OUTAGAMIE

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6037-02-72	MA-D 1090(4)	1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

C.T.H. "C" - S.T.H. "55"
C.T.H. "S"
OUTAGAMIE COUNTY

BRIAN STURTEVANT, PROJECT MANAGER
TODD J. BUHR, PROJECT ENGINEER
OMNNI ENGINEERS
303 S. BLUEMOUND DRIVE
APPLETON, WI 54914

INDEX OF SHEETS

TOTAL SHEETS = 63

CONTRACTOR
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT
1313 HOLLAND ROAD
APPLETON, WI 54915

SUBCONTRACTOR
JIM FISCHER, INC
407 N. CASALOMA DRIVE
APPLETON, WI 54914

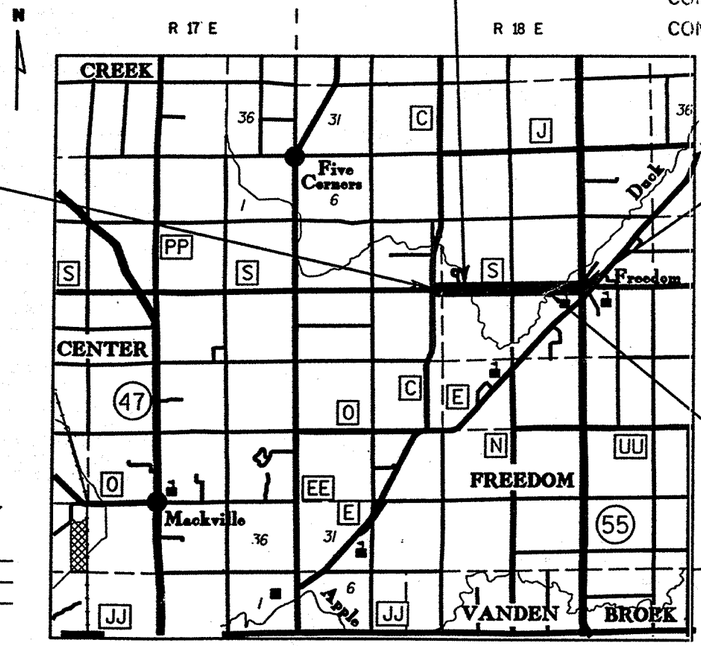
STATE PROJECT NUMBER
6037-02-72

AS BUILT PLAN
NO.
SUPERVISOR AGRIS ROZITE
EXCEPTION TO NET LENGTH OF PROJECT 6037-02-72
STRUCTURE REGINEAT BRIAN STURTEVANT (OMNNI)
STA. 258+84.93 TO STA. 259+39.16
CONTRACTOR OUTAGAMIE County
COMPLETED 7-7-94

JAN - 5 1995

S-22

APPROVED FOR OUTAGAMIE COUNTY
7-10-92 DATE
COUNTY HIGHWAY COMMISSIONER



BEGIN PROJECT
STA. 235+00.00
X = 2,435,400 (± 100')
Y = 206,100 (± 100')

END PROJECT
STA. 345+38.00

EXCEPTION TO NET ℄ LENTGH OF PROJECT 6037-02-71
STRUCTURE B-44-168
STA. 331+56.51 TO STA. 332+23.43

PROJECT ENGINEERS DIARY 13771
STARTED JUNE 7, 1993
ENDED

DESIGN DESIGNATION

A.D.T.	(1991)	=	1,750
A.D.T.	(2013)	=	2,240
D.H.V.	(2013)	=	22
D.		=	60-40
T.		=	10 A.D.T.
V.		=	55/35 M.P.H.
ESALS		=	178,000

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 (P)
POWER POLE
TELEPHONE POLE
RAILROADS
MARSH
WOODED AREA

LAYOUT
SCALE 0 1 MI.

TOTAL NET LENGTH OF CENTERLINE = 2.068 MI. (RURAL)

ALL COORDINATES SHOWN ON THIS PLAN ARE SCALED FROM U.S.G.S. TOPOGRAPHIC MAP, FREEDOM, WI., 7.5 MINUTE QUADRANGLE, CENTRAL ZONE, FOR IDENTIFICATION ONLY.

S-22

PLAN PREPARED BY
AYRES ASSOCIATES
CONSULTING ENGINEERS
GREEN BAY, WISCONSIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AYRES ASSOC.
Designer	AYRES ASSOC.
District Examiner	M.W. DOBSON
District Supervisor	J.L. LAMERS
C.O. Coordinator	D.L. Lyford
C.O. Examiner	E.N. BENISCH

APPROVED FOR DISTRICT OFFICE
DATE: 1-12-93 Marc W. Dobson P.E. (Signature)

AUTHORIZED FOR CENTRAL OFFICE DESIGN
DATE: 3/1/93 Harold E. Amundson (Signature)

6037-02-72

S-22

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:

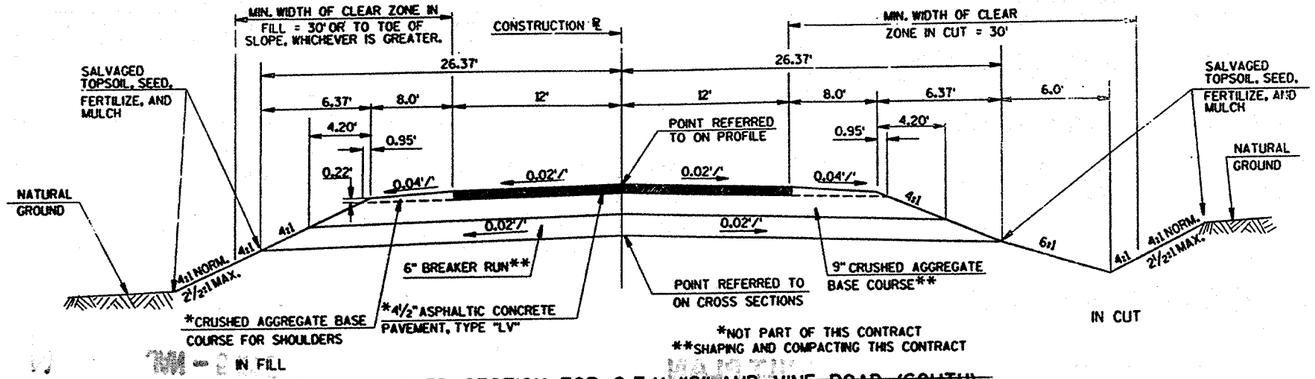
WISDOT/CADDS SHEET 10

DISTRICT

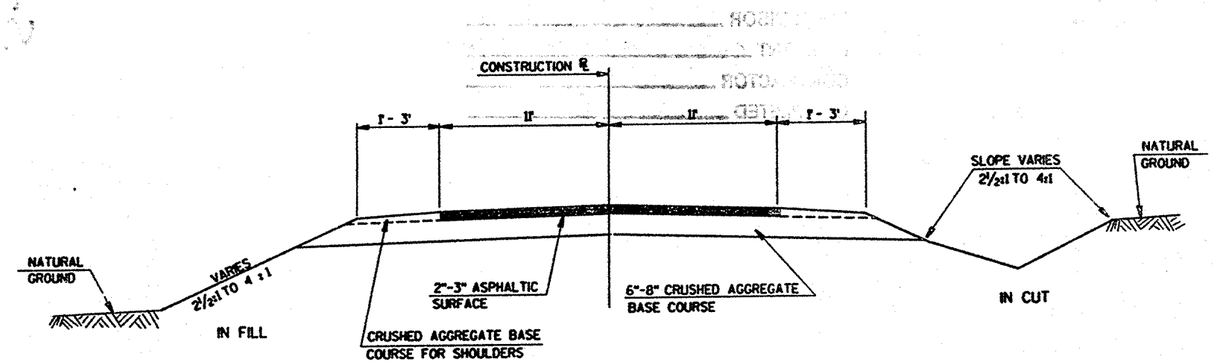
S-22

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	2.0

TYPICAL CROSS SECTIONS, GENERAL NOTES, AND UTILITIES FOR C.T.H. "S" OUTAGAMIE COUNTY



TYPICAL FINISHED SECTION FOR C.T.H. "S" AND VINE ROAD (SOUTH)



EXISTING TYPICAL SECTION FOR C.T.H. "S"

UTILITIES

WISCONSIN BELL COMPANY
221 WEST WASHINGTON STREET
P.O. BOX 2159
APPLETON, WISCONSIN 54913
ATTENTION: MR. KEITH KRISHER
TELEPHONE 1-414-735-3250

DIGGERS HOTLINE
TELEPHONE 1-800-242-8511
TOLL FREE

WISCONSIN GAS COMPANY
1921 SOUTH 8th STREET
P.O. BOX 789
WISCONSIN RAPIDS, WISCONSIN 54494
ATTENTION: MR. DEAN SULLIVAN
TELEPHONE 1-715-432-2800

FREEDOM SANITARY DISTRICT NO.1
P.O. BOX 1014
FREEDOM, WISCONSIN 54131
ATTENTION: MR. MARK KERKHOFF
TELEPHONE 1-414-788-5763

WISCONSIN ELECTRIC POWER COMPANY
800 SOUTH LYNNDALE
P.O. BOX 1599
APPLETON, WISCONSIN 54914
ATTENTION: ENGINEERING DEPARTMENT
TELEPHONE 1-414-735-0705

STANDARD DETAIL DRAWINGS

CONCRETE CURB, CONCRETE CURB AND GUTTER, AND PAVEMENT TIES	8D1-11
CURB RAMPS	8D5-8
EROSION MAT	8E7-1
SILT FENCE	8E9-3
APRON ENDWALLS FOR CULVERT PIPE	8F1-10a
APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE	8F1-10b
AT-GRADE SIDE ROAD INTERSECTIONS, TYPES "B","C", AND "D"	9A1-8a
AT-GRADE SIDE ROAD INTERSECTIONS, TYPES "A" AND PASSING LANES	9A1-8b
BARRICADES AND TRAFFIC CONTROL FOR ROAD CLOSURE	15C2-2

GENERAL NOTES

THE LOCATION 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.

ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE EARTH GRADE ELEVATIONS AT THE CENTERLINE OF THE ROADWAY.

WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE AND BREAKER RUN STONE IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS AS SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.

CURVE DATA IS BASED ON ARC DEFINITION.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT THE AREAS WITHIN THE FINISHED SUBGRADE SHOULDER POINTS, ARE TO BE TOPSOILED, FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.

SALVAGED TOPSOIL SHALL BE USED ON AREAS WHERE SOD IS TO BE PLACED.

PROPERTY LINES AS SHOWN ARE APPROXIMATE.

ALL DISTANCES ARE GROUND DISTANCE.

ALL TIES ON THIS PLAN ARE HORIZONTAL UNLESS DESCRIBED OTHERWISE.

BEARINGS SHOWN ON THIS PLAN ARE GRID BEARINGS TO THE NEAREST SECOND.

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

SILT FENCE SHALL MEET THE MATERIAL SPECIFICATIONS FOR SILTY SOILS. THE EXACT LOCATION OF SILT FENCE SHALL BE AS DIRECTED BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (E.B.S.) AS SHOWN ON THE PLAN AND PROFILE SHEETS SHALL BE MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION. THE EXACT LIMITS AND LOCATION FOR E.B.S. SHALL BE DETERMINED BY THE ENGINEER.

CONSTRUCTION PERMITS FOR P.E.'S AND DRAINAGE EXCAVATION HAVE BEEN OBTAINED AND THOSE RIGHTS HAVE BEEN EXTENDED TO THE CONTRACTOR.

INLET AND DISCHARGE ELEVATIONS SHOWN ON THE PLAN SHEETS ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE EXACT LOCATION OF CULVERT PIPES SHALL DETERMINED BY THE ENGINEER IN THE FIELD.

FILL AS SHOWN ON THE PLAN PERTAINS TO EMBANKMENT CONSTRUCTED FROM BORROW EXCAVATION OR UNCLASSIFED EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 40% PERCENT.

EARTHWORK BALANCES AND HAULS AS SHOWN ON THE PLAN AND PROFILE SHEETS MAY BE REVISED WITH THE APPROVAL OF THE ENGINEER IF SUCH REVISIONS WILL FACILITATE THE CONTRACTOR'S PLAN OF OPERATION AND SATISFY THE REQUIREMENTS OF THE CONTRACT PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS.

CURB HEIGHTS AT THE END OF THE CURB AND GUTTER SHALL BE TAPERED FROM 6 INCHES TO 0 INCHES IN 10 FEET UNLESS OTHERWISE INDICATED.

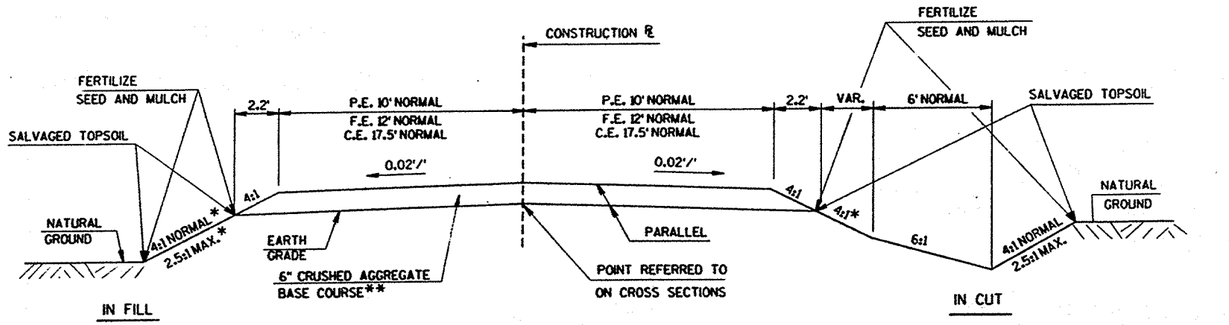
STORM SEWER, CONCRETE SIDEWALK, CONCRETE CURB AND GUTTER, 36-INCH, TYPE "D", ASPHALTIC CONCRETE PAVEMENT, BEAM GUARD, AND CONCRETE DRIVEWAYS ARE NOT PART OF THIS CONTRACT.

FILE NAME: HDGN1

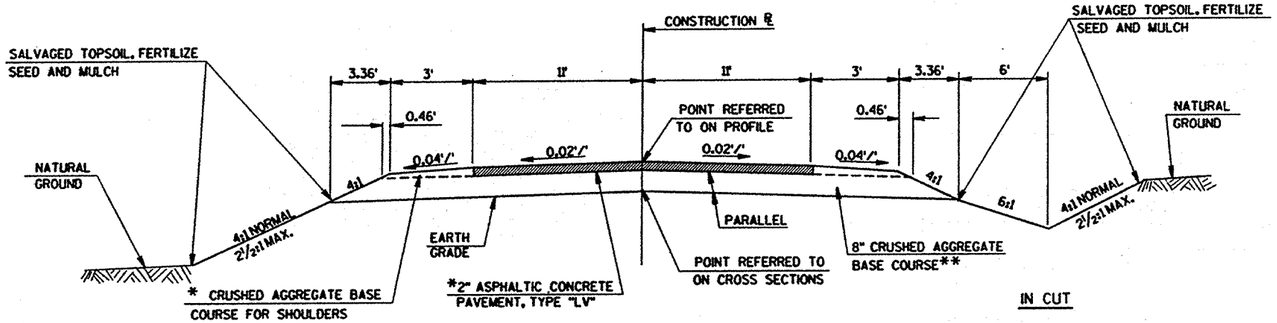
Revised 3-1-07

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	21

CONSTRUCTION DETAILS
FOR
C.T.H. "S" OUTAGAMIE COUNTY

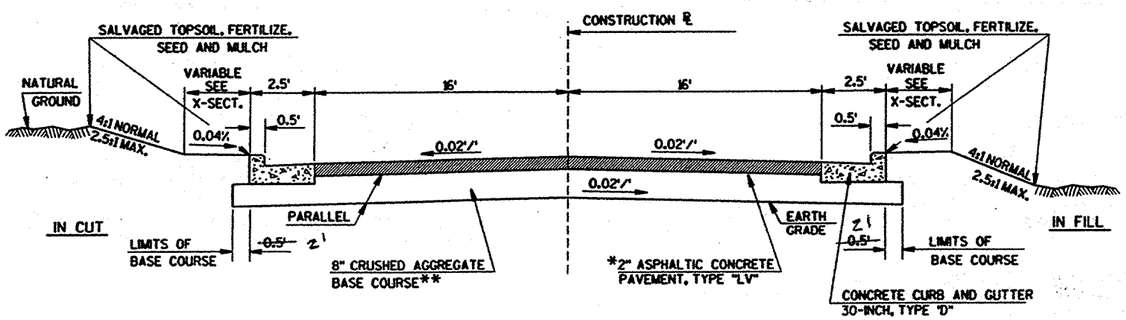


TYPICAL FINISHED SECTION FOR CRUSHED AGGREGATE PRIVATE ENTRANCES, COMMERCIAL ENTRANCES AND FIELD ENTRANCES

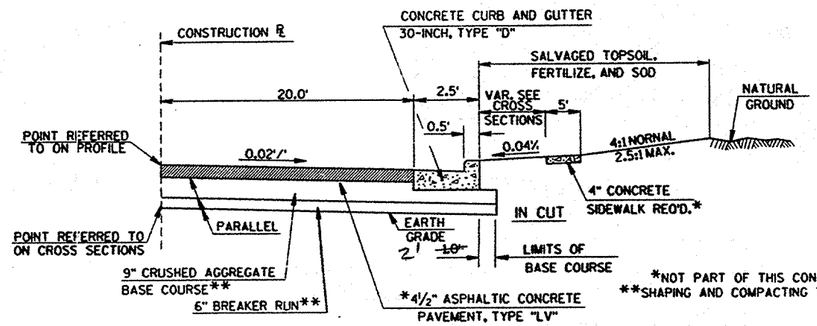


TYPICAL FINISHED SECTION FOR SIDE ROADS

GONNERING COURT
MURPHY ROAD
VINE ROAD ~~(NORTH)~~
MALLARD LANE

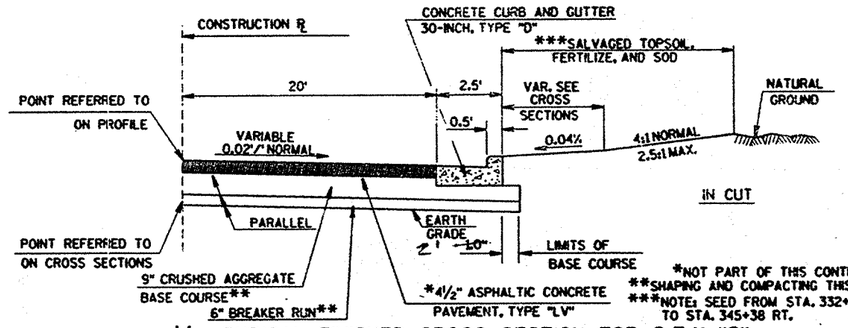


TYPICAL FINISHED SECTION FOR OAK LANE



½ TYPICAL FINISHED CROSS SECTION FOR C.T.H."S"

STA. 321+00 - 345+38 LT.



½ TYPICAL FINISHED CROSS SECTION FOR C.T.H "S"

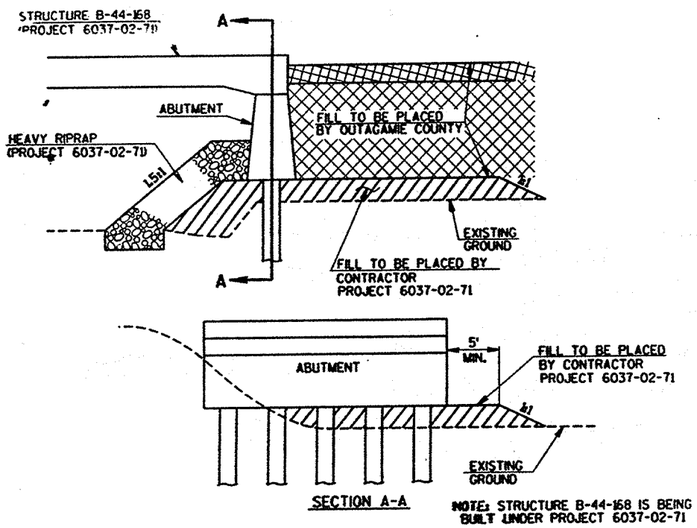
STA. 235+00 - 242+00 LT.
STA. 250+00 - 256+00 LT.
STA. 254+50 - 258+80 RT.
STA. 263+00 - 266+61 LT.
STA. 283+00 - 285+50 RT.
STA. 284+00 - 288+00 LT.
STA. 332+50 - 345+38 RT.

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

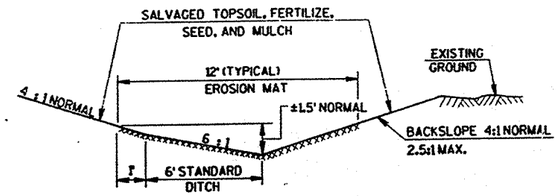
FILE NAME: NDGN1

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	2,2

CONSTRUCTION DETAILS
FOR
C.T.H. "S" OUTAGAMIE COUNTY

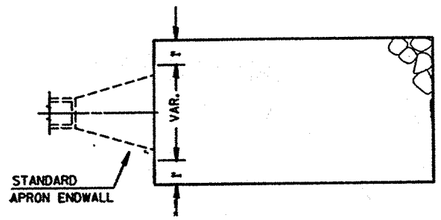


EXCAVATION AND BACKFILL FOR STRUCTURE

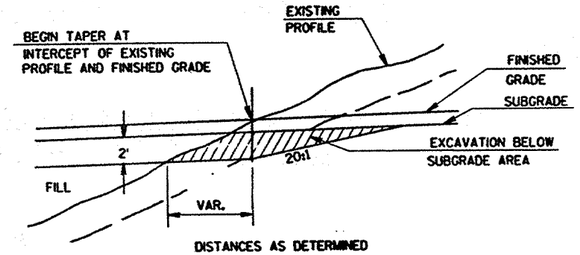


TYPICAL INSTALLATION FOR EROSION MAT

DITCH LINING



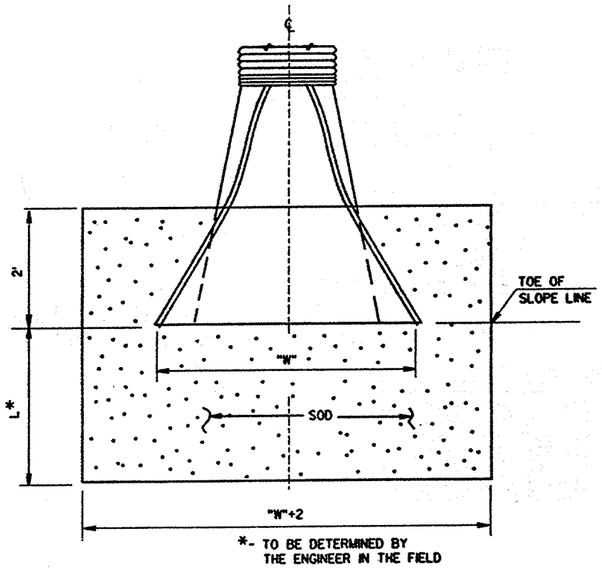
MEDIUM RANDOM RIPRAP DISCHARGE APRON



DISTANCES AS DETERMINED
BY THE ENGINEER

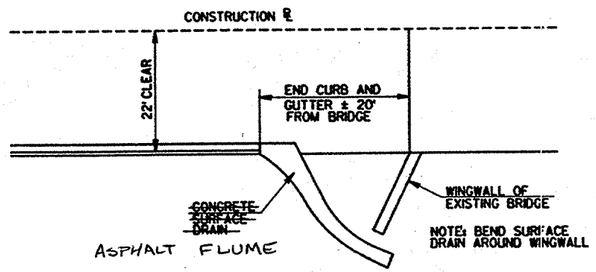
PROFILE AT UNDERCUT LOCATIONS

NOTE: EXCAVATE BELOW SUBGRADE ALL MOUTHS OF CUTS. EXACT LOCATIONS AND EXTENT OF EXCAVATION BELOW SUBGRADE (E.B.S.) SHALL BE DETERMINED BY ENGINEER IN THE FIELD. E.B.S. AREA TO BE BACKFILLED MUST BE HOMOGENEUS WITH ADJOINING FILL MATERIAL ACCEPTABLE TO THE ENGINEER. THE FILL WITHIN 100-FT. OF THE MOUTH OF THE CUT MUST BE KEPT 2-FT. BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.



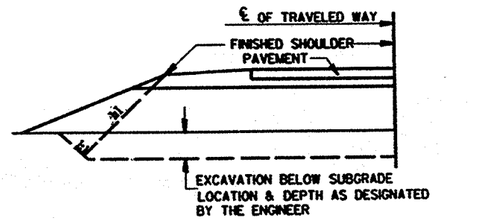
SOD AT END OF PIPE

(CONCRETE OR METAL)



ASPHALT FLUME
~~CONCRETE SURFACE DRAIN~~ AT EXISTING BRIDGE (BY OTHERS)

STA. 258+50 LT.
STA. 258+80 RT.



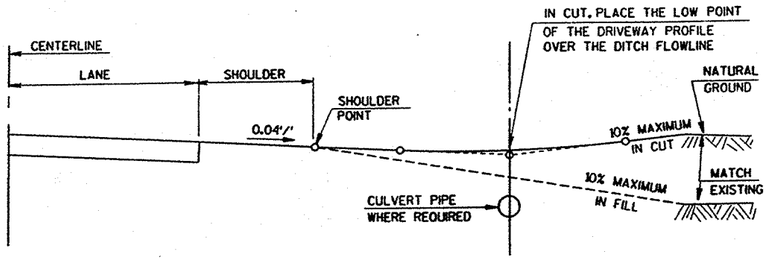
DETAIL FOR EXCAVATION BELOW SUBGRADE

FILE NAME: HDGN:

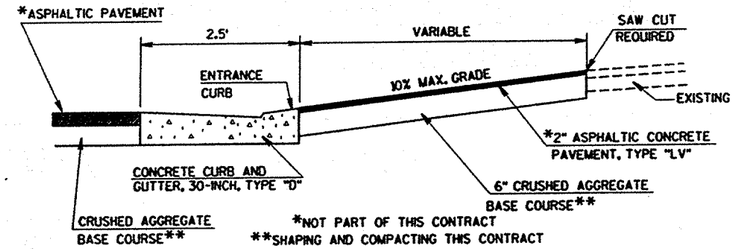
P60150D 3-6-98

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	2,3

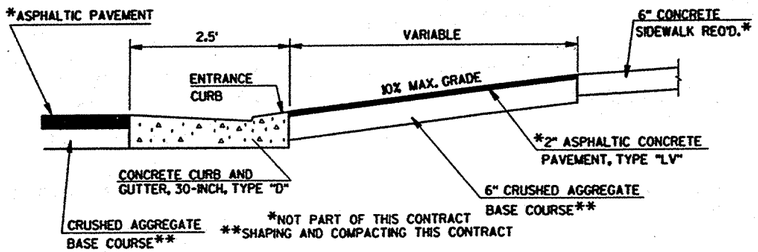
CONSTRUCTION DETAILS
FOR
C.T.H. "S" OUTAGAMIE COUNTY



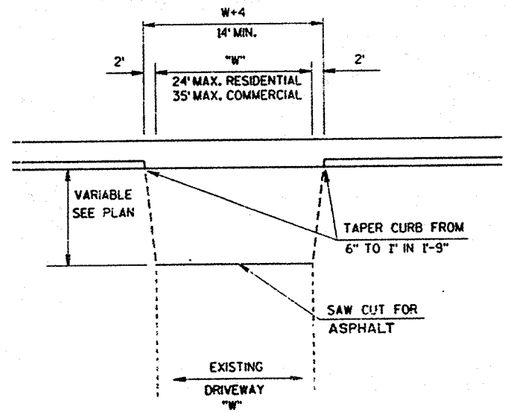
TYPICAL DRIVEWAY PROFILE



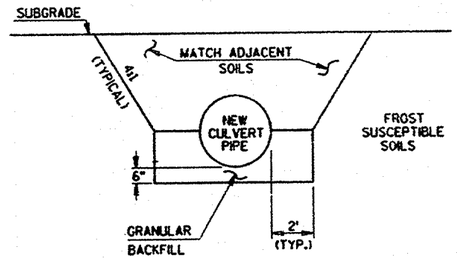
TYPICAL LONGITUDINAL SECTION AT ASPHALTIC SURFACE PRIVATE ENTRANCES WITHOUT SIDEWALK



TYPICAL LONGITUDINAL SECTION AT ASPHALTIC SURFACE PRIVATE ENTRANCES WITH SIDEWALK



CURB CUT DETAIL FOR DRIVEWAYS



DETAIL FOR CULVERT INSTALLATION

293+95, 302+50, 310+00, 320+00, 324+75

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,

FILE NAME: HDGN:

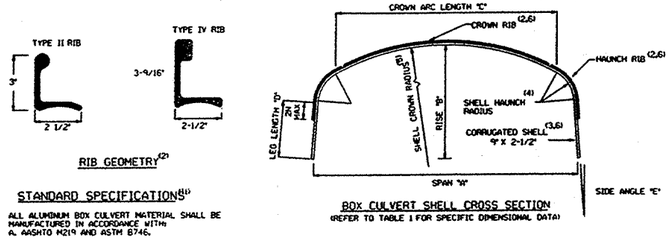
STATE PROJECT NUMBER	SHEET NO.
6037-02-72	2.4

ALUMINUM BOX CULVERT STANDARD DETAILS FOR SHELL, INSTALLATION, INVERT, AND HEADWALL FOR

C.T.H. "S" — **OUTAGAMIE COUNTY**

PLATE AND RIB COMBINATIONS WITH ALLOWABLE HEIGHT OF COVER - TABLE 1 [6,7]

(3) STRUCT. NUMBER	SPAN "A" (FT-IN)	RISE "B" (FT-IN)	AREA (SQ. FT)	HS-20 LOADING [10] A: MC\CG (GA.)	A: MRS/CRS (IN.)	A: MIN MAX (FEET)	B: MC\CG (GA.)	B: MRS/CRS (IN.)	B: MINMAX (FEET)	C: MC\CG (GA.)	C: MRS/CRS (IN.)	C: MINMAX (FEET)	D: MC\CG (GA.)	D: MRS/CRS (IN.)	D: MIN MAX (FEET)	E: MC\CG (GA.)	E: MRS/CRS (IN.)	E: MIN MAX (FEET)	HS-25 LOADING [10] F: MC\CG (GA.)	F: MRS/CRS (IN.)	F: MINMAX (FEET)	G: MC\CG (GA.)	G: MRS/CRS (IN.)	G: MIN MAX (FEET)	H: MC\CG (GA.)	H: MRS/CRS (IN.)	H: MIN MAX (FEET)	I: MC\CG (GA.)	I: MRS/CRS (IN.)	I: MINMAX (FEET)	J: MC\CG (GA.)	J: MRS/CRS (IN.)	J: MINMAX (FEET)	ADDITIONAL SHELL INFORMATION: (1) CROWN ARC LENGTH "C" (IN)	(1) LEG LENGTH "D" (IN)	SIDE ANGLE "E" (DEC-MIN)	(1,3) HAUNCH PLATE LENGTH (IN)	(1,3) CROWN PLATE LENGTH (IN)	MAX. BOLTS /FT. (EA.)	(5) MAX. SHELL WT./FT. (LB.)
28	M-10	4-10	63.2	2x4	27/18	3.0	5.0	3x5	27/18	2.5	5.0	2x2	27/9	2.0	5.0	2x3	27/9	1.7	5.0	3x6	27/18	3.0	5.0	4x6	18/18	2.5	5.0	3x5	27/9	2.0	5.0	4x6	27/9	1.7	5.0	4x6	18/9	1.4	5.0	13	2.5	61	9	8	36.67	154.2



RIB GEOMETRY [2]

BOX CULVERT SHELL CROSS SECTION
(REFER TO TABLE 1 FOR SPECIFIC DIMENSIONAL DATA)

STANDARD SPECIFICATIONS [8,9]

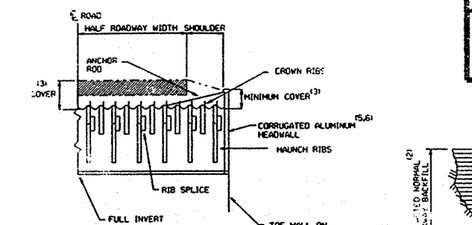
ALL ALUMINUM BOX CULVERT MATERIAL SHALL BE MANUFACTURED IN ACCORDANCE WITH:
A. AASHTO M219 AND ASTM B746.

