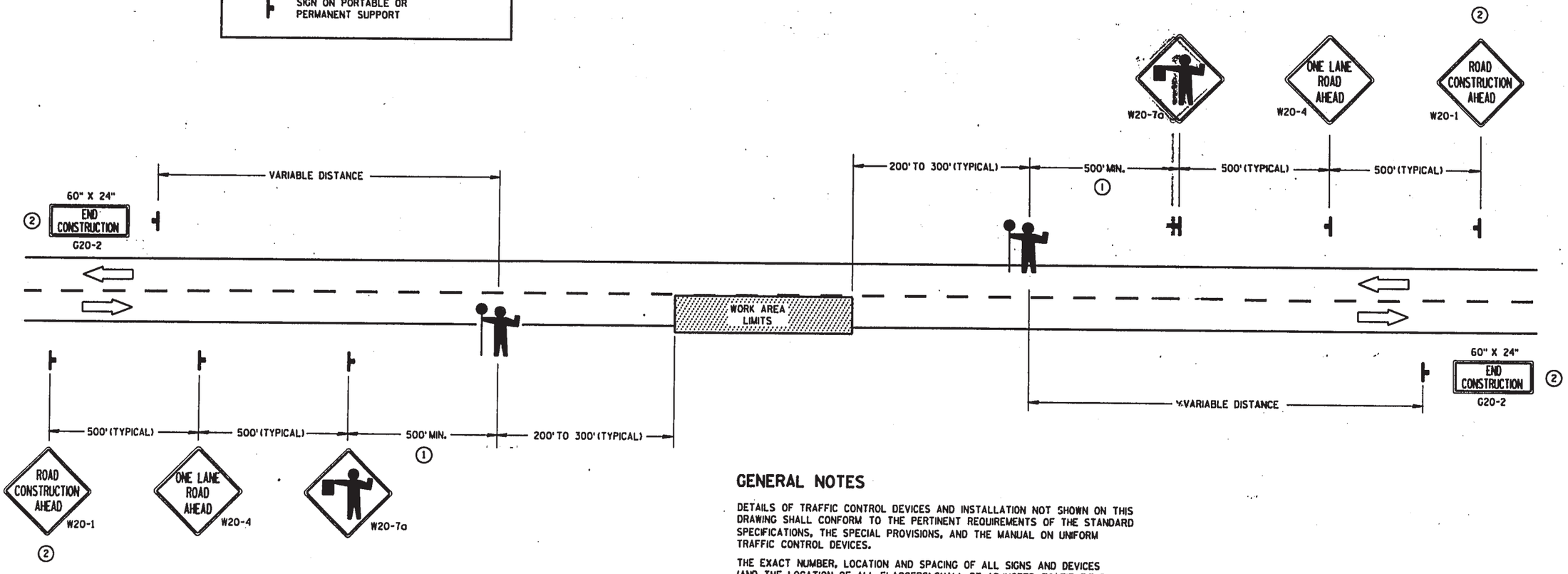
WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT

BE PREPARED TO STOP

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THESE SIGNS.



① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS DIRECTED BY THE ENGINEER.

② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD CONSTRUCTION WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD CONSTRUCTION AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-12-91
DATE
STATE TRAFFIC ENGINEER FOR HWYS
FHWA

S.D.D. 15 C 12-1

S.D.D. 15 C 12-1

OCT 3 1 1991

TRA001S
ERTH2

OWEN AYRES & ASSOCIATES INC
ROADS - EARTHWORK YARDAGE

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9

STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
58+06																			
143		153	153	1.30	189	189													
		199	199			189													11-
59+50	58				71														
8		9	163	1.30	23	211													
		12	211			211													
BALANCE TOTALS																			
59+58																			
			163			211													
			211			211													
42		48	211	1.30	119	330													
		62	274			330													56
60+00	4				82														
50		4	214	1.30	183	513													
		5	279			513													235
60+50					116														
50		2	216	1.30	205	718													
		2	281			718													437
61+00	2				105														
50		7	223	1.30	179	897													
		10	290			897													607
61+50	6				38														
50		20	243	1.30	155	1052													
		26	316			1052													736
62+00	15				79														
50		14	257	1.30	209	1261													
		18	334			1261													926
62+50					146														
50		1	258	1.30	255	1516													
		1	335			1516													1180
ADD VOLUME		DUFFY ROAD																	
62+58		23	281			1516													
		30	365			1516													1150
63+00	1				129														
100		3	284	1.30	447	1963													
		3	369			1963													1594
64+50					112														
100		13	297	1.30	325	2288													
		17	386			2288													1902
65+00	7				63														

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.1

STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
65+00	7				63														
100	104		401	1.30	146		2434												
	135		521				2434												1912
66+00	50				15														
100	280		681	1.30	85		2519												
	364		886				2519												1633
67+00	102				30														
100	467		1148	1.30	72		2590					3	3		3	33	1.50		
	607		1492				2590						3		5	55			1093
68+00	150				8							2			2				
100	629		1777	1.30	15		2606					37	40		37	440	1.50		
	818		2310				2606						40		55	660			236
69+00	189											18			18				
28	168		1945	1.30			2606					12	51		12	561	1.50		
	218		2529				2606						51		17	777			-
BALANCE TOTALS 69+27																			
			1945				2606						51			561			
			2529				2606						51			777			
72	442		2387	1.30			2606					30	82		30	882	1.50		
	575		3104				2606						82		46	1223			621-
70+00	143											4			4				
100	659		3046	1.30			2606					241	322		241	3222	1.50		
	856		3960				2606						322		360	4883			1838-
71+00	216											125			125				
100	675		3721	1.30			2606					234	556		234	5556	1.50		
	877		4836				2606						556		351	8334			3066-
ADD VOLUME AIRPORT RD																			
71+30	354		4075				2606						556			5586			
	460		5298				2606						556			8334			3526-
72+00	149											1			1				
100	456		4531	1.30	38		2643					2	558		2	5588	1.50		
	592		5890				2643						558		3	8347			4184-
ADD VOLUME																			
72+50			4531				2643					418	976		418	9776			
			5890				2643					418	976		627	14664			4711-
73+00	97				20							1			1				
100	387		4918	1.30	38		2681						977			11465	1.50		
	503		6393				2681						977		2	13465			5177-
ADD VOLUME SALW. BIT.																			
73+25	760		5678		1012-		1669						977			9777			
	988		7381		1012-		1669						977			13465			7177-
74+00	112											1			1				

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.2

STATION DIST	AREA	FILL VOL	FILL ACC VOL	FILL FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	ROCK FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	MARSH BACKFILL FACT	ACCUM NET VOL
74+00	112											1			1				
100		376	6054	1.30	47	1716						1	978		1	978	1467	1.50	
		489	7879			1716							978		2	1467			7621-
75+00	92				26														
100		361	6415	1.30	87	1804							978			978	1467	1.50	
		469	8339			1804							978			1467			8003-
76+00	103				21														
100		360	6774	1.30	42	1846							978			978	1467	1.50	
		468	8806			1846							978			1467			8428-
77+00	91				1														
100		301	7075	1.30	54	1899							978			978	1467	1.50	
		391	9198			1899							978			1467			8756-
78+00	72				26														
100		256	7329	1.30	103	2002							978			978	1467	1.50	
		330	9528			2002							978			1467			8993-
79+00	66				28														
100		214	7543	1.30	53	2055							978			978	1467	1.50	
		278	9806			2055							978			1467			9218-
80+00	54				1														
100		167	7710	1.30	6	2061							978			978	1467	1.50	
		217	10022			2061							978			1467			9429-
ADD VOLUME		WHEELER RD																	
80+72		350	8060		5	2066							978			978			
		455	10477		5	2066							978			1467			9879-
81+00	40				3														
100		168	8228	1.30	5	2071						3	981		3	981	1467	1.50	
		218	10696			2071							981		4	1471			10796-
82+00	51											1			1				
100		219	8447	1.30		2071						30	1011		30	1011	1516	1.50	
		285	10981			2071							1011		45	1516			10426-
ADD VOLUME																			
82+50			8447			2071						1514	2525		1514	2525			
			10981			2071						1514	2525		2271	3787			12697-
83+00	68											15			15				
100		285	8732	1.30		2071						38	2563		38	2563	1.50		
		370	11352			2071							2563		57	3844			13125-
84+00	86											6			6				
100		513	9245	1.30		2071						80	2643		80	2643	1.50		
		667	12019			2071							2643		120				
85+00	191											37			37				
100		595	9840	1.30		2071						81	2724		81	2724	1.50		
		773	12792			2071							2724		122	4086			14806-
86+00	130											7			7				

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 1880-05-71

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STATION DIST	AREA	FILL VOL	FILL ACC VOL	FACT	AREA	CUT VOL	CUT ACC VOL	AREA	ROCK VOL	ROCK ACC VOL	FACT	AREA	MARSH CUT VOL	MARSH CUT ACC VOL	AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
86+00	130											7			7				
100		445	10285	1.30			2071					91	2815		91	2815		1.50	
		579	13371				2071						2815		137	4223			15522-
87+00	111											43			43				
100		366	10652	1.30			2071					82	2897		82	2897		1.50	
		476	13847				2071						2897		123	4346			16121-
ADD VOLUME																			
87+50			10852				2071					344	3241		344	3241			
			13847				2071					344	3241		516	4862			16637-
88+00	87											2			2				
100		262	10914	1.30			2071					4	3245		4	3245		1.50	
		341	14188				2071						3245		5	4867			16984-
89+00	54																		
100		185	11099	1.30			2071						3245			3245		1.50	
		241	14029				2071						3245			4867			17225-
90+00	45																		
100		115	11214	1.30		8	2079					1	3246		1	3246		1.50	
		149	14578				2079						3246		2	4869			17368-
ADD VOLUME																			
90+50			11214				2079					258	3504		258	3504			
			14578				2079					258	3504		387	5256			17755-
91+00	17					4						1			1				
100		60	11274	1.30		31	2111					6	3510		6	3510		1.50	
		78	14656				2111						3510		8	5265			17810-
92+00	16					13						2			2				
100		89	11363	1.30		38	2149					4	3514		4	3514		1.50	
		115	14771				2149						3514		7	5271			17894-
93+00	32					8													
100		243	11605	1.30		74	2223					2	3516		2	3516		1.50	
		315	15087				2223						3516		3	5274			18138-
94+00	99					32						1			1				
100		698	12303	1.30		74	2297					21	3537		21	3537		1.50	
		907	13994				2297						3537		31	5305			19002-
95+00	278					8						10			10				
100		1164	13467	1.30		128	2425					21	3558		21	3558		1.50	
		1514	17508				2425						3558		32	5337			20419-
ADD VOLUME																			
95+50			13467				2425					524	4082		524				
			17508				2425					524	4082		786	6123			21205-
96+00	351					61						1			1				
100		1890	15357	1.30		113	2538					12	4094		12	4094		1.50	
		2457	19964				2538						4094		18	6140			23567-
ADD VOLUME					Borrow														
96+50			15357			4587	7125						4094			4094			
			19964			4587	7125						4094			6140			18980-
97+00	669											5			5				

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K" PROJECT I.D.: 8530-05-71

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STATION / DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
97+00	669											5			5				
100		2263	17620	1.30		7125						10	4104		10	4104		1.50	
		2941	22906			7125							4104		15	6155			21936-
98+00	552																		
100		1346	18966	1.30	81	7206							4104			4104		1.50	
		1750	24659			7206							4104			6155			23665-
99+00	175				44														
100		324	19289	1.30	1033	8239							4104			4104		1.50	
		421	25076			8239							4104			6155			22993-
100+00					514														
100			19289	1.30	3312	11551							4104			4104		1.50	
			25076			11551							4104			6155			19681-
ADD VOLUME	E.B.S.																		
100+75	588		19789		500	12051							4104			4104			
	650		25726		500	12051							4104			6155			19831-
101+00					1274														
100			19789	1.30	5500	17551							4104			4104		1.50	
			25726			17551							4104			6155			14331-
102+00					1696														
100			19789	1.30	6266	23817							4104			4104		1.50	
			25726			23817							4104			6155			8054-
103+00					1688														
100			19789	1.30	6338	30155							4104			4104		1.50	
			25726			30155							4104			6155			1727-
104+00					1734														
92			19789	1.30	1727	31882							4104			4104		1.50	
			25726			31882							4104			6155			
BALANCE TOTALS																			
104+41																			
			19789			31882							4104			4104			
			25726			31882							4104			6155			
	58		19789	1.30	2423	34305							4104			4104		1.50	
			25726			34305							4104			6155			2423
ADD VOLUME	HILLTOP PLACE																		
104+46	661		20450		5187	39492							4104			4104			
	859		26586		5187	39492							4104			6155			6751
105+00					507														
100	3		20453	1.30	1407	40899							4104			4104		1.50	
	3		26589			40899							4104			6155			8155
106+00	1				253														
100	3		20456	1.30	1146	42045							4104			4104		1.50	
	3		26592			42045							4104			6155			9297
107+00					366														

PROJECT TITLE: STH 57 NAMEKAGON RIVER TO CTH "K" PROJECT I.D.: 8530-05-71

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STATION DIST	AREA	VOL	ACC VOL	FACT	AREA	VOL	ACC VOL	AREA	VOL	ACC VOL	FACT	AREA	VOL	ACC VOL	AREA	VOL	ACC VOL	FACT	VOL	ACCUM NET VOL
					CUT			ROCK				MARSH CUT			MARSH BACKFILL					
107+00					366									4104			4104	1.50		
100		19	20475	1.30	980		43025							4104			46155		10252	
		29	36617				43025							4104			46155			
ADD VOLUME		TOWN RD LT																		
107+76		3704	24179				43025							4104			44104			
		4815	31432				43025							4104			46155		5437	
108+00		10			164															
100		39	24277	1.30	397		43422							4104			44104	1.50		
		124	30560				43422							4104			46155		5707	
109+00		43			51															
100		505	24781	1.30	123		43542							4104			44104	1.50		
		656	32216				43542							4104			46155		5171	
110+00		830			14															
100		1308	24294	1.30	26		43568							4104			44104	1.50		
		1964	33182				43568							4104			46155		3238	
111+00		587																		
100		2350	28644	1.30			43568							4104			44104	1.50		
		3155	37237				43568							4104			46155		175	
112+00		902																		
		135	28779	1.30			43568							4104			44104	1.50		
		175	37413				43568							4104			46155			
BALANCE TOTALS																				
112+05																				
			28779				43568							4104			44104			
			37413				43568							4104			46155			
		2265	40044	1.30			43568							4104			44104	1.50		
		2944	40357				43568							4104			46155		2944-	
113+00		614																		
100		1739	32783	1.30			43568							4104			44104	1.50		
		2260	42617				43568							4104			46155		5205-	
ADD VOLUME		HATCHERY RD																		
113+52		4522	3305		62		43630							4104			44104			
		5879	48496		62		43630							4104			46155		11021-	
114+00		325																		
100		695	38000	1.30	15		43645							4104			44104	1.50		
		904	49400				43645							4104			46155		11910-	
115+00		50			8															
100		96	38094	1.30	331		43977							4104			44104	1.50		
		122	49522				43977							4104			46155		11700-	
116+00					171															
100			38094	1.30	755		44731							4104			44104	1.50		
			49522				44731							4104			46155		10946-	
ADD VOLUME		E.B.S.R.																		
116+50		1300	38094		1000		45731							4104			44104			
		1300	50822		1000		45731							4104			46155		11246-	
117+00					237															

