

WINNEBAGO COUNTY

PLAN OF PROPOSED IMPROVEMENT

CTH JJ / WINNECONNE AVE.
(CITY OF NEENAH)
PENDLETON RD - TULLAR RD
WINNEBAGO COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT

INDEX OF SHEETS

- Sheet No. 1 Title
- Sheet No. 2-12 Typical Sections and Details
- Sheet No. 13-14 Estimate of Quantities
- Sheet No. 15-18 Miscellaneous Quantities
- Sheet No. 19-23 Right of Way Plat
- Sheet No. 24-28 Plan and Profile (Includes Erosion Control Plan)
- Sheet No. 29-54 Standard Detail Drawings
- Sheet No. — Sign Plates
- Sheet No. — Structure Plans
- Sheet No. 18 Computer Earthwork Data
- Sheet No. 55-63 Cross Sections

TOTAL SHEETS =



STATE PROJECT NUMBER

AS-BUILT
PLAN



WINNEBAGO COUNTY
 FILE NAME: EISDADO/SHEETS / PLKRY / EISDADO/SHEETS / PLKRY / EISDADO/SHEETS / PLKRY
 ORIGINATOR: OMNI ASSOCIATES ONE SYSTEMS DRIVE APPLETON, WI 54914-1654
 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
 PLOT DATE: 02/06/04
 PLOT SCALE: 1:1

DESIGN DESIGNATION

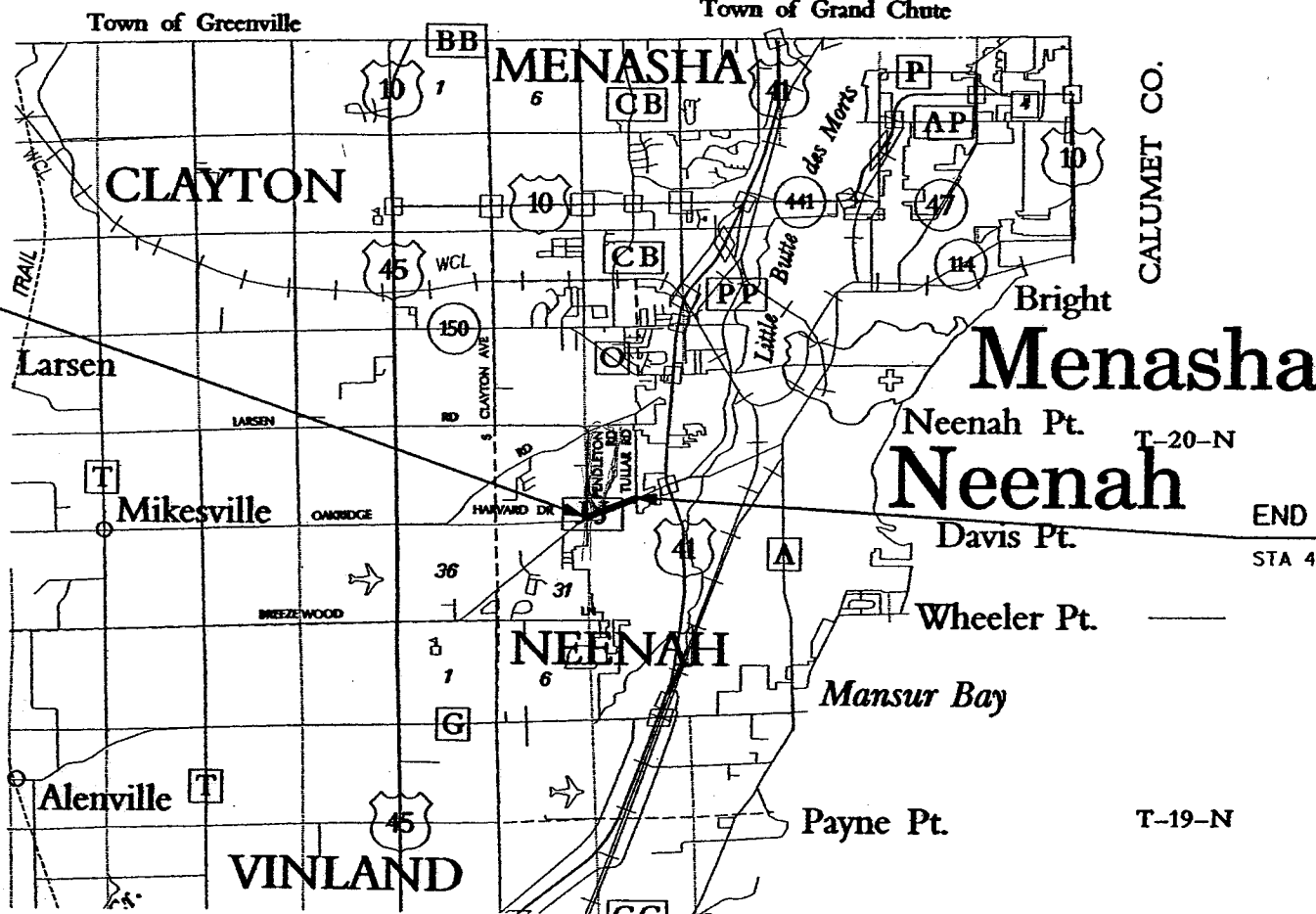
- ADT (2003) = 10,720
- ADT (2023) = 15,060
- D = 0.55
- T (ADT) = 3.6%
- DESIGN SPEED = 45 MPH
- ESALS = 1,496,500

CONVENTIONAL SIGNS

- COUNTY LINE
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SURVEY LINE
- SLOPE INTERCEPT
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- CULVERT (Profile View)
- FENCE

COMBUSTIBLE FLUIDS

- UNDERGROUND UTILITIES
- GAS
- ELECTRIC
- TELEPHONE OR TELEGRAPH
- FIBER OPTICS
- SERVICE PEDESTAL
- CABLE MARKER
- POWER POLE
- TELEPHONE POLE
- RAILROAD
- MARSH AREA
- WOODED OR SHRUB AREA



LAYOUT
SCALE 0 1 ML
TOTAL NET LENGTH OF CENTERLINE = 0.45 ML

ACCEPTED FOR
WINNEBAGO COUNTY
01/06/03 *John M. Abene*
(Date) (Signature)

ORIGINAL PLANS PREPARED BY

OMNI
WISCONSIN
DENNIS M. RUDOLF
E15517
APPLETON, WI
PROFESSIONAL ENGINEER

12/17/02 *Dennis M. Rudolf*
(Date) (Signature)

STANDARD DETAIL DRAWINGS

SDD NUMBER	TITLE
8A5-16a	INLET COVERS TYPE A, H, A-S & H-S
8A5-16b	INLET COVERS TYPE B, B-A, C, MS, MS-A & WM
8A5-16d	INLET COVER, TYPE Z MANHOLE COVERS, TYPE K, J, J-S, L & M
8B6-3	MANHOLES, TYPE 1
8B7-3	MANHOLES, TYPES 2 AND 3
8C1-5	INLETS, TYPES 1, 2, 3 AND 4
8C5-2	INLETS, TYPES 8, 9, 10, AND 11
8D1-13	CONCRETE CURB, CONCRETE CURB AND GUTTER AND PAVEMENT TIES
8D5-8	CURB RAMPS
8E8-2	TYPICAL INSTALLATIONS OF EROSION BALES
8E9-5	SILT FENCE
8F1-11	APRON ENDWALLS FOR CULVERT PIPE
8F10-1	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
9B2-6	CONDUIT
9B4-4	PULL BOX
9C2-2	CONCRETE BASES, TYPES 1, 2, AND 5
9F8-2	LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE
13C1-10	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES
13C13-3	URBAN DOWELED CONCRETE PAVEMENT
15B3-10a & 10b	CHAIN LINK FENCE
15C2-3	BARRICADES AND SIGNS FOR ROAD CLOSURES
15C7-5a	PAVEMENT MARKING SYMBOLS
15C8-9a	PAVEMENT MARKING (MAINLINE)
15C8-9d	PAVEMENT MARKING (LEFT TURN LANE)
15C8-9e	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

UTILITIES

ELECTRIC	WE ENERGIES - ELECTRIC OPERATIONS P.O. BOX 1699 800 S. LYNNDALE DRIVE APPLETON, WISCONSIN 54912 ATTN: DAVE PLAMANN TELEPHONE: (920) 380-3561
TELEPHONE	SBC (AMERITECH) 221 W. WASHINGTON STREET FOURTH FLOOR APPLETON, WISCONSIN 54911 ATTN: MR. HUGH RICHARDS TELEPHONE: (920) 735-3246
FIBER OPTIC	
GAS	WE ENERGIES - GAS OPERATIONS P. O. BOX 1699 800 SOUTH LYNNDALE DRIVE APPLETON, WISCONSIN 54912 ATTN: MR. DENNIS GIRARD TELEPHONE: (920) 380-3466
CABLE TV	TIME WARNER CABLE P.O. BOX 145 1001 KENNEDY AVENUE KIMBERLY, WISCONSIN 54316 ATTN: MS. SUE HEASTY TELEPHONE: (920) 738-3160 EXT 208
SANITARY SEWER	CITY OF NEENAH DEPARTMENT OF PUBLIC WORKS 211 WALNUT STREET NEENAH, WISCONSIN 54956 ATTN: MR. TIM HAMBLIN TELEPHONE: (920) 751-4625
WATERMAIN	
STORM SEWERS	
DNR LIAISON	DNR - SERVICE CENTER 625 E COUNTY ROAD Y OSHKOSH, WISCONSIN 54901-9731 ATTN: MS. BOBBI JO REISER TELEPHONE: (920) 303-5442
TRAFFIC SIGNALS	CITY OF NEENAH DEPARTMENT OF PUBLIC WORKS 211 WALNUT STREET NEENAH, WISCONSIN 54956 ATTN: MR. GERRY KAISER TELEPHONE: (920) 751-4629
DIGGERS HOTLINE	CABLE LOCATE TELEPHONE: (800) 242-8511 (TOLL FREE)



Toll Free (800) 242-8511
Milwaukee Area (414) 250-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

GENERAL NOTES

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

FILL AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENTS CONSTRUCTED FROM COMMON EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 30 PERCENT. ALL FILL VOLUMES SHOWN ARE THE ACTUAL VOLUMES.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT SHOWN ON THE CROSS SECTIONS. IF ADDITIONAL EBS IS REQUIRED, IT WILL BE MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS AND LIMITS FOR EBS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD.

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

DISTURBED AREAS IN FRONT OF HOMES OR BUSINESSES ARE TO BE TOPSOILED WITH PULVERIZED TOPSOIL. ALL DISTURBED AREAS, NOT OTHERWISE SURFACED, ARE TO BE TOPSOILED, FERTILIZED AND MULCHED. ALL AREAS SHALL BE SEEDDED WITH MIXTURE NO. 40.

ALL MANHOLE AND INLET OFFSETS ARE GIVEN TO THE CENTER OF THE STRUCTURE. INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHOWN ARE APPROXIMATE AND SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL EXISTING CULVERTS WITHIN THE SLOPE INTERCEPTS SHALL BE REMOVED AND CONSIDERED INCIDENTAL TO THE ITEM OF COMMON EXCAVATION.

THE REMOVAL OF EXISTING STORM SEWER PIPE ENCOUNTERED IN THE EXCAVATION FOR PROPOSED STORM SEWER PIPE WILL BE INCIDENTAL TO THE ITEM OF STORM SEWER PIPE.

THE COST OF CONNECTING EXISTING STORM SEWERS OR DRAINAGE STRUCTURES TO THE NEW STORM SEWER SHALL BE INCIDENTAL TO THE COST OF THE STORM SEWER.

ALL INLET CASTINGS IN THE CITY OF NEENAH REMOVED AS PART OF THIS PROJECT SHALL BECOME THE PROPERTY OF THE CITY OF NEENAH. THE CONTRACTOR SHALL CONTACT THE CITY OF NEENAH FOR A LOCATION TO PLACE INLETS IN THE RIGHT-OF-WAY FOR PICK UP BY THE CITY.

THE EXACT LOCATIONS OF ALL EROSION CONTROL ITEMS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

BOXOUTS SHALL BE PROVIDED IN CONCRETE LOADING ZONE BY THE CONTRACTOR FOR SIGN PLACEMENT. THE COST OF THE BOXOUTS SHALL BE INCIDENTAL TO CONCRETE LOADING ZONE. LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.

ALL CONCRETE MEDIAN NOSES SHALL BE SLOPED DOWN FROM 6 INCHES TO 2 INCHES IN 4 FEET.

CURB AND GUTTER RADII ARE SHOWN TO THE FACE OF CURB.

ALL CONCRETE CURB AND GUTTER ON THIS PROJECT SHALL BE INTEGRAL. EXCEPT FOR THE CURB RETURNS AT BABCOCK STREET.

CURB RAMP OPENINGS AS SHOWN ON THE PLANS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL CURB RAMPS SHALL BE TYPE 2 UNLESS NOTED OTHERWISE.

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES AND COMMERCIAL ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ALL DRIVEWAY APRONS SHALL BE 6-INCH CONCRETE.

BEYOND THE APRON, DRIVEWAYS TO BE REPLACED SHALL BE REPLACED IN KIND. CRUSHED AGGREGATE BASE COURSE WILL BE USED UNDER ALL DRIVEWAYS AND TRAIL.

WHERE SLOPE INTERCEPT LINES FALL OUTSIDE OF THE EXISTING RIGHT-OF-WAY, TEMPORARY INTERESTS TO ACCOMPLISH CONSTRUCTION WORK WITHIN THE SLOPE INTERCEPTS HAVE BEEN OBTAINED. THESE RIGHTS ARE EXTENDED TO THE CONTRACTOR.

TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION RATE OF 0.025 GALLONS PER SQUARE YARD AND SHALL BE USED IF DEEMED NECESSARY BY THE ENGINEER.

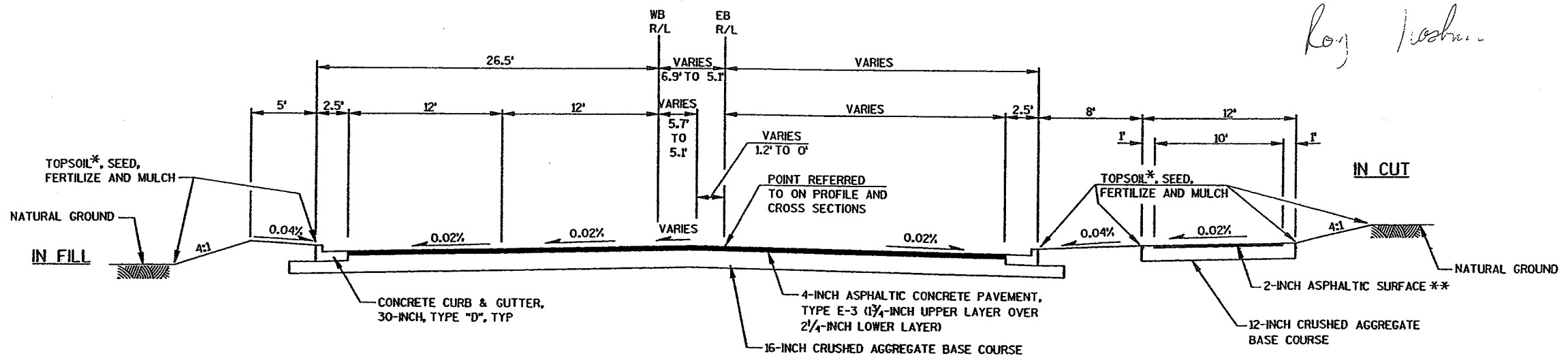
DISTANCES SHOWN ON THIS PLAN ARE GROUND DISTANCES.

BEARINGS SHOWN ON THIS PLAN ARE GRID BEARINGS BASED ON THE WINNEBAGO COUNTY COORDINATE SYSTEM.

PLAN ELEVATIONS = USGS DATUM

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, 59, 60, 61, 62.

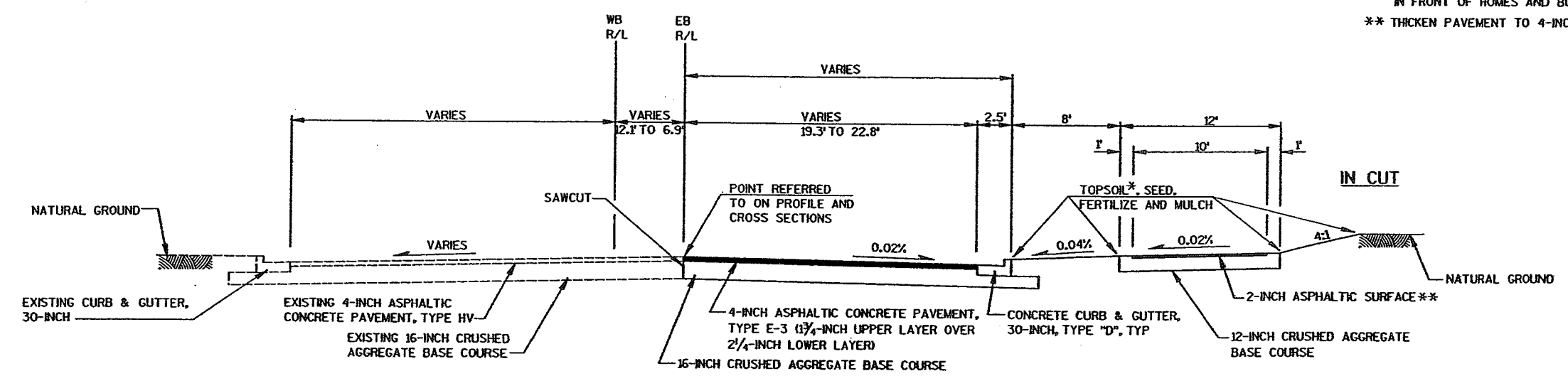
Log John



PROPOSED TYPICAL CROSS-SECTION FOR CTH JJ

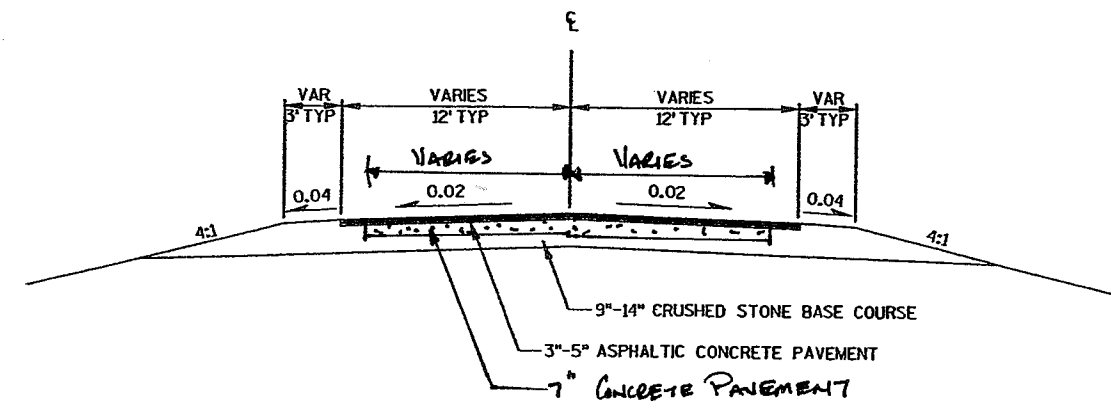
STA 23'EB+50 TO STA 23'EB+80

* PULVERIZED TOPSOIL SHALL BE USED IN FRONT OF HOMES AND BUSINESSES
 ** THICKEN PAVEMENT TO 4-INCH AT DRIVEWAYS



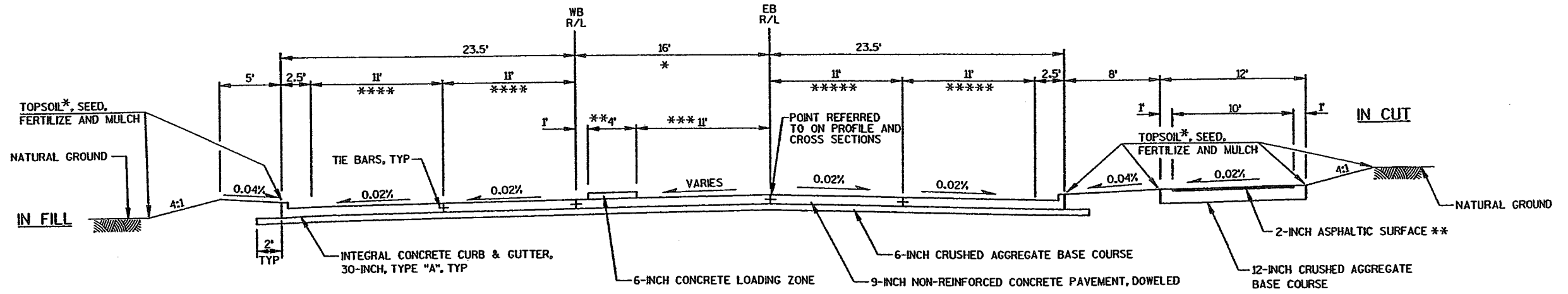
PROPOSED TYPICAL CROSS-SECTION FOR CTH JJ

STA 22'EB+60 TO STA 23'EB+50



EXISTING TYPICAL CROSS-SECTION FOR CTH JJ

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, 59, 60.



PROPOSED TYPICAL CROSS-SECTION FOR CTH JJ

(STA 45+65 - 46+93)

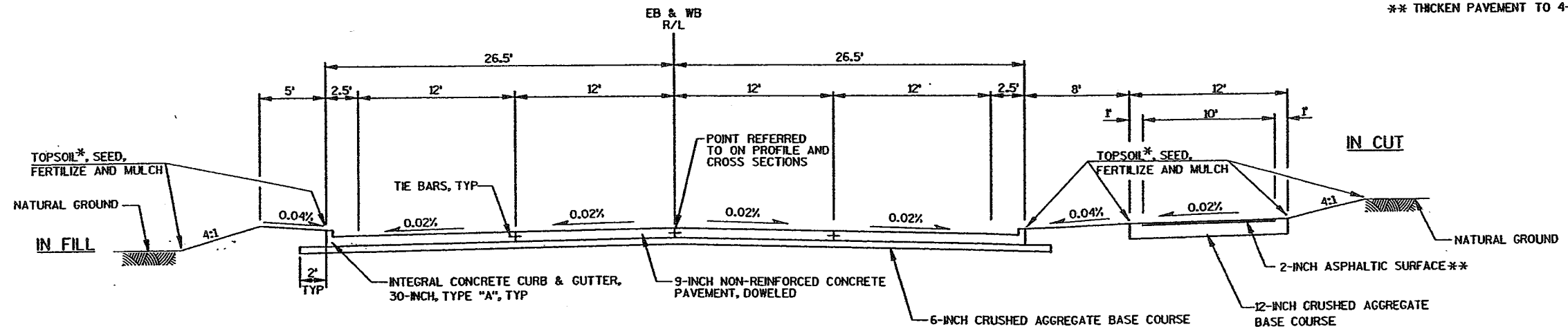
* VARIES 0' TO 16', STA 42'EB'+65 TO STA 45'EB'+65

*** VARIES 1' TO 11', STA 44'EB'+15 TO STA 45'EB'+65

** VARIES 3' TO 6', STA 43'EB'+58 TO STA 44'EB'+15
VARIES 6' TO 4', STA 44'EB'+15 TO STA 45'EB'+65

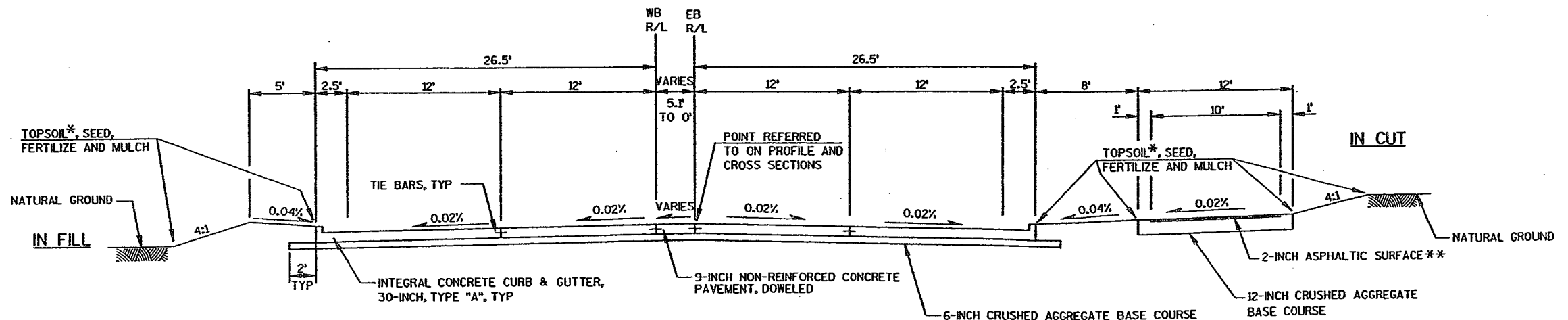
***** VARIES 12' TO 11', STA 42'EB'+65 TO STA 43'EB'+65
***** VARIES 12' TO 11' STA 42'EB'+65 TO STA 43'EB'+25

* PULVERIZED TOPSOIL SHALL BE USED IN FRONT OF HOMES AND BUSINESSES
** THICKEN PAVEMENT TO 4-INCH AT DRIVEWAYS



PROPOSED TYPICAL CROSS-SECTION FOR CTH JJ

STA 26'EB'+40 TO STA 42'EB'+65

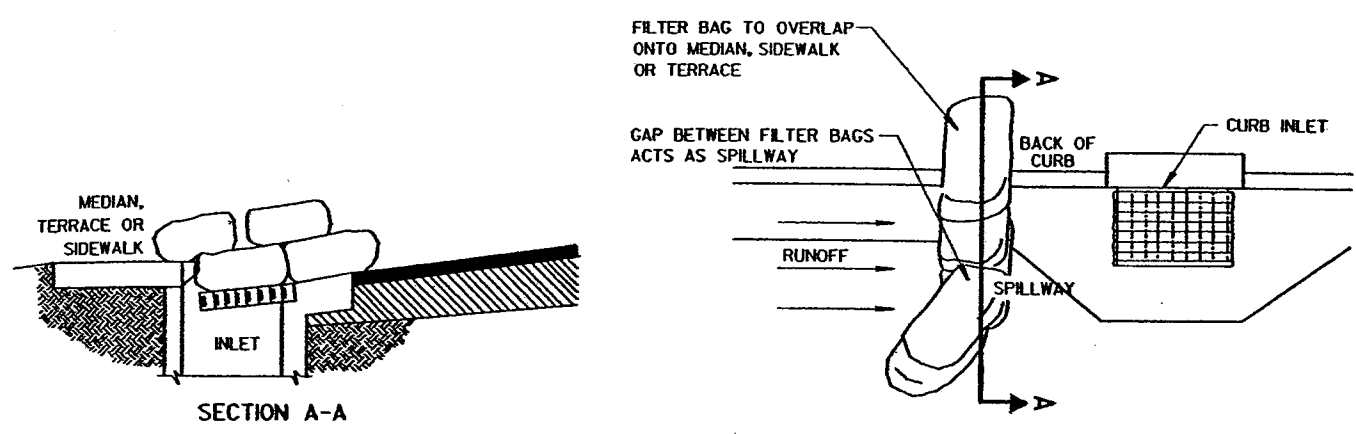


PROPOSED TYPICAL CROSS-SECTION FOR CTH JJ

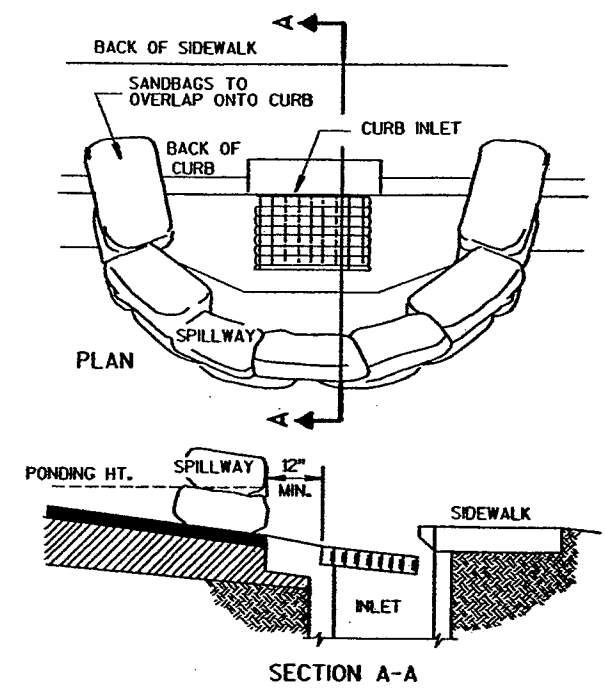
STA 23'EB'+80 TO STA 26'EB'+40

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, 59, 60.

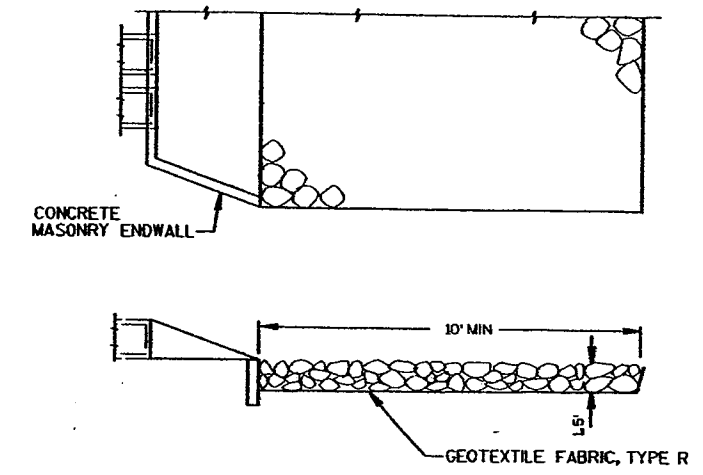
LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62.



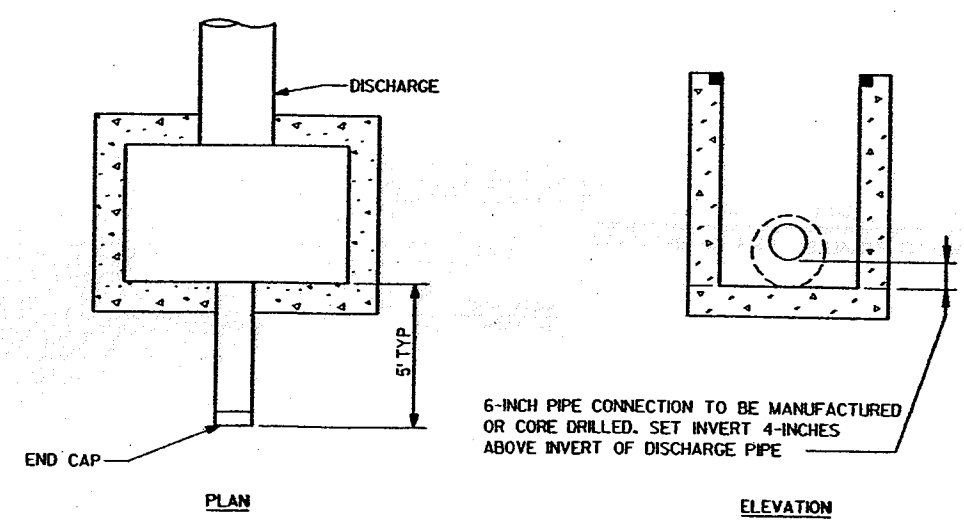
CURB INLET SEDIMENT BARRIER - CONTINUOUS GRADE
(FILTER BAG TYPE)



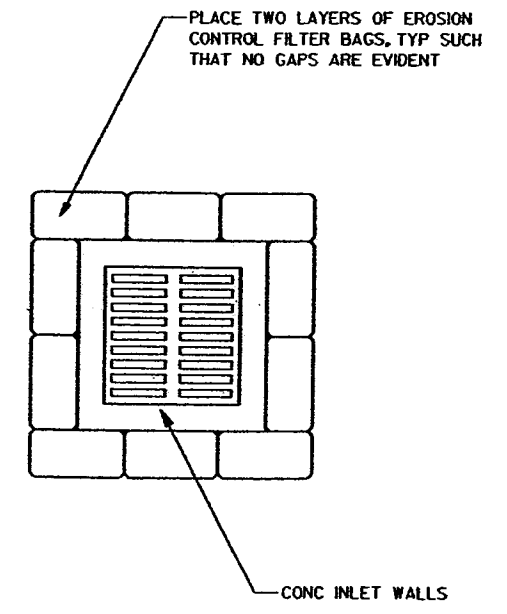
CURB INLET SEDIMENT BARRIER - SAG
(FILTER BAG TYPE)



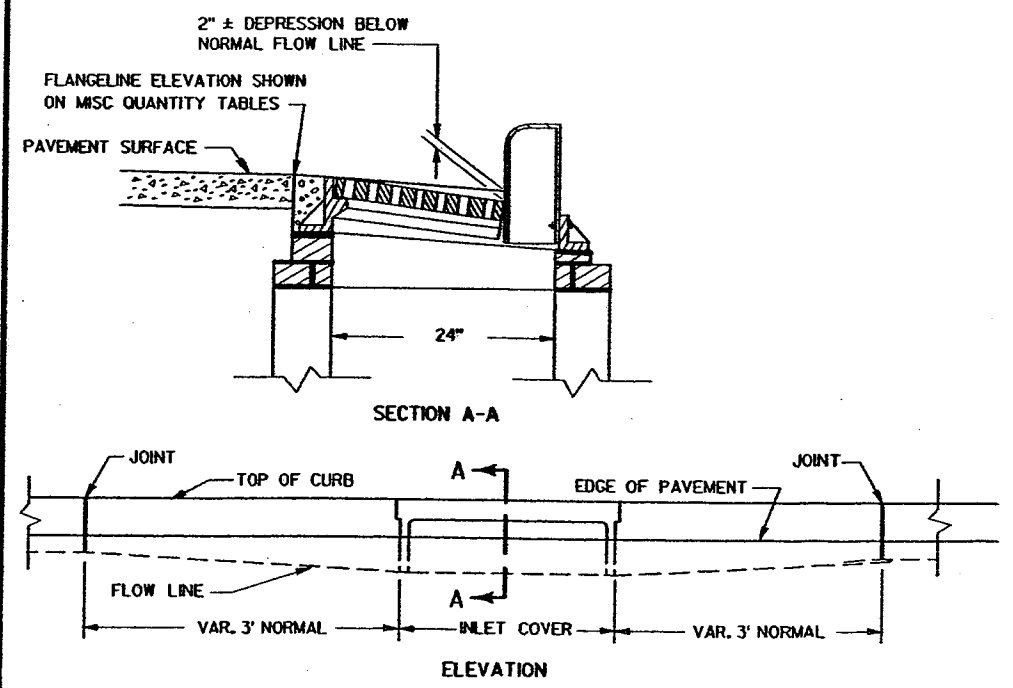
MEDIUM RANDOM RIPRAP



MINI-STORM SEWER CONNECTION DETAIL



FILTER BAGS AT FIELD INLETS OR ENDWALLS



DETAIL OF CURB AND GUTTER AT INLETS

WIDTH OF DRIVEWAYS

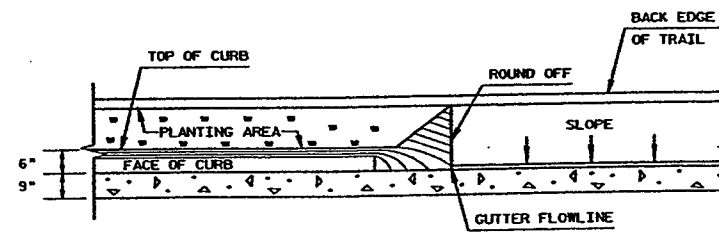
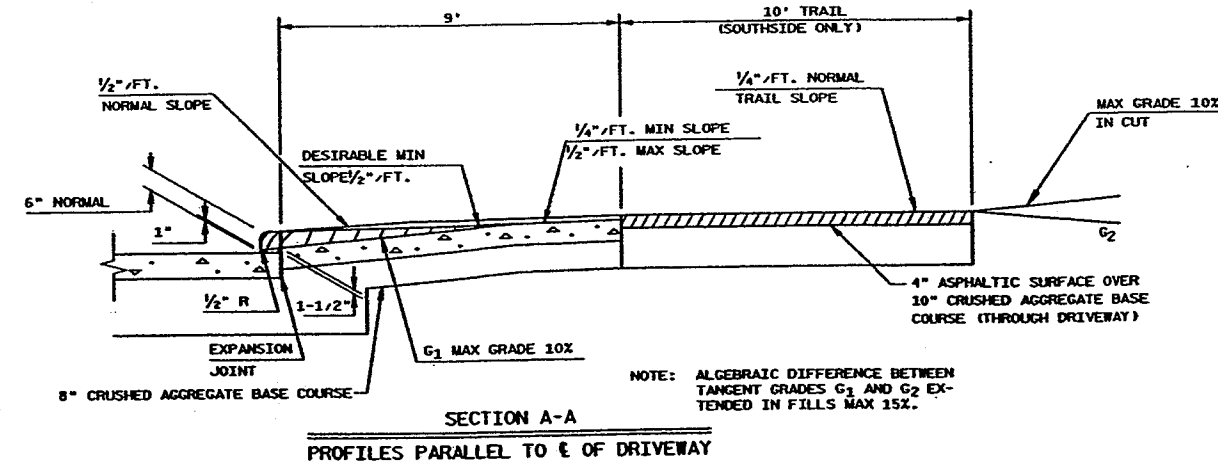
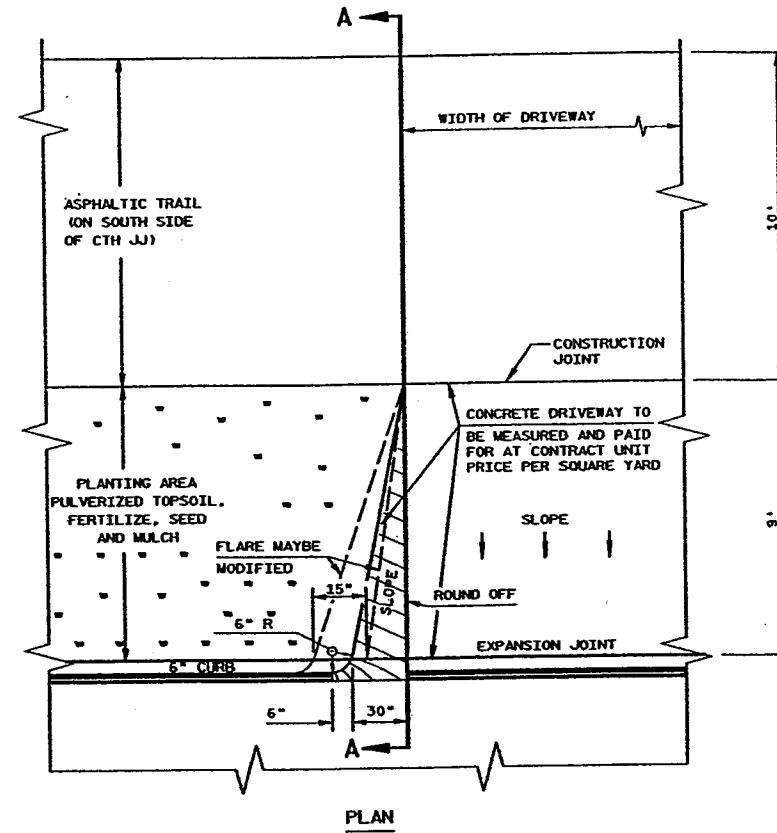
SINGLE OR COMBINATION MEASURED AT RIGHT ANGLES TO CENTERLINE OF DRIVEWAY.

- RURAL - NON-COMMERCIAL 24' MAX
- URBAN - NON-COMMERCIAL 24' MAX
- URBAN - COMMERCIAL 35' MAX

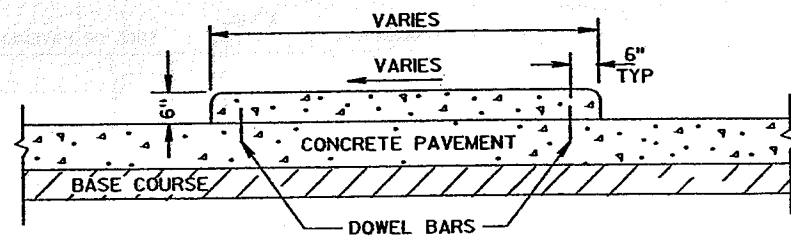
NOTE: NON-PAVED DRIVEWAYS SHALL CONSIST OF 6" OF CRUSHED AGGREGATE BASE COURSE.

ASPHALTIC DRIVEWAYS AND PARKING LOTS SHALL CONSIST OF 10" OF CRUSHED AGGREGATE BASE COURSE AND 4" OF ASPHALTIC PAVEMENT, TYPE E-0.3.

ALL CONCRETE DRIVEWAYS SHALL BE 6".