ADDITIONAL REFERENCE SPECIFICATIONS:
B. ASTM B788 (INSTALLATION)
C. ASTM B788 (DESIGN)
D. AASHTO STANDARD BRIDGE SPECIFICATIONS, SECTION 12.8 (DESIGN).

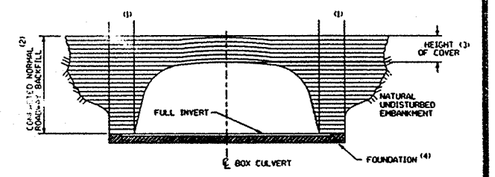
NOTES - SHELL

L N = 9.625" OR 9-5/8".
2. ALL RIBS ARE TYPE IV, EXCEPT HAUNCH RIBS FOR STRUCTURES 1-39 WHICH ARE TYPE II.
3. STRUCTURE 1 IS A ONE-PLATE SHELL. STRUCTURES 2-26 ARE TWO-PLATE SHELLS. STRUCTURES 27-87 ARE THREE-PLATE SHELLS.
4. SHELL HAUNCH RADIUS FOR STRUCTURES 1-39 IS 38-1/4".
5. SHELL CROWN RADIUS FOR STRUCTURES 1-39 IS 247-1/2".
6. IN SHELL FILL HEIGHT TABLE, THE MC\CG DESIGNATION INDICATES THICKNESS OR GAGE OF HAUNCH (HC) AND CROWN (CG) PLATES AS FOLLOWS:
2 = .125", 3 = .150", 4 = .175", 5 = .200", 6 = .225", 7 = .250".
EXAMPLE: 3\6 = .150" HAUNCH AND .225" CROWN PLATE THICKNESS.
THE MRS/CRS DESIGNATION INDICATES THE RIB SPACING ON THE HAUNCH (HRS) AND CROWN (CRS) PLATES.
EXAMPLE: 27/9 = 27" O.C. HAUNCH AND 9" O.C. CROWN.
7. ALLOWABLE COVER MINIMUM AND MAXIMUM IS MEASURED FROM THE OUTSIDE VALLEY OF CROWN PLATE TO BOTTOM OF FLEXIBLE PAVEMENT OR FROM THE OUTSIDE VALLEY OF CROWN PLATE TO TOP OF RIGID PAVEMENT. MINIMUM COVER IS MEASURED AT THE LOWEST FILL AREA SUBJECTED TO POSSIBLE WHEEL LOADS (TYPICALLY AT THE ROADWAY SHOULDER). THE ROADWAY SURFACE MUST BE MAINTAINED TO ENSURE MINIMUM COVER TO PREVENT HIGH-IMPACT LOADS BEING IMPARTED TO THE STRUCTURE. MAXIMUM COVER IS MEASURED AT THE HIGHEST FILL AND/OR PAVEMENT ELEVATION.
8. SHELL WT./FT. SHOWN IS MAXIMUM HANDLING WEIGHT AND IS BASED ON HEAVIEST COMPLETE SHELL MAKEUP FOR A SPECIFIC SPAN AND RISE COMBINATION. WEIGHT PER FOOT OF SHELL INCLUDES PLATES, REINFORCING RIBS, RIB SPLICES, BOLTS AND NUTS.
9. TOTAL STRUCTURE LENGTH CAN BE ANY DIMENSION, BUT WHENEVER POSSIBLE, IT IS RECOMMENDED TO WORK WITH A MULTIPLE OF 4.5" NET PLATE WIDTH. THIS PRACTICE USUALLY RESULTS IN LOWER TOTAL STRUCTURE COST. EXAMPLE: FOR PROPOSED STRUCTURE / 4.5 = 11.1, NEAREST WHOLE NUMBER IS 11, THEREFORE USE 11 X 4.5" = 49.5" FOR TOTAL STRUCTURE LENGTH. WHEN ORDERING A STRUCTURE WITH TOEWALLS AND/OR HEADWALLS ON EACH END, TOTAL STRUCTURE LENGTH SHOULD BE A MULTIPLE OF 9".
10. ALUMINUM BOX CULVERTS, AS SHOWN ON THIS DRAWING, ARE DESIGNED TO MEET OR EXCEED THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGE'S SECTION 12.8 FOR STANDARD HIGHWAY HS-20 & HS-25 WHEEL LOADS.

BOX CULVERT SHELL-PLATE AND RIB DETAILS



TYPICAL SQUARE END WITH ALUMINUM HEADWALL [5,6]

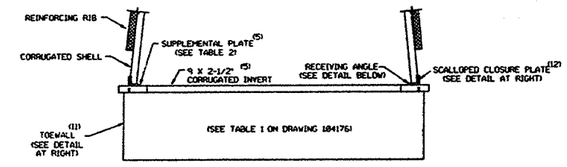


TYPICAL BACKFILL CROSS SECTION

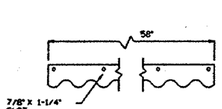
NOTES - INSTALLATION

1. x = SUFFICIENT SPACE FOR COMPACTION EQUIPMENT. IF SPACE IS NARROW, SPECIAL EQUIPMENT IS REQUIRED FOR COMPACTION OR CONCRETE GROUT IS REQUIRED.
2. BACKFILL TO BE WELL GRADED GRANULAR, A-1, A-3, A-2-4, OR A-2-5, PER AASHTO M145, PLACED IN SIX- TO EIGHT- INCH LIFTS SYMMETRICALLY ON EACH SIDE COMPACTED TO MINIMUM 98% DENSITY PER AASHTO T180, D-4 OR SMALLER TO OPERATE NEAR AND ABOVE STRUCTURE DURING BACKFILLING TO FINISH GRADE. REFER TO ASTM B789 INSTALLATION SPECIFICATION.
3. MINIMUM COVER MAY NEED TO BE INCREASED TO HANDLE TEMPORARY CONSTRUCTION VEHICLE LOADS (LARGER THAN D4) BUT NOT TO EXCEED MAXIMUM ALLOWABLE COVER FOR THE SPECIFIC BOX CULVERT DESIGN.
4. FOUNDATION TO HAVE MINIMUM 4,000 PSF BEARING. IT SHOULD CONSIST OF STABLE, WELL GRADED GRANULAR MATERIAL.
5. STANDARD HEADWALLS SHOWN ARE FOR VERTICAL ORIENTATION ONLY. ANY DESIGN, OTHER THAN VERTICAL ORIENTATION, MUST BE REVIEWED BY THE DESIGN ENGINEER.
6. THE TYPE AND EXTENT OF END TREATMENT ON THE BOX CULVERT SHOULD BE CHOSEN AND DESIGNED SO AS TO PREVENT THE LOSS OF BACKFILL DUE TO HIGH FLOW CONDITIONS.
7. BOLT TORQUE REQUIREMENTS - PLATE LAP MUST BE PROPERLY MATED IN A TANGENT FASHION USING PROPER ALIGNMENT TECHNIQUES AND ADEQUATE BOLT TORQUE TO SEAT THE CORRUGATION. THE RECOMMENDED INSTALLATION BOLT TORQUE FOR ALUMINUM BOX CULVERTS IS 90-115 FT/LBS FOR FULL INVERTS AND 115-135 FT/LBS FOR ALL OTHER COMPONENTS. WHEN SEAM SEALANT TAPE IS USED, BOLTS SHALL BE INSTALLED AND RETIGHTENED TO THESE TORQUE LEVELS AFTER 24 HOURS. TORQUE LEVELS ARE FOR INSTALLATION, NOT RESIDUAL, IN-SERVICE REQUIREMENTS.
8. FOR ASSEMBLY INFORMATION, SEE THE MANUFACTURER'S DETAILED ASSEMBLY DRAWINGS AND INSTRUCTIONS.

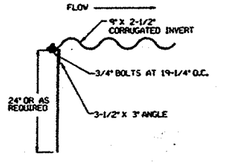
INSTALLATION DETAILS



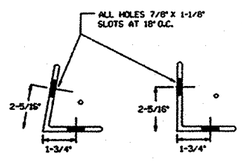
ALUMINUM FULL INVERT OPTION [2,3,5,6,14]



ALUMINUM SCALLOPED CLOSURE PLATE [12] (FULL INVERT ONLY)



ALUMINUM FLAT SHEET TOEWALL DETAIL [11]



STRUCTURES 1-25, 48-68 STRUCTURES 26-39, 61-87

ALUMINUM RECEIVING ANGLES

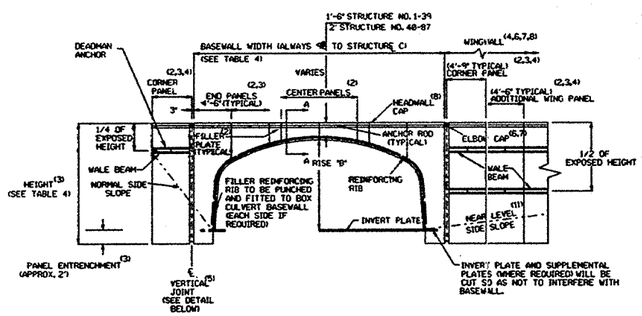
FULL INVERT - TABLE 2 [3]

STRUCT. NUMBER	(2) (5) WIDTH "F" (IN)	SUPPLEMENTAL PLATES (5) HS-20 LOADING: GAGE (GA.)	HS-20 LOADING: (2) WIDTH (IN)	HS-25 LOADING: GAGE (GA.)	HS-25 LOADING: (2) WIDTH (IN)	MAX. BOLTS /FT. (EA.)	(4) MAX. WT./FT. (LB.)
28	21	0.100	2	0.100	2	2.67	47.9

NOTES - FULL INVERT & FOOTING PADS

1. N = 9.625" OR 9-5/8".
2. MINIMUM ALLOWABLE SOIL-BEARING PRESSURE IS 4,000 LB./SQ. FT.
3. FULL INVERT SHOWN IN TABLE 2, MAY BE USED ONLY FOR COVERS OVER STRUCTURES OF 4 FEET OR LESS. FOR HIGHER COVERS USE SLOTTED CONCRETE FOOTINGS.
4. WEIGHT PER FOOT OF FULL INVERT INCLUDES 3-1/2" X 3" RECEIVING ANGLES, SCALLOPED CLOSURE PLATES, NUTS AND BOLTS, AND ALL PLATES.
5. FULL INVERT PLATES ARE 0.100" THICK. WHEN REACTIONS TO THE INVERT REQUIRE ADDITIONAL THICKNESS, SUPPLEMENTAL PLATES OF THE GAGE AND WIDTH LISTED IN TABLE 2 ARE FURNISHED TO BOLT BETWEEN THE FULL INVERT AND THE RECEIVING ANGLE.
6. INVERT WIDTHS, 20IN AND GREATER, ARE TWO-PIECES.
7. WEIGHT PER FOOT OF FOOTING PADS INCLUDES 3-1/2" X 3" RECEIVING ANGLES, NUTS AND BOLTS, PLATES, WALE BEAMS AND NUTS, AND WALE SHEAR KEYS.
8. WHEN THE GAGE LISTED IS GREATER THAN 0.250", THE FOOTING PADS WILL BE TWO OR MORE PIECES EQUALLING THE COMPOSITE GAGE REQUIRED. SEE TABLE 3.
9. FOR STRUCTURES USING FOOTING PADS WITH LEG LENGTH "D" EQUAL TO 3.5N OR MORE (SEE TABLE 1ON DRAWING 1041761), WALE BEAMS ARE USED TO RESIST LOCALIZED SIDE DEFLECTIONS DURING BACKFILLING.
10. A WALE SHEAR KEY IS USED TO CONNECT THE INTERIOR ENDS OF THE WALE BEAMS.
11. IT IS STRONGLY RECOMMENDED THAT A FLAT SHEET TOEWALL BE ADDED TO THE UPSTREAM END OF THE FULL CORRUGATED ALUMINUM INVERT TO PREVENT WATER FROM UNDERMINING THE STRUCTURE.
12. AN ALUMINUM SCALLOPED CLOSURE PLATE DOES NOT MAKE A JOINT TIGHT ENOUGH TO PREVENT INFILTRATION OF FINE SILTS AND SANDS. IF THE BACKFILL INCLUDES SUCH MATERIAL, SOME ADDITIONAL STEPS SHOULD BE TAKEN AFTER ASSEMBLY, BUT PRIOR TO BACKFILLING. THESE STEPS MAY CONSIST OF INSTALLING A GEOTEXTILE OR SEALANT TAPE.
13. GROUT SHOULD BE NON-METALLIC, NON-SHRINK MATERIAL AND SHOULD CONTAIN NO CORROSION-PROMOTING AGENTS.
14. THE TOTAL FLOW AREA OF ALL BOX CULVERTS INCLUDES THE AREA FROM THE CROWN TO THE INVERT OR FOOTING PADS. IF THE PADS ARE BURIED, A REDUCTION IN THE TOTAL AREA SHOULD BE TAKEN INTO CONSIDERATION.

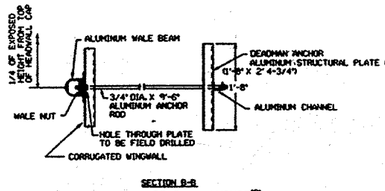
INVERT AND FOOTING DETAILS



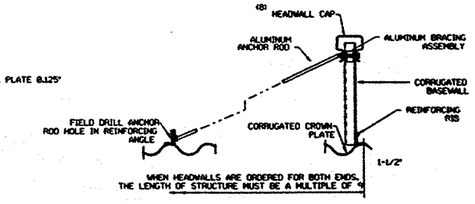
TYPICAL HEADWALL ELEVATION [10]

HEADWALL - TABLE 4

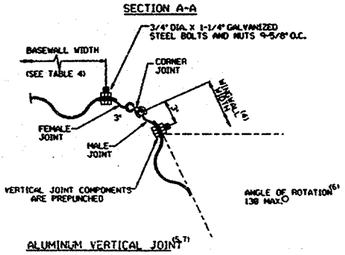
STRUCT. NUMBER	SPAN "A" (FT-IN)	RISE "B" (FT-IN)	BASEWALL: WIDTH (FT-IN)	BASEWALL: (3) HEIGHT (FT-IN)	BASEWALL: NO. OF ANCHOR RODS TO STRUCTURE FROM CAP (EA.)	BASEWALL: WEIGHT (LB./EA.)	WINGWALL: CORNER PANEL (LB./EA.)	WINGWALL: WING PANEL (LB./EA.)
28	M-10	4-10	19-4	8-7	4	457	210	159



SECTION B-B
ALUMINUM DEADMAN ANCHOR [9]



SECTION A-A

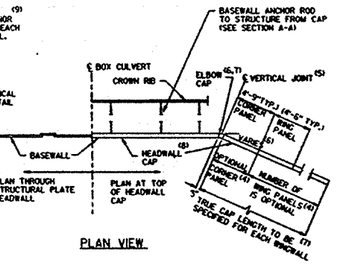


ALUMINUM VERTICAL JOINT [5,7]

NOTES - HEADWALL

1. ALL PANELS ARE FABRICATED FROM ALUMINUM STRUCTURAL PLATE AS SPECIFIED IN ASTM B746.
2. CENTER PANELS ABOVE THE BOX CULVERT CROWN RADIUS ARE 0.100" THICKNESS FOR STRUCTURES 1-39 AND 0.125" FOR STRUCTURES 40-87. ALL OTHER PANELS ARE 0.150" THICKNESS.
3. HEIGHT OF HEADWALL LISTED IN TABLE 4 PERMITS APPROXIMATELY 24" ENTRENCHMENT DEPTH BELOW THE INVERT. ALL HEADWALL PANELS MUST BE TRENCHED INTO EXISTING GROUND. IF STABLE ROCK FOUNDATION IS ENCOUNTERED, THE PANELS MAY BE TRIMMED AND PLACED INTO A CEMENT-GROUTED KEYWAY.
4. NUMBER OF CORNER PANELS AND ADDITIONAL WING PANELS IS OPTIONAL.
5. A VERTICAL JOINT IS USED ONLY WHEN A WINGWALL IS AT AN ANGLE WITH RESPECT TO THE BASEWALL.
6. SPECIFY THE DEGREE OF HORIZONTAL ROTATION ON THE WINGWALL. THIS WILL SET THE PROPER HORIZONTAL ANGLE FABRICATION FOR THE ELBOW CAP.
7. THE TOP OF A BASEWALL AND ITS WINGWALL IS ALWAYS HORIZONTAL, UNLESS BEVELED WINGWALLS ARE REQUIRED. SPECIFY THE VERTICAL DROP IN ELEVATION FOR THE WINGWALL. THIS WILL SET THE PROPER VERTICAL ANGLE FABRICATION FOR THE HEADWALL ELBOW CAP AND THE PROPER OVERALL LENGTH OF THE WINGWALL CAP.
8. HEADWALL CAP MUST BE FIELD-DRILLED AND BOLTED TO THE HEADWALL PANELS. SEE ASSEMBLY DRAWINGS FOR MORE DETAILS.
9. STANDARD SIZE AND GAGE SHOWN FOR DEADMAN ANCHORS. SPECIAL DEADMAN ANCHORS AND ANCHOR ROD LENGTHS CAN BE FABRICATED TO THE ENGINEER'S DESIGN TO RESIST FORCES ACTING ON THE HEADWALL.
10. STANDARD HEADWALLS SHOWN ARE FOR VERTICAL ORIENTATION ONLY. ANY DESIGN, OTHER THAN VERTICAL ORIENTATION, MUST BE REVIEWED BY THE DESIGN ENGINEER.
11. IF SIDE SLOPE IS NEAR LEVEL WITH STREAM BED, EXTRA WALE BEAM SHOULD BE REQUIRED FOR ALL WINGWALL PANELS.
12. FOR ASSEMBLY INFORMATION, SEE THE MANUFACTURER'S DETAILED ASSEMBLY DRAWINGS AND INSTRUCTIONS.

HEADWALL DETAILS



PLAN VIEW

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	2.5

CONSTRUCTION DETAIL
FOR
C.T.H."S" OUTAGAMIE COUNTY

BLDG.
ASPHALTIC
EXISTING R/W
CABC
+83.64 22.74'
+83.73 40'
P.L.
MATCH CURB AND GUTTER STA. 235+00
C.T.H."S" SURVEY ℄ AND CONSTRUCTION ℞
CABC F.E.
CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.
℞
R/W LINE
(REMOVED BY OTHERS) PLANTER
(REMOVED BY OTHERS) PLANTER
15" C.P. (REMOVE)
SAW CUT REQ'D.
BEGIN PROJECT STA. 235+00
15" C.P.
(REMOVE)
EDGE OF PAVEMENT
EDGE OF SHOULDER
EXISTING R/W
CABC PE
P.L.
BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)
SOD F.E.

234	235	236	237	238	239	240
810.43	809.15	807.77	806.27	804.66	802.94	801.11	799.23	797.34	795.46	793.57
810.83	809.55	808.17	806.67	805.06	803.34	801.51	799.63	797.74	795.86	793.97

20'

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.
(REMOVE BY OTHERS) PLANTER
SAW CUT REQ'D.
CONCRETE PE
+08.60 40'
LIMESTONE WALL
END OF CURB AND GUTTER STA. 242+00.00 242+06
NOTE: STORM SEWER IS NOT PART OF THIS CONTRACT.
+00 50'
+69.69 50'
+00 50'
CABC PE
R/W LINE
(REMOVE BY OTHERS)
R/W LINE
15" C.P. (REMOVE)
ASPH. PE
REMOVE RETAINING WALL TO R/W (INCIDENTAL)
100' TAPER
24" C.P. (REMOVE)
SOD FLUME REQ'D.
EDGE OF SHOULDER
EDGE OF PAVEMENT
EDGE OF PAVEMENT
EDGE OF SHOULDER

240	241	242	243	244	245
793.57	791.69	789.80	787.92	786.04
793.98	792.09	790.21	788.32	786.44

20'

P.C.=241+08.52
P.T.=243+69.69
15" C.P. (REMOVE)
24" C.P. (REMOVE)
SOD F.E.
+31.88' 50'
+08.60 50'
+00 60'
+69.60 60'
+00 60'
R/W LINE
R/W LINE
CABC PE
P.L.
BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)
C.T.H."S" SURVEY ℄ AND CONSTRUCTION ℞

CURVE DATA

P.I. 242+39.11
△ = 1°18'21"
D = 0°30'
T = 130.59'
L = 261.17'
E = 0.74'
R = 11459.16'
P.C. 241+08.52
P.T. 243+69.69
S.E. N.C.

NOTE:
ALL CURB RADII AND PAVEMENT WIDTHS ARE SHOWN TO EDGE OF PAVEMENT.

CONSTRUCTION DETAIL FOR C.T.H."S"

SCALE 1"= 20'

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,

FILE NAME: HDGN1

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	2.6

CONSTRUCTION DETAIL
FOR
C.T.H."S" OUTAGAMIE COUNTY

CONSTRUCTION LIMITS
STA. ~~93+00.00~~ 92+00

GONNERING COURT SURVEY ℄ AND CONSTRUCTION ℄

GONNERING COURT

EXISTING R/W

SAW CUT REQ'D.

(REMOVE) 15" C.P.

HOUSE

CONC. PE

WELL

CABC

END CURB & GUTTER STA. 90+80, LT

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

REMOVE PE TO REMAIN (REM.) 15" C.P.

STA. 254+70.36 C.T.H. "S" = STA. 90+00.00 GONNERING CT.

END CURB & GUTTER STA. 91+00, RT

C.T.H."S" SURVEY ℄ AND CONSTRUCTION ℄

END CURB AND GUTTER STA. ~~258+45.00~~ 258+66

BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)

EXISTING R/W

ASPHALTIC FLUME

CONCRETE SURFACE DRAIN (BY OTHERS)

EDGE OF SHOULDER

EDGE OF PAVEMENT

R/W LINE

P.L.

BEGIN CURB AND GUTTER STA. ~~248+20.00~~ 247+00

VENT

30" C.P. (REM.)

(REMOVE) 24" C.P.

120' TAPER

130 Feet

250

255

260

TAPER

100' TAPER

24" C.P. (REM.)

24" C.P. REMOVE

27" C.P. REMOVE

36" C.P. (REMOVE)

SHED

BARN

TO BE REMOVED BY OTHERS

BEGIN CURB AND GUTTER STA. ~~253+60.00~~ 253+04

EXISTING R/W 24" C.P. (REMOVE)

ASPH.

CONC. PE

HOUSE

T.L.E.

HO.

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

REMOVE PE TO R/W REMAIN 30"x40" C.P. (REMOVE)

END CURB AND GUTTER STA. 258+80.00

BEAM GUARD REQ'D. (BY OTHERS)

NOTE:
ALL CURB RADII AND PAVEMENT WIDTHS ARE SHOWN TO EDGE OF PAVEMENT.

NOTE: STORM SEWER IS NOT PART OF THIS CONTRACT.

EXCEPTION TO NET ℄ LENGTH
STA. 258+84.93 TO STA. 259+39.76

CONSTRUCTION DETAIL FOR C.T.H."S"

WISDOT/CADDS SHEET 42

FILE NAME: HDGN1

STATE PROJECT NUMBER
6037-02-72

SHEET NO. 2.7

CONSTRUCTION DETAIL
FOR
C.T.H."S" AND MURPHY RD. OUTAGAMIE COUNTY

N

MURPHY ROAD SURVEY ℄
AND CONSTRUCTION ℞

C.T.H."S" SURVEY ℄
AND CONSTRUCTION ℞

END CURB AND GUTTER
STA. ~~101+60.00~~ 102+00

END CURB & GUTTER
STA 102+25

MURPHY ROAD
N0°35'42"W

EXISTING R/W

HOUSE

GARAGE

CABC PE

HO. TRL.

P.L.

DRAIN TILE

CONNECT TO
STORM SEWER

BEGIN CURB AND GUTTER
STA. ~~264+00.00~~ 261+70

CONCRETE CURB AND GUTTER
30-INCH, TYPE "D" REQ'D.

CONCRETE CURB AND GUTTER
~~36~~-INCH, TYPE "D" REQ'D.
(BY OTHERS)

BURIED TELEPHONE CABLE
(APPROXIMATE LOCATION

R/W LINE

11" BLUE SPRUCE
NOT REMOVED

6" BLUE SPRUCE
NOT REMOVED

SAW CUT
REQ'D.

ASPH. PE

100' TAPER

18" C.P.
(REMOVE)

6" PIPE UNDERDRAIN

12" APPLE
NOT REMOVED

30" PINE
18" PINE
18" PINE
24" PINE
NOT REMOVED

4" NOT REMOVED

10" R/W LINE 8"

SOD FLUME
REQUIRED

60'R.

42'R.

12"

3'

20'

22' CLEAR

16'

EDGE OF PAVEMENT

EDGE OF SHOULDER

100+ TAPER

120' TAPER

DRAIN TO DITCH
STA 261+24

END CURB & GUTTER
STA 265+00

BEGIN CURB & GUTTER
STA 263+95

WELL

HOUSE

SHED

CABC PE

STA. 266+61.54 C.T.H."S"=
STA. 100+00.00 MURPHY ROAD

NOTE: STORM SEWER IS NOT
PART OF THIS CONTRACT.

NOTE:
ALL CURB RADII AND PAVEMENT WIDTHS
ARE SHOWN TO EDGE OF PAVEMENT.

262	263	264	265	266	267	268
745.35	744.69 / 744.85	744.56 / 744.77	744.44 / 744.71	744.30 / 744.70	744.41 / 744.71	744.53 / 744.75
745.21	745.09	745.01	744.95	744.94	744.95	744.95

744.66 / 744.82	744.68	745.02	745.17	745.31	745.48	745.67
745.06						

750.41	750.01	747.91	747.23	746.46	747.07	746.03

+00 60'
+00 40'
+51.42 40'
+55 55'
T.L.E.
+25 55'
+10.12 40'
+09.35 40.56'
+56.42 55'

CONSTRUCTION DETAIL
FOR C.T.H."S" AND MURPHY ROAD

SCALE 1"= 20'

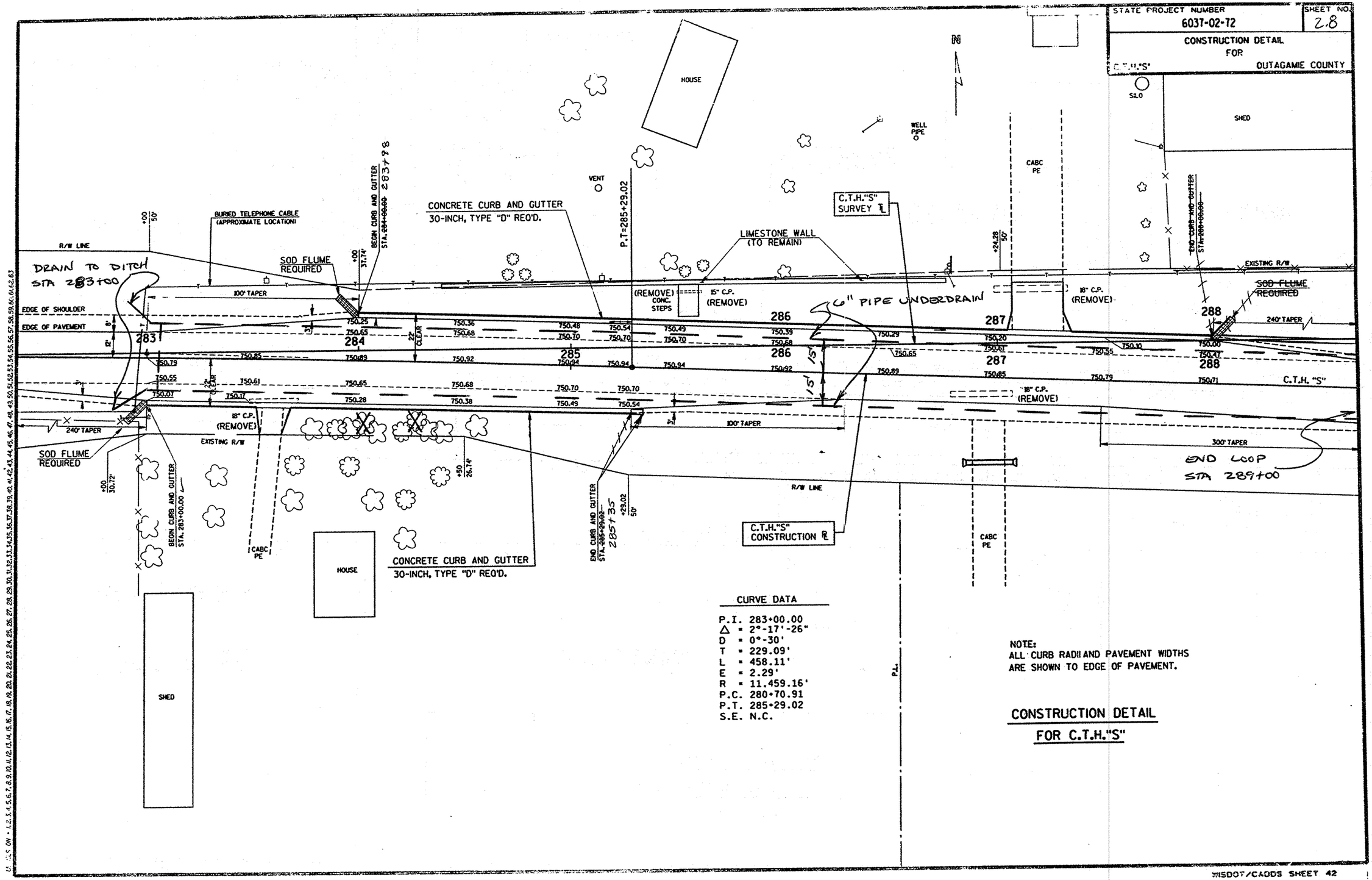
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: HDGN:

WISDOT/CADDS SHEET 42

STATE PROJECT NUMBER 6037-02-72 | SHEET NO. 28

CONSTRUCTION DETAIL
FOR
C.T.H."S" OUTAGAMIE COUNTY



CURVE DATA

P.I. 283+00.00
△ = 2°-17'-26"
D = 0°-30'
T = 229.09'
L = 458.11'
E = 2.29'
R = 11,459.16'
P.C. 280+70.91
P.T. 285+29.02
S.E. N.C.