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

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STATION / DIST	AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
117+00					237														
100		223	39317	1.30	837		46569							4104			4104	1.50	
		290	51113				46569							4104			6155		10699-
118+00	121				215														
100		223	39549	1.30	733		47301							4104			4104	1.50	
		290	51402				47301							4104			6155		10257-
119+00					180														
100		19	39559	1.30	447		47748							4104			4104	1.50	
		24	51427				47748							4104			6155		9834-
ADD VOLUME		SALV. BIT.																	
120+00		760	40319		1012-		46736							4104			4104		
		988	52415		1012-		46736							4104			6155		11834-
120+00	1				61														
100		67	40386	1.30	192		46928							4104			4104	1.50	
		87	52502				46928							4104			6155		11730-
121+00	26				43														
100		164	40550	1.30	86		47013							4104			4104	1.50	
		213	52715				47013							4104			6155		11857-
122+00	62				3														
100		304	40854	1.30	6		47019							4104			4104	1.50	
		3951	53110				47019							4104			6155		12246-
123+00	102																		
100		339	41193	1.30	17		47036							4104			4104	1.50	
		441	53552				47036							4104			6155		12671-
124+00	81				9														
100		221	41414	1.30	212		47248							4104			4104	1.50	
		287	53839				47248							4104			6155		12746-
125+00	36				115														
100		103	41517	1.30	516		47764							4104			4104	1.50	
		134	53973				47764							4104			6155		12364-
126+00	18				173														
100		58	41576	1.30	527		48291							4104			4104	1.50	
		76	54048				48291							4104			6155		11913-
127+00	14				111														
100		55	41631	1.30	285		48576							4104			4104	1.50	
		72	54121				48576							4104			6155		11699-
128+00	16				43														
100		34	41665	1.30	169		48745							4104			4104	1.50	
		44	54164				48745							4104			6155		
129+00	2				48														
100		41	41706	1.30	426		49171							4104			4104	1.50	
		53	54217				49171							4104			6155		11202-
130+00	20				182														

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

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STATION DIST	AREA	FILL VOL	FILL ACC VOL	FACT	AREA	CUT VOL	CUT ACC VOL	AREA	ROCK VOL	ROCK ACC VOL	FACT	AREA	MARSH CUT VOL	MARSH CUT ACC VOL	AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
130+00	20				182														
100		390	42096	1.30	395	49566							4104			4104	1.50		
		507	54725			49566							4104			6155			11314-
131+00	191				32														
100		563	42659	1.30	119	49685							4104			4104	1.50		
		732	55457			49685							4104			6155			11927-
132+00	193				33														
100		216	42875	1.30	271	49956							4104			4104	1.50		
		288	55737			49956							4104			6155			11938-
133+00	3				114														
100		19	42894	1.30	554	50511							4104			4104	1.50		
		24	55762			50511							4104			6155			11407-
134+00	7				186														
100		18	42906	1.30	1295	51806							4104			4104	1.50		
		15	55778			51806							4104			6155			10128-
135+00					514														
100			42906	1.30	2294	54100							4104			4104	1.50		
			55778			54100							4104			6155			7834-
136+00					725														
100			42906	1.30	1806	55905							4104			4104	1.50		
			55778			55905							4104			6155			6028-
137+00					250														
100			42906	1.30	997	56902							4104			4104	1.50		
			55778			56902							4104			6155			5031-
138+00					288														
100		4	42910	1.30	713	57615							4104			4104	1.50		
		5	55783			57615							4104			6155			4323-
139+00	2				97														
100		137	43047	1.30	179	57795							4104			4104	1.50		
		178	55961			57795							4104			6155			4321-
140+00	72																		
100		443	43490	1.30		57795							4104			4104	1.50		
		576	56537			57795							4104			6155			4898-
141+00	167																		
100		672	44162	1.30		57795							4104			4104	1.50		
		874	57411			57795							4104			6155			5772-
142+00	196																		
100		855	45018	1.30		57795							4104			4104	1.50		
		1112	58523			57795							4104			6155			7605-
143+00	266																		
100		917	45935	1.30		57795							4104			4104	1.50		
		1192	59715			57795							4104			6155			8075-
144+00	229																		

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

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STATION DIST	AREA	FILL VOL	FILL ACC VOL	FACT	AREA	CUT VOL	CUT ACC VOL	AREA	ROCK VOL	ROCK ACC VOL	FACT	AREA	MARSH CUT VOL	MARSH CUT ACC VOL	AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
144+00	229																		
100		749	46683	1.30		2	57797						4104			4104	1.50		
		973	60689				57797						4104			6155		9046-	
145+00	175					1													
100		497	47177	1.30		38	57835						4104			4104	1.50		
		633	61321				57835						4104			6155		9643-	
146+00	88					18													
100		196	47366	1.30		429	58262						4104			4104	1.50		
		285	61576				58262						4104			6155		9469-	
147+00	18					214													
100		41	47408	1.30		1229	59492						4104			4104	1.50		
		54	61630				59492						4104			6155		9284-	
148+00	4					456													
100		8	47415	1.30		1388	60880						4104			4104	1.50		
		10	61640				60880						4104			6155		9116-	
ADD VOLUME		BORROW EXC.																	
149+00			47415			6485	67365						4104			4104			
			61640			6485	67365						4104			6155		431-	
149+00						299													
55		2	47417	1.30		433	67797						4104			4104	1.50		
		2	61642				67797						4104			6155		-	
BALANCE TOTALS																			
149+54																			
			47417				67797						4104			4104			
			61642				67797						4104			6155			
45		1	47418	1.30		360	68157						4104			4104	1.50		
		2	61644				68157						4104			6155		358	
150+00		2				128													
100		216	47634	1.30		296	68452						4104			4104	1.50		
		281	61925				68452						4104			6155		373	
151+00	115					31													
71		337	47972	1.30		66	68518						4104			4104	1.50		
		439	62363				68518						4104			6155			
BALANCE TOTALS																			
151+71																			
			47972				68518						4104			4104			
			62363				68518						4104			6155			
29		137	48108	1.30		27	68545						4104			4104	1.50		
		178	62541				68545						4104			6155		151-	
152+00	141					19													
100		474	48583	1.30		115	68660						4104			4104	1.50		
		617	63157				68660						4104			6155		653-	
153+00	115					43													

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

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STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
153+00	115				43														
100	522	49104		1.30	375	69035							4104			44104		1.50	
	678	63836				69035							4104			64155			956-
154+00	167				160														
100	318	49422		1.30	666	69701							4104			44104		1.50	
	413	64249				69701							4104			64155			703-
155+00	5				200														
100	45	49467		1.30	640	70341							4104			44104		1.50	
	59	64308				70341							4104			64155			123-
156+00	20				146														
53	43	49510		1.30	179	70519							4104			44104		1.50	
	56	64364				70519							4104			64155			-
BALANCE TOTALS																			
156+53		49510				70519							4104			44104			
		64364				70519							4104			64155			
47	38	49548		1.30	156	70675							4104			44104		1.50	
	49	64413				70675							4104			64155			107
157+00	24				35														
70	125	49673		1.30	55	70730							4104			44104		1.50	
	162	64575				70730							4104			64155			
BALANCE TOTALS																			
157+69		49673				70730							4104			44104			
		64575				70730							4104			64155			
30	54	49727		1.30	24	70754							4104			44104		1.50	
	70	64645				70754							4104			64155			46-
158+00	73				8														
100	253	49980		1.30	63	70817							4104			44104		1.50	
	329	64974				70817							4104			64155			312-
159+00	64				26														
100	223	50203		1.30	108	70925							4104			44104		1.50	
	289	65263				70925							4104			64155			494-
160+00	56				32														
100	194	50397		1.30	167	71092							4104			44104		1.50	
	252	65516				71092							4104			64155			579-
161+00	49				58														
100	161	50558		1.30	230	71322							4104			44104		1.50	
	210	65725				71322							4104			64155			559-
162+00	38				56														
100	130	50688		1.30	174	71496							4104			44104		1.50	
	169	65895				71496							4104			64155			554-
163+00	32				28														

PROJECT TITLE: STH 27 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.10

STATION DIST	AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL FACT	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	ACCUM NET VOL
163+00	12				28														
100		71	50759	1.30	141	71636						4104			4104	1.50			
		92	65987			71636						4104			6155		506-		
164+00	7				48														
100		17	50777	1.30	239	71876						4104			4104	1.50			
		23	66211			71876						4104			6155		289-		
165+00	3				81														
100		6	50783	1.30	270	72146						4104			4104	1.50			
		8	66018			72146						4104			6155		34-		
166+00					65														
100		175	50958	1.30	119	72265						4104			4104	1.50			
		227	66245			72265						4104			6155		135-		
167+00	94																		
100		382	51339	1.30		72265						4104			4104	1.50			
		496	66741			72265						4104			6155		631-		
168+00	112																		
100		312	51651	1.30	8	72273						4104			4104	1.50			
		405	67146			72273						4104			6155		1029-		
169+00	56				4														
100		272	51923	1.30	12	72285						4104			4104	1.50			
		354	67500			72285						4104			6155		1370-		
ADD VOLUME		SALV. BIT.																	
170+00		760	52683		1012-	71273						4104			4104				
		988	68488		1012-	71273						4104			6155		3370-		
170+00	90				2														
100		315	52998	1.30	22	71295						4104			4104	1.50			
		409	68897			71295						4104			6155		3758-		
171+00	80				10														
100		246	53244	1.30	40	71335						4104			4104	1.50			
		319	69217			71335						4104			6155		4037-		
172+00	56				12														
100		156	53400	1.30	65	71400						4104			4104	1.50			
		203	69420			71400						4104			6155		4176-		
173+00	32				23														
100		168	53568	1.30	66	71466						4104			4104	1.50			
		218	69638			71466						4104			6155		4327-		
174+00	59				13														
100		255	53823	1.30	48	71513						4104			4104	1.50			
		331	69969			71513						4104			6155		4511-		
175+00	79				13														
100		314	54137	1.30	27	71541						4104			4104	1.50			
		408	70378			71541						4104			6155		4992-		
176+00	91				2														

PROJECT TITLE: STH 97 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.11

STATION	AREA		FACT	AREA		AREA		FACT	AREA		AREA		FACT	ACCUM NET
EAST	VOL	ACC VOL		VOL	ACC VOL	VOL	ACC VOL		VOL	ACC VOL	VOL	ACC VOL		VOL
	91			2										
100	285	58421	1.30	37	71577					4104		44104	1.50	
	370	70748			71577					4104		68155		5326-
177+00	63			18										
100	263	54684	1.30	37	71614					4104		44104	1.50	
	342	71090			71614					4104		68155		5631-
	79			2										
100	303	54987	1.30	4	71618					4104		44104	1.50	
	390	70484			71618					4104		68155		6020-
179+00	84													
100	339	55327	1.30	5	71623					4104		44104	1.50	
	441	71925			71623					4104		68155		6457-
180+00	95			2										
100	765	56122	1.30	31	71654					4104		44104	1.50	
	994	72959			71654					4104		68155		7460-
181+00	331			15										
100	824	56946	1.30	63	71717					4104		44104	1.50	
	1071	74030			71717					4104		68155		8468-
	PENINSULA RD													
181+50	222	57168		121	71838					4104		44104		
	285	74318		121	71838					4104		68155		8636-
182+00	114			19										
100	379	57547	1.30	110	71948					4104		44104	1.50	
	493	74812			71948					4104		68155		9019-
	TOWER RD RT													
182+00		57547		736	72684					4104		44104		
		74812		736	72684					4104		68155		8283-
183+00	91			40										
100	489	58036	1.30	80	72764					4104		44104	1.50	
	636	75447			72764					4104		68155		8836-
184+00	73			3										
100	640	58676	1.30	17	72781					4104		44104	1.50	
	831	76279			72781					4104		68155		9653-
185+00	172			6										
100	631	59307	1.30	18	72799					4104		44104	1.50	
	821	77099			72799					4104		68155		10455-
186+00	169			4										
100	572	59879	1.30	15	72815					4104		44104	1.50	
	744	77843			72815					4104		68155		11711-
187+00	140			4										
100	425	60304	1.30	25	72840					4104		44104	1.50	
	552	78396			72840					4104		68155		11711-
188+00	89			9										

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.12

STATION DIST	AREA VOL	FACT	CUT AREA VOL	CUT ACC VOL	ROCK AREA VOL	ROCK ACC VOL	FACT	MARSH CUT AREA VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
188+00	89		9										
100	210	60515 1.30	39	72879				4104		4104	1.50		
	273	78669		72879				4104		6155			11945-
ADD VOLUME	BORROW EXC.												
189+00		60515	11976	84855				4104		4104			
		78669	11976	84855				4104		6155			31
189+00	24		12										
100	78	60593 1.30	72	84927				4104		4104	1.50		
	102	78771		84927				4104		6155			1
190+00	18		27										
6	4	60597 1.30	4	84931				4104		4104	1.50		
	5	78776		84931				4104		6155			-
BALANCE TOTALS													
190+00													
		60597		84931				4104		4104			
		78776		84931				4104		6155			
94	64	60661 1.30	60	84992				4104		4104	1.50		
	83	78859		84992				4104		6155			23-
191+00	19		8										
100	48	60709 1.30	81	85073				4104		4104	1.50		
	62	78921		85073				4104		6155			4-
192+00	7		36										
3	1	60709 1.30	5	85077				4104		4104	1.50		
	1	78922		85077				4104		6155			-
BALANCE TOTALS													
192+02													
		60709		85077				4104		4104			
		78922		85077				4104		6155			
97	21	60730 1.30	177	85254				4104		4104	1.50		
	27	78949		85254				4104		6155			149
193+00	5		62										
100	49	60780 1.30	175	85429				4104		4104	1.50		
	64	79013		85429				4104		6155			260
194+00	22		33										
100	152	60931 1.30	81	85510				4104		4104	1.50		
	197	79210		85510				4104		6155			145
195+00	60		11										
51	120	61051 1.30	11	85521				4104		4104	1.50		
	156	79366		85521				4104		6155			-
BALANCE TOTALS													
195+50													
		61051		85521				4104		4104			
		79366		85521				4104		6155			
49	116	61167 1.30	11	85532				4104		4104	1.50		
	151	79516		85532				4104		6155			140-
196+00	67												

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.13

STATION DIST	AREA	FILL VOL	FILL ACC VOL	FACT	AREA	CUT VOL	CUT ACC VOL	AREA	ROCK VOL	ROCK ACC VOL	FACT	AREA	MARSH CUT VOL	MARSH CUT ACC VOL	AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
196+80	67												4104						
100		182	61349	1.30	104	85635							4104			4104	1.50		
		237	79753			85635							4104			6155			273-
197+00	31				56														
100		80	61426	1.30	273	85909							4104			4104	1.50		
		104	79857			85909							4104			6155			1.4-
198+00	12				92														
100		130	61558	1.30	265	86174							4104			4104	1.50		
		169	80026			86174							4104			6155			7-
199+00	58				51														
100		365	61925	1.30	137	86311							4104			4104	1.50		
		474	80500			86311							4104			6155			344-
ADD VOLUME		SALV. BIT.																	
200+00		760	62683		1012-	85299							4104			4104			
		988	81488		1012-	85299							4104			6155			2344-
200+00	139				23														
100		659	63342	1.30	55	85355							4104			4104	1.50		
		857	82345			85355							4104			6155			3146-
201+00	217				7														
100		1060	64410	1.30	13	85368							4104			4104	1.50		
		1388	83733			85368							4104			6155			4520-
ADD VOLUME		OBRIEN HILL RD																	
201+79	3189		67599		762	86130							4104			4104			
	4146		87878		762	86130							4104			6155			7904-
202+00	359																		
100		983	68581	1.30	12	86142							4104			4104	11.50		
		1277	89156			86142							4104			6155			9169-
203+00	171				6														
100		563	69145	1.30	24	86166							4104			4104	11.50		
		732	89888			86166							4104			6155			9877-
204+00	133				7														
100		388	69533	1.30	47	86213							4104			4104	11.50		
		505	90393			86213							4104			6155			10336-
205+00	77				18														
100		229	69762	1.30	124	86337							4104			4104	11.50		
		297	90691			86337							4104			6155			10509-
206+00	47				49														
100		193	69955	1.30	102	86440							4104			4104	11.50		
		251	90941			86440							4104			6155			10657-
207+00	57				7														
100		267	70222	1.30	13	86453							4104			4104	11.50		
		348	91289			86453							4104			6155			10991-
208+00	87				1														