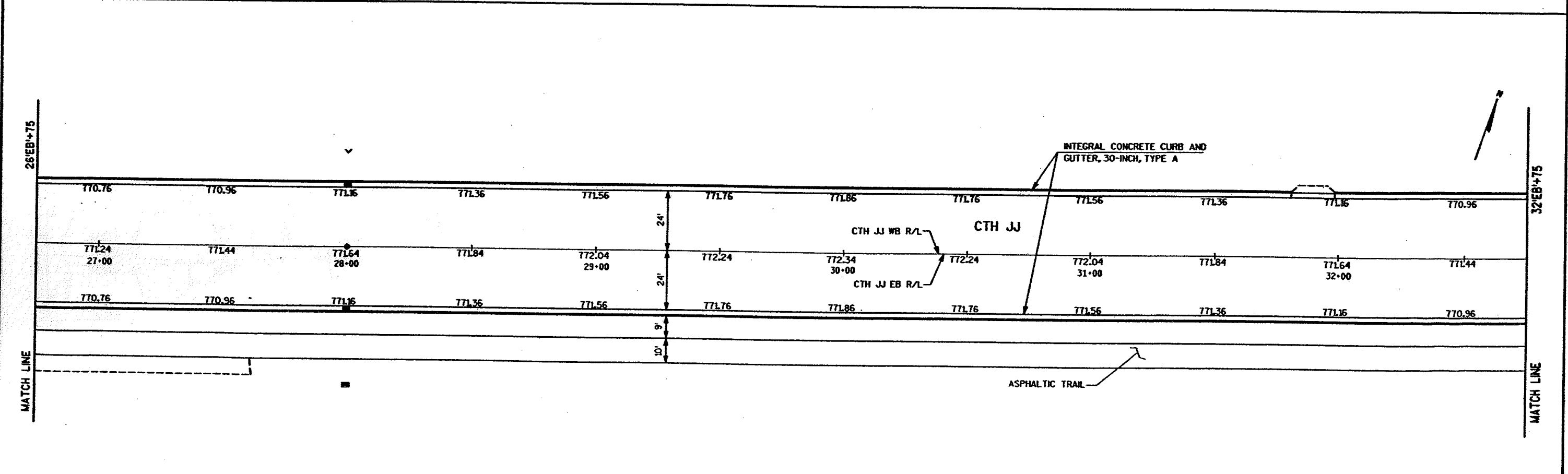
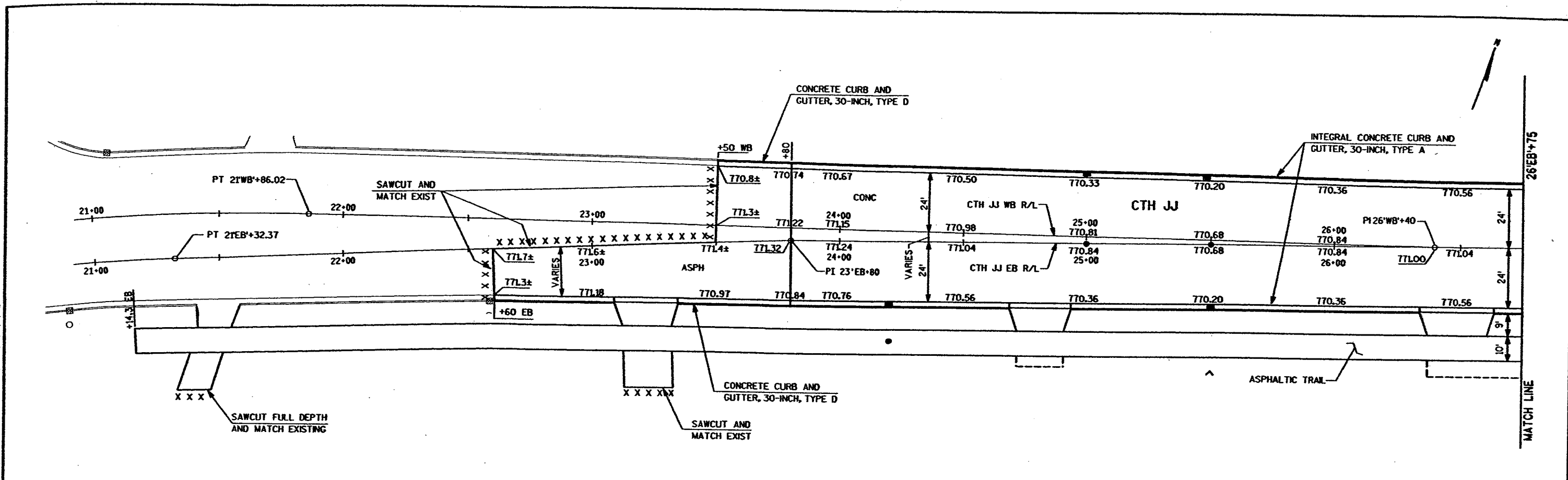
NOTE: ISLAND DOWELLED TO CONCRETE BASE WITH NO. 5 X 10" EPOXY COATED REINF. BARS 6" INTO BASE & 24" C-C (DOWEL BARS ARE INCIDENTAL TO CONCRETE LOADING ZONE)



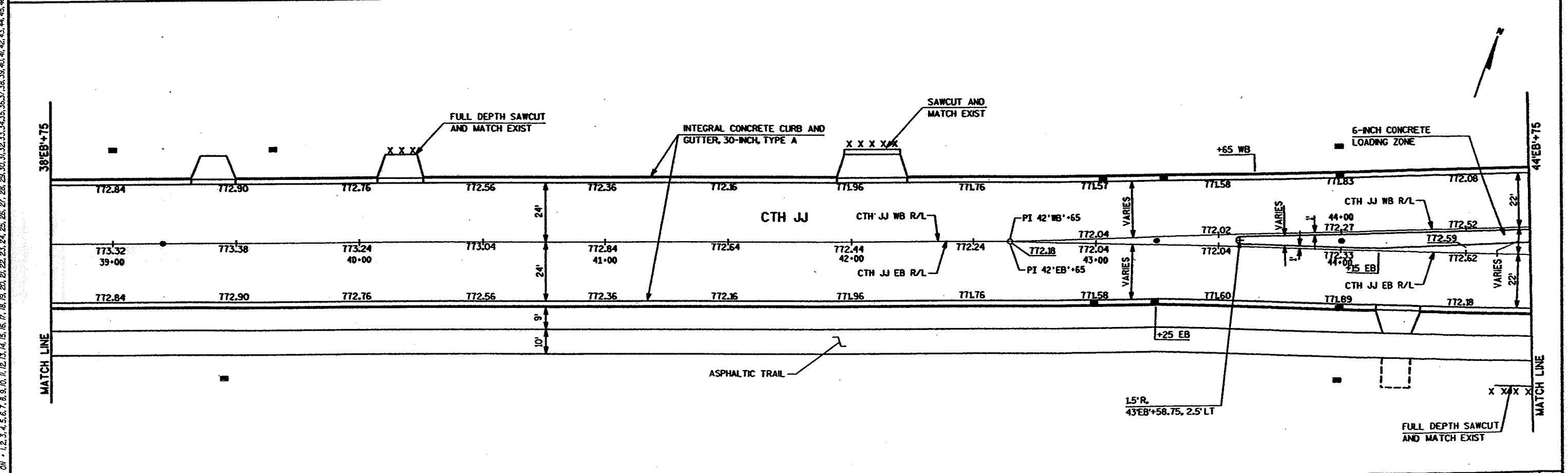
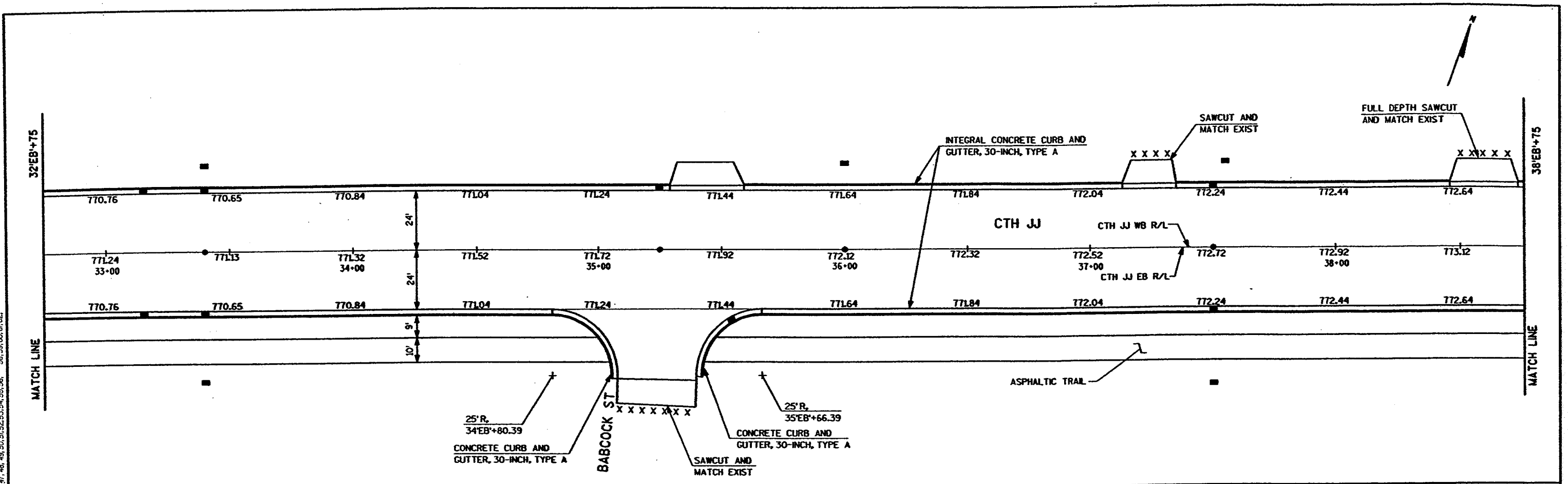
CONCRETE LOADING ZONE

CONCRETE DRIVEWAY (APRONS)

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

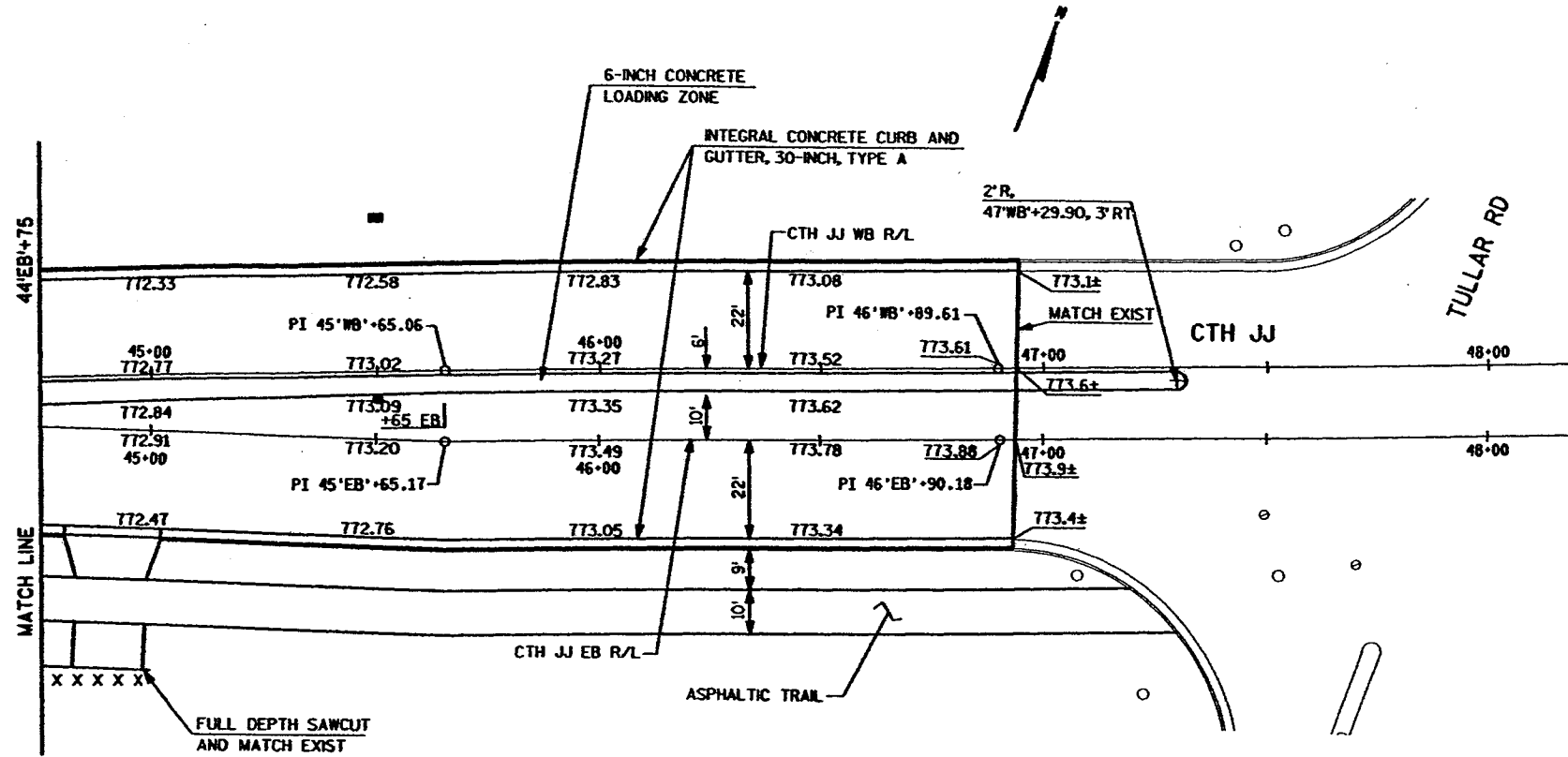


LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62.



STATE PROJECT NUMBER:	HWY: CTH JJ	COUNTY: WINNEBAGO	PAVING DETAILS	SCALE, FEET	SHEET NO: 8	E
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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, 58, 59, 60, 61, 62



STATE PROJECT NUMBER:

HWY: CTH JJ

COUNTY: WINNEBAGO

PAVING DETAILS

SCALE, FEET

SHEET NO: 9 E

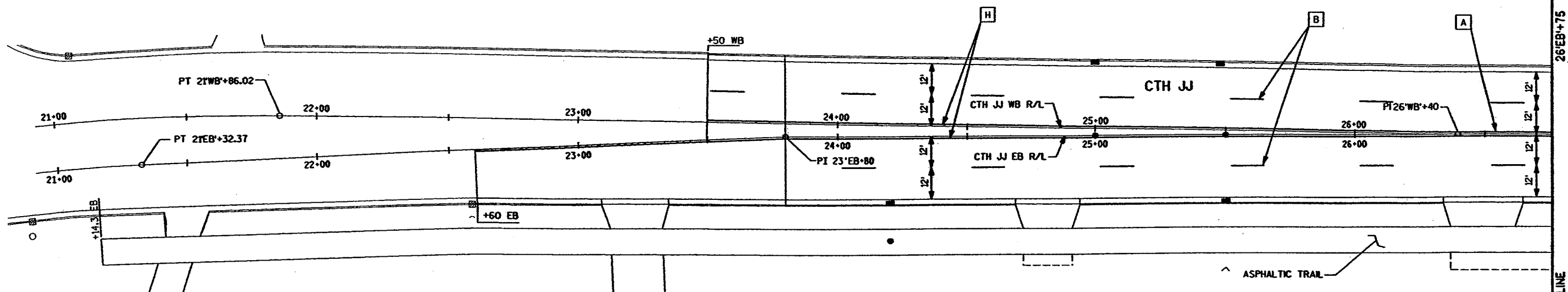
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PLOT DATE: 13 AUG 2001 10:41:21 ORG DATE : / /2000

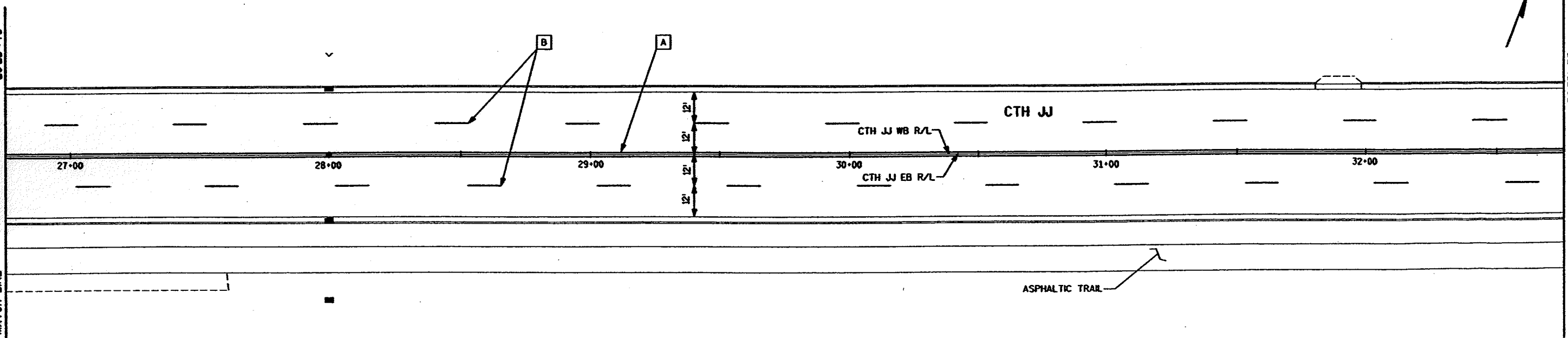
PLOT SCALE : ORIGINATOR : OMNI ASSOCIATES

PLOT SCALE : WISDOT/CADD SHEET 42

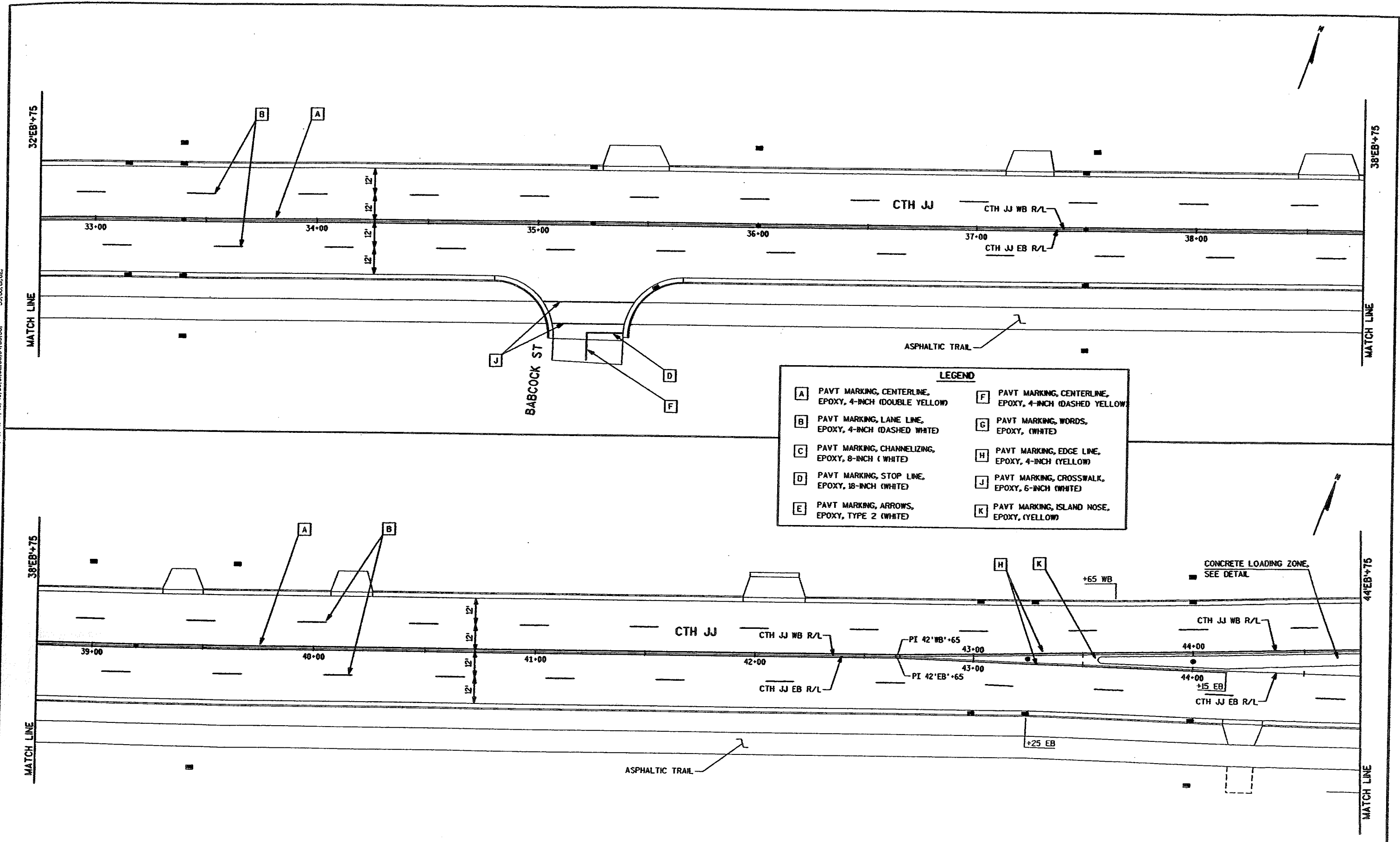
LEVELS ON - 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,59,60,61,62



LEGEND	
A PAVT MARKING, CENTERLINE, EPOXY, 4-INCH (DOUBLE YELLOW)	F PAVT MARKING, CENTERLINE, EPOXY, 4-INCH (DASHED YELLOW)
B PAVT MARKING, LANE LINE, EPOXY, 4-INCH (DASHED WHITE)	G PAVT MARKING, WORDS, EPOXY, (WHITE)
C PAVT MARKING, CHANNELIZING, EPOXY, 8-INCH (WHITE)	H PAVT MARKING, EDGE LINE, EPOXY, 4-INCH (YELLOW)
D PAVT MARKING, STOP LINE, EPOXY, 18-INCH (WHITE)	J PAVT MARKING, CROSSWALK, EPOXY, 6-INCH (WHITE)
E PAVT MARKING, ARROWS, EPOXY, TYPE 2 (WHITE)	K PAVT MARKING, ISLAND NOSE, EPOXY, (YELLOW)

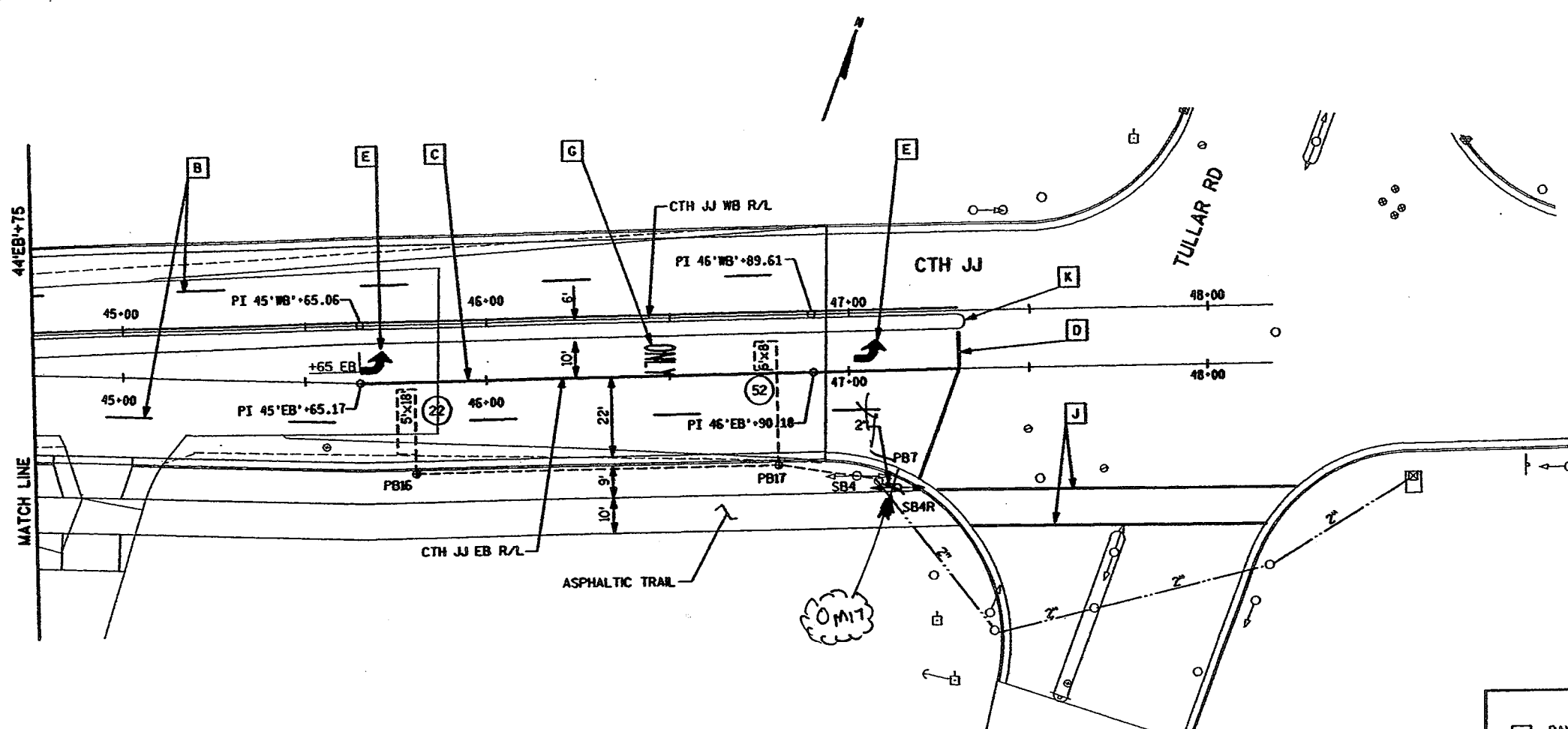


LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 59, 60, 61, 62.



LEGEND	
A	PAVT MARKING, CENTERLINE, EPOXY, 4-INCH (DOUBLE YELLOW)
B	PAVT MARKING, LANE LINE, EPOXY, 4-INCH (DASHED WHITE)
C	PAVT MARKING, CHANNELIZING, EPOXY, 8-INCH (WHITE)
D	PAVT MARKING, STOP LINE, EPOXY, 18-INCH (WHITE)
E	PAVT MARKING, ARROWS, EPOXY, TYPE 2 (WHITE)
F	PAVT MARKING, CENTERLINE, EPOXY, 4-INCH (DASHED YELLOW)
G	PAVT MARKING, WORDS, EPOXY, (WHITE)
H	PAVT MARKING, EDGE LINE, EPOXY, 4-INCH (YELLOW)
J	PAVT MARKING, CROSSWALK, EPOXY, 6-INCH (WHITE)
K	PAVT MARKING, ISLAND NOSE, EPOXY, (YELLOW)

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, 59, 60, 61, 62.



LEGEND	
A	PAVT MARKING, CENTERLINE, EPOXY, 4-INCH (DOUBLE YELLOW)
B	PAVT MARKING, LANE LINE, EPOXY, 4-INCH (DASHED WHITE)
C	PAVT MARKING, CHANNELIZING, EPOXY, 8-INCH (WHITE)
D	PAVT MARKING, STOP LINE, EPOXY, 18-INCH (WHITE)
E	PAVT MARKING, ARROWS, EPOXY, TYPE 2 (WHITE)
F	PAVT MARKING, CENTERLINE, EPOXY, 4-INCH (DASHED YELLOW)
G	PAVT MARKING, WORDS, EPOXY, (WHITE)
H	PAVT MARKING, EDGE LINE, EPOXY, 4-INCH (YELLOW)
J	PAVT MARKING, CROSSWALK, EPOXY, 6-INCH (WHITE)
K	PAVT MARKING, ISLAND NOSE, EPOXY, (YELLOW)
\oplus PB-00	12"x24" PULL BOX & NUMBER
---	1" NONMETALLIC CONDUIT (UNLESS OTHERWISE NOTED)
$\boxed{6' \times 20'}$	DETECTOR LOOPS AND SIZE
---	EXISTING CONDUIT
$\leftarrow \circ \rightarrow$ SB4R	SIGNAL BASE AND NUMBER
$\leftarrow \circ \rightarrow$ SB4	EXISTING SIGNAL BASE AND NUMBER
$\boxed{\text{X}}$	EXISTING CONTROLLER

ESTIMATE OF QUANTITIES

DATE 01/07/03

ITEM	ITEM DESCRIPTION	Unit	TOTAL	CTH JJ QUANTITY
20102	CLEARING	I.D.	180.00	180.00
20105	GRUBBING	I.D	180.00	180.00
20401	REMOVING PAVEMENT	S.Y.	94.00	94.00
20405	REMOVING CURB AND GUTTER	L.F.	190.00	190.00
20408	REMOVING MASONRY	C.Y.	12.00	12.00
20412	REMOVING FENCE	L.F.	275.00	275.00
20501	COMMON EXCAVATION	C.Y.	6,000.00	6,000.00
21301	FINISHING ROADWAY	LS	1.00	1.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	6,500.00	6,500.00
30407	SALVAGED CRUSHED AGGREGATE BASE COURSE	C.Y.	1,300.00	1,300.00
30426	BREAKER RUN STONE	TON	200.00	200.00
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL	15.00	15.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	7.00	7.00
40723	ASPHALTIC CONCRETE PAVEMENT, TYPE E-3	TON	120.00	120.00
41101	ASPHALTIC SURFACE	TON	400.00	400.00
41509	CONCRETE PAVEMENT, 9-INCH	S.Y.	9,700.00	9,700.00
41605	CONCRETE DRIVEWAY, 6-INCH	S.Y.	300.00	300.00
41653	PAVEMENT TIES	EACH	21.00	21.00
41665	CONCRETE PAVEMENT GAPS	EACH	2.00	2.00
50409	CONCRETE MASONRY, ENDWALLS	C.Y.	14.00	14.00
52260	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 12-INCH	EACH	2.00	2.00
52340	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CULVERT PIPE, CLASS HE-III, 29 X 45-INCH	L.F.	128.00	128.00
60123	CONCRETE CURB AND GUTTER, 30-INCH, TYPE A	L.F.	4,660.00	4,660.00
60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	150.00	150.00
60210	CONCRETE LOADING ZONE	S.F.	1,690.00	1,690.00
60604	MEDIUM RANDOM RIPRAP	C.Y.	120.00	120.00
60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH	L.F.	1,330.00	1,330.00
60826	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 15-INCH	L.F.	835.00	835.00
60827	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 18-INCH	L.F.	118.00	118.00
61006	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CULVERT PIPE, CLASS HE-III, STORM SEWER, 29 X 45-INCH	L.F.	21.00	21.00
61110	MANHOLES, TYPE 1	EACH	11.00	11.00
61112	MANHOLES, TYPE 3	EACH	1.00	1.00
61122	INLETS, TYPE 3	EACH	20.00	20.00
61123	INLETS, TYPE 8	EACH	12.00	12.00
61151	MANHOLE COVERS, TYPE J	EACH	11.00	11.00
61156	INLET COVERS, TYPE H-S	EACH	6.00	6.00
61163	INLET COVERS, TYPE C	EACH	1.00	1.00
61167	INLET COVERS, TYPE H	EACH	14.00	14.00
61170	INLET COVERS, TYPE MS	EACH	12.00	12.00
61182	ADJUSTING MANHOLE COVERS	EACH	2.00	2.00



ITEM	ITEM DESCRIPTION	Unit	TOTAL	QUANTITY	CTH JJ
61610	CHAIN LINK FENCE, 4 FT.	L.F.	35.00	35.00	
61910	MOBILIZATION	LS	1.00	1.00	
62401	WATER	MGAL	60.00	60.00	
62501	TOPSOIL	S.Y.	9,700.00	9,700.00	
62702	MULCHING	S.Y.	9,700.00	9,700.00	
62811	EROSION BALES, DELIVERED	EACH	39.50	39.50	
62812	EROSION BALES, INSTALLED	EACH	40.00	40.00	
62815	SILT FENCE, DELIVERED	L.F.	900.00	900.00	
62816	SILT FENCE, INSTALLED	L.F.	900.00	900.00	
62819	SILT FENCE MAINTENANCE	L.F.	1,800.00	1,800.00	
62820	MOBILIZATIONS, EROSION CONTROL	EACH	2.00	2.00	
62821	MOBILIZATIONS, EMERGENCY EROSION CONTROL	EACH	3.00	3.00	
62840	EROSION MAT, DELIVERED, CLASS III, TYPE A	S.Y.	300.00	300.00	
62841	EROSION MAT, INSTALLED, CLASS III, TYPE A	S.Y.	300.00	300.00	
62905	FERTILIZER, TYPE B	CWT	7.00	7.00	
63011	SEEDING, MIXTURE NO. 40	LB	170.00	170.00	
64301	TRAFFIC CONTROL	LS	1.00	1.00	
64505	GEOTEXTILE FABRIC, TYPE R	S.Y.	250.00	250.00	
64602	PAVEMENT MARKING, 4-INCH, EPOXY	L.F.	6,570.00	6,570.00	
64618	PAVEMENT MARKING, CHANNELIZING, 8-INCH, EPOXY	L.F.	260.00	260.00	
64710	PAVEMENT MARKING, STOP LINE, 18-INCH, EPOXY	L.F.	45.00	45.00	
64718	PAVEMENT MARKING, CROSSWALK, 6-INCH, EPOXY	L.F.	265.00	265.00	
64734	PAVEMENT MARKING, ARROWS, TYPE 2, EPOXY	EACH	2.00	2.00	
64758	PAVEMENT MARKING, WORDS, EPOXY	EACH	1.00	1.00	
64790	PAVEMENT MARKING, ISLAND NOSE, EPOXY	EACH	2.00	2.00	
65040	CONSTRUCTION STAKING, STORM SEWER SYSTEM	EACH	50.00	50.00	
65045	CONSTRUCTION STAKING, SUBGRADE	L.F.	3,153.00	3,153.00	
65050	CONSTRUCTION STAKING, CRUSHED AGGREGATE BASE COURSE	L.F.	150.00	150.00	
65055	CONSTRUCTION STAKING, CURB, GUTTER, CURB & GUTTER	L.F.	150.00	150.00	
65070	CONSTRUCTION STAKING, CONCRETE PAVEMENT	L.F.	3,003.00	3,003.00	
65216	NONMETALLIC CONDUIT, SCHEDULE 40, 1-INCH	L.F.	130.00	130.00	
65219	NONMETALLIC CONDUIT, SCHEDULE 40, 2-INCH	L.F.	6.00	6.00	
65250	LOOP DETECTOR CONDUIT	L.F.	110.00	110.00	
65301	PULL BOXES, STEEL, 12 X 24-INCH	EACH	2.00	2.00	
65401	CONCRETE BASES, TYPE 1	EACH	1.00	1.00	
65580	LOOP DETECTOR LEAD IN CABLE	L.F.	572.00	572.00	
65585	LOOP DETECTOR WIRE	L.F.	334.00	334.00	
66501	SAWING EXISTING PAVEMENT	L.F.	232.00	232.00	
66502	SAWING CONCRETE PAVEMENT, FULL DEPTH	L.F.	90.00	90.00	
90005A	EROSION CONTROL FILTER BAGS, DELIVERED	EACH	200.00	200.00	
90005B	EROSION CONTROL FILTER BAGS, INSTALLED	EACH	200.00	200.00	
90005C	EROSION CONTROL FILTER BAGS, MAINTENANCE	EACH	200.00	200.00	
90030	6-INCH MINI STORM SEWER	L.F.	53.00	53.00	

ESTIMATE OF QUANTITIES

DATE	01/07/03			CTH JJ
ITEM	ITEM DESCRIPTION	Unit	TOTAL QUANTITY	QUANTITY
20102	CLEARING	I.D.	180.00	180.00
20105	GRUBBING	I.D.	180.00	180.00
20401	REMOVING PAVEMENT	S.Y.	94.00	94.00
20405	REMOVING CURB AND GUTTER	L.F.	190.00	190.00
20408	REMOVING MASONRY	C.Y.	12.00	12.00
20412	REMOVING FENCE	L.F.	275.00	275.00
20501	COMMON EXCAVATION	C.Y.	6,000.00	6,000.00
21301	FINISHING ROADWAY	LS	1.00	1.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	6,500.00	6,500.00
30407	SALVAGED CRUSHED AGGREGATE BASE COURSE	C.Y.	1,300.00	1,300.00
30426	BREAKER RUN STONE	TON	200.00	200.00
40204	ASPHALTIC MATERIAL FOR TACK COAT	GAL	15.00	15.00
40501	ASPHALTIC MATERIAL FOR PLANT MIXES	TON	7.00	7.00
40723	ASPHALTIC CONCRETE PAVEMENT, TYPE E-3	TON	120.00	120.00
41101	ASPHALTIC SURFACE	TON	400.00	400.00
41509	CONCRETE PAVEMENT, 9-INCH	S.Y.	9,700.00	9,700.00
41605	CONCRETE DRIVEWAY, 6-INCH	S.Y.	300.00	300.00
41653	PAVEMENT TIES	EACH	21.00	21.00
41665	CONCRETE PAVEMENT GAPS	EACH	2.00	2.00
50409	CONCRETE MASONRY, ENDWALLS	C.Y.	14.00	14.00
52260	REINFORCED CONCRETE APRON ENDWALLS FOR CULVERT PIPE, 12-INCH	EACH	2.00	2.00
52340	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CULVERT PIPE, CLASS HE-III, 29 X 45-INCH	L.F.	128.00	128.00
60123	CONCRETE CURB AND GUTTER, 30-INCH, TYPE A	L.F.	4,660.00	4,660.00
60133	CONCRETE CURB AND GUTTER, 30-INCH, TYPE D	L.F.	150.00	150.00
60210	CONCRETE LOADING ZONE	S.F.	1,690.00	1,690.00
60604	MEDIUM RANDOM RIPRAP	C.Y.	120.00	120.00
60825	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 12-INCH	L.F.	1,330.00	1,330.00
60826	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 15-INCH	L.F.	835.00	835.00
60827	REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER, 18-INCH	L.F.	118.00	118.00
61006	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CULVERT PIPE, CLASS HE-III, STORM SEWER, 29 X 45-INCH	L.F.	21.00	21.00
61110	MANHOLES, TYPE 1	EACH	11.00	11.00
61112	MANHOLES, TYPE 3	EACH	1.00	1.00
61122	INLETS, TYPE 3	EACH	20.00	20.00
61123	INLETS, TYPE 8	EACH	12.00	12.00
61151	MANHOLE COVERS, TYPE J	EACH	11.00	11.00
61156	INLET COVERS, TYPE H-S	EACH	6.00	6.00
61163	INLET COVERS, TYPE C	EACH	1.00	1.00
61167	INLET COVERS, TYPE H	EACH	14.00	14.00
61170	INLET COVERS, TYPE MS	EACH	12.00	12.00
61182	ADJUSTING MANHOLE COVERS	EACH	2.00	2.00

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

STORM SEWER SUMMARY

LOCATION FROM	To	RCP CLASS III			RCHEP CLASS HE-III 61006 29X45 IN L.F.	INLET ELEVATION	DISCHARGE ELEVATION
		60825 12 IN. L.F.	60826 15 IN. L.F.	60827 18 IN. L.F.			
10.1	10.2	14.5			767.93	767.89	
10.2	10.3				766.76	766.70	
12.1	12.2	28.2			767.23	767.17	
12.2	11.1			67.7	766.78	766.70	
13.1	13.4	27.3			767.15	767.10	
13.2	13.3	24.5			769.50	767.15	
13.3	13.4	25.5			767.15	767.10	
13.4	12.2			50.0	766.85	766.79	
14.1	14.2	12.5			769.00	768.98	
14.2	14.5	25.5			768.98	768.92	
14.3	14.4	30.5			767.81	767.75	
14.4	14.5	25.5			767.75	767.70	
14.5	13.4		250.0		767.60	767.10	
15.1	15.3	25.0			767.77	767.72	
15.2	15.3	9.5			767.72	767.70	
15.3	15.7	25.5			767.70	767.65	
15.4	15.6	25.0			767.77	767.72	
15.5	15.6	27.5			767.75	767.70	
15.6	15.7	25.5			767.70	767.65	
15.7	16.2		185.0		767.55	767.18	
16.1	16.2	25.5			767.34	767.29	
16.2	16.4		42.0		767.16	766.95	
16.3	16.4	31.9			767.43	767.21	
16.4	SOUTH		0.1		766.95	766.95	
17.1	17.2	35.0			768.00	767.90	
17.2	16.2	75.0			767.68	767.46	
18.1	18.2	10.7			768.28	768.25	
18.2	18.5	25.5			768.25	768.17	
18.3	18.4	29.5			768.34	768.25	
18.4	18.5	25.5			768.25	768.18	
18.5	17.2	150.0			768.13	767.68	
19.1	19.4	43.0			768.83	768.70	
19.2	19.4	58.9			768.88	768.70	
19.3	19.4	60.4			768.88	768.70	
19.4	18.5	170.0			768.64	768.13	
20.1	20.2	25.0			768.75	768.70	
20.2	20.5	26.0			768.65	768.60	
20.3	20.4	25.0			768.75	768.70	
20.4	20.5	25.1			768.65	768.60	
20.5	21.5		75.0		768.50	768.40	
21.1	21.2	11.3			768.57	768.55	
21.2	21.5	27.1			768.55	768.49	
21.3	21.4	29.5			768.61	768.55	
21.4	21.5	27.1			768.55	768.50	
21.5	22.2		150.1		768.40	768.19	
22.1	22.2	41.1			768.56	768.44	
22.2	23.1		133.0		768.19	768.00	
TOTALS		1330.1	835.2	117.7	20.6		

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	20102 CLEARING DIA. IN.	20105 GRUBBING DIA. IN.
22+60 - 26+00	CTH JJ	12	12
26+00 - 32+00	CTH JJ	80	80
32+00 - 38+00	CTH JJ	40	40
38+00 - 43+90	CTH JJ	20	20
43+90 - 46+93	CTH JJ	28	28
TOTALS		180	180

REMOVING CURB AND GUTTER

STATION TO STATION	LOCATION	20405 L.F.
22+60 - 24+00	CTH JJ BABCOCK ST	140
		50
TOTALS		190

REMOVING MASONRY

STATION	LOCATION	20408 C.Y.
24+50	CTH JJ ENDWALLS	6
24+50	CTH JJ ENDWALLS	6
TOTALS		12

REMOVING FENCE

STATION TO STATION	LOCATION	20412 L.F.
28+15 - 29+20	CTH JJ	137
30+05 - 31+00	CTH JJ	138
TOTALS		275

CRUSHED AGGREGATE BASE COURSE AND BREAKER RUN STONE

STATION TO STATION	LOCATION	30404			30407		
		CRUSHED AGGREGATE BASE COURSE TONS	CRUSHED AGGREGATE BASE COURSE C.Y.	BREAKER RUN STONE TONS	BREAKER RUN STONE C.Y.	BREAKER RUN STONE TONS	BREAKER RUN STONE C.Y.
22+59 - 26+00	CTH JJ	700	140				
22+59 - 26+00	DRIVEWAYS	30					
22+59 - 26+00	SIDEWALK	380					
26+00 - 32+00	CTH JJ	860	250				
26+00 - 32+00	DRIVEWAYS	20					
26+00 - 32+00	SIDEWALK	560					
26+60 - 27+60	PARKING LOT	50					
32+00 - 38+00	CTH JJ	830	250				
32+00 - 38+00	DRIVEWAYS	30					
32+00 - 38+00	SIDEWALK	560					
	BABCOCK ST	90					
38+00 - 43+90	CTH JJ	820	250				
38+00 - 43+90	DRIVEWAYS	30					
38+00 - 43+90	SIDEWALK	550					
43+90 - 46+93	CTH JJ	570	110				
43+90 - 46+93	DRIVEWAYS	30					
43+90 - 46+93	SIDEWALK	290					
UNDISTRIBUTED		100					
TEMPORARY ACCESS ROADS			100				
EBS AREAS			200	200			
TOTALS		6500	1300	200			

ASPHALTIC ITEMS

STATION TO STATION	LOCATION	40204 ASPHALTIC MATERIAL FOR TACK COAT GAL	40501 ASPHALTIC MATERIAL FOR PLANT MIX TON	40723 ASPHALTIC CONCRETE PAVEMENT TYPE E-3 TON	41101 ASPHALTIC SURFACE TON
		22+60 - 23+80	CTH JJ BABCOCK ST DRIVEWAYS	12	6
		3	1	10	
21+14 - 47+00	SIDEWALK				10
TOTALS		15	7	120	400

CONCRETE PAVEMENT, 9-INCH

STATION TO STATION	LOCATION	41509 S.Y.
23+80 - 26+00	CTH JJ	900
26+00 - 32+00	CTH JJ	2420
32+00 - 38+00	CTH JJ	2540
38+00 - 43+90	CTH JJ	2380
43+90 - 46+93	CTH JJ	1460
TOTALS		9700

CONCRETE DRIVEWAY, 6-INCH

STATION	LOCATION	41605 S.Y.
21+50	CTH JJ	35
23+20	CTH JJ	23
24+80	CTH JJ	24
26+50	CTH JJ	28
35+41	CTH JJ	28
37+25	CTH JJ	20
38+59	CTH JJ	25
39+40	CTH JJ	16
40+20	CTH JJ	18
42+10	CTH JJ	28
44+25	CTH JJ	16
44+90	CTH JJ	39
31+90	LT	5
TOTALS		300 305

WATER

STATION	LOCATION	62401 WATER MGAL
UNDISTRIBUTED	COMPACTION	50
UNDISTRIBUTED	DUST CONTROL	10
TOTALS		60

CONCRETE PAVEMENT GAPS

STATION	LOCATION	41665 EACH
26+50	CTH JJ DRIVEWAY	1
42+10	CTH JJ DRIVEWAY	1
TOTALS		2

PAVEMENT TIES

STATION	LOCATION	41653 EACH
46+94	CTH JJ	21
TOTALS		21

REMOVING PAVEMENT

STATION	LOCATION	20401 S.Y.
21+50	CTH JJ DRIVEWAY	33
38+59	CTH JJ DRIVEWAY	5
40+20	CTH JJ DRIVEWAY	3
44+90	CTH JJ DRIVEWAY	53
TOTALS		94

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, 59, 60.

