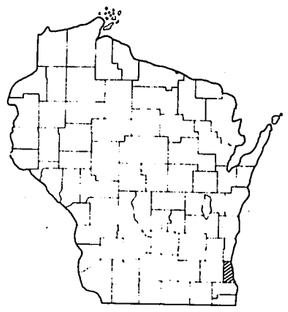
AS BUILT

40.1 - 34.1 - 22.12

Sheet Number	Total Sheets
1	52

Index of Sheets

Sheet No. 1 Title
Sheet No. 2-2.16 Typical Cross Sections
Sheet No. 3 Estimate of Quantities
Sheet No. 3A-3B Miscellaneous Quantities
Sheet No. 4-48 Right of Way Plat
Sheet No. 5-17 Plan and Profile Sta. 1.0+75 to Sta. 213+49.19
Sheet No. 18-18,5 Standard Details
Sheet No. Drainage Structures
Sheet No. 19-52 Cross Sections



STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED

WEST BROWN DEER ROAD

(NORTH 91 ST STREET – NORTH 68TH STREET)

S.T.H. 100

MILWAUKEE COUNTY

PROJECT IDENTIFICATION NUMBER	PROJECT DESIGNATION
2150 1 71	T 034-1(12)

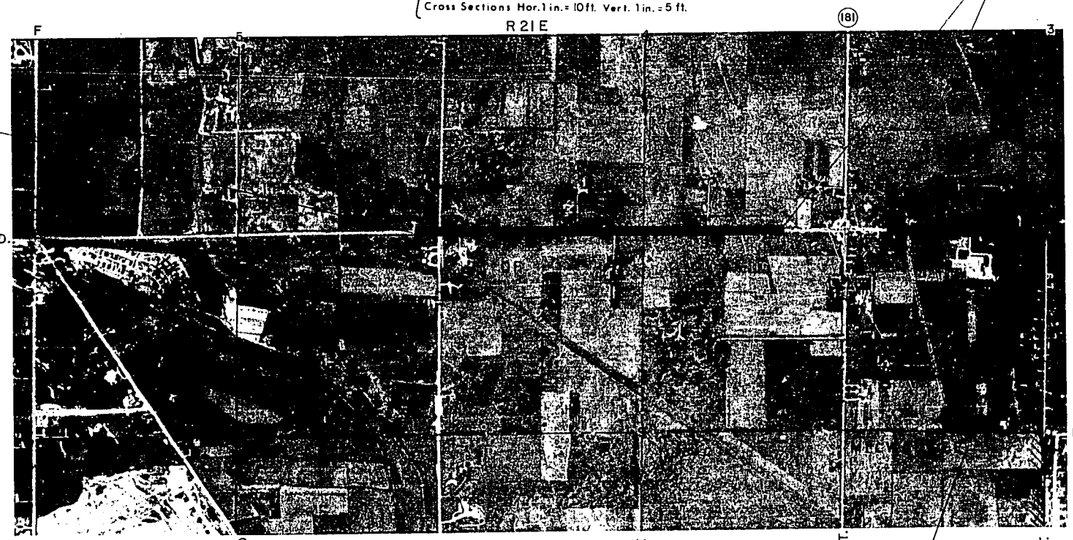
Scales { Plan 1 in. = 50 FT. & 1" = 20'
Profile Hor. 1 in. = 50 ft. Vert. 1 in. = 5 ft. & HOR. 1" = 20' VERT. 1" = 2'
Cross Sections Hor. 1 in. = 10 ft. Vert. 1 in. = 5 ft.

Design Designation

A.D.T. CURRENT, TWO WAY	= 10,120
A.D.T. 1990, TWO WAY	= 25,800
D.H.V. 1990, TWO WAY	= 3,405
D.	= 55-45
T.	= 10%
V. ZONED 1967	= 50MPH-40MPH
V. DESIGN 1990	= 45MPH
K	= 12%

BEGIN PROJECT 2150-1-71
STA. 130 + 75
307' WEST OF THE N.W. CORNER OF SECTION 9, T8N, R21E
N 435,460 (± 200') *
E 2,526,640 (± 200')*

EXCEPTION TO NET ℄ LENGTH
STA. 178 + 51.90 TO STA. 192.+50.20



END PROJECT 2150-1-71
STA. 213 + 49.19
AT THE N. ¼ CORNER OF SECTION 10, T8N, R21E
N 435,660 (± 200') *
E 2,534,960 (± 200')*

Conventional Signs

State Line
County Line
Township or Range Line
Section Line
New Right of Way Line
Present Right of Way Line
Wire Fence { Woven / Barbed
Lot Line
Corporate or City Limits
Property Line
Traveled Way or P.E.
Railroads
Base or Survey Line
Expansion Joint
Transverse Joint
Longitudinal Joint

Culverts in Place
Culverts Required
Proposed Storm Sewer 36"
Power Pole
Telephone or Telegraph Pole
Existing Catch Basin
Proposed Catch Basin
Existing Manhole
Proposed Manholes
Trees
Utility W (SIZE) G E T
Existing Sewer SAN. (SIZE) ST. (SIZE)

Layout

Scale 0 500' 1000'

Total Net Length of Centerline = 1.302 MI.

*WISCONSIN PLANE COORDINATES, SOUTH ZONE, SCALED FROM U.S.G.S. TOPOGRAPHIC MAPS "MENOMONEE FALLS, WIS. 1958" AND "THIENSVILLE, WIS. 1958", 7'-30" QUADRANGLES

Drainage system plan by Village of Brown Deer

J. P. Jansch
462-6000

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Surveyor B. KINNEL Note Book 67087, 67021
District Computer A.E.G. M.O. Checker
District Checker L.L.B. Correct

Correct:

Date 1367 District Engineer

Recommended for Approval:

Date 4/69 Chief Design Engineer

Approved:

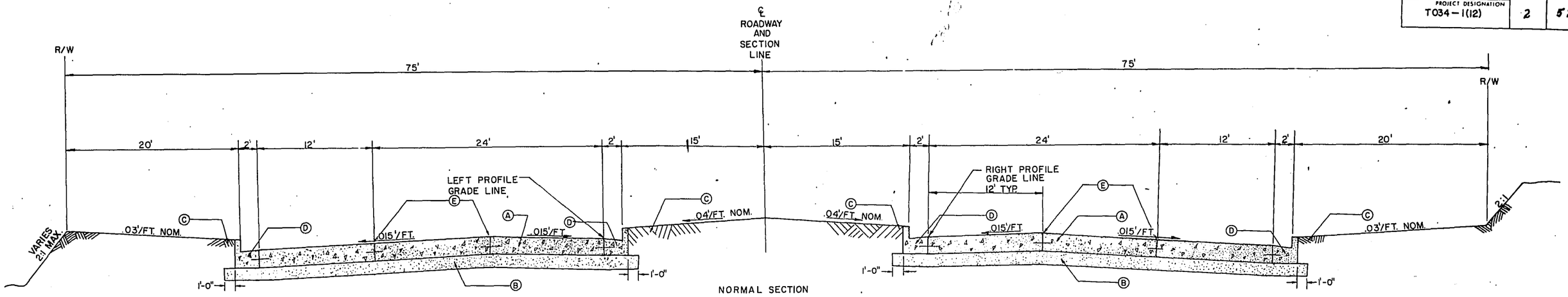
Date State Highway Engineer

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
BUREAU OF PUBLIC ROADS
REGION 4 WISCONSIN DIVISION

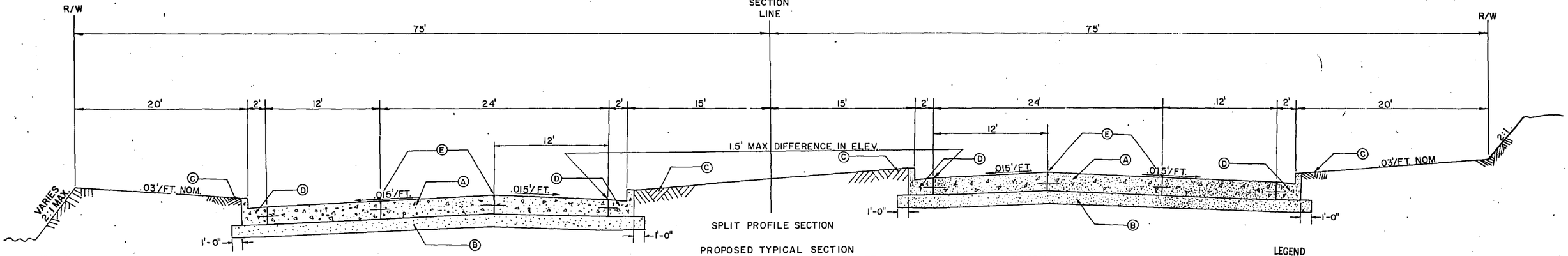
Approved:

Date Division Engineer

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71		
PROJECT DESIGNATION: T034-1(12)	2	52



NORMAL SECTION

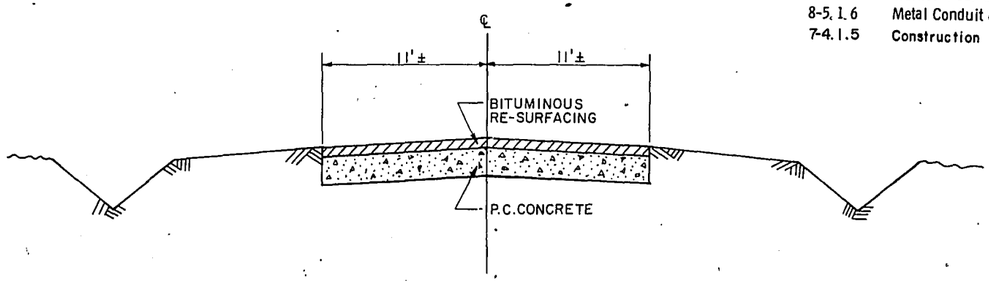


SPLIT PROFILE SECTION

PROPOSED TYPICAL SECTION
W. BROWN DEER RD., CITY OF MILWAUKEE
150' R.O.W. CENTERED ON SECTION LINE

GENERAL NOTES

1. All disturbed areas of the highway R/W, not surfaced, are to be covered with topsoil and seeded as directed by the Engineer.
2. SALV. topsoil shall be placed to an approximate depth of 3" at time of placing.
3. When the quantity of the items of subase, base or surface course is measured for payment by the ton or cubic yard, the depth or thickness or the course shown on the plan is approximate, and the actual thickness will depend on the distribution of material as directed by the Engineer.
4. Curb and gutter as shown are typical throughout the major portion of the section. Typical sections show the general roadway features throughout the project.
5. All holes or openings below subgrade resulting from removals or abandonments, shall be backfilled with granular backfill.
6. Use 9" base course between stations 210+00 and 213+49.19
7. No trees or shrubs shall be removed unless designated for removal by the engineer.
8. 4 1/2" bituminous concrete pavement shall be placed with a 1 1/4" surface course & two binder courses.



TYPICAL SECTION
EXISTING PAVEMENT
W. BROWN DEER ROAD
(91 ST - 68TH ST.)

STANDARD DETAIL DRAWINGS

2-1.1.12	Concrete pavement reinforcement
4-4.4.8	Longitudinal joints - Concrete pavement
4-4.5.11	Transverse Joints - Concrete Pavement
7-1.3.5	Marker Post & Marker Posts For Right Of Way
8-5.1.6	Metal Conduit & Fiber Conduit
7-4.1.5	Construction Barricade

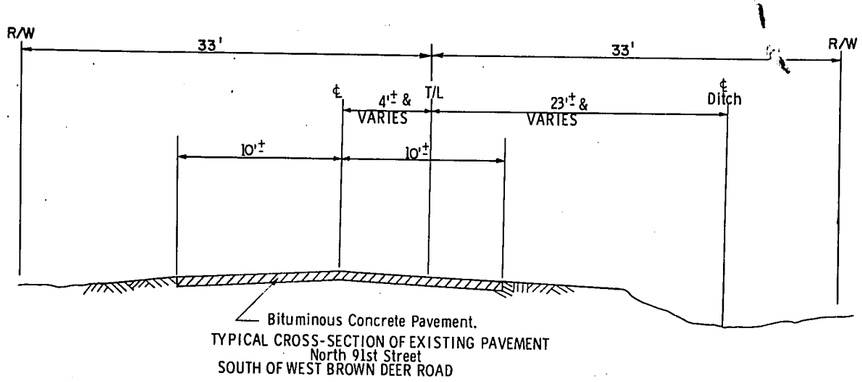
LEGEND

- (A)- 9" Reinforced concrete pavement
- (B)- 6" min. crushed aggregate base course (see General Note #6)
- (C)- 3" Topsoil, fertilizing and seed. Mulch all seeding
- (D)- Type A-1 Concrete curb and gutter (7" NOR. CURB FACE, MEDIAN / 6" NOR. CURB FACE, OUTER)
- (E)- Longitudinal joint, Either Sawed Or Construction Joint.

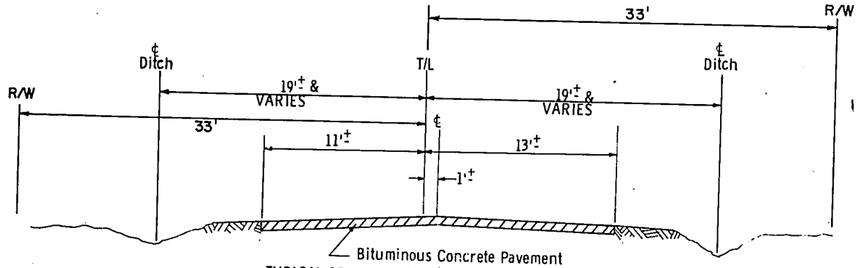
TYPICAL SECTIONS
FOR
W. BROWN DEER ROAD
(91ST-68TH ST.)

MILWAUKEE COUNTY

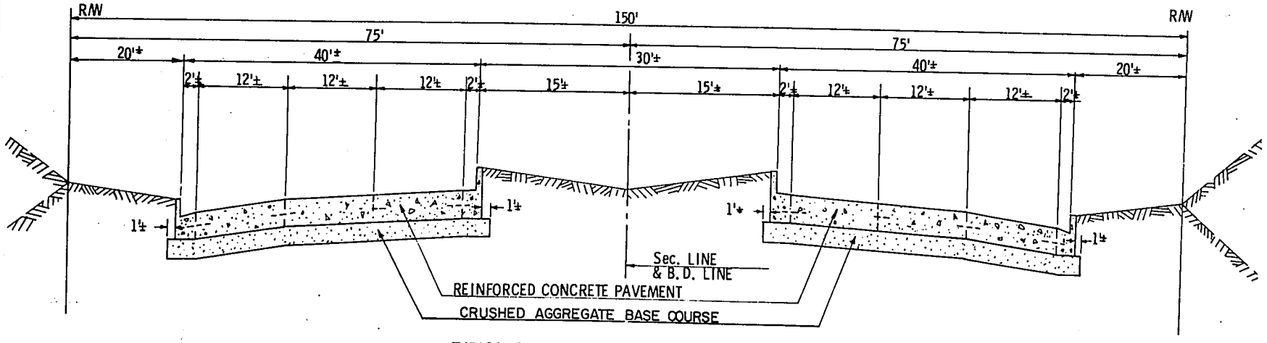
PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71		
PROJECT DESIGNATION		
T034 - 1(12)	2.1	52



TYPICAL CROSS-SECTION OF EXISTING PAVEMENT
North 91st Street
SOUTH OF WEST BROWN DEER ROAD



TYPICAL CROSS SECTION OF EXISTING PAVEMENT
NORTH 91st Street
North of West Brown Deer Road

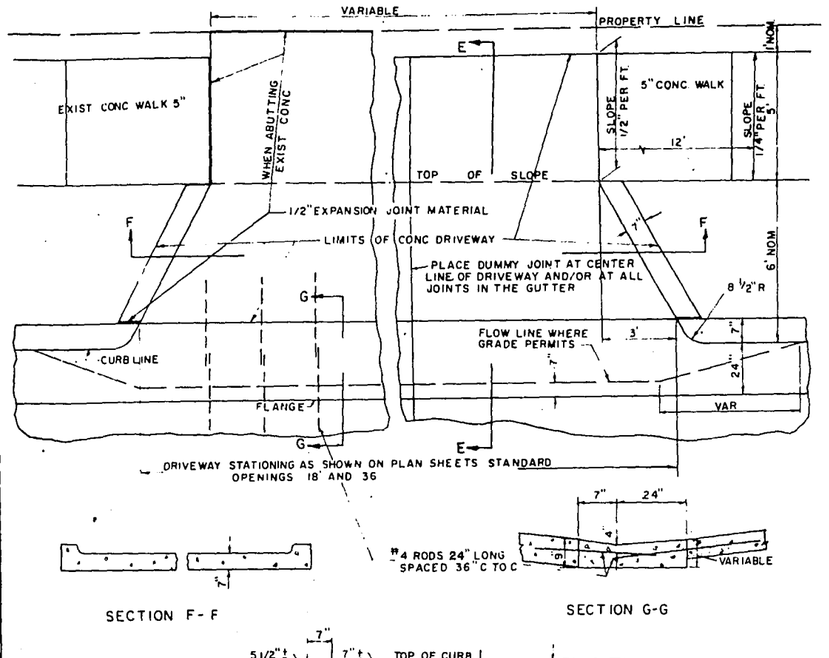


TYPICAL CROSS SECTION - EXISTING PAVEMENT
W BROWN DEER ROAD
STA. 178 + 51.90 TO STA 192+ 50.20

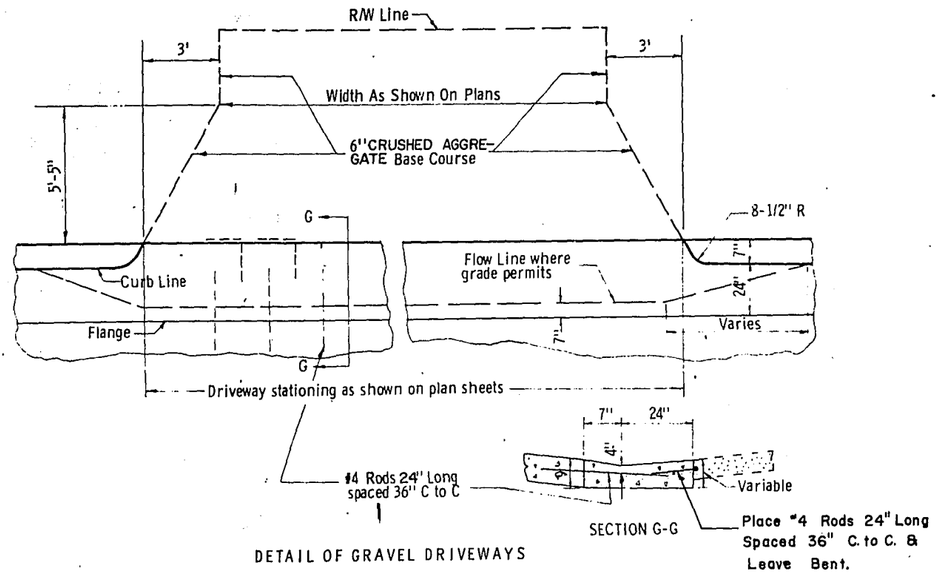
TYPICAL SECTIONS
for
WEST BROWN DEER ROAD
91st - 68th ST

MILWAUKEE COUNTY

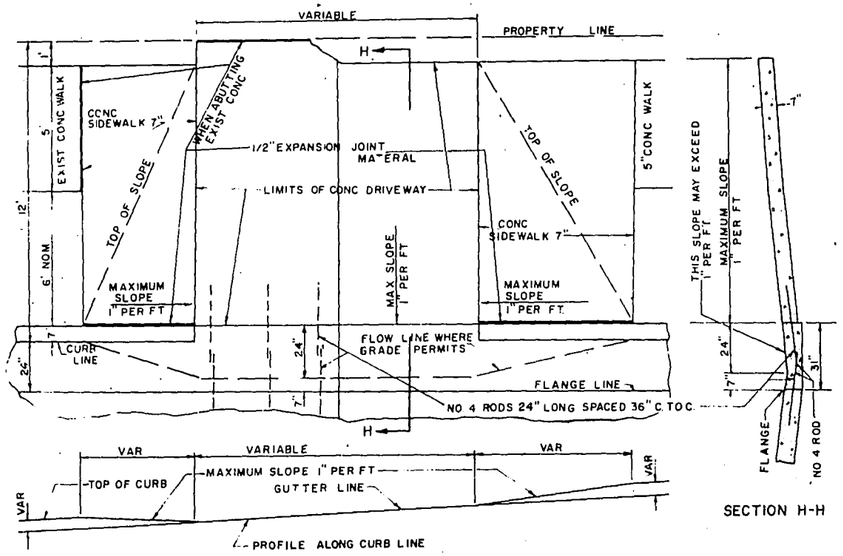
PROJECT I D	SHEET NUMBER	TOTAL SHEETS
2150 I 71	2.2	52
PROJECT DESIGNATION: T034-1(12)		



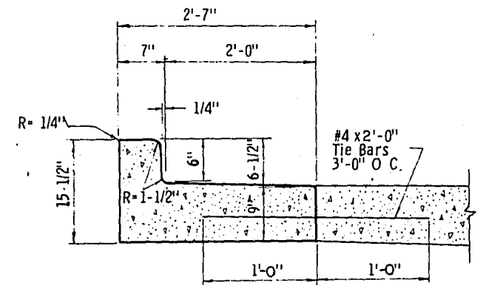
DETAIL OF CONCRETE PAVEMENT, DRIVEWAYS



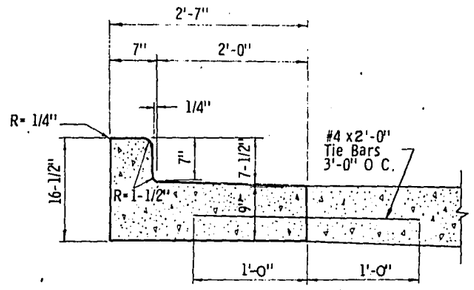
DETAIL OF GRAVEL DRIVEWAYS



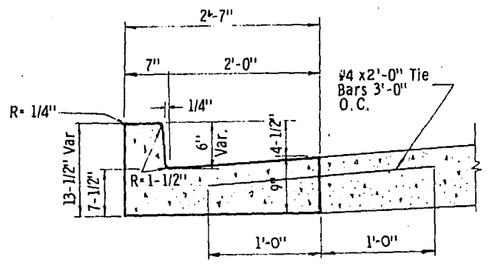
DETAIL OF DEPRESSED CONCRETE DRIVEWAY & ALLEYS



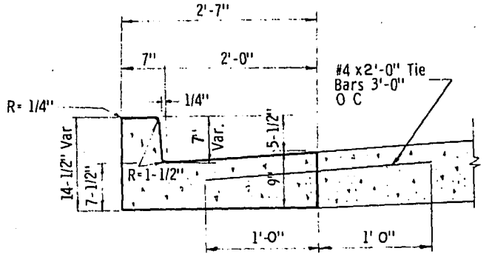
TYPE A-2 (6" Face, Outer C&G)



TYPE A-2 (7" Face, Median C&G)



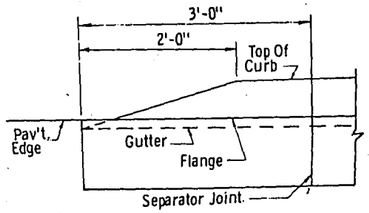
TYPE A-1 (6" Face, Outer C&G)



TYPE A-1 (7" Face, Median C&G)

NOTE: All curb and gutter to be Type A-1 (low side) unless otherwise called for on plans.

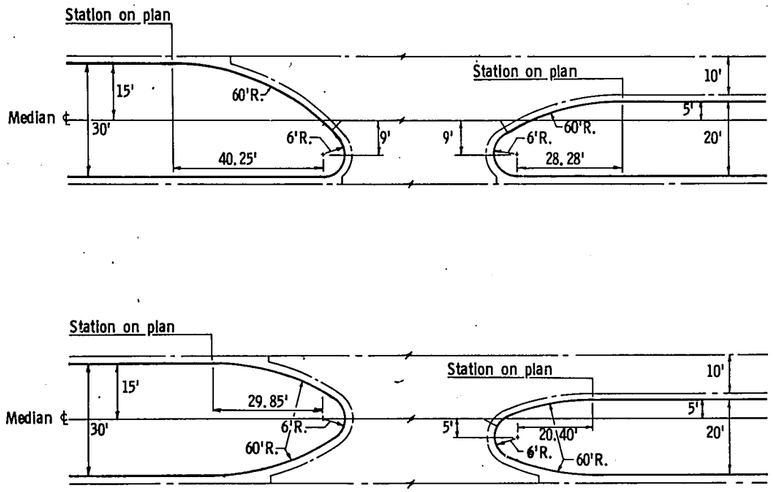
DETAIL OF CONCRETE CURB & GUTTER 31 INCH



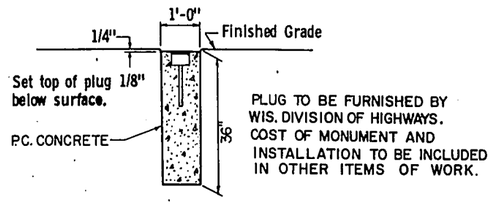
END SECTION CURB & GUTTER
(Where Shown On Plans)

2.3/52

PROJECT I D	SHEET NUMBER	TOTAL SHEETS
2150 1 71	2.3	52
PROJECT DESIGNATION: T034-1 (12)		



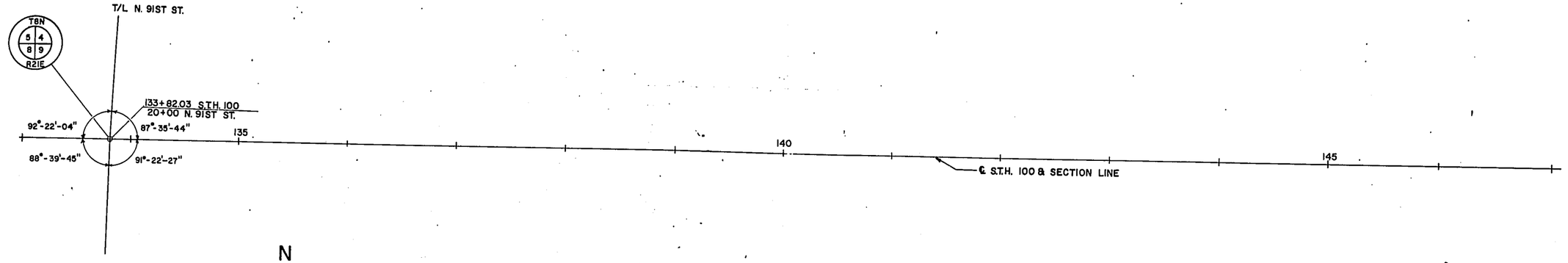
30' FOOT WIDTH (FACE-FACE)
MEDIAN CURB DETAILS



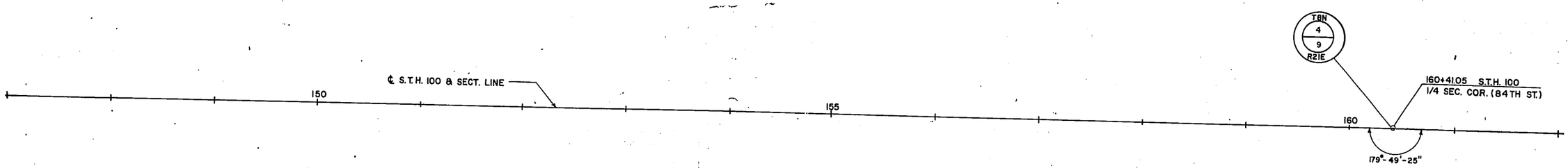
LANDMARK MONUMENT DETAIL
STA. 133+82.03 (91ST ST)
160+41.05 (84TH ST.)

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-1(12)	2.4	52

I.D. 2150 1 71



B.M. - BENCH MARK 64-13 SOUTHEAST CORNER OF NORTH 91ST STREET AND WEST BROWN DEER ROAD. 33' SOUTH AND 31' EAST OF 1/4 SECTION CORNER. ELEV. 177.97



B.M. - BENCH MARK 63-07 AT NORTH 84TH STREET AND WEST BROWN DEER RD. 30' NORTH OF E-W SECTION LINE AND ON THE N-S SECTION LINE. ELEV. 132.43

ALIGNMENT PLAN FOR

BROWN DEER ROAD

N 91 ST - N 68 ST.

NOTE BOOK NUMBERS 67021 & 67087

S.T.H. 100

MILWAUKEE COUNTY

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-1(12)	2.5	52

I.D. 2150 1 71

¢ S.T.H. 100 & SECT. LINE

165 170 175

N

T/L

P.C. 236+42.82 T/L - 4.06' LT.

P.C. 236+30.92 T/L - 28.56' LT.

P.C. 11+32.84 N.W. - 20.01' LT.
236+01.26 A - 157.91' LT.

P.T. 12+66.09 N.W.
= 234+77.74 A - 214.78' LT.

P.T. 3+74.35 N.E. - 20' LT.

P.T. 3+74.35 N.E.
= 234+72.58 T/L 76TH ST. 37' RT.

"A" LINE

P.T. 123+78.50 BD - 75.23' LT.

P.C.C. 233+28.87 A - 178.27' LT.

CTR. 5' R = 120+69.56 BD - 60' LT.
= 233+29.19 A - 173.28' LT.

P.C. 123+50.13 BD - 55' LT.

P.C. 14+50.15 N.W.
= 119+62.27 BD - 66.99' LT.

P.T. 14+77.96 N.W.
= 119+38.28 BD - 55' LT.

STATION EQUATION:
178+51.90 S.T.H. 100 BACK
= 116+50.00 BD. AHEAD

122+32.45 BD
= 233+18.80 A - REL. 76TH.

CTR. 5' R 124+06.17 BD - 60' LT.

T8N
4 3
9 10
R21E

P.C. 2+07.88 NE - 22' LT.
= 126+10.89 BD - 62.79' LT.

∠ PT. 0+00.83 N.E.
= 128+24.76 BD - 55' LT.

∠ PT. 125+69.90 BD - 55' LT.

2' R. 126+09.90 BD - 61' LT.

P.C. 1+50.00 N.E.
= 126+76.07 BD - 66.93' LT.

120 130

CTR. 2' RAD. = 118+69.12 BD - 61' RT

CTR. 5' RAD. = 120+12.22 BD - 60' RT.

P.C. 1+45.16 S.W.
= 117+94.69 BD - 66.61' RT.

∠ PT. 119+09.12 BD - 55' RT.

P.T. 120+71.63 BD - 55' RT.

CTR. 5' R 123+46.03 BD - 60' RT.

REL. 76TH. ST.

∠ PT. 0+00 S.W.
= 116+50.00 BD - 55' RT.

P.C. 2+12.61 S.W. - 22' LT.

P.C. 120+41.78 BD - 82.05' RT.
= 231+85.17 A - 158.84' LT.

P.T. 4+47.90 S.W.
= 229+96.39 A - 169.23' LT.

P.T. 4+47.90 S.W. - 20' LT.

CTR. 2' R. = 4+52.85 S.W. - 22' LT.

125+00.00 BD
= 232+55.20 T/L N. 76TH ST.
= 187+01.90 S.T.H. 100

P.T. 15+87.40 S.E.
= 124+79.82 BD 55' RT.

P.C. 15+54.84 S.E.

P.T. 14+46.56 S.E. - 72.98' LT.

STATION EQUATION:
130+48.30 BD BACK
= 192+50.20 S.T.H. 100 AHEAD

CURVE DATA TABLE

NO.	R	Δ	T	D	L	STATION P.C.	STATION P.I.	STATION P.T.
1	200.00'	86°-43'-46"	188.90'	28°-38'-52"	302.74'	1+45.16 S.W.	3+34.06 S.W.	4+47.90 S.W.
2	221.00'	67°-31'-50"	147.75'	25°-55'-32"	260.48'	2+12.18 S.W., 22' LT.	3+30.04 S.W. -65.84' LT.	4+47.90 S.W. - 20' LT.
3	30.00'	84°-21'-06"	27.18'	190°-59'-10"	44.17'	120+41.78 BD - 82.05' RT.	120+44.45 B.D.-55' RT.	120+71.63 BD - 55' RT.
4	30.00'	53°-06'-54"	15.00'	190°-59'-10"	27.81'	14+50.15 N.W.	14+65.14 N.W.	14+77.96 N.W.
5	1000.00'	15°-41'-58"	137.87'	5°-43'-46"	274.01'	236+01.26 A -157.91' LT.	234+66.45 A - 186.87' LT.	233+28.87 A - 178.27' LT.
6	30.00'	71°-00'-00"	21.40'	190°-59'-10"	37.13'	123+50.13 BD - 55' LT.	123+71.53 BD - 55' LT.	123+78.50 BD -75.23' LT.
7	30.00'	62°-10'-55"	18.09'	190°-59'-10"	32.56'	15+54.84 S.E.	15+72.93 S.E.	15+87.40 S.E.
8	173.71'	62°-32'-48"	105.50'	32°-59'-01"	189.63'	2+07.88 N.E. - 22.03' LT.		3+74.35 N.E. 20' LT.
9	150.00'	85°-41'-40"	139.13'	38°-11'-50"	224.35'	1+50.00 N.E.	2+89.13 N.E.	3+74.35 N.E.

NOTE: All Ramp stationing & Alignment on ramps is along face of curb.

FOR INFORMATION ONLY

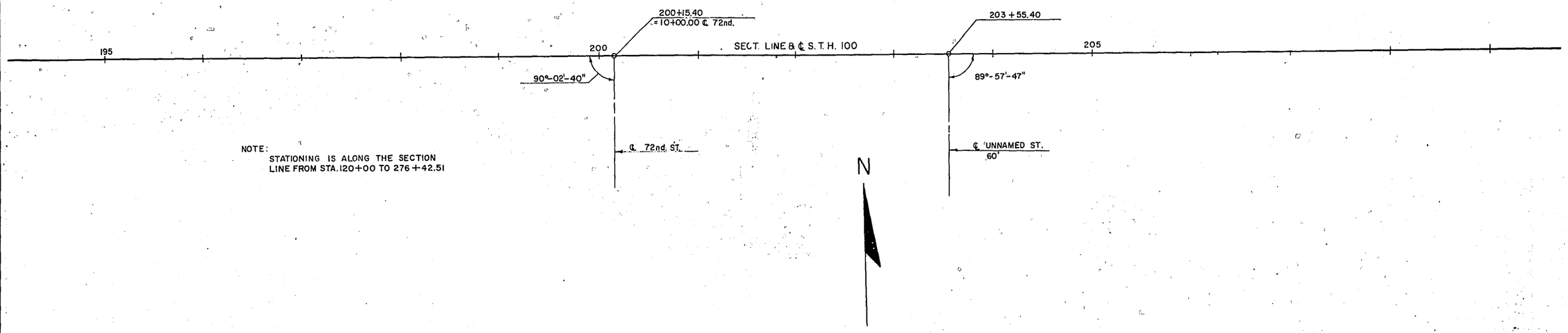
ALIGNMENT PLAN
FOR
BROWN DEER ROAD
N. 91ST ST. - N. 68TH ST.