NOTE:
ALL CURB RADII AND PAVEMENT WIDTHS ARE SHOWN TO EDGE OF PAVEMENT.

CONSTRUCTION DETAIL FOR C.T.H."S"

WISDOT/CADDS SHEET 42

Revised 3-4-93

FILE NAME: RCON1

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	2.9

CONSTRUCTION DETAIL
FOR
C.T.H."S" AND VINE RD. OUTAGAMIE COUNTY

END CURB & GUTTER
STA 290+03
SOD FLUME REQ'D

C.T.H."S"
SURVEY ℄

BURIED TELEPHONE CABLE
(APPROXIMATE LOCATION)

CONCRETE CURB AND GUTTER
36-INCH, TYPE "D" REQ'D.
(BY OTHERS)

SOD FLUME
REQUIRED

EXISTING R/W

R/W LINE

+88.68
40'

+04.86
64.39'

18" C.P.
(REMOVE)

100' TAPER

EDGE OF SHOULDER

EDGE OF PAVEMENT

C.T.H. "S"

290 291 292 293 294 295 296

748.19

748.58

748.96

748.30

748.51

250' TAPER

22'

40'R.

60'R.

15'

748.08

+87.49
40'

+13.44
65.10'

STA. 293+20.59 SURVEY ℄ =
STA. 110+00.00 VINE ROAD

N

EDGE OF PAVEMENT

EDGE OF SHOULDER

300' TAPER

200'

24'

748.95

747.86

747.58

748.51

100' TAPER

P.C=293+27.32

+00
60'

C.T.H."S"
CONSTRUCTION ℄

+29.16
60'

+76.59
60'

40'R.

746.76
24'

746.64
18"

50'R.

109

108

100' TAPER

50' TAPER

SOD FLUME
REQUIRED

+13.52
55'

+00
55'

+50
50'

+69.38
50'

STA. 293+20.15 CONSTRUCTION ℄ =
STA. 109+67.90 VINE ROAD

CONCRETE CURB AND GUTTER
36-INCH, TYPE "D" REQ'D.
(BY OTHERS)

VINE ROAD SURVEY ℄
AND CONSTRUCTION ℄

VINE ROAD

6' 12' 12' 6'

CURVE DATA

P.I. 291+00.57
△ = 2°-16'-04"
D = 0°-30"
T = 226.81'
L = 453.56'
E = 2.24'
R = 11,459.16'
P.C. 288+73.76
P.T. 293+27.32
S.E. N.C.

NOTE:
ALL CURB RADII AND PAVEMENT WIDTHS
ARE SHOWN TO EDGE OF PAVEMENT.

CONSTRUCTION DETAIL FOR
C.T.H."S" AND VINE ROAD INTERSECTION

SCALE 1"= 20'

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,

FILE NAME: HDGN:

WISDOT/CADDS SHEET 42

DATE 04/06/93

ESTIMATE OF QUANTITIES

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6037-02-72 QUANTITY
20101	CLEARING	STA.	7.00	7.00 ✓
20102	CLEARING	I.D.	332.00	~~332.00~~ 229.0
20104	GRUBBING	STA.	7.00	7.00 ✓
20105	GRUBBING	I.D.	332.00	~~332.00~~ 229.0
20301	REMOVING OLD CULVERT, STATION 270+00	L.S.	1.00	1.00 ✓
20302	REMOVING OLD CULVERT, STATION 289+90	L.S.	1.00	1.00 ✓
20303	REMOVING OLD CULVERT, STATION 302+50	L.S.	1.00	1.00 ✓
20304	REMOVING OLD CULVERT, STATION 322+50	L.S.	1.00	1.00 ✓
20405	REMOVING CURB AND GUTTER	L.F.	24.00	24.00 ✓
20503	UNCLASSIFIED EXCAVATION	C.Y.	44,893.00	~~44,893.00~~ 56,072
20801	BORROW EXCAVATION	C.Y.	1,731.00	~~1,731.00~~ 1,864
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	508.00	~~508.00~~ 419
52005	CULVERT PIPE, CLASS III, 24-INCH	L.F.	302.00	~~302.00~~ 332
52007	CULVERT PIPE, CLASS III, 30-INCH	L.F.	256.00	~~256.00~~ 282
52009	CULVERT PIPE, CLASS III, 36-INCH	L.F.	102.00	102.00 ✓
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	32.00	~~32.00~~ 24
52063	APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	16.00	~~16.00~~ 14
52065	APRON ENDWALLS FOR CULVERT PIPE, 30-INCH	EACH	10.00	10.00 ✓
52067	APRON ENDWALLS FOR CULVERT PIPE, 36-INCH	EACH	2.00	2.00 ✓
52138	CORRUGATED STEEL PIPE ARCH, 28X20-INCH	L.F.	62.00	62.00 ✓
52141	CORRUGATED STEEL PIPE ARCH, 49X33-INCH	L.F.	60.00	60.00 ✓
52164	STEEL APRON ENDWALLS FOR PIPE ARCH, 28X20-INCH	EACH	2.00	2.00 ✓
52167	STEEL APRON ENDWALLS FOR PIPE ARCH, 49X33-INCH	EACH	2.00	2.00 ✓
60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	7,075.00	~~7,075.00~~ 7,595

Sheet 3

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6037-02-72 QUANTITY	
60604	MEDIUM RANDOM RIPRAP	C.Y.	30.00	~~30.00~~	70.1
62505	SALVAGED TOPSOIL	S.Y.	66,960.00	~~66,960.00~~	71,224
62702	MULCHING	S.Y.	44,352.00	~~44,352.00~~	67,399
62803	EROSION MAT, DELIVERED	S.Y.	4,300.00	~~4,300.00~~	2,823
62804	EROSION MAT, INSTALLED	S.Y.	4,300.00	~~4,300.00~~	2,823
62815	SILT FENCE, DELIVERED	L.F.	900.00	~~900.00~~	338
62816	SILT FENCE, INSTALLED	L.F.	900.00	~~900.00~~	338
62817	SILT FENCE MAINTENANCE	L.F.	450.00	~~450.00~~	0
62905	FERTILIZER, TYPE B	CWT.	42.50	~~42.50~~	89.34
63002	SEEDING	LB.	598.00	~~598.00~~	2,375
63101	SODDING	S.Y.	16,735.00	~~16,735.00~~	3,437.5
64201	FIELD OFFICE, TYPE A	L.S.	1.00	1.00 ✓	
64301	TRAFFIC CONTROL	L.S.	1.00	1.00 ✓	
64601	SAWING EXISTING PAVEMENT	L.F.	477.00	~~477.00~~	379
90001	SHAPING AND COMPACTING BREAKER RUN STONE	TON	21,470.00	~~21,470.00~~	13,974.75
90002	SHAPING AND COMPACTING CRUSHED AGGREGATE BASE COURSE	TON	35,460.00	~~35,460.00~~	44,071.45
90003	ALUMINUM BOX CULVERT, STATION 270+00	L.S.	1.00	1.00 ✓	

Sheet 3.1

CHANGE ORDER No. 1

61201	PIPE UNDERDRAIN, 6-INCH	L.F.	2,300
64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	17,291.11
90359	BREAKER RUN STONE	TON	15,132.62

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	3A

MISCELLANEOUS QUANTITIES
FOR

C.T.H. "S" — OUTAGAMIE COUNTY

CLEARING AND GRUBBING

STATION - STATION	CLEARING LD.	CLEARING STATION	GRUBBING LD.	GRUBBING STATION
235+00 - 246+00	0	---	0	---
246+00 - 267+00	212	---	212	---
267+00 - 273+00	0	---	0	---
273+00 - 329+00	120	---	120	---
329+00 - 336+00	0	7	0	7
336+00 - 345+38	0	---	0	---
TOTALS	332	7	332	7

SAWING EXISTING PAVEMENT

STATION	LOCATION	QUANTITY L.F.
235+00	C.T.H. "S"	32
240+80 LT.	C.T.H. "S"	20
253+65 LT.	C.T.H. "S"	20
93+00	GONNERING COURT	22
90+70 LT.	GONNERING COURT	15
90+75 RT.	GONNERING COURT	40
255+80 LT.	C.T.H. "S"	60
262+65 LT.	C.T.H. "S"	20
102+50	MURPHY ROAD	22
279+65 LT.	C.T.H. "S"	20
107+00	VINE ROAD	22
112+50	VINE ROAD	22
318+40 LT.	C.T.H. "S"	12
120+45	OAK LANE	38
336+20 LT.	C.T.H. "S"	14
130+65	MALLARD LANE	24
342+75 LT.	C.T.H. "S"	16
343+50 LT.	C.T.H. "S"	20
345+38	C.T.H. "S"	38
TOTAL		477

REMOVING CURB AND GUTTER

STATION	LOCATION	QUANTITY L.F.
120+33 - 120+45	OAK LANE	24

SHAPING AND COMPACTING BREAKER RUN STONE

STATION - STATION	LOCATION	QUANTITY TONS
235+00 - 331+65	C.T.H. "S"	18,000
332+21 - 345+38	C.T.H. "S"	3,000
109+68 - 107+00	VINE ROAD	470
TOTAL		21,470

NOTE: TOTAL INCLUDES 1,270 TONS NON-PARTICIPATING AND 20,200 TONS PARTICIPATING.

CONCRETE CURB AND GUTTER, 30-INCH, TYPE "D"

STATION - STATION	LOCATION	QUANTITY L.F.
235+00 - 242+00 LT.	C.T.H. "S"	700
248+20 - 254+60 LT.	C.T.H. "S"	660
253+50 - 258+80 RT.	C.T.H. "S"	530
254+90 - 258+45 LT.	C.T.H. "S"	370
263+00 - 266+50 LT.	C.T.H. "S"	470
283+00 - 285+30 RT.	C.T.H. "S"	230
284+00 - 288+00 LT.	C.T.H. "S"	400
321+23 - 321+66 LT.	C.T.H. "S"	80
322+00 - 331+56 LT.	C.T.H. "S"	1,000
332+23 - 339+41LT.	C.T.H. "S"	740
332+23 - 345+31RT.	C.T.H. "S"	1,310
339+74 - 345+38 LT.	C.T.H. "S"	585
TOTAL		7,075

SILT FENCE, DELIVERED, INSTALLED, AND MAINTENANCE

STATION	LOCATION	QUANTITY DELIVERED AND INSTALLED L.F.	QUANTITY MAINTENANCE L.F.
259+00	C.T.H. "S	120	60
270+00	C.T.H. "S	100	50
107+00	VINE ROAD	60	30
302+00 - 303+50	C.T.H. "S	150	70
309+50 - 310+50	C.T.H. "S	100	50
332+00	C.T.H. "S	150	80
UNDISTRIBUTED		210	110
TOTALS		900	450

EROSION MAT DELIVERED AND INSTALLED

STATION - STATION	LOCATION	QUANTITY S.Y.
242+50 - 247+00 LT.	C.T.H. "S"	400
240+00 - 253+00 RT.	C.T.H. "S"	1,150
260+00 - 264+00 RT.	C.T.H. "S"	540
260+00 - 262+00 LT.	C.T.H. "S"	270
107+00 - 109+50 RT.	VINE ROAD	340
317+00 - 319+50 LT.	C.T.H. "S"	340
320+00 - 325+00 RT.	C.T.H. "S"	670
UNDISTRIBUTED	C.T.H. "S"	580
TOTAL		4,300

SHAPING AND COMPACTING CRUSHED AGGREGATE BASE COURSE

LOCATION	QUANTITY TONS
C.T.H. "S"	
ROADWAY	27,900
SHOULDERS	4,300
GONNERING COURT	465
MURPHY ROAD	395
VINE ROAD (NORTH)	435
VINE ROAD (SOUTH)	755
OAK LANE	160
MALLARD LANE	165
P.E.'s & F.E.'s	885
TOTAL	35,460

NOTE: TOTAL INCLUDES 2,460 TONS NON-PARTICIPATING AND 33,000 TONS PARTICIPATING.

WISDOT/CADDS SHEET 42

FILE NAME: MISQN

REVISED 3-4-03

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	3B

MISCELLANEOUS QUANTITIES
FOR
C.T.H. "S" OUTAGAMIE COUNTY

REMOVING CULVERTS

STATION	TYPE	SIZE	LUMP SUM
270+00	CONCRETE BOX CULVERT	3.75'x18'x32'	1
289+90	C.M.P.	12"x42'	1
302+50	C.M.P. WITH CONC. ENDWALLS	2-18"x46'	1
322+50	C.M.P.	2-30"x46'	1

CROSS DRAINS

STATION	LOCATION	DIAMETER (IN.)	LENGTH (FEET)	TYPE	CLASS	THICKNESS(IN.) STEEL	THICKNESS(IN.) ALUMINUM	ELEVATION INLET	ELEVATION OUTLET	APRON ENDWALLS	*SOD S.Y.	REMARKS
110+35	VINE ROAD	24	82	C.P.	III	0.064	0.075	743.00	741.00	2	20	
293+95	C.T.H. "S"	36	102	C.P.	III	0.079	0.105	740.70	739.50	2	20	
302+50	C.T.H. "S"	28x20	62	C.S.P.A.	---	-----	0.064	741.60	741.00	2	20	
310+00	C.T.H. "S"	49x33	60	C.S.P.A.	---	-----	0.109	738.00	737.50	2	--	
320+00	C.T.H. "S"	30	78	C.P.	III	0.079	0.075	733.00	732.50	2	20	SKEW 35° R.H.F.
324+75	C.T.H. "S"	30	100	C.P.	III	0.079	0.075	733.00	731.50	2	20	

*QUANTITY INCLUDED ELSEWHERE

PRIVATE ENTRANCE PIPES

STATION	LOCATION	DIAMETER (IN.)	LENGTH (FEET)	TYPE	CLASS	THICKNESS (IN.) STEEL	THICKNESS (IN.) ALUMINUM	APRON ENDWALLS	SOD* S.Y.
236+00	C.T.H. "S" RT.	18	24	C.P.	III	0.064	0.060	2	10
240+05	C.T.H. "S" RT.	18	28	C.P.	III	0.064	0.060	2	10
243+88	C.T.H. "S" RT.	24	24	C.P.	III	0.064	0.075	2	10
243+91	C.T.H. "S" LT.	24	26	C.P.	III	0.064	0.075	2	10
250+75	C.T.H. "S" RT.	24	26	C.P.	III	0.064	0.075	2	10
251+40	C.T.H. "S" RT.	30	24	C.P.	III	0.079	0.075	2	10
252+84	C.T.H. "S" RT.	30	24	C.P.	III	0.079	0.075	2	10
261+75	C.T.H. "S" LT.	24	30	C.P.	III	0.064	0.075	2	10
264+67	C.T.H. "S" RT.	18	42	C.P.	III	0.064	0.060	2	10
266+61	C.T.H. "S" RT.	18	34	C.P.	III	0.064	0.060	2	10
273+10	C.T.H. "S" RT.	24	40	C.P.	III	0.064	0.075	2	10
273+55	C.T.H. "S" RT.	24	40	C.P.	III	0.064	0.075	2	10
278+20	C.T.H. "S" RT.	18	40	C.P.	III	0.064	0.060	2	10
278+22	C.T.H. "S" LT.	18	32	C.P.	III	0.064	0.060	2	10
279+62	C.T.H. "S" RT.	18	32	C.P.	III	0.064	0.060	2	10
279+65	C.T.H. "S" LT.	18	34	C.P.	III	0.064	0.060	2	10
287+00	C.T.H. "S" RT.	18	28	C.P.	III	0.064	0.060	2	10
289+50	C.T.H. "S" LT.	18	32	C.P.	III	0.064	0.060	2	10
299+25	C.T.H. "S" LT.	18	30	C.P.	III	0.064	0.060	2	10
299+38	C.T.H. "S" RT.	18	32	C.P.	III	0.064	0.060	2	10
306+15	C.T.H. "S" LT.	18	32	C.P.	III	0.064	0.060	2	10
306+75	C.T.H. "S" RT.	18	36	C.P.	III	0.064	0.060	2	10
318+40	C.T.H. "S" LT.	24	34	C.P.	III	0.064	0.075	2	10
321+35	C.T.H. "S" RT.	30	30	C.P.	III	0.079	0.075	2	10
92+18	GONNERING CT.	18	28	C.P.	III	0.064	0.060	2	10
92+60	GONNERING CT.	18	24	C.P.	III	0.064	0.060	2	10

*QUANTITY INCLUDED ELSEWHERE

ALUMINUM BOX CULVERT

STATION	LOCATION	SIZE	LUMP SUM
270+00	C.T.H. "S"	14'-10"x4'-10"x66'	1

LANDSCAPING ITEMS

LOCATION	SALVAGED TOPSOIL S.Y.	FERTILIZER TYPE "B" CWT.	SEED NO. 10 LBS.	MULCHING S.Y.	SODDING S.Y.
235+00 - 240+00 LT.	740	0.5	10	740	
240+00 - 242+00 LT.	420	0.3			420
235+00 - 253+50 RT.	4,040	2.6	55	4,040	
242+00 - 248+00 LT.	1,030	0.7	14	1,030	
248+00 - 258+00 LT.	1,700	1.0			1,700
258+00 - 263+00 LT.	1,110	0.7	15	1,110	
253+50 - 259+00 RT.	1,000	0.6			1,000
259+00 - 283+00 RT.	6,970	4.4	9	697	
263+00 - 267+00 LT.	740	0.5			740
267+00 - 284+00 LT.	5,720	3.6	77	5,720	
283+00 - 285+50 RT.	780	0.5			780
285+50 - 345+38 RT.	14,900	9.5	201	14,900	
284+00 - 288+00 LT.	800	0.5			800
288+00 - 321+20 LT.	12,590	8.0	170	12,590	
321+20 - 345+38 LT.	10,590	6.7			10,590
GONNERING CT.	700	0.4	9	700	
MURPHY ROAD	805	0.5	11	805	
VINE ROAD	2,020	1.3	27	2,020	
OAK LANE	90	0.1			90
MALLARD LANE	215	0.1			215
CROSS CULVERTS					100
P.E.'s & F.E.'s					260
SOD FLUMES					40
TOTALS	66,960	42.5	598	44,352	15,735

EARTHWORK SUMMARY

STATION - STATION	LOCATION	UNCLASSIFIED EXCAVATION C.Y.	FILL C.Y.	BORROW C.Y.
235+00 - 239+10	C.T.H. "S"	1,663	86	
239+10 - 246+00	C.T.H. "S"	1,318	942	
246+00 - 277+90	C.T.H. "S"	14,293	10,208	
277+90 - 293+20	C.T.H. "S"	6,643	4,745	
293+20 - 293+40	C.T.H. "S"	240	1,272	
293+40 - 310+70	C.T.H. "S"	7,047	5,034	
310+70 - 331+56	C.T.H. "S"	8,172	5,837	
332+24 - 345+38	C.T.H. "S"	5,517	5,177	1,731
TOTALS		44,893	33,301	1,731

NOTE: TOTAL INCLUDES 1,725 C.Y. UNCLASSIFIED EXCAVATION NON-PARTICIPATING AND 43,168 C.Y. UNCLASSIFIED EXCAVATION PARTICIPATING.

MEDIUM RANDOM RIPRAP

STATION	LOCATION	QUANTITY C.Y.
270+00	C.T.H. "S" CROSS CULVERT	20
310+00	C.T.H. "S" CROSS CULVERT	10
TOTAL		30

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.

FILE NAME: HDGN:

WISDOT/CADDS SHEET 42

Revised 3-4-93

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
6037-02-00		
FEDERAL PROJECT NUMBER	4.0	7

PLAT OF RIGHT OF WAY REQUIRED FOR

C.T.H. "C"-S.T.H. 55

C.T.H. "S" OUTAGAMIE COUNTY

6037-02-72 | 4.0

Conventional Signs and Abbreviations

LINES & SYMBOLS

STATE
COUNTY
TOWNSHIP & RANGE
QUARTER
SIXTEENTH
NEW CENTERLINE
NEW R/W
OLD R/W
PROPERTY LINE
CORPORATE LIMITS
NO ACCESS (BY ACQUISITION)
LIMITED HIGHWAY EASEMENT
FENCE
BEAM GUARD

SECTION CORNER

NO ACCESS (BY STATUTORY AUTHORITY)

LOT & TIE
SLOPE INTERCEPTS
UNDERGROUND UTILITIES
IRON PIN/PIPE
POWER POLE
TELEPHONE POLE
TELEPHONE PEDESTAL
MONUMENTED R/W POINT

FOUNDATION OR RUINS
BUILDING
SILO, MANHOLE, WELL, VENT, SEPTIC TANK, ETC.

ABBREVIATIONS

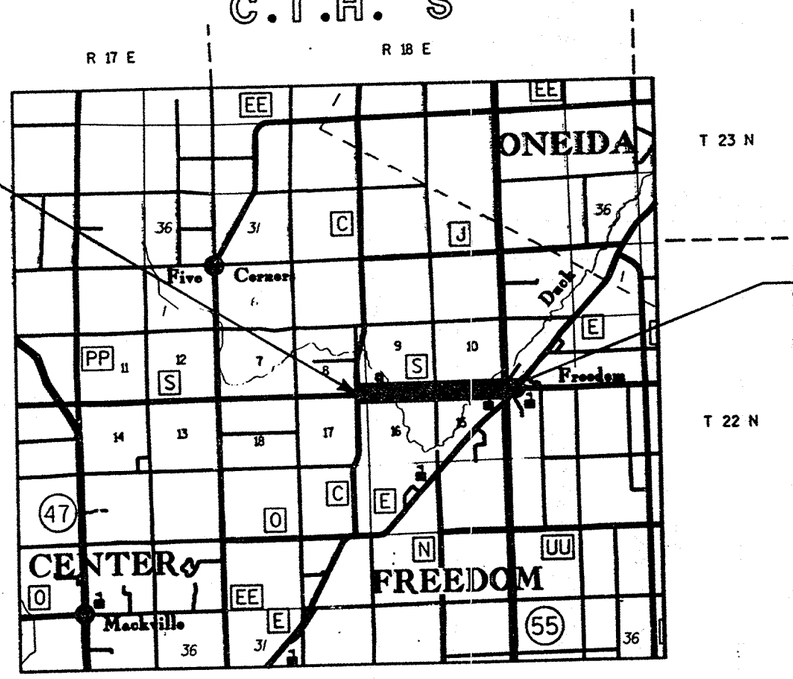
A.P.	ACCESS POINT
AC.	ACRES
A.H.	AHEAD
ALUM.	ALUMINUM
ET.AL.	AND OTHERS
BK.	BACK
BIT.	BITUMINOUS
C.M.	CABLE MARKER
℄	CENTERLINE
C.T.H.	COUNTY TRUNK HIGHWAY
C.S.M.	CERTIFIED SURVEY MAP
CONC.	CONCRETE
COR.	CORNER
CULV.	CULVERT
d/b/a	DOING BUSINESS AS
E	ELECTRIC
FDN.	FOUNDATION
G.	GARAGE
G.M.	GAS MARKER
G.P.	GAS PUMPS
H.	HOUSE
I.P.	IRON PIPE
L.C.	LAND CONTRACT
LT.	LEFT
L	LENGTH OF CURVE
L.H.E.	LIMITED HIGHWAY EASEMENT
L.C.	LONG CHORD
L.C.B.	LONG CHORD BEARING
M.H.	MANHOLE
MON.	MONUMENT
O.L.	OUTLOT
P.	PAGE
P.K.	PARKER-KALON
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.L.	PROPERTY LINE
R	RADIUS
R.R.	RAILROAD
℄	REFERENCE LINE
R.D.E.	RESTRICTED DEVELOPMENT EASEMENT
RT.	RIGHT
R/W	RIGHT OF WAY
SEC.	SECTION
S	SHED
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
T	TANGENT LENGTH OF CURVE
TAV.	TAVERN
U.S.H.	UNITED STATES HIGHWAY
X	EAST COORDINATE
Y	NORTH COORDINATE

STATE OF WISCONSIN
OUTAGAMIE COUNTY HIGHWAY DEPARTMENT

PLAT OF RIGHT OF WAY REQUIRED FOR

C.T.H. "S"

BEGIN RELOCATION ORDER
STA. 234+83.53
X=2,435,400 (± 100')
Y=206,100 (± 100')
LOCATED 13.27 FEET NORTH AND 548.16 EAST OF THE NORTHEAST CORNER OF SECTION 17, TOWNSHIP 22 NORTH, RANGE 18 EAST.



END RELOCATION ORDER
STA. 346+05.94
LOCATED AT THE NORTHEAST CORNER OF SECTION 15, TOWNSHIP 22 NORTH, RANGE 18 EAST.

NOTE:

ALL BEARINGS SHOWN ON THIS PLAT ARE TRUE BEARINGS OF EACH TANGENT.

ALL COORDINATES SHOWN ON THIS PLAT ARE SCALED FROM THE U.S.G.S. TOPOGRAPHIC MAPS, 7.5 MINUTE QUADRANGLE, FREEDOM, WISCONSIN, CENTRAL ZONE, FOR IDENTIFICATION ONLY.

AREAS SHOWN ON THE TOTAL REMAINING ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

LAYOUT
SCALE
0 1 2

TOTAL NET LENGTH OF CENTERLINE = 2.107 MI.

APPROVED FOR OUTAGAMIE COUNTY

7/6/92 DATE

COUNTY HIGHWAY COMMISSIONER

WISCONSIN — CHARLES H. FORST — REGISTERED PROFESSIONAL ENGINEER — 1ST ASST. GREEN BAY, WIS.

PLAT PREPARED BY
AYRES ASSOCIATES
CONSULTING ENGINEERS
GREEN BAY, WISCONSIN

WISDOT/CADDS SHEET 50

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=

SCHEDULE OF LANDS & INTERESTS REQUIRED

AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT ABUTTING THE AREA TO BE ACQUIRED ALONG THE HIGHWAY.

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
09-30-1992	C.T.H. "S"	OUTAGAMIE		6037-02-00	
				FEDERAL PROJECT NUMBER	4.J
				6037-02-72	4.1

PARCEL NO.	SHEET NO.	OWNERSHIP	INTEREST REQUIRED	TOTAL ACRES	R/W ACRES			TOTAL ACRES REMAINING	T.L.E. ACRES (TEMP.)	P.L.E. ACRES (PERM.)
					NEW	EXISTING	TOTAL			
43	4.2,4.3	MARTIN J. AND PATRICIA MURPHY	FEE	78.70	0.73	1.41	1.86	76.84	----	----
44										
45										
46										
47	4.3	MICHAEL A. AND NANCY M. VOSTERS	FEE	3.13	0.06	0.22	0.28	2.85	----	----
48	4.3	ROBERT P. AND KAY L. MITCHELL	FEE	0.56	0.02	0.12	0.14	2.13	----	----
49	4.3	RICHARD P. AND CYNTHIA A. PYNENBERG	FEE	2.02	0.01	0.03	0.04	1.98	----	----
50										
51	4.3	LLOYD AND ROSE ANNA GLATZ	FEE	0.76	0.05	----	0.05	0.71	----	----
52	4.3	GERALD AND PATRICIA KITTIKO	FEE	1.47	0.08	0.15	0.23	1.24	----	----
53	4.3	GEHRINGS PRIME VEAL FARM	FEE	58.07	0.22	0.50	0.72	57.35	----	----
54	4.3	LLOYD W. AND SANDRA R. GEHRING	FEE	0.70	0.02	0.08	0.10	0.60	----	----
55										
56	4.3	NORMAN A. AND BERNADETTE M. GEHRING	T.L.E.	----	----	----	----	----	0.03	----
57	4.3	GERALD J. SHERIFF	FEE	7.73	0.10	0.12	0.22	7.51	----	----
58	4.3	WAYNE AND SHARON GLATZ	FEE	1.51	0.07	0.23	0.30	1.21	----	----
59	4.3	JOHN AND BETTY VALIGA	FEE AND T.L.E.	0.77	0.13	0.26	0.39	0.38	0.01	----
60										
61	4.3	KENNETH J. AND BERNICE KERKHOFF	FEE	19.97	0.31	0.47	0.78	19.19	----	----
62	4.3	PATRICK F. AND PATSY A. GEENEN	FEE	2.01	0.17	0.28	0.45	1.56	----	----
63	4.3	ROBERT M. AND JOAN SCHUMACHER	FEE	10.85	0.16	0.26	0.42	10.43	----	----
64	4.4	ROGER A. AND LOIS M. HANSEN	FEE AND T.L.E.	1.92	0.19	0.24	0.43	1.49	0.01	----
65										
66	4.4	ROBERT J. TIGLAS AND SHARON L. KOTTLER	FEE AND T.L.E.	1.73	0.17	0.21	0.38	1.35	0.01	----
67	4.4	LYLE SWINKLES	FEE	68.02	0.48	0.44	0.92	67.10	----	----
68	4.4	WILLARD J. AND MARY LOU SCHUH	FEE	94.61	1.04	1.28	2.32	92.29	----	----
69	4.4	LEROY W. AND RHONDA R. ABEL	FEE	0.50	0.03	0.08	0.11	0.39	----	----
70										
71	4.4,4.5	HENRY C. GEENEN	FEE	136.92	2.93	2.33	5.26	131.66	----	----
72										
73	4.5	DEWAINE W. AND PATRICIA A. LOCY	FEE	2.00	0.24	0.16	0.40	1.60	----	----
74	4.5,4.6	DONALD P. AND LOIS GONNERING	P.L.E. AND T.L.E.	----	----	----	----	----	0.48	0.02
75										
76	4.5,4.6	ELLEN M. REIMER	FEE	80.25	1.70	1.27	2.97	77.28	----	----
77										
78										
79	4.4	DANIEL H. AND SHIRLEY A. WEYLAND	FEE AND T.L.E.	3.50	0.25	0.35	0.60	2.90	0.02	----
80										
81	4.4	ALLEN J. AND BETTY A. HOTTENSTINE	FEE AND T.L.E.	10.39	0.18	0.50	0.68	9.71	0.07	----
82	4.6	GERALD J. VAN CAMP	T.L.E.	----	----	----	----	----	0.01	----
83	4.6	EUGENE F. AND MARY GONNERING	T.L.E.	----	----	----	----	----	0.11	----
84	4.6	RONALD E. AND LAVONNE GREINER	T.L.E.	----	----	----	----	----	0.09	----
85	4.6	SCOTT LUDWIG	T.L.E.	----	----	----	----	----	0.12	----
86	4.6	JOSEPH LUDWIG, JR.	T.L.E.	----	----	----	----	----	0.03	----
87	4.6	JOSEPH J. AND ROSE MARY GREEN	T.L.E.	----	----	----	----	----	0.11	----
88	4.6	MICHAEL J. LIEBERGEN	T.L.E.	----	----	----	----	----	0.04	----
89	4.6	ANDREW D. BOS AND ANN C. RUDNICK	T.L.E.	----	----	----	----	----	0.04	----
90	4.6	THOMAS A. AND MICHELLE M. WASURICK	T.L.E.	----	----	----	----	----	0.05	----
91	4.6	ROBERT AND GRACE GARVEY	T.L.E.	----	----	----	----	----	0.02	----
92	4.6	FREEDOM SCHOOL DISTRICT NO. 3	FEE	25.21	0.98	0.84	1.82	23.39	----	----
93	4.6	WISCONSIN BELL, INC.	RELEASE	----	----	----	----	----	----	----
94										

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
	C.T.H. "S"	OUTAGAMIE		6037-02-00	
	SCALE. FT. 0 200	GRID FACTOR		FEDERAL PROJECT NUMBER	4.2
				6037-02-72	4.2

TOWN

FARMLAND PRESERVATION AGREEMENT

SE-SW
8-22-18

EASEMENT
WISCONSIN PUBLIC SERVICE CORP.