CONCRETE CURB & GUTTER, 30-INCH, TYPE A

STATION TO STATION	LOCATION	60123 L.F.
23+80 - 26+00.RT	CTH JJ	220 ✓
23+50 - 26+00.LT	CTH JJ	250 ✓
26+00 - 32+00.RT	CTH JJ	600 ✓
26+00 - 32+00.LT	CTH JJ	600 ✓
32+00 - 38+00.RT	CTH JJ	600 ✓
32+00 - 38+00.LT	CTH JJ	600 ✓
38+00 - 43+90.RT	CTH JJ	590 ✓
38+00 - 43+90.LT	CTH JJ	590 ✓
43+90 - 46+94.RT	CTH JJ	305 ✓
43+90 - 46+94.LT	CTH JJ	305 ✓
TOTALS		4660 ✓

CONCRETE CURB & GUTTER, 30-INCH, TYPE D

STATION TO STATION	LOCATION	60133 L.F.
22+60 - 23+80.RT	CTH JJ	120 ✓
23+50 - 23+80.LT	CTH JJ	30 ✓
TOTALS		150 ✓

CONCRETE LOADING ZONE

STATION TO STATION LOCATION	60210 S.F.
43+57 - 47+32 CTH JJ	1690
TOTALS	1690 ✓

LANDSCAPING ITEMS

STATION TO STATION	LOCATION	62501 TOPSOIL S.Y.	62702 MULCHING S.Y.	62905 FERT. TYPE B CWT	63011 SEEDING NO. 40 LB
21+14 - 26+00.RT	CTH JJ	1160	1160	1	20
21+90 - 26+00.LT	CTH JJ	590	590	0.5	8
26+00 - 32+00.RT	CTH JJ	1390	1390	1	25
26+00 - 32+00.LT	CTH JJ	940	940	0.5	13
32+00 - 38+00.RT	CTH JJ	1180	1180	0.5	21
32+00 - 38+00.LT	CTH JJ	735	735	0.5	11
38+00 - 43+90.RT	CTH JJ	1165	1165	0.5	21
38+00 - 43+90.LT	CTH JJ	950	950	0.5	14
43+90 - 47+00.RT	CTH JJ	750	750	0.5	13
43+90 - 47+00.LT	CTH JJ	490	490	0.5	9
UNDISTRIBUTED		350	350	1	15
TOTALS		9700	9700	7	170

EROSION CONTROL ITEMS

STATION TO STATION LOCATION	60604 MEDIUM RANDOM RIPRAP C.Y.	62811 EROSION BALES DELIVERED EACH	62812 EROSION BALES INSTALLED EACH	62815 SILT FENCE DELIVERED L.F.	62816 SILT FENCE INSTALLED L.F.	62819 SILT FENCE MAINT. L.F.	62820 MOBILIZATIONS EROSION CONTROL EACH	62821 EMERGENCY EROSION CONTROL EACH	62840 EROSION MAT DELIVERED CLASS III TYPE A S.Y.	62841 EROSION MAT DELIVERED CLASS III TYPE A S.Y.	64505 GEOTEXTILE FABRIC TYPE R S.Y.	90005A FILTER BAGS DELIVERED EACH	90005B FILTER BAGS INSTALLED EACH	90005C FILTER BAGS MAINT. EACH
22+60 - 26+00 CTH JJ	120	20	20	500	500	1000	---	---	150	150	250	20	20	20
26+00 - 32+00 CTH JJ	---	---	---	100	100	200	---	---	---	---	---	10	10	10
32+00 - 38+00 CTH JJ	---	---	---	50	50	100	---	---	---	---	---	40	40	40
38+00 - 43+90 CTH JJ	---	---	---	50	50	100	---	---	---	---	---	30	30	30
43+90 - 46+94 CTH JJ	---	---	---	50	50	100	---	---	---	---	---	30	30	30
UNDISTRIBUTED	---	20	20	150	150	300	2	3	150	150	---	70	70	70
TOTALS	120	40	40	900	900	1800	2	3	300	300	250	200	200	200

PAVEMENT MARKING, EPOXY

STATION TO STATION	LOCATION	64602 CENTER LINE 4-INCH L.F.	64602 LANE LINE 4-INCH L.F.	64602 EDGE LINE 4-INCH L.F.	64618 CHANNELIZING 8-INCH L.F.	64710 STOP LINE 18-INCH L.F.	64602 DIAGONALS 4-INCH L.F.	64718 CROSSWALK 6-INCH L.F.
22+50 - 26+00 CTH JJ		---	125	1010	---	---	70	---
26+00 - 32+00 CTH JJ		1200 ✓	300	---	---	---	---	---
32+00 - 38+00 CTH JJ		1200 ✓	300	---	---	---	---	---
38+00 - 43+90 CTH JJ		1000 ✓	300	180	---	---	---	---
43+90 - 46+93 CTH JJ		---	175	610	260	30	---	---
BABCOCK STREET		100	---	---	---	15	---	75
TULLAR ROAD		---	---	---	---	---	---	190
TOTALS		3500 ✓	1200 ✓	1800 ✓	260 ✓	45 ✓	70 ✓	265 ✓

PAVEMENT MARKING, ARROWS, WORDS AND ISLAND NOSES, EPOXY

STATION TO STATION LOCATION	64724 ARROWS TYPE 2 EACH	64758 WORDS EACH	64790 ISLAND NOSE EACH
38+00 - 43+90 CTH JJ	---	---	1 ✓
43+90 - 46+93 CTH JJ	2 ✓	1 ✓	1 ✓
TOTALS	2 ✓	1 ✓	2 ✓

NON-METALLIC CONDUIT, SCHEDULE 40

FROM	TO	65216 1-INCH LF	65219 2-INCH LF
PB17	PB16	100	---
PB16	PB7	30	---
SB4R	PB7	---	6
TOTALS		130	6

LOOP DETECTORS

LOOP PHASE NUMBER	LOCATION	SIZE FT X FT	NO. TURNS	65250 LOOP DETECTOR CONDUIT LF	65580 LOOP DETECTOR LEAD-IN CABLE LF	65585 LOOP DETECTOR WIRE LF
22	45+80.RT CTH JJ	5 X 18 ✓	3	53	336	158
52	46+80.LT CTH JJ	6 X 8 ✓	4	57	236	176
TOTALS				110	572	334

PULL BOXES

NUMBER	LOCATION	65301 12 X 24-INCH EACH	24 X 36-INCH EACH
PB7	47+07. 30.5 RT CTH JJ	---	EXISTING
PB16	45+80. 25.5 RT CTH JJ	1	---
PB17	46+80. 25.5 RT CTH JJ	1	---
TOTALS		2 ✓	

TRAFFIC SIGNAL BASE

NUMBER	LOCATION	65401 CONCRETE BASE TYPE 1 EACH	COMMENTS
SB4	47+01.29 RT CTH JJ	---	EXISTING
SB4R	47+12.32.5 RT CTH JJ	1 ✓	REPLACES SB4
TOTALS		1 ✓	

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, 58, 60

SAWING EXISTING PAVEMENT

STATION TO STATION	LOCATION	66501 L.F.
22+60	CTH JJ	18 ✓
23+50	CTH JJ	31 ✓
22+60 - 23+50	CTH JJ	90 ✓
23+20, RT	CTH JJ	20 ✓
	BABCOCK ST	33 ✓
37+30, LT	CTH JJ	17 ✓
42+10, LT	CTH JJ	23 ✓
44+93.73		65
TOTALS		232 297

SAWING CONCRETE PAVEMENT, FULL DEPTH

STATION	LOCATION	66502 L.F.
21+50	RT CTH JJ	15 ✓
38+59	LT CTH JJ	22 ✓
40+20	LT CTH JJ	14 ✓
44+90	RT CTH JJ	39 ✓
TOTALS		90 ✓

MINI STORM SEWER
90030
MINI STORM SEWER
6-INCH

STATION	LOCATION	DIRECTION	L.F.	COMMENTS	PROPERTY OWNER
28+00	CTH JJ	RT	5 ✓	STUB OUT OF STRUCTURE 14.3	RODNEY & BONNIE FISCHER
36+00	CTH JJ	LT	5 ✓	STUB OUT OF STRUCTURE 17.1	KATHLEEN BARKER
37+55	CTH JJ	LT	5 ✓	STUB OUT OF STRUCTURE 18.1	DONALD & ARDYSS DETRA
37+55	CTH JJ	LT	5 ✓	STUB OUT OF STRUCTURE 18.1	MARLENE ZIESEMER
39+00	CTH JJ	LT	5 ✓	STUB OUT OF STRUCTURE 19.1	TY & CARLA STEWARD
39+65	CTH JJ	LT	5 ✓	STUB OUT OF STRUCTURE 19.2	DENNIS & KAREN HEIMER
43+02	CTH JJ	LT	14 ✓	STUB OUT OF STRUCTURE 20.1	NEENAH, WI. CONGREGATION OF JEHOVAH'S WITNESSES, INC.
44+00	CTH JJ	RT	5 ✓	STUB OUT OF STRUCTURE 21.3	HAROLD & LOIS KEMP
45+48	CTH JJ	LT	4 ✓	STUB OUT OF STRUCTURE 22.1	WILLIAM DE MEUSE
TOTALS			53 ✓		

CHAIN LINK FENCE, 4FT

STATION	LOCATION	61610 L.F.
24+50	RT CTH JJ	35 ✓
TOTALS		35 ✓

COMMON EXCAVATION AND YARDAGE SUMMARY

STATION TO STATION	LOCATION	COMMON EXCAVATION C.Y.	FILL C.Y.	EXPANDED FILL C.Y.	WASTE C.Y.
21+50 - 47+00	CTH JJ	6000	2784	3619	2381

EARTHWORK

STATION	CTH JJ				CTH JJ (CONT)				
	CUT AREA (SF)	CUT VOL (CY)	FILL AREA (SF)	FILL VOL (CY)	STATION	CUT AREA (SF)	CUT VOL (CY)	FILL AREA (SF)	FILL VOL (CY)
2114	1	0	5	0	3500	88	146	2	11
2150	3	3	8	9	3550	98	172	8	9
2200	1	3	12	19	3600	74	159	12	18
2260	26	30	13	28	3650	74	137	11	21
2300	45	53	13	19	3700	70	133	10	19
2350	109	142	16	27	3750	56	117	23	30
2400	76	171	71	80	3800	51	99	20	40
2450	79	144	134	190	3850	54	97	19	36
2500	78	146	47	167	3900	32	80	31	46
2550	95	160	30	71	3950	30	58	26	52
2600	89	170	26	52	4000	43	68	24	46
2650	96	172	8	32	4050	55	91	12	33
2700	57	142	22	28	4100	73	119	7	18
2750	49	98	29	47	4150	90	151	6	12
2800	41	83	42	66	4200	120	194	3	8
2850	30	66	43	79	4250	134	236	4	7
2900	22	48	44	80	4300	148	262	6	9
2950	14	33	58	94	4350	133	260	9	14
3000	9	21	68	117	4400	102	217	19	26
3050	10	18	73	131	4450	82	170	32	47
3100	19	27	63	126	4500	78	148	8	37
3150	30	46	45	100	4550	45	114	57	60
3200	49	74	39	77	4600	35	74	86	134
3250	56	97	15	50	4650	49	79	86	159
3300	75	121	7	21	4700	86	125	59	134
3350	79	143	9	15					
3400	78	146	8	16	TOTALS		6000		2784
3450	69	137	10	17					

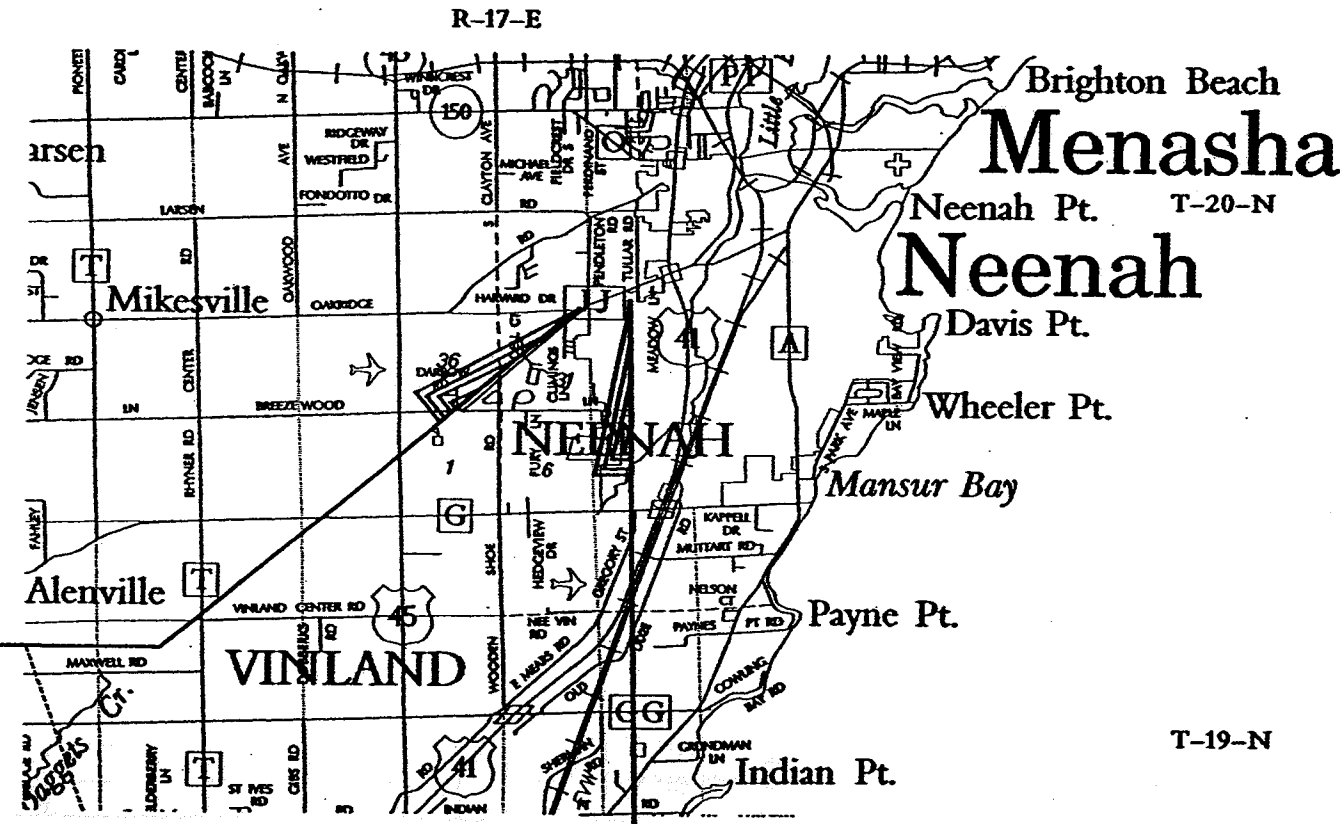
CONSTRUCTION STAKING

STATION TO STATION	LOCATION	65040 CONSTRUCTION STAKING STORM SEWER SYSTEM EACH	65045 CONSTRUCTION STAKING SUBGRADE LF	65050 CONSTRUCTION STAKING CABC LF	65055 CONSTRUCTION STAKING CURB, GUTTER, CURB & GUTTER LF	65070 CONSTRUCTION STAKING CONCRETE PAVEMENT LF
22+60 - 26+00	CTH JJ	10	590	150	150	440
26+00 - 32+00	CTH JJ	5	640	---	---	640
32+00 - 38+00	CTH JJ	18	600	---	---	600
38+00 - 43+90	CTH JJ	9	715	---	---	715
43+90 - 46+93	CTH JJ	8	608	---	---	608
TOTALS		50	3153	150	150	3003

Conventional Signs and Abbreviations

	SECTION LINE	AC	ACRES	R	RADIUS
	QUARTER LINE	Δ	CENTRAL ANGLE	R.	RANGE
	TOWNSHIP AND RANGE LINE	C/L	CENTERLINE	REF	REFERENCE LINE
	PROPOSED OR NEW CENTERLINE	COR.	CORNER	R/L	REFERENCE LINE
	PROPOSED OR NEW R/W LINE	CTH	COUNTY TRUNK HIGHWAY	R/W	RIGHT OF WAY
	EXISTING R/W LINE	D	DEGREE OF CURVE	S.	SOUTH
	LOT LINE	E.	EAST	SEC	SECTION
	PROPERTY LINE	L	LENGTH OF CURVE	SL	SECTION LINE
	CITY LINE LIMITS	LC	LONG CHORD	STH	STATE TRUNK HIGHWAY
	SLOPE INTERCEPTS	LCB	LONG CHORD BEARING	SF	SQUARE FEET
	R/W POINT	MI	MILE	STA	STATION
	FENCE	N	NORTH	T.	TOWN
	SECTION OR QUARTER CORNER	PC	POINT OF CURVATURE	T	TANGENT LENGTH OF CURVE
	POWER POLE	PI	POINT OF INTERSECTION	TI	TEMPORARY INTEREST
	TELEPHONE PEDESTAL	PT	POINT OF TANGENCY	USH	UNITED STATES HIGHWAY
	UNDERGROUND TELEPHONE CABLE	PLE	PERMANENT LIMITED EASEMENT	W.	WEST
	TEMPORARY INTEREST				
	NO ACCESS (BY ACQUISITION)				
	NO ACCESS (BY STATUTORY AUTHORITY)				
	NO ACCESS (BY PREVIOUS PROJECT)				
	RIGHT-OF-WAY TYPE 2 MONUMENTS SET AT NEWLY ACQUIRED R/W ANGLE POINTS				

REVISION DATE	R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
11/2/02-NO		4.0	5
PLAT OF RIGHT OF WAY REQUIRED FOR CTH "JJ" PENDLETON RD TO TULLAR RD TOWN & CITY OF NEENAH WINNEBAGO COUNTY			



BEGIN RELOCATION ORDER
STATION 21+14.30
 310.03 FEET NORTH OF AND 108.34 FEET EAST OF THE
 SOUTHWEST CORNER OF SECTION 29, T20N, R17E

END RELOCATION ORDER
STATION 46+62.81
 195.09 FEET NORTH OF AND 131.44 FEET WEST OF THE
 SOUTH QUARTER CORNER OF SECTION 29, T20N, R17E

Notes

COORDINATES AND BEARINGS ON THIS PLAT ARE ORIENTED TO THE WINNEBAGO COUNTY COORDINATE SYSTEM. ALL PLAT DISTANCES ARE GROUND LENGTH. THE DIFFERENCE BETWEEN PLAT BEARINGS REPRESENTS PLANE ANGLES IN DEGREES, MINUTES, AND SECONDS.

RIGHT OF WAY MONUMENTS ARE TYPE 2 AND ARE PLACED PRIOR TO OR AT THE TIME OF LAND TITLE TRANSFER FOR ALL LANDS BEING ACQUIRED.

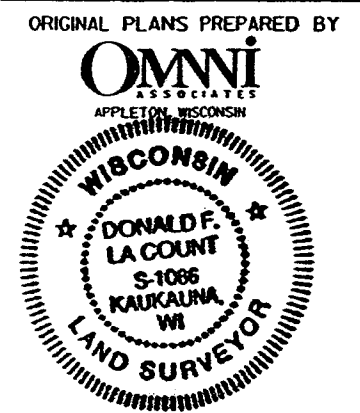
RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD. OTHER INFORMATION IS PROVIDED TO SUPPLEMENT THE BASIC PERIMETER DESCRIPTION AND SHALL NOT BE CONSTRUED TO PREVAIL OVER THE PERIMETER DESCRIPTION.

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 CONTIGUOUS TO THE AREA TO BE ACQUIRED.

LAYOUT
 SCALE 0 1/2 1 MI.
 TOTAL NET LENGTH OF CENTERLINE = ML

ACCEPTED FOR
 WINNEBAGO COUNTY

05/31/01 (Date) *John M. Haer* (Signature)



05/24/2001 (Date) *Donald F. LaCount* (Signature)

SCHEDULE OF LANDS & INTERESTS REQUIRED

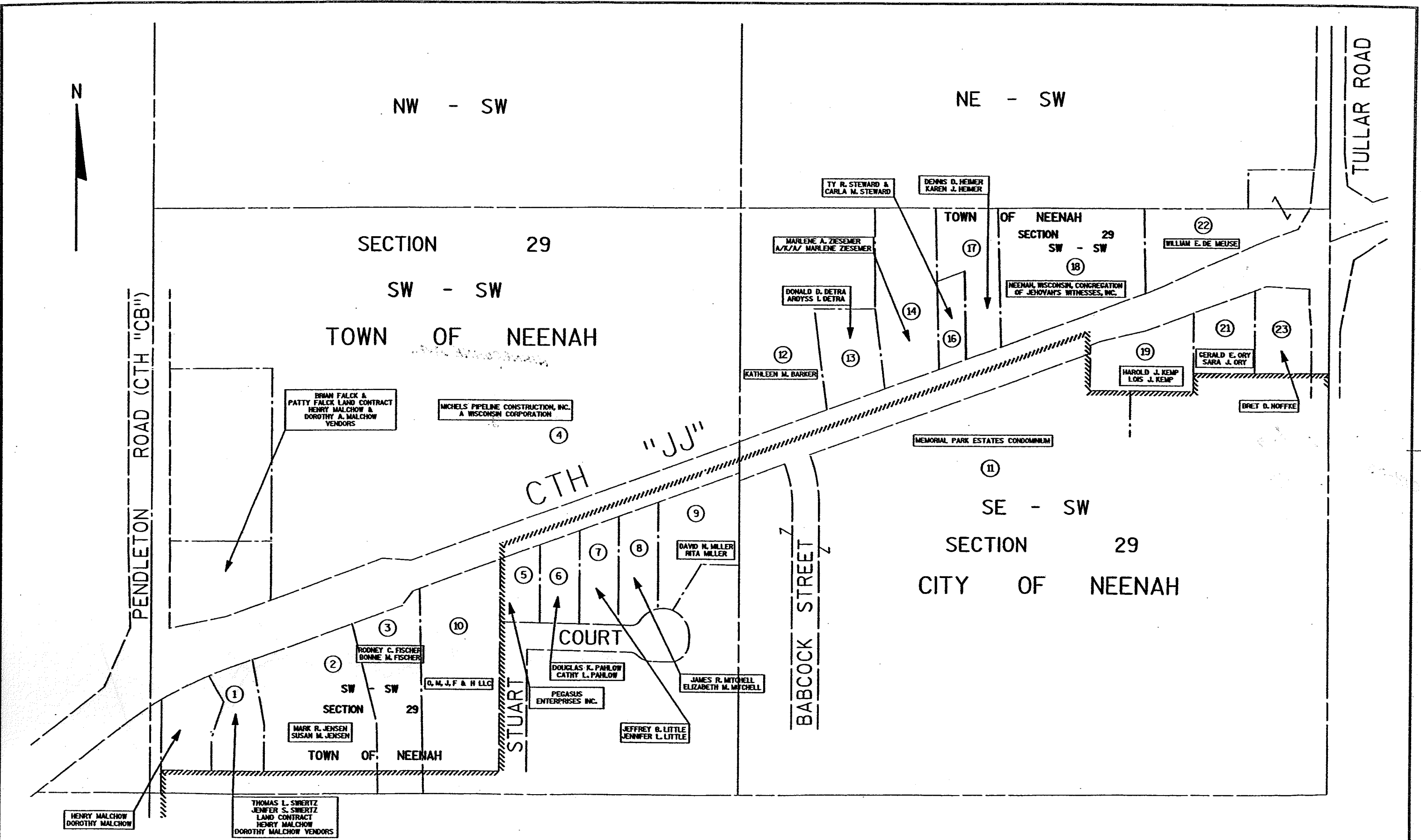
AREAS SHOWN IN THE TOTAL ACRES COLUMN MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

PARCEL NUMBER	SHEET NUMBER	OWNER	INTEREST REQUIRED	TOTAL AREA	R/W NEW	EXISTING	REQUIRED TOTAL	TOTAL AREA REM	TI AREA	PLE AREA
1	4.3	THOMAS L. SWIERTZ & JENIFER S. SWIERTZ LAND CONTRACT HENRY MALCHOW & DOROTHY MALCHOW VENDORS	TI	0.56 AC	---	---	---	0.56 AC	0.03 AC	---
2	4.3	MARK R. JENSEN & SUSAN M. JENSEN	FEE TI	1.02 AC	0.01 AC	---	0.01 AC	1.01 AC	0.05 AC	---
3	4.3	RODNEY C. FISCHER & BONNIE M. FISCHER	FEE TI	1.16 AC	0.01 AC	---	0.01 AC	1.15 AC	0.01 AC	---
4	4.3 4.4	MICHEL'S PIPELINE CONSTRUCTION INC., A WISCONSIN CORPORATION	FEE	20.01 AC	0.13 AC	---	0.13 AC	19.88 AC	---	---
5	4.3	PEGUSUS ENTERPRISES INC.	FEE TI	0.31 AC	0.04 AC	---	0.04 AC	0.27 AC	0.02 AC	---
6	4.3	DOUGLAS K. PAHLOW & CATHY L. PAHLOW	FEE TI	0.38 AC	0.04 AC	---	0.04 AC	0.34 AC	0.02 AC	---
7	4.3	JEFFREY B. LITTLE & JENNIFER L. LITTLE	FEE TI	0.45 AC	0.04 AC	---	0.04 AC	0.41 AC	0.02 AC	---
8	4.3	JAMES R. MITCHELL & ELIZABETH M. MITCHELL	FEE TI	0.49 AC	0.04 AC	---	0.04 AC	0.45 AC	0.02 AC	---
9	4.3 4.4	DAVID H. MILLER & RITA MILLER	FEE TI PLE	38333 SQ FT	3321 SQ FT	---	3321 SQ FT	35012 SQ FT	1853 SQ FT	100 SQ FT
10	4.3	O. M. J. F. & H LLC	FEE, TI, PLE	77537 SQ FT	3485 SQ FT	---	3485 SQ FT	74052 SQ FT	1742 SQ FT	100 SQ FT
11	4.4	MEMORIAL PARK ESTATES CONDOMINIUM	TI PLE	663305 SQ FT	---	---	---	663305 SQ FT	7523 SQ FT	200 SQ FT
12	4.4	KATHLEEN M. BARKER	FEE	2.59 AC	0.03 AC	---	0.03 AC	2.56 AC	---	---
13	4.4	DONALD D. DETRA & ARDYSS I. DETRA	FEE	0.77 AC	0.02 AC	0.10 AC	0.12 AC	0.65 AC	---	---
14	4.4	MARLENE A. ZIESEMER A/K/A/ MARLENE ZEISEMER	FEE	1.24 AC	0.02 AC	0.09 AC	0.11 AC	1.13 AC	---	---
15										
16	4.4	TY R. STEWARD & CARLA M. STEWARD	FEE	0.30 AC	0.01 AC	---	0.01 AC	0.29 AC	---	---
17	4.4	DENNIS D. HEIMER & KAREN J. HEIMER	FEE TI	0.68 AC	0.01 AC	---	0.01 AC	0.67 AC	0.01	---
18	4.4	NEENAH, WISCONSIN, CONGREGATION OF JEHOVAH'S WITNESSES INC.	FEE TI	2.32 AC	0.06 AC	---	0.06 AC	2.26 AC	0.02	---
19	4.4	HAROLD J. KEMP & LOIS J. KEMP	FEE TI PLE	31363 SQ FT	2714 SQ FT	---	2714 SQ FT	28649 SQ FT	2354 SQ FT	100 SQ FT
20										
21	4.4	GERALD E. DRY & SARA J. DRY	FEE TI	0.49 AC	0.04 AC	---	0.04 AC	0.45 AC	0.03 AC	---
22	4.4	WILLIAM E. DE MEUSE	FEE	0.86 AC	0.01 AC	---	0.01 AC	0.85 AC	---	---
23	4.4	BRET D. NOFFKE	FEE TI	0.63 AC	0.01 AC	---	0.01 AC	0.62 AC	0.02 AC	---
50	4.3 4.4	AMERTITECH F/K/A/ WISCONSIN TELEPHONE COMPANY	CONVEYANCE OF RIGHTS	---	---	---	---	---	---	---
51	4.3 4.4	TIME WARNER CABLE	CONVEYANCE OF RIGHTS	---	---	---	---	---	---	---
52	4.3 4.4	WISCONSIN ELECTRIC/GAS OPERATIONS	CONVEYANCE OF RIGHTS	---	---	---	---	---	---	---

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

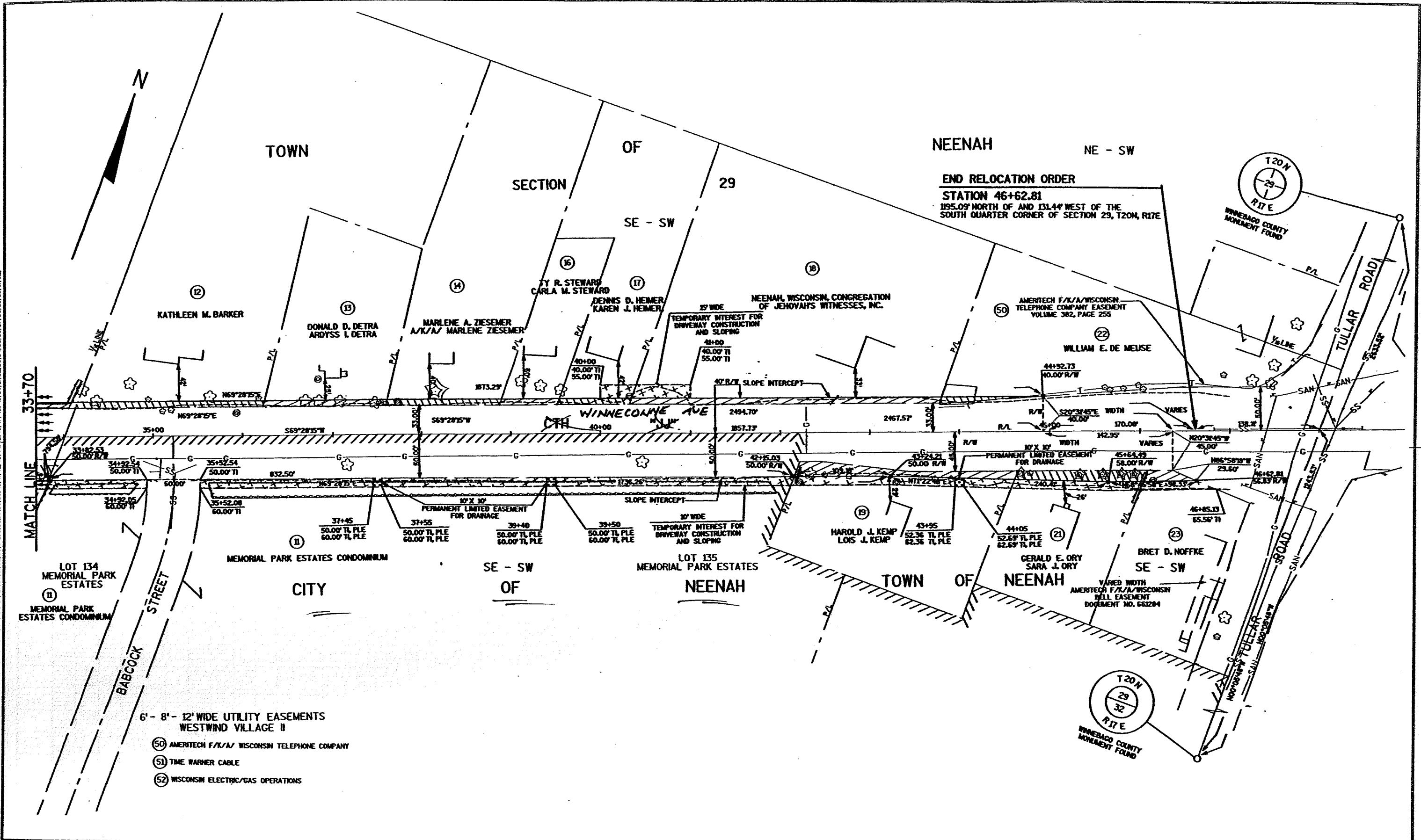
REVISION DATE 04/12/02 - ADDED PARCEL 10	DATE	SCALE, FEET 	HWY: CTH "JJ"	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: <u>A-20</u>
			COUNTY: WINNEBAGO	STATE R/W PROJECT NUMBER	PLAT SHEET NO: 4. 1
FILE NAME: \$FILE\$	PLOT DATE: \$DATE\$	\$TIME\$	ORG DATE: / /2000	PLOT SCALE:	ORIGINATOR: OMNI ASSOCIATES

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



REVISION DATE 04/12/02 - ADDED PARCEL 10	DATE	P = 200'	HWY: CTH "JJ"	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: A. 21
			COUNTY: WINNEBAGO CTY	STATE R/W PROJECT NUMBER	PLAT SHEET NO: 4. 2

LEVELS ON - 1, 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.



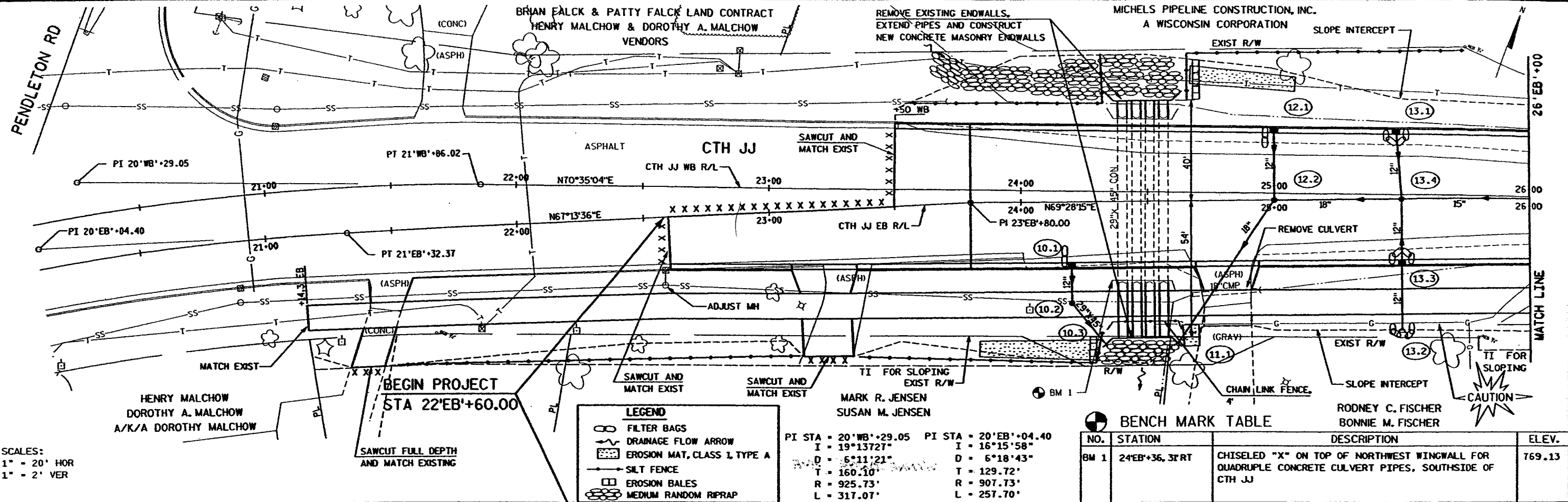
END RELOCATION ORDER
STATION 46+62.81
 1195.09' NORTH OF AND 131.44' WEST OF THE
 SOUTH QUARTER CORNER OF SECTION 29, T20N, R1E

6' - 8' - 12' WIDE UTILITY EASEMENTS
 WESTWIND VILLAGE II

- (50) AMERITECH F/K/A/ WISCONSIN TELEPHONE COMPANY
- (51) TIME WARNER CABLE
- (52) WISCONSIN ELECTRIC/GAS OPERATIONS

REVISION DATE 04/12/02 NC	DATE	0 25 50 100	HWY: CTH "JJ"	CONSTRUCTION PROJECT NUMBER	PS&E SHEET NO: A-23
FILE NAME: \$FILE\$	PLOT DATE: \$DATE\$	\$TIME\$	COUNTY: WINNEBAGO	STATE R/W PROJECT NUMBER	PLAT SHEET NO: 4. 4 E
			ORG DATE: / /2000	PLOT SCALE:	ORIGINATOR: OMNI ASSOCIATES

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



SCALES:
 1" = 20' HOR
 1" = 2' VER

LEGEND

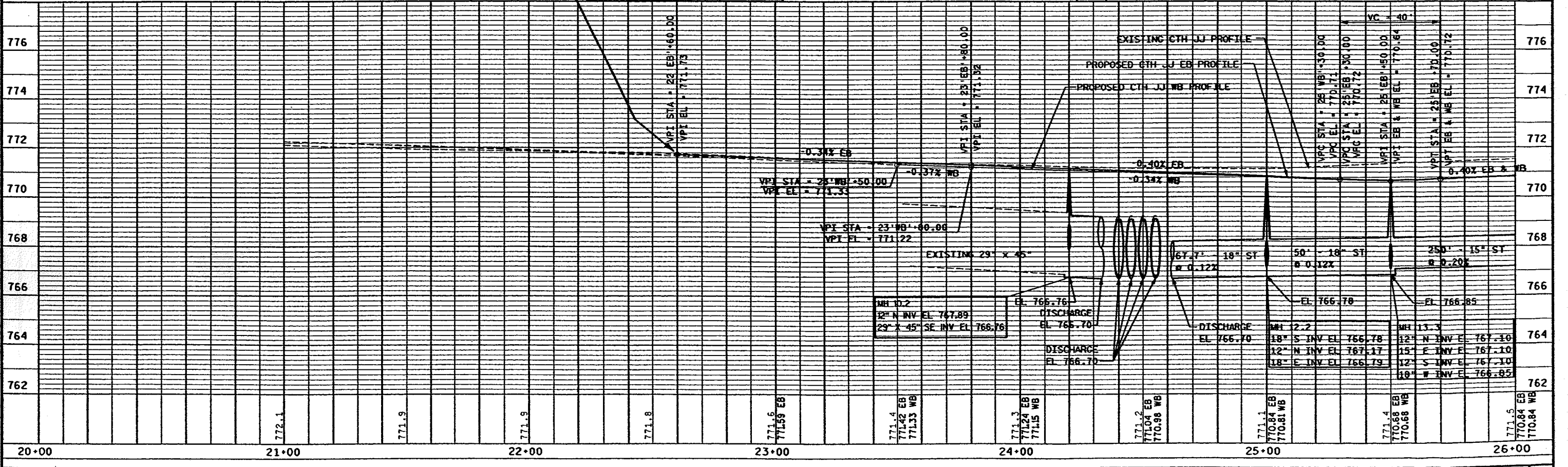
- FILTER BAGS
- DRAINAGE FLOW ARROW
- EROSION MAT, CLASS 1, TYPE A
- SILT FENCE
- EROSION BALES
- MEDIUM RANDOM RIPRAP

**MARK R. JENSEN
SUSAN M. JENSEN**

PI STA = 20'WB'+29.05	PI STA = 20'EB'+04.40
I = 19°13'27"	I = 16°15'58"
D = 6°11'21"	D = 6°18'43"
T = 160.10'	T = 129.72'
R = 925.73'	R = 907.73'
L = 317.07'	L = 257.70'

BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
BM 1	24'EB'+36, 3" RT	CHISELED "X" ON TOP OF NORTHWEST WINGWALL FOR QUADRUPLE CONCRETE CULVERT PIPES, SOUTHSIDE OF CTH JJ	769.13

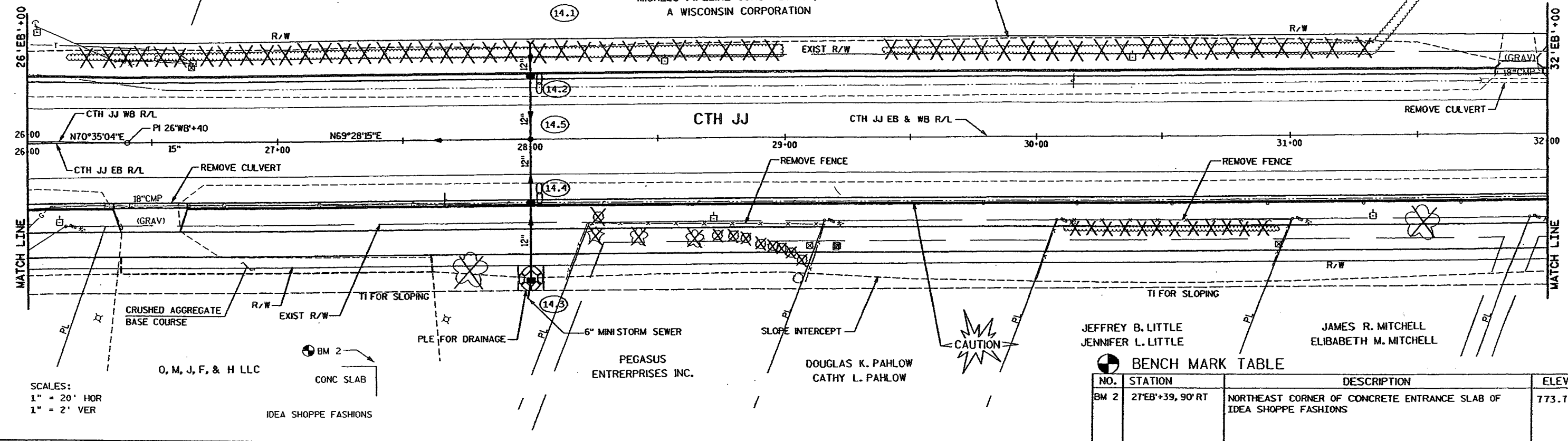


STATE PROJECT NUMBER: _____ HWY: CTH JJ COUNTY: WINNEBAGO PLAN AND PROFILE SHEET NO: 24 E

LEGEND
 FILTER BAGS

MICHELS PIPELINE CONSTRUCTION, INC.
 A WISCONSIN CORPORATION

SLOPE INTERCEPT

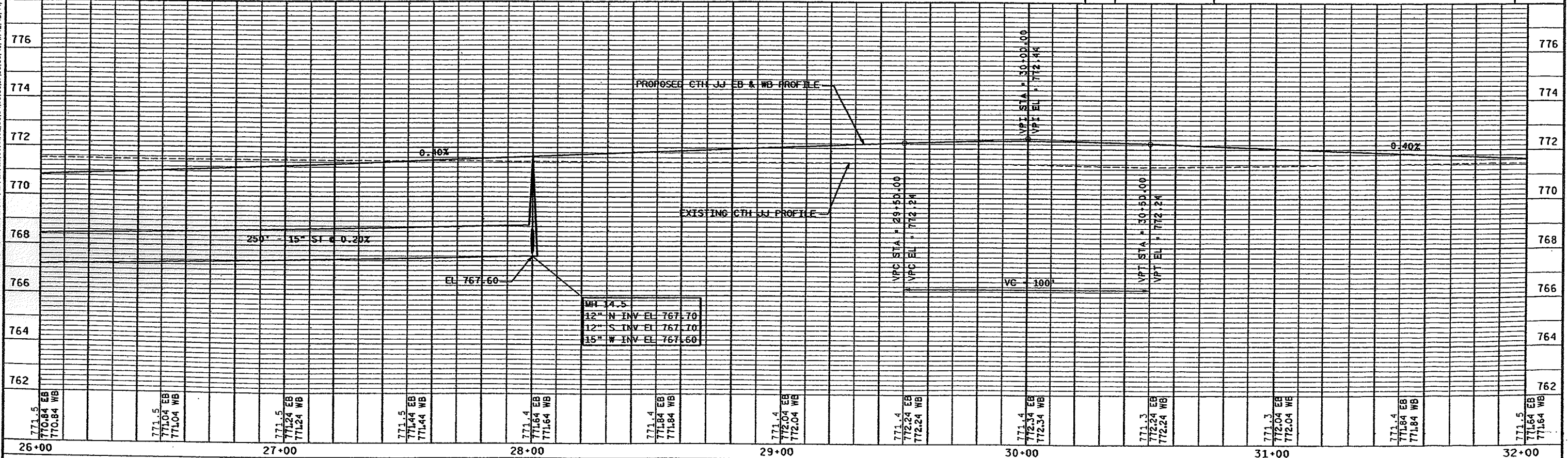


JEFFREY B. LITTLE
 JENNIFER L. LITTLE
 JAMES R. MITCHELL
 ELIBABETH M. MITCHELL

NO.	STATION	DESCRIPTION	ELEV.
BM 2	27'EB+39, 90' RT	NORTHEAST CORNER OF CONCRETE ENTRANCE SLAB OF IDEA SHOPPE FASHIONS	773.78

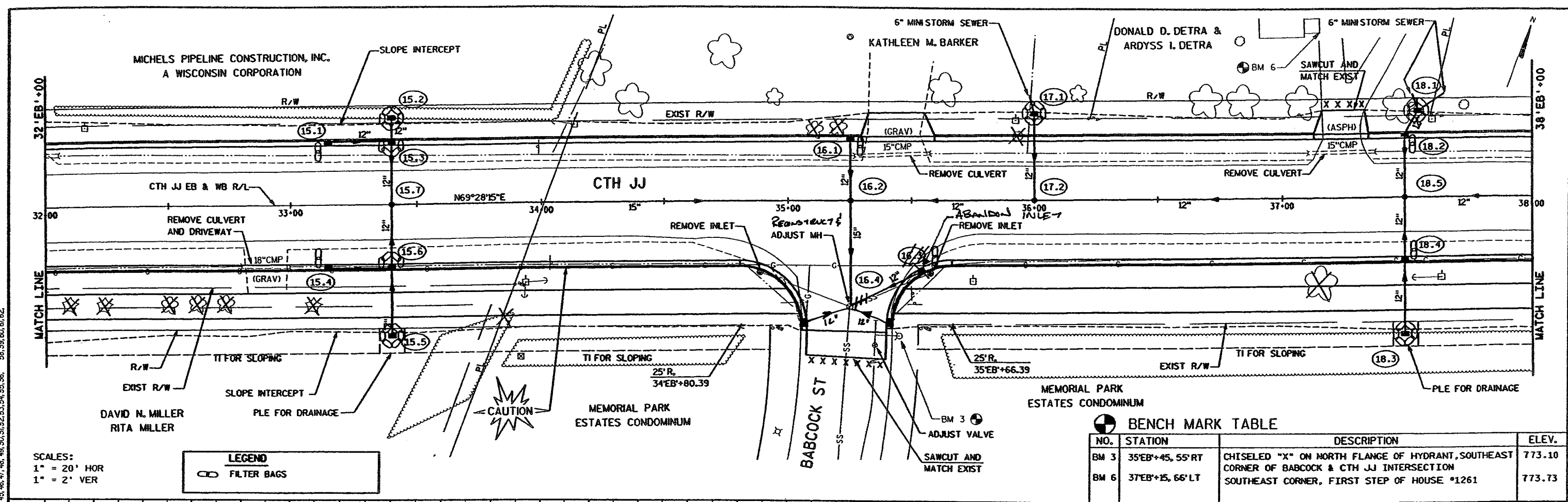
SCALES:
 1" = 20' HOR
 1" = 2' VER

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, 58, 59, 60, 61, 62.