S.T.H. 100 Milw. Co.

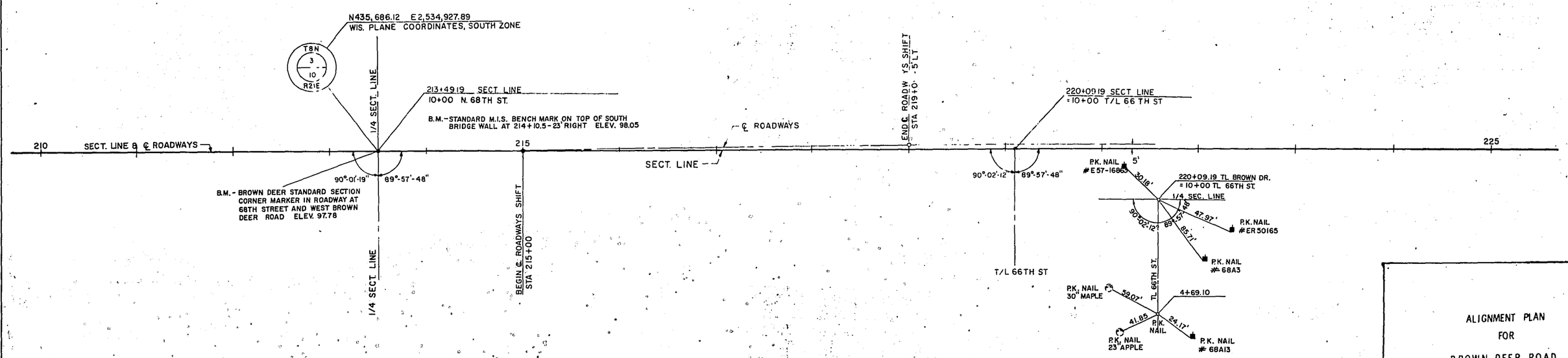
2.75

PROJECT	SHEET NO.	TOTAL SHEETS
T034-1(12)	2.6	52

I.D. 2150 / 71



NOTE:
STATIONING IS ALONG THE SECTION LINE FROM STA. 120+00 TO 276+42.51



68TH ST. — 43RD ST.
NOTE BOOK NUMBERS 67021, 67045, AND 67073

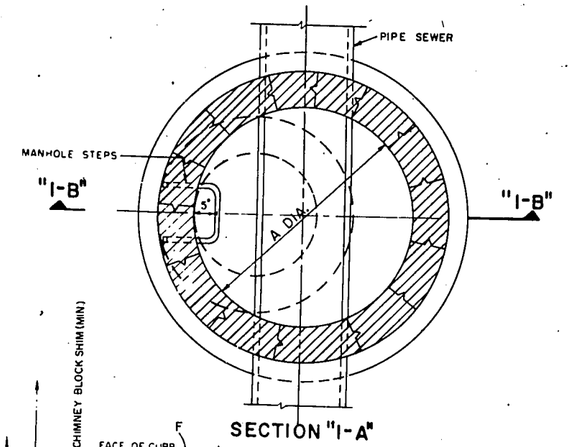
ALIGNMENT PLAN
FOR
BROWN DEER ROAD
N. 91th St. - N. 68th St.

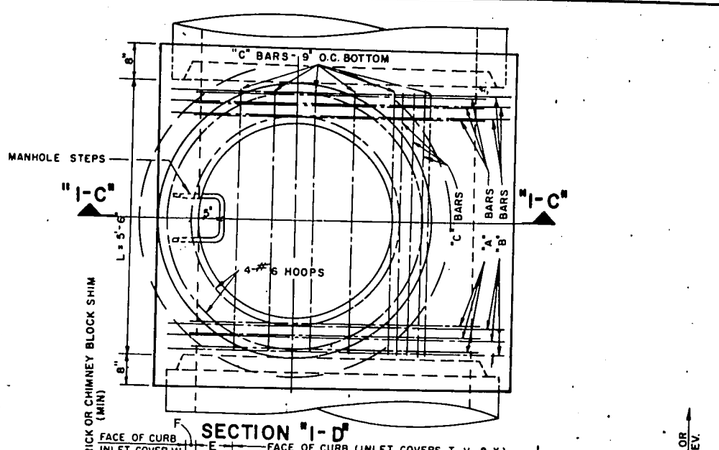
S.T.H. 100 Milw. Co.

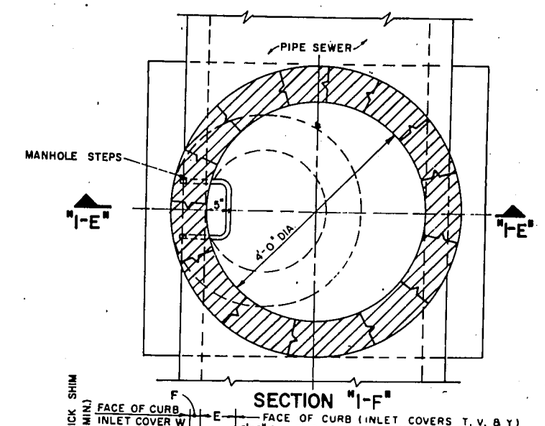
A-14

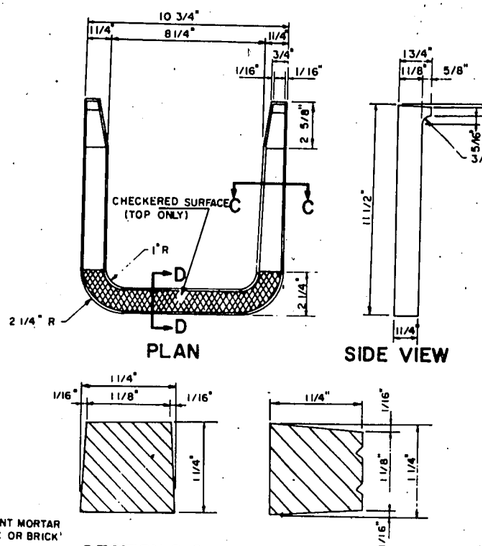
PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-1 (12)	2.7	52

2150-1-71









MANHOLE STEP

WEIGHT 10.7 LBS ±

NOTES

1. LIMIT OF PAY ITEM FOR STORM SEWERS & SUBDRAINS OUTSIDE FACE OF MANHOLE.
2. NO MANHOLE STEPS TO BE USED IN A MANHOLE 5'-0" OR LESS IN DEPTH
3. CONCRETE BLOCKS MAY BE NON-INTERLOCKING IN SIZES APPROPRIATE FOR THE WORK
4. PRECAST REINFORCED CONCRETE SECTIONS SHALL CONFORM TO AASHO DESIGNATION M-199.
5. PRECAST BASES WILL NOT BE PERMITTED.
6. PRECAST RISERS MAY BE PLACED SO THE TONGUE ENDS POINT UP OR DOWN.
7. ECCENTRIC TOP SECTIONS SHALL BE USED ON ALL MANHOLES.

INLET COVER OFFSETS FACE OF CURB TO INSIDE EDGE OF M.H.			
TYPE	DESCRIPTION	E	F
Y	CURB BOX (CITY OF MILW)	3 1/2"	
T	CURB BOX (WEST ALLIS)	5"	
V	MOUNTABLE CURB BOX	9"	
W	CURB BOX (X-WAY)		1"

TYPE	A	B	C
11	3'-6"	2'-8"	12" - 36"*
12	4'-0"	3'-8"	12" - 42"**
13	5'-0"	5'-8"	42" - 48"
14	6'-0"	7'-8"	54" - 60"

* 12" - 21" FOR PRECAST M.H.
** 12" - 24" FOR PRECAST M.H.

WHEN TONGUE AND GROOVE PIPE IS USED, CONTRACTOR MAY FORM AND POUR MONOLITHIC CONCRETE INVERT, PROVIDED THAT DISTANCE FROM CENTER OF M.H. TO PIPE END DOES NOT EXCEED VALUES GIVEN IN TABLE BELOW.

6'-0" DIA. M.H.	5'-6" DIA. M.H.	4'-0" DIA. M.H.	5'-0" DIA. M.H.	DIA. SEWER
-	18"	21"	-	21"
-	17"	20"	-	24"
-	16"	19"	-	27"
-	15"	18"	-	30"
-	12"	15"	-	36"
-	-	12"	21"	42"
-	-	-	18"	48"
24"	-	-	-	54"
19"	-	-	-	60"

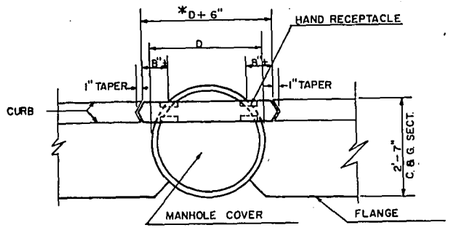
ALL "A", "B", AND "C" REINFORCING BARS ARE OF THE SAME DIAMETER, WHICH VARIES WITH "H".
FOR "H" 8'-0" TO 20'-0" USE #5 BAR.
FOR "H" 20'-0" TO 30'-0" USE #6 BAR.
FOR "H" 30'-0" TO 40'-0" USE #7 BAR.
THE "A" BARS MAY BE PLACED IN TWO SEGMENTS LAPPING 12" AT SPRING LINES, OR IN ONE HOOP WITH ONE 12" LAP AT SPRING LINE
THE "B" BARS MAY LAP 24 DIAMETERS AT SPRING LINES, OR BE PLACED IN ONE HOOP WITH ONE 12" LAP AT TOP OR BOTTOM.
ALL "C" BARS SHALL HAVE STANDARD HOOKED ENDS FACE OF STEEL TO CONCRETE FACE SHALL BE A MINIMUM OF 2".

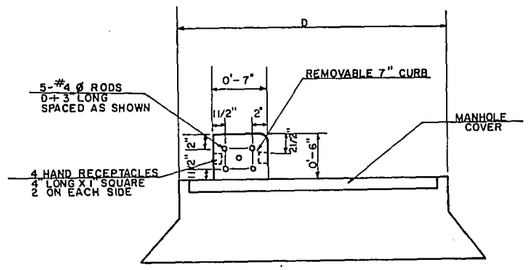
DRAINAGE DETAILS

D1-A

PROJECT I.D	SHEET NUMBER	TOTAL SHEETS
2150 I 71		
PROJECT DESIGNATION		
T034-I (12)	2.8	52

2150-1-71

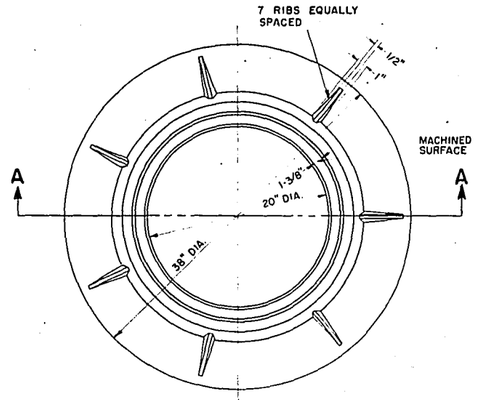




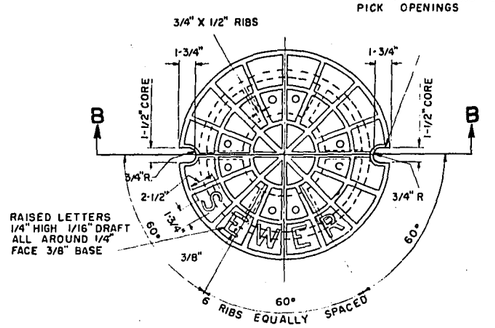
* TO INSURE EASY REMOVAL, TOP DIMENSION OF REMOVABLE SECTION SHOULD BE GREATER THAN THE BOTTOM DIMENSION.

REMOVABLE CURB SECTION

M.I.S. MANHOLES AT STA. 207+54 & 213+08 BROWN DEER RD. COST OF FABRICATING, CONSTRUCTING, INSTALLING, AND FURNISHING REMOVABLE CURB SECTION SHALL BE MEASURED AND PAID FOR AS CONCRETE CURB AND GUTTER, 31 INCH.

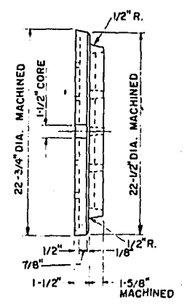


PLAN

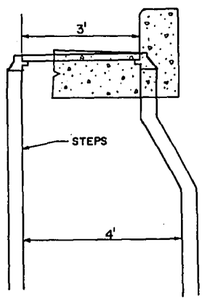


PLAN

NOTE: ONE VENT HOLE FOR SANITARY AND COMBINED SEWER



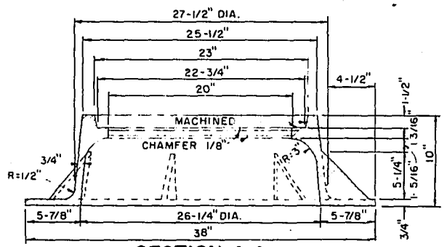
EDGE VIEW



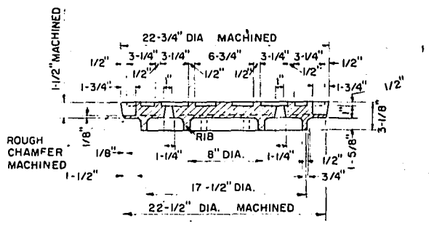
ADJUST CASTING SO THAT COVER CLEARS CURB FACE.

M.I.S. MANHOLES
STA. 197+60
STA. 203+03

COST OF ADJUSTING M.I.S. MANHOLE FRAMES AND COVERS SHALL BE CONSIDERED AS INCIDENTAL TO OTHER CONTRACT ITEMS.



SECTION A-A
FRAME



SECTION B-B
LID

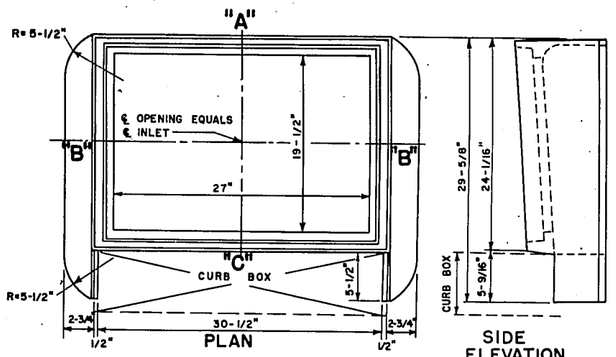
MANHOLE COVER, TYPE Q

APPROX. WEIGHT 528 LBS.

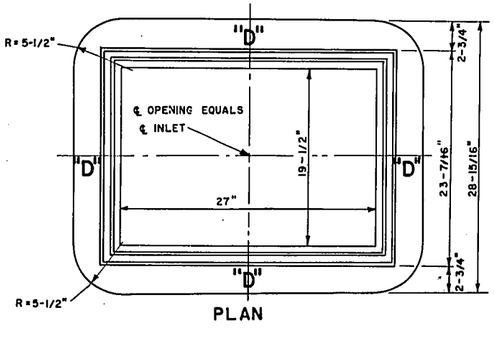
DRAINAGE DETAILS

PROJECT	SHEET NUMBER	TOTAL SHEETS
T034-102	2.9	52

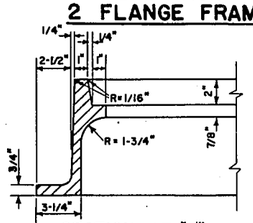
I.D. 2150 I 71

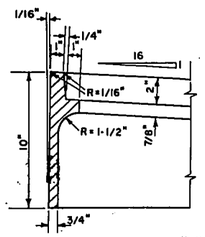


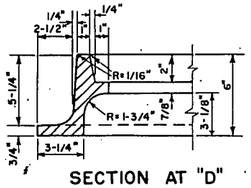
2 FLANGE FRAME-TYPE W

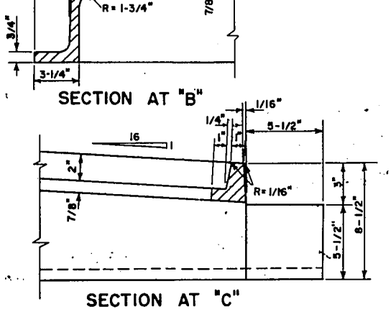


4 FLANGE FRAME-TYPE X

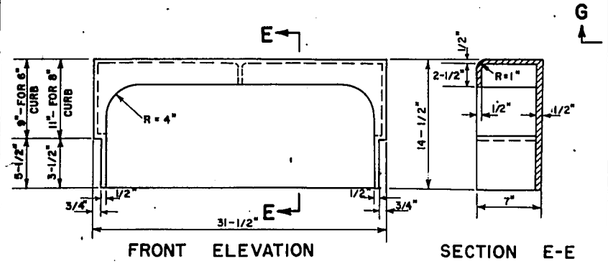


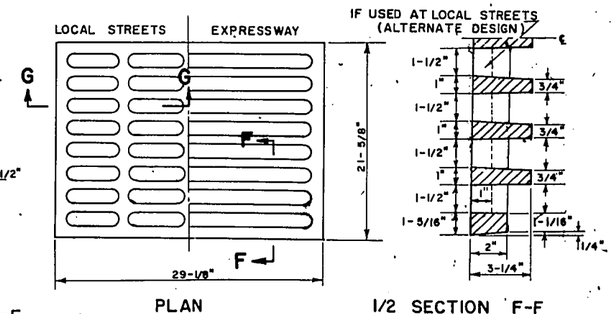


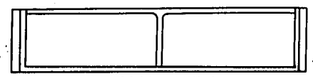




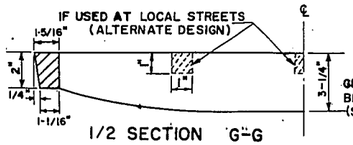
TYPICAL FRAME DETAILS







CURB BOX

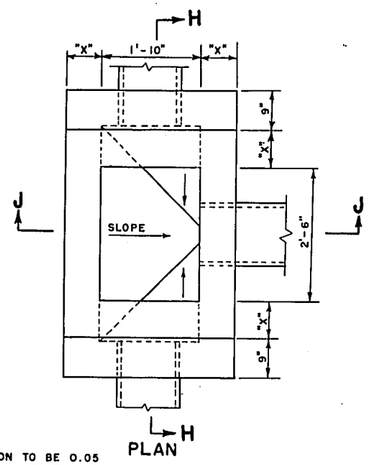


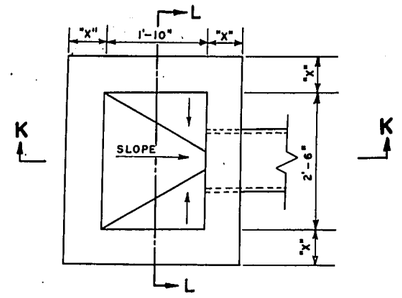
GRATE

GRATE WITH CROSS BARS TO BE USED ON LOCAL STREETS (SEE ALTERNATE DESIGN)

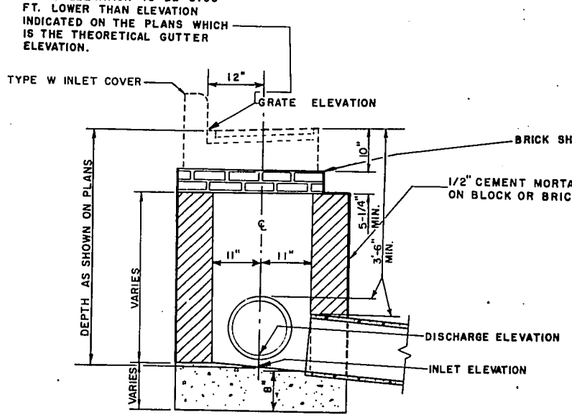
INLET COVERS, TYPES W & X

TYPE W - 2 FLANGE FRAME, GRATE, AND CURB BOX - APPROX. WEIGHT 612 LBS.
TYPE X - 4 FLANGE FRAME AND GRATE - APPROX. WEIGHT 450 LBS.





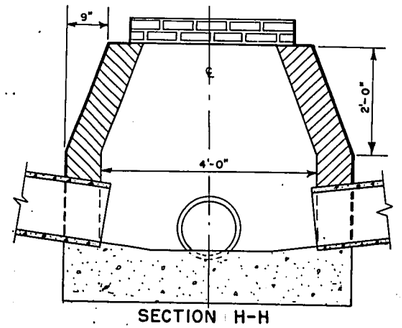
GRATE ELEVATION TO BE 0.05 FT. LOWER THAN ELEVATION INDICATED ON THE PLANS WHICH IS THE THEORETICAL GUTTER ELEVATION.



SECTION J-J

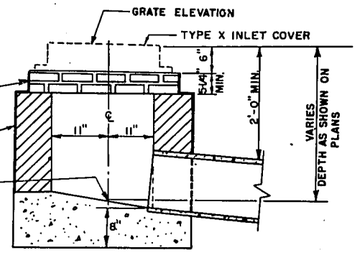
NOTE:
STRUCTURE WALL THICKNESS "X" TO BE 8" BRICK OR 6" CONCRETE BLOCK OR 6" GRADE AA CONCRETE.
STRUCTURE FOOTINGS TO BE GRADE AA CONCRETE

CONCRETE BLOCKS MAY BE NON-INTERLOCKING IN SIZES APPROPRIATE FOR THE WORK.



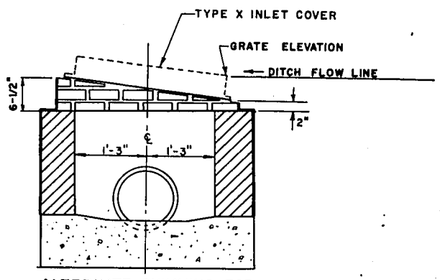
SECTION H-H

TYPE 34



SECTION K-K

TYPE 35



ALTERNATE SHIMMING FOR
DITCH INLETS - FLOW IN ONE DIRECTION
(PLACE COVER LEVEL WHEN INLET IS AT A LOW POINT.)
SECTION L-L

INLETS

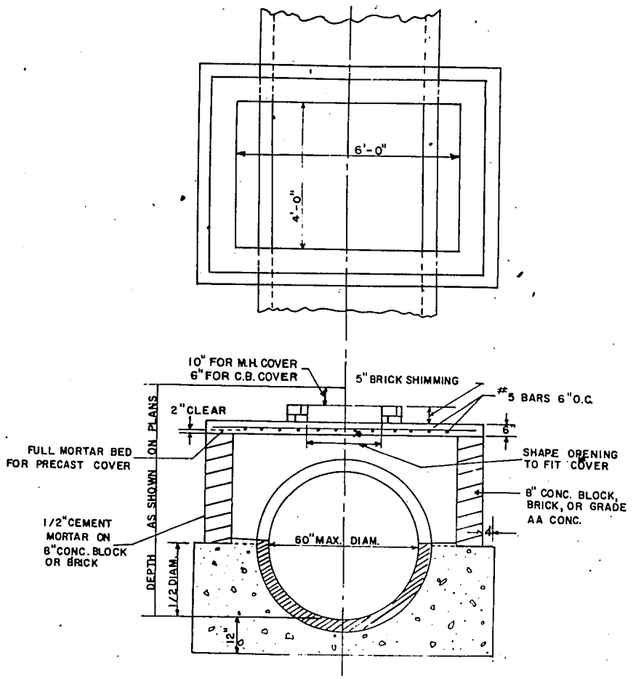
DRAINAGE DETAILS

DI-D

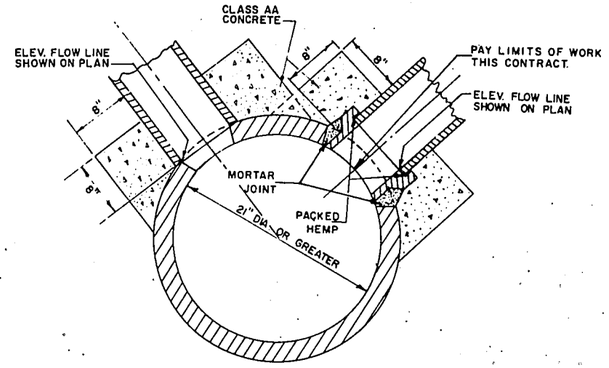
2.10/52

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
2150 1 71	2.10	52
PROJECT DESIGNATION T034-1(12)		

2150-1-71

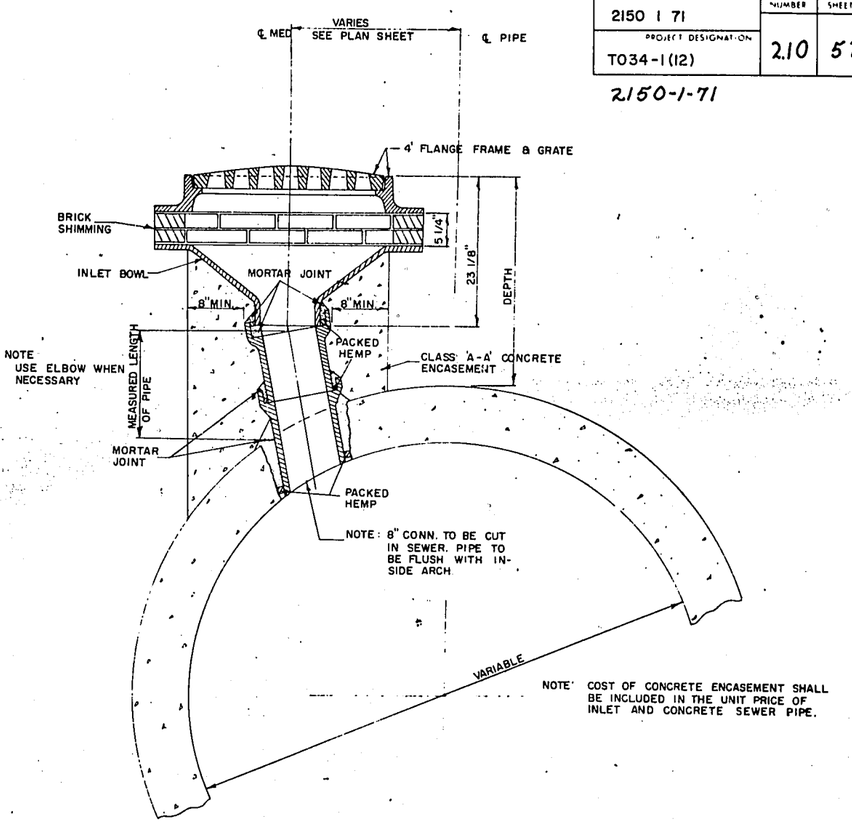


SPECIAL MANHOLE STRUCTURES (51) (52) (53) & (48)



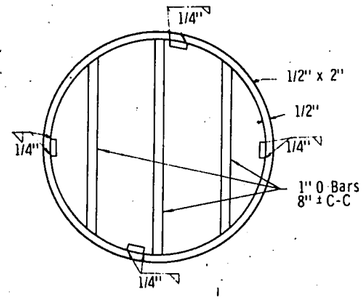
DETAIL OF CONNECTION TO STORM SEWER

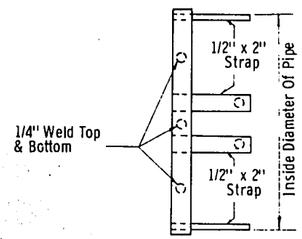
NOTE: CONTRACT UNIT PRICE FOR PIPE SHALL INCLUDE COST OF CONNECTION TO STORM SEWER OR M.H.



GENERAL NOTES

1. THE MINIMUM COVER FROM FACE OF BAR STEEL REINF. TO FACE OF CONCRETE SHALL BE 2" UNLESS OTHERWISE SHOWN ON PLAN.
2. ALL CONCRETE SHALL BE GRADE A-A





PIPE END GRATE DETAILS

Fasten straps to metal pipe with 3/4" bolts and nuts. Fasten straps to concrete pipe by means of 3/4" rawl calk-ins, cat. no. 92501 (or equivalent) and machine screws.

24' to 36" dia. pipe end grates require 4 straps, over 36" dia. require 6 straps. Straps shall be sufficient length so as to anchor bolts in body of pipe

Grate bars to be horizontal when installed at pipe outlet and vertical when installed at pipe outlet.

Note: Pipe end grate to be included in the cost of the pipe.

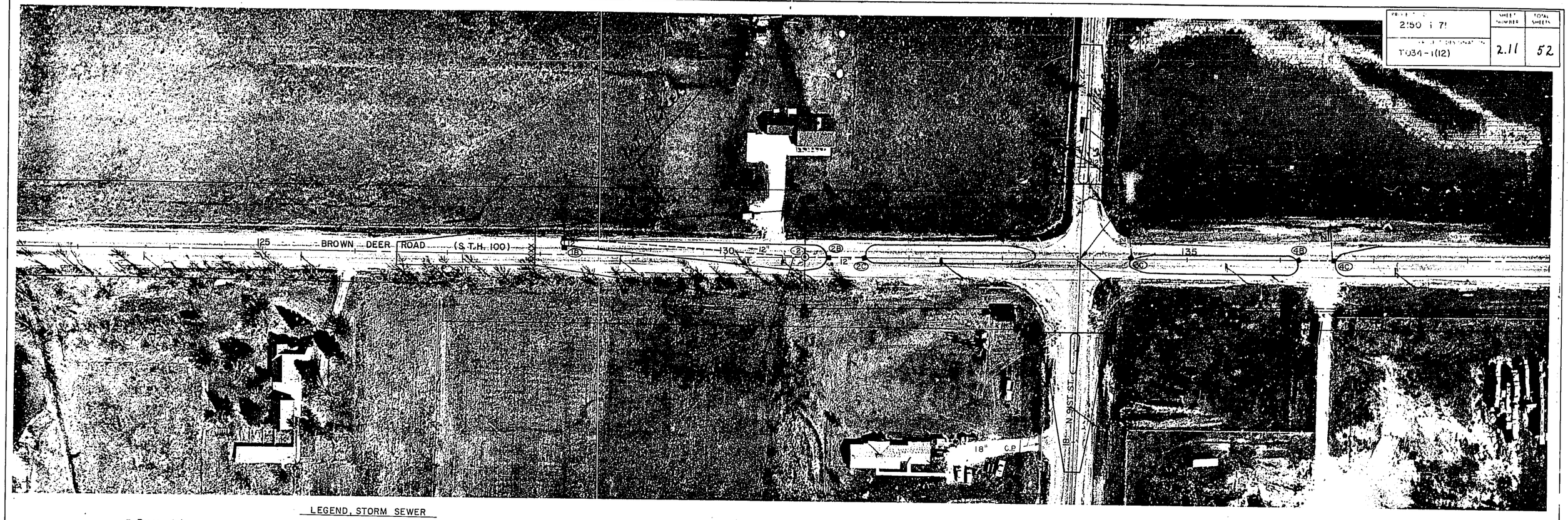
DRAINAGE DETAIL

(NOT IN CONTRACT)

DRAINAGE DETAILS

D1-G

PROJECT	SHEET NUMBER	TOTAL SHEETS
2150 - 71	2.11	52
T034-1(12)		



LEGEND, STORM SEWER

- ■ Proposed Inlet
- ◉ Proposed Manhole
- ◉ Proposed Manhole With Inlet Cover
- ○ Existing Manhole
- ◎ Existing Manhole With Inlet Cover

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	1	128+23 B D. - 53' LT.	---	---	---	---	Outfall
	1A	128+26 B D. - 15' LT.	35	W	166.38	2.69	
	1B	128+26 B D. - 10' LT.	35	W	166.42	2.42	
	2	130+86 B D. - C/L	11	Q	173.16	5.91	
	2A	130+86 B D. - 55' LT.	35	W	171.82	3.60	
	2B	131+10 B D - ℄	34	W	172.31	4.16	
	2C	131+51 B D - ℄	34	W	173.10	4.65	
	2D	130+86 B.D - 55' Rt.	35	W	171.82	3.57	
	3	134+35 B.D - 53.25' LT.			178.00		EXISTING M H
	3A	21+00 ℄ 91st. - 50' Lt.	----	-----	------	----	PIPE INLET
	3B	21+00 ℄ 91st. - 50' Rt.	35	X	175.80	2.23	
	3C	134+32 B.D - 2' Rt.	34	W	177.71	4.18	
	4	136+50 B D. - 55' LT.			177.36		EXISTING M H
	3AB	21+00 ℄ 91ST 30 RT.	11	Q	177.67	4.30	
	4B	136+15 B D. - ℄	34	W	177.43	4.50	
	4C	136+56 B.D. - ℄	34	W	177.27	4.50	
	27	136+33 B D. - 55' Rt.	11	W	177.45	5.45	
	27A	134+50 B.D. - 55' Rt.	11	W	177.85	5.00	

STORM SEWER

Code	Location From	Location To	Size (In)	Length (Ft)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g	Type of Pipe	Remarks
1A	1		15	35		163.69	163.5		
1B	1A		12	3		164.00	163.94		
2	1A		12	255		167.25	163.94		
2A	2		12	50		168.22	167.95		
2B	2		12	21		168.15	167.95		
2C	2B		12	37		168.45	168.15		
2D	2		12	50		168.25	167.95		
3A	~~3B~~ 3AB		12	~~98~~ 78		174.92	173.57		
3B	3AB		12	420		173.57	172.75		
3C	3		12	51		173.53	172.75		
3AB	3		12	50					
4B	4C		12	36		172.93	172.77		
4C	4		12	49		172.77	171.75		
27	28		15	317		172.00	169.00		
27A	27		15	179		172.85	172.00		

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks

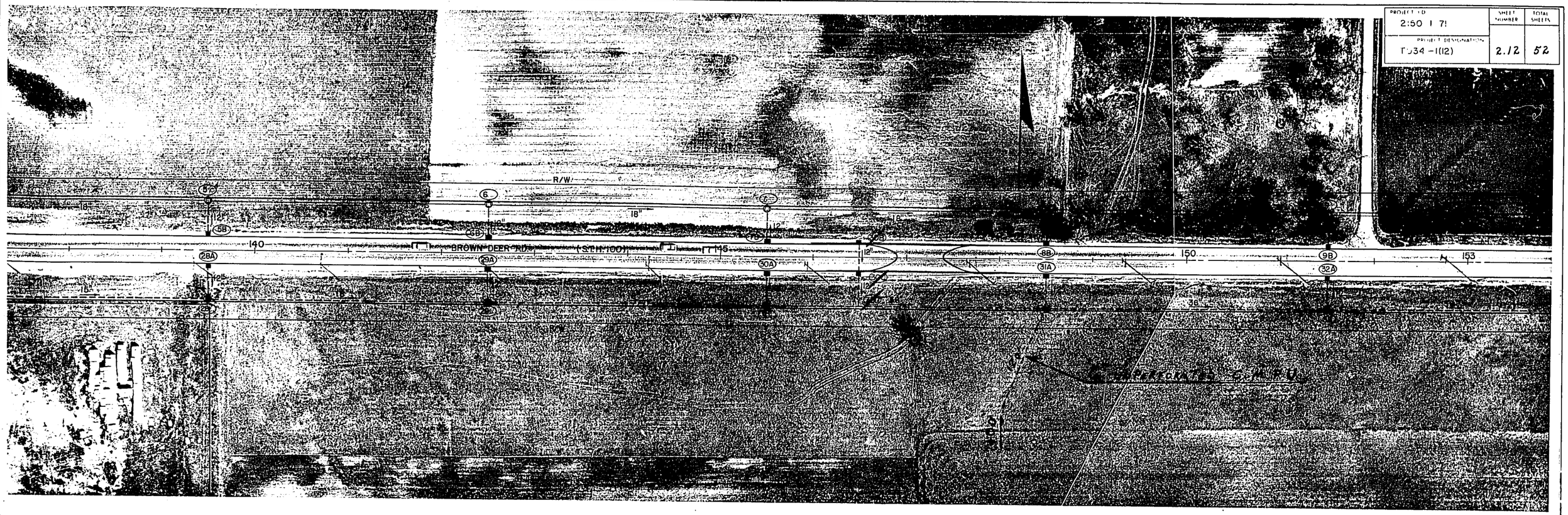
STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	17+87 91ST.	18+11 91ST.	18	24		173.0	172.5	C.P.	
	18+21 91ST.	18+55 91ST.	18	34		174.5	173.5	C.P.	
	126+ 94B.D.	127+ 34B.D.	18	40		162.3	162.1	C.P.	
	129+ 17B.D.	129+ 49B.D.	18	32		167.2	166.3	C.P.	

