FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH.	BUI 391 (52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 & 65	WAYNE	Detroit	1	

FED. ROAD	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

MICHIGAN

STATE HIGHWAY DEPARTMENT

CHARLES M. ZIEGLER

STATE HIGHWAY COMMISSIONER

PLANS OF PROPOSED

MICHIGAN PROJECT BUI 391 (52)
THE EDSEL FORD EXPRESSWAY

CITY OF DETROIT
WAYNE COUNTY

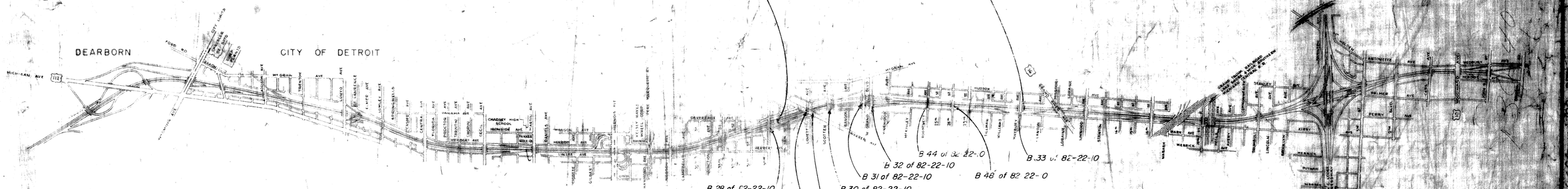
CONTROL SECTION 82023-U
HIGHWAY CLASSIFICATION 4350-M-60

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN STATE HIGHWAY DEPARTMENT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1950 EDITION, EXCEPT AS OTHERWISE INDICATED ON THE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED THEREIN.

82-64 C28
82-65 C7

INDEX OF SHEETS

Sheet	1	Title Sheet
Sheet	2 to 5	Typical Cross Sections
Sheet	6	Special Provisions
Sheet	7 to 8	Alignment
Sheet	9 to 11	Removal Plans
Sheet	12 to 16	Expressway Plans
Sheet	17 to 24	Expressway Profiles
Sheet	25 to 33	Ramps, Plan and Profile
Sheet	34 to 41	Service Road Plan and Profile
Sheet	42 to 43	Mass Diagram
Sheet	44 to 61	Special Details
Sheet	62 to 66	General Utilities
Sheet	67 to 75	Water Alterations
Sheet	76 to 107	Public Lighting, Signal and Power Details
Sheet	108 to 118	Quantities
Sheet	119 to 129	Quantities (as constructed)
Sheet	130	Mass Diagram (Construction)
Sheet	131	Mass Diagram (Completion)



ITEM 31

CONTRACT FOR G and DS, Dual 36' Pavements, Ramps, Certain Utilities and Service Roads BUI 391 (52)

STANDARD PLANS

E-4-A-9 C
E-4-A-10 B
E-4-A-21 F
E-4-A-26 D
E-4-A-27 R-3
E-4-A-27 A-3
E-4-A-27 B-3
E-4-A-27 D-3
E-4-A-29 D
E-4-A-33 D
E-4-A-49 B-7
E-4-A-75 C-2
E-4-A-77 D
E-4-A-110 B
E-4-A-127 A
E-4-A-129
E-4-A-130
E-4-A-131
E-4-A-135 A
E-4-A-55 D
Bridge Standard R 4
Bridge Standard R 5

ROAD DIVISION APPROVAL

CHECKED _____ CHIEF ROAD DRAFTSMAN _____ DATE 12-31-64
CHECKED _____ ASSISTANT ENGINEER OF ROAD DESIGN _____ DATE
RECOMMENDED FOR APPROVAL _____ ENGINEER OF ROAD DESIGN _____ DATE 12-31-64
RECOMMENDED FOR APPROVAL _____ ENGINEER OF ROAD CONSTRUCTION _____ DATE 12-31-64
APPROVED _____ ROAD ENGINEER _____ DATE 12-31-64

BRIDGE DIVISION APPROVAL

CHECKED _____ CHIEF BRIDGE DRAFTSMAN _____ DATE
RECOMMENDED FOR APPROVAL _____ ENGINEER OF BRIDGE DESIGN _____ DATE
APPROVED _____ DATE

STATE HIGHWAY DEPARTMENT APPROVAL

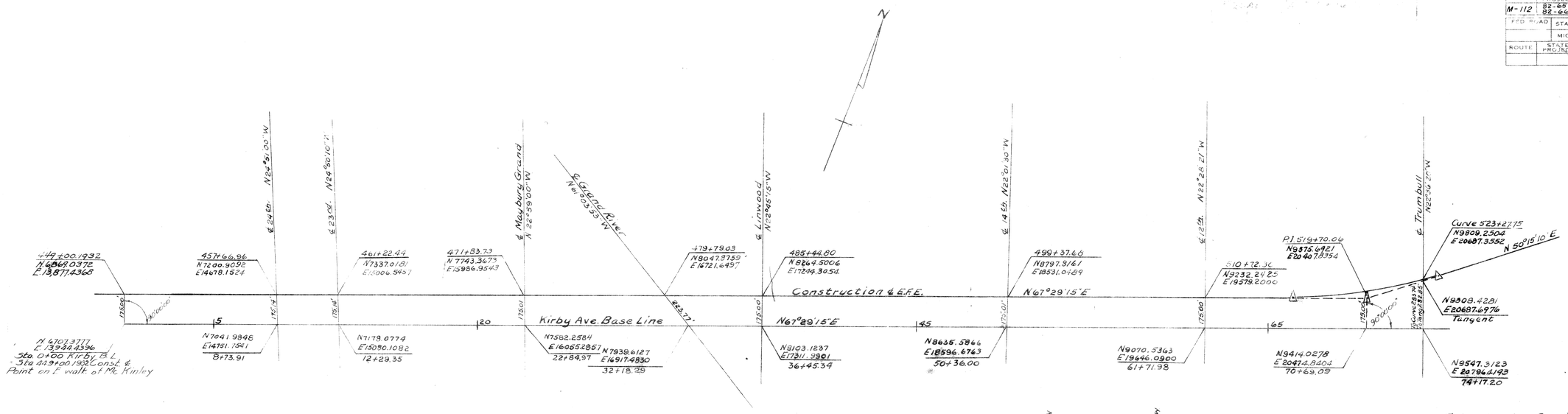
APPROVED CHARLES M. ZIEGLER, STATE HIGHWAY COMMISSIONER
BY _____ DEPUTY COMMISSIONER - CHIEF ENGINEER _____ DATE

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL
[redacted]
DISTRICT ENGINEER
APPROVED
[redacted]
DIVISION ENGINEER DATE

N-17-C

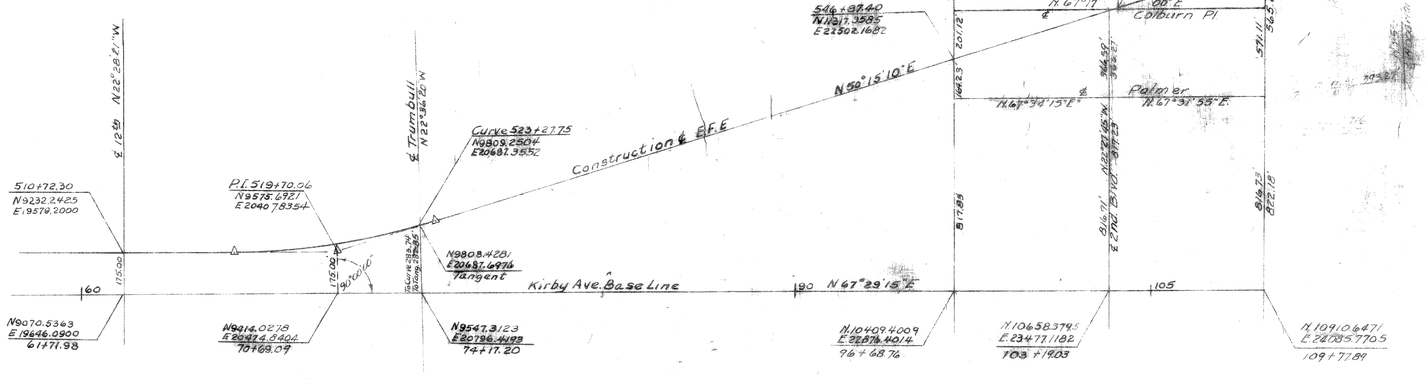
FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65 82-66	Wayne	Detroit	8	
FED. ROAD	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS



Scale 1" = 300'

Curve Data
Construction ℄ EFE
Δ = 17°14'00" Lt.
D = 2°00'00"
R = 2864.93'
L = 861.47'
T = 434.13'
E = 32.71'
PC = 515+35.97
PI = 519+70.00
P.T. = 523+97.54

To be stated on Construction
Curve Data
Construction ℄ E.F.E.
Δ = 17° 14' 05" Lt.
D = 2° 00' 02"
R = 2864.07'
L = 861.53'
T = 434.04'
E = 32.70'
PC = 515+36.01
PI = 519+70.06
PT = 523+97.54



Computed H.S. Thomason 11/47
Checked C. Noonan 11/47
with Kessler E. Noonan 8/1/50 Flow Sheet

ALIGNMENT DIAGRAM

N-17-C-1

BUI 391(52) 8

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391 (32)			
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS
M-112	82 164 82 165	Wayne Detroit	7		

FED. ROAD DIV. NO.	STATE	PROJ. No.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

0+00
N 00.00
E 00.00

Mc Grow Ave. Base Line

Construction ℄

290+43.62
S 32 44 47
E 0.0000

N 73° 30' 40" E 821.75

17+23.81
N 80 70 4.53
E 1523 20.94

Adison

308+42.64
N 470 56.94
E 1700 10.72

N 73° 30' 40" E 1773.02

25+27.36
N 1183 27.48
E 2233 24.99

Trenton

314+64.33
N 703 80.32
E 2488 05.96

N 73° 30' 40" E 419.42

29+39.14
N 1376 04.48
E 2597 11.08

Lonyo

320+83.81
N 822 81.40
E 2690 23.33

N 73° 30' 40" E 426.97

33+49.46
N 1566 17.33
E 2759 68.17

325+12.16
N 91 3.2233
E 3311 58.50

N 73° 30' 40" E 350.68

42+53.01
N 1994 01.27
E 3763 38.63

Lumley

334+62.64
N 1081 36.50
E 4245 43.65

N 79° 12' 00" E 679.14

50+97.19
N 2306 43.76
E 4504 01.86

Central

P I #2
Δ = 5° 41' 20" Rt
D = 0° 45' 00"
R = 7639.49'
T = 378.57'
L = 758.52'
E = 9.42'
PC = 317+04.24
PI = 320+83.81
PT = 324+62.76

1032.14'
N 2° 50' 35" W

1296.66 to Tang
1247.48 to Curve
N 2° 54' 50" W

1296.66' to P.I.
N 2° 55' 00" W

343+35.74
Sta on Curve
N 1296.7939
E 5098.0351

346+80.96
N 1309.6239
E 5441.9712

1392.10' to Tang
1378.66 P.C. to Curve
N 2° 55' 55" W

350+73.37
Sta on Curve
N 1513.5013
E 5792.6529

338.96

105.32

592.17

P I #3
Δ = 16° 54' 36" Lt
D = 1° 00' 00"
R = 5729.65
T = 851.76'
L = 1691.11'
E = 62.36'
PC = 338+29.20
PI = 346+80.96
PT = 355+20.31

1394.36'
N 2° 42' 10" W

63+98.56
N 2995.11.20
E 3653.93.66

N 62° 05' 00" E

1097.56

74+86.21
N 3505 93.06
E 66.16 83.86

Vernois

1313.96'
N 2° 51' 25" W

367+63.69
N 2283 66.03
E 7294 75.02

1671.25
N 62° 17' 20" E

1404.14'
N 27° 49' 00" W

89° 54' 00"

91+93.59
N 430 43.84
E 8123.72.79

384+37.87
N 3062 21.11
E 8778 37.25

Livernois

364+37.87
Y 3062.2111
X 8778.9725

Y E S S O N

Junction

Warren

30th St.

Scotten

Wurlitzer

P I #4
Δ = 20° 28' 35" Lt
D = 2° 00' 00"
R = 2864.93'
T = 517.45'
L = 1023.82'
E = 46.35'
PC = 396+48.09
PI = 401+65.54
PT = 406+71.92

P I #5
Δ = 25° 40' 30" Rt
D = 2° 00' 00"
R = 2864.93'
T = 652.87'
L = 1283.75'
E = 73.45'
PC = 427+51.06
PI = 434+03.93
PT = 440+34.81

Kirby Base Line

Sta 161+00 Kirby Base Line
Sta 14+00.00 ℄ Constr ℄

Sidewalk ℄ N Kirby

SCALE: 1" = 300'

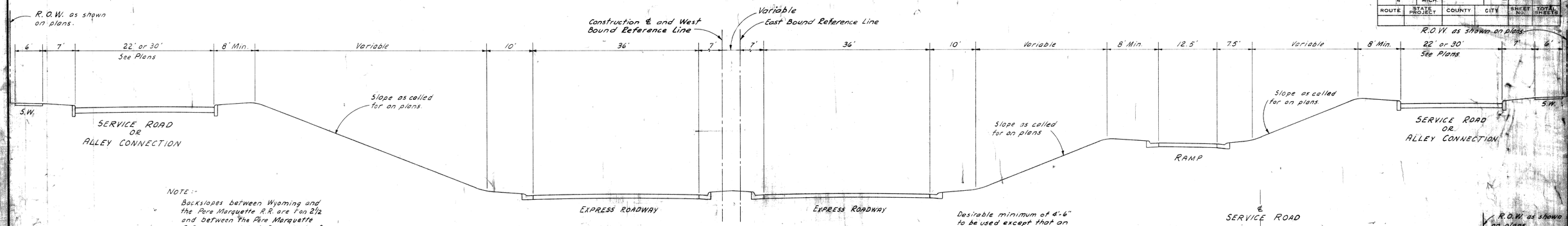
ALIGNMENT DIAGRAM

N-17-C-1

TYPICAL CROSS-SECTIONS

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 & 65	WAYNE	Detroit	2	

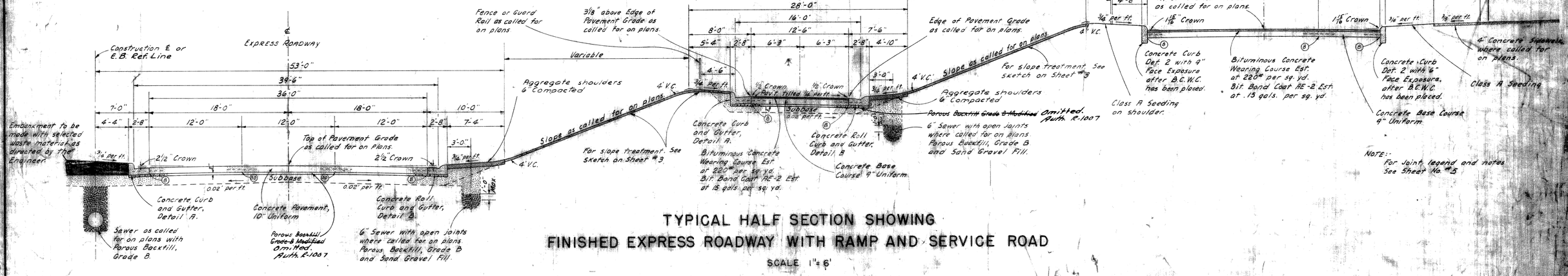
FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS



NOTE:-
Backslopes between Wyoming and the Pere Marquette R.R. are 1 on 2½ and between the Pere Marquette R.R. and Woodward Ave. are 1 on 2 unless otherwise called for on plans.

GENERAL TYPICAL CROSS SECTION

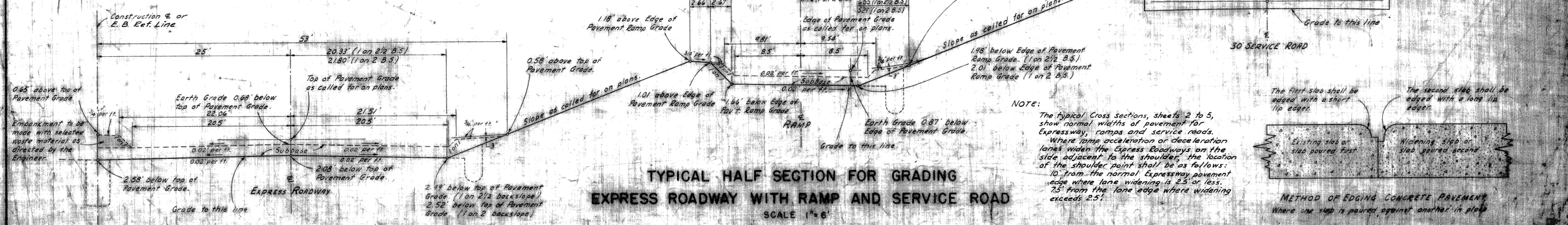
SCALE 1" = 10'



NOTE:-
For Joint, legend and notes See Sheet No. #5

TYPICAL HALF SECTION SHOWING FINISHED EXPRESS ROADWAY WITH RAMP AND SERVICE ROAD

SCALE 1" = 6'



TYPICAL HALF SECTION FOR GRADING EXPRESS ROADWAY WITH RAMP AND SERVICE ROAD

SCALE 1" = 6'

NOTE:
The typical Cross Sections, sheets 2 to 5, show normal widths of pavement for Expressway, ramps and service roads. Where ramp acceleration or deceleration lanes widen the Express Roadways on the side adjacent to the shoulder, the location of the shoulder point shall be as follows: 10' from the normal Expressway pavement edge where lane widening is 2.5' or less. 7.5' from the lane edge where widening exceeds 2.5'.

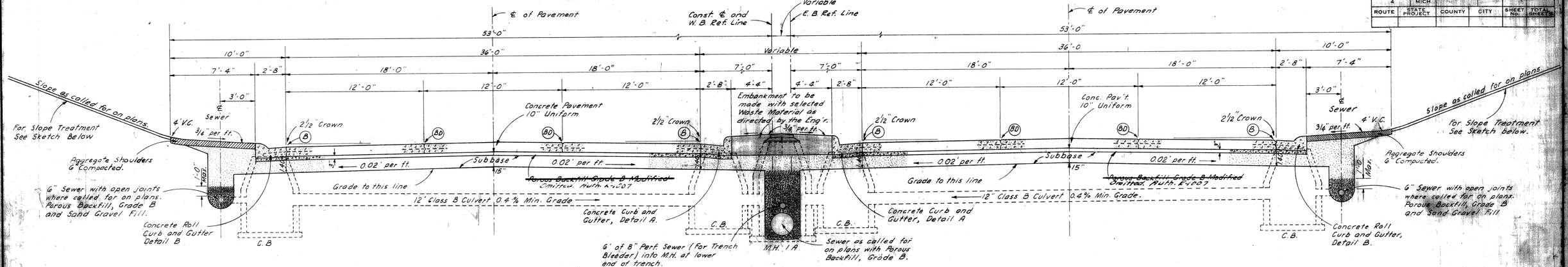
METHOD OF EDGING CONCRETE PAVEMENT
Where one slab is poured against another in place

N-17-C-1

TYPICAL CROSS-SECTIONS

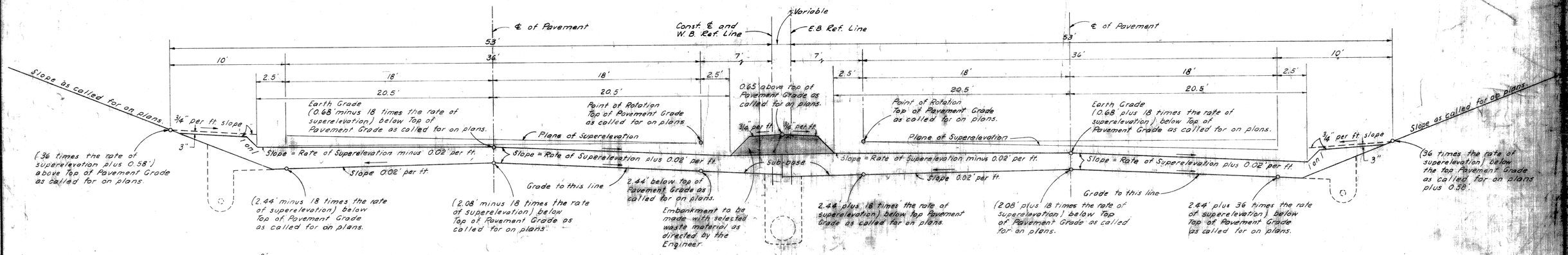
FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(62)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64A 65	WAYNE	Detroit	3	

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS



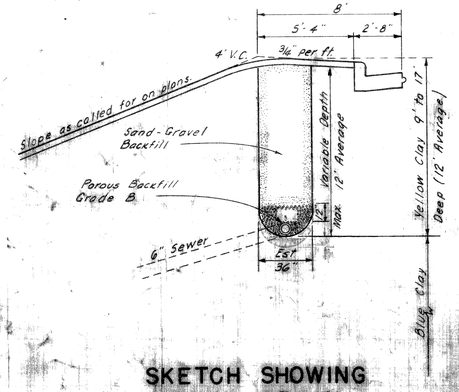
TYPICAL CROSS SECTION OF EXPRESSWAY SHOWING PAVEMENT, SUBBASE AND UNDERDRAINAGE

SCALE 1" = 4'



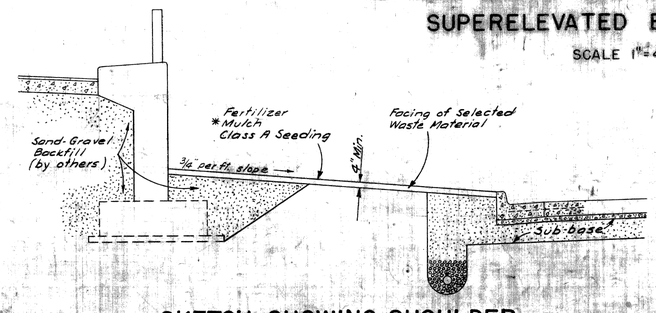
TYPICAL CROSS SECTION FOR GRADING SUPERELEVATED EXPRESSWAY

SCALE 1" = 4'



SKETCH SHOWING BANK DRAIN

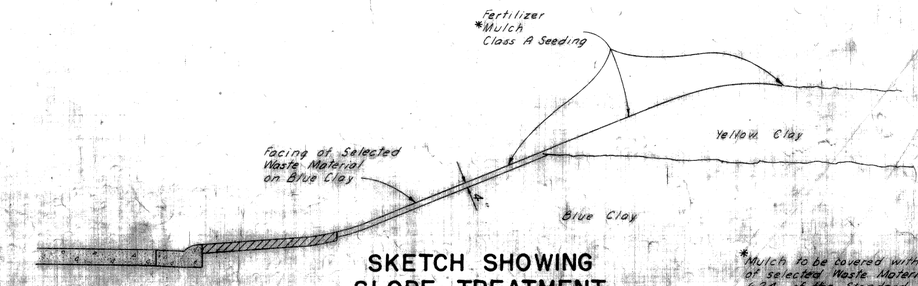
SCALE 1" = 4'



SKETCH SHOWING SHOULDER TREATMENT IN MEDIAN AREA

SCALE 1" = 4'

NOTE: For Joint Legend and Notes See Sheet #5



SKETCH SHOWING SLOPE TREATMENT

SCALE 1" = 4'

*Mulch to be covered with a thin coating of selected Waste Material according to 6.24 of the Standard Specifications.

DETAIL EXPRESSWAY SECTIONS

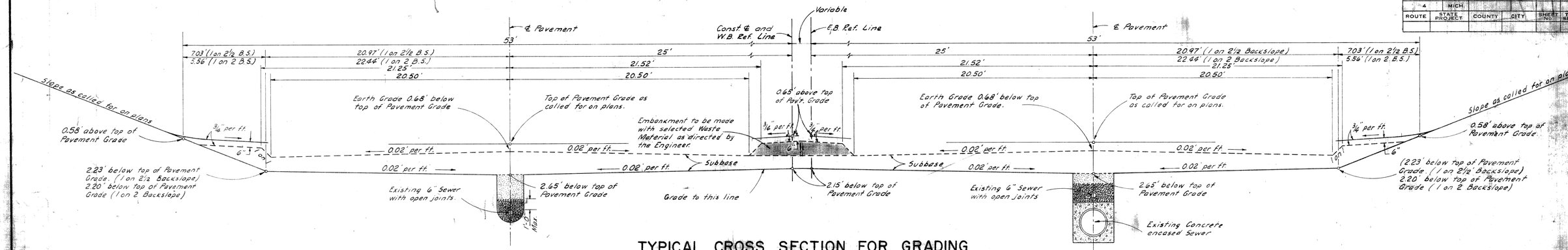
FILE NO. N-17-C-1

SHEET NO. 82-64A 65 M 3 15

TYPICAL CROSS-SECTIONS

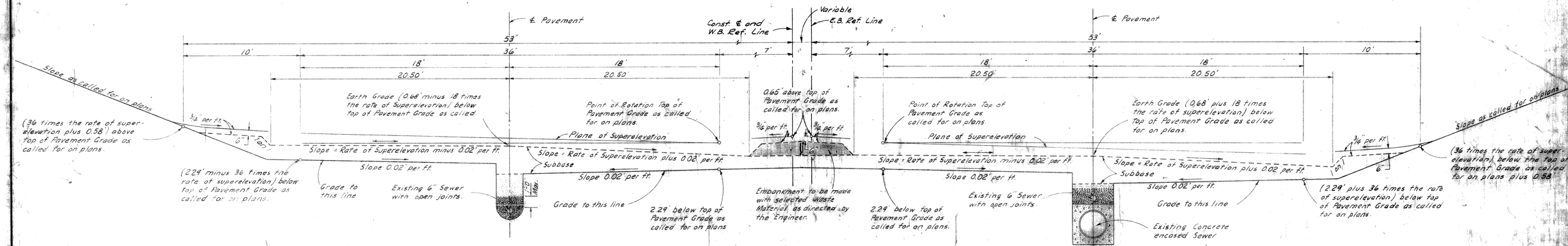
FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64A&B5	WAYNE	Detroit	4	

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS



TYPICAL CROSS SECTION FOR GRADING TO APPLY UNDER STRUCTURES

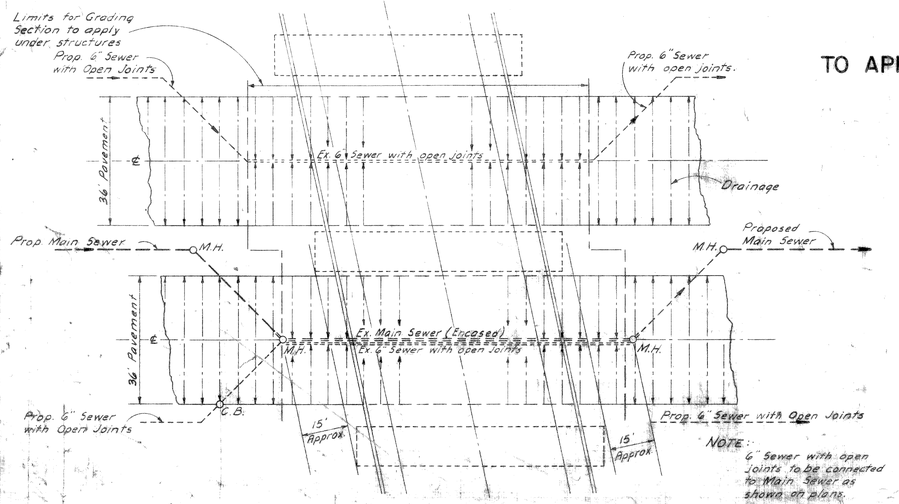
SCALE 1" = 4'



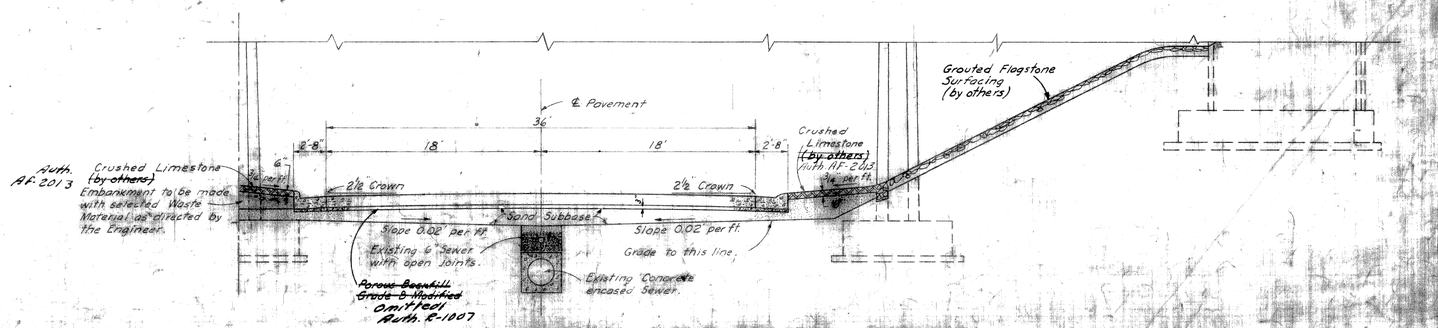
TYPICAL CROSS SECTION FOR GRADING TO APPLY UNDER STRUCTURES ON SUPERELEVATED CURVES

SCALE 1" = 4'

NOTE:- For Joint Legend and Notes see Sheet No. 5



PLAN SHOWING SUB-BASE DRAINAGE UNDER STRUCTURES



TYPICAL HALF SECTION SHOWING CRUSHED LIMESTONE SURFACE TO APPLY UNDER STRUCTURES

SCALE 1" = 6'

DETAIL EXPRESSWAY SECTIONS

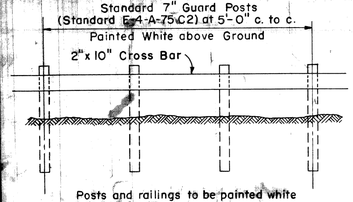
FILE NO. MRS NO. SHEET NO. N-17-C-1

STATE PROJECT 82-64A&B

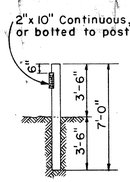
N. H. No. 4

TYPICAL CROSS-SECTIONS

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI. 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-12	82-64 & 65	WAYNE	Detroit	5	
FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS



TYPICAL ELEVATION

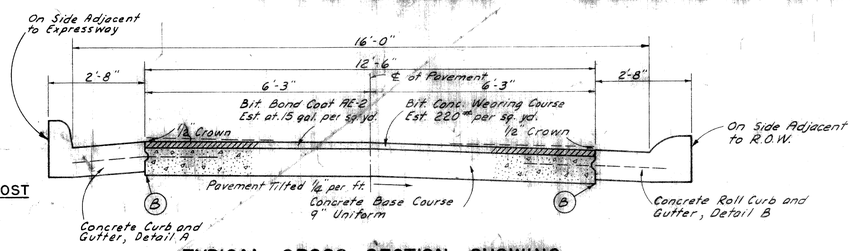


SECTION THRU POST

DETAILS OF SEMI- PERMANENT BARRICADE

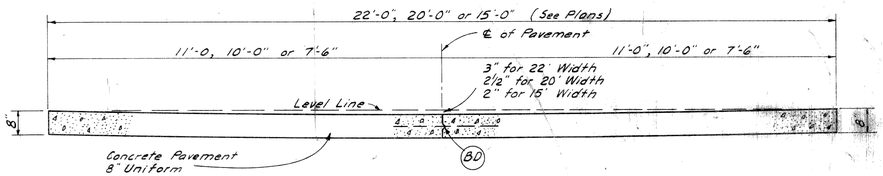
SCALE 1" = 4'

Note:
Each semi-permanent barricade shall be 10' longer than the width of pavement of the cross street or alley to be protected.
Semi-permanent barricades called for on plans as : S. P. B.



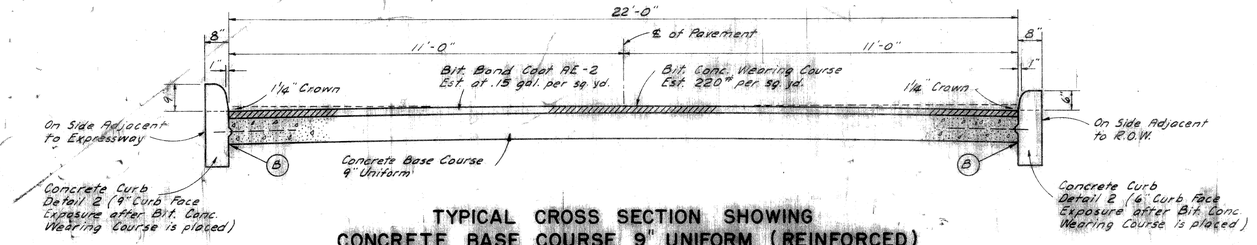
TYPICAL CROSS SECTION SHOWING CONCRETE BASE COURSE 9" UNIFORM (REINFORCED) WITH BITUMINOUS CONCRETE (CLASS I)

TO APPLY ON 16' RAMPS — SCALE ½"=1'



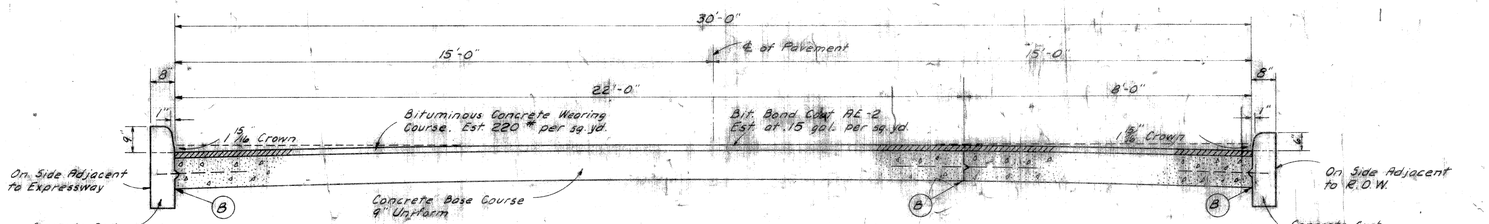
TYPICAL CROSS SECTION SHOWING CONCRETE PAVEMENT 8" UNIFORM

TO APPLY ON ALLEYS WHERE CALLED FOR ON PLANS — SCALE ½" = 1'



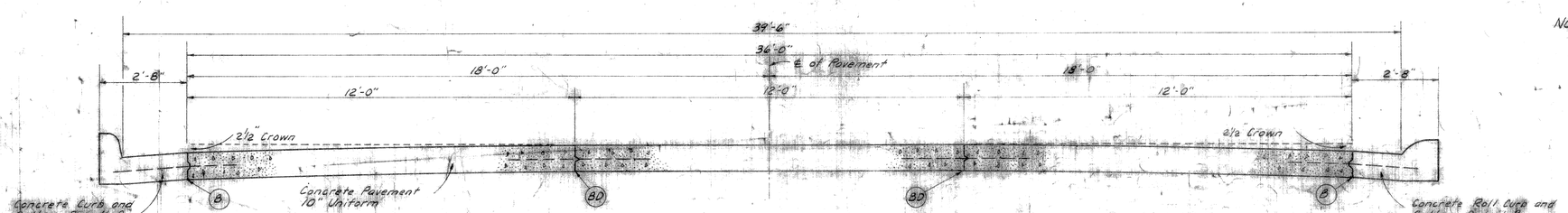
TYPICAL CROSS SECTION SHOWING CONCRETE BASE COURSE 9" UNIFORM (REINFORCED) WITH BITUMINOUS CONCRETE (CLASS I)

TO APPLY ON 22' SERVICE ROAD — SCALE ½" = 1'



TYPICAL CROSS SECTION SHOWING CONCRETE BASE COURSE 9" UNIFORM (REINFORCED) WITH BITUMINOUS CONCRETE (CLASS I)

TO APPLY ON 30' SERVICE ROAD — SCALE ½" = 1'



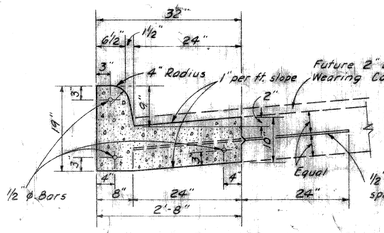
TYPICAL CROSS SECTION SHOWING CONCRETE PAVEMENT 10" UNIFORM (REINFORCED)

TO APPLY ON EXPRESS ROADWAY — SCALE ½" = 1'

JOINT LEGEND

- B — Longitudinal Bulkhead Construction Joint with Tie Bars. Standard E-4-A-33.D, Detail 3 or 4.
- D — Longitudinal Lane Tie Joint with Tie Bars. Standard E-4-A-33.D, Detail 1 or 2
- BD — Optional B or D

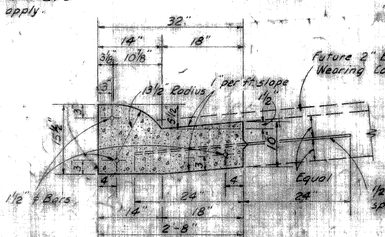
NOTE:
No poles will be allowed within the R.O.W. along this Project.
The Concrete Base Course and Concrete Pavement shall be reinforced throughout in accordance with Standard Plan E-4-A-27.F, except Omitted pavement on alley connections, ~~and Lawton Temporary Ramp.~~ Class A Slopes will be required on this project according to article 2.13.03 (6) of the Standard Specifications.



