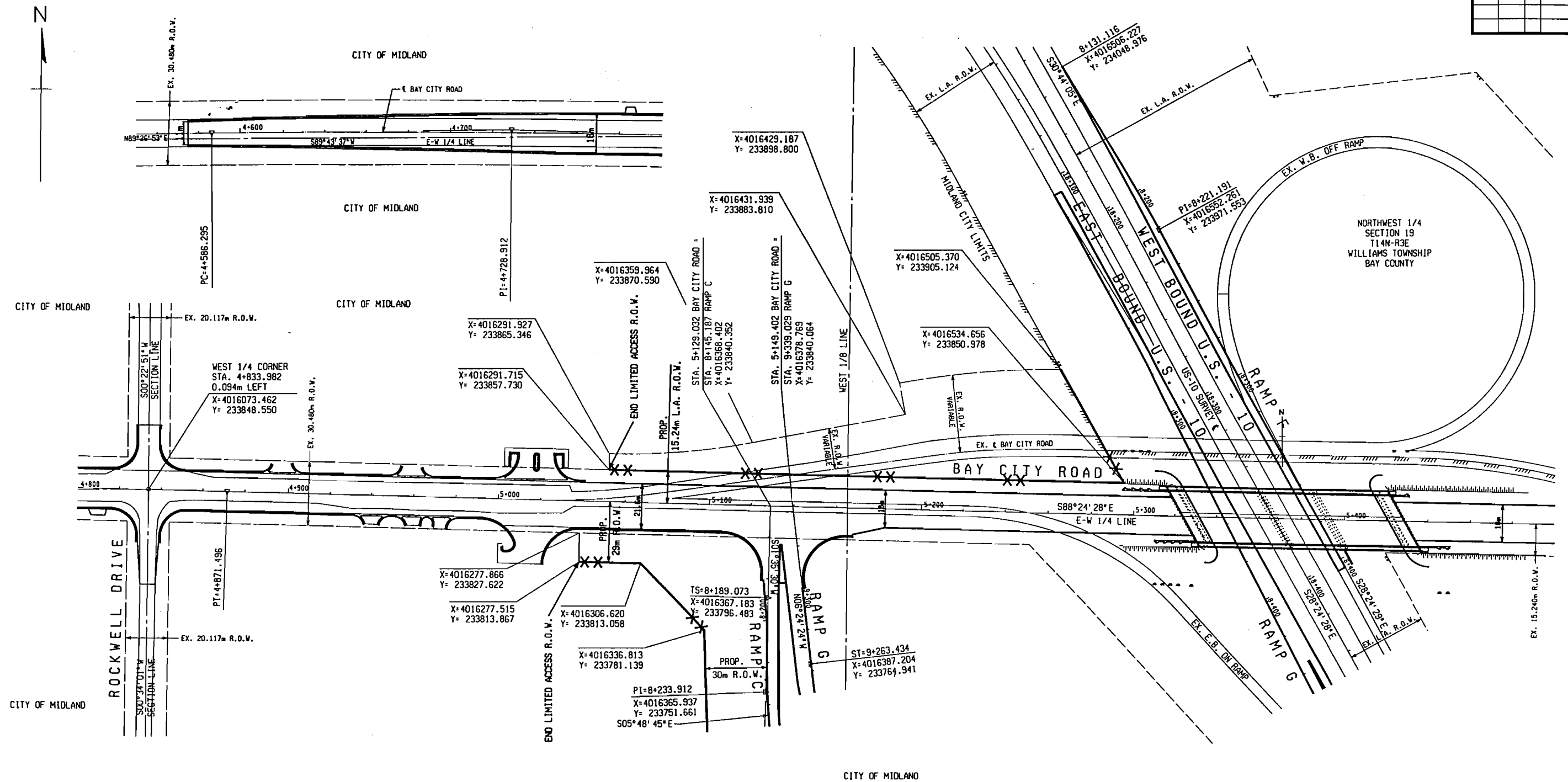


FILE NAME: 07034.MI.DGN
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63



FINAL R.O.W.			
AUTH	DATE	NO.	REVISION

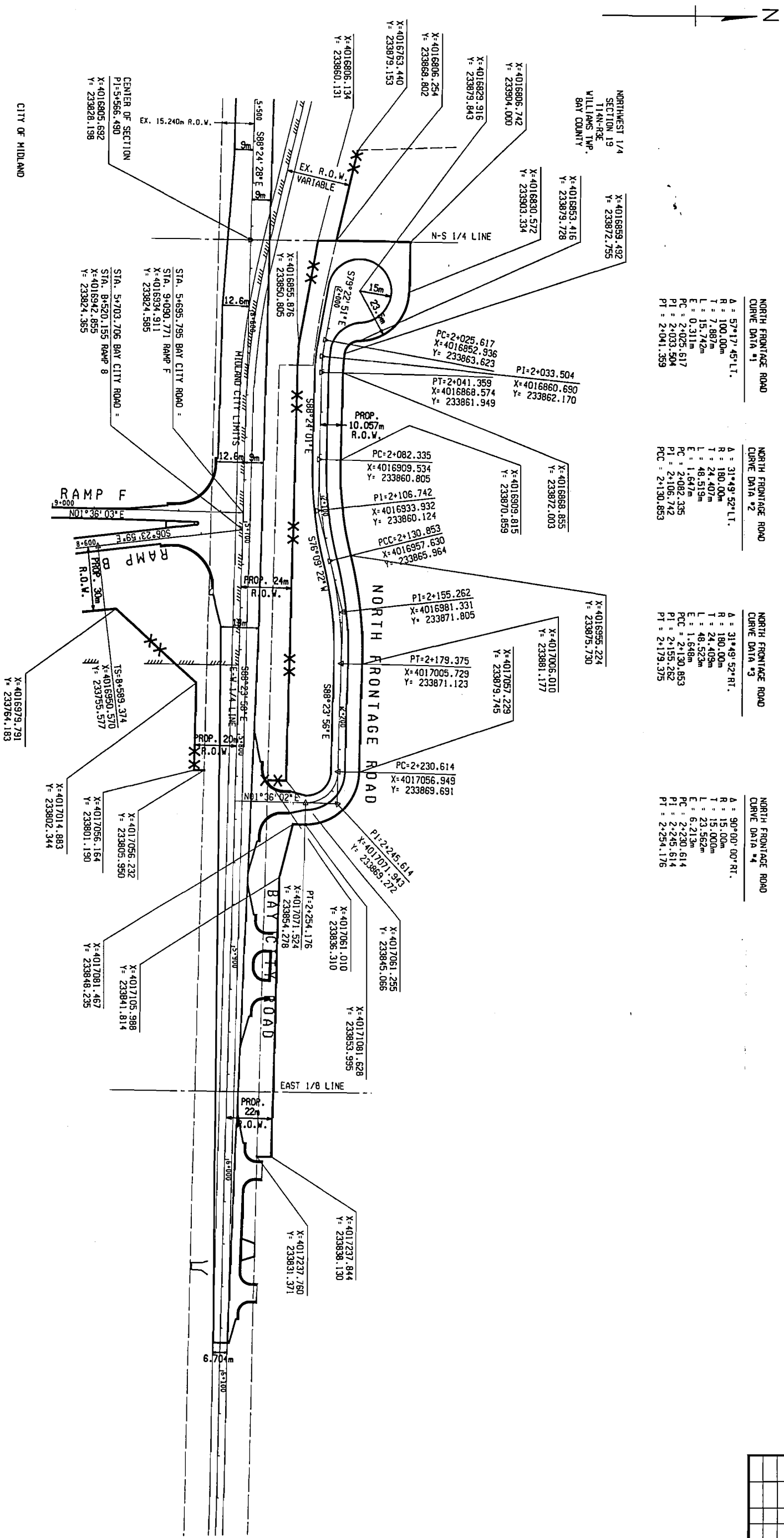


BAY CITY ROAD CURVE DATA
A = 02°08'38" RT.
R = 7621.777m
T = 142.617m
L = 285.201m
E = 1.334m
PC = 4+586.295
PI = 4+728.912
PT = 4+871.496

RAMP C CURVE DATA #1
IN SPIRAL CURVE DATA
A = 07°24'16" LT.
L = 67.200m
K = 33.581m
P = 0.723m
LT = 44.839m
ST = 22.436m
TS = 8+189.073
PI = 8+233.912
SC = 8+256.273

RAMP G CURVE DATA #2
OUT SPIRAL CURVE DATA
A = 07°42'02" RT.
L = 67.200m
K = 33.580m
P = 0.752m
LT = 44.842m
ST = 22.439m
CS = 9+196.234
PI = 9+218.592
ST = 9+263.434