CONSTRUCTION NOTES

1) Unless otherwise specified all pipe will be Class III.
2) Grate elevations are given at flow line of inlet grate or center of manhole cover.
3) Locations of structures in curb & gutter sections refers to flow line of inlet grate.
4) Location of structures not in curb & gutter sections refers to ℄ of grate or cover.
5) E.G. indicates end grate required.
6) Pipe lengths given are approx. out to out of structures.

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71		
PROJECT DESIGNATION	2.12	52
F034-1(12)		



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	5	139+50 B.D. - 55' Lt.			175.68		EXISTING M.H.
	5B	139+50 B.D - 15' Lt.	34	W	175.86	4.50	
	6	142+50 B.D. -55' Lt.			169.17		EXISTING M.H.
	6B	142+50 B.D. - 15' Lt.	34	W	169.35	4.48	
	7	145+50 B.D. -55' Lt.			160.50		EXISTING M.H.
	7B	145+50 B D - 15' Lt.	34	W	160.68	4.46	
	8	148+50 B.D. -55' Lt.			151.83		EXISTING M.H.
	8B	148+50 B.D - 15' Lt.	34	W	152.01	4.51	
	9	151+50 B.D. -55' Lt.			143.71		EXISTING M.H.
	9B	151+50 B.D - 15' Lt.	34	W	143.89	4.39	
	28	139+50 B.D -55' Rt.	11	W	175.68	6.93	
	28A	139+50 B D. - 15' Rt.	34	W	175.86	4.50	
	29	142+50 B D. -55' Rt.	11	W	169.15	6.65	
	29A	142+50 B.D - 15' Rt.	34	W	169.33	4.40	

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
5B	5		12	35		171.36	170.60		
6B	6		12	35		164.87	164.40		
7B	7		12	35		156.22	155.80		
8B	8		12	35		147.50	147.10		
9B	9		12	35		139.50	139.00		
28	29		18	296		168.75	162.50		
28A	28		12	35		171.36	169.67		
29	30		18	296		162.50	154.50		
29A	29		12	35		164.93	163.42		

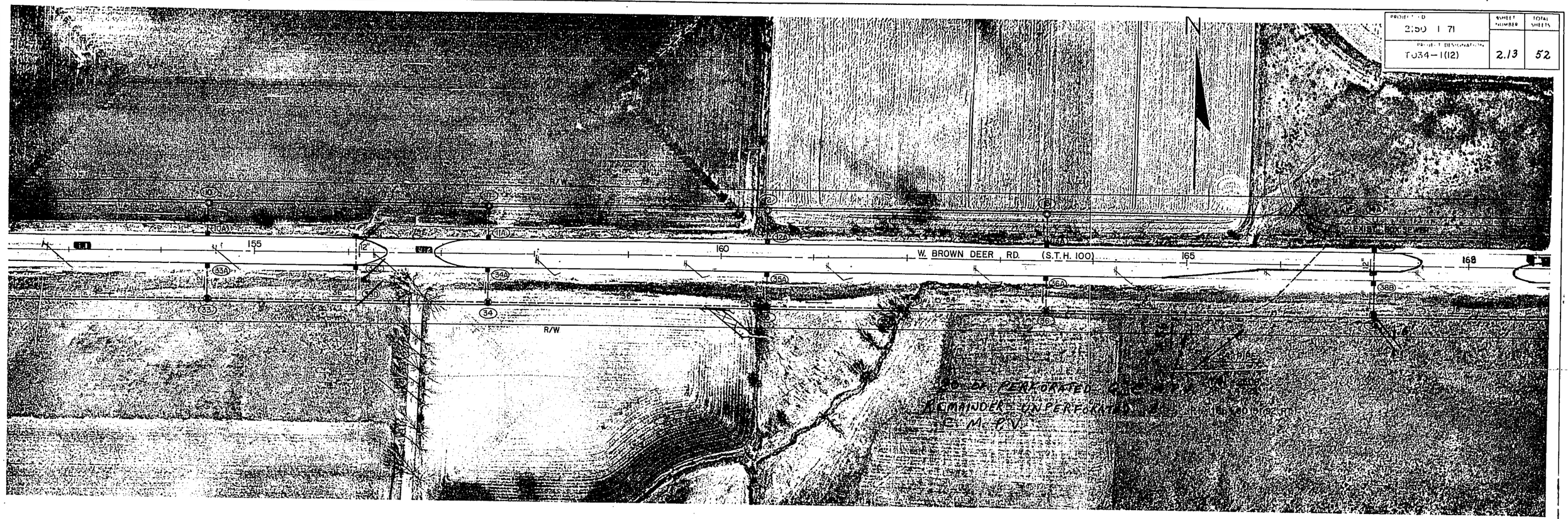
DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	30	145+50 B.D. - 55' Rt.	11	W	160.45	9.95	
	30A	145+50 B.D. - 15' Rt.	34	W	160.63	4.50	
	31	143+50 B.D. - 55' Rt.	11	W	151.75	9.25	
	31A	148+50 B.D. - 15' Rt.	34	W	151.93	4.50	
	32	151+50 B.D. -55' Rt.	11	W	145.21	7.71	
	32A	151+50 B.D. - 15' Rt.	34	W	145.39	4.50	
	~~30B~~	~~146+49 B.D. - 15' Lt.~~	~~34~~	~~W~~	~~157.76~~	~~4.50~~	
	~~30C~~	~~146+49 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~157.70~~	~~6.18~~	
	~~30D~~	~~146+49 B.D. - 82± Rt.~~					~~Connection at 36" Pipe~~

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
30	31	36	296			150.50	144.50		
30A	30	12	35			156.13	155.00		
31	32	36	296			142.50	137.50		
31A	31	12	35			147.43	146.50		
32	33	36	296			137.50	132.00		
32A	32	12	35			140.89	139.50		
~~30B~~	~~30C~~	~~12~~	~~28~~			~~153.26~~	~~152.26~~		
~~30C~~	~~30D~~	~~12~~	~~35~~			~~151.52~~	~~149.52~~		~~Connect to 36" Pipe~~

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71	2.13	52
PROJECT DESIGNATION: TO34-1(12)		



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	10	154+50 B.D. - 55' Lt.			138.24		EXISTING M.H.
	10A	154+50 B.D. - 15' Lt.	34	W	138.42	4.50	
	11	157+50 B.D. - 55' Lt.			132.93		EXISTING M.H.
	11A	157+50 B.D. - 15' Lt.	34	W	133.11	4.50	
	12	160+50 B.D. - 55' Lt.			127.94		EXISTING M.H.
	12A	160+50 B.D. - 15' Lt.	34	W	128.12	4.50	
	13	163+50 B.D. - 55' Lt.			122.93		EXISTING M.H.
	13A	163+50 B.D. - 15' Lt.	34	W	123.11	4.50	
	14	167+00 B.D. - 45'+Lt.	---	---	------	----	OUTFALL INTO BOX SEWER
	14A	167+00 B.D. - 55' Lt.	34	W	118.45	4.50	
	33	154+50 B.D. - 55' Rt.	11	W	139.74	7.74	
	33A	154+50 B.D. - 15' Rt.	34	W	139.92	4.50	
	34	157+50 B.D. - 55' Rt.	11	W	134.43	7.43	
	34A	157+50 B.D. - 15' Rt.	34	W	134.61	4.50	
	~~33B~~	~~156+08 B.D. - 15' Lt.~~	~~34~~	~~W~~	~~135.53~~	~~3.50~~	
	~~33C~~	~~156+08 B.D. 15' Rt.~~	~~34~~	~~W~~	~~137.03~~	~~5.80~~	
	~~33D~~	~~156+08 B.D. 52± Rt.~~					~~Connection at 36" Pipe~~

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
10A	10	12	35			133.92	133.50		
11A	11	12	35			128.61	128.20		
12A	12	12	35			123.62	123.20		
13A	13	12	35			118.61	118.20		
14A	14	12	7			113.95	111.89		
33	34	36	296			132.00	127.00		
33A	33	12	35			135.42	134.00		
34	35	36	296			127.00	122.00		
34A	34	12	35			130.11	129.00		
~~33B~~	~~33C~~	~~12~~	~~28~~			~~132.03~~	~~131.23~~		
~~33C~~	~~33D~~	~~12~~	~~36~~			~~131.23~~	~~130.83~~		~~Connect to 36" Pipe~~

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	35	160+50 B.D. 55' Rt.	14	W	129.43	11.53	
	35A	160+50 B.D. - 15' Rt.	34	W	129.61	4.50	
	35D	161+95 B.D. 55' RT.	14	W	127.01	11.71	
	36	163+50 B.D. - 55' Rt.	14	W	124.43	11.43	
	36A	163+50 B.D. - 15' Rt.	34	W	124.61	4.50	
	35C	161+89 B.D. 74' RT.					PIPE INLET
	37	166+60 B.D. - 35'±Lt.	---	----	------	----	OUTFALL INTO EXIST. BOX SEWER
	38	167+00 B.D. - 55' Rt.	11	W	119.95	5.95	
	38A	167+00 B.D. - 15' Lt.	35	W	118.63	3.28	
	38B	167+00 B.D. - 15' Rt.	34	W	120.13	4.93	
		167+00 B.D. - 5' RT.	34	W	INVERT ELEV. 115.25		AS PER C.C.O. #2
		120+00 B.D. - 5' LT.	34	W	INVERT ELEV. 111.76		

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
35	35D	54	141			117.90	116.20		
35A	35	12	31			125.11	124.00		
35D	36	54	151			115.30	113.50		
36	37	54	338			113.00	108.87		
36A	36	12	31			120.11	119.00		
35C	35D	30	19			126.00	120.17		E.G. REQUIRED
38	39	18	296			114.00	111.50		
38A	38B	12	28			115.35	115.20		
38B	38	12	35			115.20	115.00		

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71	2.14	52
PROJECT DESIGNATION 4 (12)		



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	15	170+00+ B.D. - 45'± Lt.	---	-----	------	----	Out Fall into Box Culvert
	15A	170+00 B.D. - 55' Lt.	34	W	116.15	4.50	
	16	173+00+B.D. - 45'± Lt.	---	---	------	----	Out Fall into Box Culvert
	16A	173+00 B.D. - 55' Lt.	34	W	114.58	4.50	
	18B	176+32 B.D. - 55' Lt.	34	W	112.85	7.25	
	18	176+32+B.D. - 46'± Lt.	---	----	------	----	Out Fall into Box Culvert
	18A	176+32 B.D. - 86' Lt.					Pipe Inlet E.G. Required
	19	178+25+B.D. -46'± Lt.	---	----	------	----	Out Fall into Box Culvert
	19A	178+25 B.D. -86' Lt.					Pipe Inlet
	19B	178+25 B.D. - 55' Lt.	34	W	111.48	5.96	
	39A	170+00 B.D. - 15' Lt.	34	W Q	116.33	4.50	
	39B	170+00 B.D. - 15' Rt.	34	W Q	117.82	6.20	
	39	170+00 B.D. - 55' Rt.	11	W	117.64	6.14	
		170+00 B.D. - 5' LT.	35	W			
	40A	173+00 B.D. - 15' Lt.	34	W	114.76	4.50	
	40B	173+00 B.D. - 5' Rt.	34	W	115.45	5.99	
	40	173+00 B.D. - 55' Rt.	13	W	115.42	8.92	
	41	173+75 B.D. - 34'± Lt.	---	-----	------	----	Out Fall into Box Culvert
	42H	174+50 B.D. - 11.5' Lt.	34	W Q	114.03	4.50	
	42G	174+50 B.D. - 55' Rt.	11	W	114.41	6.18	

STORM SEWER

Code	Location From	Location To	Size (In)	Length (Ft)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g	Type of Pipe	Remarks
	15A	15	12	8		111.65	110.09		
	16A	16	12	8		110.08	108.29		
	18B	18	36	6		105.60	103.60		
	18A	18B	24	30		108.40	105.60		
	19A	19B	12	30		107.40	105.52		
	19B	19	12	6		105.52	105.42		
	39A	39B	12	28		111.83	111.62		
	39B	39	12	35		111.62	111.42		
	39	39E	18	70		111.50	110.75		
	40A	40B	12	18		110.26	109.46		
	40B	40	12	43		109.46	108.67		
	40	41	42	106		106.50	105.35		Disch. at Box Culvert
	42H	42G	12	60		109.53	108.48		
	42G	42	15	134		108.23	107.29		

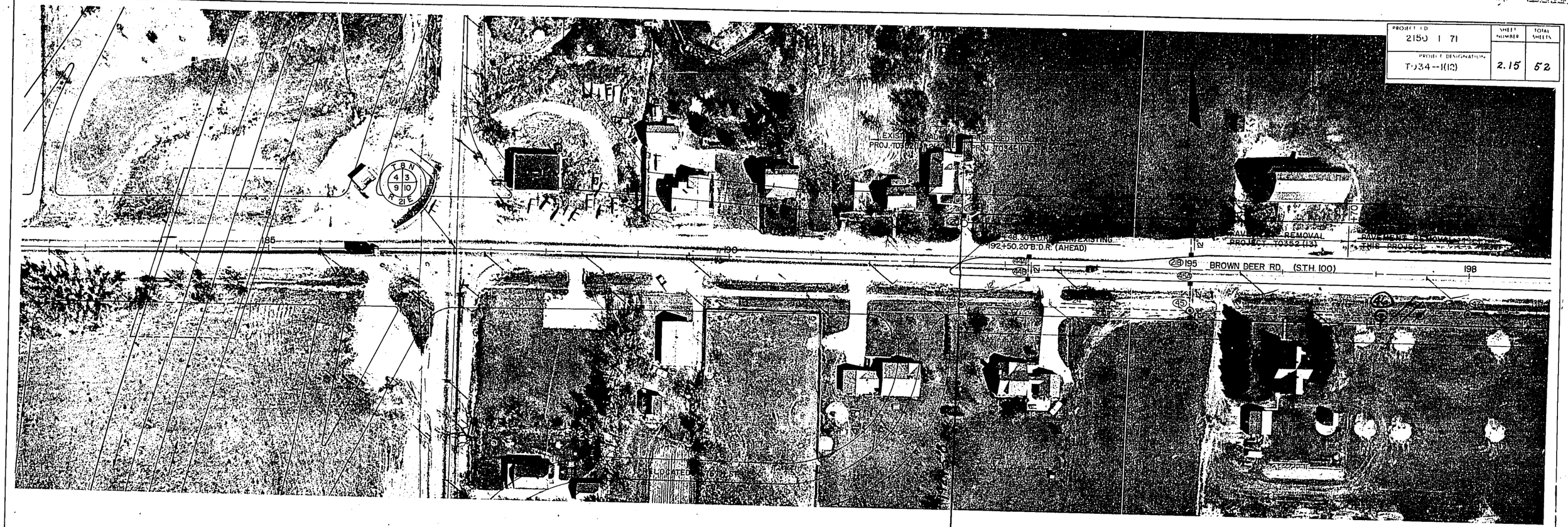
DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	42A	176+00 B.D - 15' Lt.	34	W Q	113.20	4.23	
	42B	175+90 B.D -15' Rt.	34	W	113.65	4.85	
	42	175+90 B.D. - 55' Rt.	11	W	113.47	6.18	
	42C	176+50 B.D. - 74' RT.					PIPE INLET E.G. REQUIRED
	42D	176+50 B.D. - 55' RT.	13	W	113.06	8.96	
	42E	177+25 B.D. - 33' LT.					OUTFALL INTO BOX CULVERT
	43D	177+15± B.D- 50' RT.±					EXISTING M.H.
	43A	178+00 B.D. - 15' LT.	34	W	112.15	4.34	
	43B	178+00 B.D. - 15' RT.	34	W	112.23	4.58	
	43C	178+20 B.D. - 55' RT.	34	W	111.44	3.92	
	43	178+20 ±B.D. - 50' RT.±					EXISTING M.H.
		174+25 BD - 12' LT.	34	W	114.11	4.45	
		175+97 BD - 5' LT.	34	W	113.96		
	39D	170+75 B.D. - 74' RT.					PIPE INLET
	39E	170+75 B.D. - 55' RT.	12	W	117.07	6.32	

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	42A	42B	12	30		108.97	108.80		
	42B	42	12	35		108.80	108.55		
	42	42D	15	55		107.29	106.86		
	42C	42D	36	19		112.00	107.00		
	42D	42E	48	112		104.10	103.00		
	43A	43B	12	28		107.81	107.65		
	43B	43	12	32		107.65	107.47		
	43C	43	12	1		107.52	107.47		

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71		
PROJECT DESIGNATION	2.15	52
T-934--1(12)		



PAVEMENT REMOVAL PROJECT T0352 (13)

PAVEMENT REMOVAL THIS PROJECT

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	20	192+52+ B.D. - 45'± Lt.	---	---	------	------	EXISTING M.H.
	20A	192+51 B.D. - 55' Lt.	34	W	114.83	4.37	
	21	195+00+ B.D. - 45'± Lt.	---	---	------	------	EXISTING M.H.
	21A	195+00 B.D. - 55' Lt.	34	W	117.22	4.30	
	21B	195+00 B.D. - 12.5Lt.	34	W	117.36	4.33	
	44	192+52+ B.D. - 45'± Rt.	---	---	------	------	EXISTING M.H.
	~~44A~~	~~193+25 B.D. - 5' Lt.~~	~~34~~	~~W~~	~~116.05~~	~~4.11~~	
	~~44B~~	~~193+25 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~116.33~~	~~4.50~~	
	45	195+00 B.D. - 45' Rt.	11	Q	118.21	6.96	
	~~45A~~	~~195+00 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~118.15~~	~~4.50~~	
	45B	195+00 B.D. - 55' Rt.	34	W	117.97	4.50	
	46	197+50 B.D. - 45' Rt.	11	Q	120.24	6.14	
	47	198+00 B.D. - 41' Rt.	11	Q	120.22	5.60	
	44A	193+25 B.D. 5' LT	35	W	116.05	2.51	
	44B	193+25 B.D. 15' RT.	35	W	116.33	2.89	
	45A	195+00 B.D. 15' RT.	35	W	118.15	2.89	
	46	197+16.40 B.D 45' RT	11	Q	120.15	7.14	SEE NOTE *

STORM SEWER

Code	Location From	Location To	Size (In)	Length (Ft)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	20A	20	12	5		110.46	110.22		
	21A	21	12	5		112.92	112.50		
	21B	21	12	28		113.03	112.50		
	~~44A~~	~~44B~~	~~12~~	~~18~~		~~111.94~~	~~111.83~~		
	~~44B~~	~~44~~	~~12~~	~~75~~		~~111.83~~	~~111.22~~		
	45	44	24	244		111.25	108.80		
	~~45A~~	~~45~~	~~12~~	~~25~~		~~113.65~~	~~112.42~~		
	45B	45	12	5		113.47	112.42		
	46	45	21	246		114.10	111.50		
	47	48A	15	165		114.62	113.53		
	44A	44B	12	18		113.54	113.44		
	44B	44	12	75		113.44	111.22		
	45A	45	12	25		115.26	112.42		
	46	45	21	212		113.01	111.50		

* PROVIDE 12" CONNECTION (SOUTH)

FLOW LINE ELEV. 114.05

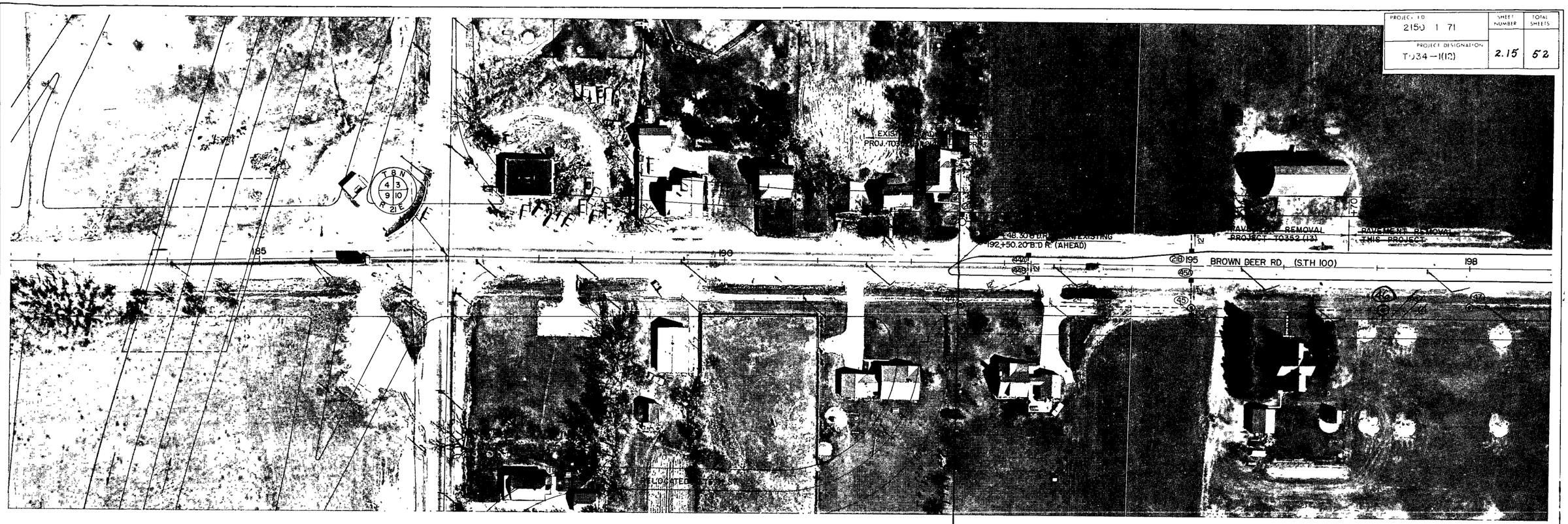
DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71	2.15	52
PROJECT DESIGNATION: T-034-1(12)		



PAVEMENT REMOVAL PROJECT T0352 (13)

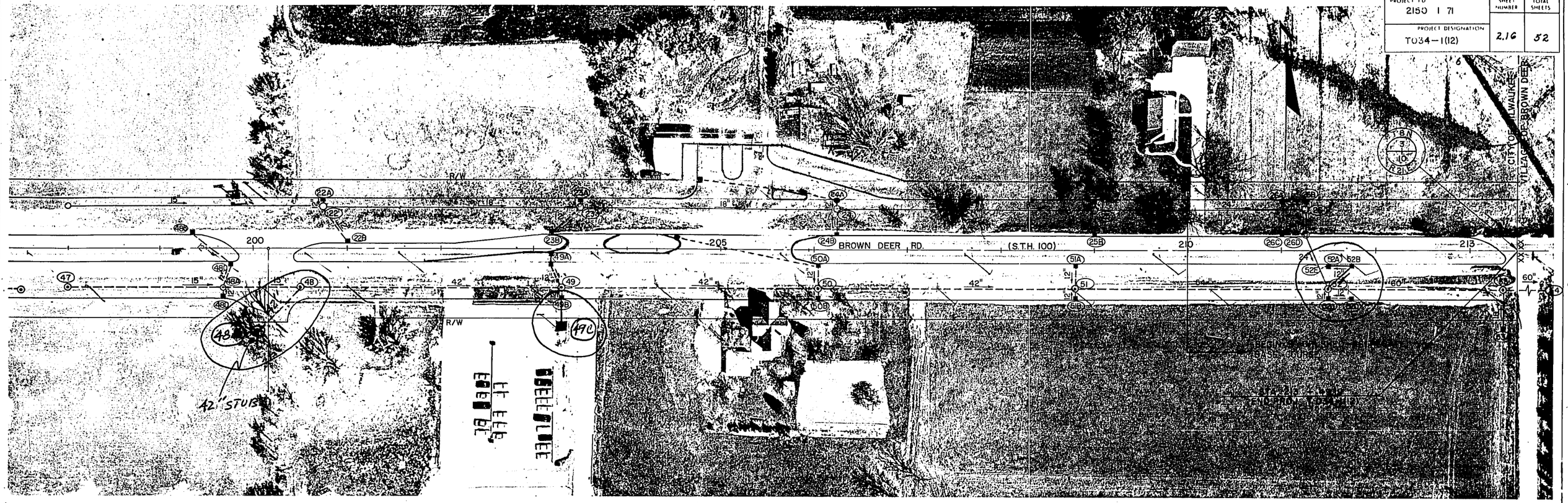
PAVEMENT REMOVAL THIS PROJECT

DRAINAGE STRUCTURES								STORM SEWER									
Sec.	Code	Location	Type Str.	Type Cover	Grade Elev	Depth	Remarks	Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	20	192+52+ B.D. - 45'± Lt.	---	---	------	------	EXISTING M.H.										
	20A	192+51 B.D. - 55' Lt.	34	W	114.83	4.37			20A	20	12	5		110.46	110.22		
	21	195+00+ B.D. - 45'± Lt.	---	---	------	------	EXISTING M.H.										
	21A	195+00 B.D - 55' Lt.	34	W	117.22	4.30			21A	21	12	5		112.92	112.50		
	21B	195+00 B.D. - 12.5Lt.	34	W	117.36	4.33			21B	21	12	28		113.03	112.50		
	44	192+52+ B.D. - 45'± Rt.	---	---	------	------	EXISTING M.H.										
	~~44A~~	~~193+25 B.D. - 5' Lt.~~	~~34~~	~~W~~	~~116.05~~	~~4.11~~			~~44A~~	~~44B~~	~~12~~	~~18~~		~~111.94~~	~~111.83~~		
	~~44B~~	~~193+25 B.D. 15' Rt.~~	~~34~~	~~W~~	~~116.33~~	~~4.50~~			~~44B~~	~~44~~	~~12~~	~~75~~		~~111.83~~	~~111.22~~		
	45	195+00 B.D. - 45' Rt.	11	Q	118.21	6.96			45	44	24	244		111.25	108.80		
	~~45A~~	~~195+00 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~118.15~~	~~4.50~~			~~45A~~	~~45~~	~~12~~	~~25~~		~~113.65~~	~~112.42~~		
	45B	195+00 B.D. - 55' Rt.	34	W	117.97	4.50			45B	45	12	5		113.47	112.42		
	46	197+50 B.D. - 45' Rt.	11	Q	120.24	6.14			46	45	21	246		114.10	111.50		
	47	198+00 B.D. - 41' Rt.	11	Q	120.22	5.60			47	48A	15	165		114.62	113.53		
	44A	193+25 B.D. 5' LT	36	W	116.05	2.51			44A	44B	12	18		113.54	113.44		
	44B	193+25 B.D. 15' RT.	35	W.	116.33	2.89			44B	44	12	75		113.44	111.22		
	45A	195+00 B.D. 15' RT.	35	W	118.15	2.89			45A	45	12	25		115.26	112.42		
	46	197+16.40 B.D 45' RT.	11	Q	120.15	7.14	SEE NOTE *		46	45	21	212		113.01	111.50		

DRAINAGE STRUCTURES								STORM SEWER									
Sec.	Code	Location	Type Str.	Type Cover	Grade Elev.	Depth	Remarks	Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks

* PROVIDE 12" CONNECTION (SOUTH)
FLOW LINE ELEV. 114.05

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71	2.16	52
PROJECT DESIGNATION: T034-1(12)		



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	22	200+75 B.D. - 45' Lt.			116.78		Existing M.H.
	22A	200+75 B.D. - 55' Lt.	34	W	116.54	4.41	
	22B	201+00 B.D. - 5' Lt.	34	W	116.38	4.07	
	23	203+50 B.D. - 45' Lt.			114.28		Existing M.H.
	23A	203+50 B.D. - 55' Lt.	34	W	114.04	4.54	
	23B	203+19 B.D. - 15' Lt.	34	W	114.65	4.65	
	24	206+25 B.D. - 45' Lt.			107.58		Existing M.H.
	24A	206+25 B.D. - 55' Lt.	34	~~W~~ Q	107.34	4.89	
	24B	206+25 B.D. - 15' Lt.	34	W	107.52	4.87	
	25	209+00 B.D. - 45' Lt.			100.50		Existing M.H.
	25A	209+00 B.D. - 55' Lt.	34	W	100.26	4.51	
	25B	209+00 B.D. - 15' Lt.	34	W	100.44	4.49	
	26	211+25 B.D. - 45' Lt.			98.69		Existing M.H.
	26A	211+00 B.D. - 55' Lt.	34	W	98.46	4.11	
	26B	211+25 B.D. - 55' Lt.	34	W	98.45	4.35	
	26C	211+00 B.D. - 15' Lt.	34	W	98.64	4.56	
	26D	211+25 B.D. - 15' Lt.			98.63		Existing M.H.
	48	200+50 B.D. - 41' Rt.	Special M.H.	Q	118.54	7.67	~~See Note *~~
	48A	199+69 B.D. - 41' RT.	11	Q	119.17	5.64	
	~~48B~~	~~199+39 B.D. - 15' LT.~~	~~35~~	~~W~~	~~117.79~~	~~3.06~~	
	~~48C~~	~~199+79 B.D. - 15' RT.~~	~~34~~	~~W~~	~~118.97~~	~~4.50~~	
	48D	199+69 B.D. - 55' RT.	34	W	118.87	4.31	
	48E	200+09.40-83' RT	12	Q	119.85	8.06	SEE NOTE *
	48B	199+39 B.D. - 15' LT.	35	W	117.79	2.86	
	48C	199+79 B.D. - 15' RT	34	W	118.97	4.50	
	49C	203+30 B.D. - 80' RT.	35	X	116.68	5.01	

* PROVIDE 42" CONNECTION. DIRECTION ~~S45°W~~, SOUTH
FLOW LINE ELEV. ~~110.87~~ 112.04

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	22A	22	12	5		112.13	111.85		
	22B	22	12	41		112.31	111.85		
	23A	23	12	5		109.50	109.30		
	23B	23	12	39		110.00	109.30		
	24A	24	12	5		102.45	102.25		
	24B	24	12	25		102.65	102.25		
	25A	25	12	5		95.75	95.55		
	25B	25	12	25		95.95	95.55		
	26A	26B	12	21		94.35	94.10		
	26B	26	12	5		94.10	94.00		
	26C	26D	12	21		94.08	93.83		
	48	49	42	276		110.87	106.57		
	48A	48	15	77		113.53	113.12		
	~~48B~~	~~48C~~	~~12~~	~~48~~		~~114.73~~	~~114.47~~		
	~~48C~~	~~48A~~	~~12~~	~~23~~		~~114.47~~	~~114.33~~		
	48D	48A	12	10		114.56	114.33		
	48E	48	42	55'		111.79	110.87		
	48B	48C	12	48'		114.98	114.67		
	48C	48A	12	23		114.67	114.33		
	49C	49B	18	23		111.67	110.37		