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K" PROJECT I.D.: 3530-05-71

9.14

STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
208+00	87				1														
100	419		70641	1.30	29		86482							4104			4104	1.50	
	545		91834				86482							4104			6155		11507-
209+00	139				15														
100	852		71493	1.30	136		86619							4104			4104	1.50	
	1107		92941				86619							4104			6155		12478-
210+00	321				58														
100	2039		73532	1.30	108		86726							4104			4104	1.50	
	2650		95591				86726							4104			6155		13009-
211+00	780																		
100	5205		78737	1.30			86726							4104			4104	1.50	
	6767		102358				86726							4104			6155		21787-
212+00	3031																		
100	7672		88409	1.30			86726							4104			4104	1.50	
	12576		138332				86726							4104			6155		34361-
213+00	3192																		
100	10308		98717	1.30			86726							4104			4104	1.50	
	13400		128332				86726							4104			6155		47761-
ADD VOLUME	BORROW EXC.																		
214+00			98717		59411		146137							4104			4104		
			128332		59411		146137							4104			6155		11653
214+00	2374																		
100	6349		105066	1.30			146137							4104			4104	1.50	
	8253		136586				146137							4104			6155		3396
215+00	1055																		
83	2613		107679	1.30			146137							4104			4104	1.50	
	3396		139982				146137							4104			6155		
BALANCE TOTALS																			
215+82																			
			107679				146137							4104			4104		
			139982				146137							4104			6155		
17	537		108215	1.30			146137							4104			4104	1.50	
	698		140680				146137							4104			6155		698-
ADD VOLUME	E.B.S.																		
215+40	1000		109215		1000		147137							4104			4104		
	1300		141980		1000		147137							4104			6155		
216+00	646																		
100	1990		111206	1.30			147137							4104			4104	1.50	
	2588		144568				147137							4104			6155		3585-
217+00	429																		
100	1245		112451	1.30			147137							4104			4104	1.50	
	1619		146186				147137							4104			6155		5204-
218+00	244																		

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.15

STATION DIST	AREA	FILL VOL	FACT	ACC VOL	AREA	CUT VOL	ACC VOL	AREA	ROCK VOL	ACC VOL	FACT	AREA	MARSH CUT VOL	ACC VOL	AREA	MARSH BACKFILL VOL	FACT	ACC VOL	ACCUM NET VOL
[illegible]																			
[illegible]		517	1.30	132968		56	147193						4104			4104	1.50		
		672		146859			147193						4104			6555			5821-
219+00	36					30													
100		68		113037	1.30	295	147489						4104			4104	1.50		
		89		146948			147489						4104			6555			5614-
[illegible]	1					129													
[illegible]	2		1.30	113039		482	147971						4104			4104	1.50		
	3			146950			147971						4104			6555			5134-
221+00						131													
100				113039	1.30	513	148482						4104			4104	1.50		
				146950			148482						4104			6555			4624-
222+00						144													
[illegible]				113039	1.30	657	149139						4104			4104	1.50		
				146950			149139						4104			6555			3967-
223+00						211													
100				113039	1.30	824	149964						4104			4104	1.50		
				146950			149964						4104			6555			3142-
224+00						235													
100		9		113048	1.30	627	150591						4104			4104	1.50		
		12		146962			150591						4104			6555			2527-
225+00	5					104													
100		120		113168	1.30	217	150808						4104			4104	1.50		
		156		147118			150808						4104			6555			2465-
226+00	60					13													
100		432		113600	1.30	24	150832						4104			4104	1.50		
		562		147680			150832						4104			6555			3003-
227+00	174																		
100		420		114020	1.30	96	150928						4104			4104	1.50		
		546		148226			150928						4104			6555			3453-
228+00	153					52													
100		116		114136	1.30	168	151096						4104			4104	1.50		
		151		148377			151096						4104			6555			3437-
229+00	10					39													
100		21		114157	1.30	223	151319						4104			4104	1.50		
		27		148404			151319						4104			6555			3240-
230+00	1					82													
100		11		114167	1.30	253	151572						4104			4104	1.50		
		14		148417			151572						4104			6555			3001-
231+00	5					55													
100		46		114214	1.30	161	151733						4104			4104	1.50		
		60		148478			151733						4104			6555			2900-
232+00	20					32													

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

916

STATION DIST	AREA VOL	AREA ACC VOL	FACT	CUT AREA VOL	CUT AREA ACC VOL	ROCK AREA VOL	ROCK AREA ACC VOL	FACT	MARSH CUT AREA VOL	MARSH CUT AREA ACC VOL	MARSH BACKFILL AREA VOL	MARSH BACKFILL AREA ACC VOL	FACT	ACCUM NET VOL
[illegible]				32										
[illegible]	81	114275	1.30	118	151851					4104		4104	1.50	
	80	148557			151851					4104		6155		2862-
233+00	13			31										
100	46	114320	1.30	11	151961					4104		4104	1.50	
	59	148617			151961					4104		6155		2811-
[illegible]	12			28										
[illegible]	88	114403	1.30	52	152013					4104		4104	1.50	
	103	148724			152013					4104		[illegible]		[illegible]
235+00	33													
100	80	114483	1.30	54	152067					4104		4104	1.50	
	104	148828			152067					4104		6155		2916-
236+00	11			29										
[illegible]	78	[illegible]561	1.30	68	152135					4104		4104	1.50	
	101	[illegible]929			152135					4104		6155		2949-
237+00	31			8										
100	179	114739	1.30	15	152150					4104		4104	1.50	
	232	149161			152150					4104		6155		3167-
[illegible]	85													
100	309	[illegible]048	1.30		152150					4104		4104	1.50	
	402	149563			152150					4104		6155		3569-
239+00	102													
100	382	115430	1.30		152150					4104		4104	1.50	
	496	150059			152150					4104		6155		4065-
[illegible]	104													
[illegible]	452	[illegible]083	1.30		152150					4104		4104	1.50	
	568	[illegible]648			152150					4104		6155		4653-
241+00	140													
100	551	116434	1.30		152150					4104		4104	1.50	
	716	151364			152150					4104		6155		5370-
[illegible]	158													
[illegible]	466	[illegible]900	1.30		152150					4104		4104	1.50	
	606	[illegible]969			152150					4104		[illegible]		[illegible]
243+00	94													
100	237	117137	1.30	11	152160					4104		4104	1.50	
	309	152278			152160					4104		6155		6273-
244+00	34			6										
100	94	[illegible]31	1.30	38	152198					4104		[illegible]		
	122	[illegible]400			152198					4104		[illegible]		[illegible]
245+00	16			15										
100	34	117265	1.30	96	152294					4104		4104	1.50	
	44	152444			152294					4104		6155		6306-
[illegible]	2			37										

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K" PROJECT I.D.: 8530-05-71

9.17

STATION DIST	AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
246+00	2				37													
100		9	117274	1.30	164	152458						4104			4104		1.50	
		12	152456			152458						4104			6155			6154-
247+00	3				51													
100		38	117312	1.30	114	152562						4104			4104		1.50	
		50	152506			152562						4104			6155			6100-
248+00	18				5													
100		103	117416	1.30	25	152587						4104			4104		1.50	
		134	152641			152587						4104			6155			6209-
249+00	38				8													
100		150	117565	1.30	33	152620						4104			4104		1.50	
		194	152835			152620						4104			6155			6370-
ADD VOLUME		SALV. BIT.																
250+00		760	118325		1012-	151608						4104			4104			
		988	153823		1012-	151608						4104			6155			8370-
250+00	43				10													
100		82	118407	1.30	81	151689						4104			4104		1.50	
		107	153930			151689						4104			6155			8396-
251+00	1				34													
100		3	118411	1.30	231	151920						4104			4104		1.50	
		4	153934			151920						4104			6155			8109-
252+00					91													
100		19	118430	1.30	248	152168						4104			4104		1.50	
		25	153959			152168						4104			6155			7946-
253+00	10				43													
100		34	118464	1.30	167	152335						4104			4104		1.50	
		44	154003			152335						4104			6155			7823-
254+00	8				47													
100		46	118509	1.30	128	152463						4104			4104		1.50	
		59	154062			152463						4104			6155			7755-
255+00	16				22													
100		126	118636	1.30	46	152509						4104			4104		1.50	
		164	154226			152509						4104			6155			7873-
256+00	52				3													
100		178	118813	1.30	6	152515						4104			4104		1.50	
		231	154457			152515						4104			6155			8098-
257+00	44																	
100		148	118962	1.30	35	152549						4104			4104		1.50	
		193	154650			152549						4104			6155			8256-
ADD VOLUME		CTH "K"																
257+98		18	118980		236	152785						4104			4104			
		23	154673		236	152785						4104			6155			8044-
258+00	36				19													

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.18

STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
258+00	36				19														
100	146	119126		1.30	116	152901						4104			4104			1.50	
	190	154864				152901						4104			6155				8118-
259+00	43				44														
100	88	119214		1.30	243	153144						4104			4104			1.50	
	115	154976				153144						4104			6155				7999-
260+00	4				87														
100	8	119222		1.30	815	153960						4104			4104			1.50	
	10	154988				153960						4104			6155				7184-
261+00					353														
100		119222		1.30	1712	155672						4104			4104			1.50	
		154988				155672						4104			6155				5472-
262+00					572														
100		119222		1.30	1691	157363						4104			4104			1.50	
		154988				157363						4104			6155				3781-
263+00					342														
100		119222		1.30	1062	158425						4104			4104			1.50	
		154988				158425						4104			6155				2719-
264+00					232														
100		119222		1.30	1297	159722						4104			4104			1.50	
		154988				159722						4104			6155				1422-
265+00					468														
76		119222		1.30	1422	161144						4104			4104			1.50	
		154988				161144						4104			6155				-
BALANCE TOTALS 265+76																			
		119222				161144						4104			4104				
		154988				161144						4104			6155				
24		119222		1.30	444	161588						4104			4104			1.50	
		154988				161588						4104			6155				444
266+00					539														
100		119222		1.30	1933	163521						4104			4104			1.50	
		154988				163521						4104			6155				2377
267+00					505														
100		119222		1.30	1432	165003						4104			4104			1.50	
		154988				165003						4104			6155				3860
268+00					296														
100	5	119227		1.30	765	165769						4104			4104			1.50	
	7	154995				165769						4104			6155				4618
269+00	3				118														
100	8	119235		1.30	350	166119						4104			4104			1.50	
	10	155005				166119						4104			6155				4959
270+00	1				72														

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.19

STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
270+00	1				72														
100	89	119324		1.30	158	166277						4104			44104			1.50	
	116	155121				166277						4104			56155				5401
271+00	47				14														
100	198	119522		1.30	51	166328						4104			44104			1.50	
	258	155378				166328						4104			56155				4795
272+00	60				14														
100	253	119775		1.30	53	166381						4104			44104			1.50	
	329	155708				166381						4104			56155				4518
273+00	76				15														
100	239	120014		1.30	166	166547						4104			44104			1.50	
	310	156018				166547						4104			56155				4374
274+00	53				75														
100	735	120749		1.30	138	166685						4104			44104			1.50	
	955	156973				166685						4104			56155				3556
275+00	344																		
100	913	121661		1.30		166685						4104			44104			1.50	
	1186	158160				166685						4104			56155				2370
276+00	148																		
100	275	121936		1.30	144	166829						4104			44104			1.50	
	357	158517				166829						4104			56155				2156
277+00					78														
100	129	122065		1.30	205	167034						4104			44104			1.50	
	168	158685				167034						4104			56155				2193
278+00	70				33														
100	517	122582		1.30	61	167095						4104			44104			1.50	
	671	159357				167095						4104			56155				1583
279+00	219																		
100	445	123027		1.30	64	167158						4104			44104			1.50	
	578	159935				167158						4104			56155				1069
280+00	31				34														
100	84	123111		1.30	187	167345						4104			44104			1.50	
	110	160044				167345						4104			56155				1145
281+00	15				66														
100	27	123138		1.30	1692	169037						4104			44104			1.50	
	35	160080				169037						4104			56155				2802
282+00					847														
100	97	123236		1.30	1871	170908						4104			44104			1.50	
	127	160206				170908						4104			56155				4547
283+00	53				163														
100	130	123366		1.30	375	171283						4104			44104			1.50	
	169	160376				171283						4104			56155				4752
284+00	18				39														

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.20

STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	FACT	ACCUM NET VOL
284+00	18				39														
100		199	123565	1.30	73	171356							4104			4104	1.50		
		258	160634			171356							4104			6155			4566
285+00	89																		
100		282	123846	1.30	139	171495							4104			4104	1.50		
		366	161080			171495							4104			6155			4339
286+00	63				75														
100		430	124277	1.30	139	171634							4104			4104	1.50		
		560	161560			171634							4104			6155			3918
287+00	170																		
100		542	124819	1.30	117	171751							4104			4104	1.50		
		705	162265			171751							4104			6155			3911
288+00	123				63														
100		467	125286	1.30	117	171869							4104			4104	1.50		
		607	162872			171869							4104			6155			2842
289+00	129																		
100		532	125818	1.30		171869							4104			4104	1.50		
		692	163564			171869							4104			6155			2150
ADD VOLUME		TEMP. RD																	
290+00		1780	127598		1821	173690							4104			4104			
		2314	165876		1821	173690							4104			6155			1637
290+00	158																		
100		509	128107	1.30		173690							4104			4104	1.50		
		662	166539			173690							4104			6155			995
291+00	117																		
100		455	128563	1.30		173690							4104			4104	1.50		
		592	167132			173690							4104			6155			403
292+00	129																		
76		310	128873	1.30		173690							4104			4104	1.50		
		403	167534			173690							4104			6155			-
BALANCE TOTALS																			
292+75																			
			128873			173690							4104			4104			
			167534			173690							4104			6155			
24		100	128973	1.30		173690							4104			4104	1.50		
		130	167664			173690							4104			6155			130-
293+00	92																		
100		277	129249	1.30		173690							4104			4104	1.50		
		360	168024			173690							4104			6155			490-
294+00	57																		
100		163	129412	1.30		173690							4104			4104	1.50		
		211	168236			173690							4104			6155			721-
295+00	31																		

PROJECT TITLE: STH 77 NAMEKAGON RIVER TO CTH "K"