MH 14.5	
12" N INV	EL 767.70
12" S INV	EL 767.70
15" W INV	EL 767.60

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, 58, 59, 60, 61, 62



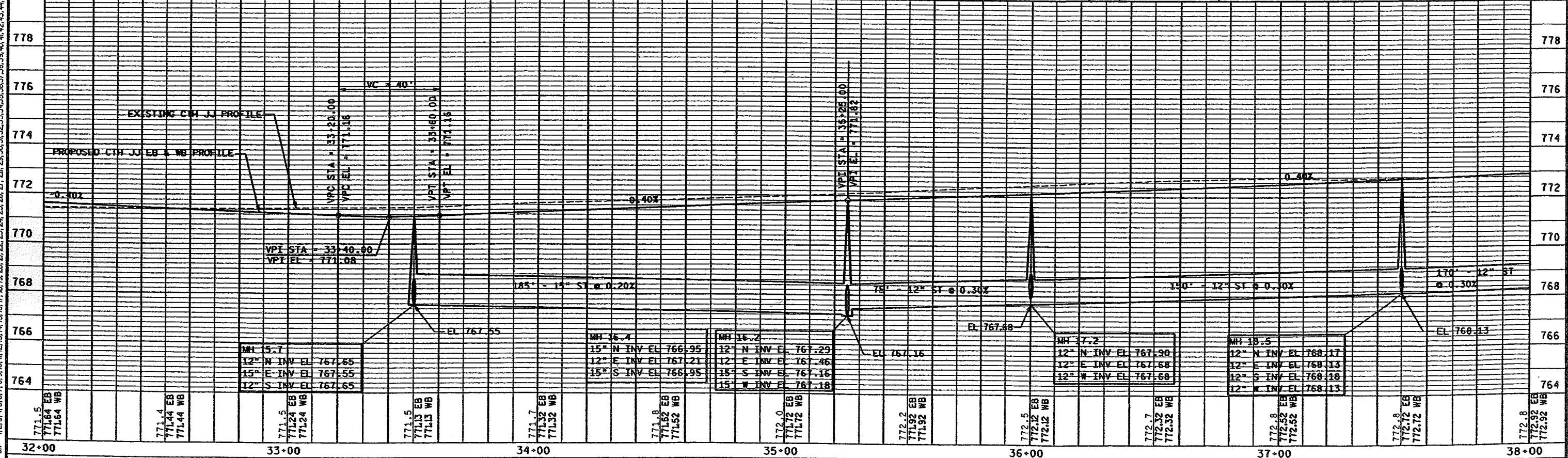
SCALES:
1" = 20' HOR
1" = 2' VER

LEGEND

FILTER BAGS

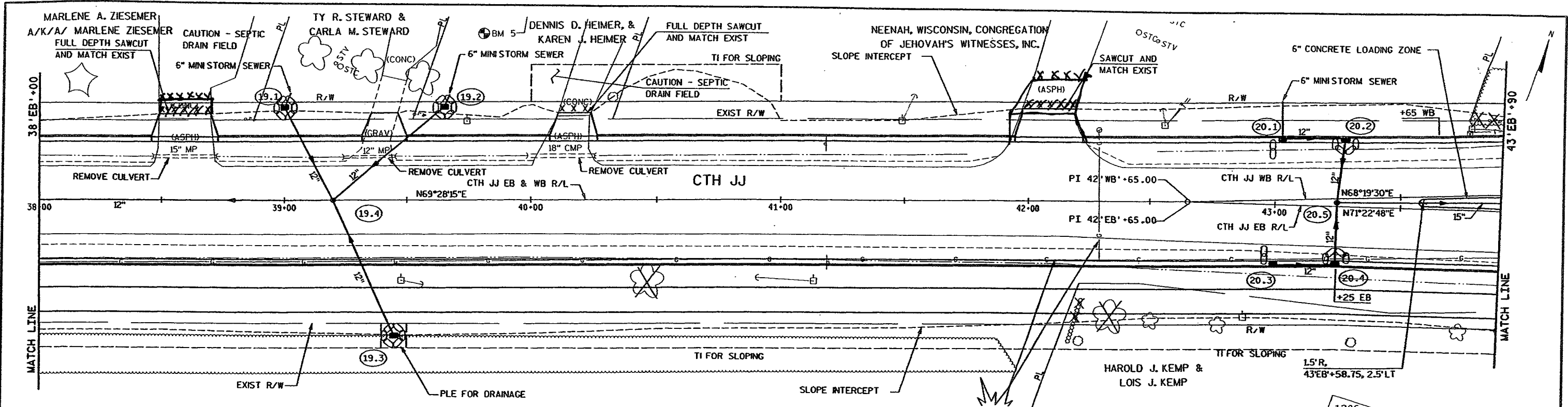
BENCH MARK TABLE

NO.	STATION	DESCRIPTION	ELEV.
BM 3	35'EB+45, 55'RT	CHISELED "X" ON NORTH FLANGE OF HYDRANT, SOUTHEAST CORNER OF BABCOCK & CTH JJ INTERSECTION	773.10
BM 6	37'EB+15, 66'LT	SOUTHEAST CORNER, FIRST STEP OF HOUSE #1261	773.73



STATE PROJECT NUMBER: _____ HWY: CTH JJ COUNTY: WINNEBAGO PLAN AND PROFILE SHEET NO: 26 E

FILE NAME: TRANSPORTATION / / .DGN PLOT DATE: / / 2000 ORG DATE: / / 2000 PLOT SCALE: _____ ORIGINATOR: OMNI ASSOCIATES PLOT SCALE: _____ WISDOT/CADD SHEET 40

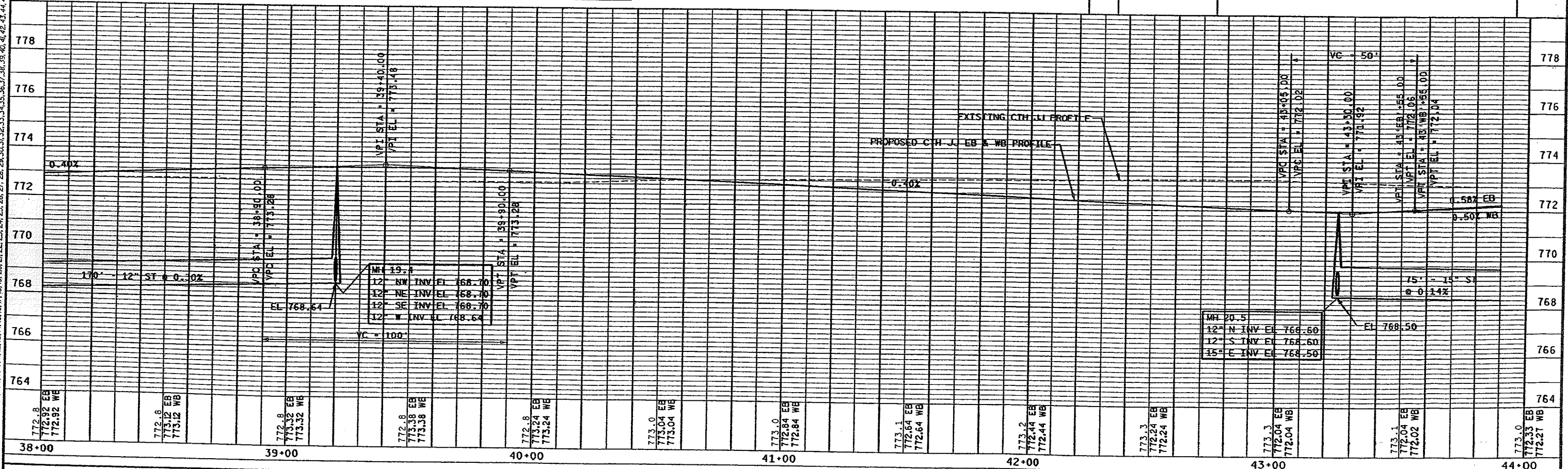


SCALES:
 1" = 20' HOR
 1" = 2' VER

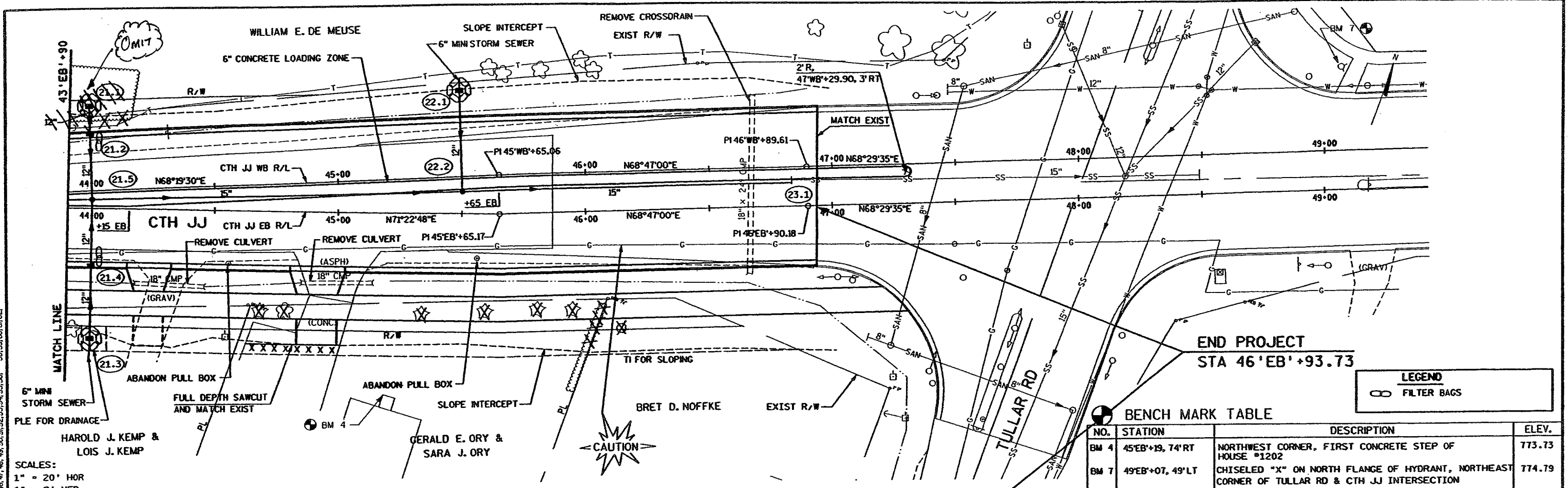
LEGEND
 FILTER BAGS

BENCH MARK TABLE

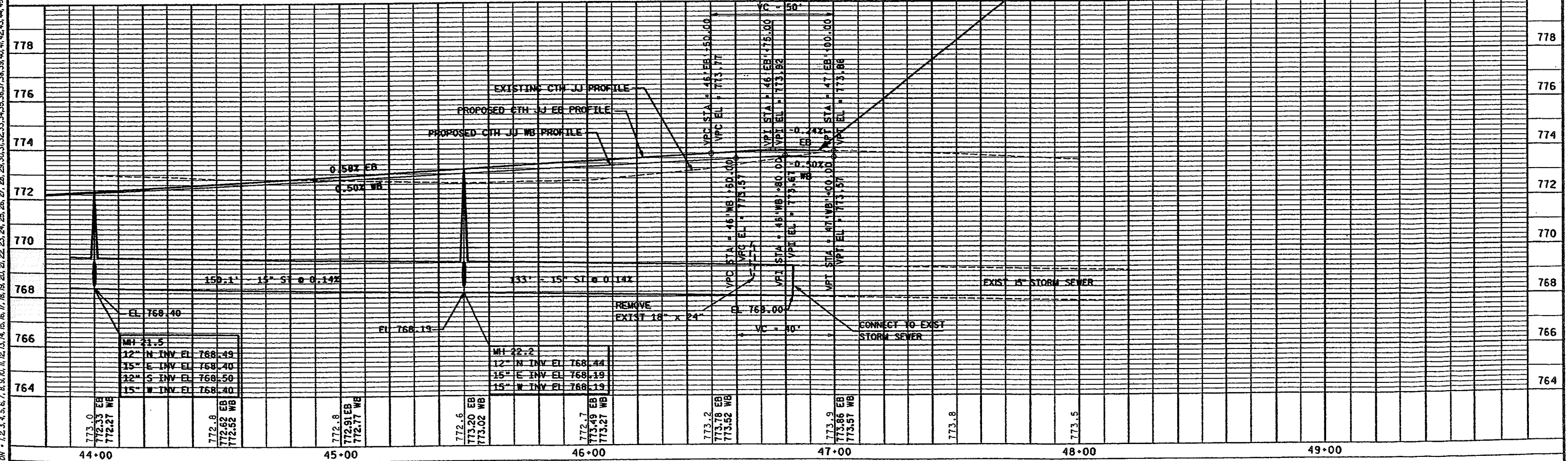
NO.	STATION	DESCRIPTION	ELEV.
BM 5	40'EB'+00, 82'LT	SOUTHWEST CORNER, TOP OF CONCRETE PORCH FOR HOUSE #1229	776.30



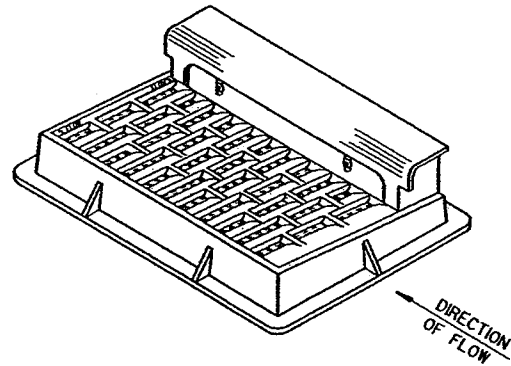
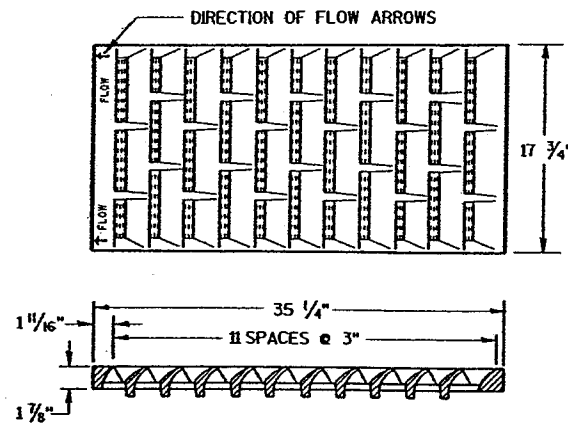
LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 58, 59, 60, 61, 62.



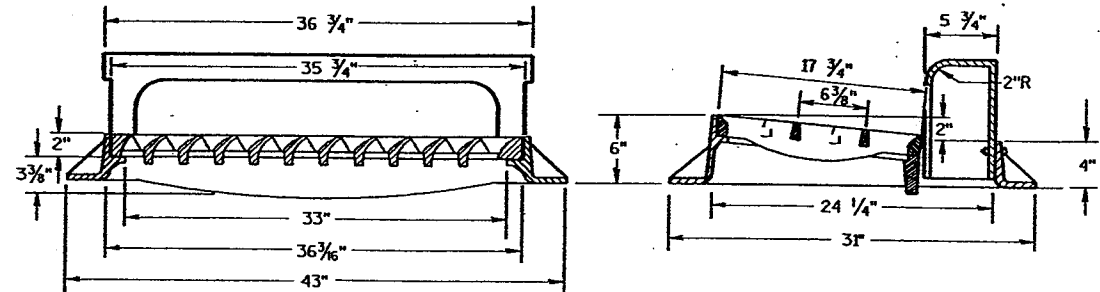
BENCH MARK TABLE			
NO.	STATION	DESCRIPTION	ELEV.
BM 4	45'EB'+19, 74'RT	NORTHWEST CORNER, FIRST CONCRETE STEP OF HOUSE #1202	773.73
BM 7	49'EB'+07, 49'LT	CHISELED "X" ON NORTH FLANGE OF HYDRANT, NORTHEAST CORNER OF TULLAR RD & CTH JJ INTERSECTION	774.79



NOTE:
GRATE IS REVERSIBLE.

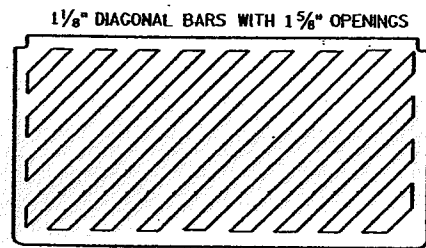


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"



TYPE "H"

(APPROXIMATE WEIGHT 422 LBS.)
 FRAME..... 175 LBS.
 GRATE..... 138 LBS.
 CURB BOX..... 109 LBS.



**SPECIAL GRATE FOR
TYPE "H" COVER**

(MEASURES 35 1/4" X 17 3/4" X 2")
 (APPROXIMATE WEIGHT 172 LBS.)
 GRATE..... 172 LBS.
 (NOTED AS TYPE H-S ON DRAINAGE TABLE)

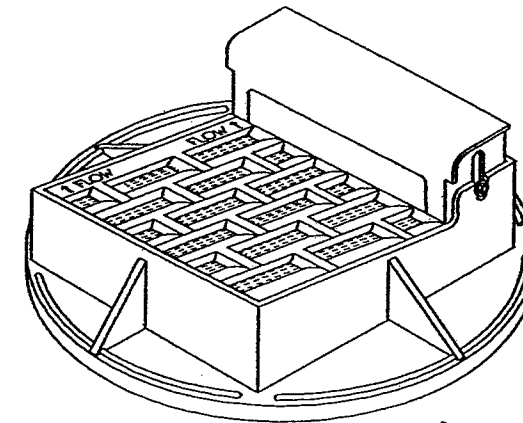
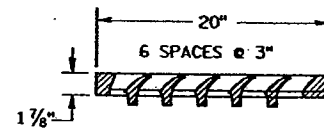
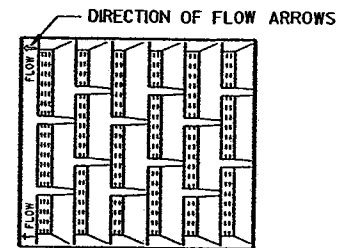
GENERAL NOTES

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

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

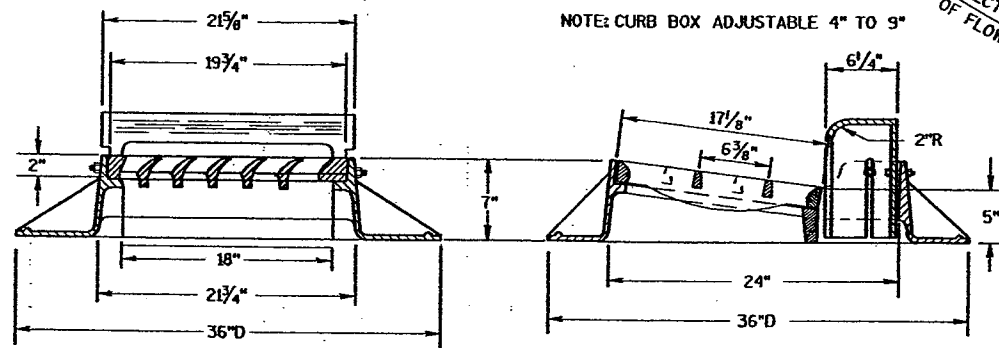
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

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



NOTE:
GRATE IS REVERSIBLE.

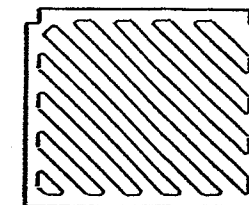
NOTE: CURB BOX ADJUSTABLE 4" TO 9"



TYPE "A"

(APPROXIMATE WEIGHT 325 LBS.)
 FRAME..... 157 LBS.
 GRATE..... 84 LBS.
 CURB BOX..... 84 LBS.

1" DIAGONAL BARS
WITH 1 1/2" OPENINGS



**SPECIAL GRATE FOR
TYPE "A" COVER**

(MEASURES 19 3/4" X 17" X 1 7/8")
 GRATE..... 84 LBS.
 (NOTED AS TYPE A-S ON DRAINAGE TABLE)

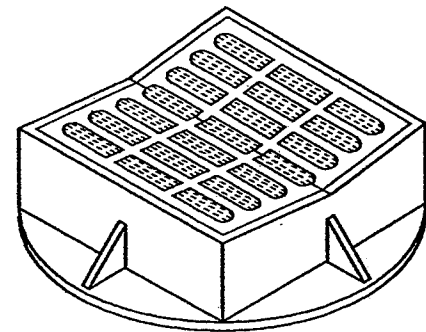
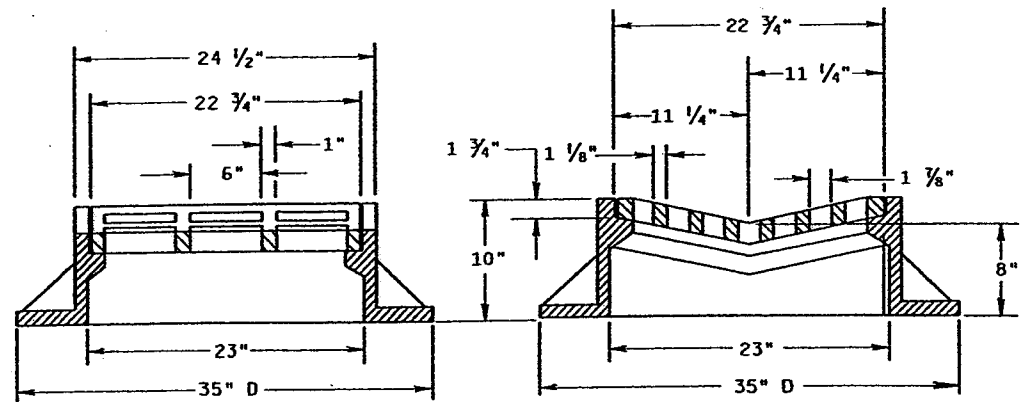
**INLET COVERS
TYPE A, H, A-S, & H-S**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

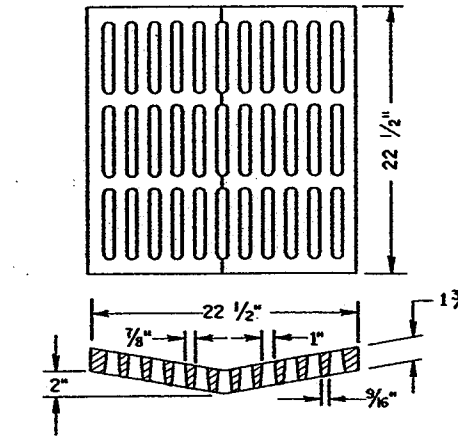
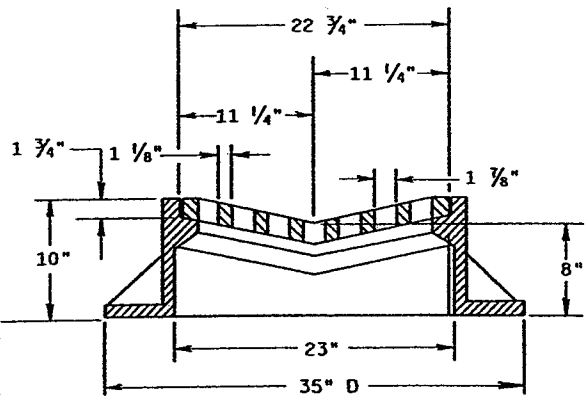
APPROVED

DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
 FHWA

S.D.D. 8 A 5-16c

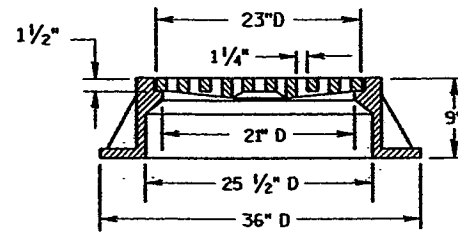
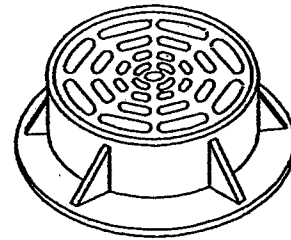


TYPE "B"
 (APPROXIMATE WEIGHT 395 LBS.)
 FRAME..... 285 LBS.
 GRATE..... 110 LBS.



ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 125 LBS.)
 GRATE.....125 LBS.
 USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
 NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"
 (APPROXIMATE WEIGHT 340 LBS.)
 FRAME..... 235 LBS.
 GRATE..... 105 LBS.

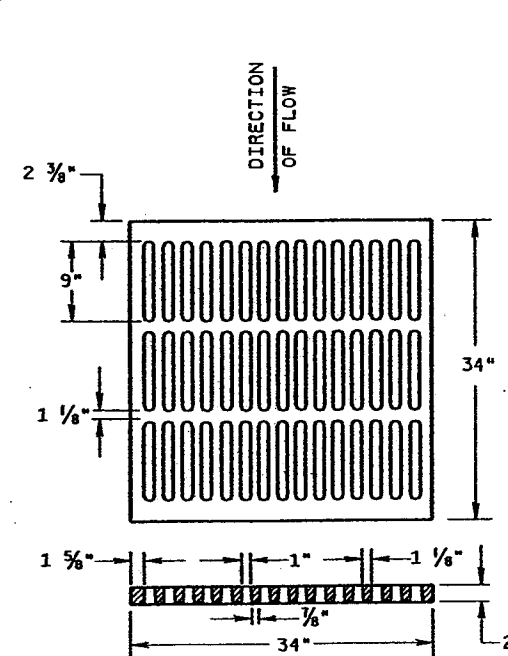
GENERAL NOTES

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

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

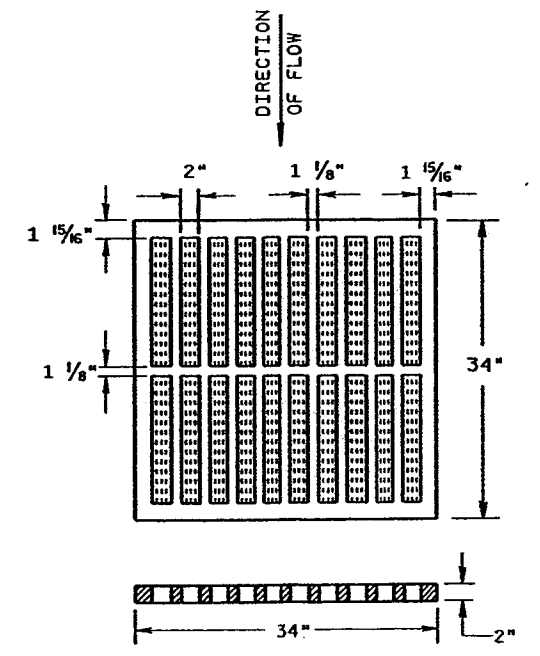
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

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



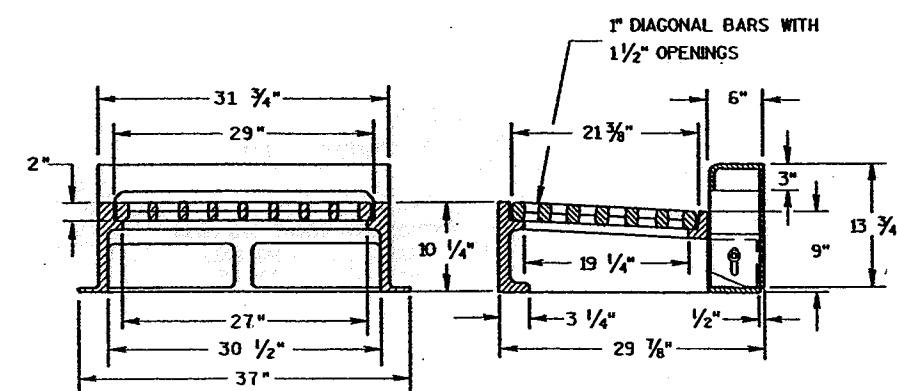
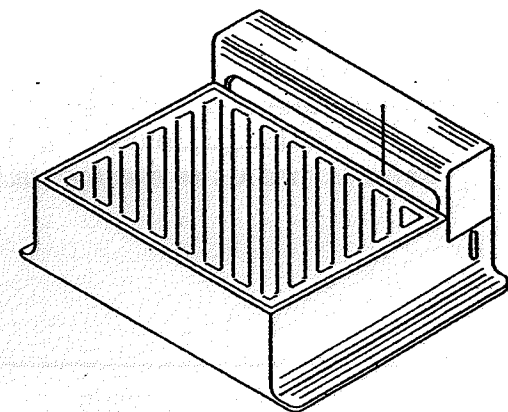
ALTERNATIVE TYPE "MS"
 (APPROXIMATE GRATE WEIGHT 365 LBS.)
 GRATE..... 365 LBS.

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
 NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"
 (APPROXIMATE GRATE WEIGHT 270 LBS.)
 GRATE.....270 LBS.

USE ON FREEWAYS AND EXPRESSWAYS
 NOTED AS TYPE MS ON DRAINAGE TABLE



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

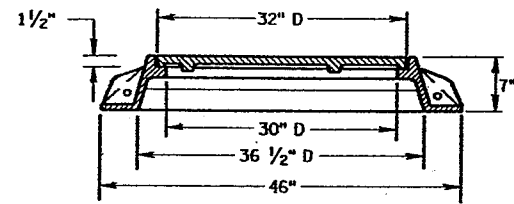
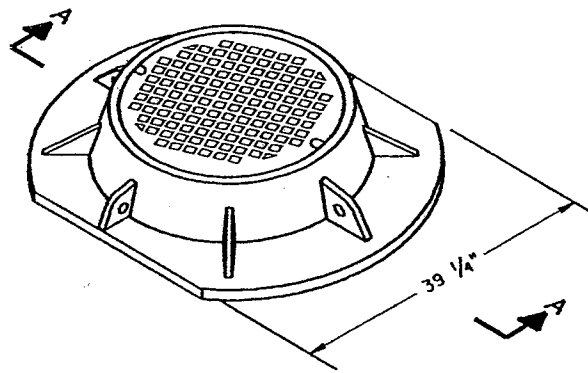
TYPE "WM"
 (APPROXIMATE WEIGHT 670 LBS.)
 FRAME..... 360 LBS.
 GRATE..... 160 LBS.
 CURB BOX..... 150 LBS.

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

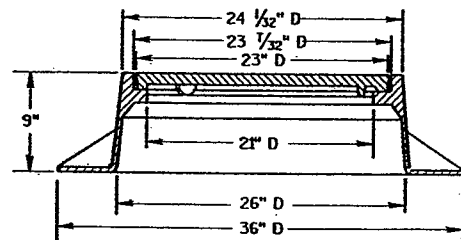
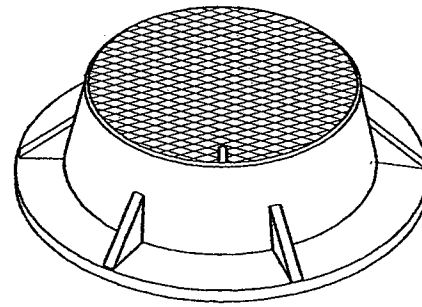
DIRECTION OF FLOW

INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	CHEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

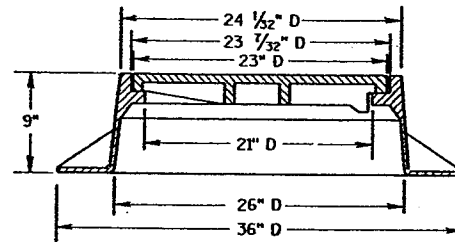
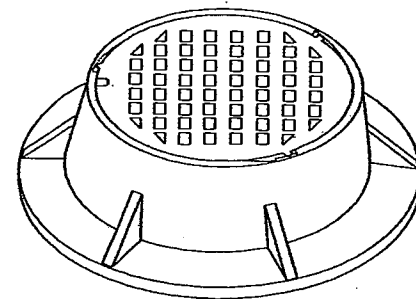
S.D.D. 8 A 5-16b



SECTION A-A
TYPE "K"
(APPROXIMATE WEIGHT 415 LBS.)
FRAME.....210 LBS.
LID.....205 LBS.



TYPE "J"
(APPROXIMATE WEIGHT 250 LBS.)
FRAME.....135 LBS.
LID.....115 LBS.



TYPE "J" SPECIAL
TYPE "B" NON-ROCKING SELF-SEAL LID
(APPROXIMATE WEIGHT 245 LBS.)
FRAME.....145 LBS.
LID.....100 LBS.
(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

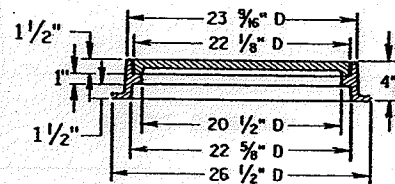
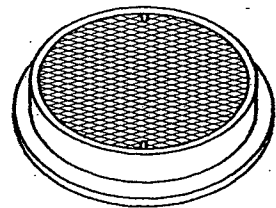
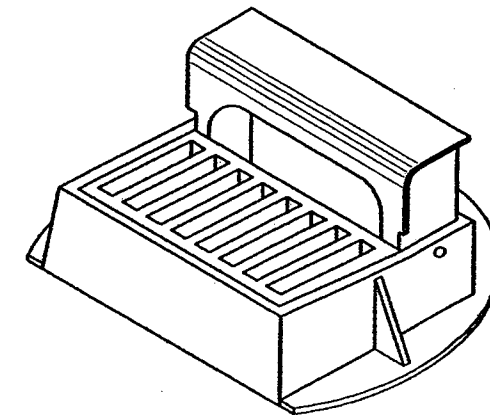
GENERAL NOTES

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

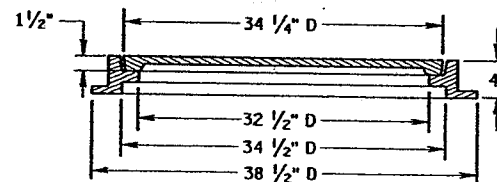
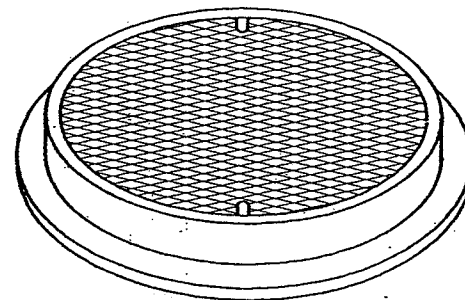
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

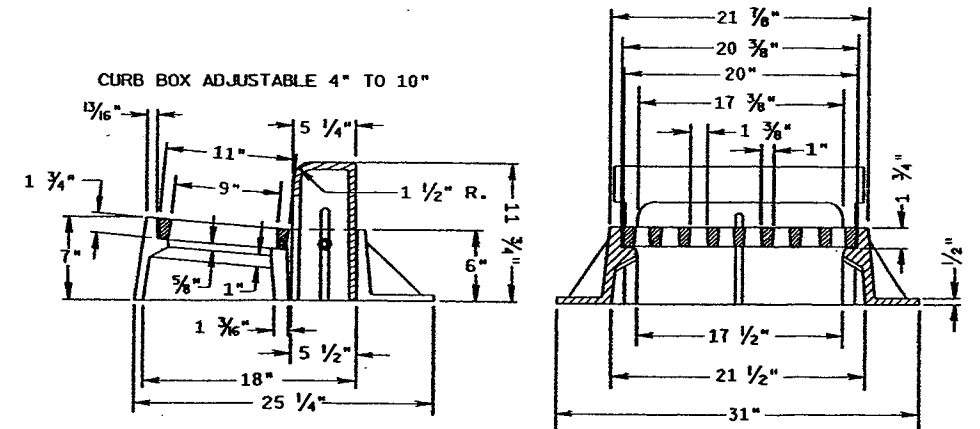
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.



TYPE "L"
(APPROXIMATE WEIGHT 145 LBS.)
FRAME.....75*
LID.....70*



TYPE "M"
(APPROXIMATE WEIGHT 385 LBS.)
FRAME.....125*
LID.....260*



INLET COVER TYPE "Z"
(APPROXIMATE WEIGHT 340 LBS.)
FRAME.....198 LBS.
GRATE.....50 LBS.
CURB BOX.....92 LBS.

INLET COVER, TYPE Z
MANHOLE COVERS, TYPE
K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

REVISION DATE: 4/10/81

PLOT NAME:

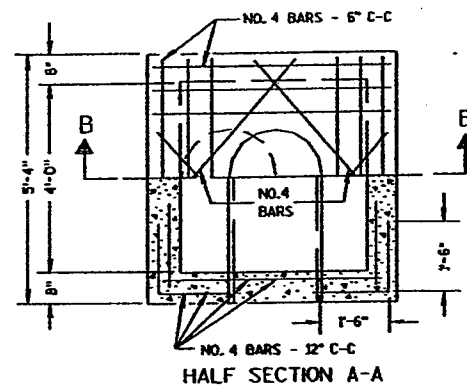
PLOT SCALE: 5/8"

FILE NAME:

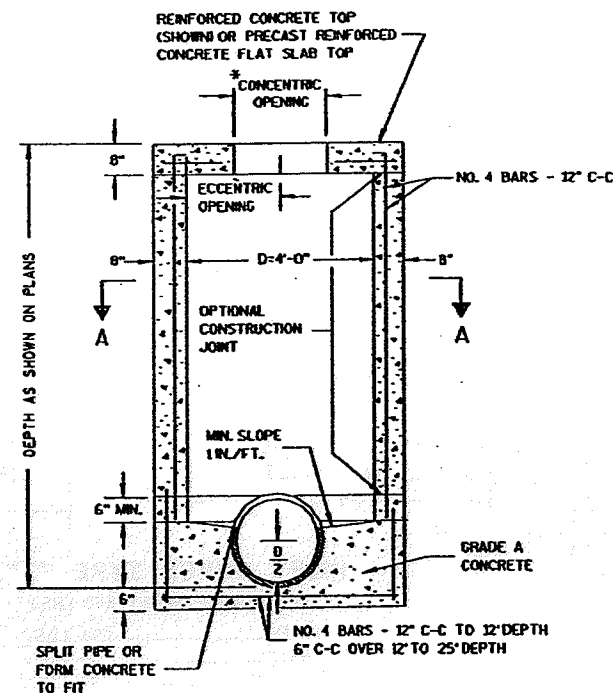
ORIGINATOR: MEL ZENLICHKA 6-2782
LEVEL: 04/1

APPROVED
DATE STATE CONST. ENGINEER FOR HWYS

S.D.D. 8 B 6-3

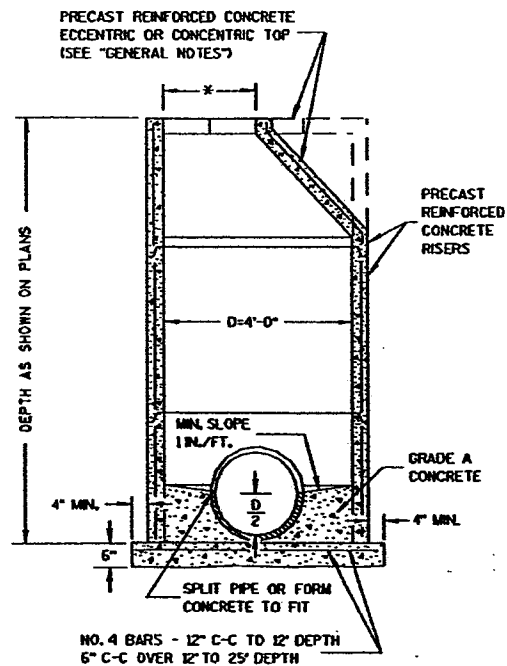


HALF SECTION A-A

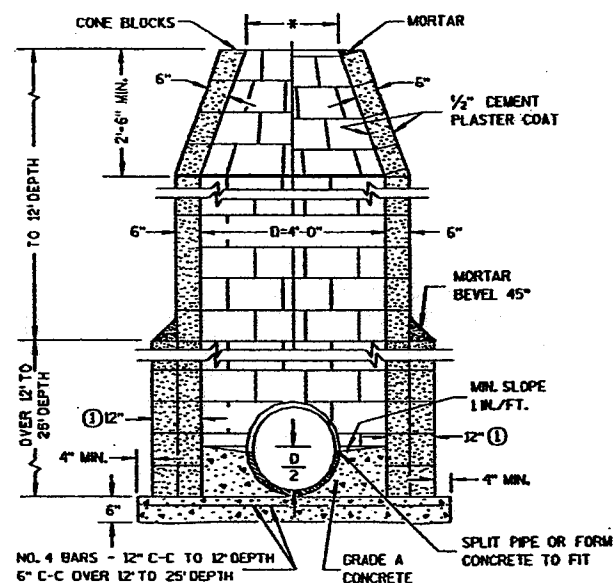


SECTION B-B
REINFORCED CONCRETE

MANHOLES TYPE 1



PRECAST REINFORCED CONCRETE



CONCRETE BLOCK

GENERAL NOTES

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

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 1-C", "CATCH BASINS 1-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 1 1/2 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

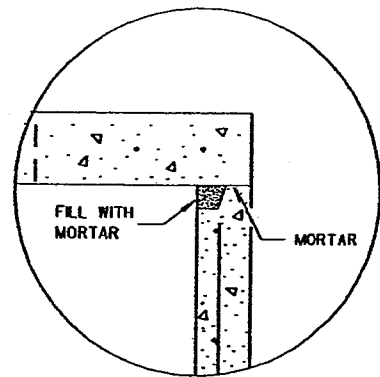
ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

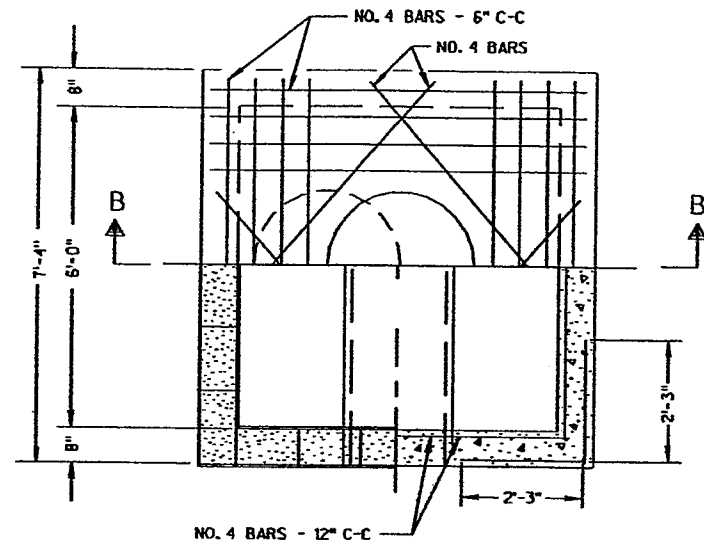
① 2 COURSES 6" BLOCK.

MANHOLES TYPE 1	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	STATE DESIGN ENGINEER FOR HWYS
FHWA	

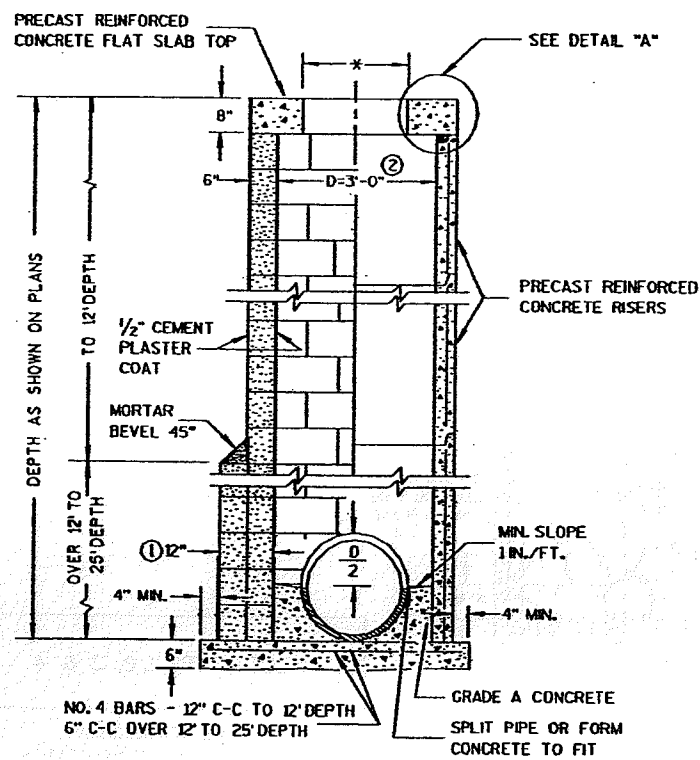
S.D.D. 8 B 6-3



DETAIL "A"

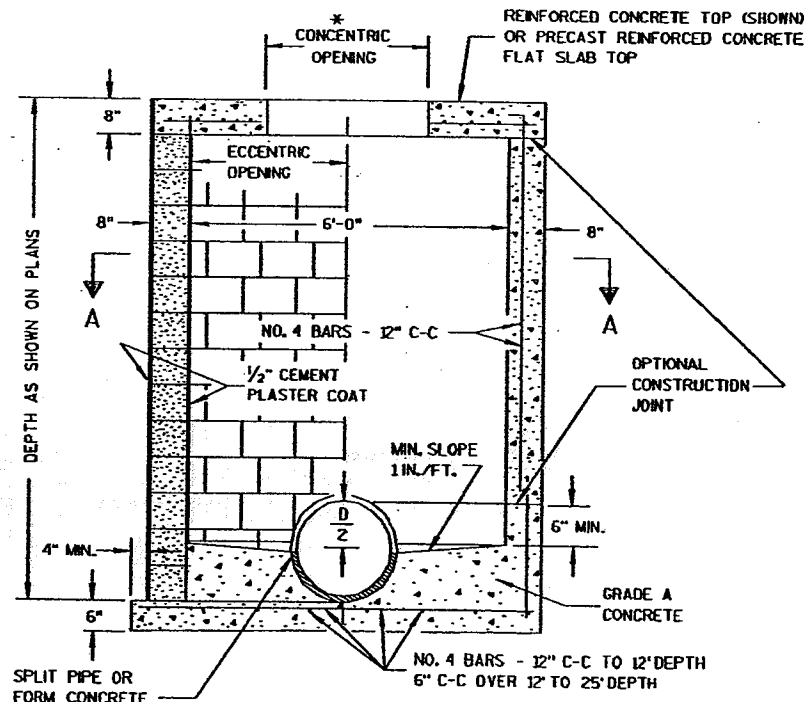


HALF SECTION A-A



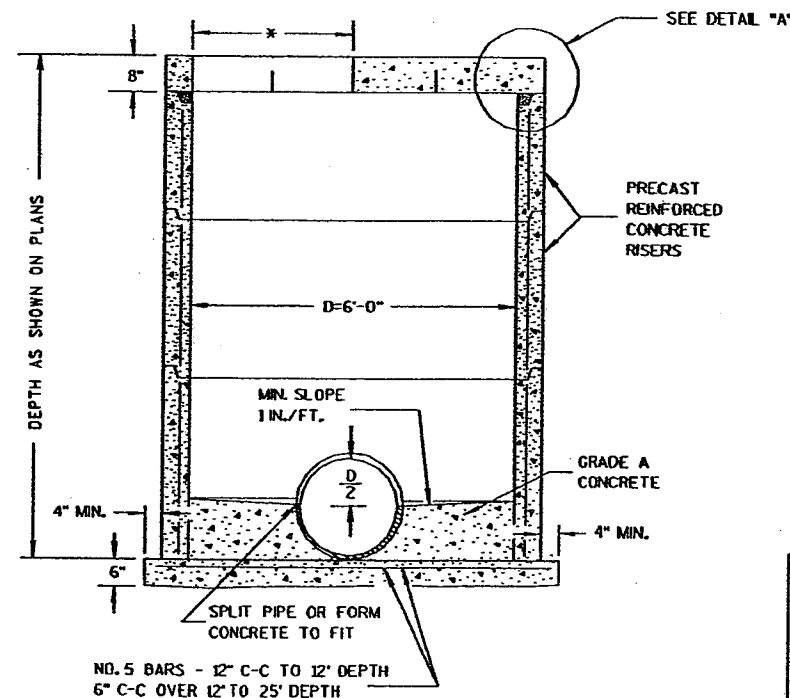
CONCRETE BLOCK
 PRECAST REINFORCED CONCRETE

MANHOLES TYPE 2



CONCRETE BLOCK
 REINFORCED CONCRETE

MANHOLES TYPE 3



PRECAST REINFORCED CONCRETE

GENERAL NOTES

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

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES I-C", "CATCH BASINS I-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

STEPS MEETING THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES; AND BE CAPABLE OF SUPPORTING A CONCENTRATED LOAD OF 300 LBS. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

SOLID ALUMINUM STEPS SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 0.75 INCH. ALUMINUM SURFACES TO BE EMBEDDED IN CONCRETE SHALL BE GIVEN ONE COAT OF SUITABLE QUALITY PAINT, SUCH AS ZINC CHROMATE PRIMER CONFORMING TO FEDERAL SPECIFICATION TT-P-645 OR EQUIVALENT. STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS MAY BE PLACED WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

* USE 2'-0" DIAMETER OPENING WITH TYPE "C", "L" AND "J" COVERS, OR 3'-0" DIAMETER WITH TYPE "K" AND "M" COVERS.