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	49	203+30 B.D. - 41' Rt.	12	Q	116.13	9.56	
	~~49A~~	~~202+19 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~116.15~~	~~4.64~~	
	49B	203+30 B.D. - 55' Rt.	34	W	115.83	4.50	
	50	206+05 B.D. - 41' Rt.	12	Q	109.73	9.81	
	~~50A~~	~~206+05 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~109.61~~	~~4.50~~	
	50B	206+05 B.D. - 55' Rt.	34	W	109.43	4.50	
	51	208+80 B.D. - 41' Rt.	Special M.H.	Q	101.99	8.49	
	~~51A~~	~~208+80 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~101.87~~	~~4.50~~	
	51B	208+80 B.D. - 55' Rt.	34	W	101.69	4.50	
	52	211+50 B.D. - 41' Rt.	Special M.H.	Q	98.97	8.97	
	~~52A~~	~~211+50 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~98.85~~	~~5.69~~	
	~~52B~~	~~211+75 B.D. - 15' Rt.~~	~~34~~	~~W~~	~~98.85~~	~~4.50~~	
	52C	211+50 B.D. - 55' Rt.	34	W	98.67	4.18	
	52D	211+75 B.D. - 55' Rt.	34	W	98.67	4.05	
	53	213+35 B.D. - 41' Rt.	Special M.H.	Q	99.30	10.15	
	53A	213+35 B.D. - 81' Rt.	11	X	97.30	5.50	
	54	214+41 B.D. - 41' Rt.	---	---	----	----	
		203+19 - 5' RT.	35	W	116.00	2.30	Outfall at Box Culvert
	52E	~~211+42± 19'± Rt.~~					Connect 12" Pipe
		204+54 B.D. - 11' RT.	35	W	112.38	4.50	into 24" Pipe
	49A	203+19 B.D. - 15' RT.	35	WQ	116.15	2.45	
	50A	206+05 B.D. - 15' RT.	35	W.	109.61	2.41	
	51A	208+80 B.D. - 15' RT.	35	W.	101.87	2.32	**
	52A	211+50 B.D. - 15' RT.	35	W	98.85	2.39	
	52B	211+75 B.D. - 15' RT.	35	W.	98.85	2.59	
		204+67 B.D. - 81' LT.	34	W	110.53	4.50	
		205+91 B.D. - 59' LT.	34	W	108.29	4.50	

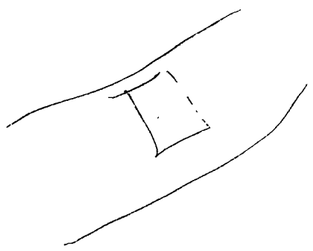
STORM SEWER

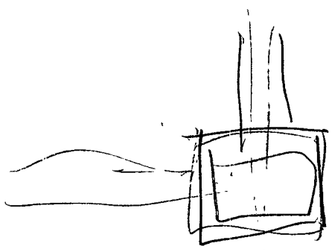
Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
	49	50	42	271		106.57	101.77		
	~~49A~~	~~49~~	~~12~~	~~23~~		~~111.51~~	~~109.07~~		
	49B	49	12	9		111.33	109.07		
	50	51	42	271		99.92	94.22		
	~~50A~~	~~50~~	~~12~~	~~21~~		~~105.11~~	~~104.27~~		
	50B	50	12	9		104.93	104.27		
	51	52	54	266		93.50	90.50		
	~~51A~~	~~51~~	~~12~~	~~21~~		~~97.37~~	~~96.72~~		
	51B	51	12	9		97.19	96.72		
	52	53	60	181		90.00	89.15		
	~~52A~~	~~52E~~	~~12~~	~~6~~		~~93.16~~	~~92.76~~		
	~~52B~~	~~52A~~	~~12~~	~~21~~		~~94.35~~	~~93.51~~		
	52C	52	12	9		94.49	94.42		
	52D	52C	12	21		94.62	94.49		
	53	54	60	104		89.15	88.65		
	53A	53	18	35		91.80	91.40		
	49A	49	12	23		113.70	109.07		
	50A	50	12	21		107.20	104.27		
	51A	51	12	21		99.55	96.72		
	52A	52B	12	21		96.46	96.26		
	52B	52	12	32		96.26	95.00		

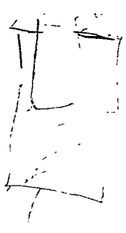
** ADD 4-#4 REINF. BARS, 2'-6" LONG @ 1'-0" IN N.-S. DIRECTION, IN FOOTING OF INLET 51A

1) Inlet (New)
   a single grate
   b double grate

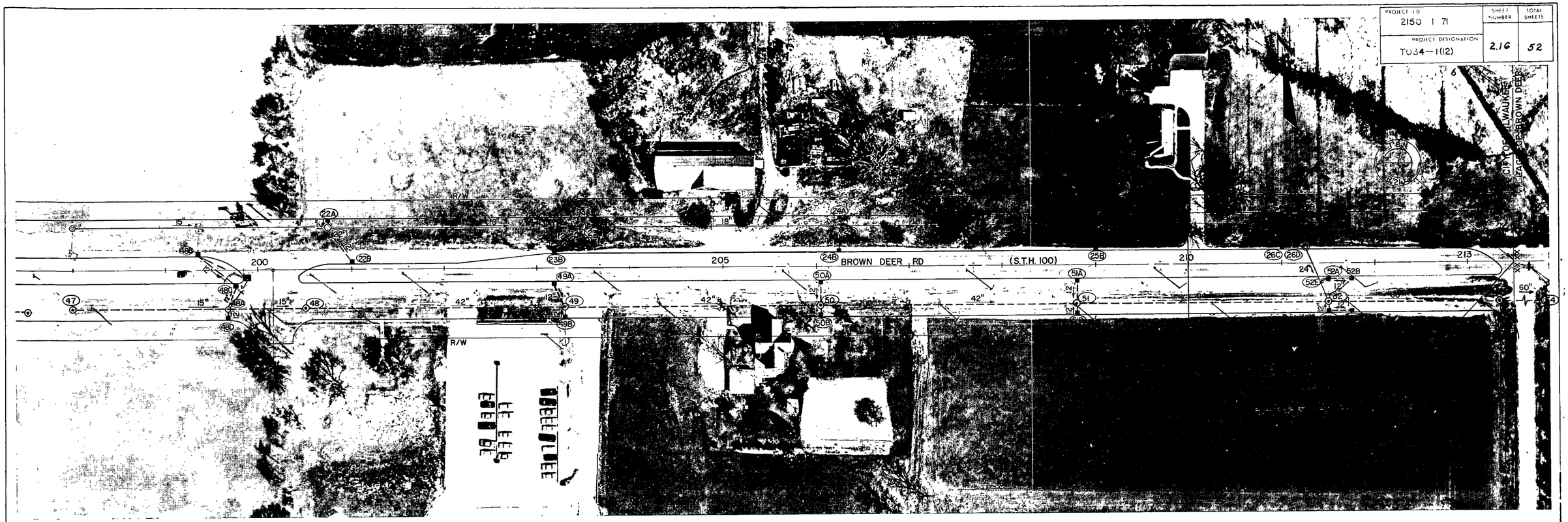
2) Pipe Size
   1) New Inlet - 49B
   2) 49B - 49







PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 - 1 - 71	2.16	52
PROJECT DESIGNATION: TO34-1(12)		



DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	22	200+75 B.D - 45' Lt.			116.78		Existing M.H.
	22A	200+75 B.D.- 55' Lt.	34	W	116.54	4.41	
	22B	201+00 B.D.- 5' Lt.	34	W	116.38	4.07	
	23	203+50 B.D.- 45' Lt.			114.28		Existing M.H.
	23A	203+50 B.D - 55' Lt.	34	W	114.04	4.54	
	23B	203+19 B.D. - 15' Lt.	34	W	114.65	4.65	
	24	206+25 B.D - 45' Lt.			107.58		Existing M.H.
	24A	206+25 B.D. - 55' Lt.	34	W	107.34	4.89	
	24B	206+25 B.D. - 15' Lt.	34	W	107.52	4.87	
	25	209+00 B.D. - 45' Lt.			100.50		Existing M.H.
	25A	209+00 B.D. - 55' Lt.	34	W	100.26	4.51	
	25B	209+00 B.D. - 15' Lt.	34	W	100.44	4.49	
	26	211+25 B.D. - 45' Lt.			98.69		Existing M.H.
	26A	211+00 B.D - 55' Lt.	34	W	98.46	4.11	
	26B	211+25 B.D. - 55' Lt.	34	W	98.45	4.35	
	26C	211+00 B.D. - 15' Lt.	34	W	98.64	4.56	
	26D	211+25 B.D - 15' Lt.			98.63	3.44	Existing M.H.
	48	200+50 B.D. - 41' Rt.	Special M.H.	Q	118.54	~~7.67~~	See Note *
	48A	199+69 B.D - 41' RT	11	Q	119.17	~~5.64~~ 6.47	
	48B	199+39 B.D - 15' LT 9'	35	W	117.79	3.06	
	48C	199+79 B.D - 15' RT.	34	W	118.97	~~4.59~~ 4.78	
	48D	199+69 B.D. - 55' RT.	34	W	118.87	4.31	
		86			118.58		

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
22A	22	12	5			112.13	111.85		
22B	22	12	41			112.31	111.85		
23A	23	12	5			109.50	109.30		
23B	23	12	39			110.00	109.30		
24A	24	12	5			102.45	102.25		
24B	24	12	25			102.65	102.25		
25A	25	12	5			95.75	95.55		
25B	25	12	25			95.95	95.55		
26A	26B	12	21			94.35	94.10		
26B	26	12	5			94.10	94.00		
26C	26D	12	21			94.08	93.83		
48	49	42	276		110.05	110.87	106.57		
48A	48	15	77		11.70	113.53	113.12		
48B	48C	12	~~54~~ 48			114.73	114.47	114.00	Bottom
48C	48A	12	~~36~~ 33		1.80	114.47	114.33	112.70	
48D	48A	12	10			114.56	114.33		

* PROVIDE 42" CONNECTION. DIRECTION S45°W, FLOW LINE ELEV 110.87

DRAINAGE STRUCTURES

Sec.	Code	Location	Type Str.	Type Cover	Grate Elev.	Depth	Remarks
	49	203+30 B.D. - 41' Rt.	12	Q	116.13	9.56	
	49A	203+19 B.D. - 15' Rt.	34	W	116.15	~~4.64~~ 2.45	
	49B	203+30 B.D. - 55' Rt.	34	W	115.83	4.50	
	50	206+05 B.D. - 41' Rt.	12	Q	109.73	9.81	
	50A	206+05 B.D. - 15' Rt.	34	W	109.61	~~4.50~~ 2.63	
	50B	206+05 B.D. - 55' Rt.	34	W	109.43	4.50	
	51	208+80 B.D. - 41' Rt.	Special M.H.	Q	101.99	8.49	
	51A	208+80 B.D. - 15' Rt.	34	W	101.87	4.50 (1.30)	
	51B	208+80 B.D. - 55' Rt.	34	W	101.69	4.50	
	52	211+50 B.D. - 41' Rt.	Special M.H.	Q	98.97	8.97	
	52A	211+50 B.D. - 15' Rt.	34	W	98.85	~~5.89~~ 2.39	
	52B	211+75 B.D. - 15' Rt.	34	W	98.85	~~4.50~~ 2.59	
	52C	211+50 B.D. - 55' Rt.	34	W	98.67	4.18	
	52D	211+75 B.D. - 55' Rt.	34	W	98.67	4.05	
	53	213+35 B.D. - 41' Rt.	Special M.H.	Q	99.30	10.15	
	53A	213+35 B.D. - 81' Rt.	11	X	97.30	5.50	
	54	214+41 B.D - 41' Rt.	---	---	---	---	Outfall at Box Culvert
	~~52E~~	~~211+42 ± 19' ± Rt.~~			~~96.71~~		~~Connect 12" Pipe into 24" Pipe~~

STORM SEWER

Code	Location From	Location To	Size (In.)	Length (Ft.)	Grade %	Invert Elev. Inlet	Invert Elev. Disch'g.	Type of Pipe	Remarks
49	50	42	271			106.57	101.77		
49A	49	12	23		113.70	~~111.51~~	109.07		
49B	49	12	9			111.33	109.07		
50	51	42	271			99.92	94.22		
50A	50	12	21			105.11	104.27		
50B	50	12	9			104.93	104.27		
51	52	54	266			93.50	90.50		
51A	51	12	21			97.37	96.72		
51B	51	12	9			97.19	96.72		
52	53	60	181			90.00	89.15		
52A	52	12	~~21~~ 21	90.40		~~93.16~~	~~92.76~~	96.26	
52B	52C	12	~~21~~ 32	96.26		~~94.35~~	~~93.51~~	95.00	
52C	52	12	9			94.49	94.42		
52D	52C	12	21			94.62	94.49		
53	54	60	104			89.15	88.65		
53A	53	18	35			91.80	91.40		
						~~92.55~~	~~92.10~~		~~95.69~~ 94.01

ESTIMATE OF QUANTITIES

CONTRACT NO. 1 (2150-1-71)
GRADING, BASE, AND
SURFACING (PCC).

BPR REGION	PROJECT	SHEET NO	TOTAL SHEETS
4	T034-1 (12)	3	52

THIS PROJECT IS TO BE EXECUTED UNDER THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE WISCONSIN DIVISION OF HIGHWAYS—EDITION OF 1969, AND SPECIAL PROVISIONS AS ATTACHED TO PROPOSALS.

SEC NO	STATION TO STATION	NET LENGTH OF CENTER LINE	CLEARING	GRUBBING	REMOVING OLD CULVERT	REMOVING OLD BRIDGE	REMOVING PAVEMENT	REMOVING CURB AND GUTTER	EXCAVATION UNCLASSIFIED	EXCAVATION ROCK	EXCAVATION MARSH	EXCAVATION BORROW	GRANULAR BACKFILL	TEST ROLLING	PREP FOUNDATION FOR	GRANULAR SUBBASE COURSE	FINISHING ROADWAY	OBLITERATING OLD ROAD	CRUSHED AGGREGATE BASE COURSE		CONCRETE BASE COURSE		BITUM MAT FOR PRIME COAT	BITUMINOUS CONCRETE PAVEMENT	BITUM MAT FOR SURFACE COURSE	CONCRETE PAVEMENT 9-INCH	CONCRETE PAVEMENT 11-INCH	CONCRETE DRIVEWAY	CONCRETE HEADER	CONCRETE SURFACE DRAINS	CONCRETE PAVEMENT REINF
	ITEM NO		20101	20102	20104	20105	2030	20302	2035		20401	20405	20503	20502	20505	20801	20901	21001	211	2120	21301	21401	30404	30	30	30	4020	40701	40702	40909	40911	40931	40933	40934	40950
	UNIT	LIN FT	STA	IN DIA	STA	IN DIA	L S	L.S.	S		S.Y.	L.F.	C.Y	C.Y	C.Y	C.Y	C.Y	L.S	L.S.		L.S.	STA.	TON		S.Y	S.Y		TON	TON	S.Y	S.Y	S.Y	S.Y	C.Y	S.Y
1	W. BROWN DEER ROAD			1150		1550	1	1			15,200	1170	71,600				100				1		25600					350	19	60,400	100				59,260
	STA. 130+75 TO 213+49.19	6875.89																																
2	STATE NON-PARTICIPATING ——																														300			
T	TOTAL	6875.89		1150		1550	1	1			15,200	1170	71,600				100				1		25,600					350	19	60,400	100	300			59,260

BRIDGES (STRUCTURES OVER 20 FT. SPAN)

SEC NO	REMOVE OLD BRIDGE STA	EXCAVATION FOR STRUCTURES	BAR STEEL REINF	STRUCTURAL CARBON STEEL	UNPAINTED STEEL	BARS	PILES	TRT'D LUMBER AND TIMBER	UNTR'D TIMBER TEST PILING	UNTREATED TIMBER PILING DELIVERED	UNTREATED TIMBER PILING DRIVEN	TREATED TIMBER PILING DELIVERED	TREATED TIMBER PILING DRIVEN	CAST IN PLACE CONC TEST PILING	CAST-IN-PLACE CONCRETE PILING DELIVERED	CAST-IN-PLACE CONCRETE PILING DRIVEN	RAILING	FLOOR DRAINS TYPE	FLOOR DRAINS TYPE	DOWNSPOUT 6"	SLOPE PAVING CONCRETE	RIP-RAP
	20251	20601	20901	50401	50501	50502	50601	50702	50801	50810	50813	50816	50820	51001	51010	51015	513	5140	5140	51426	60404	6060
	L S	C Y	C Y	C Y	L B	L B	M B M	L S		L F	L F	L F	L F	L S	L F	L F	L F	EACH	EACH	L F	S F	C Y
1																						
2																						
T																						

CULVERTS (STRUCTURES 20 FT. SPAN & UNDER)

SEC NO	REMOVE OLD CULVT STA	EXCAVATION FOR STRUCTURES	GRANULAR BACKFILL	CONCRETE MASONRY	BAR STEEL REINF	STRUCTURAL CARBON STEEL	TRT'D LUMBER AND TIMBER	UNTR'D TIMBER TEST PILING	TREATED TIMBER PILING DELIVERED	TREATED TIMBER PILING DRIVEN	FLOOR DRAINS TYPE	RIP-RAP
	20301	20602	20901	50401	50502	50601	50702	50801	50816	50820	5140	6060
	L S	C Y	C Y	C Y	L B	L B	M B M	L S	L F	L F	EACH	C Y
1												
2												
T												

| SEC NO | RUBBLE MASONRY MORTAR | RUBBLE MASONRY DRY | REINFORCED CONCRETE PIPE, CLASS III, STORM SEWER 12 INCH | 15 INCH | 18 INCH | 21 INCH | 24 INCH | 30 INCH | 36 INCH | 42 INCH | 48 INCH | 54 INCH | 60 INCH | APRON ENDWALLS FOR 12 | 15 | 18 | 21 | 24 | CLASS III CULVERT PIPE, 18 INCH | CONCRETE CURB | CONCRETE CURB AND GUTTER 31-INCH | CONCRETE S.DE WALK 5-INCH | CONCRETE LOADING ZONE | DITCH CHECKS | RIP-RAP | HEAVY RIP-RAP | | | | | | MANHOLES TYPE 11 | MANHOLES TYPE 12 | MANHOLES TYPE 13 | MANHOLES TYPE 14 | INLETS TYPE 34 | INLETS TYPE 35 | SPECIAL MANHOLE | MANHOLE COVERS TYPE | MANHOLE COVERS TYPE Q | MANHOLE COVERS TYPE | INLET COVERS TYPE W | INLET COVERS TYPE X | METAL CONDUIT 2-INCH | METAL CONDUIT 3-INCH | FIBER CONDUIT 3-INCH | MARKER POSTS | CALCIUM CHLORIDE SURFACE TREATMENT | FIELD LABORATORY | SALVAGED TOPSOIL | FERTILIZER | SEEDING | MULCHING | FIELD OFFICE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 - 1 - 71	3A	52
PROJECT DESIGNATION: T034-1(12)		

CLEARING & GRUBBING

Sec.	Station To Station	Clear. In. Dia.	Grub. In. Dia.
1	Brown Deer Rd.		
	126+45 to 133+82 - Lt.	24	24
	126+45 to 133+82 - Rt.	0	292
	133+82 to 147+15 - Lt.	38	38
	133+82 to 147+15 - Rt.	0	93
	147+15 to 156+70 - Lt.	227	227
	147+15 to 156+70 - Rt.	29	29
	156+70 to 175+00 - Lt.	123	123
	156+70 to 175+00 - Rt.	62	62
	175+00 to 178+51.90 - Lt.	0	0
	175+00 to 178+51.90 - Rt.	0	0
	192+50.20 to 203+51 - Lt.	180	180
	192+50.20 to 203+51 - Rt.	165	165
	203+51 to 213+49.19 - Lt.	242	242
	203+51 to 213+49.19 - Rt.	60	75

REMOVING PAVEMENT

Sec.	Location	Sq. Yd.
1	127+95 B.D. to 173+16.90 B.D.	11,095
	196+69.70 B.D. to 213+49.19 B.D.	4,105

REMOVING CURB AND GUTTER

Sec.	Location	Lin. Ft.
1	175+67 B.D. to 178+51.90 B.D.	566
	192+50.20 B.D. to 195+50 B.D.	604

GRANULAR BACKFILL

Sec.	Location	Cu. Yd.
1	156+18 B.D.	21
	165+70 B.D.	17
	Miscellaneous	62

CRUSHED AGGREGATE BASE COURSE

Sec.	Location	Ton
1	Brown Deer Rd.	
	126+45 to 127+95 - Lt. (9 in.)	84
	127+95 to 130+75 - Lt. (6 in.)	346
	127+95 to 130+75 - Rt. (6 in.)	306
	126+45 to 127+95 - Lt. Shoulder (6 in.)	56
	127+95 to 130+75 - Lt. Shoulder (6 in.)	88
	127+95 to 130+75 - Rt. Shoulder (6 in.)	96
	130+75 to 178+51.90 - Lt. Mainline (6 in.)	7638
	130+75 to 137+00 - Median (6 in.) Openings and Lt. Turn Lanes	342
	133+17 to 134+53 - Lt. Apron (6 in.)	100
	130+75 to 178+51.90 - Rt. Mainline (6 in.)	7638
	133+12 to 134+48 - Rt. Apron (6 in.)	92
	146+50.4 to 147+72.1 - Median Opening (6 in)	74
	156+09 to 157+30.7 - Median Opening (6 in)	74
	171+90 to 175+67 - Lt. Turn Lane and Median Opening (6 in.)	172
	192+50.20 to 210+00 - Lt. Mainline (6 in)	2800
	192+33 to 195+25 - Lt. Turn Lane (6 in)	88
	192+50.20 to 210+00 - Rt. Mainline (6 in)	2800
	210+00 to 213+49.19 - Rt. Mainline (9 in)	838
	210+00 to 213+49.19 - Lt. Mainline (9 in)	838
	212+93 to 213+49.19 - Median Opening (9 in)	36
	17+68 to 19+18 - 91st St. (6 in)	376
	20+83 to 22+33 - 91st St. (6 in)	376
	Driveways - 127+95 to 133+82 B.D.	128
	72nd. St. Apron	46
	199+40 To 203+10-Median Opening & Left Turn Lane	168

BITUMINOUS CONCRETE PAVEMENT

Sec.	Location	Ton
1	126+45 B.D. to 127+95 B.D. (4 1/2")	44
	126+45 B.D. to 127+95 B.D. (Variable Thickness)	43
	17+68 to 19+18 - 91st St. (3")	131
	20+83 to 22+33 - 91st St. (3")	132

CONCRETE PAVEMENT, 9-INCH ** CONCRETE PAVEMENT REINFORCEMENT

Sec.	Location	Sq. Yd.
1	Brown Deer Rd.	
	127+95 to 129+50 - Lt.	300*
	129+50 to 130+75 - Lt.	100*
	127+95 to 130+75 - Lt.	467
	127+95 to 130+75 - Rt.	840*
	130+75 to 178+51.90 - Lt. Mainline	19,113
	130+75 to 137+00 - Median Openings and Lt. Trun Lanes	1138
	133+17 to 134+53 - Lt. Apron	293
	130+75 to 178+51.90 - Rt. Mainline	19,113
	133+12 to 134+48 - Rt. Apron	281
	146+50 to 147+72- Median Opening	239
	156+09 to 157+31 - Median Opening	239
	171+90to 175+67- Lt. Turn Lane and Median Opening	568
	192+50.20 to 213+49.19 - Lt. Mainline	8,396
	192+33 to 195+25 - Lt. Turn Lane	271
	199+40to 203+10 - Lt. Turn Lanes and Intersection	512
	200+15 Rt. Apron	144
	212+93 to 213+49.19 Median Opening	90
	192+50.20 to 213+49.19 - Rt. Mainline	8,396

* NO REINFORCEMENT

** Includes Concrete Pavement, 11-Inch

CONCRETE DRIVEWAY

Sec.	Location	Sq. Yd.
2	Brown Deer Rd.	
	126+45 to 133+82	110
	133+82 to 147+11	29
	147+11 to 158+00	57
	158+00 to 178+51.90	29
	192+50.20 to 213+49.19	75

CONCRETE SIDEWALK, 5-INCH

Sec.	Location	Sq. Ft.
1	Median Noses At 91st. St.	92

CONCRETE CURB AND GUTTER, 31-INCH

Sec.	Location	Lin. Ft.
1	Brown Deer Rd.	
	128+20 to 131+25 - Median	597
	130+75 to 133+82 - Lt.	288
	131+25 to 133+82 - Median	390
	130+75 to 133+82 - Rt.	279
	133+82 to 178+51.90 - Lt.	4442
	133+82 to 136+25 - Median	390
	136+25 to 147+00- Median	2108
	147+00to 156+50 - Median	1830
	156+50 to 175+00 - Median	3555
	175+00 to 178+51.90 - Median	654
	133+82 to 178+51.90 - Rt.	4446
	192+50.20 to 200+00 - Lt.	775
	200+30 to 213+49.19 - Lt.	1329
	192+33 to 200+00- Median	1515
	200+00to 213+49.19 - Median	2630
	192+50.20 to 200+00 - Rt.	760
	200+30 to 213+27 - Rt.	1312

CONCRETE LOADING ZONE

Sec.	Location	Sq. Ft.
1	18+75 to 19+18 - 91st st.	320
	20+83 to 21+65.5 - 91st St.	620

METAL CONDUIT, 2-INCH

Sec.	Location	Lin. Ft.
1	131+30 B.D. - LT.	44
	136+30 B.D. - Rt.	44

METAL CONDUIT, 3-INCH

Sec.	Location	Lin. Ft.
1	133+15 B.D. - Lt.	44
	133+15 B.D. - Rt.	54
	19+14 91st - Lt.	44
	19+14 91st - Rt.	44
	20+87 91st - Lt.	44
	20+87 91st - Rt.	44
	134+45 B.D. - Lt.	56
	134+45 B.D. - Rt.	45
	174+40 B.D. - Lt.	44
	174+40 B.D. - Rt.	54
	175+47 B.D. - Lt.	47
	175+47 B.D. - Rt.	47
	213+25 B.D. - Lt.	53
	213+25 B.D. - Rt.	43

FIBER CONDUIT, 3-INCH

Sec.	Location	Lin. Ft.
1	131+00 B.D. - Rt.	46
	131+00 B.D. - Rt.	46
	136+65 B.D. - Lt	46
	136+65 B.D. - Lt.	46
	172+40 B.D. - Rt.	49
	172+40 B.D. - Rt.	49
	177+47 B.D. - Lt.	43
	177+47 B.D. - Lt.	43
	211+25 B.D. - Rt.	43
	211+25 B.D. - Rt.	43

SALVAGED TOPSOIL

Sec.	Location	Sq. Yd.
1	Brown Deer Rd.	
	126+45 to 127+95 - Lt. & Rt.	177
	127+95 to 130+75 - Lt.	276
	128+23 to 131+25 - Median	556
	127+95 to 130+75 - Rt.	244
	130+75 to 133+82 - Lt.	609
	131+25 to 133+82 - Median	413
	130+75 to 133+82 - Rt.	763
	133+82 to 178+51.90 - Lt.	18000
	133+82 to 136+25 - Median	396
	136+25 to 147+00 - Median	3290
	147+00 to 156+50 - Median	2861
	156+50 to 175+00 - Median	5411
	175+00 to 178+51.90 - Median	1009
	133+82 to 178+51.90 - Rt.	12000
	192+50.20 to 213+49.19 - Lt.	8664
	192+33 to 200+15.40 - Median	2015
	200+15.40 to 213+49.19 - Median	3910
	192+50.20 to 200+15.40 - Rt.	2213
	200+15.40 to 213+49.19 - Rt.	3584
	17+68 to 19+18 - 91st St.	332
	20+82.9 to 22+33 - 91st St.	327

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150-1-71	38	52
PROJECT DESIGNATION: T034-1(12)		

W. BROWN DEER RD. (S.T.H. 100) Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
126+45		
	Ⓐ 4	10
	Ⓑ 5	10
127+00	22	17
	26	17
127+50	42	23
	50	23
128+00	53	28
	64	28
128+50	124	24
	149	24
129+00	141	37
	170	37
129+50	100	48
	121	48
130+00	113	72
	136	72
130+50	183	140
	219	140
131+00	178	227
	213	227
131+50	116	269
	139	269
132+00	86	277
	103	277
132+50	82	222
	99	222
133+00	99	187
	119	187
133+50	41	352
	49	352
134+00	25	361
	30	361
134+50	25	365
	30	365
135+00		626
		626
135+50		891
		891
136+00		1112
		1112
138+50		1178
		1178
137+00		1131
		1131
137+50		1134
		1134
138+00		1115
		1115
138+50		1054
		1054
139+00		1065
		1065
139+50		1149
		1149
140+00		1373
		1373
140+50		1697
		1697
141+00		2134
		2134
141+50		2642
		2642
142+00		2999
		2999
142+50		3158
		3158
143+00		

STA	FILL VOLUME	CUT VOLUME
143+00		3158
		3158
143+50		3119
		3119
144+00		2776
		2776
144+50		2277
		2277
145+00		1810
		1810
145+50		1309
		1309
146+00	29	829
	35	829
146+50	164	488
	197	488
147+00	300	277
	360	277
147+50	342	128
	410	128
148+00	348	54
	417	54
148+50	334	32
	401	32
149+00	350	31
	420	31
149+50	463	31
	556	31
150+00	522	37
	626	37
150+50	443	84
	532	84
151+00	374	201
	449	201
151+50	337	312
	404	312
152+50	369	420
	443	420
152+50	460	555
	552	555
153+00	555	619
	666	619
153+50	609	516
	731	516
154+00	624	375
	749	375
154+50	655	320
	786	320
155+00	705	217
	846	217
155+50	791	153
	948	153
156+00	747	238
	897	238
156+50	742	257
	890	257
157+00	691	179
	829	179
157+50	559	171
	671	171
158+00	519	251
	622	251
158+50	436	394
159+00	523	394
	259	599
	311	599
159+50	124	766
	155	766
160+00	41	940
	49	940
160+50		968
		968
161+00	22	655
	27	655
161+50		

STA	FILL VOLUME	CUT VOLUME
161+50	128	269
	153	269
162+00	268	96
	322	96
162+50	367	101
	440	101
163+00	407	136
	488	136
163+50	392	167
	470	167
164+00	388	178
	466	178
164+50	410	185
	492	185
165+00	406	200
	487	200
165+50	459	216
	550	216
166+00	442	194
	530	194
166+50	363	120
	435	120
167+00	301	104
	361	104
167+50	206	258
	247	258
168+00	144	424
	172	424
168+50	108	418
	130	418
169+00	76	376
	91	376
169+50	40	326
	48	326
170+00	76	242
	91	242
170+50	156	187
	187	187
171+00	239	142
	287	112
171+50	311	54
	373	54
172+00	376	32
	451	32
172+50	386	24
	463	24
173+00	396	23
	475	23
173+50	313	19
	616	19
174+00	590	23
	708	23
174+50	563	32
	674	32
175+00	554	27
	666	27
175+50	589	37
	708	37
176+00	603	68
	724	68
176+50	604	113
	724	113
177+00	610	160
	732	160
177+50	607	190
	728	190
178+00	628	226
	754	226
178+52		
192+50		
	346	344
193+00	415	344
	580	304
193+50	697	304

STA	FILL VOLUME	CUT VOLUME
193+50		
	377	223
194+00	692	223
	532	140
194+50	639	140
	438	144
195+00	525	144
	315	179
195+50	378	179
	165	402
196+00	198	402
	52	534
196+50	62	534
	144	391
197+00	173	391
	291	377
197+50	349	377
	350	405
198+00	420	405
	433	349
198+50	520	349
	499	283
199+00	599	283
	509	248
199+50	612	248
	502	262
200+00	603	262
	488	296
200+50	586	296
	497	316
201+00	596	316
	504	308
201+50	605	308
	453	327
202+00	545	327
	404	328
202+50	485	328
	455	260
203+00	546	260
	511	262
203+50	613	262
	467	267
204+00	560	267
	351	254
204+50	421	254
	149	387
205+00	179	387
	94	512
205+50	114	512
	169	546
206+00	203	546
	131	587
206+50	157	587
	101	560
207+00	121	560
	86	450
207+50	102	450
	63	404
208+00	75	404
	35	429
208+50	43	429
	26	396
209+00	31	396
	28	323
209+50	33	323
	36	296
210+00	44	296
	110	229
210+50	132	229
	215	131
211+00	258	131
	322	91
211+50	386	91
	470	83
212+00	564	83

STA	FILL VOLUME	CUT VOLUME
212+00	667	29
	800	29
212+50	815	13
	978	13
213+00	856	5
	1027	5
213+50		

91st STREET Yardage Tabulation

STA	FILL VOLUME	CUT VOLUME
17+68		
	Ⓑ 2	33
18+00	4	152
18+50		270
19+00		293
19+18		
20+82.9		
	34	36
21+00	59	84
21+50	36	58
22+00	12	30
23+33		

EARTHWORK SUMMARY

UNCLASSIFIED EXCAVATION	71,600	C.Y.
FILL (INCLUDING 20% SHRINKAGE FACTOR)	49,700	C.Y.
WASTE	21,900	C.Y.