CONCRETE CURB & GUTTER, DETAIL A

SCALE ¾" = 1'-0"

NOTE:
General Notes on Std. E-4-A-29.0 shall apply.



CONCRETE ROLL CURB & GUTTER, DETAIL B

SCALE ¾" = 1'-0"

PLAN NO. N-17-G-1 82-64&65(1)

182-64
82-65

SPECIAL PROVISIONS

GRADES FOR INTERSECTIONS

All intersections are to be considered as complete units and their grades determined before construction is started.

TRANSVERSE JOINTS IN CONCRETE PAVEMENT

Transverse joints in concrete pavement shall be placed according to details on Standard Plan E-4-A-135A and E-4-A-127A.

TRANSVERSE PLANE OF WEAKNESS JOINTS IN CONCRETE BASE COURSE

Transverse plane of weakness joints shall be placed according to Standard Plan E-4-A-127A.

PAVEMENT REINFORCEMENT

All concrete pavement shall be reinforced with mesh, bar mat, or expanded metal mesh reinforcement throughout except that reinforcement shall be omitted on temporary Maybury Grand "ON" Ramp.

BASE COURSE REINFORCEMENT

The concrete base course shall be reinforced throughout with mesh, bar mat, or expanded metal mesh reinforcement.

TIE BARS FOR LONGITUDINAL JOINTS IN CONCRETE PAVEMENTS OR CONCRETE BASE COURSE

When deformed steel bars with deformations conforming to A.S.T.M. Designation: A 305 are used as tie bars in the longitudinal joints in Concrete Pavement or Concrete Base Course (Standard Plan E-4-A-33D) including tie bars for curb or curb and gutter (Standard Plan E-4-A-29D), the minimum length of the bar required will be 30 inches instead of 48 inches as called for on the plans.

The bars shall be centered across the joint unless otherwise shown on the plans.

PAVEMENT REINFORCEMENT

The pavement reinforcement shall conform to Standard Plan E-4-A-21F, except that the length of sheet or mat for 12-foot lanes may be 15'-0" instead of 10'-0". The laying lap for 15-foot length sheet or mat shall be 13 inches. The computed weight of steel per standard sheet is as follows:

Type of Reinforcement	Weight per 15-foot length of Standard Sheet for 12-foot Lane in Lbs.
Mesh	128.9
Bar Mat	142.2
Expanded Metal	138.0

MANHOLE COVERS IN SHOULDER AREAS

All manhole covers occurring within shoulder areas shall be set at an elevation 3" to 4" below the normal shoulder elevation.

62-65 BUI-391(52)

The following items of work shall be done as they apply throughout the project. These items are not detailed or included on the Plan and Profile Sheet. (Continued)

Earth Excavation and Waste (undercutting on Slopes) Entire Project	1776 Cu. Yds.
Facing of Selected Waste Material (On Unsodded Slopes, Median and Roadsides) Entire Project (Loose Measure)	4236 Cu. Yds.
Organic Fertilizer (800 lbs. per acre) (On Unsodded Slopes, Median and Roadsides) Entire Project	12,800 Lbs.
Inorganic Fertilizer (400 lbs. per acre) (On Unsodded Slopes, Median and Roadsides) Entire Project	6400 Lbs.
Mulching (2 tons per acre) (On Unsodded Slopes, Median and Roadsides) Entire Project	32 Tons
Class A Seeding (On Unsodded Slopes, Median and Roadsides) Entire Project	16 Acres
Aggregate Shoulders (Entire Project, Auth. X-1011)	2148 ~~1798~~ Tons

The following items are estimated for the entire project to correct unstable subgrade conditions where designated by the Engineer:

**Earth Excavation (Frost Heave)	9000 Cu.Yds.
*Borrow	11,250 Cu.Yds.
Overhaul on Borrow	131,276 Comp.Cydmi
6" Sewer with Open Joints (Bank Drains) 10' to 14' Depth (Omitted, Auth. C-1005)	~~4780 Lin.Ft.~~
6" Sewer (Bank Drain Connections) 10' to 14' Depth (Omitted, Auth. C-1005)	~~860 Lin.Ft.~~
**Earth Excavation (Waste from Bank Drain Sewer Trenches)	6642 Cu.Yds.
Porous Backfill, Grade B (Loose Measure)	1268 Cu.Yds.
*Sand Gravel Backfill (Loose Measure)	6874 Cu.Yds.
*Overhaul (Sand Gravel Backfill)	81,380 Comp.Cydmi

*To be obtained from Pit No. 2
11,250 Cu. Yds. from Pit No. 2
**To be disposed of by the Contractor
(The Ford Foundation is available.)

82-64
82-65

The following items of work shall be done as they apply throughout the project. These items are not detailed or included on the Plan and Profile Sheets.

82-64
BUI-391 (52)

LOCATION	STA. TO STA.	FINE GRADING	FINAL TRIMMING AND CLEANING UP
West Bound Expressway	423+00 to 426+15	3.15 Stas.	3.15 Stas.
East Bound Expressway	420+11.66 to 426+18.77	6.05 Stas.	6.05 Stas.
30th East Bound "ON" Ramp	419+32.36 to 423+93.88	4.62 Stas.	4.62 Stas.
	TOTALS	14	14

Earth Excavation and Waste (Undercutting on Slopes) Entire Project	243 Cu. Yds.
Facing of Selected Waste Material (On Unsodded Slopes, Median and Roadsides) Entire Project. (Loose Measure)	1076 Cu. Yds.
Organic Fertilizer (800 Lbs. per acre) (On Unsodded Slopes, Median and Roadsides) Entire Project	2000 Lbs.
Inorganic Fertilizer (400 lbs. per acre) (On Unsodded Slopes, Median and Roadsides) Entire Project	1000 Lbs.
Mulching (2 Tons per acre) (On Unsodded Slopes, Median and Roadsides) Entire Project	5 Tons
Class A Seeding (On Unsodded Slopes, Median and Roadsides) Entire Project	2.5 Acres
Aggregate Shoulders - Entire Project	269 Tons

The following items are estimated for the entire project to correct possible unstable subgrade conditions where designated by the engineer.

**Earth Excavation (Unsuitable Subgrade)	400 Cu. Yds.
*Borrow	500 Cu. Yds.
Overhaul	6082 Comp. Cu.Yd.Mi.

*500 Cu. Yds. from Pit No. 2
**To be disposed of by the Contractor
(The Ford Foundation is available)

The following items of work shall be done as they apply throughout the project. These items are not detailed or included on the Plan and Profile Sheets.

82-65
BUI-391 (52)

LOCATION	STA. TO STA.	FINE GRADING AND CLEANUP	FINE GRADING	FINAL TRIMMING AND CLEANING UP
West Bound Expressway	426+15 to 444+92		18.90 Stas.	18.90 Stas.
West Bound Expressway	444+92 to 456+67	11.75 Stas.		
West Bound Expressway	456+67 to 458+67		2.00 Stas.	2.00 Stas.
West Bound Expressway	458+67 to 470+83	12.16 Stas.		
West Bound Expressway	470+83 to 472+30		1.47 Stas.	1.47 Stas.
East Bound Expressway	426+16.77 to 444+64		18.38 Stas.	18.38 Stas.
East Bound Expressway	444+64 to 456+67	11.73 Stas.		
	xxxxxxxxxxxxxxxxxxxx			
East Bound Expressway	456+67 to 458+67		2.00 Stas.	2.00 Stas.
East Bound Expressway	458+67 to 470+83	12.16 Stas.		
xxxxx				
xxxxxxxxxxxxxxxxxxx

Remove trees as marked this sheet

Removing Trees 8" to 12" Dia. (9) each
Removing Trees 13" to 24" Dia. (14) each
Removing Trees 25" to 36" Dia. (4) each
Removing Trees 37" and over (1) each
} Auth. AB-1015

Remove existing conc. sidewalk
Conc. Driveways and Conc. Garage Floors shown hatched.
710 Sq. yds. Removing sidewalk

Remove Existing Pavement shown hatched Auth. AB-1015
2108 Sq. yds. Removing old Pavement

Auth. AB-1015 } (Estimated 207 cu. yds. of Removing Masonry and Conc. this sheet. (between Ex. top of slope or slope stake line and R.O.W. Line.)

Reconstructing Manholes Auth. AB-1015
(1) each (this sheet)
Abandoning Catch Basins
(1) each (this sheet)

FED. RD. DIV. No.	STATE	FED. PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET No.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	9	

FED. RD. DIV. No.	STATE	FED. PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MICH				
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET No.	TOTAL SHEETS

NOTE:

Topography represents the existing condition at the time of the survey as modified by subsequent changes resulting from the removal of buildings, construction of sewers, bridges, bridge approaches and appurtenances, and the revision of utilities due to the construction thereof. Conditions may be further altered before this contract is in force due to the removal of additional buildings and the completion of contract work in the area.

Existing Foundation

Gas Main Service has been cut or will be cut as indicated on plans.
Mains between cuts are or will be abandoned.

Engineer to check trees to be removed that are located between slope stake lines and R.O.W. lines, on entire project.

Removal items apply
Sta. 442+45 - Sta. 452+08

Squad Mark 1957 Danielson 1952

W.B. Reinicke
S.B. Foster
8-52
3-31-51

HUDSON

3 St. Br. Apt. Bldg. #1646

Ex. 18" Conc. Alley

Gas Main Service has been cut

VINEWOOD (36' Wide)

Ex. 8" Water Main
Ex. 4" Gas
Mich. Bell Tele Co.

Gas Main Service has been cut.

Ex. 20' Dirt Alley

Ex. 10" Sewer

Ex. M.H.

McKINLEY (26' Wide) Pavt. Conc.

ROOSEVELT (24' Wide) Sheet Asphalt

Ex. C.B.

Ex. 15" Sewer

Br. Gar. — 1½ St. Fr. Ho. #5521

Fr. Gar. — 2 St. Fr. Ho. #5515

Ex. 12" Water Main

Top of Ex. Slope

10" Maple Remove

12" Pear Remove

Ex. 12" Sewer

TH 2

Ex. B. 32 of 82-22-10

W. B. Expressway

N. 67°29' 15" E.

441 442 443 444 445

Ex. Retaining Wall

"Off" Ramp
N. 59°57' 45" E.

Ex. Retaining Wall

PT. 440+36.81

TH. 4

E. B. Expressway

Ex. 12" Sewer

TH. 6

"On" Ramp

Top of Ex. Slope

Ex. 12" Water Main

2 St. Br. Ho. #1598 & 1600

Gar.

2 St. Fr. Ho. #5401

Gas Main Service has been cut.

12" Apple

Ex. 6" Gas

Ex. 8" Water Main

Ex. 12" Gas Main

Ex. 4" Gas (Dead)

Ex. 2" Gas

Ex. 6" Water Main

Ex. 2" Water Main

Ex. C.B. filled with Rubbish

Ex. D.E. M.H.

Ex. Gravel Alley

Prop. Ret. Wall

Det. Ed. Underground Line

Gas Main Service has been cut.

Ex. O.E. M.H.

Ex. 10" Sewer

Ex. 12" Gas Main

Ex. 2" Water Main

Ex. 6" Water Main

Ex. C.B.

Ex. 6" Gas

Ex. 4" Gas

Ex. 2" Gas

Ex. 8" Water Main

Ex. 12" Water Main

Ex. 6" Gas

Ex. 12" Gas Main

Ex. 2" Gas

Ex. 8" Water Main

Ex. 4" Gas

Ex. 2" Gas

Ex. 6" Water Main

Ex. 2

FED. RD. DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FOR. FED. AID	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	10	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
P. RTE.	STATE PROJECT	COUNT		SHEET NO.	TOTAL SHEETS

Remove trees as marked this sheet
8" to 12" Dia. (42) each
13" to 24" Dia. (17) each
} Auth. AB-1015

Remove existing conc. sidewalk, conc. driveways, and conc. Garage floor shown hatched. 1255 sq. yds. Removing sidewalk.

Abandoning Manholes (3) each
Abandoning Catch Basins (4) each

Remove existing Pavement shown hatched. Auth. AB-1015 5856 sq. yds. Removing old Pavement.

Auth. AB 1015 } Estimated 169 cu. yds. of Removing Masonry and Concrete this sheet. (between Ex. top of slope or slope stake line and R.O.W. lines).

HUDSON

Removal Items apply Sta. 452+08 - Sta. 464+55

ROOSEVELT (24' Wide) Sheet Asphalt

TWENTY-FIFTH (26' Wide) 7" Reinf. Conc.

TWENTY-FOURTH (26' Wide) Sheet Asphalt on Conc.

TWENTY-THIRD (26' Wide) 3½" Asphalt on 6" Conc.

KIRBY (26' Wide) Sheet Asphalt on 8" Conc. Base

20' Conc. Alley

18.5' Conc. Alley

19' Conc. Alley

Squad - Marek 1951

Gas Main Service has been cut

Abandon C.B.

Slope Stake Line

Ex. Top of Slope

Abandon M.H.

Ex. B. 48 of 82-22-10

For removal items east of alley, see Sht. No. 11

N. 67° 29' 15" E.

Ex. Det Edison

Fire and Police

Parking Lot

Under Parking Lot

Vacated Alley

LOG OF BORINGS TWENTY—FOURTH

TH. 1

132.8 / 132.3	Concrete
	Firm yell. & Bl. Clay
127.8	
	Hard Yell. & Bl. Clay Trace of Pebbles
120.8	
	Stiff Blue Clay Trace of Pebbles
116.8	
	Very Firm Blue Clay Trace of Pebbles

TH. 2

132.8 / 132.3	Black Topsoil
	Plastic Bl. & Yell. Clay - Loamy
128.8	
	Stiff Blue and Yell. Clay - Silty
125.8	
	Hard Blue and Yell. Clay - Silty
119.8	
	Firm Bl. & Yell. Clay Trace of Pebbles
112.8	

TH. 3

132.8	Topsoil & Sandy Loam
127.8	
	Sandy Yell. Clay Trace of Pebbles
121.8	
	Hard Blue Clay Trace of Pebbles
118.8	
	Firm Blue Clay Trace of Pebbles
112.8	
	Plastic Blue Clay Trace of Pebbles

TH. 4

132.4	Black Topsoil
130.4	Medium yell. Sand Loamy
127.4	
	Hard Yell Clay
123.9	
	Hard Yell. & Blue Clay
119.9	
	Very firm Blue Clay Trace of Pebbles

TH. 5

133.0	Clay Loam Sandy
129.0	
	Firm Yell. & Blue Clay
126.0	
	Hard Yell. & Blue Clay Heavy Trace of Pebbles
121.0	
	Stiff Blue Clay Heavy Trace of Pebbles
118.0	
	Very firm Blue Clay Trace of Pebbles

W. B. Reinicke 8-52
S. B. Foster 4-51

REMOVAL ITEMS Sta. 452 to 464

FILE No. USE No. 356 STENCIL	N-17-C-1	STATE PROJECT	FED. PROJ.	SHEET NO.
		82-65	(52)	10

Squad - Mark 1951 Danielson 1952

Remove trees as marked. (this sheet)

8" to 12" Dia. (6) each
13" to 26" Dia. (26) each
25" to 36" Dia. (1) each
} Auth. AB-1015

Remove existing concrete sidewalk, concrete driveways, and concrete garage floors, shown hatched.
511 Sq. yds. Removing Sidewalk

Removal Items apply Sta. 464+55 - 471+42

Remove existing pavement shown hatched Auth. AB-1015
4074 Sq. yds. Removing old pavement.

Abandoning C.B. this sheet (4) each
Abandoning M.H. this sheet (4) each

Estimated 197 cu. yds. of Removing Masonry and Concrete this sheet. (between Ex. top of slope or slope stake line and R.O.W. line) } Auth. RB-1015

FED. RD. DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	11	
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

TILLMAN (26' Wide) 3½" Sh. Asphalt on 6" Conc. Base

KIRBY (26' Sht. Asphalt)

WILLIAMS (26' Sheet Asphalt)

MAYBURY GRAND (32' Wide) 5½" Asphalt

20' Conc. Alley

Gas Main Service has been cut.

Slope Stake Line

Ex. Top of Slope

Top of Slope

Abandon C.B.

Abandon M.H.

Abandon C.B.'s (2)

Abandon Manholes 171 each (2)

Retaining Wall (By others)

KIRBY (26' Sheet Asphalt and 2' widening Right and Left with Conc. Base & Bit. Conc.)

N. 67° 29' 15" E.

TH. 1
TH. 2
TH. 3A
TH. 4
TH. 5

Ex. B. 33 of 82-22-10

Ex. 6" D.I. Sewer

Ex. 24" Encased Ex. 6" D.I. Sewer

LOG OF BORINGS MAYBURY GRAND

TH. 1
135.8 Firm yell. clay Loamy
132.0 Hard yell. clay Sandy & Silty
125.0 Hard yell. & Blue Clay - Sandy & Silty
123.0 Stiff Blue Clay Trace of Pebbles
118.0 Firm Blue Clay Trace of Pebbles

TH. 2
135.9 Stiff Yell. Clay
131.0 Hard Yell. Clay Trace of Pebbles
124.0 Stiff Blue Clay Trace of Pebbles
118.0 Firm Blue Clay Trace of Pebbles

TH. 3A
135.62
134.0 Firm Yell. Clay
128.0 Hard Yell. Clay
124.0 Hard Yell. and Blue Clay
118.0 Stiff Blue Clay Trace of Gravel
Firm Blue Clay Trace of Pebbles

TH. 4
135.67 Stiff Yell. Clay
130.0 Hard Yell. Clay Trace of Pebbles
123.0 Stiff Blue Clay Trace of Pebbles
119.0 Firm Blue Clay Trace of Pebbles
110.0 Plastic Blue Clay Trace of Pebbles

TH. 5
135.25 Firm Yell. clay
131.0 Hard Yell. & Blue Clay
125.0 Stiff Blue Clay Trace of Pebbles
122.0 Firm Blue Clay Trace of Pebbles

W.B. Reiniche 8-52
S.B. Foster 5-51

REMOVAL ITEMS Sta. 464 to 476

FILE NO. USE NO. 350 STENCIL N-17-C-1

STATE PROJECT 82-65 | FED. PROJ. (if any) | SHEET NO. 11

Note:
Removal items on this project are shown and called for on Sheets No. 9, 10, 11, 12 and 34

Note:
The maximum pay limits for Sand Gravel fill around Manholes and Catch Basins on the Entire Project shall be 1'-6" outside of footing outline.

Note:
Grouted Stone Surface on backslopes under Bridges and Crushed Stone Surface on shoulders under Bridges is to be placed ~~by others~~ As Auth. AD-2011 A.F. 2013

Backfill sewer trenches under sidewalks and pavement, and elsewhere as shown on detail's, with Porous Backfill Grade B - (Entire Project) (82-65)
2482 Cu. yds. (Loose Meas.)

Sand Gravel Fill around catch basins and manholes - (Entire Project) (82-65)
721 Cu. yds. of Sand Gravel Backfill, (Loose meas.)
*Overhaul 8413 Comp. Cu. Yd. Miles

Backfill basements occuring under pavements with Sand Gravel Backfill as directed by the Engineer. (Entire Project) (82-65)
Estimated 2432 Cu. Yds. Sand Gravel Backfill, (Loose meas.)
* Overhaul 28,379 Comp. Cu. Yd. Miles

Porous Backfill Grade B and Sand Gravel Backfill for Open Joint Sewer as shown on plans (Entire Proj.)
606 Cu. Yds. Porous Backfill Grade B (Loose meas.) (82-64)
362 Cu. Yds. Sand Gravel Backfill (Loose meas.) (82-64)
*Overhaul (Sand Gravel Backfill) 4603 Comp. Cu. Yd. Miles
3404 Cu. Yds. Porous Backfill Grade B (Loose meas.) (82-65)
3129 Cu. Yds. Sand Gravel Backfill (Loose meas.) (82-65)
*Overhaul (Sand-Gravel Backfill) 36,512 Comp. Cu. Yd. Miles

Note:
The Engineer is to adjust flow lines of drainage to be placed under service roads, as necessary, to clear existing or proposed utility lines.

Note:
Information relative to actual R.O.W. will be furnished to the Engineer on request.

Note:
All abandoned service sewers and drains encountered in excavation for the expressway and ramps shall be cut at least two feet beyond the limits of the excavation and shall be plugged to a depth of at least one-half the diameter of the pipe but not less than 12" with Grade A Concrete, at severed end and at nearest manhole.

Miscellaneous Excavation for Manholes, Catch Basins, Sewers and Basements in pavement areas. (See quantity sheets for break down)
** 612 Cu. yds. Excavation and Waste (Entire Proj.) (82-64)
** 10,706 Cu. yds. Excavation and Waste (Entire Proj.) (82-65)

Restoring Roadsides, as directed by the Engineer. (Entire Project) (82-65)
4.0 Acres

Estimated 40 Tons Bit. Conc. Wearing Course to repair street approaches. Entire Project (82-65)

Note:
Waste and Sand Borrow Pits are described as to location, capacities, Pit Number and haul routes on Sheet No. 42

East Bound Expressway
Reference Line Curve Data
Δ = 18°09'00" Rt.
D = 1°00'00"
R = 5729.65'
L = 1815.00'
T = 915.18'
E = 72.62'
P.C. = 420+11.66
P.I. = 429+26.84
P.C.C. = 438+26.66

Superelevate 0.015' /ft.

Point of rotation of E. Bound Expressway is at north edge of metal, and, at south edge of metal on W. Bound Exp. (See typical X-Sections)

*Estimated to be obtained from Pit No. 2

**To be disposed of by the Contractor. (Ford Foundation available)

B.M. 16 B - Elev. 186.894
Arrow on Fire hyd. N. E. Cor. of 30th and Deferaudx

Driveway openings on Ex. Service Rds. have been provided opposite prop. gates to Expressway

Remove Old Pavement shown hatched in median area Sta. 421+35 - 422+60
140 Sq. yds.

B.M. 16 C Elev. 187.954
Arrow on Fire hyd. N.E. Cor 28th and Warren

Sod slopes at each quadrant of Bridge as shown
Class A Sodding (Total)
328 Sq. yds (State Proj. 82-64)
465 Sq. yds. (State Proj. 82-65)

Auth. AD-1039 Sta. 418+35 to 426+15 (1321 Lin. ft. of Chain link fence
2-16' Gates
Sta. 426+15 to 428+00
230 Lin. ft. of Chain Link Fence

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 & 65	WAYNE	Detroit	12	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

For details of North Service Road See Sh.# 32

Ex. B 28 of 82-22-10

Ex. B 29 of 82-22-10

Point of Beginning Mich. Proj. BUI 391 (52)
State Project 82-64 Sta. 420+11.66

State Project 82-64 Ends Sta. 426+15 Const. ℄
State Project 82-65 Begins Sta. 426+15 Const. ℄

Mich. Proj. BUI 391 (52) Continues

Ex. 1 on 2 Backslopes

For detailed profiles and sewer grades see Sheets 17 & 18

Top of Proposed Pavement Grade West Bound Expressway

Prop. Ramp Grade E. B. "On" Ramp See Sheet # 25

Proposed Ramp Grade W. B. "Off" Ramp See Sh.# 28

Bottom of Ex. Cut

Top of Ex. 110 Cyl Sewer

-0.40%
400' V.C.
+0.40%

Min. U.C. 14.62' +48.33 El. 107.64

Min. U.C. 44.24' +32.5 Ramp El. 108.32

104.78 106.86
104.38 106.46
104.08 106.16
103.88 106.06 Ex. 106.66
104.08 106.16
104.38 106.46
104.78 106.86
105.18 107.26
105.58 107.66
105.41 108.06
105.81 108.46
107.02 108.86
107.84 109.26

100 110 120

416 417 418 419 420 421 422 423 424 425 426 427 428

EXPRESSWAY ITEMS
STA. 420+11.66 to 428

FILE NO. 196 AD 382 PLEASE

STATE PROJECT 82-64,65 (BUI 391 (52)) 12

Daniel son 1952
Wood 1951
S.B. Foster 1951 8-52
A. Bourquin 8-52
W.B. Reimche 8-52

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	13	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

B.M. 17A - Elev. 131.709
Arrow on Fire hyd. S.E. Cor. Mc Grain and Lovett

B.M. 18A Elev. 130.619
Arrow on Fire hyd. N.E. Cor. Warren and Bangor

B.M. 18B Elev. 131.709
Arrow on hydrant in front of 1574 W. Grand Blvd.

Auth. D-1001

Sta 428+00 to 440+00
(1077 Lin. ft. of Chain link fence)
3-16' Gates

Sod slopes at each quadrant of bridge as shown 872 sq. yd. Class 'A' Sodding

Sod slopes at each quadrant of bridges as shown 1353 sq. yds. Class 'A' Sodding

Gas Main Service has been cut.

For details of North Service Rd. See Sh. #34

For details of South Service Rd. See Sh. #38

For details of Ramp, see Sh. #27

For details of Ramp, see Sh. #28

For details of Ramp, see Sh. #26

For Drainage See Sht. No. 27

For Drainage See Sht. No. 28

For Drainage See Sht. No. 26

For Drainage See Sht. No. 25

Ex. B 30 of 82-22-10

Ex. B 31 of 82-22-10

Ex. B 29 of 82-22-10

Ex. B 32 of 82-22-10

East Bound Expressway Ref. Line Curve Data
Δ = 18°09'00" Rt
D = 1°00'00"
R = 5729.65'
L = 1813.00'
T = 915.19'
E = 72.62'
PC = 420+11.46
PI = 429+26.84
PCC = 438+24.46

E.F.E. Construction & Curve Data
Δ = 25° 40' 30" Rt
D = 2° 00'00"
R = 2864.93'
L = 1283.73'
T = 652.87'
E = 73.45'
PC = 427+51.06
PI = 434+03.93
P.T. = 440+34.81

Superelevate 0.015 ft/ft

Superelevate 0.027 ft/ft

Const. Tang. N. 41°48'45" E.

Const. Tang. N. 67°29'15" E.

Const. Tang. N. 59°57'45" E.

Const. Tang. N. 27°47'50" W.

N. 27°48'20" W.

N. 89°05'45" E.

WARREN (76 Asphalt)

BANGOR (24' Asphalt)

WEST GRAND BLVD.

Edge is tongue

Prop. Chain Link Fence

Prop. 16' Gate

Prop. Guard Rail (by others)

Ex. Retaining Wall

Ex. Top of Slope

Ex. Temporary 'ON' Ramp

Remove Existing Guard Rail.

Removing Old Pavement shown hatched this sheet - 716 sq. yds.

Ex. Drwy. Opening

Gas Main Service has been cut.

Auth. D-1001 Revise Fence Location

Ex. 1 on 2 Backslopes

Earthwork on Scotten Temporary 'ON' Ramp
Exc. = 3102 cu yds.
Emb. = 148 cu yds.
25% shr. = 37 cu yds.
*Waste = 2917 cu. yds.

* Waste to be disposed of by the Contractor (The Ford Foundation is available)

For detailed profiles and sewer grades see Sheet No. 19 & 20

Proposed Ramp Grade West Bound 'Off' Ramp See Sheet No. 28

Proposed Ramp Grade East Bound 'Off' Ramp See Sheet No. 26

Proposed Ramp Grade West Bound 'On' Ramp See Sheet No. 27

Proposed Top of Pavement Grade West Bound Expressway

Bottom of Ex. Cut

+0.40%

Min. U.C. 15.06' +87.5 (28" RCP)

Min. U.C. 14.30 +85.21 E.B. Expwy.

Top of Ex. 13'9" Cyl. Sewer

EXPRESSWAY ITEMS STA. 428 to 440

W.B. Pelniche S-52 S.B. Fisher (93)

FILE NO. UNO NO. 1150 STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-65	BUI 391(52)	73

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	DETROIT	14	
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

Station Equation
Sta. 451+51.22 of East Bound Expr. equals Sta. 451+80.00 of Const. & East Bound Expr. Survey Line
Shortens 28.78 ft.

Curve Data
East Bound Expressway
Δ = 7° 31' 30" Lt.
D = 0° 34' 05"
R = 10085.22'
T = 663.23'
L = 1324.56'
E = 21.78
P.C. = 438+26.66
P.I. = 444+89.89
P.T. = 451+51.22
Superelevate 0.015'/ft

B.M. #19A Elev. 133.254
Arrow on Fire Hydrant at N.E. Corner of Vinewood Ave. and Kirby Ave.

B.M. #98 Elev. 134.514
Arrow on Fire Hydrant at S.W. Corner of McKinley Ave. and Kirby Ave.

Auth. Ap'd'n { Sta. 440+00 to 452+00
2030 Lin. ft. of Chain Link Fence
2-16' Gates

Proposed 13'-9" Sewer
W. GRAND BLVD.
3 St. Br. Apt. Bldg. #1646
Gas Main Service has been cut
Ex. 16" C.I. Water Main
Auth. D-1001
Prop. Chain Link Fence
S.P.B.
Top of Ex. Slope
Prop. 16' Gate
Ex. B.S.E. of 82-22-C
Point on Min. U.C.
184' of 6" O.J. Sewer
Const. & and W.B. Ref. Line
Ex. 18" Sewer
172' of 6" O.J. Sewer
Leave
128' of 6" O.J. Sewer
Ex. Retaining Wall
N 67° 49' 57" E.
"OFF" RAMP
N. 59° 57' 45" E.
E.B. Ref. Line
182' of 6" O.J. Sewer
170' of 6" O.J. Sewer
For Details of Ramp See Sht. No. 29
Prop. Guard Rail (by others)
Prop. Chain Link Fence
Top of Ex. Slope
For details of Ramp See Sh. No. 30
Ex. 12" C.I. Water Main
S.P.B.
For details of South Service Rd. See Sh. #39
Gas Main Service has been cut
Auth. D-1001
For Prop. 4" Conc. Sidewalk See Sh. #39
N. 27° 48' 20" W.
Ex. 3 Br. Apt. Bldg. #1646
Ex. 16" C.I. Water Main
Br. Gar. 18.3 Ft. Ho. #3521
12' Para.
Fr. Gar. 23 Ft. Ho. #3515
Gas Main Service has been cut
Ex. M.H.
Ex. Dia. A 164
Ex. 10" Sewer
30" Poplar
9" Tw. Pear
4" Pear
6" Para.
Prop. 16" C.I. Water Main
14" Pear
10" Para.
18" Poplar
3" Para.
1" Pear
36" Elm
18" Elm
For details of No. Service Road, see Sh. #35
10" Elm
Locust
Ex. 12" Sewer
Ex. 18" Sewer
Ex. Retaining Wall
Ex. C.B.
Ex. 24" Sewer
Ex. 20" Sewer
Ex. M.H.
Ex. 12" Sewer
Ex. 32
Ex. 18" Sewer
Ex. 12" C.I. Water Main
Ex. 6" Gas
Ex. 8" Water
Ex. 12" Gas
Ex. 4" Gas (Dead)
Ex. 8" Gas
Ex. 8" Water
Ex. 12" Gas Main
Ex. 36" Sewer
Ex. 6" Gas
Ex. 8" Water
Ex. 12" Gas Main
Ex. 12" C.I. Water Main
Ex. 10" Sewer
Ex. 20' Gravel Alley
Ex. 12" C.I. Water Main
Ex. 8" Water Main
Ex. 6" C.I. Water Main
Ex. 8" Water Main
Ex. 12" Gas Main
Ex. 8" Water Main
Ex. 12" Gas Main
Ex. 8" Water Main
Ex. 12" Gas

B.M. "19C Elev. 135.339
Arrow on Fire Hydrant at
S.W. Corner of Roosevelt Ave.
and Kirby Ave.

B.M. "19D Elev. 135.639
Arrow on Fire Hydrant at
S.W. Corner of 25th St.
and Kirby Ave.

B.M. "21A Elev. 136.059
Arrow on Fire Hydrant at
S.W. Corner of 24th St.
and Kirby Ave.

B.M. "21B Elev. 134.474
Arrow on Fire Hydrant at
S.E. Corner of 23rd St.
and Kirby Ave.

Curve Data
South Ramp
Δ = 05°38'20" Rt.
D = 01°30'
Rc = 429728'
T = 211.63'
L = 422.92'
L = 5.21
Rt. = 456159.02
Rt. = 458+70.66
Rt. = 460+81.94

FED. ROAD DIV. NO.	FEDERAL AID PROJ. NO.		STATE PROJ. NO.	SHEET NO.	TOTAL SHEETS
5	M.H.H.	BUI 391(52)			
ROUTE NO.	SECT.	JOB NO.	CITY		
M-112	82-65	L-WAYNE	DETROIT	15	
DIV. NO.	SECT.	PROJECT	CITY AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
4	A.A.T.				
ROUTE	SECT.	JOB NO.	CITY	SHEET NO.	TOTAL SHEETS

Sta. 452+00 to 464+00
2250 Lin. ft of Chain Link Fence
2-16 Gates

Auth. L-1001

Auth. D-1001

Sod slopes at each quadrant of Bridge as shown. Class A sodding 789 sq. yds.

Sod slopes at each corner of Bridge as shown: 745 sq. yds. of Class A Sodding

Gas Main Service has been cut

Prop. 16" C.I. Water Main

Ex. 6" Gas

Ex. 8" Water

Ex. 24"x36" Sewer

Ex. 4" Gas

Ex. 16" Water

Ex. 12" Sewer

Ex. 8" Water

Ex. 12" Gas

Ex. 6" Gas

Ex. 12" Sewer

Ex. 8" Water

Ex. 24"x32" Sewer

Ex. 4" Water

Ex. 24"x42" Gas

Ex. 8" Water

Ex. 12" Sewer

Ex. 12" Water

Ex. 10" Sewer

Ex. 12" Water

Ex. 12" Gas

Ex. 12" Sewer

Ex. 8" Water

Ex. 12" Gas

Ex. 8" Water

Ex. 12" Gas

Ex. 8" Water

Ex. 12" Gas

Curve Data
Bus Ramp (W. Bound)
Δ = 01°08'45" Lt.
D = 01°00'00"
R = 5729.65'
T = 57.29
L = 114.98
E = 0.23
PC = 465+75.01
PI = 466+32.31
PT = 467+89.60

B.M.# 21C Elev. 136.764
Arrow on Fire Hydrant at S.W. Corner of Tillman Ave. and Kirby Ave.

B.M.# 21D Elev. 137.719
Arrow on Fire Hydrant at N.E. Corner of Williams Ave and Kirby Ave.

Auth. AR 391

Sta. 464+00 to 471+53 Rt & Lt
1470 Lin. ft of Chain Link Fence
1-16' Gate

B.M.# 21E Elev. 137.869
Arrow on Fire Hydrant at N.W. Corner of Mayburry Grand and Kirby Ave.

For details of Lawton Temporary W.B. "On" Ramp, see Sh.# 33

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	CAL. SEC.	SHEET NO.	CAL. TOTAL
4	MICH.	BUI 391 (52)			
CONT. SEC.	ROUTE	COUNTY	CITY		TOTAL
M-112	82-65	WAYNE	DETROIT	16	
DIV.	STATE	STRUCT. NO.	CAL.	STRUCT. SEC.	CAL. TOTAL
4	MICH.				
FOURTH	PROJECT	COUNTY		TIME ST. NO.	TIME ST. TOTAL

Auth. D-1001

Gas Main Service has been cut

For Details of Service Road See Sht. No. 37

Sod slopes of west quadrants of Bridge as shown Class A sodding 439 Sq. yds.

Steepen Backslope to provide 8' Shoulder for alley connection Sta. 462+90 to 464+50 Lt.

Prop. 16" C.I. Water

Ex. 10" Sewer

Ex. M.H.

Plug

S.P.B.