PROJECT I.D.: 8530-05-71

9.21

STATION DIST	FILL AREA	FILL VOL	FILL ACC VOL	FILL FACT	CUT AREA	CUT VOL	CUT ACC VOL	ROCK AREA	ROCK VOL	ROCK ACC VOL	ROCK FACT	MARSH CUT AREA	MARSH CUT VOL	MARSH CUT ACC VOL	MARSH BACKFILL AREA	MARSH BACKFILL VOL	MARSH BACKFILL ACC VOL	MARSH BACKFILL FACT	ACCUM NET VOL
295+00	31													4104			4104	1.50	
100		72	129494	1.30	9	173699								4104			4104	1.50	
		94	168329			173699								4104			6155		786-
296+00	8				5									4104			4104	1.50	
100		26	129511	1.30	31	173730								4104			4104	1.50	
		34	168363			173730								4104			6155		788-
297+00	6				12									4104			4104	1.50	
100		15	129525	1.30	61	173791								4104			4104	1.50	
		19	168382			173791								4104			6155		746-
298+00	2				21									4104			4104	1.50	
100		4	129529	1.30	118	173909								4104			4104	1.50	
		5	168387			173909								4104			6155		634-
299+00					43									4104			4104	1.50	
100			129529	1.30	191	174100								4104			4104	1.50	
			168388			174100								4104			6155		443-
300+00					60									4104			4104	1.50	
100			129529	1.30	215	174315								4104			4104	1.50	
			168388			174315								4104			6155		228-
301+00					56									4104			4104	1.50	
100			129529	1.30	227	174543								4104			4104	1.50	
			168388			174543								4104			6155		-
302+00					67														
			129529	1.30		174543								4104			4104	1.50	
			168388			174543								4104			6155		-
302+00																			
			129529	1.30		174543								4104			4104	1.50	
			168388			174543								4104			6155		-
302+00																			
			129529	1.30		174543								4104			4104	1.50	
			168388			174543								4104			6155		-
302+00																			
			129529	1.30		174543								4104			4104	1.50	
			168388			174543								4104			6155		-
302+00																			
			129529	1.30		174543								4104			4104	1.50	
			168388			174543								4104			6155		-
302+00																			

62+00
1200
1194.55
EG
FL
2%
6%
RW
22.0 CY
22.0 CY
27.8 CY

61+50
1200
1194.35
EG
FL
2%
RW
22.0 CY

61+00
1200
1194.15
EG
FL
2%
RW

60+50
1200
1193.95
EG
FL
2%
RW

60+00
1200
1193.75
EG
FL
RW

59+50
1190
1193.55
EG
FL
3%
RW
27.0 CY
27.0 CY
52.9 CY

59+00
1190
1193.35
EG
FL
RW

58+50
1190
1193.15
EG
FL
RW

58+06
1190
EG
FL
RW

HEAVY RIPRAP SLOPES
58+06 - 59+50 RT.

HEAVY RIPRAP SLOPES
58+06 - 59+00 LT.

BEGIN PROJECT AT STA 58+06

10
0
10

3530-05-71

0123

70+00 1190

69+00 1190

68+26 1190

68+00 1190

67+00 1190

66+00 1200

65+00 1200

64+00 1200

63+00 1200

62+50 1200

52.4 SB DUPLEX AT INTERSECTION ST.

END BIT. TAPER @ 64+00 FT.

END BIT. TAPER @ 63+75 FT.

26.8' RT 1194.0

22.2' LT 1193.88

1195.75

1195.75

1195.75

1195.75

1195.70

1195.55

1195.30

1194.95

1194.75

1192.0

1191.0

1191.0

1191.0

1192.2

1192.56

1194.0

1194.5

1193.5

1193.0

1193.5

1193.0

1193.5

1193.0

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9 of 34

78+00 1200

77+00 1200

76+00 1200

75+00 1190

74+00 1190

73+36 1190

73+00 1190

72+00 1190

71+00 1190

70+16 1190

EW

4:1

6:1

DMS

1195.50

1195.11

1195.85

1196.40

1196.37

1196.03

1195.82

1195.75

1195.5

1193.0

1192.58

1192.0

1194.0

1194.2

1194.5

1195.0

6% PE

1% PE

EXIST. AIR FILL

MARSH EXC

MARSH BOTTOM

7-1-71 REVISED TO INCLUDE LC

10'

10'

8530-05-71

0125

86+00
1200

85+00
1200

84+00
1200

83+00
1200

82+00
1200

81+77
1200

81+37
1200

81+00
1200

80+00
1200

79+00
1200

78+65
1200

1202.90

1202.35

1201.80

1201.25

1200.70

1200.57

1200.15

1199.60

1199.05

1198.5

24.7' LT

25.1' RT

25.2' LT

25.1' RT

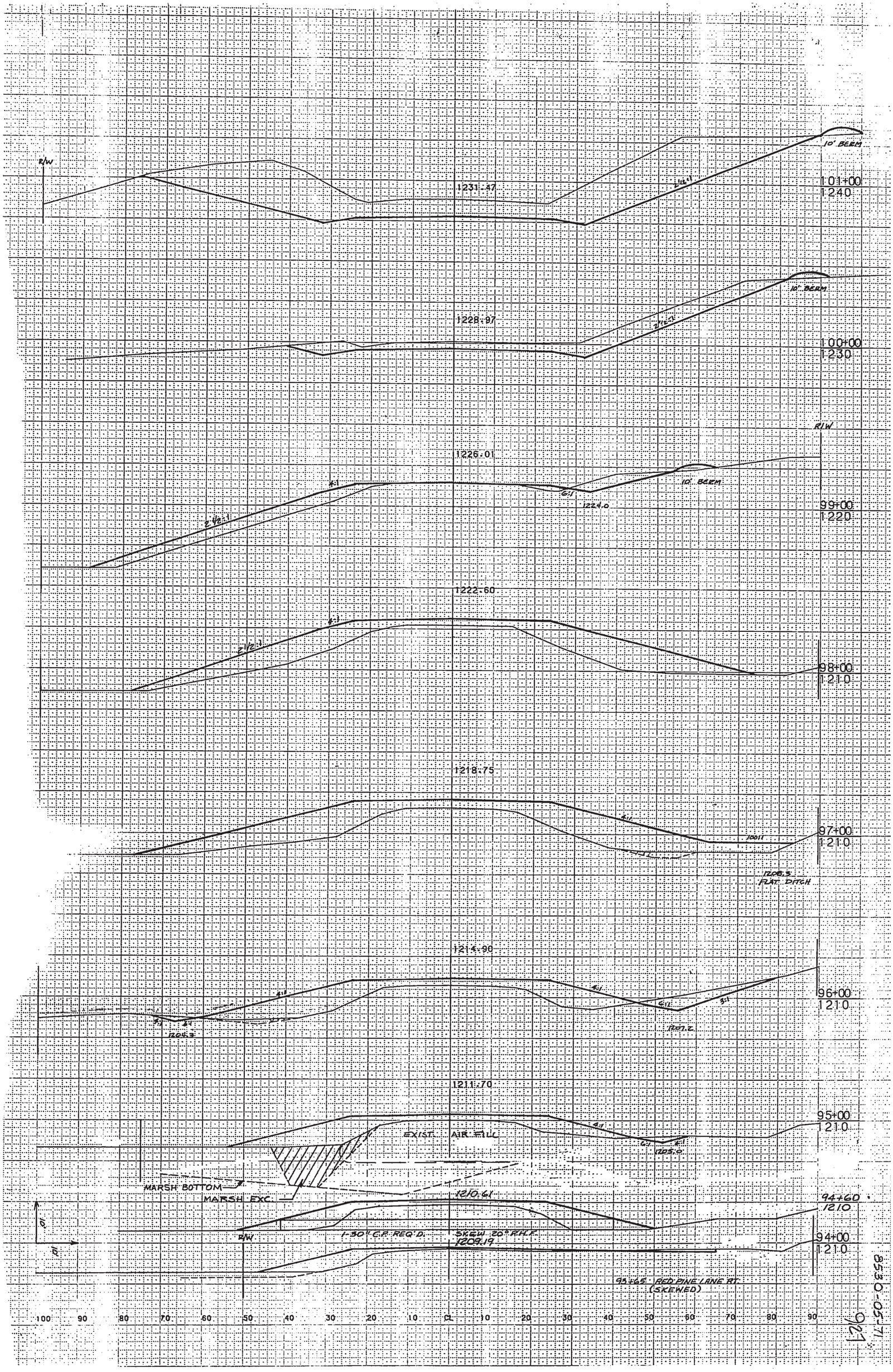
25.2' LT

25.1' RT

25.2

B530-05-71

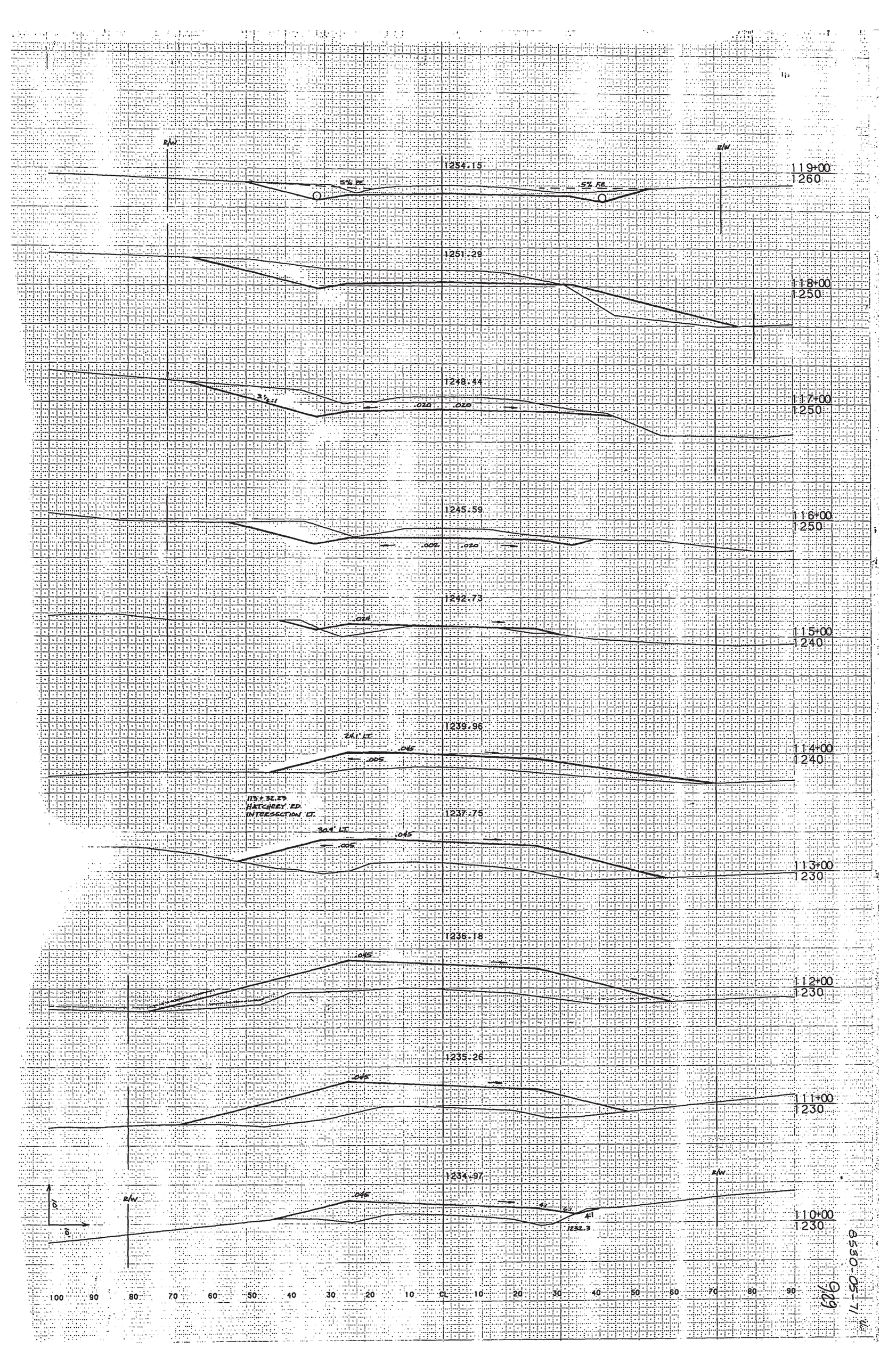
926

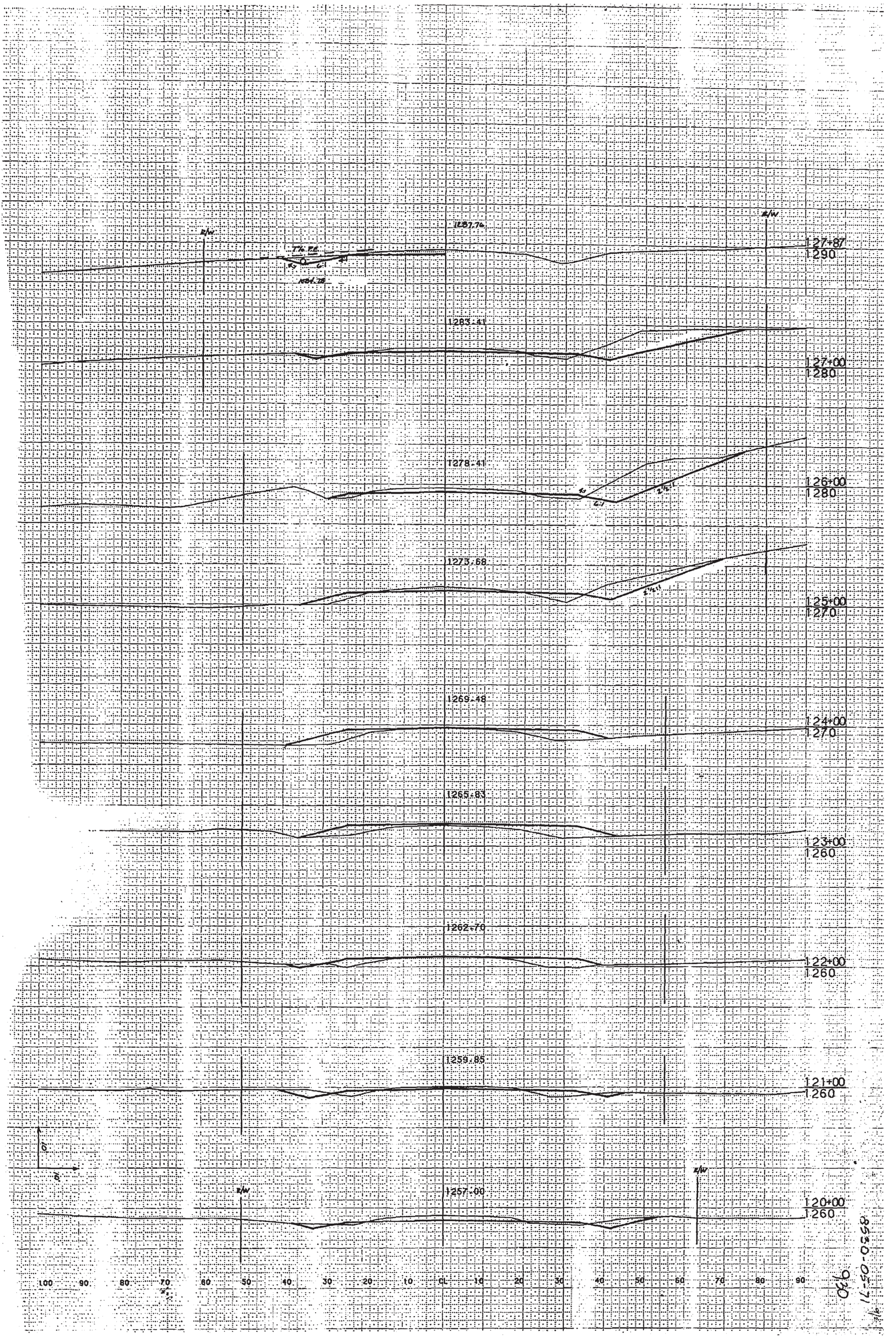

R/W
1231.47
10' BERM
101+00
1240
1228.97
10' BERM
100+00
1230
R/W
1226.01
10' BERM
1224.0
99+00
1220
1222.60
98+00
1210
1218.75
1206.3
FLAT DITCH
97+00
1210
1214.90
1209.3
1207.2
96+00
1210
1211.70
EXIST. AIR FILL
1205.0
95+00
1210
MARSH BOTTOM
MARSH EXC.
1210.61
94+60
1210
R/W
1-30" C.P. REQ'D.
SKEW 20° RHF
1209.19
94+00
1210
93+65 RED PINE LINE RT.
(SKEWED)
100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90
8530-05-71
9/21