Ⓐ ACTUAL FILL VOLUME (TYPICAL)
Ⓑ FILL VOLUME INCREASED BY 20% SHRINKAGE FACTOR (TYPICAL)

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS	4	
CONST PROJECT T034-1(12) /2150-1-70					4	52

STANDARD ABBREVIATIONS

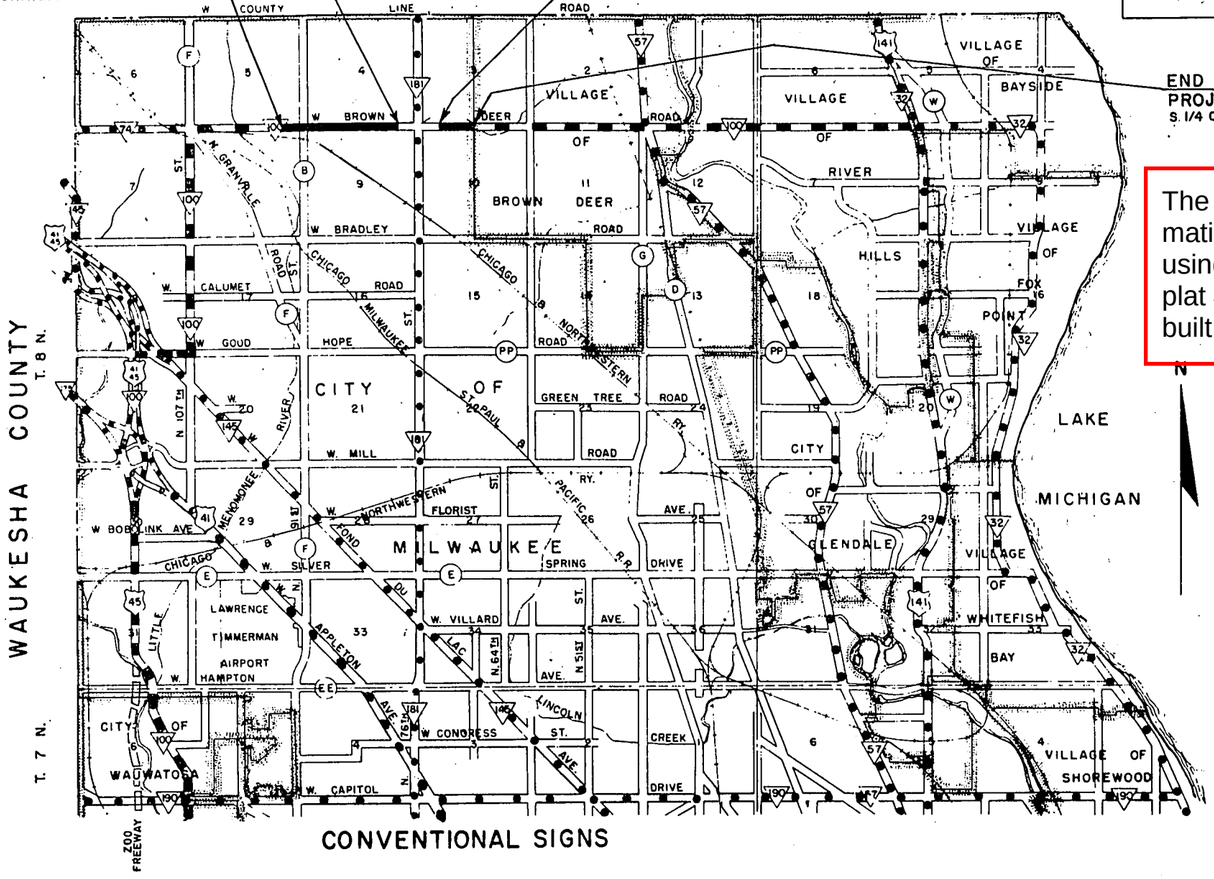
ABANDON	ABND.	MAILING ADDRESS	#0000
ABSTRACT	ABS.	MANHOLE	M.H.
ACCESS POINT	A.P.	MANUFACTURING	MFG.
ACRES	AC.	MAXIMUM	MAX.
ADDITION	ADD.	MEASURED	(M)
AGRICULTURAL	AGRI.	MILE	MI.
AHEAD	AH.	MILK ROOM	M.R.
AND OTHERS	ET. AL.	MINIMUM	MIN.
AND WIFE	ET. UX.	MONUMENT	MON.
APARTMENT	APT.	MOTEL	MO.
ASSUMED	(A)	MUNICIPAL	MCPL.
AUXILIARY REFERENCE LINE	A. R.	NORTHEAST	NE
AVENUE	AVE.	NORTHWEST	NW
BACK	BK.	NUMBER	NO.
BARN	B.	OUTLOT	O.L.
BASE LINE	B	PARALLEL	PLL.
BEARING LONG CHORD	B.L.C.	PAVEMENT	PAV'T.
BITUMINOUS	BIT.	PERMANENT	PERM.
BLOCK	BLK.	POINT OF CURVATURE	P.C.
BOULEVARD	BLVD.	POINT OF INTERSECTION	P.I.
BRICK	BRK.	POINT OF TANGENCY	P.T.
BUILDINGS	BLDGS.	POINT OF COMPOUND CURVE	P.C.C.
CATCH BASIN	C.B.	POINT OF REVERSE CURVE	P.R.C.
CEMETERY	CEM.	POINT ON CURVE	P.O.C.
CENTERLINE	℄	PRIVATE DRIVE	P.D.
CENTRAL ANGLE	Δ	PROJECT	PROJ.
CHANNEL	CH.	PROPERTY LINE	P.L.
CHANNEL CHANGE	CH. CH.	QUIT CLAIM DEED	Q.C.D.
CHICKEN HOUSE	C.H.	RADIUS	R
COMMERCIAL	COMM.	RAILROAD	RR.
COMPANY	COM.	RAILWAY	RY.
COMPUTED	(C)	REFERENCE LINE	℞
CONCRETE	CONC.	RELOCATED	REL.
CONSTRUCTION	CONST.	REQUIRED	REQ'D.
CORN CRIB	C. C.	RESIDENTIAL	RES.
CORNER	COR.	RESTAURANT	REST.
CORPORATION	CORP.	RIGHT	RT.
CORRUGATED	CORR.	RIGHT OF WAY	R/W
COUNTY	CO.	ROAD	RD.
COUNTY TRUNK HIGHWAY	C.T.H.	ROADWAY	RDWY.
CREEK	CR.	SANITARY	SAN.
CULVERT	CULV.	SCALED	(S)
DEED	(D)	SCHOOL	SCH.
DEGREE OF CURVE	D	SECTION	SEC.
DISPOSAL	DISP.	SERVICE STATION	S.S.
DISTRICT	DIST.	SEPTIC TANK	SEP.
DRIVE	DR.	SIDEWALK	SWK.
DRIVEWAY	DWY.	SHED	S.
ESTATE	EST.	SOUTHEAST	SE
EXISTING	EX.,	SOUTHWEST	SW
EXTERNAL DISTANCE	E	SPECIAL CROSSING	S.C.
FACTORY	FACT.	SPECIAL DRIVE	S.D.
FEDERAL AID PROJECT	F.A.P.	SQUARE	SQ.
FIELD ENTRANCE	F.E.	STANDARD	STD.
FIRE HYDRANT	F.H.	STATE TRUNK HIGHWAY	S.T.H.
FOOT (FEET)	FT.	STATION	STA.
FOUNDATION	FDN.	STORY	STY.
FRAME	FR.	STREET	ST.
GARAGE	G.	SUBDIVISION	SUBD.
GOVERNMENT	GOV'T.	SURVEY	(S)
GREEN HOUSE	G.H.	TANGENT	TAN.
HIGHWAY	HWY.	TANGENT LENGTH OF CURVE	T
HOTEL	HO.	TAPER	TAP.
HOUSE	H.	TAVERN	TAV.
HOUSE TRAILER	H.T.	TEMPORARY	TEMP.
INCHES	IN.	TRANSIT LINE	℄
INCORPORATED	INC.	TRANSMISSION TOWER	T.T.
INCLUSIVE	INCL.	UNITED STATES COAST & GEODETIC SURVEY	U.S.C.& G.S.
INTERSECTION ANGLE	I	UNITED STATES GEOLOGICAL SURVEY	U.S.G.S.
INTERSTATE HIGHWAY	I.H.	UNITED STATE HIGHWAY	U.S.Highway
IRON PIN	I.P.	VENDEE	VDE.
ISLAND	IS.	VENDOR	VDR.
LEFT	LT.	VITRIFIED	VIT.
LENGTH OF CURVE	L	WAREHOUSE	WH.
LESSEE	LSE.	WATER TOWER	W.T.
LESSOR	LSR.	WELL	W.
LIMITED HIGHWAY EASEMENT	L.H.E.	WINDMILL	WM.
MACHINERY SHED	M.S.	WOOD	WD.
MAGNETIC	MAG.		

END RELOCATION ORDER, SECT. 1
PROJECT T034-1(12), STA 179+00
801.90' W. SE COR. SEC 4, T8N, R21E

BEGIN RELOCATION ORDER, SECT. 1
PROJECT T034-1(12),
STA. 120+56.29,
SW COR. SE.1/4, SE.1/4,
SEC. 5, T8N. R21E.

BEGIN RELOCATION ORDER, SECT. 2
PROJECT T034-1(12), STA 193+70.15
668.25' E. OF SW. COR
SEC. 3 T8N R21E

END RELOCATION ORDER, SECT. 2
PROJECT T034-1(12), STA 213+49.19
S. 1/4 COR SEC 3. T8N, R21E



The most current Right of Way information should be viewed in DOTView using the Real Estate project ID. The plat information contained in this as-built plan may not be the final record.

LOCATION SKETCH



CONVENTIONAL SIGNS

STATE LINE	CEMETERY (Cem.)	HIGHWAY HIGHWAY SEPARATION	
COUNTY LINE	FOUNDATION (Fdn.)	HIGHWAY OVERPASS	
TOWNSHIP AND RANGE LINES	GAS PUMP ISLAND (Gas Pump)	RAIL LINE OVERPASS	
SECTION LINE	BUILDING (type)	ALL OTHER BRIDGES	
QUARTER LINE	IRON PIN I.P.	STREAM OR RIVER (name)	
SIXTEENTH LINE	POWER POLE	LAKE (name)	
NEW CENTERLINE	TELEPHONE POLE	CATTLE PASS	
NEW R/W LINE	RAIL LINE	℄ RELOCATED STREAM OR RIVER	
OLD R/W LINE	TRANSMISSION TOWER AND LINE	TRAVELED WAY (Shown only in area of Frontage Roads, Interchanges or Dual Lanes)	
PROPERTY LINE (P.L. +00.0)	UNDERGROUND CABLE MARKER		
CORPORATE LIMITS (NAME)	WELL		
SLOPE INTERCEPTS slope intercept	STONE MONUMENT		
LOT, TIE AND OTHER MINOR DASHED LINES	SEPTIC TANK		
UNDERGROUND FACILITY (POWER, TELEPHONE, TELEGRAPH, GAS, ETC.) (Name or Type)	WINDMILL		
NO ACCESS			
LIMITED HIGHWAY EASEMENT			

REVISION DATE
OCT 30-1967
SEPT. 12, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T 034 - 1(12)
BROWN DEER RD.
North 91st St. to North 68th St.
S.T.H. 100 · MILWAUKEE COUNTY

SCALE

LENGTH 1.48 MILES FEET DATED JULY 17, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B.P.R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS	4.1	
CONST PROJECT T034-1(12)/2150-1-70					4.1	52

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NUMBER	SHEET NUMBER	OWNER	INTERESTS REQUIRED	ACRES	AREA BEFORE ACRES	AREA AFTER ACRES
74(2)	4.8	Reuben Borchert	Fee & L.H.E.	0.09	1.64	1.55
82 (2)	4.4 & 4.5	Michael J. Cudahy	Fee & L.H.E	1.13	148.46	147.33
83 (2)	4.3 & 4.4	Katherine Reed Cudahy	Fee & L.H.E.	1.47	166.42	164.95
84 (2)	4.3	Humble Oil & Refining Co.	Fee & L.H.E.	0.27	0.774	0.504
85 (2)	4.3 & 4.4	Acme Block Co.	Fee & L.H.E.	0.49	6.67	6.18
86 (2)	4.4 & 4.5	The Kohl Corporation	Fee & L.H.E.	1.98	63.62	61.64
92 (2)	4.7	Security Savings & Loan Assn.	Fee & L.H.E.	0.05	0.92	0.87
93 (2)	4.7 & 4.8	Joseph Sileno	Fee & L.H.E	0.17	16.13	15.96
94 (2)	4.8	City of Milwaukee	Fee & L.H.E.	0.11	7.71	7.60
95 (2)	4.8	Marvin J. Schmit	Fee & L.H.E.	0.11	1.73	1.62
96 (2)	4.8	Est. of Joseph Raskin	Fee & L.H.E.	0.23	10.94	10.71
97 (2)	4.2 & 4.3	Metropolitan Holding Co.	Fee & L.H.E.	0.71	74.78	74.07
98 (2)	4.3	Howard Ohm	Fee	0.19	1.04	0.85
101 (2)	4.3	Arthur Blumenthal	Fee & L.H.E.	0.53	----	----
102	4.3	Clark Oil & Refining Co.	Fee	0.20	----	----
103 (2)	4.4	Wisconsin Elec. Power Co.	Modification of Easement	----		
104(3)	4.6	Wisconsin Gas Co.	Modification of Easement	---	---	---
105	4.3	Wisconsin Electric Pow. Co.	Termination of Prescriptive Rights	---	---	---
106	4.4	Wisconsin Electric Pow. Co.	Modification of Easement	---	---	---

REVISION DATE	
OCT. 30, 1967	
SEPT. 13, 1968	*

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T 034 - 1(12)

BROWN DEER RD.

North 91st St. to North 68th St.

S.T.H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.48 MILES DATED JULY 17, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS	4,2	
CONST. PROJECT T034-1(12)/2150-1-70					4.2	52

N

BEGIN RELOCATION ORDER, SECT. 1
PROJ. T034-1(12), STA. 120+56.29

METROPOLITAN HOLDING CO.
PART OF E 1/2 SE 1/4 SEC. 5 T7N R21E

SEE ALSO SHEET 4.3

T7N R21E

STA. 107+30.55

BROWN DEER RD. (S.T.H. 100)

120

170'

1155.93' E TO NE COR.

125

LAWRENCE CORP. CO.

REVISION DATE
SEPT. 13, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(12)

W. BROWN DEER RD.

N. 91ST ST. TO N. 68TH ST.

STH. 100 MILWAUKEE COUNTY

SCALE

0 50 100 FEET

LENGTH 1.16 MILES

DATED OCT. 30, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS.	4.3	
CONST. PROJECT T034-1(12)/2150-1-70					4.3	52

SEE ALSO SHEET 4.2

METROPOLITAN HOLDING CO.
PART OF E1/2 SE 1/4 SEC 5

HOWARD OHM

#9200

W.E.P. CO.

MICHAEL CUDAHY
&
KATHERINE REED CUDAHY

SEE ALSO SHEET 4.3

BROWN DEER ROAD (S.T.H. 100)

635.91' TO NW COR. E. 1/4 NE 1/4

465.91'

690.02'

N.88° 37' 25" E 255.02'

N.88° 37' 26" E 349.17'

L.H.E. (SLOPE) 0.02 AC. (TEMP.)

L.H.E. (SLOPE) 10.13 AC. (TEMP.)

L.H.E. (SLOPE) 0.18 AC. (TEMP.)

CLARK OIL & REFINING CO.

ARTHUR A. BLUMENTHAL

JOHN A. LUCAS

SEE ALSO SHEET 4.4

ACME BLOCK CORP.

N. 91ST ST.

REVISION DATE
OCT 30 1967
SEPT. 13, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT 1 034 1(12)

W. BROWN DEER RD.

North 91st St. to North 68th St.

S. T. H. 100

MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.48 MILES

DATED JULY 17, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT: STATE	CLASS AND AGREEMENT: FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS	4.4	
CONST. PROJECT T034-1(12)/2150-1-70					4.4	52

N. LI. OF SW 1/4 SEC. 4

N

MICHAEL CUDAHY
&
KATHERINE REED CUDAHY

MICHAEL J. CUDAHY

P.T. 2648.34' @ PLW W. LI. SECT. 4-8-21

LHE SLOPE
0.8± AC. (TEMP.)

SEE ALSO SHEET 4.3

SEE ALSO SHEET 4.5

+320.03

+82.03

75'

15'

40'

15'

83

82

140 — 1484' TO SEC. LI. — BROWN DEER RD. (STH 100) — 145 — 150 — 1174.65' TO E. LI., SW. 1/4 SEC. 4

573' TO NW. COR.

750' TO NW. COR.

84

85

86

106

WEPCO

LHE SLOPE
0.8± AC. (TEMP.)

SEE ALSO SHEET 4.5

LAND CONVEYED
BY WARRANTY DEED
DOC. NO. 4309070

THE KOHL CORPORATION

E 1/2 NW 1/4 LYING
N. OF C & NW RY R/W

E LI. OF W 1/2 NW 1/4

N 00°01'15" E 1145.54'
TO R/W OF C & N.W. RY.

E 1/2 - NW 1/4 SEC. 9 - T.8N. - R.21E.

75.00' PLW W. LI. SECT. 9

C & NW RY

REVISION DATE
SEPT. 13, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(12)

W. BROWN DEER RD.

N. 91ST ST. TO N. 68TH ST.

STH 100 MILWAUKEE COUNTY

SCALE

0 50 100 FEET

LENGTH 1.48 MILES

DATED OCT. 30, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT: STATE	FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS.	4.5	
CONST. PROJECT T034-1(12)/2150-1-70					4.5	52

N

1165'

T8N R21E 4 9

MICHAEL J. CUDAHY

SIDNEY KOHL, ETAL

EASEMENT TO WISCONSIN ELECTRIC POWER CO.

55'

L.H.E. SLOPE 0.68 AC. (TEMP)

SEE ALSO SHEET A 3 (82)

75' 25' 25'

20'

ROW. LINE AS DEFINED IN PROJ. T0352(10)

ACQUIRED AS PART OF PARCEL 184 ON PROJ. T0352(10)

75'

1174.65'(D) 155 160 55' 7.2'

BROWN DEER 165 RD.(STH. 100)

S.00°12'W. 2216' M.

103

75' 30' 15'

86

SEE ALSO SHEET A 4

C MATCH LINE

155+00C

C.W.E.P.CO. EASEMENT

SLOPE INTERCEPT

75'

MATCH LINE

THE SERVITE FATHERS

THE KOHL CORPORATION

E.1/2 · NW 1/4 SEC.9 LYING N. OF C.N.W. RY. R/W

EASEMENT FOR "H" FRAME TRANS. L.T. STRUCT.

S.00°12'W. 650'

35'

15'

BRUSHING EASEMENT

TRANSMISSION EASEMENT

REVISION DATE
SEPT. 13, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034 - 1(12)

W. BROWN DEER RD.

N. 91ST ST. TO N. 68TH ST.

STH 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.48 MILES

DATED OCT. 30, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS.	4.6	
CONST. PROJECT T034-1(12)/2150-1-70					4.6	52

E

SLONEY KOHL, ETAL

℄ PIPE TRANSMISSION LINE

15

15

75

20'

R.O.W. LINE AS DEFINED IN PROJ. T0352(10)

ACQUIRED AS PART OF PARCEL #164 ON PROJ. T0352(10)

END RELOCATION ORDER, SECT I PROJ. T034-1(12), STA 179+00

ACCESS RIGHTS ACQUIRED UNDER PROJ. T0352 (10)

104

170

BROWN DEER RD. (S.T.H. 100)

175

301' TO N.E. COR. SEC. 5

180

75

MATCH LINE

SLOPE INTERCEPT

5'

EASEMENT TO WISCONSIN GAS CO.

50' SERVICE FACILITIES

ACCESS RIGHTS ACQUIRED UNDER PROJ. T0352 (10)

LEGEND

DENOTES NO VEHICULAR INGRESS OR EGRESS

REVISION DATE
SEPT. 13, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(12)

W. BROWN DEER RD.

N. 91ST ST. TO N. 68TH ST.

S.T.H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.48 MILES

DATED OCT. 30, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS.	4.7	
CONST. PROJECT T 034-1(12) /2150-1-70					4.7	52

ACCESS RIGHTS ACQUIRED UNDER PROJ. T 0352 (10)

N

MAX KOHL
SIDNEY KOHL
HERBERT KOHL
ALLAN KOHL &
DOLORES KOHL SOLOVY

BEGIN RELOCATION ORDER SECT.
PROJ. T 034-1(12) STA. 192+70.5

ACQUIRED UNDER PROJ. T 0352 (10)

MATCH LINE

T 8 N
R 21 E

STATION KOHL ALONG BROWN DEER RD. PROJ. T 034-1(12)
STA. 232+88.20 ALONG N. 76TH ST. PROJ. T 0352 (10)

RELOCATE N. 76TH ST.

R/W LINE AS DEFINED

668.25'

BROWN DEER RD. (STH 100)

JOSEPH SILENO

LEGEND

DENOTES NO VEHICULAR ACCESS

REVISION DATE
SEPT. 13, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(12)

W. BROWN DEER RD.

N. 91ST ST. TO N. 68TH ST.

S.T.H. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.48 MILES

DATED OCT. 30, 1967

COUNTY AND HIGHWAY	ROUTE AND SECTION	CLASS AND AGREEMENT STATE	CLASS AND AGREEMENT FEDERAL	B. P. R. REGION DIVISION	SHEET NUMBER	TOTAL SHEETS
40.1	34.1	22.12		4 WIS.	4.6	
CONST. PROJECT T034-1(12)/2150-1-70					4.8	52

MAX KOHL
SIDNEY KOHL
HERBERT KOHL
ALLAN KOHL
DOLORES KOHL SOLOVY

ACQUIRED AS PAR. #164 PROJ. T0352(10)

R/W LINE AS DEFINED IN PROJ. T0352(10)

132' P.L. & PLL W/S L.

REUBEN BORCHERT

8 PLL W/S L.

100'

312.20' P.L. WELL

217.80' P.L.

330' S. WELL

LHE SLOPE 0.09 AC. (TEMP)

ACQUIRED AS PAR. #164 PROJ. T0352(10)

TEMPORARY CROSSOVER

T8N R21E 3 10

MILWAUKEE

BROWN DEER

449.19'

75' 20' D 505.12'(D) 1323.50' E. N.W. COR. SEC. 10

200 300 205 132' 32' 100' 210 330' 661.85'

BROWN DEER RD. (STH 100)

330.00' 331.75'

75' 15' MATCH LINE D

LHE SLOPE 0.17 AC. (TEMP.) EXCEPT FOR BLDG.

(93) SEE ALSO SHEET 4.7

JOSEPH SILENO

(94) CITY OF MILWAUKEE

LHE. SLOPE 0.11 AC. (TEMP.)

(95)

LHE SLOPE 0.11 AC. (TEMP.)

(96)

LHE SLOPE 0.23 AC. (TEMP.)

END RELOCATION ORDER SECT. PROJ. T034-1(12) STA. 213+[illegible] PROJ. T034-1(13) STA. [illegible]

30' RES. FOR STR.

227.36' 8 PLL W/W LI. E1/2 NW1/4

MARVIN F. SCHMIDT

2388.64' N. OF E.-W.

381.16' 8 PLL W/S LI. NW1/4

287.36' S. OF N. LI. & 1653.50' E. OF W. LI.

EST. OF JOSEPH RASKIN

CITY OF MILWAUKEE VILLAGE OF BROWN DEER

HAPPY HILL SCHOOL

1976.70' N. OF S. LI. NW1/4

661.72' 8 PLL W/S LI. NW1/4

655.12' 8 PLL W/S LI. NW1/4

REVISION DATE
SEPT. 13, 1968

STATE HIGHWAY COMMISSION OF WISCONSIN

PLAT OF RIGHT OF WAY REQUIRED

PROJECT T034-1(12)

W. BROWN DEER RD.

N. 91ST ST. TO N. 68TH ST.

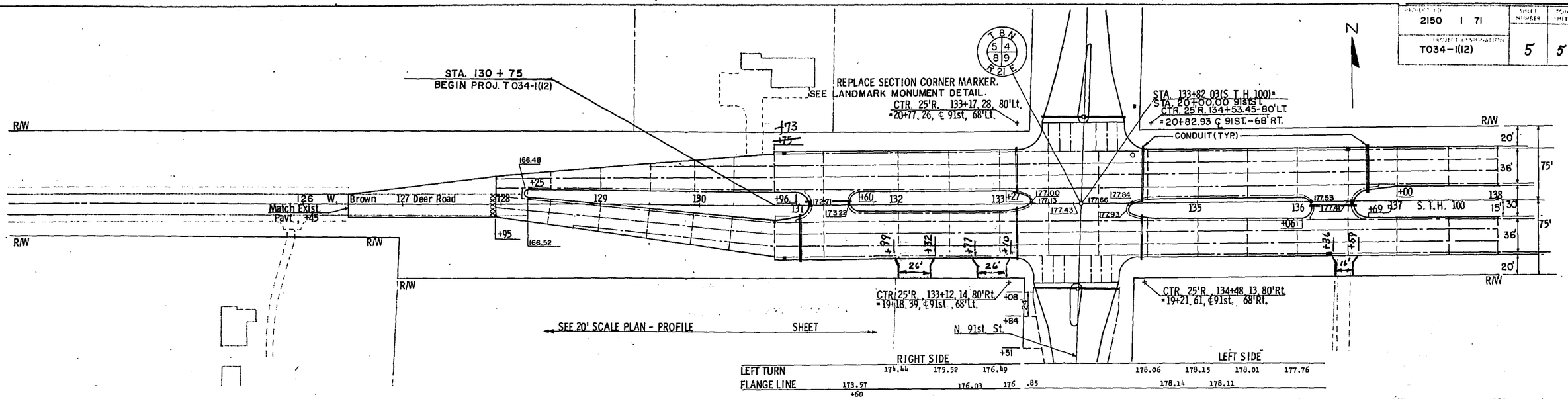
STH. 100 MILWAUKEE COUNTY

SCALE 0 50 100 FEET

LENGTH 1.48 MILES

DATED OCT. 30, 1967

PROJECT NO.	SHEET NUMBER	TOTAL SHEETS
2150 I 71		
PROJECT DESIGNATION T034-1(12)	5	52



Proposed Elevations	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138
Outer Flange Line (F/L) Left					163.86 164.77	165.81	167.10	168.13	169.15	170.17	171.19	172.24	173.32	174.41	175.49	176.46	177.20	177.73	178.04	178.12	177.98	177.73	177.48	177.23	176.98	176.73
Parkway F/L Left						166.48									176.00	176 .86	177.50	177.91	178.11	178.08						
Center F/L Left						165.83	167.20	168.28	169.36	170.44	171.52	172.60	173.68	174.77	175.85	176.82	177.56	178.09	178.40	178.48	178.34	178.09	177.84	177.59	177.34	177.09
Median F/L Left						166.51									176.36	177 .22	177.86	178.27	178.47	178.44						
						165.95	167.02	168.10	169.18	170.26	171.34	172.42	173.50	174.59	175.67	176.64	177.38	177.91	178.22	178.30	178.16	177.91	177.66	177.41	177.16	176.91
						166.48						172.96			176.18	177 .04	177.68	178.09	178.29	178.26		177.78				
Median F/L Right						166.02	167.02	168.10	169.18	170.26	171.34	172.42	173.50	174.59	175.67	176.64	177.38	177.91	178.22	178.30	178.16	177.91	177.66	177.41	177.16	176.91
												172.96			176.18	177 .04	177.68	178.09	178.29	178.26		177.78				
Center F/L Right						165.98	167.11	168.28	169.36	170.44	171.52	172.60	173.68	174.77	175.85	176.82	177.56	178.09	178.40	178.48	178.34	178.09	177.84	177.59	177.34	177.09
															176.36	177 .22	177.86	178.27	178.47	178.44						
Parkway F/L Right																										
Outer F/L Right					164.05 164.93	165.88	166.92	168.05	169.10	170.14	171.18	172.24	173.32	174.41	175.49	176.46	177.20	177.73	178.04	178.12	177.98	177.73	177.48	177.23	176.98	176.73
															176.00	176 .86	177.50	177.91	178.11	178.08						

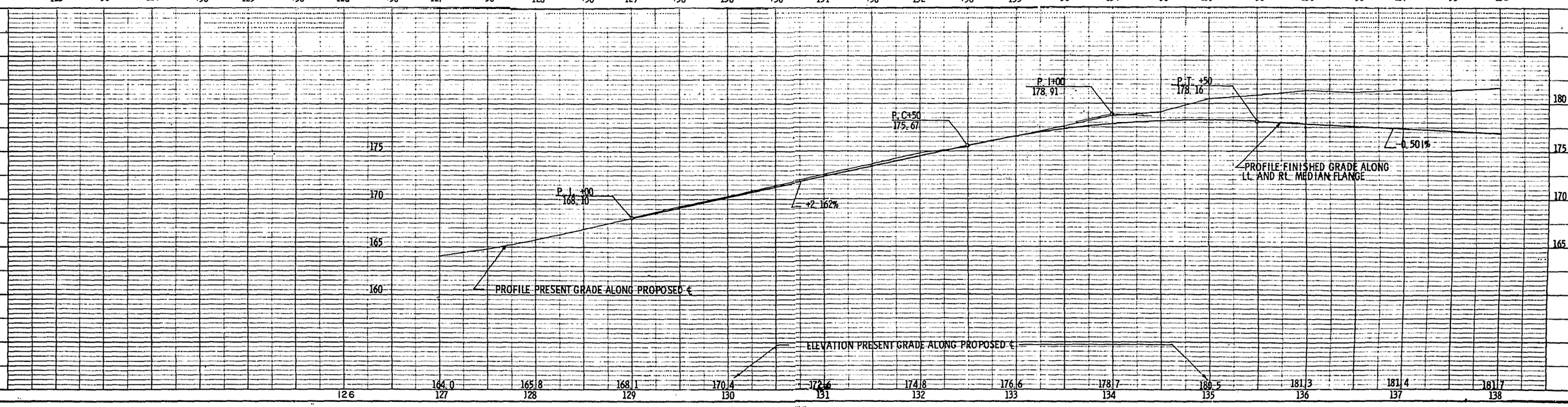
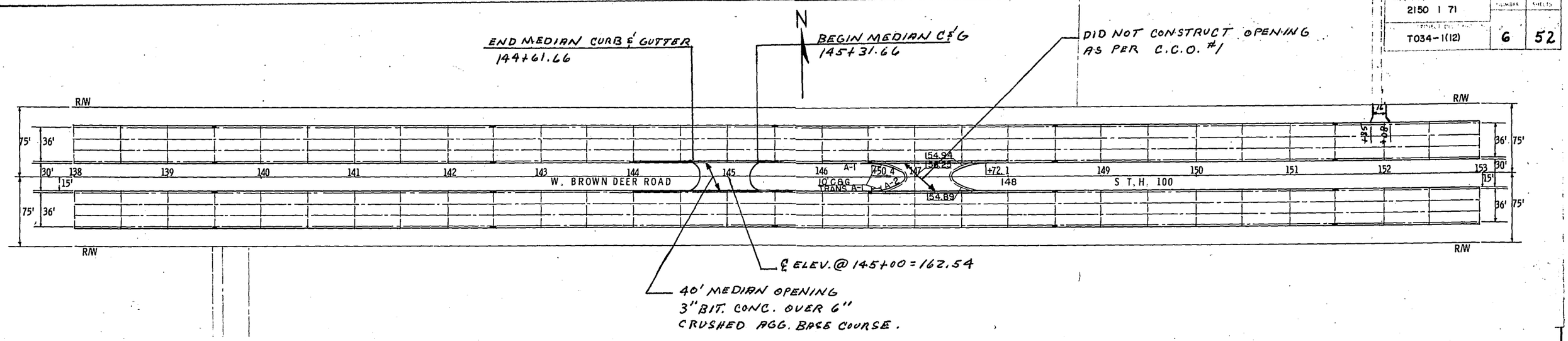


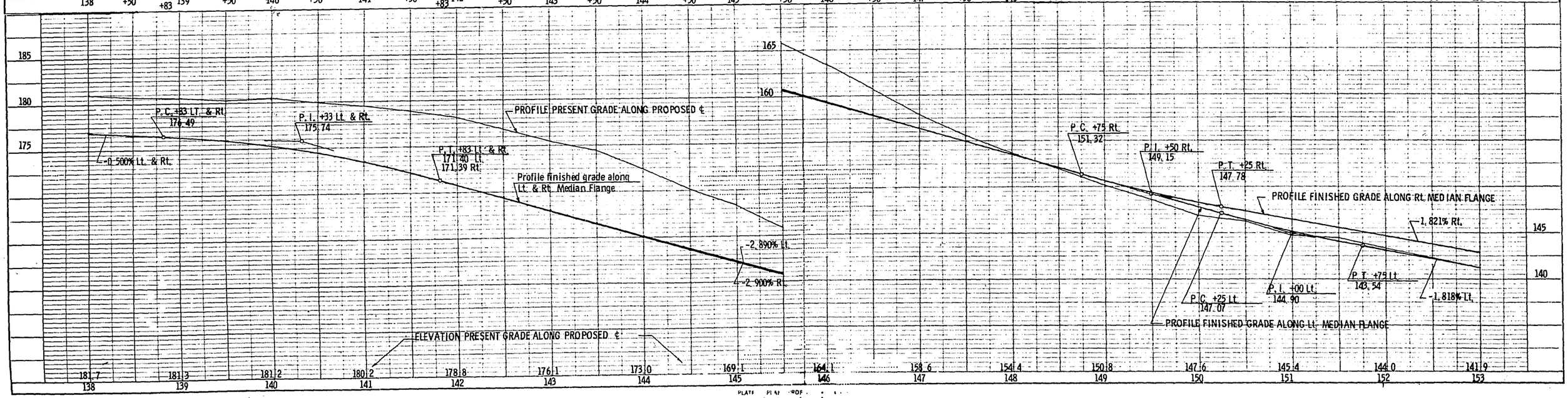
PLATE 1—PLAN—PROFILE

PROJECT NO.	SHEET NUMBER	TOTAL SHEETS
2150 I 71		
T034-1(12)	6	52

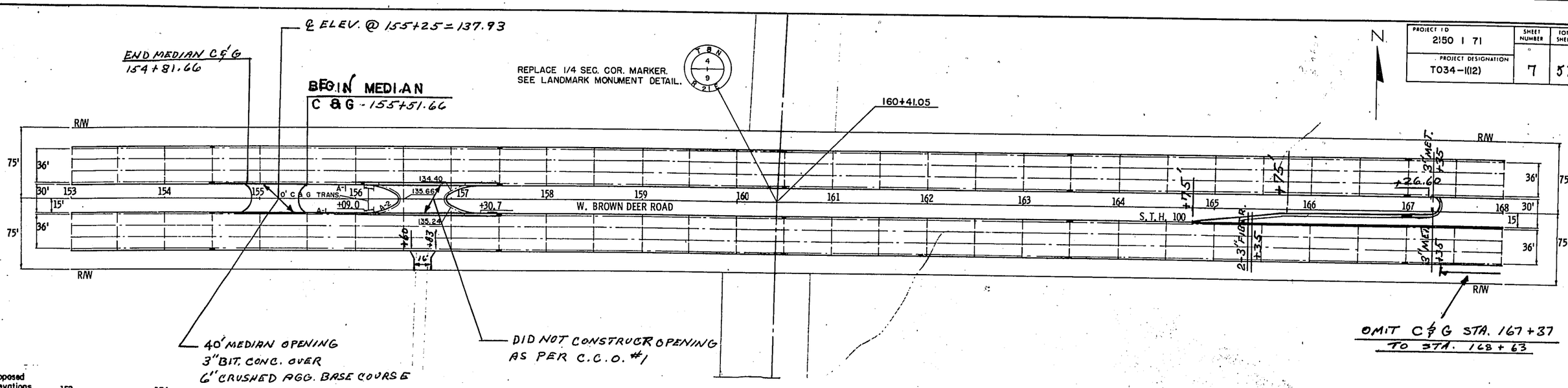


Proposed Elevations	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153
Outer F/L Left	176.73	176.31	176.03	175.51	174.80	173.88	172.77	171.22					146.89	145.53	144.35	143.36
Parkway F/L Left																
Center F/L Left	177.09	176.67	176.39	175.87	175.16	174.24	173.13	171.58					147.25	145.89	144.71	143.72
Median F/L Left	176.91	176.49	176.21	175.69	174.98	174.06	172.95	171.40					147.07	145.71	144.53	143.54
Median F/L Right	176.91	176.49	176.21	175.69	174.97	174.06	172.94	171.39					151.32	149.96	148.78	147.78
Center F/L Right	177.09	176.67	176.39	175.87	175.15	174.24	173.12	171.57					152.50	150.14	148.96	147.96
Parkway F/L Right																
Outer F/L Right	176.73	176.31	176.03	175.51	174.79	173.88	172.76	171.21					152.14	149.78	148.60	147.60