SW-SE
8-22-18

IGNATIUS AND ANNA MURPHY-(FEE)
THOMAS P. AND DEBBIE M. MURPHY-(L.C.)

RICHARD J. AND DOROTHY RICKERT-(FEE)
MARK R. RICKERT-(L.C.)

FOUND P.K. NAIL
STA. 213+97.52, ℄

C.T.H. "S" SURVEY ℄, R/W ℛ
AND CONSTRUCTION ℛ

BURIED TELPHONE CABLE
(APPROXIMATE LOCATION)

BEGIN RELOCATION ORDER
STA. 234+83.53

IGNATIUS AND
ANNA MURPHY

MARTIN J. AND PATRICIA MURPHY
(43)

MERLIN J., SR. AND
SHIRLEY M. BESSETTE

FOUND P.K. NAIL
STA. 240+31.82, 4.76' RT.

SLOPE
INTERCEPTS

S89°06'38"E 624.88'

EXISTING R/W

℄ BEARING S88°34'54"E

SECTION LINE S88°49'21"E 2634.25'

SECTION LINE S89°41'22"E 2643.51'

℄ BEARING S89°41'22"E

℄ BEARING S89°06'38"E

S00°50'24"W
4.76'

S00°50'24"W
45.24'

N01°10'38"E
40.00'
R/W

C.T.H. "C"

N01°18'54"E
82.5'

74.25'

SE-SE
8-22-18

EXISTING R/W

EXISTING R/W

P.I. STA. 233+24.54 C.T.H. "S" =
STA. 80+00.00 C.T.H. "C"

N00°39'34"E

C.T.H. "C"

GARY F. AND
REBECCA J. SCHAUMBERG

DANIEL H. ARNOLDDUSSEN AND MICHELLE GRAAN KALTER

82.5'

GLENN A. AND
DOROTHY SCHROEDER

ORVILLE AND
ANGELINE
SWINKLES

THOMAS P. AND
DEBRA M. MURPHY

JAMES L. AND DARLEY HOLTZ-FEE
BLACK CREEK LIMESTONE-L.C.

P.C.=216+57.64

P.T.=221+00.75

15'

CURVE DATA

P.I. 218+79.20
△ = 01°06'28"
D = 00°15'
T = 221.56'
L = 443.11'
E = 1.07'
R = 22918.31'
P.C. 216+57.64
P.T. 221+00.75
L.C. 443.10'
L.C.B. S89°08'08"E

NW-NE
17-22-18

NE-NW
17-22-18

NE-NE
17-22-18

EASEMENT
WISCONSIN PUBLIC SERVICE CORP.
V. 768 R., P. 403
(78)

50'

FARMLAND PRESERVATION AGREEMENT

FREEDOM

WISDOT/CADDS SHEET 75

LEVELS ON - 1,2,3,4,5, 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, 61,62,63

FILE NAME:

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
09-30-1992	C.T.H. "S"	OUTAGAMIE		6037-02-00	
	SCALE, FT. 0 200	GRID FACTOR		FEDERAL PROJECT NUMBER	4.3
				6037-02-72	4.3

TOWN

N

GONNERING PLAT

GONNERING COURT
N 19°31'57" W

SW-SW 9-22-18

SE-SW 9-22-18

NW-NW 16-22-18

NE-NW 16-22-18

MARTIN J. AND PATRICIA MURPHY (43)

(48) ROBERT P. AND KAY L. MITCHELL

FOUND P.K. NAIL
STA. 240+31.84, 4.76' RT.

(47) MICHAEL A. AND NANCY M. VOSTERS

RICHARD P. AND CYNTHIA A. PYNENBERG (49)

LLOYD AND ROSE ANNA GLATZ (51)

GERALD J. SHERIFF (57)

GERALD AND PATRICIA KITTIKO (52)

T.L.E. REQ'D. FOR PRIVATE ENTRANCE CONSTRUCTION

STA. 254+70.36 C.T.H. "S" =
STA. 90+00.00 GONNERING CT.

(59) JOHN AND BETTY VALIGA

(58) WAYNE AND SHARON GLATZ

LYLE SWINKLES (57)

MURPHY ROAD

PATRICK F. AND PATSY A. GEENEN (52)

BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)

C.T.H. "S"

SECTION LINE N89°35'04"E 2636.40'

SECTION LINE N89°32'08"E 2652.44'

P.C.=241+08.60

P.T.=243+69.60

SLOPE INTERCEPTS

HOUSE

SHED

BARN

WELL

HO.

EXISTING R/W

66'

150' TYPICAL

P.I.

LOT 4 C.S.M.75

LOT 3 C.S.M.75

LOT 2 C.S.M.75

LOT 1 C.S.M.75

S82°17'08"E 70.71'

N43°32'07"E 82.18'

N70°28'03"E 33.90'

S22°51'53"E 154.18'

N89°35'04"E 588.92'

N89°35'04"E 380.40'

624.88' S89°06'38"E

N84°26'58"E 100.11'

S89°20'21"E 91.08'

N89°45'31"E 69.30'

N87°26'13"E 400.13'

N89°35'04"E 500.00'

N89°35'04"E 149.18'

N89°35'04"E 617.15'

N89°32'08"E 332.07'

N87°33'11"E 100.12'

N44°29'41"E 98.04'

N89°35'04"E 251.42'

N56°27'34"E 18.39'

N89°24'19"E 24.57'

S45°31'43"E 134.51'

N89°32'08"E 143.58'

N81°00'17"E 101.12'

N00°35'42"W 89.88'

N00°35'42"W

S00°24'56"E 45.00'

N00°24'56"W 33.00'

N00°24'56"W 33.00'

N89°35'04"E 170.79'

N76°05'19"E 51.42'

S00°50'24"W 45.32'

S89°06'38"E 76.75'

S83°07'29"E 92.38'

S89°59'30"E 170.50'

N89°35'04"E 130.40'

N89°35'04"E 268.17'

P.I.=266+68.15 C.T.H. "S"
ANGLE=179°57'04"

STA. 266+61.54 C.T.H. "S" =
STA. 100+00.00 MURPHY ROAD

C.T.H. "S" SURVEY ℄, R/W ℄ AND CONSTRUCTION ℄

FOUND P.K. NAIL
STA. 266+68.15

T.L.E. REQ'D. FOR PRIVATE ENTRANCE CONSTRUCTION

NORMAN A. AND BERNADETTE M. GEHRING (56)

LLOYD W. AND SANDRA R. GEHRING (54)

GEHRINGS PRIME VEAL FARM
A WISCONSIN CORPORATION (53)

MARTIN J. AND PATRICIA MURPHY (43)

KENNETH J. AND BERNICE M. KERKHOFF (61)

ROBERT M. AND JOAN SCHUMACHER (53)

OF

FREEDOM

CURVE DATA

P.I. 242+39.11
Δ = 01°18'18"
D = 0°30'
T = 130.51'
L = 261.00'
E = 0.74'
R = 11459.16'
P.C. 241+08.52
P.T. 243+69.69
L.C. 260.99'
L.C.B. S89°45'47"E

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, 61, 62, 63

FILE NAME:

WISDOT/CADDS SHEET 75

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
	C.T.H. "S"	OUTAGAMIE		6037-02-00	
	SCALE, FT. 0 200	GRID FACTOR		FEDERAL PROJECT NUMBER	4.4
				6037-02-72	4.4

CURVE DATA	CURVE DATA
P.I. 283+00.00	P.I. 291+00.57
△ = 02°17'26"	△ = 02°17'26"
D = 00°30'00"	D = 00°30'00"
T = 229.09'	T = 226.81'
L = 458.11'	L = 453.56'
E = 2.29'	E = 2.24'
R = 11,459.16'	R = 11459.16'
P.C. 280+70.91	P.C. 288+73.76
P.T. 285+29.02	P.T. 293+27.32
L.C.=450.09'	L.C.=453.54'
L.C.B.=S89°19'09"E	L.C.B.=S89°23'23"E

TOWN

SW-SE 9-22-18

LYLE SWINKLES (57)

SE-SE 9-22-18

WILLARD J. AND MARY LOU SCHUH (58)

SW-SW 10-22-18

HENRY C. GEENEN (72)

DANIEL H. AND SHIRLEY WEYLAND (79)

MARION MURPHY 300

P.I. STA. 110+00.00 VINE ROAD
ANGLE=177°58'52"

P.I. 110+00.00 VINE RD.
ANGLE=182°01'08"

STA. 293+20.15 C.T.H. "S" = STA. 109+67.90 VINE ROAD
P.T.=293+27.32

NOT TO SCALE

T.L.E. REQ'D. FOR PRIVATE ENTRANCE CONSTRUCTION

C.T.H. "S" R/W ℄, SURVEY ℄ AND CONSTRUCTION ℄

BURIED TELPHONE CABLE (APPROXIMATE LOCATION)

SLOPE INTERCEPTS

T.L.E. REQ'D. FOR PRIVATE ENTRANCE CONSTRUCTION AND SLOPING

T.L.E. REQ'D. FOR PRIVATE ENTRANCE CONSTRUCTION

C.T.H. R/W ℄ AND CONSTRUCTION ℄

SECTION LINE N89°32'08"E 2652.44'

SECTION LINE N89°33'01"E 2641.41'

SECTION CORNER

℄ BEARING N89°32'08"E

℄ BEARING S88°10'26"E

℄ BEARING N89°33'30"E

N89°32'08"E 400.00'

N89°32'08"E 370.91'

S88°10'26"E 344.74'

N89°33'30"E 2300.00'

N89°32'08"E 500.00'

N89°32'08"E 200.00'

S87°36'07"E 100.12'

S81°56'01"E 101.12'

N89°32'08"E 270.91'

S82°06'23"E 101.13'

S01°10'52"W 37.74'

N89°51'30"E 128.58'

N82°16'32"E 100.69'

S71°55'20"E 82.13'

N89°32'08"E 149.68'

N81°00'17"E 101.12'

S87°36'07"E 100.12'

N89°12'44"E 33.00'

N03°12'59"E 100.24'

S04°47'31"E 100.24'

S00°47'16"E 112.51'

S53°32'37"E 146.08'

N00°47'16"W 111.32'

N53°03'55"E 148.81'

S44°23'59"E 41.59'

S01°13'51"W 176.59'

S83°58'55"E 127.24'

N88°46'09"E 60.00'

N88°46'09"E 50.00'

N86°41'45"E 100.12'

N89°33'30"E 86.48'

N45°23'42"E 64.50'

N01°13'52"E 169.58'

N01°13'52"E 32.10'

L.=230.09' L.C.=230.09' L.C.B.=S89°53'30"E R.=11,509.16'

L.=230.36' L.C.=230.35' L.C.B.=S89°22'41"E R.=11,519.16'

L.=7.17' L.C.=7.17' L.C.B.=N89°34'28"E R=11,459.16'

P.C.=280+70.91

P.C.=288+73.76

P.T.=285+29.02

FOUND P.K. NAIL
STA. 293+21.07, 32.09'LT.

T 22 N
R 18 E
9 10 16 15

ROGER A. AND LOIS M. HANSEN (54)

ROBERT J. TIGLAS AND SHARON L. KOTTLER (66)

LEROY W. AND RHONDA R. ABEL (69)

ROBERT M. AND JOAN SCHUMACHER (63)

WILLARD J. AND MARY LOU SCHUH (68)

NW-NE 15-22-18

ALLEN J. AND BETTY A. HOTTENSTINE (81)

NE-NE 15-22-18

WILLARD J. AND MARY LOU SCHUH (58)

HENRY C. GEENEN (71)

NW-NW 15-22-18

VINE ROAD N00°47'16"W

VINE ROAD N01°13'52"E

EXISTING R/W

66'

BARN

SILO

SHED

HOUSE

WELL

VENT

HO.

PIPE

P.L.

FREEDOM

WISDOT/CADDS SHEET 75

LEVELS ON = 1,2,3,4,5, 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,
48,49,50,51,52,53,54,55,56,57,58,59, 61,62,63

FILE NAME:

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
	C.T.H. "S"	OUTAGAMIE		6037-02-00	
	SCALE, FT. 0 200	GRID FACTOR		FEDERAL PROJECT NUMBER	4.5
				6037-02-72	4.5

TOWN

SW-SW
10-22-18

SE-SW
10-22-18

SW-SE
10-22-18

N

FIRST ADDITION TO
WOODLAND
SUBDIVISION

EASEMENT
WISCONSIN ELECTRIC POWER CO.
J. 7763, I. 40-43, DOC. 919766

EASEMENT
WISCONSIN ELECTRIC POWER CO.
J. 7763, I. 40-43, DOC. 919766

HENRY C. GEENEN
(71)

ELLEN M. REIMER

DONALD P. AND LOIS A. GONNERING
(74)

DEWAINE W. AND PATRICIA A. LOCY

BLDG. MARION MURPHY

STA. 321+81.43 C.T.H. "S" =
STA. 119+67.59 OAK LANE

OAK LANE

NO0°22'23"E

2" GAS

P.L.E. REQUIRED FOR DRAINAGE

T.L.E. REQUIRED FOR SLOPING

SLOPE INTERCEPTS

SHED

HO.

VENT

CULVERTS FIELD SECT

POLE SIGN

EXISTING R/W

66'

10'

50'

60'

300 305 310 315 320 325 330

R BEARING N89°33'30"E

SECTION LINE N89°33'01"E 2641.41'

C.T.H. "S"

SECTION LINE N89°34'13"E 2642.67'

N89°33'30"E 2300.00'

N89°33'30"E 1,225.00'

BURIED TELEPHONE CABLE
(APPROXIMATE LOCATION)

SLOPE INTERCEPTS

C.T.H. "S" R/W ℄
AND CONSTRUCTION ℄

DEWAINE W. AND PATRICIA A. LOCY
(73)

EBS
TOPSOIL

S84°43'52"E
100.50'

FOUND P.K. NAIL
STA. 319+62.50, 32.46'LT.

T 22 N
R 10 E
15
18

HENRY C. GEENEN
(71)

ELLEN M. REIMER
(76)

NW-NW
15-22-18

NE-NW
15-22-18

NW-NE
15-22-18

FREEDOM

LEVELS ON - 1,2,3,4,5, 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, 61,62,63

FILE NAME:

WISDOT/CADDS SHEET 75

REVISION DATE	ROUTE	COUNTY	DATE	R/W PROJECT NUMBER	SHEET NUMBER
09-30-1992	C.T.H. "S"	OUTAGAMIE		6037-02-00	
	SCALE, FT. 0 200	GRID FACTOR		FEDERAL PROJECT NUMBER	4.6
				6037-02-72	4.6

TOWN

EASEMENT
FREEDOM SANITARY DISTRICT NO. 1

GERALD J. VAN CAMP (82)

SW-SE 10-22-18

SE-SE 10-22-18

CURVE DATA

P.I. 341+00.49
△ = 03°36'57"
D = 00°30'00"
T = 361.70'
L = 723.17'
E = 5.71'
R = 11459.16'
P.C. 337+38.79
P.T. 344+61.96
L.C.=723.05'
L.C.B.=N87°45'01"E

N

T.L.E. REQ'D. FOR SLOPING

ROBERT AND GRACE GARVEY (91)

DONALD P. AND LOIS A. GONNERING (74)

JOSEPH L. AND ROSE MARY GREEN (87)

THOMAS A. AND MICHELLE M. WASURICK (90)

ANDREW D. BOS AND ANN C. RUDNICK (89)

MICHAEL J. LIEBERGEN (88)

JOSEPH LUDWIG, JR. (86)

RONALD E. AND LAVONNE GREINER (84)

EUGENE F. AND MARY GONNERING (37)

SCOTT LUDWIG (85)

MALLARD LANE

P.C.=337+61.96

P.T.=344+61.96

330

340

345
N85°56'33"E
143.98'

EQUATION

STA. 346+05.96 C.T.H. "S" BK.=
STA. 346+04.67 C.T.H. "S" AH.=
STA. 140+00.00 S.T.H. 55

60'

EXISTING R/W

C.T.H. "S"

SECTION LINE N89°34'13"E 2642.67'

R BEARING N89°33'30"E

N89°33'30"E 1225.00'

SLOPE INTERCEPTS

S68°38'25"E
26.93'

N89°33'30"E
200.00'

N75°31'19"E
103.08'

N89°33'30"E
211.96'

L.=672.46'
L.C.=672.36'
L.C.B.=N87°53'01"E
R.=11,504.16'

N03°47'27"W
45.00'

END RELOCATION ORDER
STA. 346+05.96 BK.

FOUND P.K. NAIL
STA. 346+05.96 BK.

ELLEN M. REIMER (76)

STA. 339+58.09 C.T.H. "S"=
STA. 129+70.07 MALLARD LANE

FREEDOM SCHOOL DISTRICT NO.3
JOINT TOWNS OF FREEDOM,
KAUKAUNA, ONEIDA, CENTER,
AND OSBURN, OUTAGAMIE COUNTY,
WISCONSIN, A MUNICIPAL CORP.
(92)

(93) RIGHT-OF-WAY GRANT
WISCONSIN BELL, INC.
J.8339, I.28-30, DOC. 933892
D. 03/10/1988 REC. 04/04/1988

NW-NE 15-22-18

NE-NE 15-22-18

S.T.H. 55

FREEDOM

WISDOT/CADDS SHEET 75

LEVELS ON • 1,2,3,4,5, 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, 61,62,63

FILE NAME:

6037-02-72 | 5.0

PLAN AND PROFILE
FOR
C.T.H. "S" OUTAGAMIE COUNTY

NOTE: SEE 1"= 20' CONSTRUCTION DETAIL FOR CURB AND GUTTER LAYOUT

RICHARD J. AND AND DOROTHY J. RICKERT

IGNATIUS AND ANNA MURPHY-FEE
THOMAS P. AND DEBBIE M. MURPHY-L.C.

IGNATIUS AND ANNA MURPHY

MARTIN J. AND PATRICIA MURPHY

MERLIN J., SR. AND SHIRLEY BESSETTE

GLENN A. AND DOROTHY SCHRODER

JAMES L. AND DARLEY HOLTZ

THOMAS P. AND DEBRA M. MURPHY

DRVILLE AND ANGELINE SWINKLES

RONALD E. AND JEAN C. VANDENBERG

GARY F. AND REBECCA J. SCHAUMBERG

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
19	213+93	6" NAIL IN 6" BOX ELDER-53' LT.	814.67
20	224+50	6" NAIL IN "H" POLE TRANS. LINE-49' LT.	808.31
21	233+82	SW CORN. CONC. PORCH 37.5' LT.	815.56

S 89°41'22" E

S 88°34'54" E

S 89°06'38" E

N00°18'54"E

N00°39'34"E

STA. 233+24.54 C.T.H. "S" = STA. 80+00.00 C.T.H. "C"

STA. 233+24.53 C.T.H. "S"

BEGIN PROJECT
STA. 235+00.00

UNCL. EXC. = 1663 C.Y.
FILL = 86 C.Y.
HAUL OUT 1543 C.Y. TO
STA. 293+20 TO STA. 293+40

C.T.H. "C" PROFILE

PRESENT PROFILE

FINISHED GRADE

400' V.C.

P.I. 0+00
805.05

P.I. 4+00
809.05

P.I. 8+00
801.51

-3.00%

+3.75%

STATE PROJECT NUMBER 6037-02-72 | SHEET NO. 5.1

PLAN AND PROFILE FOR C.T.H. "S" OUTAGAMIE COUNTY

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
22	241+35	6" NAIL IN 12" ASH-56' LT.	787.71
23	250+50	SW CORN. CONC. STEP @ HOUSE-54' LT.	764.29
24	259+36	CHIS. BOX ON SE WINGWALL-21' RT.	746.27
25	100+71	6" NAIL IN PP-23' RT. MURPHY RD.	749.07

MARTIN AND PATRICIA MURPHY

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

C.T.H."S" SURVEY ℄ AND CONSTRUCTION ℄

RICHARD P. AND CYNTHIA A. PYNENBERG

MICHAEL A. AND NANCY M. VOSTERS

ROBERT P. AND KAY L. MITCHELL

LLOYD AND ROSE ANNA GLATZ

GONNERING COURT

CONSTRUCTION LIMITS STA. ~~93+00.00~~ 92+00

STA. 254+70.36 C.T.H. "S" = STA. 90+00.00 GONNERING COURT

GERALD J. SHERIFF AND DONALD R. LECKER, JR.

BURIED TELEPHONE CABLE (APPROXIMATE LOCATION)

GERALD AND PATRICIA KITTIKO

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

BEAM GUARD REQ'D. (BY OTHERS)

JOHN AND BETTY VALIGA

CONSTRUCTION LIMITS STA. 102+~~50.00~~ 25.00

STA. 266+61.54 C.T.H. "S" = STA. 100+00.00 MURPHY ROAD

P.I. LYLE SWINKLES

PATRICK F. AND PATSY A. GEENEN

WAYNE AND SHARON GLATZ

C.T.H. "S"

N 89°35'04" E

N 89°32'08" E 3.75'x8' CONC. BOX CULV. (REMOVE)

SILT FENCE REQ'D.

TO BE REMOVED (BY OTHERS)

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D. (BY OTHERS)

NORMAN A. AND BERNADETTE M. GEHRING

BRIDGE TO REMAIN (P-44-56)

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

CONCRETE CURB AND GUTTER 36-INCH, TYPE "D" REQ'D. (BY OTHERS)

KENNETH J. AND BERNICE M. KERKHOFF

ROBERT M. AND JOAN S. SCHUMACHER

LLOYD W. AND SANDRA G. GEHRING

GEHRINGS PRIME VEAL FARM

CURVE DATA
P.I. 242+39.11
△ = 1°18'21"
D = 0°30'
T = 130.59'
L = 261.17'
E = 0.74'
R = 11459.16'
P.C. 241+08.52
P.T. 243+69.69
S.E.=N.C.

P.I. STA. 242+39.11 C.T.H. "S"

STA. 254+70.36 C.T.H. "S"

STA. 266+61.54 C.T.H. "S"

NOTE: SEE 1" = 50' CONSTRUCTION DETAIL FOR CURB AND GUTTER LAYOUT AT GONNERING CT. AND 1" = 20' CONSTRUCTION DETAIL FOR MURPHY ROAD (see sheet 2.6 & 2.7)

EXCEPTION TO NET ℄ LENGTH STA. 258+84.93 TO STA. 259+39.76

EROSION MAT

UNCL. EXC. = 14,293 C.Y.
FILL = 10,208 C.Y.
NOTE: INCLUDES GONNERING CT. AND MURPHY RD.

UNCL. EXC. = 438 C.Y.
FILL = 942 C.Y.

GONNERING COURT PROFILE
STA. 90+00 GONNERING COURT = STA. 254+70.36 C.T.H. "S"
UNCL. EXC. = 550 C.Y.
FILL = 0 C.Y.

MURPHY ROAD PROFILE
STA. 100+00 MURPHY ROAD = STA. 266+61.54 C.T.H. "S"
UNCL. EXC. = 1,043 C.Y.
FILL = 0 C.Y.

STA. 259+00 EXISTING BRIDGE (TO REMAIN)

STA. 270+00 1-14'-10" x 4'-10" ALUMINUM BOX CULVERT REQ'D.

LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100

FILE NAME: HDGN1

Revised 3-4-93

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	5.2

PLAN AND PROFILE
FOR
C.T.H. "S" OUTAGAMIE COUNTY

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
26	274+15	6" NAIL IN WILLOW-69' RT.	743.62
27	283+31	6" NAIL IN BOX ELDER-57' RT.	752.19
28	112+96	6" NAIL IN PP-32' LT. VINE RD.	746.59

LYLE SWINKLES
DANIEL H. AND SHIRLEY WEYLAND
C.T.H. "S" SURVEY ℄ AND CONSTRUCTION ℛ
(REMOVE) R/W LINE
3.75'x18' CONC. BOX CULV.
R/W LINE
C.T.H. "S"
N89°32'08"E
SILT FENCE REQ'D.
LEROY W. AND RHONA R. ABEL
ROGER A. AND LOIS M. HANSEN
ROBERT J. TIGLAS AND SHARON L. KOTTLER
WILLARD J. AND MARY LOU SCHUH
ALLEN J. AND BETTY A. HOTTENSTINE
BURIED TELPHONE CABLE (APPROXIMATE LOCATION)
-EROSION MAT

CURVE DATA
P.I. 283+00.00
△ = 2°-17'-26"
D = 0°-30'
T = 229.09'
L = 458.11'
E = 2.29'
R = 11,459.16'
P.C. 280+70.91
P.T. 285+29.02
S.E. N.C.

STA. 286+93.66 C.T.H. "S" P.O.T.
CONCRETE CURB AND GUTTER
30-INCH, TYPE "D" REQ'D.
LIMESTONE WALL (TO REMAIN)
STA. 293+20.59 C.T.H. "S"
P.C=288+73.76
WILLARD J. AND MARY LOU SCHUH
CONSTRUCTION LIMITS
STA. 112+50.00
P.I. STA. 291+00.57 CONST. ℛ
LOCATED 32.0' RT. OF
STA. 291+00.00 SURVEY ℄

CURVE DATA
P.I. 291+00.57
△ = 2°-16'-04"
D = 0°-30'
T = 226.81'
L = 453.56'
E = 2.24'
R = 11,459.16'
P.C. 288+73.76
P.T. 293+27.32
S.E. N.C.

CONCRETE CURB AND GUTTER
36-INCH, TYPE "D" REQ'D. (BY OTHERS)
WILLARD J. AND MARY LOU SCHUH
CONSTRUCTION LIMITS
STA. 107+00.00

HENRY C. GEENEN
STA. 293+20.59 C.T.H. "S" = STA. 110+00.00 VINE ROAD
P.T=293+27.32
MARION MURPHY
C.T.H. "S" SURVEY ℄
C.T.H. "S" CONSTRUCTION ℛ
STA. 293+20.15 C.T.H. "S" = STA. 109+67.90 VINE ROAD
SILT FENCE REQ'D.
HENRY C. GEENEN
STA. 293+20.59, VINE ROAD LEFT CONSTRUCT TYPE "B" INTERSECTION, RIGHT CONSTRUCT TYPE "A" INTERSECTION.
NOTE: SEE 1" = 20' CONSTRUCTION DETAIL FOR CURB AND GUTTER LAYOUT. SHEET 2.5 & 2.6

UNCL. EXC. = 6,643 C.Y.
FILL = 4,745 C.Y.
NOTE: INCLUDES 159 C.Y. UNCL. EXC. AND 814 C.Y. FILL FROM VINE RD.

UNCL. EXC. = 240 C.Y.
FILL = 1,272 C.Y.
INCLUDES 207 C.Y. UNCL. EXC. AND 1,054 C.Y. FILL FROM VINE RD.
HAUL IN 1,543 C.Y. FROM STA. 235+00 TO STA. 239+10

UNCL. EXC. = 7,047 C.Y.
FILL = 5,034 C.Y.

FINISHED GRADE
PRESENT PROFILE
P.I. 782.00
P.C. 749.77
P.T. 749.96
E.B.S.
1200' V.C.
STA. 293+95 I-36" C.M.P. REQ'D.