8530-05-71

928

109+00 1230
108+00 1240
107+00 1240
106+00 1240
105+00 1240
104+00 1250
103+00 1250
102+00 1240
1235.33
1236.22
1236.92
1237.15
1236.93
1236.24
1236.10
1235.51
1235.5
1233.9
1234.5
1234.22
1233.5
1234.0
1234.5
1234.6
269' Rt
253' Lt
310' Rt
Add'l Right Turn Lane Intersection Pt
Add'l Left Turn Lane Intersection Pt
4:1
6:1
2%
4%
10'
10'


R/W
1254.15
5% FF
5% FF
119+00
1260
1251.29
118+00
1250
1248.44
3½:1
.020
.020
117+00
1250
1245.59
.002
.020
116+00
1250
1242.73
.024
115+00
1240
1239.96
24.1' LT.
.045
.005
114+00
1240
113+32.23
HATCHERY RD.
INTERSECTION CT.
1237.75
30.9' LT.
.045
.005
113+00
1230
1236.18
.045
112+00
1230
1235.26
.045
111+00
1230
1234.97
.045
4:1
4:1
1232.3
110+00
1230
10
10
100 90 80 70 60 50 40 30 20 10 CL 10 20 30 40 50 60 70 80 90



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920

3530-05-71

93

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9/32 1/3

143+00
137.0

142+00
1360

141+00
1360

140+00
1360

139+00
1360

138+00
1360

137+00
1350

136+74
1350

136+00
1350

1372.48

1368.28

1365.85

1361.94

1357.57

1352.73

1347.42

1341.65

EW

0 10 20 30 40 50 60 70 80 90 100

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933

1.50+78
1390
1388.50
RW
3"x2"
LW

1.50+00
1390
1385.90
RW
3"x2"
LW

1.49+00
1390
1387.41
RW
3"x2"
LW

1.48+00
1390
1385.90
RW
3"x2"
LW

1.47+00
1390
1383.96
RW
3"x2"
LW

1.46+00
1380
1381.60
RW

1.45+56
1380
1378.83
RW
7"x2"
LW

1.45+00
1370
1375.68
RW

1.44+00
1370
1372.43
RW
3"x2"
LW

0 10 20 30 40 50 60 70 80 90 100

8530-05-71

94

157+00
1390

156+00
1390

155+00
1390

154+00
1390

153+78
1390

153+00
1390

152+00
1390

151+00
1390

AW

1394.37

1395.08

1392.08

1391.24

1390.57

1389.90

1389.23

2220

2222

2224

2226

2228

2230

2232

2234

2236

2238

2240

2242

2244

2246

2248

2250

2252

2254

2256

2258

2260

2262

2264

2266

2268

2270

2272

2274

2276

2278

2280

2282

2284

2286

2288

2290

2292

2294

2296

2298

8530-05-71

935

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-310.84

-311.42

-311.99

-312.57

-313.15

-313.72

-314.30

-314.88

-315.45

-316.03

-316.61

-317.18

-317.76

-318.34

-318.91

-319.49

-320.07

-320.64

-321.22

-321.80

-322.37

-322.95

-323.53

-324.10

-324.68

-325.26

-325.83

-326.41

-326.99

-327.56

-328.14

-328.72

-329.29

-329.87

-330.45

-331.02

-331.60

-332.18

-332.75

-333.33

-333.91

-334.48

-335.06

-335.64

-336.21

-336.79

-337.37

-337.94

-338.52

-339.10

-339.67

-340.25

-340.83

-341.40

-341.98

-342.56

-343.13

-343.71

-344.29

-344.86

-345.44

-346.02

-346.59

-347.17

-347.75

-348.32

-348.90

-349.48

-350.05

-350.63

-351.21

-351.78

-352.36

-352.94

-353.51

-354.09

-354.67

-355.24

-355.82

-356.40

-356.97

-357.55

-358.13

-358.70

-359.28

-359.86

-360.43

-361.01

-361.59

-362.16

-362.74

-363.32

-363.89

-364.47

-365.05

-365.62

-366.20

-366.78

-367.35

-367.93

-368.51

-369.08

-369.66

-370.24

-370.81

-371.39

-371.97

-372.54

-373.12

-373.70

-374.27

-374.85

-375.43

-376.00

-376.58

-377.16

-377.73

-378.31

-378.89

-379.46

-380.04

-380.62

-381.19

-381.77

-382.35

-382.92

-383.50

-384.08

-384.65

-385.23

-385.81

-386.38

-386.96

-387.54

-388.11

-388.69

-389.27

-389.84

-390.42

-391.00

-391.57

-392.15

-392.73

-393.30

-393.88

-394.46

-395.03

-395.61

-396.19

-396.76

-397.34

-397.92

-398.49

-399.07

-399.65

-400.22

-400.80

-401.38

-401.95

-402.53

-403.11

-403.68

-404.26

-404.84

-405.41

-405.99

-406.57

-407.14

-407.72

-408.30

-408.87

-409.45

-410.03

-410.60

-411.18

-411.76

-412.33

-412.91

-413.49

-414.06

-414.64

-415.22

-415.79

-416.37

-416.95

-417.52

-418.10

-418.68

-419.25

-419.83

-420.41

-420.98

-421.56

-422.14

-422.71

-423.29

-423.87

-424.44

-425.02

-425.60

-426.17

-426.75

-427.33

-427.90

-428.48

-429.06

-429.63

-430.21

-430.79

-431.36

-431.94

-432.52

-433.09

-433.67

-434.25

-434.82

-435.40

-435.98

-436.55

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-437.71

-438.28

-438.86

-439.44

-440.01

-440.59

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-441.74

-442.32

-442.90

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-453.85

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-455.01

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-456.74

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-468.85

-469.42

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-470.58

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-471.73

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-472.88

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-482.69

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-499.41

-499.99

-500.56

-501.14

-501.72

-502.29

-502.87

-503.45

-504.02

-504.60

-505.18

-505.75

-506.33

-506.91

-507.48

-508.06

-508.64

-509.21

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-510.37

-510.94

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-518.44

-519.02

-519.59

-520.17

-520.75

-521.32

-521.90

-522.48

-523.05

-523.63

-524.21

-524.78

-525.36

-525.94

-526.51

-527.09

-527.67

-528.24

-528.82

-529.40

-529.97

-530.55

-531.13

-531.70

-532.28

-532.86

-533.43

-534.01

-534.59

-535.16

-535.74

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-536.89

-537.47

-538.05

-538.62

-539.20

-539.78

-540.35

-540.93

-541.51

-542.08

-542.66

-543.24

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-546.12

-546.70

-547.27

-547.85

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-549.00

-549.58

-550.16

-550.73

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-551.89

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-553.62

-554.19

-554.77

-555.35

-555.92

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-557.08

-557.65

-558.23

-558.81

-559.38

-559.96

-560.54

-561.11

-561.69

-562.27

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-563.42

-564.00

-564.57

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-566.88

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-568.61

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-569.76

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-571.49

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-572.65

-573.22

-573.80

-574.38

-574.95

-575.53

-576.11

-576.68

-577.26

-577.84

-578.41

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-579.57

-580.14

-580.72

-581.30

-581.87

-582.45

-583.03

-583.60

-584.18

-584.76

-585.33

-585.91

-586.49

-587.06

-587.64

-588.22

-588.79

-589.37

-589.95

-590.52

-591.10

-591.68

-592.25

-592.83

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-595.71

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-596.87

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-604.94

-605.52

-606.09

-606.67

-607.25

-607.82

-608.40

-608.98

-609.55

-610.13

-610.71

-611.28

-611.86

-612.44

-613.01

-613.59

-614.17

-614.74

-615.32

-615.90

-616.47

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-617.63

-618.20

-618.78

-619.36

-619.93

-620.51

-621.09

-621.66

-622.24

-622.82

-623.39

-623.97

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-629.16

-629.74

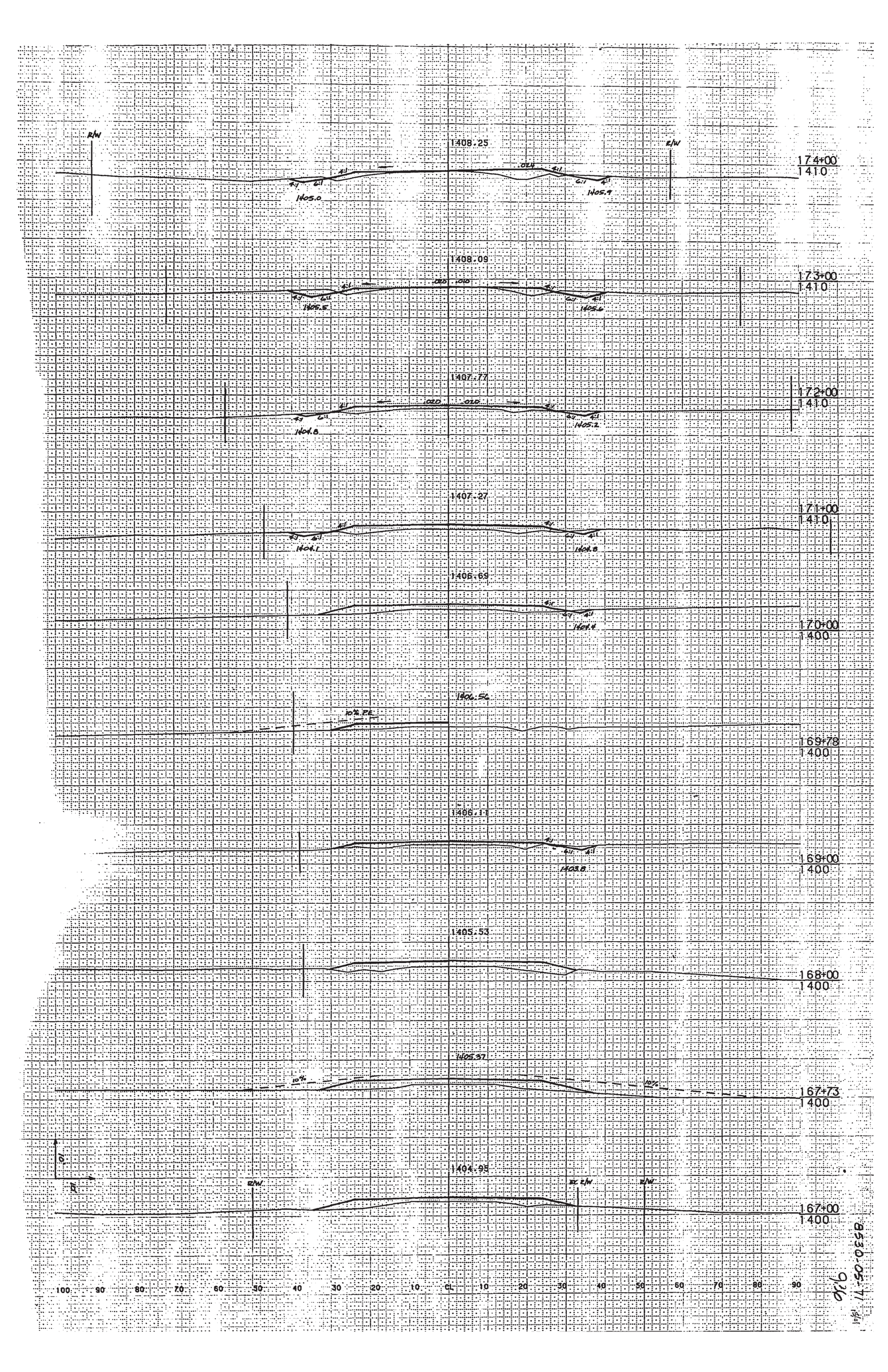
-630.31

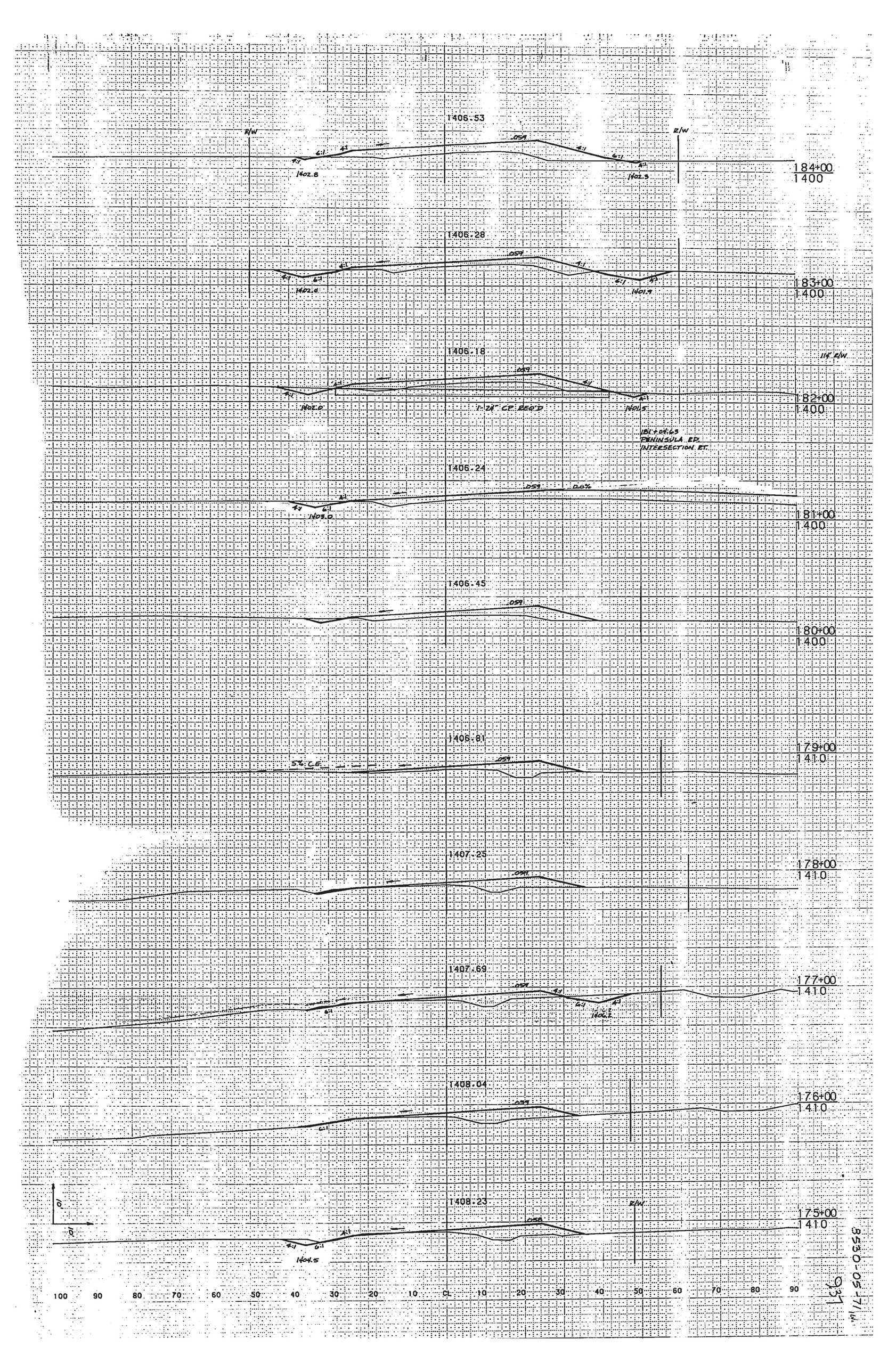
-630.89

-631.47

-632.04

-632.62


R/W
1408.25
E/W
174+00
1410
4:1
6:1
.024
1405.0
1405.9
1408.09
173+00
1410
.020
.010
1405.5
1405.6
1407.77
172+00
1410
.020
.020
1404.8
1405.2
1407.27
171+00
1410
1404.1
1404.8
1406.69
170+00
1400
1404.4
1406.56
10% PE
169+78
1400
1406.11
169+00
1400
1403.8
1405.53
168+00
1400
1405.37
10%
167+73
1400
1404.95
E/W
167+00
1400
100
90
80
70
60
50
40
30
20
10
CL
10
20
30
40
50
60
70
80
90