Prop. Chain Link Fence

Slope Stake Line

Temporary Crossover Concrete Pavement 7" Uniform in median area - 128 Sq. yds.

Plug omitted, Auth. AR 391

Ex. 16" C.I. Water Main

Ex. 16" Gate

Ex. 16" C.I. Water

N 22°59'00" W. MAYBURY GRAND

Ex. C.B.

Ex. 18"

Ex. 10" Sewer

Ex. C.B. Ex. M.H.

Ex. 16" C.I. Water Main

Chain Link Fence

Ex. Top of Slope

Ex. Toe of Slope

Ex. B.33 +82-22-10

See Sht. No. 32

See Sht. No. 15

290' of 6" O.J.

C.B. 3J & 39' of 12" Cl. B

C.B. 3H & 9' of 12"

40' of 12" Cl. B

W.B. Expressway

Omit Curb and Gutter Plus

Constr. ℄

M.H. 1A & 215' of 30"

C.B. 3J & 9' of 12"

C.B. 6H & 9' of 12"

M.H. 1A & 52' of 36" Cl. B

(5) Guard Posts - 10' c. to c.

E.B. Expressway

Omit Curb and Gutter Plus

Omit tie bars in 7" Pav't. Place tie bar retainers.

C.B. 6J & 39' of 12" Cl. B

M.H. 1A and 24' of 36" Extra Strength Reinforced Concrete Culvert Pipe

Ex. 36" Sewer (By Others)

(6) Guard Posts 10' c. to C. 36' of 6' O.J.

64' of 24" Cl. B

Ex. M.H.

Ex. 24" Encased

Ex. 6' O.J.

Point of Min. Vc.

Bus Ramp

200' of 6" O.J.

See Sht. No.

M.H. 1A & 200' of 24"

M.H. 1A & 128' of 24" Cl. B

C.B. 3H & 9' of 12"

C.B. 3J & 39' of 12" Cl. B

C.B. 6J & 39' of 12" Cl. B

140' of 6" O.J.

(11) Road Proj. Marker Lettered thus BUI 391 (52)

For Details See Sht. No. 31

For Details of Ramp See Sht. No. 31

Slope Stake Lines

Prop. Guard Rail (by others)

Slope Stake Line

D10 of 82-22-10 Ex. Pumphouse

Plug

Ex. 36" Sewer & M.H.

Prop. Chain Link Fence

Prop. 16' Gate

For Details of Service Road See Sht No. 41

For Details See, Sht. No. 41

KIRBY 26' Sheet Asphalt

Ex. D.E. Underground

Ex. 4" Gas

Ex. 12" Gas Main

Ex. 8" Water Main

Prop. 12" C.I. Water Main

Ex. R.C.M.H.

Ex. 20"

Ex. 12" C.I. Water Main

Ex. 18"

Ex. C.B.

Ex. D.E. Underground

KIRBY (26' Sheet Asphalt and 2' widening Right and Left with Conc. Base and Bit. Concrete)

Ex. Retaining Wall

Maples, Elm, Poplar

#3317 2 St. Br. Apt. Bldg. #3323

#3307

#3350 2 St. F. Bldg.

13 St. F. Bldg.

#3215 Vac. F. Mkt.

#3209 2 St. F. Bldg.

#3045 #3037 5294 2 St. Br. Apt. Bldg.

#3027 #3017 #3009 2 St. Br. Apt. Bldg's

12" & Gas Main Service has been cut.

2 St. Br. & Shingle H. #5440

2 St. Fr. Ho. #2965

#2957

#2953

#2947

#2941

#2935

#2929

#2923

#2915

2 St. Br. Ho. #5335 & #5343

Gas Main Service has been cut

Point of of Ending Mich. Proj. BUI 391 (52) State Project 82-65 Sta. 472+30.00

1 on 2 Backslopes

Prop. Ramp Grade E.B. Off Ramp See Sht. No. 31

E. Tillman +20.19

E. Williams +45.95

E. Mayburry Grand +45.95

Min. Vc. +44.29 El. 119.92

For Detailed Profiles and Sewer Grades See Sht. No. 24

Top of Proposed Pavement Grade

+0.40%

Bottom of Ex. Cut

+83

+85

El. 117.18 +85

Prop. Ramp Grade E.B. On Ramp See Sht No.

Prop. Bus Ramp Grade

Prop. Bus Ramp Grade W.B. On Bus Ramp

Note: Construction details east of Maybury Grand shown roled out to apply on Grand River Bridge Contract, except as shown on Sh. # 33

130

120

134.26 / 115.66 — 464
134.63 / 116.06 — 465
133.25 / 116.46 — 466
135.59 / 116.86 — 467
133.75 / 117.26 — 468
136.30 / 117.66 — 469
136.47 / 118.06 — 470
136.40 / 118.46 — 471
135.70 / 118.86 — 472
137.40 / 119.26 — 473
138.3 / 119.66 — 474
138.0 / 120.06 — 475
138.6 / 120.46 — 476

EXPRESSWAY ITEMS Sta. 464 — 476

Pl. No. (USE SECT. No. 350 SERIES)

N-17-C-1

STATE PROJECT	SHT. NO.	REG. PROJECT
82-65		BUI 391 (52)

W. B. Bernick Jr. - 1951

Daniel Son 1952

March 1951

Note:
Elevations shown on these plans are on City of Detroit datum.
For conversion to U.S.G.S. datum, add 479.87'

Michigan Project BUI. 391 (52) Continues

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			

ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 & 65	WAYNE	Detroit	17	

Point of Beginning Mich. Proj. BUI. 391 (52)
State Proj. 82-64 Sta. 420 + 11.66

State Proj. 82-64 Ends
Sta. 426 + 15 on Const. ℄

State Proj. 82-65 Begins
Sta. 426+15 on Const. ℄
To Sta. 472+30

Subbase
~~Porous Backfill Grade B Mod.~~ = 291 Cu. Yds.
*Borrow = ~~1607 Cu Yds.~~ 1898 Cu. Yds.
Overhaul = ~~1286~~ 2085 Comp. Cu. Yd. Miles Num. No. 1012

* 1607 Cu. Yds. from Pit #2

Proposed Top of Curb Grade and Elevations for North Curb of West Bound Pavement

106.98 | 106.58 | 106.28 | 106.18 | 106.28 | 106.58 | 106.98 | 107.38 | 107.78 | 108.43 | 109.46 | 110.29

110
100

El. 105.78

Prop. Top of Curb Grade

Ex. CB 6J
Ex. CB 3J
El. FL. 101.2

Ex. CB 6J
FL El. 100.7

Ex. M.H. with Special Cover
Special M.H. Constr. Num. MC-2011

Ex. CB 6J

Prop. 6" O.J. +0.4%

Prop. 6" O.J. +0.4%

Prop. FL. El. 101.7

Prop. FL. El. 101.7

-0.20%

Ex. FL. El. 102.0

Prop. FL. El. 102.5

Ex. 24" Sewer (at ℄ of W.B. Roadway)

Ex. CB 6J
FL. El. 104.2

Prop. 6" O.J.
Prop. FL. El. 105.4

+24

Prop. 6" O.J. +0.4%
from ℄

-0.20%

Ex. FL. El. 101.0

Ex. 11'-0" Cyl. Sewer
FL. El. 93.9±

Standard Superelevation Transition
(300' long)

+5106

Center Line Profile (West Bound)
Top of Proposed Pavement Grade

110
100

-0.40%

El. 105.66
+00

P.O.B.

400' V.C.

+11.66

Existing Subgrade

+0.40%

Ex. CB 3H
FL El. 100.5

Ex. M.H.

Ex. M.H.

Ex. CB 3H
FL El. 101.0

Ex. M.H.
FL. El. 100.4

Ex. CB 3H
FL El. 102.0

Ex. M.H.

Ex. CB 3H

Prop. 6" O.J. +0.4%

Prop. FL. El. 101.4

Prop. 6" O.J. +0.4%

Prop. 6" O.J. (of ℄ W.B. Rdy.)

Prop. 6" O.J. +0.4%
+00
To N. Edge

Prop. 6" O.J.
Prop. FL.
El. 104.5

Ex. FL. El. 104.0

Ex. FL. El. 103.6

Ex. 18"

Ex. 24"

-0.4%

Ex. FL. El. 98.01

Ex. FL. El. 97.18

Ex. FL. El. 98.8

Ex. FL. El. 99.52

Prop. FL. El. 102.16

Ex. FL. El. 99.82

Ex. FL. El. 100.55

Ex. 11'-0" Cylindrical Sewer

℄ 30 TH.
+33.45

℄ WARREN
+06.99

+5106 P.C. of Curve

416 | 417 | 418 | 419 | 420 | 421 | 422 | 423 | 424 | 425 | 426 | 427 | 428

PROFILES (WEST BOUND) Sta. 420-428

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-64 & 65	BUI 391(52)	17

N-17-C-1

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED		
FINAL R.O.W.	O.W. Dilley	4-52
FINAL DESIGN CHECKED		
TRACED	S.B. Foster	5-52
FINAL O.W. CHECK		
QUANTITIES		
QUANTITIES CHECKED		
SQUAD	Danielson	5-52

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN CKECKED		
PROFILE PLOTTED	O.W. Dilley	4-52
PROFILE CHECKED		
PRELIMINARY R.O.W.		
FINAL R.O.W.		
GRADE INSPECTION		
FEDERAL INSPECTION		

Note:
Elevations shown on these plans are on City of Detroit datum.
For conversion to U.S.G.S. datum, add 473.87'

Michigan Project BUI 391 (52) Continues

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			

ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 B65	WAYNE	Detroit	18	

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED		
FINAL DESIGN CHECKED	O.W. D'Arcy	4-52
FINAL DESIGN CHECKED		
TRACE PLOTTED	S.B. Foster	5-52
FINAL R.O.W. CHECK		
QUANTITIES		
QUANTITIES CHECKED		
SQUAD	Danielson	5-52

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN CHECKED		
PROFILE PLOTTED	O.W. D'Arcy	4-52
PROFILE CHECKED		
CROSS SECTIONS CODE		
CROSS SECTIONS CHECKED		
GRADE INSPECTION		
FEDERAL INSPECTION		

Point of Beginning Mich. Project BUI 391 (52)
State Project 82-64 Sta. 420+11.66

State Proj. 82-64 Ends
Sta. 426+15 (Constr. ℄)

State Proj. 82-65 Begins
Sta. 426+15 (Constr ℄)
To Sta. 472+30

For Subbase Quantities See Sheet No. 17

Center Line Profile (East Bound)
Top of Proposed Pavement Grade

Proposed Top of Curb Grade and Elevations for South Curb of East Bound Pavement

Existing Subgrade

-0.40%

+0.4035%

400' V.C.

El. 105.66 at +00

P.O.B.

+/-1.66

Standard Superelevation Transition (300' Long)

Maximum Superelevation (0.015 ft. per ft.)

Ex. M.H.

Ex. 36" (Rt.)

Ex. 24" @ ℄ Median -0.4%

Ex. FL. El. 98.8

Ex. FL. El. 98.01

Ex. FL. El. 97.18

Ex. CB 3H
FL El. 101.1

Ex. M.H.

Prop 6" O.J +0.4%

Ex. M.H.

Ex. 6" O.J (at ℄ E.B. Roadway)

Ex. FL. El. 101.6

Ex. CB 3H
FL. El. 101.7

+0.4%

Ex. 18" in Med.

Ex. FL. El. 99.52

Prop. FL. El. 102.26

Ex. FL. El. 100.4

Ex. FL. El. 100.55

Ex. M.H.
Spec. Conc.
with Gate

Ex. CB 3H

Ex. M.H.
FL El. 103.7

Ex. 36"
+0.18%

Ex. FL. El. 101.82

Ex. FL. El. 101.60

Ex. FL. El. 101.23

Ex. FL. El. 100.8

Ex. 11'-0" Cyl. Sewer
FL. El. 93.85 ±

Prop Top Curb Grade

Pavement Edge 43' Right

+86.99 ℄ point
105.84 Rt. point

Ex. CB 6J
FL El. 101.3

Ex. CB 6J
FL. El. 102.0

Ex. CB 6J
FL. El. 102.0

Ex. CB 6J
FL El. 104.0

Prop 6" O.J
-0.4%

-0.4%

Prop. FL.
El. 104.58

El. 104.58

Ex. CB 3J
FL. El. 101.9

Ex. 6" O.J

+0.4%

Ex. CB 6J

Ex. CB 3J

Prop. FL. El. 100.8

Prop 6" O.J +0.4%

Prop 6" O.J +0.4%

Prop. FL.
El. 102.0

Ex. FL El 100.6

Ex. FL. El. 99.5

Ex. 12"

-0.25%

Ex. FL. El. 99.21

Ex. FL. El. 98.96

Ex. FL. El. 96.96
(36" To Pumphouse Right)

For Curb Grade and Drainage Details to Right of Sta. 423+86.99 to 428+57.07 See Sheet No. 23

Ex. 11'-0" Cylindrical Sewer

℄ 30.44
+ 33.45

+/-1.66 P.C. of Curve

℄ WARREN

106.86 106.46 106.16 106.16 106.47 106.87 107.27 107.68 108.08 108.48 108.89 109.29

106.98 106.58 106.28 106.09 105.89 106.03 106.05 106.45 106.85 106.93 107.33 107.73 108.14 108.54

110
100

416 417 418 419 420 421 422 423 424 425 426 427 428

PROFILES (EAST BOUND) Sta. 420-428

N-17-C-1

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-64 B65	BUI 391(52)	18

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED		4-52
FINAL DESIGN	O.W. Dilley	
FINAL DESIGN CHECKED		4-52
PLANS PLOTTED	S.B. Foster	
FINAL R.O.W. CHECK		5-52
QUANTITIES		
PRELIMINARY GRADE		
QUANTITIES CHECKED	Danielson	5-52
SQUAD		

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN CHECKED		
PROFILE PLOTTED	O.W. Dilley	4-52
PROFILE CHECKED		
PRELIMINARY GRADE		
QUANTITIES		
FIELD INSPECTION		
FEDERAL INSPECTION		

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	(BUI 391(52))			

ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	19	

For Subbase Quantities See Sheet No. 21

Proposed Top of Curb Grade and Elevation for North Curb of West Bound Pavement

110.29 | 110.92 | 110.82 | 111.22 | 111.62 | 111.02 | 112.75 | 113.15 | 113.55 | 113.73 | 113.88 | 114.13 | 114.38 | 114.63

Sta. 428+58.89 2' Offset

Top Curb

Edge Pavement 43' Left

Sta. 433+43.67 Nose of Point

+0.40% Prop. Top Curb Grade

El. 113.75 P.I. +50

100' V.C.

+0.25%

Ex. CB 6J FL. El. 108.2

Prop 6" O.J.

+0.4%

Prop. FL. El. 105.4

See Sheet No. 27

For Curb Grade and Drainage Details to Left of Sta. 428+58.89 to 433+43.67 See Sheet No. 27

Ex. CB 3J Inlet Left 106.5 Outlet Right 106.1

Prop 6" O.J.

+0.4%

Prop. FL. El. 107.7

Ex. CB 3J Inlet and Outlet FL. El. 108.0

Prop 6" O.J.

+0.4%

Prop. FL. El. 108.75

Ex. CB 6J FL. El. 108.6

110

100

Maximum Superelevation (0.027 ft. per ft.)

Straight Line Superelevation Transition (Edge Pavement 43' Left is 0.33' below Curb Grade above)

+5.06

109.26 | 109.89 | 110.06 | 110.46 | 110.86 | 111.26 | 111.66 | 112.06 | 112.46 | 112.86 | 113.26 | 113.66 | 114.06

Existing Subgrade

+0.40%

Ex. CB 3H FL. El. 105.0

Prop 6" O.J.

+0.4%

Prop. FL. El. 104.5

Ex 6" O.J. +0.4%

Ex. CB 3H Inlet and Outlet FL. El. 107.7

Ex. M.H. FL. El. 107.5

Ex. 15" -0.4%

Ex. M.H. Inlet and Outlet FL. El. 106.84

Ex. 6" O.J. +0.4%

Ex. 6" O.J. +0.4%

Ex. CB 3H

Ex. FL. El. 108.9

Ex. FL. El. 108.7

FL. Inlet Left El. 108.2

FL. Outlet Right El. 108.0

Ex. 13'-9" Sewer FL. El. 90.85 to 90.97

110

100

Center Line Profile (West Bound)

Top of Proposed Pavement Grade

℄ SCOTTEN +71.69

℄ BAYGOR +77.89

℄ WEST GRAND BLVD. +43.98

428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440

PROFILES (WEST BOUND) Sta. 428-440

N-17-C-1

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-65	BUI 391(52)	19

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED		
FINAL DESIGN CHECKED	O.W.Dilley	4-52
FINAL DESIGN TRACED	S.B.Foster	5-52
FINAL R.O.W. CHECK		
QUANTITIES CHECKED		
QUANTITIES SQUARED	Daniel Son	5-52

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			

ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	20	

For Subbase Quantities See Sheet No. 21

Center Line Profile (East Bound)
Top of Proposed Pavement Grade

Existing Subgrade

Ex. CB 3H FL El. 105.1
Ex. M.H. FL Inlet El. 105.0 FL Inlet Fl. 104.6
Ex. M.H. Fl. Inlet Lt. El. 104.7
Ex. 6" O.J.
Ex. 36" (at ℄ E.B. Roadway)
+0.18%
Ex. FL El. 101.84
Ex. FL El. 102.36
Ex. FL. El. 102.97
Ex. M.H. FL Inlet Lt. El. 104.5 FL Inlet Rt. El. 104.9
Prop. 6" FL El. 106.5 Prop. 6" O.J.
+0.4%
Ex. 30"
+0.18%
Ex. FL El. 103.32
Ex. CB 3H (+03) FL El. 105.0
Prop. 6" FL El. 106.5 Prop. 6" O.J.
Ex. 24" (Lt. of E.B. Const. ℄)
Ex. FL El. 103.82
+0.4035%
Ex. M.H. Inlet Lt. FL El. 108.1
+0.4%
+0.4%
Ex. FL El. 104.99
Ex. M.H. Inlet Rt. FL El. 106.0
Ex. CB 3H FL El. 106.2
Prop. 6" FL El. 107.8 Prop. 6" O.J.
Ex. FL El. 105.24
Ex. 21"
+0.4%
Ex. FL El. 105.88
Ex. M.H. Inlet Lt. FL El. 106.5
Ex. 15"
Ex. FL El. 106.38
Ex. M.H. Inlet Rt. FL El. 107.8
Ex. 6" O.J. -0.4%
+0.4%
Ex. FL El. 107.0
Ex. CB 3H (+05) Inlet Lt. FL El. 107.6
Ex. 6" O.J. +0.4%
Ex. Outlet FL El. 107.4
Ex. 13'-9" Sewer FL El. 90.85 to 90.97

110
100

108.28 | 109.69 | 110.10 | 110.50 | 110.91 | 111.31 | 111.71 | 112.12 | 112.52 | 112.92 | 113.33 | 113.73 | 114.13

Maximum Superelevation (0.15 ft. per ft.)

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN CHECKED		
PROFILE PLOTTED	O.W.Dilley	4-52
PROFILE CHECKED		
PRELIMINARY GRADE		
FINAL INSPECTION		
FEDERAL INSPECTION		

Proposed Top of Curb Grade and Elevations for South Curb of East Bound Pavement

110
100

108.56 | 109.22 | 109.68 | 110.08 | 110.49 | 110.89 | 111.29 | 111.70 | 112.10 | 112.50 | 112.91 | 113.31 | 113.71

-5.76% 2" Offset at P.I.

Ex. C.B. 6 J.
Prop. 6" O.J.
+0.4%
Prop. FL El. 104.58
Ex. C.B. 6 J. FL. El. 104.7
Prop. 6" O.J.
Prop. FL. El. 105.44
Prop. Top Curb Grade
Ex. C.B. 6 J. FL El. 105.2
Prop. 6" O.J.
Prop. 6" O.J. -0.4%
Prop. FL. El. 105.6
+0.4%
Prop. FL El. 106.3
Ex. C.B. 6 J. FL El. 106.5
Prop. 6" O.J. +0.4%
Prop. FL. El. 107.5
Ex. C.B. 6 J. FL. El. 108.0

℄ SCOTTEN

℄ W. GRAND BLVD

428 | 429 | 430 | 431 | 432 | 433 | 434 | 435 | 436 | 437 | 438 | 439 | 440

PROFILES (EAST BOUND) Sta. 428-440

N-17-C-1

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-65	BUI 391(52)	20

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			

ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	Wayne	Detroit	21	

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED	O.W. Dilley	6-51
FINAL DESIGN		
FINAL DESIGN CHECKED	R.M. Hicks	9-51
TRACED		
FINAL R.O.W. CHECK		
QUANTITIES		
QUANTITIES CHECKED	Danielson & MAREK	52 61

Proposed Top of Curb Grade and Elevs. for North Curb of West Bound Pavement

From Sta. 426+15

To Sta 472+30

Sub-base Omitted Auth. R-1007

~~* Porous Backfill Grade B Mod. = 4751 Cu Yds.~~

Borrow = ~~29,091~~ Cu. Yds. 36,943 Auth. AR-1018

Overhaul = ~~339,613~~ Comp. Cu. Yd. Miles 384,412 Auth. AR-1018

~~3,792.3 Auth. AR-1015~~

* ~~29,091~~ Cu. Yds. from Pit #2

114.63 114.88 115.13 115.40 115.78 116.16 116.58 116.98 117.38 117.78 118.18 118.55 118.75

120

110

+0.25% 100' V.C. +0.40% Prop. Top of Curb Grade

Ex CB 3J/T — Ex. M.H. — El. 115.38 P.T. +00 — Prop. F.L. El. 111.74 — Ex. M.H. — C.B. 3J — C.B. 6J — C.B. 6J

+65' 6"O.J. +0.40% 6"O.J. +0.40% 6"O.J. -0.30% 6"O.J. -0.40% 6"O.J. + 0.40% 6"O.J. + 0.40%

Ex. 12" Sewer

Ex. F.L. El. 109.62 (See C.B. below)

Prop. F.L. El. 110.16

Prop. F.L. El. 110.83

Prop. F.L. El. 111.05 (Inlet 6'0.J.)

Prop. F.L. El. 112.25

Prop. F.L. El. 111.87 (Inlet 6'0.J)

Approx. F.L. El. 108.64 Inlet Lt Ex 2'10"x4'3" Outlet Rt Ex 36" Class B

Prop. F.L. El. 111.87

Prop. F.L. El. 111.47 (Outlet)

Prop. F.L. El. 112.89

Prop. F.L. El. 113.00

Prop. F.L. 112.50 (Outlet)

Prop. F.L. El. 113.98

Prop. F.L. El. 114.00 (6"O.J.)

Prop. F.L. El. 113.50 (Outlet)

Straight Line Superelevation Transition (Edge Pav't 43' L. is 0.33' below Curb Grade above)

℄ Alley +60.31

℄ Vinewood +02.60

+27

Existing ℄ Profile

℄ McKinley +72.31

℄ Alley +56.60

130

120

110

Center Line Profile (West Bound) Top of Proposed Pavement Grade

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED	O.W. Dilley	6-51
PLAN CHECKED		
PROFILE PLOTTED		
PROFILE CHECKED		
PRELIMINARY GRADE		
FINAL GRADE CHECK		
FEDERAL INSPECTION		

114.06 114.46 114.86 115.26 115.66 +92 116.06 132.1 116.46 132.5 116.86 133.0 117.26 132.4 117.66 133.0 118.06 133.4 118.43 133.5 118.63 El. 119.06 +50 P.T.

Existing Subgrade

For Earthwork See Sheet No. 23

Approx. F.L. Ex 12" El. 120.70

+0.40%

400' V.C.

Ex. C.B. 3A (℄ Pav't) & Inlet Lt. 109.62

Ex. C.B. 6H (at S. Curb)

C.B. on Ramp

C.B. 3H.

C.B. 3H.

Ex. 6"O.J.

+65'

6"O.J. + 0.40%

6"O.J. + 0.40%

6"O.J. -0.30%

Ex. F.L. El. 109.42

Prop. F.L. El. 110.06

Prop. F.L. El. 110.74

Prop. F.L. El. 111.20 (Inlet 6"O.J.)

Prop. F.L. El. 111.89

Prop. F.L. El. 112.15

Prop. F.L. El. 111.77 (Inlet 6"O.J.)

Approx. F.L. El. 108.57 Ex. 36" Class B

Prop. F.L. El. 111.27 (Inlet & Outlet)

Prop. F.L. El. 112.10 (Inlet & Outlet)

Prop. F.L. El. 113.30 (Inlet & Outlet)

440 441 442 443 444 445 446 447 448 449 450 451 452

PROFILES (WEST BOUND) Sta. 440-452

N-17-C-1

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-65	BUI 391(52)	21

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			

ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	Wayne	Detroit	22	

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED	O.W. Dilley	6-51
FINAL DESIGN CHECKED		
FINAL DESIGN CHECKED	R.N. Hicks	9-51
FINAL R.O.W. CHECK		
QUANTITIES CHECKED		
QUANTITIES CHECKED	Donelson & HAREK	12-51
SQUAD		

For Sub-base Quantities See Sheet No. 21

For Earthwork See Sheet No. 23

Center Line Profile (East Bound)
Top of Proposed Pavement Grade

130
120
110

℄ Alley +32.45
℄ Vinewood +74.61
℄ Mc Kinley 443.77
℄ Alley +27.85

Ex ℄ Profile

+00

114.13
114.54
114.94
115.34
115.75
116.15
116.55
116.96
117.36
117.77
118.17
118.51
118.63
118.66

El. 118.78
El. 119.06 452+50 P.T.
-0.40%
400' V.C.

Existing Subgrade

+0.4035%

+64

Ex. C.B. 3A (℄ of Post)
Ex C.B. 6H (at N. Curb)
C.B. 6H
MH1A
C.B. 3H
MH1A
C.B. 3H

6"O.J. + 0.40%
6"O.J. + 0.40%
6"O.J. - 0.40%
18" Sewer +0.40%
15" Sewer + 0.40%

Ex. 6"O.J.
Prop. F.L. El. 110.00 (Inlet 6"O.J)
Prop. F.L. El. 110.73
Prop. F.L. El. 111.20 (Inlet 6"O.J.)
Prop. F.L. El. 111.90
Apprx. F.L. El. 108.53 Ex. 36" Class B
Prop. F.L. El. 112.18
Prop. F.L. El. 111.67 (Inlet 6"O.J.)
Prop. F.L. El. 111.17 (Outlet)
Prop. F.L. El. 110.57 (Inlet)
Prop. F.L. El. 110.32 (Outlet 21")
Prop. F.L. El. 111.07 (2 Inlets)
Prop. F.L. El. 112.20 (Lt Inlet)
Prop. F.L. El. 112.00 (Rt. Inlet)
Prop. F.L. El. 111.57 (Outlet 18")
Prop. F.L. El. 112.10 (Inlet & Outlet)
Prop. F.L. El. 111.82 (Inlet 15")
Prop. F.L. El. 113.20 (2 Inlet)
Prop. F.L. El. 112.78 (Outlet)
Prop. F.L. El. 113.30 (Inlet & Outlet)

Sta 451+51.22 back = Sta 451+80.00 ahead

+51.22

Superelevation Transition (300' long)

Maximum Superelevation (0.015 ft. Per ft.)

Proposed Top of Curb Grade and Elev's for South Curb of East Bound Pavement

120
110

113.71
114.12
114.52
114.92
115.33
115.73
115.80
116.21
116.61
117.02
117.69
118.11
118.38
118.58

+76.33 2'-0" Offset
+77.62 nose pt.
+1.2

Prop. Top Curb Grade
Prop. Edge of Pav't 43 Rt.
Prop. Top of Curb Grade
End of Widened Median
P.T. of Curve

For Curb Grade and Drainage Details to Rt. of Sta 445+77.62 to 449+76.33 See Sheet No. 30

Ex C.B. 3BT
Ex. M.H.
Ex. M.H.
M.H.I.A.
C.B. 6J

6"O.J. + 0.30%
6"O.J. + 0.40%
6"O.J. + 0.40%
6"O.J. + 0.40%
21" Sewer + 0.30%
Ex. 12" Sewer

Prop. F.L. El. 109.60 (at Ex. C.B. See above)
Prop. F.L. El. 110.33
Prop. F.L. El. 111.00 (Inlet 6"O.J.)
Prop. F.L. El. 111.51
Prop. F.L. El. 110.90 (Inlet 6"O.J.)
Prop. F.L. El. 111.44
Prop. F.L. El. 111.71
Ex 6' of 21" Sewer
Ex F.L. El. 103.70 (Inlet)
Apprx. F.L. El. 108.46
Inlet Lt. Ex. 36" Class B
Outlet Rt. Ex. 2'10" x 4'3"
Prop. F.L. El. 110.70 (Inlet)
Prop. F.L. El. 110.12 (Inlet & Outlet)
Prop. F.L. El. 114.00
Prop. F.L. El. 113.50 (Outlet)

Sta 451+51.22 back = Sta 451+80.00 ahead
Sta 452+00
Sta 452+50

OPERATION	BY	DATE
SURVEYED		
PLANS PLOTTED	O.W. Dilley	6-51
PLAN CHECKED		
PROFILE PLOTTED		
PROFILE CHECKED		
PREFINAL R.O.W. CHECK		
GRADE INSPECTION		
FEDERAL INSPECTION		

440 441 442 443 444 445 446 447 448 449 450 451 452

PROFILES (EAST BOUND) Sta. 440-452

N-17-C-1

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-65	BUI 391(52)	22

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	MICH.	BUI 391(52)			

ROUTE	PCL	COUNTY	CITY	SHEET NO.
M-112	82266	Wayne	Dearborn	23

	DATE
BY	9-58
D.W.Village	9-59
R.A.Meade	
SURVEYS	
PRELIMINARY CHECKED	
FINAL DESIGN CHECKED	
PRELIMINARY DESIGN CHECKED	
FINAL R.O.W. CHECK	
QUANTITIES	
QUANTITIES CHECKED	Donald Johnson

SURVEY & PLAN OPERATION
PLAN PLOTTED
PROFILE PLOTTED
PROFILE INKED
PRELIMINARY GRADE
FINAL GRADE
FEDERAL INSPECTION

Note: The Engineer is to adjust flow line of Prop. 36" Cl. B Culv. Pipe at Roosevelt to fit Ex. Sewer

For Subbase Quantities See Sheet No. 21

Proposed Top of Curb Grade and Elev.'s for North Curb of West Bound Pavement

Proposed Top of Curb Grade and Elev.'s for South Curb of East Bound Pavement

Line Profile of Proposed Road

Prop. Top of Curb Grade

Existing ℄ Profile

Prop. Edge of Pav't. 43' Rt.

Prop. F.L. El. 115.16

6"OJ -0.3%

Prop. F.L. El. 114.50

Prop. F.L. El. 113.80 C.B. (Outlet)

Prop. F.L. El. 114.80

Prop. F.L. El. 114.11 (Inlet)

Prop. F.L. El. 113.60 (Outlet)

Approx. F.L. El. 111.30 Ex. 2'-10" x 4'-3" Prop. 36" Cl. B Culv.

Prop. F.L. El. 111.60 Ex. 2'-10" x 4'-3" Prop. 36" Cl. B Culv.

Approx. F.L. El. 111.50 Ex. 2'6" x 4'-3" Prop. 36" Cl. B Culv.

Prop. F.L. El. 113.26

Prop. F.L. El. 114.60

Prop. F.L. El. 113.80 C.B. (Outlet)

Prop. F.L. El. 114.80

Prop. F.L. El. 114.05 (Inlet)

Prop. F.L. El. 113.60 (Outlet)

Ex. F.L. El. 112.30

Prop. F.L. El. 112.70 (Inlet)

Prop. F.L. El. 111.70 (2 Inlets)

Prop. F.L. El. 113.70 (Inlet & Outlet)

Prop. F.L's El. 113.45

Prop. F.L's El. 113.35

Ex. 18" Encased Sewer

Prop. 18" Culv.

Prop. F.L. El. 113.45 (Inlet and Outlet)

Ex. F.L. El. 111.29

Prop. F.L. El. 111.45

Prop. F.L. El. 112.10 (Inlet & O.J.)

Ex. F.L. El. 110.93

Prop. F.L. El. 110.78 (Inlet and Outlet)

Prop. F.L. El. 110.72 (Inlet and Outlet)

Prop. F.L. El. 112.00

Prop. F.L. El. 110.92 (Outlet)

Prop. F.L. El. 111.00 (Inlet)

Prop. F.L. El. 110.6 Outlet & Inlet

Prop. F.L. El. 110.50 (Outlet)

Prop. F.L. El. 109.60 (Outlet 24")

Prop. F.L. El. 110.10 (Inlet 18")

Prop. F.L. El. 110.40 (3 Outlets, 4 Inlets)

Prop. F.L. El. 109.90 (Inlet from Ramp & Outlet on Rt.)

Prop. F.L. El. 109.80 (Inlet on Rt.)

Prop. F.L. El. 110.30 (Inlet on Lt.)

Prop. F.L. El. 108.73 (Outlet 27")

Prop. F.L. El. 108.98 (Inlet 24")

Prop. F.L. El. 112.29

Prop. F.L. El. 111.50 (Inlet)

Prop. F.L. El. 110.92 (Outlet)

Prop. F.L. El. 111.00 (Inlet)

Prop. F.L. El. 110.50 (Outlet)

Earth Exc. ~~101,940~~ cu. yds. 101,274 Auth. Inc. 1218

~~Emb. (Borrow Material)~~ ~~3,818~~ Cu. Yds.

Emb. (Backfilling Basements) 1,579 Cu. Yds. Auth. Inc. 1218

**Waste ~~96,543~~ Cu. Yds. 101,274 Auth. Inc. 1218

Overhaul ~~335,707~~ Comp. C.F. Mi. 415,231 Auth. Inc. 1218

* For facing slopes and in median areas

** 96,543 Cu. Yds. to Pit #1

For Earthwork See Sheet No. 24

For Curb Grade and Drainage Details to Rt of Sta. 457+90.11 to Sta. 462+13.92 See Ramp Sheet No. 31

Superelevation Transition East Bound Rdwy. (300' long)

From Sta 444+92 W.B.
From Sta 444+64 E.B.

PROFILES Sta. 452 – 464

N-17-C-1

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN CHECKED	O. W. Dilley	6-57
PROFILE PLOTTED		
PROFILE CHECKED	R. W. H.	9-57
PRELIMINARY GRADE		
GRADE INSPECTION		
FEDERAL INSPECTION		

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4		BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	Wayne	Detroit	24	

464 465 466 467 468 469 470 471 472 473 474 475 476

Point of Ending Mich. Project BUI 391 (52) Sta. 472+30.00
Sta. Project 82-65

From Sta. 426+15 — For Subbase Quantities See Sheet No. 21

For Curb Grade and Drainage Sta. 467+32.42 to 473+63.38 Lt. See Ramp Sheet No. 32

Proposed Top of Curb Grade and Elevs For North Curb of West Bound Pavement

115.78 116.18 116.58 116.95 117.05 117.45 117.85 118.25 118.65 119.05 119.78 120.15 120.25

120 / 110

+75 P.C. 2' offset +32.42 2' offset +21.03 +63.38 P.T.

Top Curb Grade — C.B. 3J — 6"O.J. +0.4% — Prop. F.L. El. 112.00 — Prop. F.L. El. 112.00 (Inlet) — Prop. F.L. El. 110.70 (Outlet)

C.B. 6J See Ramp Sheet No. 32 — Prop. F.L. El. (6") 113.16 — Prop. F.L. El. 112.66

C.B. 3J See Ramp Sheet No. 32 — Prop. F.L. El. 113.80

C.B. 3J — 6"O.J. +0.4% — Prop. F.L. El. 114.4 (Outlet & Inlet from ramp) — Prop. F.L. El. 115.4 (Inlet 6") — C.B. 6J See Ramp Sheet No. — Prop. F.L. El. 115.7 (Outlet)

Top Curb Grade — Edge Pavt 43' Lt.

℄ Tillman +10.19 — ℄ Alley +36.63 — ℄ Williams +55.95 — ℄ Alley +90.70 — +43 — ℄ Mayburry Grand +83.72

Existing ℄ Profile

From Sta. 458+67

Earth Exc. = ~~125,144~~ CU. Yds. 18,321 Aurn. AR-105

*Emb. (Selected Material) = ~~1,494~~ Cu. Yds. Aurn. AR-1013

Emb. (Backfilling Basements) = 980 Cu. Yds.