VINE ROAD PROFILE
STA. 109+67.90 VINE ROAD
STA. 293+20.15 C.T.H. "S"

	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300
	746.41	746.79	747.16	747.53	747.91	748.28	748.65	749.02	749.40	749.77	750.12	750.40	750.62	750.79	750.89	750.94	750.92	750.85	750.71	750.52	750.27	749.96	749.62	749.28	748.94	748.60	748.26	747.92	747.58	747.23	746.89

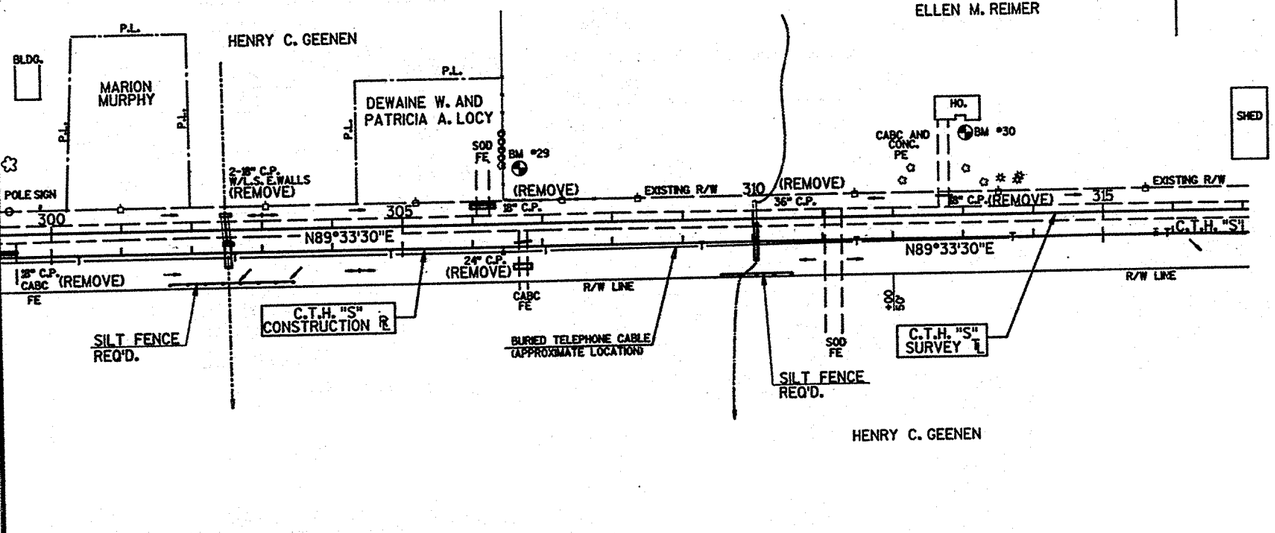
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63

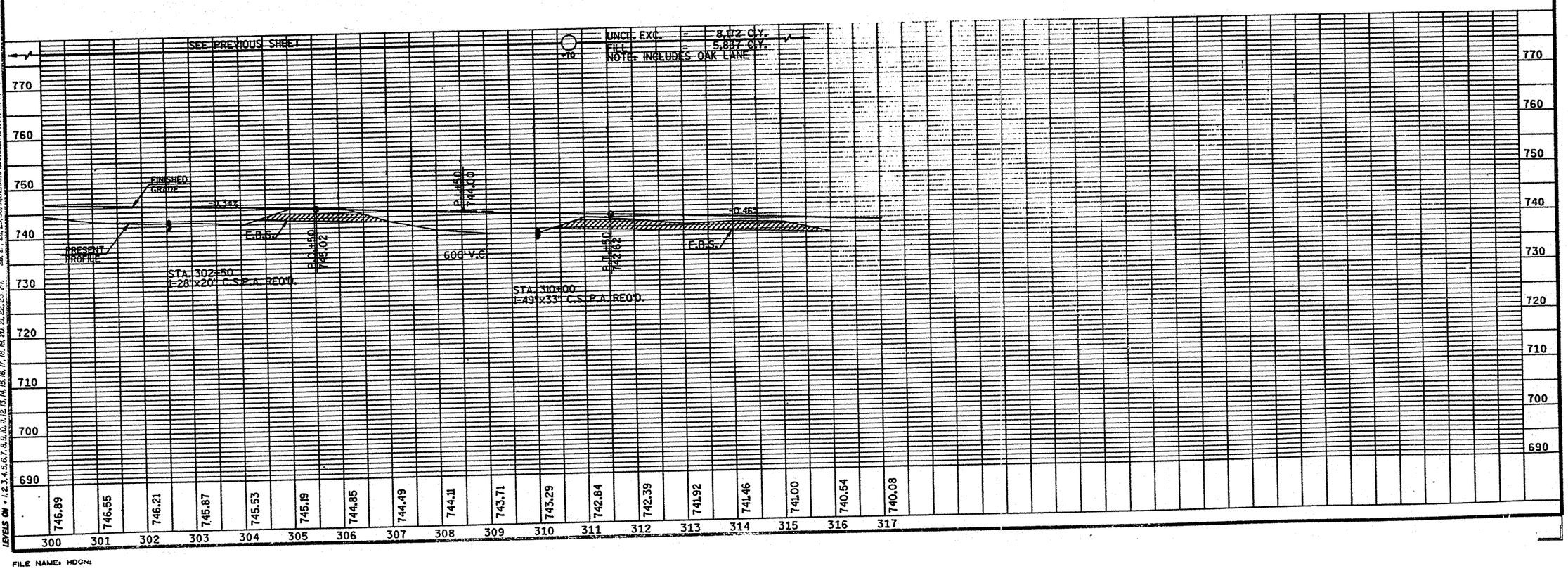
FILE NAME: HDGN:

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	5,3

PLAN AND PROFILE
FOR
C.T.H. "S" OUTAGAMIE COUNTY

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
29	306+50	6" NAIL IN 14" BOX ELDER-100' LT.	748.94
30	312+91	SE CORN. OF CONC. PORCH-133' LT.	747.78





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,

FILE NAME: HDGN:

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
31	319+59	USGS TABLET "TT13-B1954"-36'LT.	736.24
32	322+51	SW COR. OF CONC. FOOTING-73'LT.	737.25

STATE PROJECT NUMBER 6037-02-72 — SHEET NO. 5.4

PLAN AND PROFILE FOR C.T.H. "S" OUTAGAMIE COUNTY

ELLEN M. REIMER

DONALD P. AND LOIS P. GONNERING

5" MAPLE W/PK — 66.18' — OAK LANE — 66.48' — 5" MAPLE W/PK — C.T.H. "S" — 86°E — PK — 5/8" REBAR W/CAP

STA. 321+81.39 C.T.H. "S"

OAK LANE SURVEY ℄ AND CONSTRUCTION ℄

CONSTRUCTION LIMITS STA. 120+~~45.00~~ +63.00

STA. 321+81.39 SURVEY ℄ = STA. 120+00.00 OAK LANE

EXISTING R/W — 8" SANITARY — OAK LANE N22°22'33"E — SAW CUT REQ'D. — MH — 30 — 31 — 32 — EXISTING R/W — T.L.E. — 8" SANITARY — DONALD P. AND LOIS P. GONNERING — EXISTING R/W

SAW CUT REQ'D. — ASPH. PE. — C.T.H."S" SURVEY ℄ — BURIED TELEPHONE (APPROXIMATE LOCATION)

EXISTING R/W — (REMOVE) 18" C.M.P. — 40'R. — 737.50 — 737.40 — 40'R. — 4" C.S.W. REQ'D. (BY OTHERS)

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

317 — C.T.H. "S" N89°34'13"E — 318 — 319 — 320 — 321 — 322 — 323

TYPE 2 CURB RAMP REQ'D. — 30" CMP (REMOVE)

737.62 — 737.30 — 737.74 — 737.19 — 736.91 — 737.35 — 737.55

100' TAPER — 22'CLEAR — 18" CMP (REMOVE) — 738.01 — 738.23 — 737.77 — 737.31

EDGE OF SHOULDER — EDGE OF PAVEMENT — 8' — 12' — 12' — 8'

317 — 318 — C.T.H. "S" N89°33'30"E — 319 — BM #31 — 320 — 321 — 322 — 323

EDGE OF PAVEMENT — EDGE OF SHOULDER

C.T.H."S" CONSTRUCTION ℄ — CABC PE

NOTE: CURB RADII ARE SHOWN TO FACE OF CURB.

NOTE: STORM SEWER IS NOT PART OF THIS CONTRACT.

STA. 321+81.43 CONSTRUCTION ℄ = STA. 119+67.59 OAK LANE

GAS LINE (APPROXIMATE LOCATION) — CAUTION — ELLEN M. REIMER — -EROSION MAT

HENRY C. GREENEN — P.L. — R/W LINE — DEWAUNE W. AND PACTRICA LOCY — 50' — P.I. +00 — P.I. +00 — SEE PREVIOUS SHEET — R/W LINE

PRESENT PROFILE — FINISHED GRADE — -0.46% — P.C.=00 — 737.31

STA.320+00 1-30" C.M.P. REQ'D. SKEW 85° RHF

SKEW 15° RHF

OAK LANE PROFILE — VERTICAL: 1" = 5' — HORIZONTAL: 1" = 100' — STA. 119+67.59 OAK LANE = STA. 321+81.43 C.T.H. "S"

PRESENT PROFILE — P.I.=+00 737.48 — P.I.=+45 736.40 — +1.18% — FINISHED GRADE — UNCL. EXC. = 123 C.Y. FILL = 0 C.Y.

119	120	121	122	123	124
737.48	737.40				
740.08	739.85	739.62	739.39	739.15	738.93

317	+50	318	+50	319	+50	320	+50	321	+50	322	+50	323
738.69		738.47		738.23		738.01		737.77		737.55		737.31

742 740 738 736 734 732 730 728 726

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= H0204A

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	5.5

PLAN AND PROFILE
FOR
C.T.H."S" OUTAGAMIE COUNTY

DONALD P. AND LOIS GONNERING

BURIED GAS (APPROXIMATE LOCATION)

CAUTION

N

PERMANENT LIMITED EASEMENT

+50 85' +00 85'

T.L.E.

MH 8" SANITARY

BURIED TELEPHONE (APPROXIMATE LOCATION)

C.T.H."S" SURVEY ℄

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

EXISTING R/W

EXISTING R/W

4" C.S.W. (BY OTHERS)

3" GAS

323 324 325 326 327 328 329

C.T.H. "S" N89°34'13"E

35 34

736.91 736.70 736.52 736.38 736.28 736.21 736.19 736.05 736.11 736.20 736.30 736.41 736.55 736.74

22' CLEAR

323 737.31 737.10 324 736.92 736.78 325 736.68 736.61 326 736.58 736.58 327 736.62 736.70 328 736.81 736.95 329 737.14

N89°33'30"E

22' CLEAR

12'

8'

EDGE OF PAVEMENT

EDGE OF SHOULDER

C.T.H."S" CONSTRUCTION ℄

EDGE OF PAVEMENT

EDGE OF SHOULDER

36

NOTE: STORM SEWER IS NOT PART OF THIS CONTRACT.

ELLEN M.REIMER

-EROSION MAT

+00 60'

R/W LINE

SEE PREVIOUS SHEET

R/W LINE

742 740 738 736 734 732 730 728 726

P.C. 1+00 736.85

PRESENT PROFILE

FINISHED GRADE

800' V.C.

-0.46%

+0.69%

E.B.S.

P.I. 1+00 735.46

STA. 324+75 F-30" C.M.P. REQ'D.

737.31 737.10 736.92 736.78 736.68 736.61 736.58 736.58 736.62 736.70 736.81 736.95 737.14

323 +50 324 +50 325 +50 326 +50 327 +50 328 +50 329

FILE NAME: 60214

Revised 3-4-93

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	5.6

PLAN AND PROFILE
FOR
C.T.H. "S" OUTAGAMIE COUNTY

BURIED BAS (APPROXIMATE LOCATION)
CABC PE
30" C.P. (REMOVE)
4" C.S.W. REQ'D. (BY OTHERS)
T.L.E.
EXISTING R/W
8" SANITARY
MH
DONALD P. AND LOIS A. GONNERING
SILT FENCE REQ'D.
GERALD J. VAN CAMP
C.T.H. "S" CONSTRUCTION
C.T.H. "S" SURVEY
EUGENE F. AND MARY GONNERING
LIFT STATION
4" FORCE MAIN
CONSTRUCT CABC PE
18" CMP
(REMOVE)
C.T.H. "S" N89°34'13"E
329 330 331 332 333 334 335
736.74 736.96 737.21 737.50 737.82 738.22 738.95 739.20 739.54 739.89 740.23 740.58
737.14 737.36 737.61 737.90 738.22 738.95 739.25 739.60 739.94 740.29 740.63 740.98
N89°33'30"E
22' CLEAR
12"
8"
EDGE OF PAVEMENT
EDGE OF SHOULDER
BM #33
TRANSITION CURB AND GUTTER FROM 20' TO 22' CLEAR IN 75' (TYPICAL)
18" C.P. (REMOVE)
100' TAPER
STEEL PLATE BEAM GUARD REQ'D. (BY OTHERS)
EXCEPTION TO NET ℄ LENGTH STA. 331+56.51 TO STA. 332+23.43
CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.
CABC PE
30"
WOODS
BURIED TELEPHONE (APPROXIMATE LOCATION)
NOTE: STORM SEWER IS NOT PART OF THIS CONTRACT
R/W LINE
ELLEN M. REIMER
DUCK CREEK
+25 60'
+50 70'
FREEDOM SCHOOL DISTRICT

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
33	331+64	CHIS. BOX IN SW COR. ABUT. -15' RT.	738.41

SEE PREVIOUS SHEET
SEE NEXT SHEET

PRESENT PROFILE
FINISHED GRADE
P.I. 331+00 738.22
+0.69%
+38
+24

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

FILE NAME: HDGN1

Revised 3-4-93

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	5.7

PLAN AND PROFILE
FOR
C.T.H. "S" OUTAGAMIE COUNTY

C.T.H. "S" CURVE DATA
P.I. 341+00.49
△ = 3°-36'-57"
D = 0°-30'
T = 361.70'
L = 723.17'
E = 5.71'
R = 11,459.16'
P.C. 337+38.79
P.T. 344+61.96

MALLARD LANE CURVE DATA
P.I. 130+92.51
△ = 5°-48'-00"
D = 5°-30'
T = 52.77'
L = 105.45'
E = 1.34'
R = 1,041.74'
P.C. 130+39.74
P.T. 131+45.19

EUGENE F. AND MARY GONNERING
RONALD E. AND LAVONNE GREINER
BEATRICE M. LUDWIG
MAY LUDWIG
JOESPH L. AND ROSE MAY GREEN

MALLARD LANE SURVEY ℄ AND CONSTRUCTION ℞
C.T.H. "S" CONSTRUCTION ℞
C.T.H. "S" SURVEY ℄
MALLARD LANE
N01°05'21"W
SAW CUT REQ'D.
CONSTRUCTION LIMITS STA. 130+65.00
TYPE 2 CURB RAMP REQ'D.
P.C.=130+39.74
P.C.=337+38.79
C.T.H. "S" N89°34'13"E
N89°33'30"E
GAS LINE (APPROXIMATE LOCATION)
BURIED TELPHONE CABLE (APPROXIMATE LOCATION)
4" FORCED MAIN
18" RCCP (REMOVE)
18" C.P.
18" CMP
8" SANITARY
MH (ADJ.)
(REMOVE)
(REMOVE) 4" C.S.W. REQ'D. (BY OTHERS)
4" C.S.W. REQ'D. (BY OTHERS)
EXISTING R/W
T.L.E.
CONC. P.E.
ASPH. P.E.
WOODS
22' CLEAR
30'
40' R
36' CL ULTIMATE

NOTE: STORM SEWER IS NOT PART OF THIS CONTRACT.

CONCRETE CURB AND GUTTER 30-INCH, TYPE "D" REQ'D.

STA. 339+57.25 SURVEY ℄ = STA. 130+00.00 MALLARD LANE

STA. 338+58.09 CONSTRUCTION ℞ = STA. 129+70.07 MALLARD LANE

P.I. STA. 341+00.49 CONST. ℞ LOCATED 32.0' RT. OF STA. 341+00.00 SURVEY ℄
NOTE: CURB RADII ARE SHOWN TO FACE OF CURB.

FREEDOM SCHOOL DISTRICT

UNCL. EXC.	=	5,917 C.Y.
FILL	=	5,127 C.Y.
BORROW	=	1,713 C.Y.

NOTE: INCLUDES MALLARD LANE

PRESENT PROFILE
FINISHED GRADE
+0.69%
F.B.S.
P.C.=341+77

MALLARD LANE PROFILE
STA. 129+70.07 MALLARD LANE = STA. 338+58.09 C.T.H. "S"
FINISHED GRADE
PRESENT PROFILE
12.0%
4.28%
VERTICAL 1" = 10'
HORIZONTAL 1" = 100'

335 +50 336 +50 337 +50 338 +50 339 +50 340 +50 341

FILE NAME: HDGN:

Revised 3-4-93

STATE PROJECT NUMBER	SHEET NO.
6037-02-72	5.8

PLAN AND PROFILE
FOR
C.T.H."S" OUTAGAMIE COUNTY

JOESPH L. AND ROSE MAY GREEN
MICHAEL J. LIEBERGEN
ANDREW D. BOS AND ANN C. RUDNICK
THOMAS A. AND MICHELLE M. WASURICK
ROBERT AND GRACE GARVEY
EXISTING R/W
(REMOVE) 18" RCCP
(REMOVE) 15" RCCP
(REMOVE) 18" CMP
15" RCCP (REMOVE)
SAW CUT REQ'D.
CONC. PE
ASPH PE
CABC PE
P.I. PUMP
WELL
T.L.E.
L.P.
P.I.
MH (ADJ.)
8" SANITARY
R/W POST
C.T.H."S" SURVEY ℄
GAS LINE (APPROXIMATE LOCATION)
CAUTION
WITNESS MONUMENT
4" C.S.W. REQ'D. (BY OTHERS)
P.T.= 344+61.96
TAPER TO MATCH EXISTING IN 15'
22' CLEAR
S.T.H. "55" N00°40'50"E
S.T.H. "55" N01°14'35"E
EQUATION
STA. 346+05.94 C.T.H."S" =BK
STA. 346+04.67 C.T.H."S" =AH
STA. 140+00.00 S.T.H."55"
EXISTING CURB AND GUTTER TO REMAIN
TAPER TO MATCH EXISTING CURB AND GUTTER IN 5'(TYP.)
341 342 343 344 345 346 347
744.70 745.02 745.10 745.32 745.42 745.60 745.72 745.86 746.00 746.10 746.12 746.26 746.32 746.50 746.52 746.72 746.92 747.11
C.T.H."S" N89°34'13"E
C.T.H."S" N85°56'33"E
30" CMP (REMOVE)
CONSTRUCT FE
BURIED TELEPHONE (APPROXIMATE LOCATION)
C.T.H."S" CONSTRUCTION ℄
R/W LINE
CONCRETE CURB AND GUTTER 30-INCH,TYPE "D" REQ'D.
NOTE: STROM SEWER IS NOT PART OF THIS CONTRACT.
P.I. STA. 341+00.49 CONST. ℄
LOCATED 32.0' RT. OF STA. 341+00.00 SURVEY ℄
FREEDOM SCHOOL DISTRICT
ALL TIES ARE WITNESS MONUMENTS
C.T.H."S" P.K. S.T.H. "55"
80.46 86.18 89.92
STA. 346+05.94 C.T.H."S" =BK
STA. 346+04.67 C.T.H."S" =AH
STA. 140+00.00 S.T.H."55"

CURVE DATA

P.I. 341+00.49
△ = 3°-36'-57"
D = 0°-30'
T = 361.70'
L = 723.17'
E = 5.71'
R = 11,459.16'
P.C. 337+38.79
P.T. 344+61.96
S.E. N.C.

36" CMP
END OF PROJECT
STA. 345+38.00

BENCH MARKS			
NO.	STA.	DESCRIPTION	ELEV.
34	341+64	SE COR. OF TOP STEP-78' LT.	750.12
35	131+56	6" NAIL IN PP-29' RT.	747.30

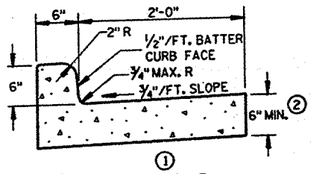
SEE PREVIOUS SHEET

PRESENT PROFILE
FINISHED GRADE
+0.69%
400' V.C.
+0.39%
P.I.+00 746.10
P.T.+50 746.92
P.I.+38.00 747.26
+38
752 750 748 746 744 742 740 738 736
745.10 745.42 745.72 746.00 746.26 746.50 746.72 746.92 747.11
341 +50 342 +50 343 +50 344 +50 345 +50 346 +50 347

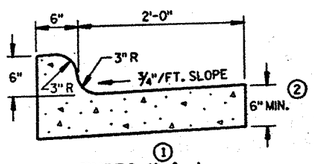
LEVELS ON = 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,50,51,52,53,54,55,56,57,58,59,60,61,62,63

FILE NAME: HDGN:

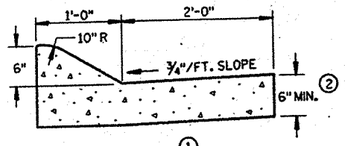
Revised 3-4-93



① TYPES A & D

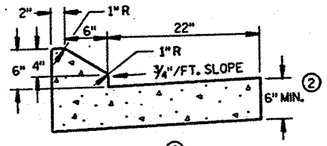


① TYPES K & L

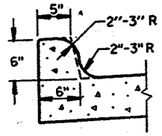


① TYPES A & D

CONCRETE CURB & GUTTER 36"

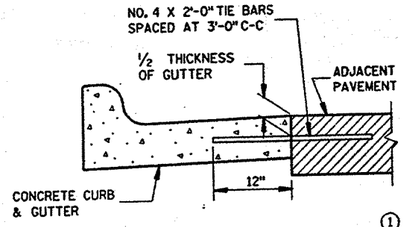


① TYPES G & J



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.

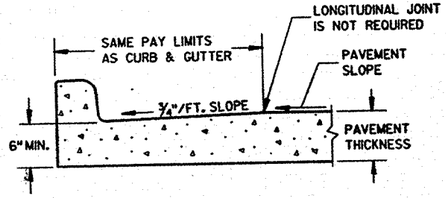
JOINTS IN INTEGRAL CURB & GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME SEALANT SPECIFIED FOR THE PAVEMENT JOINT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB & GUTTER.

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

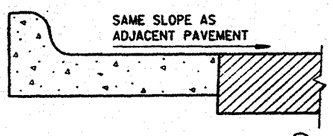
① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G AND K.

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.

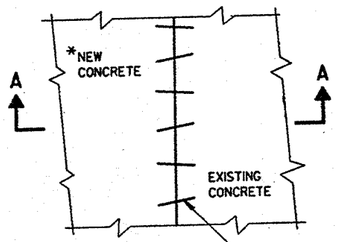
③ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATIONS WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER

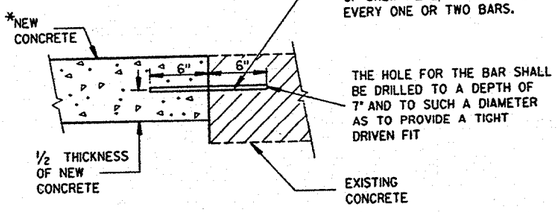


REVERSE SLOPE GUTTER ③
(TYPICAL FOR ALL CURB & GUTTER TYPES)



PLAN VIEW

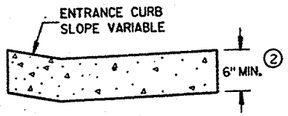
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



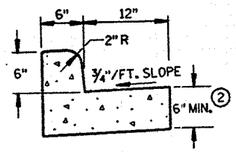
NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT

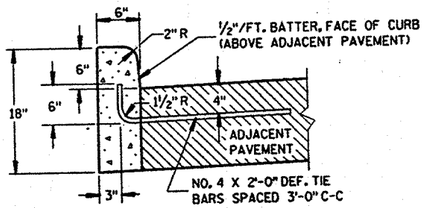
SECTION A-A
PAVEMENT TIES



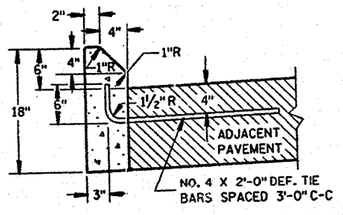
DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)



① TYPES A & D
CONCRETE CURB & GUTTER 18"



① TYPES A & D



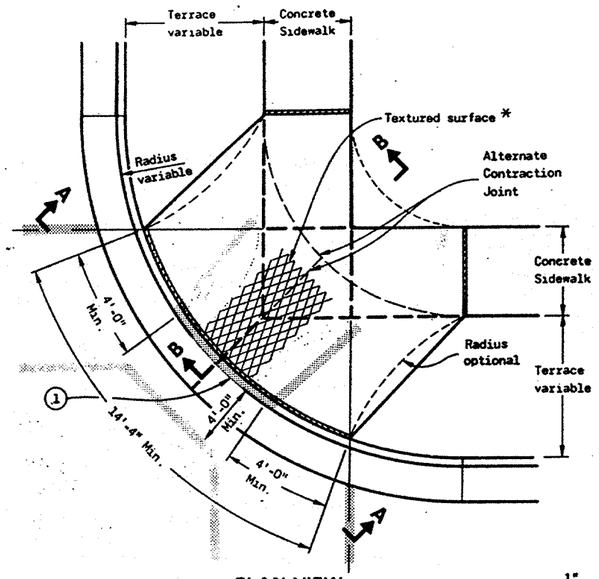
① TYPES G & J

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

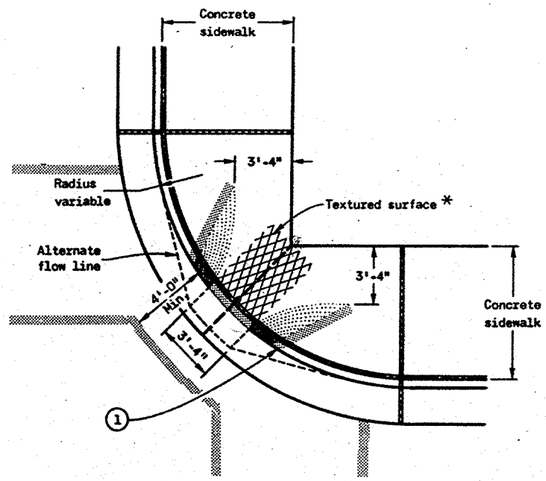
S.D.D. 8 D 1-11



PLAN VIEW

TYPE 1 RAMP

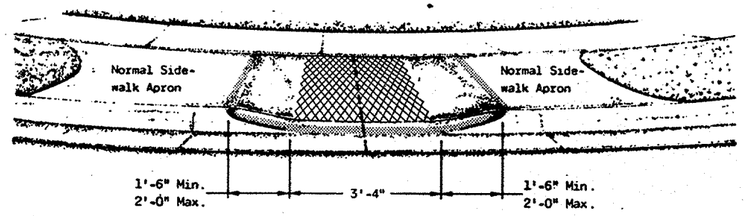
(CENTER OF CORNER RADIUS)



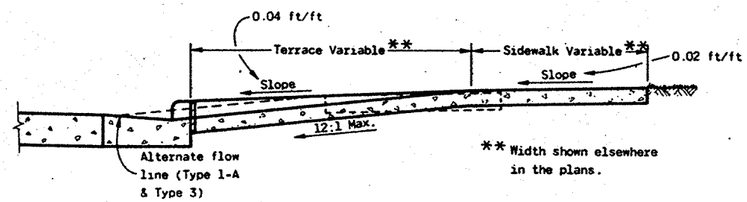
PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)



VIEW **A-A**



SECTION **B-B**

$\frac{1}{2}$" EXPANSION JOINTS - SIDEWALK

CONTRACTION JOINTS

Location of joints may be varied from those shown to better fit site conditions and/or local government preference.

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.

Ramps shall be built at 12:1 or flatter. When necessary, the sidewalk elevation may be lowered to meet the high point on the ramp.

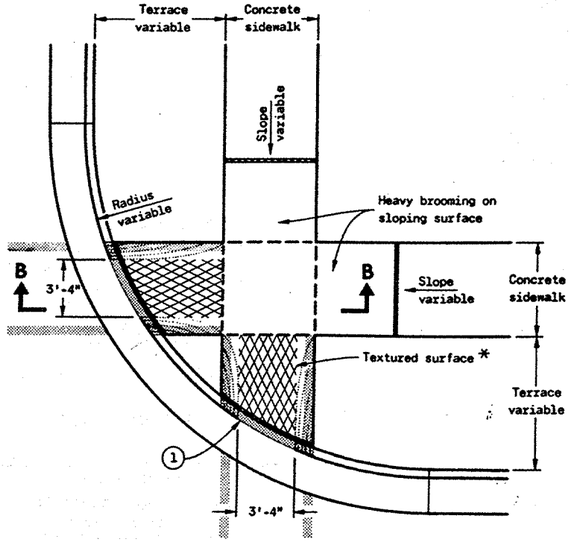
Type 1 or Type 1-A Ramps shall have a normal sidewalk apron and curb on both sides of ramp

Curb ramps shall be measured and paid for as Concrete Sidewalk and Concrete Curb and Gutter.

Surface texturing shall consist of linear impressions approximately $\frac{1}{4}$ inch to $\frac{3}{8}$ inch in depth and width, oriented to provide a uniform pattern of diamond shapes measuring approximately $1\frac{1}{4}$ inches in width by $2\frac{1}{4}$ inches in length, with the length being parallel to the direction of pedestrian movement. This surface texture may be achieved by impressing and removing a piece of expanded metal regular industrial mesh into the surface of the ramp while the concrete is in a plastic state

(1) The ramp shall be bordered on both sides and on the curb line with a 4 inch wide yellow stripe or with brick of a contrasting color. Normally the paint stripe alternate will be used. The municapality or the department will apply this striping unless otherwise specified in the contract.

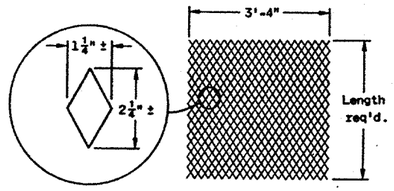
If a municapality requires the brick alternate, special details and provisions are shown elsewhere in the plans.



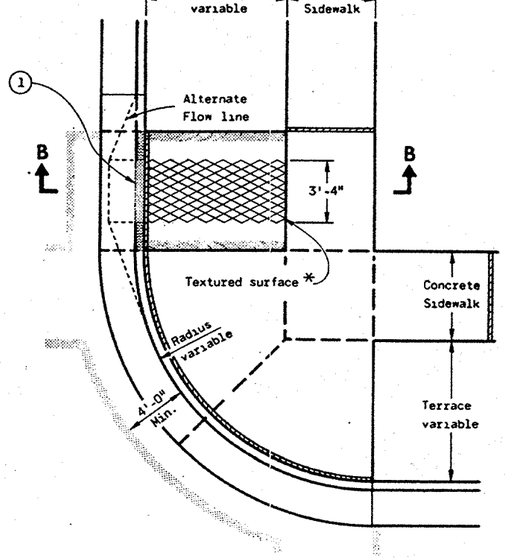
PLAN VIEW

TYPE 2 RAMP

(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN *



PLAIN VIEW

TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS

State of Wisconsin
Department of Transportation

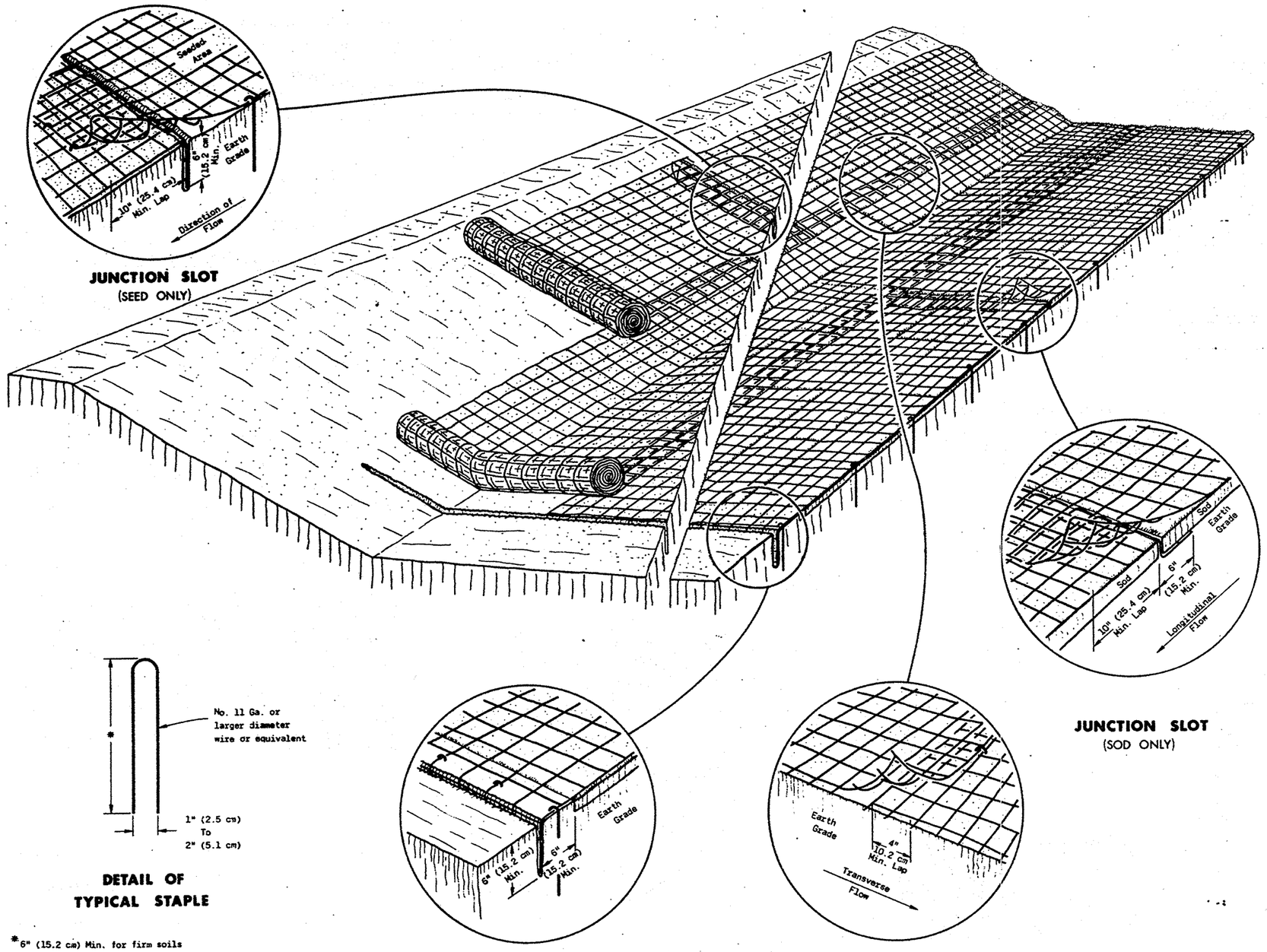
APPROVED 10-23-84
DATE

CHIEF DESIGN ENGINEER

FHWA

S.D.D. 8 D 5-8

S.D.D. 8 D 5-8



JUNCTION SLOT
(SEED ONLY)

JUNCTION SLOT
(SOD ONLY)

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.