1406.53
R/W
.059
4:1
6:1
1402.8
1402.3
184+00
1400
1406.28
.059
4:1
6:1
1402.4
1401.9
183+00
1400
1406.18
114' R/W
.059
4:1
6:1
1402.0
1401.5
1-24" CP REQ'D
182+00
1400
181+63.63
PENINSULA ED.
INTERSECTION ET.
1406.24
.059
.00%
4:1
6:1
1403.0
181+00
1400
1406.45
.059
180+00
1400
1406.81
5% C.E.
.059
179+00
1410
1407.25
.059
178+00
1410
1407.69
.059
4:1
6:1
1406.2
177+00
1410
1408.04
.059
6:1
176+00
1410
1408.23
R/W
.058
4:1
6:1
1404.5
175+00
1410
10'
10'
100 90 80 70 60 50 40 30 20 10 CL 10 20 30 40 50 60 70 80 90
8530-05-17
031

8550-05-71

9.38

93+00
1400

92+00
1400

91+00
1400

90+00
1410

89+00
1410

88+69
1410

88+00
1410

87+00
1400

86+00
1400

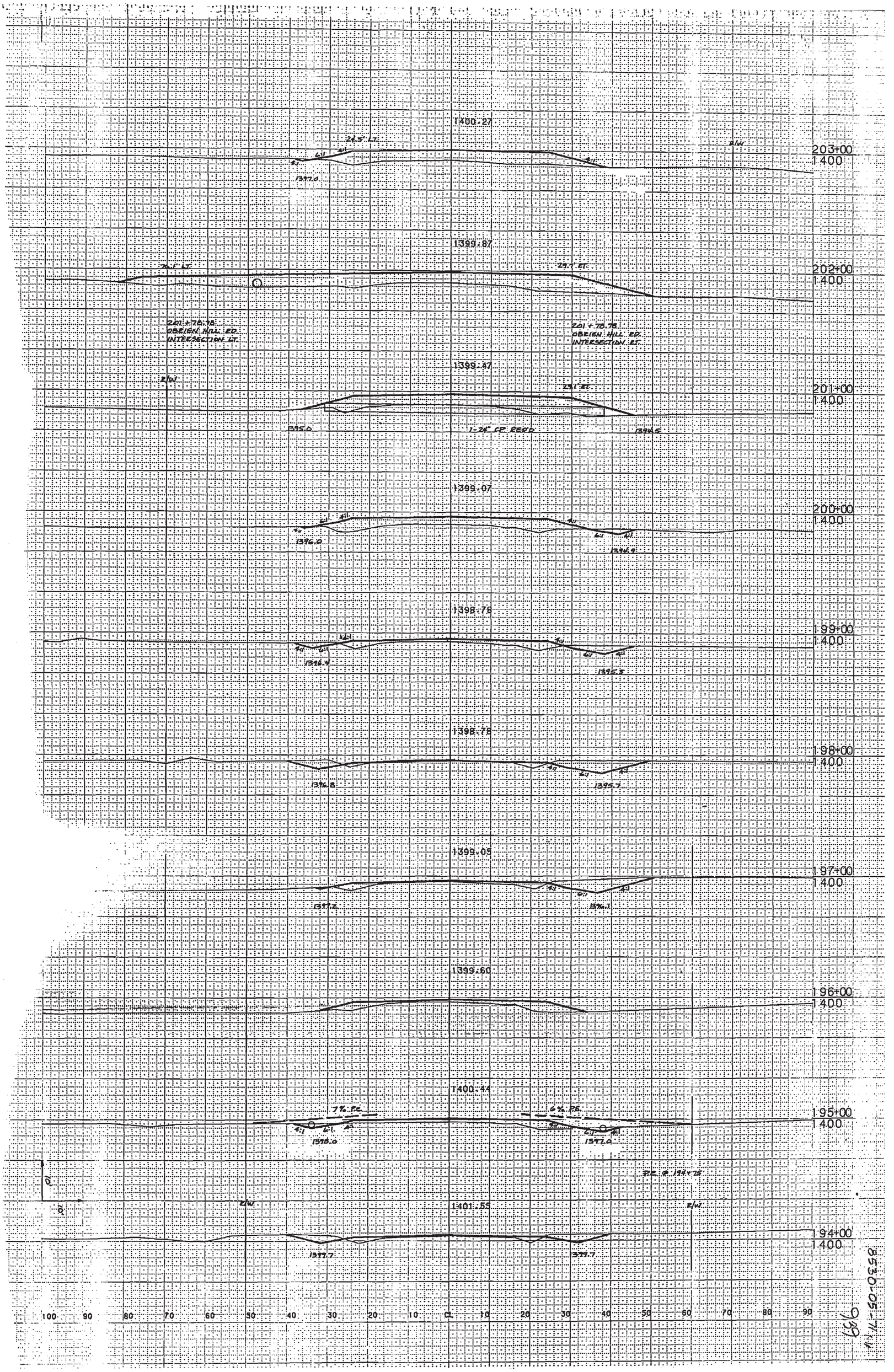
85+00
1400

1402.84
1404.12
1405.37
1406.35
1407.05
1407.21
1407.45
1407.56
1407.37
1406.93

1404.5
1404.0
1404.0
1405.0
8% PG
1404.0
1403.5
1403.7
1403.2

E/W
N/S

0 10 20 30 40 50 60 70 80 90 100



8536-05-7 V
9/99

8530-05-71 1/4

940

212+00
1380

211+00
1390

210+00
1400

209+00
1400

208+00
1400

207+00
1400

206+00
1400

205+00
1400

204+00
1400

1403.22

1403.18

1402.98

1402.67

1402.27

1401.87

1401.47

1401.07

1400.67

EXC.

EMB.

EXC.

EMB.

EXC.

EMB.

8530-05-71

94

21

218+18
1400

218+00
1400

217+00
1400

216+00
1390

215+00
1390

214+00
1380

213+00
1380

1400.66

1401.57

1402.16

1402.61

1402.94

1403.14

1400.71

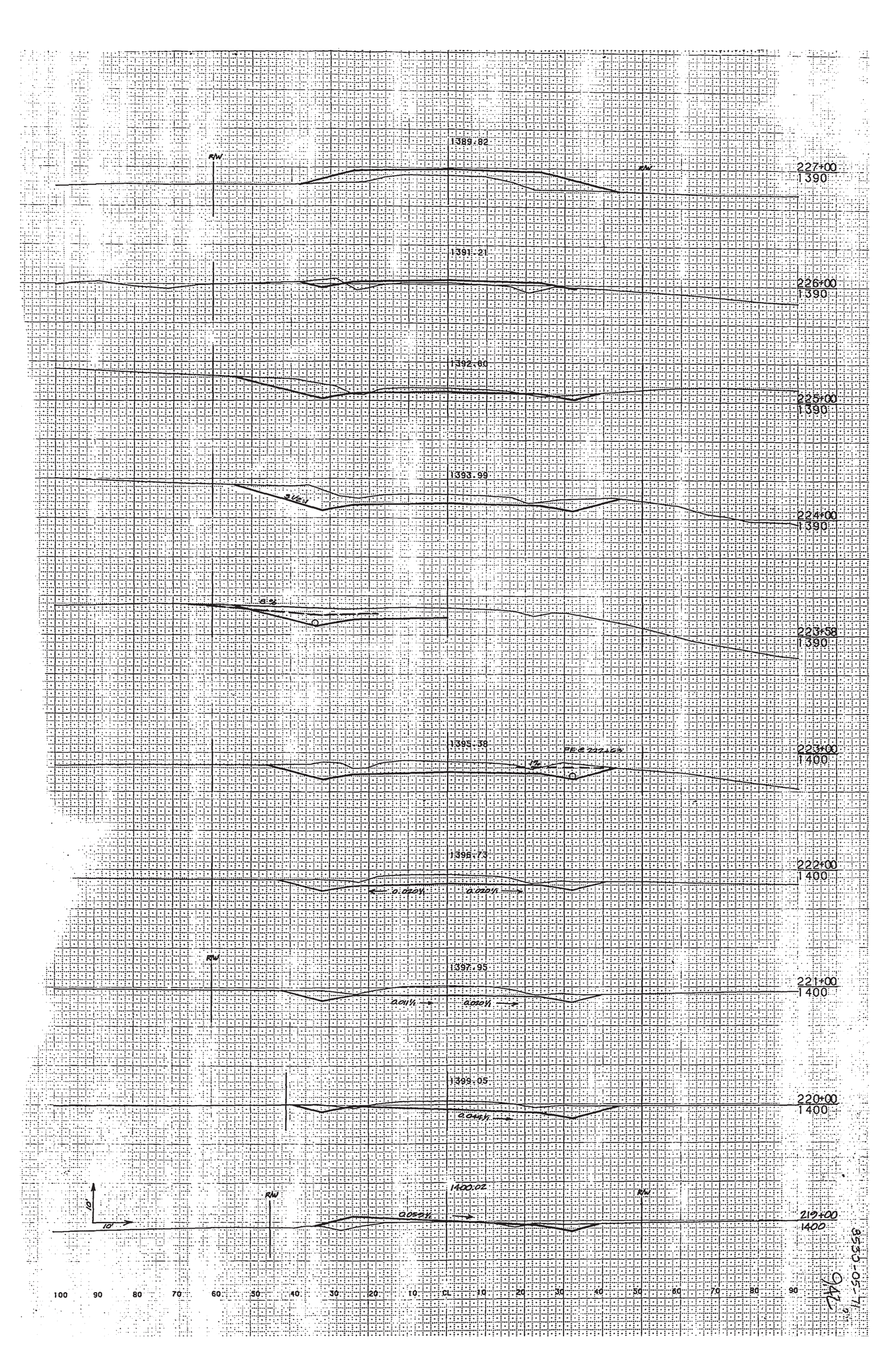
.059

4:1

2:1

10

10


1389.82
RW
RW
227+00
1390
1391.21
226+00
1390
1392.60
225+00
1390
1393.99
SLOPE
224+00
1390
6:1
223+58
1390
1395.38
FF @ 222.1 CP
1%
223+00
1400
1396.73
0.022%
0.022%
222+00
1400
RW
1397.95
0.011%
0.022%
221+00
1400
1399.05
0.044%
220+00
1400
1400.02
RW
RW
0
10
0.052%
219+00
1400
100 90 80 70 60 50 40 30 20 10 CL 10 20 30 40 50 60 70 80 90