PLANS PREPARED BY AVRES ASSOCIATES Engineers / Surveyors Midland, MI	 Michigan Department of Transportation	BAY CITY ROAD ALIGNMENT - SHEET A				
		DATE 03/15/99	SCALE 1:1000	CONT. SEC. 09101	JOB NO. 16555A	DESIGN UNIT CLOUTIER



NORTH FRONTAGE ROAD CURVE DATA #1		NORTH FRONTAGE ROAD CURVE DATA #2		NORTH FRONTAGE ROAD CURVE DATA #3		NORTH FRONTAGE ROAD CURVE DATA #4	
A = 57°37'.45" L.T.		A = 31°49'.52" L.T.		A = 31°49'.52" R.T.		A = 90°00'.00" R.T.	
R = 100.00m		R = 180.00m		R = 180.00m		R = 15.00m	
T = 7.887m		T = 24.407m		T = 24.403m		T = 15.003m	
L = 15.742m		L = 48.519m		L = 48.522m		L = 23.362m	
E = 0.311m		E = 1.647m		E = 1.648m		E = 6.213m	
PC = 2+002.617		PC = 2+082.335		PC = 2+130.853		PC = 2+230.614	
PI = 2+003.504		PI = 2+086.742		PI = 2+155.262		PI = 2+245.614	
PT = 2+041.559		PT = 2+130.853		PT = 2+179.375		PT = 2+254.176	

RAMP B-CURVE DATA *1
IN SPIRAL CURVE DATA

LI = 48.008m
SI = 24.007m
TS = 8+589.374
PI = 8+637.382
SC = 8+661.374

AMRES ASSOCIATES Engineers / Surveyors Highland, MI					PLANS PREPARED BY AMRES ASSOCIATES				
									
BAY CITY ROAD ALIGNMENT - SHEET B									
DATE	SCALE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.				
03/15/99	1:1000	09101	165556A	CLUTTER	R.O.W	CON'S	22		

FILE NAME: D:\03ALM4.DGN

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



RAMP B CURVE DATA #2
CIRCULAR CURVE DATA
Δ = 63°44' 47" LT.
R = 350.00m
T = 217.629m
L = 389.405m
E = 62.144m
SC = 8+937.353
PI = 9+154.982
CS = 9+326.758
SUPER = 7.0%

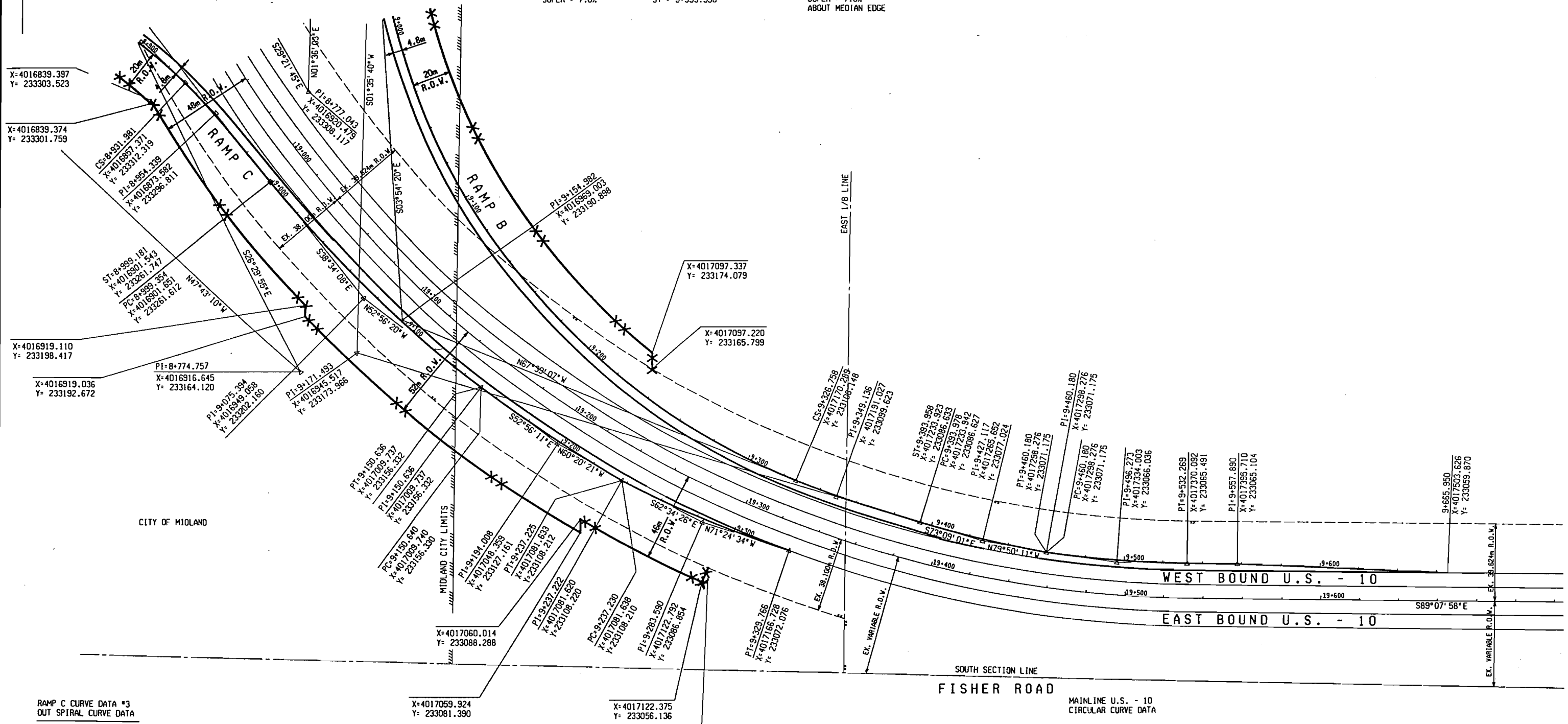
RAMP B CURVE DATA #2
OUT SPIRAL CURVE DATA
Δ = 05°30' 01" LT.
L = 67.200m
K = 33.590m
P = 0.537m
ST = 22.420m
LT = 44.822m
CS = 9+326.758
PI = 9+349.136
ST = 9+393.958