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)

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

EROSION MAT

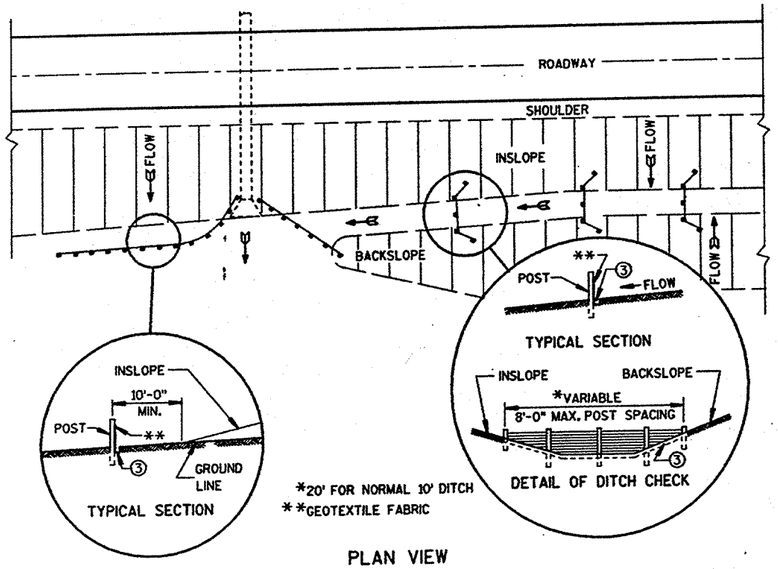
State of Wisconsin
Department of Transportation
Division of Highways

RECOMMENDED FOR APPROVAL
12-3-73 DATE — CHIEF of FACILITIES DEVELOPMENT

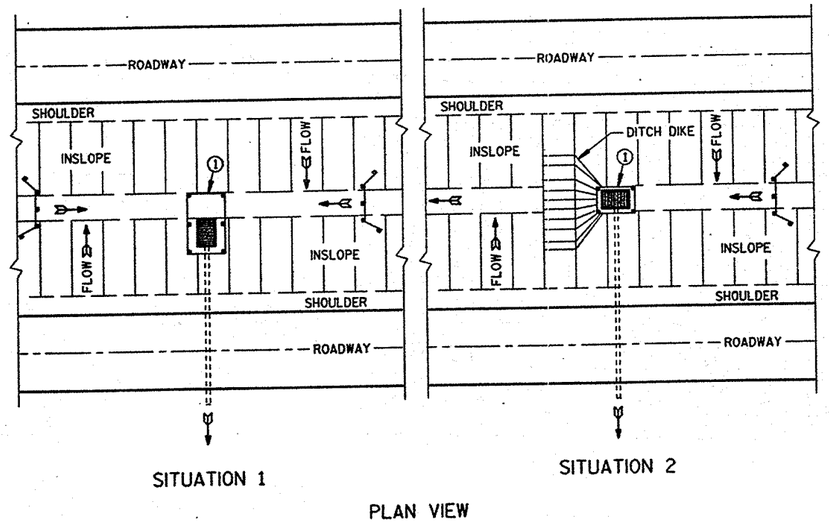
APPROVED
1-15-74 DATE — STATE HIGHWAY ENGINEER

S.D.D. 8E7-1

S.D.D. 8E7-1



TYPICAL APPLICATIONS OF SILT FENCE



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.

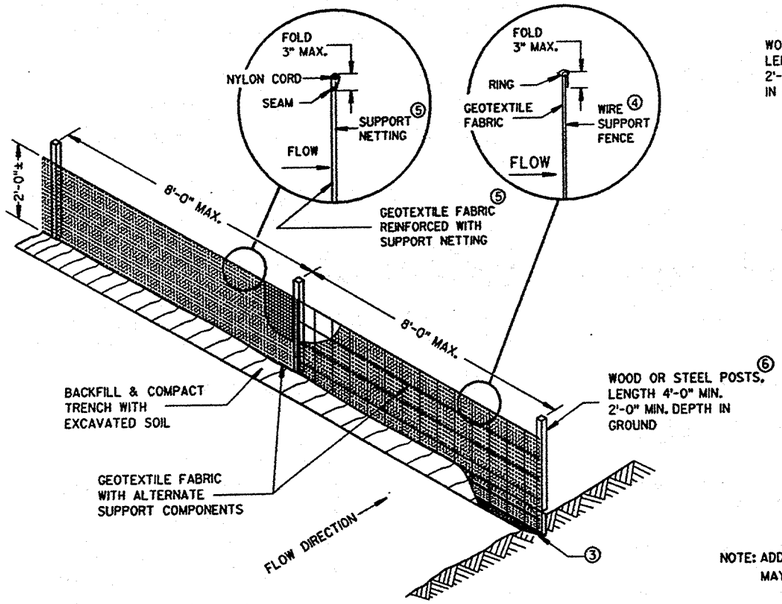
③ EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

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.

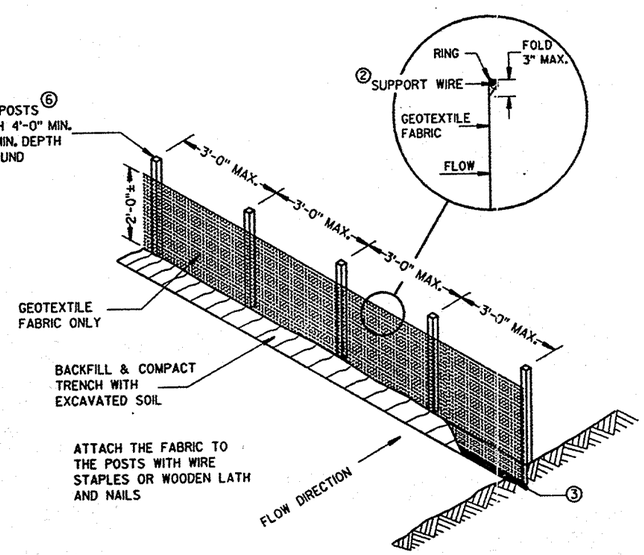
⑤ GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF ¾" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.

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.

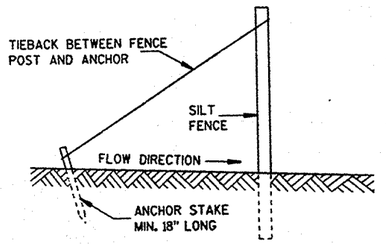


ALTERNATE "A"



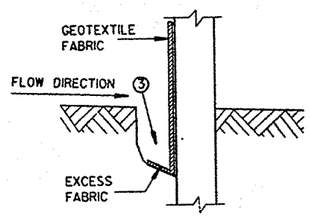
ALTERNATE "B"

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

S.D.D. 8 E 9-3

METAL APRON ENDWALLS

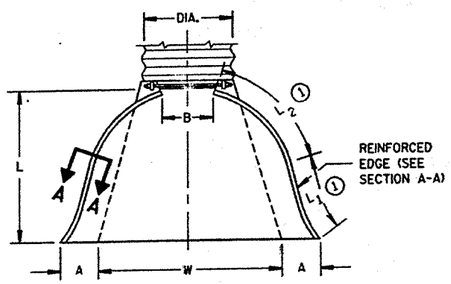
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L_1 ①	L_2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.079	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.109	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 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	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

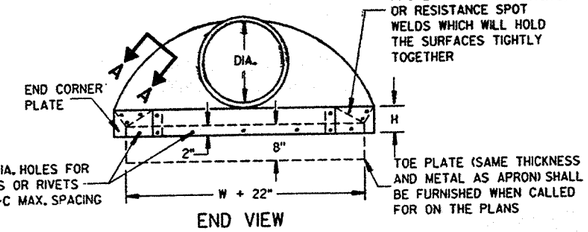
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 1/8	72 7/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 ** 35	* 98 1/4 ** 100	90	5 1/2	2 3/5 to 1
60	6	* 30 ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 ** 30	* 72 ** 78	* 21 ** 27	99	102	5 1/2	2 to 1
72	7	* 24 ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

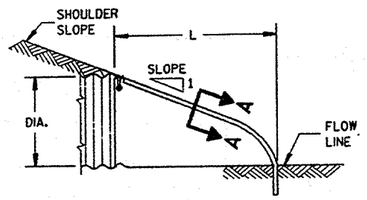
* MINIMUM
** MAXIMUM



PLAN VIEW

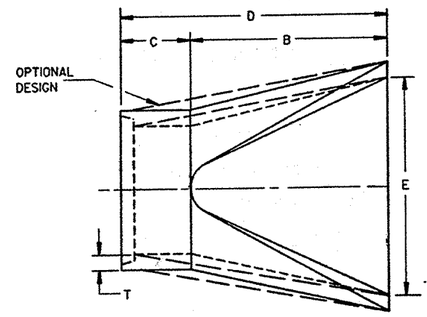


END VIEW

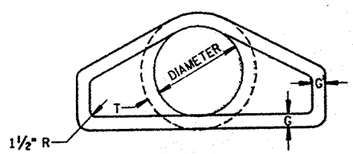


SIDE ELEVATION

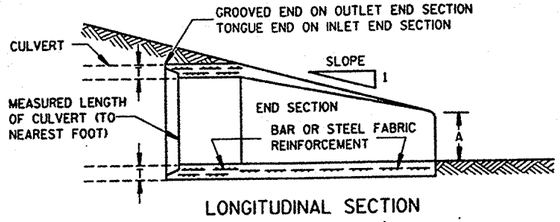
METAL ENDWALLS



PLAN

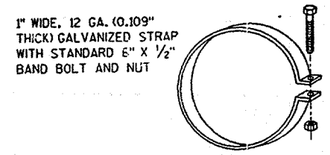


END VIEW



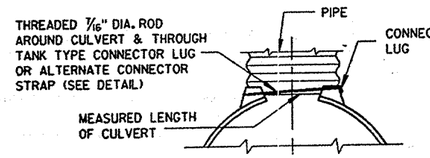
LONGITUDINAL SECTION

CONCRETE ENDWALLS

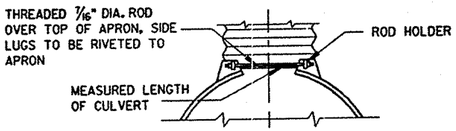


ALTERNATE FOR TYPE 1 CONNECTION

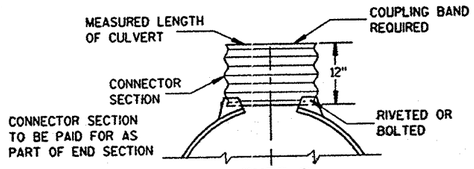
END SECTION CONNECTOR STRAP



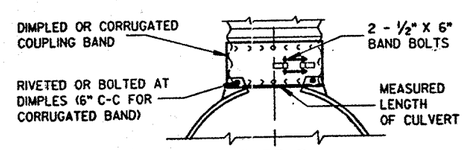
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

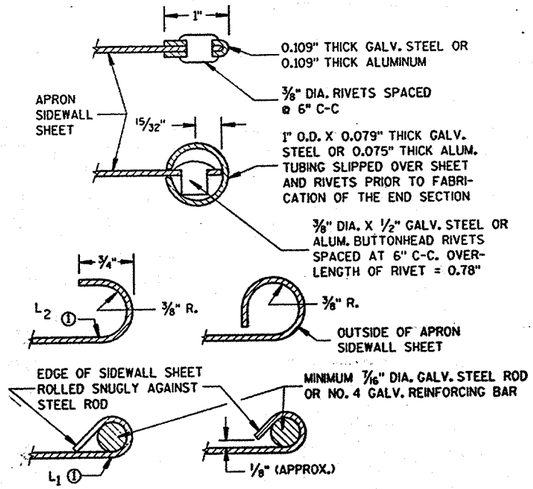
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 3.

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.

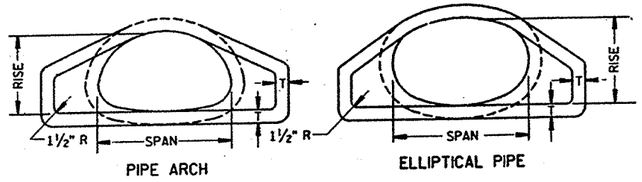
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

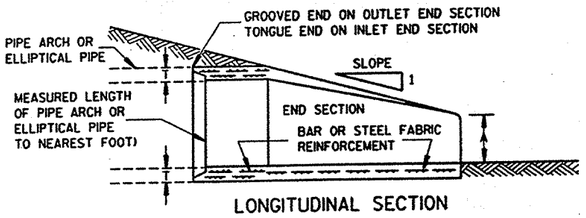
APPROVED 12/17/87 DATE
STATE DESIGN ENGINEER FOR HWYS
FHWA

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

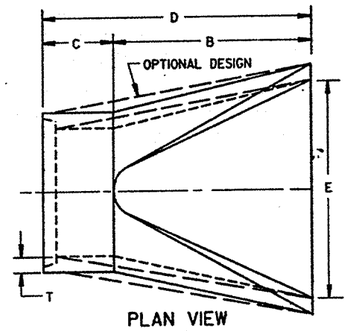
S.D.D. 8 F 1-10a



END VIEW

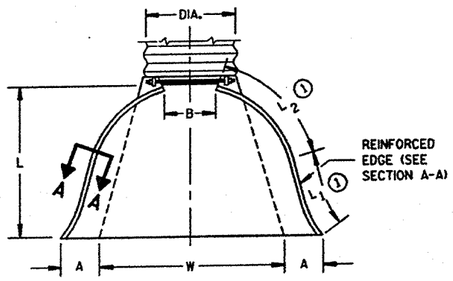


LONGITUDINAL SECTION

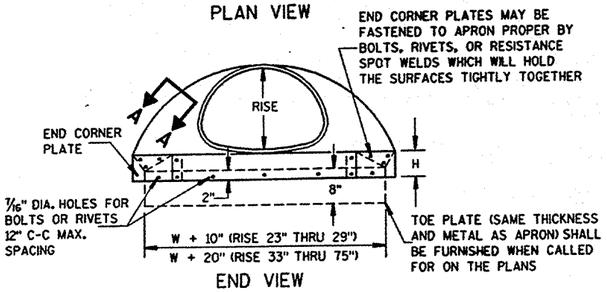


PLAN VIEW

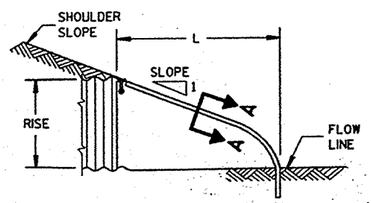
CONCRETE ENDWALLS



PLAN VIEW

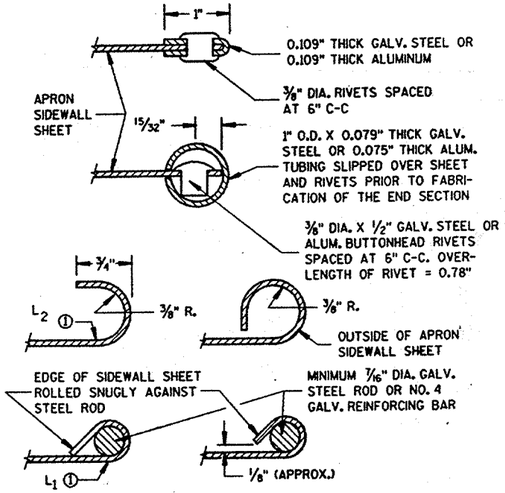


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

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

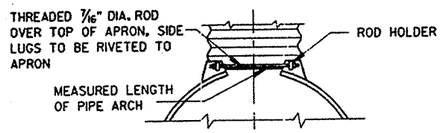
EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	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	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	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 (±1½")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	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.

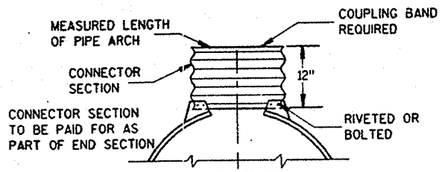
NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES



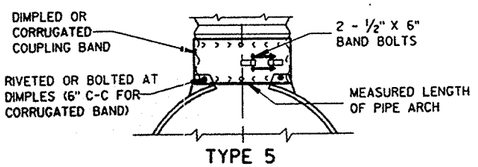
TYPE 2

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

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	11⅛	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	11⅛	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

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

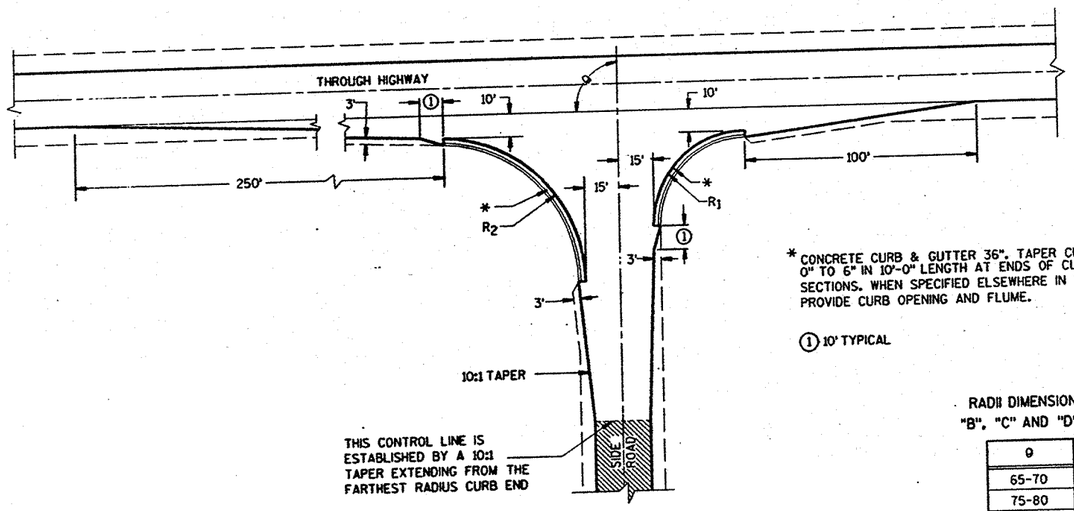
APPROVED 12/17/87 DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

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

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



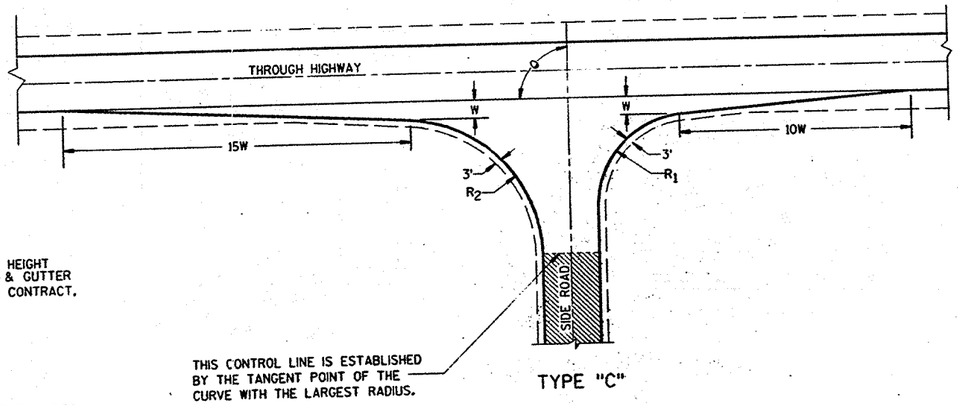
TYPE "B"

* 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.

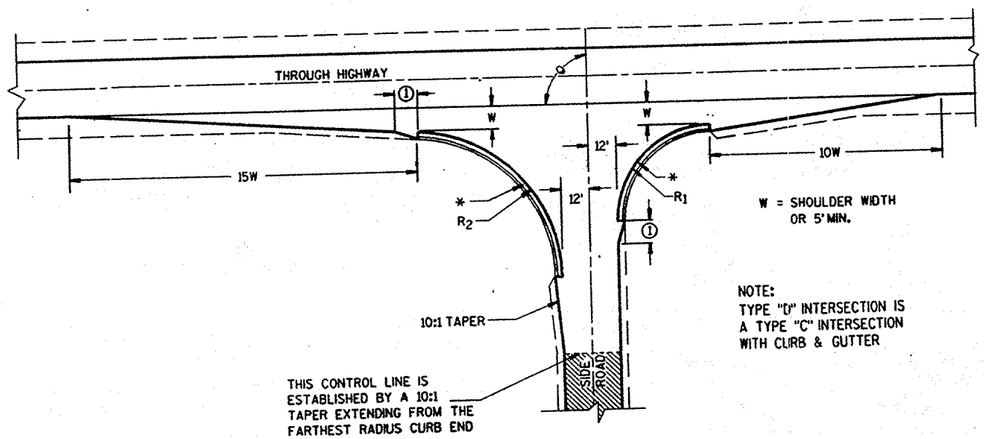
① 10' TYPICAL

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"

W = SHOULDER WIDTH OR 5' MIN.

NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

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

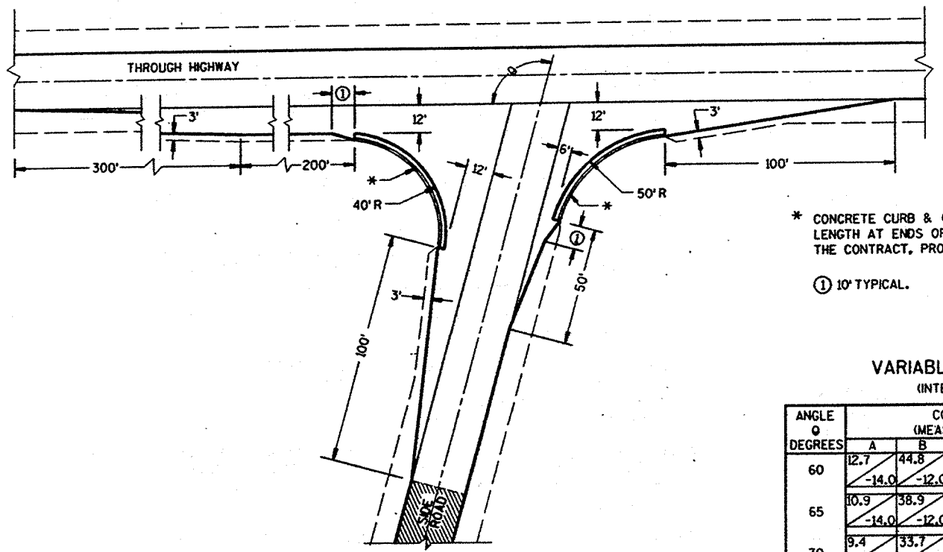
APPROVED 6/22/89
DATE

STATE DESIGN ENGINEER FOR HWYS

FHWA

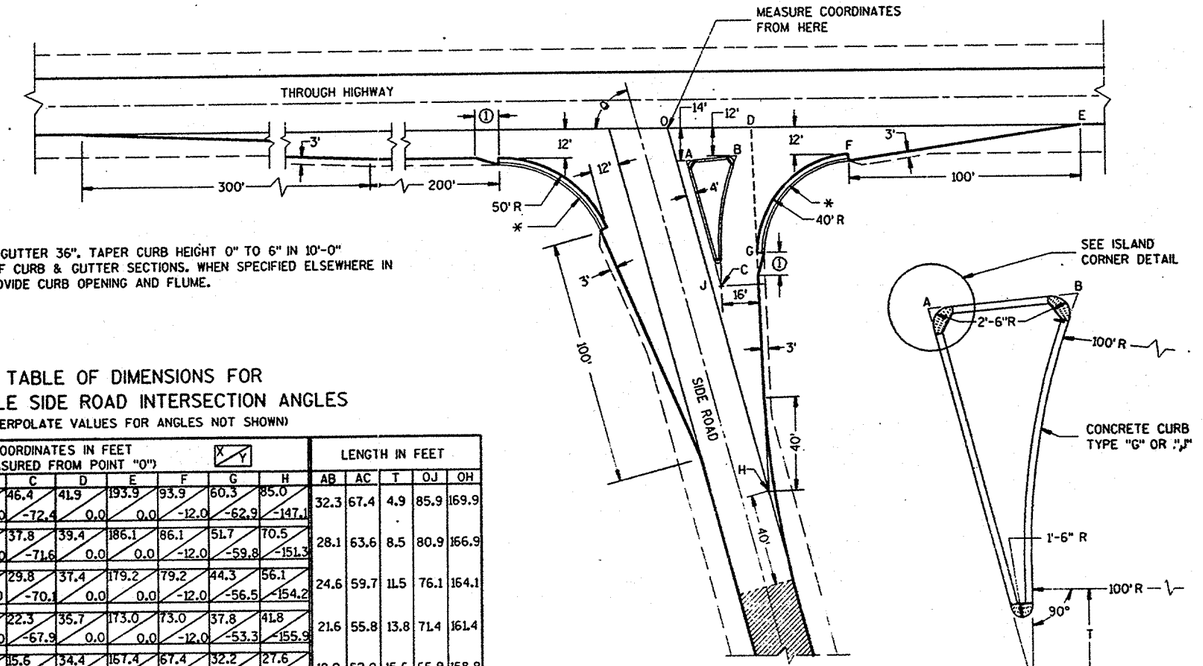
S.D.D. 9 A 1-80

S.D.D. 9 A 1-80



Θ = 80° OR MORE

EXISTING SURFACE



Θ = ACUTE ANGLES LESS THAN 80°

* 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.

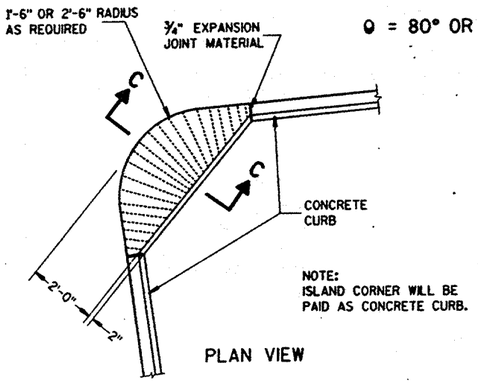
① 10' TYPICAL.

TABLE OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

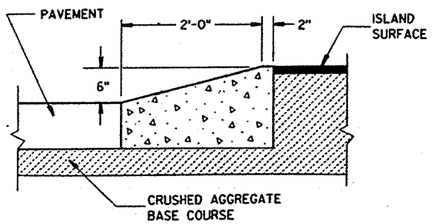
ANGLE Θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.8 / -12.0	46.4 / -72.4	41.9 / 0.0	193.9 / 0.0	93.9 / -12.0	60.3 / -62.9	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	38.9 / -12.0	37.8 / -71.6	39.4 / 0.0	186.1 / 0.0	86.1 / -12.0	51.7 / -59.8	70.5 / -151.3	28.1	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.7 / -12.0	29.8 / -70.1	37.4 / 0.0	179.2 / 0.0	79.2 / -12.0	44.3 / -56.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.2 / -12.0	22.3 / -67.9	35.7 / 0.0	173.0 / 0.0	73.0 / -12.0	37.8 / -53.3	41.8 / -155.9	21.6	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.2 / -12.0	15.6 / -65.2	34.4 / 0.0	167.4 / 0.0	67.4 / -12.0	32.2 / -50.0	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A" SIDE ROAD INTERSECTION DETAILS



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

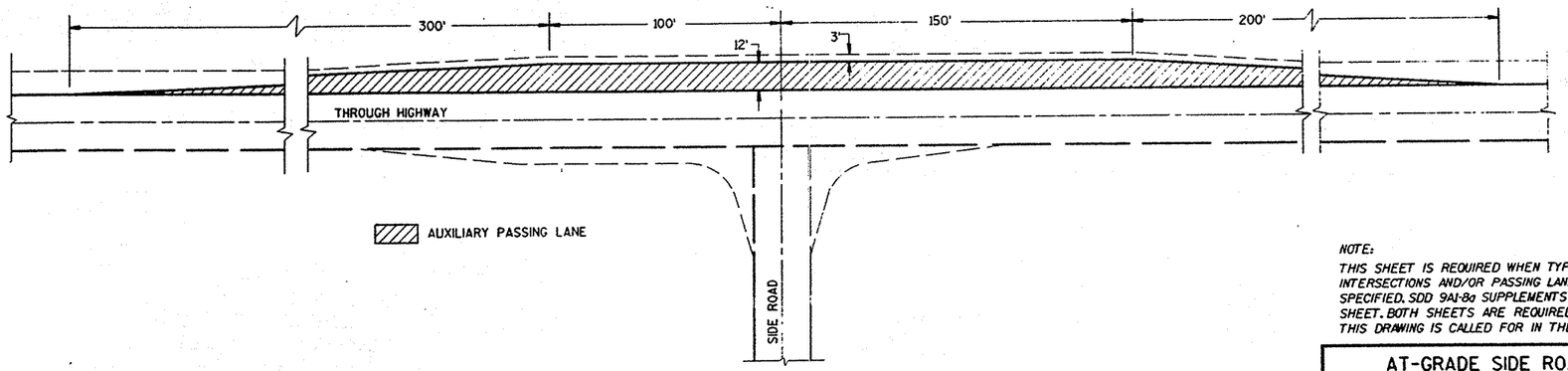
PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



PASSING LANE DETAIL

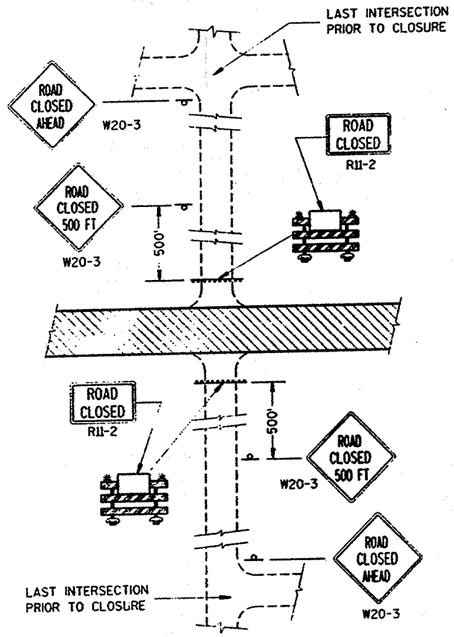
NOTE:
THIS SHEET IS REQUIRED WHEN TYPE "A" INTERSECTIONS AND/OR PASSING LANES ARE SPECIFIED. SDD 9A1-8a SUPPLEMENTS THIS SHEET. BOTH SHEETS ARE REQUIRED WHEN THIS DRAWING IS CALLED FOR IN THE PLANS.