8530-05-71 7114

943

236+00 1380

235+00 1380

234+00 1380

233+00 1380

232+00 1380

231+00 1380

230+00 1390

229+00 1390

228+00 1390

RW

1382.07

1382.11

1382.27

1382.47

1382.82

1383.47

1384.41

1385.65

1387.04

1388.43

RW

RW

RW

RW

RW

RE

0

10

20

30

40

50

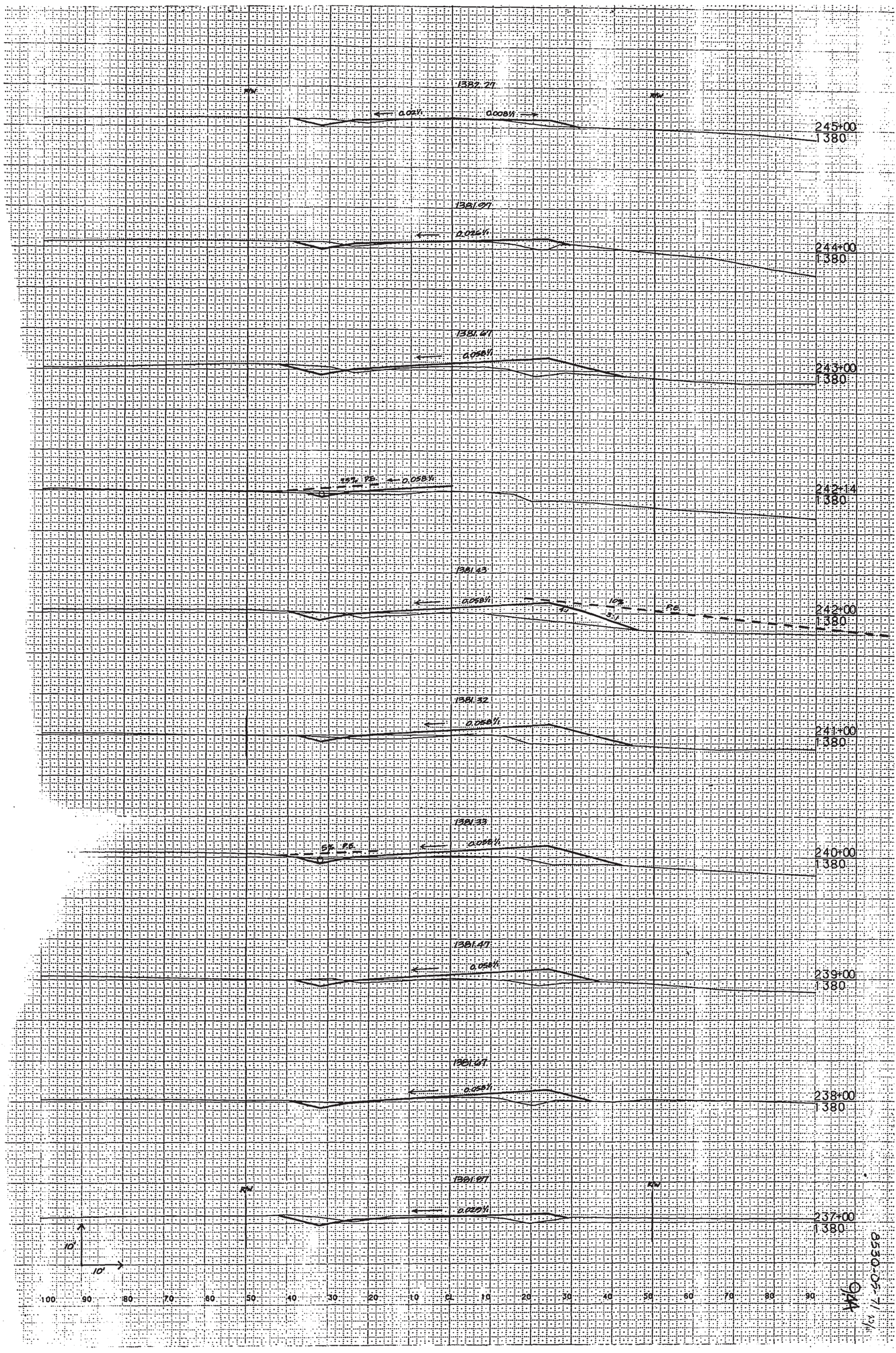
60

70

80

90

100



8530-05-71 12/75

©44

8550-05-71

95

253+00
1390
1386.72
RW

252+00
1390
1386.48
RW

251+47
1390
0.5% FE
1386.00
RW

251+00
1390
1386.00
RW

250+10
1380
1385.23
RW

250+00
1380
1384.25
RW

249+00
1380
1383.45
RW

248+00
1380
1382.90
RW

247+00
1380
1382.57
RW

246+00
1380
2% FE
1382.57
RW

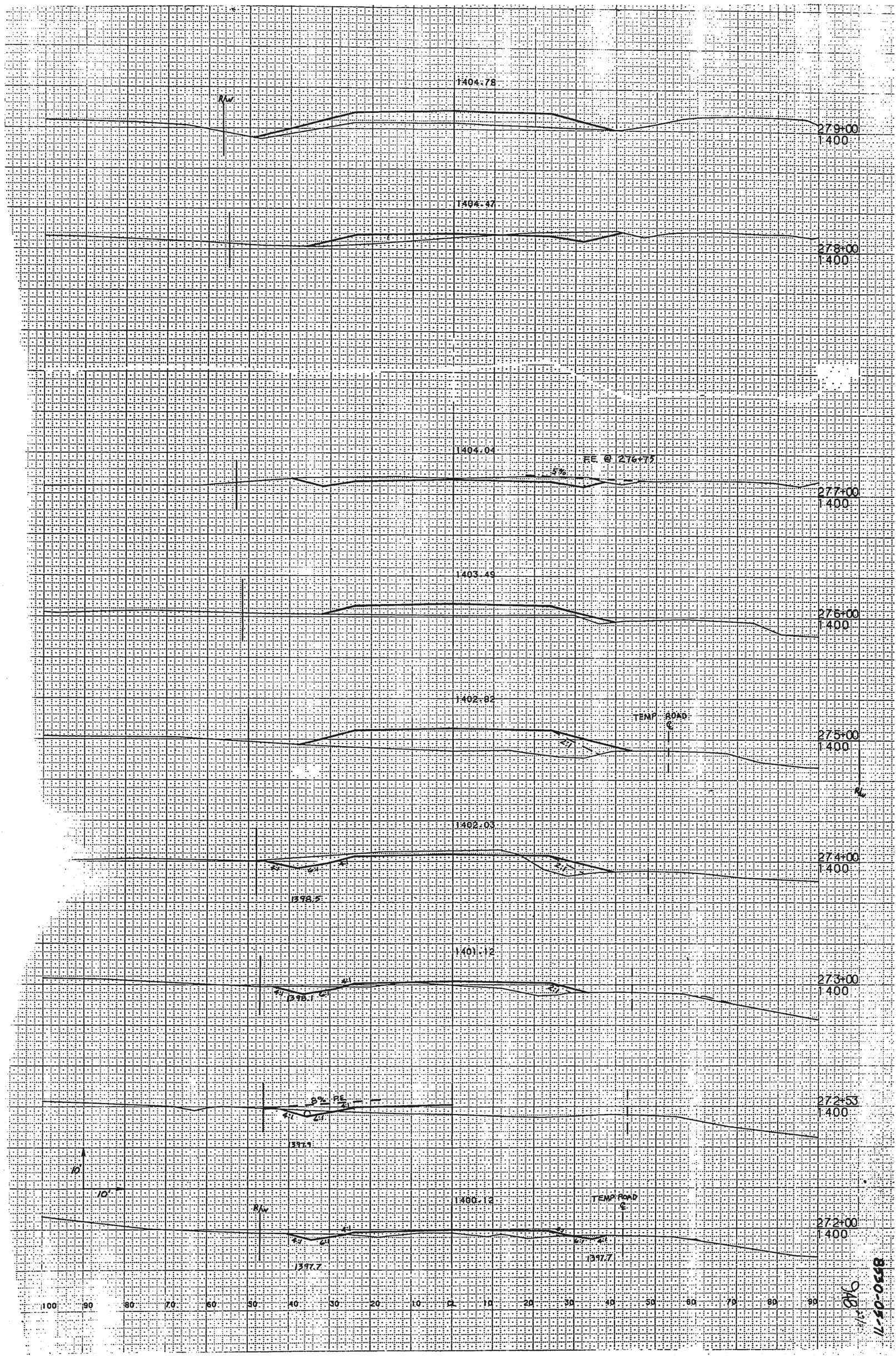
0 10 20 30 40 50 60 70 80 90 100

8530-05-71

946

8530-05-71

271+00
1400
1399.12
TEMP ROAD
℄
R/W
270+00
1400
1398.12
0.02%
269+00
1400
1397.12
0.02%
268+00
1400
1396.12
0.02%
0.016%
267+00
1400
1395.12
0.02%
0.0041%
269+19
1400
0.02%
0.02%
266+00
1400
1394.12
0.02%
0.07%
265+00
1400
1393.12
0.02%
0.08%
264+00
1390
1392.12
0.02%
263+00
1390
1391.12
TEMP ROAD
℄
R/W
0.02%
0.02%
10'
10
0
10
20
30
40
50
60
70
80
90
100


1404.78
R/W
279+00
1400
1404.47
278+00
1400
1404.04
FE @ 276+75
5%
277+00
1400
1403.49
276+00
1400
1402.82
TEMP ROAD
℄
275+00
1400
1402.03
1398.5
274+00
1400
1401.12
1398.1
273+00
1400
8% FE
1397.1
272+53
1400
10'
10'
1400.12
R/W
TEMP ROAD
℄
1397.7
1397.7
272+00
1400
100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100
748
8550-09-71

8530-05-71

949

288+00
141.0
1407.30
4'
2'
1403.4

287+00
140.0
1407.02
1403.7

286+00
140.0
1406.74
4'
2'
1404.1

285+00
140.0
1406.46
FE @ 284.75

284+00
140.0
1406.18

283+00
141.0
1405.90
3'

282+00
141.0
1405.62
4'
3'

281+00
141.0
1405.34
4'
1403.0

280+00
140.0
1405.06
4'
3'
1402.5

0 10 20 30 40 50 60 70 80 90 100

8530-05-71

950'

297+00
1410

296+00
1410

295+00
1410

294+00
1410

293+00
1400

292+80
1400

292+00
1400

291+00
1400

290+00
1400

289+00
1400

1409.82

1409.54

1409.26

1408.98

1408.70

1408.64

1408.42

1408.14

1407.86

1407.58

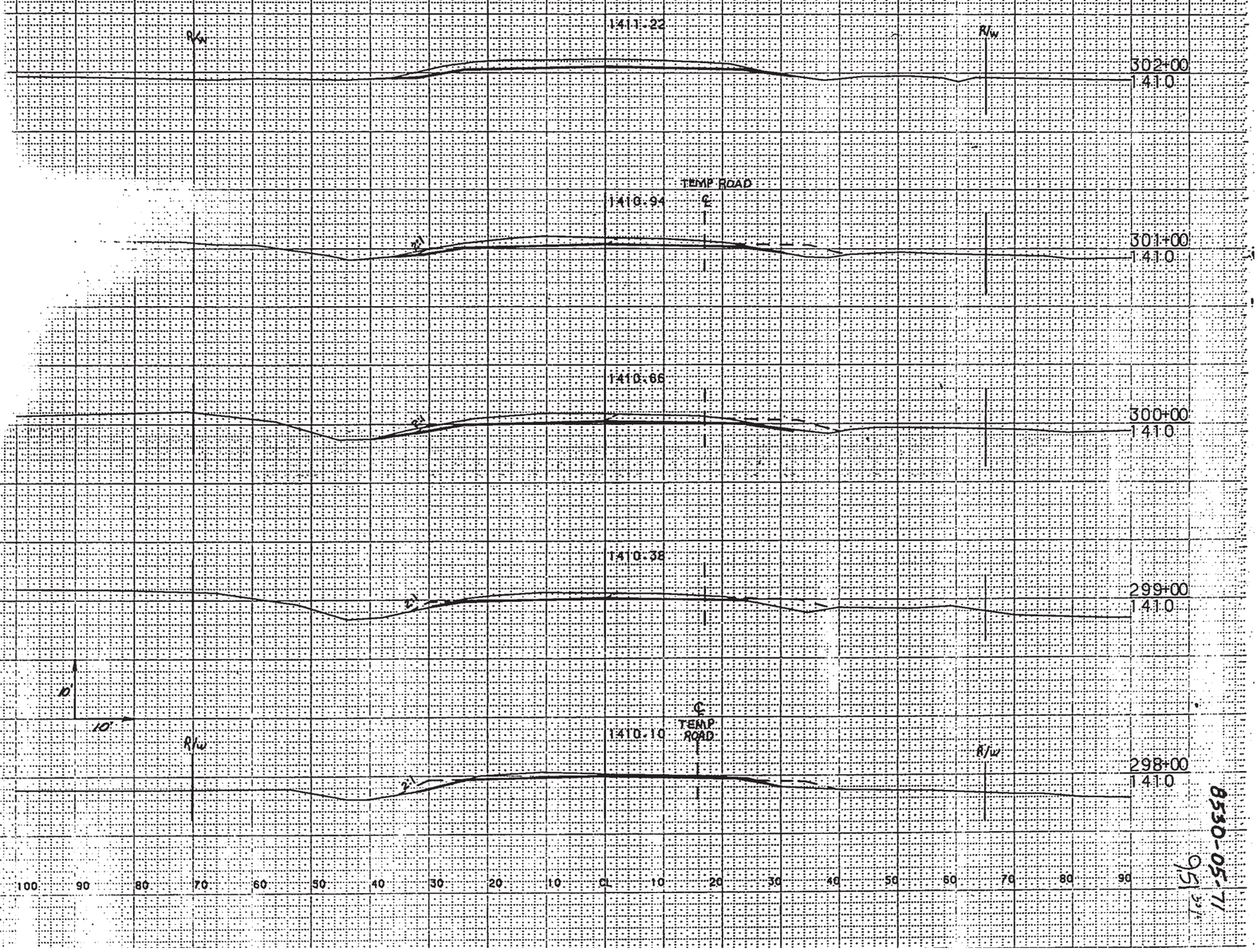
TEMP. ROAD

24" CP EXISTING

CL

10 20 30 40 50 60 70 80 90 100

END CONSTRUCTION
STA 302+00
(MATCH EXISTING)

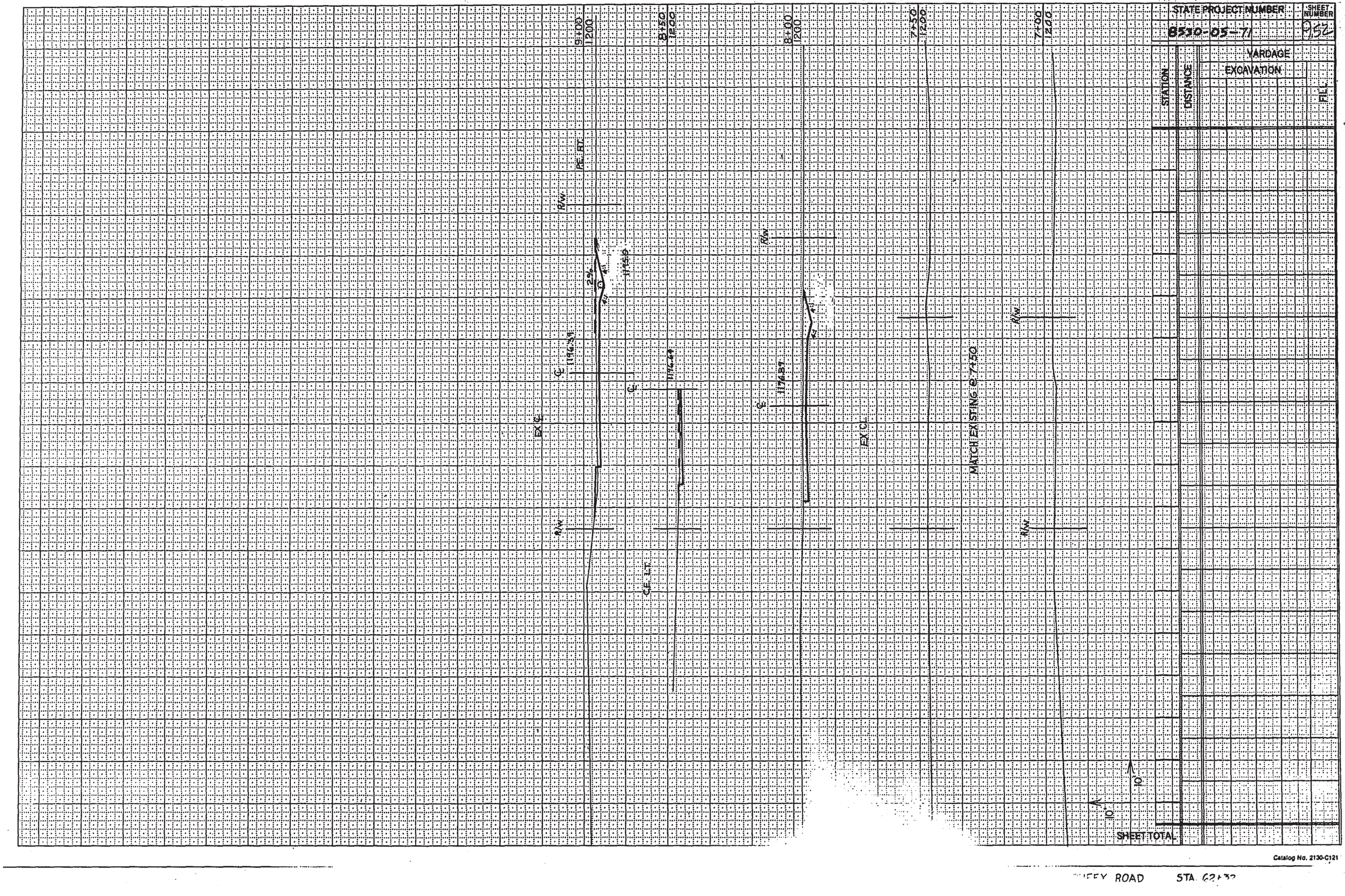


8530-05-11
95

STATE PROJECT NUMBER: 8530-05-71

SHEET NUMBER: 3 OF 3 SHEETS

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL



Catalog No. 2130-C121

...IFFY ROAD STA. 62+32

STATE PROJECT NUMBER: 8530-05-71

SHEET NUMBER: 0153

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL
13+00			
1190			
12+00			
1190			
11+00			
1190			
SHEET TOTAL			