① 2 COURSES 6" BLOCK.

② WHEN CONNECTING PIPES ARE 24" OR LARGER THE PRECAST MANHOLES MAY BE INCREASED TO 42" DIAMETER.

S.D.D. 8 B 7-3

MANHOLES TYPE 2 & 3	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	STATE DESIGN ENGINEER FOR HWYS
FHWA	

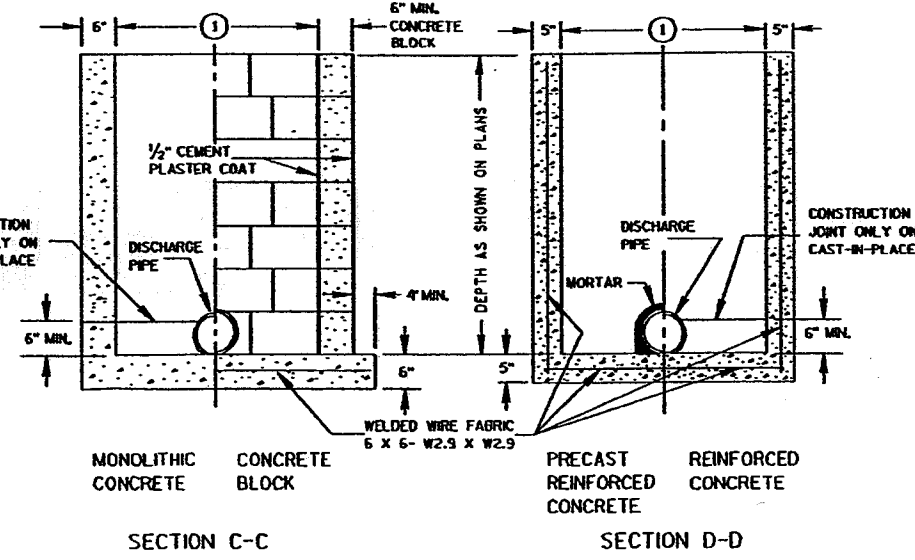
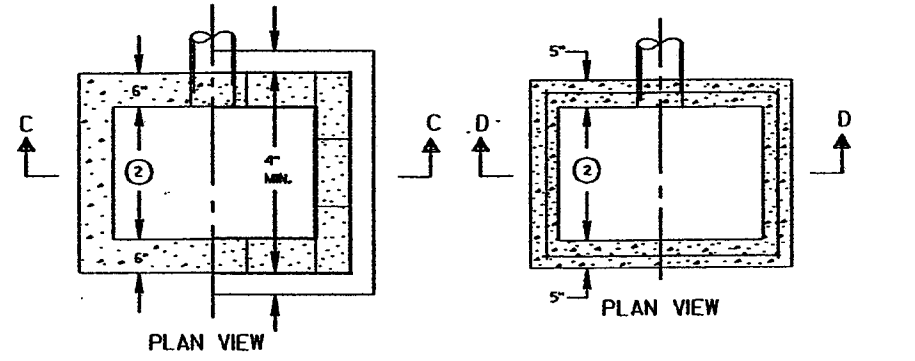
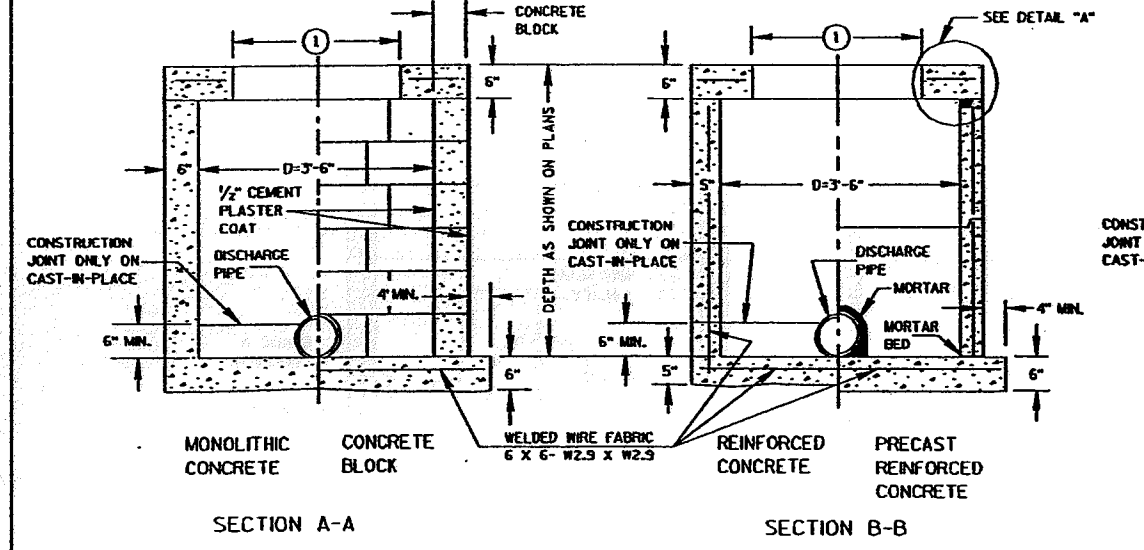
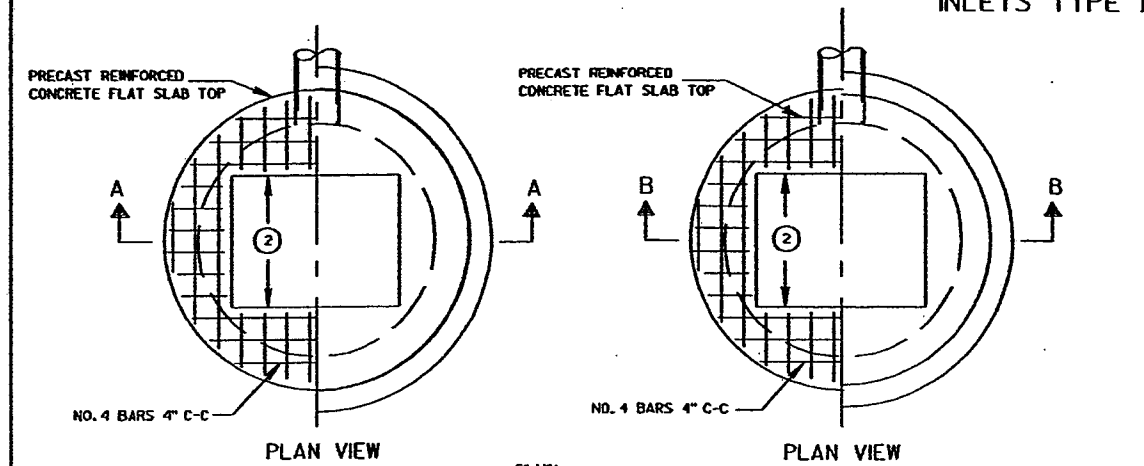
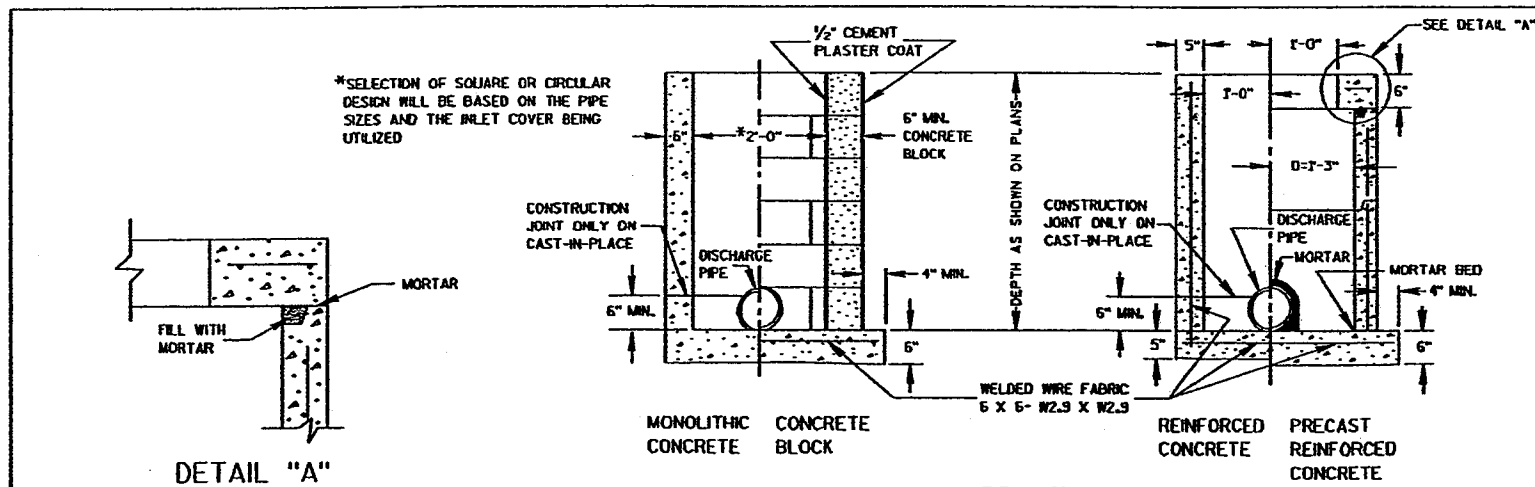
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APPROVED _____
 DATE _____
 STATE MAT'L ENGINEER FOR HWYS

APPROVED _____
 DATE _____
 STATE CONST. ENGINEER FOR HWYS

APPROVED _____
 DATE _____
 STATE DESIGN ENGINEER FOR HWYS

S.D.D. 8 C 1-5



GENERAL NOTES

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

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES I-C", "CATCH BASINS I-B", "INLETS 3-H", ETC. THE FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

PRECAST REINFORCED BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON THE STRUCTURES. THE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED CONCRETE RISERS SHALL BE PLACED WITH TONGUE DOWN.

① USE 2'-6" OPENING FOR TYPE 2 INLETS, 3'-0" OPENING FOR TYPE 3 INLETS, AND 2'-3" FOR TYPE 4 INLETS.

② USE 2'-0" OPENING FOR TYPE 1, 2 & 3 INLETS, 2'-6 1/2" OPENING FOR TYPE 4 INLETS.

INLETS TYPE 1, 2, 3 & 4

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED _____
 DATE _____
 CHIEF ROADWAY DEVELOPMENT ENGINEER
 FHWA

S.D.D. 8 C 1-5

REVISION DATE: 4/11/91

PLOT NAME:

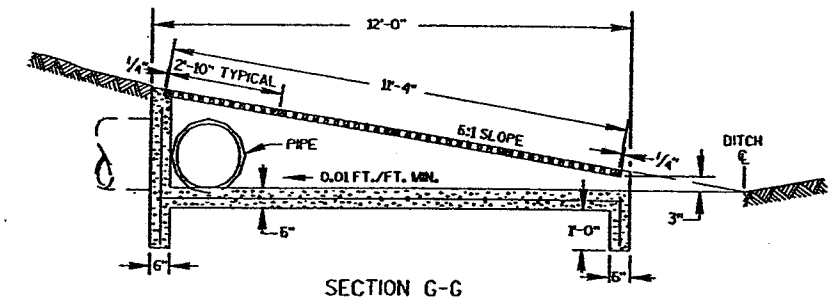
FILE NAME:

ORIGINATOR: MEL ZEMLICKA 8-2782

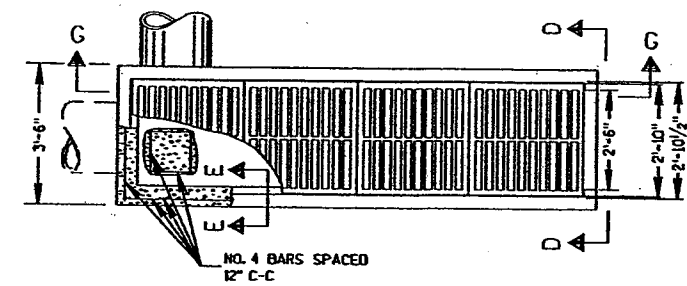
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APPROVED _____
DATE _____
STATE CONST. ENGINEER FOR HWYS

S.D.D. 8 C 5-2

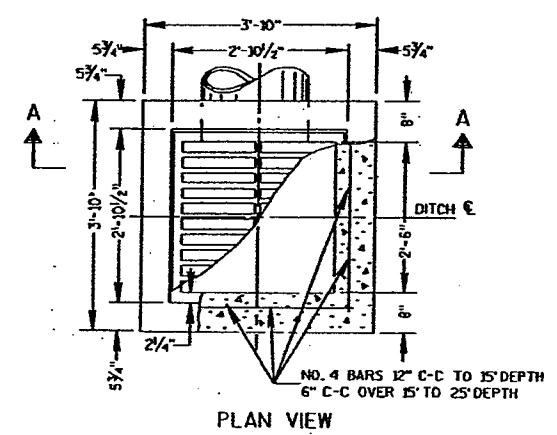


SECTION G-G

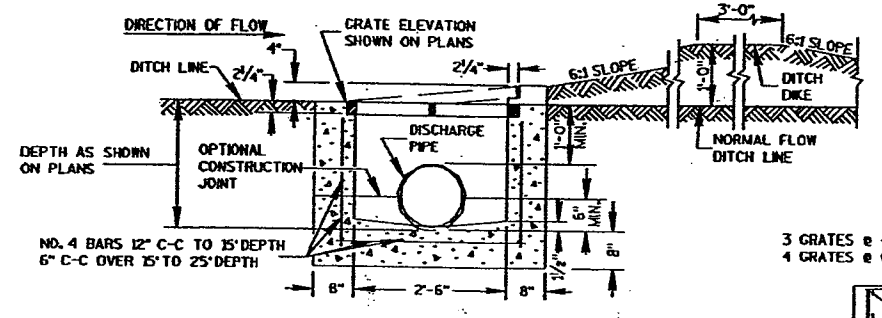


PLAN VIEW

REINFORCED CONCRETE INLET TYPE 11

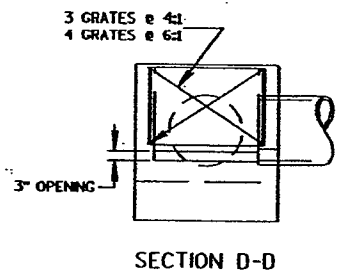


PLAN VIEW

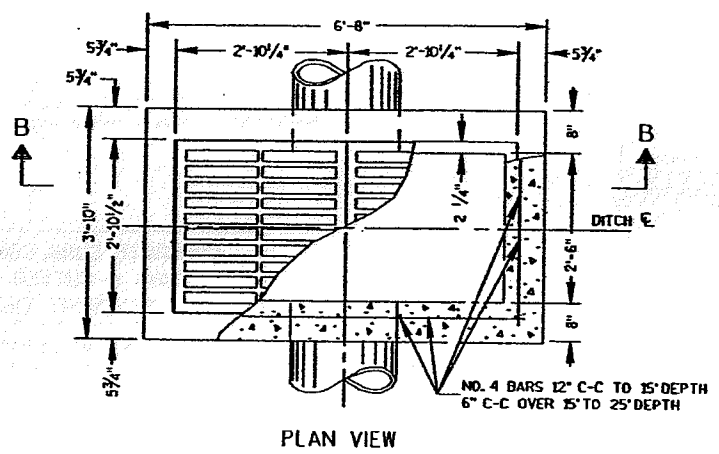


SECTION A-A

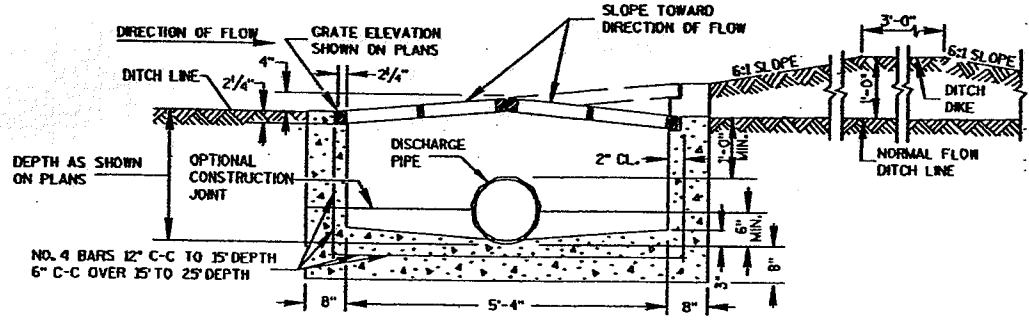
REINFORCED CONCRETE INLET TYPE 8



SECTION D-D



PLAN VIEW



SECTION B-B

REINFORCED CONCRETE INLET TYPE 9

GENERAL NOTES

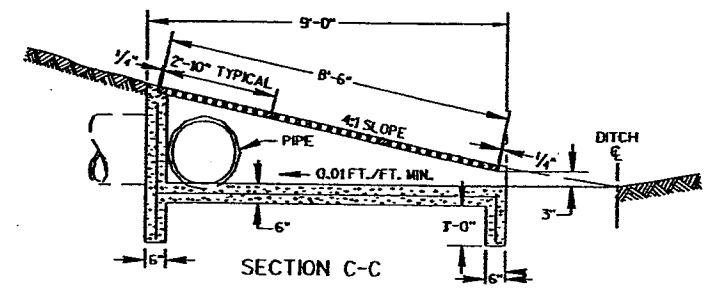
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

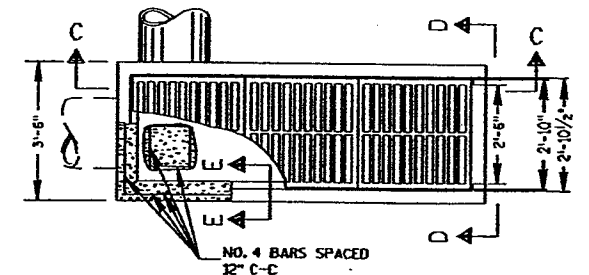
PRECAST REINFORCED CONCRETE INLET UNITS, IF USED, SHALL CONFORM TO THE REQUIREMENTS OF THE CATCH BASINS, MANHOLES AND INLETS SECTION OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER. THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A CORRECTED LIST OF SIZES IS FURNISHED BY THE ENGINEER.

ALL INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 8-MS", ETC. THIS DESIGNATION IS INTERPRETED TO MEAN THAT THE NUMBER, OR FIRST DIGIT DESIGNATES THE MASONRY PORTION OF THE STRUCTURE AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER OR IRON CASTING TO BE USED THEREWITH TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

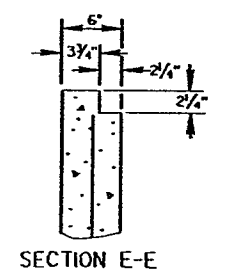


SECTION C-C



PLAN VIEW

REINFORCED CONCRETE INLET TYPE 10



SECTION E-E

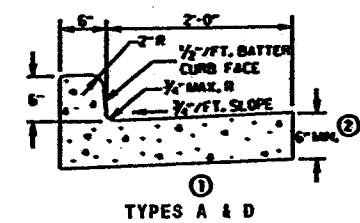
INLETS TYPE 8, 9, 10 AND 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

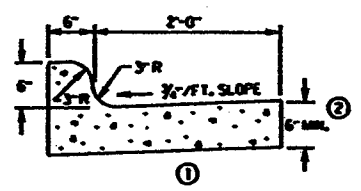
APPROVED _____
DATE _____
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHW A

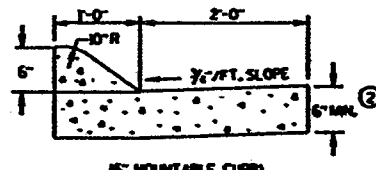
S.D.D. 8 C 5-2



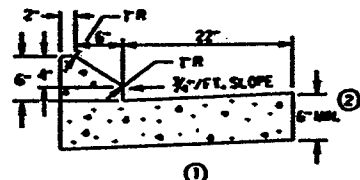
① TYPES A & D



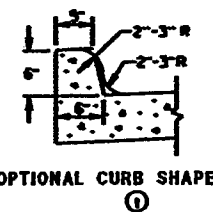
① TYPES K & L



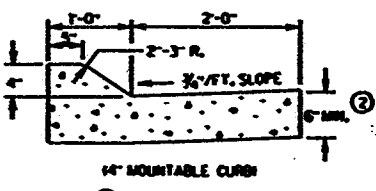
16" MOUNTABLE CURB



① TYPES G & J

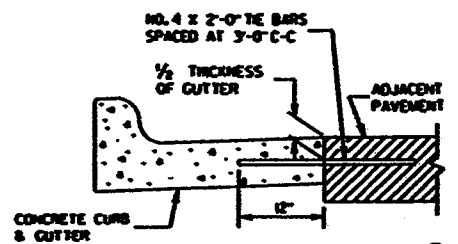


① OPTIONAL CURB SHAPE FOR TYPES K & L

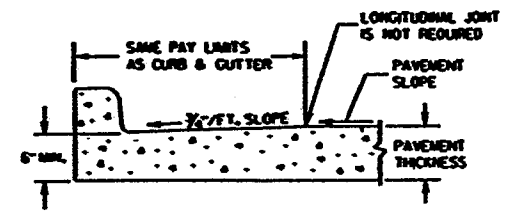


① TYPES A & D
CONCRETE CURB & GUTTER 36"

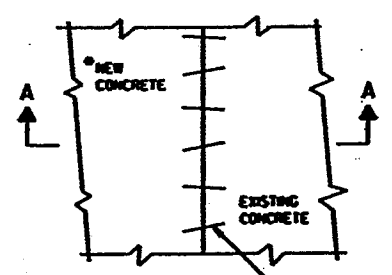
CONCRETE CURB & GUTTER 30"



① TYPICAL TIE BAR LOCATION

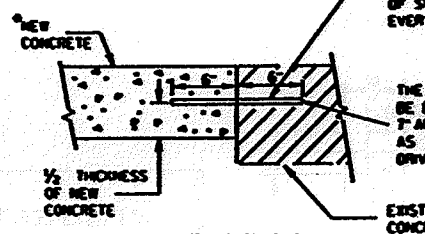


PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



PLAN VIEW

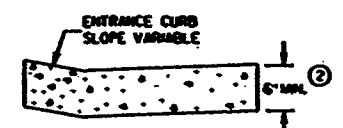
NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



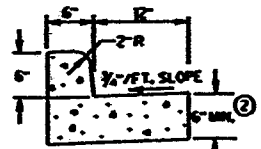
SECTION A-A
PAVEMENT TIES

NO. 6 x 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 60 DEGREE HORIZONTAL, DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.

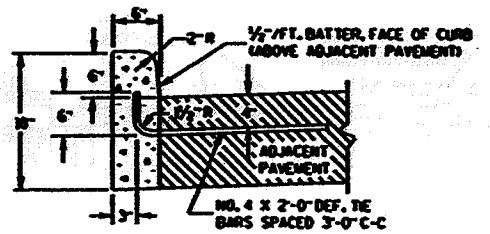
THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT



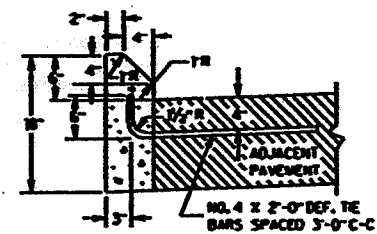
DRIVEWAY ENTRANCE CURB WHEN DIRECTED BY THE ENGINEER



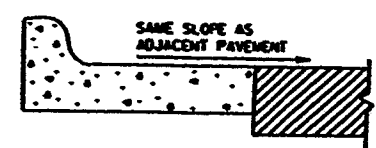
① TYPES A & D
CONCRETE CURB & GUTTER 18"



① TYPES A & D
CONCRETE CURB



① TYPES G & J
CONCRETE CURB



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

GENERAL NOTES

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

PAVEMENT TIES AND THE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE COURSE AND UNCLASSIFIED EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

- ① THE 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.

CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
PWA

S.D.O. 8 D 1-13

S.D.O. 8 D 1-13

REVISION DATE: 4/1/91

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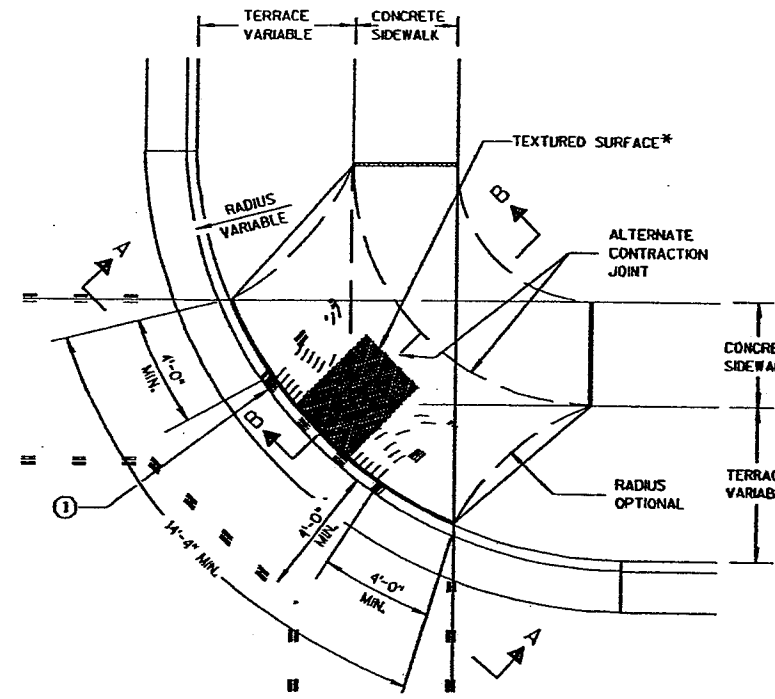
PLOT SCALE: 4"

FILE NAME:

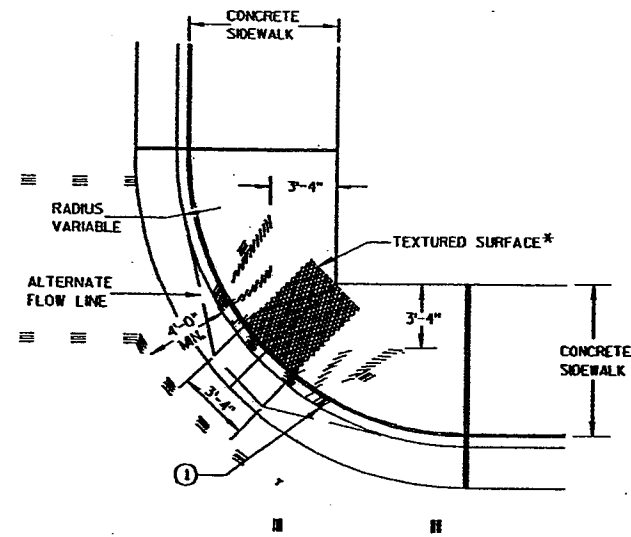
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APPROVED _____
DATE _____
STATE CONST. ENGINEER FOR HWYS

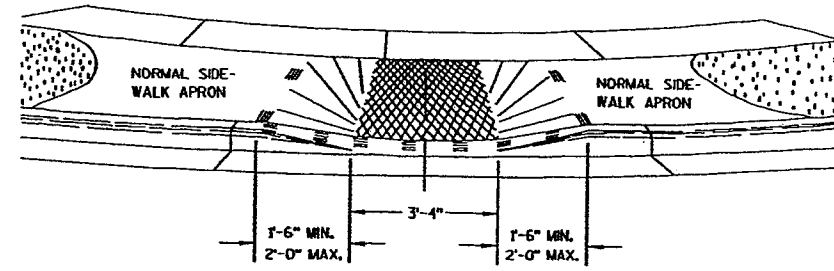
S.D.D. 8 D 5-8



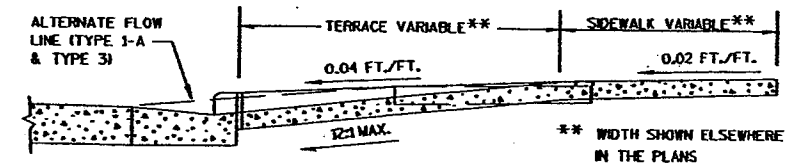
PLAN VIEW
TYPE 1 RAMP
(CENTER OF CORNER RADIUS)



PLAN VIEW
TYPE 1-A RAMP
(NO TERRACE)

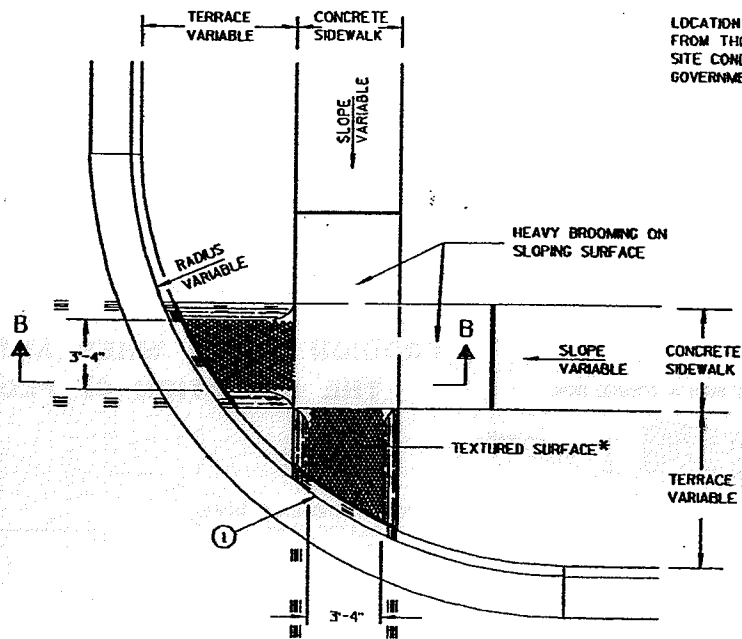


VIEW A-A

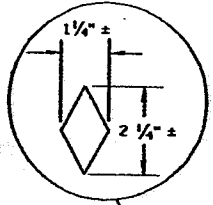


SECTION B-B

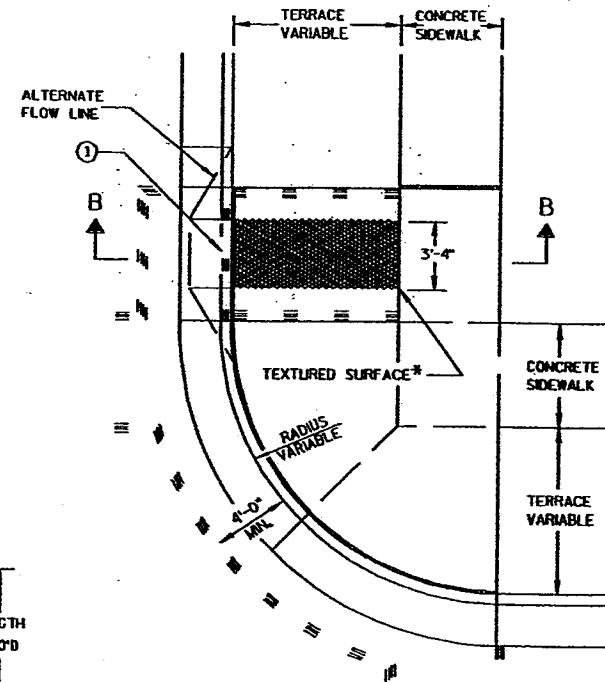
1/2" EXPANSION JOINT-SIDEWALK
CONTRACTION JOINT
LOCATION OF JOINTS MAY BE VARIED FROM THOSE SHOWN TO BETTER FIT SITE CONDITIONS AND/OR LOCAL GOVERNMENT PREFERENCE.



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



DETAIL OF DIAMOND PATTERN*



PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

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 1/4 INCH TO 3/8 INCH IN DEPTH AND WIDTH, ORIENTED TO PROVIDE A UNIFORM PATTERN OF DIAMOND SHAPES MEASURING APPROXIMATELY 1 1/4 INCHES IN WIDTH BY 2 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 PAINT STRIPE OR WITH BRICK OF A CONTRASTING COLOR. NORMALLY THE PAINT STRIPE ALTERNATE WILL BE USED, THE MUNICIPALITY OR THE DEPARTMENT WILL APPLY THIS STRIPPING UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.
- IF A MUNICIPALITY REQUIRES THE BRICK ALTERNATE, SPECIAL DETAILS AND PROVISIONS ARE SHOWN ELSEWHERE IN THE PLANS.

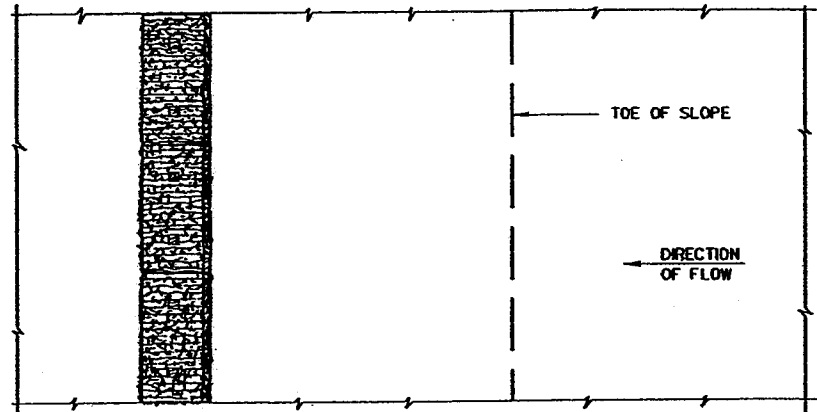
CURB RAMPS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED _____	DATE _____
STATE DESIGN ENGINEER FOR HWYS	
FHWA	

S.D.D. 8 D 5-8

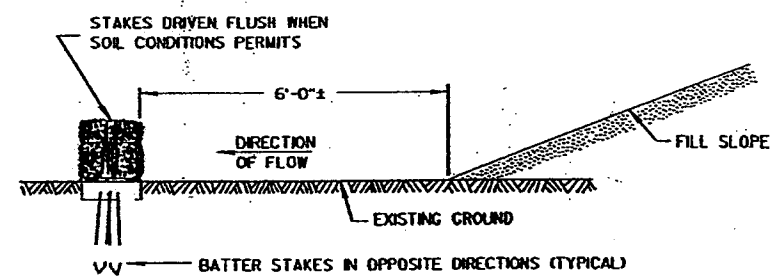
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APPROVED _____ DATE _____ STATE MAINT. ENGINEER FOR HWYS
APPROVED _____ DATE _____ STATE CONST. ENGINEER FOR HWYS

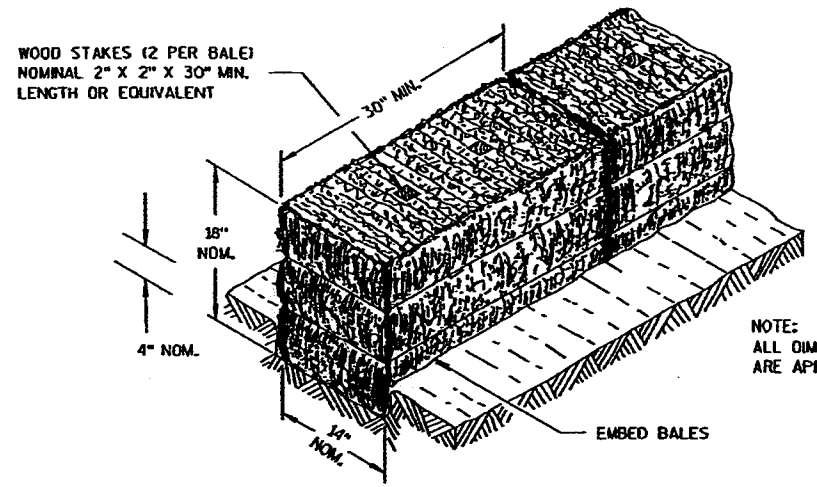
S.D.D. 8 E 8-2



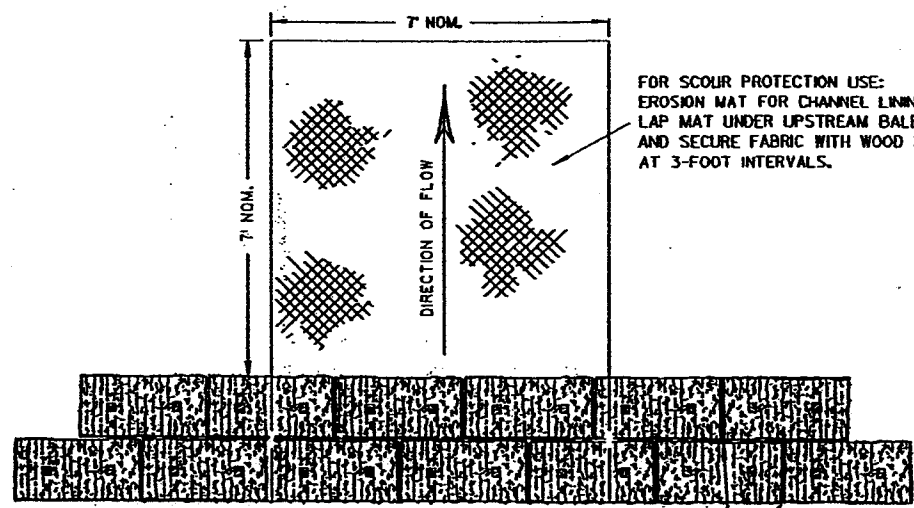
PLAN VIEW



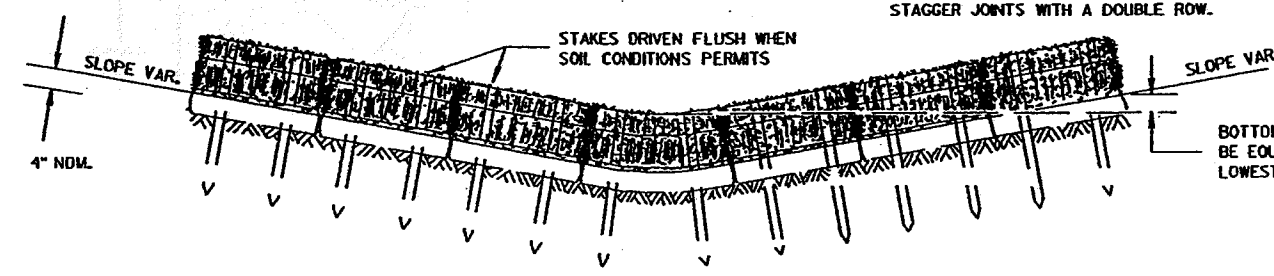
FRONT ELEVATION
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE
EROSION BALES FOR SHEET FLOW



NOTE: ALL DIMENSIONS ARE APPROXIMATE



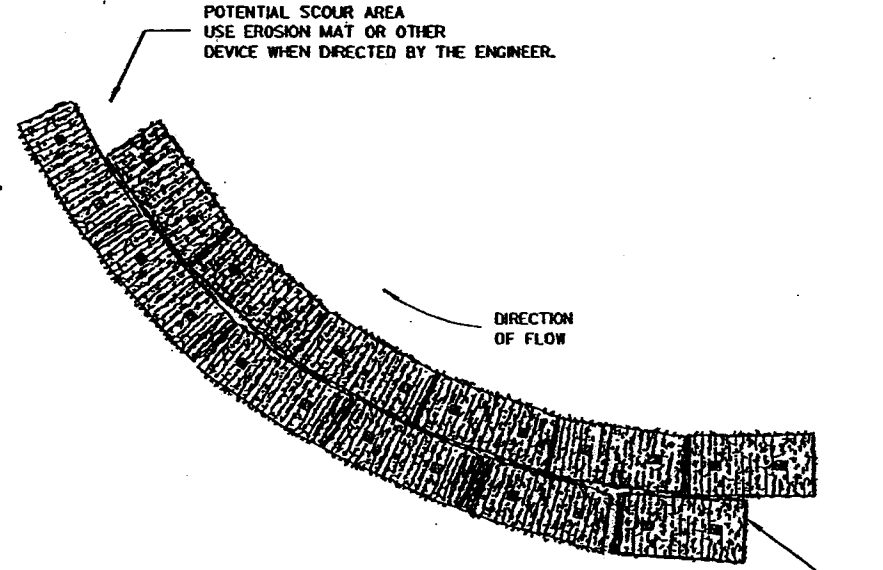
PLAN VIEW



FRONT ELEVATION
EROSION BALES FOR CHANNEL FLOW

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.