Proposed Elevations	138	138+50	+83	139	139+50	140	140+50	141	141+50	+83	142	142+50	143	143+50	144	144+50	145	145+50	146	146+50	147	147+50	148	148+50	149	149+50	150	150+50	151	151+50	152	152+50	153
Outer F/L Left	176.73	176.48	176.31	176.22	176.03	175.80	175.51	175.18	174.80	174.36	173.88	173.35	172.76	172.13	171.21	170.73	169.29	167.84	166.40	164.95	163.51	162.06	160.62	159.17	157.73	156.28	154.84	153.39	151.95	150.50	149.06	147.61	146.19	144.92	143.83	142.90	141.99	141.08
Parkway F/L Left																																						
Center F/L Left	177.09	176.84	176.67	176.58	176.39	176.16	175.87	175.54	175.16	174.72	174.24	173.71	173.13	172.49	171.58	171.09	169.65	168.20	166.76	165.31	163.87	162.42	160.98	159.53	158.09	156.64	155.20	153.75	152.31	150.86	149.42	147.97	146.55	145.28	144.19	143.26	142.35	141.44
Median F/L Left	176.91	176.66	176.49	176.40	176.21	175.98	175.69	175.36	174.98	174.54	174.06	173.53	172.95	172.31	171.40	170.91	169.47	168.02	166.58	165.13	163.69	162.24	160.80	159.35	157.91	156.46	155.02	153.57	152.13	150.68	149.24	147.79	146.37	145.10	144.01	143.08	142.17	141.26
Median F/L Right	176.91	176.66	176.49	176.39	176.21	175.98	175.69	175.36	174.97	174.54	174.06	173.52	172.94	172.30	171.39	170.90	169.45	168.00	166.55	165.10	163.65	162.20	160.75	159.30	157.85	156.40	154.95	153.50	152.05	150.62	149.35	148.26	147.33	146.42	145.51	144.60	143.69	142.78
Center F/L Right	177.09	176.84	176.67	176.58	176.39	176.16	175.87	175.54	175.15	174.72	174.24	173.70	173.12	172.48	171.57	171.08	169.63	168.18	166.73	165.28	163.83	162.38	160.93	159.48	158.03	156.58	155.13	153.68	152.23	150.80	149.53	148.44	147.51	146.60	145.69	144.78	143.87	142.96
Parkway F/L Right																																						
Outer F/L Right	176.73	176.48	176.31	176.21	176.03	175.80	175.51	175.18	174.79	174.36	173.88	173.34	172.76	172.12	171.21	170.72	169.27	167.82	166.37	164.92	163.47	162.02	160.57	159.12	157.67	156.22	154.77	153.32	151.87	150.44	149.17	148.08	147.15	146.24	145.33	144.42	143.51	142.60



PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71		
PROJECT DESIGNATION: T034-1(12)	7	52



Proposed Elevations	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168
Outer F/L Left	141.08	139.27	137.45	135.63	133.89	132.22	130.55	128.89	127.22	125.55	123.89	122.22	120.55	119.34	118.57	117.80
Parkway F/L Left													120.17	119.56		
Center F/L Left	141.44	139.63	137.81	135.99	134.25	132.58	130.91	129.25	127.58	125.91	124.25	122.58	120.91	119.70	118.93	118.16
Median F/L Left	141.26	139.45	137.63	135.81	134.07	132.40	130.73	129.07	127.40	125.73	124.07	122.40	120.73	119.52	118.75	117.98
													120.53	119.92		
Median F/L Right	142.77	140.95	139.13	137.31	135.57	133.90	132.23	130.57	128.90	127.23	125.57	123.90	122.23	121.02	120.25	119.48
													120.35	119.74		
Center F/L Right	142.95	141.13	139.31	137.49	135.75	134.08	132.41	130.75	129.08	127.41	125.75	124.08	122.41	121.20	120.43	119.66
				136.86	134.91								121.85	121.24		
Parkway F/L Right				137.04	135.29								122.03	121.42		
Outer F/L Right	142.59	140.77	138.95	137.13	135.39	133.72	132.05	130.39	128.72	127.05	125.39	123.72	122.05	120.84	120.07	119.30
				136.68	134.91								121.67	121.06		

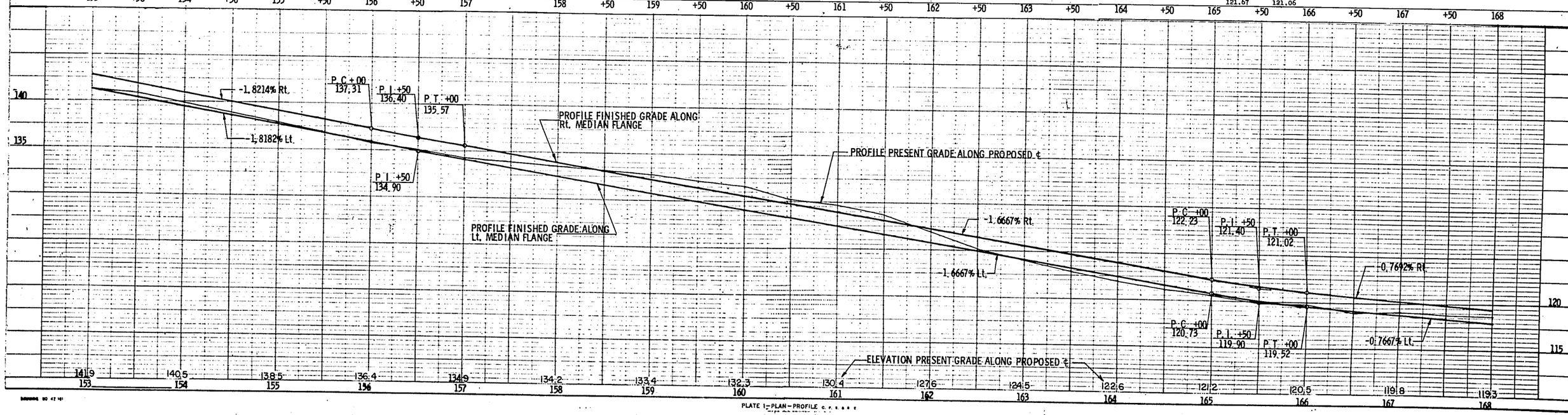
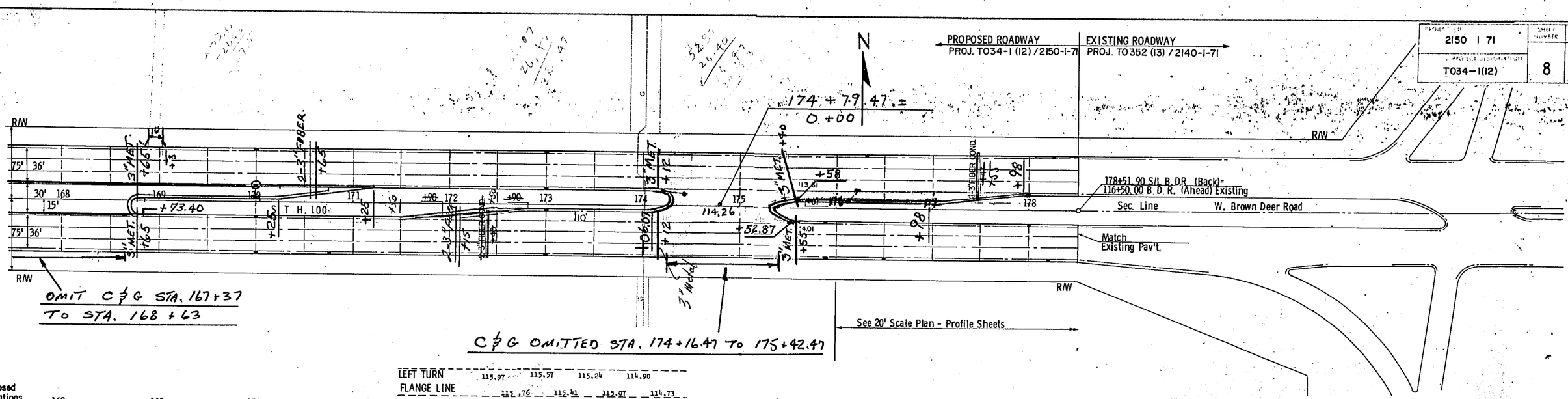


PLATE 1-PLAN-PROFILE



Proposed Elevations	168		169		170		171		172		173		174		175		176		177		178	
											LEFT TURN	115.97	115.57	115.24	114.90							
											FLANGE LINE	115.76	115.41	115.07	114.73							
Outer F/L Left	117.80	117.42	117.04	116.65	116.27	116.01	115.75	115.49	115.23	114.96	114.70	114.44	114.18	113.92	113.66	113.40	113.14	112.87	112.61	112.32	111.83	
Parkway F/L Left																			112.48	112.10	111.60	
																			112.50	112.03		
Center F/L Left	118.16	117.78	117.40	117.01	116.63	116.37	116.11	115.85	115.59	115.32	115.06	114.80	114.54	114.28	114.02	113.76	113.50	113.23	112.97	112.68	112.21	
																			112.66	112.29	111.81	
Median F/L Left	117.98	117.60	117.22	116.83	116.45	116.19	115.93	115.67	115.41	115.14	114.88	114.62	114.36	114.10	113.84	113.58	113.32	113.05	112.79	112.53	112.27	
																			112.84	112.46	111.99	
Median F/L Right	119.48	119.09	118.71	118.32	117.94	117.55	117.17	116.78	116.40	116.06	115.72	115.39	115.05	114.71	114.37	114.04	113.70	113.36	113.02	112.69	112.35	
													114.23	113.97	113.71	113.45			112.66	112.40	112.14	
Center F/L Right	119.66	119.27	118.89	118.50	118.12	117.73	117.35	116.96	116.58	116.24	115.90	115.57	115.23	114.89	114.55	114.22	113.88	113.54	113.20	112.84	112.29	
										115.89		115.56	115.22	114.88	114.54	114.21	113.87			112.86	112.52	112.18
Parkway F/L Right																			113.04	112.58	112.03	
																			112.66	112.11		
Outer F/L Right	119.30	118.91	118.53	118.14	117.76	117.37	116.99	116.60	116.22	115.88	115.54	115.21	114.87	114.53	114.19	113.86	113.52	113.18	112.84	112.41	111.85	
																			112.86	112.47	111.80	
	168	+50	169	+50	170	+50	171	+50	172	+50	173	+50	174	+50	175	+50	176	+50	177	+50	178	
																			112.68	112.17	111.50	

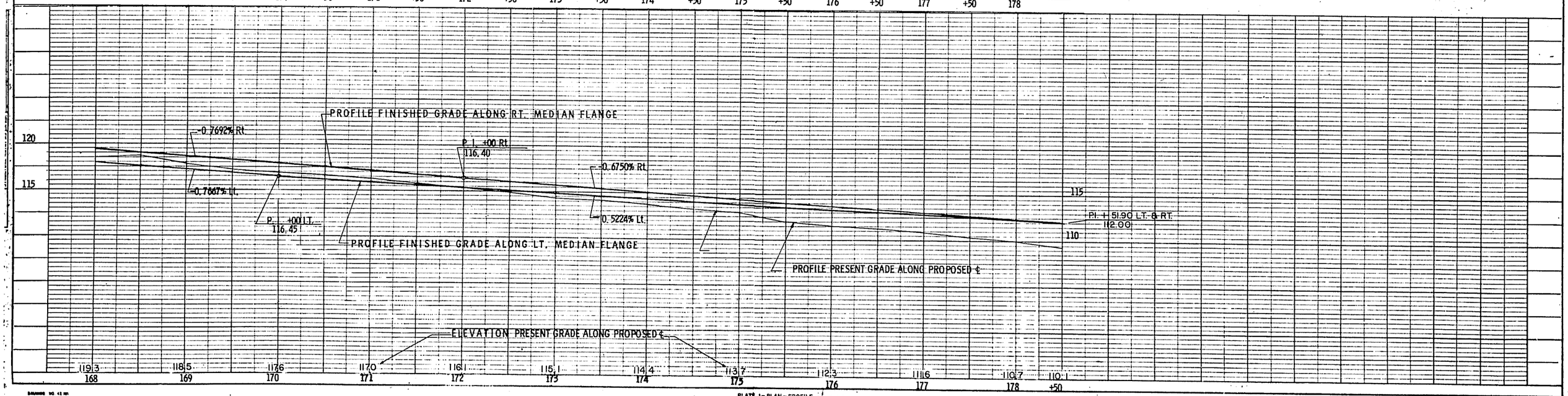
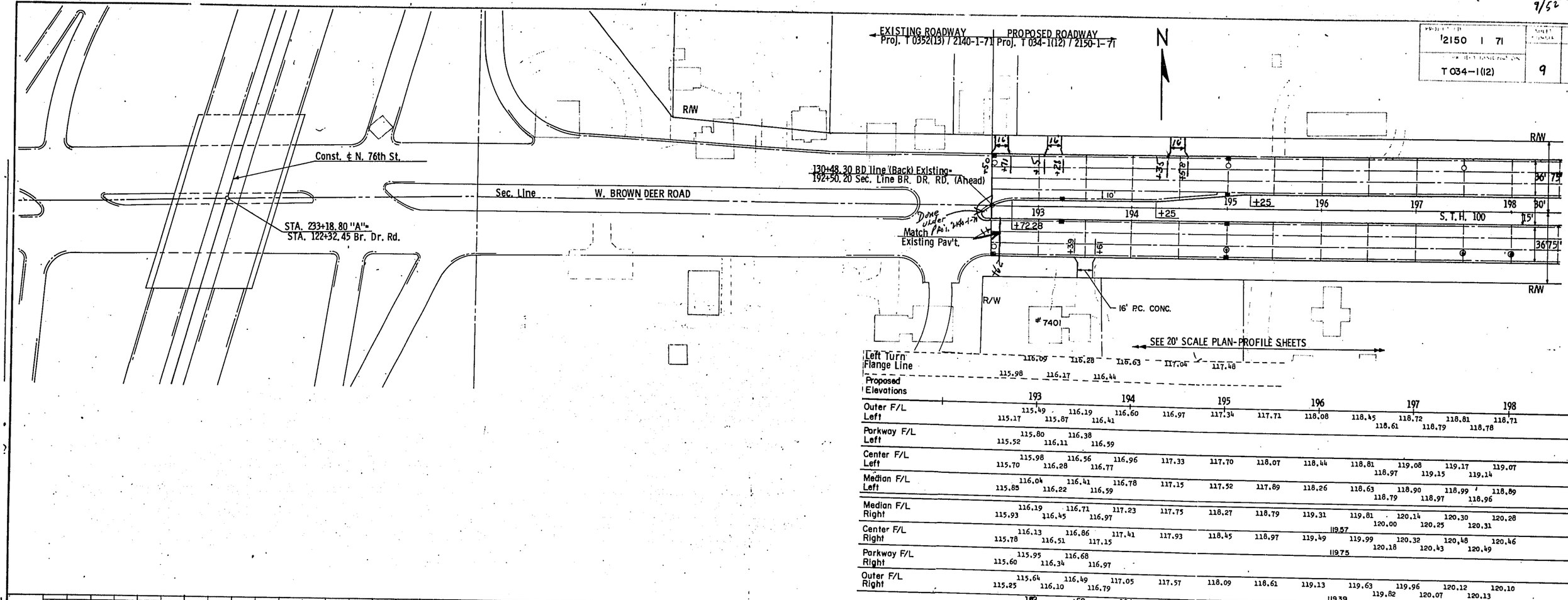


PLATE 1 - PLAN - PROFILE

MADE AND PRINTED IN U.S.A.
CHARLES BRUNING COMPANY INC.

9/52

PROJECT ID	SHEET NUMBER	TOTAL SHEETS
2150 1 71		
T 034-1(12)	9	52



	193		194		195		196		197		198
Left Turn Flange Line	116.09	116.28	116.63	117.04	117.48						
Proposed Elevations	115.98	116.17	116.44								
Outer F/L Left	115.49	116.19	116.60	116.97	117.34	117.71	118.08	118.45	118.72	118.81	118.71
	115.17	115.87	116.41						118.61	118.79	118.78
Parkway F/L Left	115.80	116.38									
	115.52	116.11	116.59								
Center F/L Left	115.98	116.56	116.96	117.33	117.70	118.07	118.44	118.81	119.08	119.17	119.07
	115.70	116.28	116.77						118.97	119.15	119.14
Median F/L Left	116.04	116.41	116.78	117.15	117.52	117.89	118.26	118.63	118.90	118.99	118.89
	115.85	116.22	116.59						118.79	118.97	118.96
Median F/L Right	116.19	116.71	117.23	117.75	118.27	118.79	119.31	119.81	120.14	120.30	120.28
	115.93	116.45	116.97						120.00	120.25	120.31
Center F/L Right	116.13	116.86	117.41	117.93	118.45	118.97	119.49	119.57	119.99	120.32	120.48	120.46
	115.78	116.51	117.15						120.18	120.43	120.49	
Parkway F/L Right	115.95	116.68						119.75				
	115.60	116.34	116.97									
Outer F/L Right	115.64	116.49	117.05	117.57	118.09	118.61	119.13	119.63	119.96	120.12	120.10	
	115.25	116.10	116.79					119.39	119.82	120.07	120.13	

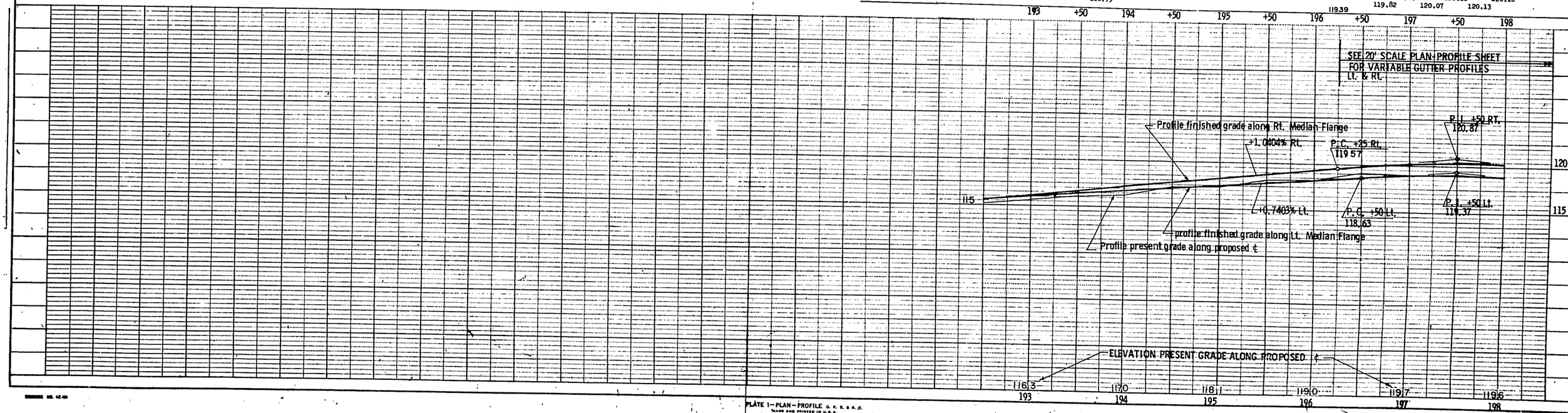


PLATE 1—PLAN—PROFILE

NOTE: CONSTRUCT CROSS-OVER AS TEMPORARY ROAD (See special provisions). Use 2" bit. conc. over 6" cr. agg. base course. If 72nd St. is built by others (south of Brown Deer Rd.), at time of construction, omit this cross-over entirely and construct median C. & G. from 203+20.40 to 203+90.40.

* NOTE: DETAILS OF INTERSECTION CAN BE FOUND ON CONTR. CHANGE ORDER #4

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150 1 71	10	52
PROJECT DESIGNATION: T034-1(12)		

NOTE: 12" BASE COURSE 24' LEFT SIDE.

BEGIN 9" CRUSHED AGGREGATE BASE COURSE

STA. 213 + 49.19
END PROJ. T 034-1(12)

T 8 N
3
10
R 21 E

200+15.40 B.D. = 10+00 ℄ 72ND ST.

STA. 203+55.40 = ℄ CROSS-OVER

STA. 1+15.07

118.11 FLG.

117.98

117.46 FLG.

118.18

END MEDIAN C.&G. +2040

BEGIN MEDIAN C.&G. +90.40

W. Brown Deer Road

S.T.H. 100

N. 68th St.

213+64.19 Br. Dr.

213+49.19 Br. Dr. = 10+00.00 T/L 68th St.

STA. 205+05.19 = 0+00.00 ENT. RD.

CTR. 25' RAD. 199+70.46 B.D. – 80' RT. = 9+20.03 72 ST. – 45' LT.

CTR. 25' RAD. 200+60.46 B.D. – 80' RT. = 9+19.97 72 ST. – 45' RT.

SEE 20' SCALE PLAN-PROFILE SHEETS

℄ 72ND ST.

SEE 20' SCALE PLAN-PROFILE SHEET STA. 211 TO STA. 217

| | | |

B P R DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
	T034-1(12)	11	52

I.D. 2150 I 71

(A) 4 1/2" Bit. Conc. over 9" Crushed Aggregate Base Course.
(B) Variable thickness Bit. Conc. Pav't. (1" Min.).

HOUSE # 9200

N

NOT PLACED

9" Non-reinforced Concrete

+99 +29 +21 +45 +73 +75

R/W

30' CR. AGG.

18" C.P

24' CR. AGG. 18" C.P

℄ Ditch

15"

10" Gravel Shldr. (6" THICKNESS)

14' 6' 11'

CROWN LINE

SECTION LINE

126 127 128 129 130 131 132

163.86 164.77 165.12 164.20 164.05 164.93 165.98 165.88 165.95 166.02 165.81 165.83 166.15 166.48 166.52 167.10 167.20 167.02 167.11 166.92 168.13 168.28 168.10 168.05 169.15 169.36 169.18 169.10 170.17 170.44 170.26 170.14 171.19 171.52 171.34 171.18 172.24 172.60 172.42 172.96 173.32 173.68 173.50 173.57 174.41 174.77 174.59 174.44

12" 12' 10' 2'

1A 1B 2A 2B 2C 2D

℄ BROWN DEER ROAD

S. T. H. 100

+96.1 - 11.1' LT. 13.9' R.

2" MET. COND.

+60 - 5' RT. 10' R.

172.43 172.38

2-3" FIBER COND. 100'

Match + 45

+95

+25 - 12.5' LT. 2.5' R.

+22

3' C&G END SECTION (SEE DETAILS)

24' P.C. CONC.

+101

75'

R/W

PROFILE FINISHED GRADE ALONG CROWN LINE

PROFILE FINISHED GRADE ALONG Lt. & Rt. MED. FLANGE

PROFILE PRESENT GRADE ALONG SECTION LINE

+2.162 %

TOP OF CURB
Lt. Outer Flange
Lt. Outer Gutter
171 +75 171.70 FLG. Inlet +86 171.82

TOP OF CURB
Rt. Outer Flange
Rt. Outer Gutter
+77 171 +75 171.70 FLG. Inlet +86 171.82

ELEVATION PRESENT GRADE ALONG SECTION LINE

162.6 163.2 164.0 164.8 165.8 166.9 168.1 169.2 170.4 171.3 172.6 173.6 174.8

126 +50 127 +50 128 +50 129 +50 130 +50 131 +50 132

164 163 162 168 175 174 173

PLATE 1 - PLAN - PROFILE OF R. R. R. E. MADE AND PRINTED IN U. S. A.

B. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
	T034-1(12)	12	52

I.D. 2150 1 71

CTR. 25' R, 133 + 17.28 -80' Lt. = 20 + 77.26 - 91 ST ST. - 68' LT.

CTR. 25' R, 134+53.45-80' II = 20+82.93 91 ST ST.- 68' RT.

REPLACE SECTION CORNER MARKER, SEE LANDMARK MONUMENT DETAIL

N

R/W

3A 3B 3C 4 4B 4C 27

4'x4' SQUARE BOXOUT

3" MET. COND.

5' R.

12"

3' C.& G. END SECTION

VARIABLE FACE C. & G.

8' 11' 11' 13' 13' 11' 11' 8'

2' 12' 12' 12' 15' 5' 10' 12' 12' 12' 12' 2'

75'

20'

15'

10'

CTR. RAD.

+15 +45 +65 +00

Type A-1 C. & G.

+27.0 - 5.0' LT.

5" CONC. SDWK.

Sta. 133 + 82.03 (S. T. H. 100) = Sta. 20 + 00.00 91st St.

+37.0 - 5.0' Rt. 6.0' R.

SECTION LINE

+06 - 5' Rt. 10' R.

2" MET. COND.

2-3" FIBER COND.

W. BROWN DEER RD. S.T.H. 100

+69.5 - 1.5' Rt. 13.5' R.

24' P.C. CONC.

conc. base

bit. conc.

conc. slab service station

CTR. 25' R, 133 + 12.14 - 80' Rt. = 19 + 18.39 91 ST ST. - 68' LT.

CTR. 25' R, 134+48.13-80' Rt. = 19 + 21.61 91 ST ST.- 68' RT.

4'x4' SQUARE BOXOUT

5' R. + 13.4

3' C.& G. END SECTION

BEG. RAD. END RAD. CTR. RAD. HIGH PT. +00 +50 +75 +25

Lt. OUTER FLANGE Lt. OUTER GUTTER Lt. MED. FLANGE Lt. MED. GUTTER

Rt. MED. FLANGE Rt. MED GUTTER Rt. OUTER FLANGE Rt. OUTER GUTTER

P. I. +00 178.91 P. T. +50 P. C. +50 +2.162%

-0.500%

PROFILE PRESENT GRADE ALONG EXISTING ℄

PROFILE FINISHED GRADE ALONG LT. & RT. MED. FLANGE

ELEVATION PRESENT GRADE ALONG EXISTING ℄

176 175 174 178 177 176

132 +50 133 134 135 136 137 138

174.8 175.5 176.6 177.7 178.7 179.2 180.5 180.9 181.3 181.2 181.4 181.4 181.7

PLATE 1—PLAN—PROFILE

MADE AND PUBLISHED IN U.S.A. OSBORN ENGINEERING COMPANY, INC.

STRUCTURE ROUTING CARD

NO.

B. P. R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
	T034-1(12)	13	52

ID 2150 1 71

CTR. 25'R. 133+12.14-80'Rt.
=19+18.39 ℄ 91st. St.
-68'Lt.

CTR. 25'R. 133+17.28-80'Lt.
=20+77.26 ℄ 91St. St.-68'Lt.

133

Z

R/W

E.L. 172.5

E.L. 173.0

18" C.P.

E.L. 173.5

24' CR. AGG.

E.L. 174.6

18" C.P.

24' CR. AGG.

+27 +51 +84 +08

6'

10'

176.54 176.60 176.78

175.87

176.24
+68-28.3'Lt.

174.89

175.42

43'

177.10 177.23

Crown LINE

175.31 175.88 176.37 176.76 177.00

18 19

177.40

C.T.H. B

+77.5-4'Lt
2.5'R.

177.08

175.08

175.66

+68-25.0'Rt

+13.4 ℄
5'R.

177.30 177.32

176.17 176.62

10'

4'

177.06

177.36 177.10

+68 Match Existing

3" Bit. Conc. on 6" Crushed Aggregate Base Course

R/W

10" Conc. Loading Zone (7" Curb Face) on 6" Crushed Aggregate Base Course

CTR. 25'R. 134+48.13-80'Rt.
=19+21.61 ℄ 91st. St.-68'Rt.

133+82.03 B.O.
=20+00.00 91st. St.

43'

43'

43'

3C

12"

3

12"

15"

3A

3B

177.10 177.18

177.20

+33-28.1'Lt.

177.29 177.39

177.47

+87.9 ℄
5' R.

177.63 177.74 177.87

177.63

2

177.67 177.69 177.75 177.83

177.67

177.61

177.63

177.75 177.67

177.75 177.37

+33-26.2'Rt

10'Conc. Loading Zone (7" Curb Face) on 6" Crushed Aggregate Base Course

CTR. 25'R. 134+53.45-80'Lt.
=20+82.93 ℄ 91st. St.-68'Rt.

10'

4'

177.51

24'

177.68

+63-2.5'Rt.
2.5'R.

178.04 22 178.23

16'

177.63 177.73

12"

10'

4'

R/W

+33 Match Existing

℄ 91st. St.

23

3" Bit. Conc. on 6" Crushed Aggregate base Course

R/W

BROWN DEER RD.

PROFILE PRESENT GRADE ALONG EXISTING ℄

+68 Match Exist

PROFILE FINISHED GRADE ALONG CROWN LINE

+33 Match Exist

PROFILE FINISHED GRADE ALONG℄

ELEVATION PRESENT GRADE ALONG EXISTING ℄

180 179 178 173 172 171

171.8 175.5 177.5 178.4 178.1 179.5

17 +50 18 +50 19 +50 20 +50 21 +50 22 +50 23

PLAN AND PROFILE

PROPOSED ROADWAY
Proj. T 034-1(12) / 2150-1-71

EXISTING ROADWAY
Proj. T 0352(13)/ 2140-1-71

PROPOSED ROADWAY
Proj. T034-1(12) / 2150-1-71

N

INSTALL 1-3" METAL CONDUIT (LENGTH ~~64'~~ 70'+)

ADDITIONAL 10'@ A 45°L. DUE TO DRIVE

R/W

EXISTING BOX SEWER

W. BROWN DEER RD (S. T. H. 100)

20'C. &G. Trans

20'C&G Trans

A-2C. &G.

178+51.90 S/L B. D. R. (Back)= 116+50.00 B. D. Line (Ahead)

130+48.30 BD Line (Back)= 192+50.20 S/L B. D. R. (Ahead)

SECTION LINE

MATCH EXIST. PAV'T.

CTR. 6"R. 192+44(9'Rt.)

A-2C&G.

20'C. &G. Trans.

16' P.C. CONC.

END STANDARD CROWN

BEGIN STANDARD CROWN

PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG FLANGE LINE 17' LT.

-0.675%

-0.522%

+1.040%

+0.740%

PLATE 1—PLAN—PROFILE

MADE AND PRINTED IN U.S.A.
CHARLES EBURING COMPANY, INC.

PROJECT I D	SHEET NUMBER	TOTAL SHEETS
2150-1-71	15	52
PROJECT DESIGNATION		
T 034-1(12)		

INSTALL 2-3" FIBER CONDUITS (LENGTH 50' EACH)

BARN

VARIABLE FACE CURB & GUTTER

R/W

M.H

Well

EXISTING 18"

EXISTING 15"

M.I.S.

+60

+25

W. Brown Deer Rd. (STH 100)
Section Line

21A	116.60	116.97	117.34	117.71	118.08	118.26	118.64TC 118.14G	118.83TC 118.31G	118.99TC 118.44G	119.10TC 118.56G	119.17TC 118.69G	119.19TC 118.81G	119.16TC 118.89G	119.09TC 118.56G	118.96TC 118.44G	118.79TC 118.29G								
21	116.96	117.33	117.70	118.07	118.44	118.81	118.97	119.08	119.15	119.17	119.14	119.07	118.94	118.77										
21B	116.78	117.15	117.52	117.89	118.26	118.44	118.63	118.79	118.90	118.97	118.99	118.96	118.89	118.76	118.59	118.40								
	116.63	117.04				118.32G 118.90TC	118.49G 119.09TC	118.62G 119.25TC	118.74G 119.36TC	118.87G 119.43TC	118.99G 119.45TC	118.87G 119.42TC	118.74G 119.35TC	118.62G 119.22TC	118.47G 119.05TC										
	194		195	196	197								198			199								
45A	117.23	117.75	118.27	118.79	119.31	119.57	120.27TC 119.69G	120.46TC 119.81G	120.60TC 119.94G	120.71TC 120.06G	120.76TC 120.19G	120.77TC 120.31G	120.74TC 120.19G	120.66TC 120.06G	120.53TC 119.94G	120.36TC 119.78G								
	117.41	117.93	118.45	118.97	119.49		119.99	120.18	120.32	120.43	120.48	120.49	120.46	120.38	120.25									
45	117.05	117.57	118.09	118.61	119.13		119.63	119.82	119.96	120.07	120.12	120.13	120.10	120.02	119.89	119.72								
45B							119.51G 120.01TC	119.63G 120.20TC	119.76G 120.34TC	119.88G 120.45TC	120.01G 120.50TC	120.13G 120.51TC	120.01G 120.48TC	119.88G 120.40TC	119.76G 120.27TC	119.60G 120.10TC								

24" 21" 15" 12"

46 47 48A 48B

119.4

CEDARS

#7323

VARIABLE FACE CURB & GUTTER

R/W

N

6" CR. AGG. BASE COURSE
9" REINF. CONC. PAVEMENT

200+15.40 B.D.
=10+00.00 ℄ 72nd. ST.

118.75 118.36 119.03 119.58 119.85 119.58 118.80

20' 20'

CTR. 25' RAD.
199+70.46 B.D.-80' RT
=9+20.03 72nd-45' LT

7 MARKER POSTS
ON 5' CENTERS

40'
FACE TO FACE
OF CURB

CTR 25' RAD.
200+80.46 B.D.-80' RT
=9+19.97 72nd-45' RT.