** Waste = ~~128,670~~ CU. Yds. Aurn. AR-1018

Overhaul = ~~662,100~~ Comp. C.Y. Mi. (See Sh. #42)

*For Facing on slopes and in median areas

**(40,115 CU. Yds. to Pit #1
45,338 CU. Yds. to Pit #2
37,217 CU. Yds. to be disposed of by the Contractor (The Ford Foundation is available)

Excavation by Others Except for Temporary Ramp to Lawton Ave. See Sheet No. 33

+27 +65

Center Line Profile Top of Proposed Pavement Grade

134.4 115.66 — 134.7 116.06 — 133.7 116.46 — 132.3 116.86 — 135.7 117.26 — 136.2 117.66 — 136.3 118.06 — +83 — 116.4 118.46 — 116.8 118.86 — 117.2 119.26 — 117.6 119.66 — 118.0 120.06 — 118.4 120.46

120 / 110

Ex. M.H. +34 — Ex. M.H +34 — Bottom of Ex. Cut

C.B. 3H — MHIA — Prop. F.L. El. 113.87 Inlet — Ex. F.L. El. 114.9 (6" Inlet) — Prop. F.L. El. 114.10 — MHIA — C.B's (2) 3H — MHIA — C.B's (2) 3H

C.B's (2) 3H — MHIA — Prop. F.L. El. 110.50 (Inlet & Outlet) — Prop. F.L. El. 110.40 (2 Inlets)

C.B. 3H — MHIA — Prop. F.L. El. 113.60 (Inlet & Outlet) — Ex. F.L. El. 114.10 (6"O.J.) — Ex. F.L. El. 115.30 (6"O.J.) — Prop. F.L. El. 114.20 (Inlet & Outlet) — Prop. F.L. El. 115.40 (Inlet) — Prop. F.L. El. 115.50 (Inlet & Outlet)

C.B. 3H — C.B. 6H — MHIA — Prop. F.L. El. 112.46 (Outlet of both) (Inlet of 3H) — Prop. F.L. El. 112.36 (2 Inlets) — Ex. 3'0" x 4'6"

6"O.J. +0.4% — Ex. F.L. El. 114.10 (6"O.J.) — Ex. 6"O.J. Rt. +0.4% — Ex. 6"O.J. Lt. +0.4% — Ex. F.L. El. 114.50 (6"O.J.) — 18"S. +0.4%

24" sewer +0.4% — Ex. 24" Encased Sewer +0.4% — 24" Sewer +0.4% — 21" Sewer +0.4%

27" -0.25% — 30" Sewer -0.25% — 30" Sewer +0.4% — Prop. F.L. El. 111.89 — Prop. F.L. El. 112.80 (Outlet) — Prop. F.L. El. 113.05 (Inlet) — Prop. F.L. El. 113.85 (Outlet) — Prop. F.L. El. 114.10 (Inlet)

Prop. F.L. El. 111.13 — Prop. F.L. El. 113.60 (Inlet & Outlet) — Prop. F.L. El. 111.63 — Prop. F.L. El. 113.50 (2 Inlets 12") — Ex. F.L. El. 112.29

Prop. F.L. El. 107.85 (Outlet) — Prop. F.L. El. 108.10 (Inlet) — Prop. F.L. El. 107.12 (Inlet) — Prop. F.L. El. 110.03 (Inlet) — Prop. F.L. El. 106.60 (Outlet 36")

Proposed Top of Curb Grade and Elevs For South Curb of East Bound Pavement

115.78 116.18 116.58 116.98 117.38 117.78 118.18 118.58 118.98 119.38 119.78 120.18 120.58

120 / 110

C.B. 3J — 6"O.J. +0.4% — Prop. F.L. El. 112.0 — Prop. F.L. El. 112.00 (Inlet) — Prop. F.L. El. 110.70 (Outlet)

C.B. 6J — MHIA — 6"O.J. +0.4% — Prop. F.L. El. (6") 113.16 — Prop. F.L. El. 112.10 (Outlet) — Prop. F.L. El. 113.16 (Inlet 6") — Prop. F.L. El. 112.00 (Inlet)

C.B. 6J — 6"O.J. +0.4% — Prop. F.L. El. 114.18 — Prop. F.L. El. 114.30 (Inlet 6") — Prop. F.L. El. 113.80 (Outlet 12")

C.B. 3J — Prop. F.L. El. 115.40 (Inlet 6") — 6"O.J. +0.4% — Prop. F.L. El. 116.20 — C.B. 6J — Prop. F.L. El. 116.20 (6" Inlet) — Prop. F.L. El. 115.70 (Outlet)

+34 +57 — 6"O.J. +0.4% — Prop. F.L. El. 115.32 — Prop. F.L. El. 114.90 — Prop. F.L. El. 114.90 (Outlet & Inlet From ramp) — Prop. F.L. El. 114.75 (Inlet at Ex. M.H. shown on ℄)

Prop. 6" Water Main

Prop. 42" Sewer +0.4% — Prop. F.L. El. 106.40 Inlet & Outlet 36" (to Pumphouse)

464 465 466 467 468 469 470 471 472 473 474 475 476

PROFILES Sta. 464 – 476

STATE PROJECT	FEDERAL SECONDARY NO.	SHEET NO.
82-65	BUI 391(52)	24

N-17-C-1

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED	Bourquin	3-22
FINAL PLOTTED		3-22
FINAL DESIGN CHECKED	W.E. Erickine	3-22
TRACED		
PRELIMINARY R.O.W. CHECK		
QUANTITIES		
QUANTITIES CHECKED		
SQUAD	Zaniskerski	1965

RAMP CURVE DATA
Δ = 07°35'55" Rt.
D = 03° 04' 03"
R = 1868.14'
T = 124.06'
L = 247.71'
E = 4.11'
P.C. = 422+28.34
P.T. = 429+52.40
P.C.C. = 424+76.06

RAMP CURVE DATA
Δ = 09° 02' 40" Rt.
D = 01° 31' 22"
R = 3762.78'
T = 297.60'
L = 593.94'
E = 11.75'
P.C.C. = 424+76.06
P.T. = 427+73.66
P.C.C. = 430+70.00

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M 1/2	82-64 & 82-65	Wayne	Detroit	25	
B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

Ex. B 28 of 82-22-10
E.B. Expressway
Top of Ex. Slope
Pc 420+11.66 E.B. Ref. Line
Curb & Gutter Transition
422 ON RAMP
800' @ 4% D.J.
210' @ 6" D.J.
226'-3" @ 6" D.J.
Bit. Conc.
Ramp Sta. 4+18+61.53
Ex. 12" CI
Ex. 15" CI
Ex. 18" CI
Ex. 36"
Ex. 3' C.I. water Main
Ex. Service Road
Ex. Pumphouse
Gas main service has been cut
Ex. 18" S.D. (Tunnel Sheet)
School Playground (Vacant)
30TH (Ex. Approach)
28TH
HARPER
Ex. Approach
Const. & and West bound Ref. Line
East Bound Ref. Line
PT+24.84 E.B. Ref. Line
For Drainage See Sheet No. 13
Ex. St. Bldg. #4230 & #4232
Ex. St. Bldg. #4224 & #4222
Concrete Base Course 9" Uniform with Bit. Conc. Wearing Course (On Ramp and Acceleration Lane)

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED Traced	Bourquin	3-52
PLAN CHECKED		
PROFILE PLOTTED	Bourquin	3-52
PROFILE CHECKED		
PRELIMINARY GRADE		
GRADE INSPECTION		
FEDERAL INSPECTION		

SUBBASE
Remove Backfill Cr & Make *Borrow = 426 Cu. yds. Unif. C. 100.7 Overhaul = 0.3 Comp Cu yd. Miles
*426 Cu. yds. from Pit #2

Existing Ground Profile
Proposed Grade for 1st Course of Ramp Pavement
Ex. Datum
80' V.C.
Bottom of Ex. Cut
Prop. Grade of Eight Edge of Pavt.
Prop. El. El. 118.13
El. 131.29 +72
-0.42%
6" D.J. +4.20%
-4.80%
-1.00%
Ex. 15" Sewer
Ex. F.L. El. 108.72
Ex. F.L. El. 108.80
Ex. F.L. El. 108.5
Prop. F.L. El. 109.73 (Inlet & D.J.)
Ex. F.L. El. 107.72
Ex. F.L. El. 104.43
Ex. F.L. El. 108.0
Prop. F.L. El. 102.38
Prop. F.L. El. 102.01 (Outlet 6" D.J.)
Ex. F.L. El. 100.8 (Inlets & Outlet)
Prop. F.L. El. 102.05 (Outlet 6" D.J.)
100 V.C.
El. 105.85 +38
+0.60%
6" D.J. +0.6%
RA Edge of Pavt Profile E.B. Expressway
Grade of Eight Edge of Ramp Acceleration Lane - For Detailed Grades See Sheet No. 44
Prop. F.L. El. 103.7
Ex. F.L. El. 101.9 (Inlets & Outlet)
Prop. F.L. El. 104.58 (Outlet 6" D.J.)
Ex. F.L. El. 104.0
-0.4% 6" D.J. +0.4%
State Project 82-64 Ends Sta. 426+15 Const. ℄
State Project 82-65 Begins Sta. 426+15 Const. ℄
Michigan Project BUI 391 (52) Continues

418 419 420 421 422 423 424 425 426 427 428 429 430

30th EAST BOUND "ON" RAMP ITEMS

FILE NO. DRB NO. 1350 STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-64 & 82-65	BUI 391(52)	25

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	26	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED	W.B. Reinicke	3-62
FINAL DESIGN CHECKED		
FINAL PLANS CHECKED	S.F. Foster	4-62
TRACED		
FINAL R.O.W. CHECK		
QUANTITIES		
QUANTITIES CHECKED		4-62
SQUAD	Donaldson	

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED	W.B. Reinicke	3-62
PROFILE PLOTTED		
PROFILE CHECKED		
PROFILE TRACED		
GRADE INSPECTION		
FEDERAL INSPECTION		

RAMP CURVE DATA
Δ = 02°50'00" Lt.
D = 00°40'00"
R = 8594.42'
T = 212.54'
L = 425.00'
E = 2.66'
P.R.C. = 426+45.00
P.I. = 428+57.54
P.T. = 430+70.00

RAMP CURVE DATA
Δ = 14°57'54.76" Rt.
D = 02°15.00'
R = 2548.64'
T = 334.48'
L = 665.12'
E = 21.88
P.C. = 433+76.99
P.I. = 434+11.47
P.T. = 437+42.11

13'-6" Superelevation as called for ℄ of Ramp 13'-6" Pavement Grade as called for on plans Point of rotation 2'-6" 1⅝" Crown 8" Curb Face
8 Curb Face
Bit Concrete Wearing Course Est. at 220# per sq. yd. and Bit. Bond Coat AE-2 Est. at 0.15 Gal. per sq. yd.
Concrete Base Course 9" Uniform
Ex. Retaining Wall
Sand Gravel Backfill (By Others)
Ex. Retaining Wall
FINISHED SECTION FOR RAMP ROADWAY To apply Stas. 434+87.94 to 437+15.25

13'-6" or Variable 11'-0" Superelevation as called for ℄ of Ramp Pavement Grade as called for on plans Point of rotation 8'-0" Conc. Roll Curb and Gutter Det. B
1⅝" Crown or Variable
1⅛" Crown
⅜ per ft. Slope
4" V.C.
Aggregate shoulder 6" Compacted
Fertilizer, Mulch and Class A Seeding
1 on 4
Earth Fill - See quantities below
Ex. Slope
8 Curb Face
Bit. Conc. Wearing Course Est. at 220# per Sq. yd. and Bit. Bond Coat AE-2 Est. at 0.15 Gal. per sq. yd.
Concrete Base Course 9" Uniform
Sand Gravel Backfill (By Others)
Ex. Retaining Wall
FINISHED SECTION FOR RAMP ROADWAY To apply Stas. 433+18.89 to 434+87.94
Scales 1"=5'

SCOTTEN N. 27°45'20" W.
Ex. Top of Slope
Ex. B 30 of 82-22-10
for details of Ramp See Sh.# 28
For details of Ramp See Sh.# 27
W.B. On Ramp
46.47'
105.93'
P.I. 434+11.47
89.39'
25' of Transition Curb and Gutter Det. A 24" to 30" Gutter Pan and 9" to 8" Curb Face
Const Tang. N 41°48'45" E.
430+74.51
Ex. 67 O.J.
Ex. Top of Slope
Ex. B 31 of 82-22-10
Const Tang. N 67°29'15" E.
W.B. EXPRESSWAY
Ex. Retaining Wall
Const ℄ and Westbound Ref. Line
95.88'
Ex. 6" O.J. Sewer
Ex. M.H.
Ex. 12"
P.T. 430+70.00
PC 430+76.99
Ex. C.B.
Ex. 30" Sewer
N. 45°18'45.24" E.
290' of 6" O.J.
Bit. Conc.
2° Curve
Ex. 6" O.J.
Ex. 36"
N 48°08'45.24" E
P.I. 428+57.54
Ex. 32 of 6" O.J.
Ex. 2' Sewer
Ex. M.H.
Ex. M.H.
WARREN
N. 89°05'45" E.
P.R.C. 426+45.00
Ex. 11'-0" Cyl. Sewer
Ex. B 29 of 82-22-10
Ex. Top of Slope
Concrete Nose Def. #1 (Sh. 38) (1) each
20 X Reverse
N. 45°18'45.24" E.
P.I. 434+11.47
N. 60°16'40" E
℄ of Ramp
Profile Grade Line
Ex. Retaining Wall
Ex. 24" Sewer
Prop. Toe of Slope
Prop. Earth Fill See Section on Left.
25' of Transition Curb and Gutter Det. B 18" to 30" Gutter Pan and 5½" to 8" Curb Face
N. 59°57'45" E.
Eastbound Ref. Line
E.B. EXPRESSWAY
WEST GRAND BLVD.
N. 27°48'20" W.
P.C.C. 438+26.66
+29.42

Concrete Base Course 9" Uniform with Bit Concrete Wearing Course (On Ramp and Deceleration Lane)
Conc. Curb and Gutter Det. A Left
Conc. Curb and Gutter Det. A Lt. — Conc. Roll Curb and Gutter Det. B Rt.
Conc. Roll Curb and Gutter Det. B Right
Superelevation Transition
See Detailed grades on Sht.# 45
0.013'/ft. to 0.032'/ft.
Superelevation 0.032 per ft.
Superelevation Transition 0.032/ft. to 0.0064/ft.

Joint Legend for Pavement Joints
B - Longitudinal Bulkhead Construction Joints with Tie Bars according to Standard Plan E-4-A-33 D, Det. 3 or 4

SUBBASE
Porous Backfill Gr. B Non. = 50 Cu. yds. Cm. in Cl. Conc. Pav. & Incl. in Item
Borrow = 233 Cu. yds. 320 Mult. to AE-1018
Overhaul = 2745 Comp. Cu. yd. Miles.

* 233 Cu. yds. from Pit #2

EARTHWORK
Sta. 433+18.89 to 434+87.94 Rt.
** Emb. = 534 Cu. yds. Omitted
85% Shr. = 134 Cu. yds. Mult. to AE-1018
** Earth Fill estimated to be secured from access excavation on No. Service Roads, Sta. 426+52 to 432+05

Proposed Grade for Right Edge of Ramp Pavement
Left Edge of Pav't. E.B. Expressway
Right Edge of Ramp Pav't. For detailed grades - See Sht.# 45
El. 109.49 +.50
El. 110.32 +58.5
Bottom of Ex. Cut
Ex. C.B.'s
Ex. M.H.
-0.30% 150 V.C.
Ex. C.B.
Ex. C.B.
Ex. 6" O.J. Sewer on Left
6" O.J. +0.40%
Top of 11'-0" Cyl. Sewer
6" O.J. -0.40%
Prop. FL. El. 104.60 (Outlet 6" O.J.)
Prop. FL. El. 100.60 (Outlet 6" O.J.)
Ex. FL. El. 103.80 (Outlet)
Prop. FL. El. 105.80 (Outlet 6" O.J.)
Ex. FL. El. 105.30 (Outlet)
Ex. FL. El. 105.20 (Inlet and Outlet)
Ex. 30" Sewer
Ex. 24" Sewer
Ex. FL. El. 104.70 (Inlets and Outlet)
Ex. FL. El. 104.60 (Inlet and Outlet)
105.97 108.68
106.37 109.08
106.72 109.48
107.08 109.84
108.14 110.13
109.82 111.82
113.05 115.04
118.61
121.76
125.11
128.46
131.64
El. 131.78 +49.18
+2.00%
102' V.C.
+40.25
3.35%
Ex. North Retaining Wall Begins
+18.89
Ex. North Retaining Wall Begins
+87.94
Face of B 3 of 82-22-10
427 428 429 430 431 432 433 434 435 436 437 438 439
130 125 120 115 110

WEST GRAND BLVD.
INSIDE EAST BOUND "OFF" RAMP ITEMS

FILE NO. USE NO. 350 STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-65	BUI 391(52)	26

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	27	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
PRELIMINARY O.K. W. CHECKED	W. B. Reinsche	3-52
FINAL DESIGN		
FINAL DESIGN CHECKED		
TRACED	S. B. Salter	3-52
FINAL O.K. CHECK		
QUANTITIES		
QUANTITIES CHECKED		
SQUAD	Danielson	3-52

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN CHECKED	W. B. Reinsche	1952
PROFILE PLOTTED		
PROFILE CHECKED		
PRELIMINARY GRADE		
GRADE INSPECTION		
FIELD AL INSPECTION		

RAMP CURVE DATA
Δ = 6°53'00" Rt.
D = 2°30'
R = 2292.01'
L = 275.33'
T = 137.84
E = 4.15'
PC = 428+76.18
PI = 430+14.02
PT = 431+51.51

Gas Main Service has been cut

For details of N. Service 20, see Sh. #34

LOVETT (28' Asphalt) N. 27°48'50" W.

Ex. 10"-12" Gas

Ex. 6" Water

Ex. 16" C.I. Water Main

Ex. 48" Sewer

8" Conc. Alley

1 St. Fr. Ho. #5349

2 St. Fr. Ho. #5358

2 St. Fr. Ho. #5390

Fr. Gar.

SCOTTEN (38' Asphalt) N. 27°45'20" W.

Ex. 12" Gas

Ex. 12" Water

Ex. 3"-30" Sewer

Ex. 4" Gas

Ex. 3" Chest

2 St. Fr. Ho. #5407

1/2 St. Fr. Ho. #5416

1 St. Factory Bldg. (C.B.) #5416 1/2

For details of N. Service 20, see Sh. #34

Ex. 8" Sewer

20' Conc. Alley

2 St. Fr. Ho. #5353

21' Maple

Tw. 8" Pear

Gas Main Service has been cut

BANGOR (24' Asphalt) N. 27°47'50" W.

Ex. 6" Water

For details of N. Service 20, see Sh. #34

1/2 St. Fr. Ho. #5370

2 St. Fr. Ho. #5362 #5364

Fr. Gar.

3 Pears

6 Pears

Gas Main Service has been cut

2 St. Br. Ho. #1645

4 Cherry

Ex. 6" Water

Ex. 16" C.I. Water Main

Ex. M.H.

Ex. Top of Slope

Ex. 30' Asphalt

W.G.M.H.

Ex. 12" Sewer

Ex. C.B.

Ex. B 30 of 82-22-10

270' of 6" O.J.

250' of 6" O.J.

116' of 6" O.J.

222' of 6" O.J.

306' of 6" O.J.

N. 41°48'45" E.

N. 48°41'45" E.

W. B. "On" Ramp

Bit. Conc.

Transition Curb and Gutter

45' R

Prop. Guard Rail by others

Ex. Top of Slope

Ex. 48" Sewer

W. B. Expressway

Const. Tang. N. 41°48'45" E.

Const. Tang. N. 67°29'15" E.

Ex. B 31 of 82-22-10

Ex. B 32 of 82-22-10

Prop. 13'-0" Sewer

WEST GRAND BLVD. N. 27°48'20" W.

Ex. 24" Asphalt

Ex. 6" O.J. Sewer

Ex. 18" Sewer

Ex. 15" Sewer

Ex. M.H.

Ex. Retaining Wall

Inside W.B. "Off" Ramp

Ex. 30" Sewer

For details of ramp, see Sh. #28

Const. & and W.B. Ref. Line

TANGENT

PC 427+51.00

PT 430+14.02

PT 431+51.51

Concrete Base Course 9" Uniform with Bit. Conc. Wearing Course (On Ramp and Acceleration Lane)

SUBBASE

Porous Backfill Gr. B Modified = 106 Cu. yds. Item P-1037

Borrow = ~~430~~ Cu. yds. 30 Inch AR-101B

Overhaul = ~~5523~~ Comp. Cu. yd. Miles.
*743 Auth. A.L. 10.8

*630 Cu. yds. from Pit 2 Item AR-101B #

Proposed Grade for Left Edge of Ramp Pavement

Left Edge of Pav't. Profile W.B. Expressway

Grade of Left Edge of Ramp Acceleration Lane. for Detailed Grades: See Sheet No. 46

+0.28% 120 V.C. +1.50%

+3.83%

Bottom of Existing Cut

6" O.J. +3.83%

6" O.J. +0.40%

6" O.J. -0.30%

Ex. C.B.

Prop. Fl. El. 116.22 (Inlet) 6" O.J.

Ex. Fl. El. 114.40 (Outlet)

Ex. Fl. El. 114.20 (Outlet)

Prop. Fl. El. 106.94

Prop. Fl. El. 107.70 (2 Inlets) 6" O.J.

Ex. Fl. El. 107.30 (Outlet)

Ex. Fl. El. 106.30 (Outlet)

Prop. Fl. El. 106.60 (Inlet) 6" O.J.

Ex. Fl. El. 105.10

Prop. Fl. El. 105.40 (Inlet) 6" O.J.

Ex. Fl. El. 104.20 (Outlet)

130.48 430+97.98

El. 112.14 +1.19

107.31 10.97

108.11 10.76

108.91 11.46

109.31 11.81

110.33 12.34

113.23 15.24

117.06 19.07

120.87 22.90

124.72 26.73

428 429 430 431 432 433 434 435 436 437 438 439

WEST GRAND BLVD.
WEST BOUND "ON" RAMP ITEMS

FILE NO. USE NO. 1350 STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-65	BUI 391(52)	27

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED		
PLAN DRAWN	W.B.Reinicke	3-52
PROFILE PLOTTED		
PROFILE CHECKED		
CROSS SECTIONS TRACED	E.B. Foster	3-52
CROSS SECTIONS CHECKED		
QUANTITIES		
QUANTITIES CHECKED		
QUAD		6-52

OPERATION	BY	DATE
PRELIMINARY P.O. W.		
PRELIMINARY CHECKED		
FINAL DESIGN CHECKED	W.B.Reinicke	3-52
TRACED		
FINAL P.O. W. CHECK		
QUANTITIES		
QUANTITIES CHECKED		
QUAD		Don Nelson

RAMP CURVE DATA
Δ = 02°06'45" Rt.
D = 00°45'00"
R = 7639.49'
T = 140.85'
L = 281.67'
E = 1.30'
PC = 430 + 10.50
PI = 431 + 51.35
PT = 432 + 92.17

RAMP CURVE DATA
Δ = 15°50'00" Rt.
D = 02°55'54.9"
R = 1953.49'
T = 271.65'
L = 539.78'
E = 18.80'
PC = 433 + 10.24
PI = 435 + 81.89
PC.C. = 438+50.02

CURVE DATA FOR LEFT EDGE OF RAMP
Δ = 02°09'05.27" Rt.
D = 02°41'23.63"
R = 2130.23'
T = 40.00'
L = 79.98'
E = 0.38'
PC = 430 + 98.91
PI = 431 + 38.91
PT = 431 + 78.89

CURVE DATA FOR RIGHT EDGE OF RAMP
Δ = 06°21'39.70" Lt.
D = 24°58'08.43"
R = 229.47'
T = 12.75'
L = 25.47'
E = 0.35'
PC = 433+98.91
PI = 431+11.66
P.C.C. = 431 + 24.38

CURVE DATA FOR RIGHT EDGE OF RAMP
Δ = 08°32'25.70" Rt.
D = 08°30'58.84"
R = 671.72'
T = 32.50'
L = 64.96'
E = 0.79'
P.C.C. = 431+26.38
P.I. = 431+56.88
P.C.C. = 431+89.34

CURVE DATA FOR RIGHT EDGE OF RAMP
Δ = 03°15'59.00" Rt.
D = 03°10'35.38"
R = 1803.97'
T = 51.44'
L = 102.83'
E = 0.73'
P.C.C. = 431+89.34
P.I. = 432+40.78
P.T. = 432+92.17

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	28	
L.I.V. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

Ex. Top of Slope
Ex. 11'-0" Cyl.
Ex. B 29 of 82-22-10
Ex. B 30 of 82-22-10
WARREN 176' Asphalt
W. B. EXPRESSWAY
E. B. EXPRESSWAY
N 89°05'45" E.
N 27°45'20" W.
℄ SCOTTEN
Const Tang. N 41°48'45" E.
N 45°50'45" E
Const ℄ Ramp
Inside W.B. "Off" Ramp
Ex. Retaining Wall
RAMP PC 430+10.50
RAMP PI 431+11.66
RAMP PT 432+92.17
RAMP PC 433+10.24
RAMP PI 435+81.89
RAMP PCC 438+50.02
Ex. 6' O.J.
Ex. 6" O.J. Sewer
Ex. 30" Sewer
Ex. 24" Sewer
Ex. 15" Sewer
Ex. M.H.
Ex. C.B.
Ex. 36"
Eastbound Ref. Line
Inside E.B. "Off" Ramp
For details of Ramp See Sh. # 26
For details of Ramp, see Sh. # 27
W.B. "On" Ramp
196.67'
Ex. Top of Slope
Concrete Nose Det. 2 (see Sh. #59) (1) Each
5° Curve
2 - 46' of 6' O.J.
37'-6" of 6' O.J.
Bit. Conc.
Const ℄ of Ramp and profile grade line
Const ℄ and Westbound Ref. Line
Ex. 15" Sewer
240'-5" of 6' O.J.
+93.14 RAMP
Ex. 12"
Ex. 8"
Ex. 4"
Ex. 2"
Ex. 1"
Ex. 3/4"
Ex. 1/2"
Ex. 3/8"
Ex. 1/4"
Ex. 1/8"
Ex. 1/16"
Ex. 1/32"
Ex. 1/64"
Ex. 1/128"
Ex. 1/256"
Ex. 1/512"
Ex. 1/1024"
Ex. 1/2048"
Ex. 1/4096"
Ex. 1/8192"
Ex. 1/16384"
Ex. 1/32768"
Ex. 1/65536"
Ex. 1/131072"
Ex. 1/262144"
Ex. 1/524288"
Ex. 1/1048576"
Ex. 1/2097152"
Ex. 1/4194304"
Ex. 1/8388608"
Ex. 1/16777216"
Ex. 1/33554432"
Ex. 1/67108864"
Ex. 1/134217728"
Ex. 1/268435456"
Ex. 1/536870912"
Ex. 1/1073741824"
Ex. 1/2147483648"
Ex. 1/4294967296"
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Ex. 1/17179869184"
Ex. 1/34359738368"
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Ex. 1/44362715105933037753254626946289339254982993206013065202727673289833940924890009968639590497666233249558259375382347198100808925184"
Ex. 1/88725430211866075506509253892578678509965986412026130405455346579667881849780019937279180995332466499116518750764694396201617850368"
Ex. 1/177450860423732151013018507785157357019931972824052260810910693159335763699560039874558361990664932998233037501529388792403235700736"
Ex. 1/354901720847464302026037015570314714039863945648104521621821386318671527399120079749116723981329865996466075003058777584806471401472"
Ex. 1/709803441694928604052074031140629428079727891296209043243642772637343054798240159498233447962659731992932150006117555169612942802944"
Ex. 1/1419606883389857208104148062281258856159455782592418086487285545274686109596480318996466895925319463985864300012235110339225885605888"
Ex. 1/2839213766779714416208296124562517712318911565184836172974571090549372219192960637992933791850638927971728600024470220678451771211776"
Ex. 1/5678427533559428832416592249125035424637823130369672345949142181098744438385921275985

FED. ROAD SYS. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	29	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

West Bound "Off" Ramp
Curve Data
Δ = 05°24'37.74" Rt.
D = 00°34'09.17"
R = 10090.42'
L = 952.84'
E = 11.26'
T = 476.78'
P.C. = 440+36.58
P.I. = 445+13.36
P.C.C. = 449+89.42

West Bound "Off" Ramp
Curve Data
Δ = 01°04'55.73 Rt.
D = 00°17'02.02
R = 20,182.66
L = 381.18'
E = 0.90'
T = 190.60'
P.C.C. = 449+89.42
P.I. = 451+80.02
P.T. = 453+70.60

DESIGNED		DATE
DRAWN	W.B. Reinicke	5-51
PLAN CHECKED		
PROFILE CHECKED		
PROFILE PLOTTED		
FINAL DESIGN CHECKED		
FINAL CHECK	S.B. Foster	1951
QUANTITIES		
QUANTITIES CHECKED		
QUANTITIES CHECKED	Danielson & Marek	32651

ITEM	BY	DATE
ORIGINATION		
PLAN ADOPTED		
PROFILE PLOTTED		
PROFILE CHECKED		
FINAL CHECK		
GRADE INSPECTION		
FEDERAL INSPECTION		

N 27°49'30" W

Ex. B32 of 82-22-10

W.B. EXPRESSWAY

E.B. EXPRESSWAY

E.W. Grand Blvd.

Ex. 18" Ex. M.H.

Ex. 36" Ex. M.H.

Top of Ex. Slope

Slope Stake Line

C.B. 3H & 15' of 12" Sewer

445+12.74 W.B. Expr. ℄

For Drainage See Sheet No. 14

Concrete Nose Det. 2 (1) each (See Sh. #59)

For Details See Sheet No. 14

For Details See Sheet No. 14

N 67°29'15" E

Const. ℄ and W.B. Ref. Line

Ex. Retaining Wall

Ex. C.B.

Ex. 12" Sewer

Ex. M.H.

N 60°59'41.53" E

Ramp Reference Line

Ex. RETAINING WALL

Ramp "A"

N 60°59'41.53" E 89.05'

E.B. Ref. Line

Ex. C.B.

Ex. C.B.

Ex. C.B.

Ex. 36"

Ex. M.H.

Transition Curb & Gutter Det. A 30" to 24" gutter pan and 8 to 9" curb face exposure 25 Lin. ft. Rt. and Lt.

Top of Ex. Slope

C.B. 3H & 10' of 12" Sewer

C.B. 6 H & 6' of 12" Sewer

E.B. Ref. P.I. Sta. 445+13.36

Prop. Retaining Wall (See Sh. #53 & 54)

E.B. Ref. Line P.T. Sta. 451+80.00

Ramp "A" P.C. Sta. 453+90.30

P.C.C. Sta. 449+89.42

L = 381.18'

T = 190.60'

2'

Slope Stake Line

13'-6" or Variable

13'-6"

Superelevate 0.01 Ft. per ft.

℄ of Ramp

Ramp Reference Line

Pavement Grade as called for on plans

2:6

1 5/8" Crown or Variable

1 5/8" Crown

8" Curb Face

8" Curb Face

Ex. Retaining Wall

Ex. Retaining Wall

B

Bit. Conc. Wearing Course Est. of 220 Lbs. per sq. yd. Bit. Bond Coat AE-2 Est. at 0.15 Gals. per sq. yd.

Concrete Base Course Uniform

Ex. C.B. 3 RT

Ex. 12"

Ex. 12"

Ex. C.B. 6 B

Ex. C.B. 6 B

Sand-Gravel Backfill (by Others)

FINISHED SECTION FOR RAMP ROADWAY
Scale 1"=5'

Concrete Base Course 9" Uniform with Bituminous Concrete Wearing Course (On Ramp and Deceleration Lane)

+41.58

Conc. Curb & Gutter Det. A on Left

+86.48

Conc. Curb and Gutter Det. A on Right

+86.48

Joint Legend for Pavement Joints
B - Longitudinal Bulkhead Construction Joints With Tie Bars according to Standard Plan E-4-A-33 D, Detail 3 or 4

Existing Ground Profile
Proposed Pavement Grade for Ramp Reference Line

130
125
120
115
110

El. 132.80 +25.51

El. 131.60 +85.51

+41.58 Retaining Walls begin

-2.00%

Proposed Pav't. Grade for Ramp Reference Line

Top of Ex. Retaining Wall

Face of ℄ 32 of 82-22-10 +36.58

Ex. C.B.

Ex. C.B.'s

-2.00%

Ex. 12" Sewer

Ex. M.H.

+82.60 North Wall
+83.65 South Wall
Retaining Walls end
El. 115.34
+42

C.B.'s 3H

+0.52%
100' V.C.

C.B. 6H

Approx. Ground Profile

Right Edge of Pav't. Profile W.B. Expressway

Grade of Right Edge of Ramp Deceleration Lane - For Detailed Grades. See Sht. N2.48

Prop. F.L. El. 111.17 (Outlet)

Prop. F.L. El. 111.27 (Inlet & Outlet)

Prop. F.L. El. 111.17 (Outlet & 2 Inlets)

	440	441	442	443	444	445	446	447	448	449	450	451	452
	130.85		127.02	123.02	119.02	117.95 / 115.78	132.23 / 115.50	132.60 / 116.40	132.95 / 116.99	132.80 / 117.35	132.97 / 117.74	133.00 / 118.18	133.55 / 118.42

WEST GRAND BLVD.
INSIDE WEST BOUND "OFF" RAMP ITEMS

ILL. NO. 33R NCHL

N-17-C-1

PROJECT	FEDERAL PROJECT	SHEET
82-65	BUI 391(52)	29

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	30	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

Curve Data South Ramp
Δ = 12°42' 20" RT.
D = 1° 20' 00"
R = 4297.28'
T = 478.43'
L = 952.92'
E = 26.54'
P.C. = 441+96.70
P.I. = 446+75.13
P.T. = 451+49.62

OPERATION	BY	DATE
SURVEYED		
PLAN PLOTTED	W.B. Reinicke	5-51
PLAN DESIGN CHECKED		
PROFILE PLOTTED		
PROFILE CHECKED	S.B. Foster	5-51
TRACED		
FINAL P. O. W. CHECK		
PRELIMINARY CHECK		
QUANTITIES CHECKED		
SQUAD	Danielson & Marek	52 & 51
FEDERAL INSPECTION		

N. 27°45'20" W.
Ex. B. 32 of 82-22-10
N 67°29'15" E.
Constr. & and W.B Ref. Line
Top of Ex. Slope
446+08.79
446+99.97
E.B. Ref. Line
N. 59°57'45" E.
Pt. Sta. 440+34.81
75.00'
210'
134.92'
22.85
E. B. Expressway
For Drainage See Sheet No. 14
C.B. 3H & 48' of 12" Sewer
45 R.
Transition Curb & Gutter around Radius
63.77'
N 54°46'55" E.
Bit. Conc.
Slope Stake Line
"ON" RAMP
200' of 6" O.J.
204' of 6" O.J.
C.B. 3J
C.B. 6J & 6 of 12" Cl. B
Prop. Ret. Wall (See Shs. #53 & 54)
250' of 6" O.J.
N 67°29'15" E.
+76.33
Pt. Sta. 451+15.22
Ramp P.T. 451+49.62
Ex. M.H.
Prop. 12" C.I. Water Main
Ex. 10" Sewer
Ex. 20' Gravel Alley
Ex. 12" Sewer
Sta. M.H.
C.B. 3J & 15 of 12" Cl. B
Peach #10
Cherry #9
Hamilton #8
Shed
Gar.
Ex. 12" C.I. Water Main
Top of Ex. Slope
330' of 6" O.J.
Prop. 12" C.I. Water Main
Ex. 12" Sewer
Ex. 36" Sewer
Ex. 6" Gas Main (Dead)
Ex. 12" Gas Main
Gas Main Service has been cut.
Ex. 6" Gas Main
Ex. 8" Water Main
Ex. 12" Water Main
Ex. C.B.
Ex. M.H.
O.E. Underground
Ex. 8" Water Main
Ex. 12" Gas Main
Fire Box
Police
W. Light
Ex. 3" Sewer
Ex. 6" Gas
Ex. 4" Gas
Ex. 8" Sewer
Ex. 6" Water Main
Ex. 4" Water Main
Ex. 4" Gas Main
Ex. 8" Gas Main
Ex. 6" Gas Main
Ex. 3" Sewer
Ex. 8" Water Main
Ex. 12

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BIII 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	31	
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
SURVEYED	F.B. Foster	1950
PLAN DRAWN	S.B. Foster	1951
PLAN CHECKED	F.B.	1951
PROFILE PLOTTED	S.B. Foster	1951
PROFILE CHECKED	W.B. Arnichs	1951
FINAL O.K. W. CHECK		
QUANTITIES		
QUANTITIES CHECKED	Danielson & Morse	5-25-51
AGAD INSPECTION		
FEDERAL INSPECTION		

Ramp Curve Data
Δ = 05° 38' 20" Rt.
D = 01° 20' 00"
R = 4297.28'
T. = 211.63'
L = 422.92'
E = 5.21'
P.C. = 456 + 59.02
P.I. = 458 + 70.66
P.T. = 460 + 81.94

See Sheet #15 | See Sheet #15 | See Sheet #15 | See Sheet #16

Ex. B 48 of 82-22-10

E.F.E. Constr. ℄ | N. 67° 29' 15" E. | E. B. Expressway

TWENTY-FOURTH (26' Wide) 5th Asphalt

Ex. M.H. | Ex. C.I. Sewer | Ex. M.H. | 131.09' | 457+90.11

Conc. Nose Det. I (See Sh. #58 (4 each)) | Bit. Conc. | 53.50' | 51.34' | 87.43' | 2' | 3° Curve | 4.5' R.