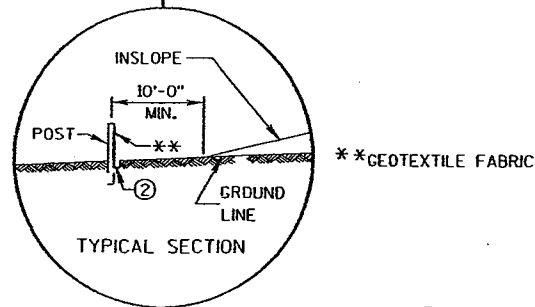
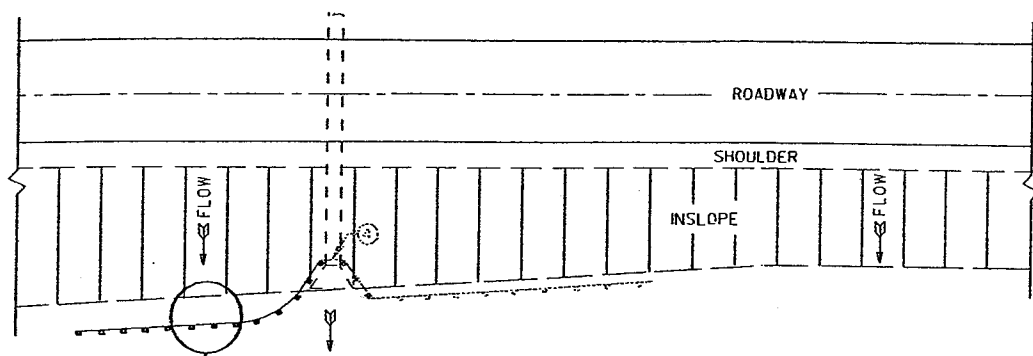


PLAN VIEW

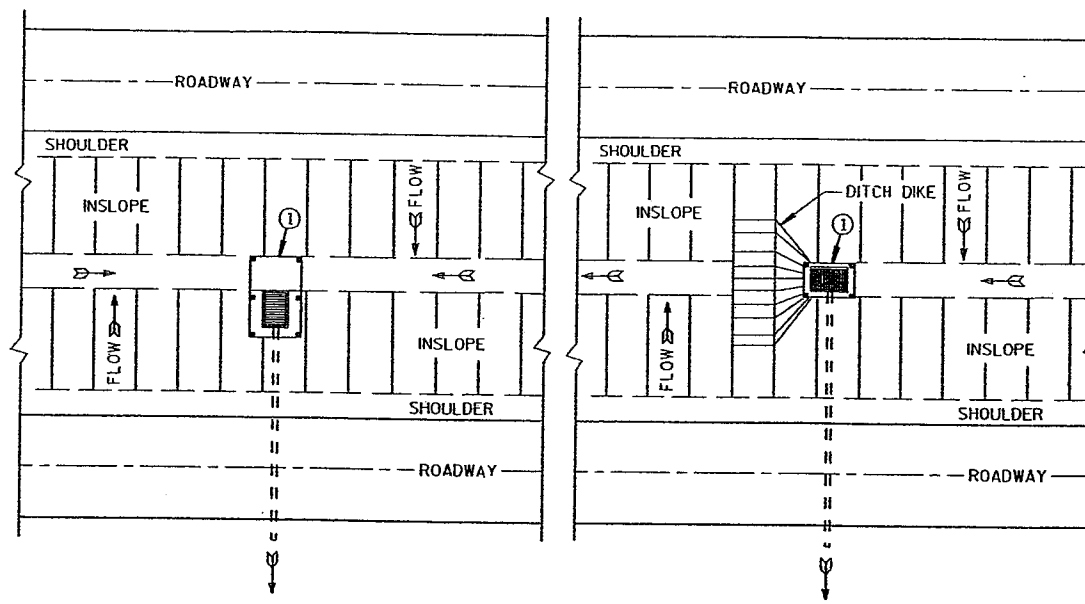
EROSION BALES WHEN ALTERING THE DIRECTION OF FLOW

TYPICAL INSTALLATIONS OF EROSION BALES
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED _____ DATE _____ CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

S.D.D. 8 E 8-2



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE



SITUATION 1 SITUATION 2

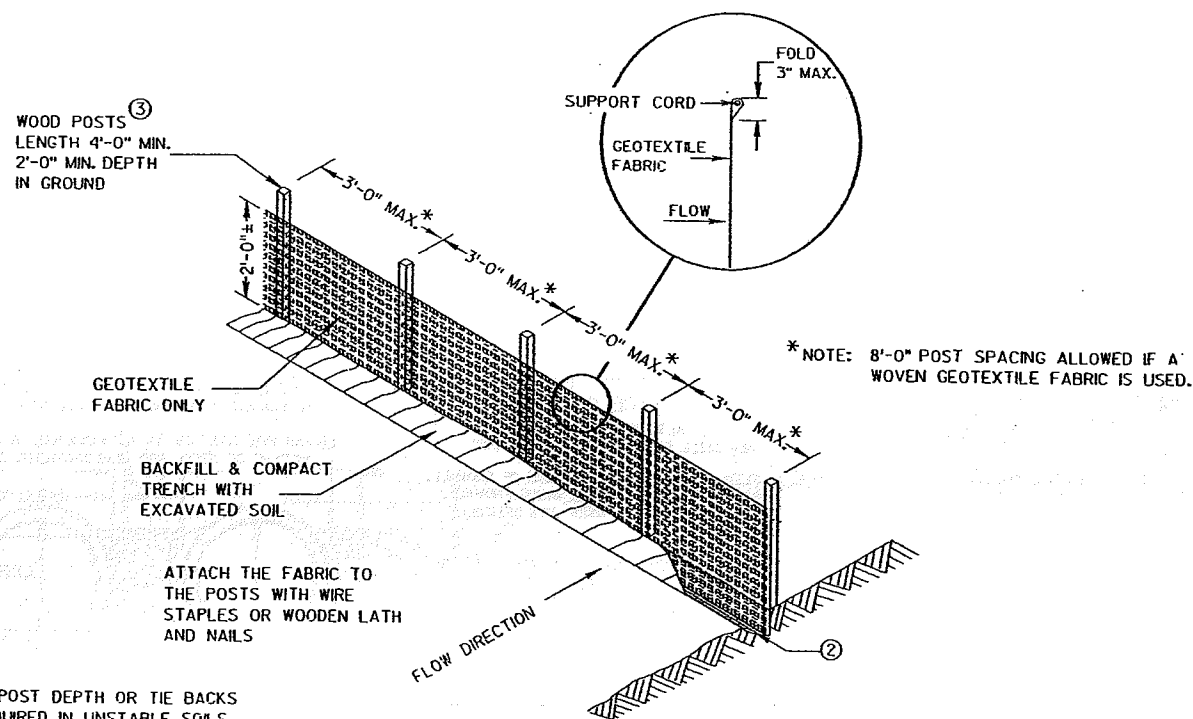
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

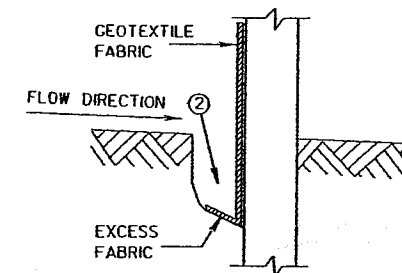
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② TRENCH SHALL BE 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.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

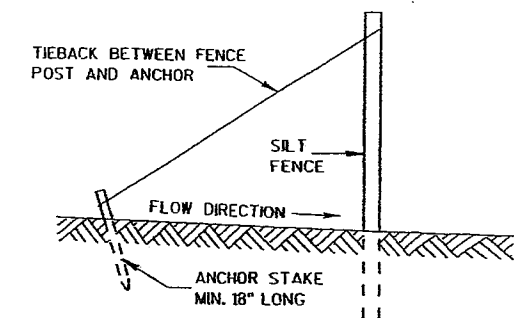


NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

SILT FENCE



TRENCH DETAIL



SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

REVISION DATE: 8-7-84

PLOT NAME: BDF10

PLOT SCALE: 1/4"

FILE NAME: BDF10.DWG

ORIGINATOR: MEL ZEMLIKHA 8-2782
LEVELS: 0+1, 5

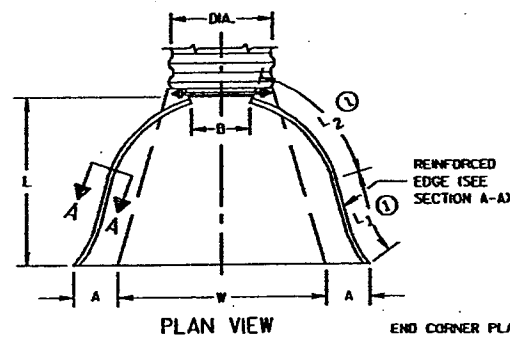
S.D.D. 8 F 1-11

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1/2")	L ₁ (1)	L ₂ (1)	W (±2")		
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 3/4	42	2 1/2 to 1	1 Pc.
24	.064	.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	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	15	22	8	69	24	75 3/4	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/2 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/2 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	47	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109	.105	18	49	12	87	—	—	150	1 1/2 to 1	3 Pc.

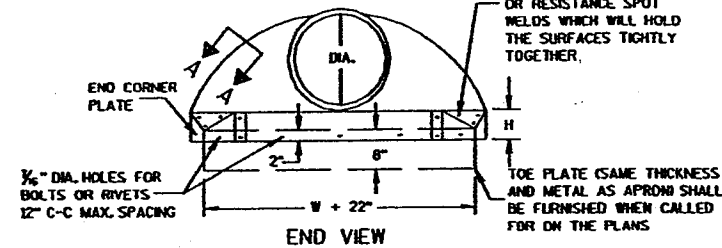
* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/4	72 1/4	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 3/4 to 1	
60	6	30-35	60	39	99	96	5	2 to 1	
66	6 1/2	33-36	72-78	21-27	99	102	5 1/2	2 to 1	
72	7	36-39	78	21	99	108	6	2 to 1	
78	7 1/2	39-42	78	21	99	114	6 1/2	2 to 1	
84	8	42-45	90 1/2	21	100 1/2	120	6 1/2	1 1/2 to 1	
90	8 1/2	45	87 1/2	24	100 1/2	132	6 1/2	1 1/2 to 1	

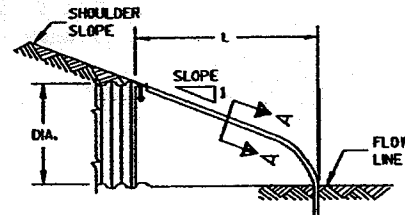
* MINIMUM
** MAXIMUM



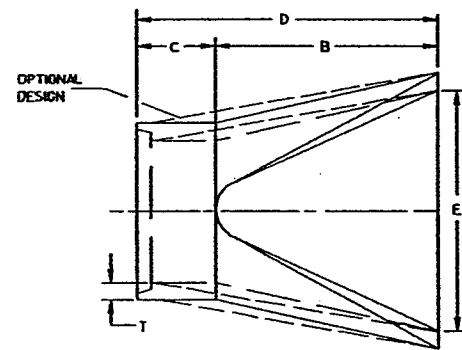
PLAN VIEW



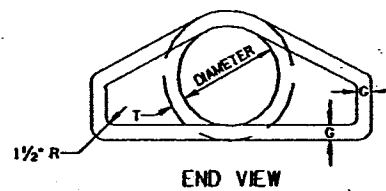
END VIEW



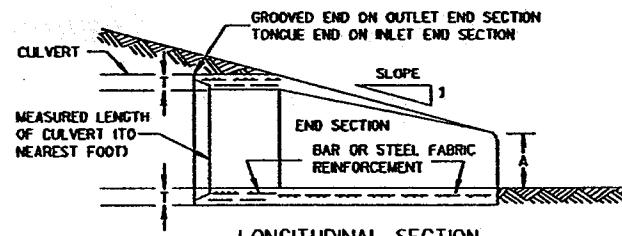
SIDE ELEVATION METAL ENDWALLS



PLAN

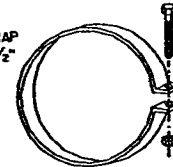


END VIEW

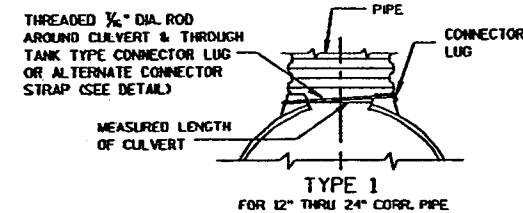


LONGITUDINAL SECTION CONCRETE ENDWALLS

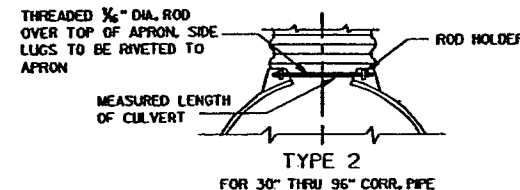
1" WIDE, 12 GA. 10.109" THICK GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



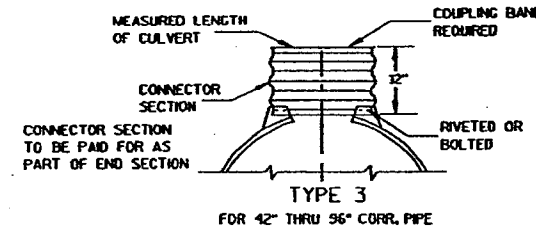
ALTERNATE FOR TYPE 1 CONNECTION END SECTION CONNECTOR STRAP



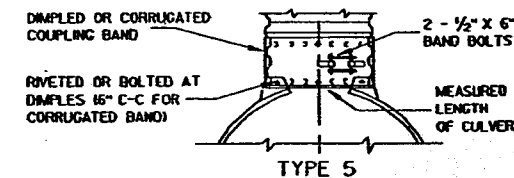
TYPE 1 FOR 12" THRU 24" CORR. PIPE



TYPE 2 FOR 30" THRU 36" CORR. PIPE



TYPE 3 FOR 42" THRU 96" CORR. PIPE



TYPE 5 ALTERNATE FOR: ALL SIZES CORRUGATED CIRCULAR PIPE

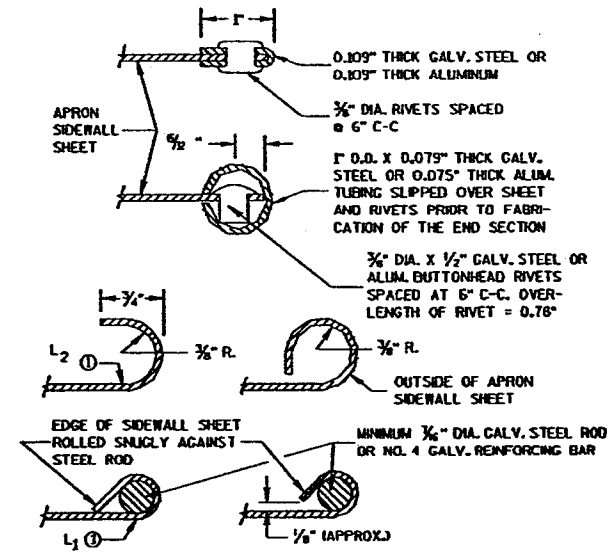
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 VICE 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.

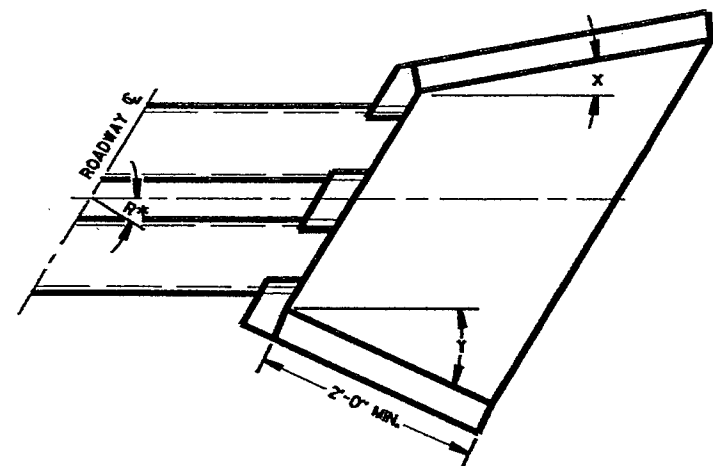
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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	DATE
CHIEF ROADWAY DEVELOPMENT ENGINEER	

S.D.D. 8 F 1-11

REVISION DATE: 5-18-90
 PLOT NAME: 88807
 FILE NAME: 88807
 PLOT SCALE: 2
 ORIGINATOR: MEL ZEMICKA 6-2788
 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



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	-	16 - 45°	10°	-
23 - 37°	20°	-	46 - 75°	5°	-
38 - 52°	15°	-	OVER 75°	0°	-
53 - 67°	10°	-			
68 - 82°	5°	-			
OVER 82°	0°	-			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

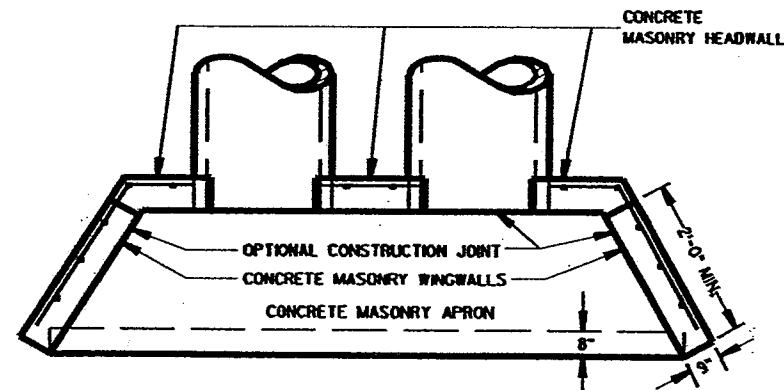
FILL SLOPES FLATTER THAN 2 1/2:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

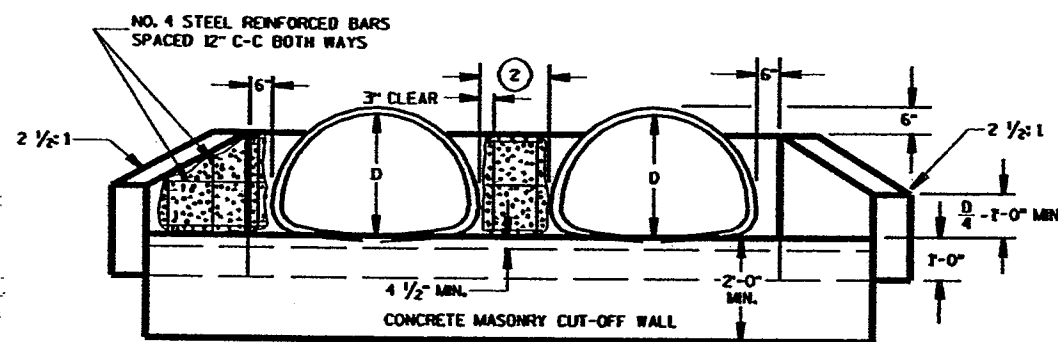
① MINIMUM REINFORCEMENT SHALL BE 6" X 6" - #4.0 X #4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

② THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

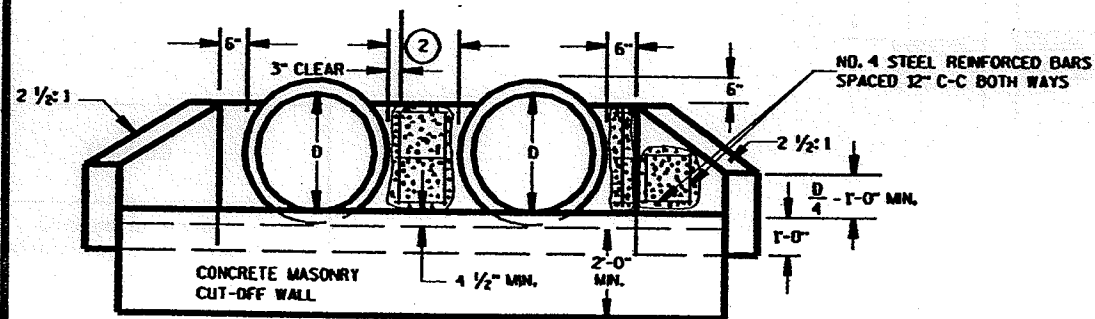
DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	1/2 DIA. OR SPAN
OVER 72"	3'-0"



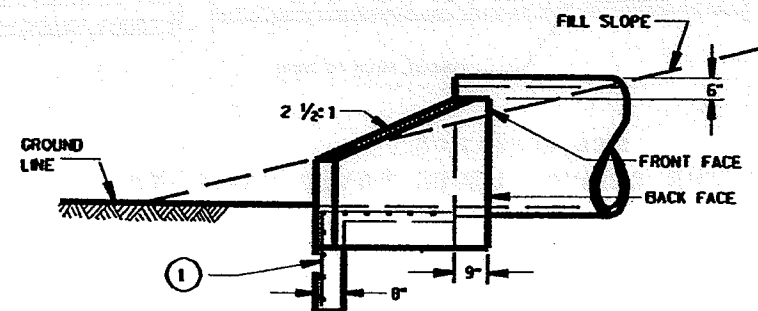
PLAN VIEW
CULVERT PIPE AND PIPE ARCH



END ELEVATION
PIPE ARCH



END ELEVATION
CULVERT PIPE



SIDE ELEVATION
CULVERT PIPE AND PIPE ARCH

S.D.D. 8 F 10-1

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED _____	
DATE _____	CHIEF ROADWAY DEVELOPMENT ENGINEER
CHWA	

S.D.D. 8 F 10-1

REVISION DATE: 4-28-82

PLOT NAME: SB8205

PLOT SCALE: 1/8" = 1'

FILE NAME: SB8205

ORIGINATOR: MEL ZENLICKA S-2782

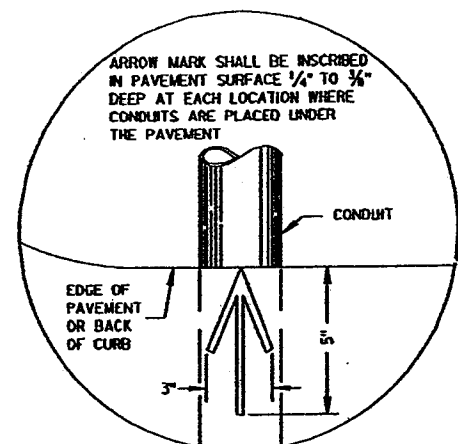
LEVEL: 01 - 1

APPROVED _____
DATE _____
STATE DESIGN ENGINEER FOR HWYS

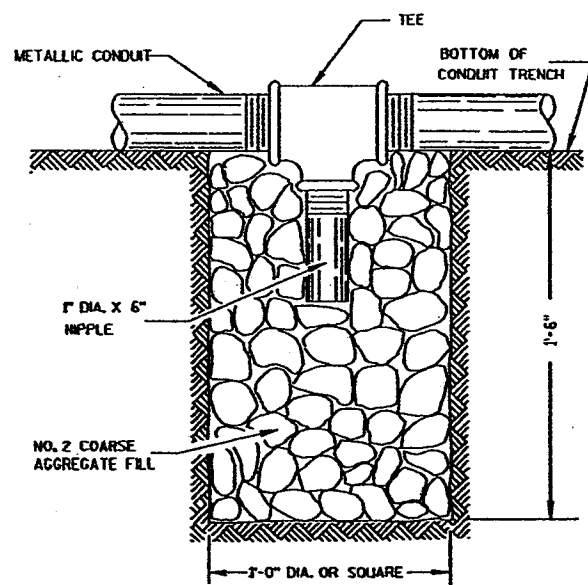
APPROVED _____
DATE _____
STATE CONST. ENGINEER FOR HWYS

APPROVED _____
DATE _____
STATE MATLS. ENGINEER FOR HWYS

S.D.D. 9 B 2-6

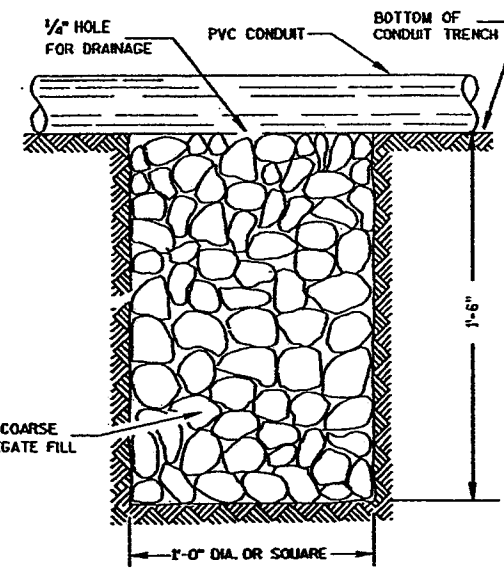


PLAN VIEW
ARROW MARK



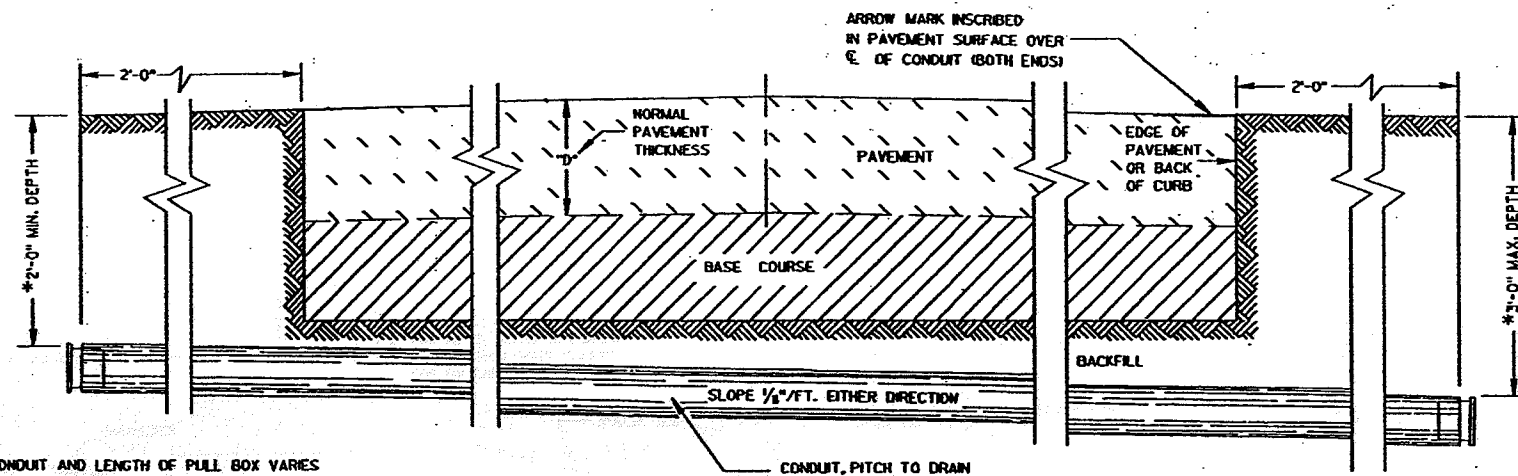
NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 984

SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSON TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX OR JUNCTION BOX TO JUNCTION BOX OR BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS UNLESS OTHERWISE APPROVED BY THE PROJECT ENGINEER.

CONDUIT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED _____	STATE ELECTRICAL ENGINEER FOR HIGHWAYS
DATE _____	FWHA

S.D.D. 9 B 2-6

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES	TYPE OF PIPE	CORRUGATED STEEL									POLYETHYLENE SDR 32.5
		A	12	12	12	18	18	18	24	24	24
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24	12
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48	24
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.4
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4	10 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2	14 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	8 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2	11 1/2
WEIGHT IN POUNDS *											
FRAME AND COVER		60	60	60	110	110	110	155	155	155	60

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICE). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

POLYETHYLENE PULL BOXES SHALL NOT BE INSTALLED IN CONCRETE OR ASPHALTIC PAVEMENT. PULL BOXES LOCATED IN THE ROADWAY SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

DRAIN DUCT SHALL BE MEASURED AND PAID FOR SEPARATELY.

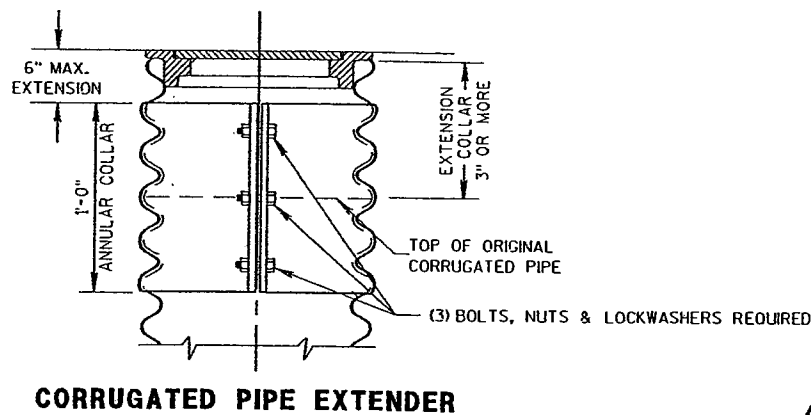
RODENT WIRE SCREEN SHALL BE 1/8" STAINLESS STEEL MESH AND BE INSTALLED WITH A STAINLESS STEEL HOSE CLAMP OF SUFFICIENT SIZE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 3/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.



CORRUGATED PIPE EXTENDER

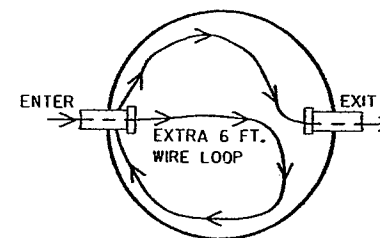
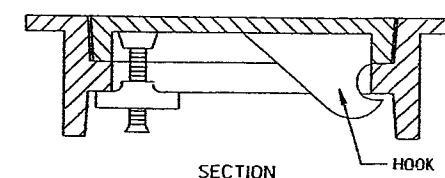
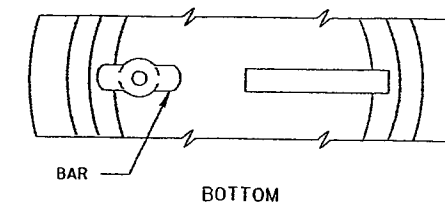
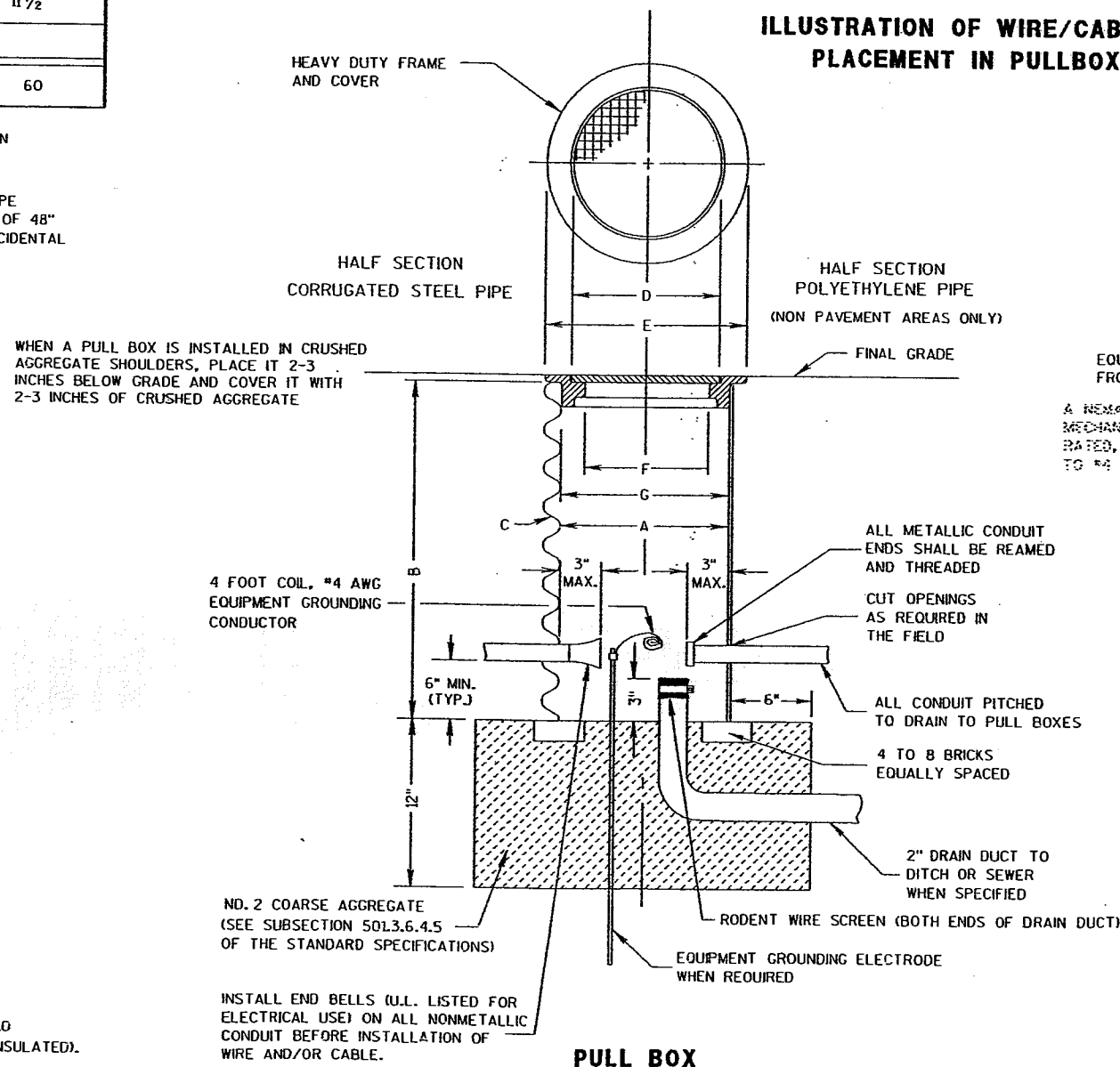


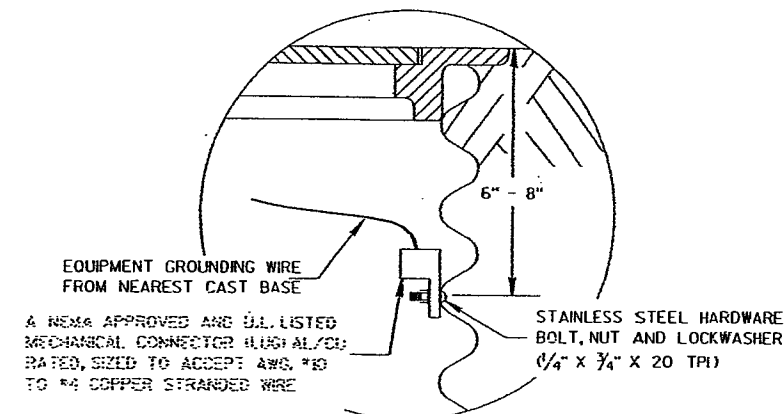
ILLUSTRATION OF WIRE/CABLE PLACEMENT IN PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	

S.D.D. 9 B 4-4

REVISION DATE:

PLOT NAME:

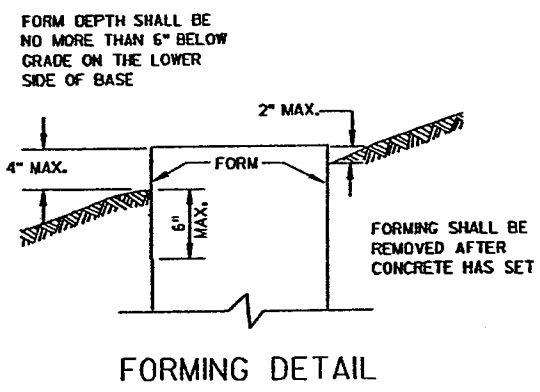
PLOT SCALE:

FILE NAME:

ORIGINATOR:

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S.D.D. 9 C 2-2



QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	38

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD, ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

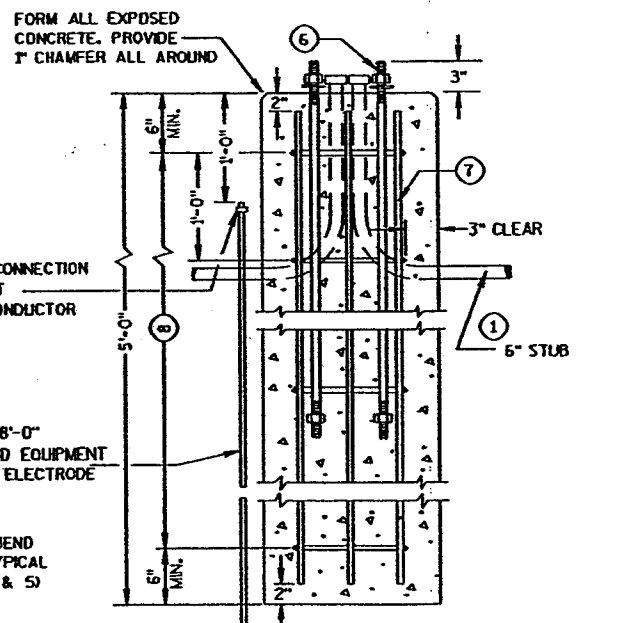
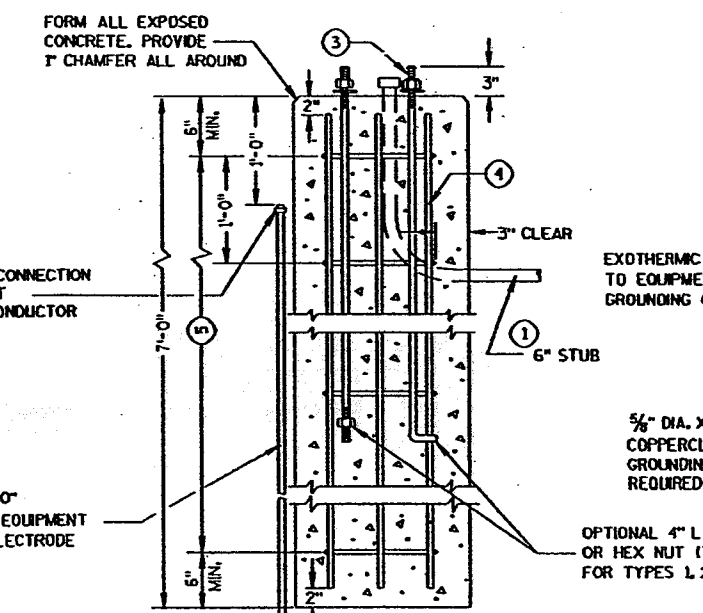
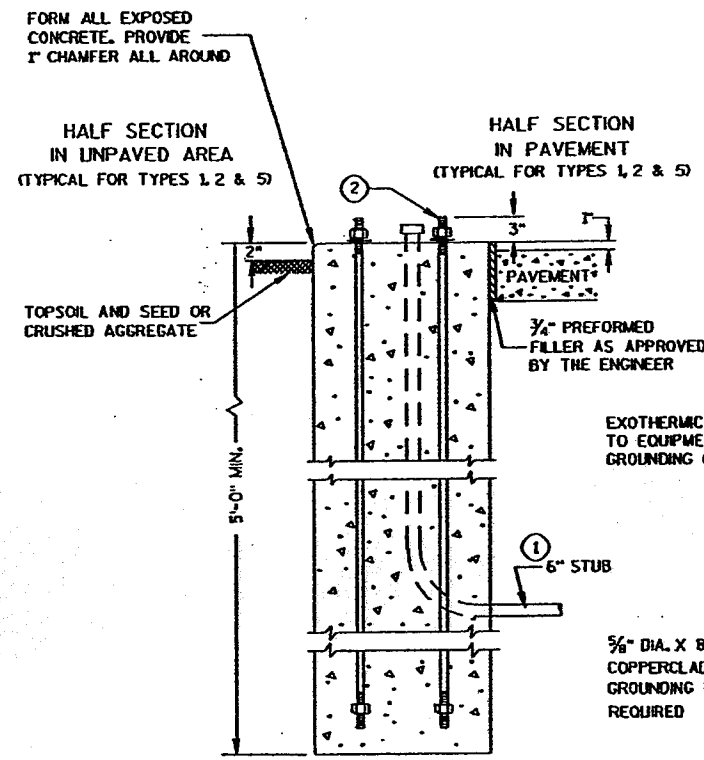
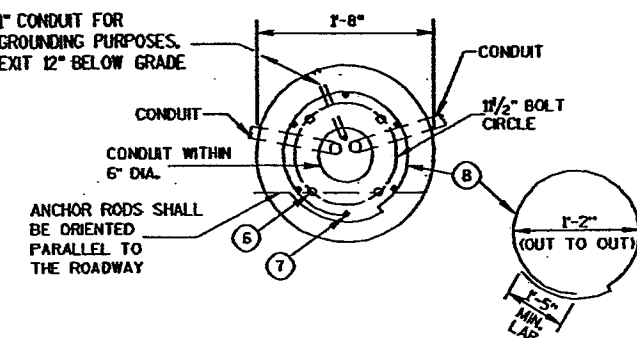
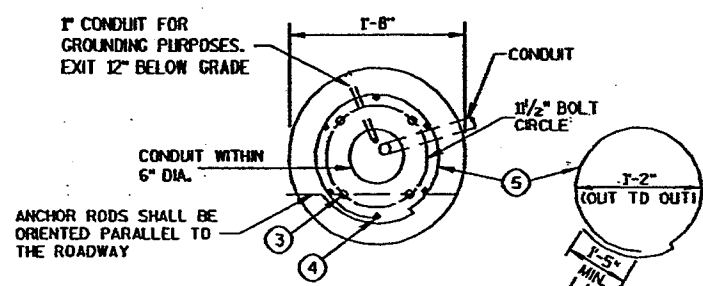
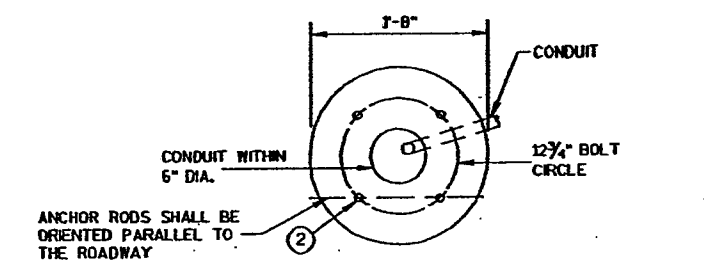
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.



- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.
- 2 (4) 1" DIA. X 3'-6" ANCHOR RODS.
- 3 (4) 1" DIA. X 5'-0" ANCHOR RODS.
- 4 (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.
- 5 (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.
- 6 (4) 1" DIA. X 3'-6" ANCHOR RODS.
- 7 (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT
- 8 (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

CONCRETE BASES

CONCRETE BASES, TYPES 1, 2 & 5	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	STATE ELECTRICAL ENGINEER FOR HIGHWAYS
FHWA	

REVISION DATE: 3-24-58

PLOT NAME: 59780

1/4" PLOT SCALE: 1

FILE NAME: 59780

ORIGINATOR: MEL ZENLICKA 11-27-62

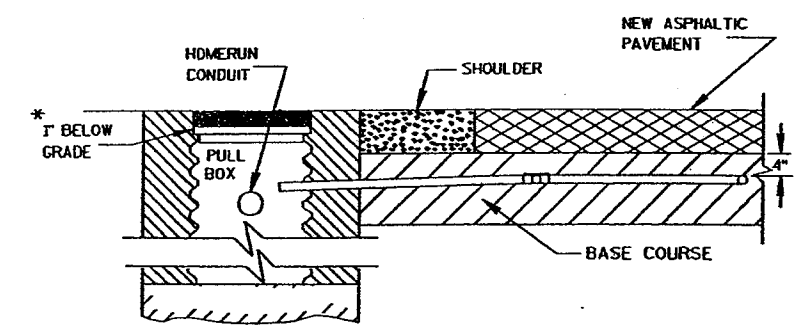
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APPROVED _____
DATE _____
STATE DESIGN ENGINEER FOR HWYS

APPROVED _____
DATE _____
STATE MAT'L'S ENGINEER FOR HWYS

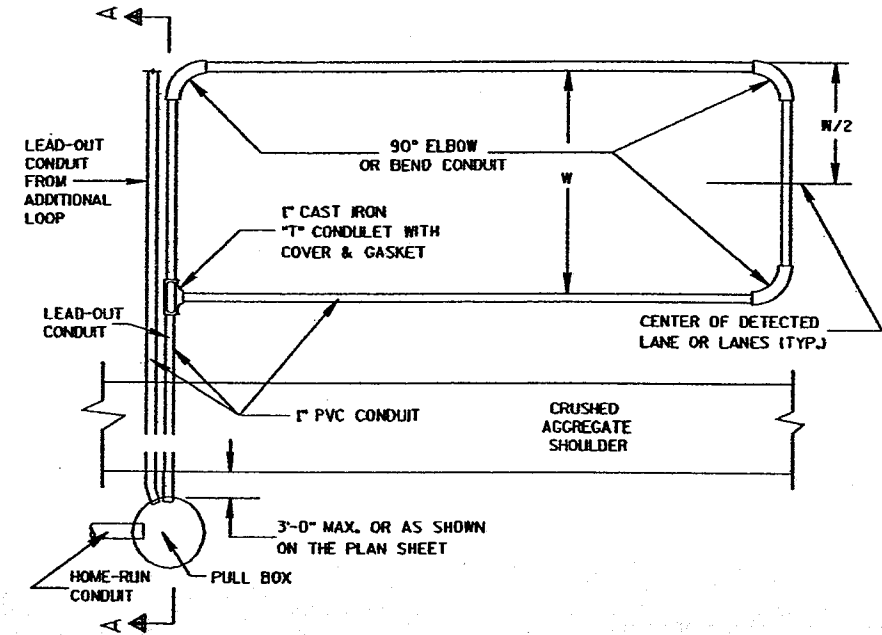
APPROVED _____
DATE _____
STATE CONST. ENGINEER FOR HWYS

S.D.D. 9 F 8-2



**SECTION A-A
NO CURB & GUTTER
DETECTOR LOOP INSTALLATION DETAIL**

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF LOOP DETECTOR

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD-OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

THE GROUND RESISTANCE READING OF THE LOOP SHALL READ "INFINITY" TO GROUND ON AN OHMMETER USING A MULTIPLIER SCALE OF 1 MEGOHM AND AN INPUT RESISTANCE OF 11 MEGOHMS MINIMUM BEFORE SPLICING THE LOOP TO THE LEAD-IN CABLE.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

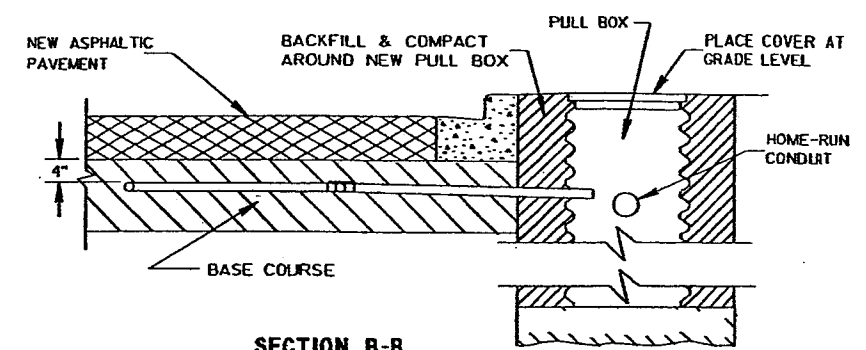
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP DUCT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT AND CONDULET SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE THE ASPHALTIC PAVEMENT IS PLACED.