PROFILE FINISHED GRADE ALONG RT. MEDIAN FLANGE

PROFILE FINISHED GRADE ALONG LT. MEDIAN FLANGE

ELEVATION PRESENT GRADE ALONG SECTION LINE

+1.040%

+0.7403%

-0.7769%

-0.7769%

P.C. +25
119.57

P.C. +50
118.63

P.I. +50
120.87

P.I. +50
119.37

P.I. +75
119.90

P.T. +50
118.59

PROFILE PRESENT GRADE ALONG EXISTING ℄

Lt. Outer Fl. Line
Gutter
Lt. Med. Fl. Line
Gutter
Rt. Med. Fl. Line
Gutter
Rt. Outer Fl. Line
Gutter

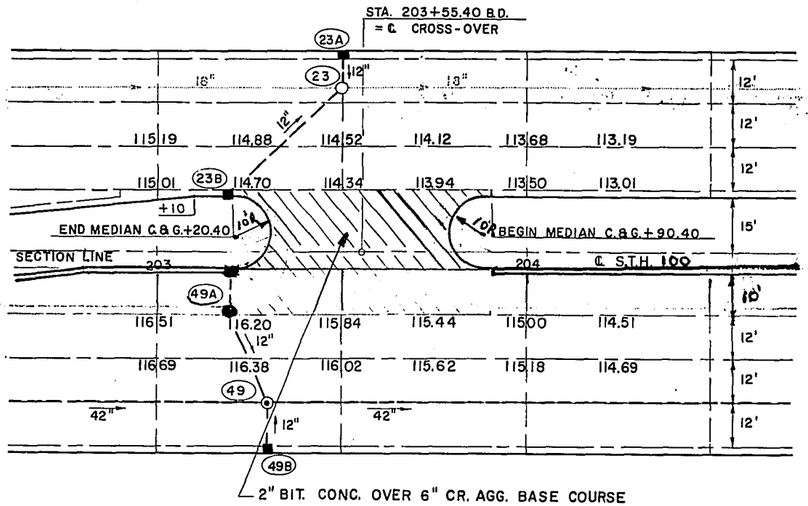
117.0	118.0	118.1	118.9	119.0	119.8	119.7	119.8	119.6	119.3	118.9	
194	+50	195	+50	196	+50	197	+50	198	+50	199	

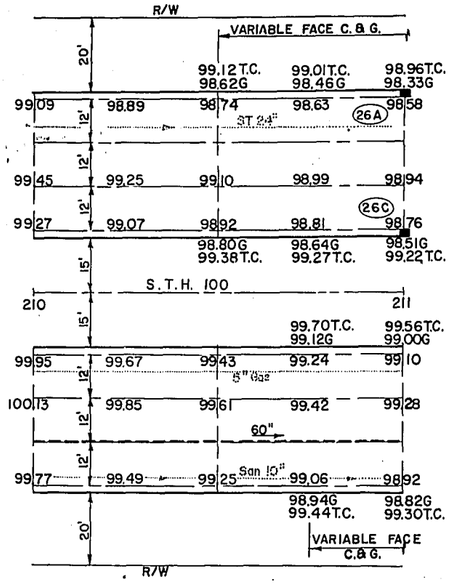
118 118 118 118 118 118 120 119 119 119 120 119 118

PLATE 1 — PLAN — PROFILE

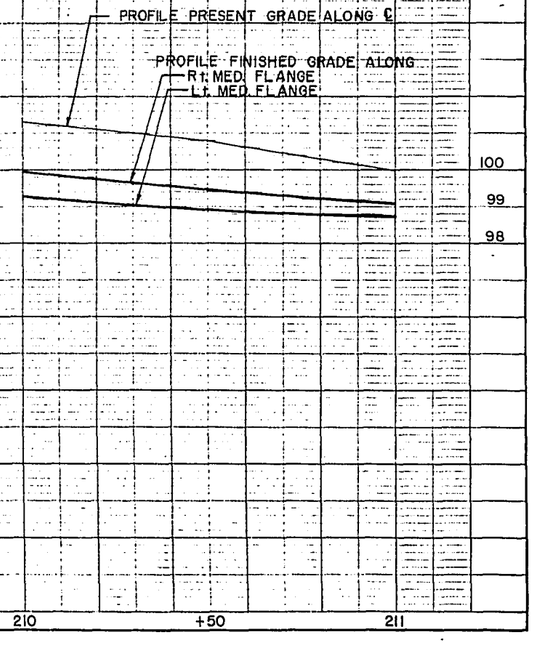
B.P.R. DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4	2150-1-71 T034-1(12)	16	52

NOTE: THE PURPOSE OF THIS CROSS-OVER IS TO PROVIDE SCHOOL-BUS ACCESS TO THE HAPPY HILL SCHOOL. IF 72ND. ST. IS ALREADY CONSTRUCTED, THE CROSS-OVER WILL NOT BE NEEDED.





NOTE: USE 9" BASE COURSE FROM STA. 210+00 TO 213+49.19



K&E 4 X 6 TO THE INCH

PROJECT I.D.	SHEET NUMBER	TOTAL SHEETS
2150-1-71	17	52
PROJECT DESIGNATION: T 034-1(12)		

REPLACE 1/4 SEC. COR. MARKER (PROJ. T034-1(13)). SEE LANDMARK MONUMENT DETAIL

T 8 N R 21 E 3 10

STA. 213 + 49.19 END PROJECT T 034-1(12) ID 2150-1-71

BEGIN PROJECT T 034-1(13) ID 2150-2-70

CITY OF MILWAUKEE

VILLAGE OF BROWN DEER

BEGIN SHIFT OF C/L TO 5' LT. of SEC. LINE STA. 215+00

R/W

VARIABLE FACE CURB & GUTTER

98.39G

98.96T.C. 98.33G | 98.95T.C. 98.32G | 98.99T.C. 98.44G | 99.07T.C. 98.57G

98.58 (26A) | 98.57 (26B) | 98.61 | 98.69 | 98.82 | 99.07 | 99.32 | 99.57

(26) 24" | 98.94 | 98.93 | 98.97 | 99.05 | 99.18 | 99.43 | 99.68

(26C) +12.5 | 98.76 | 98.75 (26D) | 98.79 | 98.87 | 99.00 | 99.25 | 99.50

98.51G 99.22T.C. | 98.50G 99.21T.C. | 98.62G 99.25T.C. | 98.75G 99.33T.C.

211 | STH 100 | 212 | W. BROWN DEER RD. | 213

98.81G

99.56T.C. 99.00G | 99.47T.C. 98.88G | 99.43T.C. 98.75G | 99.43T.C. 98.75G | 99.48T.C. 98.88G | 99.58T.C. 99.00G | 99.71T.C. 99.13G | 99.80T.C. 99.25G | 99.84T.C. 99.38G | 99.80T.C. 99.34G

99.10 | 99.01 | 98.97 | 98.97 (52B) | 99.02 | 99.12 | 99.25 | 99.34 | 99.38 | 99.34

99.28 | 99.19 | 99.15 | 99.15 | 99.20 | 99.30 | 99.43 | 99.52 | 99.56 | 99.52

98.92 | 98.83 (52C) | 98.79 | 98.79 (52D) | 98.84 | 98.94 | 99.07 | 99.16 | 99.20 | 99.16

98.82G 99.30T.C. | 98.70G 99.21T.C. | 98.57G 99.17T.C. | 98.57G 99.17T.C. | 98.70G 99.22T.C. | 98.82G 99.32T.C. | 98.95G 99.45T.C. | 99.08G 99.58T.C. | 99.20G 99.71T.C.

98.6G

VARIABLE FACE CURB & GUTTER

R/W

NOTE: USE 9" BASE COURSE FROM STA. 210+00 TO 213+49.19

2-3" FIBER COND. +25 (52E) (52A) +62.5 (52) 60' (53) 3" MET. COND. +25 (53A)

99.60 FLG. 99.64G 100.14 T.C. 99.55 FLG. 99.59G 100.09 T.C. 99.62 +93 C & G TRANS. 6'R+33.25

+49.19 1/4 SEC. COR 213+49.19 10+00 T/L 68th 99.50 99.50 +64.19 89°-57'-48" 89°-57'-48" 90°-01'-19"

99.45T.C. 99.49G 99.34 99.25 99.12 99.00 98.94 98.82

3" MET. COND. +05 (54) 60" 65'R 34'R 98.86 98.92 20' 20' 98.67 98.87

+27 END C&G-RT. PROJ. T034-1(12)

CTR. 25' RAD. 213+27.22-80' RT. = 9+20.01 T/L 68-22' LT.

CTR. 25' RAD. 214+01.24-80' RT. = 9+19.97 T/L 68-52' RT.

T/L 68th St. = 1/4 SEC. LINE

12' 12' 9' 98.83 98.60 98.60

8+75

3" MET. COND. +05 99.82 99.91 99.95 99.91 99.82 99.57 99.33

2-3" FIBER COND. +05

100.18 100.27 100.31 100.27 100.18 99.93 99.68

100.00 100.09 100.13 100.09 100.00 99.75 99.50

99.78 99.94 99.98 99.94 99.88 99.78 99.67 99.55 99.42

99.85G 99.98G 99.89G 99.80G 99.33G

100.40T.C. 100.44T.C. 100.40T.C. 215 100.34 T.C. 100.24T.C.

214 +23 6'R+94.72 VARIABLE FACE CURB & GUTTER 216 217

C/L ROADWAYS SECTION LINE

VAR. FACE C. & G.

20' 8' 20'

98.75 98.50 98.25 98.00 97.75

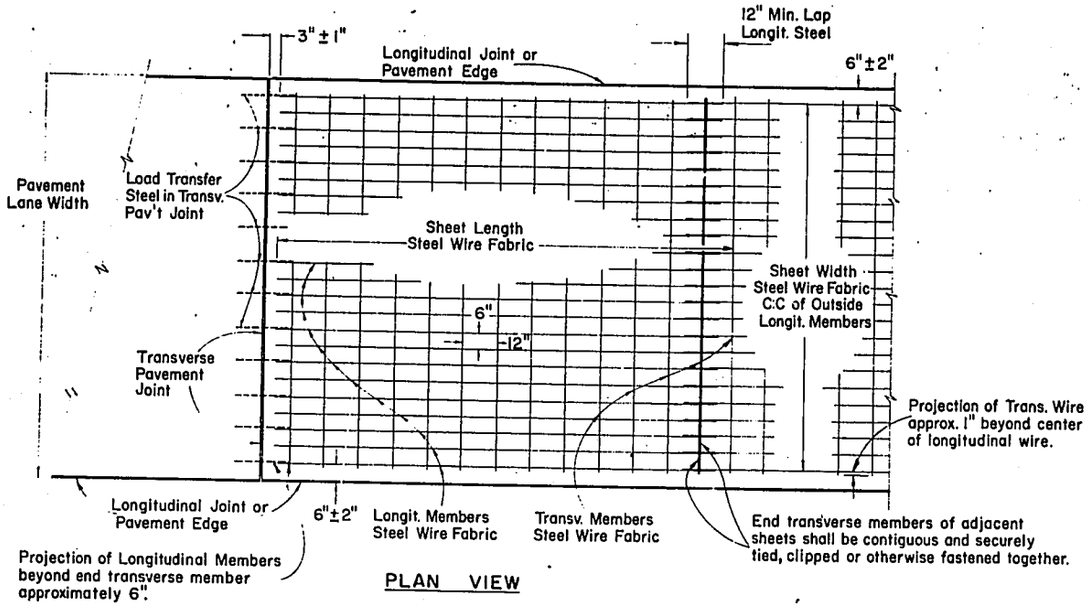
98.93 98.68 98.43 98.18 97.93

98.57 98.32 98.07 97.82 97.57

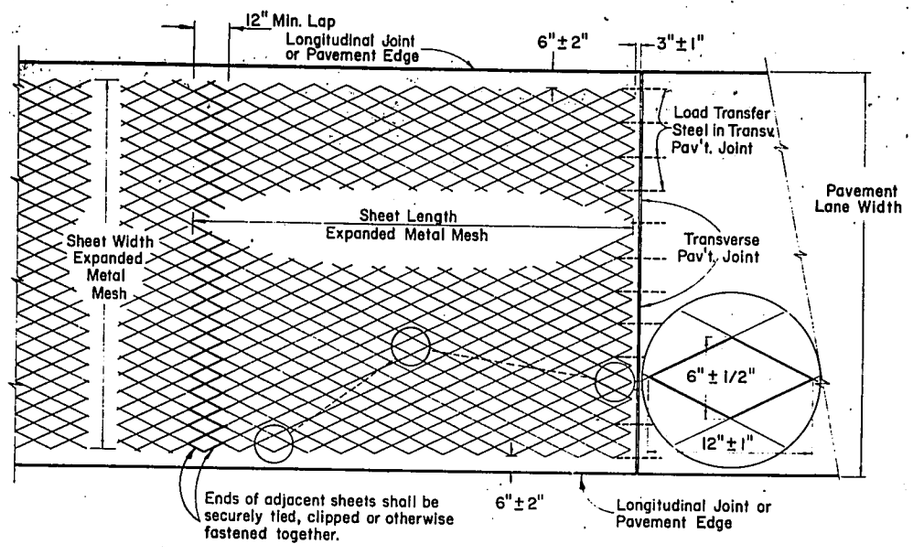
+06 +26 +66 +86

14' CR. AGG. 14' CR. AGG.

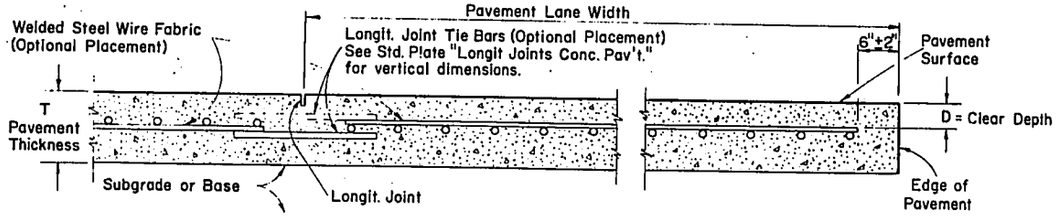
VARIES 12" 12" 12"



PLAN VIEW

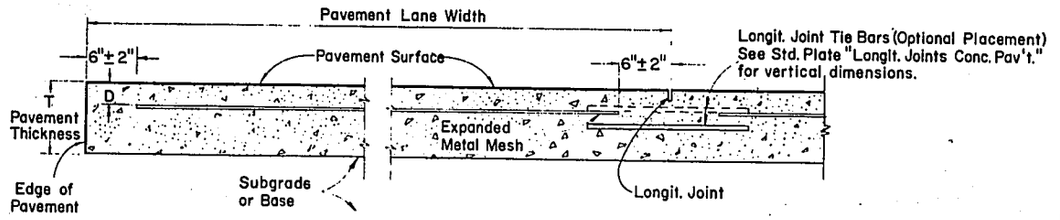


PLAN VIEW



CROSS SECTION

WELDED STEEL WIRE FABRIC



CROSS SECTION

EXPANDED METAL MESH

Pavement Thickness	"D"
8"	2"-4"
9"	2"-4 1/2"
10"	2"-5"

GENERAL NOTES-

Details of Construction and Materials not shown hereon shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

WELDED STEEL WIRE FABRIC

Manufacturer's No. 612-04
Approx. Weight per 100 Sq. Ft. = 69.0 lbs.
Longitudinal Steel - Gage No. 0 = 0.3065" D. at 6" C:C
Transverse Steel - Gage No. 4 = 0.2253" D. at 12" C:C

Welded Steel Wire Fabric shall conform to the requirements of the Standard Specifications for Welded Steel Wire Fabric for Concrete Reinforcement A.A.S.H.O. Designation M55.
Side lap of adjacent sheets approximate 6"

EXPANDED METAL MESH

Weight per 100 Sq. Ft. = 76.0 lbs. min.
Expanded Metal Mesh shall be manufactured from open hearth steel, having a phosphorus content of not more than 0.05 percent, and a yield point of not less than 55,000 p.s.i. The steel shall be sufficiently ductile to permit any strand to be bent through an angle of 180 degrees over one diam. without fracture. The diamond shaped mesh shall be fabricated by a cold drawn process which will cut and draw the steel forming uniform dimensioned strands conforming to shape and weight as shown elsewhere hereon.
Side lap of adjacent sheets approximate 6"

SHIPPING REQUIREMENTS

Welded Steel Wire Fabric or Expanded Metal Mesh Concrete Pavement Reinforcement shall be shipped to the job site in flat sheets.

CONCRETE PAVEMENT REINFORCEMENT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL:

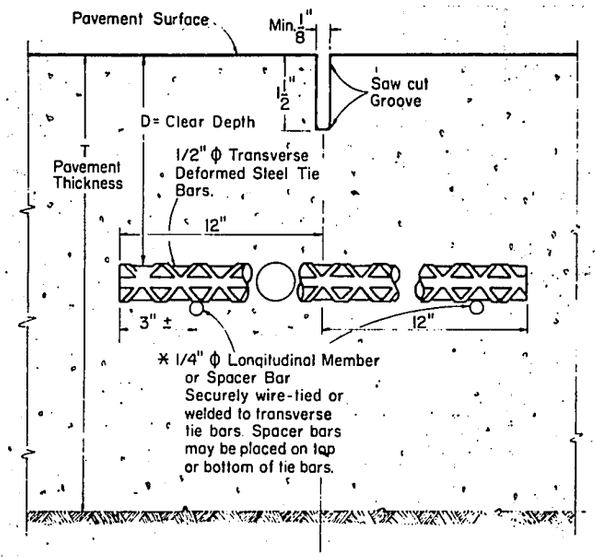
2/2/66 — DATE
E. J. Bykit — CHIEF DESIGN ENGINEER

APPROVED:

2/2/66 — DATE
A. R. Zimmerman — STATE HIGHWAY ENGINEER

PLATE NO. 2-1.1.12

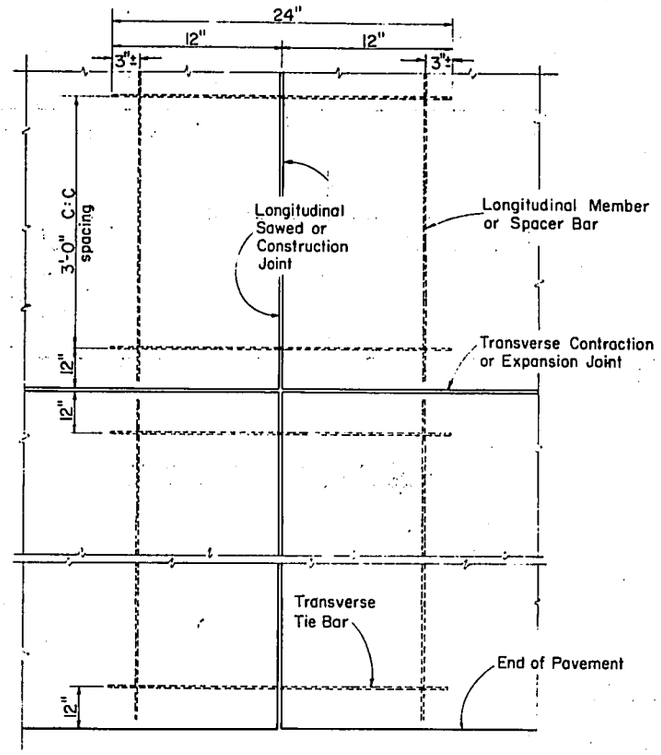
18.1-52



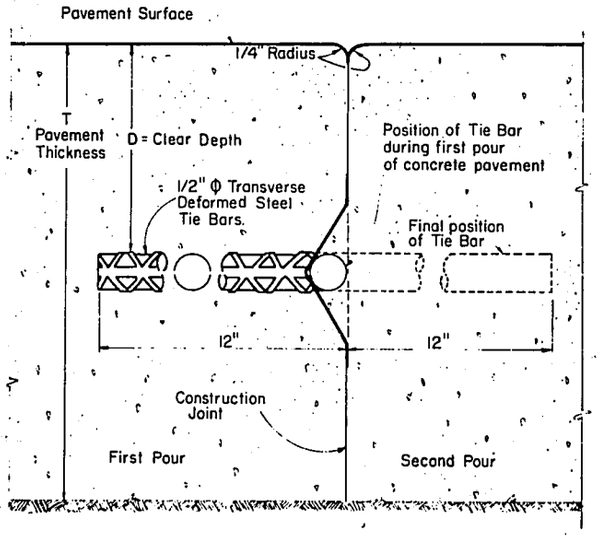
SAWED JOINT

ELEVATION, Showing Tie Bars and Positioning Details

Pavement Thickness	"D"
8"	2"-4 3/4"
9"	2"-5 1/2"
10"	2"-5 3/4"



PLAN VIEW, Showing Tie Bars and Location Details



CONSTRUCTION JOINT

ELEVATION, Showing Tie Bars and Positioning Details

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.

ALTERNATE DESIGNS-

Alternate designs of Bolt Type joint installations may be used upon written approval of the engineer.

SEALING JOINTS -

Longitudinal Joints shall not be sealed.

* TIE BARS

Tie bars shall be installed as shown (assembled ladder type pattern), or the longitudinal member spacer bar may be omitted if the transverse tie bars can be accurately placed and firmly held during the placing and setting of concrete by devices or methods approved by the engineer, or if mechanical means of placing the tie bars in the plastic concrete are approved by the engineer.

Devices may be omitted on the longitudinal construction joint type when in the opinion of the engineer the tie bars will be retained in their proper designated position.

LONGITUDINAL JOINTS CONCRETE PAVEMENT

STATE HIGHWAY COMMISSION OF WISCONSIN

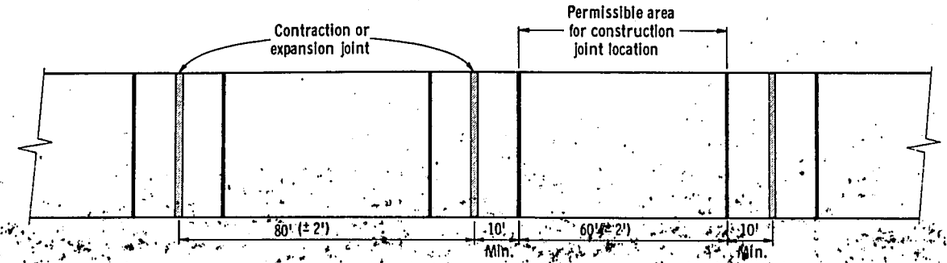
RECOMMENDED FOR APPROVAL:

2/3/66 DATE — E.J. Bytel CHIEF DESIGN ENGINEER

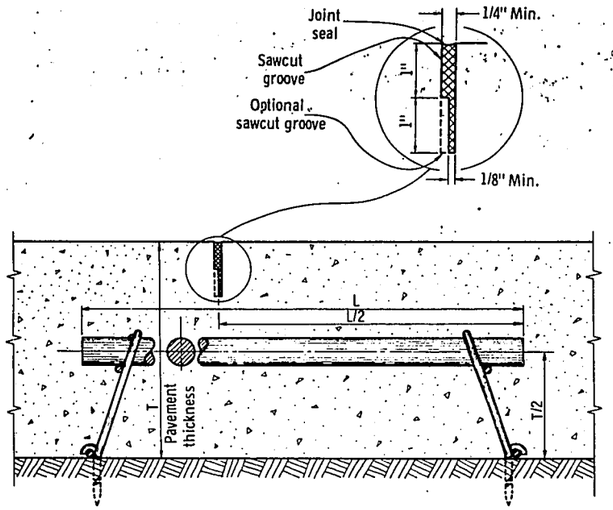
APPROVED:

2/3/66 DATE — L. Zimmerman STATE HIGHWAY ENGINEER

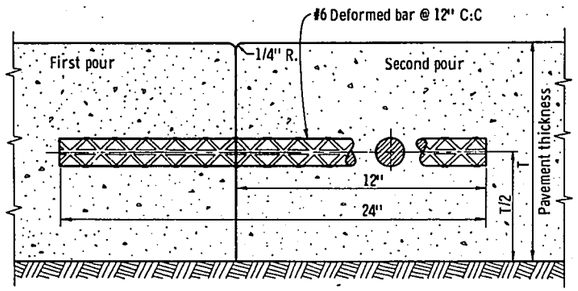
PLATE NO. 4-4.4.8



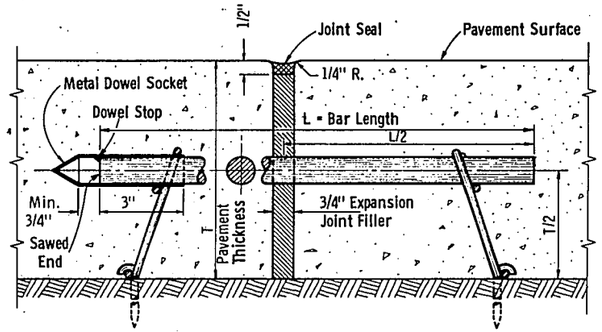
SCHEMATIC SHOWING JOINT LOCATIONS



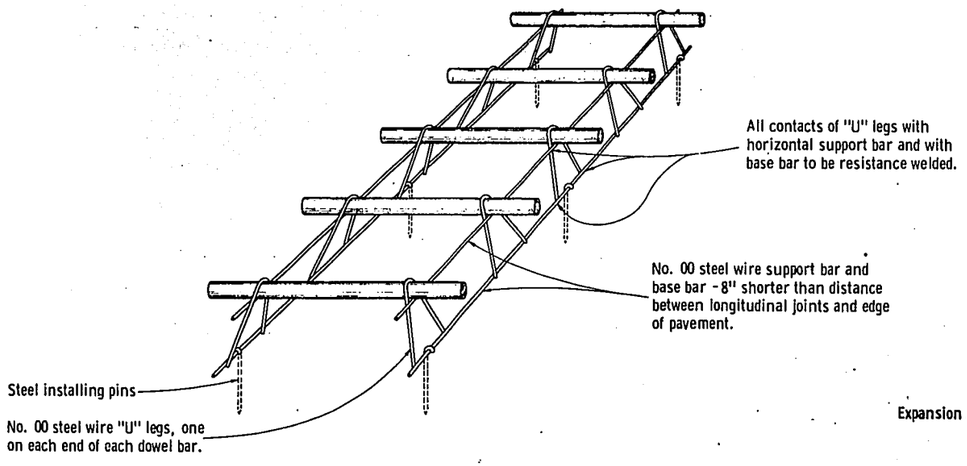
CONTRACTION JOINT



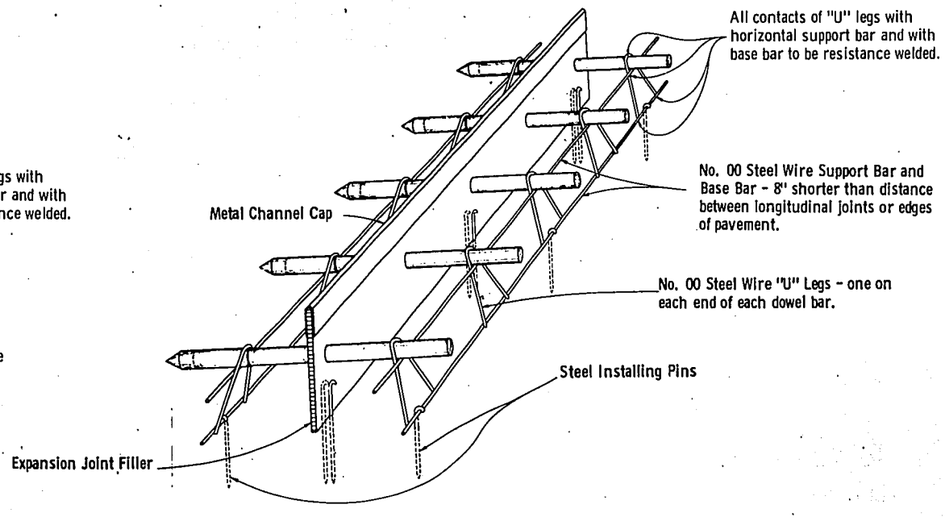
CONSTRUCTION JOINT



EXPANSION JOINT



INSTALLING DEVICE FOR LOAD TRANSFER DOWELS FOR CONTRACTION JOINTS



INSTALLING DEVICE FOR LOAD TRANSFER DOWELS AND EXPANSION JOINT ASSEMBLY

GENERAL NOTES 18.2-52

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

Steel installing pins of sufficient number, length, and rigidity shall be placed so as to prevent movement of the joint assembly during construction operations.

Details shown hereon make provision for a minimum of structural adequacy and stability to satisfy Standard Specifications requirements.

ALTERNATE DESIGNS

Alternate designs for load transfer dowels for contraction and expansion joints and appurtenances other than shown hereon may be used upon written approval of the Engineer.

CONTRACTION JOINTS

Contraction joints shall be installed at 80' (±2') spacing from adjacent contraction or expansion joints, except that lesser spacings ranging to a minimum of 40' shall be used:

1. At locations or spacing indicated on the plans.
2. As extensions of transverse joints or cracks in abutting pavement lanes.
3. At locations designated by the Engineer where there are manholes or other fixtures in the pavement.

CONSTRUCTION JOINTS

Deformed bars shall be spaced at 12" C:C and 6" from each edge of pavement.

Deformed bars may be inserted after the concrete has been poured.

Construction joints shall be installed as necessary, except that a construction joint shall be not less than 10 feet from the nearest contraction or expansion joint.

EXPANSION JOINTS

Expansion joints are required only at structure approaches and/or where shown on the plans. The locations may be shifted to avoid stationary fixtures in the pavement.

Expansion joint filler shall be secured with sufficient number of steel pins to preclude any horizontal movement during the placing of concrete.

Metal dowel socket (CAP), 1 1/16" or 1 5/16" Dia., 24 gauge, closed on one end, shall be placed on the sawed end of each dowel bar as required for proper pavement expansion.

SEALING JOINTS

Joints shall be sealed as shown.

DOWEL BARS

Dowel bars shall be spaced at 12" C:C and 6" from each edge of pavement.

One end of each dowel bar shall be sawed and free of all burrs or protruding edges.

Dowel bars shall be painted with a rust inhibitive paint and coated for at least 2/3 their length with liquid asphalt MC 70 or MC 250, or other approved lubricant, to prevent bonding with concrete. The asphalt coating shall be applied to the sawed and capped end of the dowel bar and shall be sufficiently dry so that it will not be removed by the handling and placing of the dowel assembly.

Dowel bar dimensions:

For 7" P.C. Pavement - 1" Ø x 18"
For 8" P.C. Pavement - 1" Ø x 18"
For 9" P.C. Pavement - 1 1/4" Ø x 18"
For 10" P.C. Pavement - 1 1/4" Ø x 18"

TRANSVERSE JOINTS FOR CONCRETE PAVEMENT

State of Wisconsin
Department of Transportation
Division of Highways

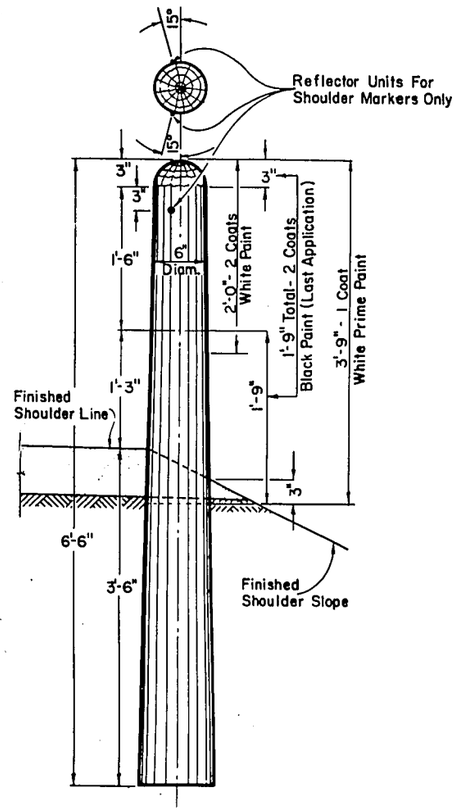
RECOMMENDED FOR APPROVAL:
5/24/68 DATE — E. J. Ostrich CHIEF DESIGN ENGINEER

APPROVED:
5/27/68 DATE — H. Linsmeier STATE HIGHWAY ENGINEER

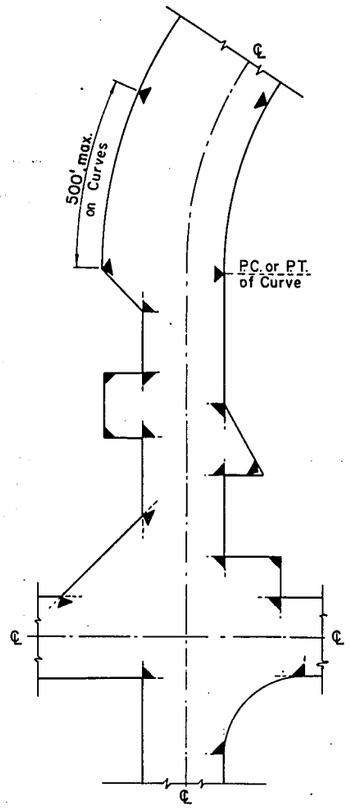
Plate No. 4-4.5.11

Plate No. 4-4.5.11

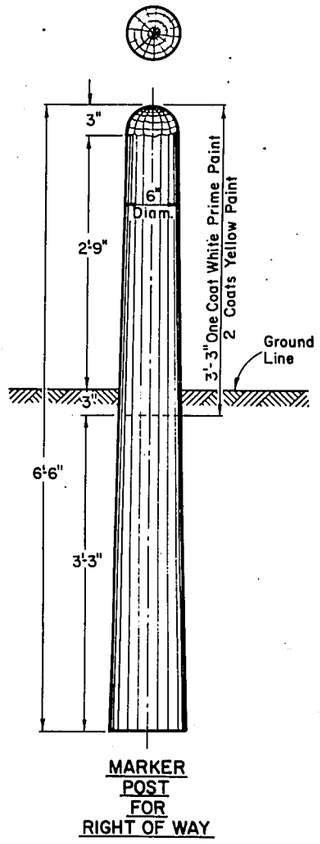
18.3-52



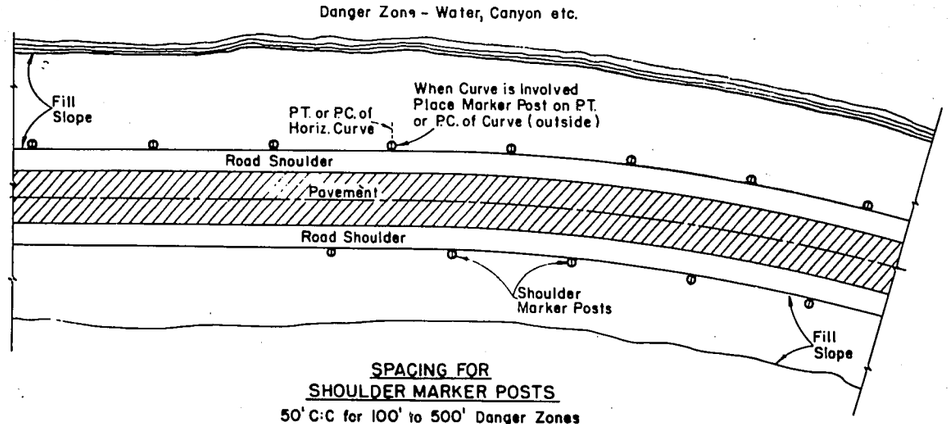
MARKER POST FOR
ROAD SHOULDERS



LOCATION DIAGRAM
SHOWING TYPICAL LOCATIONS OF
MARKER POSTS FOR RIGHT OF WAY



MARKER
POST
FOR
RIGHT OF WAY



SPACING FOR
SHOULDER MARKER POSTS
50' C:C for 100' to 500' Danger Zones
100 C:C for Over 500' Danger Zones

LOCATION DIAGRAM
SHOWING RELATIVE LOCATIONS OF SHOULDER MARKER POSTS

MARKER POSTS FOR ROAD SHOULDERS

MARKER POST FOR RIGHT OF WAY

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.