188' of 6" O.J. | 148' of 6" O.J. | 312' of 6" O.J. | 254' of 6" O.J.

C.B. 3J | C.B. 3H | C.B. 3H & 55' of 12" Sewer | Slope Stake Line

C.B. 3J & 15' of 12" Cl. B. | C.B. 6J & 6' of 12" Cl. B | C.B. 3J & 15' of 12" Cl. B

"Off" Ramp | N. 73° 07' 35" E. | 131.30' | +23.38 | 90° | +19.16 | P.C. Sta. 467+76.64 | 4.5' R.

P.C. Sta. 456+59.02 | See Sheet #15 | Ex. Top of Slope | P.I. Sta. 458+70.66 | P.T. Sta. 460+81.99 | Plug | Slope Stake Line

Ex. C.B. | Ex. 12" | Ex. C.B. | D.E.M.H. | Ex. 2" Gas (Steel) | Gas Valve | Ex. Det Edison | Ex. 3" Gas Main (Steel) | See Sheet No. 41 | P.E. M.H. | Ex. 4" Gas (Steel)

KIRBY (26' Wide) Sheet Asphalt on 8" Conc. Base | N. 67° 29' 15" E.

for Details of Service Road See Sheet No #41

Ex. 8" Water Main | Ex. C.B. | Ex. G.I.S. Maple | Ex. P.B.C., Police and Fire Cables | 18" Elm | 14" Elm | 18" Elm | 18" Elm | Ex. C.B. | Ex. Elm 28" | 21" Elms | 22" Poplars | 22" Elm | Ex. 12" Gas Main | Ex. 8" C.I. Water Main | Prop. 12" C.I. Water Main

Ash | 12" Ash | Gr. Ash | Gr. | Ex. M.H. | Ex. C.B. | Ex. 8" Water | Ex. 4" Gas Main | Ex. 2"x3" Sewer (Cap) | Ex. 10" Sewer | Ex. 8" Water | Ex. 8" Sewer | Ex. 8" Water | Ex. 8" Sewer | Ex. 8" Water | Ex. 10" Sewer | Ex. 4" Gas | Ex. 8" Water | Ex. 10" Sewer | Ex. 8" Water | Ex. 8" Sewer | Ex. 8" Water | Ex. 10" Sewer | Ex. 8" Water | Ex. 4" Gas | Ex. 8" Water | Ex. 10" Sewer | Ex. 8" Water | Ex. 8" Sewer | Ex. 8" Water

Gas Main Service has been cut.

185' Conc. Alley | 1 St. Fr. Ho. #5329 | 2 St. Br. Ho. 5324 | 2 St. Br. Apt. #3421 | 2 St. Br. Apt. #5329 & 5325 | 20' Conc. Alley | TWENTY-THIRD (26' Wide) | Vacated Alley | Parking Lot | Cinder Parking Lot | 20' Conc. Alley | #3317 | #3307 | 2 St. Br. Apt. Bldg. | TILLMAN | 2 St. Fr. Bldg. #5330 | 1 St. Fr. Bldg. #3209 | 1½ St. Fr. Bldg. #3251 | 1 St. Fr. Bldg. #3289 | WILLIAMS (26' Wide) 5th Asphalt | #3044 | #3284

Gas Main Service has been cut. | Gas Main Service has been cut | Gas Main Service has been cut

Concrete Base Course 9" Uniform with Bit. Conc. Wearing Course (On Ramp and Deceleration Lane)

+40.11 | +23.38

SUBBASE
Porous B.E. Gr. B Modified 119 Cu. yds. ~~Estimated~~ Auth. AR-1007
*Borrow = ~~528~~ Cu. yds. 182 Auth. AR-1018
Overhaul = ~~6010~~ Comp. Cu. yd. Miles 12,750 Furn. AR-1.5
~~902~~ Auth. AR-1018
*~~528~~ Cu. yds. from P.I. #2

+49.36 | +00 | El. 132.40 | +1.07% | For detailed grades See Sheet No 51 | 80' V.C.

Existing Ground Profile
Proposed Grade for Right Edge of Ramp Pavement

135 | 130 | 125 | 120 | 115

Approximate ground profile | Prop. Grade of Right Edge of Pav't.

Bottom of Ex. Cut | Right Edge of Pav't Profile E.B. Expressway | Grade of Right Edge of Ramp Deceleration Lane - For Detailed Grades See Sheet No. 50

El. 114.47 +88 | C.B. 3H | C.B. 3J | C.B. 6J | -0.60% 100' V.C. | +1.70%

Ex. 6" O.J. Sewer | +12 | 6" O.J. -0.40% | 6" O.J. -0.40% | 6" O.J. +3.60% | +3.60% | 6" O.J. +3.60% | C.B. 3H | C.B. 3J | Prop. F.L. El. 120.60 (Inlet) - 6" O.J. | Prop. F.L. El. 119.80 (Inlet) | Prop. F.L. El. 120.49 | Prop. F.L. El. 120.10 (Outlet & Inlet) | Prop. F.L. El. 118.00 (Outlet) | 12" Sewer | C.B. 3J | 6" O.J. +0.40% | 6" O.J. +0.40%

Prop. F.L. El. 112.29 | Prop. F.L. El. 111.50 (Inlet - 6" O.J.) | Prop. F.L. El. 111.50 | Prop. F.L. El. 110.90 (Inlet - 6" O.J.) | Prop. F.L. El. 110.92 (Outlet) | Prop. F.L. El. 110.4 (Inlet & Outlet for 3 J) (Outlet for 6 J) | Prop. F.L. El. 110.91 (Inlet 6" O.J.) | Prop. F.L. El. 110.30 (Inlet & Outlet for 3 H) | Prop. F.L. El. 112.32 | Prop. F.L. El. 112.00 | Prop. F.L. El. 111.10 (Inlet) | Prop. F.L. El. 110.70 (Inlet & Outlet)

	457	458	459	460	461	462	463	464	465	466	467	468	469
Ex. Gr.	114.78	116.60	130.5	116.11	132.8	115.38	132.3	115.00	133.0	115.20	133.0	118.50	132.8	122.10	133.3	125.70	133.0	129.30	134.0	132.60	134.8	133.30	134.3	
Prop. Gr.	112.29													112.32										

EARTHWORK
Sta. 461+50 to 467+23
Earth Exc. = ~~7785~~ Cu. yds. 85-2-1
**Waste = ~~7785~~ Cu. yds. 35-2-1
Overhaul = ~~14,109~~ Comp. Cu. yd. Miles 13,382
AR-12.8

** 2200 Cu. yds. to Pit #1
485 Cu. yds. to Pit #2
5300 Cu. yds. to be disposed of by the Contractor (the Ford Foundation is available.)

MAYBURY GRAND EAST BOUND "OFF" RAMP

FILE NO. 1.116.390 SHEET

N-17-C-1

STATE PROJECT 82-65 M-112

Curve Data Bus Ramp West Bound
Δ = 01° 08' 45" Lt.
D = 01° 00' 00"
R = 5729.65'
T = 57.29'
L = 114.58'
E = 0.29'
PC = 465 + 75.02
PI = 466 + 32.31
PT = 466 + 89.60

Curve Data Bus Ramp West Bound
Δ = 01° 55' 10" Lt.
D = 00° 45' 00"
R = 7639.49'
T = 127.98'
L = 255.93'
E = 1.07'
PC = 471 + 04.41
PI = 472 + 32.39
PT = 473 + 60.34

Curve Data West Bound "on" Ramp
Δ = 01° 08' 45" Lt.
D = 01° 20' 00"
R = 5729.65'
T = 57.29'
L = 114.58'
E = 0.23'
PC = 473 + 63.38
PI = 474 + 20.67
PT = 474 + 77.96

FED ROAD | FEDERAL
BUI 391(52)
CITY
M-112 82-65 WAYNE Detroit 32

For details of Lawton Temporary W.B. "On" Ramp, See Sh. #33

TILLMAN (26 Wide)
3½" Sh. Asphalt on 2" Conc.
Ex. 8" Water
Ex. 8" Gas
Ex. 10" Sewer
Ex. 20' Conc. Alley
Conc. Blk. Gar.
2 St. Fr. Gar.
2 St. Fr. Ho. #5455
2½ St. Fr. Ho. #5440
Paradise
Br. Gar.
Brick Floor
1½ St. Fr. Ho. #5454
1 St. Fr. Ho. #5453
2 St. Fr. Ho. #5452
10' Paradise
Privet
Lilacs
Gar.
2 St. Fr. Ho. #5507
Ex. 12" C.I. Water Main
Ex. 16" C.I. Water Main
Prop. 16" C.I. Water Main
Gas Main Service has been cut.
For details of N. Service Rd., see Sh. #37
Ex. 10" Sewer
Ex. M.H.
Ex. C.B.
Ex. 12" Sewer
Ex. 20" Conc. Alley
2 St. Fr. Ho. #5508
10' Paradise
Maple
Ex. M.H.
Ex. 12" Sewer
Ex. 16" C.I. Water Main
C.B. 38-8.9' of 12" Sewer
Ex. top of Slope
Cons. Curb Det 2 (4 Face)
For construction of Bus Ramp - See Sheet No.
Slope Stake Line
For Drainage See Sheet No. 15 & 16
C.B. 6 J
285' of 6" O.J.
N. 66° 20' 30" E.
C.B. 3 J
Ex. B. 33 of 82-22-10
Ex. Top of Slope
+30' of 6" O.J.
385' of 6" O.J.
N. 66° 25' 20" E.
W.B. Bus Ramp
Curb & Gutter Transition
For Drainage Details - See Sht. No.
See Sheet No. 16
W.B. Expressway
See Sheet No. 16
See Sheet No. 16
See Sheet No. 16
See Sheet No.
N. 67° 29' 15" E.
GRAND
MAYBURY
PC = 13.02
PI = 32.31
PT = 89.60
PC = 04.41
PI = 32.39
PT = 60.34
PC = 63.38
PI = 20.67
PT = 77.96
+32.31
+32.30
+32.39
+20.67
464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475 | 476

Note:
Construction details east of Maybury Grand (shown ruled out) to apply on Grand River Bridge Contract, except as shown on Sh. #33

Mich. Proj: BUI. 391(52) - State Proj: 82-65 Ends, Sta. 472+30.00
~~Concrete Pavement 10" Thickness (On Bus Ramp and Acceleration Lane)~~
Concrete Base Course 4" Unit. 3 Bituminous Conc. Wearing Course (on Bus Ramp & Accel. Lane)
Auth. AB-1015

~~Conc. Curb Det 2 Right~~ Conc. Roll Curb and Gutter Det B 6.06"
~~SUBBASE~~ See Sheet No.

Approx. Ex Ground Profile
Approx. ex. ground profile
Ex. Top of Slope
Ex. Bottom of Slope
Ex. Toe of Slope
Ex. Ground Profile
Proposed Ground Profile
Ex. Ground Profile
Ex. Inlet
Ex. Catch Basin
Ex. Manhole
S.B. Ramp
W.B. Ramp
El. 116.15 +25.02
C.B. 6 J
C.B. 6 J
C.B. 3 J
Prop. FL El. 112.66 (Outlet)
Prop. FL El. 113.16 (Inlet)
Prop. FL El. 114.30
Prop. FL El. 114.42
Prop. FL El. 114.30 (Inlet)
Prop. FL El. 113.80
Prop. FL El. 115.59
Prop. FL El. 115.10 (2 Inlets 6' O.J.)
Prop. FL El. 114.60 (Outlet)
Prop. FL El. 114.50 (Inlet & Outlet)
Bottom of Ex. Cut
For detailed grades See Sheet No. 52
N. Edge of Pav't. E.B. Expressway
Left Edge of Prop. Bus Ramp
6" Cut - 0.3%
6" Cut
6" Cut
6" Cut
+0.40%
+0.09%
+2.45%
+0.23%
+1.45%
+1.45%
+2.0%
100' Vc.
+1.85
+1.85
+1.10
135
130
125
120
115
464 | 465 | 466 | 467 | 468 | 469 | 470 | 471 | 472 | 473 | 474 | 475

LINWOOD "ON" BUS RAMP
LN-57-0-1

Remove Trees between Lt. R.O.W. Line and Rt. Slope Stake Line (this sheet)
Removing Trees 8" to 12" Dia. (1) each
Removing Trees 13" to 24" Dia. (12) each
Removing Trees 25" to 36" Dia. (2) each

Remove existing concrete sidewalk, concrete driveway and concrete garage floors shown hatched: 341 Sq. yds. Removing Sidewalk

Remove existing Concrete Pavement shown hatched 1457 Sq. yds. Removing Old Pavement

Restoring Roadsides between Maybury Grand and Lawton on Lt. Side only. Quantities are included in total on Sheet No. 12

Prop. Sodding See Sheet No. 16

B.M. #21E Elev. 137.869
Arrow on Fire Hydrant at N.W. Corner of Maybury Grand and Kirby Ave.

~~Estimated 77 C.yds. of Removing Masonry and Concrete this sheet (between existing Top of slope as slope stake line and R.O.W. Line, on Left side only.)~~

Curve Data for Left edge of Temporary Ramp
Δ = 1°55'10" Lt.
D = 00°45'00"
R = 2,390.49'
T = 129.98'
L = 255.93'
E = 1.07'
P.C. = 471+04.41
P.T. = 472+32.39
P.T. = 473+60.34

Transition Roll Curb Det. 5-A to Det. 2-A (6" Curb Face)
30 Lin. Ft. of Conc. Curb Det. 2-A (6" Curb Face)

Transition Roll Curb Det. 6-D to Det. B
25 Lin. Ft. of Conc. Roll Curb Det. B

Removing Curb 22 Lin. Ft.

Transition Curb and Gutter Det. 7A (Modified) to Det. 2A
24 Lin. Ft. of Conc. Curb and Gutter Det. 7A (Modified)

Concrete Roll Curb Det. 5A on Lt. 377 Lin. Ft. (between transitions)
Concrete Curb and Gutter Det. 7A (Modified) on Rt. 461 Lin. Ft. (excluding transition)

2" Concrete Pavement 8" Uniform (not reinforced)
Concrete Roll Curb Det. 5A Lt. Concrete Curb and Gutter Det. 7A (Modified) Rt. (See detail below)

CB 6-T and 24" of 12" Class B (center CB 15'2" from Edge of Pav't.)

MH 1A and 12'0" of 24" Class B
6" of 2" Sewer Stub on E. 6" of 12" Sewer Stub 45° to E. from S.F.E. Const. ℄

CB 3-H and 9' of 12" Sewer (center CB 5'8" from S.F.E. Const. ℄)

CB 3B and 32' of 12" Class B

Ex. B 33 of 82-22-10

It is the intent that drainage shown on this sheet shall be placed to fit ultimate construction, except such drainage as required for Temporary Ramp.

Lawton Temp. W. B. On Ramp and all items crossed out on plan and profile omitted
Auth. AB 1015
AP 1017
AR 1018

2 Cable Guard Rail on CA
2 Expansion Tone type

Sta. 472+30.12 to 476+56.08

Earth Excavation	~~15,428~~ Cu. yds.
Embankment	~~105~~ Cu. yds.
+25% Shr.	~~27~~ Cu. yds.
Backfill Basements	1343 Cu. yds.
*Waste	~~13,945~~ Cu. yds.
Overhaul	~~156,142~~ Comp. C.Y. Mi.

*~~13,945~~ Cu. yds. to P.I. #2

Omitted
Auth. AB 1015
AP 1017
AR 1018

LAWTON TEMPORARY WEST BOUND "ON" RAMP ITEMS

OPERATION	BY	DATE
SURVEYED		
PLANS PLOTTED	Kelner & Bourquin	4-52
PLANS CHECKED	W.B. Reinicke	7-52
PROFILE PLOTTED		
PROFILE CHECKED	W.B. Reinicke	9-52
PROJECT CHECKED		
PRELIMINARY R.O.W.		
FINAL R.O.W.		
QUANTITIES CHECKED		
SQUAD		
FEDERAL INSPECTION		

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED	W.B. Reinicke	7-52
FINAL R.O.W. CHECKED		
FINAL DESIGN CHECKED		
TRACED	S.A. Foster	11-52
FINAL R.O.W. CHECK		
PROJECT CHECKED		
QUANTITIES CHECKED		
SQUAD	Danielson	4-53

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BIII 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	33	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

SECTIONS FOR GRADING
Scale 1"=20'

FINISHED SECTION FOR RAMP PAVEMENT
Scale 1"=5'

Joint Legend for Pavement Joints
D- Longitudinal Lane Tie Joints with Tie Bars, according to Standard Plan E-4-A-33D, Detail 1 or 2
B- Longitudinal Bulkhead Construction Joints with Tie Bars, according to Standard Plan E-4-A-33D, Detail 3 or 4
BD- Optional B or D

The general notes shown on Standard Plan E-4-A-21D shall apply except that intermediate plane of weakness joints may be placed at 25 ft. intervals instead of the 10 ft. spacing as shown on Standard Plan.

C = 0.0502
S = 2.00%

DETAIL OF CONCRETE CURB & GUTTER DET. 7A (MODIFIED)

FILE NO.	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
N-17-C-1	82-65	BIII 391(52)	33

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	34	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
SURVEYED	S.B. Foster	9-52
PLAN PLOTTED		
PLAN DESIGN	W.B. Barnicha	4-52
PROJ. I & E PLOTTED		
PROFILE CHECKED		
FINAL R.O.W. CHECK		
QUANTITIES		
GRADE INSPECTION		
SQUARED		Corrected 5-52
FEDERAL INSPECTION		

SERVICE ROAD CURVE DATA
Δ = 26°28'23" Lt.
R = 140'
E = 3.82'
T = 32.93'
P.I. = 426+84.92

SERVICE ROAD CURVE DATA
Δ = 19°42'15" Lt.
R = 150'
E = 2.25'
T = 26.05'
P.I. = 428+18.86

Removing Old Pavement Shown hatched this Sheet 14 Sq. yds.

Auth. Sta. 425+80 to 431+95
AR 1017 ~~3546~~ 3582 Sq. ft. of 4" Conc. Sidewalk

Auth. D-1001
1097 Sq. Ft. 4" Conc. Sidewalk Sta. 432+28 to Sta. 434+05 (omitted.)

Auth. D-1001
851 Sq. Ft. 4" Conc. Sidewalk Sta. 437+00 to Sta. 439+45

Prop. Chain Link Fence
Section Showing Prop. Sidewalk in Entry To apply Sta. 425+75 to 426+50
Prop. 4" Conc. Sidewalk on 6" Gr. 2
Variable slope to meet Ex. 1 on 2 slope.

Auth. AB-1015 ~~120 Sq. ft. of 7" Conc. Sidewalk~~ ~~27~~ 26 Sq. yds. Conc. Pavt. 7" Uniform

Vacant Lot
1 St. Fr. Bldg. #4358
1 St. Fr. Ho. #5349
2 St. Fr. Ho. #5360
2 St. Fr. Ho. #5358
2 St. Fr. Ho. #5407
1½ St. Fr. Ho. #5416
1 St. Factory (Conc. Blk.) 5416½
2 St. Fr. Ho. #5393
1½ St. Fr. Ho. #5370
2 St. Fr. Ho. #5362
#5362½
Fr. Gar.
Br. Gar.
Gr. Fr. Gar.

Gas Main Service has been cut
CB 3B and 53' of 12" Sewer
CB 6B and 30' of 12" Sewer
CB 6B, CB 3B and 66' of 12" Sewer
Gas Main Service has been cut
Gas Main Service has been cut
Gas Main Service has been cut

18' Conc. Alley
Ex. 1-10 Sq. Sewer
LOVETT (26' Asphalt)
SCOTTEN (38' Asphalt)
BANGOR (24' Asphalt)
N. 27°48'50" W.
N. 27°47'50" W.
Ex. 16" C.I. Water Main
Ex. 12" Water
Ex. 8" Water
Ex. 6" Water
Ex. 4" Water
Ex. 16" C.I. Water
Ex. 6" Water
Ex. 8" Water
Ex. 6" Water
Ex. 6" Water
Ex. 16" C.I. Water Main

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	35	

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	DATE
SURVEY PLOTTED	6-57
PLAN PLOTTED	W.B. Reinecke
PLAN QUESTIONED	6-57
PROFILE PLOTTED	S.B. Foster
PROFILE CHECKED	6-57
PRELIMINARY GRADE	S.B. Foster
GRADE INSPECTION	12-57
FINAL R.O.W. CHECK	
QUANTITIES CHECKED	Damelson & Marek 12-57
SQUAD	

NAME	
DESIGNED	F. Ayman
DRAWN	S.B. Foster
TRACED	S.B. Foster
CHECKED	S.B. Foster
QUANTITIES	M.A. Reineke
APPROVED	

STA.	
440	
441	
442	
443	
444	
445	
446	
447	
448	
449	
450	
451	
452	

Auth. D-1001
1343 Sq. Ft. 4" Conc. Sidewalk
Sta. 440 + 24 to Sta. 442 + 50

WEST GRAND BLVD.

N. 27° 48' 20" W.

3 St. Br. Apt. Bldg. #1646

W.G.M.H.

Ex. 16" C.I. Water Main

Gas Main Service has been cut

CB. 3D with Trap and 18' of 12" Sewer

Top of Ex. Slope

Ex. 6" C.I. Sewer

N. 67° 29' 15" E.

107.21'

+48.77

Ex. 12" Sewer

Ex. M.H.

Ex. 36"

+96.88

114.96'

32 Lin. ft. of Conc. Driveway Return Det. 15 - Brn. Hd. Auth. BE-1015

10' of Curb Transition (Ex. 16" C.I. Water Main Prop. 16" C.I. Water Main)

S. VINEWOOD (36' Asph.)

Ex. 2-10"x4'-3" Sewer

Ex. 6" Water Main

Ex. 4" Gas Main

Ex. 20' Dirt Alley

Ex. M.H.

N. 67° 02' 00" E.

Ex. S.M.H.

Ex. 10" Sewer

Br. Gar.

1½ St. Fr. Ho. #5521

2 St. Fr. Ho. #5515

Gar.

N. 64° 32' 55" E.

443

Tw. 10" Ash

18" Elm

30" Poplar

16" Pear

Tw. 9" Pear

1" Pear

36" Elm

3" Para.

1" Locust

6" Pear

6" Parasite

18" Elm

2 St. Fr. Ho. #5521

2 St. Fr. Ho. #5511

Slope Stake Line

N. 25° 12' 05" W.

Mc KINLEY (26' Paint. Conc. and Sheet Asphalt)

Auth. D-1001
400 Sq. Ft. 4" Conc. Sidewalk
Sta. 448 + 90 to Sta. 450 + 42

Gas Main Service has been cut

CB. 3D with Trap and 6' of 12" Sewer

2 St. Fr. Ho. #5521

2 St. Fr. Ho. #5514

Tree

12" Apple

Tree

Tree

Cherry Apple

CB. 6B and 24' of 12" Sewer

46 Lin. ft. of Conc. Curb Det. 2 (9" Curb Face)

CB. 3B with Trap and 174' of 12" Sewer

Conc. Base Course 9" Unif. 29 Sq. yds. Bit. Conc. Wearing Course 3.2 Tons.

Prop. 16" C.I. Water

449

N. 68° 08' 55" E.

451

452

M.H. 1 AD and 165 of 12" Class B

Plug

101.02'

+42.46

N. 24° 41' 10" W.

20' Conc. Alley

Ex. 12" Sewer

Ex. 6" Water Main

Ex. 4" Gas Main

Gas Main Service has been cut

Pear

#5457 2 St. Fr. Ho. #5455

10" Apple

#5453 2 St. Fr. Ho. #5449

Gar.

Prop. 16" C.I. Water

28 Lin. ft. of Conc. Driveway Return Det. 16 Drop Head Brn. Hd. Auth.

12" Sewer Top (1) each

See Sht. 15

See Sht. No. 36

Left 25' Hub Profile and Proposed Edge of Pavement Grade

Centerline Profile and Top of Prop. Pav't. Grade

Top of Existing Slope and Proposed Edge of Pavement Grade

36' Conc. Base Course 9" Unif. with Bit. Conc. Wearing course, Conc. Curb Det. 2 9" Face Rt. 6" Face Lt.

22' Conc. Pav't. 8" Uniform Inverted Crown

18' Conc. Pav't. 8" Uniform Inverted Crown

See Sht. No. 36

Ex. Ground Profile

Prop. Edge of Pav't. Grade

Prop. ℄ Grade

Prop. Top of Curb Grade

Ex. 12" Sewer

Approx. FL. Ex. 12" El. 116.89

Approx. FL. El. 108.64 Ex. 2-10"x4'-3"

Approx. FL. El. 110.9 Ex. 2-10"x4'-3"

Approx. FL. El. 110.8 Ex. 2-10"x4'-3"

Approx. FL. Ex. 12" El. 120.70

Prop. ℄ Gar.

Prop. FL. El. 126.10

Prop. FL. El. 126.20

Prop. FL. El. 127.2

Prop. FL. El. 127.00 Inlet and Outlet

Prop. FL. El. 128.40

Prop. FL. El. 128.50

Prop. FL. El. 126.13

Prop. FL. El. 119.70

Prop. 12" Sewer - 0.50%

C.B. 6B

C.B. 3D.T.

MH. 1-A-D

Exc. = 459 Cu. yds. 3" Auth. AR-1018
Emb. = 80 Cu. yds. Auth. AR-1018
25% Shr. = 22 Cu. yds.
* Waste = 42 Cu. yds. 3" Auth. AR-1018

*Waste to be disposed of by the Contractor (The Ford Foundation is available)

For Earthwork See Sheet No. 36

N. SERVICE ROAD ITEMS Sta. 440 to 452

N-17-C-1

82-65 BUI 391(52) 35

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	36	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

DATE	BY	REVISIONS
1-8-60		
1-20-60		
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2-15-60		
2-22-60		
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N. SERVICE ROAD ITEMS Sta. 464 to 476

ALL E.I.O.	STATE PROJECT	PREVIOUS SHEET	SHEET
NO SCALE	82-65	Det 30(b2)	37

OPERATION	BY	DATE
SURVEYED		
PLAN DRAFTED		
PLAN CHECKED		
PROFILE PLOTTED	J.P.L.	7-27-52
PROFILE DRAFTED	J.P.L.	7-27-52
PROFILE CHECKED	M.B.	7-30-52
GRADE INSPECTION	S.B. Foster	7-30-52
PAVEMENT	W.B. Reinicke	8-1-52
FEDERAL INSPECTION		

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED	W.B. Reinicke	6-52
FINAL DESIGN		
FINAL DESIGN DATA ADJ.		
TRACED	S.B. Foster	7-30-52
FINAL R.O.W. CHECK		
QUANTITIES CHECKED		
SQUAD	Marks & Jamieson	8/6/52

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 31(52)			
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	37	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED		
FINAL DESIGN CHECKED	W.B. Reinicke	5-52
TRACED		
FINAL R.O.W. CHECK	S.B. Foster	5-52
CHANTILLIES		
QUANTITIES CHECKED		
SQUAD	Danielson	5-52

OPERATION	BY	DATE
SURVEY EDITED		
PLAN PLOTTED	S.B. Foster	5-52
PLAN CHECKED		
PROFILE PLOTTED	W.B. Reinicke	5-52
PROFILE CHECKED		
PRELIMINARY GRADE		
GRADE INSPECTION		
FEDERAL INSPECTION		

Auth # D-1001
135.32 Ft. of 4 Conc. Sidewalk
Sta. 431+65 to Sta. 433+65

Auth # D-1001
Sta. 433+65 to Sta. 439+65

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	(BUI 391(52))			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	38	

B. P. R. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

P.I. 429+26.84

N 59°57'45" E

480.95'

279.13'

138.13'

East Bound Ref. Line

PCC 438+26.66

Ex. B 30 of 82-22-10

Ex. B 29 of 82-22-10

Ex. B 31 of 82-22-10

Ex. B 32 of 82-22-10

~~32 Lin. ft. of Conc. Driveway Return Det. 15 omitted AB-1015~~

~~38 Lin. ft. of Conc. Driveway Return Det. 15 omitted Auth. AB-1015~~

Ex. Top of Slope

138.75'

125.57'

131.80'

200' R.

Ex. P.L.C.

N 89°05'45" E

LOVETT N. 27°48'50" W.

WARREN (76' Asphalt)

Ex. 8" C.I. Water Main

Ex. 42" Water

Ex. 12" Water

Ex. 6" Water

Ex. 12" Sewer

Ex. 8" Water

Ex. 8" Gas

Ex. P.L.C.

Ex. C.B.

Ex. W.G.

Ex. W.M.H.

Ex. T.H.

Ex. 18" Gravel Alley

SCOTTEN (38' Asphalt)

N. 27°48'50" W.

Ex. 8" Gas

Ex. 8" Sewer

Ex. 18" Gravel Alley

Box Culv.

Ex. M.H.

Ex. 15" Sewer

Ex. 12" C.I. Water Main

Ex. 6" Water

Ex. 24" Elm

Ex. 16" Para.

Ex. 12" Para.

Ex. 11" Para.

Ex. 6" Para.

Ex. 6" Gas

Ex. 8" Gas

Ex. 6" Water

WEST GRAND BLVD.

N. 27°48'20" W.

1 St. Fr. Ho. #5336

2 St. Fr. Ho. #5280

2 St. Br. Ho. #5273 & #5271

2 St. Br. Apt. #1601 & #1603

1 St. Br. Ho. #4230 & #4240

2 St. Br. Ho. #5222 & #5222

2 St. Br. Apt. #5325

2 St. Br. Apt. #5315

Fr. Gar.

Br. Gar.

Gas Main Service has been cut.

CB 3B with trap and 8' of 12" Sewer

CB 3B with trap and 16' of 12" C.I.P. 11.12" Sewer Top

24' Conc. Base Course 9" Unif. with Bit. Conc. Wearing Course and Conc. Curb Det. 2

22' Conc. Pavement 8" Uniform Inverted Crown

9" Face Lt.

6" Face Rt.

Ex. Ground Profile

Prop. Edge of Pavement Grade

Prop. Top of Curb Grade

Prop. & Grade

Prop. Edge of Pav't. Grade

Ex. Ground Profile

+0.35%

-1.57%

+1.18%

50 V.C.

30 V.C.

Ex. M.H.

3 BT

Prop. FL El. 123.40 (Outlet)

Prop. FL El. 123.00 (Outlet)

Prop. FL El. 115.10

Ex. 15" Sewer

Top of Existing Slope and Proposed Edge of Pavement Grade

Centerline Profile and Top of Proposed Pavement Grade

Right 25' Hub Profile and Proposed Edge of Pavement Grade

El. 128.51 +85

El. 129.43 +100

El. 128.26 +45

El. 128.80 +30

El. 128.25 +40

El. 128.45 +10

El. 130.20 +80

El. 128.66 +20

El. 128.46 +25

El. 128.15 +35

El. 128.40 +50

El. 128.15 +40

El. 128.40 +70

El. 130.08 +70

El. 128.7

El. 128.45

El. 130.2

El. 128.65

El. 129.00

El. 130.00

El. 124.00

C0.2

C0.5

C0.4

+30.06

+88.53

+89

+80

Exc. = 373 Auth. AB-1018 225 Cu. Yds.

*Waste = 298 Cu. Yds. 373 Auth. AB-1018

* Waste to be disposed of by the Contractor (The Ford foundation is available).

428 429 430 431 432 433 434 435 436 437 438 439 440

S. SERVICE ROAD ITEMS Sta. 428 to 440

FILE NO. USE NO. 390 STENCIL N-17-C-1

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-65	BUI 391(52)	38

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	39	
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
SURVEYED		
PRELIMINARY DESIGN	F. Pullman	7-51
FINAL DESIGN	W. B. Kendebe	
FINAL DESIGN CHECKED	S. B. Foster	6-8-52
PROFILE PLOTTED		
PROFILE CHECKED	S. B. Foster	
QUANTITIES		
QUANTITIES CHECKED		
GRADE INSPECTION		
FEDERAL INSPECTION		

Auth. # D-1001
1205 Sq. ft. 4" Conc. Sidewalk.
Sta. 440 +60 to Sta. 442 +65

Curve Data South Service Road
Δ 23° 56' 50" Lt.
R 150'
P.I. 443+09.02

Top of Ex. Slope

Const. ℄ and W.B. Ref. Line

440 | 441 | 442 | +61.36 | 443 | 444 | +08.85 | 445 | +59.83 | 446 | N. 67° 29' 15" E. | 447 | 448 | 449 | 450 | 451 | 452

N. 27° 48' 20" W.

N. 59° 57' 45" E.

195.50'

188.29'

112.19'

WEST GRAND BLVD

Ex. B 32 of 82-22-10

22' of Conc. End Header Det. 20

32' of Conc. Driveway Return Det. 18 ~~omitted~~ Auth. AB-1013

~~Omitted~~ Auth. AB-1015 CB 38 with trap and 70' of 12" Sewer

33' of Conc. Driveway Return Det. 15 ~~omitted~~ Auth. AB 1015

Top of Ex. Slope

Ex. 12" C.I. Water Main

442+61.36

N. 64° 41' 10" E.

N. 40° 44' 20" E.

Ex. 18" Water Main

Ex. 18" Sewer

Ex. M.H.

Ex. 12" Sewer

Ex. 8" Water Main

Prop. 12" C.I. Water Main

Ex. 10" Sewer

N. 66° 45' 44" E.

Ex. 20' Gravel Alley

5 cu. yds. Agg. Appr.

Prop. Retaining Wall, For Details, See Sheet No. 53 & 54

35 Lin. ft of Conc. Auth. AB-1015 Curb Det 2 ~~6" Curb Face~~ 9" Curb Face

Slope Stake Line

Cut Curb for driveway opening 22 Lin. ft. of Cutting Curb

Plug

36 Lin. ft of Conc. Curb Det 2A (6" Curb Face)

Prop. Street Lighting Regulator House (By others)

Ex. Det. Ed. Underground Line

Prop. 12" C.I. Water Main

Ex. 8" Water Main

Ex. 12" Gas Main

Ex. 8" C.I. Water Main

Ex. 8" Sewer

Ex. 10" Sewer

Ex. 4" Gas Main (Good)

Ex. 8" Water Main

Ex. C.B.

W.G.M.H.

Ex. D.E.M.H.

Ex. C.B.