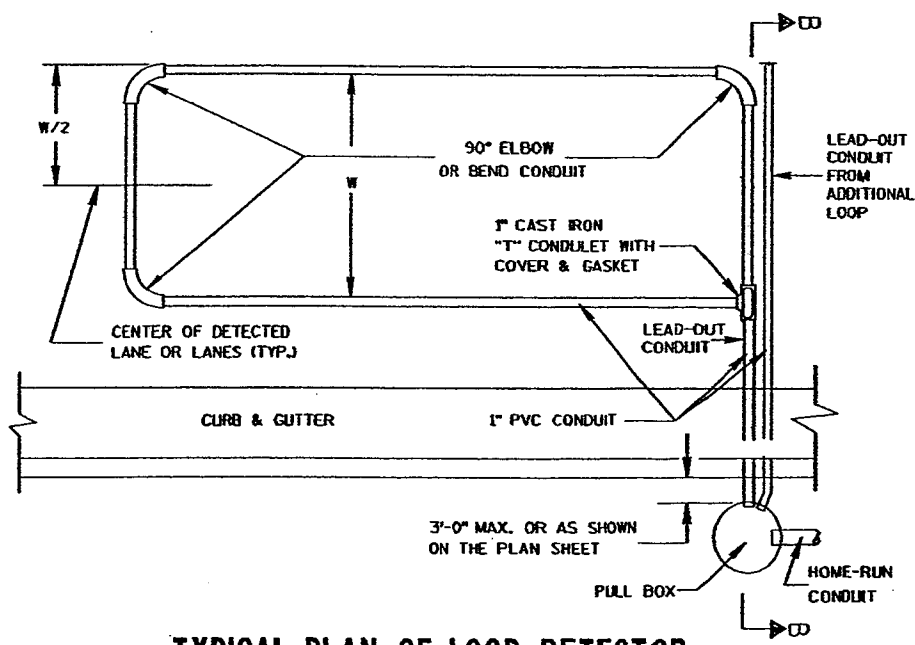
WHEN MULTIPLE LAYERS OF ASPHALTIC PAVEMENT ARE TO BE PLACED, LOOPS MAY BE INSTALLED BY SAWING A TWO INCH WIDE SLOT IN THE FIRST LAYER, DIG OUT THE ASPHALTIC MATERIAL AND BASE COURSE, PLACE THE LOOP, FILL THE SLOT WITH BASE COURSE MATERIAL AND NEW ASPHALTIC MATERIAL AND TAMP THE ASPHALTIC MATERIAL IN PLACE.

SHOULD TRAFFIC BE ALLOWED TO USE THE AREA OF ROADWAY WITH THE NEWLY INSTALLED LOOP BEFORE THE PLACEMENT OF THE NEXT LAYER OF ASPHALTIC PAVEMENT, THE SLOT/PAVEMENT OPENING SHALL BE SEALED WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

DRIVE A 1 1/2" MAX. PK NAIL INTO THE NEW ASPHALTIC PAVEMENT AND DIRECTLY ABOVE THE CONDULET AFTER THE FINAL LAYER OF NEW ASPHALTIC PAVEMENT IS COMPLETELY INSTALLED, IF REQUIRED BY THE DISTRICT TRAFFIC SECTION.



**SECTION B-B
CURB & GUTTER
LOOP DETECTOR INSTALLATION DETAIL**



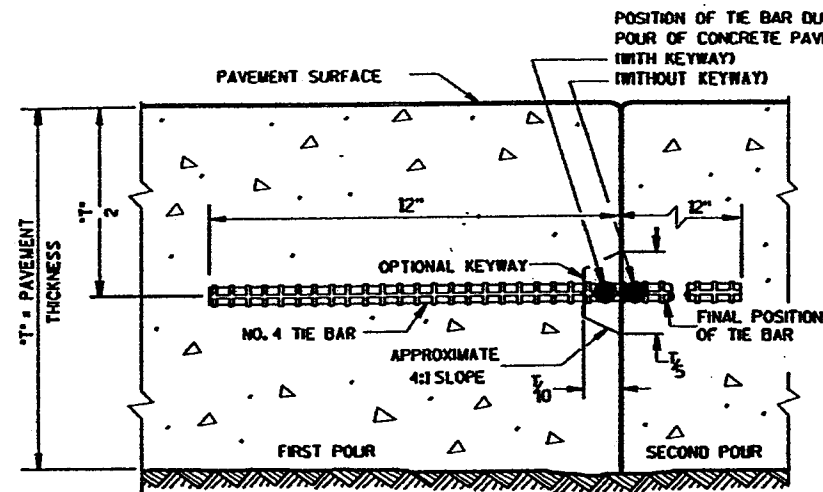
TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR PLACED IN CRUSHED AGGREGATE BASE (NEW ASPHALTIC PAVEMENT)

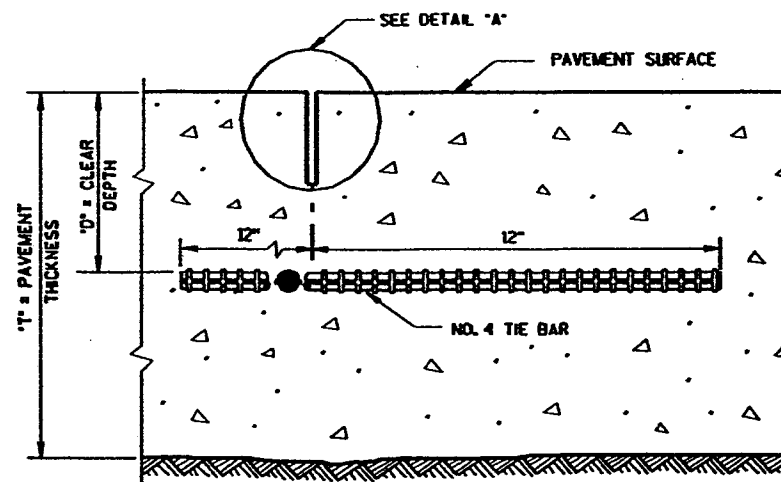
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED _____
DATE _____
STATE ELECTRICAL ENGINEER FOR HIGHWAYS

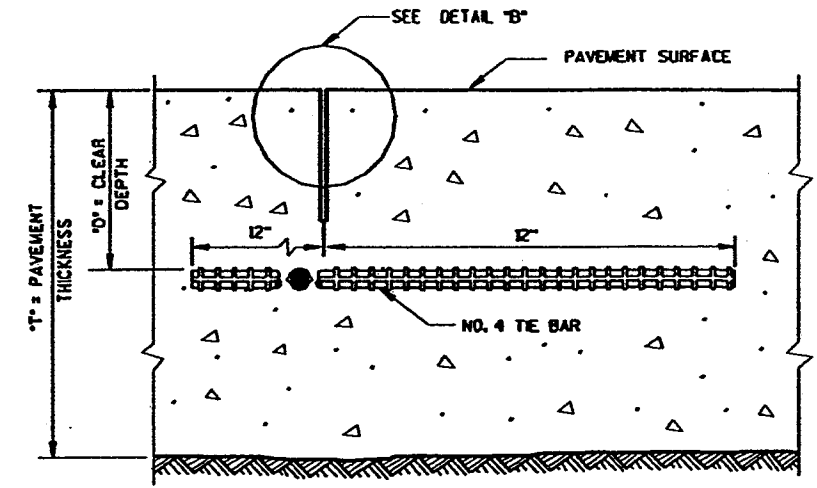
S.D.D. 9 F 8-2



CONSTRUCTION JOINT



SAWED JOINT



RIBBON JOINT

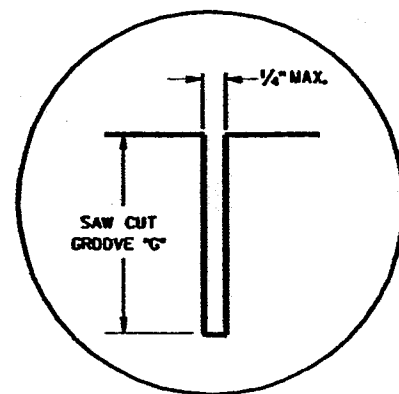
GENERAL NOTES

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

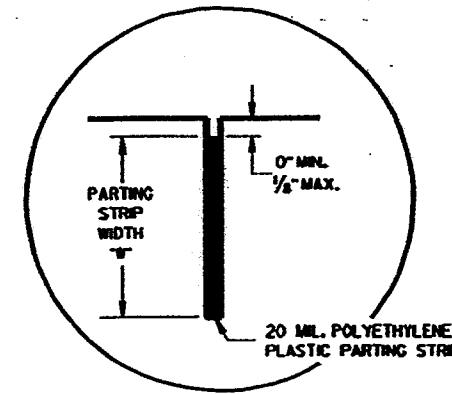
DETAILS "A" AND "B" ARE EQUAL ALTERNATES UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

LONGITUDINAL JOINTS SHALL NOT BE SEALED OR FILLED.

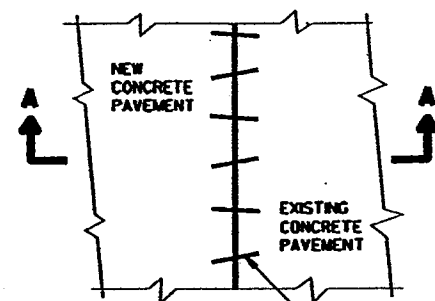
THE BAR SPACINGS ARE VALID ONLY FOR PAVEMENT WIDTHS IN THE TABLE. FOR WIDER PAVEMENTS, TIED CONCRETE SHOULDERS OR RAMPS, THE TIE BAR SPACING SHALL BE AS SHOWN ON THE PLANS.



DETAIL "A"

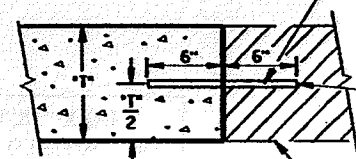


DETAIL "B"



PLAN VIEW

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

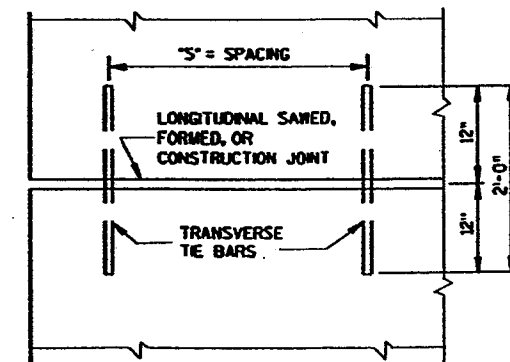


SECTION A-A PAVEMENT TIES

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.

EXIST. CONC. PAVEMENT

PAVEMENT THICKNESS "T"	CLEAR DEPTH "D"	SAW CUT GROOVE "G"	MAXIMUM TIE BAR SPACING "S"		PARTING STRIP WIDTH "W"
			PAVEMENT WIDTH 24' OR 26'	30'	
6, 6 1/2"	3 1/2"	2"	48"	42"	2"
7, 7 1/2"	3 3/4" ± 1"	2 1/4"	45"	36"	2 1/4"
8, 8 1/2"	3 7/8" ± 1"	2 1/2"	39"	30"	2 1/2"
9, 9 1/2"	4 1/4" ± 1"	3"	33"	27"	3"
10, 10 1/2"	4 3/4" ± 1"	3 1/4"	30"	24"	3 1/4"
11, 11 1/2"	5 1/4" ± 1"	3 3/4"	27"	21"	3 3/4"
12"	5 3/8" ± 1"	4"	24"	21"	4"



PLAN VIEW SHOWING LOCATION OF TIE BARS

**CONCRETE PAVEMENT
LONGITUDINAL JOINTS
AND PAVEMENT TIES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED _____

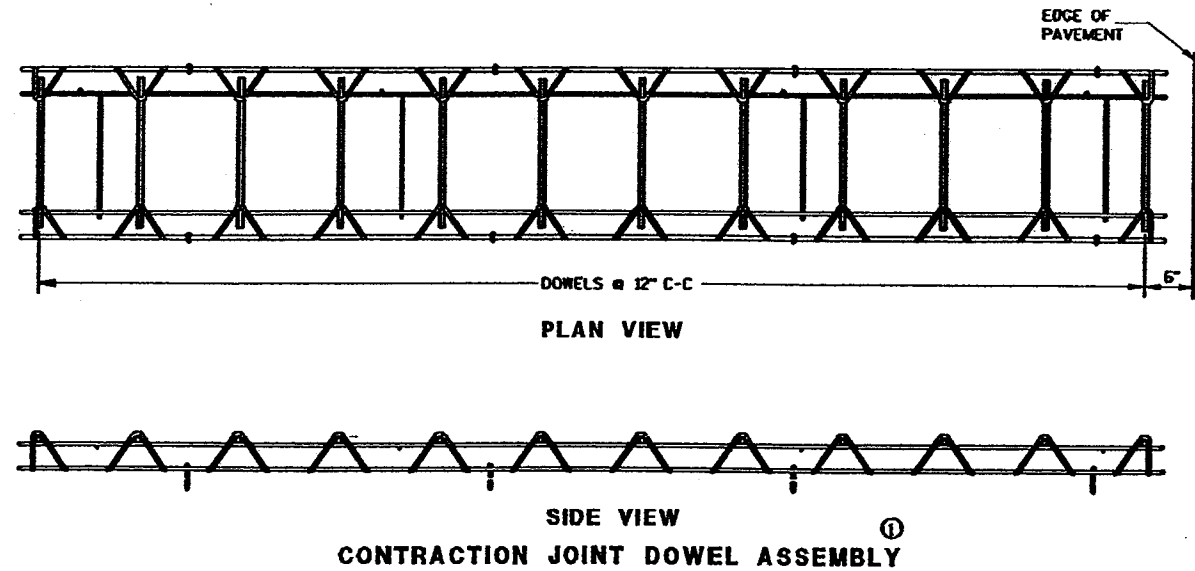
DATE _____ CHIEF PAVEMENTS & RESEARCH ENGINEER

FWHA _____

S.D.D. 13 C 1-10

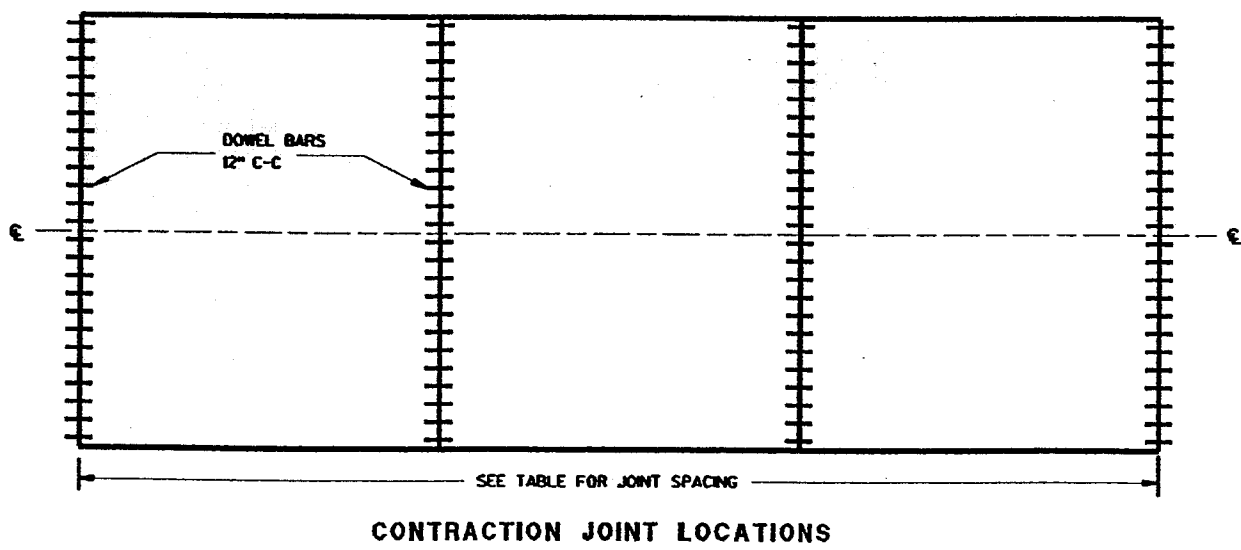
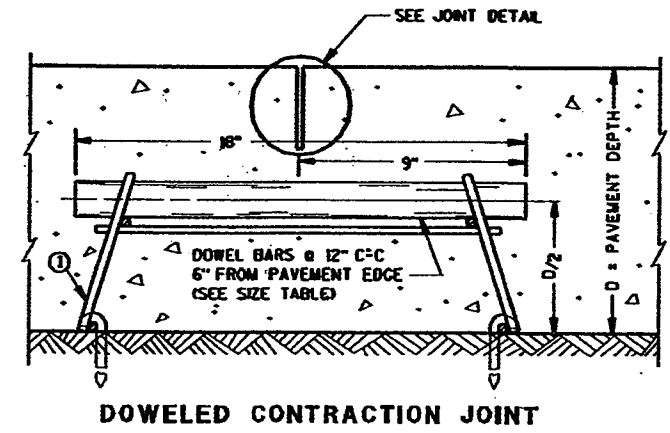
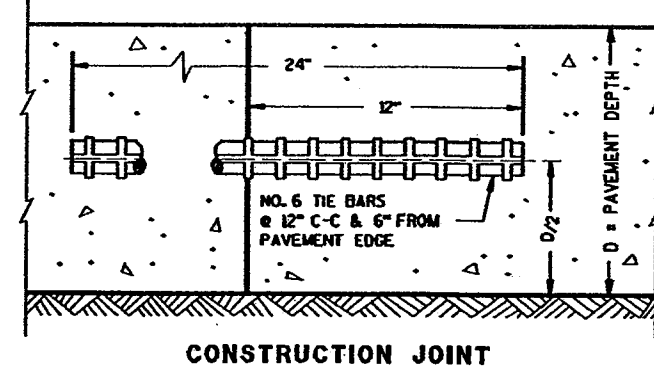
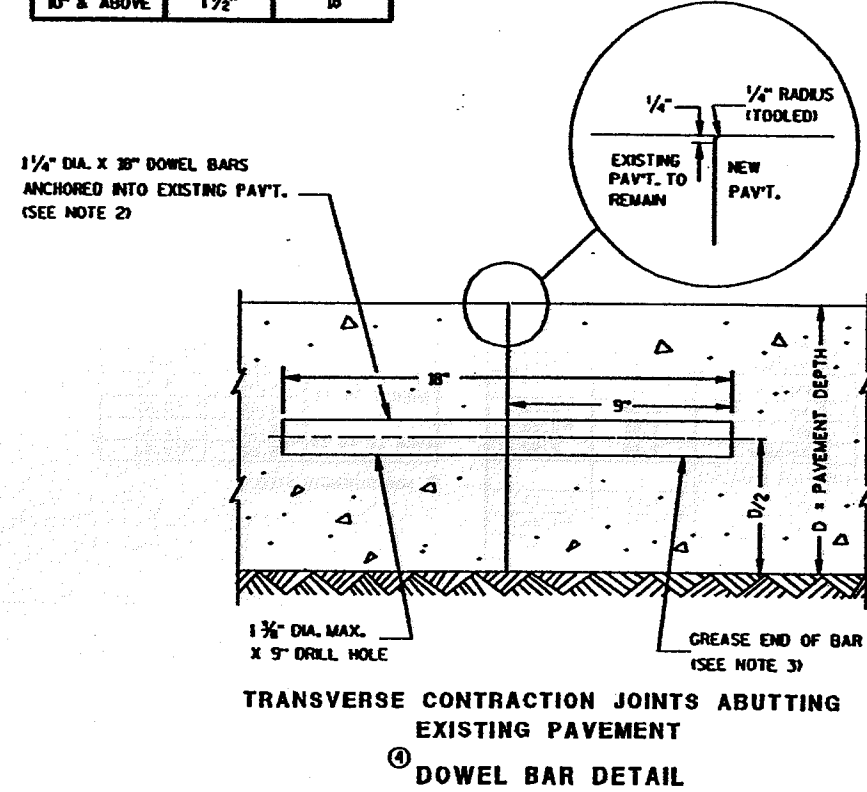
S.D.D. 13 C 1-10

REVISION DATE: 01/17/80
 PLOT NAME: SUD303
 PLOT SCALE: 60
 FILE NAME: SUD303
 ORIGINATOR: MEL ZEMLICKA 6-2782
 LEVELS ON: 1, 5



PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6'-6 1/2"	1 1/4"	12'
7'-7 1/2"	1 1/4"	14'
8'-8 1/2"	1 1/4"	15'
9'-9 1/2"	1 1/4"	15'
10' & ABOVE	1 1/2"	18'



GENERAL NOTES

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

CONTRACTION JOINTS

UNLESS OTHERWISE SPECIFIED, CONTRACTION JOINTS SHALL BE NORMAL TO THE CENTERLINE. THE LOCATION OF CONTRACTION JOINTS THRU INTERSECTIONS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

CONTRACTION JOINTS SHALL NOT BE SEALED OR FILLED.

DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND SURFACE.

CONSTRUCTION JOINTS

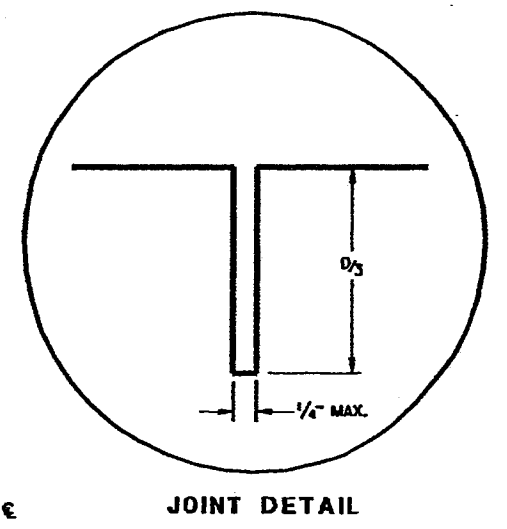
CONSTRUCTION JOINTS SHALL BE A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGNED EITHER PARALLEL TO CONTRACTION JOINTS OR AT 90° TO THE CENTERLINE.

THE BARS MAY BE INSERTED THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN POURED.

- ① ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY MAY BE USED WHEN APPROVED BY THE ENGINEER. MECHANICAL DOWEL BAR IMPLANTERS MAY BE USED INSTEAD OF DOWEL ASSEMBLIES.
- ② DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT.
- ③ THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND BREAKING GREASE.
- ④ DOWEL BARS INSTALLED BY DRILLING SHALL BE SPACED 1'-3" ON CENTER. THE GROUPING OF DOWEL BARS SHALL BE CENTERED INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

THE CLEAR DISTANCE FROM THE EDGE OF PAVEMENT OR LONGITUDINAL JOINT TO THE NEAR EDGE OF DOWEL BAR NEAREST THAT EDGE OR JOINT SHALL BE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 14 INCHES.



URBAN DOWELED CONCRETE PAVEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	CHIEF PAVEMENTS & RESEARCH ENGINEER
FWA	

S.D.D. 13 C 13-3

S.D.D. 13 C 13-3

REVISION DATE: 4-29-92

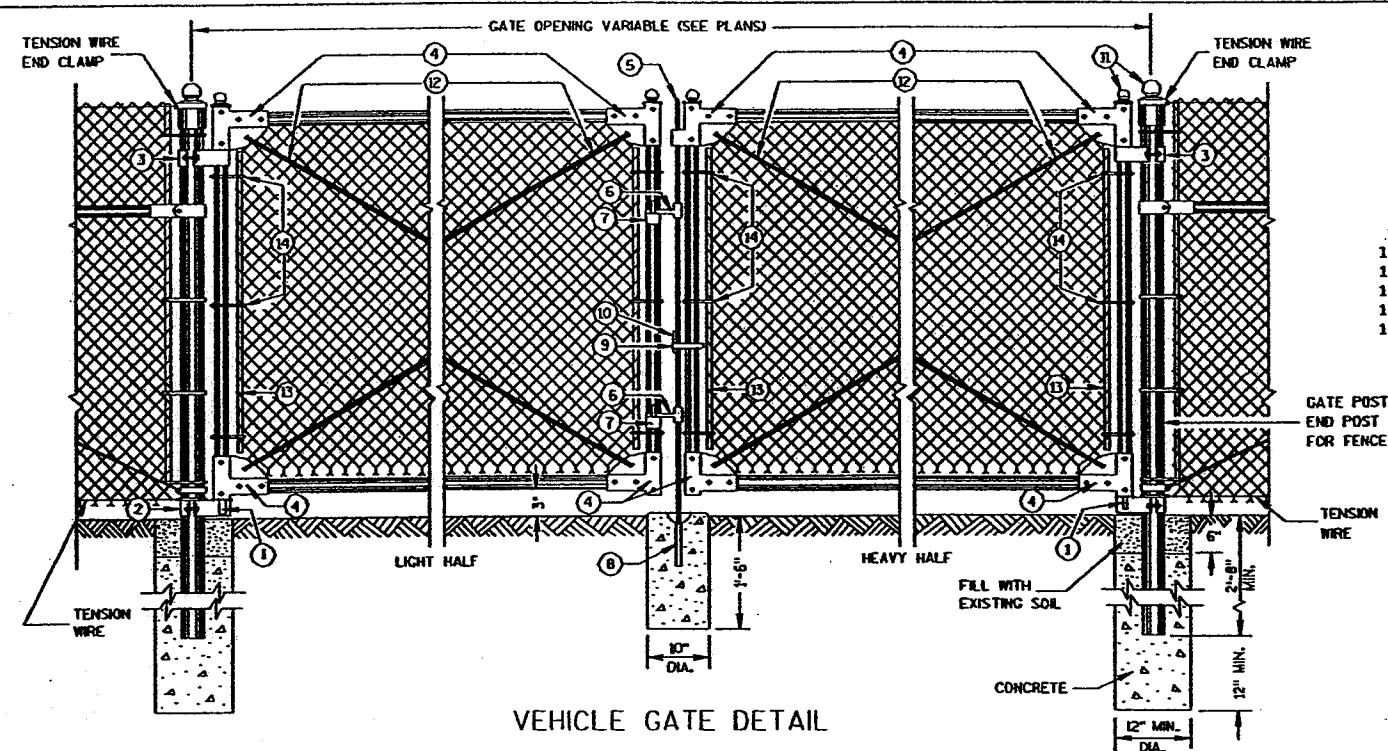
PLOT NAME: SIBSD08A

FILE NAME: SIBSD08A

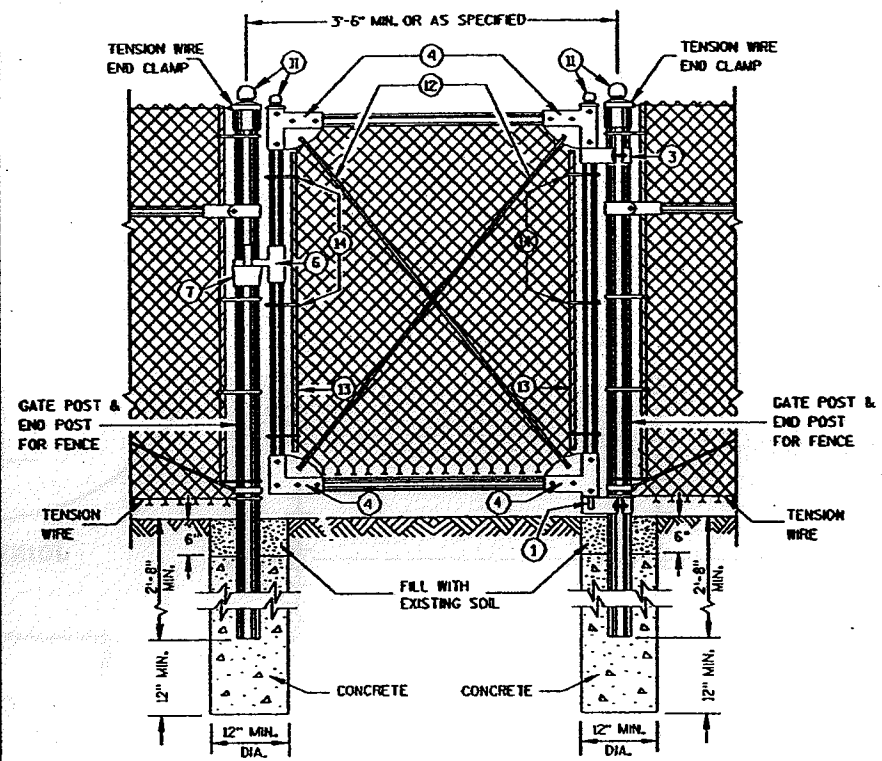
FILE NAME: SIBSD08A

ORIGINATOR: MEL ZEMLICKA 6-2782

S.D.D. 15 B 3-100



VEHICLE GATE DETAIL



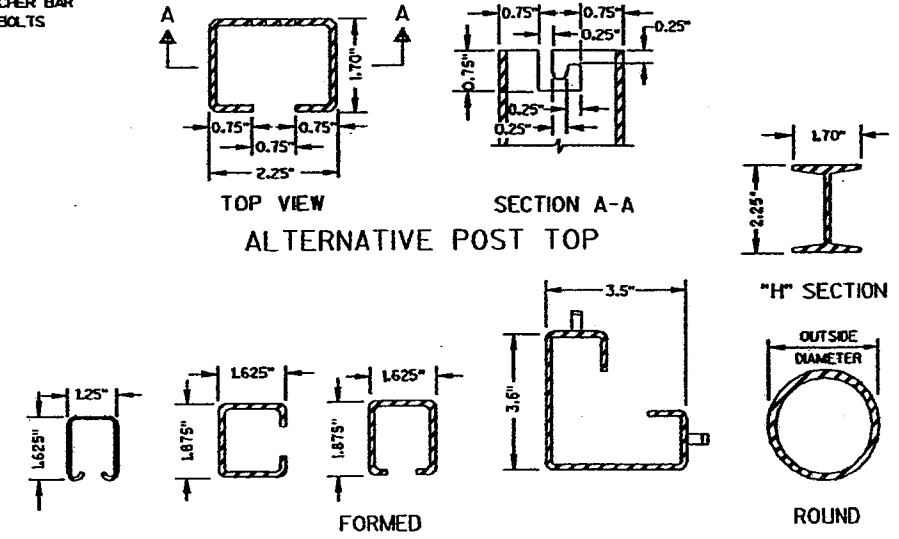
PEDESTRIAN GATE DETAIL

- LEGEND**
1. STRAIGHT PLUG
 2. BOTTOM HINGE
 3. TOP HINGE
 4. CORNER ELBOW
 5. PLUNGER ROD
 6. LATCH FORK
 7. FORK CATCH
 8. PLUNGER ROD CATCH
 9. LOCK KEEPER GUIDE
 10. LOCK KEEPER
 11. ORNAMENTAL TOPS
 12. TRUSS ROOS
 13. STRETCHER BAR
 14. HOOK BOLTS

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. DETAILS NOT COVERED BY ANY OF THE ABOVE SHALL CONFORM TO THE MANUFACTURERS SPECIFICATIONS.

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.



CROSS SECTIONS OF POSTS AND RAILS

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR FENCE POSTS AND RAILS

USE	FENCE HT. FEET	SHAPE	OUTSIDE DIMENSIONS INCHES	WEIGHT LBS./L.F.
TERMINAL POSTS **	6 AND LESS	ROUND	2.375	3.65
	6 AND LESS	*ROUND	2.375	3.12
	OVER 6	ROUND	2.875	5.79
	OVER 6	*ROUND	2.875	4.64
LINE POSTS	ALL HEIGHTS	FORMED	3.5 X 3.5	5.14
	6 AND LESS	ROUND	1.90	2.72
		*ROUND	1.90	2.28
	OVER 6	*H SECTION	2.25 X 1.70	3.26
		FORMED	1.875 X 1.625	1.65
ROUND		2.375	3.65	
BRACE RAIL	X	*ROUND	2.375	3.12
		*H SECTION	2.25 X 1.70	3.26
		FORMED	1.875 X 1.625	2.28
BRACE RAIL	X	ROUND	1.66	2.27
		*ROUND	1.66	1.84
BRACE RAIL	X	FORMED	1.625 X 1.25	1.35

* HIGH STRENGTH STEEL
 ** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

GATE FRAME MEMBERS, SIZE AND WEIGHT

GATE FABRIC HEIGHT (FEET)	OUTSIDE DIMENSION (INCHES)	WEIGHT LBS./L.F.
6 OR LESS	Round	1.66
	Round	1.66
	Rectangular	1.50
OVER 6	Round	1.90
	Round	1.90
	Rectangular	2.00
INTERIOR BRACING		
Round	1.66	2.27
Round	1.66	*1.84
Rectangular	1.50	1.84

* HIGH STRENGTH STEEL

GATE POST SIZE AND WEIGHT

GATE LEAF WIDTH (FEET)	POST SIZE (INCHES)	
	OUTSIDE DIAMETER (INCHES)	WEIGHT LBS./L.F.
6 AND UNDER	2.875	5.79
	2.875	*4.64
OVER 6 TO 12	4.00	9.10
	4.00	*8.65
OVER 12 TO 18	6.62	18.97
	6.62	*18.02

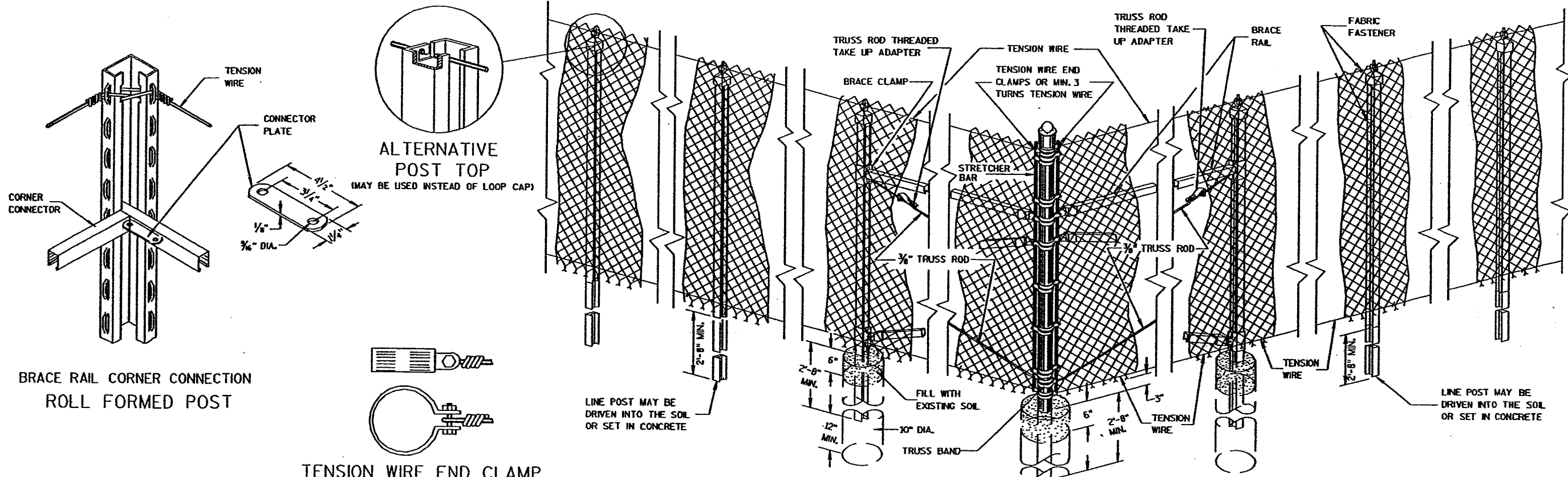
* HIGH STRENGTH STEEL

CHAIN LINK FENCE

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

S.D.D. 15 B 3-100

S.D.D. 15 B 3-10b



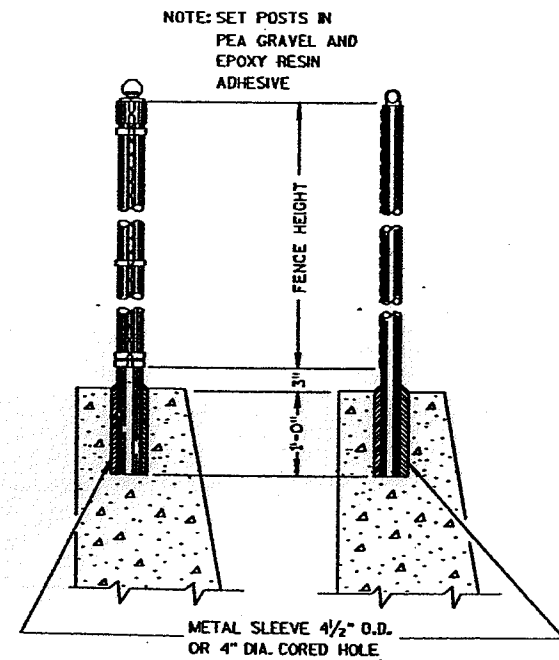
BRACE RAIL CORNER CONNECTION
ROLL FORMED POST

TENSION WIRE END CLAMP

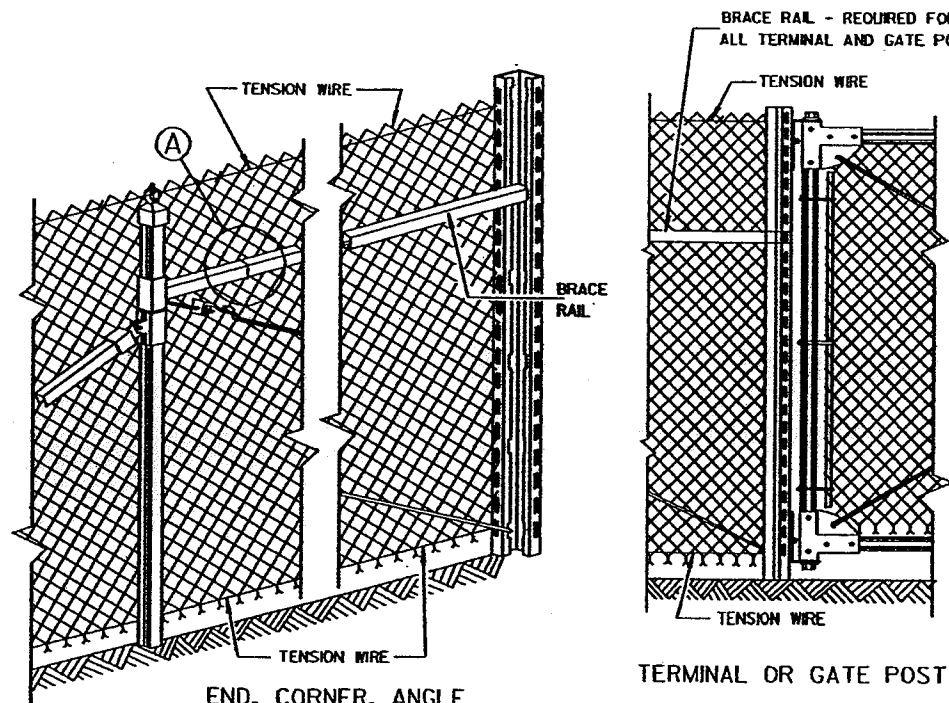
LINE POST MAY BE
DRIVEN INTO THE SOIL
OR SET IN CONCRETE

LINE POST MAY BE
DRIVEN INTO THE SOIL
OR SET IN CONCRETE

NOTE: 10'-0" LINE POST SPACING
LINE POST - TYPICAL LINE SECTION
"H" SECTION ALTERNATE



END POST &
CORNER POST
LINE POST
DETAILS OF FENCE ON WALL



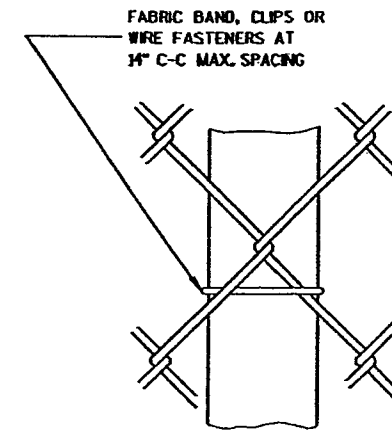
END, CORNER, ANGLE
INTERSECTION & INTERMEDIATE
BRACED POSTS

TERMINAL OR GATE POST

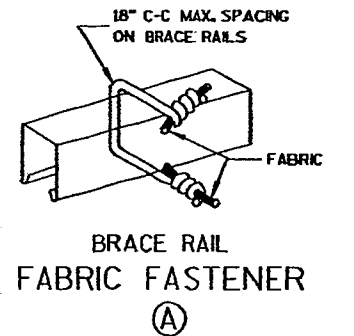
ROLL FORMED ALTERNATE

NOTE: DETAILS OF FOOTINGS ARE SHOWN ON THE PIPE ALTERNATE DETAIL

END, CORNER, ANGLE
INTERSECTION & INTERMEDIATE
BRACED POSTS
PIPE ALTERNATE

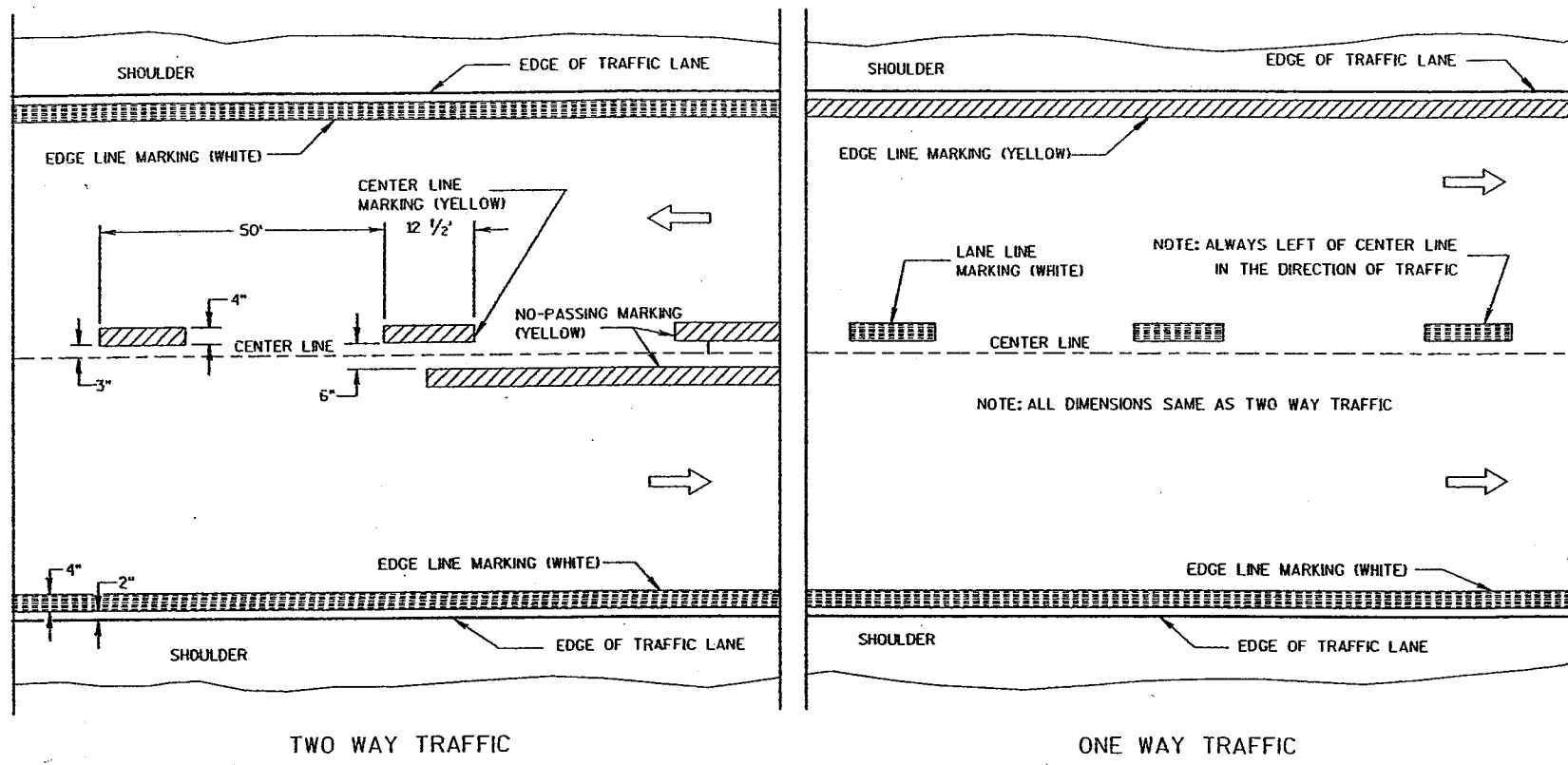


LINE POST
FABRIC FASTENER

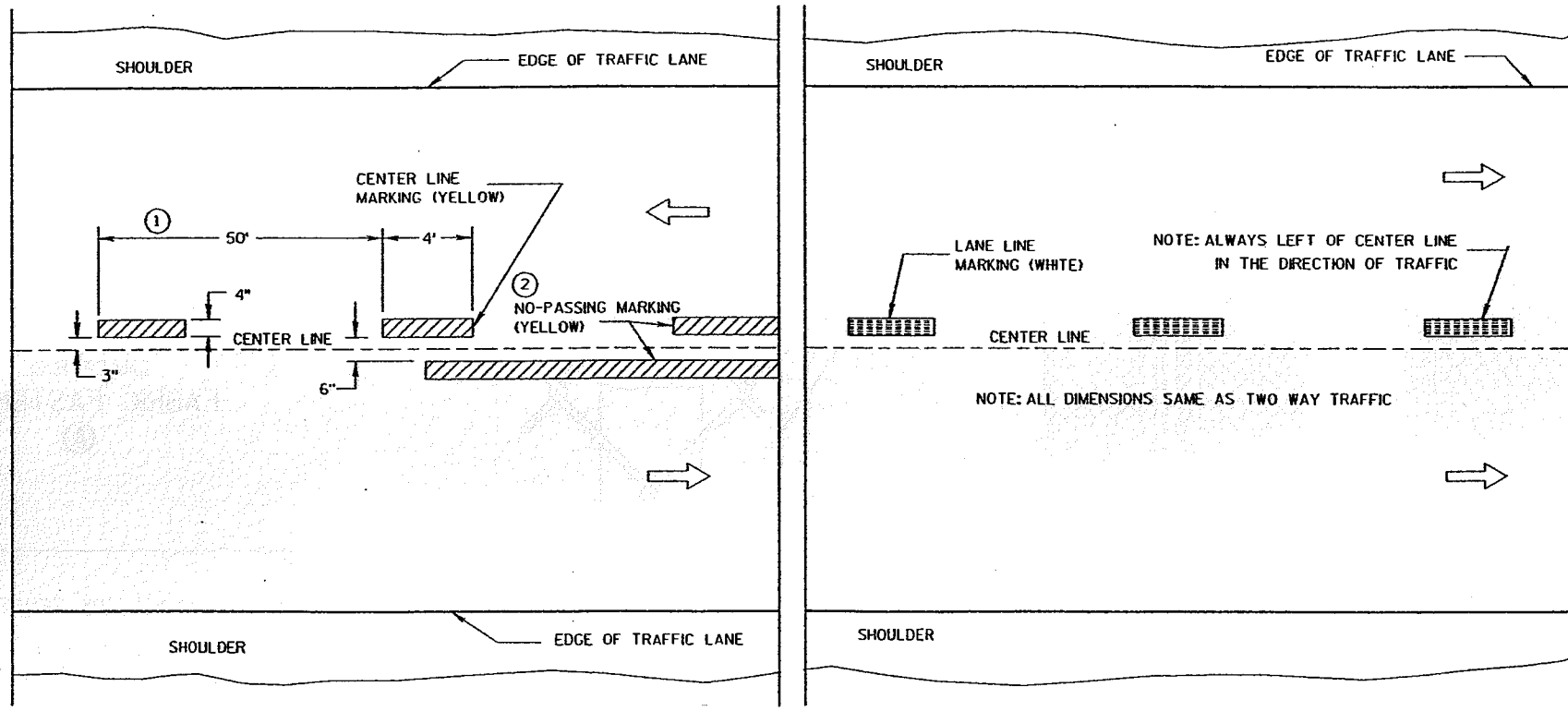


BRACE RAIL
FABRIC FASTENER
(A)