MAINLINE U.S. - 10
CIRCULAR CURVE DATA
Δ = 60°43' 30" LT.
R = 582.192m
T = 341.056m
L = 616.967m
E = 92.543m
PC = 18+914.973
PI = 19+256.029
PT = 19+531.940
SUPER = 7.0%
ABOUT MEDIAN EDGE

RAMP B CURVE DATA #3
CURVE DATA
Δ = 06°40' 58" LT.
R = 567.580m
T = 33.138m
L = 66.201m
E = 0.967m
PC = 9+393.978
PI = 9+427.117
PT = 9+460.180

RAMP B CURVE DATA #4
CURVE DATA
Δ = 07°19' 12" LT.
R = 564.267
T = 36.094m
L = 72.089m
E = 1.153m
PC = 9+460.180
PI = 9+496.273
PT = 9+532.269

FINAL R.O.W.			
AUTH	DATE	NO.	REVISION



RAMP C CURVE DATA #3
OUT SPIRAL CURVE DATA
Δ = 07°42' 02" RT.
L = 67.200m
K = 33.580m
P = 0.752m
ST = 22.439m
LT = 44.842m
CS = 8+931.981
PI = 8+954.339
ST = 8+999.181

RAMP C CURVE DATA #4
CURVE DATA
Δ = 14°22' 04" LT.
R = 603.275
T = 76.040m
L = 151.282m
E = 4.773m
PC = 8+999.354
PI = 9+075.394
PT = 9+150.636

RAMP C CURVE DATA #6
CURVE DATA
Δ = 08°16' 00" LT.
R = 600.117
T = 43.368m
L = 86.585m
E = 1.565m
PC = 9+150.640
PI = 9+194.008
PT = 9+237.225

RAMP C CURVE DATA #8
CURVE DATA
Δ = 08°50' 05" LT.
R = 600.115
T = 46.360m
L = 92.536m
E = 1.788m
PC = 9+237.230
PI = 9+283.590
PT = 9+329.766

NORTHEAST 1/4
SECTION 30
T14N-R3E
WILLIAMS TWP.
BAY COUNTY

MAINLINE U.S. - 10
CIRCULAR CURVE DATA
Δ = 60°43' 30" LT.
R = 582.192m
T = 341.056m
L = 616.967m
E = 92.543m
PC = 18+914.973
PI = 19+256.029
PT = 19+531.940
SUPER = 7.0%
ABOUT MEDIAN EDGE

PLANS PREPARED BY
AYRES
ASSOCIATES
Engineers / Surveyors
Midland, MI



BAY CITY ROAD ALIGNMENT - SHEET D

DATE	SCALE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.
03/15/99	1:1000	09101	16555A	CLOUTIER	R.O.W. CONST 24