Ex. Light Standard

Ex. Fire Hydrant

Ex. Telephone Pole

Ex. Guy Wire

Ex. Sign

Ex. Tree

Ex. Shrub

Ex. Fence

Ex. Hedge

Ex. Bush

Ex. Flower Bed

Ex. Rock Garden

Ex. Pool

Ex. Pergola

Ex. Arbor

Ex. Trellis

Ex. Bench

Ex. Statue

Ex. Fountain

Ex. Pond

Ex. Stream

Ex. Bridge

Ex. Culvert

Ex. Retaining Wall

Ex. Steps

Ex. Ramp

Ex. Curb

Ex. Gutter

Ex. Sidewalk

Ex. Driveway

Ex. Parking Lot

Ex. Building

Ex. Garage

Ex. Shed

Ex. Greenhouse

Ex. Barn

Ex. Silo

Ex. Windmill

Ex. Water Tower

Ex. Chimney

Ex. Flagpole

Ex. Mailbox

Ex. Newspaper Box

Ex. Bench

Ex. Trash Can

Ex. Bicycle Rack

Ex. Parking Meter

Ex. Bus Stop

Ex. Taxi Stand

Ex. Fire Alarm Box

Ex. Police Call Box

Ex. Public Telephone

Ex. Post Office Box

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	40	

P. R. A. DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATION	BY	DATE
PRELIMINARY R.O.W. CHECKED	W.B. Reinicke	6-57
FINAL DESIGN CHECKED		
PLOTTED	S.B. Foster	6-1-57
FINAL R.O.W. CHECK		
QUANTITIES CHECKED		
SQUAD	Marek & Donelson	31 & 32

Remove Asphalt Surface on Kirby shown Cross-hatched and replace with Bit. Concrete Wearing Course to adjust crown. For quantities, see notes below

452 | 453 | 454 | 455 | 456 | 457 | 458 | N. 67° 29' 15" E. | 459 | E.F.E. Constr. ℄ | 460 | 461 | 462 | 463 | 464

Prop. B. 44 of 82-22-10 (By others)

See Sht. No. 15

Leave Sewer

Prop. C.B.'s and 12" Sewer (by others)

44 Lin. ft Conc. Curb Det. 2A (6" Curb Face)

Reconstructing M.H. (by Owner)

Prop. Sidewalk (by others)

Det. Edison

Plug

Slope Stake Line

~~Omitted~~ Auth. AB-10/5 ~~30 Lin. ft. Conc. Curb Det. 2A (6" Curb Face)~~

~~Omitted~~ Auth. AB-10/5 ~~46 Lin. ft. Conc. Curb Det. 2A (6" Curb Face)~~

Reconstructing M.H. (by Owner)

Ex. Top of Slope

~~Omitted~~ Auth. AB-10/5 ~~30 Lin. ft. Conc. Curb Det. 2A (6" Curb Face)~~

~~Reconstructing Kirby~~ McKinley & Mayburg Grand R. 2009 ~~30 Lin. ft. Conc. Curb Det. 2A (6" Curb Face)~~

Omitted Auth. AB-10/5 46 Lin. ft. Conc. Curb Det. 2A (6" Curb Face)

Reconstructing M.H.'s (By Owner)

~~Cut curb for drive opening 22 Lin. ft. of Cutting Curb~~

Omitted Auth. AB-10/5 Gas Main (Deed)

Adjusting Gas Stop (By Owner)

Omitted Auth. AB-10/5 ~~30 Lin. ft. Conc. Curb Det. 2A (6" Curb Face)~~

Slope Stake Line

Ex. 4" Gas Main (Deed)

Det. Edison

K I R B Y (26' Wide) 5" Asphalt on 8" Conc. Base

Ex. 8" Water Main

Adjusting M.H. Cover (by Owner)

Ex. 8" Water Main

Ex. 12" Gas Main

TWENTY-FOURTH

N. 24° 51' 00" W.

TWENTY-FIFTH (26' Wide)

ROOSEVELT

1 St. Fr. Church Bldg. #5320

1 St. Fr. Bldg. #5327

2 St. Fr. Apt. 5328 & 5326

1 St. Fr. Ho. #5329

2 St. Br. Ho. #5324

2 St. Br. Apt. #3421

2 St. Br. Apt. #5329 & 5325

Parking Lot

Vacated Alley

Cinder Parking Lot

Fire and Police

Gas Main Service has been cut.

51 Sq yds Removing Asphalt Surface 5.6 Tons Bit. Concrete Wearing Course

Existing Kirby

OPERATION	BY	DATE
SURVEYED	E. Pulver	1950
PLAN PLOTTED	S.B. Foster	1957
PLAN CHECKED	S.B. Foster	1957
PROFILE PLOTTED	S.B. Foster	1957
PROFILE CHECKED	W.B. Reinicke	1957
PRELIMINARY GRADE		
GRADE INSPECTION		
FEDERAL INSPECTION		

Existing Centerline Profile

135 | 130 | 125

Kirby ℄ Profile

131.76 | 132.02 | 132.58 | 132.74 | 132.81 | 132.54 | 132.85 | 131.90 | 131.21 | 130.77 | 131.05 | 131.72 | 132.20

452 | 453 | 454 | 455 | 456 | 457 | 458 | 459 | 460 | 461 | 462 | 463 | 464

S. SERVICE ROAD ITEMS Sta. 452 to 464

FILE NO. USE NO-PRO STENCIL: N-17-C-1

STATE PROJECT 82-65 | FEDERAL PROJECT BUI 391(52)

Remove asphalt surface on Kirby shown cross-hatched and replace with Bit. Concrete Wearing Course to adjust crown.
For quantities, see notes below.

Sta. 467+24 to 470+06 Rt.
236 sq. yds. 4" Conc. Sidewalk

Curve Data for Eastbound off Ramp
Δ = 05°38'20" Lt.
D = 02°00'00"
R = 2864.98'
T = 141.10'
L = 281.94'
E = 3.47'
P.C. = 467+76.64
P.I. = 469+17.74
P.T. = 470+58.58

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	41	
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

OPERATIONS	BY	DATE
SURVEYED	F.P.Lynar	1960
PLANS PREPARED	E.E.Sabo	1961
PLAN CHECKED	E.Palmer	1961
PROFILE PLOTTED	E.Palmer	1961
PRELIM. QUANTITIES	G.B.Pettit	1961
PRELIMINARY GRADE	W.S.Metcalfe	1961
GRADE INSPECTION		
FEDERAL INSPECTION		

OPERATIONS	BY	DATE
PRELIMINARY PLANS	Manes & Danielson	3-1-62
FINAL DESIGN CHECKED		
TRACED		
QUANTITIES	C.B.Pettit	6-5-62
QUANTITIES CHECKED		
BOARD		

E.F.E. Constr. ℄ — N. 67°29'15" E. — P.T. 133.80' — P.C. 467+76.64 — 56.53' — 131.30' — 131.37' — 133.80' — 30° — 90° — +19.16 — +17.49 — +42.68 — +14.75 — +51.53 — 470+58.59 — 4.5' R. — 2' — 40' Est.

464 465 466 467 468 469 470 471 472 473 474 475 476

Adjusting M.H. Cover (by owner)
for Details See Sheet No. 31
Omitted Auth. AB-10/5 ~~38 Lin. ft. of Conc. Curb Det. 2-A (6" Curb Face)~~
Omitted Auth. AB-10/5 ~~46 Lin. ft. Conc. Curb Det. 2-A (6" Curb Face)~~
Adjusting M.H. Cover (By Owner)
Slope Stake Line
"Off" Ramp
Transition Curb & Gutter Det. B around Radius
Gas Main Service has been cut.
C.B. 3 B.T. and 14' of 12" Sewer
Ex. 36" Sewer and M.H.
Ex. Pumphouse
Reconstruct M.H. Auth. AB-10/6
22 Lin. ft. of Driveway opening Det. 19
Ex. Top of slope
Ex. B. 33 of 82-22-10
Top of Slope
Retaining Wall by others
Slope Stake Line
Ex. 4" Gas (Lead)
Ex. D.E. Underground
Ex. 4" Gas (Dead)
KIRBY (26' Sht. Asphalt)
Ex. 8" Water Main
Prop. 12" C.I. Water Main
Adjusting M.H. Cover (1) each
Ex. 30" Sewer
Prop. 12" C.I. Water
Ex. Mich. Bell Tele.
GRAND RIVER AVE. N. 22°30'00" W.
Ex. 12" C.I. Water Main
KIRBY (26' Sheet Asphalt and 2' widening each side Left with Conc. Base and B.A. Concrete)
Ex. D.E. Underground
Ex. 12" Gas Main
Ex. 4" Gas
Ex. 6" Water Main
Ex. 12" Gas
Ex. 8" Water Main
Ex. 4" Gas
Ex. 12" Gas
Ex. 8" Water Main
Ex. 6" Water Main
Ex. 4" Gas
Ex. 8" Water Main

MASS DIAGRAM

SCALES { HOR. 1" = 500 FT.
VER. 1" = 10,000 CU. YDS.

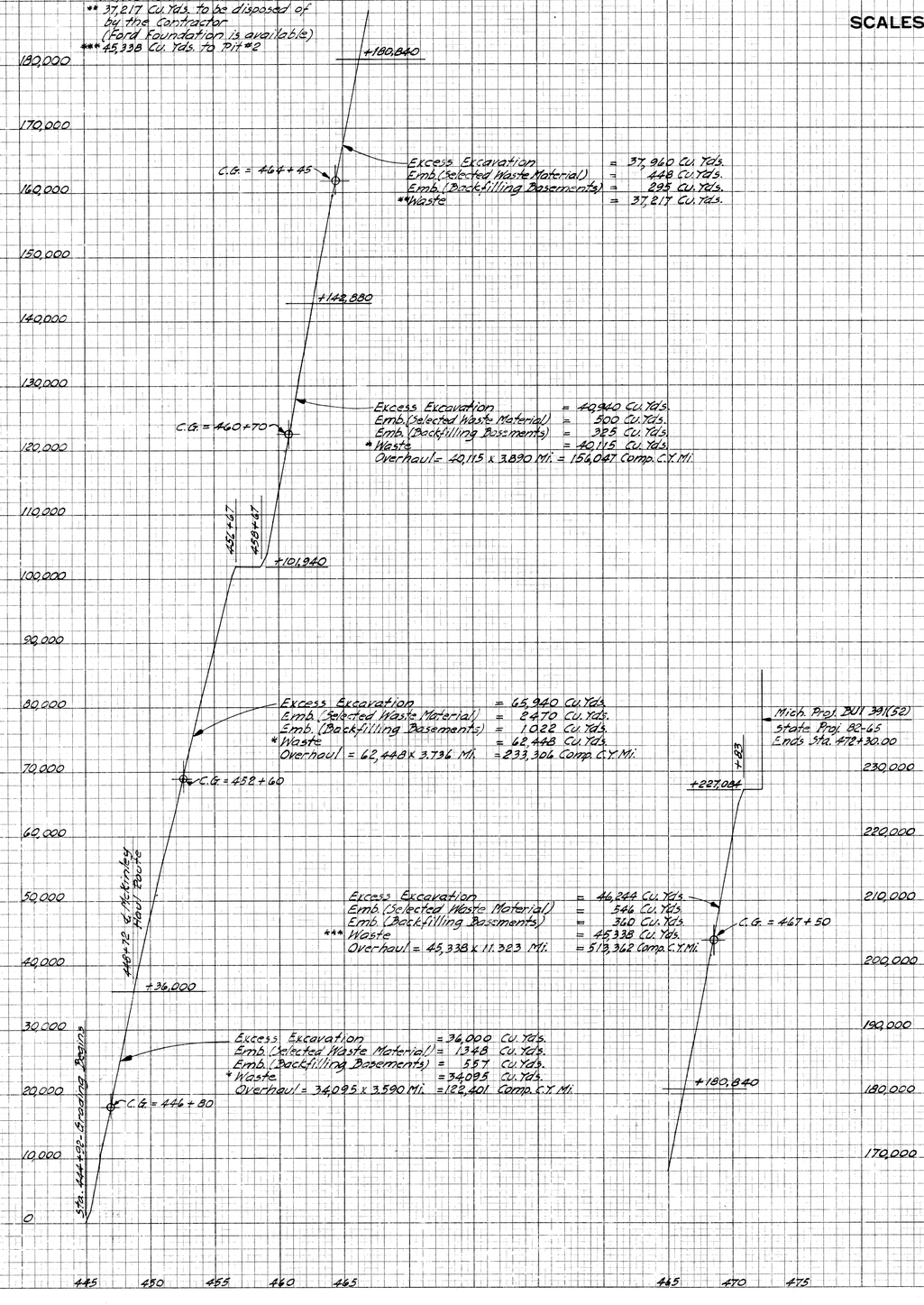
FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit	42	

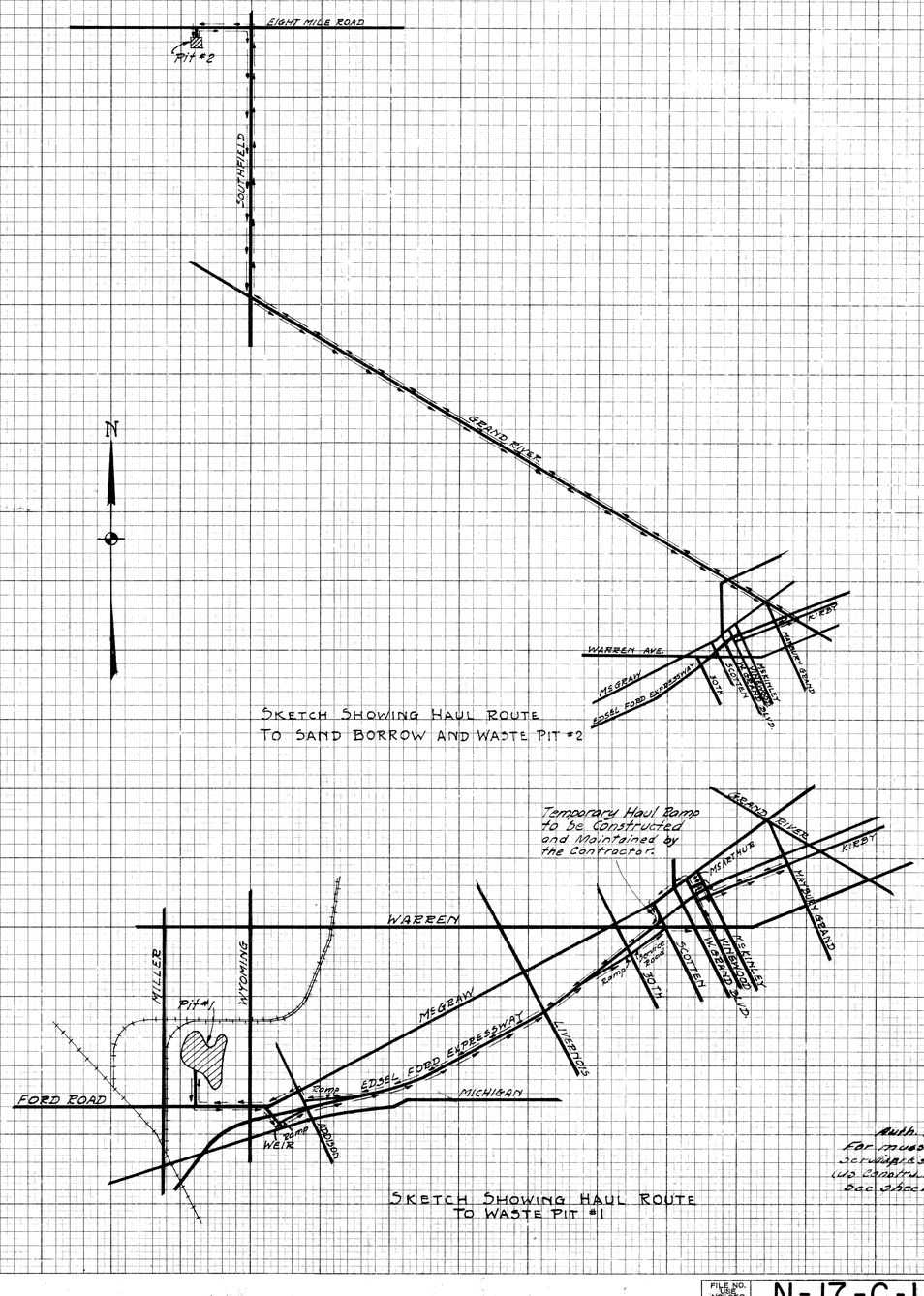
DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

	BY	DATE
PLOTTED	S. B. Slater	10-52
COMPUTED	H. B. Belmore	11-52
CHECKED	A. J. Bourquin	11-52

Squad - Davidson 1952

* 136,658 Cu. Yds. to Pit #1
** 37,217 Cu. Yds. to be disposed of by the Contractor (Ford Foundation is available)
*** 45,338 Cu. Yds. to Pit #2





SKETCH SHOWING HAUL ROUTE TO SAND BORROW AND WASTE PIT #2

SKETCH SHOWING HAUL ROUTE TO WASTE PIT #1

Auth. AR-1018
For mass diagram of Scrudgrass Swamp Slimes (U.S. Construction) See Sheet #37

FILE NO. USE NO. TSO STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-65	BUI 391(52)	42

MASS DIAGRAM

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391 (52)		43	
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	Detroit		

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

	BY	DATE
PLOTTED	S.B. Foster	10-52
COMPUTED	W.A. Reinicke	11-52
CHECKED	A.T. Bourquin	11-52

Squad-Danielson 1952

NORTH SERVICE ROADS

Excess Excavation = 732 Cu. Yds.
*** Emb. = 448 Cu. Yds.
** Waste = 284 Cu. Yds.

**** Material as selected by the Engineer, to be hauled to W. Grand Blvd. inside E.B. "OFF" Ramp. See Sh. No. 26

** Waste to be disposed of by the Contractor (The Ford Foundation is available)

** Waste = 569 Cu. Yds.

** Waste = 507 Cu. Yds.

Excess Excavation = 246 Cu. Yds.
*** Emb. = 151 Cu. Yds.
** Waste = 95 Cu. Yds.

** Waste = 174 Cu. Yds.

Excess Exc. = 112 Cu. Yds.
*** Emb. = 69 Cu. Yds.
** Waste = 43 Cu. Yds.

** Waste = 88 Cu. Yds.

** Waste = 47 Cu. Yds.

SOUTH SERVICE ROADS

** Waste to be disposed of by the Contractor (The Ford Foundation is available)

** Waste = 232 Cu. Yds.

** Waste = 162 Cu. Yds.

** Waste = 269 Cu. Yds.

SERVICE ROAD SCALES
Vert. 1" = 50 Cu. yds.
Horz. 1" = 500 Ft.

*** Waste = 485 Cu. Yds.
Overhaul = 485 x 11.337 = 5498 Comp. C.Y. Mi.

*** 485 Cu. Yds. to Pit #2

** Waste = 5300 Cu. Yds.

** 5300 Cu. Yds. to be disposed of by the Contractor (The Ford Foundation is available)

RAMP SCALES
Vert. 1" = 500 Cu. yds.
Horz. 1" = 500 Ft.

* Waste = 2200 Cu. Yds.
Overhaul = 2200 x 3.914 = 8611 Comp. C.Y. Mi.

* 3342 Cu. Yds. to Pit #1

* Waste = 1142 Cu. Yds.
Overhaul = 1142 x 3.564 = 4070 Comp. C.Y. Mi.

West Grand Blvd. "ON" Ramp

Maybury Grand "OFF" Ramp

Excess Excavation = 15,288 Cu. Yds.
Emb. (Backfilling Basements) = 1,343 Cu. Yds.
*** Waste = 13,945 Cu. Yds.
Overhaul = 13,945 x 11.197 Mi. = 156,142 Comp. C.Y. Mi.

*** 13,945 Cu. Yds. to Pit #2

RAMP SCALE
Vert. 1" = 1000 Cu. yds.
Horz. 1" = 500 Ft.

Auth. AR-1018
For Mass Diagram of Service Roads & Ramps, (as constructed) See Sheet #136.

Lawton Temporary Ramp to W. B. Expressway

FILE NO. URS NO. 350 SIGNOL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-65	BUI 391 (52)	43

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M112	82-64 & 82-63	Wayne	Detroit	44	

Const & Tang N 41° 48' 45" E

State proj. 82-64 | +15 | State proj. 82-65

Mich. proj BUI 391 (52) Continues

E.B. Reference Line

P.R.C. +45.00

+62.91 L. Rdr.

+57.47 L. Rdr.

4.5° 21'

+53.86 Rdr. Bank

+52.09 Rdr. Bank

P.C.C. +76.06

P.T. +53.46

+52.09 6" Ramp

Plan Scale 1" = 20'

Profile Scale
Horz. 1" = 80'
Vert. 1" = 8'

Section Scale
Horz. 1" = 10'
Vert. 1" = 1'

DETAILED GRADES FOR INTERSECTION OF RAMP FROM 30th ST. WITH E.B. EXPRESSWAY

FINAL SURVEY — SURVEYED, PLOTTED, TRACED, NOTE BOOK, NO., AREAS, AREAS CHECKED, BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TRACED, NOTE BOOK, NO., AREAS, AREAS CHECKED, BY, DATE — 3-52 Jack Dick; 3-52 Ken Bumgarner; Ged.; Jones

Speed - Jamieson - 1952

PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E Co. No. 346-3C
"IMPERIAL" TRACING CLOTH

FILE NO. USE NO. 350 STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-64 & 82-63	BUI 391(52)	44

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	DETROIT	45	

Const. ℄ Tang. N 41° 48' 45" E

E.B. Exp. ℄ Tang. N 59° 37' 45" E

N

P.R.C. +45.00

+62.26 Ramp

E.B. Exp. Ref. Line

P.T. +57.54

P.T. +70.00

P.R.C. +75.99

12.5'

+78.46 Ramp

4.5' R.

℄ of Ramp See Sh. No. 26

+80.03

+49.04 Exp.

2° Curve

P.R.C. +31.46

+62.31 Exp.

+57.47 Exp.

+68.03 Ramp

+70.00 P.C.C.

Plan Scale 1" = 20'

Profile Scale
Horz. 1" = 20'
Vert. 1" = 8'

Section Scale
Horz. 1" = 10'
Vert. 1" = 1'

+0.30%

El. 110.32
+58.5

130 V.C.

+3.35%

DETAILED GRADES FOR INTERSECTION OF RAMP TO W. GRAND BLVD. WITH E.B. EXPRESSWAY

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED	W.B. Reinicke	8-52
PLOTTED	A.L. Berglund	2-53
TEMPLATE	A.L. Berglund	2-53
NOTE BOOK	254, 255	
NO.	AREAS CHECKED	

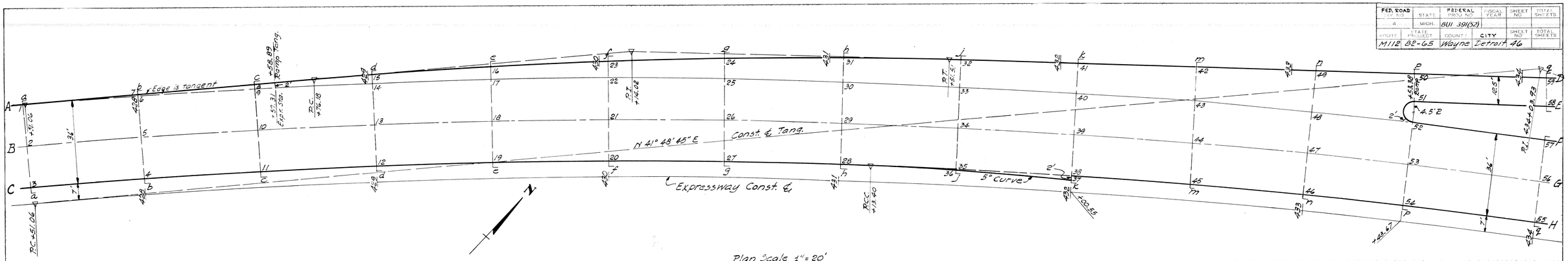
Squad - Danis Son. 1952

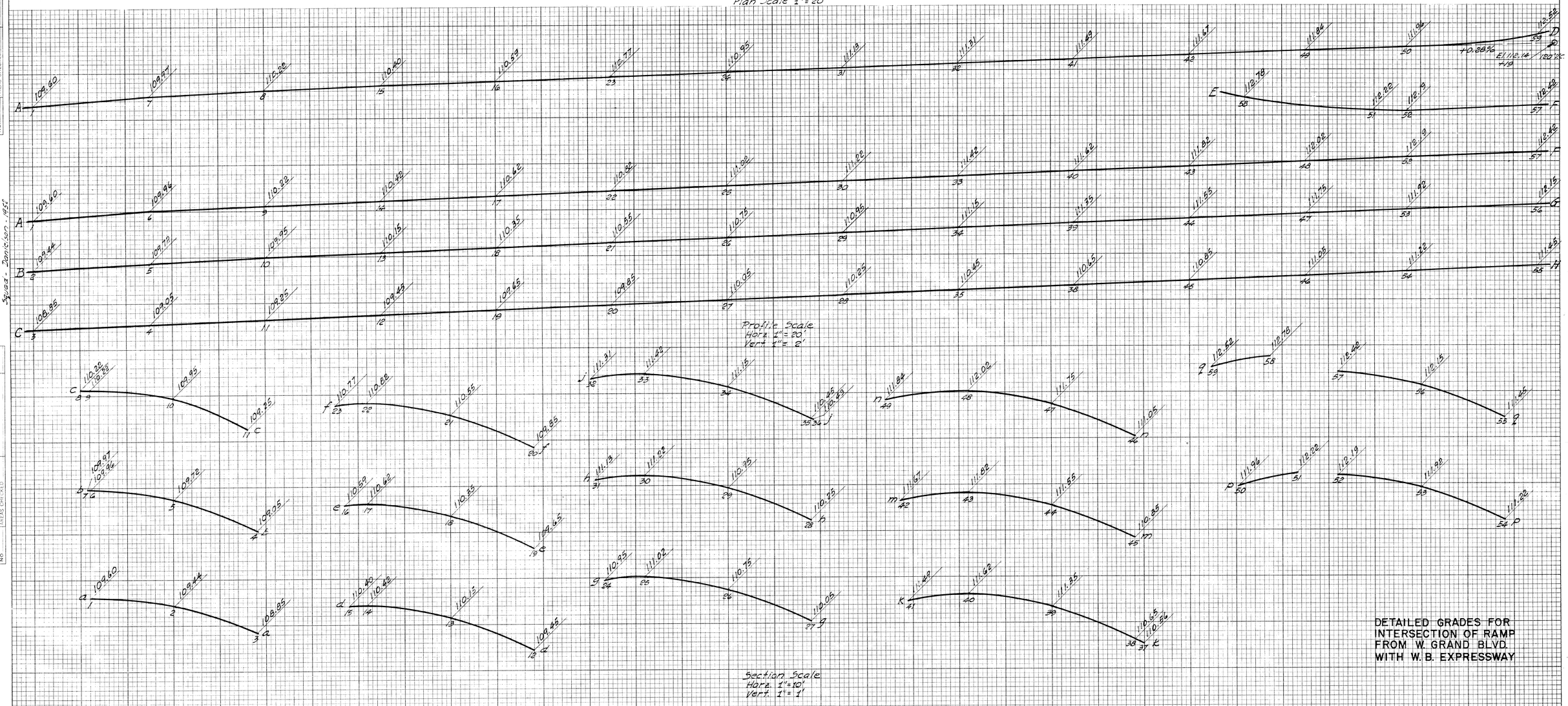
PLATE 3 - CROSS SECTION O, P, R, & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO.: NO. 348-30
IMPERIAL TRACING CLOTH 48195

FILE NO. USE NO. 350 STENCIL	N-17-C-1	STATE PROJECT	FED'L PROJECT	SHEET NO.
		82-65	BUI 391(52)	45

FED. ROAD CLASS	STATE	FEDERAL PROJ. NO.	LOCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M112	82-65	Wayne	Detroit	46	





DETAILED GRADES FOR INTERSECTION OF RAMP FROM W. GRAND BLVD. WITH W.B. EXPRESSWAY

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK — NO. — BY — DATE

ORIGINAL SURVEY — SURVEYED 11-52 Bergeron; PLOTTED Chr. Jacobson; TEMPLATE Traced; AREAS; AREAS CHECKED — NOTE BOOK — NO. — BY — DATE 3-53 3-53 3-53

PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E Co. No. 346-3C

FILE NO. USE NO. 350 STENCIL	N-17-C-1	STATE PROJECT 82-65	FEDERAL PROJECT BUI 391(52)	SHEET NO. 46

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUII 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M112	82-65	Wayne	Detroit	47	

N

Constr. & Tang. N41°48'45"E

P.I. Sta. 432+03.83

Constr. & Tang. N67°39'15"E

45° R

143.67

155.31

Expressway Constr.

6°5° curve

4.5 R.

Ramp P.I. 432+40.78

Ramp P.C. 432+52.16

Ramp P.C. 433+10.34

Ramp P.I. 433+45.69

Ramp P.T. 434+94.06 E.W. Const. ℄

Ramp P.T. 434+23.42

Ramp P.C. 434+20.34

Plan Scale 1" = 20'

Profile Scale
Horz. 1" = 20'
Vert. 1" = 12'

Section Scale
Horz. 1" = 10'
Vert. 1" = 1'

DETAILED GRADES FOR INTERSECTION OF RAMP TO WARREN WITH W. B. EXPRESSWAY

ORIGINAL SURVEY	BY	DATE
SURVEYED	Bowden	2-5-52
PLOTTED	H.J.R.	2-5-52
NOTE BOOK	J.S. Bush	2-5-52
TEMPLATE		
AREAS		
AREAS CHECKED		
NO.		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
TEMPLATE		
AREAS		
AREAS CHECKED		
NO.		

Quad - Dennison - 1950

PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK

K & E Co. No. 346-3C
IMPERIAL TRACING CLOTH

FILE NO. USE STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
NO. 350		82-65	BUII 391(52)	47

FED. ROAD DIV. No.	STATE	FEDERAL PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET No.	TOTAL SHEETS
M112	82-65	WAYNE	DETROIT	48	

FINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO.		

ORIGINAL SURVEY	DATE	BY
SURVEYED	3-51	W.B. Perkins
PLOTTED	4-51	R.W. Hicks
TEMPLATE		Traced
AREAS		
AREAS CHECKED		
NOTE BOOK		
NO.		

Squad Marek - 51
Daniel San - 52

Plan Scale 1"=20'

Profile Scale
Horz. 1"=20'
Vert. 1"= 2'

Section Scale
Horz. 1"= 10'
Vert. 1"= 1'

DETAILED GRADES FOR INTERSECTION OF RAMP TO W. GRAND BLVD. WITH W. B. EXPRESSWAY

PLATE 1 CROSS SECTIONS O.P.R. & R.E. STANDARD
Parsons & Klute Engineers

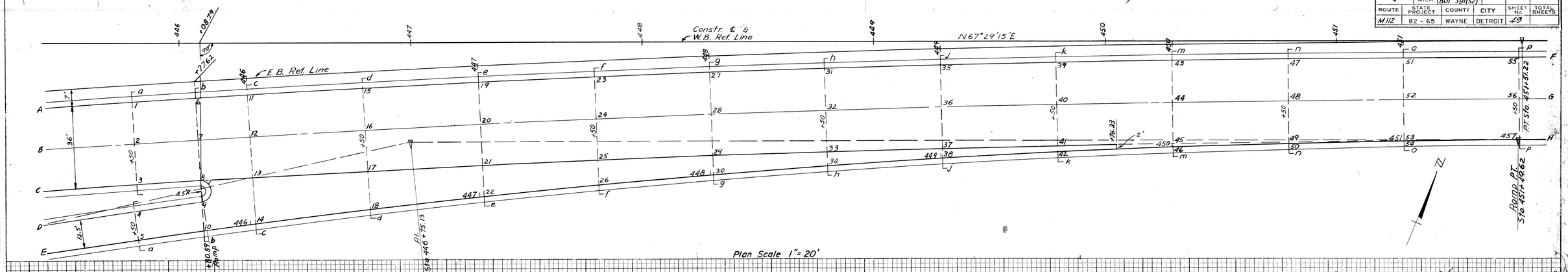
FILE NO. NOT USED ON STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-65	BUI 391(52)	48

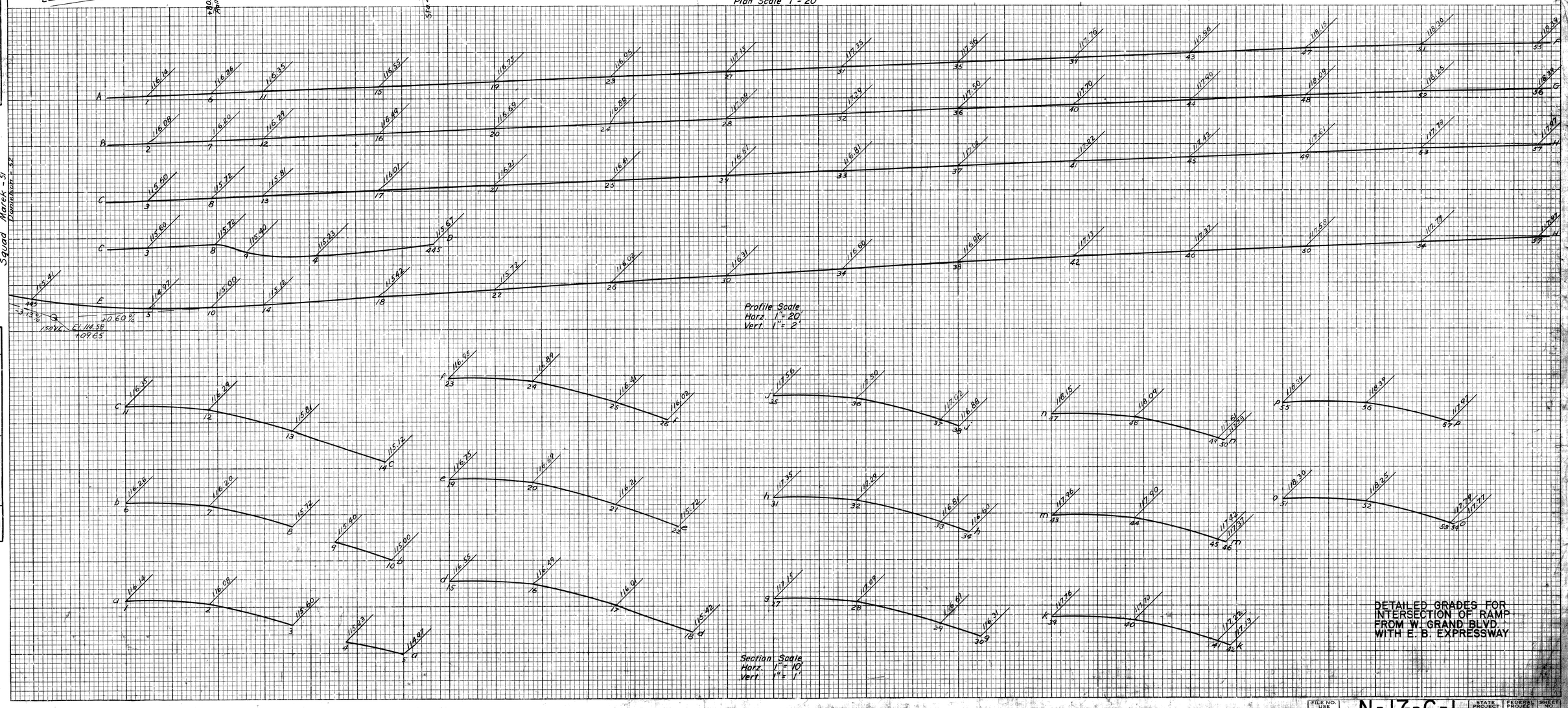
FED. ROAD DIV. No.	STATE	FEDERAL PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET No.	TOTAL SHEETS
M112	82 - 65	WAYNE	DETROIT	29	

ORIGINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED	W.B. Reinicke	3-51
NOTE BOOK	TEMPLATE	R.M. Weeks	3-51
NO.	AREAS	Traced	
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS		
	AREAS CHECKED		

Squad Marek - 51
Danekas - 52





DETAILED GRADES FOR INTERSECTION OF RAMP FROM W. GRAND BLVD. WITH E. B. EXPRESSWAY

FILE NO. USE NO. 350 STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
		82-65	BUI 391(52)	29

PLATE 3 CROSS SECTION—O. P. R. & R. C. STANDARD
Gibson & Kerr, Chicago

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET No.	TOTAL SHEETS
M112	82-65	WAYNE	DETROIT	50	

FINAL SURVEY	SURVEYED	BY
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS	AREAS CHECKED

ORIGINAL SURVEY	SURVEYED	W.B. & R.N.	5-51
	PLOTTED		
NOTE BOOK	TEMPLATE		
NO.	AREAS	Traced R.N. Hazen	5-51
	AREAS CHECKED		

Marek Squad - 1951
Danielson - 1952

Constr. ℄ Expressway

N67°29'15"E

PC 456+39.02

PI 459+70.66

PT 460+81.94

3° Curve
See Sht. No. 31 for details

Plan Scale 1"=20'

Profile Scale
Horz 1"=20'
Vert 1"=2'

Section Scale
Horz 1"=10'
Vert 1"=1'

DETAILED GRADES FOR INTERSECTION OF RAMP TO KIRBY AVENUE WITH E. B. EXPRESSWAY

FILE NO.	STATE PROJECT	FEDERAL PROJECT	SHEET NO.
N-17-C-1	82-65	(BUI 391(52))	50

PLATE 3 CROSS SECTION — U. P. R. & R. E. STANDARD
Gleeson & Kern, Chicago

FED. ROAD DIV. No.	STATE	FEDERAL PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET No.	TOTAL SHEETS
M-112	82-65	Wayne	Detroit	51	

Prop. Maybury Grand "Off" Ramp

+23.38 Rdwy.
+20.11 N. Edge
of Service Road

P.C. +78.64

P.T. +17.74

P.T. +51.53

P.T. +58.58

℄ KIRBY 26' WIDE

N. 67° 29' 15" E.

℄ TILLMAN

℄ of 18' Conc. Alley

℄ WILLIAMS

℄ of 18' Conc. Alley

℄ MAYBURY GRAND

Plan Scale
1" = 20'

Right Edge of Ramp

Left Edge of Ramp

+3.60%

+6.32%

Profile Scale
Horz. 1" = 20'
Vert. 1" = 2'

Note: Existing Pav't. Grade shown thus

Section Scale
Horz. 1" = 10'
Vert. 1" = 1'

DETAILED GRADES FOR INTERSECTION OF MAYBURY GRAND "OFF" RAMP WITH KIRBY

ORIGINAL SURVEY	SURVEYED		BY	DATE
	PLOTTED			
NOTE BOOK	TEMPLATE		W. B. Reinicke	7-57
NO.	AREAS & VOL.	Traced	R. N. Hladke	7-57
	AREAS CHECKED			

FINAL SURVEY	SURVEYED	DATE
	PLOTTED	
NOTE BOOK	TEMPLATE	
NO.	AREAS & VOL.	
	AREAS CHECKED	

Squad - Macek - 51
Danielson - 52

FILE NO. USE NO. 350 STENCIL	N-17-C-1	STATE PROJECT	FEDERAL PROJECT	SHEET
		82-65	BUI 391(52)	51

PLATE 3 CROSS SECTION—U. S. & M. E. STANDARD
Bureau of Surv. Chicago

Point of Ending Mich. Proj. BUI 391(52)
State Project 82-65 Sta 472+30.00

FEDERAL PROJECT NO. | SHEET NO. | TOTAL SHEETS
BUI 391(52)
CITY
STATE PROJECT 82-65 Wayne Detroit 52

For Curve details See Sht. No.