CHAIN LINK FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	DATE
	CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	



PERMANENT PAVEMENT MARKING



TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25') WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

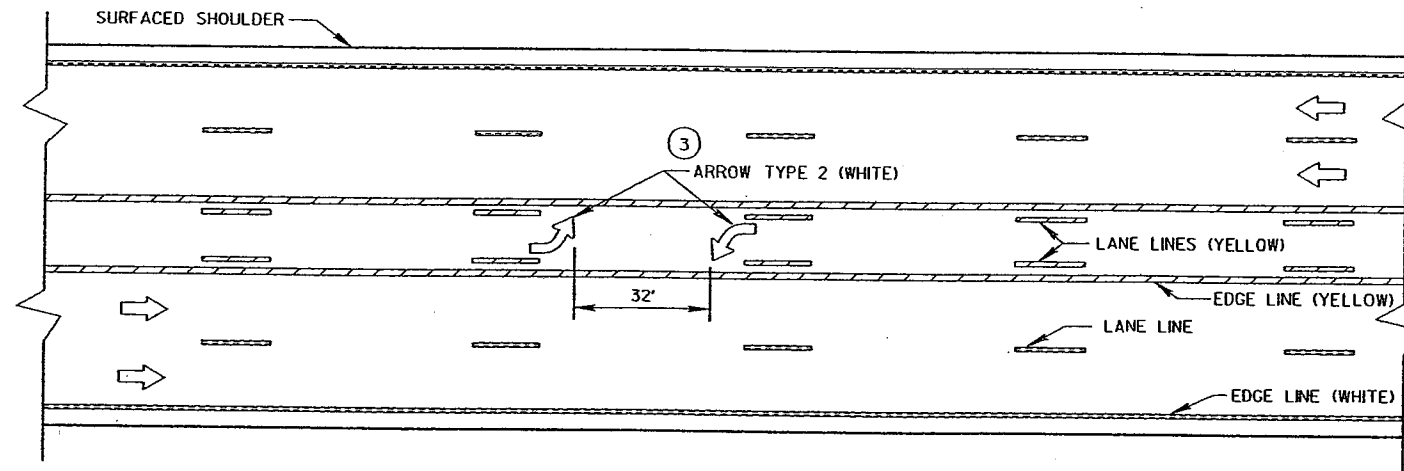
NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

S.D.D. 15 C 8-9c

PAVEMENT MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	CHEF SIGNS AND MARKING ENGINEER
FHWA	

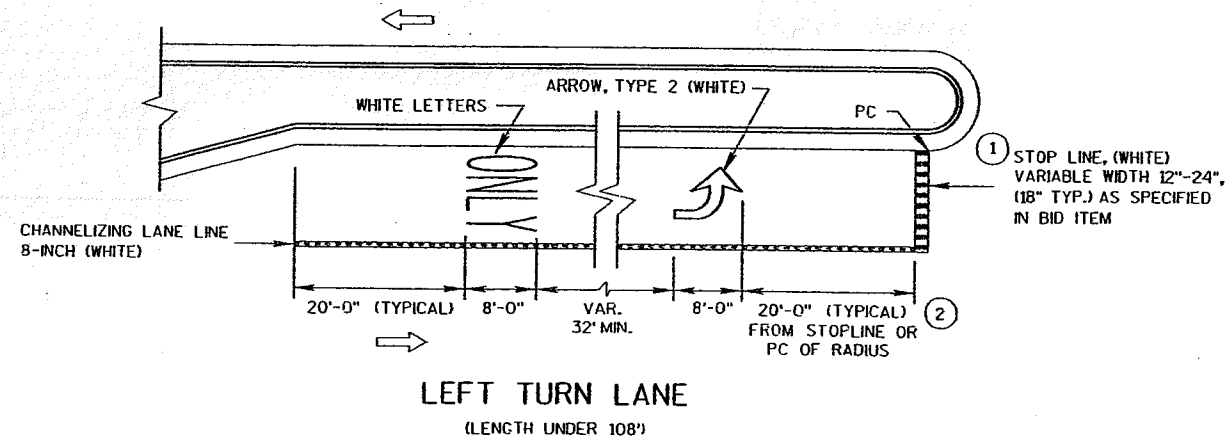
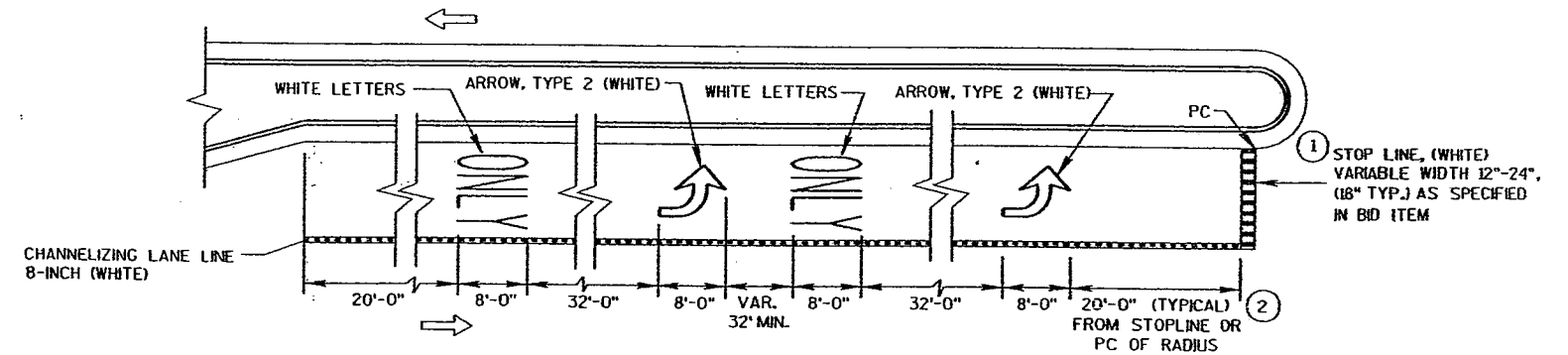
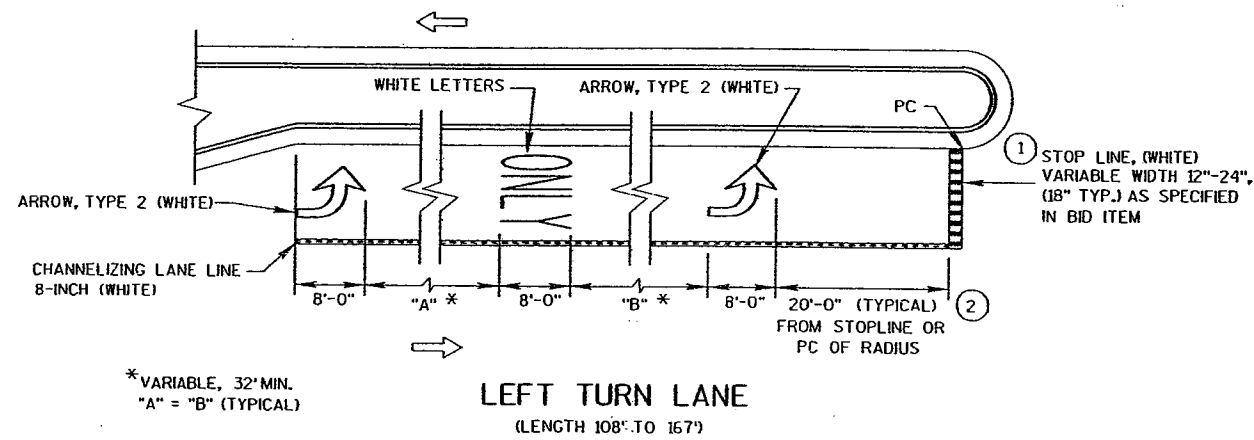
NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL



TWO WAY LEFT TURN LANE

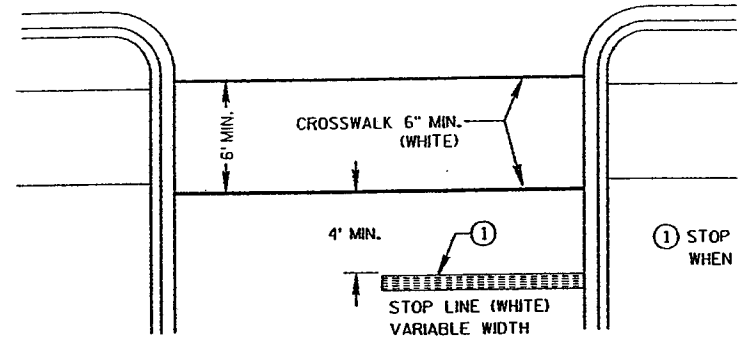
NOTES:

- ① STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
- ② DISTANCE MAY BE ADJUSTED TO ACCOMMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
- ③ A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.



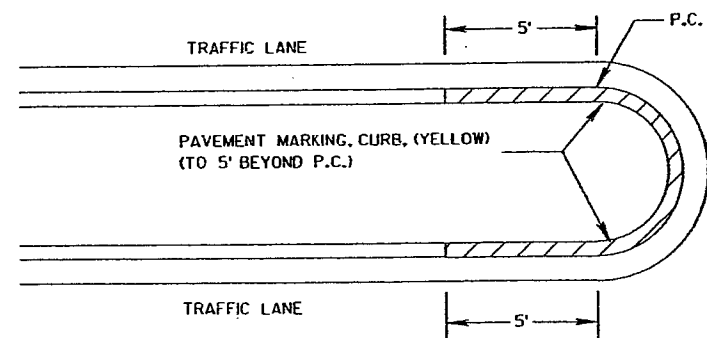
PAVEMENT MARKING
(LEFT TURN LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

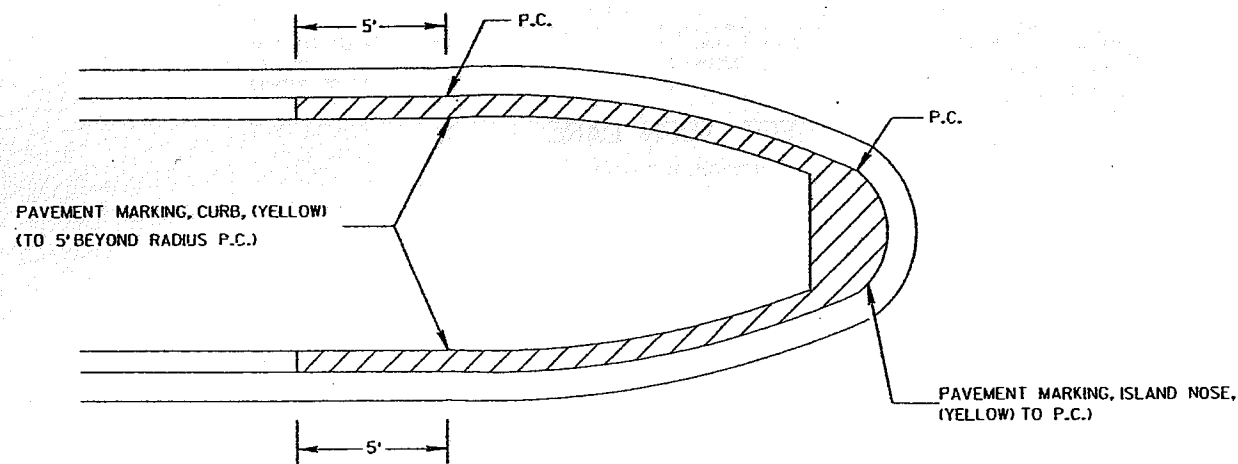


STOP LINE AND CROSSWALK

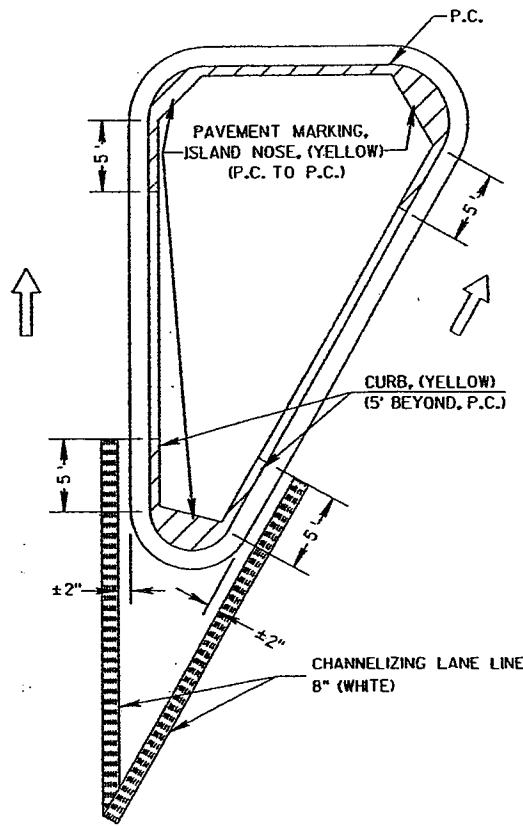
① STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT



MEDIAN CURB

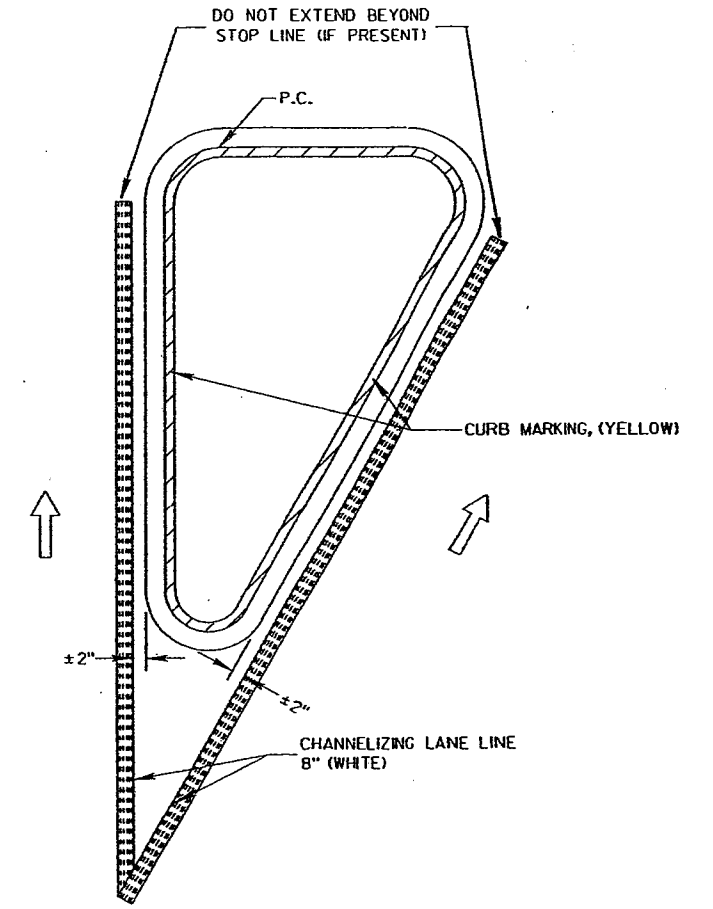


BULLET NOSE ISLAND



LARGE ISLAND

(GREATER THAN 50' PERIMETER OR ANY SIDE
GREATER THAN 25' BETWEEN CURVES)



SMALL ISLAND

(LESS THAN 50' PERIMETER OR ANY SIDE
LESS THAN 25' BETWEEN CURVES)

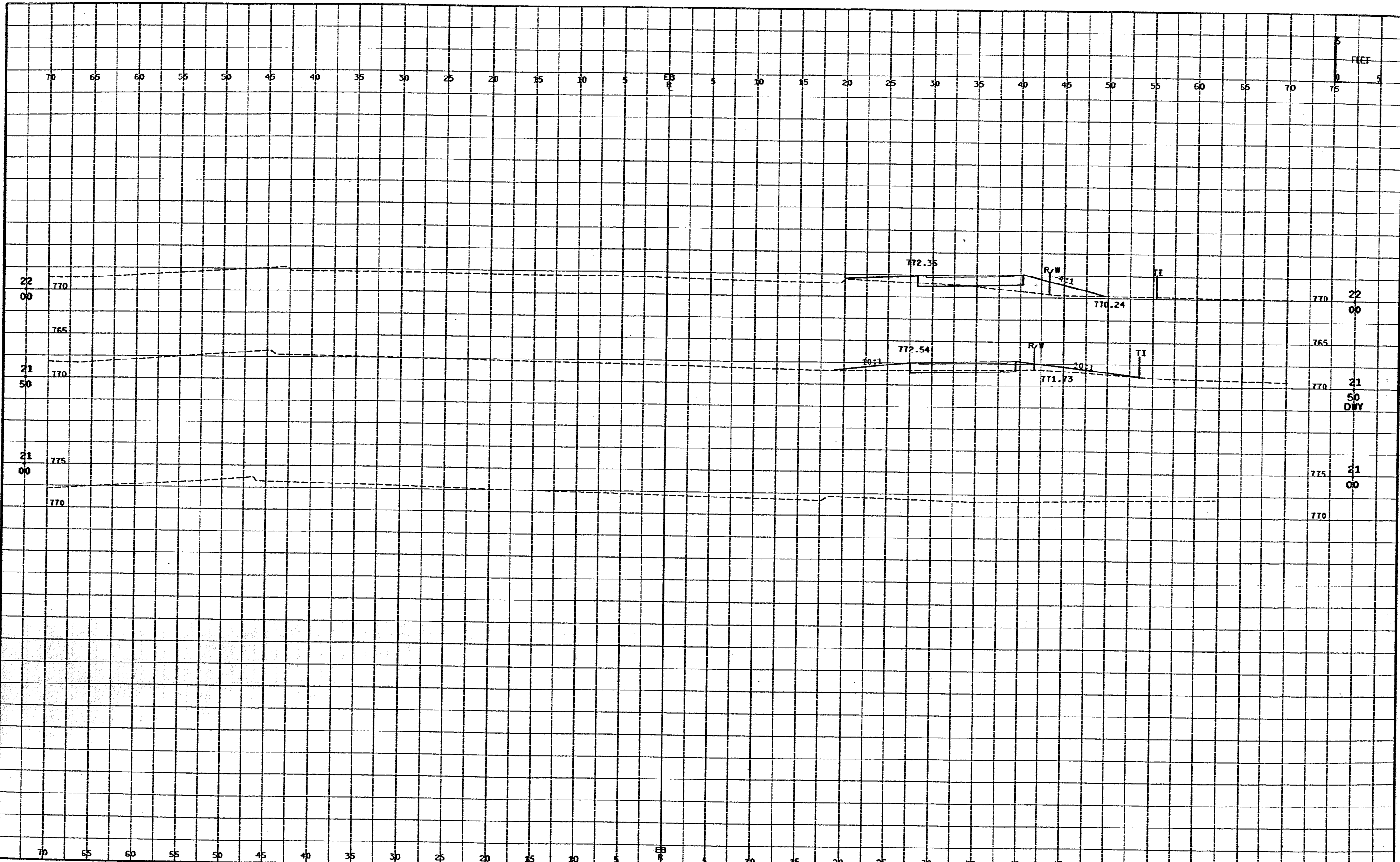
NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL

S.D.D. 15 C 8-9e

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
DATE	CHIEF SIGNS AND MARKING ENGINEER
FHWA	

S.D.D. 15 C 8-9e

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.



STATE PROJECT NUMBER:

HWY: CTH JJ

COUNTY: WINNEBAGO

CROSS SECTIONS:

SHEET NO: 55

E

FILE NAME : f:\transportation\el510a00\sheets\xsect\xs00.dgn

PLOT DATE: 24 JUL 2001

09:45:34

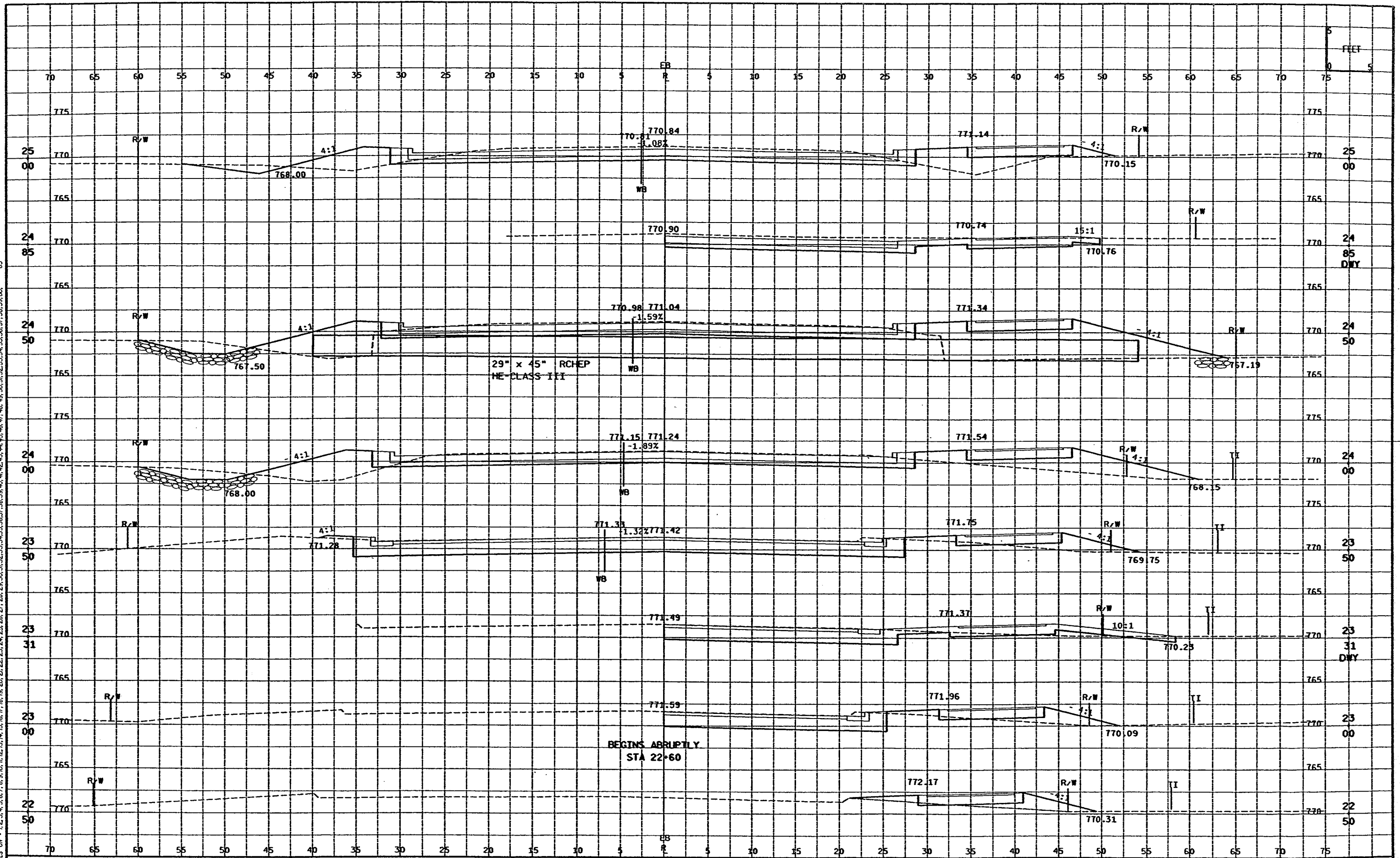
ORG DATE : / / 2000

PLOT SCALE :

ORIGINATOR : OMNI ASSOCIATES

PLOT SCALE :

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



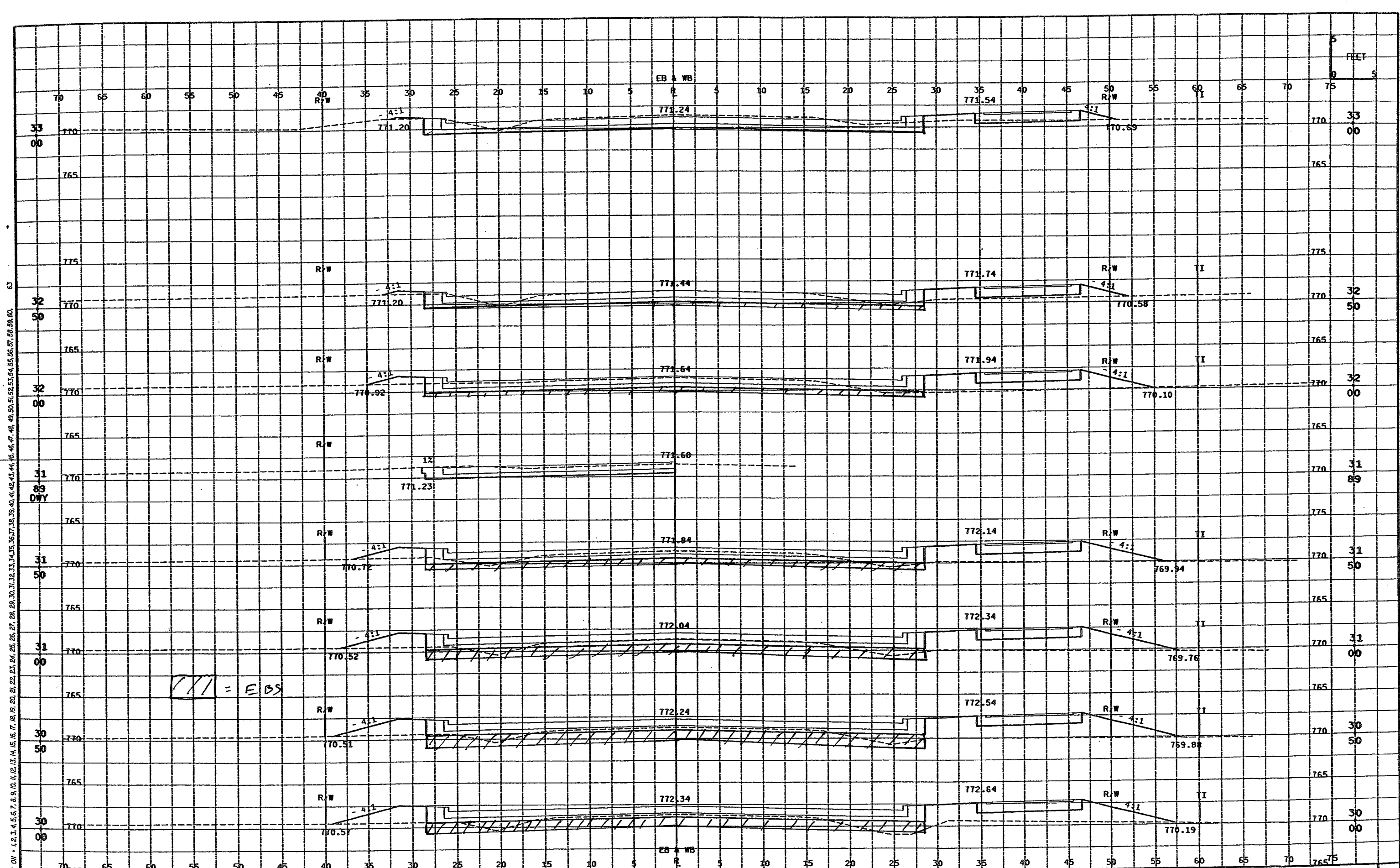
STATE PROJECT NUMBER:	HWY: CTH JJ	COUNTY: WINNEBAGO	CROSS SECTIONS:	SHEET NO: 56	E
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STATE PROJECT NUMBER: HWY: CTH JJ COUNTY: WINNEBAGO CROSS SECTIONS: SHEET NO: 57 E

FILE NAME: f:\transportation\1510a00\sheets\sect\xs02.dgn PLOT DATE: 24 JUL 2001 09:48:36 ORG DATE: / /2000 PLOT SCALE: ORIGINATOR: OMNI ASSOCIATES PLOT SCALE: WISDOT/CADD SHEET 21



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

STATE PROJECT NUMBER: HWY: CTH JJ COUNTY: WINNEBAGO CROSS SECTIONS: SHEET NO: 58 E

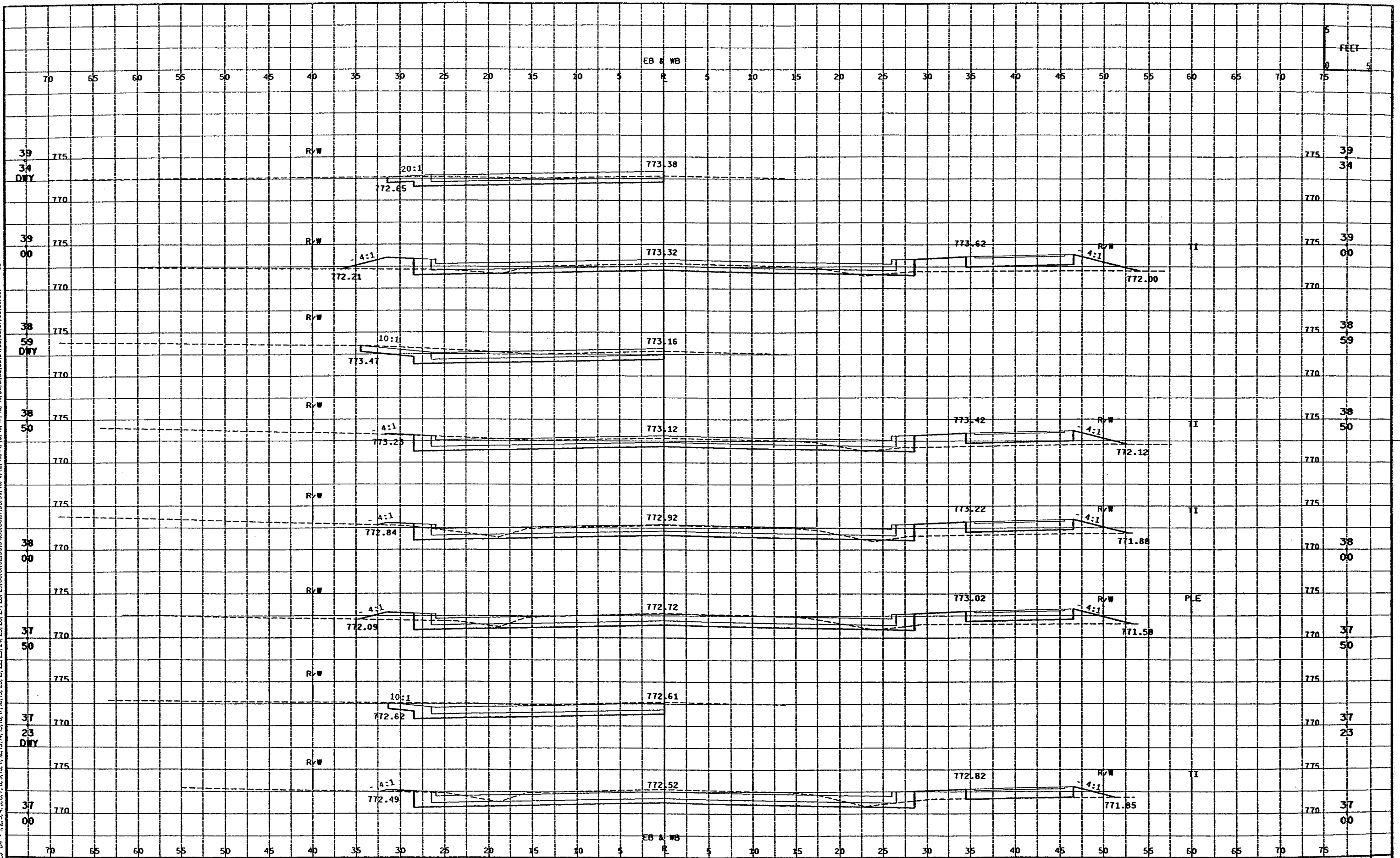
FILE NAME : f:\transportation\el510a00\sheets\xsect\xs03.dgn PLOT DATE: 13 JUN 2001 09:51:17 ORG DATE : / /2000 PLOT SCALE : ORIGINATOR : OMNI ASSOCIATES PLOT SCALE : WISDOT/CADD SHEET 21

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



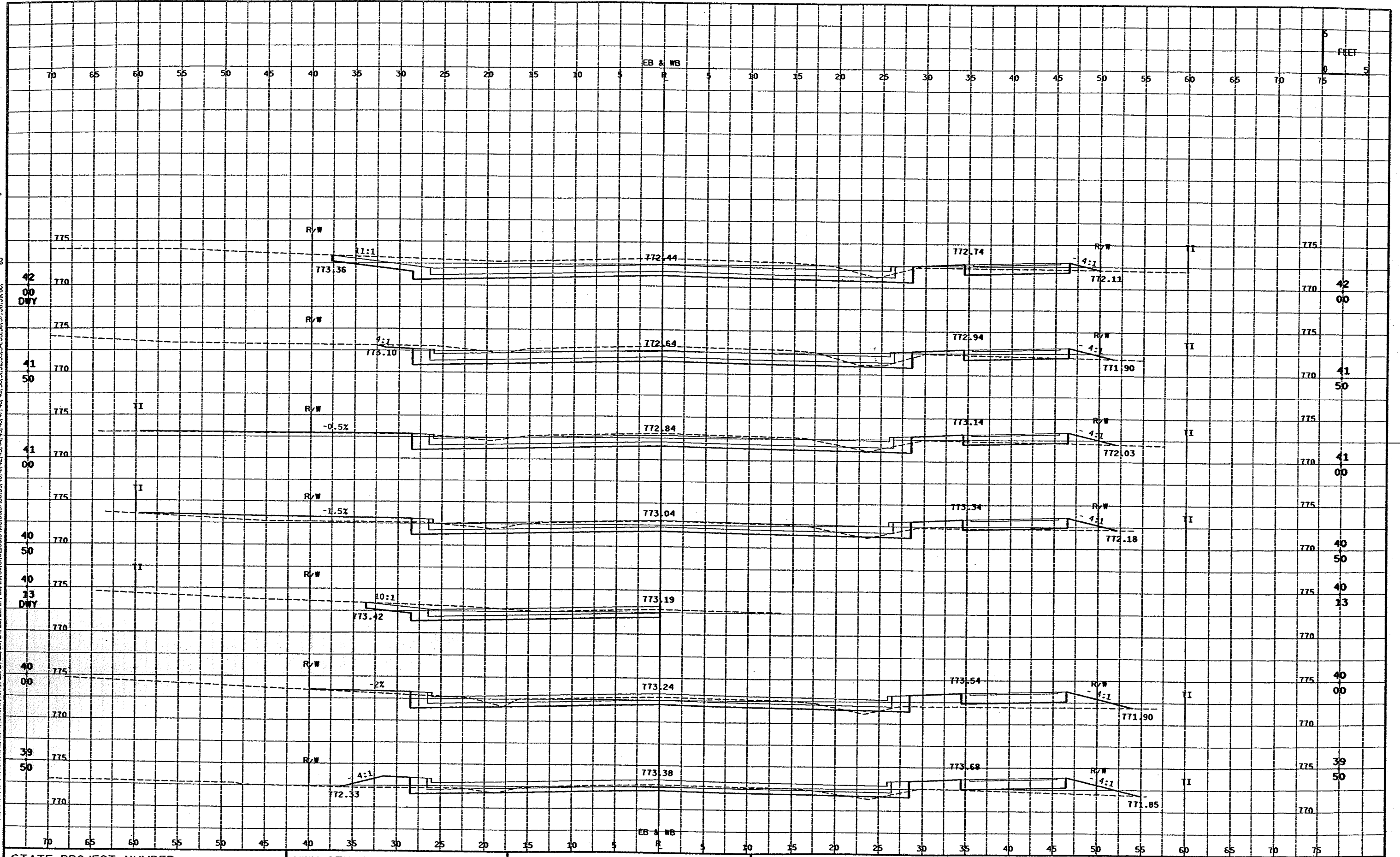
STATE PROJECT NUMBER:	HWY: CTH JJ	COUNTY: WINNEBAGO	CROSS SECTIONS:	SHEET NO: 59	E
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LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 63



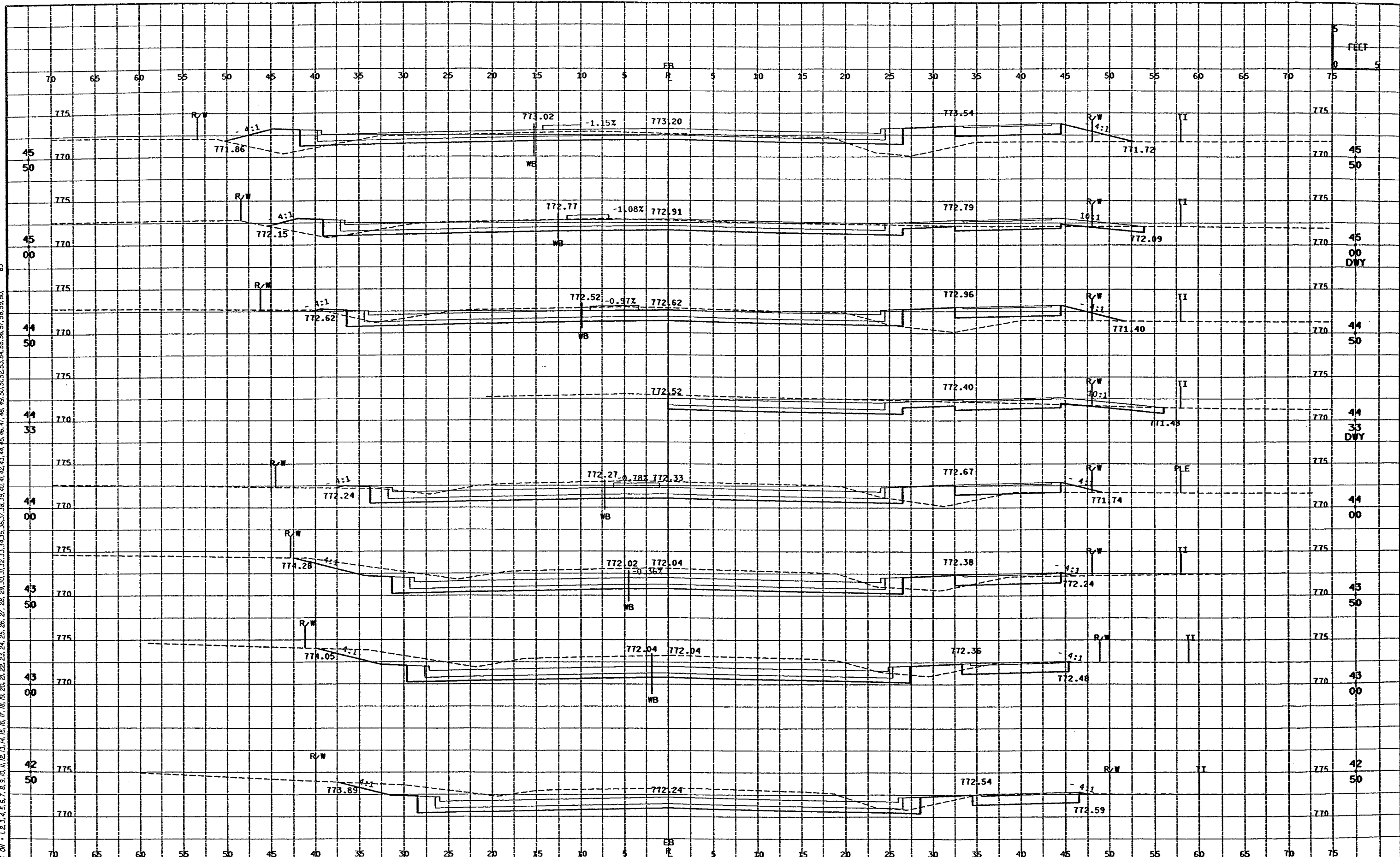
STATE PROJECT NUMBER: HWY: CTH JJ COUNTY: WINNEBAGO CROSS SECTIONS: SHEET NO: 60 E

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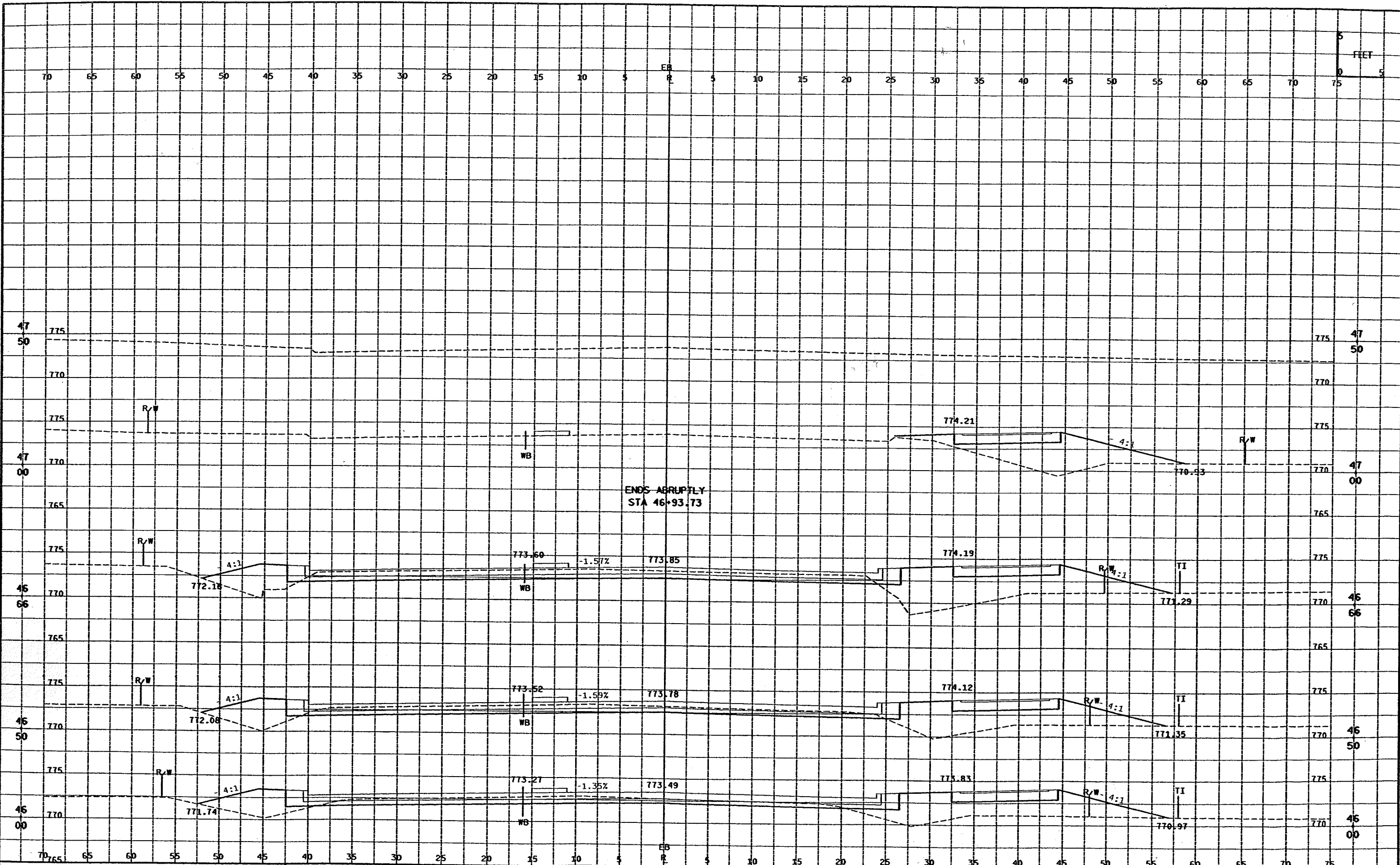
STATE PROJECT NUMBER:	HWY: CTH JJ	COUNTY: WINNEBAGO	CROSS SECTIONS:	SHEET NO: 61	E
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LEVELS ON - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



STATE PROJECT NUMBER:	HWY: CTH JJ	COUNTY: WINNEBAGO	CROSS SECTIONS:	SHEET NO: 62	E
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LEVELS ON = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63



STATE PROJECT NUMBER: HWY: CTH JJ COUNTY: WINNEBAGO CROSS SECTIONS: SHEET NO: 63 E