Et. RW

Et. RW

1192.55

MATCH EXISTING @ STA. 12+00

1193.5

2%

CL

Rt. RW

10'

10'

Catalog No. 2130-C181

AIRPORT RD STA 7[illegible]

STATE PROJECT NUMBER: 8530-05-71

SHEET NUMBER: 10A

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL
12+00	200		
11+00	200		
9+00	1200		
8+00	1200		
7+00	1200		

RW

MATCH EXISTING @ STA. 11+40

11930

RW

1203

RW

1197.1

MATCH EXISTING @ STA. 8+00

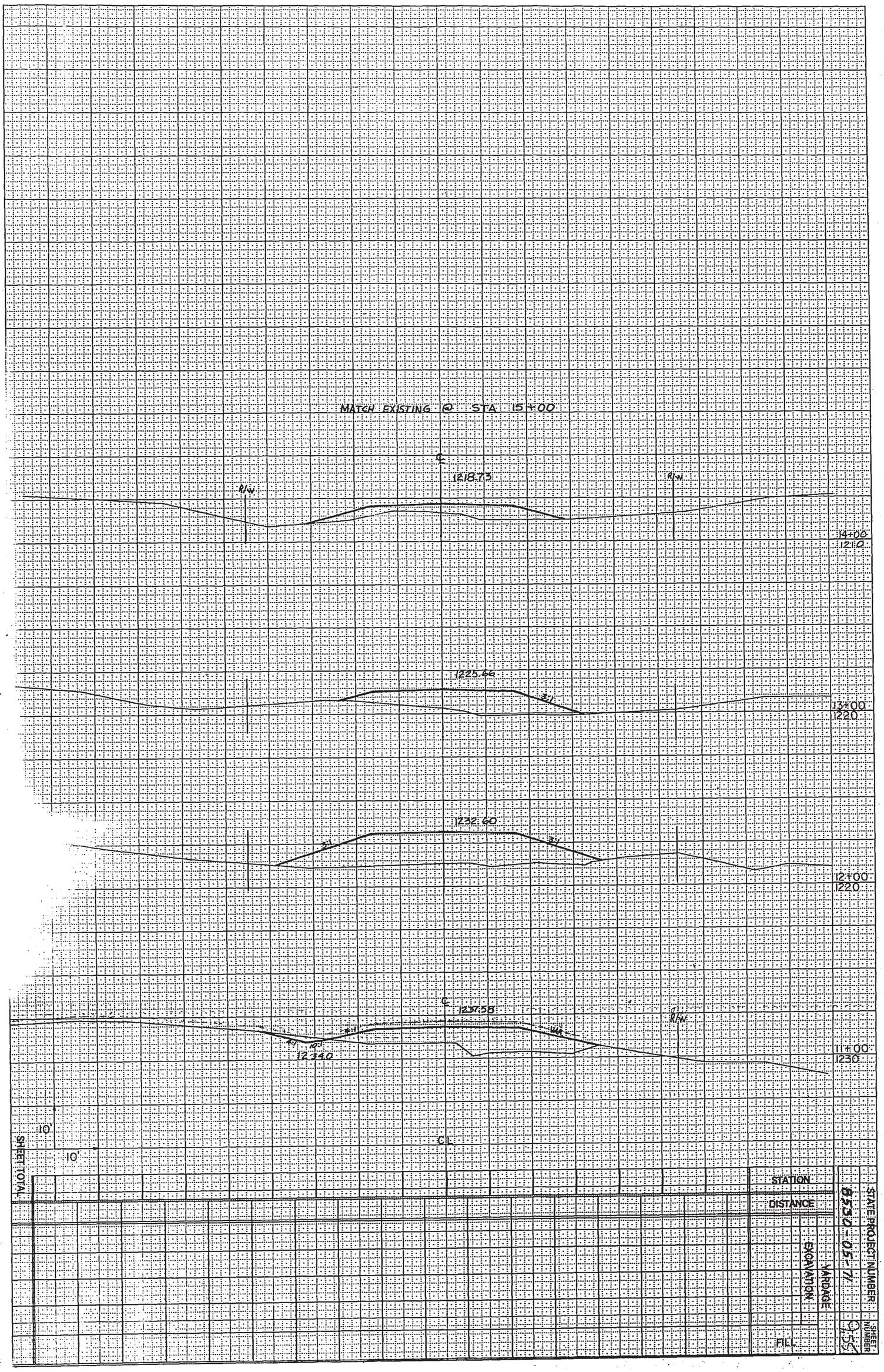
RW

CL

10

10

SHEET TOTAL


MATCH EXISTING @ STA 15+00
℄
1218.73
R/W
R/W
14+00
1210
1225.66
3:1
13+00
1220
1232.60
3:1
3:1
12+00
1220
℄
1237.55
R/W
3:1
3:1
1234.0
11+00
1230
10'
10'
C.L.
SHEET TOTAL
STATION
DISTANCE
EXCAVATION
EMBANKMENT
FILL
STATE PROJECT NUMBER
8530-05-71
SHEET NUMBER
C-55

STATE PROJECT NUMBER: 8520 - 05 - 71

SHEET NUMBER: 25

STATION	DISTANCE	YARDAGE EXCAVATION	FILL

9+00
1250

8+00
1250

7+00
1250

RW

RW

℄ 1239.59

℄ 1245.17

℄ 1250.08

STA 6+50

MATCH EXISTING @ STA

CL

9+00
1260

55.1

67.2

RW

RW

℄ OLD RD

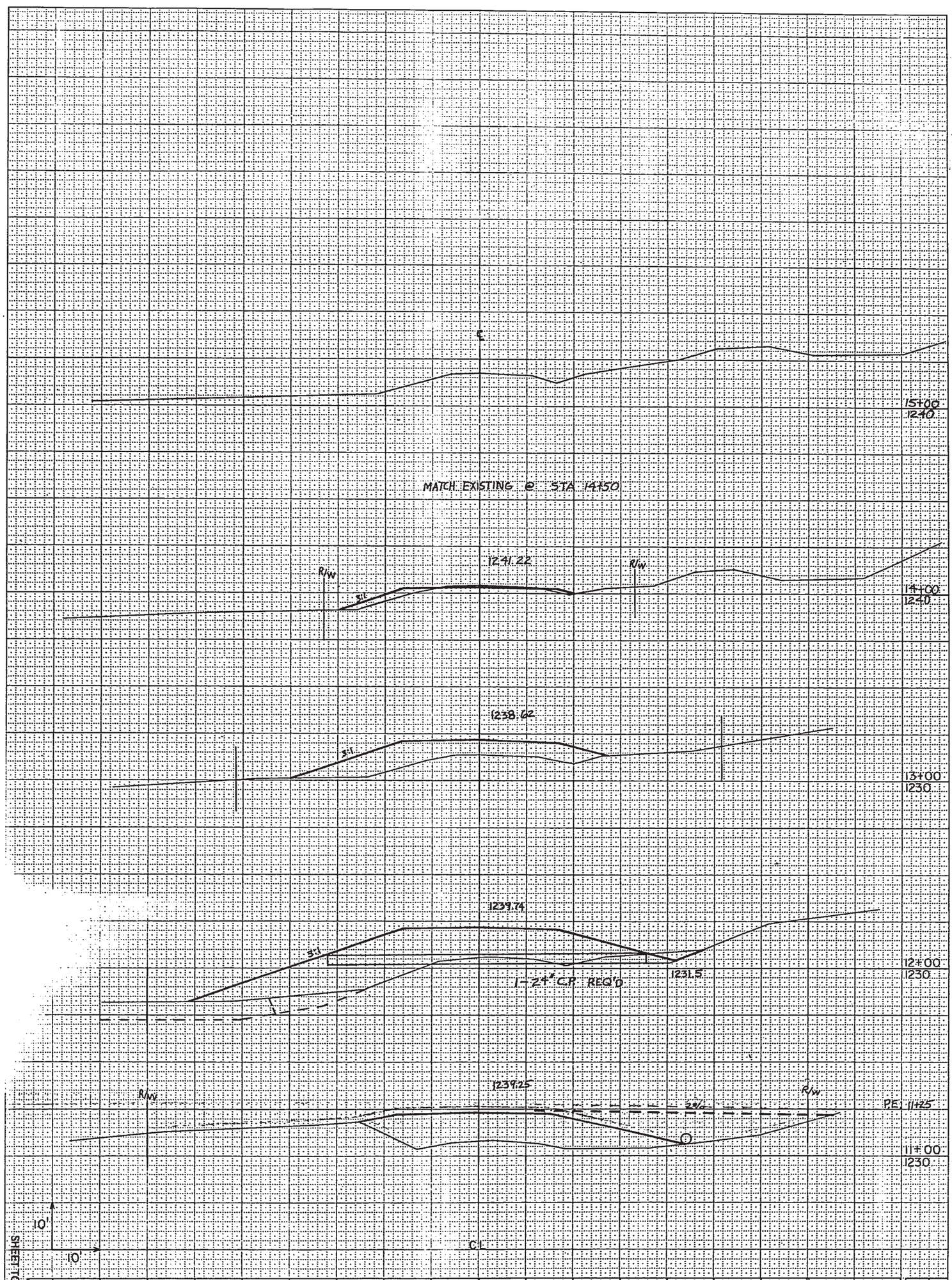
℄ OLD RD

T.L.

10

10

SHEET TOTAL



SHEET TOTAL

STATION	DISTANCE	YARDAGE EXCAVATION	FILL

STATE PROJECT NUMBER: 8530-05-71

SHEET NUMBER: 051

Catalog No. 2130-C121

STATE PROJECT NUMBER: 8530-05-71 | SHEET NUMBER: 58

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL
9+00			
14.00			
8+00			
14.00			
SHEET TOTAL			

9+00
14.00
8+00
REINKE RD.
INTERSECTION
FINISHED GRADE
REINKE RD.
C
140.54
FILL
1482
1398.6
140.16
C
FILL
FILL
EXISTING
℄
STA 7+50
MARCH
R/W
R/W
10'
10'

STATE PROJECT NUMBER: 8530-05-71

SHEET NUMBER: 9.99

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

14+00 1400

13+00 1400

12+00 1400

11+86 1400

MATCH EXISTING @ STA. 14+25

1399.84 .020 .010 R/W

1400.86 4:1 1399.5 .020 4:1 1400.2 R/W

1400.88 .020 4:1 1399.2 .017 4:1 1400.0 R/W

1400.88 .020 4:1 1398.9 .020 4:1 1398.8 R/W

℄ 18" C.P. RCPD @ INTERSECTION W/PENINSULA RD

℄

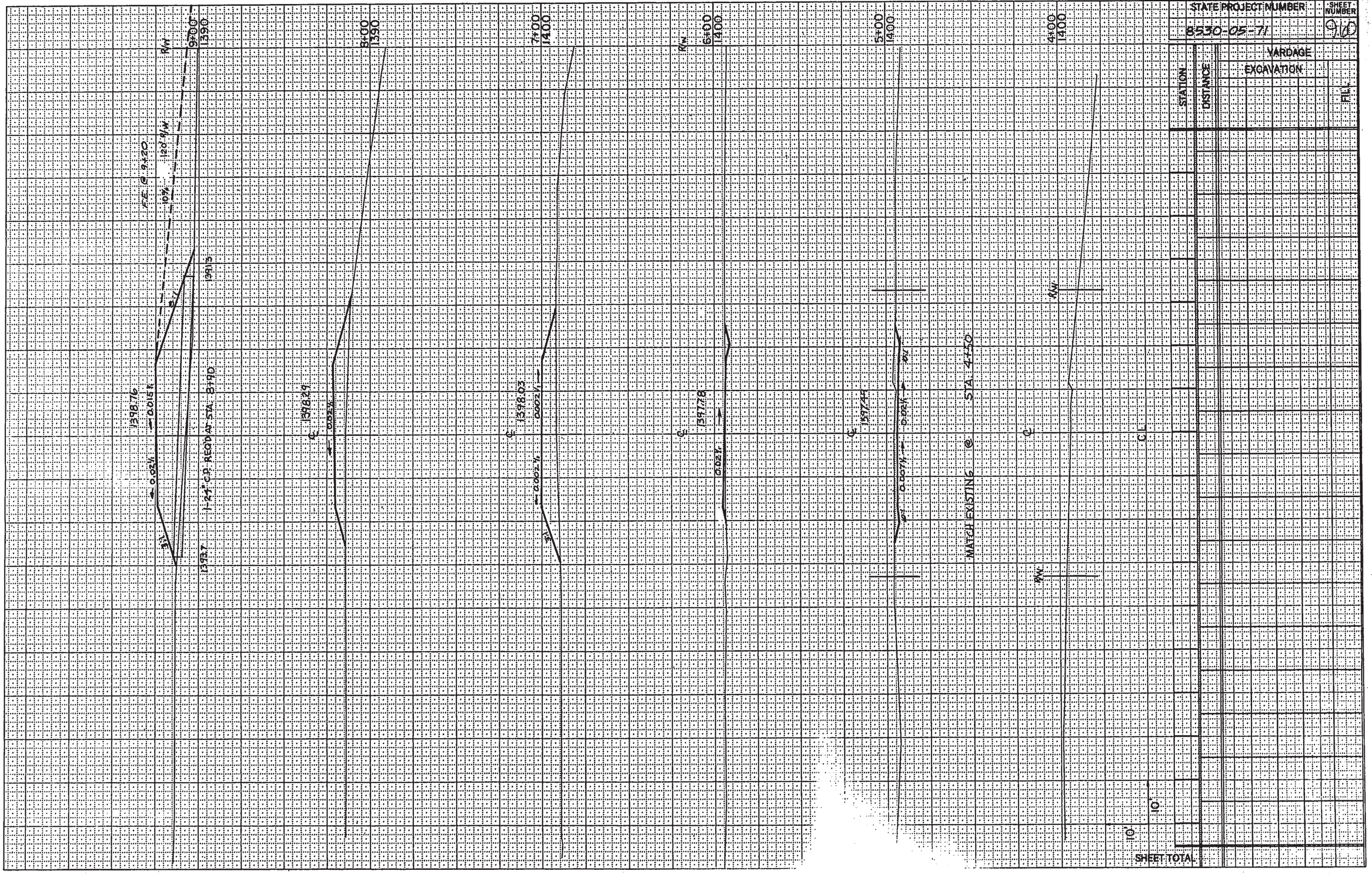
SHEET TOTAL

REINKE RD. @ PENINSULA RD.

Catalog No. 2130-C121

STATE PROJECT NUMBER: 8530-05-71 | SHEET NUMBER: 96

STATION	DISTANCE	VARDAGE EXCAVATION	FILL



STATE PROJECT NUMBER	SHEET NUMBER
8530-05-71	9.10

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL

14+00
1400

13+00
1400

12+00
1400

11+00
1400

RW

EXISTING @ STA 13+00

MATCH EXISTING

1379.10

1378.86

1396.0

FF @ 11+20

I-84 C.P. REQ'D @ 10+55

CL

1395.5

1393.0

RW

RW

10'

10'

SHEET TOTAL

STATE PROJECT NUMBER	SHEET NUMBER
8530-05-71	9/62

STATION	DISTANCE	YARDAGE EXCAVATION	YARDAGE FILL
9+00			
1380			
	1385.44		
	1385.0		
8+00			
1380			
7+00			
1380			
SHEET TOTAL			

RW

RW

RW

RW

10'

2

2

MATCH EXISTING @ STA. 8+00

Catalog No. 2130 0121

C.T.H. "K" STA. 257+97 PC