AT-GRADE SIDE ROAD INTERSECTION, TYPE "A" AND PASSING LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

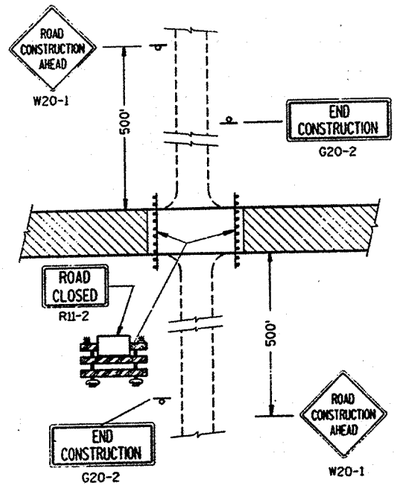
S.D.D. 9 A 1-8b

S.D.D. 9 A 1-8b



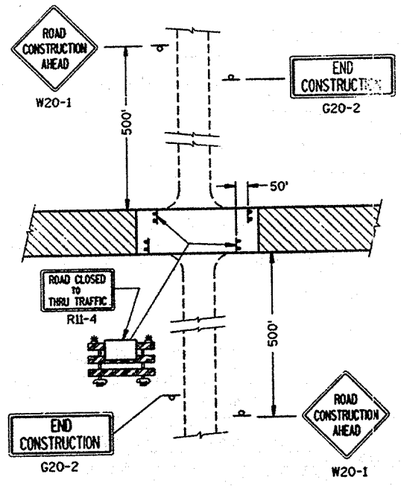
DETAIL 1

(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".
- G20-2 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.

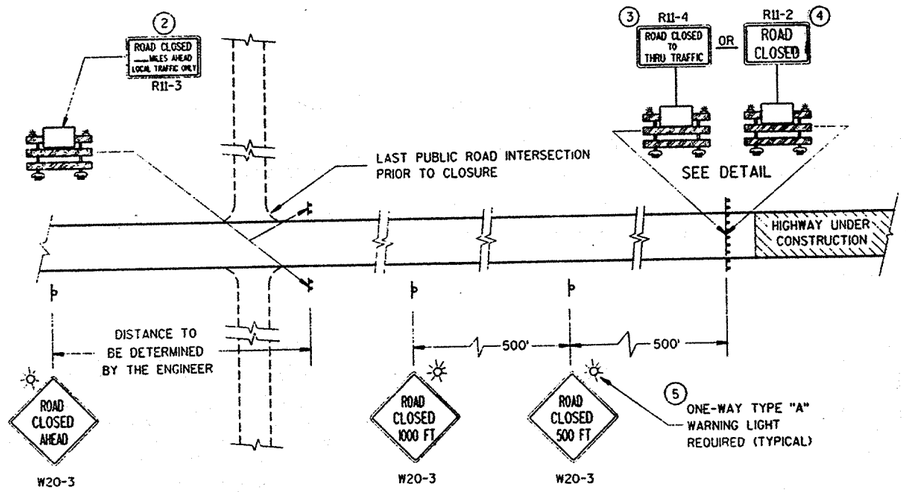
(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

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

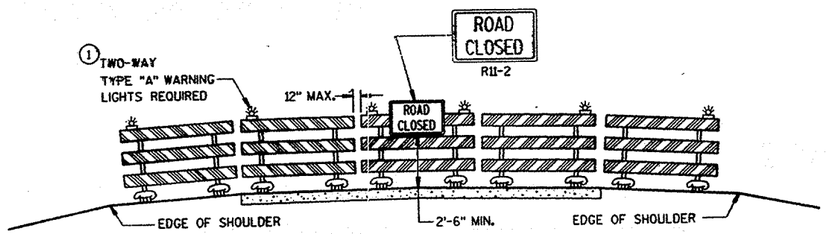
(4) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT. SEE ROAD CLOSURE BARRICADE DETAIL.

(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

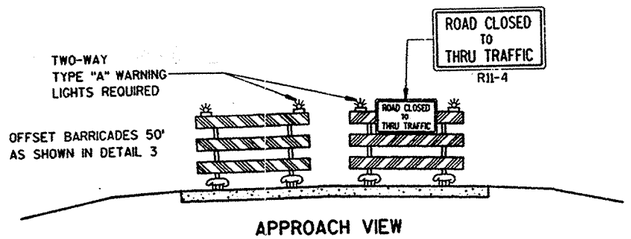


MAINLINE CLOSURE



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 10-31-89 DATE
STATE TRAFFIC ENGINEER FOR HWYS

FHWA

S.D.D. 15 C 2-2

S.D.D. 15 C 2-2

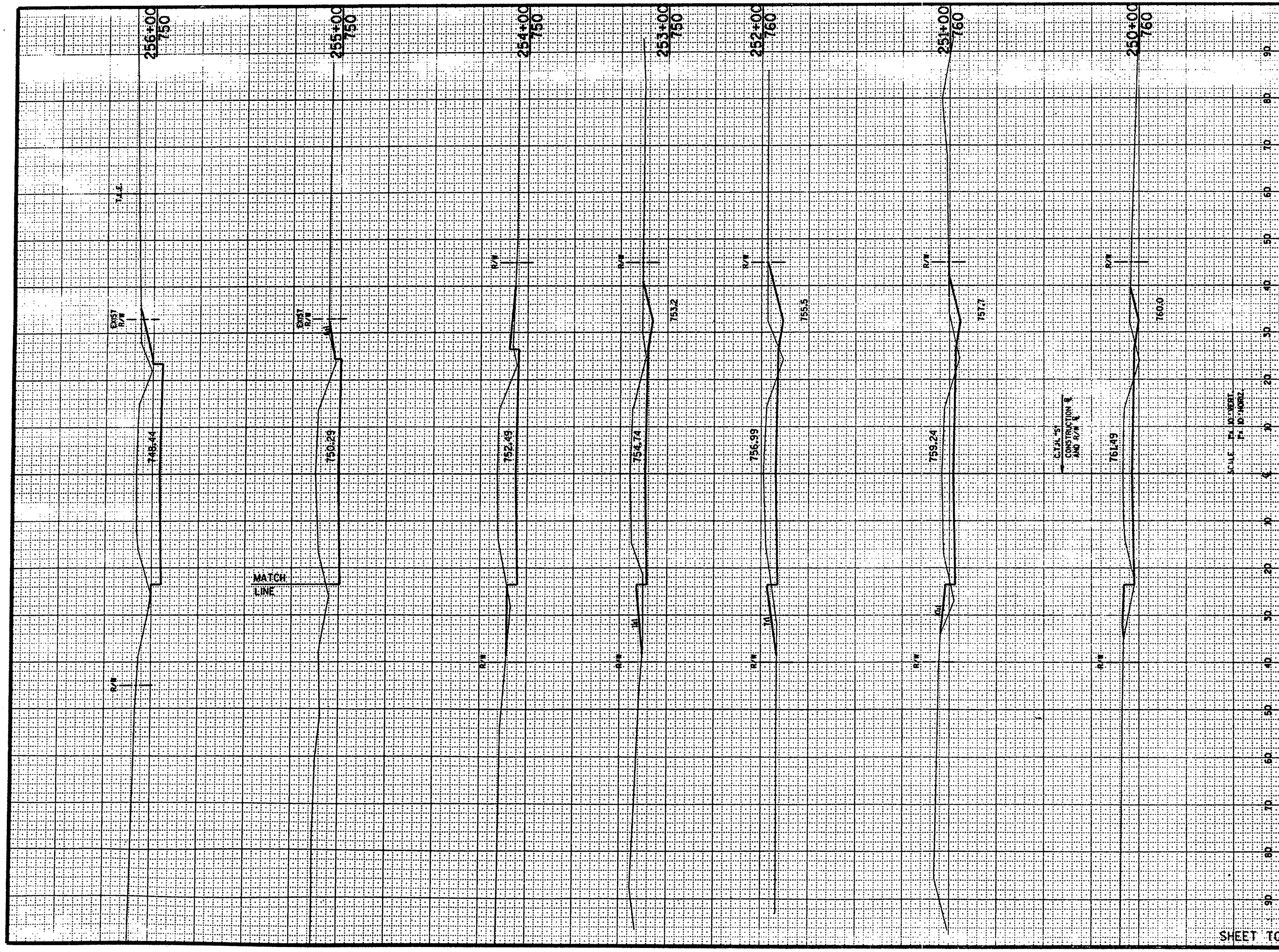
STATE PROJECT NUMBER: 6037-02-72

SHEET NUMBER: 9.0

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	EXCAVATION	EXCAVATION	EXCAVATION	FILL
235 + 00						
		266				48
236 + 00						
		413				20
237 + 00						
		492				8
238 + 00						
		448				9
239 + 00						
		393				13
240 + 00						
		297				68
241 + 00						
		180				174
242 + 00						
SHEET TOTAL		2489				340

STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.1

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
242 + 00						
		128				233
243 + 00						
		132				174
244 + 00						
		117				150
245 + 00						
		114				127
246 + 00						
		129				76
247 + 00						
		149				85
248 + 00						
		221				71
249 + 00						
		274				58
250 + 00						
SHEET TOTAL		1264				974

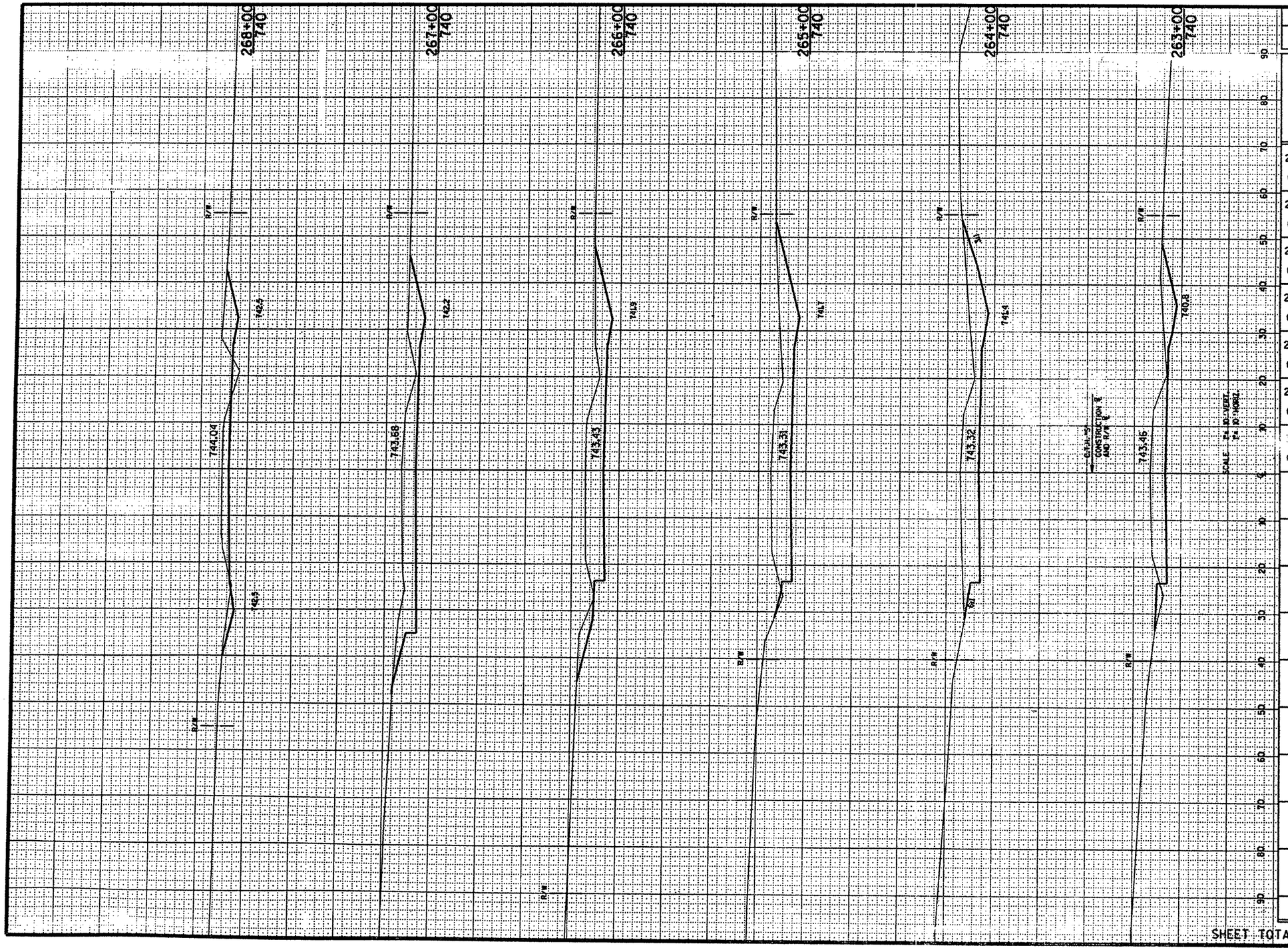


STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.2

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.			FILL
250+00					
		347			63
251+00					
		431			56
252+00					
		492			48
253+00					
		547			31
254+00					
		654			11
255+00					
		784			0
256+00					
		735			1
257+00					
SHEET TOTAL		3990			210

STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.3

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
257 + 00			
	528		62
258 + 00			
	487		61
259 + 00			
	370		46
260 + 00			
	313		81
261 + 00			
	439		59
262 + 00			
	597		37
263 + 00			
SHEET TOTAL		2734	346



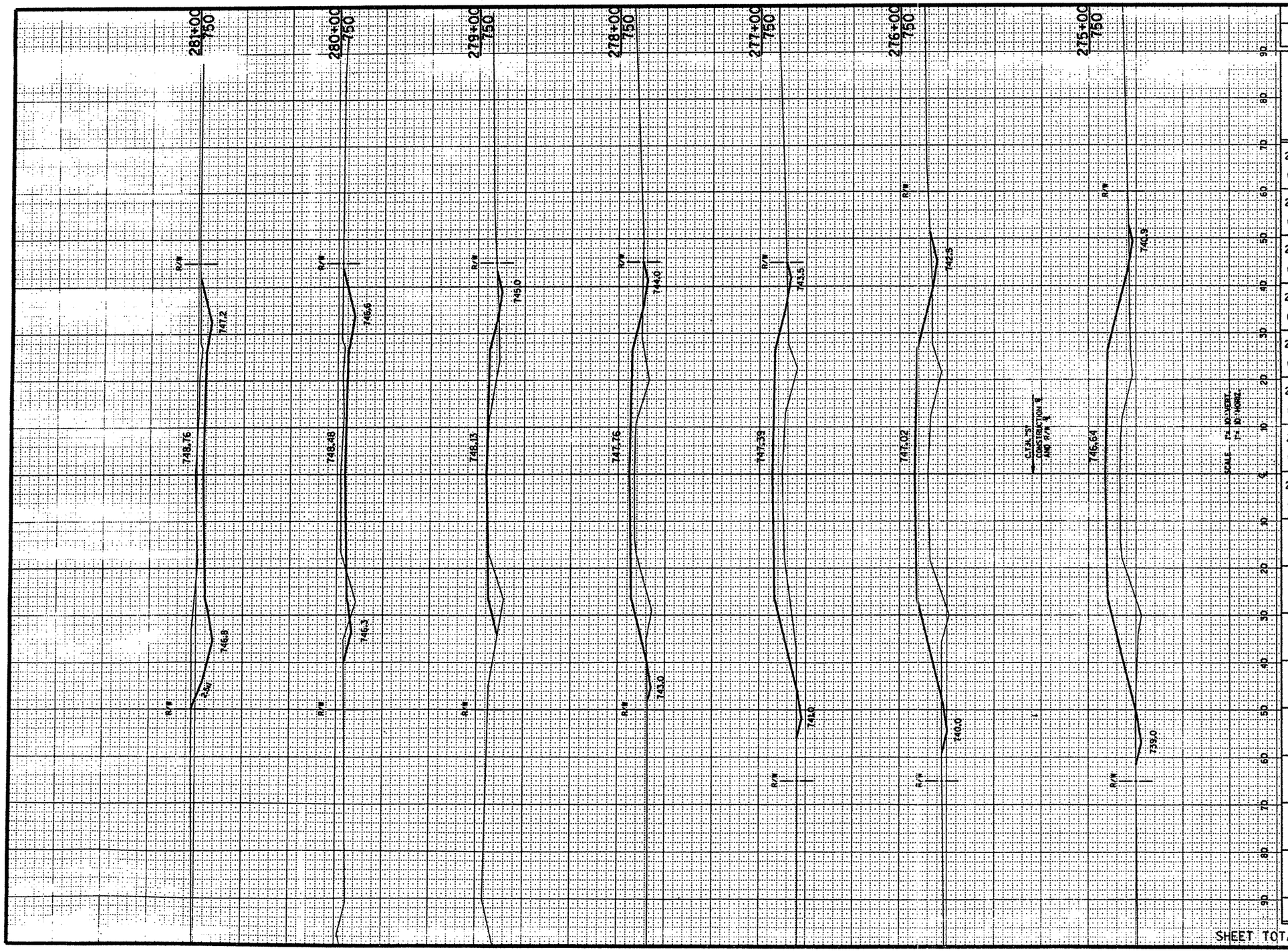
STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.4

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE FILL
263 + 00							
		755					15
264 + 00							
		913					3
265 + 00							
		903					3
266 + 00							
		836					0
267 + 00							
		569					14
268 + 00							
		172					307
00							
SHEET TOTAL		4148					342

STATE PROJECT NUMBER: 6037-02-72

SHEET NUMBER: 9.5

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
269+00			
	10		882
270+00			
	90		1112
271+00			
	245		1008
272+00			
	240		1069
273+00			
	148		1227
274+00			
	92		1234
275+00			
SHEET TOTAL		825	6532

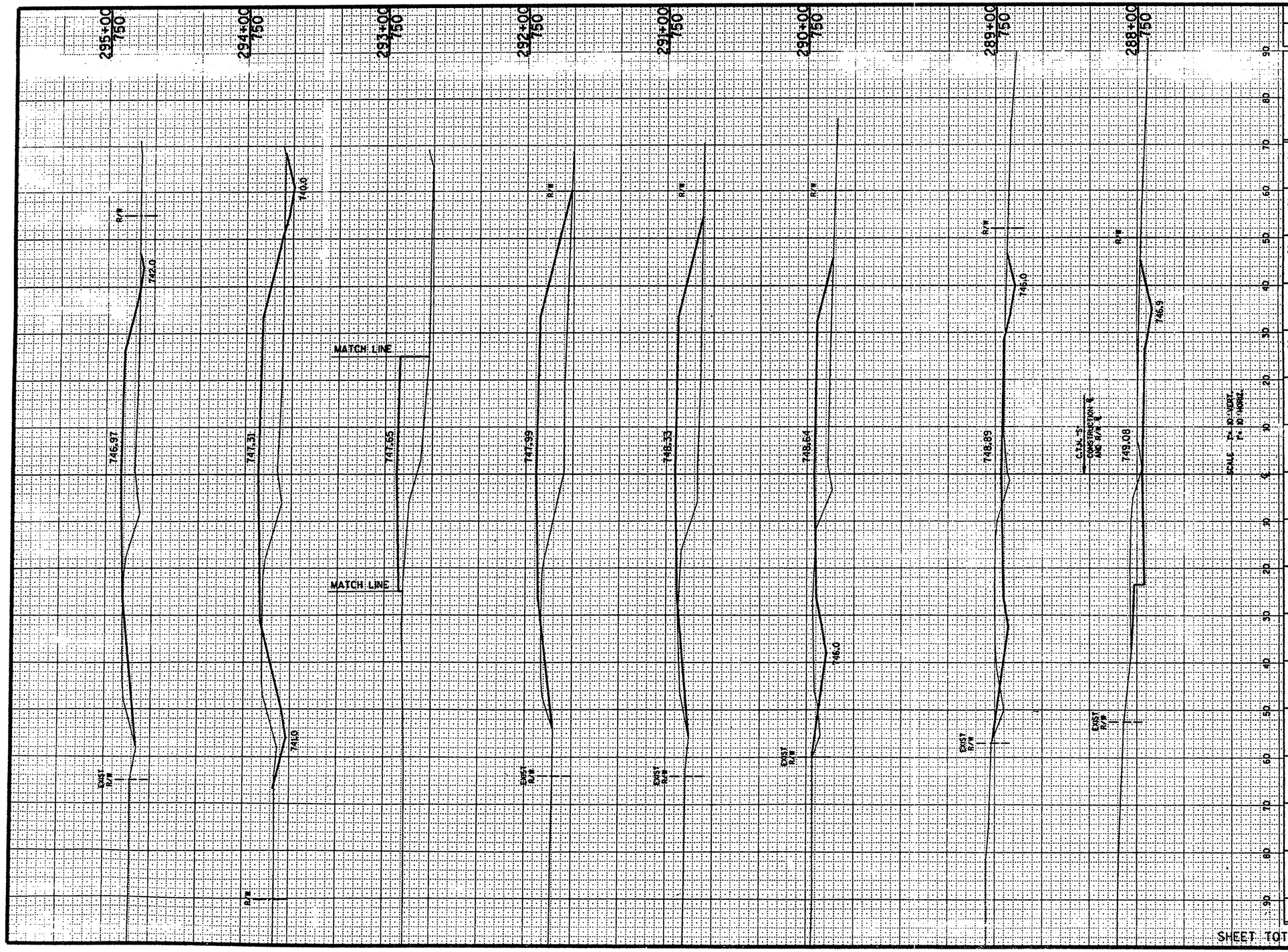


STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.6

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
275 + 00						
		47				1085
276 + 00						
		44				855
277 + 00						
		32				603
278 + 00						
		23				35
279 + 00						
		144				131
280 + 00						
		454				18
281 + 00						
		578				0
282 + 00						
SHEET TOTAL		1322				3045

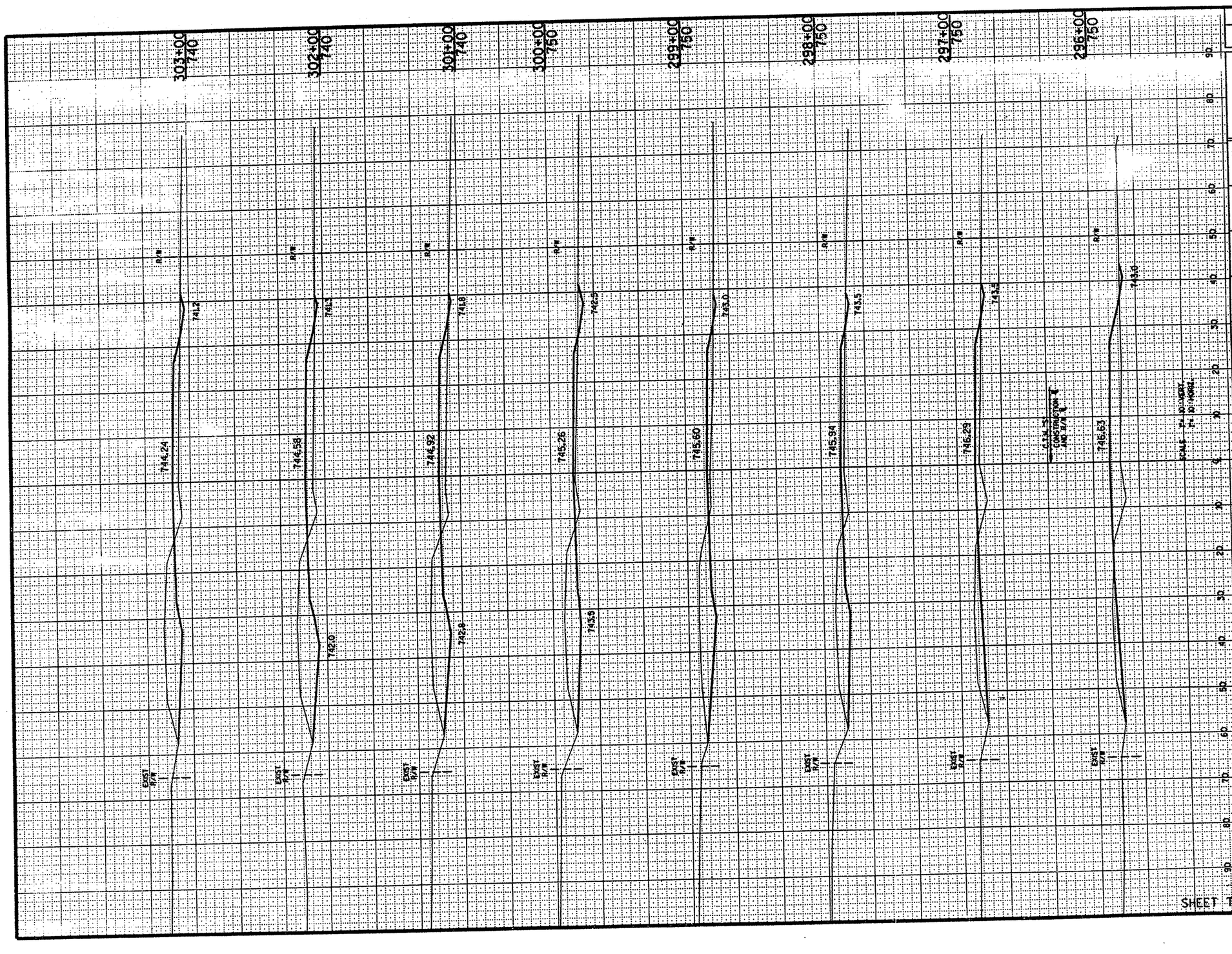
STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.7

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
282 00			
	538		1
283 00			
	637		11
284 00			
	821		12
285 00			
	933		2
286 00			
	883		0
287 00			
	643		0
288 00			
SHEET TOTAL	4455		26



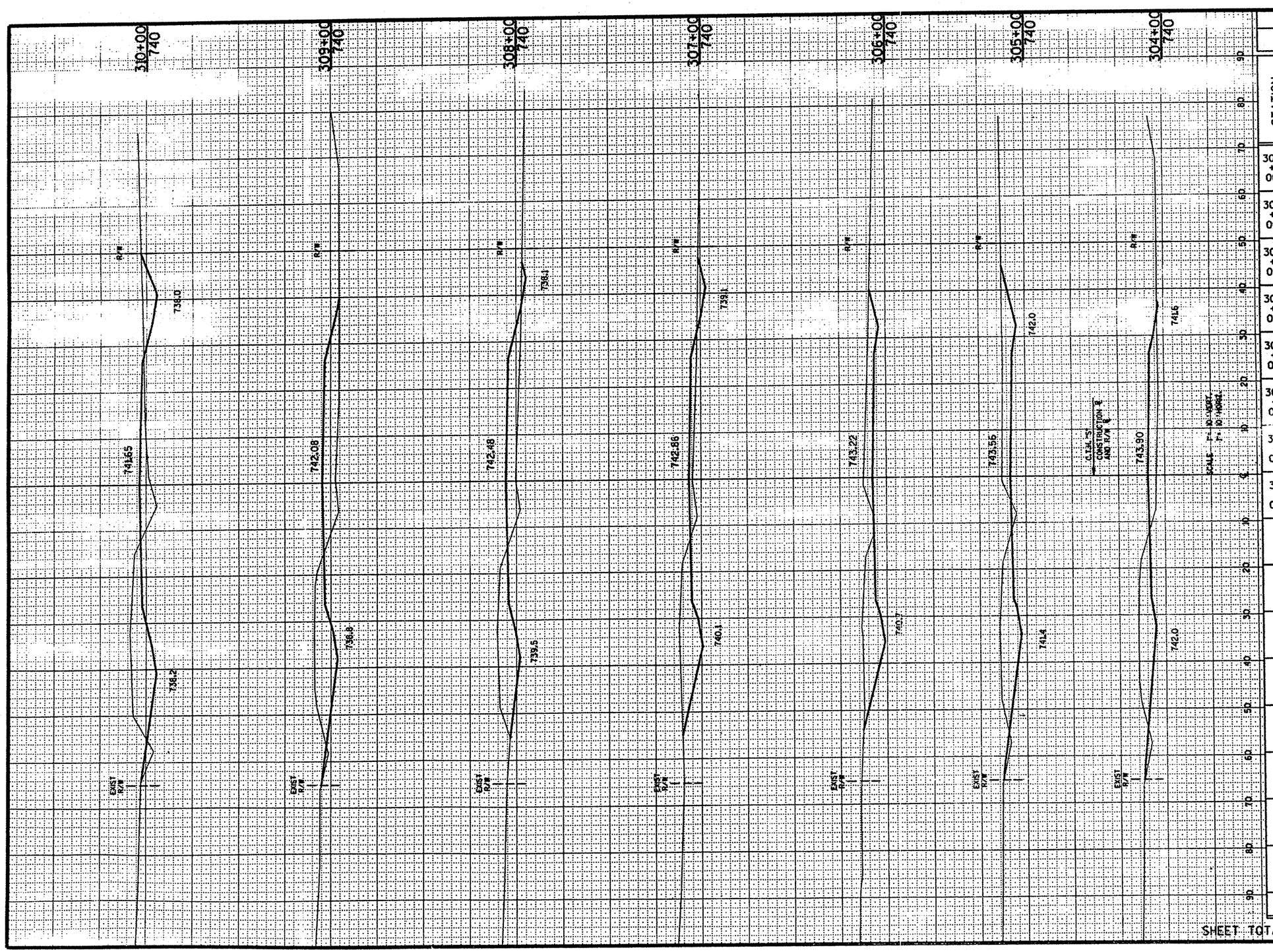
STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.8

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
288 + 00			
		391	51
289 + 00			
		235	335
290 + 00			
		106	807
291 + 00			
		61	1166
292 + 00			
		33	991
293 + 00			
		124	830
294 + 00			
		185	770
295 + 00			
		118	507
296 + 00			
SHEET TOTAL		1253	5457