Plan Scale 1"=20'

Constr. E.B. Crossway

N 6°29'15" E

Daniels on Linwood 1952

Profile Scale
Vert 1"=2'
Horiz 1"=20'

Section Scale
Vert 1"=1'
Horiz 1"=10'

DETAILED GRADES FOR INTERSECTION OF BUS RAMP FROM LINWOOD WITH W. B. EXPRESSWAY.

N-17-C

82-65 BUI 391(52) 52

FEDERAL PROJECT NO. | SHEET NO. | TOTAL SHEETS
BUI 391(52)
STATE PROJECT NO. | COUNTY | SHEET NO. | TOTAL SHEETS
M- 82-65 Wayne Detroit 52

Point of Ending Mich. Proj. BUI 391(52)
State Project 82-65 Sta 472+30.00

Pt. 12.99'

For Curve details See Sht. N-9

Constr. & Ex. Roadway

N 67°29'15" E

Plan Scale 1"=20'

Profile Scale
Vert. 1"=2'
Horz. 1"=20'

Section Scale
Vert. 1"=1'
Horz. 1"=10'

DETAILED GRADES FOR INTERSECTION OF BUS RAMP FROM LINWOOD WITH W. B. EXPRESSWAY.

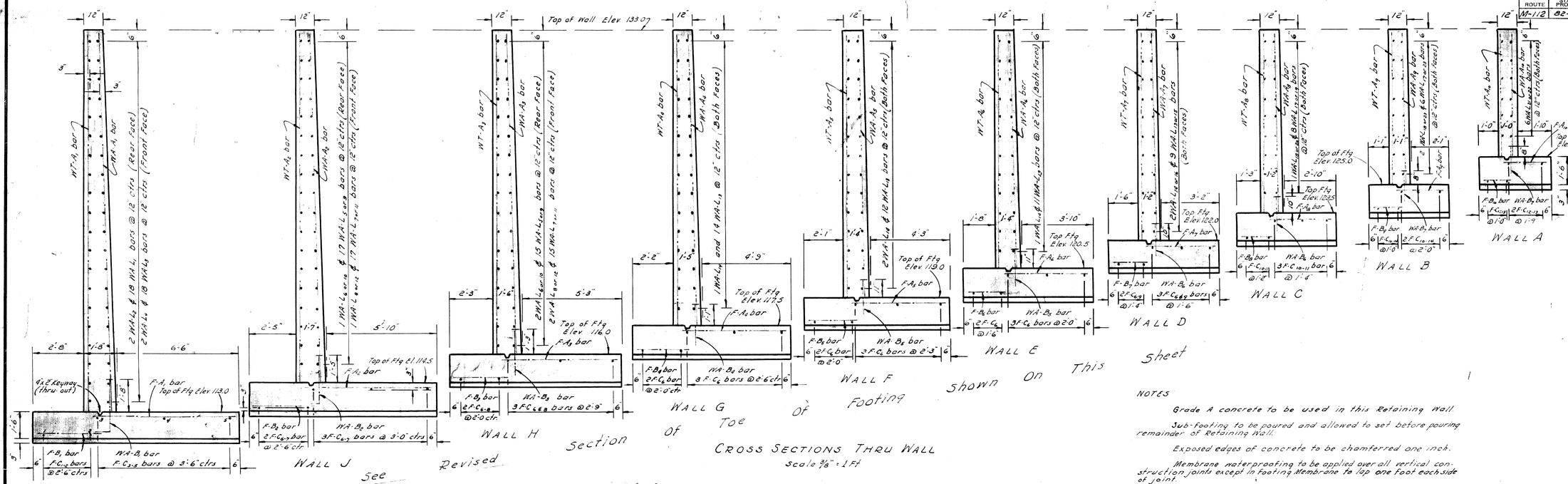
Daniels 1952

Hladky

N-17-C-1

82-65 (Wayne) 52

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391 (52)			
ROUTE	STATE PROJECT	COUNTY	City	SHEET NO.	TOTAL SHEETS
M-12	82065	Wayne	Detroit	53	



CROSS SECTIONS THRU WALL
Scale ⅜" = 1 Ft.

Revised Section of Toe of Footing Shown On This Sheet

Note: See Revised Section of Toe of Footing

NOTES

Grade A concrete to be used in this Retaining Wall.

Sub-footing to be poured and allowed to set before pouring remainder of Retaining Wall.

Exposed edges of concrete to be chamferred one inch.

Membrane waterproofing to be applied over all vertical construction joints except in footing. Membrane to lap one foot each side of joint.

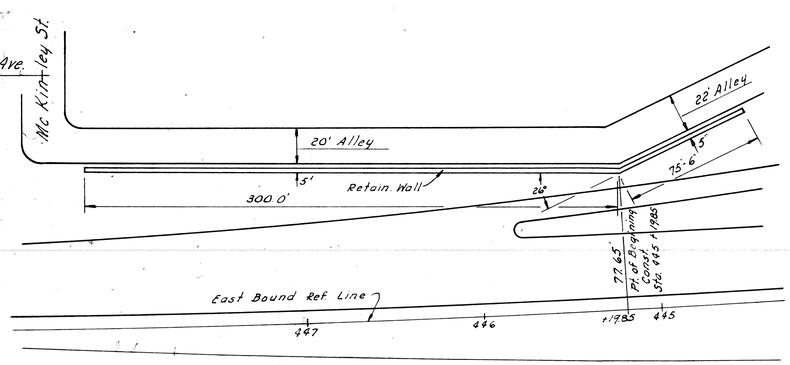
Railing Posts, Flanges and Clips are as shown on Bridge Standard B5

Railing as shown on Bridge Standard R 4

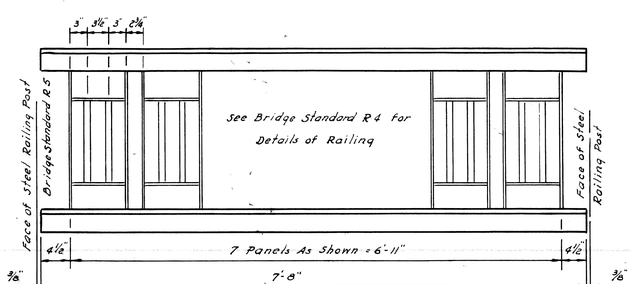
High Bond Steel without hooks to be used in this structure.

The deformation of deformed steel bars for concrete reinforcement shall be according to A.S.T.M. designation A305.

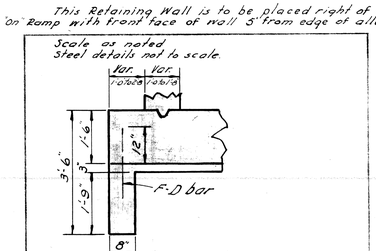
This Retaining Wall is to be placed right of East Bound On Ramp with front face of wall 5' from edge of alley.



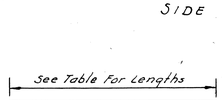
LOCATION SKETCH
Scale 1" = 40'



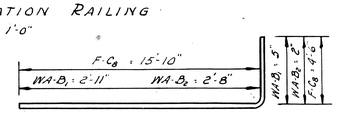
SIDE ELEVATION RAILING
1" = 1'-0"



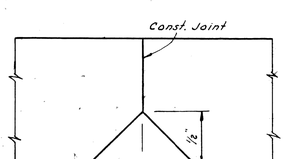
Revised Section of Toe of Footing Showing Drop-Wall
Scale ½" = 1 Ft.



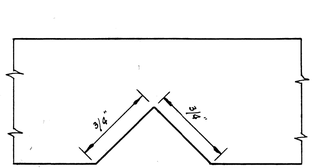
All bars except WA-B1,2 & F-C8



WA-B1,2 and F-C8 Bars

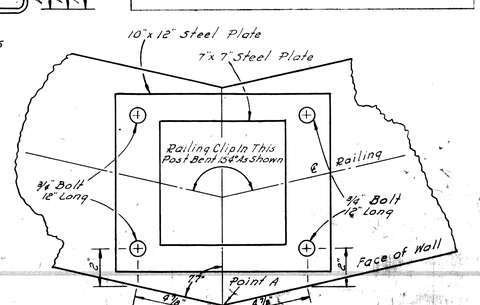


Double ½" Δ Moulding at Const. Jt.



False Const. Jt. - ¾" Moulding

Enlarged Sketch Of Railing Bend
Scale 3" = 1 Ft.



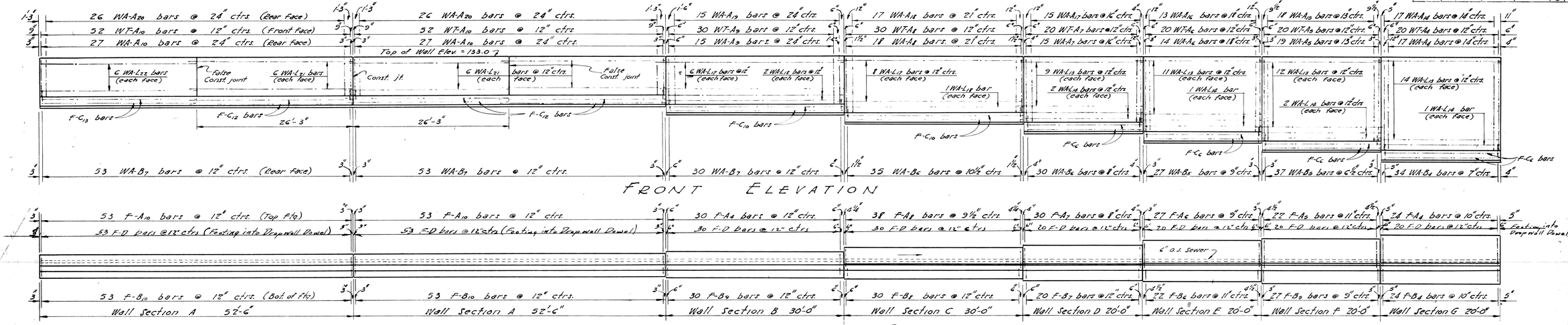
For Further Details See Sheet No. 54

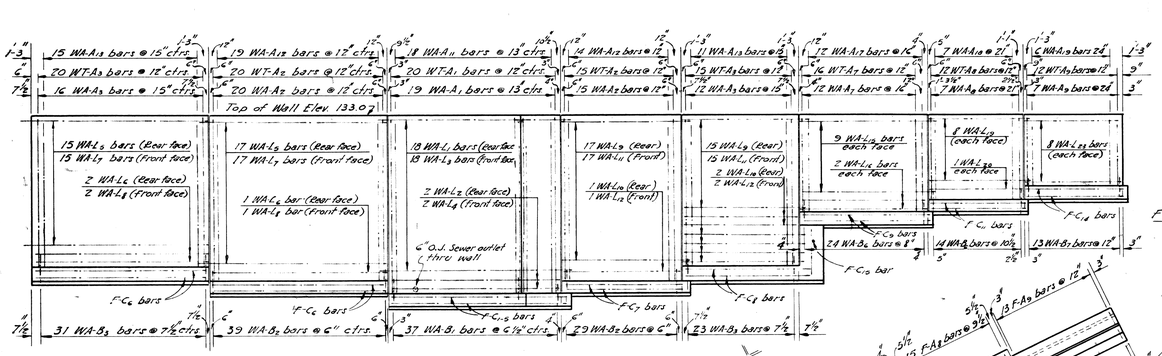
CANTILEVER RETAIN. WALL S. LT. ALLEY
GRAND BLVD & VINEWOOD AREA
Revised by EBA 5-18-53
Drawn by EAU 10-21-52
Checked by T.R.F. 10-22-52
Traced by T.R.F. 10-22-52

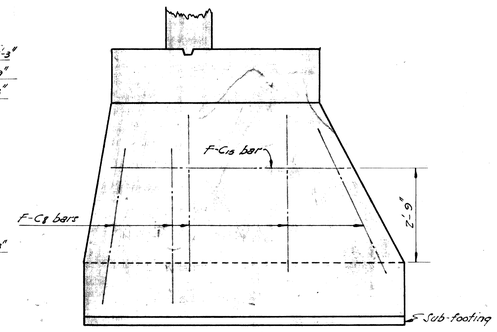
FILE NO. 1-3-53 DESIGN SECTION

N-17-C-4

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391 (52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	Wayne	Detroit	54	







This Retaining Wall is to be placed right of East-Bound On Ramp Point of beginning construction to be 77.65' right of Sta. 445+19.15 on East-Bound reference line.
Face of Retaining Wall is 5' from edge of alley.

Scale 1/8" = 1 Ft. (unless noted)

Bar	Size	Spacing	No	Length	Weight
WA-A1	1⅛" □	13"	19	19'-9"	1615
WA-A2	1" □	12"	35	18'-3"	2172
WA-A3	1" ●	15"	28	16'-9"	1257
WA-A4	⅞" ●	14"	17	15'-3"	530
WA-A5	⅞" ●	13"	19	13'-9"	392
WA-A6	¾" ●	18"	14	12'-3"	258
WA-A7	¾" ●	16"	27	10'-9"	303
WA-A8	¾" ●	21"	25	9'-3"	241
WA-A9	⅝" ●	24"	22	7'-9"	114
WA-A10	⅝" ●	24"	54	6'-3"	225
WA-A11	1⅛" □	13"	18	16'-9"	1297
WA-A12	1" □	12"	33	15'-3"	1730
WA-A13	1" ●	15"	26	14'-1"	978
WA-A14	⅞" ●	14"	17	12'-9"	443
WA-A15	¾" ●	13"	18	11'-6"	311
WA-A16	¾" ●	18"	13	10'-3"	203
WA-A17	¾" ●	16"	27	9'-1"	256
WA-A18	⅝" ●	21"	24	8'-0"	200
WA-A19	⅝" ●	24"	21	6'-8"	94
WA-A20	⅝" ●	24"	52	5'-8"	197
WA-B1	1⅛" □	6½"	37	3'-4"	531
WA-B2	1" □	6"	61	2'-10"	655
WA-B3	1" ●	7½"	54	2'-6"	360
WA-B4	⅞" ●	7"	34	2'-4"	151
WA-B5	¾" ●	C⅝" & 9"	64	1'-10"	176
WA-B6	¾" ●	8" & 10½"	103	1'-8"	179
WA-B7	⅝" ●	12"	149	1'-4"	133
WA-L1	¾" ●		18	22'-2"	416
WA-L2	¾" ●		2	19'-8"	41
WA-L3	⅛" ●		18	22'-0"	265
WA-L4	⅛" ●		2	19'-10"	26
WA-L5	¾" ●		32	21'-3"	709
WA-L6	¾" ●		3	19'-0"	62
WA-L7	⅛" ●		32	21'-1"	451
WA-L8	⅛" ●		3	19'-10"	40
WA-L9	¾" ●		32	16'-3"	542
WA-L10	¾" ●		3	14'-10"	46
WA-L11	⅛" ●		32	16'-1"	344
WA-L12	↓	↓	3	14'-10"	30
WA-L13			92	21'-1"	1296
WA-L14			12	19'-10"	159
WA-L15			18	17'-1"	205
WA-L16			4	15'-10"	42
WA-L17			21	31'-1"	541
WA-L18			6	29'-10"	120
WA-L19			16	13'-1"	140
WA-L20			2	11'-10"	16
WA-L21			36	27'-8"	657
WA-L22			12	26'-1"	209
WA-L23			16	12'-9"	132
WT-A1			20	19'-9"	264
WT-A2	↓	↓	35	18'-3"	427
WT-A3	⅛" ●	12"	35	16'-9"	392

Bar	Size	Spacing	No	Length	Weight
WT-A4	⅝" ●	12"	20	15'-3"	204
WT-A5	↓	↓	20	13'-9"	184
WT-A6			20	12'-3"	164
WT-A7			36	10'-9"	259
WT-A1			42	9'-3"	260
WT-A9			42	7'-9"	217
WT-A10	⅛" ●	12"	104	6'-3"	434
F-A1	1" ●	7	29	7'-6"	331
F-A2	1⅛" ●	6½"	65	6'-8"	186
F-A3	⅞" ●	8"	53	6'-0"	650
F-A4	⅞" ●	10"	24	5'-6"	270
F-A5	¾" ●	11"	22	5'-0"	165
F-A6	¾" ●	9"	27	4'-6"	127
F-A7	½" ●	8"	30	3'-6"	70
F-A8	↓	9½"	38	3'-8"	85
F-A9		12"	30	2'-6"	50
F-A10	½" ●	12"	106	2'-3"	159
F-B1	¾" ●	8½"	30	3'-8"	150
F-B2	¾" ●	8½"	45	3'-0"	203
F-B3	¾" ●	8"	33	2'-6"	138
F-B4	⅝" ●	10"	24	2'-6"	63
F-B5	½" ●	9"	27	2'-6"	45
F-B6	↓	11"	22	2'-0"	29
F-B7		12"	36	2'-0"	48
F-B8		↓	42	1'-8"	47
F-B9			43	1'-6"	43
F-B10		12"	106	1'-6"	106
F-C1		As Shown	1	20'-8"	14
F-C2	½" ●	↓	1	19'-6"	13
F-C3	⅝" ●		1	19'-8"	20
F-C4	⅝" ●		1	17'-9"	19
F-C5	⅝" ●		1	16'-0"	17
F-C6	½" ●		30	19'-8"	394
F-C7	↓		5	18'-8"	49
F-C8			5	20'-8"	68
F-C9			5	15'-8"	52
F-C10			9	29'-8"	178
F-C11			5	11'-8"	39
F-C12			12	27'-8"	219
F-C13			4	26'-1"	70
F-C14			4	18'-7"	33
F-C15	½" ●	As Shown	7	6'-6"	2
F-D	⅝" ●	12"	377	2'-0"	786
Total Weight of Steel				Lbs.	*30220
Grade A Concrete				Cu. Yds.	1487
Walls					1137
Footings					1326
Jogs-Footings					37.86
Total Grade A Concrete					3501
*Sand Gravel Back-fill (Cu. Yds. M.)					765
6" Open Joint Sewer (Lin. Ft.)					396
Bridge Railing with Steel Posts (Lin. Ft.)					374
Overhaul (Sand-Gravel Backfill) Comp. C.Y. Mile					8964

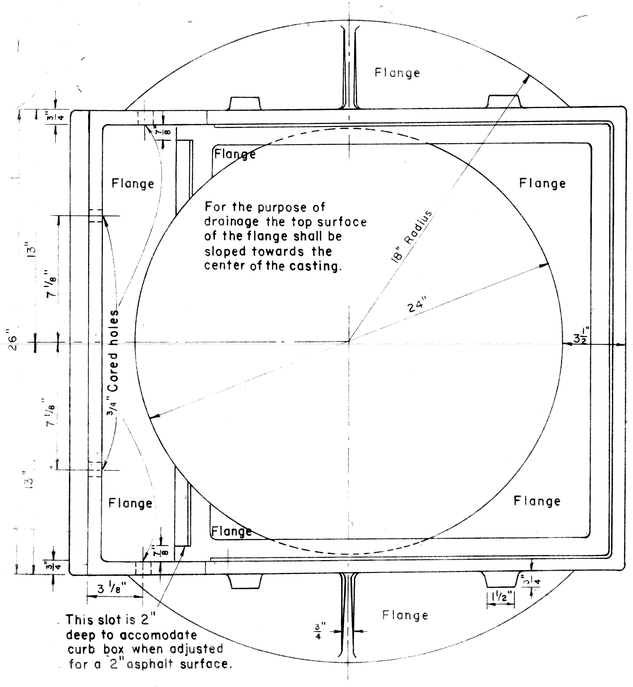
*765 Cu. Yd. from P.I.# 2

For further details see Sheet No. 53

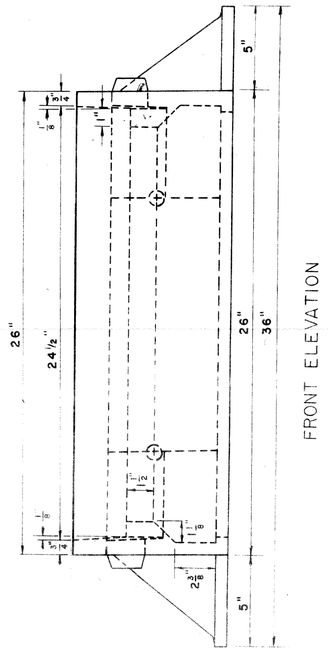
CANTILEVER RET. WALL
5 FT. LEFT OF ALLEY
GRAND BLVD. & VINEWOOD AVE.
Drawn By E.R.G. 11-14-62
Checked By T.R.P. 12-5-62
Traced By M.J.H.

FILE NO. USE NO. 24 STRUCT. N-17-C-1

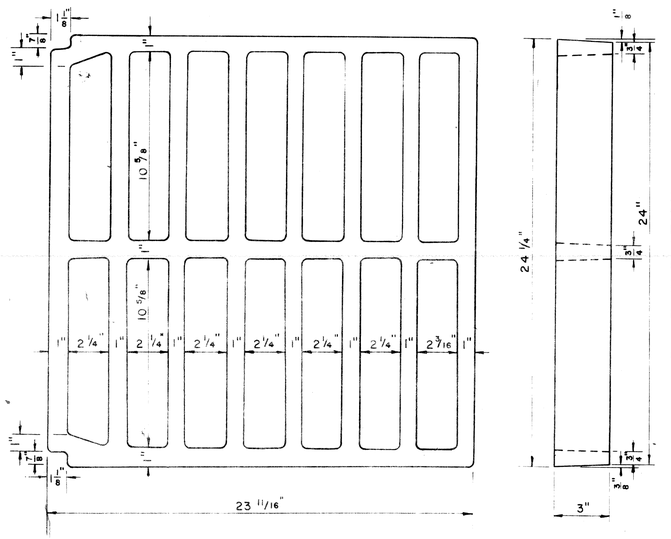
FED. ROAD		FEDERAL PROJ.		YEAR	SHEET NO.	TOTAL SHEETS
		BUI 341 (52)				
		PROJECT		CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64865	WAYNE		Detroit	55	
	STATE	PROJECT		FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	COUNTY				SHEET NO.	TOTAL SHEETS



PLAN VIEW

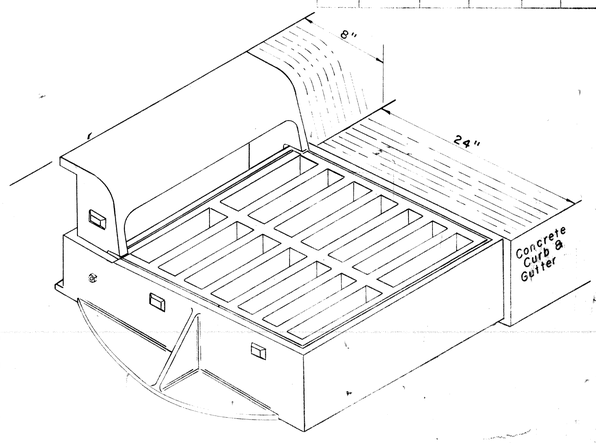


FRONT ELEVATION



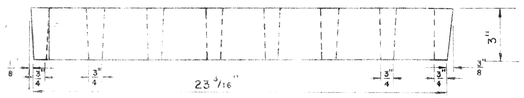
PLAN VIEW

FRONT ELEVATION

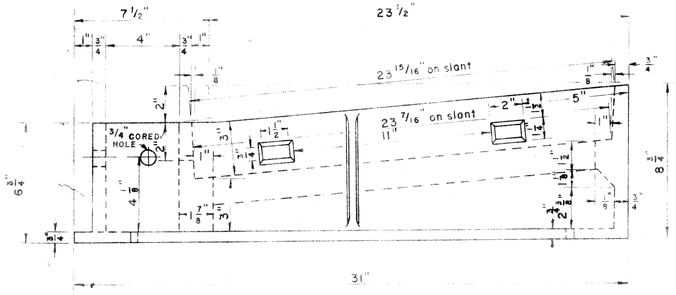


ISOMETRIC VIEW

All corners to have 1/4" radii or 1/4" radius fillets.



SIDE ELEVATION

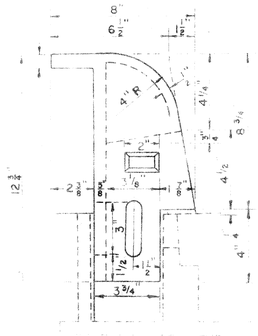


SIDE ELEVATION

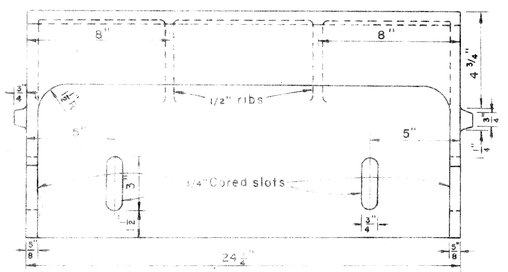
DETAILS OF FRAME

Scale 1/4" =

Bolt curb box firmly to frame at foundry with four 5/8" x 2 1/2" Galvanized Machine bolts with washers on nut ends. (See general note)



SIDE ELEVATION



FRONT ELEVATION

DETAILS OF GRATE

Scale 1/4" = 1'

DETAILS OF CURB BOX

Scale 1/4" = 1'

NOTES:

All materials and workmanship shall be in accordance with the current Michigan State Highway Department Standard Specifications.

The castings shall meet the requirement of the Current Specifications for Gray-iron Castings A.S.T.M. Designation A-48 and shall have a minimum strength as provided for class No. 30 Gray-Iron castings.

All Castings shall be cleaned by sand blastings.

The bearing surfaces between Curb Box and Frame shall be Ground and seated so as to produce an even bearing thru out. The Curb Box shall be firmly bolted in place on the frame before finishing of the Grate Seats is done. Galvanized iron washers and shims shall be placed between frame and ends of Curb Box so as to prevent breaking of Curb Box when these bolts are tightened.

The producing foundry shall deliver the Curb Box and Frame completely assembled to the contractor.

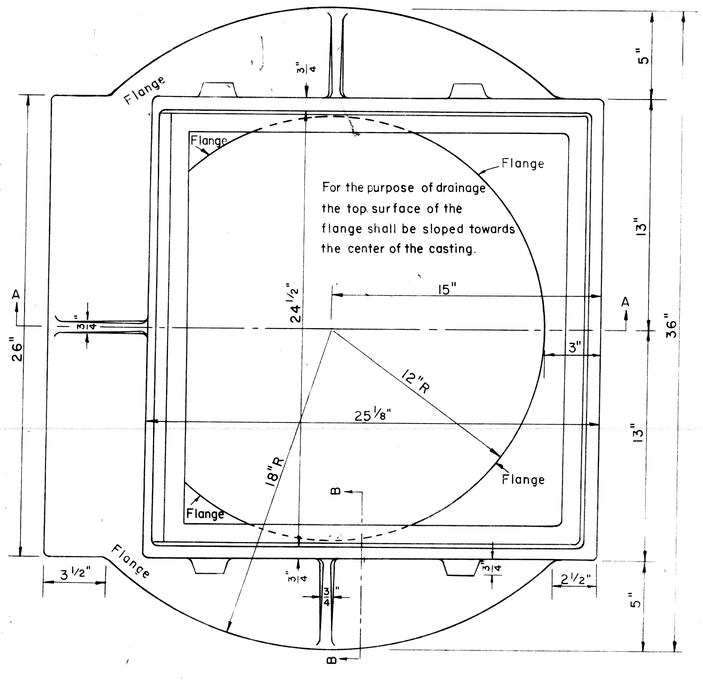
The seating face of the grate and the seat for same on the frame and the curb box shall be ground so that the grate shall have an even bearing on its seat to prevent rocking or tilting.

The castings shall be free of pouring faults, blow holes, cracks and other imperfections. They shall be sound, true to form and thickness, clean, and neatly finished, and shall be coated with coal tar pitch varnish.

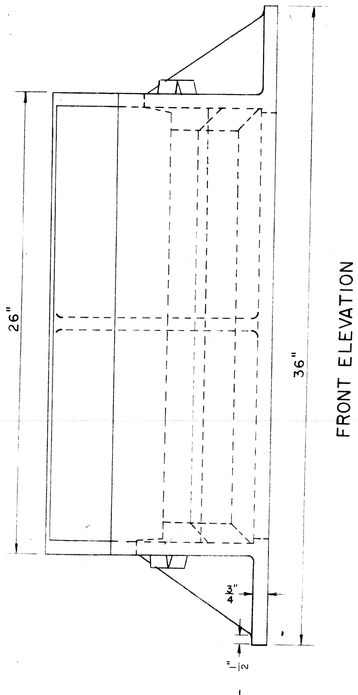
SPECIAL DETAILS FOR COVER H

N-17-C-1

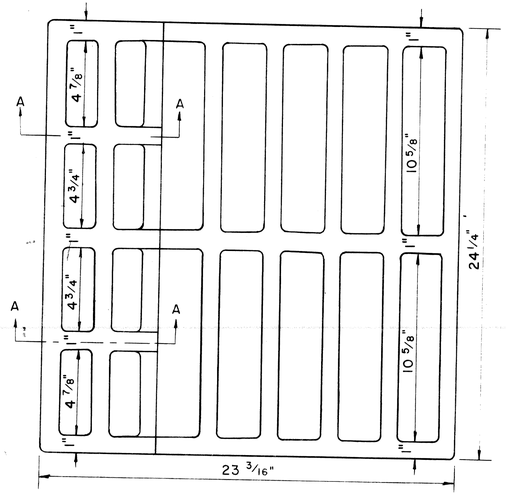
FED. ROAD	FED. ROAD		SHEET NO.	TOTAL SHEETS
	BU 391 (52)			
	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112 82-64 B 65	WAYNE	Detroit	56	
	PROJECT NO.	LOCAL AGENCY	SHEET NO.	TOTAL SHEETS
	CONTRACT		SHEET NO.	TOTAL SHEETS



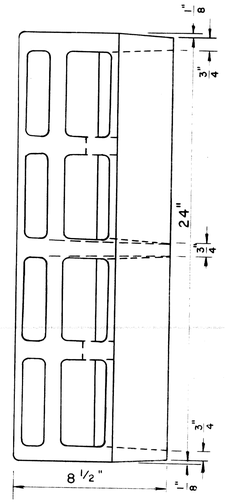
PLAN VIEW



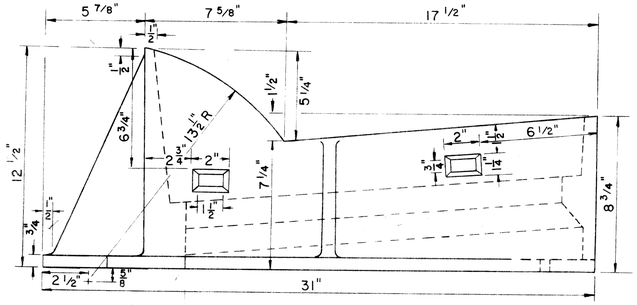
FRONT ELEVATION



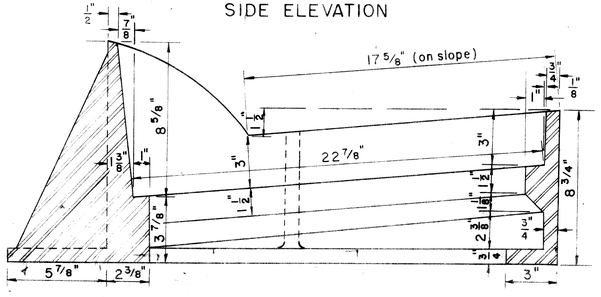
PLAN VIEW



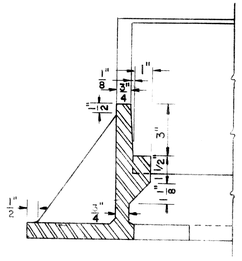
FRONT ELEVATION



SIDE ELEVATION

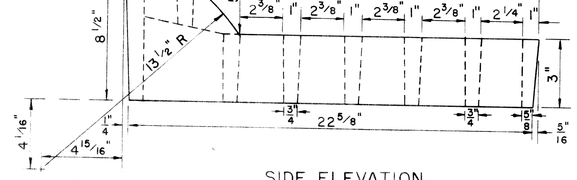


SECTION A-A



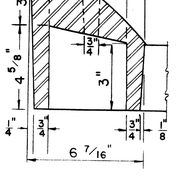
SECTION B-B

DETAILS OF
CATCH BASIN FRAME
Scale 1/4"=1"



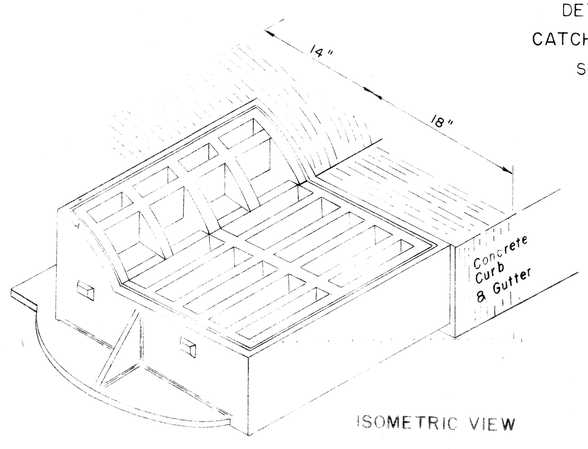
All corners to have 1/4" radii or 1/4" radius fillets.

SIDE ELEVATION



SECTION A-A

DETAILS OF
CATCH BASIN GRATE
Scale 1/4"=1"



ISOMETRIC VIEW

Notes:

All materials and workmanship shall be in accordance with the current Michigan State Highway Department Standard Specifications.

The Castings shall meet the requirements of the current Specifications for Gray Iron Castings, A.S.T.M. Designation A48 and shall have a minimum strength as provided for class No. 30 Gray Iron Castings.

All Castings shall be cleaned by sand blasting.