MARKER POSTS FOR RIGHT OF WAY

Right of Way Marker Posts shall be erected in advance of grading operations. Posts shall be placed at the outer limits of the highway Right of Way, but entirely within the Right of Way, and shall be so placed that the outer edge of the posts shall be tangent to the Right of Way line or lines extended. The exact location of all Right of Way posts will be staked in the field by the Engineer.

REFLECTOR UNITS

Reflector Units shall be installed in road shoulder marker posts only. Reflector Units shall have plastic crystal lens 7/8" in diameter. Unit assembly shall be a minimum of 7/8" in length. Reflector Units shall be furnished with flared expanding metal clips for wood mounting. Units shall be mounted in tightest fit possible and securely stayed in posts.

MARKER POSTS &
MARKER POSTS FOR RIGHT OF WAY

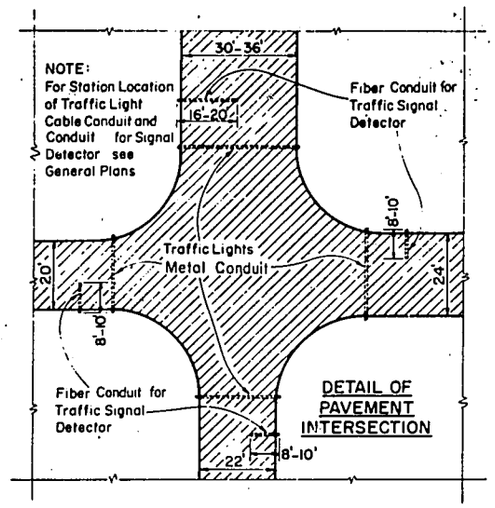
State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:
7/6/66 DATE — E.J. Bykit CHIEF DESIGN ENGINEER

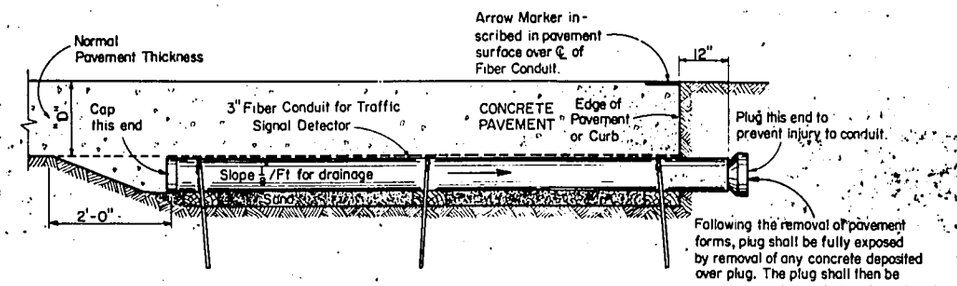
APPROVED:
7/5/66 DATE — A.C. Tramburg STATE HIGHWAY ENGINEER

Plate No. 7-1.3.5

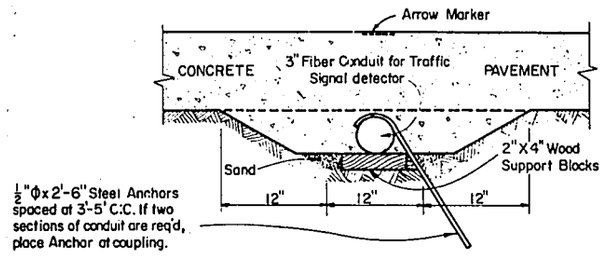
184-52



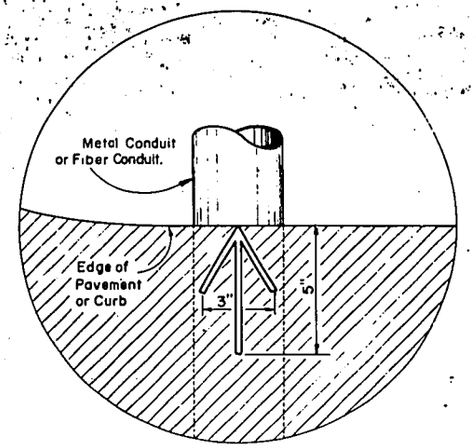
PLAN VIEW
SHOWING RELATIVE POSITION OF
TRAFFIC LIGHT CONDUITS AND
TRAFFIC SIGNAL DETECTOR CONDUITS
AT UNDIVIDED HIGHWAY INTERSECTIONS



TRAFFIC SIGNAL DETECTOR FOR
UNDIVIDED HIGHWAYS

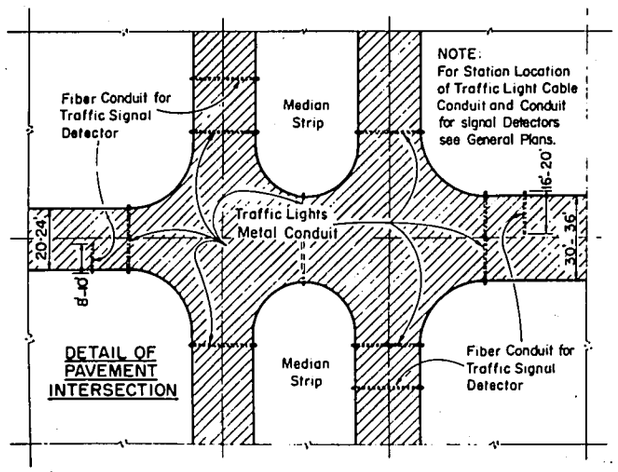


SIDE & END ELEVATIONS
SHOWING PLACEMENT DETAILS
FOR TRAFFIC SIGNAL DETECTOR CONDUIT

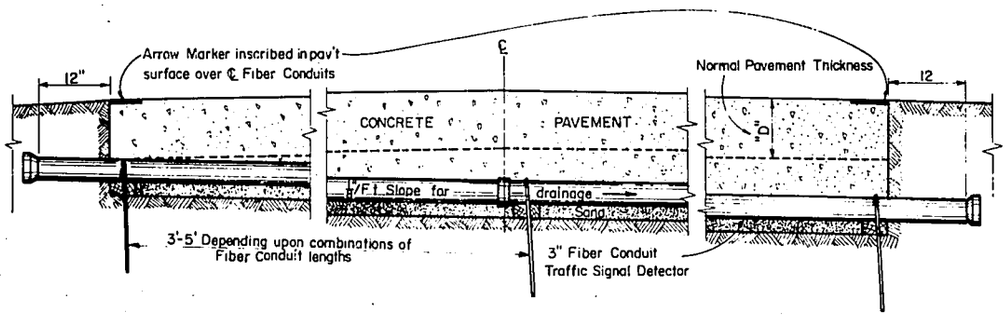


Arrow Marker to be inscribed in fresh concrete and/or bituminous surfacing 1/4" to 3/8" deep at each location where pipe conduit or fiber cond. are placed under rigid surfacing.

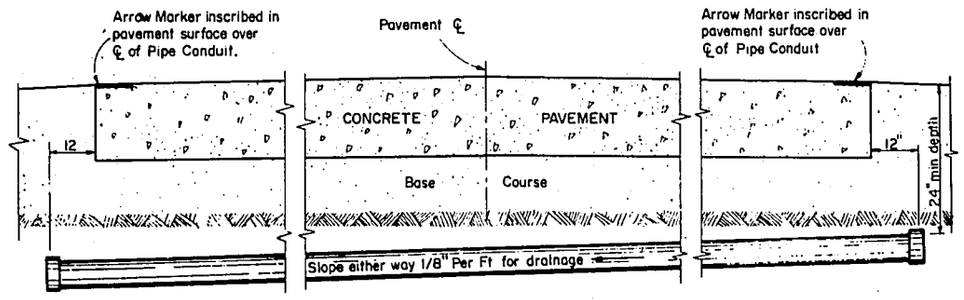
PLAN VIEW - ARROW MARKER



PLAN VIEW
SHOWING RELATIVE POSITION OF
TRAFFIC LIGHT CONDUITS AND
TRAFFIC SIGNAL DETECTOR CONDUITS
AT DIVIDED HIGHWAY INTERSECTIONS



TRAFFIC SIGNAL DETECTOR FOR
DIVIDED HIGHWAYS



ELEVATION ON CENTERLINE
SHOWING PLACEMENT DETAILS
FOR TRAFFIC SIGNAL CONDUIT

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.

MATERIALS

Metal Conduit shall be furnished and placed as shown hereon and in accord with the Standard Specifications.

Fiber Conduit shall be furnished and placed as shown hereon and in accord with the Standard Specifications.

MEASUREMENT & PAYMENT

The item of Fiber Conduit shall be measured and paid for by the linear foot complete in place and in accord with Standard Specifications

CONDUIT SIZE

Unless shown or required otherwise on the plans, Metal Conduit shall be 2" I.D.

METAL CONDUIT & FIBER CONDUIT

STATE HIGHWAY COMMISSION OF WISCONSIN

RECOMMENDED FOR APPROVAL.

4-3-63
DATE

J. S. Pilt
ENGINEER OF DESIGN

APPROVED:

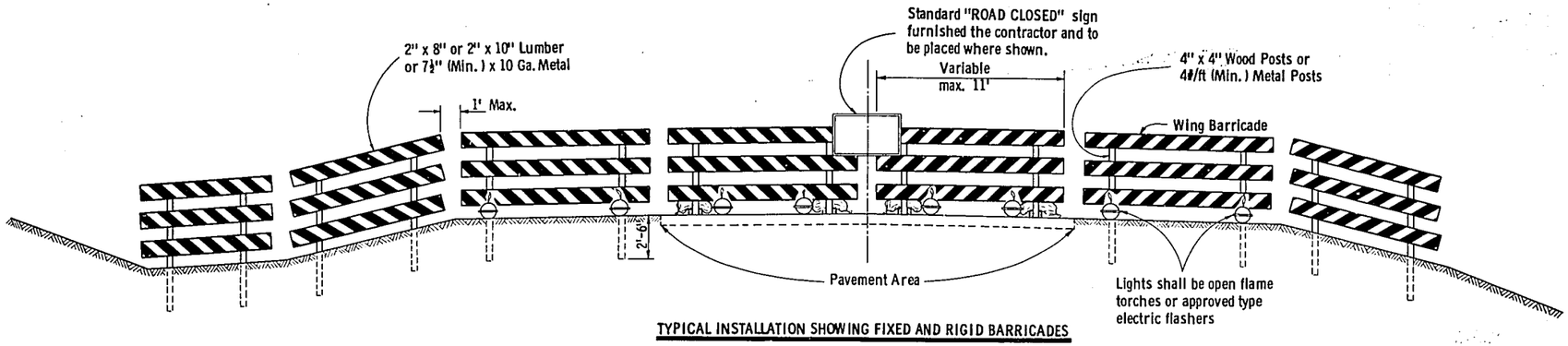
4/5/63
DATE

E. L. Roettiger
STATE HIGHWAY ENGINEER

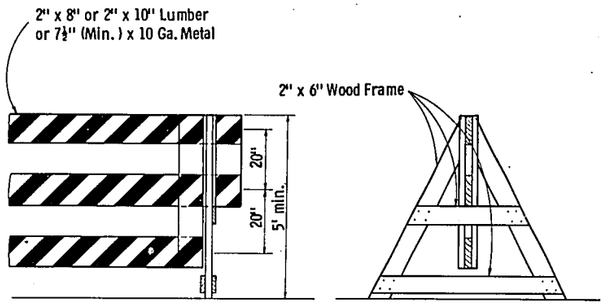
PLATE NO. 8-5.1.6

18.5-52

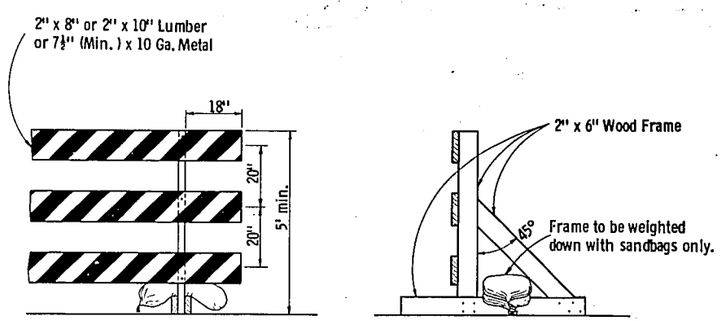
CLASS I BARRICADES



TYPICAL INSTALLATION SHOWING FIXED AND RIGID BARRICADES



ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



ALTERNATE TYPE INSTALLATION (RIGID)

GENERAL NOTES

The contractor shall construct, place and maintain barricades as shown on the drawing and as required by the Standard Specifications or applicable Special Provisions.

CLASS 1 BARRICADE:

Class 1 Barricades shall be of variable length as indicated, and long barricades shall be assembled from these units. The Class 1 Barricade is the type normally required for major operations, where the barricade will remain in place for extended periods. Class 1 Barricades shall be used at points where the road is closed to traffic. Gates or movable sections of a barricade shall be provided when necessary, for access of equipment or other authorized vehicles.
Wing Barricades are Class 1 Barricades erected on the shoulder on one or both sides of the pavement to give Traffic the perceptive effect of a narrowing or restricted roadway. The ends closest to traffic of all three members of a wing barricade shall be in a vertical line. If used in a series, they should start at the outer edge of the shoulder and be brought progressively closer to the pavement. Wing Barricades may be used as a mounting for the advance warning or guide signs or for flashers. When used on two-way roadways, the back of the wing barricade shall be painted reflectorized white.

CLASS 11 BARRICADE:

Class 11 Barricades may be used only where the hazard to traffic is relatively small, and for the more or less continuous delimiting of a restricted roadway, or for temporary daytime use.

MATERIAL & FABRICATION:

Lumber shall be of a grade structurally sound and sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.
Metal shall be sufficiently rigid to satisfactorily support and maintain the purpose and intent of a barricade facility.
The fabrication of the barricade shall be in accord with good pertinent woodworking and metalworking practices.
All lumber or timber dimensions stated are nominal.

PAINTING:

All barricades shall be painted in alternate 4" or 6" black and white stripes at a 45° angle. The width of stripe shall be consistent for each complete barricade installation.
Black stripes shall be painted with weather resistant and durable black paint. White stripes shall be primed, followed by two coats of white reflectorized paint or reflective wide angle sheeting.

DIRECTION OF DIAGONAL STRIPES:

Where a barricade extends entirely across the roadway with no vehicle access provision, the stripes shall slope downward toward the highway centerline.
Where vehicle access is permitted, the stripes shall slope downward in the direction toward which vehicles must turn in detouring.
Where both right and left turns are provided for, the stripes shall slope downward in both directions from the center.
The stripes on wing barricades shall point downward toward the roadway.

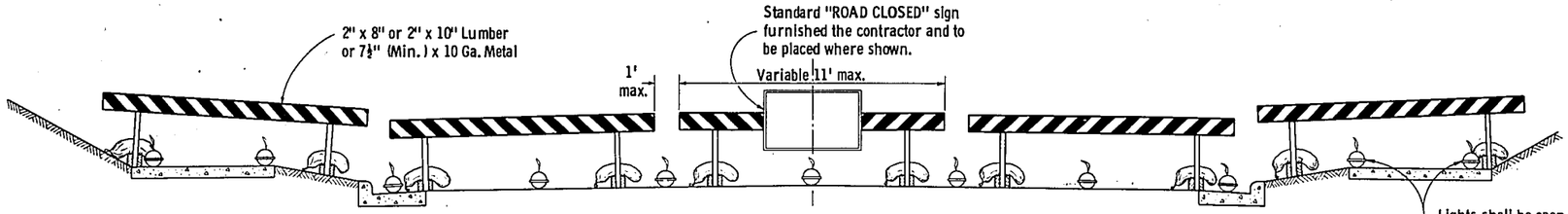
LIGHTING:

Lighting devices for barricades shall conform to the requirements of the Standard Specifications.

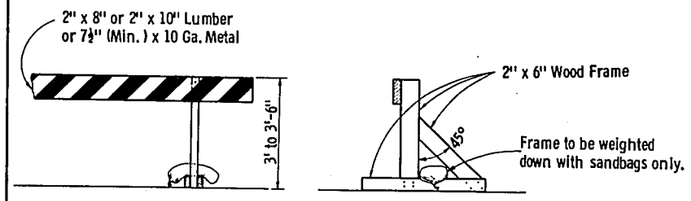
MEASUREMENT & PAYMENT:

All barricades, unless otherwise provided for in the plans and/or special provisions shall be furnished, placed, and maintained as noted above, and no additional compensation will be allowed but shall be construed to be included in the price bid for other items.

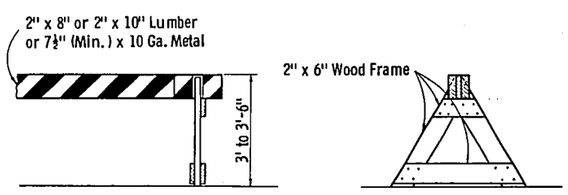
CLASS II BARRICADES



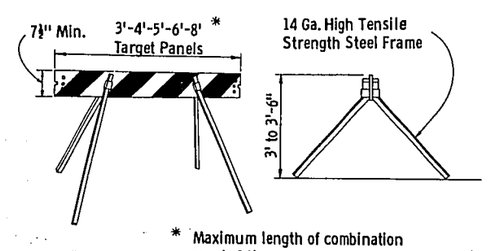
TYPICAL INSTALLATION SHOWING RIGID BARRICADES



ALTERNATE TYPE INSTALLATION (RIGID)

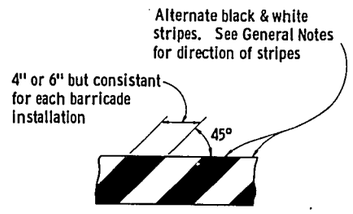


ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



* Maximum length of combination panels 16'

ALTERNATE TYPE INSTALLATION (DEMOUNTABLE)



TYPICAL DIAGONAL STRIPES

Applies to all Classes & Types of Barricades

CONSTRUCTION BARRICADE

State Highway Commission of Wisconsin

RECOMMENDED FOR APPROVAL:
1/11/67 DATE — CHIEF DESIGN ENGINEER
APPROVED:
1/13/67 DATE — STATE HIGHWAY ENGINEER

Plate No. 7-4.1.5

Plate No 7-4.1.5

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	2150-1-71 T.034-1(12)	11	52

℄ S.T.H. 100

R/W

167.02 167.02

128+50 165

165.94 166.02

128+00 165

165.17

127+50 165

164.18

127+00 165

R/W

126+45 165

SCALE = 1" = 10' HOR.
1" = 5' VER.

STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE FILL
129+00	50	22	131
128+50	50	28	64
128+00	50	23	50
127+50	50	17	26
127+00	55	10	5
126+45			
SHEET TOTAL			

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

S.T.H. 100

2150-1-71
T034-1(12)

20-52

131+50
175

131+00
170

130+50
170

130+00
170

129+50
170

129+00
165

1 = 10 HOR
1 = 05 VER
9300 1

2150-1-71
T.034-1(12)
21-52
21/67

135+00
180

134+50
175

MATCH
81ST ST.

134+00
180

MATCH
91ST ST.

133+50
180

133+00
175

132+50
175

132+00
175

1 = 10 HOR
1 = 05 VER
9300 2

21

2150-1-71
T.034-1(12)
22-52

138+50
180

138+00
180

137+50
180

137+00
180

136+50
180

136+00
180

135+50
180

1 = 10 HOR
1 = 05 VER
9300 3

2150-1-71
T.034-1(12)

23-32

141+00
175

140+50
180

140+00
180

139+50
180

139+00
180

1 = 10 HOR
1 = 05 VER
9300 4

64/52

2150-1-71
T.039-1(12)

24.52

143+00
170

142+50
175

142+00
175

141+50
175

1 = 10 HOR
1 = 05 VER
9300 5

24

2150-1-71
T.034-1(12)
25-52

145+00
165

144+50
165

144+00
170

143+50
170

1 = 10 HOR
1 = 05 VER
9300 6

2/50-1-71 26-52
T034-1(12)

148+50
150

148+00
150

147+50
155

147+00
155

146+50
160

146+00
165

145+50
165

1 = 10 HOR
1 = 05 VER
9300 7

26

2150-1-71
T.034-1(12)
27-52
27/12

151+00
145

150+50
145

150+00
145

149+50
150

149+00
150

1 = 10 HOR
1 = 05 VER
9300 8

21

28/52

2150-1-71

28-52

T.034-1(12)

152+50

140

152+00

140

151+50

145

1 = 10 HOR
1 = 05 VER
9300 9

27/5

2150-(-71

29-32

T.034-1(12)

154+00

140

153+50

140

153+00

140

1 = 10 HOR.
1 = 05 VER.
9300 10

21

30/52

2150-1-71
T.034-1(12)

30-52

155+50
135

155+00
135

154+50
135

1 = 10 HOR
1 = 05 VER
9300 11

30

Z/50-1-71
T.034-1(12)

31·52

157+00
135

156+50
135

156+00
135

1 = 10 HOR
1 = 05 VER
9300 12

2150-1-71
T.034-1(12)

32-52

158+50
135

158+00
135

157+50
130

1 = 10 HOR
1 = 05 VER
9300 13

33/6

2150-1-71

T034-1(12)

33-52

R/W

160+50

130

160+00

135

159+50

135

159+00

135

1 = 10 HOR
1 = 05 VER
9300 14

2150-1-71
T.034-1(12)

34-52

R/W

163+00
125

162+50
125

162+00
130

161+50
130

161+00
130

1 = 10 HOR
1 = 05 VER
9300 15

34

2150-(-7)
T034-1(12)
35-52

R/W

165+50
120

165+00
120

164+50
120

164+00
120

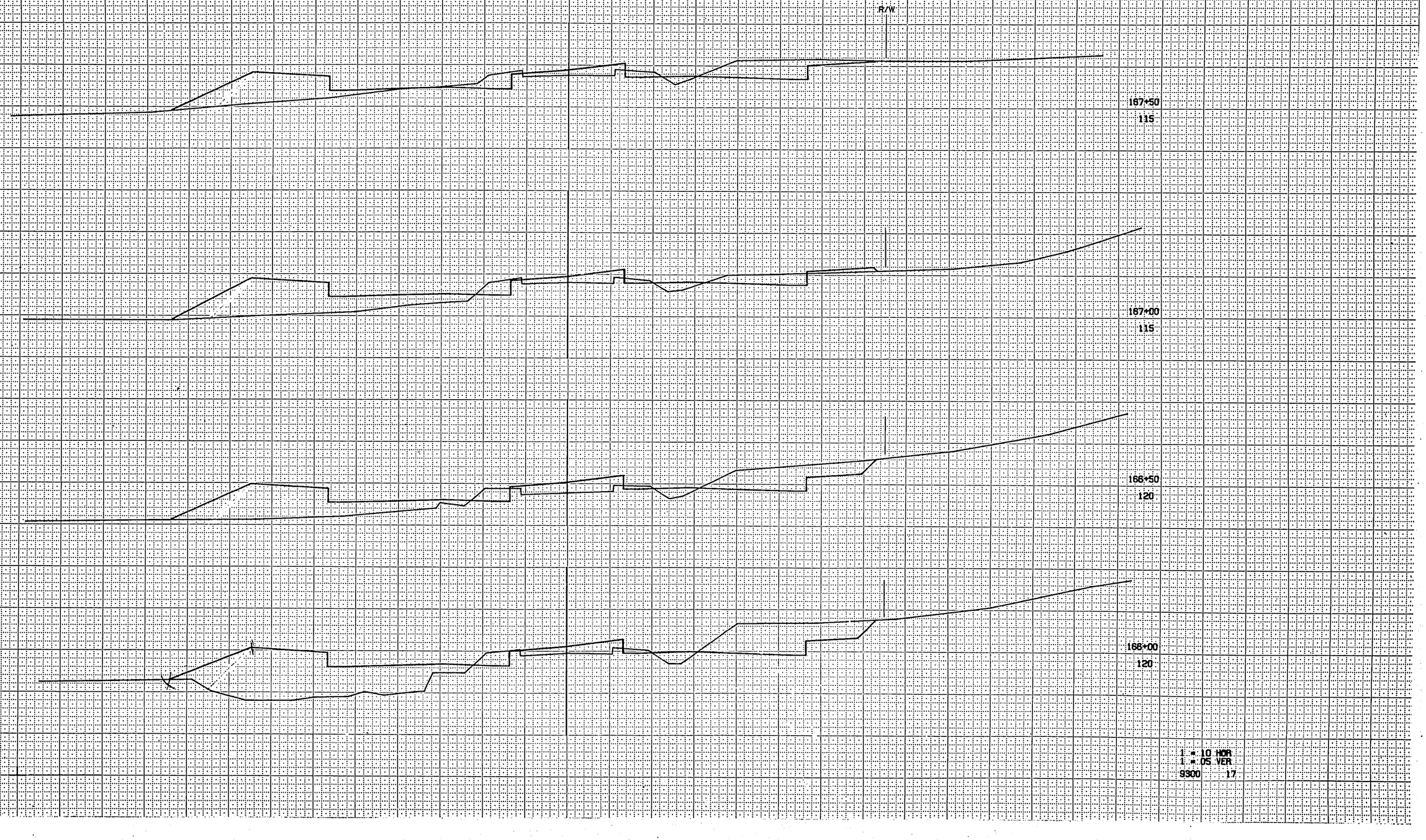
163+50
120

1 = 10 HOR
1 = 05 VER
9300 16

36/52

2150-1-71 36-32

T.034-1(12)



1 = 10 HOR
1 = 05 VER
9300 17

R/W

170+50
115

170+00
115

169+50
115

169+00
115

168+50
120

168+00
115

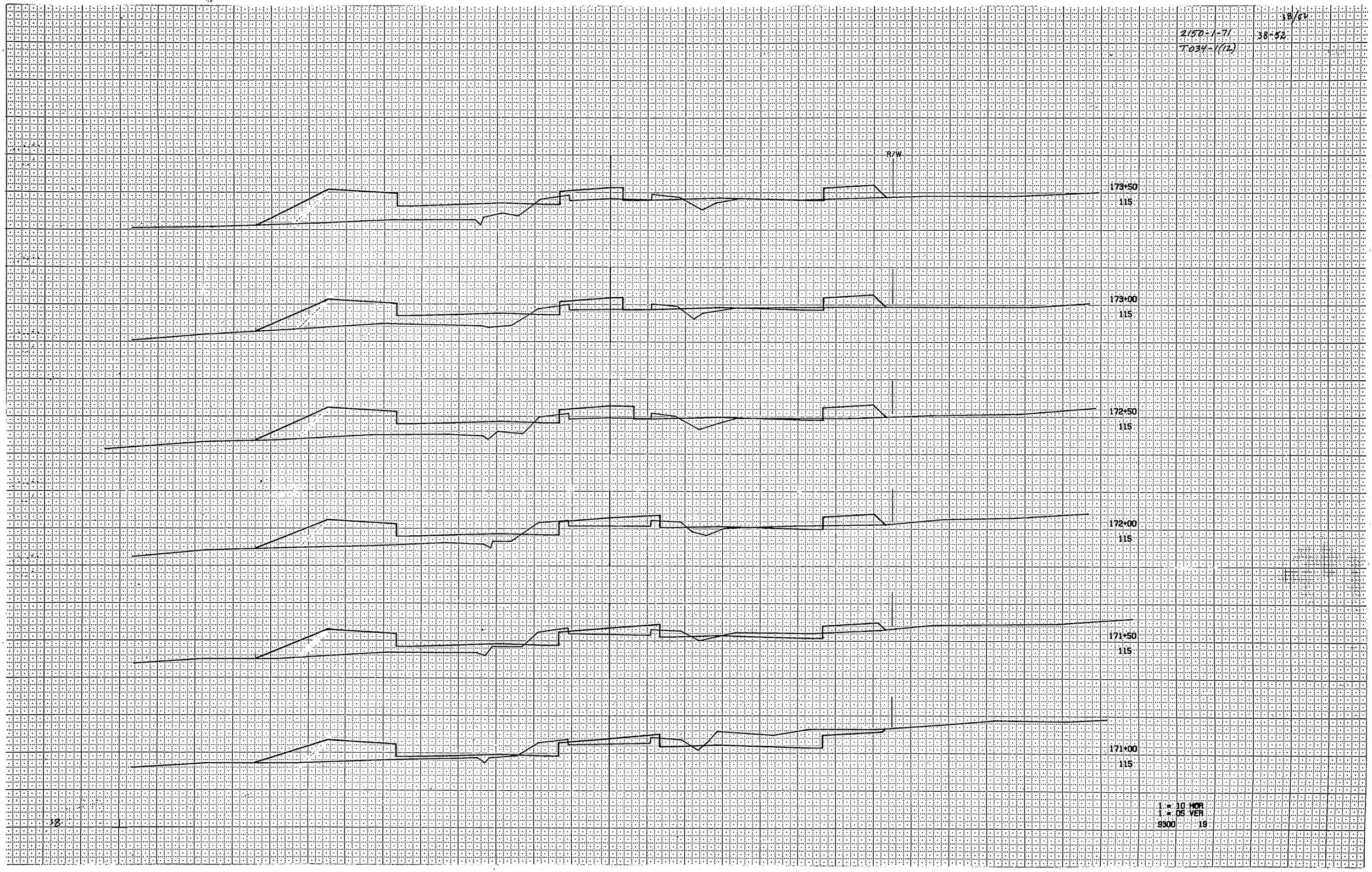
1 = 10 HOR
1 = 05 VER
9300 18

38/8V

2150-1-71

38-52

T034-1(12)



1 = 10 HOR
1 = 05 VER
9300 19

38

97/5

2150-1-71 39-52

T034-1(12)

R/W

176+00
110

175+50
110

175+00
115

174+50
115

174+00
115

1 = 10 HOR
1 = 05 VER
8900 20

39

40/5c

2150-1-71
T.034-1(12)

40-52

R/W

178+52
110

178+00
110

177+50
110

177+00
110

176+50
110

1 = 10 HOR
1 = 05 VER
9300 21

42

41/6L

2150-1-71 41-52

T 034-1(12)

194+00

115

193+50

115

193+00

115

192+50

115

1 = 10 HOR
1 = 05 VER

8900 22

42/52

2150-1-71 42-52

T.034-1(12)

196+00
115

195+50
115

195+00
115

194+50
115

1 = 10 HOR
1 = 05 VER
9300 23

42

41/4

2150-1-71 43-62

T 039-1(12)

198+00
115

197+50
120

197+00
115

196+50
115

1 = 10 HOR
1 = 05 VER
8300 24

V 2

4/6

R150-1-71 44-52
T.034-1(12)

199+50
115

199+00
115

198+50
115

1 = 10 HOR
1 = 05 VER
9300 25

2150-1-71 45-52
T.034-1(12)

201+00
115

200+50
115

200+00
120

1 = 10 HOR
1 = 05 VER
9300 26

05

2150-1-11 46-52
T034-1(12)

203+00
115

202+50
115

202+00
115

201+50
115

1 = 10 HOR
1 = 05 VER
9900 27

2150-1-71
T 034-1(12)

47-52

VI/4

205+00
115

204+50
110

204+00
110

203+50
115

1 = 10 HOR
1 = 05 VER
9300 28

47


207+50
110
207+00
110
206+50
110
206+00
110
205+50
115
1 = 10 HOR
1 = 05 VER
9300 29

2150-1-71
T034-1(12)

41-52

10/5"

210+50
95

210+00
100

STA. 210+00-BEGIN
9" BASE COURSE

209+50
105

209+00
105

208+50
105

208+00
105

1" = 10' HOR
1" = 05' VER
9300 30

2150-I-7
T034-I(12)

50-52

213+50
95

213+00
100

212+50
95

212+00
95

211+50
95

211+00
95

1 = 10 HOR
1 = 05 VER
9300 31

50

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	2150-1-71 7034-1(12)	51	52

91ST ST.

R/W

177.27

R/W

19+18 BACK ONLY
180

BACK

AHEAD (FOR REFERENCE ONLY)

19+00
180

177.00 177.08

176.37

18+50
180

175.31

18+00
175

17+68 AHEAD ONLY
175

SCALE = 1" = 10' HOR.
1" = 5' VER.

STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	YARDAGE FILL
19+18			
	18	105	
19+00			
	50	270	
18+50			
	50	152	4
18+00			
	32	33	2
17+68			

SHEET TOTAL

NO. MADE REVISION MADE CHECKED

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

91ST ST.

B.P.R. REGION DIVISION	PROJECT	SHEET NUMBER	TOTAL SHEETS
4 WIS.	2150-1-71 T034-1(12)	52	52

℄ 91ST ST.

R/W

R/W

22+33 BACK ONLY
180

178.23

22+00
180

177.87

177.83

21+50
180

177.63

177.69

21+00
180

177.63

20+82.9 AHEAD ONLY
180

AHEAD

BACK (FOR REFERENCE ONLY)

SCALE = 1" = 10' HOR.
1" = 5' VER.

STATION	DISTANCE	YARDAGE EXCAVATION UNCLASS.	FILL
22+33			
	33	30	12
22+00			
	50	58	36
21+50			
	50	84	59
21+00			
	17.1	36	34
20+82.9			
SHEET TOTAL			

NO. | AREAS AREAS CHECKED

FUNCTIONAL CROSS SECTION - OPEN DOTTED
CHARLES BRUNING COMPANY, INC.

91ST ST.