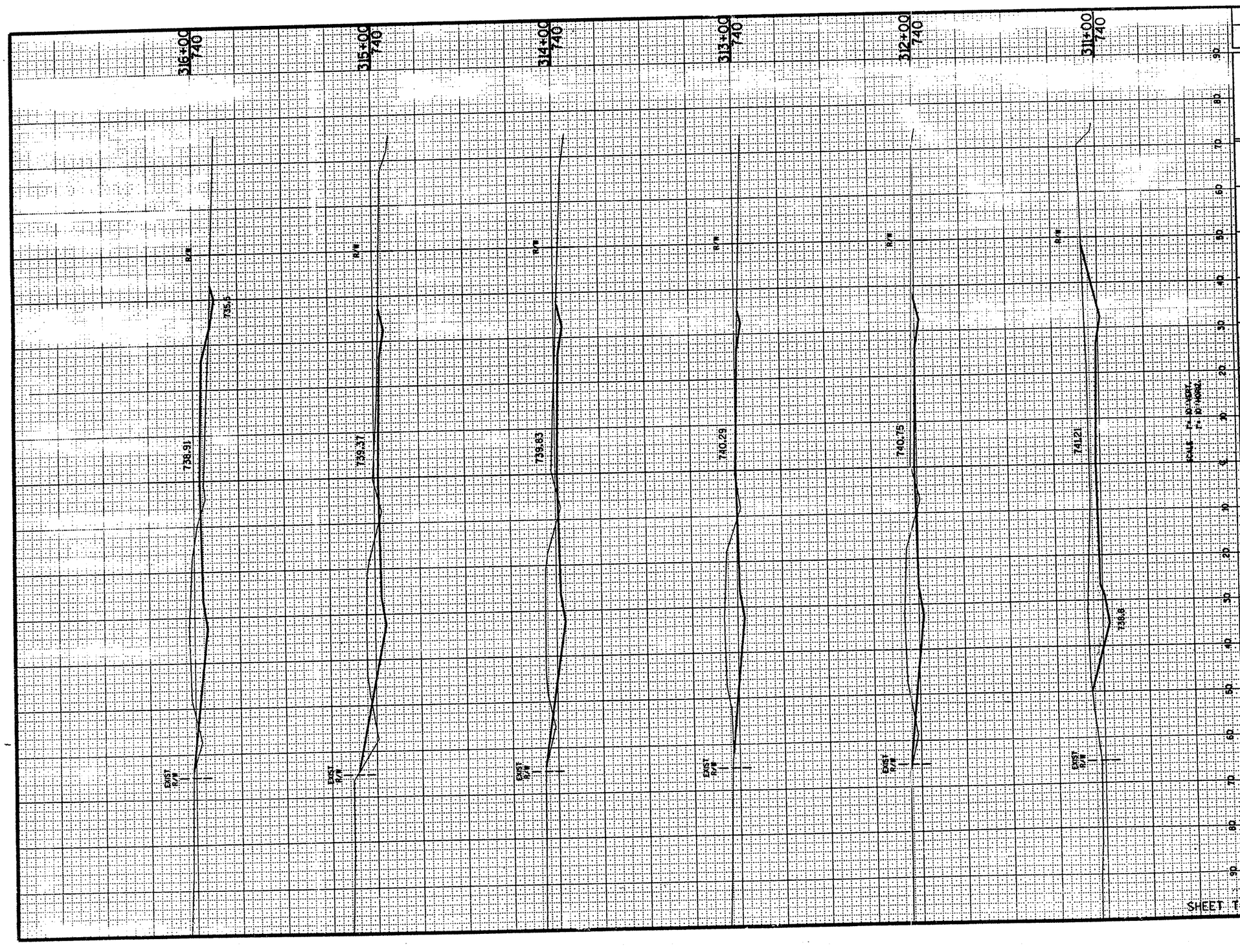
STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.9

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
296 + 00			
		156	324
297 + 00			
		263	174
298 + 00			
		363	141
299 + 00			
		406	121
300 + 00			
		422	172
301 + 00			
		450	261
302 + 00			
		470	241
303 + 00			
		419	251
304 + 00			
SHEET TOTAL		2949	1685



STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.10

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
304+00						
		537				163
305+00						
		701				16
306+00						
		568				80
307+00						
		432				272
308+00						
		454				461
309+00						
		563				390
310+00						
		681				121
311+00						
SHEET TOTAL		3936				1503

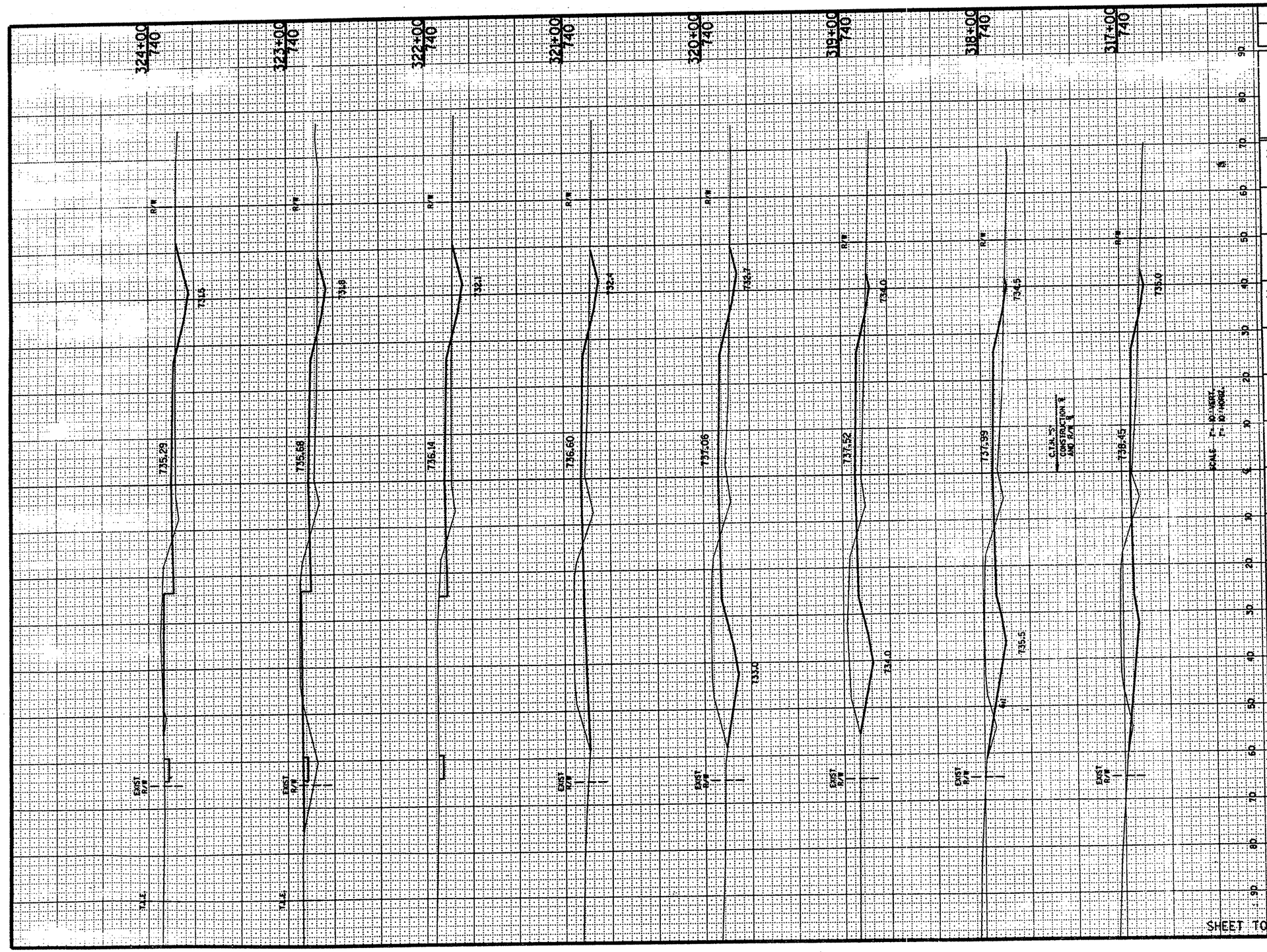


STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.11

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
311 00						
		633				16
312 00						
		515				22
313 00						
		535				18
314 00						
		533				55
315 00						
		453				132
316 00						
		413				170
317 00						
SHEET TOTAL		3082				413

STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.12

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
317 00						
		401				217
318 00						
		431				257
319 00						
		506				264
320 00						
		466				247
321 00						
		262				206
322 00						
		145				289
323 00						
		195				244
324 00						
		185				97
325 00						
SHEET TOTAL		2591				1821



STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.13

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
325+00						
		391				126
326+00						
		593				81
327+00						
		644				83
328+00						
		309				257
329+00						
		93				826
330+00						
		69				1230
331+00						
		33				679
331+50						
SHEET TOTAL		2132				3282

STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.14

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				FILL
331+50						
		10				222
331+65		STRUCTURE B-44-168				
332+21		21				521
332+50		26				786
333+00		17				716
333+50		22				819
334+00		22				701
334+50						
SHEET TOTAL		118				3765

334+00 740
333+50 740
333+00 740
332+50 740
332+00 740
331+50 740

R/W

4:1

738.66
736.31
737.97
737.62
736.83

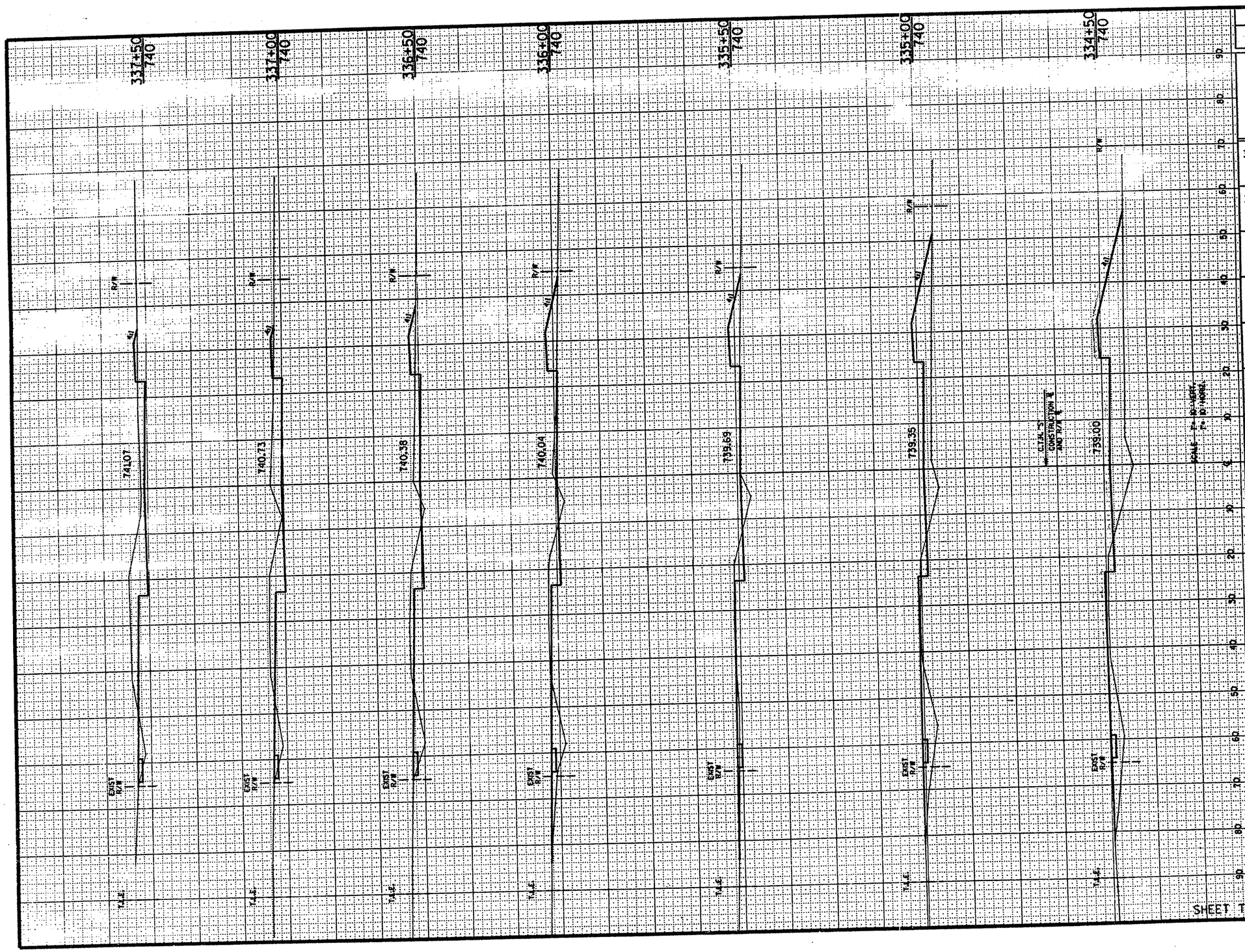
EXCEPTION TO NET ℄ LENGTH
STA. 331+65 TO STA. 332+21
STRUCTURE B-44-168

CLASS "A" CONSTRUCTION IN THIS AREA

SCALE 1" = 10' VERT.
1" = 10' HORIZ.

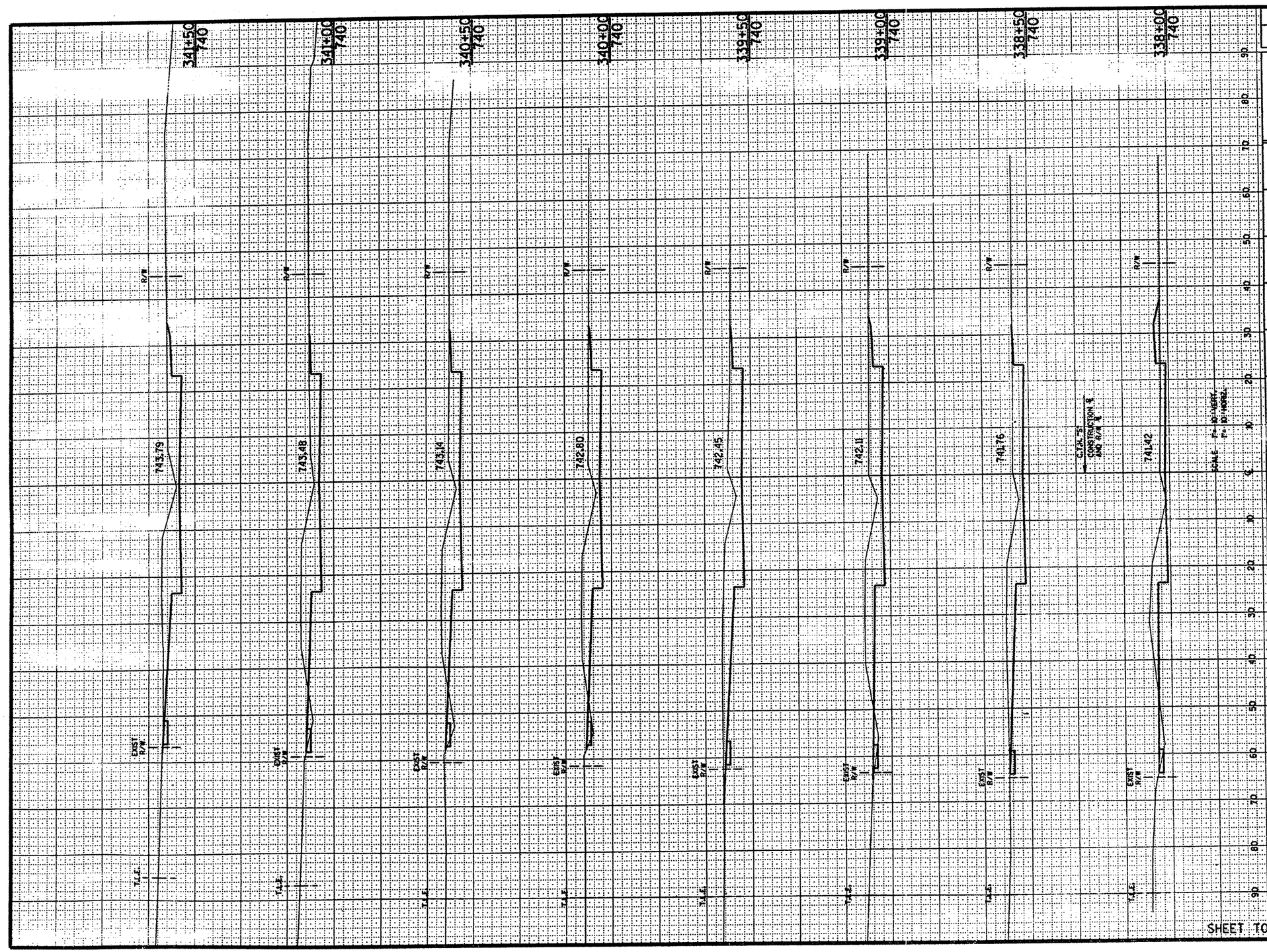
EXIST R/W
T.A.E.

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90



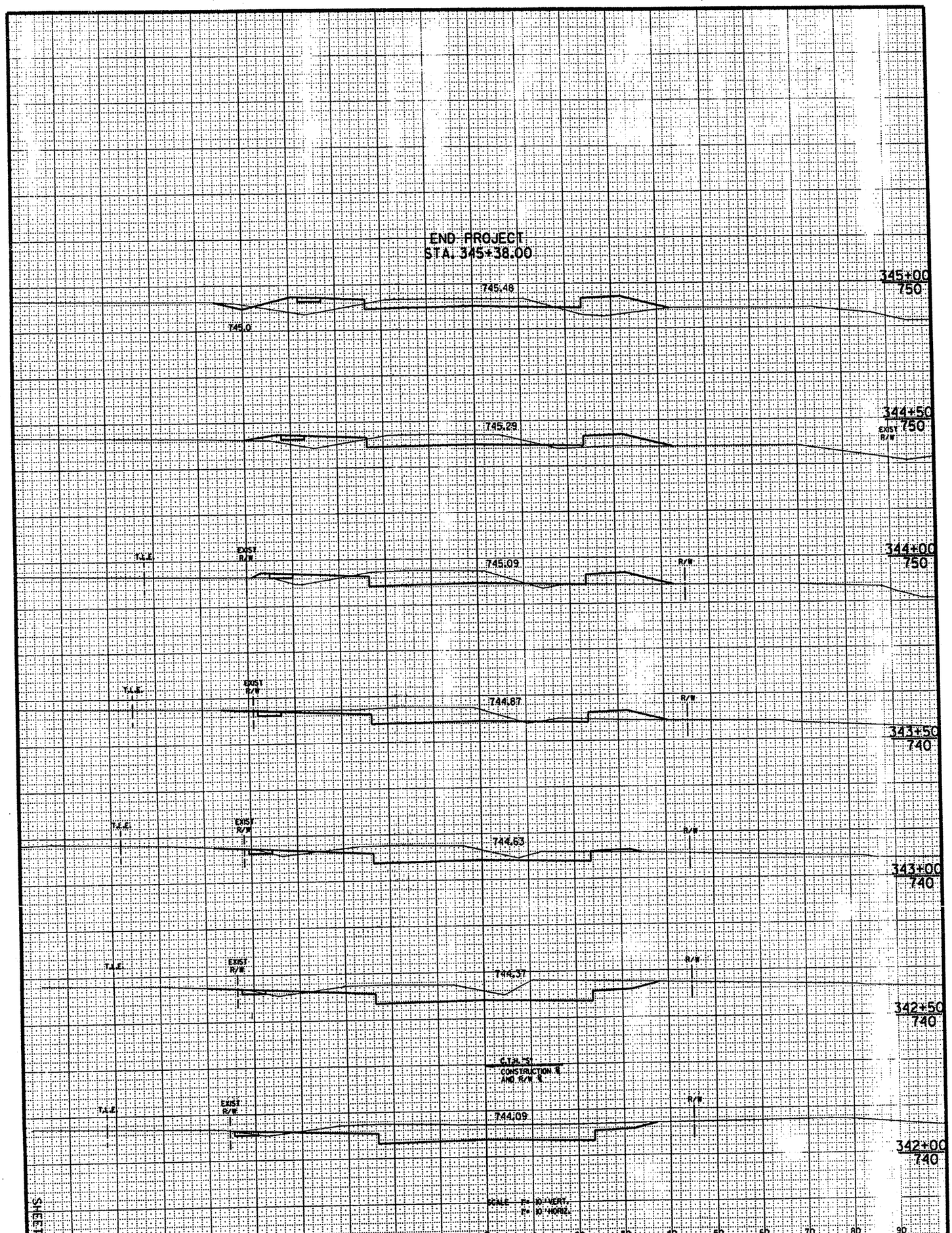
STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	915

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
334+50			
	21		445
335+00			
	27		234
335+50			
	50		119
336+00			
	106		103
336+50			
	195		54
337+00			
	244		39
337+50			
	214		43
338+00			
SHEET TOTAL	857		1037



STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9,16

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.				YARDAGE FILL
338 + 00						
		260				24
338 + 50		343				6
339 + 00		375				6
339 + 50		356				4
340 + 00		316				11
340 + 50		309				15
341 + 00		320				7
341 + 50		364				6
342 + 00						
SHEET TOTAL		2643				79

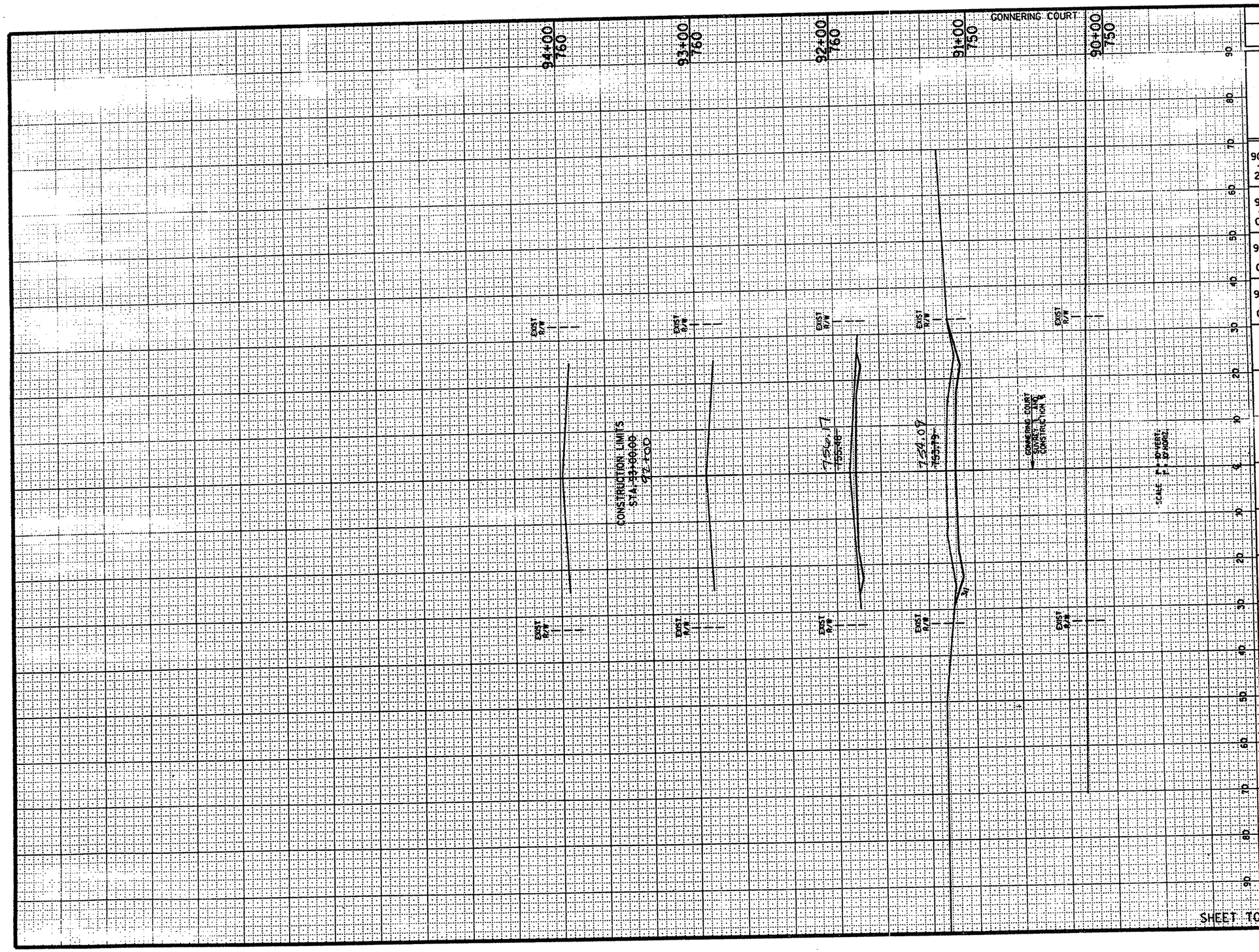


SHEET TOTAL

STATION	DISTANCE	EXCAVATION UNCL.	EXCAVATION YARDAGE	FILL
345 + 38				
345 + 00	87	146	150	169
344 + 50	155	192	115	74
344 + 00	234	323	35	19
343 + 50	323	389	19	13
343 + 00	389		13	
342 + 50				
342 + 00				
		1536	576	

STATE PROJECT NUMBER
6037-02-72

SHEET NUMBER
9.17



STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9/18

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE FILL
90+25						
		306				0
91+00						
		254				0
92+00						
		100				0
93+00						
SHEET TOTAL		660				0

STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.19

MURPHY ROAD

104+00 750 | 103+00 750 | 102+00 750 | 101+00 750 | 100+00 750

EXIST R/W

CONSTRUCTION LIMITS STA. 99+50.00 TO STA. 104+35.00

MURPHY ROAD STREET WIDENING CONSTRUCTION

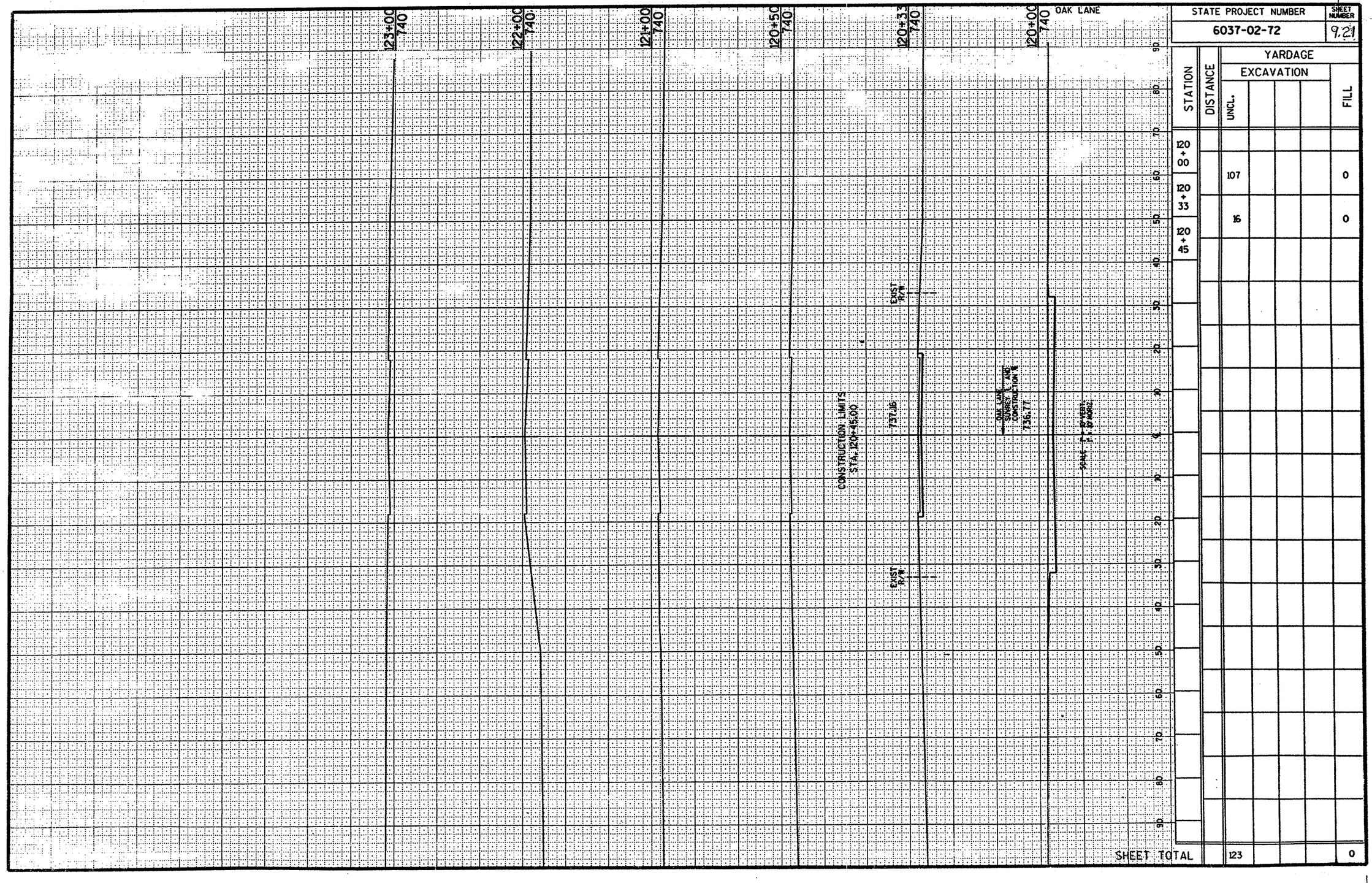
SCALE: 1" = 50' HORZ. 1" = 10' VERT.

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	FILL
100 25			
	481		0
101 00			
	469		0
102 00			
	93		0
102 50			
SHEET TOTAL	1043		0

STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.20

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.					YARDAGE FILL
107 + 00							
		122					154
108 + 00							
		102					622
109 + 00							
		69					703
109 + 75							
		---					---
110 + 25							
		19					203
111 + 00							
		31					169
111 + 75							
		23					17
112 + 50							
SHEET TOTAL		366					1868

113+00 750
112+00 750
111+00 740
110+00 740
109+00 740
108+00 740
107+00 740
VINE ROAD
EXIST R/W
R/W
746.93
743.0
742.3
741.25
745.52
739.3
742.19
736.8
739.97
743.5
CONSTRUCTION LIMITS STA. 112+50.00
MATCH EXISTING STA. 107+00
VINE ROAD SURVEY & CONSTRUCTION ℄
CONSTRUCTION LIMITS STA. 107+00.00
SCALE: 1" = 10' VERT.
1" = 10' HORIZ.
10 20 30 40 50 60 70 80 90



STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.21

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE FILL
120 + 00						
		107				0
120 + 33						
		16				0
120 + 45						
SHEET TOTAL		123				0

MALLARD LANE

132+00 750

131+50 750

131+00 750

130+50 750

130+00 750

CONSTRUCTION LIMITS STA. 130+65.00

P.I.

745.43

P.I.

MALLARD LANE SURVEY LINE CONSTRUCTION ℄

745.29

SCALE: 1" = 10' VERT. 1" = 10' HORIZ.

STATE PROJECT NUMBER	SHEET NUMBER
6037-02-72	9.22

STATION	DISTANCE	YARDAGE EXCAVATION UNCL.	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE EXCAVATION	YARDAGE FILL
130 00						
		354				0
130 + 50						
		23				0
130 + 65						
SHEET TOTAL		377				0