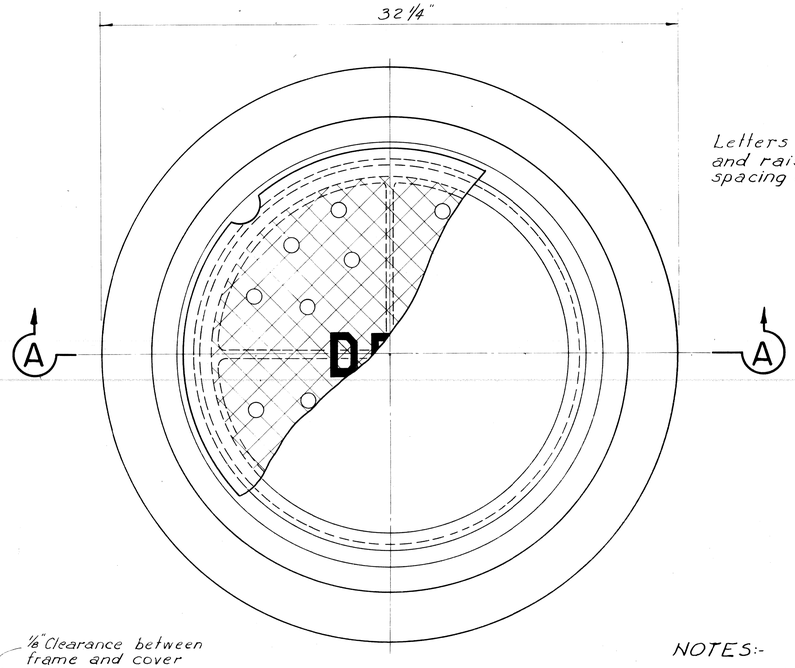
The seating face of the Grate and the seat for same on the Frame shall be ground so that the grate shall have an even bearing on its seat to prevent rocking or tilting.

The castings shall be free of pouring faults, blow holes, cracks, and other imperfections. They shall be sound, true to form and thickness, clean and neatly finished, and shall be coated with coal tar pitch varnish.

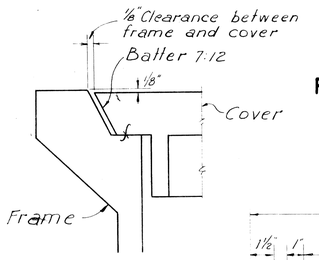
SPECIAL DETAILS FOR COVER J

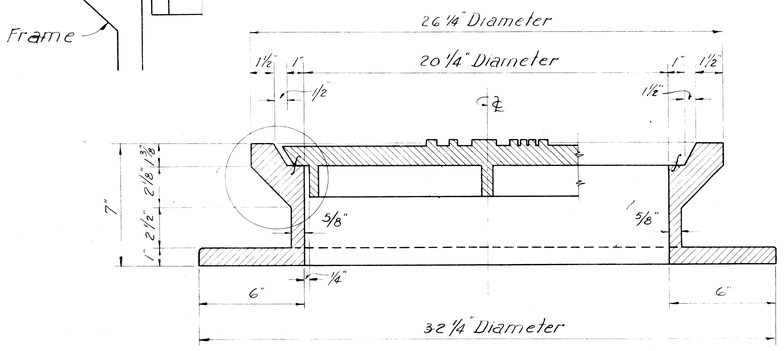
FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 39(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64865	WAYNE	Detroit	57	

DIV. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS



PLAN VIEW OF FRAME





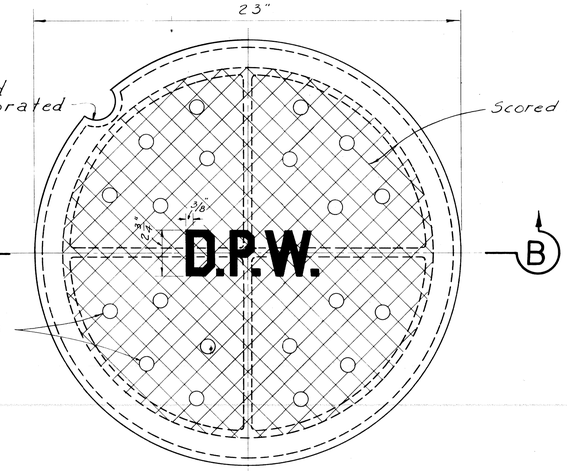
SECTION A-A

NOTES:-

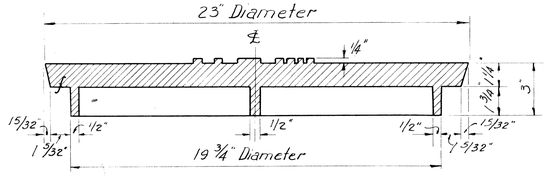
Frame and cover to be gray iron castings
Total weight = 409# (Perf cover)
Manhole frame = 262#
Cover (Perf) = 147#
Cover (Blank) = 157#

The seating face of the cover and the seat for same on the frame shall be machine finished or the equivalent thereof so that the cover shall have an even bearing on its seat at all points without rocking or tilting.

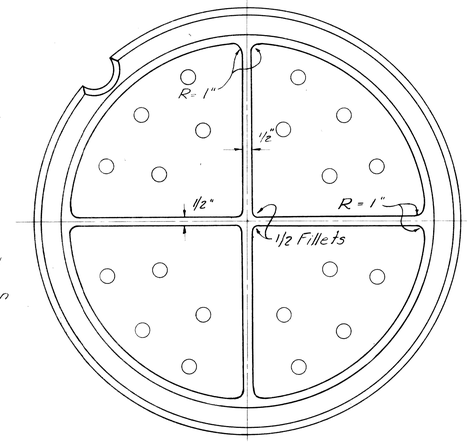
SCALE 3"= 1'



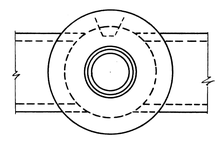
PLAN VIEW OF COVER



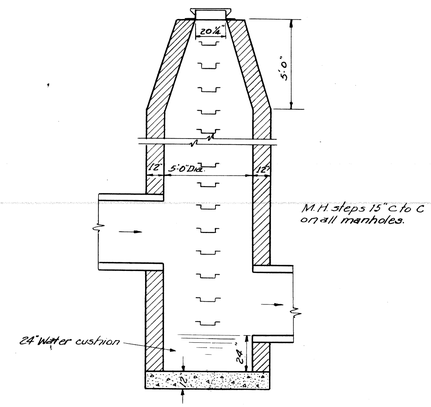
SECTION B-B



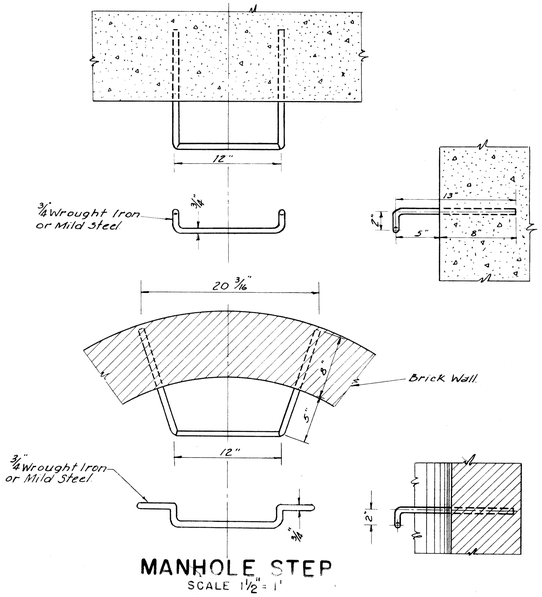
BOTTOM VIEW OF COVER



PLAN



SPECIAL 5' MANHOLE
SCALE 1/4" = 1'



MANHOLE STEP
SCALE 1 1/2" = 1'

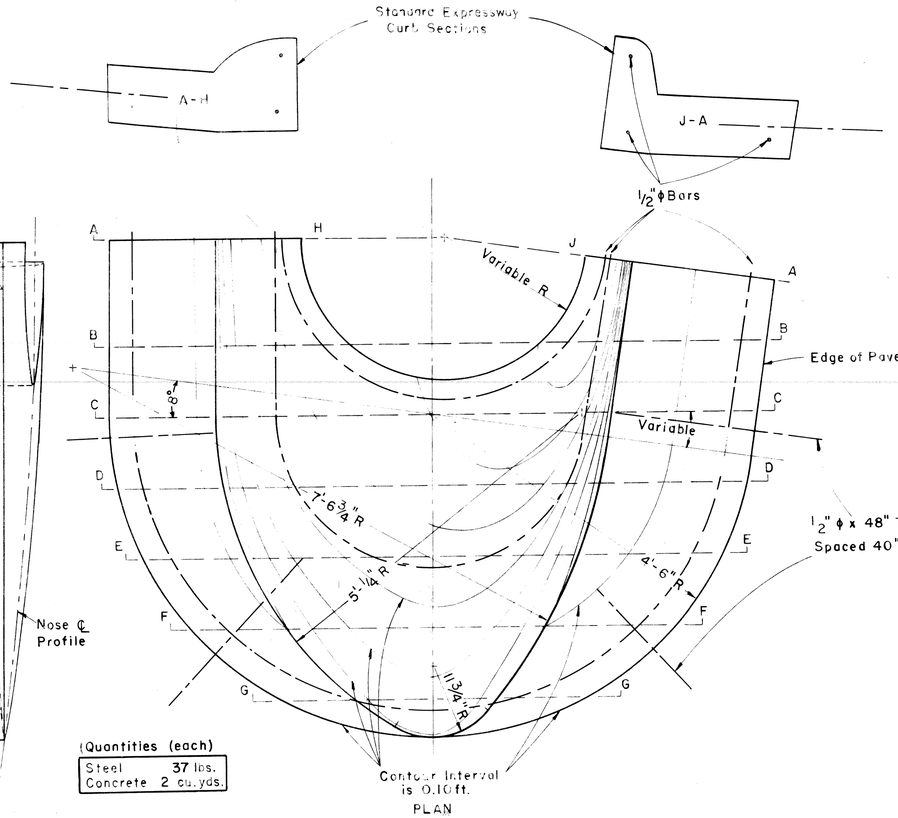
SPECIAL DETAIL OF MANHOLE FRAME AND COVER AD AND SPECIAL 5' MANHOLE

FILE NO. USE No. 310 STENCIL

N-17-C-1

STATE PROJECT 82-64865 SHEET NO. 57

FED. ROAD DIV. NO.	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 & 65	WAYNE	Detroit	58	



(Quantities (each)

Steel	37 lbs.
Concrete	2 cu. yds.

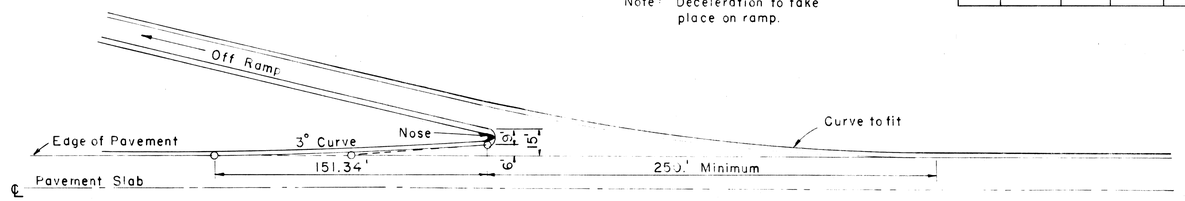
GENERAL DESIGN OF NOSE
TO BE USED ON OFF RAMPS WHERE
CALLED FOR ON PLANS

Scale: 1" = 1'

Notes: Noses will be warped to meet grade requirements as directed by the Engineer.

The general notes on Standard Plan E-4-A-29D shall apply.

Note: Deceleration to take place on ramp.



DETAIL FOR RAMP TAKE-OFF TO BE USED ON
THE EDSEL FORD EXPRESSWAY

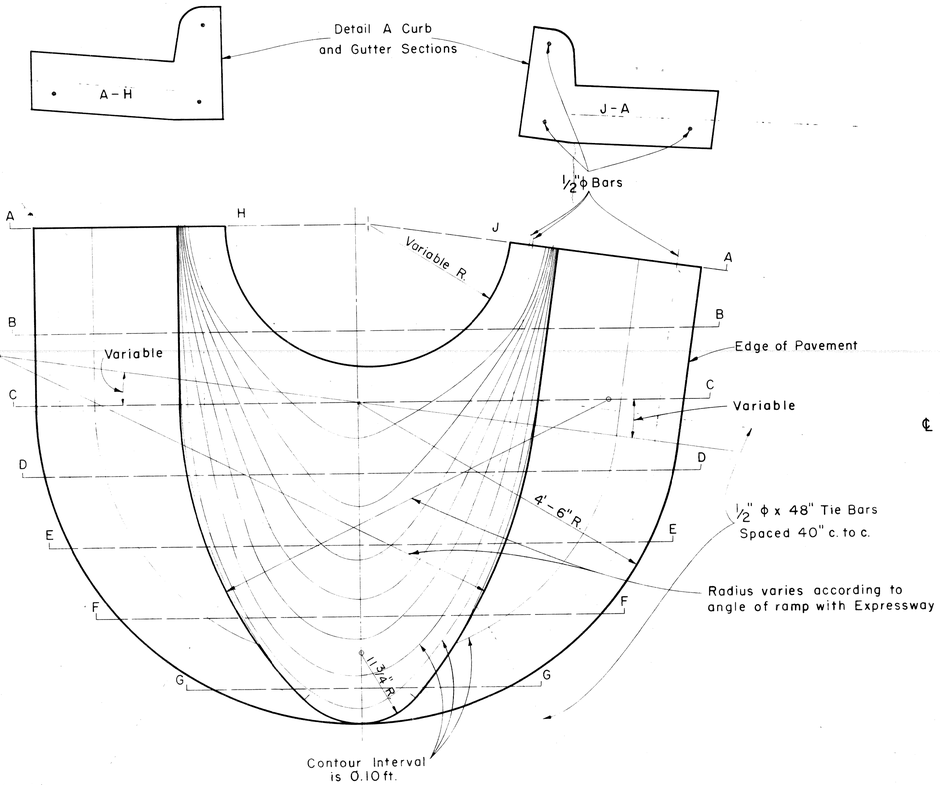
Scale: 1" = 40'

CONCRETE NOSE DETAIL NO. 1

N-17-C-1

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 B65	WAYNE	Detroit	59	

	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	MICH.				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

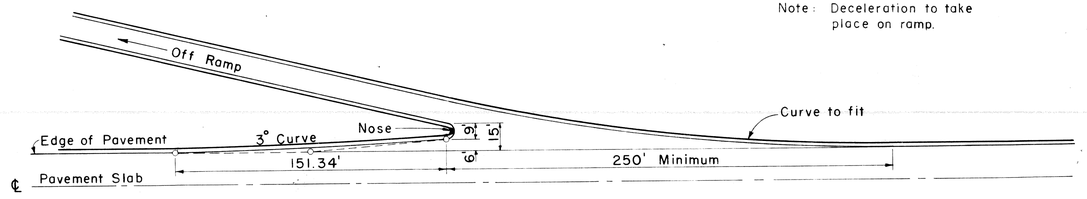


Quantities (each)

Steel	37 lbs.
Concrete	2 cu. yds.

GENERAL DESIGN OF NOSE TO BE USED ON OFF RAMPS WHERE CALLED FOR ON PLANS

Scale 1" = 1'



Note: Deceleration to take place on ramp.

DETAIL FOR RAMP TAKE-OFF TO BE USED ON THE EDSEL FORD EXPRESSWAY

Scale: 1" = 40'

Notes Noses will be warped to meet grade requirements as directed by the Engineer.

The general notes on Standard Plan E-4-A-29D shall apply.

CONCRETE NOSE DETAIL NO. 2

L. Waters & S.B.F.

N-17-C-1

STATE PROJECT	FEDERAL PROJECT	SHEET NO.
82-64 B65	BUI 391(52)	59

PART NO.	LEGEND	
1	6" DETROIT STD. HYDT.	
2	" " " " BONNET	1
3	" " " " STANDPIPE	1
4	" " " " EXTENSION PIECE	1
4A	" " " " " " " GASKET	1
5	" " " " FROST JACKET	1
6	" " " " SHOE	1
6A	" " " " " " GASKET	1
7	" " " " HANGER FOR NOZZLE CAP CHAIN	2
8	" " " " NOZZLE	1
9	" " " " BONNET BOLTS AMER. STD. 1/2" x 3 1/2" SQ HD	2
10	" " " " " " " 1/2 x 3 1/4	4
11	" " " " " " NOZZLE CAP	1
12	" " " " " " " CHAIN	2
13	" " " " " " OPENING STEM	1
14	" " " " EXT. PIECE BOLTS AMER. STD. 1/2" x 1 3/4" SQ HD	8
15	" " " " NON. CORRODING GUN GREASE	**
16	" " " " " " HEAD PLATE	1
16A	" " " " " " " GASKET	1
17	" " " " " " STEM PACKING NUT	1
18	" " " " " " FLAX GRAPHITED 1/2" SQ. BRAIDED	FT.
19	" " " " " " STEM OPENING NUT	1
20	" " " " " " HOLD DOWN NUT	1
21	" " " " " " STEM STOP	1
22	" " " " " " AMER STD. 1/2" HEX NUTS	14
23	" " " " " " VALVE UPPER PLATE	1
24	" " " " " " " " LOWER	1
25	" " " " " " " " DISC	1
26	" " " " " " " " LOCK NUTS (2)	2
27	" " " " " " " " CANDLE WICKING	FT.
28	" " " " " " " VALVE	1
29	" " " " " " KEY	1

GASKET NOT REQUIRED

94°

6D.F.D.

1938

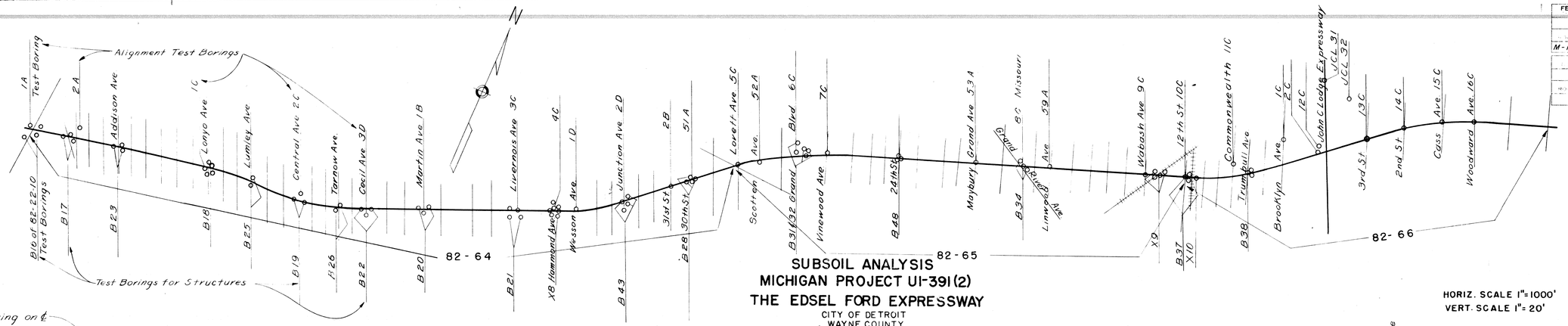
6" DETROIT STANDARD HYDRANT

FED. ROAD DIV. NO.	4	STATE	MICH.	FEDERAL PROJECT NO.		F.A. NO.		SHEET NO.	SHEETS
ROUTE		STATE PROJECT	M-112 (52) 82-64 & 85	COUNTY	WAYNE	CITY	Detroit		
DIV. NO.	4	STATE	MICH.	PROJ. NO.		F.A. NO.		SHEET NO.	SHEETS
ROUTE		STATE PROJECT		COUNTY				SHEET NO.	SHEETS

N-17-0-1

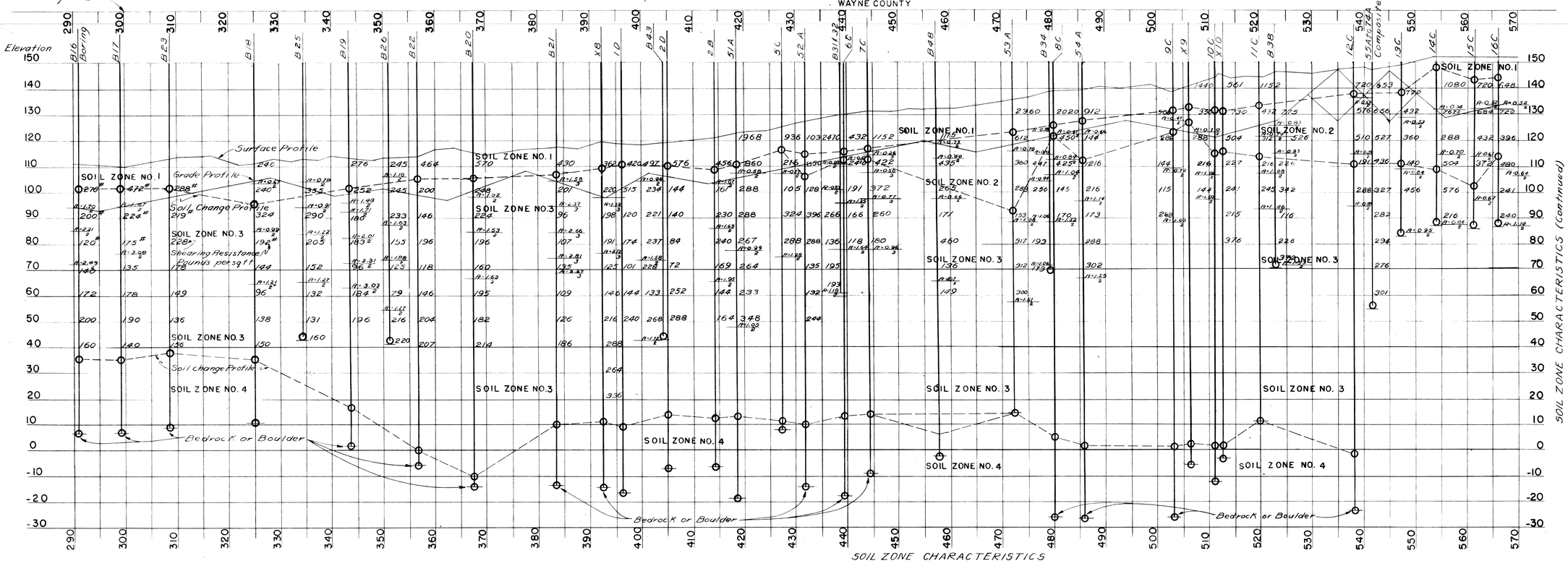
FED. ROAD		FEDERAL PROJ.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH	BUI 391 (52)			
STATE PROJECT	COUNTY	CITY		SHEET NO.	TOTAL SHEETS
M-112 82-64 B65	WAYNE	Detroit		61	

F.A. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH				
NO. 23	STATE PROJ.	COUNTY		SHEET NO.	TOTAL SHEETS



SUBSOIL ANALYSIS
MICHIGAN PROJECT UI-391(2)
THE EDSEL FORD EXPRESSWAY
CITY OF DETROIT
WAYNE COUNTY

HORIZ. SCALE 1"=1000'
VERT. SCALE 1"=20'



Test Boring Conventions

- Soil Profile as Developed from Test Borings
- Bottom of Boring
- Bedrock or Boulder
- Overload Ratio 1 on 2 or 1 on 3 Backslope

Shearing resistance shown in small figures are single or composite as indicated by the number of borings at a given location. They are in pounds per square foot at ten foot vertical intervals and at Stations shown.

Soil Zone No. 1 is a belt of surface soil averaging ten feet in thickness, extending from Wyoming to Woodward Avenue. From Wyoming to Addison Avenue, the soil is soft, plastic, silty yellow clay with an average shearing resistance of 340 lbs. per sq ft. From Addison to Linwood Avenues the soil in this belt becomes a mixture of yellow and blue clay with a shearing resistance rising from a minimum of 240 lbs. per sq ft to a maximum of 2360 lbs. per sq ft. The silt content increases sharply and to this is added sand and gravel. The consistancy runs the gamut from soft, plastic, firm, stiff to hard. From Linwood to Woodward Avenue, the soil alternates in masses of yellow and blue clay. The silt, sand and gravel content falls off noticeably and consequently the shearing resistance ranges from a low of 350 lbs. per sq. ft. to a high of 1440.

Soil Zone No. 2 begins at Lovett Avenue and extends to Woodward. It consists entirely of blue clay ranging in consistancy from firm to stiff. There are traces of gravel. Its shearing resistances range from a low of 144 lbs. per sq ft. to a high of 1080 lbs. per sq ft.

Soil Zone No. 3 begins at Wyoming and extends to Woodward and underlies Zones Nos. 1 and 2. It consists entirely of blue clay ranging in consistancy from plastic to soft. The plastic forms a shallow layer in contact with the soils of Zones No. 1 and 2. Soft blue clay, containing traces of gravel occupies the remainder of the Zone. The shearing resistances range from a low of 72 lbs. per sq ft. to a high of 576 lbs. per sq ft.

Soil Zone No. 4 is found directly over bedrock wherever test borings have been extended that low. It varies in thickness from 0 ft. to 30 ft. It is a hard blue clay containing much sand and gravel

SUBSOIL ANALYSIS

FILE NO USE NO. 350 STENCIL	N-17-C-1	STATE PROJECT No.	FED. PROJECT No.	SHEET NO.
		82-64	BUI	61
		82-65	391(2)	

FED. RD. DIV. NO.	STATE	FEDERAL PROJ. NO.			
4	MICH.	BUI 391 (52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-64 & 65	WAYNE	Detroit	62	

Gas Main Service has been cut as indicated on the plans. Mains between cuts are abandoned.

Gas Main Service has been cut

Gas Main Service has been cut

Gas Main Service has been cut

Gas Main Service has been cut

Gas Main Service has been cut

Gas Main service has been cut

Gas Main service has been cut

24,000 Volt Coble (Temporary during const of Warren Bridge)

31st St. 66' 24' Asphalt

EVEREAUX 26' Asphalt 66'

30th St. 66' 26' Asphalt

ALLEY 20' Dirt

ALLEY 18' Dirt

WARREN 76' Asphalt 100'

ALLEY 18' Concrete

ALLEY 20' Concrete

12" SEWER

TUNNEL

SHAFT

PUMPHOUSE

SLOPE STAKE LINE

Reference Line East Bound Lane

N 41° 48' 45" E

N 42° 58' 20" E

N 36° 05' 30" E

N 51° 48' 45" E

N 45° 50' 45" E

N 43° 21' 05" E

N 42° 40' 07" E

N 43° 27' 40" E

N 32° 48' 15" E

N 22° 41' 30" W

W 89° 45' E

Curve Data
East Bound On Ramp
Δ = 07°35'55" Rt
D = 03°04'03"
R = 1868.12
T = 124.06
L = 247.71
E = 4.11
P.C. = 422+28.34
P.I. = 424+52.40
P.T. = 425+76.06

Curve Data
Service Road on Right
Δ = 05°29'20" Rt
D = 01°30'00"
R = 3819.83
T = 183.11
L = 366.99
E = 4.38
P.C. = 422+67.68
P.I. = 424+50.79
P.T. = 426+33.61

Curve Data
East Bound On Ramp
Δ = 09°02'40" Rt
D = 01°31'22"
R = 3762.72'
T = 297.60'
L = 593.94
E = 11.75
P.C. = 424+76.06
P.I. = 427+73.66
P.T. = 430+70.00

LEGEND

UTILITY	UNDERGROUND EXISTING	UNDERGROUND DELETE OR ABANDONED	UNDERGROUND NEW WORK BY OTHERS	UNDERGROUND NEW WORK BY RD CONT	OVERHEAD
DETROIT EDISON CO	E	E	E	E	E
PUBLIC LIGHTING COMM	L	L	L	L	L
MICHIGAN BELL TEL CO	T	T	T	T	T
DETROIT WATER DEPT	W	W	W	W	
MICH CONSOLIDATED GAS CO	G	G	G	G	
CITY OF DETROIT SEWERS	S	S	S	S	
DETROIT POLICE DEPT	P	P	P	P	P
DETROIT FIRE DEPT	F	F	F	F	F

CB TYP. INLET ● MH
POLE ○ LIGHT POST
WATERGATE WELL ⊖ VALVE
WATER HYDRANT
POLICE OR FIRE ALARM BOX
P.I.C. HANDHOLE D

UTILITY SHEETS BY DILLEY 1961 & 1962
SCALED BY HOISK 1952

FED. ROAD PROJ. NO.	STATE	FEDERAL PROJ. NO.	FINAL ENT.	SHEET NO.	TOTAL SHEETS
4	MICH	BUI 391(52)			
ROUTE	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	Wayne	Detroit	69	

FED. ROAD PROJ. NO.	STATE	FEDERAL PROJ. NO.	FINAL ENT.	SHEET NO.	TOTAL SHEETS
4	MICH				
ROUTE	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

Gas Main Service has been cut as indicated on the plans. Mains between cuts are abandoned

East Bound Lane Curve Data
Δ = 13° 27' 00" Rt.
Dc = 1° 00' 00"
R = 5729.65'
L = 1345.00'
T = 676.18'
E = 72.62'
PC. = 420+11.66
PI = 429+26.84
P.C.C. = 438+26.66
Superelevate 0.015'/ft.

On Ramp Curve Data
Δ = 6° 33' 00" Rt.
D = 2° 30'
R = 3292.01'
L = 376.33'
T = 137.84'
E = 4.18'
PC. = 428+76.18
P.T. = 430 +14.02
P.T. = 431 + 51.51

E.B.E. Construction ℄ Curve Data
Δ = 25° 40 30" Rt.
D = 2° 00 00"
R = 2864.93'
L = 1283.73'
T = 652.87'
E = 73.43'
PC. = 427+51.06
P.T. = 433+34.93
PT. = 440+84.81
Superelevate 0.027'/ft.

Curve Data West Bound Off Ramp
Δ = 02° 06' 45" Rt.
D = 00° 45' 00"
R = 7639.49'
T = 140.85'
L = 281.67'
E = 1.30'
PC. = 430 + 10.50
PI = 431 + 51.35
PT. = 432 + 92.16

Curve Data West Bound Off Ramp
Δ = 15° 30' 00" Rt.
D = 02° 55' 59"
R = 1953.49'
T = 271.65'
L = 529.18'
E = 18.80'
PC. = 433 + 10.24
PI = 435 + 81.89
P.C.C. = 438 + 50.02

Gas Main Service has been cut.

Slope Stake line

Ramp PT 431 +51.51

CONST TANG. N41° 48' 45" E

Retaining Wall

Ramp PT 435+81.89

CONST TANG. N 67° 29' 15" E

N 63° 47' 30" E

Ramp PCC 438+50.02

Ret Wall

Eastbound Ref. Line

Westbound Ref Line

N 59° 57' 45" E

N 56° 12' 26" E

N 42° 29' 52" E

N 48° 08' 45" E

N 62° 23' 45" E

N 89° 05' 45" E

N 62° 29' 43" E

N 55° 13' 30" E

N 27° 45' 25" W

N 27° 47' 50" W

Ramp PT 430+70.00

Ramp PT 433+92.16

Ramp PC 433+10.24

Ramp PT 435+81.89

Ramp PC 435+81.89

Ramp PT 438+50.02

Ramp PC 438+50.02

Ramp PT 430+70.00

Ramp PC

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	M H	BUI 391 (152)			
R	STATE PROJECT	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	Wayne	Detroit	64	
FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	M H				
R	STATE PROJECT	COUNTY		SHEET NO.	TOTAL SHEETS

STATION EQUATION

Station 451 + 51.22 of East Bound Lane Equals
Station 451 + 80 of Construction Center Line.
East Bound Lane Survey Line Shortens 28.78'

East Bound Lane
Curve Data
Δ = 7° 31' 30" Rt.
D = 09° 34' 05.2"
R = 1003.5 .22
L = 1324.50
T = 663.23'
E = 21.78'
P.C.C. = 438 + 24.66
P.I. = 444 + 89.89
P.T. = 451 + 51.22
Superelevate 0.015'/ft.

Gas Main service has been cut or will be cut as indicated on plans. Mains between cuts are or will be abandoned.

Note: P.I. Sta. 445 + 13.36 is 90° to Const. ℄ at Sta. 445 + 12.74 and 5.60' Rt.

Note: Location of 4½ Radius Point is 90° to Sta. 445 + 49.26 and 2.5' Lt.

Curve Data
West Bound "H" Ramp
Δ = 35° 24' 37.74" Rt.
D = 03° 34' 04.7"
R = 1009.42'
T = 478.78'
L = 952.82'
E = 11.26'
P.C. = 440 + 36.58
P.I. = 445 + 13.36
P.C.C. = 449 + 89.42

Curve Data
East Bound "On" Ramp
Δ = 12° 42' 20" Rt.
D = 01° 20' 00"
R = 4297.28'
T = 478.43'
L = 952.92'
E = 26.54'
P.C. = 441 + 96.70
P.I. = 446 + 75.13
P.T. = 451 + 49.62

Curve Data
West Bound "Off" Ramp
Δ = 01° 04' 55.73" Rt.
D = 00° 17' 02.02"
R = 20182.66'
T = 190.60'
L = 381.78'
E = 0.90'
P.C.C. = 449 + 89.42
P.I. = 451 + 80.02
P.T. = 453 + 70.60

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FED. ROAD DIV. NO.		FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH.	BUI 391 (52)			
	STATE	COUNTY	CITY	SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	DETROIT	65	
FED. ROAD	STATE	FEDERAL PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	MICH.				
	STATE	COUNTY		SHEET NO.	TOTAL SHEETS

HUDSON

5'9" CYL SEWER

5'0" CYL SEWER

Gas Main Service has been cut.

Gas Main Service has been cut.

Gas Main Service has been cut.

Gas Main Service has been cut.

Gas Main Service has been cut.

Gas Main Service has been cut.

Gas Main Service has been cut.

SLOPE STAKE LINE

SLOPE STAKE LINE

Ex Top of Slope

Slope Stake Line

Kirby 60' Wd. N 67°29'15"E

Kirby 60' Wd. N 67°29'15"E

Curve Data
East Bound "Off" Ramp
Δ = 05° 38' 20" Rt.
D = 01° 20' 00"
L = 422.92'
T = 211.63'
R = 4297.28'
E = 5.21'
PC 456+34.02
PI 458+70.66
PT 460+81.44

Proposed 24"G - Main by the Michigan Consolidated Gas Co. Application for Permit 82-382-3 dated May 29, 1963 with Location of 24" Gas Main 2' West of East Property Line of Twenty Third St or 11' East of Centerline of Street as per Drawing E-45-435

N-17-C-1

82-65 BUI 391(52) 65

FED. ROAD		FEDERAL			SHEET NO.	TOTAL SHEETS
		BUI 391 (52)				
		COUNTY	CITY		SHEET NO.	TOTAL SHEETS
M-112	82-65	WAYNE	DETROIT		66	
FED. ROAD		FEDERAL			SHEET NO.	TOTAL SHEETS
		PROJECT NO.			SHEET NO.	TOTAL SHEETS

Curve Data
W. Bound Bus Ramp
Δ = 01° 08' 45" Lt.
D = 01° 00' 00"
R = 5729.65
T = 57.29'
L = 114.58'
E = 0.28'
P.C. = 465+75.02
P.I. = 466+32.31
P.T. = 466+89.60

Curve Data
N. Service Road
Δ = 4° 01' 34" Lt.
D = 3° 00' 00"
R = 1910.08'
T = 67.14'
L = 134.20'
E = 1.18'
P.C. = 467+87.76
P.I. = 468+54.90
P.T. = 469+21.96

Curve Data
West Bound Bus Ramp
Δ = 01° 55' 10" Lt.
D = 00° 45' 00"
R = 7639.49'
T = 127.38'
L = 255.35'
E = 0.21'
P.C. = 471+04.41
P.I. = 472+32.39
P.T. = 473+60.34

Curve Data
W. Bound "On" Ramp
Δ = 01° 08' 45" Lt.
D = 01° 00' 00"
R = 5729.65'
T = 57.29'
L = 114.58'
E = 0.23'
P.C. = 473+63.38
P.I. = 474+20.67
P.T. = 474+77.96

Curve Data
East Bound "Off" Ramp
Δ = 05° 38' 20" Lt.
D = 02° 00' 00"
R = 2864.98'
T = 141.10'
L = 281.94'
E = 3.47'
P.C. = 468+76.66
P.I. = 469+17.74
P.T. = 470+58.58

Curve Data
East Bound Bus Ramp
Δ = 11° 13' 00" Rt.
D = 10° 30' 00"
R = 545.67'
T = 53.58'
L = 106.83'
E = 2.62'
P.C. = 473+63.77
P.I. = 474+17.35
P.R.C. = 474+70.60

Curve Data
East Bound Bus Ramp
Δ = 05° 30' 00" Lt.
D = 10° 30' 00"
R = 545.67'
T = 26.21'
L = 52.38'
E = 0.63'
P.R.C. = 474+70.60
P.I. = 474+96.81
P.T. = 475+22.98

N-17-C-1

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